CITY OF ONTARIO

Regular City Council/Housing Authority Meeting
MARCH 21, 2023

City Hall
303 East B Street, Ontario, CA 91764

MAYOR PAUL S. LEON • MAYOR PRO TEM DEBRA DORST-PORADA
COUNCIL MEMBERS ALAN D. WAPNER, JIM W. BOWMAN AND RUBEN VALENCIA

CITY CLERK SHEILA MAUTZ • TREASURER JAMES R. MILHISER
CITY MANAGER SCOTT OCHOA • CITY ATTORNEY RUBEN DURAN

WELCOME TO A MEETING OF THE ONTARIO CITY COUNCIL

All documents for public review are on file with the Records Management/City Clerk's Department located at 303 East B Street, Ontario, CA 91764.

Anyone wishing to speak in person during public comment or on a particular item will be required to fill out a blue slip. Blue slips must be turned in prior to public comment beginning or before an agenda item is taken up. The Clerk will not accept blue slips after that time. To comment by email, submit your comments no later than 4:00 p.m. on the day of the meeting by emailing your name, agenda item you are commenting on and your comments to publiccomments@ontarioca.gov. All comments received by the deadline will be forwarded to the City Council for consideration before action is taken on the matter and will be entered into the record.

Comments will be limited to 3 minutes. Speakers will be alerted when they have 1 minute remaining and when their time is up. Speakers are then to return to their seats and no further comments will be permitted.

In accordance with State Law, remarks during public comment are to be limited to subjects within Council's jurisdiction. Remarks on other agenda items will be limited to those items.

Remarks from those seated or standing in the back of the chamber will not permitted. All those wishing to speak including Council and Staff need to be recognized by the Chair before speaking.

ACCOMODATIONS

If you need special assistance or accommodations to participate in this meeting, please contact the City Clerk's office at 909-395-2009. Notification of 48 hours prior to the meeting will help the City make reasonable arrangements. Equipment for the hearing impaired is available in the Records Management Office.

ORDER OF BUSINESS

The regular City Council and Housing Authority meeting begins with Closed Session and Closed Session Comment at 5:30 p.m., Public Comment at 6:30 p.m. immediately followed by the Regular Meeting and Public Hearings. No agenda item will be introduced for consideration after 10:00 p.m. except by majority vote of the City Council.

CALL TO ORDER *(OPEN SESSION)*

ROLL CALL

Dorst-Porada, Wapner, Bowman, Valencia, Mayor/Chairman Leon

CLOSED SESSION PUBLIC COMMENT

The Closed Session Public Comment portion of the Council/Housing Authority meeting is limited to a maximum of 3 minutes for each speaker and comments will be limited to matters appearing on the Closed Session. Additional opportunities for further Public Comment will be given during and at the end of the meeting.

CLOSED SESSION

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 0110-061-10; 1207 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Yoon Ku Byun; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 0110-061-22; 1230 East Nocta Street; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Kathy Jong Kim Trusty, Kyung Sam Kim Trustee; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 0110-061-30; 1253 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Harrison Street Real Estate, Andasol Management Inc, Brett Henry; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 1048-472-15; 1182 East Nocta Street; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Uikelotu Ngalo, Semisi M. Kakau, Semisi Kofu, Sione L. Tovi, Uilisa Uele, Semisi Tonga and Sosaia Ngalo; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 1048-472-22; 110 North Virginia Avenue; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Robert Diaz; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 1049-141-24; 1194 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Adel Batarseh; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 1049-141-28; 1100 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Richard S. and Camilla M. Coulter; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 1049-141-30; 1172 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: David Lanzer; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APNs: 0110-131-01, 0110-131-19; 1222, 1210 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Charles Sabbah; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS:
Property: APN: 0110-061-21; 1217 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Kulendra N Rami; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 0110-061-24; 1315 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Hideo Kikumoto; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 0110-061-25; 1241 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Babubhai Prajapati Shashikalaben Premchandbhai Prajapati; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 0110-061-31; 1253 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Mohammed I. Patel; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 0110-131-20; 1228 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Edward and Connie L. Berki; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APNs: 1048-472-24 and 1048-472-25; 1131 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Patty Bashoura; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 1049-141-25; 1120 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Pardip Dayaram; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 1049-141-31; 1154 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Rexford Industrial; Under negotiation: Price and terms of payment

GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
Property: APN: 1048-566-07; City/Authority negotiator: Scott Ochoa or his designee; Negotiating parties: Overland Direct LLC; Wascher INC; Under negotiation: Price and terms of payment

GC 54957, PUBLIC EMPLOYEE PERFORMANCE EVALUATIONS:
City Manager

GC 54957.6, CONFERENCE WITH LABOR NEGOTIATORS
City Negotiator: City Attorney; Unrepresented Employee: City Manager

ATTACHMENT: 20230321 Closed Session

PLEDGE OF ALLEGIANCE

Council Member Wapner

INVOCATION

REPORT ON CLOSED SESSION

City Attorney

PUBLIC COMMENTS **6:30 P.M.**

The Public Comment portion of the Council/Housing Authority meeting is limited to 30 minutes with each speaker given a maximum of 3 minutes. An opportunity for further Public Comment may be given at the end of the meeting. Under provisions of the Brown Act, Council is prohibited

from taking action on oral requests.

To comment by email, submit your comments by email no later than 4:00 p.m. on the day of the meeting by emailing your name, agenda item you are commenting on and your comment to publiccomments@ontarioca.gov. All Comments received by the deadline will be forwarded to the City Council for consideration before action is taken on the matter and entered into the record. As previously noted -- if you wish to address the Council, fill out one of the blue slips at the rear of the chambers and give it to the City Clerk.

AGENDA REVIEW/ANNOUNCEMENTS

The City Manager will go over all updated materials and correspondence received after the Agenda was distributed to ensure Council Members have received them. He will also make any necessary recommendations regarding Agenda modifications or announcements regarding Agenda items to be considered.

CONSENT CALENDAR

All matters listed under CONSENT CALENDAR will be enacted by one motion in the form listed below – there will be no separate discussion on these items prior to the time Council votes on them, unless a member of the Council requests a specific item be removed from the Consent Calendar for a separate vote.

Each member of the public wishing to address the City Council on items listed on the Consent Calendar will be given a total of 3 minutes.

1. APPROVAL OF MINUTES

Minutes for the regular meetings of the City Council and Housing Authority of February 21, 2023, and approving same as on file in the Records Management Department.

ATTACHMENT: 20230221 Minutes (Not Official Until Approved).pdf

2. BILLS & PAYROLL

Bills February 24, 2023 through March 2, 2023, and Payroll February 12, 2023 through February 25, 2023 when audited by the Finance Committee.

3. APPROVAL OF A PRE-AUTHORIZED LIST OF SOLE-SOURCE VENDORS TO PROVIDE SPECIAL TAX CONSULTING AND LEGAL SERVICES FOR THE CITY OF ONTARIO COMMUNITY FACILITIES DISTRICTS

That the City Council approve the request for a pre-authorized Sole Source list of vendors for the City's bond financing team for future Community Facility District (CFD) formations and bond issues for a maximum term of two years.

4. **ACCEPT AND APPROVE LAW ENFORCEMENT EQUIPMENT GRANT PROGRAM ADDITIONAL AWARD FOR FISCAL YEAR 2020-21**

That the City Council authorize the City Manager or his designee to execute all documents necessary to accept and approve the Citizen's Option for Public Safety (COPS) / Enhancing Law Enforcement Activities Subaccount (ELEAS) Grant for Fiscal Year 2020-21.

5. **A DEVELOPMENT IMPACT FEE CREDIT AGREEMENT (FILE NO. PDIF21-004) BETWEEN THE CITY OF ONTARIO AND ONTARIO CC 2.0, LLC, FOR FACILITY CONSTRUCTION ASSOCIATED WITH PARCEL MAP NO. 20027, LOCATED NEAR THE SOUTHWEST CORNER OF HAMNER AVENUE AND RIVERSIDE DRIVE, WITHIN THE EDENGLEN SPECIFIC PLAN**

That the City Council approve the Development Impact Fee Credit Agreement (File No. PDIF21-004) between the City of Ontario and Ontario CC 2.0, LLC, for facility construction associated with Parcel Map No. 20027, located near the southwest corner of Hamner Avenue and Riverside Drive, within the Edenglen Specific Plan, and authorize the City Manager to execute the Agreement.

6. **REAL PROPERTY EXCHANGE BETWEEN THE CITY OF ONTARIO AND THE DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION**

That the City Council adopt a Resolution:

A. Declaring certain City-owned real property to be exempt surplus land;
B. Approving a real property exchange agreement with the Diocese of San Bernardino Education and Welfare Corporation;
C. Authorizing the City Manager to take all actions necessary with respect thereto; and
D. Finding that no further CEQA analysis is necessary

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, (I) DECLARING CERTAIN CITY-OWNED REAL PROPERTY TO BE EXEMPT SURPLUS LAND; (II) APPROVING A REAL PROPERTY EXCHANGE AGREEMENT WITH THE DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION**;** (III) AUTHORIZING THE CITY MANAGER TO TAKE ALL ACTIONS NECESSARY WITH RESPECT THERETO; AND (IV) FINDING THAT NO FURTHER CEQA ANALYSIS IS NECESSARY.

ATTACHMENT: Exchange Agreement^01^RESO^RM
ATTACHMENT: Land Exchange Agreement (City of Ontario- Catholic Church) EXH A

7. **APPLICATION FOR CALIFORNIA OFFICE OF TRAFFIC SAFETY FISCAL YEAR 2023-24 SELECTIVE TRAFFIC ENFORCEMENT PROGRAM (STEP) GRANT**

That City Council authorize the City Manager, or his designee to execute all documents necessary to apply for and accept a 12-month grant in the amount of $1,015,605 from the California Office of Traffic Safety (OTS) for participation in the FY 2023-24 Selective Traffic

Enforcement Program (STEP) Grant.

8. AN APPLICATION FOR GRANT FROM CALIFORNIA HIGHWAY PATROL FOR THE CANNABIS TAX FUND GRANT PROGRAM FISCAL YEAR 2023-24 FOR THE AMOUNT OF $291,250.

That City Council authorize the City Manager or his designee to execute all documents necessary to apply for and accept a 12-month grant in the amount of $291,250 from the California Highway Patrol for the Cannabis Tax Fund Grant Program.

9. ACCEPT AND APPROVE AWARD OF OFFICER WELLNESS AND MENTAL HEALTH GRANT FOR FISCAL YEAR 2022-23

That the City Council authorize the City Manager or his designee to execute all documents necessary to accept and approve the Officer Wellness and Mental Health Grant Award for Fiscal Year 2022-23.

10. A CONSTRUCTION CONTRACT FOR CITY'S BROADBAND FIBER CONDUIT INSTALLATION WEST RING-SEGMENT 2

That the City Council take the following actions:

A. Approve Construction Contract No. BB-2023-001, FY 2022-23 CDBG City Fiber Conduit Installation - West Ring Segment 2 (on file in the Records Management Department), to Servitek Electric, Inc. of Walnut, California, to provide fiber optic conduit installation services in the amount of $731,914 plus a ten percent (10%) contingency of $73,191 for a total authorized expenditure of $805,105; and

B. Authorize the City Manager or designee to execute said contract and all documents required for the completion of the project, including, but not limited to purchase orders, contracts, agreements, easements, reduction of retention accounts, and the filing of a Notice of Completion at the conclusion of all related work.

ATTACHMENT: Exhibit A.pdf

11. SECOND AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT FOR ARCHITECTURAL AND DESIGN SERVICES

That the City Council ("City") approve and authorize the City Manager to execute a Second Amendment to a Professional Services Agreement with Thirtieth Street Architects, Inc. to increase Agreement by $250,000 for a total not-to-exceed amount of $450,000.

12. AWARD OF A CONSTRUCTION CONTRACT AND AMENDMENT TO THE ON-CALL PROJECT MANAGEMENT SERVICES AGREEMENT FOR THE JOHN GALVIN PARK RESTROOM RENOVATION

That the City Council take the following actions:

A. Authorize the City Manager or his designee to complete and execute a Construction Contract with JCOS Development, Inc. of Buena Park, California, for the John Galvin Park Restroom Renovation Project in the amount of $1,050,000;

B. Authorize a 10% contingency of $105,000 for the JCOS Development, Inc. Construction Contract for a total contract value of $1,155,000 to address any unforeseen issues that arise during construction;
C. Authorize the City Manager or his designee to complete and execute Amendment No. 9 to the On-Call Project Management Services Contract with Transtech Engineers, Inc. of Chino, California, for the John Galvin Park Restroom Renovation Project in the amount of $14,073; and
D. Authorize the City Manager or his designee to execute all documents required for the completion of the project including, but not limited to, contracts, agreements, assessments, easements, reduction of retention accounts, and filing a notice of completion at the conclusion of all construction related activities.

13. A RESOLUTION AUTHORIZING THE CITY MANAGER TO ENTER INTO SETTLEMENT AGREEMENTS WITH WALGREENS CO., WALMART, INC., CVS HEALTH CORPORATION/CVS PHARMACY INC., TEVA PHARMACEUTICAL INDUSTRIALS LTD., AND ALLERGAN FINANCE LLC/ALLERGAN LIMITED, AGREE TO THE TERMS OF THE STATE-SUBDIVISION AGREEMENTS, AND AUTHORIZE ENTRY INTO THE STATE-SUBDIVISION AGREEMENTS WITH THE ATTORNEY GENERAL

That the City Council adopt a Resolution authorizing the City Manager to:

1. Opt into settlement agreement with opioid distributor, Walgreens Co., and direct the City Manager to execute any documents necessary to implement the action.
2. Opt into settlement agreement with opioid distributor, Walmart, Inc. and direct the City Manager to execute any documents necessary to implement the action.
3. Opt into settlement agreement with opioid distributor, CVS Health Corporation/CVS Pharmacy, Inc. and direct the City Manager to execute any documents necessary to implement the action.
4. Opt into settlement agreement with opioid manufacturer, Teva Pharmaceutical Industries Ltd., and direct the City Manager to execute any documents necessary to implement the action.
5. Opt into settlement agreement with opioid manufacturer, Allergan Finance, LLC/Allergan Limited and direct the City Manager to execute any documents necessary to implement the action.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, AUTHORIZING THE CITY MANAGER TO ENTER INTO THE SETTLEMENT AGREEMENTS WITH WALGREENS CO., WALMART, INC., CVS HEALTH CORPORATION/CVS PHARMACY INC., TEVA PHARMACEUTICAL INDUSTRIALS LTD., AND ALLERGAN FINANCE LLC/ALLERGAN LIMITED, AGREE TO THE TERMS OF THE STATE-SUBDIVISION AGREEMENTS, AND AUTHORIZE ENTRY INTO THE STATE-SUBDIVISION AGREEMENTS WITH THE ATTORNEY GENERAL.

ATTACHMENT: 20230321 Walgreens Settlement Agreement^01 EXH A.pdf
ATTACHMENT: 20230321 Walmart Settlement Agreement^02 EXH B.pdf
ATTACHMENT: 20230321 CVS Settlement Agreement^03 EXH C.pdf

ATTACHMENT: 20230321 Teva Settlement Agreement^04 EXH D.pdf
ATTACHMENT: 20230321 Allergan Settlement Agreement^05 EXH E.pdf
ATTACHMENT: 20230321 CA Allocation and Participation Agreement^06 EXH F.pdf
ATTACHMENT: 20230321 National Opioid Settlement Agreements^07^RESO^RM

14. LICENSE AND REIMBURSEMENT AGREEMENT WITH ONTARIO AUTO CENTER DEALERS' ASSOCIATION

That the City Council authorize Staff to execute a License and Reimbursement Agreement (on file in the Records Management Department) between the City and the Ontario Auto Center Dealers' Association related to upgrades on two digital signs.

15. A LEASE AGREEMENT BETWEEN THE CITY OF ONTARIO AND GROVE LAND VENTURE, LLC

That the City Council approve a Lease Agreement (on file in the Records Management Department) between the City of Ontario and Grove Land Venture, LLC for the use of property located on the southeast corner of Bon View and Eucalyptus Avenues for a two-year term with the option to extend one additional year.

PUBLIC HEARINGS

Pursuant to Government Code Section 65009, if you challenge the City's zoning, planning or any other decision in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice, or in written correspondence delivered to the City Council at, or prior to the public hearing. Affidavits of posting compliance, for all items below, are on file with the Records Management Department.

---

16. A PUBLIC HEARING TO CONSIDER ADOPTION OF A RESOLUTION TO VACATE FERN AVENUE FROM TRANSIT STREET TO EMPORIA STREET

That the City Council adopt a Resolution approving the vacation of Fern Avenue from Transit Street to Emporia Street.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, ORDERING THE VACATION OF FERN AVENUE FROM TRANSIT STREET TO EMPORIA STREET.

ATTACHMENT: 20230321_NOI to Vacate Fern_1_ Exh_A.pdf
ATTACHMENT: 20230321 NOI to Vacate Fern^2^RESO^RM.doc
ATTACHMENT: 20230321_NOI to Vacate Fern_3_Exh_ A and B.pdf

17. A PUBLIC HEARING TO CONSIDER FILE NO. PUD22-003, A PLANNED UNIT DEVELOPMENT ON 0.11-ACRE OF LAND LOCATED AT 213 NORTH FERN AVENUE

That the City Council introduce and waive further reading of an Ordinance approving File No. PUD22-003, the Fern Townhomes Planned Unit Development, establishing development standards, design guidelines, and infrastructure requirements to facilitate a residential

development at 213 North Fern Avenue.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PUD22-003, A PLANNED UNIT DEVELOPMENT TO ESTABLISH DEVELOPMENT STANDARDS, DESIGN GUIDELINES, AND INFRASTRUCTURE REQUIREMENTS FOR PROPERTY LOCATED AT 213 NORTH FERN AVENUE, WITHIN LUA-3 (HOLT BOULEVARD) OF THE MU-1 (DOWNTOWN MIXED USE) ZONING DISTRICT, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1048-572-06.

ATTACHMENT: 20230321 File No. PUD22-003^02^ORD^RM
ATTACHMENT: 20230321 File Nos. PUD22-003^ PC Backup.pdf
ATTACHMENT: 20230321_File_No._PUD22-003_03_PUD_Attachment.pdf

18. A PUBLIC HEARING TO CONSIDER AN APPEAL OF THE PLANNING COMMISSION'S DECISION TO APPROVE THE USE OF AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT (STATE CLEARINGHOUSE NO. 2021070364) AND A DEVELOPMENT PLAN (FILE NO. PDEV21-047) TO CONSTRUCT NINE INDUSTRIAL BUILDINGS TOTALING 4,263,454 SQUARE FEET ON 216.36 GROSS ACRES (196.83 NET ACRES) OF LAND LOCATED EAST OF HAVEN AVENUE, WEST OF DOUBLEDAY AND DUPONT AVENUES, NORTH OF JURUPA STREET AND SOUTH OF AIRPORT DRIVE

That the City Council consider and adopt a Resolution upholding the Planning Commission's approval of the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) and Development Plan (File No. PDEV21-047) and deny the appeal.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, DENYING THE APPEAL, AND UPHOLDING PLANNING COMMISSION RESOLUTION NOS. PC23-007 AND PC23-008 APPROVING THE USE OF THE ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT AND APPROVING FILE NO. PDEV21-047, A DEVELOPMENT PLAN TO CONSTRUCT NINE INDUSTRIAL BUILDINGS TOTALING 4,263,454 SQUARE FEET AND ASSOCIATED IMPORVEMENTS ON 216.39 GROSS ACRES (196.83 NET ACRES) OF LAND LOCATED EAST OF HAVEN AVENUE, WEST OF DOUBLEDAY AND DUPONT AVENUES, NORTH OF JURUPA STREET AND SOUTH OF AIRPORT DRIVEAND MAKING FINDINGS IN SUPPORT THEREOF.

ATTACHMENT: 20230321 File No. PDEV21-047_APPEAL^01 Exh 1_Appeal statement.pdf
ATTACHMENT: 20230321 File No. PDEV21-047_APPEAL^02 Exh 2_Allen Matkins Response & Exhibits.pdf
ATTACHMENT: 20230321 File No. PDEV21-047_APPEAL^03 Exh 3_AQ Response.pdf
ATTACHMENT: 20230321 File No. PDEV21-047_APPEAL^04 Exh 4_Bio Response.pdf
ATTACHMENT: 20230321 File No. PDEV21-047_APPEAL^05 Exh 5_MH-Airport_Response.pdf
ATTACHMENT: 20230321 File No. PDEV21-047_APPEAL^06 Exh 6_FAA AC 150-5200-33C.pdf

ATTACHMENT: 20230321 File No. PDEV21-047^07 PC Back up.pdf
ATTACHMENT: 20230321 File No. PDEV21-047_APPEAL^08 Attach A Reso Uphold PC Deny Appeal.docx

ADMINISTRATIVE REPORTS/DISCUSSION/ACTION

19. FISCAL YEAR 2022-23 MID-YEAR BUDGET UPDATE REPORT

A. That the City Council approve the budget adjustments and recommendations as presented in the Fiscal Year 2022-23 Mid-Year Budget Update Report (Exhibit A);
B. That the City Council adopt a Resolution revising the appropriation limit of the City of Ontario for Fiscal Year 2022-23; and
C. That the City Council introduce Ordinance Amending Section 2-1.203 of the Ontario Municipal Code relating to Salary Compensation for the Mayor and City Council.

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, REVISING THE APPROPRIATION LIMIT OF THE CITY OF ONTARIO FOR FISCAL YEAR 2022-23.

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, AMENDING SECTION 2-1.203 OF THE ONTARIO MUNICIPAL CODE RELATING TO SALARY COMPENSATION FOR THE MAYOR AND THE CITY COUNCIL.

ATTACHMENT: FY 2022-23 Mid-Year Budget Update Report_EXHIBIT A.pdf
ATTACHMENT: Fiscal Year 2022-23 Annual Operating Budget 01^RESO^Appropriations Limit^RM
ATTACHMENT: Salary_Increase^02^ORD^RM

STAFF MATTERS

City Manager Ochoa

COUNCIL MATTERS

Mayor Leon
Mayor pro Tem Dorst-Porada
Council Member Wapner
Council Member Bowman
Council Member Valencia

ADJOURNMENT

CITY OF ONTARIO
CLOSED SESSION REPORT
City Council // Housing Authority // Other // *(GC 54957.1)*
March 21, 2023

ROLL CALL: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

STAFF: City Manager / Executive Director __, City Attorney __

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 0110-061-10; 1207 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Yoon Ku Byun; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 0110-061-22; 1230 East Nocta Street; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Kathy Jong Kim Trusty, Kyung Sam Kim Trustee; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 0110-061-30; 1253 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Harrison Street Real Estate, Andasol Management Inc, Brett Henry; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 1048-472-15; 1182 East Nocta Street; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Uikelotu Ngalo, Semisi M. Kakau, Semisi Kofu, Sione L. Tovi, Uilisa Uele, Semisi Tonga and Sosaia Ngalo; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 1048-472-22; 110 North Virginia Avenue; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Robert Diaz; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 1049-141-24; 1194 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Adel Batarseh; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

CITY OF ONTARIO
CLOSED SESSION REPORT
City Council // Housing Authority // Other // *(GC 54957.1)*
March 21, 2023
(Continued)

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 1049-141-28; 1100 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Richard S. and Camilla M. Coulter; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 1049-141-30; 1172 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: David Lanzer; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APNs: 0110-131-01, 0110-131-19; 1222, 1210 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Charles Sabbah; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

CITY OF ONTARIO
CLOSED SESSION REPORT
City Council // Housing Authority // Other // *(GC 54957.1)*
March 21, 2023
(Continued)

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS:
  Property: APN: 0110-061-21; 1217 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Kulendra N Rami; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 0110-061-24; 1315 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Hideo Kikumoto; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 0110-061-25; 1241 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Babubhai Prajapati Shashikalaben Premchandbhai Prajapati; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

CITY OF ONTARIO
CLOSED SESSION REPORT
City Council // Housing Authority // Other // *(GC 54957.1)*
March 21, 2023
(Continued)

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 0110-061-31; 1253 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Mohammed I. Patel; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 0110-131-20; 1228 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Edward and Connie L. Berki; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APNs: 1048-472-24 and 1048-472-25; 1131 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Patty Bashoura; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 1049-141-31; 1120 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Pardip Dayaram; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 1049-141-31; 1154 East Holt Boulevard; City/Authority Negotiator: Scott Ochoa or his designee; Negotiating parties: Rexford Industrial; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54956.8, CONFERENCE WITH REAL PROPERTY NEGOTIATORS
  Property: APN: 1048-566-07; City/Authority negotiator: Scott Ochoa or his designee; Negotiating parties: Overland Direct LLC; Wascher INC; Under negotiation: Price and terms of payment

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

CITY OF ONTARIO
CLOSED SESSION REPORT
City Council // Housing Authority // Other // *(GC 54957.1)*
March 21, 2023
(Continued)

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54957, PUBLIC EMPLOYEE PERFORMANCE EVALUATIONS:
  City Manager

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

In attendance: Dorst-Porada _, Wapner _, Bowman _, Valencia _, Mayor / Chairman Leon _.

- GC 54957.6, CONFERENCE WITH LABOR NEGOTIATORS
  City Negotiator: City Attorney; Unrepresented Employee: City Manager

No Reportable Action	Continue	Approved
/ /	/ /	/ /

Disposition: _____

Reported by:

_____
City Attorney / City Manager / Executive Director

ONTARIO CITY COUNCIL/
ONTARIO HOUSING AUTHORITY
MINUTES
FEBRUARY 21, 2023

(Not Official Until Approved)

JOINT MEETINGS

The regular meetings of the Ontario City Council and Housing Authority were held on Tuesday, February 21, 2023 at Ontario City Hall, 303 E. B Street Ontario, California.

CALL TO ORDER

Mayor Leon called the joint meetings to order at 6:31 p.m.

ROLL CALL

PRESENT:	Mayor/Chairman	Paul S. Leon
	Mayor pro Tem/Vice Chair:	Debra Dorst-Porada
	Council/Authority Members:	Alan D. Wapner and Ruben Valencia
ABSENT:	Council/Authority Members:	Jim W. Bowman

Also present were City Manager / Executive Director Scott Ochoa, City Attorney/Legal Counsel Ruben Duran, and City Clerk / Secretary Sheila Mautz.

CLOSED SESSION - (CANCELLED)

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Mayor pro Tem Dorst-Porada.

INVOCATION

The invocation was led by Pastor (Dr.) Francesca Fajinmi Dios International Missionary Church.

REPORT ON CLOSED SESSION

City Attorney Duran announced the cancellation of Closed Session.

PUBLIC COMMENTS

Assistant City Clerk Isbell announced two emailed public comments:

Ontario Resident, regarding consideration of construction quiet zones.

Janice Elliott, in opposition to the potential censuring of Council Member Valencia.

Mayor Leon called upon the first speaker:

Harold Wheat, spoke of traffic on Philadelphia, between Campus Avenue and Sultana Avenue.

Celina Lopez, spoke in opposition to the potential censuring of Council Member Valencia.

Sherrell Talley, asked City Council for help with housing.

Cory Briggs, made a records request for any and all materials that have been provided to the Council members with respect to censuring Council Member Valencia.

Karen Howey, representative of San Bernardino County Board Supervisor Curt Hagman's Office announced upcoming events.

Chris Craig, representative of Assemblymember Rodriguez's Office announced upcoming events.

AGENDA REVIEW/ANNOUNCEMENTS

City Manager Ochoa made no announcements

CONSENT CALENDAR

PUBLIC COMMENT

Dawn Hudley, spoke in support of Item No. 12 and homelessness.

MOTION: Moved by Mayor pro Tem Dorst-Porada, seconded by Council Member Valencia and carried by unanimous vote 4-0, with Council Member Bowman absent, to approve the Consent Calendar as presented.

1. APPROVAL OF MINUTES

Minutes for the special meetings of the City Council and Housing Authority of January 17, 2023, the regular meetings of the City Council and Housing Authority of January 17, 2023, the special meetings of the City Council and Housing Authority of January 19, 2023, and approving same as on file in the Records Management Department.

2. BILLS & PAYROLL

Bills January 20, 2023 through February 9, 2023 in the amount of $28,312,895.45, and Payroll January 15, 2023 through January 28, 2023 in the amount $4,195,158.62, when audited by the Finance Committee.

3. AN AMENDMENT TO THE CONSULTING SERVICES AGREEMENT FOR THE COMPUTER-AIDED DISPATCH (CAD) REPLACEMENT PROJECT

The City Council authorized the City Manager to execute an Amendment to the current Agreement with National Public Safety Group, LLC., of Aberdeen, North Carolina, for consulting services for the selection, procurement, and project management for the computer-aided dispatch (CAD) replacement project for a total not-to-exceed amount of $377,219.

4. A CONSTRUCTION CONTRACT AND TWO AMENDMENTS FOR AUTOMATED WATER METER READING WITH ADVANCED METERING INFRASTRUCTURE TECHNOLOGY

The City Council took the following actions:

A. Approved the plans and specifications and awarded Contract No. UT 1053 to LEED Electric Inc. of Santa Fe Springs, California, for the Automated Water Meter Reading with Advance Metering Infrastructure (AMI) Technology (Phase 1) Project, in the amount of $1,146,700 plus a 15% contingency of $172,005, for a total not-to-exceed amount of $1,318,705, a term of 240 calendar days after issuance of notice to proceed, and authorized the City Manager or designee to execute said contract and file a notice of completion at the conclusion of all construction activities related to the project.
B. Approved and authorized the City Manager, or designee to execute Amendment No. 9 to the Professional Services Agreement with Wallace and Associates Consulting LLC. of Santa Ana, California, for a total not-to-exceed amount of $220,560 for construction management and inspection services and a term from February 21, 2023, to October 1, 2024.
C. Approved and authorized the City Manager, or designee to execute Amendment No. 1 to the Professional Services Agreement with Hazen and Sawyer Co. of Irvine, California, for a total not-to-exceed amount of $137,500 for construction engineering services and a term from February 21, 2023, to October 1, 2024.

5. A RESOLUTION APPROVING AN IMPROVEMENT AGREEMENT, IMPROVEMENT SECURITY AND FINAL PARCEL MAP NO. 20339, LOCATED AT THE SOUTHWEST CORNER OF PALM AVENUE AND TRANSIT STREET

The City Council adopted a Resolution approving an Improvement Agreement, Improvement Security and Final Parcel Map No. 20339, located at the southwest corner of Palm Avenue and Transit Street.

RESOLUTION NO. 2023-009 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING AN IMPROVEMENT AGREEMENT, IMPROVEMENT SECURITY AND FINAL PARCEL MAP NO. 20339 LOCATED AT THE SOUTHWEST CORNER OF PALM AVENUE AND TRANSIT STREET.

6. DOWNTOWN ONTARIO IMPROVEMENT ASSOCIATION ANNUAL REPORT FOR FISCAL YEAR 22-23

The City Council adopted a Resolution approving the Downtown Ontario Improvement Association ("DOIA") Annual Report for FY 22-23.

RESOLUTION NO. 2023-010 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING THE ANNUAL REPORT SUBMITTED BY THE DOWNTOWN ONTARIO IMPROVEMENT ASSOCIATION FOR THE DOWNTOWN ONTARIO COMMUNITY BENEFIT DISTRICT FOR FY 2022-23.

7. AN AMENDMENT TO ON-CALL DESIGN SERVICES AGREEMENT FOR ENGINEERING GRANT SUPPORT SERVICES

The City Council authorized the City Manager, or designee to execute Amendment No. 15 to the On-Call Design Services Agreement with Infrastructure Engineering Co. (IEC) of Irvine, California, for a total not-to-exceed amount of $100,000 for grant support services and a term from May 7, 2019, to May 6, 2024.

8. AN AMENDMENT TO DESIGN SERVICES AGREEMENT WITH HMC ARCHITECTS FOR ON-CALL ARCHITECTURAL, SPACE PLANNING AND ENGINEERING SERVICES FOR THE CITY HALL ANNEX PROJECT

The City Council authorized the City Manager or his designee to execute Amendment No. 2 to the Design Services Agreement with HMC Architects of Ontario, California, to provide On-call Architectural, Space Planning and Engineering Services for the City Hall Annex Project in a total not-to-exceed amount of $3,978,123.

9. A RESOLUTION OF INTENT TO VACATE FERN AVENUE FROM TRANSIT STREET TO EMPORIA STREET

The City Council adopted a Resolution declaring the intent to vacate Fern Avenue from Transit Street to Emporia Street and set the date, time and place for the public hearing.

RESOLUTION NO. 2023-011 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, PERTAINING TO THE VACATION OF FERN AVENUE FROM TRANSIT STREET TOEMPORIA STREET AND TO SET THE DATE, TIME AND PLACE FOR A PUBLIC HEARING.

10. PRE-AUTHORIZED LIST OF VENDORS TO PROVIDE RENTAL EQUIPMENT AND ENTERTAINMENT SERVICES FOR SPECIAL EVENTS

The City Council approved the attached list of pre-authorized vendors to provide rental equipment and entertainment services for the Community Life & Culture Agency.

11. PRE-AUTHORIZED LIST OF VENDORS TO PROVIDE TRANSLATION AND COPY EDITING

The City Council approved the attached list of pre-authorized vendors to provide translation and copy-editing services for the Community Life & Culture Agency.

12. SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT AGREEMENT AUTHORIZING CITY OF ONTARIO TO ENFORCE TRESPASSING AND PARKING VIOLATIONS AT DISTRICT PROPERTY WITHIN THE CITY

The City Council approved San Bernardino County's Flood Control District Agreement which authorizes law enforcement officers and code enforcement officers of the City of Ontario to enforce trespassing and parking violations on Flood Control District property within Ontario's city limits.

13. ADOPTION OF AN ORDINANCE AMENDING THE ONTARIO MUNICIPAL CODE RELATING TO PURCHASING AUTHORITY OF THE CITY MANAGER FOR PUBLIC PROJECTS

The City Council adopted an Ordinance to amend the Ontario Municipal Code to increase the City Manager's spending authority for Public Projects up to a maximum of $150,000. Introduction and first reading took place at a regular City Council meeting on February 7, 2023.

ORDINANCE NO. 3242 AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, AMENDING SECTION 2-6.18(H) OF CHAPTER 6 OF TITLE 2 OF THE ONTARIO MUNICIPAL CODE RELATING TO PURCHASING AUTHORITY OF THE CITY MANAGER FOR PUBLIC PROJECTS.

PUBLIC HEARINGS

14. A PUBLIC HEARING TO CONSIDER A CONDITIONAL USE PERMIT, FILE NO. PCUP22-006, TO ESTABLISH AND OPERATE A 118-ROOM LIMITED-SERVICE HOTEL ON PROPERTY LOCATED AT THE SOUTHEAST CORNER OF CORONA AVENUE AND G STREET (APN: 0110-241-33)

The City Council considered and adopted a Resolution approving File No. PCUP22-006, granting the right to establish and operate a 118-room limited-service hotel (Everhome Suites) on a 2.11-acre portion of the 3.37-acre Project site located at the southeast corner of Corona Avenue and G Street.

RESOLUTION NO. 2023-012 A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PCUP22-006, A CONDITIONAL USE PERMIT TO ESTABLISH AND OPERATE A 118-ROOM, LIMITED-SERVICE HOTEL (EVERHOME SUITES) ON A 2.11-ACRE PORTION OF A 3.37-ACRE PROJECT SITE LOCATED AT THE SOUTHEAST CORNER OF CORONA AVENUE AND G STREET, WITHIN THE CCS (CONVENTION CENTER SUPPORT COMMERCIAL) ZONING DISTRICT, AND MAKING FINDINGS IN SUPPORT THEREOF - APN: 0110-241-33.

Notice of public hearing was duly given and affidavits of compliance are on file in the Records Management Department. There were no written communications.

Mayor Leon opened the public hearing and inquired if anyone was interested in speaking to the item.

Eddie Campos, asked that the developer consider hiring local talent for the development.

Vanessa Hill, spoke in opposition of the item.

Paige Gosney, spoke in support of the item.

Mayor Leon closed the public hearing and opened the item for Council discussion.

Mayor pro Tem Dorst-Porada spoke to the issue of using local workmanship and asked that developer be a good neighbor to the residents of Ontario.

MOTION: Moved by Mayor pro Tem Dorst-Porada, seconded by Council Member Valencia and carried by vote 4-0, with Bowman absent, to adopt Resolution No. 2023-012.

ADMINISTRATIVE REPORTS/DISCUSSION/ACTION

15. A PURCHASE AND SALE AGREEMENT FOR THE ACQUISITION OF REAL PROPERTY LOCATED SOUTH OF RIVERSIDE DRIVE BETWEEN VINEYARD AVENUE AND ONTARIO AVENUE

The City Council took the following actions:

A. Approved a Purchase and Sale Agreement and Joint Escrow Instructions; and
B. Authorized the City Manager or his designee to take any action required to execute any and all documents, amendments, and instruments necessary to implement the Agreement.

MOTION: Moved by Council Member Wapner, seconded by Mayor Leon and carried by vote 4-0, with Bowman absent, to approve the Purchase and Sale Agreement and Joint Escrow Instructions.

STAFF MATTERS

City Manager Ochoa made no comments.

COUNCIL MATTERS

- **A RESOLUTION TO CENSURE A COUNCIL MEMBER**

City Attorney Duran provided introductory comments, noting that the Mayor and Council Members are authorized to initiate sanctions or other actions, including a formal censure, when the Mayor or a majority of the City Council believes that a Council Member has violated City Council Rules of Conduct. As a result of the Mayor's concern, City Attorney Duran requested the item be added to the agenda for discussion.

Mayor Leon inquired if anyone was interested in speaking to the matter.

Council Member Valencia recused himself from the dais and sat in the audience.

Cory Briggs, announced he was the legal representative for Council Member Valencia and expanded on his records request to include emails, voicemails, and text messages between and among Council Members related to this topic.

Maria Galvan, spoke in opposition of censuring Council Member Valencia.

Mayor Leon expressed his desire to add the item to the agenda to begin the process of censuring Council Member Valencia. Mayor Leon explained that adding the item to a future agenda was the first step in the process and that his concerns were related to City representation during a recent trip to Guamuchi, Mexico.

ADJOURNMENT

Mayor Leon adjourned the meetings of the Joint Agencies at 7:31 p.m. and announced the next regular meeting on March 7, 2023.

Respectfully submitted,

_____
SHEILA MAUTZ, CITY CLERK/SECRETARY

APPROVED:

_____
PAUL S. LEON, MAYOR/CHAIRMAN

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Financial Services Prepared By: Cecilia House Staff Member Presenting: Armen Harkalyan, Executive Director of Finance Reviewed By: Cecilia House, Armen Harkalyan Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 3

SUBJECT: **APPROVAL OF A PRE-AUTHORIZED LIST OF SOLE-SOURCE VENDORS TO PROVIDE SPECIAL TAX CONSULTING AND LEGAL SERVICES FOR THE CITY OF ONTARIO COMMUNITY FACILITIES DISTRICTS**

RECOMMENDATION: That the City Council approve the request for a pre-authorized Sole Source list of vendors for the City's bond financing team for future Community Facility District (CFD) formations and bond issues for a maximum term of two years.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

FISCAL IMPACT: There is no fiscal impact to the General Fund associated with the proposed preauthorized list for services related to CFD formations and Bond Issuances. Individual developers will fund the cost of formation services and costs associated with bond issuance will be funded with bond proceeds at the time of issuance. Other related services for projects not included in the Developers' deposits are included in the Adopted Fiscal Year 2022-23 Operating Budget. Because each vendor has different levels of involvement in the CFD formation and Bond Issuance process, the not-to-exceed amount will be set for each Agreement.

BACKGROUND & ANALYSIS:

On November 16, 2021, the City Council approved a preauthorized list of sole source vendors for a Bond Formation and Financing Team for the Ontario Ranch development. With the expected continued growth in Ontario Ranch, and potential projects in the Old Model Colony the City will need to continue CFD formations, bond financing, legal services, investment banking, and other related services.

Bond and Disclosure Counsel:

- Orrick, Herrington & Sutcliffe, LLP of Los Angeles, CA (not to exceed annual amount $450,000)

Special Tax Consultants:

- Goodwin Consulting Group of Sacramento, CA (not to exceed annual amount $500,000)
- Harris and Associates Corporation of Irvine, CA (not to exceed annual amount $55,000)

Real Estate Economists:
- Empire Economics, Inc. of Capistrano Beach, CA (not to exceed annual amount $50,000)

Financial Advisors:
- CSG Advisors of San Francisco, CA (not to exceed annual amount $175,000)

The City is currently working with the firms listed below to set up agreements for Investment Banking, Bond Disclosure Counsel and Real Estate Appraisal.

Investment Banking:
- Stifel, Nicolaus & Company, Incorporated of San Francisco, CA
- Samuel A. Ramirez & Co, Incorporated of Los Angeles, CA

Bond and Disclosure Counsel:
- Stradling, Yocca Carlson & Rauth of Newport Beach, CA

Real Estate Appraisal:
- Kitty Siino & Associates of Tustin, CA

The firms that have been approved for the City's CFD formation and bond issuance team have significant experience in CFD formations and municipal bond financing. They are familiar with the City's community facilities structure, district's local goals and policies, and the City's outstanding debt term obligations. The future selection of the specific CFD formations and bond issuance team members to participate in particular financings will be determined on a case-by-case basis dependent upon the project's specific needs and other circumstances existing at the time of formation and bond issuance. The recommendations to include the CFD formations, bond issuance, investment banking, legal, and related service providers as proposed are based on the following factors:
- Experience with municipal bonds;
- Staff qualifications;
- High quality of past performance with the City;
- Exceptional customer service;
- Competitiveness of fees;

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Police Department Prepared By: Matthew Hernandez Staff Member Presenting: Mike Lorenz, Chief of Police Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 4

SUBJECT: ACCEPT AND APPROVE LAW ENFORCEMENT EQUIPMENT GRANT PROGRAM ADDITIONAL AWARD FOR FISCAL YEAR 2020-21

RECOMMENDATION: That the City Council authorize the City Manager or his designee to execute all documents necessary to accept and approve the Citizen's Option for Public Safety (COPS) / Enhancing Law Enforcement Activities Subaccount (ELEAS) Grant for Fiscal Year 2020-21.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Maintain the Current High Level of Public Safety
Pursue City's Goals and Objectives by Working with Other Governmental Agencies

FISCAL IMPACT: Council previously approved the acceptance of the COPS/ELEAS grant program for fiscal year 2020-21 on January 19, 2021 in the amount of $277,795. The program has since awarded the City an additional $170,287 reallocated from actuals received from the State's Vehicle License Fee (VLF) revenues for Fiscal Year 2020-21. If approved, the associated revenue and expenditure adjustments in the Grants Fund will be presented to Council as part of the Year End budget report.

BACKGROUND & ANALYSIS: Beginning in FY 2002-03, the State of California allocated grant monies (COPS/ELEAS), formerly known as Supplemental Law Enforcement Services Fund/Citizen's Option for Public Safety to counties. The County granted those monies to cities for the purpose of supporting front-line law enforcement needs. The California State Department of Finance later announced the actual funding allocation amounts to be awarded to each participating agency under the COPS/ELEAS grant program. The City of Ontario is receiving an additional award of $170,287. If approved, the associated revenue and expenditure adjustments will be presented as part of the Year-End budget report to the City Council.

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Development Administration Prepared By: Derrick E Womble Staff Member Presenting: Scott Murphy, Executive Director Community Development Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 5

SUBJECT: **A DEVELOPMENT IMPACT FEE CREDIT AGREEMENT (FILE NO. PDIF21-004) BETWEEN THE CITY OF ONTARIO AND ONTARIO CC 2.0, LLC, FOR FACILITY CONSTRUCTION ASSOCIATED WITH PARCEL MAP NO. 20027, LOCATED NEAR THE SOUTHWEST CORNER OF HAMNER AVENUE AND RIVERSIDE DRIVE, WITHIN THE EDENGLEN SPECIFIC PLAN**

RECOMMENDATION: That the City Council approve the Development Impact Fee Credit Agreement (File No. PDIF21-004) between the City of Ontario and Ontario CC 2.0, LLC, for facility construction associated with Parcel Map No. 20027, located near the southwest corner of Hamner Avenue and Riverside Drive, within the Edenglen Specific Plan, and authorize the City Manager to execute the Agreement.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)
Ensure the Development of a Well Planned, Balanced, and Self-Sustaining Community in Ontario Ranch

FISCAL IMPACT: Approval of the proposed Development Impact Fee ("DIF") Credit Agreement (File No. PDIF21-004) will result in no fiscal impact to the City's General Fund. The project's Development Agreement (File Nos. PDA18-006) and related Conditions of Approval (COA) for the parcel map, require Ontario CC 2.0, LLC, ("Developer") to construct DIF Program infrastructure with an estimated cost of $11,180,499. The proposed DIF Credit Agreement defines the amount of DIF Credit that the Developer may be eligible to receive for construction of these improvements. The DIF Credit that the Developer will receive upon completion of the improvements may be exchanged for a refund of DIF that was paid by the Developer (up to the Developer's maximum DIF obligation) in the respective DIF category.

BACKGROUND & ANALYSIS: On February 16, 2021, the City Council adopted Ordinance No. 3179, approving a Development Agreement to establish the terms and conditions for the development of

Parcel Map 20027 (File No. PMTT18-009) within the Edenglen Specific Plan.

Per the Development Agreement and COA, the Developer is required to construct DIF Program infrastructure to serve the project. This includes the construction and completion of storm drain, street improvements, traffic signals, water, recycled water, sewer, and fiber optic facilities generally located along Riverside Drive, Hamner Avenue, and Chino Avenue within the Edenglen Specific Plan development area.

Pursuant to the City's adopted DIF Credit policies, construction of DIF Program facilities requires the Developer and the City to enter into a DIF Credit Agreement ("Agreement"). The terms of the proposed Agreement specify the defined portion of the infrastructure to be constructed by the Developer in the Local Adjacent or Regional DIF categories and includes an estimate of the maximum DIF Credit (not reimbursement) that may be applied in the respective Local Adjacent or Regional DIF category. This infrastructure is within Ontario Ranch Local Adjacent Storm Drain, Streets, Water, Sewer and Fiber Optic System categories. Since the maximum eligible costs in the Agreement for the required infrastructure exceeds the Developer's DIF obligation, the Developer is eligible to receive DIF Credit under the proposed Agreement.

The proposed Agreement complies with the City's DIF policies and is in conformance with the approved Development Agreements and related COAs. Under the provisions of the City's DIF Program, the City Manager is authorized to execute such Agreements upon approval by the City Council.

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Economic Development Prepared By: Charity Hernandez Staff Member Presenting: Jennifer McLain Hiramoto, Economic Development Director Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 6

SUBJECT: REAL PROPERTY EXCHANGE BETWEEN THE CITY OF ONTARIO AND THE DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION

RECOMMENDATION: That the City Council adopt a Resolution:

A. Declaring certain City-owned real property to be exempt surplus land;
B. Approving a real property exchange agreement with the Diocese of San Bernardino Education and Welfare Corporation;
C. Authorizing the City Manager to take all actions necessary with respect thereto; and
D. Finding that no further CEQA analysis is necessary

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Focus Resources in Ontario's Commercial and Residential Neighborhoods

FISCAL IMPACT: As the exchange of real property is an even exchange, there is no direct fiscal impact.

BACKGROUND & ANALYSIS: In November of 2021, the City of Ontario ("City") acquired two vacant parcels from Frontier Communications located at 206 West D Street and 221 West E. Street ("City-Exchange Properties") for future expansion of multi-family residential development it the area. The Diocese of San Bernardino Education and Welfare Corporation ("Diocese") owns property located at 315 West D Street and 325 North Palm Avenue (Diocese-Exchange Prop"), in close proximity to the City owned property. In 2022, the Diocese expressed interest to the City to utilize City-owned property for the purpose of having parking located in closer proximity to its facilities. The City and Diocese have agreed to exchange properties.

On December 19, 2022, the Planning Commission adopted Resolution No. PC22-066 finding that the proposed uses of the properties are consistent with the General Plan.

The proposed transfer and acquisition of the properties is in the City's best interest because it achieves the City's goals of developing new multi-family housing, attracting workforce population to the downtown area, removing blight, activating underutilized assets in the City. It also supports the interests of the Diocese, which has been a good-standing property owner in Downtown Ontario.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, (I) DECLARING CERTAIN CITY-OWNED REAL PROPERTY TO BE EXEMPT SURPLUS LAND; (II) APPROVING A REAL PROPERTY EXCHANGE AGREEMENT WITH THE DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION**;** (III) AUTHORIZING THE CITY MANAGER TO TAKE ALL ACTIONS NECESSARY WITH RESPECT THERETO; AND (IV) FINDING THAT NO FURTHER CEQA ANALYSIS IS NECESSARY.

WHEREAS, the City of Ontario (the "City") owns in fee simple the real property located at 206 West "D' Street and 221 West "E" Street, APNs: 1048-353-13 and 1048-353-14, (together, the "City-Exchange Properties"); and

WHEREAS, the Diocese of San Bernardino Education and Welfare Corporation ("Diocese") desires to acquire the City-Exchange Properties; and

WHEREAS, the City is willing to convey the City-Exchange Properties in exchange for certain real property owned in fee simple by the Diocese located at 315 West "D" Street and 325 North Palm Avenue, APNs 1048-576-01 and 1048-576-02, (together, the "Diocese-Exchange Properties"), pursuant to the terms and conditions of that certain Real Property Exchange Agreement and Joint Escrow Instructions, a form of which is attached hereto as Exhibit A (the "Agreement"); and

WHEREAS, the City desires to acquire the Diocese-Exchange Properties for future redevelopment purposes; and

WHEREAS, the City-Exchange Properties are not necessary for the City's use; and

WHEREAS, the City has determined that, pursuant to Government Code sections 37350 and 37351, exchanging the City-Exchange Properties for the Diocese-Exchange Properties according to the terms and conditions of the Agreement is for the common benefit and in the best interests of the City and its residents.

WHEREAS, on December 19, 2022, pursuant to Government Code section 65402, the Planning Commission adopted Resolution No. PC22-066 finding that the proposed disposition of the City-Exchange Properties, pursuant to the terms of the Agreement, is consistent with the City's General Plan.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Ontario as follows:

SECTION 1. Recitals. The above recitals are true and correct and incorporated into this Resolution by reference.

SECTION 2. Finding of Exemption from Surplus Land Act. The City hereby finds that the City-Exchange Properties are exempt surplus land pursuant to Section 54221(f)(1)(C) of the Surplus Land Act (Government Code section 54220 *et seq.*) (the "Act"), because they are part of an exchange of real property between the City and the Diocese, and the land to be received by the City from the Diocese is necessary for the City's use.

SECTION 3. Approval of Agreement. The City Council hereby approves the Agreement in substantially the form attached hereto as Exhibit A and on file with the City Clerk, together with such additions thereto and changes therein as the City Attorney shall deem necessary, desirable or appropriate, the execution of which by the City Manager shall be conclusive evidence of the approval of any such additions and changes.

SECTION 4. City Manager Authorization. The City Manager is hereby authorized and directed to execute, and the City Clerk is hereby authorized and directed to attest to the final form of the Agreement for and in the name and on behalf of the City. The City Council hereby authorizes the delivery and performance of the Agreement. The City Manager and his designees are hereby authorized and directed to do any and all things, to execute and deliver any and all documents, which, in consultation with staff and the City Attorney, they may deem necessary or advisable in order to effectuate the purposes of this Resolution, and any such actions previously taken by such officers are hereby ratified and confirmed.

SECTION 5. CEQA. The California Environmental Quality Act (Pub. Res. Code § 21000 *et seq.*) ("CEQA") does not apply here, because declaration of the City-Exchange Properties as exempt surplus land under the Act and approval of the Agreement does not constitute a "project" as defined in Cal. Code Regs. tit. 14 ("CEQA Guidelines") § 15378, in that such actions, taken as a whole, have no "potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment." In the alternative, even if such actions constitute a "project," they are exempt under CEQA Guidelines § 15061(b)(3), because they have no "potential for causing a significant effect on the environment."

SECTION 6. Effective Date. This Resolution shall take effect upon adoption.

The City Clerk of the City of Ontario shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 21st day of March 2023.

_____

PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER, LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2023- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held March 21, 2023, by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2023- duly passed and adopted by the Ontario City Council at their regular meeting held March 21, 2023.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

CITY OF ONTARIO

303 EAST B STREET | ONTARIO, CALIFORNIA 91764

(909) 395-2000 FAX (909) 395-2070 OntarioCA.gov

PAUL S. LEON
MAYOR

DEBRA PORADA
MAYOR PRO TEM

ALAN D. WAPNER
JIM W. BOWMAN
RUBEN VALENCIA
COUNCIL MEMBERS

SHEILA MAUTZ
CITY CLERK

JAMES R. MILHISER
TREASURER

SCOTT OCHOA
CITY MANAGER

AGREEMENT FOR THE EXCHANGE OF REAL PROPERTY AND JOINT ESCROW INSTRUCTIONS

THIS AGREEMENT FOR THE EXCHANGE OF REAL PROPERTY AND JOINT ESCROW INSTRUCTIONS (this "**Agreement**") is made as of this 21st day of March, 2023 ("**Effective Date**"), by and between the **CITY OF ONTARIO**, a municipal corporaton ("**City**"), and **DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION,** a California nonprofit corporation ("**Diocese**"). City and Diocese are sometimes referred to herein individually as a "**Party**" and collectively as the "**Parties.**"

RECITALS

A. WHEREAS, City is the owner of that certain real property generally located in the City of Ontario, County of San Bernardino, California (APN's 1048-353-13; 1048-353-14) ("**City Property**").

B. WHEREAS, the Diocese is the owner of that certain real property generally located adjacent to the westerly line of the Property, located in the County of San Bernardino, California (APN's 1048-576-01, 1048-576-02) (the "**Diocese Property**").

C. WHEREAS, City desires to exchange approximately 1.3 acres of the City Property, as more particularly described in Exhibit "A" attached hereto (the "**City Exchange Property**") with the Diocese for approximately 1.205 acres of the Diocese Property, as more particularly described in Exhibit "B" attached hereto (the "**Diocese Exchange Property**").

D. WHEREAS, City desires to transfer the City Exchange Property to the Diocese for governmental use, and the Diocese desires to transfer the Diocese Exchange Property to the City for governmental use, pursuant to the terms and conditions of this Agreement.

NOW, THEREFORE, based upon the foregoing facts, in consideration of the mutual covenants and agreements contained in this Agreement, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Parties hereby agree as follows:

1. Transfer of Properties. Upon the satisfaction or waiver of all of the conditions precedent to the Close of Escrow set forth in Section 5 below, (a) City shall acquire the Diocese

Exchange Property from the Diocese, and (b) the Diocese shall acquire the City Exchange Property from City (the "**Exchange**").

2. Escrow and Title.

2.1. Escrow Holder. The Exchange shall be consummated through an escrow (the "**Escrow**") at Fidelity National Title Company, located at 3237 E. Guasti Road, Suite 105, Ontario, CA 91761, escrow officer Jennifer Riddle (the "**Escrow Holder**").

2.2. Title Company. Any title policies issued to the Diocese with respect to the City Exchange Property and to City with respect to the Diocese Exchange Property, respectively, in connection with the Exchange shall be issued by Fidelity National, located at 4210 Riverwalk Parkway, Suite 100, Riverside, CA 92505, title officer Andrew Margo (the "**Title Company**").

2.3. Escrow Instructions. Escrow shall be opened within three (3) days following the execution of this Agreement by delivery to Escrow and acceptance of this Agreement by Escrow Holder in writing. Escrow Holder shall open an Escrow for the consummation of the Exchange pursuant to the terms of this Agreement and this Agreement shall constitute the joint escrow instructions of the Parties to Escrow Holder. Upon Escrow Holder's receipt of the fully executed Agreement, Escrow Holder is authorized to act in accordance with the terms of this Agreement. City and the Diocese shall execute Escrow Holder's general escrow instructions upon request; provided, however, that if there is any conflict or inconsistency between such general escrow instructions and this Agreement, this Agreement shall control.

2.4. Definition of Close of Escrow. For purposes of this Agreement, the term "**Close of Escrow**" shall mean the time when Escrow Holder shall have recorded the Grant Deeds as set forth in Section 6.4.

2.5. Preliminary Title Report. Within (10) business days following the Effective Date, the Diocese and City shall cause the Escrow Holder to deliver a current preliminary title report for the Diocese Exchange Property and the City Exchange Property to each entity at the addresses listed in Section 13.1. The preliminary title reports shall show the status of title to the respective properties as of the date of the preliminary title reports and be accompanied by copies of all documents referred to on Schedule B of the preliminary title reports (individually referred to as either the "**Diocese Exchange Property Report**" or "**City Exchange Property Report**").

2.6 **Consideration.** Within three (3) days following the Effective Date, Diocese shall deposit into Escrow the amount of Ten Dollars ($10.00) ("**Consideration**") in cash or other immediately available funds. Notwithstanding anything herein to the contrary, the Consideration shall be non-refundable, independent consideration and paid to City within 3 days of the Effective Date. The Consideration shall serve as consideration for the granting of the time periods herein contained for Diocese to exercise Diocese's right to satisfy and approve all of Diocese's conditions herein contained.

3. City's Approval of Condition of Title; Due Diligence.

3.1. Review of Condition of Title. City shall have fifteen (15) days from the receipt of the Diocese Exchange Property Report provided pursuant to Section 2.5 to give the Diocese and Escrow Holder written notice of its approval of the Diocese Exchange Property

Report or the disapproval of any title exception that is unacceptable to City. Those exceptions which City has approved on the Diocese Exchange Property Report are hereinafter referred to as the "**Diocese Exchange Property Permitted Exceptions**." The Diocese Exchange Property Permitted Exceptions shall exclude any delinquent taxes or any taxes due and payable prior to the Close of Escrow and/or any and all other monetary liens or encumbrances on the Diocese Exchange Property.

3.2. Diocese Exchange Property Title Insurance Policy. At the option of City, and upon City's request, at the Close of Escrow and as a condition thereto, the Title Company shall issue to City a policy of title insurance (the "**Diocese Exchange Property Title Policy**") as to the Diocese Exchange Property, containing the terms and provisions set forth in this Section 3.2. The Diocese Exchange Property Title Policy shall be an ALTA Standard Coverage Owner's Policy of Title Insurance issued by the Title Company in an amount determined by City, showing fee simple title to the Diocese Exchange Property vested in City, subject only to non-delinquent taxes and assessments, the Diocese Exchange Property Permitted Exceptions, and such other matters as to which City may consent in writing. The premium for the Diocese Exchange Property Title Policy and any costs in connection with the search and examination of title and/or for the issuance of the Diocese Exchange Property Report shall be paid by City. The Diocese Exchange Property Title Policy shall be issued without reliance on any indemnity of the Diocese or any third party to induce Title Company to issue the Diocese Exchange Property Title Policy, without the prior written consent of City. If City so elects and the Title Company agrees, the Diocese Exchange Property Title Policy may include such endorsements as City may reasonably request; provided however that all such endorsements shall be issued at City's sole cost and expense. In addition, if City so elects and the Title Company agrees to issue an ALTA Extended Coverage Owner's Policy (2006 Form), the Diocese Exchange Property Title Policy as defined above shall be an ALTA Extended Coverage Policy rather than a ALTA Standard Coverage Policy, with all other elements remaining the same; provided however that such ALTA Extended coverage shall be issued at City's sole cost and expense.

3.3. Due Diligence. Commencing on the Effective Date and for thirty (30) days thereafter ("**Due Diligence Period**"), the City shall complete all of its due diligence investigations of the Diocese Exchange Property to determine the suitability of the properties for the City, at City's sole cost and expense ("**Due Diligence Investigations**"). City shall rely solely and exclusively upon the results of its Due Diligence Investigations. The Diocese makes no representation or warranty to the City relating to the condition of the Diocese Exchange Property or suitability of the Diocese Exchange Property for any intended use by the City.

3.4. City's Right to Cancel. Until the expiration of the Due Diligence Period, City will have the unconditional right to cancel this Agreement by giving written notice to the Diocese and Escrow Holder of cancellation at or prior to the expiration of the Due Diligence Period. If City timely elects to cancel this Agreement, Escrow Holder will immediately cancel the escrow, and neither City nor the Diocese will have any further obligations under this Agreement, other than those obligations that expressly survive the termination of this Agreement.

3.5. Right of Entry. During the period from and after the Opening Date of Escrow and continuing until the Closing, City may enter upon the Diocese Exchange Property upon at least forty-eight (48) hours prior written notice to the Diocese with the Diocese's

representatives and agents for the purpose of examining the Diocese Exchange Property, provided such examinations do not interfere with the activities of the Diocese on the Diocese Exchange Property; provided, however, if City proposes to make any tests in connection with any environmental report or any other tests which involve drilling, boring or other similar intrusive or invasive action on or under the Diocese Exchange Property, then City shall obtain the Diocese's written consent prior to making any such tests. City shall use care and consideration in connection with any of its examinations or tests and the Diocese shall have the right to be present during any examination of the Diocese Exchange Property by City or its agents. City shall restore the Diocese Exchange Property to its original condition after any and all tests and/or examinations. City shall indemnify and hold the Diocese harmless from any and all losses, liabilities, costs, claims, damages, judgments, actions, proceedings, penalties, liens or expenses of any kind or nature whatsoever resulting or arising from City or its representatives', contractors', employees' and/or agents' entry and activities upon the Diocese Exchange Property, which obligation shall survive the expiration or earlier termination of this Agreement and the Close of Escrow. Prior to any entry upon the Diocese Exchange Property by City or City's agents, contractors, subcontractors or employees and at all times prior to the Closing, City shall obtain and maintain commercial general liability insurance with a financially responsible insurance company covering the activities of City and City's agents, contractors, subcontractors and employees on or upon the Diocese Exchange Property.

4. Diocese's Approval of Condition of Title; Due Diligence.

4.1. Diocese's Review of Condition of Title. Diocese shall have fifteen (15) days from the receipt of the City Exchange Property Report to give City and Escrow Holder written notice of its approval of the City Exchange Property Report or the disapproval of any title exception that is unacceptable to the Diocese. Those exceptions which the Diocese has approved on the City Exchange Property Report are hereinafter referred to as the "**City Exchange Property Permitted Exceptions**." The City Exchange Property Permitted Exceptions shall exclude any delinquent taxes or any taxes due and payable prior to the Close of Escrow and any other monetary liens or encumbrances on the City Exchange Property.

4.2. City Title Insurance Policy. At the option of the Diocese, and upon the Diocese's request, at the Close of Escrow and as a condition thereto, the Title Company shall issue to the Diocese a policy of title insurance (the "**City Exchange Property Title Policy**") as to all or part of the City Exchange Property, containing the terms and provisions set forth in this Section 4.2. The City Exchange Property Title Policy shall be an ALTA Standard Coverage Owner's Policy of Title Insurance issued by the Title Company in an amount determined by the Diocese, showing fee simple title to the City Exchange Property, vested in the Diocese, subject only to non-delinquent taxes and assessments, the City Exchange Property Permitted Exceptions, and such other matters as to which the Diocese may consent in writing. The premium for the City Exchange Property Title Policy and any costs in connection with the search and examination of title and/or for the issuance of the City Exchange Property Report shall be paid by the Diocese. The City Exchange Property Title Policy shall be issued without reliance on any indemnity of City or any third party to induce Title Company to issue the City Exchange Property Title Policy, without the prior written consent of the Diocese. If the Diocese so elects and the Title Company agrees, the City Exchange Property Title Policy may include such endorsements, respectively and as applicable, as the Diocese may reasonably request; provided however that all such endorsements shall be issued at the Diocese's sole cost and expense. In addition, if the Diocese so elects and the Title Company agrees to issue one or more ALTA Extended Coverage Owner's

Policy (2006 Form), the "**City Exchange Property Title Policy**" as defined above shall be an ALTA Extended Coverage Policy rather than an ALTA Standard Coverage policies, with all other elements remaining the same; provided however that such extended ALTA Extended coverage shall be issued at the Diocese's sole cost and expense.

4.3. Due Diligence. Commencing on the Effective Date and for thirty (30) days thereafter ("**Due Diligence Period**"), the Diocese shall complete all of its due diligence investigations of the City Exchange Property to determine the suitability of the properties for the Diocese, at the Diocese's sole cost and expense ("**Due Diligence Investigations**"). The Diocese shall rely solely and exclusively upon the results of their respective Due Diligence Investigations. City makes no representation or warranty to the Diocese relating to the condition of the City Exchange Property or suitability of the City Exchange Property for any intended use by the Diocese.

4.4. Diocese's Right to Cancel. Until the expiration of the Due Diligence Period, the Diocese will have the unconditional right to cancel this Agreement by giving written notice to City and Escrow Holder of cancellation at or prior to the expiration of the Due Diligence Period. If the Diocese timely elects to cancel this Agreement, Escrow Holder will immediately cancel the escrow, and neither City nor the Diocese will have any further obligations under this Agreement, other than those obligations that expressly survive the termination of this Agreement.

4.5. Right of Entry. During the period from and after the Opening Date of Escrow and continuing until the Closing, the Diocese may enter upon the City Exchange Property upon at least forty-eight (48) hours prior written notice to City with City's representatives and agents for the purpose of examining the City Exchange Property, provided such examinations do not interfere with the activities of City on the City Exchange Property; provided, however, if the Diocese proposes to make any tests in connection with any environmental report or any other tests which involve drilling, boring or other similar intrusive or invasive action on or under the City Exchange Property, then the Diocese shall obtain City's written consent prior to making any such tests. The Diocese shall use care and consideration in connection with any of its examinations or tests and City shall have the right to be present during any examination of the City Exchange Property by Diocese or its agents. The Diocese shall restore the City Exchange Property to its original condition after any and all tests and/or examinations. The Diocese shall indemnify and hold City harmless from any and all losses, liabilities, costs, claims, damages, judgments, actions, proceedings, penalties, liens or expenses of any kind or nature whatsoever resulting or arising from the Diocese or its representatives', contractors', employees' and/or agents' entry and activities upon the City Exchange Property, which obligation shall survive the expiration or earlier termination of this Agreement and the Close of Escrow. Prior to any entry upon the City Exchange Property by the Diocese or its agents, contractors, subcontractors or employees and at all times prior to the Closing, each entity shall obtain and maintain commercial general liability insurance with a financially responsible insurance company covering the activities of their respective agents, contractors, subcontractors and employees on or upon the City Exchange Property.

5. Conditions Precedent to Close of Escrow.

5.1. City's Conditions. Each of the following shall constitute a condition precedent to the obligations of City to close the Escrow and may be waived only by a written waiver executed by City and delivered to the Diocese and to Escrow Holder:

Documents. The applicable documents described in Section 6.3 shall have been deposited in Escrow by the Diocese.

Title Policy. If requested by City, the Title Company shall be irrevocably committed to issue the Diocese Exchange Property Title Policy upon the Close of Escrow.

No Material Change. As of the Close of Escrow, there shall be no material change in the Diocese Exchange Property that would materially impair City's use or development of the Diocese Exchange Property.

Representations and Warranties. All of the Diocese's representations and warranties as set forth herein shall be true as of the Close of Escrow.

No Default. The Diocese shall not be in material default hereunder. If City does not give Escrow Holder written notice of the Diocese's default, for purposes of this Section 5.1 only, the Diocese shall be deemed not to be in default hereunder, and Escrow Holder shall proceed with the Close of Escrow as though the Diocese were not in default. City's failure to give such notice to Escrow Holder shall not excuse performance by the Diocese of any obligation hereunder.

5.2. Diocese's Conditions. Each of the following shall constitute a condition precedent to the obligations of the Diocese to close the Escrow and may be waived only by a written waiver executed by the Diocese and delivered to City and to Escrow Holder:

Documents. The applicable documents described in Section 6.3 shall have been deposited in Escrow by City.

Title Policy. If requested by the Diocese, the Title Company shall be irrevocably committed to issue the City Exchange Property Title Policy upon the Close of Escrow.

No Material Change. As of the Close of Escrow, there shall be no material change in the City Exchange Property that would materially impair the Diocese's use or development of the City Exchange Property.

Representations and Warranties. All of City's representations and warranties as set forth herein shall be true as of the Close of Escrow.

No Default. City shall not be in material default hereunder. If the Diocese does not give Escrow Holder written notice of City's default, for purposes of this Section 5.2 only, City shall be deemed not to be in default hereunder, and Escrow Holder shall proceed with the Close of Escrow as though City were not in default. The Diocese's failure to give such notice to Escrow Holder shall not excuse performance by City of any obligation hereunder.

5.2.6. No Structures. There shall be no structures on the City Exchange

Property.

6. Close or Cancellation of Escrow.

6.1. Closing Date.

Provided that this Agreement is not earlier terminated pursuant to the terms and provisions hereof and provided that all of the conditions precedent to the Close of Escrow have been satisfied or waived, the Parties agree that the Escrow shall close and Escrow Holder is instructed to close the Escrow on the date that is thirty (30) days after the expiration of all Due Diligence Periods (as defined in Section 3.3 and Section 4.3), (the "**Closing Date**"), unless extended as described in Section 6.1; provided however, that in no event shall the Closing Date be later than June 30, 2023 ("**Outside Closing Date**"). Escrow Holder by closing the Escrow shall be deemed to have irrevocably committed to cause the Title Company to issue any requested City Exchange Property Title Policy and the Diocese Exchange Property Title Policy.

In the event that either Party believes it is necessary to extend the Closing Date, that Party shall have the right to unilaterally extend the Closing Date by ten (10) days by providing written notice to the other Party before the Closing Date. Each Party shall only be entitled to one unilateral extension. The Parties may subsequently extend the Closing Date only by written agreement of both Parties, except that in no event shall the Closing Date be later than the Outside Closing Date without the written agreement of both Parties.

In the event that the Close of Escrow fails to occur by the Outside Closing Date, and neither Party is in default of its obligations hereunder, then the Party for whose benefit the non-satisfied condition exists may cancel the Escrow by written notice to the other Party and to Escrow Holder. In the event that, due to an "**Event of Default**" by a "**Defaulting Party**" (as the quoted terms are defined in Section 9.1 below), the Close of Escrow fails to occur by the Outside Closing Date, then without waiving any rights or remedies which the non-Defaulting Party may have against the Defaulting Party under Section 9, the non-Defaulting Party may cancel the Escrow upon written notice to the Defaulting Party and to Escrow Holder. In the event that the non-Defaulting Party elects not to terminate this Agreement, then the non-Defaulting Party may pursue the remedies for such Event of Default as provided in Section 9.

6.2. Escrow Cancellation.

If, for any reason, the Escrow is cancelled pursuant to Section 6.1, Escrow Holder shall return to the Parties delivering same all instruments which are then held by Escrow Holder in connection with the Escrow.

If the Escrow is cancelled pursuant to Section 6.1 and neither Party is in default of its obligations hereunder, this Agreement shall be deemed to be terminated (with the exception of those provisions which expressly state that they are to survive such termination), and City and the Diocese shall each bear one-half (1/2) of the title and Escrow fee and cancellation charges, if any. In such event, neither Party shall be obligated to the other to close the Escrow hereunder.

If the Escrow is cancelled pursuant to Section 6.1 and City is the Defaulting Party, City shall pay the Escrow fee and cancellation charges.

If the Escrow is cancelled pursuant to Section 6.1 and the Diocese is the Defaulting Party, the Diocese shall pay the Escrow fee and cancellation charges.

6.3. Items to be Delivered into Escrow.

City. On or before one (1) business day prior to the Closing Date, City shall execute and deposit in Escrow the following:

(a) Immediately available funds in the amount of City's share of costs and prorations described in Sections 7.1;

(b) A fully executed grant deed conveying fee simple title to the City Exchange Property to the Diocese (the "**City Grant Deed**"), in the form of Exhibit "E" attached hereto, in recordable form;

(c) A nonforeign transferor declaration (the "**Nonforeign Transferor Declaration**") in the form of Exhibit "G" attached hereto;

(d) A California state tax withholding certificate in accordance with the requirements of California Revenue and Taxation Code Sections 18805(d) and 26131 (California Form 593-W for Non-Individual Sellers and California Form 593-C for Individual Sellers), executed by City (the "**City California Tax Certificate**"); and

(e) Such other documents as may be reasonably required by Title Company or Escrow Holder in order to issue one or more of the City Exchange Property Title Policy, if requested by the Diocese, or otherwise required to transfer the City Exchange Property to the Diocese in accordance with the terms of this Agreement.

Diocese. On or before one (1) business day prior to the Closing Date, the Diocese shall execute and deposit in Escrow the following:

(f) Immediately available funds in the amount of the Diocese's share of costs and prorations described in Sections 7.2;

(g) A fully executed grant deed conveying fee simple title to the Diocese Exchange Property to City (the "**Diocese Grant Deed**"), in the form of Exhibit "F" attached hereto, in recordable form;

(h) A nonforeign transferor declaration (the "**Nonforeign Transferor Declaration**") in the form of Exhibit "G" attached hereto;

(i) A California state tax withholding certificate in accordance with the requirements of California Revenue and Taxation Code Sections 18805(d) and 26131 (California Form 593-W for Non-Individual Sellers and California Form 593-C for Individual Sellers), executed by the Diocese (the "**Diocese California Tax Certificate**"); and

(j) Such other documents as may be reasonably required by Title Company or Escrow Holder in order to issue the Diocese Exchange Property Title Policy, if requested, or otherwise required to transfer the Diocese Exchange Property to City in accordance with the terms of this Agreement.

6.4. Escrow Holder's Instructions. At such time as the conditions precedent to the Close of Escrow have been satisfied or waived, Escrow Holder shall:

Collate the counterparts of the Exchange Agreement into two fully executed counterparts;

Date, as of the Close of Escrow, all instruments calling for a date;

Record the City Grant Deed and the Diocese Grant Deed in the Official Records of San Bernardino County, California ("**Official Records**");

Give the Diocese and City written notice that the Close of Escrow has occurred; and

Deliver to the Diocese the City Exchange Property Title Policy, and to City the Diocese Exchange Property Title Policy, if so requested.

6.5. Post-Closing Matters. After the Close of Escrow, Escrow Holder shall deliver the following:

To the Diocese: A copy, as recorded, of the City Grant Deed for the City Exchange Property, the original Nonforeign Transferor Declaration executed by City, the original City California Tax Certificate executed by City, and plain copies of the Nonforeign Transferor Declaration and the Diocese California Tax Certificate executed by the Diocese.

To City: A copy, as recorded, of the Grant Deed for the Diocese Exchange Property, the original Nonforeign Transferor Declaration executed by the Diocese, the original the Diocese California Tax Certificate executed by the Diocese, and plain copies of the Nonforeign Transferor Declaration and the City California Tax Certificate executed by City.

6.6. IRS Form 1099-S. For purposes of complying with Section 6045 of the Internal Revenue Code, as amended by Section 1521 of the Tax Reform Act of 1986, Escrow Holder shall be deemed the "person responsible for closing the transaction," and shall be responsible for obtaining the information necessary to file and shall file within the time specified with the Internal Revenue Service Form 1099-S, "Statement for Recipients of Proceeds from Real Estate, Broker and Barter Exchange Transactions."

7. Costs and Prorations.

7.1. Costs to be Paid by City. City shall pay the following costs:

The premium for the Diocese Exchange Property Title Policy, if such policy is requested by City;

Property tax prorated to the Close of Escrow and documentary transfer taxes, if any, due with respect to the transfer of the City Exchange Property;

One-half (1/2) of the Escrow fee.

7.2. Costs to be Paid by Diocese. The Diocese shall pay the following costs:

The premium for the City Exchange Property Title Policy, and to the extent applicable if one or more of such policies are requested by the Diocese;

Property tax prorated to the Close of Escrow and documentary transfer taxes, if any, due with respect to the transfer of the Diocese Exchange Property;

One-half (1/2) of the Escrow fee.

8. Representations and Warranties; Covenants.

8.1. City's Representations and Warranties. As a material inducement to the Diocese to enter into this Agreement, City makes the following covenants, representations, and warranties to the Diocese set forth in this Section 8.1 as of the date hereof and as of the Close of Escrow.

Property Owner. City is the owner of the City Exchange Property and has the right, power, and the Diocese to transfer the same to the Diocese pursuant to this Agreement.

City's Authority to Execute Agreement. City is a duly organized, validly existing public agency organized and existing under the laws of the State of California. Neither the execution and delivery of this Agreement nor the performance or consummation of the transactions contemplated by this Agreement will result in any breach of or constitute a default under or conflict with any agreement, covenant, law, regulation, ordinance, or obligation binding upon City. City has the legal right, power and the Diocese to enter into this Agreement and all documents, instruments, or agreements referenced herein to be executed by City, and to consummate the transaction contemplated hereby. All individuals executing this Agreement and all other documents, instruments, or agreements required hereunder, on behalf of City, have the legal right, power, and actual authority to bind City to the terms and conditions hereof and thereof.

Compliance with Law. City has no knowledge and has received no notice (i) that the City Exchange Property is in violation of any applicable statutes, ordinances, and regulations, including those relating to environmental and health and safety requirements including those governing the storage, discharge, use, and cleaning of toxic or hazardous substances and materials; (ii) of any presently pending or threatened action or proceeding under any environmental or health and safety statutes, ordinances, or regulations; or (iii) of the existence of any present or pending order or directive of any city, county, state, or federal authority, or any agency thereof, requiring that any work or repair, maintenance, improvement, or pollution or contamination abatement be performed on the City Exchange Property.

No Litigation. There are no actions, suits, or proceedings of any kind or nature whatsoever, legal or equitable, pending or, to the best of City's knowledge, threatened against City or the City Exchange Property or relating to or arising out of the ownership, management, condition, or operation of the City Exchange Property, in any court or before or by any federal, state, county, or municipal department, commission, board, bureau, agency, or other governmental instrumentality.

No Mechanic's Liens. No work has been done upon, or materials delivered to, the City Exchange Property by or at the request of City, or with City's knowledge, which is not fully paid for, nor, to the best of City's knowledge, does any person, firm, or corporation now have, nor, to the best of City's knowledge, will it have upon the giving of any notice or passage of time or otherwise, any mechanic's or materialman's lien rights with respect to the City Exchange Property or any part or parcel thereof.

No Adverse Agreements. There are no adverse possessors, tenancies, or occupancy agreements affecting possession of the City Exchange Property, or any portion thereof, except as disclosed in this Agreement, nor has any option to purchase the City Exchange Property, or any portion thereof, been granted by City to any party. No party (other than the Diocese pursuant to this Agreement) has the right to acquire the City Exchange Property.

No Bankruptcy Proceedings. City is not the subject of a bankruptcy, insolvency, or similar proceeding.

Environmental Status. To the best of City's actual knowledge, City warrants and represents to the Diocese that it is not aware that any release of Hazardous Materials has come to be located upon or under the City Exchange Property. Neither City nor, to the actual knowledge of City, without duty of inquiry, any third parties during the period of time the City Exchange Property has been owned by City have generated, handled, manufactured, stored, used, transported, or discharged any Hazardous Materials on, in, or under the City Exchange Property, the groundwater or any adjacent property. City is not aware of any underground storage tanks located on or under the City Exchange Property. As used herein, the term "Hazardous Materials" shall mean any toxic or hazardous substance, material or waste or any pollutant or contaminant or infectious or radioactive material, including but not limited to those substances, materials or wastes regulated now or in the future under any of the following statutes or regulations promulgated thereto: (1) any "hazardous substance" within the meaning of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA") 42 U.S.C. Section 9601, *et seq.* or the California Hazardous Substance Account Act, Cal. Health and Safety Code Section 25300 *et seq.* or the Porter-Cologne Water Quality Act, Cal. Water Code Section 13000 *et seq.* or the Hazardous Materials Transportation Act, 49 U.S.C. Section 1801, *et seq.*; (2) any "hazardous waste" within the meaning of the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 *et seq.*; or (3) any other substance, chemical, waste, toxicant, pollutant, or contaminant regulated by any federal, state, or local law, statute, rule, regulation, or ordinance for the protection of health or the environment, including, without limitation, any petroleum products or fractions thereof.

AS-IS. City acknowledges that City has inspected the Diocese Exchange Property and made its own independent investigation of the Diocese Exchange Property. City further acknowledges that it is acquiring the Diocese Exchange Property "AS-IS," in reliance solely on its own inspection of the Diocese Exchange Property and on Diocese's representations and warranties as set forth herein.

8.2. Diocese's Representations and Warranties. As a material inducement to City to enter into this Agreement, the Diocese makes the following covenants, representations and warranties to City set forth in this Section 8.2 as of the date hereof and as of the Close of Escrow.

Property Owner. The Diocese is the owner of the Diocese Exchange Property and has the right, power, and Diocese to transfer the same to City pursuant to this Agreement.

Diocese's Authority to Execute Agreement. The Diocese is a duly organized, validly existing public agency organized and existing under the laws of the State of California. Neither the execution and delivery of this Agreement nor the performance or consummation of the transactions contemplated by this Agreement will result in any breach of or constitute a default under or conflict with any agreement, covenant, law, regulation, ordinance, or obligation binding upon authority. Diocese has the legal right, power, and the Diocese to enter into this Agreement and all documents, instruments or agreements referenced herein to be executed by agency, and to consummate the transaction contemplated hereby. All individuals executing this Agreement and all other documents, instruments, or agreements required hereunder, on behalf of the Diocese, have the legal right, power, and actual authority to bind the Diocese to the terms and conditions hereof and thereof.

Compliance with Law. The Diocese has no knowledge and has received no notice (i) that the Diocese Exchange Property is in violation of any applicable statutes, ordinances, and regulations, including those relating to environmental and health and safety requirements including those governing the storage, discharge, use, and cleaning of toxic or hazardous substances and materials; (ii) of any presently pending or threatened action or proceeding under any environmental or health and safety statutes, ordinances, or regulations; or (iii) of the existence of any present or pending order or directive of any authority, county, state, or federal authority, or any agency thereof, requiring that any work or repair, maintenance, improvement, or pollution or contamination abatement be performed on the Diocese Exchange Property.

No Litigation. There are no actions, suits, or proceedings of any kind or nature whatsoever, legal or equitable, pending or, to the best of the Diocese's knowledge, threatened against the Diocese or the Diocese Exchange Property or relating to or arising out of the ownership, management, condition, or operation of the Diocese Exchange Property, in any court or before or by any federal, state, county or municipal department, commission, board, bureau, authority, or other governmental instrumentality.

No Mechanic's Liens. No work has been done upon, or materials delivered to, the Diocese Exchange Property by or at the request of the Diocese, or with the Diocese's knowledge, which is not fully paid for, nor, to the best of the Diocese's knowledge, does any person, firm or corporation now have, nor, to the best of the Diocese's knowledge, will it have upon the giving of any notice or passage of time or otherwise, any mechanic's or materialman's lien rights with respect to the Diocese Exchange Property or any part or parcel thereof.

No Adverse Agreements. There are no adverse possessors, tenancies, or occupancy agreements affecting possession of the Diocese Exchange Property, or any portion thereof, except as disclosed in this Agreement, nor has any option to purchase the Diocese Exchange Property, or any portion thereof, been granted by the Diocese to any party. No party (other than City pursuant to this Agreement) has the right to acquire the Diocese Exchange Property.

No Bankruptcy Proceedings. The Diocese is not the subject of a bankruptcy, insolvency, or similar proceeding.

Environmental Status. To the best of the Diocese's knowledge, the Diocese warrants and represents to City that it is not aware that any release of Hazardous Materials has come to be located upon or under the Diocese Exchange Property. Neither the Diocese nor, to the actual knowledge of the Diocese, without duty of inquiry, any third parties during the period of time the Diocese Exchange Property has been owned by the Diocese have generated, handled, manufactured, stored, used, transported, or discharged any Hazardous Materials on, in or under the Diocese Exchange Property, the groundwater or any adjacent property. The Diocese is not aware of any underground storage tanks located on or under the Diocese Exchange Property. As used herein, the term "Hazardous Materials" shall mean any toxic or hazardous substance, material, or waste or any pollutant or contaminant or infectious or radioactive material, including but not limited to those substances, materials, or wastes regulated now or in the future under any of the following statutes or regulations promulgated thereto: (1) any "hazardous substance" within the meaning of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended ("CERCLA") 42 U.S.C. Section 9601, *et seq.* or the California Hazardous Substance Account Act, Cal. Health and Safety Code Section 25300 *et seq.* or the Porter-Cologne Water Quality Act, Cal. Water Code Section 13000 *et seq.* or the Hazardous Materials Transportation Act, 49 U.S.C. Section 1801, *et seq.*; (2) any "hazardous waste" within the meaning of the Resource Conservation and Recovery Act, 42 U.S.C. Section 6901 *et seq.*; or (3) any other substance, chemical, waste, toxicant, pollutant or contaminate regulated by any federal, state, or local law, statute, rule, regulation or ordinance for the protection of health or the environment, including, without limitation, any petroleum products or fractions thereof.

AS-IS. The Diocese acknowledges that the Diocese has inspected the City Exchange Property and made its own independent investigation of the City Exchange Property, and that the City is transferring the City Exchange Property to the Diocese in its "AS-IS" condition, in reliance solely on its own inspection of the City Exchange Property and on City's representations and warranties as set forth herein.

9. Default.

9.1. Events of Default. The failure of a Party (the "**Defaulting Party**") to perform any material act to be performed by such Party, to refrain from performing any material prohibited act, or to fulfill any condition to be fulfilled by such Party under this Agreement, or under any agreement referred to herein or attached hereto as an exhibit, within ten (10) days after written notice of such failure from the Non-Defaulting Party shall be an "**Event of Default**" by the Defaulting Party with respect to the Defaulting Party's obligations hereunder; provided, however, that if more than ten (10) days are reasonably required in order to cure such Event of Default, then the Defaulting Party shall be entitled to a maximum of thirty (30) days to effect such cure, provided the Defaulting Party commences cure within such ten (10) day period and diligently proceeds to complete such cure within such thirty (30) day period.

9.2. Remedies. Upon the occurrence of any Event of Default by a Defaulting Party, the non-Defaulting Party shall have such rights or remedies available to it under this Agreement or at law or in equity.

10. Casualty Loss; Condemnation.

10.1. Notice Re Condemnation or Casualty; Election. In the event that, prior to the Close of Escrow, all or any portion of the City Exchange Property or the Diocese

Exchange Property is taken or proposed to be taken as a result of the exercise or proposed exercise of the power of eminent domain (a "**Condemnation Action**"), or all or any portion of the City Exchange Property or the Diocese Exchange Property is damaged by earthquake, flood, or fire (a "**Casualty**"), then the Party that is the current property owner shall, within ten (10) days thereafter, give written notice of such Condemnation Action or Casualty to the other Party ("**Noticed Party**"). Such Noticed Party shall have thirty (30) days following receipt of such notice to elect in writing to accept or not to accept the City Exchange Property or the Diocese Exchange Property, as the case may be, subject to such Casualty or Condemnation Action. Failure of a Noticed Party to notify the other Party of its election within such thirty (30) day period shall be deemed an election not to accept the City Exchange Property or the Diocese Exchange Property, as the case may be, subject to such Casualty or Condemnation Action.

10.2. Termination of Agreement. In the event that a Noticed Party elects not to accept the City Exchange Property or the Diocese Exchange Property, as the case may be, subject to such Casualty or Condemnation Action as provided in Section 10.1, the Noticed Party shall cancel the Escrow by written notice to Escrow Holder and the Party that is the current property owner and this Agreement shall be deemed to be terminated (with the exception of those provisions which expressly state that they are to survive such termination), and City and the Diocese shall each bear one-half (1/2) of the Escrow fee and cancellation charges. In such event, neither Party shall be obligated to the other to close the Escrow hereunder.

10.3. Proceeds of Condemnation or Casualty Insurance. In the event that a Noticed Party elects to accept the City Exchange Property or Diocese Exchange Property, as the case may be, subject to a Casualty or Condemnation Action pursuant to Section 10.1, then the Party owning the property shall assign to the Noticed Party all rights, causes of action, claims, benefits, payments, and awards arising from such Condemnation Action or Casualty (including, without limitation, any amount due from or paid by any insurance company or any other party as a result of the damage).

11. Possession. Possession of the City Exchange Property shall be delivered to the Diocese upon the Close of Escrow, subject only to the City Exchange Property Permitted Exceptions. Possession of the Diocese Exchange Property shall be delivered to City upon the Close of Escrow, subject only to the Diocese Exchange Property Permitted Exceptions.

12. Brokerage Commissions. Each Party warrants and represents to the other that no broker, finder, or other intermediary hired or employed by it is entitled to a commission, finder's fee, or other compensation based upon the transaction contemplated hereby and each Party shall indemnify and hold harmless the other Party from and against any and all claims, liabilities, losses, damages, costs, and expenses (including, but not limited to, reasonable attorneys' fees, court costs and litigation expenses) caused by or arising out of the claim of any broker, finder, or other intermediary alleging to have been employed or hired by such Party to a commission, finder's fee, or other compensation based upon the transaction contemplated hereby. The obligations of City and the Diocese pursuant to this Section 12 shall survive beyond the Close of Escrow or if the Escrow is cancelled, beyond any termination of this Agreement.

13. Miscellaneous.

13.1. Notices. All notices or other communications between City and the Diocese required or permitted hereunder shall be in writing and personally delivered or sent by

certified mail, return receipt requested and postage prepaid, sent by reputable overnight courier (such as Federal Express, UPS, or DHL), or transmitted by electronic facsimile transmission (with electronic confirmation of receipt), to the following addresses:

If to City:

Scott Ochoa, City Manager
City of Ontario
303 East "B" Street
Ontario, CA 91764

With a copy to:

Ruben Duran, City Attorney
Best Best & Krieger, LLP
2855 E Guasti Road
Ontario, CA 91761

If to the Diocese:

DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION
Att: OCRE Mr. David Meier
1201 E. Highland Ave.
San Bernardino, Ca 92404
(909) 475-5316

With copy to:

Mr. Wilfrid C.Lemann
Fullerton, Lemann Schaefer and Dominick
215 N. D. Street
San Bernardino, CA 92401
(909)889-3691

A notice shall be effective on the date of personal delivery if personally delivered before 5:00 p.m. or otherwise on the day following personal delivery, or when received, if transmitted by electronic facsimile transmission (with electronic confirmation of receipt), or two (2) business days following the date the notice is postmarked, if mailed, or on the day following delivery to the applicable overnight courier, if sent by overnight courier. Either Party may change the address to which notices are to be given to it by giving notice of such change of address in the manner set forth above for giving notice.

13.2. Time of the Essence. Time is of the essence for this Agreement and each and every term and provision hereof.

13.3. Interpretation; Governing Law. This Agreement shall be construed as if prepared by both Parties. This Agreement shall be construed, interpreted and governed by the laws of the State of California and the laws of the United States of America prevailing in California.

13.4. Severability. In the event that any phrase, clause, sentence, paragraph, section, article, or other portion of this Agreement shall become illegal, null or void, or against public policy, for any reason, or shall be held by any court of competent jurisdiction to be illegal, null or void, or against public policy, the remaining portions of this Agreement shall not be affected thereby and shall remain in force and effect to the full extent permissible by law.

13.5. Performance of Acts on Business Days. Unless specifically stated to the contrary, all references to days herein shall be deemed to refer to calendar days. In the event that the final date for payment of any amount or performance of any act hereunder falls on a Saturday, Sunday, or holiday, such payment may be made or act performed on the next succeeding business day.

13.6. Attorneys' Fees. In the event of any legal action or other proceeding between the Parties regarding this Agreement, any of the documents attached hereto as exhibits, the City Exchange Property or the Diocese Exchange Property (an "**Action**"), the prevailing Party shall be entitled to the payment by the losing Party of its reasonable attorneys' fees, court costs, and litigation expenses, as determined by the court.

13.7. Post-Judgment Attorneys' Fees. The prevailing Party in any Action shall be entitled, in addition to and separately from the amounts recoverable under Section 13.6, to the payment by the losing Party of the prevailing Party's reasonable attorneys' fees, court costs, and litigation expenses incurred in connection with (a) any appellate review of the judgment rendered in such Action or of any other ruling in such Action, and (b) any proceeding to enforce a judgment in such Action. It is the intent of the Parties that the provisions of this Section 13.7 be distinct and severable from the other rights of the parties under this Agreement, shall survive the entry of judgment in any Action and shall not be merged into such judgment.

13.8. Further Assurances; Survival. Each Party will, whenever and as often as it shall be requested to do so by the other Party, execute, acknowledge and deliver, or cause to be executed, acknowledged, and delivered, any and all such further conveyances, assignments, approvals, consents, and any and all other documents and do any and all other acts as may be necessary to carry out the intent and purpose of this Agreement.

13.9. Entire Agreement; Amendments. This Agreement, together with the other written agreements referred to herein, is intended by the Parties to be the final expression of their agreement with respect to the subject matter hereof, and is intended as the complete and exclusive statement of the terms of the agreement between the Parties. As such, this Agreement supersedes any prior understandings between the Parties, whether oral or written. Any amendments to this Agreement shall be in writing and shall be signed by all Parties hereto.

13.10. No Waiver. A waiver by either Party hereto of a breach of any of the covenants or agreements hereof to be performed by the other Party shall not be construed as a waiver of any succeeding breach of the same or other covenants, agreements, restrictions or conditions hereof.

13.11. Assignment. Neither Party hereto shall assign its rights under this Agreement without the prior written consent of the other Party, which consent may be given or withheld in such Party's sole discretion.

13.12. Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective heirs, representatives, successors, and permitted assigns.

13.13. Headings; Cross-References; Exhibits. The headings and captions used in this Agreement are for convenience and ease of reference only and shall not be used to construe, interpret, expand or limit the terms of this Agreement. All cross-references in this Agreement, unless specifically directed to another agreement or document, shall refer to provisions in this Agreement and shall not be deemed to be references to any other agreements or documents. Each of the exhibits attached to this Agreement is hereby incorporated into this Agreement by this reference.

13.14. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same document.

13.15. Special Condition. Notwithstanding any other term or provision to the contrary set forth in this Agreement, in no event shall this Agreement be interpreted to require a transfer of real property by either party unless the City Exchange Property and the Diocese Exchange Property are deemed suitable for transfer by both Parties, and are actually transferred to the other Party under the terms of this Agreement at the Close of Escrow.

13.16. Incorporation of Recitals. The Recitals are hereby incorporated into this Agreement as if fully and completely rewritten.

13.17. List of Exhibits. The following exhibits are hereby incorporated by reference and are made a part of this Agreement.

Exhibit A	Legal Description of City Exchange Property
Exhibit B	Legal Description of the Diocese Exchange Property
Exhibit C	City Grant Deed
Exhibit D	Diocese Grant Deed
Exhibit E	Non-Foreign Transferor Declaration

[Signatures Included on Following Page]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the date set forth opposite their respective signatures below.

CITY OF ONTARIO, a municipal corporation

By: _____
Scott Ochoa, City Manager

DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION, a California nonprofit corporation

By: _____
Bishop Alberto Rojas, President

ACCEPTANCE BY ESCROW HOLDER

Escrow Holder hereby acknowledges receipt of this fully executed Agreement on the ____ day of _____, 20__, and accepts the escrow instructions set forth herein.

ESCROW HOLDER:

FIDELITY NATIONAL TITLE COMPANY

By:_____

Name:_____

Title:_____

EXHIBIT "A"

Legal Description of City Exchange Property

APN 1048-353-13

LOTS 3 THROUGH 6 INCLUSIVE, BLOCK 22 OF TOWN OF ONTARIO, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS RECORDED IN BOOK 9, PAGE 43 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY,

TOGETHER WITH THAT PORTION OF PALM AVENUE VACATED BY RESOLUTION 2001-58 RECORDED OCTOBER 19, 2001 AS INSTRUMENT NO. 20010478474 OF OFFICIAL RECORDS, ADJOINING LOT 6 ON THE WEST SIDE AND EXTENDING FROM THE SOUTH LINE OF E STREET TO THE CENTER LINE OF BLOCK 22.

APN 1048-353-14

LOTS 11 AND 12 BLOCK 22 OF TOWN OF ONTARIO, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS RECORDED IN BOOK 9, PAGE 43 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY

EXHIBIT "B"

Legal Description of the Diocese Exchange Property

APN 1048-576-01

LOTS 4, 5 AND 6, BLOCK 26, OF TOWN OF ONTARIO, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS RECORDED IN BOOK 9, PAGE 43 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY

APN 1048-576-02

LOTS 1, 2 AND THE SOUTH 72 FEET OF LOT 3, BLOCK 26, OF TOWN OF ONTARIO, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS RECORDED IN BOOK 9, PAGE 43 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY

EXHIBIT "C"

City Grant Deed (Sample)

RECORDING REQUESTED BY WHEN RECORDED RETURN TO: FREE RECORDING: This instrument is for the benefit of , and is entitled to be recorded without fee or tax. (Govt. Code 6103, 27383 and Rev. & Tax Code 11922)	
Portions of APN(s): APN	Above Space for Recorder's Use

GRANT DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, **CITY OF ONTARIO**, a California General Law City ("**Grantor**"), hereby grants to the **DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION,** a California nonprofit corporation **("Grantee")**, the fee simple interest in the following described real property (the "**Property**") situated in the City of Ontario, County of San Bernardino, State of California, as described and depicted in **Exhibit "A"** , attached hereto.

IN WITNESS WHEREOF, Grantor has caused its name to be affixed hereto and this instrument to be executed by its duly authorized officer.

Date: _____

GRANTOR:
CITY OF ONTARIO, a California General Law City

By: _____
Name: _____
Title: _____

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)

COUNTY OF _____)

On _____ before me, _____,
Notary Public, personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT A TO CITY GRANT DEED

LEGAL DESCRIPTION

[Attach Description of City Property to be Transferred]

Certificate of Acceptance:

This is to certify that the interest in the real property conveyed by this instrument to the **DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION,** a California nonprofit corporation was accepted by the Board of Directors of said City on _____, 20 ____, by Resolution No. _____, and said Board has consented to the recordation of the within instrument.

_____

_____, _____

EXHIBIT "D"

Diocese Grant Deed (Sample)

RECORDING REQUESTED BY WHEN RECORDED RETURN TO: FREE RECORDING: This instrument is for the benefit of , and is entitled to be recorded without fee or tax. (Govt. Code 6103, 27383 and Rev. & Tax Code 11922)	
Portions of APN(s): APN	Above Space for Recorder's Use

GRANT DEED

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, the **DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION,** a California nonprofit corporation ("**Grantor**"), hereby grants to **CITY OF ONTARIO**, a California General Law City **("Grantee")**, the fee simple interest in the following described real property (the "**Property**") situated in the City of Ontario, County of San Bernardino, State of California, as described and depicted in **Exhibit "A"** , attached hereto.

IN WITNESS WHEREOF, Grantor has caused its name to be affixed hereto and this instrument to be executed by its duly authorized officer.

Date: _____

GRANTOR:
DIOCESE OF SAN BERNARDINO EDUCATION AND WELFARE CORPORATION, a California nonprofit corporation

By: _____
Name: Bishop Alberto Rojas
Title: President

ACKNOWLEDGEMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)

COUNTY OF _____)

On _____ before me, _____,
Notary Public, personally appeared _____,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under penalty of perjury under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

EXHIBIT A
TO ROMAN CATHOLIC BISHOP OF SAN BERNARDINO GRANT DEED

LEGAL DESCRIPTION

[Attach Description of Diocese Property to be Transferred]

Certificate of Acceptance:

This is to certify that the interest in the real property conveyed by this instrument to the CITY OF ONTARIO was accepted by the City Council of said City on _____, 20 ____, by Resolution No. _____, and said Board has consented to the recordation of the within instrument.

_____
_____, _____

EXHIBIT "E"

Non-Foreign Transferor Declaration

TRANSFEROR'S CERTIFICATION OF NON-FOREIGN STATUS

Section 1445 of the Internal Revenue Code provides that a transferee of a U.S. real property interest must withhold tax if the transferor is a foreign person. For U.S. tax purposes (including Section 1445), the owner of a disregarded entity (which has legal title to a U.S. real property interest under local law) will be the transferor of the Property and not the disregarded entity. To inform _____ _____ ("**Transferee**"), the transferee of that certain real property described in Schedule "1" attached hereto and incorporated herein by this reference, that withholding of tax is not required upon the disposition of the above-referenced real property by _____, a public Diocese ("**Transferor**"), the undersigned hereby certifies the following on behalf of the Transferor:

1. Transferor is not a foreign corporation, foreign partnership, foreign trust, foreign estate or foreign person (as those terms are defined in the Code and the Income Tax Regulations promulgated thereunder); and

2. Transferor's taxpayer identification number is: _____; and

3. Transferor's address is: _____.

The Transferor understands that this Certification may be disclosed to the Revenue Service by the Transferee and that any false statement contained herein could be punished by fine, imprisonment, or both.

The Transferor understands that the Transferee is relying on this Certification in determining whether withholding is required upon said transfer.

Under penalty of perjury I declare that I have examined this Certification and to the best of my knowledge and belief it is true, correct and complete, and I further declare that I have authority to sign this document on behalf of the Transferor.

Dated: _____, 20__

"TRANSFEROR"

_____,

By:_____

Name:_____

Title:_____

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Police Department Prepared By: Nicole Alvarez Staff Member Presenting: Mike Lorenz, Chief of Police Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 7

SUBJECT: APPLICATION FOR CALIFORNIA OFFICE OF TRAFFIC SAFETY FISCAL YEAR 2023-24 SELECTIVE TRAFFIC ENFORCEMENT PROGRAM (STEP) GRANT

RECOMMENDATION: That City Council authorize the City Manager, or his designee to execute all documents necessary to apply for and accept a 12-month grant in the amount of $1,015,605 from the California Office of Traffic Safety (OTS) for participation in the FY 2023-24 Selective Traffic Enforcement Program (STEP) Grant.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Maintain the Current High Level of Public Safety
Pursue City's Goals and Objectives by Working with Other Governmental Agencies

FISCAL IMPACT: Grant awards will be announced in July 2023 and the funds will be used for eligible costs incurred from October 1, 2023 to September 30, 2024. These grants are reimbursable on a quarterly basis and fund police overtime, education, equipment, supplies, and training to conduct DUI saturation patrols, special traffic enforcement, field enforcement, street racing enforcement and training, education and sobriety checkpoints. The approximate grant funding reimbursement requested is $1,015,605 and the City is not required to provide matching funds for the grants. If awarded, the approved amount will be included as revenue (and associated expenditure adjustments) in a subsequent quarterly budget report to City Council.

BACKGROUND & ANALYSIS: The California Office of Traffic Safety (OTS), through the National Highway Traffic Safety Administration (NHTSA), offers local law enforcement agencies overtime grants to mitigate traffic safety program deficiencies, expand ongoing activities, develop new programs, and conduct sobriety checkpoints. The grant period includes two "National Impaired Driving Campaign" mobilization periods- the Winter Mobilization which occurs around Christmas and New Year's Eve and Summer Mobilization which occurs around Labor Day. Sobriety checkpoints, DUI saturation patrols and special traffic enforcement will be scheduled during each of the highly publicized mobilization periods. Additional operations will continue to be conducted outside the mobilization periods. Each overtime operation and checkpoint will be conducted according to each operation's specific needs, which may require supervisors, officers, technicians, and/or clerical/other staff members.

The goal of the OTS grant program includes: (1) reducing the number of people killed in alcohol-involved crashes through the combined efforts of local law enforcement agencies, California Highway Patrol, and OTS, (2) reduce the total number of traffic collisions that occur within the City, (3) through press releases, inform citizens of increased enforcement and educate drivers that the only way to “avoid” arrest, injury, and/or death is to drive sober, and (4) network with regional law enforcement agencies to conduct multiple joint operations to decrease alcohol related issues such as DUI’s and underage drinking.

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Police Department Prepared By: Nicole Alvarez Staff Member Presenting: Mike Lorenz, Chief of Police Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 8

SUBJECT: **AN APPLICATION FOR GRANT FROM CALIFORNIA HIGHWAY PATROL FOR THE CANNABIS TAX FUND GRANT PROGRAM FISCAL YEAR 2023-24 FOR THE AMOUNT OF $291,250.**

RECOMMENDATION: That City Council authorize the City Manager or his designee to execute all documents necessary to apply for and accept a 12-month grant in the amount of $291,250 from the California Highway Patrol for the Cannabis Tax Fund Grant Program.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Maintain the Current High Level of Public Safety
Pursue City's Goals and Objectives by Working with Other Governmental Agencies

FISCAL IMPACT: Grant awards will be announced in May 2023 and the funds will be used for eligible costs incurred from July 1, 2023, to June 30, 2024. These grants are reimbursable on a quarterly basis and fund police overtime to conduct DUI saturation patrols, equipment, and training. The approximate grant funding reimbursement requested is $291,250 and the City is not required to provide matching funds for the grants. If awarded, the approved amount will be included as revenue (and associated expenditure adjustments) in a subsequent quarterly budget report to City Council.

BACKGROUND & ANALYSIS: The California Highway Patrol (CHP) works closely with state and local agencies and other traffic safety stakeholders to actively address impaired driving. The CHP will consider a variety of factors in determining specific needs for each grant cycle, including opportunities and projects best suited to prevent the loss of life, injuries, and property damage caused by driving under the influence of alcohol and/or drugs.

The purpose of the Cannabis Tax Fund Grant Program (CTFGP) is to provide alternative funding sources to augment, but not supplant, current activities and programs. The CHP will allocate funds for the project categories in accordance with California Code of Regulations (CCR) Sections 1890.05 through 1890.07, as determined by the CHP.

With the passage of Proposition 64, the Control, Regulate, and Tax Adult Use of Marijuana Act (AUMA), California voters mandated the state set aside funding for the California Highway Patrol

(CHP) to award grants to local governments and qualified nonprofit organizations, as described in Revenue and Taxation Code Section 34019(f)(3)(B).

The Cannabis Tax Fund Grant Program marks an important step toward reducing impaired driving crashes, increasing public awareness surrounding the dangers of impaired driving, and making California's roadways a safer place to travel.

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Police Department Prepared By: Matthew Hernandez Staff Member Presenting: Mike Lorenz, Chief of Police Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 9

SUBJECT: ACCEPT AND APPROVE AWARD OF OFFICER WELLNESS AND MENTAL HEALTH GRANT FOR FISCAL YEAR 2022-23

RECOMMENDATION: That the City Council authorize the City Manager or his designee to execute all documents necessary to accept and approve the Officer Wellness and Mental Health Grant Award for Fiscal Year 2022-23.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Maintain the Current High Level of Public Safety
Pursue City's Goals and Objectives by Working with Other Governmental Agencies

FISCAL IMPACT: The program awarded the City $193,073 for Fiscal Year 2022-23. If approved, the associated revenue and expenditure adjustments in the Grants Fund will be presented to Council at the next available quarter adjustment.

BACKGROUND & ANALYSIS: On December 21, 2022, the Board of State Community Corrections announced a new state program awarding local law enforcement agencies funding for wellness and mental health programs. The disbursement is made under Assembly Bill 178, Chapter 45 Statutes of 2022, Item 15227-121-0001. Allocation of funds were determined by the number of officers described in Penal Code 830.1.

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Broadband Operations Prepared By: Jimmy Chang Staff Member Presenting: Jimmy Chang, Broadband General Manager Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 10

SUBJECT: A CONSTRUCTION CONTRACT FOR CITY'S BROADBAND FIBER CONDUIT INSTALLATION WEST RING-SEGMENT 2

RECOMMENDATION: That the City Council take the following actions:

A. Approve Construction Contract No. BB-2023-001, FY 2022-23 CDBG City Fiber Conduit Installation - West Ring Segment 2 (on file in the Records Management Department), to Servitek Electric, Inc. of Walnut, California, to provide fiber optic conduit installation services in the amount of $731,914 plus a ten percent (10%) contingency of $73,191 for a total authorized expenditure of $805,105; and

B. Authorize the City Manager or designee to execute said contract and all documents required for the completion of the project, including, but not limited to purchase orders, contracts, agreements, easements, reduction of retention accounts, and the filing of a Notice of Completion at the conclusion of all related work.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The Fiscal Year 2022-23 Adopted Budget allocated funds for CDBG City Fiber Conduit Installation - West Ring Segment 2 Project in the amount of $430,934 from Community Development Block Grant (CDBG) funds; and $374,171 in the Broadband Fiber Fund to cover the remaining balance. The total recommended expenditure authorization consists of $731,914 plus a ten percent (10%) contingency of $73,191 for a total authorized expenditure of $805,105.

BACKGROUND & ANALYSIS: The general scope of work to be performed consists of the installation of underground fiber optic conduit, handholes and locate cable for the purpose of expanding the OntarioNet broadband fiber and wireless network to west Ontario. The area affected is generally located on Mountain Avenue from 4th Street to Phillips Street with a lateral route on Flora Street from Mountain Avenue to Vine Avenue. This project will provide conduit pathway for fiber optic cable installation to be performed under a separate project. Project location maps are provided for

reference as Exhibit A. In February 2023, the City solicited bids for the project and six bids were received. The following is a summary of the bid results:

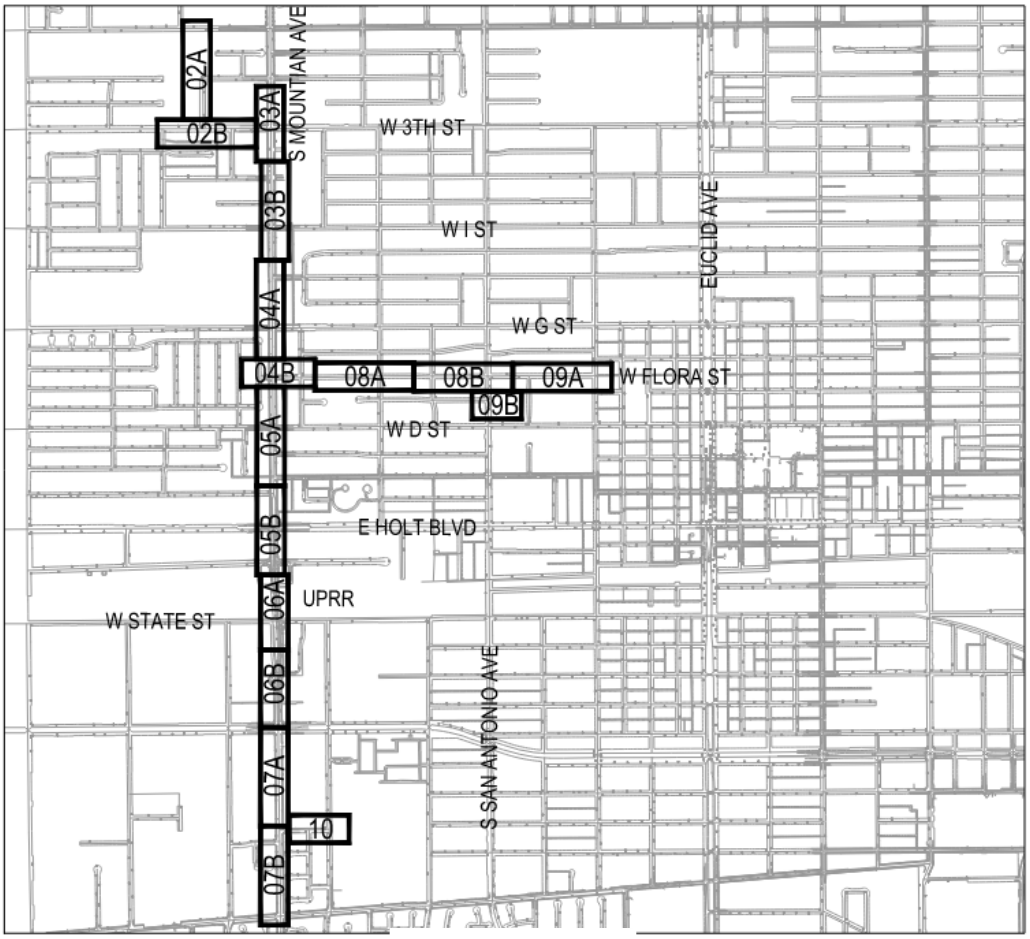
COMPANY	**LOCATION**	**AMOUNT**
Servitek Electric, Inc.	Walnut, CA	$731,914
HP Communications, Inc.	Corona, CA	$875,478
Elecnor Belco Electric, Inc.	Chino, CA	$1,178,087
SECC Corporation	Corona, CA	$1,411,343
DBX, INC.	Temecula, CA	$1,758,052
Mears Group Inc.	Sacramento, CA	$2,281,650

Servitek Electric, Inc. provided all the required documents in their bid package and Staff recommends that the City Council award a construction contract to Servitek Electric, Inc., the lowest responsible bidder.

Exhibit “A"

FIBER OPTIC IMPROVEMENT PLANS

CROSSING AT S MOUNTAIN AVENUE
WEST RING SEGMENT II
WORK ORDER # 2022-005



CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Economic Development Prepared By: Peter Pallesen Staff Member Presenting: Jennifer McLain Hiramoto, Economic Development Director Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 11

SUBJECT: SECOND AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT FOR ARCHITECTURAL AND DESIGN SERVICES

RECOMMENDATION: That the City Council ("City") approve and authorize the City Manager to execute a Second Amendment to a Professional Services Agreement with Thirtieth Street Architects, Inc. to increase Agreement by $250,000 for a total not-to-exceed amount of $450,000.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner

FISCAL IMPACT: The Fiscal Year 2022-23 Adopted Budget includes, and any subsequent Adopted Budget shall include appropriations from the General Liability Fund for these services. This proposed amendment to the Agreement in the amount of $250,000 is for a new contract amount not-to-exceed $450,000. The term of the contract ends on December 31, 2023, at which point the City shall have the option to renew this Agreement.

BACKGROUND & ANALYSIS: In January 2022, the City acquired the property located at 137-143 N Euclic Avenue. Since then, the City has determined that the second-floor office space of this building will be a future City facility to serve both the Ontario Housing Authority and Community Life and Culture Agency.

Pursuant to California Building Code Section 15.40, the City is required to conduct a systematic review and reconstruction of all existing unreinforced masonry buildings within the City to improve vital safety measures in the event of an earthquake. As part of this State infrastructure requirement, the City's Building Department is preparing an Unreinforced Masonry Program for all properties located within Downtown Ontario.

The Second Amendment to the Professional Services Agreement with Thirtieth Street Architects, Inc. will include architectural and engineering services for the adaptive reuse of the building located at 137-143 N Euclid Avenue. Additionally, this contract will be utilized to provide architectural and engineering services to property owners located within Downtown Ontario whose buildings contain unreinforced masonry and will be required to abide by this State regulation.

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Municipal Services Prepared By: Adrian Escamilla Staff Member Presenting: Tito Haes, Executive Director Public Works Reviewed By: Bonnie Tam, Andrea Ampig Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 12

SUBJECT: **AWARD OF A CONSTRUCTION CONTRACT AND AMENDMENT TO THE ON-CALL PROJECT MANAGEMENT SERVICES AGREEMENT FOR THE JOHN GALVIN PARK RESTROOM RENOVATION**

RECOMMENDATION: That the City Council take the following actions:

A. Authorize the City Manager or his designee to complete and execute a Construction Contract with JCOS Development, Inc. of Buena Park, California, for the John Galvin Park Restroom Renovation Project in the amount of $1,050,000;
B. Authorize a 10% contingency of $105,000 for the JCOS Development, Inc. Construction Contract for a total contract value of $1,155,000 to address any unforeseen issues that arise during construction;
C. Authorize the City Manager or his designee to complete and execute Amendment No. 9 to the On-Call Project Management Services Contract with Transtech Engineers, Inc. of Chino, California, for the John Galvin Park Restroom Renovation Project in the amount of $14,073; and
D. Authorize the City Manager or his designee to execute all documents required for the completion of the project including, but not limited to, contracts, agreements, assessments, easements, reduction of retention accounts, and filing a notice of completion at the conclusion of all construction related activities.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The proposed contract amount for JCOS Development, Inc. is $1,050,000. Staff is requesting a 10% contingency for a total contract amount of $1,155,000. The recommended Amendment No. 9 to the On-Call Project Management Services Contract with Transtech Engineers, Inc. is not-to-exceed $14,073. The Fiscal Year 2022-23 Community Development Block Grant (CDBG) Fund includes appropriations for the John Galvin Park Restroom Renovation Project. If approved, remaining appropriations of $668,065 will be used from the Public Works operating budget.

BACKGROUND & ANALYSIS: The City receives an annual allocation from the CDBG program. The CDBG program is federal funding that is administered by the U.S. Department of Housing and Urban Development. CDBG funds can be used by local jurisdictions to support programs that benefit low and moderate-income areas and persons, including infrastructure, community facilities and parks, and public services.

Approximately 2,000 square feet of the existing John Galvin Park Restroom will be demolished and a new pre-fabrication restroom with six total stalls will be installed to meet the Americans with Disabilities Act (ADA) access, improve infrastructure, and provide improved security.

Transtech Engineers, Inc. will be performing a topographical survey which will include, but are not limited to, the site features, hardscape and softscape, curbs, gutters, pavement edges, grade-breaks, traffic markings and all utilities.

On November 11, 2022, Staff solicited bids for the John Galvin Park Restroom Renovation project. Staff received ten (10) construction bids ranging from $1,050,000 and $1,611,000.

All the bids received are listed below:

Vendor	**Location**	**Amount**
JCOS Development Inc.	Buena Park, CA	$1,050,000
JT Construction Group Inc.	Duarte, CA	$1,075,199
Rasmussen Brothers Construction	Fallbrook, CA	$1,091,763
Edra Construction Corporation	Glendora, CA	$1,160,000
KASA Construction, Inc	Chino, CA	$1,219,975
H2M Construction Inc.	Rancho Cucamonga, CA	$1,242,000
Armstrong Cal Building Inc.	Mission Viejo, CA	$1,278,000
Pub Construction, Inc.	Diamond Bar, CA	$1,301,000
CS Legacy Construction, Inc.	Walnut, CA	$1,307,572
Kazoni Construction	Costa Mesa, CA	$1,611,000

JCOS Development Inc., located in Buena Park, California, was the lowest responsible bidder that met all the required specifications with a base cost of $1,050,000. Based on the bid, credentials, pricing and favorable reference checks, staff recommends awarding the Construction Contract to JCOS Development, Inc. The project has an estimated completion date of December 2023.

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Financial Services Prepared By: Jialuan Ning Staff Member Presenting: Armen Harkalyan, Executive Director of Finance Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 13

SUBJECT: **A RESOLUTION AUTHORIZING THE CITY MANAGER TO ENTER INTO SETTLEMENT AGREEMENTS WITH WALGREENS CO., WALMART, INC., CVS HEALTH CORPORATION/CVS PHARMACY INC., TEVA PHARMACEUTICAL INDUSTRIALS LTD., AND ALLERGAN FINANCE LLC/ALLERGAN LIMITED, AGREE TO THE TERMS OF THE STATE-SUBDIVISION AGREEMENTS, AND AUTHORIZE ENTRY INTO THE STATE-SUBDIVISION AGREEMENTS WITH THE ATTORNEY GENERAL**

RECOMMENDATION: That the City Council adopt a Resolution authorizing the City Manager to:

1. Opt into settlement agreement with opioid distributor, Walgreens Co., and direct the City Manager to execute any documents necessary to implement the action.
2. Opt into settlement agreement with opioid distributor, Walmart, Inc. and direct the City Manager to execute any documents necessary to implement the action.
3. Opt into settlement agreement with opioid distributor, CVS Health Corporation/CVS Pharmacy, Inc. and direct the City Manager to execute any documents necessary to implement the action.
4. Opt into settlement agreement with opioid manufacturer, Teva Pharmaceutical Industries Ltd., and direct the City Manager to execute any documents necessary to implement the action.
5. Opt into settlement agreement with opioid manufacturer, Allergan Finance, LLC/Allergan Limited and direct the City Manager to execute any documents necessary to implement the action.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Maintain the Current High Level of Public Safety
Operate in a Businesslike Manner

FISCAL IMPACT: The recommended action of opting in the National Opioids Settlement will result in additional funding of approximately $2,254,472 to the City of Ontario, to be disbursed over 15 years; totaling approximately $150,298 annually.

BACKGROUND & ANALYSIS: In the previous year, litigation brought by states and cities across the United States against the three largest pharmaceutical distributors of opioid painkillers, Amerisource Bergen, Cardinal Health, and McKesson (the "Distributors"), and the opioid painkiller manufacturer, Janssen (owned by Johnson & Johnson) ("J&J"), resulted in two proposed settlements totaling approximately $26 billion dollars. The City had previously opted into the Distributors and the J&J Settlements and has started receiving payments.

Between November and December 2022, five additional parties (the "New Parties") have entered into National Opioid Settlements with terms identical to the Distributors/J&J Settlements. The City can opt into these new settlements, thereby releasing its claims against the New Parties, in order to receive (at most) $2,254,472 paid out over a period of 15 years. The funds are restricted to certain opioid abatement/remediation uses. The City can either allow the funds to be used by the County of San Bernardino or elect to use the funds itself subject to reporting requirements to the State. Alternatively, the City can take no action, thereby opting out of the settlements, while maintaining its right to pursue litigation against the New Parties.

Allocation of Funds

Additional litigation brought by states and cities across the United States against the New Parties has resulted in a proposed settlement totaling approximately $20.2 billion dollars. The proposed settlement is broken into five separate deals: (1) the Walgreens Settlement (Exhibit A); (2) the Walmart Settlement (Exhibit B); (3) the CVS Settlement (Exhibit C); (4) the Teva Settlement (Exhibit D); and the Allergan Settlement (Exhibit E). The estimated total nationwide payout and payment schedule are outlined below:

Defendant	Estimated Max Payout (100% Participation)	Years
Walgreens	$5,522,528,766	15 years
Walmart	$3,011,242,061	Primarily paid within 3 years, but if participation levels are not met until later, payment can extend over 6 years
CVS	$5,002,083,578	10 years
Teva	$4,246,567,372	6 years
Allergan	$2,372,972,184	7 years

Of the amounts above, California is to receive approximately $1.8 billion and is to distribute these funds pursuant to intrastate allocation agreements for the new settlements.

As outlined in the Intrastate Allocation Agreements, Settlement Fund payments due to the State of California are allocated as follows: 15% to the State Fund; 70% to the California Abatement Accounts Fund; and 15% to the California Subdivision Fund. This results in the State receiving 15% of the payments allocated to California and local subdivisions receiving the remaining 85%. The percentages paid out to the California Subdivision Fund is reserved for entities that participated in

the litigation of the claims giving rise to the settlement agreements. The percentages paid out to local subdivisions that did not litigate but choose to opt into the settlements comes from the share of the settlement proceeds that are placed in the California Abatement Accounts Fund. Essentially, this means that the City of Ontario, if it chooses to opt into the settlement, is entitled to receive a percentage share from the California Abatement Accounts Fund.

The City of Ontario has been allocated 0.179% of the 70% of the approximate $1,800,000,000 (i.e., best case scenario), which is equal to $2,254,472. This total amount will be disbursed over a period of 15 years, with payments decreasing as each settlement finishes paying out. The first payments are scheduled to occur in the latter half of 2023. After the receipt of these initial payments, further payments will be received annually thereafter. As stated above, the definite amount is not yet known because of the bonus structure built into the agreements.

The default distribution of funds in the settlement agreements provides that the funds will go directly to the county in which a city is located. A city can elect to have its funds delivered directly to the city by providing notice in the settlement agreements. Additionally, a city within a county may opt in or out of direct payment at any time, and it may also elect direct payment of only a portion of its share, with the remainder going to the county, by providing notice to the settlement fund administrators at least sixty days prior to a payment date.

In deciding whether to allow a city's funds to go directly to the county in which a city is located, a city should consider the following: (1) whether the amount of money is substantial enough for the city to handle it on its own; (2) whether the city offers the services and has the employees to spend the money in accordance with its prescribed uses; and (3) whether the city wants to engage in the reporting requirements over the course of the next nineteen years (eighteen years of distribution and an additional year following final distribution).

Use of Received Funds

Similar to the Distributor and J&J Settlements, funds received from these additional settlements must be used for future opioid remediation or abatement. For instance, participating subdivisions may use funds for areas such as services to treat opioid use disorder; support people in treatment and recovery; connect people to care; address needs of criminal justice-involved persons; address the needs of pregnant or parenting women and their families, including babies with neonatal abstinence syndrome; prevent over-prescribing and ensure appropriate prescribing and dispensing of opioids; prevent misuse of opioids; prevent overdose deaths and other harms; provide leadership, planning, and coordination of programs; provide training; and conduct research.

The Intrastate Allocation Agreements (Exhibit F) also provide spending limitations in addition to those provided in the settlement agreements. Under the Intrastate Allocation Agreements, no less than 50% of the funds received in each calendar year will be used for one or more of the following High Impact Abatement Activities:

(1) the provision of matching funds or operating costs for substance use disorder facilities within the Behavioral Health Continuum Infrastructure Program;

(2) creating new or expanded Substance Use Disorder ("SUD") treatment infrastructure;

(3) addressing the needs of communities of color and vulnerable populations (including sheltered and unsheltered homeless populations) that are disproportionately impacted by SUD;

(4) diversion of people with SUD from the justice system into treatment, including by providing training and resources to first and early responders (sworn and non-sworn) and implementing best practices for outreach, diversion and deflection, employability, restorative justice, and harm reduction; and/or

(5) interventions to prevent drug addiction in vulnerable youth.

In addition to these requirements, there is also a time limit on the spending of received funds. If funds are not expended or encumbered within five years of receipt and in accordance with the settlement agreements and the Intrastate Allocation Agreements, the funds are required to be transferred back to the State.

Management of Funds

Each county and city that receives payment of funds from the settlements must prepare written reports at least annually regarding the use of those funds until the funds are fully expended and for one year thereafter. Each county and city will need to track all deposits and expenditures. These reports will also include a certification that all funds received have been used in compliance with the allocation agreements. The California Department of Healthcare and Services ("DHCS") may review these reports in order to determine compliance with the settlement agreements and the Intrastate Allocation Agreement.

If the DHCS determines that a participating subdivision's use of abatement funds is inconsistent with the settlement agreements or Intrastate Allocation Agreements, the parties are required to meet and confer. If the meet and confer process does not provide a resolution, the DHCS may conduct an audit, which can lead to a court action if the matter is still not resolved after an audit.

Opting In

The City must opt into the settlements by April 18, 2023, which requires the City to release its claims against the New Parties. If the City takes no action, it will have opted out of the settlements and its designated funds will flow to the State. The City would still have the opportunity to bring its own action against the New Parties. Unless the City intends to pursue its own litigation against these parties, it is recommended that the City opt into the settlement and elect to receive payments directly.

WALGREENS SETTLEMENT AGREEMENT

WALGREENS SETTLEMENT AGREEMENT

This Settlement Agreement, dated as of December 9, 2022 (the *"Agreement")*, sets forth the terms of settlement between and among the Settling States, the Participating Subdivisions, and Walgreens (as those terms are defined below). Upon satisfaction of the conditions set forth in Sections II and VIII, this Agreement will be binding on the Settling States, Walgreens and the Participating Subdivisions. This Agreement will then be filed as part of a Consent Judgment in the respective courts of each of the Settling States, pursuant to the terms set forth in Section VIII.

I. Definitions

Unless otherwise specified, the following definitions apply:

A. *"Additional Remediation Amount."* The amount available to the Settling States totaling up to $31,921,103, to be paid in accord with the payment schedule at Exhibit M-3.

B. *"Adjusted State Remediation Payment."* The State Remediation Payment reduced by the Overall State Allocation for each Non-Settling State on Exhibit F-2. For the avoidance of doubt, this amount shall be the same as the Base State Remediation Payment reduced by the State Global Allocation Percentage for each Non-Settling State and Florida on Exhibit F-1.

C. *"Agreement."* This agreement, as set forth above. For the avoidance of doubt, this Agreement is inclusive of all exhibits.

D. *"Alleged Harms."* The alleged past, present, and future financial, societal, and public nuisance harms and related expenditures arising out of the alleged misuse and abuse of Products, non-exclusive examples of which are described in the documents listed on Exhibit A, that have allegedly arisen as a result of the physical and bodily injuries sustained by individuals suffering from opioid-related addiction, abuse, death, and other related diseases and disorders, and that have allegedly been caused by Released Entities.

E. *"Allocation Statute."* A state law that governs allocation, distribution, and/or use of some or all of the Settlement Fund amounts allocated to that State and/or its Subdivisions. An Allocation Statute may, without limitation, contain a Statutory Trust, further restrict expenditures of funds, form an advisory committee, establish oversight and reporting requirements, or address other default provisions and other matters related to the funds. An Allocation Statute is not required to address all three (3) types of funds comprising the Settlement Fund or all default provisions.

F. *"Annual Remediation Payment."* The amount payable to the Settlement Fund by Walgreens for Settling States' Base Payments and Incentive Payments on the Payment Date for each Payment Year, as calculated by the Settlement Fund Administrator.

G. *"Annual Fees Payment."* The amounts payable by Walgreens in each Payment Year comprised of the State AG Fees and Costs payment and Additional Remediation Amount,

as reduced for non-Settling States, and the Private Attorneys Fees, including any reduction to the Contingency Fee Fund, and not including the Annual Remediation Payment.

H. *"Annual Maximum."* As defined in Section IV.B.2.

I. *"Appropriate Official."* As defined in Section XIII.G.3.

J. *"Bankruptcy Code."* Title 11 of the United States Code, 11 U.S.C. § 101, et seq.

K. *"Bar."* Either: (1) a law barring Subdivisions in a State from maintaining Released Claims against Released Entities (either through a direct bar or through a grant of authority to release claims and the exercise of such authority in full) or (2) a ruling by the highest court of the State (or, in a State with a single intermediate court of appeals, the intermediate court of appeals) when setting forth the general principle that Subdivisions in the State may not maintain any Released Claims against Released Entities, whether on the ground of this Agreement (or the release in it) or otherwise. For the avoidance of doubt, a law or ruling that is conditioned or predicated upon payment by a Released Entity (apart from the Annual Remediation Payments by Walgreens under this Agreement) shall not constitute a Bar.

L. *"Base Payment."* As defined in Section **Error! Reference source not found.**..

M. *"Base State Remediation Payment"* shall be $5,150,000,000.

N. *"Case-Specific Resolution."* Either: (1) a law barring the Subdivision at issue from maintaining any Released Claims against any Released Entities (either through a direct bar or through a grant of authority to release claims and the exercise of such authority in full); or (2) a ruling by a court of competent jurisdiction over the Subdivision at issue that the Subdivision may not maintain any Released Claims at issue against any Released Entities, whether on the ground of this Agreement (or the release in it) or otherwise. For the avoidance of doubt, a law or ruling that is conditioned or predicated upon payment by a Released Entity (apart from the annual payments by Walgreens under this Agreement) shall not constitute a Case-Specific Resolution.

O. *"Claim."* Any past, present or future cause of action, claim for relief, cross-claim or counterclaim, theory of liability, demand, derivative claim, request, assessment, charge, covenant, damage, debt, lien, loss, penalty, judgment, right, obligation, dispute, suit, contract, controversy, agreement, *parens patriae* claim, promise, performance, warranty, omission, or grievance of any nature whatsoever, whether legal, equitable, statutory, regulatory or administrative, whether arising under federal, state or local common law, statute, regulation, guidance, ordinance or principles of equity, whether filed or unfiled, whether asserted or unasserted, whether known or unknown, whether accrued or unaccrued, whether foreseen, unforeseen or unforeseeable, whether discovered or undiscovered, whether suspected or unsuspected, whether fixed or contingent, and whether existing or hereafter arising, in all such cases, including, but not limited to, any request for declaratory, injunctive, or equitable relief, compensatory, punitive, or statutory damages, absolute liability, strict liability, restitution, remediation, subrogation, contribution, indemnity, apportionment, disgorgement, reimbursement,

attorney fees, expert fees, consultant fees, fines, penalties, expenses, costs or any other legal, equitable, civil, administrative, or regulatory remedy whatsoever.

P. *"Claim-Over."* A Claim asserted by a Non-Released Entity against a Released Entity on the basis of contribution, indemnity, or other claim-over on any theory relating to a Non-Party Covered Conduct Claim asserted by a Releasor.

Q. *"Compensatory Restitution Amount."* The aggregate amount paid or incurred by Walgreens hereunder for Opioid Remediation, which includes each Annual Remediation Payment and does not include amounts paid as attorneys' fees and costs or identified pursuant to Section V.B.2 as being used to pay attorneys' fees, investigation costs or litigation costs, which shall be up to the amount of the Adjusted State Remediation Payment.

R. *"Consent Judgment."* A consent judgment in a form to be agreed by the Settling States and Walgreens prior to the Initial Participation Date that, among other things, (1) approves this Agreement and (2) provides for the release set forth in Section X.A, including the dismissal with prejudice of any Released Claims that the Settling State has brought against Released Entities.

S. *"Covered Conduct."* Any actual or alleged act, failure to act, negligence, statement, error, omission, breach of any duty, conduct, event, transaction, agreement, misstatement, misleading statement or other activity of any kind whatsoever from the beginning of time through the Reference Date (and any past, present, or future consequence of any such act, failure to act, negligence, statement, error, omission, breach of duty, conduct, event, transaction, agreement, misstatement, misleading statement or other activity) relating in any way to (1) compounding, counseling and documentation relating to any Product or class of Products (2) the discovery, development, manufacture, packaging, repackaging, marketing, promotion, advertising, labeling, recall, withdrawal, distribution, delivery, monitoring, reporting, supply, sale, prescribing, dispensing, physical security, warehousing, use or abuse of, or operating procedures relating to, any Product, or any system, plan, policy or advocacy relating to any Product or class of Products, including, but not limited to, any unbranded promotion, marketing, programs, or campaigns relating to any Product or class of Products; (3) the characteristics, properties, risks, or benefits of any Product; (4) the reporting, disclosure, non-reporting or nondisclosure to federal, state or other regulators of orders placed with any Released Entity; or (5) diversion control programs or suspicious order monitoring;

T. "*Deferred Payment Notice*." As defined in Section IV.K.4.

U. "*Designated State.*" The State of New York.

V. "*Effective Date.*" The date sixty (60) calendar days after the Reference Date.

W. "*Eligible States.*" The states, commonwealths, and territories of the United States of America, excluding Florida.

X. "*Enforcement Committee.*" A committee consisting of representatives of the Settling States and of the Participating Subdivisions. Exhibit B contains the organizational

bylaws of the Enforcement Committee. Notice pursuant to Section XIII.S shall be provided when there are changes in membership or contact information.

Y. *"Final Order."* An order or judgment of a court of competent jurisdiction with respect to the applicable subject matter (1) which has not been reversed or superseded by a modified or amended order, is not currently stayed, and as to which any right to appeal or seek certiorari, review, reargument, stay, or rehearing has expired, and as to which no appeal or petition for certiorari, review, reargument, stay, or rehearing is pending, or (2) as to which an appeal has been taken or petition for certiorari, review, reargument, stay, or rehearing has been filed and (a) such appeal or petition for certiorari, review, reargument, stay, or rehearing has been resolved by the highest court to which the order or judgment was appealed or from which certiorari, review, reargument, stay, or rehearing was sought, or (b) the time to appeal further or seek certiorari, review, reargument, stay, or rehearing has expired and no such further appeal or petition for certiorari, review, reargument, stay, or rehearing is pending.

Z. "*Global Settlement Amount.*" The Global Settlement Amount is $5,522,528,766which is comprised of the Adjusted State Remediation Payment, Private Attorneys Fees, State AG Fees and Costs, and Additional Remediation Amount

AA. "*Implementation Administrator*." The vendor agreed to by Walgreens and the Enforcement Committee, and retained by Walgreens for costs of up to $1,500,000, to provide notice pursuant to Section VII.A and to manage the initial joinder period for Subdivisions, including the issuance and receipt of Subdivision Participation Agreements.

BB. *"Incentive Payment A."* The incentive payment described in Section IV.H.4.

CC. "*Incentive Payment A Catch-up Payment*." As defined in Section IV.H.4.f.

DD. *"Incentive Payment BC."* The incentive payment described in Section IV.H.5.

EE. *"Incentive Payment D."* The incentive payment described in Section IV.H.6.

FF. *"Initial Participating Subdivision."* A Subdivision that meets the requirements set forth in Section VII.D.

GG. *"Initial Participation Date."* The date ninety (90) calendar days after the Preliminary Agreement Date, unless it is extended by written agreement of Walgreens and the Enforcement Committee.

HH. *"Injunctive Relief Terms."* The terms described in Section III and set forth in Exhibit P.

II. *"Later Litigating Subdivision."* A Subdivision (or Subdivision official asserting the right of or for the Subdivision to recover for Alleged Harms to the Subdivision and/or the people thereof) that: (1) first files a lawsuit bringing a Released Claim against a Released Entity after the Trigger Date; or (2) adds a Released Claim against a Released Entity after the Trigger Date to a lawsuit brought before the Trigger Date that, prior to the Trigger Date, did not include any Released Claims against a Released Entity; or (3) (a) was a Litigating Subdivision whose

Released Claims against Released Entities were resolved by a legislative Bar or legislative Case-Specific Resolution as of the Trigger Date, (b) such legislative Bar or legislative Case-Specific Resolution is subject to a Revocation Event after the Trigger Date, and (c) the earlier of the date of completion of opening statements in a trial in an action brought by a Subdivision in that State that includes a Released Claim against a Released Entity or one hundred eighty (180) days from the Revocation Event passes without a Bar or Case-Specific Resolution being implemented as to that Litigating Subdivision or the Litigating Subdivision's Released Claims being dismissed; or (4) (a) was a Litigating Subdivision whose Released Claims against Released Entities were resolved by a judicial Bar or judicial Case-Specific Resolution as of the Trigger Date, (b) such judicial Bar or judicial Case-Specific Resolution is subject to a Revocation Event after the Trigger Date, and (c) such Litigating Subdivision takes any action in its lawsuit asserting a Released Claim against a Released Entity other than seeking a stay or dismissal.

JJ. *"Later Participating Subdivision."* A Participating Subdivision that is not an Initial Participating Subdivision, but meets the requirements set forth in Section VILE.

KK. *"Litigating Subdivision."* A Subdivision (or Subdivision official) that brought any Released Claim against any Released Entity prior to the Trigger Date; *provided, however,* that a Subdivision (or Subdivision official) that is a Prior Litigating Subdivision shall not be considered a Litigating Subdivision. Exhibit C is an agreed list of all Litigating Subdivisions. Exhibit C will be updated (including with any corrections) periodically, and a final version of Exhibit C will be attached hereto as of the Reference Date.

LL. "*National Arbitration Panel.*" The panel comprised as described in Section VI.F.2.b.

MM. "*National Disputes.*" As defined in Section VI.F.2.a.

NN. *"Non-Litigating Subdivision."* Any Subdivision that is neither a Litigating Subdivision nor a Later Litigating Subdivision.

OO. "*Non-Litigating Threshold Subdivisions.*" Primary Subdivisions (a) with populations greater than 30,000 that have not sued Walgreens as of the Initial Subdivision Participation Date and (b) with populations between 10,000 and 30,000 that have not sued Walgreens but have sued McKesson, AmerisourceBergen, Cardinal or Janssen related to any allegations regarding the Products.

PP. *"Non-Participating Subdivision."* Any Subdivision that is not a Participating Subdivision.

QQ. *"Non-Party Covered Conduct Claim."* A Claim against any Non-Released Entity involving, arising out of, or related to Covered Conduct (or conduct that would be Covered Conduct if engaged in by a Released Entity).

RR. *"Non-Party Settlement."* A settlement by any Releasor that settles any Non-Party Covered Conduct Claim and includes a release of any Non-Released Entity.

SS. *"Non-Released Entity."* An entity that is not a Released Entity.

TT. "*Non-Settling State.*" Any Eligible State that is not a Settling State.

UU. *"Opioid Remediation."* Care, treatment, and other programs and expenditures (including reimbursement for past such programs or expenditures[1] except where this Agreement restricts the use of funds solely to future Opioid Remediation) designed to (1) address the misuse and abuse of opioid products, (2) treat or mitigate opioid use or related disorders, or (3) mitigate other alleged effects of, including on those injured as a result of, the opioid epidemic. Exhibit E provides a non-exhaustive list of expenditures that qualify as being paid for Opioid Remediation. Qualifying expenditures may include reasonable related administrative expenses in connection with the above.

VV. "*Opioid Tax.*" Any tax, assessment, license fee, surcharge or any other fee (other than a fixed prospective excise tax or similar tax or fee that has no restriction on pass-through) imposed by a State on Walgreens on the sale, transfer or distribution of opioid products; *provided*, *however*, that none of the following as currently enacted shall be considered an Opioid Tax for purposes of this Agreement: 16 Del. Code Chapter 48B; fees assessed by the Minnesota Board of Pharmacy under Minnesota Statutes section 151.065; any penalty assessed under Minnesota's Opiate Product Registration Fee law, Minnesota Statutes section 151.066; the MinnesotaCare Wholesale Drug Distributor and Use Tax, Minnesota Statutes section 292.52; the Excise Tax on sale of Opioids, Article 20-D of New York's Tax Law; the Opioid Stewardship Act, Article 33, Title 2-A of New York's Public Health Law; and Rhode Island's Opioid Stewardship Act, R.I. Gen. Laws §§ 21-28.10, *et seq*.).

WW. "*Overall Allocation Percentage*." A Settling State's percentage as set forth in Exhibit F-2.

XX. *"Participating Subdivision."* Any Subdivision that meets the requirements for becoming a Participating Subdivision under Section VII.B and Section VII.C. Participating Subdivisions include both Initial Participating Subdivisions and Later Participating Subdivisions.

YY. "*Participation Percentage of Incentive BC Eligible Subdivision Population*." As defined in Section IV.H.5.e.

ZZ. *"Parties."* Walgreens and the Settling States (each, a *"Party").*

AAA. *"Payment Date."* The date on which Walgreens makes the Annual Remediation Payment pursuant to Section IV.B. For the avoidance of doubt, the date on which the Annual Fee Payments (including without limitation State AG Fees and Costs and Additional Remediation Amounts) are made is December 31 for each Payment Year in which Annual Fee Payments are due pursuant to Exhibit M-3, which may be a different date than the Payment Date.

BBB. *"Payment Year."* The Walgreens' fiscal year during which the applicable Annual Remediation Payment and/or Annual Fees Payment is due pursuant to Exhibit M-2 and Exhibit M-3. Walgreens' fiscal year is September 1-August 31. Payment Year 1 is September 1, 2022-

[1] Reimbursement includes amounts paid to any governmental entities for past expenditures or programs

August 31, 2023, Payment Year 2 is September 1, 2023-August 31, 2024 and so forth. References to payment *"for a Payment Year"* mean the Annual Remediation Payment and/or Annual Fees Payment (including without limitation State AG Fees and Costs and Additional Remediation Amounts) due during that year. References to eligibility *"for a Payment Year"* mean eligibility in connection with the Annual Remediation Payment due during that year.

CCC. "*Post-Suspension Payment.*" As defined in Section IV.K.2.

DDD. "*Primary Fire District.*" A fire district that covers a population of 25,000, or 0.20% of an Eligible State's population if an Eligible State's population is greater than 18 million. If not easily calculable from state data sources and agreed to between the Eligible State and Walgreens, a fire district's population is calculated by dividing the population of the county or counties a fire district serves by the number of fire districts in the county or counties. "Primary Fire Districts" shall mean fire districts as identified in connection with the implementation of the July 21, 2021 Janssen Settlement Agreement.

EEE. "*Preliminary Agreement Date*." The date on which Walgreens is to inform the Settling States of their determination whether the condition in Section II.B has been satisfied. The Preliminary Agreement Date shall be no more than ten (10) calendar days after the end of the notice period to States, unless it is extended by written agreement of the Walgreens and the Enforcement Committee.

FFF. *"Primary Subdivision."* A Subdivision that is a General Purpose Government (including, but not limited to, a municipality, county, county subdivision, city, town, township, parish, village, borough, gore, or any other entities that provide municipal-type government) with population over 10,000. Attached as Exhibit I is an agreed list of the Primary Subdivisions in each Eligible State.

GGG. *"Prior Litigating Subdivision."* A Subdivision (or Subdivision official) that brought any Released Claim against any Released Entity prior to the Trigger Date and all such Released Claims were separately settled or finally adjudicated prior to the Trigger Date; *provided, however,* that if the final adjudication was pursuant to a Bar, such Subdivision shall not be considered a Prior Litigating Subdivision. Notwithstanding the prior sentence, Walgreens and the Settling State of the relevant Subdivision may agree in writing that the Subdivision shall not be considered a Prior Litigating Subdivision.

HHH. "*Private Attorney Fees"* are the amount to be paid by Walgreens for private attorneys' litigation fees and costs on behalf of Participating Subdivisions. The Private Attorney Fees are 12.4% times the Base State Remediation Payment with the maximum amount being $638,600,000. For avoidance of doubt, Private Attorney Fees do not include State AG Fees and Costs or Additional Remediation Amount.

III. *"Product."* Any chemical substance, whether used for medicinal or non-medicinal purposes, and whether natural, synthetic, or semi-synthetic, or any finished pharmaceutical product made from or with such substance, that is: (1) an opioid or opiate, as well as any product containing any such substance; or (2) benzodiazepine, carisoprodol, or gabapentin; or (3) a combination or "cocktail" of chemical substances prescribed, sold, bought, or dispensed to be used

together that includes opioids or opiates. "Product" shall include, but is not limited to, any substance consisting of or containing buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, oxycodone, oxymorphone, tapentadol, tramadol, opium, heroin, carfentanil, diazepam, estazolam, quazepam, alprazolam, clonazepam, oxazepam, flurazepam, triozolam, temazepam, midazolam, carisoprodol, gabapentin, or any variant of these substances or any similar substance. Notwithstanding the foregoing, nothing in this section prohibits a Settling State from taking administrative or regulatory action related to benzodiazepine (including, but not limited to, diazepam, estazolam, quazepam, alprazolam, clonazepam, oxazepam, flurazepam, triozolam, temazepam, and midazolam), carisoprodol, or gabapentin that is wholly independent from the use of such drugs in combination with opioids, *provided* such action does not seek money (including abatement and/or remediation) for conduct prior to the Effective Date.

JJJ. "*Reduced Payment Termination Date.*" As defined in Section IV.K.3.

KKK. *"Reference Date."* The date on which Walgreens is to inform the Settling States of its determination whether the condition in Section VIII has been satisfied. The Reference Date shall be no later than thirty (30) calendar days after the Initial Participation Date, unless it is extended by written agreement of Walgreens and the Enforcement Committee.

LLL. *"Released Claims."* Any and all Claims that directly or indirectly are based on, arise out of, or in any way relate to or concern the Covered Conduct occurring prior to the Reference Date. Without limiting the foregoing, Released Claims include any Claims that have been asserted against Walgreens, including claims arising from Walgreens' acquisition of other firms or assets prior to the Reference Date, by a Settling State or Litigating Subdivision in any federal, state, or local action or proceeding (whether judicial, arbitral, or administrative) based on, arising out of, or relating to, in whole or in part, the Covered Conduct, or any such Claims that could be or could have been asserted now or in the future in those actions or in any comparable action or proceeding brought by a State, Subdivision, or Releasor (whether or not such State, Subdivision, or Releasor has brought such action or proceeding), including any subsidiaries thereof to the extent permissible by law. Released Claims include any claims of a Non-Released Entity held by a Released Entity by way of assignment. Released Claims also include all Claims asserted in any proceeding to be dismissed pursuant to this Agreement, whether or not such claims relate to Covered Conduct. The Parties intend that this term, "Released Claims," be interpreted broadly. This Agreement does not release Claims by private individuals. It is the intent of the Parties that Claims by private individuals be treated in accordance with applicable law. Released Claims is also used herein to describe claims brought by a Later Litigating Subdivision or other non-party Subdivision that would have been Released Claims if they had been brought by a Releasor against a Released Entity.

MMM. *"Released Entities."* With respect to Released Claims, Walgreens and (1) all past and present subsidiaries, divisions, predecessors, successors, and assigns (in each case, whether direct or indirect) of Walgreens; (2) all past and present subsidiaries and divisions (in each case, whether direct or indirect) of any entity described in subsection (1); (3) the respective past and present officers, directors, members, trustees, and employees of any of the foregoing (each for actions that occurred during and related to their work for, or employment with, any of Walgreens or the foregoing entities); (4) all past and present joint ventures (whether direct or indirect) of

Walgreens or its subsidiaries, including in any Walgreens or subsidiary's capacity as a participating member in such joint venture; (5) all direct or indirect parents and shareholders of Walgreens (solely in their capacity as parents or shareholders of Walgreens with respect to Covered Conduct); and (6) any insurer of Walgreens or any person or entity otherwise described in subsections (1)-(5) (solely in its role as insurer of such person or entity and subject to the last sentence of Section X.C). An illustrative list of Walgreens' present joint ventures, subsidiaries and affiliates and predecessor entities is set forth in Exhibit J. Any person or entity described in subsections (3)-(6) shall be a Released Entity solely in the capacity described in such clause and shall not be a Released Entity with respect to its conduct in any other capacity. Any joint venture or past or present subsidiary of Walgreens is a Released Entity, including any joint venture between Walgreens and any distributor, provided, however, that any joint venture partner of Walgreens or any of Walgreens subsidiaries is not a Released Entity unless it falls within subsections (1)-(6) above. With respect to joint ventures (including predecessor entities), only entities listed on Exhibit J are Released Entities. With respect to wholly-owned subsidiaries (including predecessor entities), Exhibit J represents a good faith effort by Walgreens to list all such entities, but any and all wholly-owned subsidiaries (including predecessor entities) of Walgreens are Released Entities, whether or not they are listed on Exhibit J. For the avoidance of doubt, Exhibit J is illustrative, not exhaustive, and may not specifically identify or correctly name each and every Released Entity. Any entity acquired, or joint venture entered into, by Walgreens after the Reference Date is not a Released Entity.

NNN. *"Releasors."* With respect to Released Claims, (1) each Settling State; (2) each Participating Subdivision; and (3) without limitation and to the maximum extent of the power of each Settling State's Attorney General's and/or Participating Subdivision to release Claims, (a) the Settling State's and Participating Subdivision's departments, agencies, divisions, boards, commissions, Subdivisions, districts, instrumentalities of any kind and attorneys, including its Attorney General , and any person in his or her official capacity whether elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, (b) any public entities, public instrumentalities, public educational institutions, unincorporated districts, fire districts, irrigation districts, and other Special Districts in a Settling State, and (c) any person or entity acting in a *parens patriae,* sovereign, quasi-sovereign, private attorney general, *qui tam,* taxpayer, or other capacity seeking relief on behalf of or generally applicable to the general public with respect to a Settling State or Subdivision in a Settling State, whether or not any of them participate in this Agreement. The inclusion of a specific reference to a type of entity in this definition shall not be construed as meaning that the entity is not a Subdivision. Each Settling State's Attorney General represents that he or she has or has obtained (or will obtain no later than the Initial Participation Date) the authority set forth in Section X.F. In addition to being a Releasor as provided herein, a Participating Subdivision shall also provide the Subdivision Settlement Participation Form referenced in Section VII providing for a release to the fullest extent of the Participating Subdivision's authority.

OOO. *"Remediation Accounts Fund."* The component of the Settlement Fund described in Section V.C.

PPP. *"Revocation Event."* With respect to a Bar, Settlement Class Resolution, or Case-Specific Resolution, a revocation, rescission, reversal, overruling, or interpretation that in any way limits the effect of such Bar, Settlement Class Resolution, or Case-Specific Resolution on

Released Claims, or any other action or event that otherwise deprives the Bar, Settlement Class Resolution, or Case-Specific Resolution of force or effect in any material respect.

QQQ. *"Settlement Class Resolution."* A class action resolution in a court of competent jurisdiction in a Settling State (that is not successfully removed to federal court) with respect to a class of Subdivisions in that State that (1) conforms with that Settling State's statutes, case law, and rules of procedure regarding class actions; (2) is approved and entered as an order of a court of competent jurisdiction in that State and such order has become a Final Order; (3) is binding on all Non-Participating Subdivisions in that State (other than opt outs as permitted under the next sentence); (4) provides that all such Non-Participating Subdivisions may not bring any Released Claims against any Released Entities, whether on the ground of this Agreement (or the releases herein) or otherwise; and (5) does not impose any costs or obligations on Walgreens other than those provided for in this Agreement, or contain any provision inconsistent with any provision of this Agreement. If applicable state law requires that opt-out rights be afforded to members of the class, a class action resolution otherwise meeting the foregoing requirements shall qualify as a Settlement Class Resolution unless Subdivisions collectively representing more than one percent (1%) of the total population of that State opt out. In seeking certification of any Settlement Class, the applicable State and Participating Subdivisions shall make clear that certification is sought solely for settlement purposes and shall have no applicability beyond approval of the settlement for which certification is sought. Nothing in this Agreement constitutes an admission by any Party that class certification would be appropriate for litigation purposes in any case or for purposes unrelated to this Agreement.

RRR. *"Settlement Fund."* The interest-bearing fund established pursuant to this Agreement into which the Annual Remediation Payments are made under Section IV.

SSS. *"Settlement Fund Administrator."* The entity that annually determines the Annual Remediation Payment (including calculating suspension, offset or reduction and Incentive Payments pursuant to Section IV and any amounts subject to offset or reduction pursuant to Section XI and Section XII), administers the Settlement Fund, and distributes amounts into the Remediation Accounts Fund, State Fund, and Subdivision Fund pursuant to this Agreement. The duties of the Settlement Fund Administrator shall be governed by this Agreement. Prior to the Initial Participation Date, Walgreens and the Enforcement Committee shall agree to selection and removal processes for and the identity of the Settlement Fund Administrator, and a detailed description of the Settlement Fund Administrator's duties and responsibilities, including a detailed mechanism for paying the Settlement Fund Administrator's fees and costs, all of which shall be appended to the Agreement as Exhibit L.

TTT. *"Settlement Fund Escrow."* The interest-bearing escrow fund established pursuant to this Agreement to hold disputed payments made under this Agreement, and to hold the first Annual Remediation Payment until the Effective Date.

UUU. *"Settlement Payment Schedule."* The schedule attached to this Agreement as Exhibit M-1, Exhibit M-2, and Exhibit M-3.

VVV. "*Settling State.*" An Eligible State that has entered into this Agreement and delivers executed releases in accordance with Section VIII.A.

WWW. "*State*." The states, commonwealths, and territories of the United States of America, as well as the District of Columbia. The States are listed in Exhibit F-1. Additionally, the use of non-capitalized "state" to describe something (*e.g.*, "state court") shall also be read to include parallel entities in commonwealths, territories, and the District of Columbia (*e.g.*, "territorial court").

XXX. *"State Allocation."* The State Remediation Payment multiplied by the percentage for each State listed in Exhibit F-2. For the avoidance of doubt, this amount shall be the same as the Base State Remediation Payment multiplied by the percentage for each Eligible State listed in Exhibit F-1, and it does not include the Additional Remediation Amount.

YYY. *"State AG Fees and Costs."* The amount to be paid by Walgreens to the States for their litigation fees and costs pursuant to Exhibit S and Exhibit T. The State AG Fees and Costs are 2% times the State Remediation Payment, minus the Additional Remediation Amount, with the maximum amount being $63,842,206.

ZZZ. *"State Fund."* The component of the Settlement Fund described in Section V.C.

AAAA. "*State Global Allocation Percentage.*" The allocation percentages for all States as set forth in Exhibit F-1, which represents allocations before the credit for Walgreens' settlement with the State of Florida is applied.

BBBB. "*Statewide Payment Amount.*" The amount from an Annual Remediation Payment to be paid to a Settling State, its separate types of funds (if applicable), and its Participating Subdivision listed on Exhibit G.

CCCC. "*State Remediation Payment.*" The maximum amount owed by Walgreens to the States and Subdivisions, exclusive of the Private Attorney Fees, State AG Fees and Costs, Additional Remediation Amount, and is in the amount of $4,788,165,456, consisting of the Base State Remediation Payment and including a credit for Walgreens' settlement with the State of Florida in the amount of 7.02591344086813% of the Base State Remediation Payment. An additional credit for Walgreens' settlement with Suffolk and Nassau Counties in New York State in the amount of 15.31% of New York's State Allocation will be applied to New York's State Allocation pursuant to Section IV.L. For the avoidance of doubt, the credit for Walgreens' settlement with Suffolk and Nassau Counties in New York State does not reduce the State Remediation Payment as defined herein, but shall nevertheless reduce the amount owed by Walgreens pursuant to this Agreement to New York State and its Subdivisions.

DDDD. "*State-Specific Agreement*." As defined in Section IV.J.

EEEE. *"State-Subdivision Agreement."* An agreement that a Settling State reaches with the Subdivisions in that State regarding the allocation, distribution, and/or use of funds allocated to that State and to its Subdivisions. A State-Subdivision Agreement shall be effective if approved pursuant to the provisions of Exhibit O or if adopted by statute. Preexisting agreements addressing funds other than those allocated pursuant to this Agreement shall qualify if the approval requirements of Exhibit O are met. A State and its Subdivisions may revise a State-

Subdivision Agreement if approved pursuant to the provisions of Exhibit O, or if such revision is adopted by statute.

FFFF. *"Statutory Trust."* A trust fund established by state law to receive funds allocated to a Settling State's Remediation Accounts Fund and restrict any expenditures made using funds from the Settling State's Remediation Accounts Fund to Opioid Remediation, subject to reasonable administrative expenses. A State may give a Statutory Trust authority to allocate one (1) or more of the three (3) types of funds comprising such State's Settlement Fund, but this is not required.

GGGG. *"Subdivision."* Any (1) General Purpose Government (including, but not limited to, a municipality, county, county subdivision, city, town, township, parish, village, borough, gore, or any other entities that provide municipal-type government), School District, or Special District within a State, and (2) any other subdivision, subdivision official (acting in an official capacity on behalf of the subdivision) or sub-entity of or located within a State (whether political, geographical or otherwise, whether functioning or non-functioning, regardless of population overlap, and including, but not limited to, Nonfunctioning Governmental Units and public institutions) that has filed a lawsuit that includes a Released Claim against a Released Entity in a direct, *parens patriae*, or any other capacity. "General Purpose Government," "School District," and "Special District" shall correspond to the "five basic types of local governments" recognized by the U.S. Census Bureau and match the 2017 list of Governmental Units.[2] The three (3) General Purpose Governments are county, municipal, and township governments; the two (2) special purpose governments are School Districts and Special Districts.[3] "Fire District," "Health District," "Hospital District," and "Library District" shall correspond to categories of Special Districts recognized by the U.S. Census Bureau.[4] References to a State's Subdivisions or to a Subdivision "in," "of," or "within" a State include Subdivisions located within the State even if they are not formally or legally a sub-entity of the State; *provided, however*, that a "Health District" that includes any of the following words or phrases in its name shall not be considered a Subdivision: mosquito, pest, insect, spray, vector, animal, air quality, air pollution, clean air, coastal water, tuberculosis, and sanitary. Each of Lake and Trumbull Counties of Ohio shall not be considered “Subdivisions” for purposes of this Agreement.

---

[2] https://www.census.govidataidatasets/2017/econ/gus/public-use-files.html.

[3] *E.g.*, U.S. Census Bureau, "Technical Documentation: 2017 Public Use Files for State and Local Government Organization" at 7 (noting that "the Census Bureau recognizes five basic types of local governments," that three of those are "general purpose governments" (county governments, municipal governments, and township governments), and that the other two are "school district and special district governments"), https://www2.census.gov/programs-surveysigus/datasets/2017/2017_gov_org_meth_tech_doc.pdf.

[4] A list of 2017 Government Units provided by the Census Bureau identifies 38,542 Special Districts and categorizes them by "FUNCTION_NAME." "Govt_Units_2017_Final" spreadsheet, "Special District" sheet, included in "Independent Governments - list of governments with reference information," https://www.census.govidataidatasets/2017/econ/gus/public-use-files.html. As used herein, "Fire District" corresponds to Special District function name "24 — Local Fire Protection," "Health District" corresponds to Special District function name "32 — Health," "Hospital District" corresponds to Special District function name "40 —Hospitals," and "Library District" corresponds to Special District function name "52 — Libraries." *See id.*

HHHH. *"Subdivision Allocation Percentage."* The portion of a Settling State's Subdivision Fund set forth in Exhibit G that a Subdivision will receive pursuant to Section V if it becomes a Participating Subdivision. The aggregate Subdivision Allocation Percentage of all Subdivisions receiving a Subdivision Allocation Percentage in each State shall equal one hundred percent (100%). Immediately upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3) that addresses allocation from the Subdivision Fund, whether before or after the Initial Participation Date, Exhibit G will automatically be amended to reflect the allocation from the Subdivision Fund pursuant to the State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3. The Subdivision Allocation Percentages contained in Exhibit G may not change once notice is distributed pursuant to Section VII.A, except upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3) that addresses allocation from the Subdivision Fund. For the avoidance of doubt, no Subdivision not listed on Exhibit G shall receive an allocation from the Subdivision Fund and no provision of this Agreement shall be interpreted to create such an entitlement.

IIII. *"Subdivision Fund."* The component of the Settlement Fund described in Section V.A.

JJJJ. *Subdivision Settlement Participation Form"* The form attached as Exhibit K that Participating Subdivisions must execute and return to the Implementation Administrator or Settlement Fund Administrator, and which shall (1) make such Participating Subdivisions signatories to this Agreement, (2) include a full and complete release of any and of such Subdivision's claims, and (3) require the prompt dismissal with prejudice of any Released Claims that have been filed by any such Participating Subdivision

KKKK. *"Threshold Motion."* A motion to dismiss or equivalent dispositive motion made at the outset of litigation under applicable procedure. A Threshold Motion must include as potential grounds for dismissal any applicable Bar or the relevant release by a Settling State or Participating Subdivision provided under this Agreement and, where appropriate under applicable law, any applicable limitations defense.

LLLL. *"Total Available Amount."* The sum of (1) the Adjusted State Remediation Payment, (2) State AG Fees and Costs payment and Additional Remediation Amount, as reduced for non-Settling States and (3) the Private Attorneys Fees, including any reduction to the Contingency Fee Fund.

MMMM. *"Trigger Date."* In the case of a Primary Subdivision, the Reference Date. In the case of all other Subdivisions, the Preliminary Agreement Date.

NNNN. *"Walgreens."* Walgreen Co.

II. Participation by States and Condition to Preliminary Agreement

A. *Notice to States.* On December 7 2022 this Agreement shall be distributed to all States. The States' Attorneys General shall then have until December 30, 2022 to decide whether to become Settling States. States that determine to become Settling States shall so notify Walgreens and shall further commit to obtaining any necessary additional State releases prior to the Reference Date. This notice period may be extended by written agreement of Walgreens and the Enforcement Committee.

B. *Condition to Preliminary Agreement*. Following the notice period set forth in Section II.A above, Walgreens shall determine whether, in its sole discretion, enough States have agreed to become Settling States to proceed with notice to Subdivisions as set forth in Section VII below. If Walgreens determines that this condition has been satisfied, and that notice to the Litigating Subdivisions should proceed, it will so notify the Settling States by providing notice to the Enforcement Committee on the Preliminary Agreement Date. If Walgreens determine that this condition has not been satisfied, and this Agreement will have no further effect and all releases and other commitments or obligations contained herein will be void.

C. *Later Joinder by States*. After the Preliminary Agreement Date, a State may only become a Settling State with the consent of Walgreens and the Enforcement Committee. If a State becomes a Settling State more than sixty (60) calendar days after the Preliminary Agreement Date, but on or before June 30, 2023, the Subdivisions in that State that become Participating Subdivisions within ninety (90) calendar days of the State becoming a Settling State shall be considered Initial Participating Subdivisions. A State may not become a Settling State after June 30, 2023.

D. *Litigation Activity.* Following the Preliminary Agreement Date, States that determine to become Settling States shall make reasonable efforts to cease litigation activity against Walgreens, including by jointly seeking stays or, where appropriate, severance of claim against Walgreens, where feasible, and otherwise to minimize such activity by means of agreed deadline extensions and agreed postponement of depositions, document productions, and motion practice if a motion to stay or sever is not feasible or is denied.

III. Injunctive Relief

A. *Injunctive Relief.* As part of the Consent Judgment, the Parties agree to the entry of the injunctive relief terms attached in Exhibit P.

IV. Settlement Payments

A. *Settlement Fund.* All payments under this Section IV shall be made into the Settlement Fund, except that, where specified, they shall be made into the Settlement Fund Escrow. The Settlement Fund shall be allocated and used only as specified in Section V.

B. *Annual Remediation Payments*

1. Walgreens shall make fifteen (15) Annual Remediation Payments, each comprised of Base Payments and Incentive Payments as provided in this Section IV and as determined by the Settlement Fund Administrator as set forth in this Agreement, *provided that* the Annual Remediation Payment in Payment Year 1 shall consist solely of Base Payments.

2. The combination of the Annual Remediation Payment and the Annual Fee Payment in any given Payment Year shall not exceed one-fifteenth ($1/15^{th}$) of the Total Available Amount (the "Annual Maximum"). Payments may be lower than one-fifteenth ($1/15^{th}$) of the Total Available Amount due to credits and incentive eligibility. In the event that the full amount of the Annual Remediation Payment calculated by the Settlement Fund Administrator pursuant to Section IV.C exceeds the Annual Maximum, Settling States will be paid a prorated amount of payment available up to the Annual Maximum, and any unpaid amount will be due the following Payment Year and each succeeding Payment Year until the remediation is fully paid. The payment schedule for the Annual Remediation Payments is attached hereto as Exhibit M-2. The payment schedule for the Annual Fee Payments is attached hereto as Exhibit M-3.

C. *Settlement Fund Payment Process*

1. To determine each Annual Remediation Payment for Payment Year 2 forward, the Settlement Fund Administrator shall use the data as of sixty (60) days prior to the Payment Date for each payment, unless another provision of the Agreement specifies a different date. Prior to the Effective Date, the Parties will include an exhibit to the Agreement setting forth in detail the process for the Settlement Fund Administrator obtaining relevant data and for distributing funds to the Settling States and their Participating Subdivisions listed on Exhibit G consistent with the terms of this Agreement as quickly as practical.

2. The Settlement Fund Administrator shall determine the Annual Remediation Payment and the Statewide Payment Amount for each Settling State, consistent with the provisions in Exhibit L, by:

a. Determining, for each Settling State, the amount of Base Payments and Incentive Payments to which the State is entitled by applying the criteria under Section IV.F, Section IV.G, and Section IV.H;

b. applying any offsets, credits or reductions as specified under Section IV, Section XI, and Section XII;

c. applying the annual cap on payments as specified under Section IV.B.

d. applying any adjustment required as a result of significant financial constraint, as specified under Section IV.K

e. determining the total amount owed by Walgreens to all Settling States and the Participating Subdivisions listed on Exhibit G; and

f. the Settlement Fund Administrator shall then allocate, after subtracting the portion of any Settlement Fund Administrator costs and fees owed out of funds from the Settlement Fund pursuant to Section V.C.5, the Annual Remediation Payment pursuant to Section V among the Settling States, among the separate types of funds for each Settling State (if applicable), and among the Participating Subdivisions listed on Exhibit G.

3. If, no later than fifty (50) days prior to the Payment Date, Walgreens and the Enforcement Committee inform the Settlement Fund Administrator that they agree on the amount of the Annual Remediation Payment and the Statewide Payment Amount for each Settling State, Walgreens shall pay the agreed-upon Annual Remediation Payment amount on the Payment Date and the Settlement Fund Administrator shall treat those amounts as the determination described in Section IV.C.2. If the Settlement Fund Administrator is not so informed, it shall give notice to Walgreens, the Settling States, and the Enforcement Committee of the amount of the Annual Remediation Payment, and the Statewide Payment Amount for each Settling State, following the determination described in Section IV.C.2, and the following timeline shall apply:

a. Within twenty-one (21) calendar days of the notice provided by the Settlement Fund Administrator, Walgreens, any Settling State or the Enforcement Committee may dispute, in writing, the calculation of the Annual Remediation Payment or the Statewide Payment Amount for a Settling State. Such disputing party must provide a written notice of dispute to the Settlement Fund Administrator, the Enforcement Committee, any affected Settling State, and Walgreens identifying the nature of the dispute, the amount of money that is disputed, and the Settling State(s) affected.

b. Within twenty-one (21) calendar days of the sending of a written notice of dispute, any affected party may submit a response, in writing, to the Settlement Fund Administrator, the Enforcement Committee, any affected Settling State, and Walgreens identifying the basis for disagreement with the notice of dispute.

c. If no response is filed, the Settlement Fund Administrator shall adjust the amount calculated consistent with the written notice of dispute, and Walgreens shall pay the adjusted amount, collectively totaling that year's Annual Remediation Payment, on the Payment Date. If a written response to the written notice of dispute is timely sent to the Settlement Fund Administrator, the Settlement Fund Administrator shall notify Walgreens of the preliminary amount to be paid, which shall be the greater of the amount originally calculated by the Settlement Fund Administrator or the amount that would be consistent with the notice of dispute, *provided, however*, that in no circumstances shall the preliminary amount to be paid be higher than the Annual Maximum as set forth in Section IV.B.2. For the avoidance of doubt, a transfer of payments from the Settlement Fund Escrow for other Payment Years does not count toward determining whether the amount to be paid is higher than the Annual Maximum.

d. The Settlement Fund Administrator shall place any disputed amount of the preliminary amount paid by Walgreens into the Settlement Fund Escrow and shall disburse any undisputed amount to each Settling State and its Participating Subdivisions listed on Exhibit G pursuant to Section IV.C.4.

4. If a Settling State informs the Settlement Fund Administrator that it and its Participating Subdivisions listed on Exhibit G have agreed on the amount of its Statewide Payment Amount, determined pursuant to Section IV.C.2 or Section IV.C.3, to be distributed to the Settling State, among its separate types of funds (if applicable), and among its Participating Subdivisions listed on Exhibit G, the Settlement Fund Administrator shall disburse the Statewide Payment Amount pursuant to the consensus distribution amounts provided by the Settling State as quickly as practical. For a Settling State that does not so notify the Settlement Fund Administrator, the Settlement Fund Administrator shall allocate the Settling State's Statewide Payment Amount, pursuant to Section V, among the separate types of funds for the Settling State (if applicable), and among its Participating Subdivisions listed on Exhibit G using the following procedures:

a. As soon as possible for each payment and following the determination described in Section IV.C.2 or Section IV.C.3, the Settlement Fund Administrator shall give notice to the relevant Settling States and their Participating Subdivisions listed on Exhibit G of the amount to be received by each Settling State, the amount to be received by the separate types of funds for each Settling State (if applicable), and the amount to be received by each Participating Subdivision listed on Exhibit G for each Settling State.

b. Within twenty-one (21) days of the notice provided by the Settlement Fund Administrator, any Settling State or Participating Subdivision listed on Exhibit G may dispute, in writing, the calculation of the amount to be received by the relevant Settling State and/or its Participating Subdivision listed on Exhibit G. A dispute will be deemed invalid and disregarded if it challenges the allocations adopted by a State-Subdivision Agreement approved pursuant to the provisions of Exhibit O or by statute. Such disputing party must provide a written notice of dispute to the Settlement Fund Administrator, any affected Settling State, and any affected Participating Subdivision identifying the nature of the dispute, the amount of money that is disputed, and the Settling State(s) affected.

c. Within twenty-one (21) days of the sending of a written notice of dispute, any affected Settling State or any affected Participating Subdivision may submit a response, in writing, to the Settlement Fund Administrator, any affected Settling State and any affected Participating Subdivision identifying the basis for disagreement with the notice of dispute.

d. If no response is filed, the Settlement Fund Administrator shall adjust the amount calculated consistent with the written notice of dispute.

e. The Settlement Fund Administrator shall place any disputed amount into the Settlement Fund Escrow and shall disburse any undisputed amount to the Settling State and its Participating Subdivisions eligible for payment.

5. Disputes described in this subsection shall be resolved in accordance with the terms of Section VI.F.

6. The Settlement Fund Administrator may combine the disbursements of Annual Remediation Payments with disbursement of funds under other comparable opioid settlements. In determining when disbursements for each Annual Remediation Payment will be made, the Settlement Fund Administrator may take into account the timeline for the availability of disbursements under other comparable opioid settlements.

7. For the avoidance of doubt, a Subdivision not listed on Exhibit G shall not receive an allocation from the Subdivision Fund and no provision of this Agreement shall be interpreted to create such an entitlement.

D. *Procedure for Annual Remediation Payment in Payment Year 1*. The process described in Section IV.C shall not apply to Payment Year 1. The procedure in lieu of Section IV.C for Payment Year 1 is as set forth below:

1. The Payment Date for Payment Year 1 is December 31, 2022 or five (5) business days after the Preliminary Agreement Date, whichever is later. Walgreens shall pay into the Settlement Fund Escrow the total amount of the Base Payment for the Eligible States that have agreed to become Settling States, pursuant to Section II.A, as of December 31, 2022 or the Preliminary Agreement Date, whichever is later. This amount shall be calculated by multiplying the aggregate Overall Allocation Percentage attributable to Eligible States that have agreed to become Settling States by the amount specified in Exhibit M-2 for Payment Year 1. Walgreens shall inform the Enforcement Committee of the Statewide Payment Amount for each Eligible State that has agreed to become a Settling State as of December 31, 2022 or the Preliminary Agreement Date, whichever is later.

2. In the event that, in accordance with the terms of Section VIII.A, Walgreens determines not to proceed with the Settlement, or the Settlement does not become effective for any other reason, the funds held in the Settlement Fund Escrow shall immediately revert to Walgreens. If the condition set forth in Section VIII.A is met, Walgreens shall pay into the Settlement Fund Escrow, no later than five (5) business days after the Reference Date, the difference between the existing escrowed amount and the total amount of the Base Payment for the Settling States as of the Initial Participation Date, which shall be calculated by multiplying those Settling States' Overall Allocation Percentage by the amount specified in Exhibit M-2 for Payment Year 1. Walgreens shall inform the Enforcement Committee of the Statewide Payment Amount for each Settling State with money included in the payment.

3. The Annual Remediation Payment for Payment Year 1 placed in the Settlement Fund Escrow pursuant to Section IV.D.1 or Section IV.D.2 shall be transferred by the Settlement Fund Administrator on the Effective Date from the Settlement Fund Escrow to the Settlement Fund for distribution to each Settling State and to its Initial Participating Subdivisions listed on Exhibit G pursuant to Section IV.C.4 through Section IV.C.7; *provided, however*, that for any Settling State where the Consent Judgment has not been entered as of the Effective Date, the funds allocable to that Settling State and its Participating Subdivisions listed on Exhibit G shall not be disbursed until ten (10) calendar days after the entry of the Consent Judgment in that State.

E. *Payment Date for Payment Years 2 through 15.* The Payment Date for Payment Year 2 is December 31, 2023. The Payment Date for Payment Year 3 is March 31, 2025, and the Payment Date for Payment Years 4 through 14 shall be each successive March 31. The Payment Date for Payment Year 15 is December 31, 2036. The Annual Remediation Payments for those Payment Years shall be made pursuant to the process set forth in Section IV.C.

F. *Offsets to Annual Remediation Payments to the Settlement Fund for Non-Settling States.* An offset equal to $4,788,165,456 times the Overall Allocation Percentage assigned to each Non-Settling State in Exhibit F-2 shall be deducted from the total amount to be paid by Walgreens to the Settlement Fund. For the avoidance of doubt, the Adjusted State Remediation Payment is calculated in a way that reflects this offset. The Base Payments and Incentive Payments are also subject to suspension, offset, and reduction as provided in Section IV.K, Section XI and Section XII.

G. *Base Payments.*

1. Subject to the offset and reduction provisions set forth in Section XI and Section XII, Walgreens shall make Base Payments into the Settlement Fund in an amount equal to forty-one percent (41%) of the Adjusted State Remediation Payment. The maximum total for Base Payments is $1,963,147,836. The Base Payments shall be due in installments consistent with Exhibit M-2 over the fifteen (15) Payment Years, subject to potential offsets for Non-Settling States as provided in Section IV.F.

2. The Base Payment for any Settling State in each Payment Year shall be the Base Payment for that Payment Year specified in Exhibit M-2 times the Settling State's Overall Allocation Percentage specified in Exhibit F-2.

H. *Incentive Payments.*

1. Subject to the offset and reduction provisions set forth in Section XI and Section XII, Walgreens shall make potential additional incentive payments totaling up to a maximum of fifty-nine percent (59%) of the Adjusted State Remediation Payment, with the Incentive Payment amount depending on whether and the extent to which the criteria set forth below are met in each Settling State. The maximum total for Incentive Payments is $2,825,017,620.

2. A Settling State qualifies to receive Incentive Payments in addition to Base Payments if it meets the incentive eligibility requirements specified below. The maximum total Incentive Payment for any Settling State shall be no more than the maximum total for Incentive Payments listed in Section IV.H.1 times the Settling State's Overall Allocation Percentage specified in Exhibit F-2. Incentive Payments are state-specific, with the actual amount depending on whether and the extent to which the criteria set forth below are met in such Settling State.

3. The incentive payments shall be divided among three (3) categories, referred to as Incentive Payments A, BC and D. Incentive Payments A and BC will be due in installments over the fourteen (14) Payment Years beginning with Payment Year 2, and Incentive Payment D will be due in installments over Payment Years 6 through 15, as shown on Exhibit M-2. The total amount of incentive payments in an Annual Remediation Payment shall be the sum of the incentive payments for which the individual Settling States are eligible for that Payment Year under the criteria set forth below. The incentive payments shall be made with respect to a specific Settling State based on its eligibility for that Payment Year under the criteria set forth below. For the avoidance of doubt, eligibility for Incentive Payments A, BC, and D shall be determined on a Settling State-by-Settling State basis.

4. Incentive Payment A.

a. Incentive Payment A is mutually exclusive with Incentive Payments BC and D; if a Settling State receives Incentive Payment A in an Annual Remediation Payment, such Settling State is not eligible for Incentive Payments BC or D in that Annual Remediation Payment.

b. Incentive Payment A shall be equal to fifty-nine percent (59%) of the Adjusted State Remediation Payment, provided all Settling States satisfy the requirements of Incentive Payment A. Incentive Payment A will be due to a Settling State as part of the Annual Remediation Payment over fourteen (14) Payment Years, starting in Annual Remediation Payment 2, and shall equal a total potential maximum of $2,825,017,620 if all states are eligible. Each Settling State's share of Incentive Payment A in a given year, *provided* that Settling State is eligible, shall equal the total maximum amount available for Incentive Payment A for that year as reflected in Exhibit M-2 times the Settling State's Overall Allocation Percentage.

c. Eligibility for Incentive Payment A is as follows: A Settling State is eligible for Incentive Payment A if, as of two (2) years of the Effective Date: (i) there is a Bar in that State in full force and effect, (ii) there is a Settlement Class Resolution in that State in full force and effect, (iii) the Released Claims of all of the following entities are released through the execution of Subdivision Settlement Participation Forms, or there is a Case-Specific Resolution against such entities: all Primary Subdivisions, Litigating Subdivisions, School Districts with a K-12 student enrollment of at least 25,000 or .10% of a State's population, whichever is greater, Hospital Districts that have at least one hundred twenty-five

(125) hospital beds in one or more hospitals rendering services in that district, and Primary Fire Districts; or (iv) a combination of the actions in clauses (i)-(iii) has achieved the same level of resolution of Claims by Subdivisions *(e.g.,* a Bar against future litigation combined with full joinder by Litigating Subdivisions). For the avoidance of doubt, subsection (iv) cannot be satisfied unless all Litigating Subdivisions are Participating Subdivisions or there is a Case-Specific Resolution against any such Subdivisions that are not Participating Subdivisions. Walgreens and the Enforcement Committee shall meet and confer in order to agree on data sources for purposes of this Section prior to the Preliminary Agreement Date.

d. A Settling State that is not eligible for Incentive Payment A as of two (2) years after the Effective Date shall not be eligible for Incentive Payment A for that Payment Year or any subsequent Payment Years.

e. Walgreens shall indicate before the Initial Participation Date whether existing legislation in a Settling State is sufficient to qualify as a Bar.

f. If a Settling State is not eligible for Incentive Payment A as of the Payment Date for Payment Year 2, and becomes eligible for Incentive Payment A as of Payment Date for Payment Year 3, it shall receive the payment that it would have received for Incentive Payment A for Payment Year 2 (the "Incentive Payment A Catch-up Payment") beginning on the Payment Date for Payment Year 3. If a Settling State is not eligible for Incentive Payment A as of the Payment Date for Payment Year 3, and becomes eligible for Incentive Payment A as two (2) years after the Effective Date, it shall receive the payment that it would have received for Incentive Payment A for Payment Years 2 and 3 (also an "Incentive Payment A Catch-up Payment") beginning on the Payment Date for Payment Year 4. The Incentive A Catch-up Payment shall be reduced by any amounts paid to the Settling State under Incentives Payments B or C prior to the Settling State's eligibility for Incentive Payment A. The Incentive Payment A Catch-up Payment is subject to the Annual Maximum as set forth in Section IV.B.2. In the event that the full amount of Incentive Payment A Catch-up Payments is limited by the Annual Maximum, the process set forth in Section IV.B.2 shall apply.

g. If Walgreens made a payment under Incentive Payment A solely on the basis of a Bar or Settlement Class Resolution in a Settling State and that Bar or Settlement Class Resolution is subsequently removed, revoked, rescinded, reversed, overruled, interpreted in a manner to limit the scope of the release, or otherwise deprived of force or effect in any material respect, that Settling State shall not be eligible for Incentive Payment A thereafter, unless the State requalifies for Incentive Payment A through any method pursuant to Section IV.H.4.b, in which case the Settling State shall be eligible for Incentive Payment A less any litigation fees and costs incurred by Walgreens in the interim, except that, if the re-imposition occurs after the completion of opening statements in a

trial involving a Released Claim, the Settling State shall not be eligible for Incentive Payment A (unless this exception is waived by Walgreens).

5. Incentive Payment BC.

a. Incentive Payment BC shall be available to Settling States that do not qualify for Incentive Payment A.

b. Incentive Payment BC shall be up to a maximum of fifty-six percent (56%) of the Settling State's State Allocation. Incentive Payment A will be due to a Settling State as part of the Annual Remediation Payment over fourteen (14) Payment Years, starting in Annual Remediation Payment 2. Subject to Section IV.F, Incentive Payment BC shall equal a total potential maximum of $2,681,372,654 if all states are eligible.

c. A Settling State may earn Incentive Payment BC in Annual Remediation Payments 2 through 15 and may receive, when combined with the Settling State's Base Payment, a maximum of up to ninety-seven 97% of the Settling State's State Allocation. The maximum Incentive Payment BC for any Settling State in a given Payment Year shall be the Incentive Payment BC for that Payment Year specified in Exhibit M-2 times the Settling State's Overall Allocation Percentage specified in Exhibit F-2, provided such Settling State becomes eligible for Incentive Payment BC by sixty (60) days before the Payment Date for Payment Year 6.

d. The amount of Incentive Payment BC for which a Settling State is eligible shall be determined based on the aggregate population of the Settling State's Incentive BC Subdivisions that are Participating Subdivisions or have had their claims resolved through a Case-Specific Resolution, divided by the aggregate population of all the Settling State's Incentive BC Subdivisions. The Settling State's Incentive BC Subdivisions are (i) all Litigating Subdivisions (including School Districts and Special Districts) and (ii) all Non-Litigating Threshold Subdivisions (collectively, all Litigating Subdivisions and all Non-Litigating Threshold Subdivisions are "*Incentive BC Subdivisions*").

e. The percentage of the Settling State's maximum Incentive Payment BC for the Payment Year provided by Section IV.H.5.c to which the Settling State is entitled shall be determined according to the table of Incentive BC payment levels below:

Participation Percentage of Incentive BC Eligible Subdivision Population[5]	Incentive Payment BC Percentage for the Relevant Payment Year
Less than 85%	0%
85% or more but less than 86%	3.57%
86% or more but less than 87%	8.93%
87% or more but less than 88%	14.29%
88% or more but less than 89%	19.64%
89% or more but less than 90%	25%
90% or more but less than 91%	30.36%
91% or more but less than 92%	35.71%
92% or more but less than 93%	41.07%
93% or more but less than 94%	46.43%
94% or more but less than 95%	51.79%
95% or more but less than 96%	60.71%
96% or more but less than 97%	68.75%
97% or more but less than 98%	76.79%
98% or more but less than 99%	84.82%
99% or more but less than 100%	92.86%
100%	100%

[5] The "Participation Percentage of Incentive BC Eligible Subdivision Population" shall be determined by the aggregate population of the Settling State's Incentive BC Subdivisions that are Participating Subdivisions, or have had their claims resolved through a Case-Specific Resolution, divided by the aggregate population of the Settling State's Incentive BC Subdivisions. In calculating the Settling State's population that resides in Incentive BC Subdivisions, the population of the Settling State's Incentive BC Subdivisions shall be the sum of the population of all Incentive BC Subdivisions in the Settling State, notwithstanding that persons may be included within the population of more than one Incentive BC Subdivision. An individual Subdivision shall not be included more than once in the numerator, and shall not be included more than once in the denominator, of the calculation regardless if it (or any of its officials) is named as multiple plaintiffs in the same lawsuit; provided, however, that for the avoidance of doubt, no Subdivision will be excluded from the numerator or denominator under this sentence unless a Subdivision otherwise counted in the denominator has the authority to release the Claims (consistent with Section XI) of the Subdivision to be excluded.

f. For Payment Years 2-5, the percentage of the available Incentive Payment BC amount for which a Settling State is eligible will be based on the Participation Percentage of Incentive BC Eligible Subdivision Population as of sixty (60) days before the Payment Date. For Payment Years 6-15, the percentage of the available Incentive Payment BC amount for which a Settling State is eligible will be based on the Participation Percentage of Incentive BC Eligible Subdivision Population as of sixty (60) days before the Payment Date for Payment Year 6. If Incentive BC Eligible Subdivisions that have become Participating Subdivisions, or achieved Case-Specific Resolution status, collectively represent less than eighty-five percent (85%) of a Settling State's Incentive BC Eligible Subdivision population by sixty (60) days before the Payment Date for Payment Year 6, the Settling State shall not receive any Incentive Payment BC.

g. If there are no Incentive BC Eligible Subdivisions in a Settling State, and that Settling State is otherwise eligible for Incentive Payment BC because it is not eligible for Incentive Payment A, that Settling State will receive its maximum Incentive Payment BC for that Annual Remediation Payment provided by Section IV.H.5.c.

6. Incentive Payment D.

a. Incentive Payment D shall be available to Settling States that do not qualify for Incentive Payment A.

b. Incentive Payment D shall be equal to up to a maximum of ten percent (10%) of the Adjusted State Remediation Payment, with the actual amount depending whether and the extent to which the criteria set forth below are met in each Settling State. The maximum total for Incentive Payment D is $478,816,550.[6]

c. Incentive Payment D shall be paid starting at Payment Year 6 and the amount of Incentive Payment D in Payment Years 6-15 will depend on (i) the Settling State's eligibility as set out in Section IV.H.6.d and (ii) the Participation Percentage of Incentive BC Eligible Subdivision Population achieved by the Settling State as of sixty (60) days prior to the Payment Date for Payment Year 6.

d. A Settling State is eligible for Incentive Payment D if no Later Litigating Subdivision (for purposes of Incentive Payment D, Later Litigating Subdivisions are limited to (i) a Primary Subdivision; (ii) a school district with a

[6] The Incentive Payment BC table specified in Section IV.H.5.f and Incentive Payment D table specified in Section IV.H.6.e operate so that the combined amount of Incentive Payment BC and Incentive Payment D cannot exceed fifty-nine percent (59%) of the Adjusted State Remediation Payment over the term of the Agreement. Walgreens will have no obligation to pay more than $2,825,017,620 for the combined amounts of Incentive Payment BC and Incentive Payment D minus any offsets for Non-Settling States specified in Section IV.F.

K-12 student enrollment of at least 25,000 or 0.10% of the State's population, whichever is greater; (iii) a health district or hospital district that has at least one hundred twenty-five (125) hospital beds in one or more hospitals rendering services in that district; and (iv) Primary Fire Districts) in that State has a lawsuit against a Released Entity survive more than six (6) months after denial in whole or in part of a Threshold Motion.

e. A Settling State's eligibility for Incentive Payment D shall be determined as of sixty (60) calendar days prior to the Payment Date ("*Incentive Payment D Look-Back Date*"). If a Later Litigating Subdivision's lawsuit in that State survives more than six (6) months after denial in whole or in part a Threshold Motion after that date, that State shall not be eligible for Incentive Payment D for the Payment Year in which that occurs and any subsequent Payment Year.

f. The Incentive Payment D for any Settling State eligible for Incentive Payment D in Payment Years 6-15 shall be equal to between three percent (3%) and ten percent (10%) of the of the State Remediation Payment times the Settling State's Overall Allocation Percentage specified in Exhibit F-2. The applicable percentage shall be determined based on the Participation Percentage of Incentive BC Eligible Subdivision Population achieved by the Settling State as of sixty (60) days prior to the Payment Date for Payment Year 6 as shown in the table below:

Participation Percentage of Incentive BC Eligible Subdivision Population as of sixty (60) days prior to the Payment Date for Payment Year 6	**Each Eligible Settling State's Applicable Incentive Payment D Percentage**
Participation of less than 95%	10% of State Allocation
Participation of 95% but less than 96%	9% of State Allocation
Participation of 96% but less than 97%	8% of State Allocation
Participation of 97% but less than 98%	7% of State Allocation
Participation of 98% but less than 99%	6% of State Allocation
Participation of 99% but less than 100%	5% of State Allocation
Participation of 100%	3% of State Allocation

g. Incentive Payment D shall be paid in the installments of ten percent (10%) per year. In the event that the full amount of Incentive D is limited by the Annual Maximum, the process set forth in Section IV.B.2 shall apply. Prior to making the Annual Remediation Payment for Payment Years 6 through 15, the Settlement Fund Administrator shall determine a Settling State's eligibility for Incentive Payment D as of the Incentive Payment D Look-Back Date for that Payment Year. Prior to the Incentive Payment D Look-Back Date for each Payment Year, Walgreens may provide the Settlement Fund Administrator and the Enforcement Committee with notice identifying any Settling State(s) it

believes do not qualify for Incentive Payment D and information supporting its belief.

h. Notwithstanding Section IV.H.6.d and Section IV.H.6.e, a Settling State can become re-eligible for Incentive Payment D if the lawsuit that survived a Threshold Motion is dismissed pursuant to a later motion on grounds included in the Threshold Motion, in which case the Settling State shall be eligible for Incentive Payment D less any litigation fees and costs incurred by Walgreens in the interim, except that if the dismissal motion occurs after the completion of opening statements in such action, the Settling State shall not be eligible for Incentive Payment D.

I. In no event shall any Settling State receive Base Payments and Incentive Payments totaling more than one hundred percent (100%) of its respective Overall Allocation Percentage specified in Exhibit F-2 times the State Remediation Payment.

J. *State Specific Agreements.* Notwithstanding any other provision of this Agreement or any other agreement, in the event that: (1) Walgreens enters into an agreement with any Eligible State that resolves with finality such State's Claims consistent with Section XI of this Agreement and such agreement has an effective date prior to the Effective Date of this Agreement (such agreement, a "*State-Specific Agreement*") and (2) pursuant to the terms of the State-Specific Agreement, any payments, or any portion thereof, made by the Walgreens thereunder are made in lieu of any payments, or any portion thereof, to be made under this Agreement and Walgreens makes such a payment pursuant to the State-Specific Agreement, then Walgreens will reduce any payments allocable to such State (whether made to the Settlement Fund Escrow or the Settlement Fund) made pursuant to this Agreement in proportion to the Overall Allocation Percentage for such State.

K. *Significant Financial Constraint.*

1. Walgreens may suspend its payments if, as of thirty (30) calendar days preceding an annual Payment Date, Walgreens' credit rating from one or more of the three nationally recognized rating agencies is below BBB- or Baa3, except if within the prior three (3) months it repurchased any shares (other than those shares required to make the Company's compensation programs non-dilutive), funded new acquisitions with a purchase price greater than $250 million, or paid a dividend. Walgreens shall not utilize this provision until after payment of the first two Annual Remediation Payments.

2. The suspension shall last until thirty (30) days after Walgreens achieves a BBB- or Baa3 or higher credit rating from all nationally recognized rating agencies that rate Walgreens, at which point Walgreens shall make a payment equal to the lowest of the remaining Total Available Amount or one-thirtieth ($1/30^{th}$) of the Total Available Amount (the "*Post-Suspension Payment*").

3. Annual Remediation Payments and Annual Fees Payments shall be made on the schedule prescribed in Exhibit M-2 and Exhibit M-3 beginning in the Payment Year following the Post-Suspension Payment (i.e., if the last payment made pre-suspension was the Annual

Remediation Payment 6, the Post-Suspension Payment would be made on schedule for Annual Remediation Payment 7), but shall remain capped at one-thirtieth ($1/30^{th}$) of the Total Available Amount for two Payment Years until and unless Walgreens' credit rating from all of the three nationally recognized rating agencies that rate Walgreens increases to BBB or Baa2 (the "Reduced Payment Termination Date").

4. If Walgreens has reason to believe that it will not be able to the Annual Remediation Payment or Annual Fees Payment for a Payment Year, it shall provide at least ninety (90) calendar days' prior written notice to the Settlement Fund Administrator and Enforcement Committee (a "*Deferred Payment Notice*"). Any Deferred Payment Notice shall specify and include: (a) the gross amount of the payments owed, (b) the amount that Walgreens believes it will be unable to pay, (c) the accounting and audited financial documents upon which Walgreens relied for making this determination, and (d) any other relevant information for the Enforcement Committee to consider.

5. Deferrals and payments made pursuant to Section IV.K.2-3 will apply proportionally across Base Payments and Incentive Payments. For the avoidance of doubt, this Section IV.K applies fully to Payment Years after the first two (2) Annual Remediation Payment Dates, including the Base Payments and all Incentive Payments due pursuant to this Agreement during the Payment Year at issue.

6. Walgreens shall pay any amounts deferred due to suspension or reduced Post-Suspension Payments, including applicable interest, or before the Payment Date for Payment Year 15.

7. If Walgreens defers some or all of the payments due in a Payment Year pursuant to this Section IV.K, it shall not repurchase any shares (other than those shares required to make the Company's compensation programs non-dilutive), or fund new acquisitions with a purchase price greater than $250 million during the deferral period or until the deferred amount is fully repaid with interest.

8. Any payments deferred under this Section IV.K shall bear interest at a 7% per annum.

9. In the event that Walgreens suspends and/or defers Annual Payments pursuant to Section IV.K.1-2, Walgreens shall repay the suspended and/or deferred payments as follows:

a. If Walgreens suspends payments for up to one year, it shall repay the suspended and/or deferred payments within three Payment Years after the Reduced Payment Termination Date. For each of those three Payment Years, Walgreens shall pay its Annual Remediation Payment and Annual Fee Payment, if applicable, plus the sum of (1) the amount of payments suspended pursuant to Section IV.K.1; (2) the amount of underpayments due to deferral pursuant to Section IV.K.2; and (3) interest pursuant to Section IV.K.8, divided by three or the remaining number of Payment Years, whichever is smaller.

b. If Walgreens suspends payments for longer than one year and up to three years, it shall repay the suspended and/or deferred payments within six Payment Years after the Reduced Payment Termination Date. For each of those six Payment Years, Walgreens shall pay its Annual Remediation Payment and Annual Fee Payment, if applicable, plus the sum of (1) the amount of payments suspended pursuant to Section IV.K.1; (2) the amount of underpayments due to deferral pursuant to Section IV.K.2; and (3) interest pursuant to Section IV.K.8, divided by six or the remaining number of Payment Years, whichever is smaller.

c. If Walgreens suspends payments for longer than three years, it shall repay the suspended and/or deferred payments by no later than the Payment Date for Payment Year 15. For each of the remaining Payment Years, Walgreens shall pay its Annual Remediation Payment and Annual Fee Payment, if applicable, plus the sum of (1) the amount of payments suspended pursuant to Section IV.K.1; (2) the amount of underpayments due to deferral pursuant to Section IV.K.2; and (3) interest pursuant to Section IV.K.8, divided by the number of remaining Payment Years.

L. *New York Prior Settlement Credit*. Walgreens shall not be required to pay into the Settlement Fund 15.31% of New York's State Allocation as otherwise calculated pursuant to this Section IV as a credit for Walgreens' settlement with Suffolk and Nassau Counties in New York State. For the avoidance of doubt, this credit shall solely reduce the amount New York State and its Subdivisions would otherwise have received under this Agreement, and it shall not affect the amount received by any other Settling State or their Subdivisions.

V. Allocation and Use of Settlement Payments

A. *Components of Settlement Fund.* The Settlement Fund shall be funded by the Annual Remediation Payments and comprised of a Remediation Accounts Fund, a State Fund, and a Subdivision Fund for each Settling State. The payments made under Section IV into the Settlement Fund shall be initially allocated among those three (3) sub-funds and distributed and used as provided below. Payments placed into the Settlement Fund do not revert back to Walgreens.

B. *Use of Settlement Payments.*

1. It is the intent of the Parties that the payments disbursed from the Settlement Fund to Settling States and Participating Subdivisions be for Opioid Remediation, subject to exceptions that must be documented in accordance with Section V.B.2. In no event may less than ninety-five (95%) of Walgreens' maximum amount of payments pursuant to Section IV as set forth on Exhibit M-2 over the entirety of all Payments Years (but not any single Payment Year) be spent on Opioid Remediation.

2. While disfavored by the Parties, a Settling State or a Participating Subdivision set forth on Exhibit G may use monies from the Settlement Fund (that have not been restricted by this Agreement solely to future Opioid Remediation) for purposes that do not qualify as Opioid Remediation. If, at any time, a Settling State or a Participating Subdivision set forth on Exhibit G

uses any monies from the Settlement Fund for a purpose that does not qualify as Opioid Remediation, such Settling State or Participating Subdivision set forth on Exhibit G shall identify such amounts and report to the Settlement Fund Administrator and Walgreens how such funds were used, including if used to pay attorneys' fees, investigation costs, litigation costs, or costs related to the operation and enforcement of this Agreement, respectively. It is the intent of the Parties that the reporting under this Section V.B.2 shall be available to the public. For the avoidance of doubt, (a) any amounts not identified under this Section V.B.2 as used to pay attorneys' fees, investigation costs, or litigation costs by December 15 each year shall be included in the Compensatory Restitution Amount for purposes of Section V.F and (b) Participating Subdivisions not listed on Exhibit G may only use monies from the Settlement Fund for purposes that qualify as Opioid Remediation.

C. *Allocation of Settlement Fund.* The allocation of the Settlement Fund allows for different approaches to be taken in different states, such as through a State-Subdivision Agreement. Given the uniqueness of States and their Subdivisions, Settling States and their Subdivisions are encouraged to enter into State-Subdivision Agreements in order to direct the allocation of their portion of the Settlement Fund. As set out below, the Settlement Fund Administrator will make an initial allocation to three (3) state-level sub-funds. The Settlement Fund Administrator will then, for each Settling State and its Participating Subdivisions, apply the terms of this Agreement and any relevant State-Subdivision Agreement, Statutory Trust, Allocation Statute, or voluntary redistribution of funds as set out below before disbursing the funds.

1. Base Payments. The Settlement Fund Administrator will allocate Base Payments under Section IV.G among the Settling States pursuant to Section IV.G.2. Base payments for each Settling State will then be allocated fifteen percent (15%) to its State Fund, seventy percent (70%) to its Remediation Accounts Fund, and fifteen percent (15%) to its Subdivision Fund. Amounts may be reallocated and will be distributed as provided in Section V.D.

2. Incentive Payments. The Settlement Fund Administrator will treat Incentive Payments under Section IV.H on a State-specific basis. Incentive Payments for which a Settling State is eligible under Section IV.F will be allocated fifteen percent (15%) to its State Fund, seventy percent (70%) to its Remediation Accounts Fund, and fifteen percent (15%) to its Subdivision Fund. Amounts may be reallocated and will be distributed as provided in Section V.D.

3. Application of Adjustments. If a suspension, offset or reduction under Section XI or Section XII applies with respect to a Settling State, the suspension, offset or reduction shall be applied proportionally to all amounts that would otherwise be apportioned and distributed to the State Fund, the Remediation Accounts Fund, and the Subdivision Fund for that State.

4. Settlement Fund Administrator. Prior to the Initial Participation Date, Walgreens and the Enforcement Committee will agree to a detailed mechanism consistent with the foregoing for the Settlement Fund Administrator to follow in allocating, apportioning, and distributing payments, which shall then be appended hereto as Exhibit L.

5. Settlement Fund Administrator Costs. Any costs and fees associated with or arising out of the duties of the Settlement Fund Administrator as described in Exhibit L shall be

paid from the interest accrued in the Settlement Fund Escrow and the Settlement Fund; *provided, however*, that if such accrued interest is insufficient to pay the entirety of any such costs and fees, Walgreens shall pay fifty percent (50%) of the additional amount and fifty percent (50%) shall be paid out of the Settlement Fund.

D. *Settlement Fund Reallocation and Distribution.* As set forth below, within a particular Settling State's account, amounts contained in the Settlement Fund sub-funds may be reallocated and distributed per a State-Subdivision Agreement or other means. If the apportionment of amounts is not addressed and controlled under Section V.D.1 and Section V.D.2, then the default provisions of Section V.D.4 apply. It is not necessary that a State-Subdivision Agreement or other means of allocating funds pursuant to Section V.D.1 and Section V.D.2 address all of the Settlement Fund sub-funds. For example, a Statutory Trust might only address disbursements from a Settling State's Remediation Accounts Fund.

1. Distribution by State-Subdivision Agreement. If a Settling State has a State-Subdivision Agreement, amounts apportioned to that State's State Fund, Remediation Accounts Fund, and Subdivision Fund under Section V.C shall be reallocated and distributed as provided by that agreement. Any State Subdivision Agreement entered into after the Preliminary Agreement Date shall be applied only if it requires: (a) that all amounts be used for Opioid Remediation, except as allowed by Section V.B.2, and (b) that at least seventy percent (70%) of amounts be used solely for future Opioid Remediation.[7] For a State-Subdivision Agreement to be applied to the relevant portion of an Annual Payment, notice must be provided to Walgreens and the Settlement Fund Administrator at least sixty (60) calendar days prior to the Payment Date.

2. Distribution by Allocation Statute. If a Settling State has an Allocation Statute and/or a Statutory Trust that addresses allocation or distribution of amounts apportioned to such State's State Fund, Remediation Accounts Fund, and/or Subdivision Fund and that, to the extent any or all such sub-funds are addressed, requires (1) all amounts to be used for Opioid Remediation, except as allowed by Section V.B.2[8], and (2) at least seventy percent (70%) of all amounts to be used solely for future Opioid Remediation then, to the extent allocation or distribution is addressed, the amounts apportioned to that State's State Fund, Remediation Accounts Fund, and Subdivision Fund under Section V.C shall be allocated and distributed as addressed and provided by the applicable Allocation Statute or Statutory Trust. For the avoidance of doubt, an Allocation Statute or Statutory Trust need not address all three (3) sub-funds that comprise the Settlement Fund, and if the applicable Allocation Statute or Statutory Trust does not address distribution of all or some of these three (3) sub-funds, the applicable Allocation Statute or Statutory Trust does not replace the default provisions described in Section V of any such unaddressed fund. For example, if an Allocation Statute or Statutory Trust that meets the requirements of this Section V.D.2 only addresses funds restricted to remediation, then the default provisions of this Agreement concerning allocation among the three (3) sub-funds comprising the Settlement Fund and the distribution of the State Fund and Subdivision Fund for

[7] Future Opioid Remediation includes amounts paid to satisfy any future demand by another governmental entity to make a required reimbursement in connection with the past care and treatment of a person related to the Alleged Harms

that State would still apply, while the distribution of the applicable State's Remediation Accounts Fund would be governed by the qualifying Allocation Statute or Statutory Trust.

3. Voluntary Redistribution. A Settling State may choose to reallocate all or a portion of its State Fund to its Remediation Accounts Fund. A Participating Subdivision included on Exhibit G may choose to reallocate all or a portion of its allocation from the Subdivision Fund to the State's Remediation Accounts Fund or to another Participating Subdivision. The Settlement Fund Administrator is not required to honor a voluntary redistribution for which notice is provided to it less than sixty (60) calendar days prior to the applicable Payment Date.

4. Distribution in the Absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust. If Section V.D.1 and Section V.D.2 do not apply, amounts apportioned to that State's State Fund, Remediation Accounts Fund, and Subdivision Fund under Section V.C shall be distributed as follows:

a. Amounts apportioned to that State's State Fund shall be distributed to that State.

b. Amounts apportioned to that State's Remediation Accounts Fund shall be distributed consistent with Section V.E. Each Settling State shall submit to the Settlement Fund Administrator a designation of a lead state agency or other entity to serve as the single point of contact for that Settling State's funding requests from the Remediation Accounts Fund and other communications with the Settlement Fund Administrator. The designation of an individual entity is for administrative purposes only and such designation shall not limit funding to such entity or even require that such entity receive funds from this Agreement. The designated entity shall be the only entity authorized to request funds from the Settlement Fund Administrator to be disbursed from that Settling State's Remediation Accounts Fund. If a Settling State has established a Statutory Trust then that Settling State's single point of contact may direct the Settlement Fund Administrator to release the State's Remediation Accounts Fund to the Statutory Trust.

c. Amounts apportioned to that State's Subdivision Fund shall be distributed to Participating Subdivisions in that State included on Exhibit G per the Subdivision Allocation Percentage listed in Exhibit G. Section VII.I shall govern amounts that would otherwise be distributed to Non-Participating Subdivisions listed in Exhibit G. For the avoidance of doubt and notwithstanding any other provision in this Agreement, no Non-Participating Subdivision will receive any amount from the Settlement Fund, regardless of whether such Subdivision is included on Exhibit G.

d. Special Districts shall not be allocated funds from the Subdivision Fund, except through a voluntary redistribution allowed by Section V.D.3 to Special Districts that are Participating Subdivisions. A Settling State may allocate funds from its State Fund or Remediation Accounts Fund for Special Districts that are Participating Subdivisions.

5. Restrictions on Distribution. No amounts may be distributed from the Subdivision Fund contrary to Section VII, i.e., no amounts may be distributed directly to Non-Participating Subdivisions or to Later Participating Subdivisions to the extent such a distribution would violate Section VII.E through Section VII.H. Amounts allocated to the Subdivision Fund that cannot be distributed by virtue of the preceding sentence shall be distributed into the sub-account in the Remediation Accounts Fund for the Settling State in which the Subdivision is located, unless those payments are redirected elsewhere by a State-Subdivision Agreement described in Section V.D.1 or by an Allocation Statute or a Statutory Trust described in Section V.D.2.

E. *Provisions Regarding the Remediation Accounts Fund.*

1. State-Subdivision Agreement, Allocation Statute, and Statutory Trust Fund Provisions. A State-Subdivision Agreement, Allocation Statute, or Statutory Trust may govern the operation and use of amounts in that State's Remediation Accounts Fund so long as it complies with the requirements of Section V.D.1 or Section V.D.2, as applicable, and all direct payments to Subdivisions comply with Section VII.E through Section VII.H.

2. Absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust. In the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust that addresses distribution, the Remediation Accounts Fund will be used solely for future Opioid Remediation[9] and the following shall apply with respect to a Settling State:

a. Regional Remediation.

(i) At least fifty percent (50%) of distributions for remediation from a State's Remediation Accounts Fund shall be annually allocated and tracked to the regional level. A Settling State may allow the Advisory Committee established pursuant to Section V.E.2.c to define its regions and assign regional allocations percentages. Otherwise, the State shall (A) define its initial regions, which shall consist of one (1) or more General Purpose Subdivisions and which shall be designated by the state agency with primary responsibility for substance abuse disorder services employing, to the maximum extent practical, existing regions established in that State for opioid abuse treatment or other public health purposes; (B) assign initial regional allocation percentages to the regions based on the Subdivision Allocation Percentages in Exhibit G and an assumption that all Subdivisions included on Exhibit G will become Participating Subdivisions.

(ii) This minimum regional expenditure percentage is calculated on the Settling State's initial Remediation Accounts Fund allocation and does not include any additional amounts a Settling State has directed to its Remediation Accounts Fund from its State Fund, or any other amounts directed to the fund. A Settling State may dedicate more than fifty percent (50%) of its Remediation Accounts Fund to the regional expenditure and may annually adjust the percentage of its Remediation

Accounts Fund dedicated to regional expenditures as long as the percentage remains above the minimum amount.

(iii) The Settling State (A) has the authority to adjust the definition of the regions, and (B) may annually revise the percentages allocated to each region to reflect the number of General Purpose Subdivisions in each region that are Non-Participating Subdivisions.

b. *Subdivision Block Grants.* Certain Subdivisions shall be eligible to receive regional allocation funds in the form of a block grant for future Opioid Remediation. A Participating Subdivision eligible for block grants is a county or parish (or in the case of States that do not have counties or parishes that function as political subdivisions, a city) that (1) does not contain a Litigating Subdivision or a Later Litigating Subdivision for which it has the authority to end the litigation through a release, bar or other action, (2) either (i) has a population of 400,000 or more or (ii) in the case of California has a population of 750,000 or more and (3) has funded or otherwise managed an established health care or treatment infrastructure *(e.g.,* health department or similar agency). Each Subdivision eligible to receive block grants shall be assigned its own region.

c. *Small States.* Notwithstanding the provisions of Section V.E.2.a, Settling States with populations under four (4) million that do not have existing regions described in Section V.E.2.a shall not be required to establish regions. However, such a Settling State that contains one (1) or more Subdivisions eligible for block grants under Section V.E.2.b shall be divided regionally so that each block-grant eligible Subdivision is a region and the remainder of the state is a region.

d. *Advisory Committee.* The Settling State shall designate an Opioid Settlement Remediation Advisory Committee (the *"Advisory Committee")* to provide input and recommendations regarding remediation spending from that Settling State's Remediation Accounts Fund. A Settling State may elect to use an existing advisory committee or similar entity (created outside of a State-Subdivision Agreement or Allocation Statute); *provided, however,* the Advisory Committee or similar entity shall meet the following requirements:

(i) Written guidelines that establish the formation and composition of the Advisory Committee, terms of service for members, contingency for removal or resignation of members, a schedule of meetings, and any other administrative details;

(ii) Composition that includes at least an equal number of local representatives as state representatives;

(iii) A process for receiving input from Subdivisions and other communities regarding how the opioid crisis is affecting their

communities, their remediation needs, and proposals for remediation strategies and responses; and

(iv) A process by which Advisory Committee recommendations for expenditures for Opioid Remediation will be made to and considered by the appropriate state agencies.

3. Remediation Accounts Fund Reporting. The Settlement Fund Administrator shall track and assist in the report of remediation disbursements as agreed to among the Walgreens and the Enforcement Committee

F. Nature of Payment. Each of the Settling States, the Participating Subdivisions and Walgreens acknowledges, agrees and understands that, notwithstanding anything to the contrary in this Agreement, for purposes of Section 162(f) of the Internal Revenue Code, the Compensatory Restitution Amount paid by Walgreens (up to $4,788,165,456 to be paid out over fifteen (15) years) constitutes restitution or remediation, as defined in Treasury Regulation § 1.162-21(e)(4), for damage or harm allegedly caused by the potential violation of a law and is an amount paid for the purpose of remediating the damage or harm allegedly caused, including to restore the affected persons, Settling States and Participating Subdivisions to the same or substantially similar position or condition as existed prior to such damage or harm allegedly caused. The Parties acknowledge, agree and understand that only the Private Attorneys Fees, tate AG Fees and Costs, and Additional Remediation Amount (up to $734,363,310) represent reimbursement to Settling States, Participating Subdivisions listed on Exhibit G, or any other person or entity for the fees and costs of any investigation or litigation, that no portion of the Compensatory Restitution Amount represents reimbursement to Plaintiffs or any other person or entity for the fees and costs of any investigation or litigation, and no portion of the Compensatory Restitution Amount represents or should properly be characterized as the payment of fines, penalties or other punitive assessments. Releasors acknowledge, agree and understand that Walgreens intends to allocate the cost of the Annual Remediation Payments among the Releasees using a reasonable basis. The Designated State, on behalf of all Settling States and Participating Subdivisions shall complete and file Form 1098-F with the Internal Revenue Service on or before February 28 (March 31 if filed electronically) of the year following the calendar year in which the order entering this Agreement becomes binding. The Form 1098-F shall identify the entire Adjusted State Remediation Payment except as reported pursuant to Section V.B.2 as of December 31, 2023, as remediation/restitution amounts, and Releasors shall furnish Copy B of such Form 1098-F to Walgreens on or before January 31 of the year following the calendar year in which the order entering this Agreement becomes binding. Walgreens makes no warranty or representation to Releasors as to the tax consequences of the Compensatory Restitution Amount, Adjusted State Remediation Payment, the Private Attorneys Fees, or State AG Fees and Costs or any portion thereof. Further, Releasors specifically acknowledge that no portion of the Compensatory Restitution Amount shall be used for general enforcement efforts or other discretionary purposes as described in Treasury Regulation § 1.162-21(e)(4)(i)(C).

VI. Enforcement

A. *Enforceability.* This Agreement is enforceable only by the Settling States and Walgreens; *provided, however,* that Released Entities may enforce Section X and Participating

Subdivisions listed on Exhibit G have the enforcement rights described in Section VI.D. Except to the extent allowed by the Injunctive Relief Terms, Settling States and Participating Subdivisions shall not have enforcement rights against Walgreens with respect to either the terms of this Agreement that apply only to or in other States or any Consent Judgment entered into by another Settling State. Participating Subdivisions shall not have enforcement rights against Walgreens with respect to this Agreement or any Consent Judgment except that Participating Subdivisions listed on Exhibit G shall have enforcement rights as set forth herein as to payments that would be allocated to the Subdivision Fund or Remediation Accounts Fund pursuant to Section V; *provided, however,* that each Settling State shall allow Participating Subdivisions in such Settling State to notify it of any perceived violations of this Agreement or the applicable Consent Judgment.

B. *Jurisdiction.* Walgreens consents to the jurisdiction of the court in which each Settling State files its Consent Judgment, limited to resolution of disputes identified in Section VI.F.1 for resolution in that court.

C. *Specific Terms Dispute Resolution.*

1. Any dispute that is addressed by the provisions set forth in the Injunctive Relief Terms shall be resolved as provided therein.

2. In the event that Walgreens believes that the ninety-five percent (95%) threshold established in Section V.B.1 is not being satisfied, any Party may request that Walgreens and the Enforcement Committee meet and confer regarding the use of funds to implement Section V.B.1. The completion of such meet-and-confer process is a precondition to further action regarding any such dispute. Further action concerning Section V.B.1 shall: (i) be limited to Walgreens seeking to reduce their Annual Remediation Payments by no more than five percent (5%) of the difference between the actual amount of Opioid Remediation and the ninety-five percent (95%) threshold established in Section V.B.1; (ii) only reduce Annual Remediation Payments to those Settling States and their Participating Subdivision(s) that are below the ninety-five percent (95%) threshold established in Section V.B.1; and (iii) not reduce Annual Remediation Payments restricted to future Opioid Remediation.

D. *State-Subdivision Enforcement.*

1. A Subdivision shall not have enforcement rights against a Settling State in which it is located with respect to this Agreement or any Consent Judgment except that a Participating Subdivision listed on Exhibit G shall have enforcement rights (a) as provided for in a State-Subdivision Agreement, Allocation Statute, or Statutory Trust with respect to intrastate allocation or (b) in the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust, to allegations that (i) the Settling State's use of Remediation Accounts Fund monies were not used for uses similar to or in the nature of those uses contained in Exhibit E; or (ii) a Settling State failed to pay funds directly from the Remediation Accounts Fund to a Participating Subdivision eligible to receive a block grant pursuant to Section V.E.2.b.

2. A Settling State shall have enforcement rights against a Participating Subdivision located in its territory (a) as provided for in a State-Subdivision Agreement, Allocation Statute,

or Statutory Trust; or (b) in the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust, to allegations that the Participating Subdivisions' uses of Remediation Accounts Fund monies were not used for purposes similar to or in the nature of those uses contained in Exhibit E.

3. As between the Settling States and Participating Subdivisions, the above rights are contractual in nature and nothing herein is intended to limit, restrict, change or alter any other existing rights under law.

E. *Subdivision Walgreens Payment Enforcement.* A Participating Subdivision listed on Exhibit G shall have the same right as a Settling State to seek resolution regarding the failure by Walgreens to make its Annual Remediation Payment in a Payment Year.

F. *Other Terms Regarding Dispute Resolution.*

1. Except to the extent provided by Section VI.C or Section VI.F.2, all disputes shall be resolved in either the court that entered the relevant Consent Judgment or, if no such Consent Judgment was entered, a state or territorial court with jurisdiction located wherever the seat of the relevant state government is located.

a. State court proceedings shall be governed by the rules and procedures of the relevant forum.

b. For the avoidance of doubt, disputes to be resolved in state court include, but are not limited to, the following:

(i) disputes concerning whether expenditures qualify as Opioid Remediation;

(ii) disputes between a Settling State and its Participating Subdivisions as provided by Section VI.D, except to the extent the State-Subdivision Agreement provides for other dispute resolution mechanisms. For the avoidance of doubt, disputes between a Settling State and any Participating Subdivision shall not be considered National Disputes;

(iii) whether this Agreement and relevant Consent Judgment are binding under state law;

(iv) the extent of the Attorney General's or other participating entity's authority under state law, including the extent of the authority to release claims; and

(v) whether the definition of a Bar, a Case-Specific Resolution, Final Order, lead state agency as described in Section V.D.4.b, Later Litigating Subdivision, Litigating Subdivision, or Threshold Motion have been met; and

(vi) all other disputes not specifically identified in Section VI.C or Section VI.F.2.

c. Any Party may request that the National Arbitration Panel provide an interpretation of any provision of the settlement that is relevant to the state court determination, and the National Arbitration Panel shall make reasonable best efforts to supply such interpretation within the earlier of thirty (30) calendar days or the time period required by the state court proceedings. Any Party may submit that interpretation to the state court to the extent permitted by, and for such weight provided by, the state court's rules and procedures. If requested by a Party, the National Arbitration Panel shall request that its interpretation be accepted in the form of an *amicus curiae* brief, and any attorneys' fees and costs for preparing any such filing shall be paid for by the requesting Party.

2. National Disputes involving a Settling State, a Participating Subdivision that has enforcement rights pursuant to Section VI.A, and/or Walgreens shall be resolved by the National Arbitration Panel.

a. National Disputes are disputes that are not addressed by Section VI.C, and which are exceptions to Section VI.F.1's presumption of resolution in state courts because they involve issues of interpretation of terms contained in this Agreement applicable to all Settling States without reference to a particular State's law. Disputes between a Settling State and any Participating Subdivision shall not be considered National Disputes. National Disputes are limited to the following:

(i) the amount of offset and/or credit attributable to Non-Settling States;

(ii) issues involving the scope and definition of Product;

(iii) interpretation and application of the terms "Covered Conduct," "Released Entities," and "Released Claims";

(iv) the failure by Walgreens to pay the Annual Remediation Payment or the Additional Restitution Amount in a Payment Year, but for the avoidance of doubt, disputes between Walgreens and a Settling State over the amounts owed only to that state that do not affect any other Settling State shall not be considered National Disputes;

(v) the interpretation and application of the significant financial constraint provision in Section IV.K, including, without limitation, eligibility for and amount of deferrals for any given year, time for repayment, and compliance with restrictions during deferral term;

(vi) the interpretation and application of any most-favored-nation provision in Section XIII.E;

(vii) questions regarding the performance and/or removal of the Settlement Fund Administrator;

(viii) disputes involving liability of successor entities;

(ix) disputes that require a determination of the sufficiency of participation in order to qualify for Incentive Payments A, BC or D;

(x) disputes involving a Releasor's compliance with, and the appropriate remedy under, Section X.B.4.c;

(xi) disputes requiring the interpretation of Agreement terms that are national in scope or impact, which shall mean disputes requiring the interpretation of Agreement terms that (i) concretely affect four (4) or more Settling States; and (ii) do not turn on unique definitions and interpretations under state law; and

(xii) any dispute subject to resolution under Section VI.F.1 but for which all parties to the dispute agree to arbitration before the National Arbitration Panel under the provisions of this Section VI.F.2.

b. The National Arbitration Panel shall be comprised of three (3) arbitrators. One (1) arbitrator shall be chosen by Walgreens, one (1) arbitrator shall be chosen by the Enforcement Committee with due input from Participating Subdivisions listed on Exhibit G, and the third arbitrator shall be agreed upon by the first two (2) arbitrators. The membership of the National Arbitration Panel is intended to remain constant throughout the term of this Agreement, but in the event that replacements are required, the retiring arbitrator shall be replaced by the party that selected him/her.

c. The National Arbitration Panel shall make reasonable best efforts to decide all matters within one hundred eighty (180) calendar days of filing, and in no event shall it take longer than one (1) year.

d. The National Arbitration Panel shall conduct all proceedings in a reasonably streamlined process consistent with an opportunity for the parties to be heard. Issues shall be resolved without the need for live witnesses where feasible and with a presumption in favor of remote participation to minimize the burdens on the parties.

e. To the extent allowed under state law, a Settling State, a Participating Subdivision that has enforcement rights pursuant to Section VI.A, and (at any party's request) the National Arbitration Panel may certify to an appropriate state court any question of state law. The National Arbitration Panel shall be bound by a final state court determination of such a certified question. The time period for the arbitration shall be tolled during the course of the certification process.

f. The arbitrators will give due deference to any authoritative interpretation of state law, including any declaratory judgment or similar relief obtained by a Settling State, a Participating Subdivision that has enforcement rights pursuant to Section VI.A, or Walgreens on a state law issue.

g. The decisions of the National Arbitration Panel shall be binding on Settling States, Participating Subdivisions, Walgreens, and the Settlement Fund Administrator. In any proceeding before the National Arbitration Panel involving a dispute between a Settling State and Walgreens whose resolution could prejudice the rights of a Participating Subdivision(s) in that Settling State, such Participating Subdivision(s) shall be allowed to file a statement of view in the proceeding.

h. Nothing herein shall be construed so as to limit or otherwise restrict a State from seeking injunctive or other equitable relief in state court to protect the health, safety, or welfare of its citizens.

i. Each party shall bear its own costs in any arbitration or court proceeding arising under this Section VI. The costs for the arbitrators on the National Arbitration Panel shall be divided and paid equally by the disputing sides for each individual dispute, e.g., a dispute between Walgreens and Settling States/Participating Subdivisions shall be split fifty percent (50%) by Walgreens and fifty percent (50%) by the Settling States/Participating Subdivisions that are parties to the dispute; a dispute between a Settling State and a Participating Subdivision shall be split fifty percent (50%) by the Settling State that is party to the dispute and fifty percent (50%) by any Participating Subdivisions that are parties to the dispute.

3. Prior to initiating an action to enforce pursuant to this Section VI.F, the complaining party must:

a. Provide written notice to the Enforcement Committee and/or Walgreens of its complaint, including the provision of the Consent Judgment and/or Agreement that the practice appears to violate, as well as the basis for its interpretation of the disputed provision. The Enforcement Committee shall establish a reasonable process and timeline for obtaining additional information from the involved parties; *provided, however*, that the date the Enforcement Committee establishes for obtaining additional information from the parties shall not be more than forty-five (45) calendar days following the notice. The Enforcement Committee may advise the involved parties of its views on the complaint and/or seek to resolve the complaint informally.

b. Wait to commence any enforcement action until thirty (30) calendar days after the date that the Enforcement Committee establishes for obtaining additional information from the involved parties.

4. If the parties to a dispute cannot agree on the proper forum for resolution of the dispute under the provisions of Section VI.F.1 or Section VI.F.2, a committee comprising the Enforcement Committee and sufficient representatives of Walgreens such that the members of the Enforcement Committee have a majority of one (1) member will determine the forum where the dispute will be initiated within twenty-eight (28) calendar days of receiving notification of the dispute relating to the proper forum. The forum identified by such committee shall be the sole forum for litigating the issue of which forum will hear the substantive dispute, and the committee's identification of such forum in the first instance shall not be entitled to deference by the forum selected.

5. To the extent allowed by applicable law, this Settlement Agreement shall not be deemed to create a lien or encumbrance against any real property owned by Walgreens or its affiliates, unless in the event of a default or breach of the payment provisions by Walgreens. Nothing in this Section VI.F.5 shall be construed to limit any remedy of any Settling State or Participating Subdivision in the event of a default or breach of this Agreement by Walgreens.

G. *No Effect.* Nothing in this Agreement shall be interpreted to limit the Settling States' Civil Investigative Demand *("CID")* or investigative subpoena authority, to the extent such authority exists under applicable state law and the CID or investigative subpoena is issued pursuant to such authority, and Walgreens reserve all of its rights in connection with a CID or investigative subpoena issued pursuant to such authority.

VII. Participation by Subdivisions

A. *Notice.* Prior to the State Participation Date, the Parties shall agree on a vendor to serve as the Implementation Administrator and provide notice pursuant to this Section VII.A. No later than fifteen (15) calendar days after the Preliminary Agreement Date, the Implementation Administrator shall send individual written notice (which may be delivered via e-mail or other electronic means) of the opportunity to participate in this Agreement and the requirements of participation to all Subdivisions in the Settling States that are (1) Litigating Subdivisions or (2) Non-Litigating Subdivisions listed on Exhibit G. To the extent a Special District is entitled to an allocation for a direct payment through its inclusion in Exhibit G pursuant to a State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution, the Implementation Administrator, with the cooperation of the Settling States shall also send individual written notice (which may be delivered via e-mail or other electronic means) of the opportunity to participate in this Agreement and the requirements of participation to such Special Districts. Unless otherwise agreed by the Parties, the version of Exhibit G used for notice shall be the one in place as of the State Participation Date. Notice (which may be delivered via e-mail or other electronic means) shall also be provided simultaneously to counsel of record for Litigating Subdivisions and known counsel for Non-Litigating Subdivisions and Special Districts listed on Exhibit G. Up to $1,500,000 of the costs of the Implementation Administrator shall be paid for by Walgreens. The Settling States, with the cooperation of Walgreens, may also provide general notice reasonably calculated to alert Non-Litigating Subdivisions in the Settling States to this Agreement, the opportunity to participate in it, and the requirements for participation. Such notice may include publication and other standard forms of notification, as well as notice to state and county organizations such as the National Association of Counties and the National League of Cities. The notice will include that the deadline for

becoming an Initial Participating Subdivision is the Initial Participation Date. Nothing contained herein shall preclude a Settling State from providing further notice to or otherwise contacting any of its Subdivisions about becoming a Participating Subdivision, including beginning any of the activities described in this paragraph prior to the Preliminary Agreement Date.

B. *Requirements for Becoming a Participating Subdivision—Non-Litigating Subdivisions.* A Non-Litigating Subdivision in a Settling State may become a Participating Subdivision by returning an executed Subdivision Settlement Participation Form to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) specifying (1) that the Subdivision agrees to the terms of this Agreement pertaining to Subdivisions, (2) that the Subdivision releases all Released Claims against all Released Entities, (3) that the Subdivision agrees to use monies it receives, if any, from the Settlement Fund pursuant to the applicable requirements of Section V; *provided, however,* that Non-Litigating Subdivisions may only use monies originating from the Settlement Fund for purposes that qualify as Opioid Remediation, and (4) that the Subdivision submits to the jurisdiction of the court where the applicable Consent Judgment is filed for purposes limited to that court's role under this Agreement. The required Subdivision Settlement Participation Form is attached as Exhibit K.

C. *Requirements for Becoming a Participating Subdivision—Litigating Subdivisions/Later Litigating Subdivisions.* A Litigating Subdivision or Later Litigating Subdivision in a Settling State may become a Participating Subdivision by returning an executed Subdivision Settlement Participation Form to the Implementation Administrator Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) and upon prompt dismissal with prejudice of its lawsuit. A Settling State may require each Litigating Subdivision in that State to specify on the Subdivision Settlement Participation Form whether its counsel has waived any contingency fee contract with that Participating Subdivision and whether, if eligible, it intends to seek fees pursuant to Exhibit R. The Settlement Fund Administrator shall provide quarterly reports of this information to the parties organized by Settling State. A Litigating Subdivision or Later Litigating Subdivision may not become a Participating Subdivision after the completion of opening statements in a trial of the lawsuit it brought that includes a Released Claim against a Released Entity.

D. *Initial Participating Subdivisions.* A Subdivision qualifies as an Initial Participating Subdivision if it meets the applicable requirements for becoming a Participating Subdivision set forth in Section VII.B or Section VII.C by the Initial Participation Date. All Subdivision Settlement Participation Forms shall be held in escrow by the Implementation Administrator until the Reference Date.

E. *Later Participating Subdivisions.* A Subdivision that is not an Initial Participating Subdivision may become a Later Participating Subdivision by meeting the applicable requirements for becoming a Participating Subdivision set forth in Section VII.B or Section VII.C after the Initial Participation Date and by agreeing to be subject to the terms of a State-Subdivision Agreement (if any) or any other structure adopted or applicable pursuant to Section

V.D or Section V.E. The following provisions govern what a Later Participating Subdivision can receive (but do not apply to Initial Participating Subdivisions):

1. A Later Participating Subdivision shall not receive any share of any Annual Remediation Payment due before it became a Participating Subdivision.

2. A Later Participating Subdivision that becomes a Participating Subdivision after November 30, 2023 shall receive seventy-five percent (75%) of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Subdivision prior to that date (unless the Later Participating Subdivision is subject to Section VII.E.3 or Section VII.E.4).

3. A Later Participating Subdivision that, after the Initial Participation Date, maintains a lawsuit for a Released Claim(s) against a Released Entity and has judgment entered against it on every such Claim before it became a Participating Subdivision (other than a consensual dismissal with prejudice) shall receive fifty percent (50%) of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Subdivision prior to such judgment; *provided, however*, that if the Subdivision appeals the judgment and the judgment is affirmed with finality before the Subdivision becomes a Participating Subdivision, the Subdivision shall not receive any share of any Base Payment or Incentive Payments.

4. A Later Participating Subdivision that becomes a Participating Subdivision while a Bar or Case-Specific Resolution involving a different Subdivision exists in its State shall receive twenty-five percent (25%) of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Subdivision without such Bar or Case-Specific Resolution.

F. *No Increase in Payments.* Amounts to be received by Later Participating Subdivisions shall not increase the payments due from Walgreens.

G. *Ineligible Subdivisions.* Prior Litigating Subdivisions whose claims have already been resolved and Subdivisions in Non-Settling States are not eligible to be Participating Subdivisions.

H. *Non-Participating Subdivisions.* Non-Participating Subdivisions shall not directly receive any portion of any Annual Remediation Payment, including from the State Fund and direct distributions from the Remediation Accounts Fund; however, a Settling State may choose to fund future Opioid Remediation that indirectly benefits Non-Participating Subdivisions.

I. *Unpaid Allocations to Later Participating Subdivisions and Non-Participating Subdivisions.* Any Base Payment and Incentive Payments allocated pursuant to Section V.D to a Later Participating Subdivision or Non-Participating Subdivision that cannot be paid pursuant to this Section VII, including the amounts that remain unpaid after the reductions required by Section VII.E.2 through Section VII.E.4, will be allocated to the Remediation Accounts Fund for the State in which the Subdivision is located, unless those payments are redirected elsewhere by a State-Subdivision Agreement or by a Statutory Trust.

VIII. Condition to Effectiveness of Agreement and Filing of Consent Judgment

A. *Determination to Proceed With Settlement.*

1. The Settling States shall confer with legal representatives of the Participating Subdivisions listed on Exhibit G and inform Walgreens no later than eighteen (18) calendar days prior to the Reference Date whether the Settling States agree that there is sufficient participation to proceed with this Agreement. Within seven (7) calendar days of informing Walgreens that there is sufficient participation to proceed, the Settling States will deliver all signatures and releases required by the Agreement to be provided by the Settling States to Walgreens.

2. If the Settling States inform Walgreens that they agree that there is sufficient participation, Walgreens will then determine on or before the Reference Date whether there is sufficient State participation, sufficient Subdivision participation, and sufficient resolution of the Claims of the Litigating Subdivisions in the Settling States (through participation under Section VII, Case-Specific Resolution(s) and Bar(s)) to proceed with this Agreement. The determination shall be in the sole discretion of Walgreens and may be based on any criteria or factors deemed relevant by Walgreens.

B. *Notice by Walgreens.* On or before the Reference Date, Walgreens shall inform the Settling States of its determination pursuant to Section VIII.A.2. If Walgreens determines to proceed, the Parties will proceed to file the Consent Judgments and the obligations in the Subdivision Settlement Participation Forms will be effective and binding as of the Reference Date. If Walgreens determines not to proceed, this Agreement will have no further effect, any amounts placed in escrow for Payment Year 1, including funds referenced in Section IV.C.1 and Exhibit M-2, shall be returned to Walgreens, and all releases (including those contained in Subdivision Settlement Participation Forms) and other commitments or obligations contained herein or in Subdivision Settlement Participation Forms will be void.

IX. Settling State and Participating Subdivision Attorneys' Fees and Costs and Additional Remediation Amount

A. The Agreement on Subdivision Attorneys' Fees, Expenses and Costs is set forth in Exhibit R and incorporated herein by reference. The Agreement on the State Outside Counsel Fee Fund for Chain Pharmacy Settlement and the Agreement on the Joint State Cost Fund are set forth in Exhibit S and Exhibit T, respectively, and are incorporated herein by reference.

B. *Additional Remediation Amount.*

1. Subject to and without exceeding the maximum payment amounts set forth in the "Additional Remediation Amount" column of Exhibit M-3 and subject to the reduction specified in Section IX.B.2, Walgreens shall pay an Additional Remediation Amount to the Settling States listed in Exhibit N. Such funds shall be paid, on the schedule set forth in Exhibit M-3, as allocated by the Settlement Fund Administrator pursuant to Exhibit N.

2. *Reduction of Additional Remediation Amount*. The amounts owed by Walgreens pursuant to this Section IX.B shall be reduced by the allocations set forth on Exhibit N for Non-Settling States.

3. For the avoidance of doubt, (1) a Settling State that retained outside counsel in connection with the investigation of one or more Chain Pharmacies, as that term is defined in Exhibit S, that receives an Additional Remediation Amount because the Settling State was not otherwise eligible to receive funds from the State Outside Counsel Fee Fund may choose to have the Additional Remediation Amount designated to pay the Settling State's outside counsel, and may instruct the Settlement Fund Administrator to pay those funds directly to the Settling State's outside counsel, and (2) Additional Remediation Amount funds, including funds designated by a Settling State to pay its outside counsel under this paragraph, shall not be subject to allocation as provided in Section V.C through Section V.E.

C. All payments addressed by this Section IX will be made on December 31 for each Payment Year in which they are due pursuant to Exhibit M-3.

X. Release

A. *Scope.* As of the Effective Date, the Released Entities are hereby released and forever discharged from all of the Releasors' Released Claims. Each Settling State (for itself and its Releasors) and Participating Subdivisions hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in this Agreement are intended by the Parties to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of each Settling State and its Attorney General to release claims. This Agreement shall be a complete bar to any Released Claim.

B. *Claim-Over and Non-Party Settlement.*

1. It is the intent of the Parties that:

a. Released Entities should not seek contribution or indemnification (other than pursuant to an insurance contract), from other parties for their payment obligations under this Agreement;

b. the payments made under this Agreement shall be the sole payments made by the Released Entities to the Releasors involving, arising out of, or related to Covered Conduct (or conduct that would be Covered Conduct if engaged in by a Released Entity);

c. Claims by Releasors against non-Parties should not result in additional payments by Released Entities, whether through contribution, indemnification or any other means; and

d. the Agreement meets the requirements of the Uniform Contribution Among Joint Tortfeasors Act and any similar state law or doctrine that reduces or discharges a released party's liability to any other parties.

The provisions of this Section X.B are intended to be implemented consistent with these principles. This Agreement and the releases and dismissals provided for herein are made in good faith.

2. No Released Entity shall seek to recover for amounts paid under this Agreement based on indemnification, contribution, or any other theory from a manufacturer, pharmacy, hospital, pharmacy benefit manager, health insurer, third-party vendor, trade association, distributor, or health care practitioner; *provided* that a Released Entity shall be relieved of this prohibition with respect to any entity that asserts a Claim-Over against it. For the avoidance of doubt, nothing herein shall prohibit a Released Entity from recovering amounts owed pursuant to insurance contracts, and nothing herein shall prohibit a Released Entity from seeking a voluntary agreement providing indemnification for liability and/or expenses arising from Walgreens' post-Effective Date implementation of the Injunctive Relief Terms set forth in Exhibit P.

3. To the extent that, on or after the Reference Date, any Releasor enters into a Non-Party Settlement, including in any bankruptcy case or through any plan of reorganization (whether individually or as a class of creditors), the Releasor will include (or in the case of a Non-Party Settlement made in connection with a bankruptcy case, will cause the debtor to include), unless prohibited from doing so under applicable law, in the Non-Party Settlement a prohibition on contribution or indemnity of any kind substantially equivalent to that required from Walgreens in Section X.B.2, or a release from such Non-Released Entity in favor of the Released Entities (in a form equivalent to the releases contained in this Agreement) of any Claim-Over. The obligation to obtain the prohibition and/or release required by this subsection is a material term of this Agreement.

4. In the event that any Releasor obtains a judgment with respect to Non-Party Covered Conduct against a Non-Released Entity that does not contain a prohibition like that described in Section X.B.3. or any Releasor files a Non-Party Covered Conduct Claim against a Non-Released Entity in bankruptcy or a Releasor is prevented for any reason from obtaining a prohibition/release in a Non-Party Settlement as provided in Section X.B.3, and such Non-Released Entity asserts a Claim-Over against a Released Entity, the Released Entity shall be relieved of the prohibition in Section X.B.2 with respect to that Non-Released Entity and that Releasor and Walgreens shall take the following actions to ensure that the Released Entities do not pay more with respect to Covered Conduct to Releasors or to Non-Released Entities than the amounts owed under this Settlement Agreement by Walgreens:

a. Walgreens shall notify that Releasor of the Claim-Over within sixty (60) calendar days of the assertion of the Claim-Over or sixty (60) calendar days of the Effective Date of this Settlement Agreement, whichever is later;

b. Walgreens and that Releasor shall meet and confer concerning the means to hold Released Entities harmless and ensure that they are not required to

pay more with respect to Covered Conduct than the amounts owed by Walgreens under this Agreement;

c. That Releasor and Walgreens shall take steps sufficient and permissible under the law of the State of the Releasor to hold Released Entities harmless from the Claim-Over and ensure Released Entities are not required to pay more with respect to Covered Conduct than the amounts owed by Walgreens under this Agreement. Such steps may include, where permissible:

(i) Filing of motions to dismiss or such other appropriate motion by Walgreens or Released Entities, and supported by Releasors, in response to any claim filed in litigation or arbitration;

(ii) Reduction of that Releasors' Claim and any judgment it has obtained or may obtain against such Non-Released Entity by whatever amount or percentage is necessary to extinguish such Claim-Over under applicable law, up to the amount that Releasor has obtained, may obtain, or has authority to control from such Non-Released Entity;

(iii) Placement into escrow of funds paid by the Non-Released Entities such that those funds are available to satisfy the Claim-Over;

(iv) Return of monies paid by Walgreens to that Releasor under this Settlement Agreement to permit satisfaction of a judgment against or settlement with the Non-Released Entity to satisfy the Claim-Over;

(v) Payment of monies to Walgreens by that Releasor to ensure they are held harmless from such Claim-Over, up to the amount that Releasor has obtained, may obtain, or has authority to control from such Non-Released Entity;

(vi) Credit to Walgreens under this Agreement to reduce the overall amounts to be paid under the Agreement such that they are held harmless from the Claim-Over; and

(vii) Such other actions as that Releasor and Walgreens may devise to hold Walgreens harmless from the Claim-Over.

d. The actions of that Releasor and Walgreens taken pursuant to paragraph (c) must, in combination, ensure Walgreens is not required to pay more with respect to Covered Conduct than the amounts owed by Walgreens under this Agreement.

e. In the event of any dispute over the sufficiency of the actions taken pursuant to paragraph (c), that Releasor and Walgreens may seek review by the National Arbitration Panel, provided that, if the parties agree, such dispute may be heard by the state court where the relevant Consent Judgment was filed. The

National Arbitration Panel shall have authority to require Releasors to implement a remedy that includes one or more of the actions specified in paragraph (c) sufficient to hold Released Entities fully harmless. In the event that the Panel's actions do not result in Released Entities being held fully harmless, Walgreens shall have a claim for breach of this Agreement by Releasors, with the remedy being payment of sufficient funds to hold Walgreens harmless from the Claim-Over. For the avoidance of doubt, the prior sentence does not limit or eliminate any other remedy that Walgreens may have.

5. To the extent that the Claim-Over is based on a contractual indemnity, the obligations under Section X.B.4 shall extend solely to a Non-Party Covered Conduct Claim against a clinic, hospital or other purchaser, distributor or dispenser of Products, a manufacturer that sold Products, a consultant, and/or a pharmacy benefit manager or other third-party payor. Walgreens shall notify the Settling States, to the extent permitted by applicable law, in the event that any of these types of Non-Released Entity asserts a Claim-Over arising out of contractual indemnity against it.

6. *Indemnification and Contribution Prohibited.* No Released Entity shall seek to recover for amounts paid under this Agreement based on indemnification, contribution, or any other theory, from a manufacturer, pharmacy, hospital, pharmacy benefit manager, health insurer, third-party vendor, trade association, distributor, or health care practitioner. For the avoidance of doubt, nothing herein shall prohibit a Released Entity from recovering amounts owed pursuant to insurance contracts and nothing herein shall prohibit a Released Entity from seeking a voluntary agreement providing indemnification for liability and/or expenses arising from Walgreens' post-Effective Date implementation of the Injunctive Relief Terms set forth in Exhibit P.

C. *General Release.* In connection with the releases provided for in this Agreement, each Settling State (for itself and its Releasors) and Participating Subdivision expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any State or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release and that if known by him or her, would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Settling State (for itself and its Releasors) and Participating Subdivision hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Settling States' decision to enter into this Agreement or the Participating Subdivisions' decision to participate in this Agreement.

D. *Assigned Interest Waiver.* To the extent that any Settling State has any direct or indirect interest in any rights of a third-party that is a debtor under the Bankruptcy Code as a result of a claim arising out of Covered Conduct by way of assignment or otherwise, including as a result of being the beneficiary of a trust or other distribution entity, to assert claims against Walgreens (whether derivatively or otherwise), under any legal or equitable theory, including for indemnification, contribution, or subrogation, the Settling State waives the right to assert any such claim, or to receive a distribution or any benefit on account of such claim and such claim, distribution, or benefit shall be deemed assigned to Walgreens.

E. *Res Judicata.* Nothing in this Agreement shall be deemed to reduce the scope of the res judicata or claim preclusive effect that the settlement memorialized in this Agreement, and/or any Consent Judgment or other judgment entered on this Agreement, gives rise to under applicable law.

F. *Representation and Warranty.* The signatories hereto on behalf of their respective Settling States expressly represent and warrant that they have (or have obtained, or will obtain no later than the Initial Participation Date) the authority to settle and release, to the maximum extent of the State's power, all Released Claims of (1) their respective Settling States, (2) all past and present executive departments, state agencies, divisions, boards, commissions and instrumentalities with the regulatory authority to enforce state and federal controlled substances acts, and (3) any of their respective Settling State's past and present executive departments, agencies, divisions, boards, commissions, and instrumentalities that have the authority to bring Claims related to Covered Conduct seeking money (including abatement and/or remediation) or revocation or suspension of a pharmaceutical distribution or dispensing license. For the purposes of clause (3) above, executive departments, agencies, divisions, boards, commissions, and instrumentalities are those that are under the executive authority or direct control of the State's Governor. Also for the purposes of clause (3), a release from a State's Governor as set forth in Exhibit X is sufficient to demonstrate that the appropriate releases have been obtained.

G. *Effectiveness.* The releases set forth in this Agreement shall not be impacted in any way by any dispute that exists, has existed, or may later exist between or among the Releasors. Nor shall such releases be impacted in any way by any current or future law, regulation, ordinance, or court or agency order limiting, seizing, or controlling the distribution or use of the Settlement Fund or any portion thereof, or by the enactment of future laws, or by any seizure of the Settlement Fund or any portion thereof.

H. *Cooperation.* Releasors (1) will not encourage any person or entity to bring or maintain any Released Claim against any Released Entity and (2) will reasonably cooperate with and not oppose any effort by Walgreens to secure the prompt dismissal of any and all Released Claims, including suits brought by non-Releasors based on Released Claims. Releasors will meet and confer and make reasonable efforts to resolve any action that is filed by a Subdivision against Walgreens on or after the date the Preliminary Agreement Date. This provision shall not require a State to make any monetary payment or adjustment to allocation or incur other obligation.

I. *Non-Released Claims.* Notwithstanding the foregoing or anything in the definition of Released Claims, this Agreement does not waive, release or limit any criminal liability,

workers' compensation Claims, Claims for liability under tax law, Claims under securities law by a State Releasor as investor, Claims against parties who are not Released Entities, Claims by private individuals, and any claims arising under this Agreement for enforcement of this Agreement.

XI. Later Litigating Subdivisions

A. Released Claims against Released Entities. Subject to Section XI.B, the following shall apply in the event a Later Litigating Subdivision in a Settling State maintains a lawsuit for a Released Claim against a Released Entity after the Reference Date:

1. The Released Entity shall take ordinary and reasonable measures to defend the action, including filing a Threshold Motion with respect to the Released Claim. The Released Entity shall further notify the Settling State and Settlement Fund Administrator immediately upon notice of a Later Litigating Subdivision bringing a lawsuit for a Released Claim, and shall not oppose a Settling State's submission in support of the Threshold Motion.

2. If the lawsuit asserting a Released Claim is resolved with finality on terms requiring payment by the Released Entity, Walgreens shall receive a dollar-for-dollar offset against Incentive Payment D for the amount paid. The offset shall be applied against the relevant portion of the Annual Remediation Payments starting in Payment Year 15 and working backwards.

3. For the avoidance of doubt, any offset pursuant to this Section XI in a Settling State if it at the time is not eligible for Incentive Payment A shall continue to apply even if the Settling State at issue subsequently becomes eligible for Incentive Payment A.

4. *"Terms requiring payment"* shall mean (i) a final monetary judgment or (ii) a settlement; *provided* that the Released Entity sought the applicable State Attorney General's consent to the settlement and such consent was either obtained or unreasonably withheld. Should the judgment or settlement resolve claims that are not Released Claims, the offset shall be for the Released Claims portion only, which shall be distinguishable in the judgment or settlement.

B. Exceptions.

1. Section XI.A shall not apply where the Settling State at issue meets the eligibility criteria for and is entitled to Incentive Payment A for the Payment Year at issue, except as expressly provided therein.

2. An offset under Section XI.A.2 shall not apply where the Later Litigating Subdivision opted out of a Settlement Class Resolution in the Settling State at issue that was in full force and effect in that Settling State as of the due date of the payment for Payment Year 2 and remains in full force and effect; *provided* that an offset relating to that Subdivision may apply under Section XII.

3. Section XI.A shall not apply where the Later Litigating Subdivision seeks less than $10 million, or so long as its total claim is reduced to less than $10 million, in the lawsuit for a Released Claim at issue.

C. *No Effect on Other Provisions.* A suspension or offset under Section XI.A shall not affect the Injunctive Relief Terms or the Consent Judgment.

D. *No Effect on Other States.* A suspension or offset under Section XI.A applicable to one State shall not affect the allocation or payment of the Annual Remediation Payment to other Settling States.

XII. Other Reductions/Offsets

A. *Settlement Class Resolution Opt Outs.* If a Settling State is eligible for Incentive Payment A on the basis of a Settlement Class Resolution, and a Primary Subdivision that opted out of the Settlement Class Resolution maintains a lawsuit asserting a Released Claim against a Released Entity, the following shall apply. If the lawsuit asserting a Released Claim either survives a Threshold Motion or has an unresolved Threshold Motion fewer than sixty (60) calendar days prior to the scheduled start of a trial involving a Released Claim, and is resolved with finality on terms requiring payment by the Released Entity, Walgreens shall receive a dollar-for-dollar offset for the amount paid against its obligation to make remaining Incentive Payment A payments that would be apportioned to that State and to its Subdivisions. For the avoidance of doubt, an offset shall not be applicable under this subsection if it is applicable under Section XI.A with respect to the Subdivision at issue.

B. *Revoked Bar, Settlement Class Resolution, or Case-Specific Resolution.* If Walgreens made any Annual Remediation Payments that included any incentive payments earned as a result of the existence of a Bar, Settlement Class Resolution, or Case-Specific Resolution in a Settling State, and there is subsequently a Revocation Event with respect to that Bar, Settlement Class Resolution, or Case-Specific Resolution after the determination of the amount of such Annual Remediation Payment, the Walgreens shall receive a dollar-for-dollar offset against the portion of remaining Annual Remediation Payments that would be allocated to that State and its Participating Subdivisions. This offset will be calculated as the dollar amount difference between (1) the total amount of incentive payments paid by the Walgreens by virtue of the Bar, Settlement Class Resolution, or Case-Specific Resolution subject to the Revocation Event and (2) the total amount of incentive payments that would have been due from the Walgreens during that time had the Bar, Settlement Class Resolution, or Case-Specific Resolution subject to the Revocation Event not been in effect. The amount of incentive payments that would have been due, referenced in clause (2) above, will be calculated one hundred eighty (180) calendar days after the Revocation Event; for purposes of calculating the amount of incentive payments that would have been due, any relevant Subdivision shall be included as a Participating Subdivision if: (1) its Released Claims are extinguished by any subsequent Bar, Settlement Class Resolution, or Case-Specific Resolution in effect as of the date of such calculation, or (2) it becomes a Participating Subdivision (in addition to all other Participating Subdivisions) prior to the date of such calculation.

C. *Certain Taxes.* Amounts paid by Walgreens under an Opioid Tax in a Settling State in a Payment Year shall give rise to a dollar-for-dollar offset against Walgreens obligation to pay its share of the Annual Remediation Payment in that Payment Year that would be allocated to the taxing State or its Participating Subdivisions. If such amounts paid exceed that Walgreens allocable share of the Annual Remediation Payment allocable to the taxing State or its Participating Subdivisions in that Payment Year, the excess shall carry forward as an offset against its allocable share of remaining Annual Remediation Payments that would be allocated to the taxing State or its Participating Subdivisions. Walgreens represents that as of December 6, 2022, there is no Opioid Tax currently in effect in any Eligible State that would give rise to this offset provision.

XIII. Miscellaneous

A. *Population of New York.* Calculation of the population of New York State for any purpose under the Agreement shall not include the respective populations of Nassau and Suffolk Counties.

B. *Population of General Purpose Governments.* The population figures for General Purpose Governments shall be the published U.S. Census Bureau's population estimates for July 1, 2019, released May 2020. These population figures shall remain unchanged during the term of this Agreement.

C. *Population of Special Districts.* For any purpose in this Agreement in which the population of a Special District is used other than Section IV.H.4.b and Section IV.H.6.d: (a) School Districts' population will be measured by the number of students enrolled who are eligible under the Individuals with Disabilities Education Act *("IDEA")* or Section 504 of the Rehabilitation Act of 1973; (b) Health Districts' and Hospital Districts' population will be measured at twenty-five percent (25%) of discharges; and (c) all other Special Districts' (including Fire Districts' and Library Districts') population will be measured at ten percent (10%) of the population served.[8] For the avoidance of doubt, this means that California healthcare districts will be measured at ten percent (10%) of their membership. Walgreens and the Enforcement Committee shall meet and confer in order to agree on data sources for purposes of this Section prior to the Preliminary Agreement Date.

D. *Population Associated with Sheriffs*. For any purpose in this Agreement in which the population associated with a lawsuit by a sheriff is used, the population will be measured at twenty percent (20%) of the capacity of the jail(s) operated by the sheriff.

E. *Most-Favored-Nation Provision – Walgreens*

1. If, after the Effective Date, Walgreens enters into any settlement agreement with any Non-Settling State that resolves Claims similar in scope to the Claims released by a Settling State under this Agreement on overall payment terms that are more favorable to such Non-Settling State than the overall payment terms of the Agreement (after due

[8] The estimates for counties and parishes were accessed at https://www.census.gov/data/datasets/time-series/demo/popest/2010s-counties-total.html. The estimates for cities and towns can currently be found at https://www.census.gov/data/datasets/time-series/demo/popest/2010s-total-cities-and-towns.html.

consideration of relevant differences in population or other appropriate factors), then the Settling States, individually or collectively, may elect to seek review, pursuant to Section XIII.E.3, of the overall payment terms of this Agreement and the Non-Settling State agreement so that such Settling State(s) may obtain overall payment terms at least as favorable as those obtained by such Non-Settling State. "Overall payment terms" refers to consideration of all payment terms of the two agreements, taken together, including, but not limited to the amount of payments, the timing of payments, and conditions or contingencies on payments

2. For any settlement with a Non-Settling State involving Released Claims that is entered into after the Effective Date, Walgreens shall provide the Enforcement Committee with a copy of the settlement agreement or relevant consent judgment within thirty (30) calendar days of the consummation of such settlement. The Enforcement Committee will promptly distribute such copy to all Settling States.

3. In the event that one or more Settling State(s) believes that the overall payment terms of an agreement by Walgreens with a Non-Settling State are more favorable to the Non-Settling State, when compared based on the totality of the consideration set forth in Section XIII.E.1, the Settling State(s) and Walgreens shall engage in the following process:

a. Within sixty (60) calendar days of the date on which the Enforcement Committee provides a settlement agreement or consent judgment to Settling States, the Settling State(s) shall provide notice to Walgreens, of their intent to seek revision of this Agreement to provide payment terms that are, on an overall basis, as favorable as those obtained by the Non-Settling State. To the extent allowed by law, such notice shall be confidential and not disclosed publicly and shall provide, in detail, the basis for the State's belief that it is entitled to a revision of the Agreement.

b. Walgreens shall, within thirty (30) calendar days, provide a response to the Settling State(s), explaining its position, in detail, as to whether the Settling State(s) are entitled to more favorable overall payment terms than those provided for in this Agreement.

c. In the event the Settling State(s) and Walgreens do not reach agreement as to the application of Section XIII.E.1, the Settling State(s) may petition the National Arbitration Panel to seek a ruling from the Panel as to the applicability of Section XIII.E.1, provided that the Settling State(s) may seek such review only if at least five (5) Settling States co-sign the petition. The Panel shall consider submissions and argument by the parties pursuant to the procedures set forth in Section VI.F.2.

d. The Settling State and Walgreens shall be bound by the determination of the National Arbitration Panel of the overall payment terms of this Agreement and the Non-Settling State agreement so that such Settling

State(s) may obtain, with respect to Walgreens, overall payment terms at least as favorable as those obtained by such Non-Settling State.

4. This Section XIII.E does not apply to, and there is no ability of any Settling State to seek or obtain revision of this Agreement based on, any Non-Settling State agreement with Walgreens that is entered into: (a) either the earlier of (i) after the close of expert discovery or (ii) after a date ninety (90) calendar days prior to the scheduled start date of a trial between Walgreens and the Non-Settling State or any severed or bifurcated portion thereof, provided that, where, in order to complete a settlement, a Non-Settling State and Walgreens jointly request an adjournment of the scheduled start date of a trial within ninety (90) days of that date, this exception will apply as if the trial date had not been adjourned; (b) with a Non-Settling State that previously litigated to judgment a case related to opioids against any manufacturer, distributor, or pharmacy; (c) the earlier of (i) after a Non-Settling State has obtained any court order or judicial determination that grants judgment (in whole or in part) against Walgreens in the Non-Settling State's case, (ii) after a sanctions ruling against Walgreens in the Non-Settling State's case against Walgreens; or (iii) after any ruling has issued in the Non-Settling State's case against any manufacturer, distributor, or pharmacy on the issue of joint and several liability; or (d) with West Virginia or New Mexico. The National Arbitration Panel shall have no power to review agreements that satisfy any of the conditions described in this paragraph.

5. This Section XII.E does not apply to, and there is no ability of any Settling State to seek or obtain revision of this Agreement based on, any agreement between Walgreens and Non-Participating Subdivisions or Non-Participating Special Districts.

6. This Section XII.E will not apply to any agreement entered into more than eighteen (18) months after the Effective Date.

F. *No Admission.* Walgreens does not admit liability or wrongdoing. Neither this Agreement nor the Consent Judgments shall be considered, construed or represented to be (1) an admission, concession or evidence of liability or wrongdoing or (2) a waiver or any limitation of any defense otherwise available to the Walgreens

G. *Tax Cooperation and Reporting.*

1. Upon request by Walgreens, the Settling States and Participating Subdivisions agree to perform such further acts and to execute and deliver such further documents as may be reasonably necessary for Walgreens to establish the statements set forth in Section V.F to the satisfaction of their tax advisors, their independent financial auditors, the Internal Revenue Service, or any other governmental authority, including as contemplated by Treasury Regulations Section 1.162-21(b)(3)(ii) and any subsequently proposed or finalized relevant regulations or administrative guidance.

2. Without limiting the generality of Section XIII.G.1, each Settling State and Participating Subdivision shall cooperate in good faith with Walgreens with respect to any tax claim, dispute, investigation, audit, examination, contest, litigation, or other proceeding relating to this Agreement.

3. The Designated State shall designate one of its officers or employees to act as the "appropriate official" within the meaning of Treasury Regulations Section 1.6050X-1(f)(1)(ii)(B) (the *"Appropriate Official").* The State shall direct and ensure that the Appropriate Official timely (a) files (i) at the time this Agreement becomes binding on the Parties, an IRS Form 1098-F in the form attached as Exhibit U with respect to Walgreens and (ii) any legally required returns or amended returns with any applicable governmental authority, or any returns requested by Walgreens, and (b) provides Walgreens a copy of (i) the IRS Form 1098-F filed with respect to Walgreens and (ii) any legally required written statement pursuant to any applicable law and any other document referred to in clause (a)(ii) above. Any such form, return, or statement shall be prepared and filed in a manner fully consistent with Section V.F.

4. The Settling States and Participating Subdivisions agree that any return, amended return, or written statement filed or provided pursuant to Section XIII.G.3, and any similar document, shall be prepared and filed in a manner consistent with reporting the Global Settlement Amount as the "Total amount to be paid" pursuant to this Agreement in Box 1 of IRS Form 1098-F and the Compensatory Restitution Amount as "Restitution/remediation amount" in Box 2 of IRS Form 1098-F, as reflected in the attached Exhibit U. If the Designated State or Appropriate Official shall be required to file any return, amended return, or written statement contemplated by this Section XIII.G other than an IRS Form 1098-F, the Designated State shall direct and ensure that the Appropriate Official provides to Walgreens a draft of such return, amended return, or written statement in respect of Walgreens no later than sixty (60) calendar days prior to the due date thereof and shall accept and reflect any reasonable comments of Walgreens on the return, amended return, or written statement in respect of Walgreens.

5. For the avoidance of doubt, neither Walgreens nor the Settling States and Participating Subdivisions make any warranty or representation to any State, Participating Subdivision, or Releasor as to the tax consequences of the payment of the Compensatory Restitution Amount (or any portion thereof).

H. *No Third-Party Beneficiaries.* Except as expressly provided in this Agreement, no portion of this Agreement shall provide any rights to, or be enforceable by, any person or entity that is not the Settling State or Released Entity. The State may not assign or otherwise convey any right to enforce any provision of this Agreement.

I. *Calculation.* Any figure or percentage referred to in this Agreement shall be carried to seven decimal places.

J. *Construction.* None of the Parties and no Participating Subdivision shall be considered to be the drafter of this Agreement or of any of its provisions for the purpose of any statute, case law, or rule of interpretation or construction that would or might cause any provision to be construed against the drafter of this Agreement. The headings of the provisions of this Agreement are not binding and are for reference only and do not limit, expand, or otherwise affect the contents or meaning of this Agreement.

K. *Cooperation.* Each Party and each Participating Subdivision agrees to use its best efforts and to cooperate with the other Parties and Participating Subdivisions to cause this Agreement and the Consent Judgments to become effective, to obtain all necessary approvals,

consents and authorizations, if any, and to execute all documents and to take such other action as may be appropriate in connection herewith. Consistent with the foregoing, each Party and each Participating Subdivision agrees that it will not directly or indirectly assist or encourage any challenge to this Agreement or any Consent Judgment by any other person, and will support the integrity and enforcement of the terms of this Agreement and the Consent Judgments.

L. *Entire Agreement.* This Agreement, including its exhibits and any other attachments, embodies the entire agreement and understanding between and among the Parties and Participating Subdivisions relating to the subject matter hereof and supersedes (1) all prior agreements and understandings relating to such subject matter, whether written or oral and (2) all purportedly contemporaneous oral agreements and understandings relating to such subject matter.

M. *Execution.* This Agreement may be executed in counterparts and by different signatories on separate counterparts, each of which shall be deemed an original, but all of which shall together be one and the same Agreement. One or more counterparts of this Agreement may be delivered by facsimile or electronic transmission with the intent that it or they shall constitute an original counterpart hereof. One or more counterparts of this Agreement may be signed by electronic signature.

N. *Good Faith and Voluntary Entry.* Each Party warrants and represents that it negotiated the terms of this Agreement in good faith. Each of the Parties and Participating Subdivisions warrants and represents that it freely and voluntarily entered into this Agreement without any degree of duress or compulsion. The Parties and Participating Subdivisions state that no promise of any kind or nature whatsoever (other than the written terms of this Agreement) was made to them to induce them to enter into this Agreement

O. *Legal Obligations.* Nothing in this Agreement shall be construed as relieving Walgreens of the obligation to comply with all state and federal laws, regulations or rules, nor shall any of the provisions herein be deemed to be permission to engage in any acts or practices prohibited by such laws, regulations, or rules. Except with respect to the Injunctive Relief Terms, in the event of a conflict between this Agreement and any requirement or requirements of federal, state, or local laws, such that Walgreens cannot comply with this Agreement without violating such a requirement or requirements, Walgreens shall document such conflicts and notify the State Attorneys General of the relevant Settling States that it intends to comply with the requirement or requirements to the extent necessary to eliminate the conflict. With respect to the Injunctive Relief Terms, in the event of such a conflict, the procedures set forth in the Injunctive Relief Terms will be followed.

P. *No Prevailing Party.* The Parties and Participating Subdivisions each agree that they are not the prevailing party in this action, for purposes of any claim for fees, costs, or expenses as prevailing parties arising under common law or under the terms of any statute, because the Parties and Participating Subdivisions have reached a good faith settlement.

Q. *Waive Challenge.* The Parties and Participating Subdivisions each further waive any right to challenge or contest the validity of this Agreement on any ground, including, without limitation, that any term is unconstitutional or is preempted by, or in conflict with, any current or

future law. Nothing in the previous sentence shall modify, or be construed to conflict with, Section XIII.O.

R. *Non-Admissibility.* The settlement negotiations resulting in this Agreement have been undertaken by the Parties and by certain representatives of the Participating Subdivisions in good faith and for settlement purposes only, and no evidence of negotiations or discussions underlying this Agreement shall be offered or received in evidence in any action or proceeding for any purpose. This Agreement shall not be offered or received in evidence in any action or proceeding for any purpose other than in an action or proceeding arising under or relating to this Agreement.

S. *Notices.* All notices or other communications under this Agreement shall be in writing (including, but not limited to, electronic communications) and shall be given to the recipients indicated below:

For the Attorney(s) General:

Josh Stein, Attorney General
North Carolina Department of Justice
Attn: Daniel Mosteller, Deputy General Counsel
PO Box 629
Raleigh, NC 27602
Dmosteller@ncdoj.gov

Dave Yost, Attorney General
Ohio Attorney's General Office
Attn: Jonathan Blanton, First Assistant Attorney General
30 East Broad Street
Columbus, OH 43215
Jonathan.Blanton@OhioAGO.gov

Letitia James, Attorney General
New York State Office of the Attorney General
Attn: Jennifer Levy, First Deputy Attorney General
28 Liberty Street
New York, NY 10005
Jennifer.Levy@ag.ny.gov

For the Plaintiffs' Executive Committee:

Co-leads
Jayne Conroy
Simmons Hanly Conroy LLC
112 Madison Avenue
7th Floor

New York, NY 10016-7416
JConroy@simmonsfirm.com

Paul T. Farrell, Jr.
Farrell & Fuller, LLP
270 Munoz Rivera Ave.
Suite 201
San Juan, Puerto Rico 00918
paul@farrellfuller.com

Joseph F. Rice
Motley Rice LLC
28 Bridgeside Blvd.
Mount Pleasant, SC 29464
jrice@motleyrice.com

For Walgreens:

Harlan Levy
Foley Hoag LLP
1301 Avenue of the Americas
New York, New York 10019
hlevy@foleyhoag.com

Kristyn DeFilipp
Foley Hoag LLP
155 Seaport Boulevard
Boston, MA 02110
kbuncedefilipp@foleyhoag.com

and

Wayne B. Mason
Faegre Drinker
1717 Main Street, Ste. 5400
Dallas, TX 75201-7367
Wayne.Mason@faegredrinker.com

and

Michael J. Freeman
104 Wilmot Road, MS#144Q

Deerfield, IL 60015
michael.j.freeman@walgreens.com

Any Party or the Plaintiffs' Executive Committee may change or add the contact information of the persons designated to receive notice on its behalf by notice given (effective upon the giving of such notice) as provided in this Section XIII.S.

T. *No Waiver.* The waiver of any rights conferred hereunder shall be effective only if made by written instrument executed by the waiving Party or Parties. The waiver by any Party of any breach of this Agreement shall not be deemed to be or construed as a waiver of any other breach, whether prior, subsequent, or contemporaneous, nor shall such waiver be deemed to be or construed as a waiver by any other Party.

U. *Preservation of Privilege.* Nothing contained in this Agreement or any Consent Judgment, and no act required to be performed pursuant to this Agreement or any Consent Judgment, is intended to constitute, cause, or effect any waiver (in whole or in part) of any attorney-client privilege, work product protection, or common interest/joint defense privilege, and each Party and Participating Subdivision agrees that it shall not make or cause to be made in any forum any assertion to the contrary.

V. *Successors.*

1. This Agreement shall be binding upon, and inure to the benefit of, Walgreens and its respective successors and assigns.

2. Walgreens shall not, in one (1) transaction or a series of related transactions, sell or transfer U.S. assets having a fair market value equal to twenty-five percent (25%) or more of the consolidated assets of Walgreens (other than sales or transfers of inventories, or sales or transfers to an entity owned directly or indirectly by Walgreens) where the sale or transfer is announced after the Reference Date, is not for fair consideration, and would foreseeably and unreasonably jeopardize Walgreens' ability to make the payments under this Agreement that are due on or before the third Payment Date following the close of a sale or transfer transaction, unless Walgreens obtains the acquiror's agreement that it will be either a guarantor of or successor to the percentage of Walgreens remaining Payment Obligations under this Agreement equal to the percentage of Walgreens' consolidated assets being sold or transferred in such transaction. Percentages under this section shall be determined in accordance with United States generally accepted accounting principles and as of the date of Walgreens most recent publicly filed consolidated balance sheet prior to the date of entry into the sale or transfer agreement at issue. This Section XIII.V shall be enforceable solely by the Settling States, and any objection under this Section XIII.V not raised within sixty (60) calendar days of the announcement of the relevant transaction is waived.

W. *Modification, Amendment, Alteration.* In the event the Plaintiffs' Executive Committee, the Executive Committee of the State Attorneys General, or Walgreens concludes prior to December 21, 2022 that technical corrections are required to this Agreement, the Plaintiffs' Executive Committee, the Executive Committee of the State Attorneys General, and Walgreens shall meet and confer and make such amendments as they agree are appropriate. After the Reference Date, any modification, amendment, or alteration of this Agreement by the Parties shall be binding only if evidenced in writing signed by Walgreens, along with the signature of at

least thirty-seven (37) of those then serving as Attorney General of the Settling States along with a representation from each Attorney General that either: (1) the advisory committee or similar entity established or recognized by that State (either pursuant to Section V.E.2.c, by a State-Subdivision Agreement, or by statute) voted in favor of the modification, amendment or alteration of this Agreement including at least one member appointed by the Participating Subdivisions listed on Exhibit G; or (2) in States without any advisory committee, that 50.1% (by population) of the Participating Subdivisions listed on Exhibit G expressed approval of the modification, amendment, or alteration of this Agreement in a writing.

X. *Termination.*

1. Unless otherwise agreed to by each of Walgreens and the State, this Agreement and all of its terms (except Section XIII.R and any other non-admissibility provisions, which shall continue in full force and effect) shall be canceled and terminated with respect to the Settling State, and the Agreement and all orders issued by the courts in the Settling State pursuant to the Agreement shall become null and void and of no effect if one or more of the following conditions applies:

a. a Consent Judgment approving this Agreement without modification of any of the Agreement's terms has not been entered as to a Settling State by a court of competent jurisdiction on or before one hundred eighty (180) calendar days after the Effective Date;

b. this Agreement or the Consent Judgment as to that Settling State has been disapproved by a court of competent jurisdiction to which it was presented for approval and/or entry (or, in the event of an appeal from or review of a decision of such a court to approve this Agreement and the Consent Judgment, by the court hearing such appeal or conducting such review), and the time to appeal from such disapproval has expired, or, in the event of an appeal from such disapproval, the appeal has been dismissed or the disapproval has been affirmed by the court of last resort to which such appeal has been taken and such dismissal or disapproval has become no longer subject to further appeal (including, without limitation, review by the United States Supreme Court); or

2. If this Agreement is terminated with respect to a Settling State for whatever reason pursuant to Section XIII.X.1, then:

a. an applicable statute of limitation or any similar time requirement (excluding any statute of repose) shall be tolled from the date the Settling State signed this Agreement until the later of the time permitted by applicable law or for one year from the date of such termination, with the effect that Walgreens and the Settling State shall be in the same position with respect to the statute of limitation as they were at the time the Settling State filed its action; and

b. Walgreens and the State shall jointly move the relevant court of competent jurisdiction for an order reinstating the actions and claims dismissed pursuant to the terms of this Agreement governing dismissal, with the effect that

Walgreens and the State shall be in the same position with respect to those actions and claims as they were at the time the action or claim was stayed or dismissed.

3. Unless Walgreens and the Enforcement Committee agree otherwise, this Agreement, with the exception of the Injunctive Relief Terms that have their own provisions on duration, shall terminate as to all Parties as of the Payment Date for Payment Year 15, *provided* that Walgreens' has performed its Payment obligations under the Agreement as of that date. Notwithstanding any other provision in this Section XIII.X.3 or in this Agreement, all releases under this Agreement will remain effective despite any termination under this Section XIII.X.3.

Y. *Governing Law.* Except as (1) otherwise provided in this Agreement or (2) as necessary, in the sole judgment of the National Arbitration Panel, to promote uniformity of interpretation for matters within the scope of the National Arbitration Panel's authority, this Agreement shall be governed by and interpreted in accordance with the respective laws of the Settling State, without regard to the conflict of law rules of such Settling State, that is seeking to enforce the Agreement against Walgreens or against which Walgreens is seeking enforcement. Notwithstanding any other provision in this subsection on governing law, any disputes relating to the Settlement Fund Escrow shall be governed by and interpreted in accordance with the law of the State where the escrow agent has its primary place of business.

Z. *Bankruptcy.* The following provisions shall apply if Walgreens enters Bankruptcy and (i) the Walgreens bankruptcy estate recovers, pursuant to 11 U.S.C. § 550, any payments made under this Agreement, or (ii) this Agreement is deemed executory and is rejected by Walgreens pursuant to 11 U.S.C. § 365:

1. In the event that the both a number of Settling States equal to at least seventy-five percent (75%) of the total number of Settling States and Settling States having aggregate Overall Allocation Percentages as set forth on Exhibit F equal to at least seventy-five percent (75%) of the total aggregate Overall Allocation Percentages assigned to all Settling States deem (by written notice to Walgreens) that the financial obligations of this Agreement have been terminated and rendered null and void (except as provided in Section XIII.Z.1.a) due to a material breach by Walgreens, whereupon:

a. all agreements, all concessions, all reductions of Releasing Parties' Claims, and all releases and covenants not to sue, contained in this Agreement shall immediately and automatically be deemed null and void as to Walgreens; the Settling States shall be deemed immediately and automatically restored to the same position they were in immediately prior to their entry into this Settlement Agreement in respect to Walgreens shall have the right to assert any and all claims against Walgreens in the Bankruptcy or otherwise without regard to any limits or agreements as to the amount of the settlement otherwise provided in this Agreement; *provided, however,* that notwithstanding the foregoing sentence, (i) all reductions of Releasing Parties' Claims, and all releases and covenants not to sue, contained in this Agreement shall remain in full force and effect as to all persons or entities other than Walgreens itself; and (ii) in the event the State asserts any Released Claim against Walgreens after the rejection and/or termination of this Agreement as described in this Section XIII.Z.1.a and receives

a judgment, settlement or distribution arising from such Released Claim, then the amount of any payments the State has previously received from Walgreens under this Agreement shall be applied to reduce the amount of any such judgment, settlement or distribution (provided that no credit shall be given against any such judgment, settlement or distribution for any payment that the State is required to disgorge or repay to Walgreens' bankruptcy estate); and

b. the Settling States may exercise all rights provided under the federal Bankruptcy Code (or other applicable bankruptcy or non-bankruptcy law) with respect to their Claims against Walgreens subject to all defenses and rights of the Walgreens.

AA. *Waiver*. Walgreens, for good and valuable consideration the receipt of which is acknowledged, hereby (a) waives, foregoes and relinquishes all rights to utilize and/or seek relief under any of the following laws of the State of Texas for the restructuring of its debts or liabilities related to Released Claims, Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement: Tex. Bus. Orgs. Code § 10.003 (Contents of Plan of Merger: More Than One Successor) or any other statute of Subchapter A of Chapter 10 of Tex. Bus. Orgs. Code to the extent such statute relates to multi-successor mergers (and/or any other similar laws or statutes in any other state or territory); Tex. Bus. Orgs. Code §§ 11.01–11.414 (Winding Up and Termination of Domestic Entity); or Tex. Bus. & Com. Code §§ 23.01–23.33 (Assignments for the Benefit of Creditors) (collectively, the "Texas Statutes"), and (b) agrees, warrants and represents that it will not file, request or petition for relief under the Texas Statutes related to its debts or liabilities related to Released Claims, Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement, in each case until such time as all of Walgreens' payment obligations incurred hereunder are satisfied in full. The foregoing waiver and relinquishment includes, without limitation, until such time as all of Walgreens' payment obligations incurred hereunder are satisfied in full, Walgreens' rights to execute a divisional merger or equivalent transaction or restructuring related to its debts or liabilities related to Released Claims, Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement that in each case has the intent or foreseeable effect of (i) separating material assets from material liabilities and (ii) assigning or allocating all or a substantial portion of those liabilities to any subsidiary or affiliate that files for relief under chapter 11 of the Bankruptcy Code, or pursuant to which such subsidiary or affiliate that files for relief under chapter 11 of the Bankruptcy Code would be assuming or retaining all or a substantial portion of those liabilities.

EXHIBIT A

Alleged Harms

The following expert reports that were filed in connection with the case captioned *In re: National Prescription Opiate Litigation*, No. 1: 17-md-2804 (N.D. Ohio) provide non-exclusive examples of Alleged Harms:

1. Expert report of G. Caleb Alexander, dated April 16, 2021.
2. Expert report of David Cutler, dated April 16, 2021; supplemental expert report of David Cutler, dated April 21, 2021; and second supplemental expert report of David Cutler, dated May 10, 2021.
3. Expert report of David Herzberg, dated April 16, 2021.
4. Expert report of Katherine M. Keyes, Ph.D., dated April 16, 2021; supplemental expert report of Katherine M. Keyes, Ph.D, dated June 2, 2021.
5. Expert report of Dr. Anna Lembke, dated April 16, 2021.
6. Expert report of Harvey Rosen, dated April 16, 2021.
7. Expert report of Nancy Young, dated April 16, 2021.

EXHIBIT B

Enforcement Committee Organization Bylaws

ARTICLE I

These bylaws constitute the code of rules adopted by the Settling States and Participating Subdivisions for the creation of an Enforcement Committee (the "Committee") to exist and operate during the term of the Agreement in connection with Walgreens and shall control the regulation and management of the Committee's affairs.

ARTICLE II

Purpose

The Committee is organized for the sole purpose of evaluating and taking such action as deemed reasonable, necessary, and appropriate by the members of the Committee on the matters delegated to the Committee under that certain Settlement Agreement between the Settling States and Walgreens dated December [__], 2022.

ARTICLE III

Members of the Committee

A. Number of Members

The Committee will consist of sixteen (16) members (the "Members"). Upon majority resolution of the Committee, the number of Members may be increased or decreased from time to time, but in no event shall a decrease have the effect of decreasing the total number of Members to less than seven Members.

B. Initial Members

The Committee initially will consist of ten (10) Settling State Members and six (6) Participating Subdivision Members; three (3) of the Participating Subdivisions shall be counties and three (3) shall be municipalities. The initial Settling State Members are representatives from: Connecticut, Delaware, Illinois, Indiana, Louisiana, New York, North Carolina, Ohio, Tennessee, and Texas. The initial Participating Subdivision Members are: [●]. Until fifteen (15) months from the Effective Date contained in the Settlement Agreement, the Participating Subdivisions may designate their outside counsel to serve as their representative. After fifteen (15) months from the Effective Date, an employee or official of the Participating Subdivision must be the designated as the representative of the Participating Subdivision.

C. Term of Members

The term of office for Members of the Committee will be until the end of the term of the Settlement Agreement unless and until a Member withdraws or resigns from the Committee.

D. Resignation

Any Member may resign at any time by delivering written notice to the Chairperson of the Committee. Such resignation shall take effect upon receipt or, if later, at the time specified in the notice.

E. Removal

(a) Any Member may be removed without cause, at any time, by a majority of the entire Committee, at a Regular or Special Meeting called for that purpose. Any Member under consideration of removal must first be notified about the consideration by written notice at least five days prior to the meeting at which the vote takes place.

(b) In the event that any Member is not a Settling State or a Participating Subdivision or the Member subsequently becomes a Later Litigating Subdivision, the Member shall be removed immediately without notice or vote of the Committee.

F. Vacancies

In the event of a vacancy, the Members of the same type (Settling State or Participating Subdivision) shall select another Settling State or Participating Subdivision to fill that Member's position.

G. Compensation

Members shall not receive any salaries or other compensation for their services, but, by resolution of the Committee, may be reimbursed for any actual expenses incurred in the performance of their duties for the Committee, as long as a majority of disinterested Members approve the reimbursement. Any reimbursement shall be sought from the Settlement Fund Administrator.

ARTICLE IV
Conflicts of Interest and Code of Ethics

If a Member, agent, or employee of the Committee has a conflict of interest, he or she may not participate in a vote, discussion, or decision about the matter. Each Member shall follow any applicable state or local law with respect to conflicts, gifts, and ethics.

ARTICLE V

Committee Meetings

A. Place of Meetings

Meetings of the Committee will be held at any place that the Chairperson may designate, including by telephonic or electronic means.

B. Regular Meetings

Regular meetings of the Committee shall be held as deemed necessary by the Chairperson or any three members.

C. Notice of Meetings

Written notice of the date, time, place and subject of each meeting must be provided to the Members at least 72 hours before the scheduled time of the meeting, except when there is an emergency or urgent public necessity.

D. Quorum

A majority of the incumbent Members (not counting vacancies) shall constitute a quorum for the purposes of convening a meeting or conducting business.

E. Voting and Proxy

When it is necessary to vote on any matter before the Committee, Members may vote by electronic means as provided in these Bylaws. Proxy voting is permitted. In order for a matter to pass, the matter must have a majority vote of Members present and must have at least one vote from a Settling State Member and a Participating Subdivision Member. In the event that there is a Quorum, but no Settling State or Participating Subdivision Member is present, then a matter may pass with a simple majority vote.

F. Minutes

The Committee shall prepare and keep minutes. The minutes must state the subject of each deliberation and indicate each vote, order, decision, or other action taken.

ARTICLE VI

Officers

A. Roster of Officers

The Committee shall have a Chairperson, a Vice Chairperson, and a Secretary. The Committee may have at its discretion, such other officers as may be appointed by the Members of the Committee. One person may hold two or more offices, except those serving as Chairperson.

B. Election and Removal of Officers

All officers shall serve two-year terms. The election shall be conducted at the first meeting of the fiscal year. Officers shall remain in office until their successors have been selected. Officers may serve consecutive terms without limit. The election of officers shall be by majority vote of the Members of the Committee attending the meeting.

C. Vacancies

If a vacancy occurs during the term of office for any elected officer, the Members of the Committee shall elect a new officer to fill the remainder of the term as soon as practical, by majority vote of Members present.

D. Chairperson

The Chairperson will supervise and control the affairs of the Committee and shall exercise such supervisory powers as may be given him/her by the Members of the Committee. The Chairperson will perform all duties incident to such office and such other duties as may be provided in these bylaws or as may be prescribed from time to time by the Committee. The Chairperson shall preside at all meetings and shall exercise parliamentary control in accordance with Robert's Rules of Order.

E. Vice Chairperson

The Vice Chairperson shall act in place of the Chairperson in the event of the Chairperson's absence, inability, or refusal to act, and shall exercise and discharge such other duties as may be required by the Committee. The Vice Chairperson shall serve as the parliamentarian and interpret any ambiguities of the bylaws.

F. Secretary

The Secretary will keep and maintain all records related to the Committee and take minutes of all meetings.

G. Records

All elected officers and committee chairpersons shall relinquish their records to the Chairperson immediately upon the completion of their term of office or completion of a project.

H. Resignation

An officer may resign the office while not resigning membership from the Committee, by submitting a letter to the Chairperson. Vacancies occurring in any office shall be appointed for the remainder of the term.

ARTICLE VII

Duties

A. Prior to the Effective Date

The Committee shall be responsible for any additional negotiations with Walgreens, including, but not limited to, negotiating extensions of any periods created by the Settlement Agreement, except that any additional negotiations related to the Injunctive Relief Terms (Exhibit [●]) shall be handled by the States Injunctive Relief Committee in accordance with the terms of Exhibit [●].

B. After the Effective Date

The Committee shall establish procedures for the receipt of notices that a dispute exists concerning the Agreement and review of such disputes, pursuant to Section [●] of the Agreement. Members may engage with Walgreens, Settling States, and Participating Subdivisions attempting to resolve any dispute without further action by the Committee. The Committee may request additional information from Walgreens, Settling States, and Participating Subdivisions to the extent the Committee believes such information is necessary to understand, resolve, or provide advice related to a dispute. The Committee

shall endeavor to provide advice relative to the dispute no later than 60 days after receipt of notice.

ARTICLE VIII

Rules of Procedure

The proceedings and business of the Committee shall be governed by Robert's Rules of Order unless otherwise waived by the Committee.

ARTICLE IX

Operations

A. Records

The Committee will keep correct and complete records and will also keep minutes of the proceedings of the Committee meetings and Committees. The Committee will keep such records at its principal place of business at a place designated by the Chairperson**.**

All elected officers and committee chairpersons shall relinquish their records to the Chairperson, immediately upon the completion of their term of office.

B. Inspection of Books and Records

The minutes of a meeting are public records and shall be available for public inspection and copying on request to the Committee's Chairperson or the Chairperson's designee.

C. Amendments

The bylaws may be amended at any time by a vote of a majority of Members present and must have at least one vote from a Settling State Member and a Participating Subdivision Member. In the event that there is a Quorum, but no Settling State or Participating Subdivision Member is present, then a matter may pass with a simple majority vote.

EXHIBIT C

Litigating Subdivisions Exhibit

1. Alabaster, City of, Alabama
2. Albertville, City of, Alabama
3. Arab, City of, Alabama
4. Ashville, City of, Alabama
5. Athens, City of, Alabama
6. Attala, City of, Alabama
7. Auburn, City of, Alabama
8. Baldwin, County of, Alabama
9. Bessemer, City of, Alabama
10. Birmingham, City of, Alabama
11. Boaz, City of, Alabama
12. Brewton, City of, Alabama
13. Bridgeport, City of, Alabama
14. Brookwood, Town of, Alabama
15. Butler, Town of, Alabama
16. Calera, City of, Alabama
17. Calhoun, County of, Alabama
18. Camp Hill, Town of, Alabama
19. Centre, City of, Alabama
20. Centreville, City of, Alabama
21. Cedar Bluff, Town of, Alabama
22. Cherokee, Town of, Alabama
23. Clanton, City of, Alabama
24. Coffee, County of, Alabama
25. Columbiana, City of, Alabama
26. Cullman, City of, Alabama
27. Cullman, County of, Alabama
28. Dadeville, City of, Alabama
29. Dallas, County of, Alabama
30. Daphne, City of, Alabama
31. Decatur, City of, Alabama
32. Dora, City of, Alabama
33. Douglas, Town of, Alabama
34. East Brewton, City of, Alabama
35. Elmore, County of, Alabama
36. Enterprise, City of, Alabama
37. Etowah, County of/Etowah (Sheriff of) County of, Alabama
38. Fairhope, City of, Alabama

39. Florence, City of, Alabama
40. Foley, City of, Alabama
41. Fort Deposit, Town of, Alabama
42. Fort Payne, City of, Alabama
43. Fultondale, City of, Alabama
44. Gadsden, City of, Alabama
45. Geraldine, Town of, Alabama
46. Grant, Town of, Alabama
47. Graysville, City of, Alabama
48. Gilbertown, Town of, Alabama
49. Gulf Shores, City of, Alabama
50. Guntersville, City of, Alabama
51. Hartselle, City of, Alabama
52. Helena, City of, Alabama
53. Henagar, City of, Alabama
54. Homewood, City of, Alabama
55. Hoover, City of, Alabama
56. Huntsville, City of, Alabama
57. Irondale, City of, Alabama
58. Jasper, City of, Alabama
59. Jackson, County of, Alabama
60. Lauderdale, County of, Alabama
61. Leesburg, City of, Alabama
62. Leighton, Town of, Alabama
63. Lincoln City of, Alabama
64. Madison, County of, Alabama
65. Marion, County of, Alabama
66. Marshall County, Alabama
67. Millbrook, City of, Alabama
68. Mobile, County of, Alabama
69. Mobile County Board of Health, Alabama
70. Moody, City of, Alabama
71. Morgan, County of, Alabama
72. Munford, Town of, Alabama
73. New Hope, City of, Alabama
74. Northport, City of, Alabama
75. Oakman, Town of, Alabama
76. Opelika, City of, Alabama
77. Orange Beach, City of, Alabama
78. Pelham, City of, Alabama
79. Phenix City, City of, Alabama
80. Pickens, County of, Alabama

81. Piedmont, City of, Alabama
82. Pike, County of, Alabama
83. Prattville, City of, Alabama
84. Ragland, City of, Alabama
85. Rainbow City, City of, Alabama
86. Randolph, County of, Alabama
87. Red Bay, City of, Alabama
88. Roanoke, City of, Alabama
89. Robertsdale, City of, Alabama
90. Russellville, City of, Alabama
91. Saraland, City of, Alabama
92. Scottsboro, City of, Alabama
93. Selma, City of, Alabama
94. Semmes, City of, Alabama
95. Sheffield, City of, Alabama
96. Slocomb, City of, Alabama
97. Spanish Fort, City of, Alabama
98. Springville, City of, Alabama
99. Sumiton, City of, Alabama
100. Sylacauga, City of, Alabama
101. Talladega, County of, Alabama
102. Tallapoosa, County of, Alabama
103. Thomasville, City of, Alabama
104. Troy, City of, Alabama
105. Trussville, City of, Alabama
106. Tuscaloosa, City of, Alabama
107. Tuscaloosa, County of, Alabama
108. Vestavia Hills, City of, Alabama
109. Walker, County of, Alabama
110. West Blocton, Town of, Alabama
111. Wetumpka, City of, Alabama
112. Winston, County of, Alabama
113. Woodville, Town of, Alabama
114. Arizona Municipal Risk Retention Pool, Arizona
115. Cochise, County of, Arizona
116. Kingman, City of, Arizona
117. Maricopa, County of, Arizona
118. Mohave, County of, Arizona
119. Navajo, County of, Arizona
120. Phoenix, City of, Arizona
121. Pinal, County of, Arizona
122. Prescott, City of, Arizona

123. Yuma, County of, Arizona
124. Alameda, County of, California
125. Amador, County of, California
126. Butte, County of, California
127. Calaveras, County of, California
128. Chico, City of, California
129. Chula Vista, City of, California
130. Clearlake, City of, California
131. Costa Mesa, City of, California
132. Del Norte, County of, California
133. Dublin, City of, California
134. El Dorado, County of, California
135. Eureka, City of, California
136. Fresno, County of, California
137. Fullerton, City of, California
138. Humboldt, County of, California
139. Imperial, County of, California
140. Inyo, County of, California
141. La Hambra, City of, California
142. La Mesa, City of, California
143. Laguna Beach, City of, California
144. Lakeport, City of, California
145. Lassen, County of, California
146. Los Angeles, City of, California
147. Los Angeles, County of, California
148. Madera, County of, California
149. Marin, County of, California
150. Mariposa, County of, California
151. Mendocino, County of, California
152. Merced, County of, California
153. Modoc, County of, California
154. Mono, County of, California
155. Monterey, County of, California
156. Murrieta, City of, California
157. Nevada, County of, California
158. Oxnard, City of, California
159. Placentia, City of, California
160. Placer, County of, California
161. Plumas, County of, California
162. Riverside, County of, California
163. Sacramento, City of, California
164. Sacramento, County of, California

165. San Benito, County of, California
166. San Bernardino, County of, California
167. San Clemente, City of, California
168. San Diego, County of, California
169. San Luis Obispo, County of, California
170. San Francisco, City of, California
171. San Francisco, County of, California
172. San Jose, City of, California
173. San Mateo, County of, California
174. Santa Ana, City of, California
175. Santa Barbara, County of, California
176. Santa Cruz, County of, California
177. Santa Rosa, County of, California
178. Shasta, County of, California
179. Sonoma, County of, California
180. Sutter, County of, California
181. Tehama, County of, California
182. Trinity, County of, California
183. Tulare, County of, California
184. Tuolumne, County of, California
185. Ventura, County of, California
186. Westminster, City of, California
187. Yolo, County of, California
188. Yuba, County of, California
189. Adams, County of, Colorado
190. Alamosa, City of, Colorado
191. Alamosa, County of, Colorado
192. Arapahoe, County of, Colorado
193. Aurora, County of, Colorado
194. Black Haw, City of, Colorado
195. Boulder, County of, Colorado
196. Brighton, City of, Colorado
197. Broomfield, City of, Colorado
198. Broomfield, County of, Colorado
199. Chaffe, County of, Colorado
200. Commerce City, City of, Colorado
201. Conejos, County of, Colorado
202. Denver, City of, Colorado
203. Denver, County of, Colorado
204. Federal Heights, City of, Colorado
205. Fremont, County of, Colorado
206. Greeley, City of, Colorado

207. Hudson, Town of, Colorado
208. Jefferson, County of, Colorado
209. Lakewood, City of, Colorado
210. Larimer, County of, Colorado
211. Las Animas, County of, Colorado
212. Mesa, County of, Colorado
213. Northglenn, City of, Colorado
214. Otero, County of, Colorado
215. Pueblo, County of, Colorado
216. Sheridan, City of, Colorado
217. Thornton, City of, Colorado
218. Teller, County of, Colorado
219. Tri-County Health Department, Colorado
220. Westminster, City of, Colorado
221. Wheat Ridge, City of, Colorado
222. Enfield, Town of, Connecticut
223. Middletown, City of, Connecticut
224. Monroe, Town of, Connecitcut
225. Norwich, City of, Connecticut
226. Waterbury, City of, Connecticut
227. Wethersfield, Town of, Connecticut
228. Windham, Town of, Connecticut
229. Dover, City of, Delaware
230. Kent, County of, Delaware
231. Seaford, City of, Delaware
232. Sussex, County of, Delaware
233. Albany, City of, Georgia
234. Appling, County of, Georgia
235. Athens-Clarke, County of, Georgia
236. Atlanta, City of, Georgia
237. Augusta, City of, Georgia
238. Bainbridge, City of, Georgia
239. Baldwin, County of/Baldwin, (Sheriff of) County of, Georgia
240. Banks, County of, Georgia
241. Bartow, County of, Georgia
242. Bibb, County of/Bibb, (Sheriff of) County of, Georgia
243. Brantley, County of, Georgia
244. Buloch, County of, Georgia
245. Burke, County of, Georgia
246. Butts, County of, Georgia
247. Camden, County of, Georgia
248. Candler, County of, Georgia

249. Candler County Hospital Authority, Georgia
250. Carroll, County of, Georgia
251. Catoosa, County of, Georgia
252. Charlton, County of, Georgia
253. Cherokee, County of, Georgia
254. Clay, County of, Georgia
255. Clayton, County of, Georgia
256. Clinch, County of, Georgia
257. Clinch County Hospital Authority, Georgia
258. Cobb, County of, Georgia
259. Columbia, County of, Georgia
260. Columbus, City of, Georgia
261. Cook, County of, Georgia
262. Crisp, County of/Crisp, (Sheriff of) County of, Georgia
263. Dade, County of, Georgia
264. Dawson, County of, Georgia
265. Decatur, County of, Georgia
266. Dekalb, County of, Georgia
267. Dooly, County of, Georgia
268. Dougherty, County of, Georgia
269. Early, County of, Georgia
270. Effingham, County of, Georgia
271. Elbert, County of, Georgia
272. Emanuel, County of, Georgia
273. Evans, County of, Georgia
274. Fayette, County of, Georgia
275. Forsyth, County of, Georgia
276. Fulton, County of, Georgia
277. Gainesville, City of, Georgia
278. Glascock, County of, Georgia
279. Glynn, County of/Glynn, (Sheriff of) County of, Georgia
280. Grady, County of, Georgia
281. Greene, County of, Georgia
282. Gwinnett, County of, Georgia
283. Habersham, County of, Georgia
284. Hall, County of, Georgia
285. Hancock, County of, Georgia
286. Henry, County of, Georgia
287. Houston, County of/Houston (Sheriff of) County of, Georgia
288. Irwin, County of, Georgia
289. Jackson, County of, Georgia
290. Jasper, County of, Georgia

291. Jefferson, County of, Georgia
292. Johnson, County of, Georgia
293. Jones, County of/Jones, (Sheriff of) County of, Georgia
294. Laurens, County of, Georgia
295. Lee, County of, Georgia
296. Liberty, County of, Georgia
297. Lincoln, County of, Georgia
298. Long, County of, Georgia
299. Lowndes, County of, Georgia
300. Lumpkin, County of, Georgia
301. Macon Bibb, County of, Georgia
302. Madison, County of, Georgia
303. McDuffie, County of, Georgia
304. McIntosh, County of, Georgia
305. Milledgeville, City of, Georgia
306. Montgomery, County of, Georgia
307. Murray, County of, Murray, (Sheriff of) County of, Georgia
308. Newton, County of, Georgia
309. Oconee, County of, Georgia
310. Oglethorpe, County of, Georgia
311. Pike, County of, Georgia
312. Polk, County of, Georgia
313. Pulaski, County of, Georgia
314. Rabun, County of, Georgia
315. Randolph, County of, Georgia
316. Rockdale, County of, Georgia
317. Rome, City of, Georgia
318. Sandy Springs, City of, Georgia
319. Savannah, City of, Georgia
320. Screven, County of, Georgia
321. Seminole, County of, Georgia
322. Spalding, County of, Georgia
323. Springfield, County of, Georgia
324. Stephens, County of, Georgia
325. Sumter, County of, Georgia
326. Taliaferro, County of, Georgia
327. Tattnall, County of, Georgia
328. Tift, County of/Tift, (Sheriff of) County of, Georgia
329. Tifton, City of, Georgia
330. Toombs, County of, Georgia
331. Towns, County of, Georgia
332. Troup, County of, Georgia

333. Twiggs, County of, Georgia
334. Union, County of, Georgia
335. Walton, County of, Georgia
336. Ware, County of/Ware, (Sheriff of) County of, Georgia
337. Warren, County of, Georgia
338. Washington, County of, Georgia
339. Wayne, County of/Wayne, (Sheriff of) County of, Georgia
340. Wilkes, County of, Georgia
341. Worth, County of, Georgia
342. Kauai, County of, Hawaii
343. Adams, County of, Idaho
344. Blaine, County of, Idaho
345. Bingham, County of, Idaho
346. Boise, County of, Idaho
347. Bonneville, County of, Idaho
348. Camas, County of, Idaho
349. Canyon, County of, Idaho
350. Caribou, County of, Idaho
351. Cassia, County of, Idaho
352. Elmore, County of, Idaho
353. Gooding, County of, Idaho
354. Latah, County of, Idaho
355. Minidoka, County of, Idaho
356. Owyhee, County of, Idaho
357. Payette, County of, Idaho
358. Board of Education of Thornton Township High Schools, District 20, Illinois
359. Boone, County of, Illinois
360. Calhoun, County of, Illinois
361. Christian, County of, Illinois
362. Coles, County of, Illinois
363. Effingham, County of, Illinois
364. Franklin, County of, Illinois
365. Herrin, City of, Illinois
366. Jefferson, County of, Illinois
367. Johnson, County of, Illinois
368. Lee, County of, Illinois
369. Livingston, County of, Illinois
370. Marion, City of, Illinois
371. Marion, County of, Illinois
372. Massac, County of, Illinois
373. Metropolis, City of, Illinois
374. Rockford, City of, Illinois

375. Saline, County of, Illinois
376. Schuyler, County of, Illinois
377. Union, County of, Illinois
378. West Frankfort, City of, Illinois
379. Winnebago, County of, Illinois
380. Sangamon, County of, Illinois
381. Alexandria, City of, Indiana
382. Allen, County of, Indiana
383. Atlanta, Town of, Indiana
384. Beech Grove, City of, Indiana
385. Benton, County of, Indiana
386. Brownstown, Town of, Indiana
387. Chandler, Town of, Indiana
388. Danville, Town of, Indiana
389. Delaware, County of, Indiana
390. Elwood, City of, Indiana
391. Evansville, City of, Indiana
392. Fishers, City of, Indiana
393. Franklin, City of, Indiana
394. Franklin, County of, Indiana
395. Fort Wayne, City of, Indiana
396. Gary, City of, Indiana
397. Greenwood, City of, Indiana
398. Hammond, City of, Indiana
399. Harrison, County of, Indiana
400. Howard, County of, Indiana
401. Huntington, City of, Indiana
402. Indianapolis, City of, Indiana
403. Jackson, County of, Indiana
404. Jasper, City of, Indiana
405. Jeffersonville, City of, Indiana
406. Jennings, County of, Indiana
407. Lafayette, City of, Indiana
408. Lake, County of, Indiana
409. LaPorte, County of, Indiana
410. Lawrence, City of, Indiana
411. Lawrence, County of, Indiana
412. Logansport, City of, Indiana
413. Madison, County of, Indiana
414. Marshall, County of, Indiana
415. Martinsville, City of, Indiana
416. Mooresville, Town of, Indiana

417. Morgan, County of, Indiana
418. Muncie, City of, Indiana
419. New Albany, City of, Indiana
420. New Castle, City of, Indiana
421. Noblesville, City of, Indiana
422. Pendleton, Town of, Indiana
423. Peru, City of, Indiana
424. Plainfield, Town of, Indiana
425. Porter, County of, Indiana
426. Portland, City of, Indiana
427. Richmond, City of, Indiana
428. Ripley, County of, Indiana
429. St. Clair, County of, Indiana
430. St. Joseph, County of, Indiana
431. Sheridan, Town of, Indiana
432. South Bend, City of, Indiana
433. Starke, County of, Indiana
434. Terre Haute, City of, Indiana
435. Tippecanoe, County of, Indiana
436. Upland, Town of, Indiana
437. Vanderburgh, County of, Indiana
438. Vigo, County of, Indiana
439. West Lafayette, City of, Indiana
440. Westfield, City of, Indiana
441. Adair, County of, Iowa
442. Adams, County of, Iowa
443. Allamakee, County of, Iowa
444. Appanoose, County of, Iowa
445. Audubon, County of, Iowa
446. Benton, County of, Iowa
447. Black Hawk, County of, Iowa
448. Bremer, County of, Iowa
449. Buchanan, County of, Iowa
450. Buena Vista, County of, Iowa
451. Calhoun, County of, Iowa
452. Carroll, County of, Iowa
453. Cedar, County of, Iowa
454. Clay, County of, Iowa
455. Clayton, County of, Iowa
456. Clinton, County of, Iowa
457. Dallas, County of, Iowa
458. Delaware, County of, Iowa

459. Des Moines, County of, Iowa
460. Fayette, County of, Iowa
461. Hamilton, County of, Iowa
462. Hardin, County of, Iowa
463. Harrison, County of, Iowa
464. Howard, County of, Iowa
465. Humboldt, County of, Iowa
466. Jasper, County of, Iowa
467. Johnson, County of, Iowa
468. Lee, County of, Iowa
469. Lyon, County of, Iowa
470. Mahaska, County of, Iowa
471. Marion, County of, Iowa
472. Mitchell, County of, Iowa
473. Monroe, County of, Iowa
474. Montgomery, County of, Iowa
475. O'Brien, County of, Iowa
476. Plymouth, County of, Iowa
477. Polk, County of, Iowa
478. Pottawattamie, County of, Iowa
479. Sac, County of, Iowa
480. Scott, County of, Iowa
481. Shelby, County of, Iowa
482. Sioux, County of, Iowa
483. Tam, County of, Iowa
484. Taylor, County of, Iowa
485. Union, County of, Iowa
486. Winneshiek, County of, Iowa
487. Worth, County of, Iowa
488. Bourbon, County of, Kansas
489. Cherokee, County of, Kansas
490. Cowley, County of, Kansas
491. Finney, County of, Kansas
492. Ford, County of, Kansas
493. Harvey, County of, Kansas
494. Johnson, County of, Kansas
495. Leavenworth, County of, Kansas
496. Montgomery, County of, Kansas
497. Overland Park, City of, Kansas
498. Reno, County of, Kansas
499. Sedgwick, County of, Kansas
500. Seward, County of, Kansas

501. Wichita, City of, Kansas
502. Wyandotte, County of, Kansas
503. Bell, County of, Kentucky
504. Bellefonte, City of, Kentucky
505. Benham, City of, Kentucky
506. Boone, County of, Kentucky
507. Boyd, County of, Kentucky
508. Buckhorn, City of, Kentucky
509. Vullitt, County of, Kentucky
510. Campbell, County of, Kentucky
511. Christian, County of, Kentucky
512. Clark, County of, Kentucky
513. Covington, City of, Kentucky
514. Edmonson, County of, Kentucky
515. Estill, County of, Kentucky
516. Estill County Emergency Medical Services, Kentucky
517. Florence, City of, Kentucky
518. Franklin, County of, Kentucky
519. Grayson, City of, Kentucky
520. Greenup, City of, Kentucky
521. Harlan, City of, Kentucky
522. Henderson, City of, Kentucky
523. Henderson, County of, Kentucky
524. Hopkins, County of, Kentucky
525. Hyden, City of, Kentucky
526. Jenkins, City of, Kentucky
527. Jessamine, County of, Kentucky
528. Kenton, County of, Kentucky
529. Kentucky River District Health Department, Kentucky
530. Knott, County of, Kentucky
531. Knox, County of, Kentucky
532. Lawrence, County of, Kentucky
533. Lexington-Fayette, County of, Kentucky
534. Louisville/Jefferson, County of, Kentucky
535. London, City of, Kentucky
536. Loyall, City of, Kentucky
537. Lynch, City of, Kentucky
538. Madison, County of, Kentucky
539. Manchester, City of, Kentucky
540. Morehead, City of, Kentucky
541. Oldham, County of, Kentucky
542. Owsley, County of, Kentucky

543. Pike, County of, Kentucky
544. Pineville, City of, Kentucky
545. Pippa Passes, City of, Kentucky
546. Pulaski, County of, Kentucky
547. Russell, City of, Kentucky
548. Scott, County of, Kentucky
549. Shelby, County of, Kentucky
550. South Shore, City of, Kentucky
551. Vanceburg, City of, Kentucky
552. Warren, County of, Kentucky
553. Whitesburg, City of, Kentucky
554. Whitley, County of, Kentucky
555. Winchester, City of, Kentucky
556. Worthington, City of, Kentucky
557. Acadia-St. Landry Hospital Service District, Louisiana
558. Alexandria, City of, Louisiana
559. Allen, Parish of, Louisiana
560. Ascension, Parish of/Ascension (Sheriff of) Parish of, Louisiana
561. Ascension Parish School Board, Louisiana
562. Assumption, Parish of/Assumption (Sheriff of) Parish of, Louisiana
563. Avoyelles, Parish of/Avoyelles, (Sheriff of) Parish of, Louisiana
564. Baldwin, Town of, Louisiana
565. Bastrop, City of, Louisiana
566. Baton Rouge, City of, Louisiana
567. Bearegard, Parish of, Louisiana
568. Benton Fire Protection District No. 4, Louisiana
569. Berwick, Town of, Louisiana
570. Bogalusa, City of, Louisiana
571. Bossier, City of, Louisiana
572. Bossier, Parish of, Louisiana
573. Caddo, Parish of, Louisiana
574. Caddo Fire Protection District No. 1, Louisiana
575. Calcasieu, Parish of, Louisiana
576. Delhi, Town of, Louisiana
577. Desoto Fire Protection District No. 8, Louisiana
578. Donaldsonville, City of, Louisiana
579. East Baton Rouge, Parish of/East Baton Rouge (Sheriff of) Parish of, Louisiana
580. East Carroll, Parish of/East Carroll, (Sheriff of) Parish of, Louisiana
581. Eunice, City of, Louisiana
582. Evangeline, Parish of/Evangeline, (Sheriff of) Parish of, Louisiana
583. Ferriday, Town of, Louisiana
584. Franklin, City of, Louisiana

585. Gramercy, Town of, Louisiana
586. Grant, Parish of/Grant, (Sheriff of) Parish of, Louisiana
587. Iberia, Parish of/Iberia, (Sheriff of) Parish of, Louisiana
588. Iberia Parish School Board, Louisiana
589. Jefferson, Parish of, Louisiana
590. Jefferson Davis, Parish of/ Jefferson Davis, (Sheriff of) Parish of, Louisiana
591. Jefferson Parish Hospital Service District No. 1, Louisiana
592. Jefferson Parish Hospital Service District No. 2, Louisiana
593. Kenner, City of, Louisiana
594. Lafayette, Parish of/Lafayette, (Sheriff of) Parish of, Louisiana
595. Lafourche, Parish of, Louisiana
596. Lafourche Parish School Board, Louisiana
597. Lake Charles, City of, Louisiana
598. Lake Providence, Town of, Louisiana
599. Lutcher, Town of, Louisiana
600. Madisonville, Town of, Louisiana
601. Mandeville, City of, Louisiana
602. Monroe, City of, Louisiana
603. Morehouse, Parish of/Morehouse, (Sheriff of) Parish of, Louisiana
604. Natchitoches, City of, Louisiana
605. New Iberia, City of, Louisiana
606. New Orleans, City of, Louisiana
607. North Caddo Hospital Service District, Louisiana
608. Opelousas, City of, Louisiana
609. Orleans, Parish of, Louisiana
610. Ouchita, Parish of/Ouchita, (Sheriff of) Parish of, Louisiana
611. Patterson, City of Louisiana
612. Pearl River, Town of, Louisiana
613. Pineville, City of, Louisiana
614. Rapides, Parish of/Rapides, (Sheriff of) Parish of, Louisiana
615. Red River, Parish of, Louisiana
616. Red River Fire Protection District, Louisiana
617. Richland, Parish of/Richland, (Sheriff of) Parish of, Louisiana
618. Richwood, Town of, Louisiana
619. Sabine, Parish of/Sabine, (Sheriff of) Parish of, Louisiana
620. St. Bernard, Parish of/St. Bernard (Sheriff of) Parish of, Louisiana
621. St. Bernard Parish School Board, Louisiana
622. St. Charles, Parish of/St. Charles (Sheriff of) Parish of, Louisiana
623. St. James, Parish of, Louisiana
624. St. James Parish School Board, Louisiana
625. St. John the Baptist, Parish of, Louisiana
626. St. Martin, Parish of, Louisiana

627. St. Martinville, City of, Louisana
628. St. Mary, Parish of/St. Mary (Sheriff of) Parish of, Louisiana
629. St. Mary Parish School Board, Louisiana
630. St. Landry, Parish of/St. Landry, (Sheriff of) Parish of, Louisiana
631. St. Tammany, Parish of/St. Tammany (Sheriff of) Parish of, Louisiana
632. St. Tammany Fire Protection District No. 1, Louisiana
633. St. Tammany Fire Protection District No. 2, Louisiana
634. St. Tammany Fire Protection District No. 3, Louisiana
635. St. Tammany Fire Protection District No. 4, Louisiana
636. St. Tammany Fire Protection District No. 5, Louisiana
637. St. Tammany Fire Protection District No. 12, Louisiana
638. St. Tammany Fire Protection District No. 13, Louisiana
639.
640. St. Tammany Parish Coroner's Office
641. Slidell, City of, Louisiana
642. Vermillion, Parish of, Louisiana
643. Vernon, Parish of/Vernon, (Sheriff of) Parish of, Louisiana
644. Washington, Parish of/Washington (Sheriff of) Parish of, Louisiana
645. Webster, Parish of, Louisiana
646. West Ascension Parish Hospital Service District, Louisiana
647. West Baton Rouge, Parish of, Louisiana
648. West Baton Rouge Fire Protection District No. 1, Louisiana
649. West Carroll, Parish of/West Carroll, (Sheriff of) Parish of, Louisiana
650. West Monroe, City of, Louisiana
651. Winn, Parish of, Louisiana
652. Androscoggin, County of, Maine
653. Aroostook, County of, Maine
654. Auburn, City of, Maine
655. August, City of, Maine
656. Bangor, City of, Maine
657. Biddeford, City of, Maine
658. Calais, City of, Maine
659. Cumberland, County of, Maine
660. Kennebec, County of, Maine
661. Knox, County of, Maine
662. Lewiston, City of, Maine
663. Lincoln, County of, Maine
664. Penobscot, County of, Maine
665. Portland, City of, Maine
666. Rockland, City of, Maine
667. Saco, City of, Maine
668. Sagadahoc, County of, Maine

669. Sanford, City of, Maine
670. Somerset, County of, Maine
671. Waldo, County of, Maine
672. Washington, County of, Maine
673. Waterville, City of, Maine
674. York, County of, Maine
675. Anne Arundel, County of, Maryland
676. Aberdeen, City of, Maryland
677. Baltimore, City of, Maryland
678. Bel Air, City of, Maryland
679. Berlin, City of, Maryland
680. Calvert, County of, Maryland
681. Cambridge, City of, Maryland
682. Cecil, County of, Maryland
683. Charles, County of, Maryland
684. Charlestown, City of, Maryland
685. Dorchester, County of, Maryland
686. Grantsville, City of, Maryland
687. Hagerstown, City of, Maryland
688. Harford, County of, Maryland
689. Havre de Grace, City of, Maryland
690. Howard, County of, Maryland
691. Laurel, City of, Maryland
692. Mountain Lake Park, City of, Maryland
693. North East, City of, Maryland
694. Oakland, City of, Maryland
695. Perryville, City of, Maryland
696. Prince George's, County of, Maryland
697. Seat Pleasant, City of, Maryland
698. Somerset, County of, Maryland
699. St. Mary's, County of, Maryland
700. Vienna, City of, Maryland
701. Washington, County of, Maryland
702. Wicomico, County of, Maryland
703. Acushnet, Town of, Massachusetts
704. Agawam, Town of, Massachusetts
705. Amesbury, City of, Massachusetts
706. Andover, Town of, Massachusetts
707. Aquinnah, Town of, Massachusetts
708. Athol, Town of, Massachusetts
709. Auburn, Town of, Massachusetts
710. Ayer, Town of, Massachusetts

711. Barnstable, Town of, Massachusetts
712. Belchertown, Town of, Massachusetts
713. Beverly, City of, Massachusetts
714. Billerica, Town of, Massachusetts
715. Boston, City of, Massachusetts
716. Boston Public Health Commission, Massachusetts
717. Boston Housing Authority, Massachusetts
718. Braintree, Town of, Massachusetts
719. Brewster, Town of, Massachusetts
720. Bridgewater, Town of, Massachusetts
721. Brockton, City of, Massachusetts
722. Brookline, Town of, Massachusetts
723. Cambridge, City of, Massachusetts
724. Canton, Town of, Massachusetts
725. Carver, Town of, Massachusetts
726. Charlton, Town of, Massachusetts
727. Chelmsford, Town of, Massachusetts
728. Chelsea, City of, Massachusetts
729. Chicopee, City of, Massachusetts
730. Clarksburg, Town of, Massachusetts
731. Clinton, Town of, Massachusetts
732. Danvers, Town of, Massachusetts
733. Dedham, Town of, Massachusetts
734. Dennis, Town of, Massachusetts
735. Douglas, Town of, Massachusetts
736. Dudley, Town of, Massachusetts
737. East Bridgewater, Town of, Massachusetts
738. Eastham, Town of, Massachusetts
739. Easthampton, City of, Massachusetts
740. Easton, Town of, Massachusetts
741. Everett, City of, Massachusetts
742. Fairhaven, Town of, Massachusetts
743. Fall River, City of, Massachusetts
744. Falmouth, Town of, Massachusetts
745. Fitchburg, City of, Massachusetts
746. Framingham, City of, Massachusetts
747. Freetown, Town of, Massachusetts
748. Georgetown, Town of, Massachusetts
749. Gloucester, City of, Massachusetts
750. Grafton, Town of, Massachusetts
751. Greenfield, City of, Massachusetts
752. Hanson, Town of, Massachusetts

753. Haverhill, City of, Massachusetts
754. Holliston, Town of, Massachusetts
755. Holyoke, City of, Massachusetts
756. Hopedale, Town of, Massachusetts
757. Hull, Town of, Massachusetts
758. Kingston, Town of, Massachusetts
759. Lakeville, Town of, MassachusettsLeicester, Town of, Massachusetts
760. Leominster, City of, Massachusetts
761. Leverett, Town of, Massachusetts
762. Longmeadow, Town of, Massachusetts
763. Lowell, City of, Massachusetts
764. Ludlow, Town of, Massachusetts
765. Lunenberg, Town of, Massachusetts
766. Lynnfield, City of, Massachusetts
767. Lynn, City of, Massachusetts
768. Malden, City of, Massachusetts
769. Marblehead, Town of, Massachusetts
770. Marshfield, Town of, Massachusetts
771. Mashpee, Town of, Massachusetts
772. Mattapoisett, Town of, Massachusetts
773. Medford, City of, Massachusetts
774. Melrose, City of, Massachusetts
775. Methuen, City of, Massachusetts
776. Middleborough, Town of, Massachusetts
777. Milford, Town of, Massachusetts
778. Millbury, Town of, Massachusetts
779. Millis, Town of, Massachusetts
780. Natick, Town of, Massachusetts
781. New Bedford, City of, Massachusetts
782. Newburyport, City of, Massachusetts
783. North Andover, Town of, Massachusetts
784. North Attleborough, Town of, Massachusetts
785. North Reading, Town of, Massachusetts
786. Northampton, City of, Massachusetts
787. Northbridge, Town of, Massachusetts
788. Norton, Town of, Massachusetts
789. Norwell, Town of, Massachusetts
790. Norwood, Town of, Massachusetts
791. Orange, Town of, Massachusetts
792. Oxford, Town of, Massachusetts
793. Palmer, Town of, Massachusetts
794. Peabody, City of, Massachusetts

795. Pembroke, Town of, Massachusetts
796. Plainville, Town of, Massachusetts
797. Plymouth, Town of, Massachusetts
798. Provincetown, Town of, Massachusetts
799. Quincy, City of, Massachusetts
800. Randolph, Town of, Massachusetts
801. Rehoboth, Town of, Massachusetts
802. Revere, City of, Massachusetts
803. Rockland, Town of, Massachusetts
804. Salem, City of, Massachusetts
805. Salisbury, Town of, Massachusetts
806. Sandwich, Town of, Massachusetts
807. Scituate, Town of, Massachusetts
808. Seekonk, Town of, Massachusetts
809. Sheffield, Town of, Massachusetts
810. Shirley, Town of, Massachusetts
811. Somerset, Town of, Massachusetts
812. Somerville, City of, Massachusetts
813. South Hadley, Town of, Massachusetts
814. Southbridge, Town of, Massachusetts
815. Spencer, Town of, Massachusetts
816. Springfield, City of, Massachusetts
817. Stoneham, Town of, Massachusetts
818. Stoughton, Town of, Massachusetts
819. Sturbridge, Town of, Massachusetts
820. Sudbury, Town of, Massachusetts
821. Sutton, Town of, Massachusetts
822. Swampscott, Town of, Massachusetts
823. Templeton, Town of, Massachusetts
824. Tewksbury, Town of, Massachusetts
825. Truro, Town of, Massachusetts
826. Tyngsborough, Town of, Massachusetts
827. Upton, Town of, Massachusetts
828. Wakefield, Town of, Massachusetts
829. Walpole, Town of, Massachusetts
830. Ware, Town of, Massachusetts
831. Warren, Town of, Massachusetts
832. Watertown, Town of, Massachusetts
833. Wellfleet, Town of, Massachusetts
834. West Boylston, Town of, Massachusetts
835. West Bridgewater, Town of, Massachusetts
836. West Springfield, Town of, Massachusetts

837. Westborough, Town of, Massachusetts
838. Westford, Town of, Massachusetts
839. Weymouth, Town of, Massachusetts
840. Williamsburg, Town of, Massachusetts
841. Wilmington, Town of, Massachusetts
842. Winchendon, Town of, Massachusetts
843. Winthrop, Town of, Massachusetts
844. Woburn, City of, Massachusetts
845. Worcester, City of, Massachusetts
846. Alcona, County of, Michigan
847. Alger, County of, Michigan
848. Alpena, County of, Michigan
849. Antrim, County of, Michigan
850. Arenac, County of, Michigan
851. Baraga, County of, Michigan
852. Bay, County of, Michigan
853. Benzie, County of, Michigan
854. Berrien, County of, Michigan
855. Branch, County of, Michigan
856. Calhoun, County of, Michigan
857. Canton, Charter Township of, Michigan
858. Cass, County of, Michigan
859. Charlevoix, County of, Michigan
860. Chippewa, County of, Michigan
861. Clinton, Charter Township of, Michigan
862. County of, Michigan
863. Crawford, County of, Michigan
864. Delta, County of, Michigan
865. Detroit, City of, Michigan
866. Dickinson, County of, Michigan
867. East Lansing, City of, Michigan
868. Eaton, County of, Michigan
869. Escanaba, City of, Michigan
870. Genesee, County of, Michigan
871. Grand Rapids, City of, Michigan
872. Grand Traverse, County of, Michigan
873. Gratiot, County of, Michigan
874. Hillsdale, County of, Michigan
875. Houghton, County of, Michigan
876. Huron, Charter Township of, Michigan
877. Ingham, County of, Michigan
878. Ionia, County of, Michigan

879. Iosco, County of, Michigan
880. Iron, County of, Michigan
881. Iron Mountain, City of, Michigan
882. Isabella County of, Michigan
883. Jackson, City of, Michigan
884. Kalamazoo, County of, Michigan
885. Kent, County of, Michigan
886. Lake, County of, Michigan
887. Lansing, City of, Michigan
888. Leelanau, County of, Michigan
889. Lenawee, County of, Michigan
890. Livingston, County of, Michigan
891. Livonia, City of, Michigan
892. Luce, County of, Michigan
893. Macomb, County of, Michigan
894. Manistee, County of, Michigan
895. Marquette, County of, Michigan
896. Mason, County of, Michigan
897. Monroe, County of, Michigan
898. Montcalm, County of, Michigan
899. Montmorency, County of, Michigan
900. Muskegon, County of, Michigan
901. Newaygo, County of, Michigan
902. Northville, Charter Township of, Michigan
903. Oakland, County of, Michigan
904. Oceana, County of, Michigan
905. Ogemaw, County of, Michigan
906. Ontonogon, County of, Michigan
907. Osceola, County of, Michigan
908. Otsego, County of, Michigan
909. Pittsfield, Charter Township of, Michigan
910. Pontiac, City of, Michigan
911. Presque Isle, County of, Michigan
912. Romulus, City of, Michigan
913. Roscommon, County of, Michigan
914. Saginaw, County of, Michigan
915. St. Clair, County of, Michigan
916. Sanilac, County of, Michigan
917. Sault Ste. Marie, City of, Michigan
918. Shiawasee, County of, Michigan
919. Traverse City, City of, Michigan
920. Tuscola, County of, Michigan

921. Van Buren, Charter Township of, Michigan
922. Washtenaw, County of, Michigan
923. Wayne, City of, Michigan
924. Wayne, County of, Michigan
925. Westland, County of, Michigan
926. Wexford, County of, Michigan
927. Anoka, County of, Minnesota
928. Dakota, County of, Minnesota
929. Douglas, County of, Minnesota
930. Hennepin, County of, Minnesota
931. McLeod, County of, Minnesota
932. Minneapolis, City of, Minnesota
933. Morrison, County of, Minnesota
934. Mower, County of, Minnesota
935. Ramsey, County of, Minnesota
936. St. Paul, City of, Minnesota
937. Sibley, County of, Minnesota
938. Washington, County of, Minnesota
939. Winona, County of, Minnesota
940. Adams, County of, Mississippi
941. Amite, County of, Mississippi
942. Amory, City of, Mississippi
943. Arcola, Town of, Mississippi
944. Bolivar, County of, Mississippi
945. Brookhaven, City of, Mississippi
946. Clarksdale, City of, Mississippi
947. Columbia, City of, Mississippi
948. Covington, County of, Mississippi
949. Desoto, County of, Mississippi
950. Forrest, County of, Mississippi
951. Greenwood, City of, Mississippi
952. Grenada, City of, Mississippi
953. Grenada, County of, Mississippi
954. Gulfport, City of, Mississippi
955. Harrison, County of, Mississippi
956. Hattiesburg, City of, Mississippi
957. Hinds, County of, Mississippi
958. Holly Springs, City of, Mississippi
959. Indianola, City of, Mississippi
960. Issaquena, County of, Mississippi
961. Jackson, City of, Mississippi
962. Jonestown, City of, Mississippi

963. Lafayette, County of, Mississippi
964. Laurel, City of, Mississippi
965. Leflore, County of, Mississippi
966. Lincoln, County of, Mississippi
967. Long Beach, City of, Mississippi
968. Luka, City of, Mississippi
969. Lumberton, City of, Mississippi
970. Madison, County of, Mississippi
971. Marion, County of, Mississippi
972. Meridian, City of, Mississippi
973. Monroe, County of, Mississippi
974. Mound Bayou, City of, Mississippi
975. Neshoba, County of, Mississippi
976. New Albany, City of, Mississippi
977. Pascagoula, City of, Mississippi
978. Pearl River, County of, Mississippi
979. Philadelphia, City of, Mississippi
980. Scott, County of, Mississippi
981. Shelby, County of, Mississippi
982. Stone, County of, Mississippi
983. Summit, Town of, Mississippi
984. Union, County of, Mississippi
985. Washington, County of, Mississippi
986. Audrain, County of, Missouri
987. Boone, County of, Missouri
988. Buchanan, County of, Missouri
989. Butler, County of, Missouri
990. Callaway, County of, Missouri
991. Camden, County of, Missouri
992. Cape Girardeau, County of, Missouri
993. Cass, County of, Missouri
994. Charlton, County of, Missouri
995. Christian, County of, Missouri
996. Cole, County of, Missouri
997. Douglas, County of, Missouri
998. Franklin, County of, Missouri
999. Gasconade, County of, Missouri
1000. Greene, County of, Missouri
1001. Harrisonville, City of, Missouri
1002. Howell, County of, Missouri
1003. Independence, City of, Missouri
1004. Iron, County of, Missouri

1005. Jackson, County of, Missouri
1006. Jasper, County of, Missouri
1007. Jefferson, County of, Missouri
1008. Johnson, County of, Missouri
1009. Joplin, City of, Missouri
1010. Kansas City, City of, Missouri
1011. Knox, County of, Missouri
1012. Lewis, County of, Missouri
1013. Lincoln, County of, Missouri
1014. Livingston, County of, Missouri
1015. Madison, County of, Missouri
1016. Maries, County of, Missouri
1017. Miller, County of, Missouri
1018. Moniteau, County of, Missouri
1019. Montgomery, County of, Missouri
1020. Nodaway, County of, Missouri
1021. Osage, County of, Missouri
1022. Ozark, County of, Missouri
1023. Pemiscot, County of, Missouri
1024. Perry, County of, Missouri
1025. Pettis, County of, Missouri
1026. Phelps, County of, Missouri
1027. Pulaski, County of, Missouri
1028. Randolph, County of, Missouri
1029. Reynolds, County of, Missouri
1030. Ripley, County of, Missouri
1031. St. Charles, County of, Missouri
1032. St. Francois, County of, Missouri
1033. Ste. Genevieve, County of, Missouri
1034. St. Joseph, City of, Missouri
1035. St. Louis, County of, Missouri
1036. Schuyler, County of, Missouri
1037. Scott, County of, Missouri
1038. Sedalia, City of, Missouri
1039. Shannon, County of, Missouri
1040. Shelby, County of, Missouri
1041. Stone, County of, Missouri
1042. Taney, County of, Missouri
1043. Texas, County of, Missouri
1044. Warren, County of, Missouri
1045. Washington, County of, Missouri
1046. Webster, County of, Missouri

1047. Wright, County of, Missouri
1048. Anaconda-Deer Lodge, County of, Montana
1049. Cascade, County of, Montana
1050. Gallatin, County of, Montana
1051. Great Falls, City of, Montana
1052. Lake, County of, Montana
1053. Missoula, City of, Montana
1054. Missoula, County of, Montana
1055. Douglas, County of, Nebraska
1056. Knox, County of, Nebraska
1057. Lincoln, County of, Nebraska
1058. Sarpy, County of, Nebraska
1059. South Sioux City, City of, Nebraska
1060. Carson City, City of, Nevada
1061. Churchill, County of, Nevada
1062. Clark, County of, Nevada
1063. Douglas, County of, Nevada
1064. Esmeralda, County of, Nevada
1065.
1066. Henderson, City of, Nevada
1067. Las Vegas, City of, Nevada
1068. North Las Vegas, City of, Nevada
1069. Nye, County of, Nevada
1070. Sparks, City of, Nevada
1071. Washoe, County of, Nevada
1072. West Wendover, City of, Nevada
1073. Belknap, County of, New Hampshire
1074. Belmont, City of, New Hampshire
1075. Berlin, City of, New Hampshire
1076. Carroll, County of, New Hampshire
1077. Cheshire, County of, New Hampshire
1078. Claremont, City of, New Hampshire
1079. Concord, City of, New Hampshire
1080. Coos, County of, New Hampshire
1081. Derry, Town of, New Hampshire
1082. Franklin, City of, New Hampshire
1083. Grafton, County of, New Hampshire
1084. Hillsborough, County of, New Hampshire
1085. Laconia, City of, New Hampshire
1086. Londonderry, Town of, New Hampshire
1087. Manchester, City of, New Hampshire
1088. Merrimack, County of, New Hampshire

1089. Nashua, City of, New Hampshire
1090. Rochester, City of, New Hampshire
1091. Rockingham, County of, New Hampshire
1092. Strafford, County of, New Hampshire
1093. Sullivan, County of, New Hampshire
1094. Atlantic, County of, New Jersey
1095. Barnegat, Township of, New Jersey
1096. Bayonne, City of, New Jersey
1097. Bergen, County of, New Jersey
1098. Brick, Township of, New Jersey
1099. Burlington, County of, New Jersey
1100. Camden, County of, New Jersey
1101. Clifton, City of, New Jersey
1102. Clinton, Town of, New Jersey
1103. Elizabeth, City of, New Jersey
1104. Essex, County of, New Jersey
1105. Hudson, County of, New Jersey
1106. Hunterdon, County of, New Jersey
1107. Jersey City, City of, New Jersey
1108. Newark, City of, New Jersey
1109. Ocean, County of, New Jersey
1110. Paramus, Borough of, New Jersey
1111. Passaic, County of, New Jersey
1112. Paterson, City of, New Jersey
1113. Ridgefield, Borough of, New Jersey
1114. Saddle Brook, Township of, New Jersey
1115. Sussex, County of, New Jersey
1116. Trenton, City of, New Jersey
1117.
1118. Hunterdon, County of, New Jersey
1119. Vineland, City of, New Jersey
1120. Alamogordo, City of, New Mexico
1121. Albuquerque, City of, New Mexico
1122. Bernalillo, County of, New Mexico
1123. Catron, County of, New Mexico
1124. Cibola, County of, New Mexico
1125. Colfax, County of, New Mexico
1126. Curry, County of, New Mexico
1127. Dona Ana, County of, New Mexico
1128. Eddy, County of, New Mexico
1129. Espanola, City of, New Mexico
1130. Grant, County of, New Mexico

1131. Hidalgo, County of, New Mexico
1132. Hobbs, City of, New Mexico
1133. Las Cruces, City of, New Mexico
1134. Lea, County of, New Mexico
1135. Lincoln, County of, New Mexico
1136. Luna, County of, New Mexico
1137. McKinley, County of, New Mexico
1138. Mora, County of, New Mexico
1139. Otero, County of, New Mexico
1140. Rio Arriba, County of, New Mexico
1141. Roosevelt, County of, New Mexico
1142. San Juan, County of, New Mexico
1143. San Miguel, County of, New Mexico
1144. Sandoval, County of, New Mexico
1145. Santa Fe, City of, New Mexico
1146. Santa Fe, County of, New Mexico
1147. Sierra, County of, New Mexico
1148. Socorro, County of, New Mexico
1149. Taos, County of, New Mexico
1150. Torrance, County of, New Mexico
1151. Union, County of, New Mexico
1152. Valencia, County of, New Mexico
1153. Albany, City of, New York
1154. Albany, County of, New York
1155. Alleghany, County of, New York
1156. Amityville, Village of, New York
1157. Amsterdam, City of, New York
1158. Auburn, City of, New York
1159. Babylon, Town of, New York
1160. Babylon, Incorporated Village of, New York
1161. Bellmore fire District, New York
1162. Bellport, Village of, New York
1163. Branch, Village of, New York
1164. Brookhaven, Town of, New York
1165. Broome, County of, New York
1166. Buffalo, City of, New York
1167. Centereach Fire District, New York
1168. Centerport Fire District, New York
1169. Clarkstown, Town of, New York
1170. Clinton, County of, New York
1171. Columbia, County of, New York
1172. Dutchess, County of, New York

1173. East Hampton, Village of, New York
1174. East Rockaway, Incorporated Village of, New York
1175. Erie, County of, New York
1176. Farmingdale, Incorporated Village of, New York
1177. Floral Park, Incorporated Village of, New York
1178. Franklin, County of, New York
1179. Friendship Engine & Hose Company, New York
1180. Fulton, County of, New York
1181. Garden City, Incorporated Village of, New York
1182. Genesee, County of, New York
1183. Geneva, City of, New York
1184. Great Neck, Village of, New York
1185. Greene, County of, New York
1186. Greenport, Village of, New York
1187. Hamilton, County of, New York
1188. Hauppauge Fire District, New York
1189. Hempstead, Incorporated Village of, New York
1190. Herkimer, County of, New York
1191. Herkimer, Village of, New York
1192. Huntington, Town of, New York
1193. Ithaca, City of, New York
1194. Islandia, Incorporated Village of, New York
1195. Islip, Town of, New York
1196. Islip Terrace Fire District, New York
1197. Jefferson, County of, New York
1198. Kingston, City of, New York
1199. Lackawanna, City of, New York
1200. Lake Grove, Incorporated Village of, New York
1201. Lawrence, Incorporated Village of, New York
1202. Levittown Fire District, New York
1203. Lewis, County of, New York
1204. Lindenhurst, Incorporated Village of, New York
1205. Lloyd Harbor, Incorporated Village of, New York
1206. Long Beach, City of, New York
1207. Lynbrook, Incorporated Village of, New York
1208. Massapequa Park, Incorporated Village of, New York
1209. Medford Volunteer Ambulance, New York
1210. Melville Fire District, New York
1211. Mill Neck, Incorporated Village of, New York
1212. Miller Place Fire District, New York
1213. Monroe, County of, New York
1214. Montgomery, County of, New York

1215. Mount Sinai Fire District, New York
1216. Nesconset Fire District, New York
1217. New Hyde Park, Incorporated Village of, New York
1218. New York, City of, New York
1219. Niagara, County of, New York
1220. Nissequogue, Incorporated Village of, New York
1221. North Hempstead, Town of, New York
1222. North Merrick Fire District, new York
1223. North Patchogue Fire District, New York
1224. Northport, Incorporated Village of, New York
1225. Ogdensburg, City of, New York
1226. Old Westbury, Incorporated Village of, New York
1227. Oneida, County of, New York
1228. Onondaga, County of, New York
1229. Ontario, County of, New York
1230. Orange, County of, New York
1231. Orangetown, Town of, New York
1232. Oswego, County of, New York
1233. Oyster Bay, Town of, New York
1234. Patchogue, Incorporated Village of, New York
1235. Plattsburgh, City of, New York
1236. Poquott, Incorporated Village of, New York
1237. Port Washington, Incorporated Village of, New York
1238. Port Washington Water District, New York
1239. Poughkeepsie, City of, New York
1240. Poughkeepsie, Town of, New York
1241. Ramapo, Town of, New York
1242. Rensselaer, County of, New York
1243. Ridge Fire District, New York
1244. Riverhead, Town of, New York
1245. Rochester, City of, New York
1246. Rockland, County of, New York
1247. Rosalyn Water District, New York
1248. Rome, City of, New York
1249. St. James Fire District, New York
1250. St. Lawrence, County of, New York
1251. Saratoga, County of, New York
1252. Saratoga Springs, City of, New York
1253. Schenectady, City of, New York
1254. Schenectady, County of, New York
1255. Schoharie, County of, New York
1256. Schuyler, County of, New York

1257. Seneca, County of, New York
1258. Smithtown, Town of, New York
1259. Smithtown Fire District, New York
1260. South Farmingdale Fire District, New York
1261. Southampton, Town of, New York
1262. Southold, Town of, New York
1263. Steuben, County of, New York
1264. Stewart Manor, Village of, New York
1265. Stony Brook Fire District, New York
1266. Stony Point, Town of, New York
1267. Suffern, Village of, New York
1268. Sullivan, County of, New York
1269. Syracuse, City of, New York
1270. Tompkins, County of, New York
1271. Troy, City of, New York
1272. Uniondale Fire District, New York
1273. Utica, City of, New York
1274. Valley Stream, Incorporated Village of, New York
1275. Washington, County of, New York
1276. West Hampton Dunes, Incorporated Village of, New York
1277. West Haverstraw, Village of, New York
1278. Westbury, Incorporated Village of, New York
1279. Westchester, County of, New York
1280. Wyoming, County of, New York
1281. Yonkers, City of, New York
1282. Alamance, County of, North Carolina
1283. Alleghany, County of, North Carolina
1284. Beaufort, County of, North Carolina
1285. Brunswick, County of, North Carolina
1286. Buncombe, County of, North Carolina
1287. Burke, County of, North Carolina
1288. Caldwell, County of, North Carolina
1289. Cabarrus, County of, North Carolina
1290. Camden, County of, North Carolina
1291. Carteret, County of, North Carolina
1292. Catawba, County of, North Carolina
1293. Cherokee, County of, North Carolina
1294. Cleveland, County of, North Carolina
1295. Columbus, County of, North Carolina
1296. Craven, County of, North Carolina
1297. Cumberland, County of, North Carolina
1298. Dare, County of, North Carolina

1299. Davidson, County of, North Carolina
1300. Davie, County of, North Carolina
1301. Duplin, County of, North Carolina
1302. Durham, County of, North Carolina
1303. Fayetteville, City of, North Carolina
1304. Forsyth, County of, North Carolina
1305. Franklin, County of, North Carolina
1306. Gaston, County of, North Carolina
1307. Granville, County of, North Carolina
1308. Greene, County of, North Carolina
1309. Greensboro, City of, North Carolina
1310. Guilford, County of, North Carolina
1311. Halifax, County of, North Carolina
1312. Haywood, County of, North Carolina
1313. Henderson, City of, North Carolina
1314. Hickory, City of, North Carolina
1315. Iredell, County of, North Carolina
1316. Jacksonville, City of, North Carolina
1317. Lee, County of, North Carolina
1318. Lenoir, County of, North Carolina
1319. Lincoln, County of, North Carolina
1320. Mecklenburg, County of, North Carolina
1321. Moore, County of, North Carolina
1322. New Hanover, County of, North Carolina
1323. Onslow, County of, North Carolina
1324. Orange, County of, North Carolina
1325. Pasquotank, County of, North Carolina
1326. Pitt, County of, North Carolina
1327. Randolph, County of, North Carolina
1328. Richmond, County of, North Carolina
1329. Robeson, County of, North Carolina
1330. Rockingham, County of, North Carolina
1331. Rowan, County of, North Carolina
1332. Sampson, County of, North Carolina
1333. Scotland, County of, North Carolina
1334. Surry, County of, North Carolina
1335. Vance, County of, North Carolina
1336. Warren, County of, North Carolina
1337. Washington, County of, North Carolina
1338. Watauga, County of, North Carolina
1339. Wayne, County of, North Carolina
1340. Wilkes, County of, North Carolina

1341. Wilmington, City of, North Carolina
1342. Winston-Salem, City of, North Carolina
1343. Barnes, County of, North Dakota
1344. Benson, County of, North Dakota
1345. Bismarck, City of, North Dakota
1346. Burleigh, County of, North Dakota
1347. Devils Lake, City of, North Dakota
1348. Dickey, County of, North Dakota
1349. Dunn, County of, North Dakota
1350. Eddy, County of, North Dakota
1351. Foster, County of, North Dakota
1352. Grand Forks, County of, North Dakota
1353. LaMoure, County of, North Dakota
1354. Lisbon, City of, North Dakota
1355. McKenzie, County of, North Dakota
1356. McLean, County of, North Dakota
1357. Mercer, County of, North Dakota
1358. Mountrial, County of, North Dakota
1359. Pembina, County of, North Dakota
1360. Pierce, County of, North Dakota
1361. Ramsey, County of, North Dakota
1362. Ransom, County of, North Dakota
1363. Richland, County of, North Dakota
1364. Rolette, County of, North Dakota
1365. Sargent, County of, North Dakota
1366. Stark, County of, North Dakota
1367. Towner, County of, North Dakota
1368. Walsh, County of, North Dakota
1369. Ward, County of, North Dakota
1370. Wells, County of, North Dakota
1371. Williams, County of, North Dakota
1372. Ashtabula, County of, Ohio
1373. Aurora, City of, Ohio
1374. Barberton, City of, Ohio
1375. Boston Heights, Village of, Ohio
1376. Broadview Heights, City of, Ohio
1377. Brooklyn Heights, Village of, Ohio
1378. Cincinnati, City of, Ohio
1379. Clermont, County of, Ohio
1380. Cleveland, City of, Ohio
1381. Clinton, Village of, Ohio
1382. Columbiana, County of, Ohio

1383. Copley, Township of, Ohio
1384. Coshocton, County of, Ohio
1385. Coventry, Township of, Ohio
1386. Cuyahoga, County of, Ohio
1387. Cuyahoga Falls, City of, Ohio
1388. Darke, County of, Ohio
1389. Dayton, City of, Ohio
1390. Delaware, County of, Ohio
1391. East Cleveland, City of, Ohio
1392. Elyria, City of, Ohio
1393. Euclid, City of, Ohio
1394. Fairfield, City of, Ohio
1395. Fairfield, County of, Ohio
1396. Fairlawn, City of, Ohio
1397. Fayette, County of, Ohio
1398. Findlay, City of, Ohio
1399. Franklin, County of, Ohio
1400. Fulton, County of, Ohio
1401. Garfield Heights, City of, Ohio
1402. Geauga, County of, Ohio
1403. Green, City of, Ohio
1404. Hamilton, City of, Ohio
1405. Hancock, County of, Ohio
1406. Huron, City of, Ohio
1407. Huron, County of, Ohio
1408. Jackson, County of, Ohio
1409. Kent, City of, Ohio
1410. Lake, County of, Ohio
1411. Lakeore, Village of, Ohio
1412. Lebanon, City of, Ohio
1413. Lexington, Village of, Ohio
1414. Licking, County of, Ohio
1415. Lima, City of, Ohio
1416. Logan, County of, Ohio
1417. Lorain, City of, Ohio
1418. Lorain, County of, Ohio
1419. Lucas, County of, Ohio
1420. Lucas County Children’s Services, Ohio
1421. Lyndhurst, City of, Ohio
1422. Macedonia, City of, Ohio
1423. Marion, County of, Ohio
1424. Mayfield Heights, City of, Ohio

1425. Meigs, County of, Ohio
1426. Mental Health and Recovery Services Board of Lucas County, Ohio
1427. Middletown, City of, Ohio
1428. Mogadore, Village of, Ohio
1429. Montgomery, County of, Ohio
1430. Munroe Falls, City of, Ohio
1431. Muskingum, County of, Ohio
1432. New Franklin, City of, Ohio
1433. Newburgh Heights, Village of, Ohio
1434. Noble, County of, Ohio
1435. North Olmsted, City of, Ohio
1436. North Ridgeville, City of, Ohio
1437. North Royalton, City of, Ohio
1438. Norton, City of, Ohio
1439. Olmsted Falls, City of, Ohio
1440. Painesville, Township of, Ohio
1441. Parma, City of, Ohio
1442. Parma Heights, City of, Ohio
1443. Peninsula, Village of, Ohio
1444. Portage, County of, Ohio
1445. Ravenna, City of, Ohio
1446. Richfield, Village of, Ohio
1447. Richland County Children's Services, Ohio
1448. Ross, County of, Ohio
1449. Sandusky, County of, Ohio
1450. Seven Hills, City of, Ohio
1451. Silver Lake, Village of, Ohio
1452. Springfield, Township of, Ohio
1453. Stark, County of, Ohio
1454. Stow, City of, Ohio
1455. Strongsville, City of, Ohio
1456. Summit, County of, Ohio
1457. Summit County Combined General Health District, Ohio
1458. Tallmadge, City of, Ohio
1459. Toledo, City of, Ohio
1460. Trumbull, County of, Ohio
1461. Valley Fire District, Ohio
1462. Warren, City of, Ohio
1463. Warrensville Heights, City of, Ohio
1464. Washington, County of, Ohio
1465. Wickliffe, City of, Ohio
1466. Williams, County of, Ohio

1467. Altus, City of, Oklahoma
1468. Atoka, County of, Oklahoma
1469. Beckham, County of, Oklahoma
1470. Bethany, City of, Oklahoma
1471. Broken Arrow, City of, Oklahoma
1472. Caddo, County of, Oklahoma
1473. Choctaw, County of, Oklahoma
1474. Cimarron, County of, Oklahoma
1475. Cleveland, County of, Oklahoma
1476. Coal, County of, Oklahoma
1477. Collinsville, City of, Oklahoma
1478. Comanche, County of, Oklahoma
1479. Craig, County of, Oklahoma
1480. Creek, County of, Oklahoma
1481. Custer, County of, Oklahoma
1482. Delaware, County of, Oklahoma
1483. Dewey, County of, Oklahoma
1484. Edmond, City of, Oklahoma
1485. El Reno, City of, Oklahoma
1486. Elk City, City of, Oklahoma
1487. Enid, City of, Oklahoma
1488. Garvin, County of, Oklahoma
1489. Grady, County of, Oklahoma
1490. Greer, County of, Oklahoma
1491. Guthrie, City of, Oklahoma
1492. Harper, County of, Oklahoma
1493. Haskell, County of, Oklahoma
1494. Hughes, County of, Oklahoma
1495. Jackson, County of, Oklahoma
1496. Jefferson, County of, Oklahoma
1497. Jenks, City of, Oklahoma
1498. Johnston, County of, Oklahoma
1499. Kay, County of, Oklahoma
1500. Kiowa, County of, Oklahoma
1501. Latimer, County of, Oklahoma
1502. Lawton, City of, Oklahoma
1503. LeFlore, County of, Oklahoma
1504. Lincoln, County of, Oklahoma
1505. Logan, County of, Oklahoma
1506. Love, County of, Oklahoma
1507. Major, County of, Oklahoma
1508. Mayes, County of, Oklahoma

1509. McClain, County of, Oklahoma
1510. McCurtain, County of, Oklahoma
1511. Midwest City, City of, Oklahoma
1512. Muskogee, City of, Oklahoma
1513. Muskogee, County of, Oklahoma
1514. Noble, County of, Oklahoma
1515. Nowata, County of, Oklahoma
1516. Okfuskee, County of, Oklahoma
1517. Oklahoma, County of, Oklahoma
1518. Oklahoma City, City of, Oklahoma
1519. Okmulgee, County of, Oklahoma
1520. Osage, County of, Oklahoma
1521. Ottawa, County of, Oklahoma
1522. Owasso, City of, Oklahoma
1523. Pawnee, County of, Oklahoma
1524. Payne, County of, Oklahoma
1525. Pittsburg, County of, Oklahoma
1526. Ponca City, City of, Oklahoma
1527. Pottawatomie, County of, Oklahoma
1528. Rogers, County of, Oklahoma
1529. Shawnee, City of, Oklahoma
1530. Stephens, County of, Oklahoma
1531. Stillwater, City of, Oklahoma
1532. Texas, County of, Oklahoma
1533. Tulsa, City of, Oklahoma
1534. Washington, County of, Oklahoma
1535. Woods, County of, Oklahoma
1536. Woodward, County of, Oklahoma
1537. Yukon, City of, Oklahoma
1538. Clackamas, County of, Oregon
1539. Coos, County of, Oregon
1540. Multnomah, County of, Oregon
1541. Portland, City of, Oregon
1542. Adams, County of, Pennsylvania
1543. Allegheny, County of, Pennsylvania
1544. Beaver, County of, Pennsylvania
1545. Bensalem, Township of, Pennsylvania
1546. Bristol, Township of, Pennsylvania
1547. Bucks, County of, Pennsylvania
1548. Cambria, County of, Pennsylvania
1549. Carbon, County of, Pennsylvania
1550. Chester, County of, Pennsylvania

1551. Clinton, County of, Pennsylvania
1552. Coatesville, City of, Pennsylvania
1553. Dauphin, County of, Pennsylvania
1554. Delaware, County of, Pennsylvania
1555. Edwardsville, Borough of, Pennsylvania
1556. Exeter, Borough of, Pennsylvania
1557. Fairview, Township of, Pennsylvania,
1558. Fayette, County of, Pennsylvania
1559. Forty Fort, Borough of, Pennsylvania
1560. Greene, County of, Pennsylvania
1561. Hanover, Township of, Pennsylvania
1562. Hazleton, City of, Pennsylvania
1563. Huntington, County of, Pennsylvania
1564. Kingston, Borough of, Pennsylvania
1565. Lackawanna, County of, Pennsylvania
1566. Lawrence, County of, Pennsylvania
1567. Lock Haven, City of, Pennsylvania
1568. Lower Makefield, Township of, Pennsylvania
1569. Lower Southampton, Township of, Pennsylvania
1570. Luzerne, County of, Pennsylvania
1571. Mercer, County of, Pennsylvania
1572. Middletown, Township of, Pennsylvania
1573. Morrisville, Borough of, Pennsylvania
1574. Nanticoke, City of, Pennsylvania
1575. Newtown, Township of, Pennsylvania
1576. Norristown, Municipality of, Pennsylvania
1577. Philadelphia, City of, Pennsylvania
1578. Plains, Township of, Pennsylvania
1579. Pike, County of, Pennsylvania
1580. Pittsburgh, City of, Pennsylvania
1581. Sugar Notch, Borough of, Pennsylvania
1582. Tioga, County of, Pennsylvania
1583. Warminster, Township of, Pennsylvania
1584. Warrington, Township of, Pennsylvania
1585. West Norristown, Township of, Pennsylvania
1586. West Pittston, Borough of, Pennsylvania
1587. Wilkes-Barre, City of, Pennsylvania
1588. Wilkes-Barre, Township of, Pennsylvania
1589. Wright, Township of, Pennsylvania
1590. Wyoming, Borough of, Pennsylvania
1591. Aguada, Municipality of, Puerto Rico
1592. Aguadilla, Municipality of, Puerto Rico

1593. Aibonito, Municipality of, Puerto Rico
1594. Anasco, Municipality of, Puerto Rico
1595. Arecibo, Municipality of, Puerto Rico
1596. Barranquitas, Municipality of, Puerto Rico
1597. Cabo Rojo, Municipality of, Puerto Rico
1598. Camuy, Municipality of, Puerto Rico
1599. Canovanas, Municipality of, Puerto Rico
1600. Comerio, Municipality of, Puerto Rico
1601. Dorado, Municipality of, Puerto Rico
1602. Fajardo, Municipality of, Puerto Rico
1603. Gaunica, Municipality of, Puerto Rico
1604. Guayanilla, Municipality of, Puerto Rico
1605. Huatillo, Municipality of, Puerto Rico
1606. Huatillo, Municipality of, Puerto Rico
1607. Harmigueros, Municipality of, Puerto Rico
1608. Isabela, Municipality of, Puerto Rico
1609. Jayuya, Municipality of, Puerto Rico
1610. Juana Diaz, Municipality of, Puerto Rico
1611. Juncos, Municipality of, Puerto Rico
1612. Loiza, Municipality of, Puerto Rico
1613. Rio Grande, Municipality of, Puerto Rico
1614. Sabana Grande, Municipality of, Puerto Rico
1615. San Juan, Municipality of, Puerto Rico
1616. Vega Alta, Municipality of, Puerto Rico
1617. Yabucoa, Municipality of, Puerto Rico
1618. Barrington, Town of, Rhode Island
1619. Bristol, Town of, Rhode Island
1620. Burrillville, Town of, Rhode Island
1621. Central Falls, City of, Rhode Island
1622. Charlestown, Town of, Rhode Island
1623. Coventry, Town of, Rhode Island
1624. Cranston, City of, Rhode Island
1625. Cumberland, Town of, Rhode Island
1626. East Greenwich, Town of, Rhode Island
1627. East Providence, City of, Rhode Island
1628. Foster, Town of, Rhode Island
1629. Glocester, Town of, Rhode Island
1630. Hopkinton, Town of, Rhode Island
1631. Jamestown, Town of, Rhode Island
1632. Johnston, Town of, Rhode Island
1633. Middletown, Town of, Rhode Island
1634. Narragansett, Town of, Rhode Island

1635. Newport, City of, Rhode Island
1636. North Kingstown, Town of, Rhode Island
1637. North Providence, Town of, Rhode Island
1638. Pawtucket, City of, Rhode Island
1639. Portsmouth, Town of, Rhode Island
1640. Providence, City of, Rhode Island
1641. Richmond, Town of, Rhode Island
1642. Scituate, Town of, Rhode Island
1643. Smithfield, Town of, Rhode Island
1644. South Kingstown, Town of, Rhode Island
1645. Warren, Town of, Rhode Island
1646. Warwick, City of, Rhode Island
1647. West Greenwich, Town of, Rhode Island
1648. West Warwick, Town of, Rhode Island
1649. Westerly, Town of, Rhode Island
1650. Abbeville, County of, South Carolina
1651. Aiken, County of, South Carolina
1652. Allendale, County of, South Carolina
1653. Anderson, County of, South Carolina
1654. Bamberg, County of, South Carolina
1655. Barnwell, County of, South Carolina
1656. Beaufort, County of, South Carolina
1657. Berkeley, County of, South Carolina
1658. Calhoun, County of, South Carolina
1659. Charleston, City of, South Carolina
1660. Charleston, County of, South Carolina
1661. Cherokee, County of, South Carolina
1662. Chester, City of, South Carolina
1663. Chester, County of, South Carolina
1664. Chesterfield, County of, South Carolina
1665. Clarendon, County of, South Carolina
1666. Colleton, County of, South Carolina
1667. Dillon, County of, South Carolina
1668. Dorchester, County of, South Carolina
1669. Edgefield, County of, South Carolina
1670. Fairfield, County of, South Carolina
1671. Florence, County of, South Carolina
1672. Georgetown, City of, South Carolina
1673. Georgetown, County of, South Carolina
1674. Greenville, County of, South Carolina
1675. Greenwood, County of, South Carolina
1676. Hampton, County of, South Carolina

1677. Horry, County of, South Carolina
1678. Jasper, County of, South Carolina
1679. Kershaw, County of, South Carolina
1680. Lancaster, County of, South Carolina
1681. Laurens, County of, South Carolina
1682. Lee, County of, South Carolina
1683. Lexington, County of, South Carolina
1684. Marion, County of, South Carolina
1685. Marlboro, County of, South Carolina
1686. McCormick, County of, South Carolina
1687. Medical University Hospital Authority, South Carolina
1688. Mount Pleasant, Town of, South Carolina
1689. Newberry, County of, South Carolina
1690. North Charleston, City of, South Carolina
1691. Oconee, County of, South Carolina
1692. Orangeburg, City of, South Carolina
1693. Orangeburg, County of, South Carolina
1694. Pickens, County of, South Carolina
1695. Richland, County of, South Carolina
1696. Saluda, County of, South Carolina
1697. Spartanburg, County of, South Carolina
1698. Summerville, Town of, South Carolina
1699. Sumter, County of, South Carolina
1700. Union, County of, South Carolina
1701. Williamsburg, County of, South Carolina
1702. York, County of, South Carolina
1703. Pennington, County of, South Dakota
1704. Anderson, County of, Tennessee
1705. Arlington, Town of, Tennessee
1706. Bedford, County of, Tennessee
1707. Bledsoe, County of, Tennessee
1708. Blount, County of, Tennessee
1709. Bradley, County of, Tennessee
1710. Campbell, County of, Tennessee
1711. Centerville, Township of, Tennessee
1712. Claiborne, County of, Tennessee
1713. Clarksville, City of, Tennessee
1714. Cocke, County of, Tennessee
1715. Fentress, County of, Tennessee
1716. Franklin, County of, Tennessee
1717. Gatlinburg, City of, Tennessee
1718. Grainger, County of, Tennessee

1719. Greene, County of, Tennessee
1720. Grundy, County of, Tennessee
1721. Hamilton, County of, Tennessee
1722. Hawkins, County of, Tennessee
1723. Haywood, County of, Tennessee
1724. Henderson, County of, Tennessee
1725. Knox, County of, Tennessee
1726. Knoxville, City of, Tennessee
1727. Lexington, County of, Tennessee
1728. Loudon, County of, Tennessee
1729. Madison, County of, Tennessee
1730. Marion, County of, Tennessee
1731. McMinn, County of, Tennessee
1732. Meigs, County of, Tennessee
1733. Memphis, City of, Tennessee
1734. Millington, City of, Tennessee
1735. Monroe, County of, Tennessee
1736. Montgomery, County of, Tennessee
1737. Nashville and Davidson, County of, Tennessee
1738. Overton, County of, Tennessee
1739. Polk, County of, Tennessee
1740. Rhea, County of, Tennessee
1741. Roane, County of, Tennessee
1742. Rutherford, County of, Tennessee
1743. Rutledge, Town of, Tennessee
1744. Scott, County of, Tennessee
1745. Sequatchie, County of, Tennessee
1746. Sevier, County of, Tennessee
1747. Union, County of, Tennessee
1748. Washington, County of, Tennessee
1749. Williamson, County of, Tennessee
1750. Angelina, County of, Texas
1751. Bailey, County of, Texas
1752. Bexar, County of, Texas
1753. Bowie, County of, Texas
1754. Brazos, County of, Texas
1755. Clay, County of, Texas
1756. Coryell, County of, Texas
1757. Dallas, County of, Texas
1758. Dallas County Hospital District, Texas
1759. Duval, County of, Texas
1760. Eagle Pass, City of, Texas

1761. Ellis, County of, Texas
1762. Freestone, County of, Texas
1763. Henderson, County of, Texas
1764. Harris County Hospital District, Texas
1765. Jim Hogg, County of, Texas
1766. Jim Wells, County of, Texas
1767. Johnson, County of, Texas
1768. Kaufman, County of, Texas
1769. Kendall, County of, Texas
1770. Kleberg, County of, Texas
1771. Lamar, County of, Texas
1772. Laredo, City of, Texas
1773. Maverick, County of, Texas
1774. McLennan, County of, Texas
1775. Montgomery, County of, Texas
1776. Rusk, County of, Texas
1777. Rockwall, County of, Texas
1778. San Antonio, City of, Texas
1779. Smith, County of, Texas
1780. Tarrant, County of, Texas
1781. Tarrant County Hospital District, Texas
1782. Titus, County of, Texas
1783. Webb, County of, Texas
1784. Wichita, County of, Texas
1785. Williamson, County of, Texas
1786. Zavala, County of, Texas
1787. Beaver, County of, Utah
1788. Cache, County of, Utah
1789. Daggett, County of, Utah
1790. Duchesne, County of, Utah
1791. Emery, County of, Utah
1792. Garfield, County of, Utah
1793. Juab, County of, Utah
1794. Kane, County of, Utah
1795. Piute, County of, Utah
1796. Salt Lake, County of, Utah
1797. Sevier, County of, Utah
1798. Summit, County of, Utah
1799. Tooele, County of , Utah
1800. Tricounty Health Department, Utah
1801. Uintah, County of, Utah
1802. Utah, County of, Utah

1803. Wasatch, County of, Utah
1804. Washington, County of, Utah
1805. Wayne, County of, Utah
1806. Weber, County of, Utah
1807. Bennington, Town of, Vermont
1808. Counseling Services of Addison County, Vermont
1809. Health Care & Rehab Services Southeastern Vermont, Vermont
1810. Northeast Kingdom Human Services, Vermont
1811. St. Albans, City of, Vermont
1812. Accomack, County of, Virginia
1813. Alexandria, City of, Virginia
1814. Alleghany, County of, Virginia
1815. Amherst, County of, Virginia
1816. Arlington, County of, Virginia
1817. Botetourt, County of, Virginia
1818. Bristol, City of, Virginia
1819. Buena Vista, City of, Virginia
1820. Charlotte, County of, Virginia
1821. Chesapeake, City of, Virginia
1822. Chesterfield, County of, Virginia
1823. Covington, City of, Virginia
1824. Culpepper, County of, Virginia
1825. Cumberland, County of, Virginia
1826. Danville, City of, Virginia
1827. Dickenson, County of, Virginia
1828. Dinwiddie, County of, Virginia
1829. Emporia, City of, Virginia
1830. Fairfax, City of, Virginia,
1831. Fairfax, County of, Virginia
1832. Fauquier, City of, Virginia
1833. Floyd, County of, Virginia
1834. Franklin, County of, Virginia
1835. Frederick, County of, Virginia
1836. Fredericksburg, City of, Virginia
1837. Galax, City of, Virginia
1838. Giles, County of, Virginia
1839. Goochland, County of, Virginia
1840. Greensville, County of, Virginia
1841. Halifax, County of, Virginia
1842. Henrico, County of, Virginia
1843. Henry, County of, Virginia
1844. Hopewell, City of, Virginia

1845. Isle of Wight, County of, Virginia
1846. King and Queen, County of, Virginia
1847. Lee, County of, Virginia
1848. Lexington, City of, Virginia
1849. Loudon, County of, Virginia
1850. Louisa, County of, Virginia
1851. Madison, County of, Virginia
1852. Martinsville, City of, Virginia
1853. Mecklenburg, County of, Virginia
1854. Montgomery, County of, Virginia
1855. Norfolk, City of, Virginia
1856. Northampton, County of, Virginia
1857. Northumberland, County of, Virginia
1858. Norton, City of, Virginia
1859. Page, County of, Virginia
1860. Patrick, County of, Virginia
1861. Portsmouth, City of, Virginia
1862. Prince George, County of, Virginia
1863. Prince William, County of, Virginia
1864. Radford, City of, Virginia
1865. Richmond, City of, Virginia
1866. Roanoke, City of, Virginia
1867. Roanoke, County of, Virginia
1868. Rockbridge, County of, Virginia
1869. Salem, City of, Virginia
1870. Scott, County of, Virginia
1871. Shenandoah, County of, Virginia
1872. Smyth, County of, Virginia
1873. Stafford, County of, Virginia
1874. Virginia Beach, City of/Virginia Beach (Sheriff of) City of, Virginia
1875. Washington, County of, Virginia
1876. Waynesboro, City of Virginia
1877. Winchester, City of, Virginia
1878. Wise, County of, Virginia
1879. Anacortes, City of, Washington
1880. Bainbridge, Island, City of, Washington
1881. Burlington, City of, Washington
1882. Chelan, County of, Washington
1883. Clallam, County of, Washington
1884. Clark, County of, Washington
1885. Everett, City of, Washington
1886. Franklin, County of, Washington

1887. Island, County of, Washington
1888. Kent, City of, Washington
1889. King, County of, Washington
1890. Kirkland, City of, Washington
1891. Kitsap, County of, Washington
1892. Lakewood, City of, Washington
1893. Lewis, County of, Washington
1894. Mount Vernon, City of, Washington
1895. Olympia, City of, Washington
1896. Pierce, County of, Washington
1897. Seattle, City of, Washington
1898. Sedro-Wooley, City of, Washington
1899. Skagit, County of, Washington
1900. Snohomish, County of, Washington
1901. Spokane, City of, Washington
1902. Spokane, County of, Washington
1903. Tacoma, City of, Washington
1904. Thurston, County of, Washington
1905. Vancouver, City of, Washington
1906. Walla Walla, County of, Washington
1907. Whatcom, County of, Washington
1908. Beckley, City of, West Virginia
1909. Berkeley, County of, West Virginia
1910. Cabell, County of, West Virginia
1911. Charles Town, City of, West Virginia
1912. Charleston, City of, West Virginia
1913. Clendenin, Town of, West Virginia
1914. Delbarton, Town of, West Virginia
1915. Dunbar, City of, West Virginia
1916. Eleanor, Town of, West Virginia
1917. Elizabeth, Town of, West Virginia
1918. Fayette, County of, West Virginia
1919. Grant, County of, West Virginia
1920. Harrisville, Town of, West Virginia
1921. Huntington, City of, West Virginia
1922. Hurricane, City of, West Virginia
1923. Jackson, County of, West Virginia
1924. Jefferson, County of, West Virginia
1925. Kanawha, County of, West Virginia
1926. Logan, City of, West Virginia
1927. Milton, City of, West Virginia
1928. Mineral, County of, West Virginia

1929. Monroe, County of, West Virginia
1930. Nicholas, County of, West Virginia
1931. Pleasants, County of, West Virginia
1932. Raleigh, County of, West Virginia
1933. Ravenswood, Town of, West Virginia
1934. Ripley, City of, West Virginia
1935. Ritchie, County of, West Virginia
1936. Roane, County of, West Virginia
1937. Spencer, City of, West Virginia
1938. St. Albans, City of, West Virginia
1939. St. Mary's, City of, West Virginia
1940. Smithers, City of, West Virginia
1941. Sophia, Town of, West Virginia
1942. Summersville, City of, West Virginia
1943. Vienna, City of, West Virginia
1944. Wayne, County of, West Virginia
1945. Williamstown, City of, West Virginia
1946. Winfield, City of, West Virginia
1947. Wirt, County of, West Virginia
1948. Wood, County of, West Virginia
1949. Adams, County of, Wisconsin
1950. Ashland, County of, Wisconsin
1951. Barron, County of, Wisconsin
1952. Bayfield, County of, Wisconsin
1953. Brown, County of, Wisconsin
1954. Buffalo, County of, Wisconsin
1955. Burnett, County of, Wisconsin
1956. Calumet, County of, Wisconsin
1957. Chippewa, County of, Wisconsin
1958. Clark, County of, Wisconsin
1959. Columbia, County of, Wisconsin
1960. Crawford, County of, Wisconsin
1961. Cudahy, City of, Wisconsin
1962. Dane, County of, Wisconsin
1963. Dodge, County of, Wisconsin
1964. Door, County of, Wisconsin
1965. Douglas, County of, Wisconsin
1966. Dunn, County of, Wisconsin
1967. Eau Claire, County of, Wisconsin
1968. Florence, County of, Wisconsin
1969. Fond du Lac, County of, Wisconsin
1970. Forest, County of, Wisconsin

1971. Franklin, City of, Wisconsin
1972. Grant, County of, Wisconsin
1973. Green, County of, Wisconsin
1974. Green Lake, County of, Wisconsin
1975. Greenfield, City of, Wisconsin
1976. Iowa, County of, Wisconsin
1977. Iron, County of, Wisconsin
1978. Jackson, County of, Wisconsin
1979. Juneau, County of, Wisconsin
1980. Kenosha, City of, Wisconsin
1981. Kenosha, County of, Wisconsin
1982. Kewaunee, County of, Wisconsin
1983. La Crosse, County of, Wisconsin
1984. Lafayette, County of, Wisconsin
1985. Lincoln, County of, Wisconsin
1986. Manitowoc, County of, Wisconsin
1987. Marathon, County of, Wisconsin
1988. Marinette, County of, Wisconsin
1989. Marquette, County of, Wisconsin
1990. Menominee, County of, Wisconsin
1991. Milwaukee, City of, Wisconsin
1992. Milwaukee, County of, Wisconsin
1993. Monroe, County of, Wisconsin
1994. Mount Pleasant, Village of, Wisconsin
1995. Oak Tree, City of, Wisconsin
1996. Oconto, County of, Wisconsin
1997. Oneida, County of, Wisconsin
1998. Outagamie, County of, Wisconsin
1999. Ozaukee, County of, Wisconsin
2000. Pepin, County of, Wisconsin
2001. Pierce, County of, Wisconsin
2002. Pleasant Prairie, City of, Wisconsin
2003. Portage, County of, Wisconsin
2004. Price, County of, Wisconsin
2005. Racine, County of, Wisconsin
2006. Richland, County of, Wisconsin
2007. Rock, County of, Wisconsin
2008. Rusk, County of, Wisconsin
2009. Sauk, County of, Wisconsin
2010. St. Croix, County of, Wisconsin
2011. Sawyer, County of, Wisconsin
2012. Shawano, County of, Wisconsin

2013. Sheboygan, County of, Wisconsin
2014. Taylor, County of, Wisconsin
2015. Trempealeau, County of, Wisconsin
2016. Vernon, County of, Wisconsin
2017. Vilas, County of, Wisconsin
2018. Walworth, County of, Wisconsin
2019. Washburn, County of, Wisconsin
2020. Washington, County of, Wisconsin
2021. Waukesha, County of, Wisconsin
2022. Waupaca, County of, Wisconsin
2023. Waushara, County of, Wisconsin
2024. Wauwatosa, County of, Wisconsin
2025. West Allis, City of, Wisconsin
2026. Winnebago, County of, Wisconsin
2027. Wood, County of, Wisconsin
2028. Casper, City of, Wyoming
2029. Cheyenne, City of, Wyoming
2030. Green River, City of, Wyoming
2031. Riverton, City of, Wyoming
2032. Rock Springs, City of, Wyoming
2033. Sweetwater, County of, Wyoming

EXHIBIT D

Intentionally Omitted

Exhibit E
List of Opioid Remediation Uses

Schedule A
Core Strategies

Settling States and Participating Subdivisions listed on Exhibit G may choose from among the abatement strategies listed in Schedule B. However, priority may be given to the following core abatement strategies ("*Core Strategies*").[1]

A. NALOXONE OR OTHER FDA-APPROVED DRUG TO REVERSE OPIOID OVERDOSES

Expand training for first responders, schools, community support groups and families; and

Increase distribution to individuals who are uninsured or whose insurance does not cover the needed service.

B. MEDICATION-ASSISTED TREATMENT ("*MAT*") DISTRIBUTION AND OTHER OPIOID-RELATED TREATMENT

1. Increase distribution of MAT to individuals who are uninsured or whose insurance does not cover the needed service;

2. Provide education to school-based and youth-focused programs that discourage or prevent misuse;

3. Provide MAT education and awareness training to healthcare providers, EMTs, law enforcement, and other first responders; and

4. Provide treatment and recovery support services such as residential and inpatient treatment, intensive outpatient treatment, outpatient therapy or counseling, and recovery housing that allow or integrate medication and with other support services.

[1] As used in this Schedule A, words like "expand," "fund," "provide" or the like shall not indicate a preference for new or existing programs.

C. PREGNANT & POSTPARTUM WOMEN

1. Expand Screening, Brief Intervention, and Referral to Treatment ("*SBIRT*") services to non-Medicaid eligible or uninsured pregnant women;

2. Expand comprehensive evidence-based treatment and recovery services, including MAT, for women with co-occurring Opioid Use Disorder ("*OUD*") and other Substance Use Disorder ("*SUD*")/Mental Health disorders for uninsured individuals for up to 12 months postpartum; and

3. Provide comprehensive wrap-around services to individuals with OUD, including housing, transportation, job placement/training, and childcare.

D. EXPANDING TREATMENT FOR NEONATAL ABSTINENCE SYNDROME ("*NAS*")

1. Expand comprehensive evidence-based and recovery support for NAS babies;

2. Expand services for better continuum of care with infant-need dyad; and

3. Expand long-term treatment and services for medical monitoring of NAS babies and their families.

E. EXPANSION OF WARM HAND-OFF PROGRAMS AND RECOVERY SERVICES

1. Expand services such as navigators and on-call teams to begin MAT in hospital emergency departments;

2. Expand warm hand-off services to transition to recovery services;

3. Broaden scope of recovery services to include co-occurring SUD or mental health conditions;

4. Provide comprehensive wrap-around services to individuals in recovery, including housing, transportation, job placement/training, and childcare; and

5. Hire additional social workers or other behavioral health workers to facilitate expansions above.

F. TREATMENT FOR INCARCERATED POPULATION

1. Provide evidence-based treatment and recovery support, including MAT for persons with OUD and co-occurring SUD/MH disorders within and transitioning out of the criminal justice system; and

2. Increase funding for jails to provide treatment to inmates with OUD.

G. PREVENTION PROGRAMS

1. Funding for media campaigns to prevent opioid use (similar to the FDA's "Real Cost" campaign to prevent youth from misusing tobacco);

2. Funding for evidence-based prevention programs in schools;

3. Funding for medical provider education and outreach regarding best prescribing practices for opioids consistent with the CDC guidelines, including providers at hospitals (academic detailing);

4. Funding for community drug disposal programs; and

5. Funding and training for first responders to participate in pre-arrest diversion programs, post-overdose response teams, or similar strategies that connect at-risk individuals to behavioral health services and supports.

H. EXPANDING SYRINGE SERVICE PROGRAMS

1. Provide comprehensive syringe services programs with more wrap-around services, including linkage to OUD treatment, access to sterile syringes and linkage to care and treatment of infectious diseases.

I. EVIDENCE-BASED DATA COLLECTION AND RESEARCH ANALYZING THE EFFECTIVENESS OF THE ABATEMENT STRATEGIES WITHIN THE STATE

Schedule B
Approved Uses

Support treatment of Opioid Use Disorder (OUD) and any co-occurring Substance Use Disorder or Mental Health (SUD/MH) conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

PART ONE: TREATMENT

A. TREAT OPIOID USE DISORDER (OUD)

Support treatment of Opioid Use Disorder ("*OUD*") and any co-occurring Substance Use Disorder or Mental Health ("*SUD/MH*") conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:[2]

1. Expand availability of treatment for OUD and any co-occurring SUD/MH conditions, including all forms of Medication-Assisted Treatment ("*MAT*") approved by the U.S. Food and Drug Administration.

2. Support and reimburse evidence-based services that adhere to the American Society of Addiction Medicine ("*ASAM*") continuum of care for OUD and any co-occurring SUD/MH conditions.

3. Expand telehealth to increase access to treatment for OUD and any co-occurring SUD/MH conditions, including MAT, as well as counseling, psychiatric support, and other treatment and recovery support services.

4. Improve oversight of Opioid Treatment Programs ("*OTPs*") to assure evidence-based or evidence-informed practices such as adequate methadone dosing and low threshold approaches to treatment.

5. Support mobile intervention, treatment, and recovery services, offered by qualified professionals and service providers, such as peer recovery coaches, for persons with OUD and any co-occurring SUD/MH conditions and for persons who have experienced an opioid overdose.

6. Provide treatment of trauma for individuals with OUD (*e.g.*, violence, sexual assault, human trafficking, or adverse childhood experiences) and family members (*e.g.*, surviving family members after an overdose or overdose fatality), and training of health care personnel to identify and address such trauma.

[2] As used in this Schedule B, words like "expand," "fund," "provide" or the like shall not indicate a preference for new or existing programs.

7. Support evidence-based withdrawal management services for people with OUD and any co-occurring mental health conditions.

8. Provide training on MAT for health care providers, first responders, students, or other supporting professionals, such as peer recovery coaches or recovery outreach specialists, including telementoring to assist community-based providers in rural or underserved areas.

9. Support workforce development for addiction professionals who work with persons with OUD and any co-occurring SUD/MH conditions.

10. Offer fellowships for addiction medicine specialists for direct patient care, instructors, and clinical research for treatments.

11. Offer scholarships and supports for behavioral health practitioners or workers involved in addressing OUD and any co-occurring SUD/MH or mental health conditions, including, but not limited to, training, scholarships, fellowships, loan repayment programs, or other incentives for providers to work in rural or underserved areas.

12. Provide funding and training for clinicians to obtain a waiver under the federal Drug Addiction Treatment Act of 2000 ("*DATA 2000*") to prescribe MAT for OUD, and provide technical assistance and professional support to clinicians who have obtained a DATA 2000 waiver.

13. Disseminate web-based training curricula, such as the American Academy of Addiction Psychiatry's Provider Clinical Support Service–Opioids web-based training curriculum and motivational interviewing.

14. Develop and disseminate new curricula, such as the American Academy of Addiction Psychiatry's Provider Clinical Support Service for Medication–Assisted Treatment.

B. SUPPORT PEOPLE IN TREATMENT AND RECOVERY

Support people in recovery from OUD and any co-occurring SUD/MH conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the programs or strategies that:

1. Provide comprehensive wrap-around services to individuals with OUD and any co-occurring SUD/MH conditions, including housing, transportation, education, job placement, job training, or childcare.

2. Provide the full continuum of care of treatment and recovery services for OUD and any co-occurring SUD/MH conditions, including supportive housing, peer support services and counseling, community navigators, case management, and connections to community-based services.

3. Provide counseling, peer-support, recovery case management and residential treatment with access to medications for those who need it to persons with OUD and any co-occurring SUD/MH conditions.

4. Provide access to housing for people with OUD and any co-occurring SUD/MH conditions, including supportive housing, recovery housing, housing assistance programs, training for housing providers, or recovery housing programs that allow or integrate FDA-approved mediation with other support services.

5. Provide community support services, including social and legal services, to assist in deinstitutionalizing persons with OUD and any co-occurring SUD/MH conditions.

6. Support or expand peer-recovery centers, which may include support groups, social events, computer access, or other services for persons with OUD and any co-occurring SUD/MH conditions.

7. Provide or support transportation to treatment or recovery programs or services for persons with OUD and any co-occurring SUD/MH conditions.

8. Provide employment training or educational services for persons in treatment for or recovery from OUD and any co-occurring SUD/MH conditions.

9. Identify successful recovery programs such as physician, pilot, and college recovery programs, and provide support and technical assistance to increase the number and capacity of high-quality programs to help those in recovery.

10. Engage non-profits, faith-based communities, and community coalitions to support people in treatment and recovery and to support family members in their efforts to support the person with OUD in the family.

11. Provide training and development of procedures for government staff to appropriately interact and provide social and other services to individuals with or in recovery from OUD, including reducing stigma.

12. Support stigma reduction efforts regarding treatment and support for persons with OUD, including reducing the stigma on effective treatment.

13. Create or support culturally appropriate services and programs for persons with OUD and any co-occurring SUD/MH conditions, including new Americans.

14. Create and/or support recovery high schools.

15. Hire or train behavioral health workers to provide or expand any of the services or supports listed above.

C. CONNECT PEOPLE WHO NEED HELP TO THE HELP THEY NEED (CONNECTIONS TO CARE)

Provide connections to care for people who have—or are at risk of developing—OUD and any co-occurring SUD/MH conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Ensure that health care providers are screening for OUD and other risk factors and know how to appropriately counsel and treat (or refer if necessary) a patient for OUD treatment.

2. Fund SBIRT programs to reduce the transition from use to disorders, including SBIRT services to pregnant women who are uninsured or not eligible for Medicaid.

3. Provide training and long-term implementation of SBIRT in key systems (health, schools, colleges, criminal justice, and probation), with a focus on youth and young adults when transition from misuse to opioid disorder is common.

4. Purchase automated versions of SBIRT and support ongoing costs of the technology.

5. Expand services such as navigators and on-call teams to begin MAT in hospital emergency departments.

6. Provide training for emergency room personnel treating opioid overdose patients on post-discharge planning, including community referrals for MAT, recovery case management or support services.

7. Support hospital programs that transition persons with OUD and any co-occurring SUD/MH conditions, or persons who have experienced an opioid overdose, into clinically appropriate follow-up care through a bridge clinic or similar approach.

8. Support crisis stabilization centers that serve as an alternative to hospital emergency departments for persons with OUD and any co-occurring SUD/MH conditions or persons that have experienced an opioid overdose.

9. Support the work of Emergency Medical Systems, including peer support specialists, to connect individuals to treatment or other appropriate services following an opioid overdose or other opioid-related adverse event.

10. Provide funding for peer support specialists or recovery coaches in emergency departments, detox facilities, recovery centers, recovery housing, or similar settings; offer services, supports, or connections to care to persons with OUD and any co-occurring SUD/MH conditions or to persons who have experienced an opioid overdose.

11. Expand warm hand-off services to transition to recovery services.

12. Create or support school-based contacts that parents can engage with to seek immediate treatment services for their child; and support prevention, intervention, treatment, and recovery programs focused on young people.

13. Develop and support best practices on addressing OUD in the workplace.

14. Support assistance programs for health care providers with OUD.

15. Engage non-profits and the faith community as a system to support outreach for treatment.

16. Support centralized call centers that provide information and connections to appropriate services and supports for persons with OUD and any co-occurring SUD/MH conditions.

D. ADDRESS THE NEEDS OF CRIMINAL JUSTICE-INVOLVED PERSONS

Address the needs of persons with OUD and any co-occurring SUD/MH conditions who are involved in, are at risk of becoming involved in, or are transitioning out of the criminal justice system through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Support pre-arrest or pre-arraignment diversion and deflection strategies for persons with OUD and any co-occurring SUD/MH conditions, including established strategies such as:

    1. Self-referral strategies such as the Angel Programs or the Police Assisted Addiction Recovery Initiative ("*PAARI*");

    2. Active outreach strategies such as the Drug Abuse Response Team ("*DART*") model;

    3. "Naloxone Plus" strategies, which work to ensure that individuals who have received naloxone to reverse the effects of an overdose are then linked to treatment programs or other appropriate services;

    4. Officer prevention strategies, such as the Law Enforcement Assisted Diversion ("*LEAD*") model;

    5. Officer intervention strategies such as the Leon County, Florida Adult Civil Citation Network or the Chicago Westside Narcotics Diversion to Treatment Initiative; or

    6. Co-responder and/or alternative responder models to address OUD-related 911 calls with greater SUD expertise.

2. Support pre-trial services that connect individuals with OUD and any co-occurring SUD/MH conditions to evidence-informed treatment, including MAT, and related services.

3. Support treatment and recovery courts that provide evidence-based options for persons with OUD and any co-occurring SUD/MH conditions.

4. Provide evidence-informed treatment, including MAT, recovery support, harm reduction, or other appropriate services to individuals with OUD and any co-occurring SUD/MH conditions who are incarcerated in jail or prison.

5. Provide evidence-informed treatment, including MAT, recovery support, harm reduction, or other appropriate services to individuals with OUD and any co-occurring SUD/MH conditions who are leaving jail or prison or have recently left jail or prison, are on probation or parole, are under community corrections supervision, or are in re-entry programs or facilities.

6. Support critical time interventions ("*CTI*"), particularly for individuals living with dual-diagnosis OUD/serious mental illness, and services for individuals who face immediate risks and service needs and risks upon release from correctional settings.

7. Provide training on best practices for addressing the needs of criminal justice-involved persons with OUD and any co-occurring SUD/MH conditions to law enforcement, correctional, or judicial personnel or to providers of treatment, recovery, harm reduction, case management, or other services offered in connection with any of the strategies described in this section.

E. ADDRESS THE NEEDS OF PREGNANT OR PARENTING WOMEN AND THEIR FAMILIES, INCLUDING BABIES WITH NEONATAL ABSTINENCE SYNDROME

Address the needs of pregnant or parenting women with OUD and any co-occurring SUD/MH conditions, and the needs of their families, including babies with neonatal abstinence syndrome ("*NAS*"), through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Support evidence-based or evidence-informed treatment, including MAT, recovery services and supports, and prevention services for pregnant women—or women who could become pregnant—who have OUD and any co-occurring SUD/MH conditions, and other measures to educate and provide support to families affected by Neonatal Abstinence Syndrome.

2. Expand comprehensive evidence-based treatment and recovery services, including MAT, for uninsured women with OUD and any co-occurring SUD/MH conditions for up to 12 months postpartum.

3. Provide training for obstetricians or other healthcare personnel who work with pregnant women and their families regarding treatment of OUD and any co-occurring SUD/MH conditions.

4. Expand comprehensive evidence-based treatment and recovery support for NAS babies; expand services for better continuum of care with infant-need dyad; and expand long-term treatment and services for medical monitoring of NAS babies and their families.

5. Provide training to health care providers who work with pregnant or parenting women on best practices for compliance with federal requirements that children born with NAS get referred to appropriate services and receive a plan of safe care.

6. Provide child and family supports for parenting women with OUD and any co-occurring SUD/MH conditions.

7. Provide enhanced family support and child care services for parents with OUD and any co-occurring SUD/MH conditions.

8. Provide enhanced support for children and family members suffering trauma as a result of addiction in the family; and offer trauma-informed behavioral health treatment for adverse childhood events.

9. Offer home-based wrap-around services to persons with OUD and any co-occurring SUD/MH conditions, including, but not limited to, parent skills training.

10. Provide support for Children's Services—Fund additional positions and services, including supportive housing and other residential services, relating to children being removed from the home and/or placed in foster care due to custodial opioid use.

PART TWO: PREVENTION

F. PREVENT OVER-PRESCRIBING AND ENSURE APPROPRIATE PRESCRIBING AND DISPENSING OF OPIOIDS

Support efforts to prevent over-prescribing and ensure appropriate prescribing and dispensing of opioids through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Funding medical provider education and outreach regarding best prescribing practices for opioids consistent with the Guidelines for Prescribing Opioids for Chronic Pain from the U.S. Centers for Disease Control and Prevention, including providers at hospitals (academic detailing).

2. Training for health care providers regarding safe and responsible opioid prescribing, dosing, and tapering patients off opioids.

3. Continuing Medical Education (CME) on appropriate prescribing of opioids.

4. Providing Support for non-opioid pain treatment alternatives, including training providers to offer or refer to multi-modal, evidence-informed treatment of pain.

5. Supporting enhancements or improvements to Prescription Drug Monitoring Programs ("*PDMPs*"), including, but not limited to, improvements that:

    1. Increase the number of prescribers using PDMPs;

    2. Improve point-of-care decision-making by increasing the quantity, quality, or format of data available to prescribers using PDMPs, by improving the interface that prescribers use to access PDMP data, or both; or

    3. Enable states to use PDMP data in support of surveillance or intervention strategies, including MAT referrals and follow-up for individuals identified within PDMP data as likely to experience OUD in a manner that complies with all relevant privacy and security laws and rules.

6. Ensuring PDMPs incorporate available overdose/naloxone deployment data, including the United States Department of Transportation's Emergency Medical Technician overdose database in a manner that complies with all relevant privacy and security laws and rules.

7. Increasing electronic prescribing to prevent diversion or forgery.

8. Educating dispensers on appropriate opioid dispensing.

G. PREVENT MISUSE OF OPIOIDS

Support efforts to discourage or prevent misuse of opioids through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Funding media campaigns to prevent opioid misuse.

2. Corrective advertising or affirmative public education campaigns based on evidence.

3. Public education relating to drug disposal.

4. Drug take-back disposal or destruction programs.

5. Funding community anti-drug coalitions that engage in drug prevention efforts.

6. Supporting community coalitions in implementing evidence-informed prevention, such as reduced social access and physical access, stigma reduction—including staffing, educational campaigns, support for people in treatment or recovery, or

training of coalitions in evidence-informed implementation, including the Strategic Prevention Framework developed by the U.S. Substance Abuse and Mental Health Services Administration ("*SAMHSA*").

7. Engaging non-profits and faith-based communities as systems to support prevention.

8. Funding evidence-based prevention programs in schools or evidence-informed school and community education programs and campaigns for students, families, school employees, school athletic programs, parent-teacher and student associations, and others.

9. School-based or youth-focused programs or strategies that have demonstrated effectiveness in preventing drug misuse and seem likely to be effective in preventing the uptake and use of opioids.

10. Create or support community-based education or intervention services for families, youth, and adolescents at risk for OUD and any co-occurring SUD/MH conditions.

11. Support evidence-informed programs or curricula to address mental health needs of young people who may be at risk of misusing opioids or other drugs, including emotional modulation and resilience skills.

12. Support greater access to mental health services and supports for young people, including services and supports provided by school nurses, behavioral health workers or other school staff, to address mental health needs in young people that (when not properly addressed) increase the risk of opioid or another drug misuse.

H. PREVENT OVERDOSE DEATHS AND OTHER HARMS (HARM REDUCTION)

Support efforts to prevent or reduce overdose deaths or other opioid-related harms through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Increased availability and distribution of naloxone and other drugs that treat overdoses for first responders, overdose patients, individuals with OUD and their friends and family members, schools, community navigators and outreach workers, persons being released from jail or prison, or other members of the general public.

2. Public health entities providing free naloxone to anyone in the community.

3. Training and education regarding naloxone and other drugs that treat overdoses for first responders, overdose patients, patients taking opioids, families, schools, community support groups, and other members of the general public.

4. Enabling school nurses and other school staff to respond to opioid overdoses, and provide them with naloxone, training, and support.

5. Expanding, improving, or developing data tracking software and applications for overdoses/naloxone revivals.

6. Public education relating to emergency responses to overdoses.

7. Public education relating to immunity and Good Samaritan laws.

8. Educating first responders regarding the existence and operation of immunity and Good Samaritan laws.

9. Syringe service programs and other evidence-informed programs to reduce harms associated with intravenous drug use, including supplies, staffing, space, peer support services, referrals to treatment, fentanyl checking, connections to care, and the full range of harm reduction and treatment services provided by these programs.

10. Expanding access to testing and treatment for infectious diseases such as HIV and Hepatitis C resulting from intravenous opioid use.

11. Supporting mobile units that offer or provide referrals to harm reduction services, treatment, recovery supports, health care, or other appropriate services to persons that use opioids or persons with OUD and any co-occurring SUD/MH conditions.

12. Providing training in harm reduction strategies to health care providers, students, peer recovery coaches, recovery outreach specialists, or other professionals that provide care to persons who use opioids or persons with OUD and any co-occurring SUD/MH conditions.

13. Supporting screening for fentanyl in routine clinical toxicology testing.

PART THREE: OTHER STRATEGIES

I. FIRST RESPONDERS

In addition to items in section C, D and H relating to first responders, support the following:

1. Education of law enforcement or other first responders regarding appropriate practices and precautions when dealing with fentanyl or other drugs.

2. Provision of wellness and support services for first responders and others who experience secondary trauma associated with opioid-related emergency events.

J. LEADERSHIP, PLANNING AND COORDINATION

Support efforts to provide leadership, planning, coordination, facilitations, training and technical assistance to abate the opioid epidemic through activities, programs, or strategies that may include, but are not limited to, the following:

1. Statewide, regional, local or community regional planning to identify root causes of addiction and overdose, goals for reducing harms related to the opioid epidemic, and areas and populations with the greatest needs for treatment intervention services, and to support training and technical assistance and other strategies to abate the opioid epidemic described in this opioid abatement strategy list.

2. A dashboard to (a) share reports, recommendations, or plans to spend opioid settlement funds; (b) to show how opioid settlement funds have been spent; (c) to report program or strategy outcomes; or (d) to track, share or visualize key opioid- or health-related indicators and supports as identified through collaborative statewide, regional, local or community processes.

3. Invest in infrastructure or staffing at government or not-for-profit agencies to support collaborative, cross-system coordination with the purpose of preventing overprescribing, opioid misuse, or opioid overdoses, treating those with OUD and any co-occurring SUD/MH conditions, supporting them in treatment or recovery, connecting them to care, or implementing other strategies to abate the opioid epidemic described in this opioid abatement strategy list.

4. Provide resources to staff government oversight and management of opioid abatement programs.

K. TRAINING

In addition to the training referred to throughout this document, support training to abate the opioid epidemic through activities, programs, or strategies that may include, but are not limited to, those that:

1. Provide funding for staff training or networking programs and services to improve the capability of government, community, and not-for-profit entities to abate the opioid crisis.

2. Support infrastructure and staffing for collaborative cross-system coordination to prevent opioid misuse, prevent overdoses, and treat those with OUD and any co-occurring SUD/MH conditions, or implement other strategies to abate the opioid epidemic described in this opioid abatement strategy list (*e.g.*, health care, primary care, pharmacies, PDMPs, etc.).

L. RESEARCH

Support opioid abatement research that may include, but is not limited to, the following:

1. Monitoring, surveillance, data collection and evaluation of programs and strategies described in this opioid abatement strategy list.

2. Research non-opioid treatment of chronic pain.

3. Research on improved service delivery for modalities such as SBIRT that demonstrate promising but mixed results in populations vulnerable to opioid use disorders.

4. Research on novel harm reduction and prevention efforts such as the provision of fentanyl test strips.

5. Research on innovative supply-side enforcement efforts such as improved detection of mail-based delivery of synthetic opioids.

6. Expanded research on swift/certain/fair models to reduce and deter opioid misuse within criminal justice populations that build upon promising approaches used to address other substances (*e.g.*, Hawaii HOPE and Dakota 24/7).

7. Epidemiological surveillance of OUD-related behaviors in critical populations, including individuals entering the criminal justice system, including, but not limited to approaches modeled on the Arrestee Drug Abuse Monitoring ("ADAM") system.

8. Qualitative and quantitative research regarding public health risks and harm reduction opportunities within illicit drug markets, including surveys of market participants who sell or distribute illicit opioids.

9. Geospatial analysis of access barriers to MAT and their association with treatment engagement and treatment outcomes.

Exhibit F-1
List of States and State Global Allocation Percentage

Alabama	1.5958653635%
Alaska	0.2283101787%
American Samoa	0.0171221696%
Arizona	2.3755949882%
Arkansas	0.9322152924%
California	9.9213830698%
Colorado	1.6616291219%
Connecticut	1.2938102647%
Delaware	0.4420285052%
District of Columbia	0.1799774824%
Florida	7.0259134409%
Georgia	2.7882080114%
Guam	0.0480366565%
Hawaii	0.3246488040%
Idaho	0.4919080117%
Illinois	3.3263363702%
Indiana	2.2168933059%
Iowa	0.7419256132%
Kansas	0.7840793410%
Kentucky	1.9963344879%
Louisiana	1.4650905059%
Maine	0.5293231313%
Maryland	2.1106090494%
Massachusetts	2.3035761083%
Michigan	3.4020234989%
Minnesota	1.2972597706%
Mississippi	0.8624327860%
Missouri	2.0056475170%
Montana	0.3125481816%
N. Mariana Islands	0.0167059202%
Nebraska	0.4171546352%
Nevada	1.2017657135%
New Hampshire	0.5784834777%
New Jersey	2.7551354545%
New Mexico	0.7989379794%
New York	5.3903813405%
North Carolina	3.2502525994%

North Dakota	0.1700251989%
Ohio	4.3567051408%
Oklahoma	1.5322312508%
Oregon	1.3741405009%
Pennsylvania	4.5882419559%
Puerto Rico	0.7101195950%
Rhode Island	0.4465429178%
South Carolina	1.5393083548%
South Dakota	0.1982071487%
Tennessee	2.6881474977%
Texas	6.2932157196%
Utah	1.1466798699%
Vermont	0.2544890561%
Virgin Islands	0.0315673573%
Virginia	2.2801150757%
Washington	2.3189040182%
West Virginia	1.0567416533%
Wisconsin	1.7582560561%
Wyoming	0.1668134842%

Exhibit F-2

Overall Allocation Percentages (to be multiplied by $4,788,165,456)

Alabama	1.7164625355%
Alaska	0.2455632394%
American Samoa	0.0184160665%
Arizona	2.5551151682%
Arkansas	1.0026614155%
California	10.6711272323%
Colorado	1.7871959633%
Connecticut	1.3915815821%
Delaware	0.4754319419%
District of Columbia	0.1935781130%
Georgia	2.9989087439%
Guam	0.0516667151%
Hawaii	0.3491820313%
Idaho	0.5290807685%
Illinois	3.5777026624%
Indiana	2.3844206358%
Iowa	0.7979918283%
Kansas	0.8433310507%
Kentucky	2.1471945160%
Louisiana	1.5758052164%
Maine	0.5693232931%
Maryland	2.2701046362%
Massachusetts	2.4776539287%
Michigan	3.6591093548%
Minnesota	1.3952917621%
Mississippi	0.9276055489%
Missouri	2.1572113169%
Montana	0.3361669829%
N. Mariana Islands	0.0179683617%
Nebraska	0.4486783905%
Nevada	1.2925813611%
New Hampshire	0.6221986137%
New Jersey	2.9633369431%
New Mexico	0.8593125342%

New York	5.7977244413%
North Carolina	3.4958693542%
North Dakota	0.1828737503%
Ohio	4.6859348686%
Oklahoma	1.6480196875%
Oregon	1.4779822548%
Pennsylvania	4.9349685765%
Puerto Rico	0.7637822767%
Rhode Island	0.4802875019%
South Carolina	1.6556315977%
South Dakota	0.2131853681%
Tennessee	2.8912868060%
Texas	6.7687846717%
Utah	1.2333327622%
Vermont	0.2737204155%
Virgin Islands	0.0339528555%
Virginia	2.4524199807%
Washington	2.4941401460%
West Virginia	1.1365980484%
Wisconsin	1.8911248512%
Wyoming	0.1794193311%

Exhibit G
Subdivisions Eligible to Receive Direct Allocations from the Subdivision Fund and Subdivision Fund Allocation Percentages

The Subdivisions set forth on this Exhibit G are eligible to receive direct allocations from the Subdivision Fund, if such Subdivisions are otherwise eligible to receive such funds under this Agreement. By default, the Subdivisions set forth on this Exhibit G shall include all Subdivisions set forth on Exhibit G of the national opioid settlement agreement dated July 21, 2021 with Janssen Pharmaceuticals, Inc., et al., including all amendments up to the Preliminary Agreement Date of this Agreement. A State may elect to add any additional Subdivisions to this Exhibit G at any time prior to the Initial Participation Date.

Immediately upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3) that addresses allocation from the Subdivision Fund, whether before or after the Initial Participation Date, this Exhibit G will automatically be amended to reflect the allocation from the Subdivision Fund pursuant to the State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3.

For the avoidance of doubt, inclusion on this Exhibit G shall not create any claim for any amount of the Settlement Fund, and no such amounts shall be allocated or distributed to any Subdivision included herein if such Subdivision does not otherwise meet all requirements to receive any such funds pursuant to the Agreement.

[List to be Added]

EXHIBIT H

Intentionally Omitted

EXHIBIT I

Primary Subdivisions

1. Alabaster, City of, Alabama
2. Albertville, City of, Alabama
3. Alexander City, City of, Alabama
4. Anniston, City of, Alabama
5. Athens, City of, Alabama
6. Auburn, City of, Alabama
7. Autauga, County of, Alabama
8. Baldwin, County of, Alabama
9. Barbour, County of, Alabama
10. Bessemer, City of, Alabama
11. Bibb, County of, Alabama
12. Birmingham, City of, Alabama
13. Blount, County of, Alabama
14. Bullock, County of, Alabama
15. Butler, County of, Alabama
16. Calera, City of, Alabama
17. Calhoun, County of, Alabama
18. Center Point, City of, Alabama
19. Chambers, County of, Alabama
20. Chelsea, City of, Alabama
21. Cherokee, County of, Alabama
22. Chilton, County of, Alabama
23. Choctaw, County of, Alabama
24. Clarke, County of, Alabama
25. Clay, County of, Alabama
26. Cleburne, County of, Alabama
27. Coffee, County of, Alabama
28. Colbert, County of, Alabama
29. Conecuh, County of, Alabama
30. Coosa, County of, Alabama
31. Covington, County of, Alabama
32. Crenshaw, County of, Alabama
33. Cullman, City of, Alabama
34. Cullman, County of, Alabama
35. Dale, County of, Alabama
36. Dallas, County of, Alabama
37. Daphne, City of, Alabama
38. Decatur, City of, Alabama
39. DeKalb, County of, Alabama
40. Dothan, City of, Alabama
41. Elmore, County of, Alabama
42. Enterprise, City of, Alabama
43. Escambia, County of, Alabama
44. Etowah, County of, Alabama
45. Eufaula, City of, Alabama
46. Fairfield, City of, Alabama

47. Fairhope, City of, Alabama
48. Fayette, County of, Alabama
49. Florence, City of, Alabama
50. Foley, City of, Alabama
51. Fort Payne, City of, Alabama
52. Franklin, County of, Alabama
53. Gadsden, City of, Alabama
54. Gardendale, City of, Alabama
55. Geneva, County of, Alabama
56. Gulf Shores, City of, Alabama
57. Hale, County of, Alabama
58. Hartselle, City of, Alabama
59. Helena, City of, Alabama
60. Henry, County of, Alabama
61. Homewood, City of, Alabama
62. Hoover, City of, Alabama
63. Houston, County of, Alabama
64. Hueytown, City of, Alabama
65. Huntsville, City of, Alabama
66. Irondale, City of, Alabama
67. Jackson, County of, Alabama
68. Jacksonville, City of, Alabama
69. Jasper, City of, Alabama
70. Jefferson, County of, Alabama
71. Lamar, County of, Alabama
72. Lauderdale, County of, Alabama
73. Lawrence, County of, Alabama
74. Lee, County of, Alabama
75. Leeds, City of, Alabama
76. Limestone, County of, Alabama
77. Macon, County of, Alabama
78. Madison, City of, Alabama
79. Madison, County of, Alabama
80. Marengo, County of, Alabama
81. Marion, County of, Alabama
82. Marshall, County of, Alabama
83. Millbrook, City of, Alabama
84. Mobile, City of, Alabama
85. Mobile, County of, Alabama
86. Monroe, County of, Alabama
87. Montgomery, City of, Alabama
88. Montgomery, County of, Alabama
89. Moody, City of, Alabama
90. Morgan, County of, Alabama
91. Mountain Brook, City of, Alabama
92. Muscle Shoals, City of, Alabama
93. Northport, City of, Alabama
94. Opelika, City of, Alabama
95. Oxford, City of, Alabama
96. Ozark, City of, Alabama
97. Pelham, City of, Alabama

98. Pell City, City of, Alabama
99. Phenix City, City of, Alabama
100. Pickens, County of, Alabama
101. Pike, County of, Alabama
102. Pike Road, Town of, Alabama
103. Prattville, City of, Alabama
104. Prichard, City of, Alabama
105. Randolph, County of, Alabama
106. Russell, County of, Alabama
107. Saraland, City of, Alabama
108. Scottsboro, City of, Alabama
109. Selma, City of, Alabama
110. Shelby, County of, Alabama
111. St. Clair, County of, Alabama
112. Sumter, County of, Alabama
113. Sylacauga, City of, Alabama
114. Talladega, City of, Alabama
115. Talladega, County of, Alabama
116. Tallapoosa, County of, Alabama
117. Troy, City of, Alabama
118. Trussville, City of, Alabama
119. Tuscaloosa, City of, Alabama
120. Tuscaloosa, County of, Alabama
121. Vestavia Hills, City of, Alabama
122. Walker, County of, Alabama
123. Washington, County of, Alabama
124. Wilcox, County of, Alabama
125. Winston, County of, Alabama
126. Anchorage, Municipality of, Alaska
127. Fairbanks, City of, Alaska
128. Fairbanks North Star, Borough of, Alaska
129. Juneau, City of/ Borough of, Alaska
130. Kenai Peninsula, Borough of, Alaska
131. Ketchikan Gateway, Borough of, Alaska
132. Kodiak Island, Borough of, Alaska
133. Matanuska-Susitna, Borough of, Alaska
134. Wasilla, City of, Alaska
135. Apache, County of, Arizona
136. Apache Junction, City of, Arizona
137. Avondale, City of, Arizona
138. Buckeye, City of, Arizona
139. Bullhead City, City of, Arizona
140. Camp Verde, Town of, Arizona
141. Casa Grande, City of, Arizona
142. Chandler, City of, Arizona
143. Chino Valley, Town of, Arizona
144. Cochise, County of, Arizona
145. Coconino, County of, Arizona
146. Coolidge, City of, Arizona
147. Cottonwood, City of, Arizona
148. Douglas, City of, Arizona

149. El Mirage, City of, Arizona
150. Eloy, City of, Arizona
151. Flagstaff, City of, Arizona
152. Florence, Town of, Arizona
153. Fountain Hills, Town of, Arizona
154. Gila, County of, Arizona
155. Gilbert, Town of, Arizona
156. Glendale, City of, Arizona
157. Goodyear, City of, Arizona
158. Graham, County of, Arizona
159. Kingman, City of, Arizona
160. La Paz, County of, Arizona
161. Lake Havasu City, City of, Arizona
162. Marana, Town of, Arizona
163. Maricopa, City of, Arizona
164. Maricopa, County of, Arizona
165. Mesa, City of, Arizona
166. Mohave, County of, Arizona
167. Navajo, County of, Arizona
168. Nogales, City of, Arizona
169. Oro Valley, Town of, Arizona
170. Paradise Valley, Town of, Arizona
171. Payson, Town of, Arizona
172. Peoria, City of, Arizona
173. Phoenix, City of, Arizona
174. Pima, County of, Arizona
175. Pinal, County of, Arizona
176. Prescott, City of, Arizona
177. Prescott Valley, Town of, Arizona
178. Queen Creek, Town of, Arizona
179. Sahuarita, Town of, Arizona
180. San Luis, City of, Arizona
181. Santa Cruz, County of, Arizona
182. Scottsdale, City of, Arizona
183. Sedona, City of, Arizona
184. Show Low, City of, Arizona
185. Sierra Vista, City of, Arizona
186. Somerton, City of, Arizona
187. Surprise, City of, Arizona
188. Tempe, City of, Arizona
189. Tucson, City of, Arizona
190. Yavapai, County of, Arizona
191. Yuma, City of, Arizona
192. Yuma, County of, Arizona
193. Arkadelphia, City of, Arkansas
194. Arkansas, County of, Arkansas
195. Ashley, County of, Arkansas
196. Batesville, City of, Arkansas
197. Baxter, County of, Arkansas
198. Bella Vista, City of, Arkansas
199. Benton, City of, Arkansas

200. Benton, County of, Arkansas
201. Bentonville, City of, Arkansas
202. Blytheville, City of, Arkansas
203. Boone, County of, Arkansas
204. Bradley, County of, Arkansas
205. Bryant, City of, Arkansas
206. Cabot, City of, Arkansas
207. Camden, City of, Arkansas
208. Carroll, County of, Arkansas
209. Centerton, City of, Arkansas
210. Chicot, County of, Arkansas
211. Clark, County of, Arkansas
212. Clay, County of, Arkansas
213. Cleburne, County of, Arkansas
214. Columbia, County of, Arkansas
215. Conway, City of, Arkansas
216. Conway, County of, Arkansas
217. Craighead, County of, Arkansas
218. Crawford, County of, Arkansas
219. Crittenden, County of, Arkansas
220. Cross, County of, Arkansas
221. Desha, County of, Arkansas
222. Drew, County of, Arkansas
223. El Dorado, City of, Arkansas
224. Faulkner, County of, Arkansas
225. Fayetteville, City of, Arkansas
226. Forrest City, City of, Arkansas
227. Fort Smith, City of, Arkansas
228. Franklin, County of, Arkansas
229. Fulton, County of, Arkansas
230. Garland, County of, Arkansas
231. Grant, County of, Arkansas
232. Greene, County of, Arkansas
233. Harrison, City of, Arkansas
234. Helena-West Helena, City of, Arkansas
235. Hempstead, County of, Arkansas
236. Hot Spring, County of, Arkansas
237. Hot Springs, City of, Arkansas
238. Howard, County of, Arkansas
239. Independence, County of, Arkansas
240. Izard, County of, Arkansas
241. Jackson, County of, Arkansas
242. Jacksonville, City of, Arkansas
243. Jefferson, County of, Arkansas
244. Johnson, County of, Arkansas
245. Jonesboro, City of, Arkansas
246. Lawrence, County of, Arkansas
247. Lincoln, County of, Arkansas
248. Little River, County of, Arkansas
249. Little Rock, City of, Arkansas
250. Logan, County of, Arkansas

251. Lonoke, County of, Arkansas
252. Madison, County of, Arkansas
253. Magnolia, City of, Arkansas
254. Malvern, City of, Arkansas
255. Marion, City of, Arkansas
256. Marion, County of, Arkansas
257. Maumelle, City of, Arkansas
258. Miller, County of, Arkansas
259. Mississippi, County of, Arkansas
260. Mountain Home, City of, Arkansas
261. North Little Rock, City of, Arkansas
262. Ouachita, County of, Arkansas
263. Paragould, City of, Arkansas
264. Perry, County of, Arkansas
265. Phillips, County of, Arkansas
266. Pike, County of, Arkansas
267. Pine Bluff, City of, Arkansas
268. Poinsett, County of, Arkansas
269. Polk, County of, Arkansas
270. Pope, County of, Arkansas
271. Pulaski, County of, Arkansas
272. Randolph, County of, Arkansas
273. Rogers, City of, Arkansas
274. Russellville, City of, Arkansas
275. Saline, County of, Arkansas
276. Scott, County of, Arkansas
277. Searcy, City of, Arkansas
278. Sebastian, County of, Arkansas
279. Sevier, County of, Arkansas
280. Sharp, County of, Arkansas
281. Sherwood, City of, Arkansas
282. Siloam Springs, City of, Arkansas
283. Springdale, City of, Arkansas
284. St. Francis, County of, Arkansas
285. Stone, County of, Arkansas
286. Texarkana, City of, Arkansas
287. Union, County of, Arkansas
288. Van Buren, City of, Arkansas
289. Van Buren, County of, Arkansas
290. Washington, County of, Arkansas
291. West Memphis, City of, Arkansas
292. White, County of, Arkansas
293. Yell, County of, Arkansas
294. Adelanto, City of, California
295. Agoura Hills, City of, California
296. Alameda, City of, California
297. Alameda, County of, California
298. Albany, City of, California
299. Alhambra, City of, California
300. Aliso Viejo, City of, California
301. Amador, County of, California

302. American Canyon, City of, California
303. Anaheim, City of, California
304. Anderson, City of, California
305. Antioch, City of, California
306. Apple Valley, Town of, California
307. Arcadia, City of, California
308. Arcata, City of, California
309. Arroyo Grande, City of, California
310. Artesia, City of, California
311. Arvin, City of, California
312. Atascadero, City of, California
313. Atwater, City of, California
314. Auburn, City of, California
315. Avenal, City of, California
316. Azusa, City of, California
317. Bakersfield, City of, California
318. Baldwin Park, City of, California
319. Banning, City of, California
320. Barstow, City of, California
321. Beaumont, City of, California
322. Bell, City of, California
323. Bell Gardens, City of, California
324. Bellflower, City of, California
325. Belmont, City of, California
326. Benicia, City of, California
327. Berkeley, City of, California
328. Beverly Hills, City of, California
329. Blythe, City of, California
330. Brawley, City of, California
331. Brea, City of, California
332. Brentwood, City of, California
333. Buena Park, City of, California
334. Burbank, City of, California
335. Burlingame, City of, California
336. Butte, County of, California
337. Calabasas, City of, California
338. Calaveras, County of, California
339. Calexico, City of, California
340. California City, City of, California
341. Camarillo, City of, California
342. Campbell, City of, California
343. Canyon Lake, City of, California
344. Capitola, City of, California
345. Carlsbad, City of, California
346. Carpinteria, City of, California
347. Carson, City of, California
348. Cathedral City, City of, California
349. Ceres, City of, California
350. Cerritos, City of, California
351. Chico, City of, California
352. Chino, City of, California

353. Chino Hills, City of, California
354. Chowchilla, City of, California
355. Chula Vista, City of, California
356. Citrus Heights, City of, California
357. Claremont, City of, California
358. Clayton, City of, California
359. Clearlake, City of, California
360. Clovis, City of, California
361. Coachella, City of, California
362. Coalinga, City of, California
363. Colton, City of, California
364. Colusa, County of, California
365. Commerce, City of, California
366. Compton, City of, California
367. Concord, City of, California
368. Contra Costa, County of, California
369. Corcoran, City of, California
370. Corona, City of, California
371. Coronado, City of, California
372. Costa Mesa, City of, California
373. Covina, City of, California
374. Cudahy, City of, California
375. Culver City, City of, California
376. Cupertino, City of, California
377. Cypress, City of, California
378. Daly City, City of, California
379. Dana Point, City of, California
380. Danville, Town of, California
381. Davis, City of, California
382. Del Norte, County of, California
383. Delano, City of, California
384. Desert Hot Springs, City of, California
385. Diamond Bar, City of, California
386. Dinuba, City of, California
387. Dixon, City of, California
388. Downey, City of, California
389. Duarte, City of, California
390. Dublin, City of, California
391. East Palo Alto, City of, California
392. Eastvale, City of, California
393. El Cajon, City of, California
394. El Centro, City of, California
395. El Cerrito, City of, California
396. El Dorado, County of, California
397. El Monte, City of, California
398. El Paso de Robles (Paso Robles), City of, California
399. El Segundo, City of, California
400. Elk Grove, City of, California
401. Emeryville, City of, California
402. Encinitas, City of, California
403. Escondido, City of, California

404. Eureka, City of, California
405. Exeter, City of, California
406. Fairfield, City of, California
407. Farmersville, City of, California
408. Fillmore, City of, California
409. Folsom, City of, California
410. Fontana, City of, California
411. Fortuna, City of, California
412. Foster City, City of, California
413. Fountain Valley, City of, California
414. Fremont, City of, California
415. Fresno, City of, California
416. Fresno, County of, California
417. Fullerton, City of, California
418. Galt, City of, California
419. Garden Grove, City of, California
420. Gardena, City of, California
421. Gilroy, City of, California
422. Glendale, City of, California
423. Glendora, City of, California
424. Glenn, County of, California
425. Goleta, City of, California
426. Grand Terrace, City of, California
427. Grass Valley, City of, California
428. Greenfield, City of, California
429. Grover Beach, City of, California
430. Half Moon Bay, City of, California
431. Hanford, City of, California
432. Hawaiian Gardens, City of, California
433. Hawthorne, City of, California
434. Hayward, City of, California
435. Healdsburg, City of, California
436. Hemet, City of, California
437. Hercules, City of, California
438. Hermosa Beach, City of, California
439. Hesperia, City of, California
440. Highland, City of, California
441. Hillsborough, Town of, California
442. Hollister, City of, California
443. Humboldt, County of, California
444. Huntington Beach, City of, California
445. Huntington Park, City of, California
446. Imperial Beach, City of, California
447. Imperial, City of, California
448. Imperial, County of, California
449. Indio, City of, California
450. Inglewood, City of, California
451. Inyo, County of, California
452. Irvine, City of, California
453. Jurupa Valley, City of, California
454. Kerman, City of, California

455. Kern, County of, California
456. King City, City of, California
457. Kings, County of, California
458. Kingsburg, City of, California
459. La Cañada Flintridge, City of, California
460. La Habra, City of, California
461. La Mesa, City of, California
462. La Mirada, City of, California
463. La Palma, City of, California
464. La Puente, City of, California
465. La Quinta, City of, California
466. La Verne, City of, California
467. Lafayette, City of, California
468. Laguna Beach, City of, California
469. Laguna Hills, City of, California
470. Laguna Niguel, City of, California
471. Laguna Woods, City of, California
472. Lake, County of, California
473. Lake Elsinore, City of, California
474. Lake Forest, City of, California
475. Lakewood, City of, California
476. Lancaster, City of, California
477. Larkspur, City of, California
478. Lassen, County of, California
479. Lathrop, City of, California
480. Lawndale, City of, California
481. Lemon Grove, City of, California
482. Lemoore, City of, California
483. Lincoln, City of, California
484. Lindsay, City of, California
485. Livermore, City of, California
486. Livingston, City of, California
487. Lodi, City of, California
488. Loma Linda, City of, California
489. Lomita, City of, California
490. Lompoc, City of, California
491. Long Beach, City of, California
492. Los Alamitos, City of, California
493. Los Altos, City of, California
494. Los Angeles, City of, California
495. Los Angeles, County of, California
496. Los Banos, City of, California
497. Los Gatos, Town of, California
498. Lynwood, City of, California
499. Madera, City of, California
500. Madera, County of, California
501. Malibu, City of, California
502. Manhattan Beach, City of, California
503. Manteca, City of, California
504. Marin, County of, California
505. Marina, City of, California

506. Mariposa, County of, California
507. Martinez, City of, California
508. Marysville, City of, California
509. Maywood, City of, California
510. McFarland, City of, California
511. Mendocino, County of, California
512. Mendota, City of, California
513. Menifee, City of, California
514. Menlo Park, City of, California
515. Merced, City of, California
516. Merced, County of, California
517. Mill Valley, City of, California
518. Millbrae, City of, California
519. Milpitas, City of, California
520. Mission Viejo, City of, California
521. Modesto, City of, California
522. Mono, County of, California
523. Monrovia, City of, California
524. Montclair, City of, California
525. Montebello, City of, California
526. Monterey, City of, California
527. Monterey, County of, California
528. Monterey Park, City of, California
529. Moorpark, City of, California
530. Moraga, Town of, California
531. Moreno Valley, City of, California
532. Morgan Hill, City of, California
533. Morro Bay, City of, California
534. Mountain View, City of, California
535. Murrieta, City of, California
536. Napa, City of, California
537. Napa, County of, California
538. National City, City of, California
539. Nevada, County of, California
540. Newark, City of, California
541. Newman, City of, California
542. Newport Beach, City of, California
543. Norco, City of, California
544. Norwalk, City of, California
545. Novato, City of, California
546. Oakdale, City of, California
547. Oakland, City of, California
548. Oakley, City of, California
549. Oceanside, City of, California
550. Ontario, City of, California
551. Orange, City of, California
552. Orange, County of, California
553. Orange Cove, City of, California
554. Orinda, City of, California
555. Oroville, City of, California
556. Oxnard, City of, California

557. Pacific Grove, City of, California
558. Pacifica, City of, California
559. Palm Desert, City of, California
560. Palm Springs, City of, California
561. Palmdale, City of, California
562. Palo Alto, City of, California
563. Palos Verdes Estates, City of, California
564. Paramount, City of, California
565. Parlier, City of, California
566. Pasadena, City of, California
567. Patterson, City of, California
568. Perris, City of, California
569. Petaluma, City of, California
570. Pico Rivera, City of, California
571. Piedmont, City of, California
572. Pinole, City of, California
573. Pittsburg, City of, California
574. Placentia, City of, California
575. Placer, County of, California
576. Placerville, City of, California
577. Pleasant Hill, City of, California
578. Pleasanton, City of, California
579. Plumas, County of, California
580. Pomona, City of, California
581. Port Hueneme, City of, California
582. Porterville, City of, California
583. Poway, City of, California
584. Rancho Cordova, City of, California
585. Rancho Cucamonga, City of, California
586. Rancho Mirage, City of, California
587. Rancho Palos Verdes, City of, California
588. Rancho Santa Margarita, City of, California
589. Red Bluff, City of, California
590. Redding, City of, California
591. Redlands, City of, California
592. Redondo Beach, City of, California
593. Redwood City, City of, California
594. Reedley, City of, California
595. Rialto, City of, California
596. Richmond, City of, California
597. Ridgecrest, City of, California
598. Ripon, City of, California
599. Riverbank, City of, California
600. Riverside, City of, California
601. Riverside, County of, California
602. Rocklin, City of, California
603. Rohnert Park, City of, California
604. Rosemead, City of, California
605. Roseville, City of, California
606. Sacramento, City of, California
607. Sacramento, County of, California

608. Salinas, City of, California
609. San Anselmo, Town of, California
610. San Benito, County of, California
611. San Bernardino, City of, California
612. San Bernardino, County of, California
613. San Bruno, City of, California
614. San Buenaventura (Ventura), City of, California
615. San Carlos, City of, California
616. San Clemente, City of, California
617. San Diego, City of, California
618. San Diego, County of, California
619. San Dimas, City of, California
620. San Fernando, City of, California
621. San Francisco, City of/ County of, California
622. San Gabriel, City of, California
623. San Jacinto, City of, California
624. San Joaquin, County of, California
625. San Jose, City of, California
626. San Juan Capistrano, City of, California
627. San Leandro, City of, California
628. San Luis Obispo, City of, California
629. San Luis Obispo, County of, California
630. San Marcos, City of, California
631. San Marino, City of, California
632. San Mateo, City of, California
633. San Mateo, County of, California
634. San Pablo, City of, California
635. San Rafael, City of, California
636. San Ramon, City of, California
637. Sanger, City of, California
638. Santa Ana, City of, California
639. Santa Barbara, City of, California
640. Santa Barbara, County of, California
641. Santa Clara, City of, California
642. Santa Clara, County of, California
643. Santa Clarita, City of, California
644. Santa Cruz, City of, California
645. Santa Cruz, County of, California
646. Santa Fe Springs, City of, California
647. Santa Maria, City of, California
648. Santa Monica, City of, California
649. Santa Paula, City of, California
650. Santa Rosa, City of, California
651. Santee, City of, California
652. Saratoga, City of, California
653. Scotts Valley, City of, California
654. Seal Beach, City of, California
655. Seaside, City of, California
656. Selma, City of, California
657. Shafter, City of, California
658. Shasta, County of, California

659. Shasta Lake, City of, California
660. Sierra Madre, City of, California
661. Signal Hill, City of, California
662. Simi Valley, City of, California
663. Siskiyou, County of, California
664. Solana Beach, City of, California
665. Solano, County of, California
666. Soledad, City of, California
667. Sonoma, City of, California
668. Sonoma, County of, California
669. South El Monte, City of, California
670. South Gate, City of, California
671. South Lake Tahoe, City of, California
672. South Pasadena, City of, California
673. South San Francisco, City of, California
674. Stanislaus, County of, California
675. Stanton, City of, California
676. Stockton, City of, California
677. Suisun City, City of, California
678. Sunnyvale, City of, California
679. Susanville, City of, California
680. Sutter, County of, California
681. Tehachapi, City of, California
682. Tehama, County of, California
683. Temecula, City of, California
684. Temple City, City of, California
685. Thousand Oaks, City of, California
686. Torrance, City of, California
687. Tracy, City of, California
688. Trinity, County of, California
689. Truckee, Town of, California
690. Tulare, City of, California
691. Tulare, County of, California
692. Tuolumne, County of, California
693. Turlock, City of, California
694. Tustin, City of, California
695. Twentynine Palms, City of, California
696. Ukiah, City of, California
697. Union City, City of, California
698. Upland, City of, California
699. Vacaville, City of, California
700. Vallejo, City of, California
701. Ventura, County of, California
702. Victorville, City of, California
703. Visalia, City of, California
704. Vista, City of, California
705. Walnut, City of, California
706. Walnut Creek, City of, California
707. Wasco, City of, California
708. Watsonville, City of, California
709. West Covina, City of, California

710. West Hollywood, City of, California
711. West Sacramento, City of, California
712. Westminster, City of, California
713. Whittier, City of, California
714. Wildomar, City of, California
715. Windsor, Town of, California
716. Woodland, City of, California
717. Yolo, County of, California
718. Yorba Linda, City of, California
719. Yuba City, City of, California
720. Yuba, County of, California
721. Yucaipa, City of, California
722. Yucca Valley, Town of, California
723. Adams, County of, Colorado
724. Alamosa, County of, Colorado
725. Arapahoe, County of, Colorado
726. Archuleta, County of, Colorado
727. Arvada, City of, Colorado
728. Aurora, City of, Colorado
729. Boulder, City of, Colorado
730. Boulder, County of, Colorado
731. Brighton, City of, Colorado
732. Broomfield, City of/ County of, Colorado
733. Cañon City, City of, Colorado
734. Castle Pines, City of, Colorado
735. Castle Rock, Town of, Colorado
736. Centennial, City of, Colorado
737. Chaffee, County of, Colorado
738. Colorado Springs, City of, Colorado
739. Commerce City, City of, Colorado
740. Delta, County of, Colorado
741. Denver, City of/ County of, Colorado
742. Douglas, County of, Colorado
743. Durango, City of, Colorado
744. Eagle, County of, Colorado
745. El Paso, County of, Colorado
746. Elbert, County of, Colorado
747. Englewood, City of, Colorado
748. Erie, Town of, Colorado
749. Evans, City of, Colorado
750. Federal Heights, City of, Colorado
751. Firestone, Town of, Colorado
752. Fort Collins, City of, Colorado
753. Fort Morgan, City of, Colorado
754. Fountain, City of, Colorado
755. Frederick, Town of, Colorado
756. Fremont, County of, Colorado
757. Fruita, City of, Colorado
758. Garfield, County of, Colorado
759. Golden, City of, Colorado
760. Grand, County of, Colorado

761. Grand Junction, City of, Colorado
762. Greeley, City of, Colorado
763. Greenwood, Village of/ City of, Colorado
764. Gunnison, County of, Colorado
765. Jefferson, County of, Colorado
766. Johnstown, Town of, Colorado
767. La Plata, County of, Colorado
768. Lafayette, City of, Colorado
769. Lakewood, City of, Colorado
770. Larimer, County of, Colorado
771. Las Animas, County of, Colorado
772. Littleton, City of, Colorado
773. Logan, County of, Colorado
774. Lone Tree, City of, Colorado
775. Longmont, City of, Colorado
776. Louisville, City of, Colorado
777. Loveland, City of, Colorado
778. Mesa, County of, Colorado
779. Moffat, County of, Colorado
780. Montezuma, County of, Colorado
781. Montrose, City of, Colorado
782. Montrose, County of, Colorado
783. Morgan, County of, Colorado
784. Northglenn, City of, Colorado
785. Otero, County of, Colorado
786. Park, County of, Colorado
787. Parker, Town of, Colorado
788. Pitkin, County of, Colorado
789. Prowers, County of, Colorado
790. Pueblo, City of, Colorado
791. Pueblo, County of, Colorado
792. Rio Grande, County of, Colorado
793. Routt, County of, Colorado
794. Steamboat Springs, City of, Colorado
795. Sterling, City of, Colorado
796. Summit, County of, Colorado
797. Superior, Town of, Colorado
798. Teller, County of, Colorado
799. Thornton, City of, Colorado
800. Weld, County of, Colorado
801. Wellington, Town of, Colorado
802. Westminster, City of, Colorado
803. Wheat Ridge, City of, Colorado
804. Windsor, Town of, Colorado
805. Yuma, County of, Colorado
806. Ansonia, Town of/ City of, Connecticut
807. Avon, Town of, Connecticut
808. Berlin, Town of, Connecticut
809. Bethel, Town of, Connecticut
810. Bloomfield, Town of, Connecticut
811. Branford, Town of, Connecticut

812. Bridgeport, Town of/ City of, Connecticut
813. Bristol, City of/ Town of, Connecticut
814. Brookfield, Town of, Connecticut
815. Canton, Town of, Connecticut
816. Cheshire, Town of, Connecticut
817. Clinton, Town of, Connecticut
818. Colchester, Town of, Connecticut
819. Coventry, Town of, Connecticut
820. Cromwell, Town of, Connecticut
821. Danbury, City of/ Town of, Connecticut
822. Darien, Town of, Connecticut
823. Derby, City of/ Town of, Connecticut
824. East Hampton, Town of, Connecticut
825. East Hartford, Town of, Connecticut
826. East Haven, Town of, Connecticut
827. East Lyme, Town of, Connecticut
828. East Windsor, Town of, Connecticut
829. Ellington, Town of, Connecticut
830. Enfield, Town of, Connecticut
831. Fairfield, Town of, Connecticut
832. Farmington, Town of, Connecticut
833. Glastonbury, Town of, Connecticut
834. Granby, Town of, Connecticut
835. Greenwich, Town of, Connecticut
836. Griswold, Town of, Connecticut
837. Groton, Town of, Connecticut
838. Guilford, Town of, Connecticut
839. Hamden, Town of, Connecticut
840. Hartford, City of/ Town of, Connecticut
841. Killingly, Town of, Connecticut
842. Ledyard, Town of, Connecticut
843. Madison, Town of, Connecticut
844. Manchester, Town of, Connecticut
845. Mansfield, Town of, Connecticut
846. Meriden, City of/ Town of, Connecticut
847. Middletown, City of/ Town of, Connecticut
848. Milford, City of, Connecticut
849. Milford, Town of, Connecticut
850. Monroe, Town of, Connecticut
851. Montville, Town of, Connecticut
852. Naugatuck, Borough of/ Town of, Connecticut
853. New Britain, Town of/ City of, Connecticut
854. New Canaan, Town of, Connecticut
855. New Fairfield, Town of, Connecticut
856. New Haven, Town of/ City of, Connecticut
857. New London, City of/ Town of, Connecticut
858. New Milford, Town of, Connecticut
859. Newington, Town of, Connecticut
860. Newtown, Town of, Connecticut
861. North Branford, Town of, Connecticut
862. North Haven, Town of, Connecticut

863. Norwalk, City of/ Town of, Connecticut
864. Norwich, City of/ Town of, Connecticut
865. Old Saybrook, Town of, Connecticut
866. Orange, Town of, Connecticut
867. Oxford, Town of, Connecticut
868. Plainfield, Town of, Connecticut
869. Plainville, Town of, Connecticut
870. Plymouth, Town of, Connecticut
871. Ridgefield, Town of, Connecticut
872. Rocky Hill, Town of, Connecticut
873. Seymour, Town of, Connecticut
874. Shelton, City of/ Town of, Connecticut
875. Simsbury, Town of, Connecticut
876. Somers, Town of, Connecticut
877. South Windsor, Town of, Connecticut
878. Southbury, Town of, Connecticut
879. Southington, Town of, Connecticut
880. Stafford, Town of, Connecticut
881. Stamford, City of/ Town of, Connecticut
882. Stonington, Town of, Connecticut
883. Stratford, Town of, Connecticut
884. Suffield, Town of, Connecticut
885. Tolland, Town of, Connecticut
886. Torrington, City of/ Town of, Connecticut
887. Trumbull, Town of, Connecticut
888. Vernon, Town of, Connecticut
889. Wallingford, Town of, Connecticut
890. Waterbury, City of/ Town of, Connecticut
891. Waterford, Town of, Connecticut
892. Watertown, Town of, Connecticut
893. West Hartford, Town of, Connecticut
894. West Haven, City of/ Town of, Connecticut
895. Weston, Town of, Connecticut
896. Westport, Town of, Connecticut
897. Wethersfield, Town of, Connecticut
898. Wilton, Town of, Connecticut
899. Winchester, Town of, Connecticut
900. Windham, Town of, Connecticut
901. Windsor Locks, Town of, Connecticut
902. Windsor, Town of, Connecticut
903. Wolcott, Town of, Connecticut
904. Dover, City of, Delaware
905. Kent, County of, Delaware
906. Middletown, Town of, Delaware
907. Milford, City of, Delaware
908. New Castle, County of, Delaware
909. Newark, City of, Delaware
910. Smyrna, Town of, Delaware
911. Sussex, County of, Delaware
912. Wilmington, City of, Delaware
913. Acworth, City of, Georgia

914. Albany, City of, Georgia
915. Alpharetta, City of, Georgia
916. Americus, City of, Georgia
917. Appling, County of, Georgia
918. Athens-Clarke County, Unified Government of, Georgia
919. Atlanta, City of, Georgia
920. Augusta-Richmond County, Consolidated Government of, Georgia
921. Bacon, County of, Georgia
922. Bainbridge, City of, Georgia
923. Baldwin, County of, Georgia
924. Banks, County of, Georgia
925. Barrow, County of, Georgia
926. Bartow, County of, Georgia
927. Ben Hill, County of, Georgia
928. Berrien, County of, Georgia
929. Bleckley, County of, Georgia
930. Brantley, County of, Georgia
931. Braselton, Town of, Georgia
932. Brookhaven, City of, Georgia
933. Brooks, County of, Georgia
934. Brunswick, City of, Georgia
935. Bryan, County of, Georgia
936. Buford, City of, Georgia
937. Bulloch, County of, Georgia
938. Burke, County of, Georgia
939. Butts, County of, Georgia
940. Calhoun, City of, Georgia
941. Camden, County of, Georgia
942. Candler, County of, Georgia
943. Canton, City of, Georgia
944. Carroll, County of, Georgia
945. Carrollton, City of, Georgia
946. Cartersville, City of, Georgia
947. Catoosa, County of, Georgia
948. Chamblee, City of, Georgia
949. Charlton, County of, Georgia
950. Chatham, County of, Georgia
951. Chattooga, County of, Georgia
952. Cherokee, County of, Georgia
953. Clarkston, City of, Georgia
954. Clayton, County of, Georgia
955. Cobb, County of, Georgia
956. Coffee, County of, Georgia
957. College Park, City of, Georgia
958. Colquitt, County of, Georgia
959. Columbia, County of, Georgia
960. Columbus, City of, Georgia
961. Columbus, City of/ Muscogee, County of, Georgia
962. Conyers, City of, Georgia
963. Cook, County of, Georgia
964. Cordele, City of, Georgia

965. Covington, City of, Georgia
966. Coweta, County of, Georgia
967. Crawford, County of, Georgia
968. Crisp, County of, Georgia
969. Cusseta-Chattahoochee County, Unified Government of, Georgia
970. Dade, County of, Georgia
971. Dallas, City of, Georgia
972. Dalton, City of, Georgia
973. Dawson, County of, Georgia
974. Decatur, City of, Georgia
975. Decatur, County of, Georgia
976. DeKalb, County of, Georgia
977. Dodge, County of, Georgia
978. Dooly, County of, Georgia
979. Doraville, City of, Georgia
980. Dougherty, County of, Georgia
981. Douglas, City of, Georgia
982. Douglas, County of, Georgia
983. Douglasville, City of, Georgia
984. Dublin, City of, Georgia
985. Duluth, City of, Georgia
986. Dunwoody, City of, Georgia
987. Early, County of, Georgia
988. East Point, City of, Georgia
989. Effingham, County of, Georgia
990. Elbert, County of, Georgia
991. Emanuel, County of, Georgia
992. Evans, County of, Georgia
993. Fairburn, City of, Georgia
994. Fannin, County of, Georgia
995. Fayette, County of, Georgia
996. Fayetteville, City of, Georgia
997. Floyd, County of, Georgia
998. Forest Park, City of, Georgia
999. Forsyth, County of, Georgia
1000. Franklin, County of, Georgia
1001. Fulton, County of, Georgia
1002. Gainesville, City of, Georgia
1003. Gilmer, County of, Georgia
1004. Glynn, County of, Georgia
1005. Gordon, County of, Georgia
1006. Grady, County of, Georgia
1007. Greene, County of, Georgia
1008. Griffin, City of, Georgia
1009. Grovetown, City of, Georgia
1010. Gwinnett, County of, Georgia
1011. Habersham, County of, Georgia
1012. Hall, County of, Georgia
1013. Haralson, County of, Georgia
1014. Harris, County of, Georgia
1015. Hart, County of, Georgia

1016. Heard, County of, Georgia
1017. Henry, County of, Georgia
1018. Hinesville, City of, Georgia
1019. Holly Springs, City of, Georgia
1020. Houston, County of, Georgia
1021. Jackson, County of, Georgia
1022. Jasper, County of, Georgia
1023. Jeff Davis, County of, Georgia
1024. Jefferson, City of, Georgia
1025. Jefferson, County of, Georgia
1026. Johns Creek, City of, Georgia
1027. Jones, County of, Georgia
1028. Kennesaw, City of, Georgia
1029. Kingsland, City of, Georgia
1030. LaGrange, City of, Georgia
1031. Lamar, County of, Georgia
1032. Lanier, County of, Georgia
1033. Laurens, County of, Georgia
1034. Lawrenceville, City of, Georgia
1035. Lee, County of, Georgia
1036. Liberty, County of, Georgia
1037. Lilburn, City of, Georgia
1038. Loganville, City of, Georgia
1039. Long, County of, Georgia
1040. Lowndes, County of, Georgia
1041. Lumpkin, County of, Georgia
1042. Macon, County of, Georgia
1043. Macon-Bibb, County of, Georgia
1044. Madison, County of, Georgia
1045. Marietta, City of, Georgia
1046. McDonough, City of, Georgia
1047. McDuffie, County of, Georgia
1048. McIntosh, County of, Georgia
1049. Meriwether, County of, Georgia
1050. Milledgeville, City of, Georgia
1051. Milton, City of, Georgia
1052. Mitchell, County of, Georgia
1053. Monroe, City of, Georgia
1054. Monroe, County of, Georgia
1055. Morgan, County of, Georgia
1056. Moultrie, City of, Georgia
1057. Murray, County of, Georgia
1058. Newnan, City of, Georgia
1059. Newton, County of, Georgia
1060. Norcross, City of, Georgia
1061. Oconee, County of, Georgia
1062. Oglethorpe, County of, Georgia
1063. Paulding, County of, Georgia
1064. Peach, County of, Georgia
1065. Peachtree City, City of, Georgia
1066. Peachtree Corners, City of, Georgia

1067. Perry, City of, Georgia
1068. Pickens, County of, Georgia
1069. Pierce, County of, Georgia
1070. Pike, County of, Georgia
1071. Polk, County of, Georgia
1072. Pooler, City of, Georgia
1073. Powder Springs, City of, Georgia
1074. Pulaski, County of, Georgia
1075. Putnam, County of, Georgia
1076. Rabun, County of, Georgia
1077. Richmond Hill, City of, Georgia
1078. Rincon, City of, Georgia
1079. Riverdale, City of, Georgia
1080. Rockdale, County of, Georgia
1081. Rome, City of, Georgia
1082. Roswell, City of, Georgia
1083. Sandy Springs, City of, Georgia
1084. Savannah, City of, Georgia
1085. Screven, County of, Georgia
1086. Smyrna, City of, Georgia
1087. Snellville, City of, Georgia
1088. South Fulton, City of, Georgia
1089. Spalding, County of, Georgia
1090. St. Marys, City of, Georgia
1091. Statesboro, City of, Georgia
1092. Stephens, County of, Georgia
1093. Stockbridge, City of, Georgia
1094. Stonecrest, City of, Georgia
1095. Sugar Hill, City of, Georgia
1096. Sumter, County of, Georgia
1097. Suwanee, City of, Georgia
1098. Tattnall, County of, Georgia
1099. Telfair, County of, Georgia
1100. Thomas, County of, Georgia
1101. Thomasville, City of, Georgia
1102. Tift, County of, Georgia
1103. Tifton, City of, Georgia
1104. Toombs, County of, Georgia
1105. Towns, County of, Georgia
1106. Troup, County of, Georgia
1107. Tucker, City of, Georgia
1108. Union City, City of, Georgia
1109. Union, County of, Georgia
1110. Upson, County of, Georgia
1111. Valdosta, City of, Georgia
1112. Vidalia, City of, Georgia
1113. Villa Rica, City of, Georgia
1114. Walker, County of, Georgia
1115. Walton, County of, Georgia
1116. Ware, County of, Georgia
1117. Warner Robins, City of, Georgia

1118. Washington, County of, Georgia
1119. Waycross, City of, Georgia
1120. Wayne, County of, Georgia
1121. White, County of, Georgia
1122. Whitfield, County of, Georgia
1123. Winder, City of, Georgia
1124. Woodstock, City of, Georgia
1125. Worth, County of, Georgia
1126. Hawaii, County of, Hawaii
1127. Honolulu, County of/ City of, Hawaii
1128. Kauai, County of, Hawaii
1129. Maui, County of, Hawaii
1130. Ada, County of, Idaho
1131. Ammon, City of, Idaho
1132. Bannock, County of, Idaho
1133. Bingham, County of, Idaho
1134. Blackfoot, City of, Idaho
1135. Blaine, County of, Idaho
1136. Boise City, City of, Idaho
1137. Bonner, County of, Idaho
1138. Bonneville, County of, Idaho
1139. Boundary, County of, Idaho
1140. Burley, City of, Idaho
1141. Caldwell, City of, Idaho
1142. Canyon, County of, Idaho
1143. Cassia, County of, Idaho
1144. Chubbuck, City of, Idaho
1145. Coeur d'Alene, City of, Idaho
1146. Eagle, City of, Idaho
1147. Elmore, County of, Idaho
1148. Franklin, County of, Idaho
1149. Fremont, County of, Idaho
1150. Garden City, City of, Idaho
1151. Gem, County of, Idaho
1152. Gooding, County of, Idaho
1153. Hayden, City of, Idaho
1154. Idaho, County of, Idaho
1155. Idaho Falls, City of, Idaho
1156. Jefferson, County of, Idaho
1157. Jerome, City of, Idaho
1158. Jerome, County of, Idaho
1159. Kootenai, County of, Idaho
1160. Kuna, City of, Idaho
1161. Latah, County of, Idaho
1162. Lewiston, City of, Idaho
1163. Madison, County of, Idaho
1164. Meridian, City of, Idaho
1165. Minidoka, County of, Idaho
1166. Moscow, City of, Idaho
1167. Mountain Home, City of, Idaho
1168. Nampa, City of, Idaho

1169. Nez Perce, County of, Idaho
1170. Owyhee, County of, Idaho
1171. Payette, County of, Idaho
1172. Pocatello, City of, Idaho
1173. Post Falls, City of, Idaho
1174. Rexburg, City of, Idaho
1175. Shoshone, County of, Idaho
1176. Star, City of, Idaho
1177. Teton, County of, Idaho
1178. Twin Falls, City of, Idaho
1179. Twin Falls, County of, Idaho
1180. Valley, County of, Idaho
1181. Washington, County of, Idaho
1182. Adams, County of, Illinois
1183. Addison Township, Illinois
1184. Addison, Village of, Illinois
1185. Algonquin Township, Illinois
1186. Algonquin, Village of, Illinois
1187. Alsip, Village of, Illinois
1188. Alton, City of, Illinois
1189. Alton Township, Illinois
1190. Antioch Township, Illinois
1191. Antioch, Village of, Illinois
1192. Arlington Heights, Village of, Illinois
1193. Aurora, City of, Illinois
1194. Aurora Township, Illinois
1195. Aux Sable Township, Illinois
1196. Avon Township, Illinois
1197. Barrington Township, Illinois
1198. Barrington, Village of, Illinois
1199. Bartlett, Village of, Illinois
1200. Batavia, City of, Illinois
1201. Batavia Township, Illinois
1202. Beach Park, Village of, Illinois
1203. Belleville, City of, Illinois
1204. Bellwood, Village of, Illinois
1205. Belvidere, City of, Illinois
1206. Belvidere Township, Illinois
1207. Bensenville, Village of, Illinois
1208. Benton Township, Illinois
1209. Berwyn, City of, Illinois
1210. Berwyn Township, Illinois
1211. Blackberry Township, Illinois
1212. Bloom Township, Illinois
1213. Bloomingdale Township, Illinois
1214. Bloomingdale, Village of, Illinois
1215. Bloomington, City of, Illinois
1216. Bloomington City Township, Illinois
1217. Blue Island, City of, Illinois
1218. Bolingbrook, Village of, Illinois
1219. Bond, County of, Illinois

1220. Boone, County of, Illinois
1221. Bourbonnais Township, Illinois
1222. Bourbonnais, Village of, Illinois
1223. Bradley, Village of, Illinois
1224. Bremen Township, Illinois
1225. Bridgeview, Village of, Illinois
1226. Bristol Township, Illinois
1227. Brookfield, Village of, Illinois
1228. Bruce Township, Illinois
1229. Buffalo Grove, Village of, Illinois
1230. Burbank, City of, Illinois
1231. Bureau, County of, Illinois
1232. Burr Ridge, Village of, Illinois
1233. Cahokia, Village of, Illinois
1234. Calumet City, City of, Illinois
1235. Calumet Township, Illinois
1236. Campton Hills, Village of, Illinois
1237. Campton Township, Illinois
1238. Canton, City of, Illinois
1239. Canton Township, Illinois
1240. Capital Township, Illinois
1241. Carbondale, City of, Illinois
1242. Carbondale Township, Illinois
1243. Carol Stream, Village of, Illinois
1244. Carpentersville, Village of, Illinois
1245. Carroll, County of, Illinois
1246. Cary, Village of, Illinois
1247. Caseyville Township, Illinois
1248. Cass, County of, Illinois
1249. Centralia, City of, Illinois
1250. Centralia Township, Illinois
1251. Centreville Township, Illinois
1252. Champaign, City of, Illinois
1253. Champaign City Township, Illinois
1254. Champaign, County of, Illinois
1255. Champaign Township, Illinois
1256. Channahon Township, Illinois
1257. Channahon, Village of, Illinois
1258. Charleston, City of, Illinois
1259. Charleston Township, Illinois
1260. Chatham, Village of, Illinois
1261. Cherry Valley Township, Illinois
1262. Chicago, City of, Illinois
1263. Chicago Heights, City of, Illinois
1264. Chicago Ridge, Village of, Illinois
1265. Christian, County of, Illinois
1266. Cicero, Town of/ Township of, Illinois
1267. Clark, County of, Illinois
1268. Clay, County of, Illinois
1269. Clinton, County of, Illinois
1270. Coles, County of, Illinois

1271. Collinsville, City of, Illinois
1272. Collinsville Township, Illinois
1273. Coloma Township, Illinois
1274. Columbia, City of, Illinois
1275. Cook, County of, Illinois
1276. Cortland Township, Illinois
1277. Country Club Hills, City of, Illinois
1278. Crawford, County of, Illinois
1279. Crest Hill, City of, Illinois
1280. Crestwood, Village of, Illinois
1281. Crete Township, Illinois
1282. Crystal Lake, City of, Illinois
1283. Cuba Township, Illinois
1284. Cumberland, County of, Illinois
1285. Cunningham Township, Illinois
1286. Danville, City of, Illinois
1287. Danville Township, Illinois
1288. Darien, City of, Illinois
1289. De Witt, County of, Illinois
1290. Decatur, City of, Illinois
1291. Decatur Township, Illinois
1292. Deerfield, Village of, Illinois
1293. DeKalb, City of, Illinois
1294. DeKalb, County of, Illinois
1295. DeKalb Township, Illinois
1296. Des Plaines, City of, Illinois
1297. Dixon, City of, Illinois
1298. Dixon Township, Illinois
1299. Dolton, Village of, Illinois
1300. Dorr Township, Illinois
1301. Douglas, County of, Illinois
1302. Douglas Township, Illinois
1303. Downers Grove Township, Illinois
1304. Downers Grove, Village of, Illinois
1305. Du Page Township, Illinois
1306. Dundee Township, Illinois
1307. DuPage, County of, Illinois
1308. East Moline, City of, Illinois
1309. East Peoria, City of, Illinois
1310. East St. Louis, City of, Illinois
1311. East St. Louis Township, Illinois
1312. Edgar, County of, Illinois
1313. Edwardsville, City of, Illinois
1314. Edwardsville Township, Illinois
1315. Effingham, City of, Illinois
1316. Effingham, County of, Illinois
1317. Ela Township, Illinois
1318. Elgin, City of, Illinois
1319. Elgin Township, Illinois
1320. Elk Grove Township, Illinois
1321. Elk Grove Village, Village of, Illinois

1322. Elmhurst, City of, Illinois
1323. Elmwood Park, Village of, Illinois
1324. Evanston, City of, Illinois
1325. Evergreen Park, Village of, Illinois
1326. Fairview Heights, City of, Illinois
1327. Fayette, County of, Illinois
1328. Flagg Township, Illinois
1329. Fondulac Township, Illinois
1330. Ford, County of, Illinois
1331. Forest Park, Village of, Illinois
1332. Fox Lake, Village of, Illinois
1333. Frankfort Township, Illinois
1334. Frankfort, Village of, Illinois
1335. Franklin, County of, Illinois
1336. Franklin Park, Village of, Illinois
1337. Freeport, City of, Illinois
1338. Freeport Township, Illinois
1339. Fremont Township, Illinois
1340. Fulton, County of, Illinois
1341. Galesburg, City of, Illinois
1342. Galesburg City Township, Illinois
1343. Geneva, City of, Illinois
1344. Geneva Township, Illinois
1345. Glen Carbon, Village of, Illinois
1346. Glen Ellyn, Village of, Illinois
1347. Glendale Heights, Village of, Illinois
1348. Glenview, Village of, Illinois
1349. Godfrey Township, Illinois
1350. Godfrey, Village of, Illinois
1351. Grafton Township, Illinois
1352. Granite City, City of, Illinois
1353. Granite City Township, Illinois
1354. Grant Township, Illinois
1355. Grayslake, Village of, Illinois
1356. Greene, County of, Illinois
1357. Greenwood Township, Illinois
1358. Groveland Township, Illinois
1359. Grundy, County of, Illinois
1360. Gurnee, Village of, Illinois
1361. Hampton Township, Illinois
1362. Hancock, County of, Illinois
1363. Hanover Park, Village of, Illinois
1364. Hanover Township, Illinois
1365. Harlem Township, Illinois
1366. Harrisburg Township, Illinois
1367. Harvey, City of, Illinois
1368. Hazel Crest, Village of, Illinois
1369. Henry, County of, Illinois
1370. Herrin, City of, Illinois
1371. Hickory Hills, City of, Illinois
1372. Hickory Point Township, Illinois

1373. Highland Park, City of, Illinois
1374. Hinsdale, Village of, Illinois
1375. Hoffman Estates, Village of, Illinois
1376. Homer Glen, Village of, Illinois
1377. Homer Township, Illinois
1378. Homewood, Village of, Illinois
1379. Huntley, Village of, Illinois
1380. Iroquois, County of, Illinois
1381. Jackson, County of, Illinois
1382. Jacksonville, City of, Illinois
1383. Jarvis Township, Illinois
1384. Jefferson, County of, Illinois
1385. Jersey, County of, Illinois
1386. Jo Daviess, County of, Illinois
1387. Johnson, County of, Illinois
1388. Joliet, City of, Illinois
1389. Joliet Township, Illinois
1390. Justice, Village of, Illinois
1391. Kane, County of, Illinois
1392. Kankakee, City of, Illinois
1393. Kankakee, County of, Illinois
1394. Kankakee Township, Illinois
1395. Kendall, County of, Illinois
1396. Kewanee, City of, Illinois
1397. Knox, County of, Illinois
1398. La Grange Park, Village of, Illinois
1399. La Grange, Village of, Illinois
1400. Lake, County of, Illinois
1401. Lake Forest, City of, Illinois
1402. Lake in the Hills, Village of, Illinois
1403. Lake Villa Township, Illinois
1404. Lake Zurich, Village of, Illinois
1405. Lansing, Village of, Illinois
1406. LaSalle, County of, Illinois
1407. LaSalle Township, Illinois
1408. Lawrence, County of, Illinois
1409. Lee, County of, Illinois
1410. Lemont Township, Illinois
1411. Lemont, Village of, Illinois
1412. Leyden Township, Illinois
1413. Libertyville Township, Illinois
1414. Libertyville, Village of, Illinois
1415. Limestone Township, Illinois
1416. Lincoln, City of, Illinois
1417. Lincolnwood, Village of, Illinois
1418. Lindenhurst, Village of, Illinois
1419. Lisle Township, Illinois
1420. Lisle, Village of, Illinois
1421. Little Rock Township, Illinois
1422. Livingston, County of, Illinois
1423. Lockport, City of, Illinois

1424. Lockport Township, Illinois
1425. Logan, County of, Illinois
1426. Lombard, Village of, Illinois
1427. Long Creek Township, Illinois
1428. Loves Park, City of, Illinois
1429. Lyons Township, Illinois
1430. Lyons, Village of, Illinois
1431. Machesney Park, Village of, Illinois
1432. Macomb, City of, Illinois
1433. Macomb City Township, Illinois
1434. Macon, County of, Illinois
1435. Macoupin, County of, Illinois
1436. Madison, County of, Illinois
1437. Mahomet Township, Illinois
1438. Maine Township, Illinois
1439. Manhattan Township, Illinois
1440. Manteno Township, Illinois
1441. Marion, City of, Illinois
1442. Marion, County of, Illinois
1443. Markham, City of, Illinois
1444. Marshall, County of, Illinois
1445. Mason, County of, Illinois
1446. Massac, County of, Illinois
1447. Matteson, Village of, Illinois
1448. Mattoon, City of, Illinois
1449. Mattoon, Township of, Illinois
1450. Maywood, Village of, Illinois
1451. McDonough, County of, Illinois
1452. McHenry, City of, Illinois
1453. McHenry, County of, Illinois
1454. McHenry, Township of, Illinois
1455. McLean, County of, Illinois
1456. Medina, Township of, Illinois
1457. Melrose Park, Village of, Illinois
1458. Menard, County of, Illinois
1459. Mercer, County of, Illinois
1460. Midlothian, Village of, Illinois
1461. Milton Township, Illinois
1462. Minooka, Village of, Illinois
1463. Mokena, Village of, Illinois
1464. Moline, City of, Illinois
1465. Moline, Township of, Illinois
1466. Monee, Township of, Illinois
1467. Monroe, County of, Illinois
1468. Montgomery, County of, Illinois
1469. Montgomery, Village of, Illinois
1470. Moraine, Township of, Illinois
1471. Morgan, County of, Illinois
1472. Morris, City of, Illinois
1473. Morton Grove, Village of, Illinois
1474. Morton, Township of, Illinois

1475. Morton, Village of, Illinois
1476. Moultrie, County of, Illinois
1477. Mount Prospect, Village of, Illinois
1478. Mount Vernon, City of, Illinois
1479. Mount Vernon, Township of, Illinois
1480. Mundelein, Village of, Illinois
1481. Nameoki, Township of, Illinois
1482. Naperville, City of, Illinois
1483. Naperville, Township of, Illinois
1484. New Lenox, Township of, Illinois
1485. New Lenox, Village of, Illinois
1486. New Trier, Township of, Illinois
1487. Newell, Township of, Illinois
1488. Niles, Township of, Illinois
1489. Niles, Village of, Illinois
1490. Normal, Town of, Illinois
1491. Normal, Township of, Illinois
1492. Norridge, Village of, Illinois
1493. North Aurora, Village of, Illinois
1494. North Chicago, City of, Illinois
1495. Northbrook, Village of, Illinois
1496. Northfield, Township of, Illinois
1497. Northlake, City of, Illinois
1498. Norwood Park, Township of, Illinois
1499. Nunda, Township of, Illinois
1500. Oak Forest, City of, Illinois
1501. Oak Lawn, Village of, Illinois
1502. Oak Park, Township of, Illinois
1503. Oak Park, Village of, Illinois
1504. O'Fallon, City of, Illinois
1505. O'Fallon, Township of, Illinois
1506. Ogle, County of, Illinois
1507. Orland Park, Village of, Illinois
1508. Orland, Township of, Illinois
1509. Oswego, Township of, Illinois
1510. Oswego, Village of, Illinois
1511. Ottawa, City of, Illinois
1512. Ottawa, Township of, Illinois
1513. Palatine, Township of, Illinois
1514. Palatine, Village of, Illinois
1515. Palos Heights, City of, Illinois
1516. Palos Hills, City of, Illinois
1517. Palos, Township of, Illinois
1518. Park Forest, Village of, Illinois
1519. Park Ridge, City of, Illinois
1520. Pekin, City of, Illinois
1521. Pekin, Township of, Illinois
1522. Peoria, City of, Illinois
1523. Peoria City Township, Illinois
1524. Peoria, County of, Illinois
1525. Perry, County of, Illinois

1526. Peru, Township of, Illinois
1527. Piatt, County of, Illinois
1528. Pike, County of, Illinois
1529. Plainfield, Township of, Illinois
1530. Plainfield, Village of, Illinois
1531. Plano, City of, Illinois
1532. Pontiac, City of, Illinois
1533. Pontiac, Township of, Illinois
1534. Prospect Heights, City of, Illinois
1535. Proviso, Township of, Illinois
1536. Quincy, City of, Illinois
1537. Quincy, Township of, Illinois
1538. Randolph, County of, Illinois
1539. Rantoul, Township of,Illinois
1540. Rantoul, Village of, Illinois
1541. Rich, Township of, Illinois
1542. Richland, County of, Illinois
1543. Richton Park, Village of, Illinois
1544. River Forest, Township of, Illinois
1545. River Forest, Village of, Illinois
1546. Riverdale, Village of, Illinois
1547. Riverside, Township of, Illinois
1548. Rock Island, City of, Illinois
1549. Rock Island, County of, Illinois
1550. Rock Island, Township of, Illinois
1551. Rockford, City of, Illinois
1552. Rockford, Township of, Illinois
1553. Rockton, Township of, Illinois
1554. Rolling Meadows, City of, Illinois
1555. Romeoville, Village of, Illinois
1556. Roscoe, Township of, Illinois
1557. Roscoe, Village of, Illinois
1558. Roselle, Village of, Illinois
1559. Round Lake Beach, Village of, Illinois
1560. Round Lake, Village of, Illinois
1561. Rutland, Township of, Illinois
1562. Saline, County of, Illinois
1563. Sangamon, County of, Illinois
1564. Sauk Village, Village of, Illinois
1565. Schaumburg, Township of, Illinois
1566. Schaumburg, Village of, Illinois
1567. Schiller Park, Village of, Illinois
1568. Shelby, County of, Illinois
1569. Shields, Township of, Illinois
1570. Shiloh Valley, Township of, Illinois
1571. Shiloh, Village of, Illinois
1572. Shorewood, Village of, Illinois
1573. Skokie, Village of, Illinois
1574. South Elgin, Village of, Illinois
1575. South Holland, Village of, Illinois
1576. South Moline, Township of, Illinois

1577. South Rock Island, Township of, Illinois
1578. Springfield, City of, Illinois
1579. St. Charles, City of, Illinois
1580. St. Charles, Township of, Illinois
1581. St. Clair, County of, Illinois
1582. St. Clair, Township of, Illinois
1583. Stephenson, County of, Illinois
1584. Sterling, City of, Illinois
1585. Sterling, Township of, Illinois
1586. Stickney, Township of, Illinois
1587. Streamwood, Village of, Illinois
1588. Streator, City of, Illinois
1589. Sugar Grove, Township of, Illinois
1590. Summit, Village of, Illinois
1591. Swansea, Village of, Illinois
1592. Sycamore, City of, Illinois
1593. Sycamore, Township of, Illinois
1594. Taylorville, City of, Illinois
1595. Taylorville, Township of, Illinois
1596. Tazewell, County of, Illinois
1597. Thornton, Township of, Illinois
1598. Tinley Park, Village of, Illinois
1599. Troy, City of, Illinois
1600. Troy, Township of, Illinois
1601. Union, County of, Illinois
1602. Urbana, City of, Illinois
1603. Vermilion, County of, Illinois
1604. Vernon Hills, Village of, Illinois
1605. Vernon, Township of, Illinois
1606. Villa Park, Village of, Illinois
1607. Wabash, County of, Illinois
1608. Warren, County of, Illinois
1609. Warren, Township of, Illinois
1610. Warrenville, City of, Illinois
1611. Washington, City of, Illinois
1612. Washington, County of, Illinois
1613. Washington, Township of, Illinois
1614. Waterloo, City of, Illinois
1615. Wauconda, Township of, Illinois
1616. Wauconda, Village of, Illinois
1617. Waukegan, City of, Illinois
1618. Waukegan, Township of, Illinois
1619. Wayne, County of, Illinois
1620. Wayne, Township of, Illinois
1621. West Chicago, City of, Illinois
1622. West Deerfield, Township of, Illinois
1623. Westchester, Village of, Illinois
1624. Western Springs, Village of, Illinois
1625. Westmont, Village of, Illinois
1626. Wheatland, Township of, Illinois
1627. Wheaton, City of, Illinois

1628. Wheeling, Township of, Illinois
1629. Wheeling, Village of, Illinois
1630. White, County of, Illinois
1631. Whiteside, County of, Illinois
1632. Will, County of, Illinois
1633. Williamson, County of, Illinois
1634. Wilmette, Village of, Illinois
1635. Winfield, Township of, Illinois
1636. Winnebago, County of, Illinois
1637. Winnetka, Village of, Illinois
1638. Wood Dale, City of, Illinois
1639. Wood River, City of, Illinois
1640. Wood River, Township of, Illinois
1641. Woodford, County of, Illinois
1642. Woodridge, Village of, Illinois
1643. Woodside, Township of, Illinois
1644. Woodstock, City of, Illinois
1645. Worth, Township of, Illinois
1646. Worth, Village of, Illinois
1647. York, Township of, Illinois
1648. Yorkville, City of, Illinois
1649. Zion, City of, Illinois
1650. Zion, Township of, Illinois
1651. Aboite, Township of, Indiana
1652. Adams, County of, Indiana
1653. Adams, Township of, Indiana
1654. Addison, Township of, Indiana
1655. Allen, County of, Indiana
1656. Anderson, City of, Indiana
1657. Anderson, Township of, Indiana
1658. Auburn, City of, Indiana
1659. Avon, Town of, Indiana
1660. Bainbridge, Township of, Indiana
1661. Bartholomew, County of, Indiana
1662. Baugo, Township of, Indiana
1663. Bedford, City of, Indiana
1664. Beech Grove, City of, Indiana
1665. Blackford, County of, Indiana
1666. Bloomington, City of, Indiana
1667. Bloomington, Township of, Indiana
1668. Bluffton, City of, Indiana
1669. Boon, Township of, Indiana
1670. Boone, County of, Indiana
1671. Brown, County of, Indiana
1672. Brown, Township of, Indiana
1673. Brownsburg, Town of, Indiana
1674. Calumet, Township of, Indiana
1675. Carmel, City of, Indiana
1676. Carroll, County of, Indiana
1677. Cass, County of, Indiana
1678. Cedar Creek, Township of, Indiana

1679. Cedar Lake, Town of, Indiana
1680. Center, Township of, Indiana
1681. Centre, Township of, Indiana
1682. Charlestown, Township of, Indiana
1683. Chesterton, Town of, Indiana
1684. Clark, County of, Indiana
1685. Clarksville, Town of, Indiana
1686. Clay, County of, Indiana
1687. Clay, Township of, Indiana
1688. Cleveland, Township of, Indiana
1689. Clinton, County of, Indiana
1690. Columbia, Township of, Indiana
1691. Columbus, City of, Indiana
1692. Columbus, Township of, Indiana
1693. Concord, Township of, Indiana
1694. Connersville, City of, Indiana
1695. Connersville, Township of, Indiana
1696. Coolspring, Township of, Indiana
1697. Crawford, County of, Indiana
1698. Crawfordsville, City of, Indiana
1699. Crown Point, City of, Indiana
1700. Danville, Town of, Indiana
1701. Daviess, County of, Indiana
1702. Dearborn, County of, Indiana
1703. Decatur, County of, Indiana
1704. Decatur, Township of, Indiana
1705. DeKalb, County of, Indiana
1706. Delaware, County of, Indiana
1707. Delaware, Township of, Indiana
1708. Dubois, County of, Indiana
1709. Dyer, Town of, Indiana
1710. East Chicago, City of, Indiana
1711. Eel, Township of, Indiana
1712. Elkhart, City of, Indiana
1713. Elkhart, County of, Indiana
1714. Elkhart, Township of, Indiana
1715. Evansville, City of, Indiana
1716. Fairfield, Township of, Indiana
1717. Fall Creek, Township of, Indiana
1718. Fayette, County of, Indiana
1719. Fishers, City of, Indiana
1720. Floyd, County of, Indiana
1721. Fort Wayne, City of, Indiana
1722. Fountain, County of, Indiana
1723. Frankfort, City of, Indiana
1724. Franklin, City of, Indiana
1725. Franklin, County of, Indiana
1726. Franklin, Township of, Indiana
1727. Fulton, County of, Indiana
1728. Gary, City of, Indiana
1729. Georgetown, Township of, Indiana

1730. Gibson, County of, Indiana
1731. Goshen, City of, Indiana
1732. Grant, County of, Indiana
1733. Greencastle, City of, Indiana
1734. Greencastle, Township of, Indiana
1735. Greene, County of, Indiana
1736. Greenfield, City of, Indiana
1737. Greensburg, City of, Indiana
1738. Greenwood, City of, Indiana
1739. Griffith, Town of, Indiana
1740. Guilford, Township of, Indiana
1741. Hamilton, County of, Indiana
1742. Hammond, City of, Indiana
1743. Hancock, County of, Indiana
1744. Hanover, Township of, Indiana
1745. Harris, Township of, Indiana
1746. Harrison, County of, Indiana
1747. Harrison, Township of, Indiana
1748. Hendricks, County of, Indiana
1749. Henry, County of, Indiana
1750. Henry, Township of, Indiana
1751. Highland, Town of, Indiana
1752. Hobart, City of, Indiana
1753. Hobart, Township of, Indiana
1754. Honey Creek, Township of, Indiana
1755. Howard, County of, Indiana
1756. Huntington, City of, Indiana
1757. Huntington, County of, Indiana
1758. Huntington, Township of, Indiana
1759. Jackson, County of, Indiana
1760. Jackson, Township of, Indiana
1761. Jasper, City of, Indiana
1762. Jasper, County of, Indiana
1763. Jay, County of, Indiana
1764. Jefferson, County of, Indiana
1765. Jefferson, Township of, Indiana
1766. Jeffersonville, City of, Indiana
1767. Jeffersonville, Township of, Indiana
1768. Jennings, County of, Indiana
1769. Johnson, County of, Indiana
1770. Keener, Township of, Indiana
1771. Knight, Township of, Indiana
1772. Knox, County of, Indiana
1773. Kokomo, City of, Indiana
1774. Kosciusko, County of, Indiana
1775. La Porte, City of, Indiana
1776. Lafayette, City of, Indiana
1777. LaGrange, County of, Indiana
1778. Lake, County of, Indiana
1779. Lake Station, City of, Indiana
1780. LaPorte, County of, Indiana

1781. Lawrence, City of, Indiana
1782. Lawrence, County of, Indiana
1783. Lawrence, Township of, Indiana
1784. Lawrenceburg, Township of, Indiana
1785. Lebanon, City of, Indiana
1786. Lincoln, Township of, Indiana
1787. Logansport, City of, Indiana
1788. Lost Creek, Township of, Indiana
1789. Madison, City of, Indiana
1790. Madison, County of, Indiana
1791. Madison, Township of, Indiana
1792. Marion, City of, Indiana
1793. Marion, County of/ Indianapolis, City of, Indiana
1794. Marshall, County of, Indiana
1795. Martin, County of, Indiana
1796. Martinsville, City of, Indiana
1797. Merrillville, Town of, Indiana
1798. Miami, County of, Indiana
1799. Michigan City, City of, Indiana
1800. Michigan, Township of, Indiana
1801. Mill, Township of, Indiana
1802. Mishawaka, City of, Indiana
1803. Monroe, County of, Indiana
1804. Montgomery, County of, Indiana
1805. Morgan, County of, Indiana
1806. Muncie, City of, Indiana
1807. Munster, Town of, Indiana
1808. New Albany, City of, Indiana
1809. New Albany, Township of, Indiana
1810. New Castle, City of, Indiana
1811. New Haven, City of, Indiana
1812. Newton, County of, Indiana
1813. Noble, County of, Indiana
1814. Noble, Township of, Indiana
1815. Noblesville, City of, Indiana
1816. Noblesville, Township of, Indiana
1817. North, Township of, Indiana
1818. Ohio, Township of, Indiana
1819. Orange, County of, Indiana
1820. Osolo, Township of, Indiana
1821. Owen, County of, Indiana
1822. Parke, County of, Indiana
1823. Patoka, Township of, Indiana
1824. Penn, Township of, Indiana
1825. Perry, County of, Indiana
1826. Perry, Township of, Indiana
1827. Peru, City of, Indiana
1828. Peru, Township of, Indiana
1829. Pigeon, Township of, Indiana
1830. Pike, County of, Indiana
1831. Pike, Township of, Indiana

1832. Pipe Creek, Township of, Indiana
1833. Plainfield, Town of, Indiana
1834. Pleasant, Township of, Indiana
1835. Portage, City of, Indiana
1836. Portage, Township of, Indiana
1837. Porter, County of, Indiana
1838. Posey, County of, Indiana
1839. Pulaski, County of, Indiana
1840. Putnam, County of, Indiana
1841. Randolph, County of, Indiana
1842. Richland, Township of, Indiana
1843. Richmond, City of, Indiana
1844. Ripley, County of, Indiana
1845. Ross, Township of, Indiana
1846. Rush, County of, Indiana
1847. Schererville, Town of, Indiana
1848. Scott, County of, Indiana
1849. Seymour, City of, Indiana
1850. Shawswick, Township of, Indiana
1851. Shelby, County of, Indiana
1852. Shelbyville, City of, Indiana
1853. Silver Creek, Township of, Indiana
1854. South Bend, City of, Indiana
1855. Speedway, Town of, Indiana
1856. Spencer, County of, Indiana
1857. St. John, Town of, Indiana
1858. St. John, Township of, Indiana
1859. St. Joseph, County of, Indiana
1860. St. Joseph, Township of, Indiana
1861. Starke, County of, Indiana
1862. Steuben, County of, Indiana
1863. Sugar Creek, Township of, Indiana
1864. Sullivan, County of, Indiana
1865. Switzerland, County of, Indiana
1866. Terre Haute, City of, Indiana
1867. Tippecanoe, County of, Indiana
1868. Tipton, County of, Indiana
1869. Troy, Township of, Indiana
1870. Union, Township of, Indiana
1871. Valparaiso, City of, Indiana
1872. Van Buren, Township of, Indiana
1873. Vanderburgh, County of, Indiana
1874. Vermillion, County of, Indiana
1875. Vernon, Township of, Indiana
1876. Vigo, County of, Indiana
1877. Vincennes, City of, Indiana
1878. Vincennes, Township of, Indiana
1879. Wabash, County of, Indiana
1880. Wabash, Township of, Indiana
1881. Warren, Township of, Indiana
1882. Warrick, County of, Indiana

1883. Warsaw, City of, Indiana
1884. Washington, City of, Indiana
1885. Washington, County of, Indiana
1886. Washington, Township of, Indiana
1887. Wayne, County of, Indiana
1888. Wayne, Township of, Indiana
1889. Wea, Township of, Indiana
1890. Wells, County of, Indiana
1891. West Lafayette, City of, Indiana
1892. Westchester, Township of, Indiana
1893. Westfield, City of, Indiana
1894. White, County of, Indiana
1895. White River, Township of, Indiana
1896. Whitley, County of, Indiana
1897. Winfield, Township of, Indiana
1898. Yorktown, Town of, Indiana
1899. Zionsville, Town of, Indiana
1900. Allamakee, County of, Iowa
1901. Altoona, City of, Iowa
1902. Ames, City of, Iowa
1903. Ankeny, City of, Iowa
1904. Appanoose, County of, Iowa
1905. Benton, County of, Iowa
1906. Bettendorf, City of, Iowa
1907. Black Hawk, County of, Iowa
1908. Boone, City of, Iowa
1909. Boone, County of, Iowa
1910. Bremer, County of, Iowa
1911. Buchanan, County of, Iowa
1912. Buena Vista, County of, Iowa
1913. Burlington, City of, Iowa
1914. Butler, County of, Iowa
1915. Carroll, County of, Iowa
1916. Cass, County of, Iowa
1917. Cedar, County of, Iowa
1918. Cedar Falls, City of, Iowa
1919. Cedar Rapids, City of, Iowa
1920. Cerro Gordo, County of, Iowa
1921. Cherokee, County of, Iowa
1922. Chickasaw, County of, Iowa
1923. Clay, County of, Iowa
1924. Clayton, County of, Iowa
1925. Clinton, City of, Iowa
1926. Clinton, County of, Iowa
1927. Clive, City of, Iowa
1928. Coralville, City of, Iowa
1929. Council Bluffs, City of, Iowa
1930. Crawford, County of, Iowa
1931. Dallas, County of, Iowa
1932. Davenport, City of, Iowa
1933. Delaware, County of, Iowa

1934. Des Moines, City of, Iowa
1935. Des Moines, County of, Iowa
1936. Dickinson, County of, Iowa
1937. Dubuque, City of, Iowa
1938. Dubuque, County of, Iowa
1939. Fairfield, City of, Iowa
1940. Fayette, County of, Iowa
1941. Floyd, County of, Iowa
1942. Fort Dodge, City of, Iowa
1943. Fort Madison, City of, Iowa
1944. Franklin, County of, Iowa
1945. Grimes, City of, Iowa
1946. Grundy, County of, Iowa
1947. Guthrie, County of, Iowa
1948. Hamilton, County of, Iowa
1949. Hancock, County of, Iowa
1950. Hardin, County of, Iowa
1951. Harrison, County of, Iowa
1952. Henry, County of, Iowa
1953. Indianola, City of, Iowa
1954. Iowa City, City of, Iowa
1955. Iowa, County of, Iowa
1956. Jackson, County of, Iowa
1957. Jasper, County of, Iowa
1958. Jefferson, County of, Iowa
1959. Johnson, County of, Iowa
1960. Johnston, City of, Iowa
1961. Jones, County of, Iowa
1962. Keokuk, City of, Iowa
1963. Keokuk, County of, Iowa
1964. Kossuth, County of, Iowa
1965. Le Mars, City of, Iowa
1966. Lee, County of, Iowa
1967. Linn, County of, Iowa
1968. Louisa, County of, Iowa
1969. Lyon, County of, Iowa
1970. Madison, County of, Iowa
1971. Mahaska, County of, Iowa
1972. Marion, City of, Iowa
1973. Marion, County of, Iowa
1974. Marshall, County of, Iowa
1975. Marshalltown, City of, Iowa
1976. Mason City, City of, Iowa
1977. Mills, County of, Iowa
1978. Mitchell, County of, Iowa
1979. Muscatine, City of, Iowa
1980. Muscatine, County of, Iowa
1981. Newton, City of, Iowa
1982. North Liberty, City of, Iowa
1983. Norwalk, City of, Iowa
1984. O'Brien, County of, Iowa

1985. Oskaloosa, City of, Iowa
1986. Ottumwa, City of, Iowa
1987. Page, County of, Iowa
1988. Pella, City of, Iowa
1989. Pleasant Hill, City of, Iowa
1990. Plymouth, County of, Iowa
1991. Polk, County of, Iowa
1992. Pottawattamie, County of, Iowa
1993. Poweshiek, County of, Iowa
1994. Scott, County of, Iowa
1995. Shelby, County of, Iowa
1996. Sioux City, City of, Iowa
1997. Sioux, County of, Iowa
1998. Spencer, City of, Iowa
1999. Storm Lake, City of, Iowa
2000. Story, County of, Iowa
2001. Tama, County of, Iowa
2002. Union, County of, Iowa
2003. Urbandale, City of, Iowa
2004. Wapello, County of, Iowa
2005. Warren, County of, Iowa
2006. Washington, County of, Iowa
2007. Waterloo, City of, Iowa
2008. Waukee, City of, Iowa
2009. Waverly, City of, Iowa
2010. Webster, County of, Iowa
2011. West Des Moines, City of, Iowa
2012. Winnebago, County of, Iowa
2013. Winneshiek, County of, Iowa
2014. Woodbury, County of, Iowa
2015. Wright, County of, Iowa
2016. Allen, County of, Kansas
2017. Andover, City of, Kansas
2018. Arkansas City, City of, Kansas
2019. Atchison, City of, Kansas
2020. Atchison, County of, Kansas
2021. Barton, County of, Kansas
2022. Bourbon, County of, Kansas
2023. Bruno, Township of, Kansas
2024. Butler, County of, Kansas
2025. Cherokee, County of, Kansas
2026. Cowley, County of, Kansas
2027. Crawford, County of, Kansas
2028. Derby, City of, Kansas
2029. Dickinson, County of, Kansas
2030. Dodge City, City of, Kansas
2031. Douglas, County of, Kansas
2032. El Dorado, City of, Kansas
2033. Ellis, County of, Kansas
2034. Emporia, City of, Kansas
2035. Fairmount, Township of, Kansas

2036. Finney, County of, Kansas
2037. Ford, County of, Kansas
2038. Franklin, County of, Kansas
2039. Garden City, City of, Kansas
2040. Gardner, City of, Kansas
2041. Geary, County of, Kansas
2042. Great Bend, City of, Kansas
2043. Harvey, County of, Kansas
2044. Hays, City of, Kansas
2045. Haysville, City of, Kansas
2046. Haysville, City of, Kansas
2047. Hutchinson, City of, Kansas
2048. Jackson, County of, Kansas
2049. Jefferson, County of, Kansas
2050. Johnson, County of, Kansas
2051. Junction City, City of, Kansas
2052. Kansas City, City of, Kansas
2053. Kansas City, City of, Kansas
2054. Labette, County of, Kansas
2055. Lansing, City of, Kansas
2056. Lawrence, City of, Kansas
2057. Lawrence, City of, Kansas
2058. Leavenworth, City of, Kansas
2059. Leavenworth, County of, Kansas
2060. Leawood, City of, Kansas
2061. Lenexa, City of, Kansas
2062. Liberal, City of, Kansas
2063. Lyon, County of, Kansas
2064. Madison, Township of, Kansas
2065. Manhattan, City of, Kansas
2066. Marion, County of, Kansas
2067. McPherson, City of, Kansas
2068. McPherson, County of, Kansas
2069. Merriam, City of, Kansas
2070. Miami, County of, Kansas
2071. Montgomery, County of, Kansas
2072. Nemaha, County of, Kansas
2073. Neosho, County of, Kansas
2074. Newton, City of, Kansas
2075. Olathe, City of, Kansas
2076. Osage, County of, Kansas
2077. Ottawa, City of, Kansas
2078. Overland Park, City of, Kansas
2079. Pittsburg, City of, Kansas
2080. Pottawatomie, County of, Kansas
2081. Prairie, Village of, City of, Kansas
2082. Reno, County of, Kansas
2083. Riley, County of, Kansas
2084. Riverside, Township of, Kansas
2085. Rockford, Township of, Kansas
2086. Salina, City of, Kansas

2087. Saline, County of, Kansas
2088. Sedgwick, County of, Kansas
2089. Seward, County of, Kansas
2090. Shawnee, City of, Kansas
2091. Shawnee, County of, Kansas
2092. Soldier, Township of, Kansas
2093. Sumner, County of, Kansas
2094. Topeka, City of, Kansas
2095. Wichita, City of, Kansas
2096. Winfield, City of, Kansas
2097. Wyandotte, County of, Kansas
2098. Adair, County of, Kentucky
2099. Allen, County of, Kentucky
2100. Anderson, County of, Kentucky
2101. Ashland, City of, Kentucky
2102. Bardstown, City of, Kentucky
2103. Barren, County of, Kentucky
2104. Bath, County of, Kentucky
2105. Bell, County of, Kentucky
2106. Berea, City of, Kentucky
2107. Boone, County of, Kentucky
2108. Bourbon, County of, Kentucky
2109. Bowling Green, City of, Kentucky
2110. Boyd, County of, Kentucky
2111. Boyle, County of, Kentucky
2112. Breathitt, County of, Kentucky
2113. Breckinridge, County of, Kentucky
2114. Bullitt, County of, Kentucky
2115. Butler, County of, Kentucky
2116. Caldwell, County of, Kentucky
2117. Calloway, County of, Kentucky
2118. Campbell, County of, Kentucky
2119. Campbellsville, City of, Kentucky
2120. Carroll, County of, Kentucky
2121. Carter, County of, Kentucky
2122. Casey, County of, Kentucky
2123. Christian, County of, Kentucky
2124. Clark, County of, Kentucky
2125. Clay, County of, Kentucky
2126. Clinton, County of, Kentucky
2127. Covington, City of, Kentucky
2128. Danville, City of, Kentucky
2129. Daviess, County of, Kentucky
2130. Edmonson, County of, Kentucky
2131. Elizabethtown, City of, Kentucky
2132. Erlanger, City of, Kentucky
2133. Estill, County of, Kentucky
2134. Fleming, County of, Kentucky
2135. Florence, City of, Kentucky
2136. Floyd, County of, Kentucky
2137. Fort Thomas, City of, Kentucky

2138. Frankfort, City of, Kentucky
2139. Franklin, County of, Kentucky
2140. Garrard, County of, Kentucky
2141. Georgetown, City of, Kentucky
2142. Glasgow, City of, Kentucky
2143. Grant, County of, Kentucky
2144. Graves, County of, Kentucky
2145. Grayson, County of, Kentucky
2146. Green, County of, Kentucky
2147. Greenup, County of, Kentucky
2148. Hardin, County of, Kentucky
2149. Harlan, County of, Kentucky
2150. Harrison, County of, Kentucky
2151. Hart, County of, Kentucky
2152. Henderson, City of, Kentucky
2153. Henderson, County of, Kentucky
2154. Henry, County of, Kentucky
2155. Hopkins, County of, Kentucky
2156. Hopkinsville, City of, Kentucky
2157. Independence, City of, Kentucky
2158. Jackson, County of, Kentucky
2159. Jeffersontown, City of, Kentucky
2160. Jessamine, County of, Kentucky
2161. Johnson, County of, Kentucky
2162. Kenton, County of, Kentucky
2163. Knott, County of, Kentucky
2164. Knox, County of, Kentucky
2165. Larue, County of, Kentucky
2166. Laurel, County of, Kentucky
2167. Lawrence, County of, Kentucky
2168. Lawrenceburg, City of, Kentucky
2169. Letcher, County of, Kentucky
2170. Lewis, County of, Kentucky
2171. Lexington-Fayette, Urban County of, Kentucky
2172. Lincoln, County of, Kentucky
2173. Logan, County of, Kentucky
2174. Louisville/Jefferson, County Metro of, Kentucky
2175. Lyndon, City of, Kentucky
2176. Madison, County of, Kentucky
2177. Madisonville, City of, Kentucky
2178. Magoffin, County of, Kentucky
2179. Marion, County of, Kentucky
2180. Marshall, County of, Kentucky
2181. Martin, County of, Kentucky
2182. Mason, County of, Kentucky
2183. McCracken, County of, Kentucky
2184. McCreary, County of, Kentucky
2185. Meade, County of, Kentucky
2186. Mercer, County of, Kentucky
2187. Metcalfe, County of, Kentucky
2188. Monroe, County of, Kentucky

2189. Montgomery, County of, Kentucky
2190. Morgan, County of, Kentucky
2191. Mount Washington, City of, Kentucky
2192. Muhlenberg, County of, Kentucky
2193. Murray, City of, Kentucky
2194. Nelson, County of, Kentucky
2195. Newport, City of, Kentucky
2196. Nicholasville, City of, Kentucky
2197. Ohio, County of, Kentucky
2198. Oldham, County of, Kentucky
2199. Owen, County of, Kentucky
2200. Owensboro, City of, Kentucky
2201. Paducah, City of, Kentucky
2202. Pendleton, County of, Kentucky
2203. Perry, County of, Kentucky
2204. Pike, County of, Kentucky
2205. Powell, County of, Kentucky
2206. Pulaski, County of, Kentucky
2207. Radcliff, City of, Kentucky
2208. Richmond, City of, Kentucky
2209. Rockcastle, County of, Kentucky
2210. Rowan, County of, Kentucky
2211. Russell, County of, Kentucky
2212. Scott, County of, Kentucky
2213. Shelby, County of, Kentucky
2214. Shelbyville, City of, Kentucky
2215. Shepherdsville, City of, Kentucky
2216. Shively, City of, Kentucky
2217. Simpson, County of, Kentucky
2218. Somerset, City of, Kentucky
2219. Spencer, County of, Kentucky
2220. St. Matthews, City of, Kentucky
2221. Taylor, County of, Kentucky
2222. Todd, County of, Kentucky
2223. Trigg, County of, Kentucky
2224. Union, County of, Kentucky
2225. Warren, County of, Kentucky
2226. Washington, County of, Kentucky
2227. Wayne, County of, Kentucky
2228. Webster, County of, Kentucky
2229. Whitley, County of, Kentucky
2230. Winchester, City of, Kentucky
2231. Woodford, County of, Kentucky
2232. Morgan, County of, Kentucky Louisiana
2233. Abbeville, City of, Louisiana
2234. Acadia, Parish of, Louisiana
2235. Alexandria, City of, Louisiana
2236. Allen, Parish of, Louisiana
2237. Ascension, Parish of, Louisiana
2238. Assumption, Parish of, Louisiana
2239. Avoyelles, Parish of, Louisiana

2240. Baker, City of, Louisiana
2241. Bastrop, City of, Louisiana
2242. Baton Rouge, City of, Louisiana
2243. Beauregard, Parish of, Louisiana
2244. Bienville, Parish of, Louisiana
2245. Bogalusa, City of, Louisiana
2246. Bossier City, City of, Louisiana
2247. Bossier, Parish of, Louisiana
2248. Broussard, City of, Louisiana
2249. Caddo, Parish of, Louisiana
2250. Calcasieu, Parish of, Louisiana
2251. Central, City of, Louisiana
2252. Claiborne, Parish of, Louisiana
2253. Concordia, Parish of, Louisiana
2254. Covington, City of, Louisiana
2255. Crowley, City of, Louisiana
2256. De Soto, Parish of, Louisiana
2257. DeRidder, City of, Louisiana
2258. East Baton Rouge, Parish of, Louisiana
2259. East Feliciana, Parish of, Louisiana
2260. Evangeline, Parish of, Louisiana
2261. Franklin, Parish of, Louisiana
2262. Gonzales, City of, Louisiana
2263. Grant, Parish of, Louisiana
2264. Gretna, City of, Louisiana
2265. Hammond, City of, Louisiana
2266. Iberia, Parish of, Louisiana
2267. Iberville, Parish of, Louisiana
2268. Jackson, Parish of, Louisiana
2269. Jefferson Davis, Parish of, Louisiana
2270. Jefferson, Parish of, Louisiana
2271. Kenner, City of, Louisiana
2272. Lafayette, City of, Louisiana
2273. Lafayette, Parish of, Louisiana
2274. Lafourche, Parish of, Louisiana
2275. Lake Charles, City of, Louisiana
2276. LaSalle, Parish of, Louisiana
2277. Lincoln, Parish of, Louisiana
2278. Livingston, Parish of, Louisiana
2279. Madison, Parish of, Louisiana
2280. Mandeville, City of, Louisiana
2281. Minden, City of, Louisiana
2282. Monroe, City of, Louisiana
2283. Morehouse, Parish of, Louisiana
2284. Morgan City, City of, Louisiana
2285. Natchitoches, City of, Louisiana
2286. Natchitoches, Parish of, Louisiana
2287. New Iberia, City of, Louisiana
2288. New Orleans, City of, Louisiana
2289. Orleans, Parish of, Louisiana
2290. Opelousas, City of, Louisiana

2291. Ouachita, Parish of, Louisiana
2292. Pineville, City of, Louisiana
2293. Plaquemines, Parish of, Louisiana
2294. Pointe Coupee, Parish of, Louisiana
2295. Rapides, Parish of, Louisiana
2296. Richland, Parish of, Louisiana
2297. Ruston, City of, Louisiana
2298. Sabine, Parish of, Louisiana
2299. Shreveport, City of, Louisiana
2300. Slidell, City of, Louisiana
2301. St. Bernard, Parish of, Louisiana
2302. St. Charles, Parish of, Louisiana
2303. St. Helena, Parish of, Louisiana
2304. St. James, Parish of, Louisiana
2305. St. John the Baptist, Parish of, Louisiana
2306. St. Landry, Parish of, Louisiana
2307. St. Martin, Parish of, Louisiana
2308. St. Mary, Parish of, Louisiana
2309. St. Tammany, Parish of, Louisiana
2310. Sulphur, City of, Louisiana
2311. Tangipahoa, Parish of, Louisiana
2312. Terrebonne, Parish of/ Houma, City of, Louisiana
2313. Thibodaux, City of, Louisiana
2314. Union, Parish of, Louisiana
2315. Vermilion, Parish of, Louisiana
2316. Vernon, Parish of, Louisiana
2317. Washington, Parish of, Louisiana
2318. Webster, Parish of, Louisiana
2319. West Baton Rouge, Parish of, Louisiana
2320. West Carroll, Parish of, Louisiana
2321. West Feliciana, Parish of, Louisiana
2322. West Monroe, City of, Louisiana
2323. Winn, Parish of, Louisiana
2324. Youngsville, City of, Louisiana
2325. Zachary, City of, Louisiana
2326. Androscoggin, County of, Maine
2327. Aroostook, County of, Maine
2328. Auburn, City of, Maine
2329. Augusta, City of, Maine
2330. Bangor, City of, Maine
2331. Biddeford, City of, Maine
2332. Brunswick, Town of, Maine
2333. Cumberland, County of, Maine
2334. Falmouth, Town of, Maine
2335. Franklin, County of, Maine
2336. Gorham, Town of, Maine
2337. Hancock, County of, Maine
2338. Kennebec, County of, Maine
2339. Kennebunk, Town of, Maine
2340. Knox, County of, Maine
2341. Lewiston, City of, Maine

2342. Lincoln, County of, Maine
2343. Orono, Town of, Maine
2344. Oxford, County of, Maine
2345. Penobscot, County of, Maine
2346. Piscataquis, County of, Maine
2347. Portland, City of, Maine
2348. Saco, City of, Maine
2349. Sagadahoc, County of, Maine
2350. Sanford, City of, Maine
2351. Scarborough, Town of, Maine
2352. Somerset, County of, Maine
2353. South Portland, City of, Maine
2354. Standish, Town of, Maine
2355. Waldo, County of, Maine
2356. Washington, County of, Maine
2357. Waterville, City of, Maine
2358. Wells, Town of, Maine
2359. Westbrook, City of, Maine
2360. Windham, Town of, Maine
2361. York, County of, Maine
2362. York, Town of, Maine
2363. Aberdeen, City of, Maryland
2364. Allegany, County of, Maryland
2365. Annapolis, City of, Maryland
2366. Anne Arundel, County of, Maryland
2367. Baltimore, City of, Maryland
2368. Baltimore, County of, Maryland
2369. Bel Air, Town of, Maryland
2370. Bowie, City of, Maryland
2371. Calvert, County of, Maryland
2372. Cambridge, City of, Maryland
2373. Caroline, County of, Maryland
2374. Carroll, County of, Maryland
2375. Cecil, County of, Maryland
2376. Charles, County of, Maryland
2377. College Park, City of, Maryland
2378. Cumberland, City of, Maryland
2379. Dorchester, County of, Maryland
2380. Easton, Town of, Maryland
2381. Elkton, Town of, Maryland
2382. Frederick, City of, Maryland
2383. Frederick, County of, Maryland
2384. Gaithersburg, City of, Maryland
2385. Garrett, County of, Maryland
2386. Greenbelt, City of, Maryland
2387. Hagerstown, City of, Maryland
2388. Harford, County of, Maryland
2389. Havre de Grace, City of, Maryland
2390. Howard, County of, Maryland
2391. Hyattsville, City of, Maryland
2392. Kent, County of, Maryland

2393. Laurel, City of, Maryland
2394. Montgomery, County of, Maryland
2395. New Carrollton, City of, Maryland
2396. Prince George's, County of, Maryland
2397. Queen Anne's, County of, Maryland
2398. Rockville, City of, Maryland
2399. Salisbury, City of, Maryland
2400. Somerset, County of, Maryland
2401. St. Mary's, County of, Maryland
2402. Takoma Park, City of, Maryland
2403. Talbot, County of, Maryland
2404. Washington, County of, Maryland
2405. Westminster, City of, Maryland
2406. Wicomico, County of, Maryland
2407. Worcester, County of, Maryland
2408. Abington, Town of, Massachusetts
2409. Acton, Town of, Massachusetts
2410. Acushnet, Town of, Massachusetts
2411. Agawam, Town of/ City of, Massachusetts
2412. Amesbury, Town of/ City of, Massachusetts
2413. Amherst, Town of, Massachusetts
2414. Andover, Town of, Massachusetts
2415. Arlington, Town of, Massachusetts
2416. Ashland, Town of, Massachusetts
2417. Athol, Town of, Massachusetts
2418. Attleboro, City of, Massachusetts
2419. Auburn, Town of, Massachusetts
2420. Barnstable, County of, Massachusetts
2421. Barnstable, Town of/ City of, Massachusetts
2422. Bedford, Town of, Massachusetts
2423. Belchertown, Town of, Massachusetts
2424. Bellingham, Town of, Massachusetts
2425. Belmont, Town of, Massachusetts
2426. Beverly, City of, Massachusetts
2427. Billerica, Town of, Massachusetts
2428. Boston, City of, Massachusetts
2429. Bourne, Town of, Massachusetts
2430. Braintree, Town of/ City of, Massachusetts
2431. Bridgewater, Town of/ City of, Massachusetts
2432. Bristol, County of, Massachusetts
2433. Brockton, City of, Massachusetts
2434. Brookline, Town of, Massachusetts
2435. Burlington, Town of, Massachusetts
2436. Cambridge, City of, Massachusetts
2437. Canton, Town of, Massachusetts
2438. Carver, Town of, Massachusetts
2439. Charlton, Town of, Massachusetts
2440. Chelmsford, Town of, Massachusetts
2441. Chelsea, City of, Massachusetts
2442. Chicopee, City of, Massachusetts
2443. Clinton, Town of, Massachusetts

2444. Concord, Town of, Massachusetts
2445. Danvers, Town of, Massachusetts
2446. Dartmouth, Town of, Massachusetts
2447. Dedham, Town of, Massachusetts
2448. Dennis, Town of, Massachusetts
2449. Dracut, Town of, Massachusetts
2450. Dudley, Town of, Massachusetts
2451. Dukes, County of, Massachusetts
2452. Duxbury, Town of, Massachusetts
2453. East Bridgewater, Town of, Massachusetts
2454. East Longmeadow, Town of, Massachusetts
2455. Easthampton, Town of, City of, Massachusetts
2456. Easton, Town of, Massachusetts
2457. Everett, City of, Massachusetts
2458. Fairhaven, Town of, Massachusetts
2459. Fall River, City of, Massachusetts
2460. Falmouth, Town of, Massachusetts
2461. Fitchburg, City of, Massachusetts
2462. Foxborough, Town of, Massachusetts
2463. Framingham, City of, Massachusetts
2464. Franklin, Town of, City of, Massachusetts
2465. Gardner, City of, Massachusetts
2466. Gloucester, City of, Massachusetts
2467. Grafton, Town of, Massachusetts
2468. Greenfield, Town of, City of, Massachusetts
2469. Groton, Town of, Massachusetts
2470. Hanover, Town of, Massachusetts
2471. Hanson, Town of, Massachusetts
2472. Harwich, Town of, Massachusetts
2473. Haverhill, City of, Massachusetts
2474. Hingham, Town of, Massachusetts
2475. Holbrook, Town of, Massachusetts
2476. Holden, Town of, Massachusetts
2477. Holliston, Town of, Massachusetts
2478. Holyoke, City of, Massachusetts
2479. Hopkinton, Town of, Massachusetts
2480. Hudson, Town of, Massachusetts
2481. Hull, Town of, Massachusetts
2482. Ipswich, Town of, Massachusetts
2483. Kingston, Town of, Massachusetts
2484. Lakeville, Town of, Massachusetts
2485. Lawrence, City of, Massachusetts
2486. Leicester, Town of, Massachusetts
2487. Leominster, City of, Massachusetts
2488. Lexington, Town of, Massachusetts
2489. Littleton, Town of, Massachusetts
2490. Longmeadow, Town of, Massachusetts
2491. Lowell, City of, Massachusetts
2492. Ludlow, Town of, Massachusetts
2493. Lunenburg, Town of, Massachusetts
2494. Lynn, City of, Massachusetts

2495. Lynnfield, Town of, Massachusetts
2496. Malden, City of, Massachusetts
2497. Mansfield, Town of, Massachusetts
2498. Marblehead, Town of, Massachusetts
2499. Marlborough, City of, Massachusetts
2500. Marshfield, Town of, Massachusetts
2501. Mashpee, Town of, Massachusetts
2502. Maynard, Town of, Massachusetts
2503. Medfield, Town of, Massachusetts
2504. Medford, City of, Massachusetts
2505. Medway, Town of, Massachusetts
2506. Melrose, City of, Massachusetts
2507. Methuen, Town of, City of, Massachusetts
2508. Middleborough, Town of, Massachusetts
2509. Middleton, Town of, Massachusetts
2510. Milford, Town of, Massachusetts
2511. Millbury, Town of, Massachusetts
2512. Milton, Town of, Massachusetts
2513. Nantucket, Town of/ County of, Massachusetts
2514. Natick, Town of, Massachusetts
2515. Needham, Town of, Massachusetts
2516. New Bedford, City of, Massachusetts
2517. Newburyport, City of, Massachusetts
2518. Newton, City of, Massachusetts
2519. Norfolk, County of, Massachusetts
2520. Norfolk, Town of, Massachusetts
2521. North Adams, City of, Massachusetts
2522. North Andover, Town of, Massachusetts
2523. North Attleborough, Town of, Massachusetts
2524. North Reading, Town of, Massachusetts
2525. Northampton, City of, Massachusetts
2526. Northborough, Town of, Massachusetts
2527. Northbridge, Town of, Massachusetts
2528. Norton, Town of, Massachusetts
2529. Norwell, Town of, Massachusetts
2530. Norwood, Town of, Massachusetts
2531. Oxford, Town of, Massachusetts
2532. Palmer, Town of/ City of, Massachusetts
2533. Peabody, City of, Massachusetts
2534. Pembroke, Town of, Massachusetts
2535. Pepperell, Town of, Massachusetts
2536. Pittsfield, City of, Massachusetts
2537. Plymouth, County of, Massachusetts
2538. Plymouth, Town of, Massachusetts
2539. Quincy, City of, Massachusetts
2540. Randolph, Town of/ City of, Massachusetts
2541. Raynham, Town of, Massachusetts
2542. Reading, Town of, Massachusetts
2543. Rehoboth, Town of, Massachusetts
2544. Revere, City of, Massachusetts
2545. Rockland, Town of, Massachusetts

2546. Salem, City of, Massachusetts
2547. Sandwich, Town of, Massachusetts
2548. Saugus, Town of, Massachusetts
2549. Scituate, Town of, Massachusetts
2550. Seekonk, Town of, Massachusetts
2551. Sharon, Town of, Massachusetts
2552. Shrewsbury, Town of, Massachusetts
2553. Somerset, Town of, Massachusetts
2554. Somerville, City of, Massachusetts
2555. South Hadley, Town of, Massachusetts
2556. Southborough, Town of, Massachusetts
2557. Southbridge, Town of/ City of, Massachusetts
2558. Spencer, Town of, Massachusetts
2559. Springfield, City of, Massachusetts
2560. Stoneham, Town of, Massachusetts
2561. Stoughton, Town of, Massachusetts
2562. Sudbury, Town of, Massachusetts
2563. Swampscott, Town of, Massachusetts
2564. Swansea, Town of, Massachusetts
2565. Taunton, City of, Massachusetts
2566. Tewksbury, Town of, Massachusetts
2567. Tyngsborough, Town of, Massachusetts
2568. Uxbridge, Town of, Massachusetts
2569. Wakefield, Town of, Massachusetts
2570. Walpole, Town of, Massachusetts
2571. Waltham, City of, Massachusetts
2572. Wareham, Town of, Massachusetts
2573. Watertown, Town of/ City of, Massachusetts
2574. Wayland, Town of, Massachusetts
2575. Webster, Town of, Massachusetts
2576. Wellesley, Town of, Massachusetts
2577. West Springfield, Town of/ City of, Massachusetts
2578. Westborough, Town of, Massachusetts
2579. Westfield, City of, Massachusetts
2580. Westford, Town of, Massachusetts
2581. Weston, Town of, Massachusetts
2582. Westport, Town of, Massachusetts
2583. Westwood, Town of, Massachusetts
2584. Weymouth, Town of/ City of, Massachusetts
2585. Whitman, Town of, Massachusetts
2586. Wilbraham, Town of, Massachusetts
2587. Wilmington, Town of, Massachusetts
2588. Winchendon, Town of, Massachusetts
2589. Winchester, Town of, Massachusetts
2590. Winthrop, Town of/ City of, Massachusetts
2591. Woburn, City of, Massachusetts
2592. Worcester, City of, Massachusetts
2593. Wrentham, Town of, Massachusetts
2594. Yarmouth, Town of, Massachusetts
2595. Ada, Township of, Michigan
2596. Adrian, City of, Michigan

2597. Alcona, County of, Michigan
2598. Algoma, Township of, Michigan
2599. Allegan, County of, Michigan
2600. Allen Park, City of, Michigan
2601. Allendale, Charter Township of, Michigan
2602. Alpena, County of, Michigan
2603. Alpine, Township of, Michigan
2604. Ann Arbor, City of, Michigan
2605. Antrim, County of, Michigan
2606. Antwerp, Township of, Michigan
2607. Arenac, County of, Michigan
2608. Auburn Hills, City of, Michigan
2609. Bangor, Charter Township of, Michigan
2610. Barry, County of, Michigan
2611. Bath, Charter Township of, Michigan
2612. Battle Creek, City of, Michigan
2613. Bay City, City of, Michigan
2614. Bay, County of, Michigan
2615. Bedford, Township of, Michigan
2616. Benton, Charter Township of, Michigan
2617. Benzie, County of, Michigan
2618. Berkley, City of, Michigan
2619. Berrien, County of, Michigan
2620. Beverly Hills, Village of, Michigan
2621. Big Rapids, City of, Michigan
2622. Birmingham, City of, Michigan
2623. Blackman, Charter Township of, Michigan
2624. Bloomfield, Charter Township of, Michigan
2625. Branch, County of, Michigan
2626. Brandon, Charter Township of, Michigan
2627. Brighton, Township of, Michigan
2628. Brownstown, Charter Township of, Michigan
2629. Burton, City of, Michigan
2630. Byron, Township of, Michigan
2631. Cadillac, City of, Michigan
2632. Caledonia, Township of, Michigan
2633. Calhoun, County of, Michigan
2634. Cannon, Township of, Michigan
2635. Canton, Charter Township of, Michigan
2636. Cascade, Charter Township of, Michigan
2637. Cass, County of, Michigan
2638. Charlevoix, County of, Michigan
2639. Cheboygan, County of, Michigan
2640. Chesterfield, Township of, Michigan
2641. Chippewa, County of, Michigan
2642. Clare, County of, Michigan
2643. Clawson, City of, Michigan
2644. Clinton, Charter Township of, Michigan
2645. Clinton, County of, Michigan
2646. Coldwater, City of, Michigan
2647. Commerce, Charter Township of, Michigan

2648. Comstock, Charter Township of, Michigan
2649. Cooper, Charter Township of, Michigan
2650. Crawford, County of, Michigan
2651. Davison, Township of, Michigan
2652. Dearborn, City of, Michigan
2653. Dearborn Heights, City of, Michigan
2654. Delhi, Charter Township of, Michigan
2655. Delta, Charter Township of, Michigan
2656. Delta, County of, Michigan
2657. Detroit, City of, Michigan
2658. DeWitt, Charter Township of, Michigan
2659. Dickinson, County of, Michigan
2660. East Bay, Township of, Michigan
2661. East Grand Rapids, City of, Michigan
2662. East Lansing, City of, Michigan
2663. Eastpointe, City of, Michigan
2664. Eaton, County of, Michigan
2665. Egelston, Township of, Michigan
2666. Emmet, County of, Michigan
2667. Emmett, Charter Township of, Michigan
2668. Escanaba, City of, Michigan
2669. Farmington, City of, Michigan
2670. Farmington Hills, City of, Michigan
2671. Fenton, Charter Township of, Michigan
2672. Fenton, City of, Michigan
2673. Ferndale, City of, Michigan
2674. Flat Rock, City of, Michigan
2675. Flint, Charter Township of, Michigan
2676. Flint, City of, Michigan
2677. Flushing, Charter Township of, Michigan
2678. Fort Gratiot, Charter Township of, Michigan
2679. Fraser, City of, Michigan
2680. Frenchtown, Township of, Michigan
2681. Fruitport, Charter Township of, Michigan
2682. Gaines, Charter Township of, Michigan
2683. Garden City, City of, Michigan
2684. Garfield, Charter Township of, Michigan
2685. Genesee, Charter Township of, Michigan
2686. Genesee, County of, Michigan
2687. Genoa, Township of, Michigan
2688. Georgetown, Charter Township of, Michigan
2689. Gladwin, County of, Michigan
2690. Gogebic, County of, Michigan
2691. Grand Blanc, Charter Township of, Michigan
2692. Grand Haven, Charter Township of, Michigan
2693. Grand Haven, City of, Michigan
2694. Grand Rapids, Charter Township of, Michigan
2695. Grand Rapids, City of, Michigan
2696. Grand Traverse, County of, Michigan
2697. Grandville, City of, Michigan
2698. Gratiot, County of, Michigan

2699. Green Oak, Township of, Michigan
2700. Grosse Ile, Township of, Michigan
2701. Grosse Pointe Park, City of, Michigan
2702. Grosse Pointe Woods, City of, Michigan
2703. Hamburg, Township of, Michigan
2704. Hamtramck, City of, Michigan
2705. Harper Woods, City of, Michigan
2706. Harrison, Charter Township of, Michigan
2707. Hartland, Township of, Michigan
2708. Hazel Park, City of, Michigan
2709. Highland, Charter Township of, Michigan
2710. Highland Park, City of, Michigan
2711. Hillsdale, County of, Michigan
2712. Holland, Charter Township of, Michigan
2713. Holland, City of, Michigan
2714. Holly, Township of, Michigan
2715. Houghton, County of, Michigan
2716. Huron, Charter Township of, Michigan
2717. Huron, County of, Michigan
2718. Independence, Charter Township of, Michigan
2719. Ingham, County of, Michigan
2720. Inkster, City of, Michigan
2721. Ionia, City of, Michigan
2722. Ionia, County of, Michigan
2723. Iosco, County of, Michigan
2724. Iron, County of, Michigan
2725. Isabella, County of, Michigan
2726. Jackson, City of, Michigan
2727. Jackson, County of, Michigan
2728. Kalamazoo, Charter Township of, Michigan
2729. Kalamazoo, City of, Michigan
2730. Kalamazoo, County of, Michigan
2731. Kalkaska, County of, Michigan
2732. Kent, County of, Michigan
2733. Kentwood, City of, Michigan
2734. Lake, County of, Michigan
2735. Lansing, City of, Michigan
2736. Lapeer, County of, Michigan
2737. Leelanau, County of, Michigan
2738. Lenawee, County of, Michigan
2739. Lenox, Township of, Michigan
2740. Leoni, Township of, Michigan
2741. Lincoln, Charter Township of, Michigan
2742. Lincoln Park, City of, Michigan
2743. Livingston, County of, Michigan
2744. Livonia, City of, Michigan
2745. Lyon, Charter Township of, Michigan
2746. Mackinac, County of, Michigan
2747. Macomb, County of, Michigan
2748. Macomb, Township of, Michigan
2749. Madison Heights, City of, Michigan

2750. Manistee, County of, Michigan
2751. Marion, Township of, Michigan
2752. Marquette, City of, Michigan
2753. Marquette, County of, Michigan
2754. Mason, County of, Michigan
2755. Mecosta, County of, Michigan
2756. Melvindale, City of, Michigan
2757. Menominee, County of, Michigan
2758. Meridian, Charter Township of, Michigan
2759. Midland, City of, Michigan
2760. Midland, County of, Michigan
2761. Milford, Charter Township of, Michigan
2762. Missaukee, County of, Michigan
2763. Monitor, Charter Township of, Michigan
2764. Monroe, Charter Township of, Michigan
2765. Monroe, City of, Michigan
2766. Monroe, County of, Michigan
2767. Montcalm, County of, Michigan
2768. Mount Clemens, City of, Michigan
2769. Mount Morris, Township of, Michigan
2770. Mount Pleasant, City of, Michigan
2771. Mundy, Township of, Michigan
2772. Muskegon, Charter Township of, Michigan
2773. Muskegon, City of, Michigan
2774. Muskegon, County of, Michigan
2775. Muskegon Heights, City of, Michigan
2776. New Baltimore, City of, Michigan
2777. Newaygo, County of, Michigan
2778. Niles, City of, Michigan
2779. Niles, Township of, Michigan
2780. Northville, Township of, Michigan
2781. Norton Shores, City of, Michigan
2782. Novi, City of, Michigan
2783. Oak Park, City of, Michigan
2784. Oakland, Charter Township of, Michigan
2785. Oakland, County of, Michigan
2786. Oceana, County of, Michigan
2787. Oceola, Township of, Michigan
2788. Ogemaw, County of, Michigan
2789. Orion, Charter Township of, Michigan
2790. Osceola, County of, Michigan
2791. Oshtemo, Charter Township of, Michigan
2792. Otsego, County of, Michigan
2793. Ottawa, County of, Michigan
2794. Owosso, City of, Michigan
2795. Oxford, Charter Township of, Michigan
2796. Park, Township of, Michigan
2797. Pittsfield, Charter Township of, Michigan
2798. Plainfield, Charter Township of, Michigan
2799. Plymouth, Charter Township of, Michigan
2800. Pontiac, City of, Michigan

2801. Port Huron, Charter Township of, Michigan
2802. Port Huron, City of, Michigan
2803. Portage, City of, Michigan
2804. Presque Isle, County of, Michigan
2805. Redford, Charter Township of, Michigan
2806. Riverview, City of, Michigan
2807. Rochester, City of, Michigan
2808. Rochester Hills, City of, Michigan
2809. Romulus, City of, Michigan
2810. Roscommon, County of, Michigan
2811. Roseville, City of, Michigan
2812. Royal Oak, City of, Michigan
2813. Saginaw, Charter Township of, Michigan
2814. Saginaw, City of, Michigan
2815. Saginaw, County of, Michigan
2816. Sanilac, County of, Michigan
2817. Sault Ste. Marie, City of, Michigan
2818. Scio, Township of, Michigan
2819. Shelby, Charter Township of, Michigan
2820. Shiawassee, County of, Michigan
2821. South Lyon, City of, Michigan
2822. Southfield, City of, Michigan
2823. Southfield, Township of, Michigan
2824. Southgate, City of, Michigan
2825. Spring Lake, Township of, Michigan
2826. Springfield, Charter Township of, Michigan
2827. St. Clair, County of, Michigan
2828. St. Clair Shores, City of, Michigan
2829. St. Joseph, County of, Michigan
2830. Sterling Heights, City of, Michigan
2831. Sturgis, City of, Michigan
2832. Summit, Township of, Michigan
2833. Superior, Charter Township of, Michigan
2834. Taylor, City of, Michigan
2835. Texas, Charter Township of, Michigan
2836. Thomas, Township of, Michigan
2837. Traverse City, City of, Michigan
2838. Trenton, City of, Michigan
2839. Troy, City of, Michigan
2840. Tuscola, County of, Michigan
2841. Tyrone, Township of, Michigan
2842. Union, Charter Township of, Michigan
2843. Van Buren, Charter Township of, Michigan
2844. Van Buren, County of, Michigan
2845. Vienna, Charter Township of, Michigan
2846. Walker, City of, Michigan
2847. Warren, City of, Michigan
2848. Washington, Township of, Michigan
2849. Washtenaw, County of, Michigan
2850. Waterford, Charter Township of, Michigan
2851. Wayne, City of, Michigan

2852. Wayne, County of, Michigan
2853. West Bloomfield, Charter Township of, Michigan
2854. Westland, City of, Michigan
2855. Wexford, County of, Michigan
2856. White Lake, Charter Township of, Michigan
2857. Wixom, City of, Michigan
2858. Woodhaven, City of, Michigan
2859. Wyandotte, City of, Michigan
2860. Wyoming, City of, Michigan
2861. Ypsilanti, Charter Township of, Michigan
2862. Ypsilanti, City of, Michigan
2863. Zeeland, Charter Township of, Michigan
2864. Aitkin, County of, Minnesota
2865. Albert Lea, City of, Minnesota
2866. Alexandria, City of, Minnesota
2867. Andover, City of, Minnesota
2868. Anoka, City of, Minnesota
2869. Anoka, County of, Minnesota
2870. Apple Valley, City of, Minnesota
2871. Arden Hills, City of, Minnesota
2872. Austin, City of, Minnesota
2873. Becker, County of, Minnesota
2874. Beltrami, County of, Minnesota
2875. Bemidji, City of, Minnesota
2876. Benton, County of, Minnesota
2877. Big Lake, City of, Minnesota
2878. Blaine, City of, Minnesota
2879. Bloomington, City of, Minnesota
2880. Blue Earth, County of, Minnesota
2881. Brainerd, City of, Minnesota
2882. Brooklyn Center, City of, Minnesota
2883. Brooklyn Park, City of, Minnesota
2884. Brown, County of, Minnesota
2885. Buffalo, City of, Minnesota
2886. Burnsville, City of, Minnesota
2887. Carlton, County of, Minnesota
2888. Carver, County of, Minnesota
2889. Cass, County of, Minnesota
2890. Champlin, City of, Minnesota
2891. Chanhassen, City of, Minnesota
2892. Chaska, City of, Minnesota
2893. Chippewa, County of, Minnesota
2894. Chisago, County of, Minnesota
2895. Clay, County of, Minnesota
2896. Cloquet, City of, Minnesota
2897. Columbia Heights, City of, Minnesota
2898. Coon Rapids, City of, Minnesota
2899. Cottage Grove, City of, Minnesota
2900. Cottonwood, County of, Minnesota
2901. Crow Wing, County of, Minnesota
2902. Crystal, City of, Minnesota

2903. Dakota, County of, Minnesota
2904. Dodge, County of, Minnesota
2905. Douglas, County of, Minnesota
2906. Duluth, City of, Minnesota
2907. Eagan, City of, Minnesota
2908. East Bethel, City of, Minnesota
2909. Eden Prairie, City of, Minnesota
2910. Edina, City of, Minnesota
2911. Elk River, City of, Minnesota
2912. Fairmont, City of, Minnesota
2913. Faribault, City of, Minnesota
2914. Faribault, County of, Minnesota
2915. Farmington, City of, Minnesota
2916. Fergus Falls, City of, Minnesota
2917. Fillmore, County of, Minnesota
2918. Forest Lake, City of, Minnesota
2919. Freeborn, County of, Minnesota
2920. Fridley, City of, Minnesota
2921. Golden Valley, City of, Minnesota
2922. Goodhue, County of, Minnesota
2923. Grand Rapids, City of, Minnesota
2924. Ham Lake, City of, Minnesota
2925. Hastings, City of, Minnesota
2926. Hennepin, County of, Minnesota
2927. Hibbing, City of, Minnesota
2928. Hopkins, City of, Minnesota
2929. Houston, County of, Minnesota
2930. Hubbard, County of, Minnesota
2931. Hugo, City of, Minnesota
2932. Hutchinson, City of, Minnesota
2933. Inver Grove Heights, City of, Minnesota
2934. Isanti, County of, Minnesota
2935. Itasca, County of, Minnesota
2936. Kanabec, County of, Minnesota
2937. Kandiyohi, County of, Minnesota
2938. Koochiching, County of, Minnesota
2939. Lake, County of, Minnesota
2940. Lakeville, City of, Minnesota
2941. Le Sueur, County of, Minnesota
2942. Lino Lakes, City of, Minnesota
2943. Little Canada, City of, Minnesota
2944. Lyon, County of, Minnesota
2945. Mankato, City of, Minnesota
2946. Maple Grove, City of, Minnesota
2947. Maplewood, City of, Minnesota
2948. Marshall, City of, Minnesota
2949. Martin, County of, Minnesota
2950. McLeod, County of, Minnesota
2951. Meeker, County of, Minnesota
2952. Mendota Heights, City of, Minnesota
2953. Mille Lacs, County of, Minnesota

2954. Minneapolis, City of, Minnesota
2955. Minnetonka, City of, Minnesota
2956. Monticello, City of, Minnesota
2957. Moorhead, City of, Minnesota
2958. Morrison, County of, Minnesota
2959. Mounds View, City of, Minnesota
2960. Mower, County of, Minnesota
2961. New Brighton, City of, Minnesota
2962. New Hope, City of, Minnesota
2963. New Ulm, City of, Minnesota
2964. Nicollet, County of, Minnesota
2965. Nobles, County of, Minnesota
2966. North Branch, City of, Minnesota
2967. North Mankato, City of, Minnesota
2968. North St. Paul, City of, Minnesota
2969. Northfield, City of, Minnesota
2970. Oakdale, City of, Minnesota
2971. Olmsted, County of, Minnesota
2972. Otsego, City of, Minnesota
2973. Otter Tail, County of, Minnesota
2974. Owatonna, City of, Minnesota
2975. Pennington, County of, Minnesota
2976. Pine, County of, Minnesota
2977. Plymouth, City of, Minnesota
2978. Polk, County of, Minnesota
2979. Pope, County of, Minnesota
2980. Prior Lake, City of, Minnesota
2981. Ramsey, City of, Minnesota
2982. Ramsey, County of, Minnesota
2983. Red Wing, City of, Minnesota
2984. Redwood, County of, Minnesota
2985. Renville, County of, Minnesota
2986. Rice, County of, Minnesota
2987. Richfield, City of, Minnesota
2988. Robbinsdale, City of, Minnesota
2989. Rochester, City of, Minnesota
2990. Rogers, City of, Minnesota
2991. Roseau, County of, Minnesota
2992. Rosemount, City of, Minnesota
2993. Roseville, City of, Minnesota
2994. Sartell, City of, Minnesota
2995. Sauk Rapids, City of, Minnesota
2996. Savage, City of, Minnesota
2997. Scott, County of, Minnesota
2998. Shakopee, City of, Minnesota
2999. Sherburne, County of, Minnesota
3000. Shoreview, City of, Minnesota
3001. Sibley, County of, Minnesota
3002. South St. Paul, City of, Minnesota
3003. St. Cloud, City of, Minnesota
3004. St. Louis, County of, Minnesota

3005. St. Louis Park, City of, Minnesota
3006. St. Michael, City of, Minnesota
3007. St. Paul, City of, Minnesota
3008. St. Peter, City of, Minnesota
3009. Stearns, County of, Minnesota
3010. Steele, County of, Minnesota
3011. Stillwater, City of, Minnesota
3012. Todd, County of, Minnesota
3013. Vadnais Heights, City of, Minnesota
3014. Victoria, City of, Minnesota
3015. Wabasha, County of, Minnesota
3016. Waconia, City of, Minnesota
3017. Wadena, County of, Minnesota
3018. Waseca, County of, Minnesota
3019. Washington, County of, Minnesota
3020. Watonwan, County of, Minnesota
3021. West St. Paul, City of, Minnesota
3022. White Bear Lake, City of, Minnesota
3023. White Bear, Township of, Minnesota
3024. Willmar, City of, Minnesota
3025. Winona, City of, Minnesota
3026. Winona, County of, Minnesota
3027. Woodbury, City of, Minnesota
3028. Worthington, City of, Minnesota
3029. Wright, County of, Minnesota
3030. Adams, County of, Mississippi
3031. Alcorn, County of, Mississippi
3032. Amite, County of, Mississippi
3033. Attala, County of, Mississippi
3034. Bay St. Louis, City of, Mississippi
3035. Biloxi, City of, Mississippi
3036. Bolivar, County of, Mississippi
3037. Brandon, City of, Mississippi
3038. Brookhaven, City of, Mississippi
3039. Byram, City of, Mississippi
3040. Calhoun, County of, Mississippi
3041. Canton, City of, Mississippi
3042. Chickasaw, County of, Mississippi
3043. Clarke, County of, Mississippi
3044. Clarksdale, City of, Mississippi
3045. Clay, County of, Mississippi
3046. Cleveland, City of, Mississippi
3047. Clinton, City of, Mississippi
3048. Coahoma, County of, Mississippi
3049. Columbus, City of, Mississippi
3050. Copiah, County of, Mississippi
3051. Corinth, City of, Mississippi
3052. Covington, County of, Mississippi
3053. DeSoto, County of, Mississippi
3054. D'Iberville, City of, Mississippi
3055. Forrest, County of, Mississippi

3056. Gautier, City of, Mississippi
3057. George, County of, Mississippi
3058. Greene, County of, Mississippi
3059. Greenville, City of, Mississippi
3060. Greenwood, City of, Mississippi
3061. Grenada, City of, Mississippi
3062. Grenada, County of, Mississippi
3063. Gulfport, City of, Mississippi
3064. Hancock, County of, Mississippi
3065. Harrison, County of, Mississippi
3066. Hattiesburg, City of, Mississippi
3067. Hernando, City of, Mississippi
3068. Hinds, County of, Mississippi
3069. Holmes, County of, Mississippi
3070. Horn Lake, City of, Mississippi
3071. Itawamba, County of, Mississippi
3072. Jackson, City of, Mississippi
3073. Jackson, County of, Mississippi
3074. Jasper, County of, Mississippi
3075. Jefferson Davis, County of, Mississippi
3076. Jones, County of, Mississippi
3077. Lafayette, County of, Mississippi
3078. Lamar, County of, Mississippi
3079. Lauderdale, County of, Mississippi
3080. Laurel, City of, Mississippi
3081. Lawrence, County of, Mississippi
3082. Leake, County of, Mississippi
3083. Lee, County of, Mississippi
3084. Leflore, County of, Mississippi
3085. Lincoln, County of, Mississippi
3086. Long Beach, City of, Mississippi
3087. Lowndes, County of, Mississippi
3088. Madison, City of, Mississippi
3089. Madison, County of, Mississippi
3090. Marion, County of, Mississippi
3091. Marshall, County of, Mississippi
3092. McComb, City of, Mississippi
3093. Meridian, City of, Mississippi
3094. Monroe, County of, Mississippi
3095. Moss Point, City of, Mississippi
3096. Natchez, City of, Mississippi
3097. Neshoba, County of, Mississippi
3098. Newton, County of, Mississippi
3099. Noxubee, County of, Mississippi
3100. Ocean Springs, City of, Mississippi
3101. Oktibbeha, County of, Mississippi
3102. Olive Branch, City of, Mississippi
3103. Oxford, City of, Mississippi
3104. Panola, County of, Mississippi
3105. Pascagoula, City of, Mississippi
3106. Pearl, City of, Mississippi

3107. Pearl River, County of, Mississippi
3108. Perry, County of, Mississippi
3109. Petal, City of, Mississippi
3110. Picayune, City of, Mississippi
3111. Pike, County of, Mississippi
3112. Pontotoc, County of, Mississippi
3113. Prentiss, County of, Mississippi
3114. Rankin, County of, Mississippi
3115. Ridgeland, City of, Mississippi
3116. Scott, County of, Mississippi
3117. Simpson, County of, Mississippi
3118. Smith, County of, Mississippi
3119. Southaven, City of, Mississippi
3120. Starkville, City of, Mississippi
3121. Stone, County of, Mississippi
3122. Sunflower, County of, Mississippi
3123. Tallahatchie, County of, Mississippi
3124. Tate, County of, Mississippi
3125. Tippah, County of, Mississippi
3126. Tishomingo, County of, Mississippi
3127. Tupelo, City of, Mississippi
3128. Union, County of, Mississippi
3129. Vicksburg, City of, Mississippi
3130. Walthall, County of, Mississippi
3131. Warren, County of, Mississippi
3132. Washington, County of, Mississippi
3133. Wayne, County of, Mississippi
3134. West Point, City of, Mississippi
3135. Winston, County of, Mississippi
3136. Yalobusha, County of, Mississippi
3137. Yazoo City, City of, Mississippi
3138. Yazoo, County of, Mississippi
3139. Adair, County of, Missouri
3140. Andrew, County of, Missouri
3141. Arnold, City of, Missouri
3142. Audrain, County of, Missouri
3143. Ballwin, City of, Missouri
3144. Barry, County of, Missouri
3145. Barton, County of, Missouri
3146. Bates, County of, Missouri
3147. Bellefontaine Neighbors, City of, Missouri
3148. Belton, City of, Missouri
3149. Benton, County of, Missouri
3150. Blue Springs, City of, Missouri
3151. Bolivar, City of, Missouri
3152. Bollinger, County of, Missouri
3153. Boone, County of, Missouri
3154. Branson, City of, Missouri
3155. Bridgeton, City of, Missouri
3156. Buchanan, County of, Missouri
3157. Butler, County of, Missouri

3158. Callaway, County of, Missouri
3159. Camden, County of, Missouri
3160. Cape Girardeau, City of, Missouri
3161. Cape Girardeau, County of, Missouri
3162. Carthage, City of, Missouri
3163. Cass, County of, Missouri
3164. Cedar, County of, Missouri
3165. Chesterfield, City of, Missouri
3166. Christian, County of, Missouri
3167. Clay, County of, Missouri
3168. Clayton, City of, Missouri
3169. Clinton, County of, Missouri
3170. Cole, County of, Missouri
3171. Columbia, City of, Missouri
3172. Cooper, County of, Missouri
3173. Crawford, County of, Missouri
3174. Crestwood, City of, Missouri
3175. Creve Coeur, City of, Missouri
3176. Dallas, County of, Missouri
3177. Dardenne Prairie, City of, Missouri
3178. DeKalb, County of, Missouri
3179. Dent, County of, Missouri
3180. Douglas, County of, Missouri
3181. Dunklin, County of, Missouri
3182. Eureka, City of, Missouri
3183. Excelsior Springs, City of, Missouri
3184. Farmington, City of, Missouri
3185. Ferguson, City of, Missouri
3186. Festus, City of, Missouri
3187. Florissant, City of, Missouri
3188. Franklin, County of, Missouri
3189. Fulton, City of, Missouri
3190. Gasconade, County of, Missouri
3191. Gladstone, City of, Missouri
3192. Grain Valley, City of, Missouri
3193. Grandview, City of, Missouri
3194. Greene, County of, Missouri
3195. Hannibal, City of, Missouri
3196. Harrisonville, City of, Missouri
3197. Hazelwood, City of, Missouri
3198. Henry, County of, Missouri
3199. Howard, County of, Missouri
3200. Howell, County of, Missouri
3201. Independence, City of, Missouri
3202. Independence, Township of, Missouri
3203. Iron, County of, Missouri
3204. Jackson, City of, Missouri
3205. Jackson, County of, Missouri
3206. Jasper, County of, Missouri
3207. Jefferson City, City of, Missouri
3208. Jefferson, County of, Missouri

3209. Jennings, City of, Missouri
3210. Johnson, County of, Missouri
3211. Joplin, City of, Missouri
3212. Kansas City, City of, Missouri
3213. Kearney, City of, Missouri
3214. Kennett, City of, Missouri
3215. Kirksville, City of, Missouri
3216. Kirkwood, City of, Missouri
3217. Laclede, County of, Missouri
3218. Lafayette, County of, Missouri
3219. Lake St. Louis, City of, Missouri
3220. Lawrence, County of, Missouri
3221. Lebanon, City of, Missouri
3222. Lee's Summit, City of, Missouri
3223. Liberty, City of, Missouri
3224. Liberty, Township of, Missouri
3225. Lincoln, County of, Missouri
3226. Linn, County of, Missouri
3227. Livingston, County of, Missouri
3228. Macon, County of, Missouri
3229. Madison, County of, Missouri
3230. Manchester, City of, Missouri
3231. Marion, County of, Missouri
3232. Marshall, City of, Missouri
3233. Maryland Heights, City of, Missouri
3234. Maryville, City of, Missouri
3235. McDonald, County of, Missouri
3236. Mexico, City of, Missouri
3237. Miller, County of, Missouri
3238. Mississippi, County of, Missouri
3239. Moberly, City of, Missouri
3240. Moniteau, County of, Missouri
3241. Montgomery, County of, Missouri
3242. Morgan, County of, Missouri
3243. Neosho, City of, Missouri
3244. New Madrid, County of, Missouri
3245. Newton, County of, Missouri
3246. Nixa, City of, Missouri
3247. Nodaway, County of, Missouri
3248. O'Fallon, City of, Missouri
3249. Oregon, County of, Missouri
3250. Osage, County of, Missouri
3251. Overland, City of, Missouri
3252. Ozark, City of, Missouri
3253. Pemiscot, County of, Missouri
3254. Perry, County of, Missouri
3255. Pettis, County of, Missouri
3256. Phelps, County of, Missouri
3257. Pike, County of, Missouri
3258. Platte, County of, Missouri
3259. Polk, County of, Missouri

3260. Polk, Township of, Missouri
3261. Poplar Bluff, City of, Missouri
3262. Pulaski, County of, Missouri
3263. Ralls, County of, Missouri
3264. Randolph, County of, Missouri
3265. Ray, County of, Missouri
3266. Raymore, City of, Missouri
3267. Raytown, City of, Missouri
3268. Republic, City of, Missouri
3269. Ripley, County of, Missouri
3270. Rolla, City of, Missouri
3271. Saline, County of, Missouri
3272. Scott, County of, Missouri
3273. Sedalia, City of, Missouri
3274. Sikeston, City of, Missouri
3275. Smithville, City of, Missouri
3276. Springfield, City of, Missouri
3277. St. Ann, City of, Missouri
3278. St. Charles, City of, Missouri
3279. St. Charles, County of, Missouri
3280. St. Francois, County of, Missouri
3281. St. Joseph, City of, Missouri
3282. St. Louis, City of, Missouri
3283. St. Louis, County of, Missouri
3284. St. Peters, City of, Missouri
3285. Ste. Genevieve, County of, Missouri
3286. Stoddard, County of, Missouri
3287. Stone, County of, Missouri
3288. Taney, County of, Missouri
3289. Texas, County of, Missouri
3290. Town and Country, City of, Missouri
3291. Troy, City of, Missouri
3292. Union, City of, Missouri
3293. University City, City of, Missouri
3294. Vernon, County of, Missouri
3295. Warren, County of, Missouri
3296. Warrensburg, City of, Missouri
3297. Washington, City of, Missouri
3298. Washington, County of, Missouri
3299. Wayne, County of, Missouri
3300. Webb City, City of, Missouri
3301. Webster, County of, Missouri
3302. Webster Groves, City of, Missouri
3303. Wentzville, City of, Missouri
3304. West Plains, City of, Missouri
3305. Wildwood, City of, Missouri
3306. Wright, County of, Missouri
3307. Big Horn, County of, Montana
3308. Billings, City of, Montana
3309. Bozeman, City of, Montana
3310. Butte-Silver Bow, Montana

3311. Carbon, County of, Montana
3312. Cascade, County of, Montana
3313. Custer, County of, Montana
3314. Fergus, County of, Montana
3315. Flathead, County of, Montana
3316. Gallatin, County of, Montana
3317. Glacier, County of, Montana
3318. Great Falls, City of, Montana
3319. Helena, City of, Montana
3320. Hill, County of, Montana
3321. Jefferson, County of, Montana
3322. Kalispell, City of, Montana
3323. Lake, County of, Montana
3324. Lewis and Clark, County of, Montana
3325. Lincoln, County of, Montana
3326. Missoula, City of, Montana
3327. Missoula, County of, Montana
3328. Park, County of, Montana
3329. Ravalli, County of, Montana
3330. Richland, County of, Montana
3331. Roosevelt, County of, Montana
3332. Sanders, County of, Montana
3333. Yellowstone, County of, Montana
3334. Adams, County of, Nebraska
3335. Beatrice, City of, Nebraska
3336. Bellevue, City of, Nebraska
3337. Box Butte, County of, Nebraska
3338. Buffalo, County of, Nebraska
3339. Cass, County of, Nebraska
3340. Colfax, County of, Nebraska
3341. Columbus, City of, Nebraska
3342. Custer, County of, Nebraska
3343. Dakota, County of, Nebraska
3344. Dawson, County of, Nebraska
3345. Dodge, County of, Nebraska
3346. Douglas, County of, Nebraska
3347. Fremont, City of, Nebraska
3348. Gage, County of, Nebraska
3349. Grand Island, City of, Nebraska
3350. Hall, County of, Nebraska
3351. Hastings, City of, Nebraska
3352. Holt, County of, Nebraska
3353. Kearney, City of, Nebraska
3354. La Vista, City of, Nebraska
3355. Lancaster, County of, Nebraska
3356. Lexington, City of, Nebraska
3357. Lincoln, City of, Nebraska
3358. Lincoln, County of, Nebraska
3359. Madison, County of, Nebraska
3360. Norfolk, City of, Nebraska
3361. North Platte, City of, Nebraska

3362. Omaha, City of, Nebraska
3363. Otoe, County of, Nebraska
3364. Papillion, City of, Nebraska
3365. Platte, County of, Nebraska
3366. Red Willow, County of, Nebraska
3367. Saline, County of, Nebraska
3368. Sarpy, County of, Nebraska
3369. Saunders, County of, Nebraska
3370. Scotts Bluff, County of, Nebraska
3371. Scottsbluff, City of, Nebraska
3372. Seward, County of, Nebraska
3373. South Sioux City, City of, Nebraska
3374. Washington, County of, Nebraska
3375. York, County of, Nebraska
3376. Boulder City, City of, Nevada
3377. Carson, City of, Nevada
3378. Churchill, County of, Nevada
3379. Clark, County of, Nevada
3380. Douglas, County of, Nevada
3381. Elko, City of, Nevada
3382. Elko, County of, Nevada
3383. Fernley, City of, Nevada
3384. Henderson, City of, Nevada
3385. Humboldt, County of, Nevada
3386. Las Vegas, City of, Nevada
3387. Lyon, County of, Nevada
3388. Mesquite, City of, Nevada
3389. North Las Vegas, City of, Nevada
3390. Nye, County of, Nevada
3391. Reno, City of, Nevada
3392. Sparks, City of, Nevada
3393. Washoe, County of, Nevada
3394. Amherst, Town of, New Hampshire
3395. Bedford, Town of, New Hampshire
3396. Belknap, County of, New Hampshire
3397. Berlin, City of, New Hampshire
3398. Carroll, County of, New Hampshire
3399. Cheshire, County of, New Hampshire
3400. Claremont, City of, New Hampshire
3401. Concord, City of, New Hampshire
3402. Conway, Town of, New Hampshire
3403. Coos, County of, New Hampshire
3404. Derry, Town of, New Hampshire
3405. Dover, City of, New Hampshire
3406. Durham, Town of, New Hampshire
3407. Exeter, Town of, New Hampshire
3408. Goffstown, Town of, New Hampshire
3409. Grafton, County of, New Hampshire
3410. Hampton, Town of, New Hampshire
3411. Hanover, Town of, New Hampshire
3412. Hillsborough, County of, New Hampshire

3413. Hooksett, Town of, New Hampshire
3414. Hudson, Town of, New Hampshire
3415. Keene, City of, New Hampshire
3416. Laconia, City of, New Hampshire
3417. Lebanon, City of, New Hampshire
3418. Londonderry, Town of, New Hampshire
3419. Manchester, City of, New Hampshire
3420. Merrimack, County of, New Hampshire
3421. Merrimack, Town of, New Hampshire
3422. Milford, Town of, New Hampshire
3423. Nashua, City of, New Hampshire
3424. Pelham, Town of, New Hampshire
3425. Portsmouth, City of, New Hampshire
3426. Raymond, Town of, New Hampshire
3427. Rochester, City of, New Hampshire
3428. Rockingham, County of, New Hampshire
3429. Salem, Town of, New Hampshire
3430. Somersworth, City of, New Hampshire
3431. Strafford, County of, New Hampshire
3432. Sullivan, County of, New Hampshire
3433. Windham, Town of, New Hampshire
3434. Aberdeen, Township of, New Jersey
3435. Asbury Park, City of, New Jersey
3436. Atlantic City, City of, New Jersey
3437. Atlantic, County of, New Jersey
3438. Barnegat, Township of, New Jersey
3439. Bayonne, City of, New Jersey
3440. Beachwood, Borough of, New Jersey
3441. Belleville, Township of, New Jersey
3442. Bellmawr, Borough of, New Jersey
3443. Bergen, County of, New Jersey
3444. Bergenfield, Borough of, New Jersey
3445. Berkeley Heights, Township of, New Jersey
3446. Berkeley, Township of, New Jersey
3447. Bernards, Township of, New Jersey
3448. Bloomfield, Township of, New Jersey
3449. Bordentown, Township of, New Jersey
3450. Bound Brook, Borough of, New Jersey
3451. Branchburg, Township of, New Jersey
3452. Brick, Township of, New Jersey
3453. Bridgeton, City of, New Jersey
3454. Bridgewater, Township of, New Jersey
3455. Burlington, County of, New Jersey
3456. Burlington, Township of, New Jersey
3457. Camden, City of, New Jersey
3458. Camden, County of, New Jersey
3459. Cape May, County of, New Jersey
3460. Carteret, Borough of, New Jersey
3461. Cedar Grove, Township of, New Jersey
3462. Chatham, Township of, New Jersey
3463. Cherry Hill, Township of, New Jersey

3464. Cinnaminson, Township of, New Jersey
3465. City of Orange, Township of, New Jersey
3466. Clark, Township of, New Jersey
3467. Cliffside Park, Borough of, New Jersey
3468. Clifton, City of, New Jersey
3469. Clinton, Township of, New Jersey
3470. Collingswood, Borough of, New Jersey
3471. Cranford, Township of, New Jersey
3472. Cumberland, County of, New Jersey
3473. Delran, Township of, New Jersey
3474. Denville, Township of, New Jersey
3475. Deptford, Township of, New Jersey
3476. Dover, Town of, New Jersey
3477. Dumont, Borough of, New Jersey
3478. East Brunswick, Township of, New Jersey
3479. East Greenwich, Township of, New Jersey
3480. East Hanover, Township of, New Jersey
3481. East Orange, City of, New Jersey
3482. East Windsor, Township of, New Jersey
3483. Eatontown, Borough of, New Jersey
3484. Edgewater, Borough of, New Jersey
3485. Edison, Township of, New Jersey
3486. Egg Harbor, Township of, New Jersey
3487. Elizabeth, City of, New Jersey
3488. Elmwood Park, Borough of, New Jersey
3489. Englewood, City of, New Jersey
3490. Essex, County of, New Jersey
3491. Evesham, Township of, New Jersey
3492. Ewing, Township of, New Jersey
3493. Fair Lawn, Borough of, New Jersey
3494. Fairview, Borough of, New Jersey
3495. Florence, Township of, New Jersey
3496. Florham Park, Borough of, New Jersey
3497. Fort Lee, Borough of, New Jersey
3498. Franklin Lakes, Borough of, New Jersey
3499. Franklin, Township of, New Jersey
3500. Freehold, Borough of, New Jersey
3501. Freehold, Township of, New Jersey
3502. Galloway, Township of, New Jersey
3503. Garfield, City of, New Jersey
3504. Glassboro, Borough of, New Jersey
3505. Glen Rock, Borough of, New Jersey
3506. Gloucester City, City of, New Jersey
3507. Gloucester, County of, New Jersey
3508. Gloucester, Township of, New Jersey
3509. Guttenberg, Town of, New Jersey
3510. Hackensack, City of, New Jersey
3511. Haddon, Township of, New Jersey
3512. Haddonfield, Borough of, New Jersey
3513. Hamilton, Township of, New Jersey
3514. Hammonton, Town of, New Jersey

3515. Hanover, Township of, New Jersey
3516. Harrison, Town of, New Jersey
3517. Harrison, Township of, New Jersey
3518. Hasbrouck Heights, Borough of, New Jersey
3519. Hawthorne, Borough of, New Jersey
3520. Hazlet, Township of, New Jersey
3521. Highland Park, Borough of, New Jersey
3522. Hillsborough, Township of, New Jersey
3523. Hillsdale, Borough of, New Jersey
3524. Hillside, Township of, New Jersey
3525. Hoboken, City of, New Jersey
3526. Holmdel, Township of, New Jersey
3527. Hopatcong, Borough of, New Jersey
3528. Hopewell, Township of, New Jersey
3529. Howell, Township of, New Jersey
3530. Hudson, County of, New Jersey
3531. Hunterdon, County of, New Jersey
3532. Irvington, Township of, New Jersey
3533. Jackson, Township of, New Jersey
3534. Jefferson, Township of, New Jersey
3535. Jersey City, City of, New Jersey
3536. Kearny, Town of, New Jersey
3537. Lacey, Township of, New Jersey
3538. Lakewood, Township of, New Jersey
3539. Lawrence, Township of, New Jersey
3540. Lincoln Park, Borough of, New Jersey
3541. Linden, City of, New Jersey
3542. Lindenwold, Borough of, New Jersey
3543. Little Egg Harbor, Township of, New Jersey
3544. Little Falls, Township of, New Jersey
3545. Little Ferry, Borough of, New Jersey
3546. Livingston, Township of, New Jersey
3547. Lodi, Borough of, New Jersey
3548. Long Branch, City of, New Jersey
3549. Lower, Township of, New Jersey
3550. Lumberton, Township of, New Jersey
3551. Lyndhurst, Township of, New Jersey
3552. Madison, Borough of, New Jersey
3553. Mahwah, Township of, New Jersey
3554. Manalapan, Township of, New Jersey
3555. Manchester, Township of, New Jersey
3556. Mantua, Township of, New Jersey
3557. Manville, Borough of, New Jersey
3558. Maple Shade, Township of, New Jersey
3559. Maplewood, Township of, New Jersey
3560. Marlboro, Township of, New Jersey
3561. Medford, Township of, New Jersey
3562. Mercer, County of, New Jersey
3563. Metuchen, Borough of, New Jersey
3564. Middle, Township of, New Jersey
3565. Middlesex, Borough of, New Jersey

3566. Middlesex, County of, New Jersey
3567. Middletown, Township of, New Jersey
3568. Millburn, Township of, New Jersey
3569. Millstone, Township of, New Jersey
3570. Millville, City of, New Jersey
3571. Monmouth, County of, New Jersey
3572. Monroe, Township of, New Jersey
3573. Montclair, Township of, New Jersey
3574. Montgomery, Township of, New Jersey
3575. Montville, Township of, New Jersey
3576. Moorestown, Township of, New Jersey
3577. Morris, County of, New Jersey
3578. Morris, Township of, New Jersey
3579. Morristown, Town of, New Jersey
3580. Mount Laurel, Township of, New Jersey
3581. Mount Olive, Township of, New Jersey
3582. Neptune, Township of, New Jersey
3583. New Brunswick, City of, New Jersey
3584. New Milford, Borough of, New Jersey
3585. New Providence, Borough of, New Jersey
3586. Newark, City of, New Jersey
3587. North Arlington, Borough of, New Jersey
3588. North Bergen, Township of, New Jersey
3589. North Brunswick, Township of, New Jersey
3590. North Plainfield, Borough of, New Jersey
3591. Nutley, Township of, New Jersey
3592. Oakland, Borough of, New Jersey
3593. Ocean City, City of, New Jersey
3594. Ocean, County of, New Jersey
3595. Ocean, Township of, New Jersey
3596. Old Bridge, Township of, New Jersey
3597. Palisades Park, Borough of, New Jersey
3598. Paramus, Borough of, New Jersey
3599. Parsippany-Troy Hills, Township of, New Jersey
3600. Passaic, City of, New Jersey
3601. Passaic, County of, New Jersey
3602. Paterson, City of, New Jersey
3603. Pemberton, Township of, New Jersey
3604. Pennsauken, Township of, New Jersey
3605. Pennsville, Township of, New Jersey
3606. Pequannock, Township of, New Jersey
3607. Perth Amboy, City of, New Jersey
3608. Phillipsburg, Town of, New Jersey
3609. Pine Hill, Borough of, New Jersey
3610. Piscataway, Township of, New Jersey
3611. Plainfield, City of, New Jersey
3612. Plainsboro, Township of, New Jersey
3613. Pleasantville, City of, New Jersey
3614. Point Pleasant, Borough of, New Jersey
3615. Pompton Lakes, Borough of, New Jersey
3616. Princeton, New Jersey

3617. Rahway, City of, New Jersey
3618. Ramsey, Borough of, New Jersey
3619. Randolph, Township of, New Jersey
3620. Raritan, Township of, New Jersey
3621. Readington, Township of, New Jersey
3622. Red Bank, Borough of, New Jersey
3623. Ridgefield, Borough of, New Jersey
3624. Ridgefield Park, Village of, New Jersey
3625. Ridgewood, Village of, New Jersey
3626. Ringwood, Borough of, New Jersey
3627. River Edge, Borough of, New Jersey
3628. Robbinsville, Township of, New Jersey
3629. Rockaway, Township of, New Jersey
3630. Roselle, Borough of, New Jersey
3631. Roselle Park, Borough of, New Jersey
3632. Roxbury, Township of, New Jersey
3633. Rutherford, Borough of, New Jersey
3634. Saddle Brook, Township of, New Jersey
3635. Salem, County of, New Jersey
3636. Sayreville, Borough of, New Jersey
3637. Scotch Plains, Township of, New Jersey
3638. Secaucus, Town of, New Jersey
3639. Somers Point, City of, New Jersey
3640. Somerset, County of, New Jersey
3641. Somerville, Borough of, New Jersey
3642. South Brunswick, Township of, New Jersey
3643. South Orange Village, Township of, New Jersey
3644. South Plainfield, Borough of, New Jersey
3645. South River, Borough of, New Jersey
3646. Southampton, Township of, New Jersey
3647. Sparta, Township of, New Jersey
3648. Springfield, Township of, New Jersey
3649. Stafford, Township of, New Jersey
3650. Summit, City of, New Jersey
3651. Sussex, County of, New Jersey
3652. Teaneck, Township of, New Jersey
3653. Tenafly, Borough of, New Jersey
3654. Tinton Falls, Borough of, New Jersey
3655. Toms River, Township of, New Jersey
3656. Totowa, Borough of, New Jersey
3657. Trenton, City of, New Jersey
3658. Union City, City of, New Jersey
3659. Union, County of, New Jersey
3660. Union, Township of, New Jersey
3661. Upper, Township of, New Jersey
3662. Vernon, Township of, New Jersey
3663. Verona, Township of, New Jersey
3664. Vineland, City of, New Jersey
3665. Voorhees, Township of, New Jersey
3666. Waldwick, Borough of, New Jersey
3667. Wall, Township of, New Jersey

3668. Wallington, Borough of, New Jersey
3669. Wanaque, Borough of, New Jersey
3670. Wantage, Township of, New Jersey
3671. Warren, County of, New Jersey
3672. Warren, Township of, New Jersey
3673. Washington, Township of, New Jersey
3674. Waterford, Township of, New Jersey
3675. Wayne, Township of, New Jersey
3676. Weehawken, Township of, New Jersey
3677. West Caldwell, Township of, New Jersey
3678. West Deptford, Township of, New Jersey
3679. West Milford, Township of, New Jersey
3680. West New York, Town of, New Jersey
3681. West Orange, Township of, New Jersey
3682. West Windsor, Township of, New Jersey
3683. Westfield, Town of, New Jersey
3684. Westwood, Borough of, New Jersey
3685. Willingboro, Township of, New Jersey
3686. Winslow, Township of, New Jersey
3687. Woodbridge, Township of, New Jersey
3688. Woodland Park, Borough of, New Jersey
3689. Woolwich, Township of, New Jersey
3690. Wyckoff, Township of, New Jersey
3691. Albany, City of, New York
3692. Albany, County of, New York
3693. Allegany, County of, New York
3694. Amherst, Town of, New York
3695. Amsterdam, City of, New York
3696. Arcadia, Town of, New York
3697. Auburn, City of, New York
3698. Aurora, Town of, New York
3699. Babylon, Town of, New York
3700. Babylon, Village of, New York
3701. Ballston, Town of, New York
3702. Batavia, City of, New York
3703. Bath, Town of, New York
3704. Beacon, City of, New York
3705. Bedford, Town of, New York
3706. Beekman, Town of, New York
3707. Bethlehem, Town of, New York
3708. Binghamton, City of, New York
3709. Blooming Grove, Town of, New York
3710. Brighton, Town of, New York
3711. Bronx, County of, New York
3712. Brookhaven, Town of, New York
3713. Broome, County of, New York
3714. Brunswick, Town of, New York
3715. Buffalo, City of, New York
3716. Camillus, Town of, New York
3717. Canandaigua, City of, New York
3718. Canandaigua, Town of, New York

3719. Canton, Town of, New York
3720. Carmel, Town of, New York
3721. Catskill, Town of, New York
3722. Cattaraugus, County of, New York
3723. Cayuga, County of, New York
3724. Chautauqua, County of, New York
3725. Cheektowaga, Town of, New York
3726. Chemung, County of, New York
3727. Chenango, County of, New York
3728. Chenango, Town of, New York
3729. Chester, Town of, New York
3730. Chili, Town of, New York
3731. Cicero, Town of, New York
3732. Clarence, Town of, New York
3733. Clarkstown, Town of, New York
3734. Clay, Town of, New York
3735. Clifton Park, Town of, New York
3736. Clinton, County of, New York
3737. Cohoes, City of, New York
3738. Colonie, Town of, New York
3739. Columbia, County of, New York
3740. Corning, City of, New York
3741. Cornwall, Town of, New York
3742. Cortland, City of, New York
3743. Cortland, County of, New York
3744. Cortlandt, Town of, New York
3745. De Witt, Town of, New York
3746. Delaware, County of, New York
3747. Depew, Village of, New York
3748. Dobbs Ferry, Village of, New York
3749. Dryden, Town of, New York
3750. Dunkirk, City of, New York
3751. Dutchess, County of, New York
3752. East Fishkill, Town of, New York
3753. East Greenbush, Town of, New York
3754. East Hampton, Town of, New York
3755. Eastchester, Town of, New York
3756. Elma, Town of, New York
3757. Elmira, City of, New York
3758. Endicott, Village of, New York
3759. Erie, County of, New York
3760. Essex, County of, New York
3761. Evans, Town of, New York
3762. Fallsburg, Town of, New York
3763. Farmington, Town of, New York
3764. Fishkill, Town of, New York
3765. Floral Park, Village of, New York
3766. Franklin, County of, New York
3767. Fredonia, Village of, New York
3768. Freeport, Village of, New York
3769. Fulton, City of, New York

3770. Fulton, County of, New York
3771. Garden City, Village of, New York
3772. Gates, Town of, New York
3773. Geddes, Town of, New York
3774. Genesee, County of, New York
3775. Geneseo, Town of, New York
3776. Geneva, City of, New York
3777. German Flatts, Town of, New York
3778. Glen Cove, City of, New York
3779. Glens Falls, City of, New York
3780. Glenville, Town of, New York
3781. Gloversville, City of, New York
3782. Goshen, Town of, New York
3783. Grand Island, Town of, New York
3784. Great Neck, Village of, New York
3785. Greece, Town of, New York
3786. Greenburgh, Town of, New York
3787. Greene, County of, New York
3788. Guilderland, Town of, New York
3789. Halfmoon, Town of, New York
3790. Hamburg, Town of, New York
3791. Harrison, Town of, New York
3792. Harrison, Village of, New York
3793. Haverstraw, Town of, New York
3794. Haverstraw, Village of, New York
3795. Hempstead, Town of, New York
3796. Hempstead, Village of, New York
3797. Henrietta, Town of, New York
3798. Herkimer, County of, New York
3799. Highlands, Town of, New York
3800. Horseheads, Town of, New York
3801. Huntington, Town of, New York
3802. Hyde Park, Town of, New York
3803. Irondequoit, Town of, New York
3804. Islip, Town of, New York
3805. Ithaca, City of, New York
3806. Ithaca, Town of, New York
3807. Jamestown, City of, New York
3808. Jefferson, County of, New York
3809. Johnson City, Village of, New York
3810. Kenmore, Village of, New York
3811. Kent, Town of, New York
3812. Kings, County of, New York
3813. Kingsbury, Town of, New York
3814. Kingston, City of, New York
3815. Kirkland, Town of, New York
3816. Kiryas Joel, Village of, New York
3817. La Grange, Town of, New York
3818. Lackawanna, City of, New York
3819. Lake Grove, Village of, New York
3820. Lancaster, Town of, New York

3821. Lancaster, Village of, New York
3822. Lansing, Town of, New York
3823. Le Ray, Town of, New York
3824. Lewis, County of, New York
3825. Lewisboro, Town of, New York
3826. Lewiston, Town of, New York
3827. Lindenhurst, Village of, New York
3828. Livingston, County of, New York
3829. Lloyd, Town of, New York
3830. Lockport, City of, New York
3831. Lockport, Town of, New York
3832. Long Beach, City of, New York
3833. Lynbrook, Village of, New York
3834. Lysander, Town of, New York
3835. Madison, County of, New York
3836. Malone, Town of, New York
3837. Malta, Town of, New York
3838. Mamakating, Town of, New York
3839. Mamaroneck, Town of, New York
3840. Mamaroneck, Village of, New York
3841. Manlius, Town of, New York
3842. Massapequa Park, Village of, New York
3843. Massena, Town of, New York
3844. Massena, Village of, New York
3845. Middletown, City of, New York
3846. Milton, Town of, New York
3847. Mineola, Village of, New York
3848. Monroe, County of, New York
3849. Monroe, Town of, New York
3850. Montgomery, County of, New York
3851. Montgomery, Town of, New York
3852. Moreau, Town of, New York
3853. Mount Kisco, Village of/ Town of, New York
3854. Mount Pleasant, Town of, New York
3855. Mount Vernon, City of, New York
3856. Nassau, County of, New York
3857. New Castle, Town of, New York
3858. New Hartford, Town of, New York
3859. New Paltz, Town of, New York
3860. New Rochelle, City of, New York
3861. New Windsor, Town of, New York
3862. New York, City of, New York
3863. New York, County of, New York
3864. Newburgh, City of, New York
3865. Newburgh, Town of, New York
3866. Niagara, County of, New York
3867. Niagara Falls, City of, New York
3868. Niskayuna, Town of, New York
3869. North Castle, Town of, New York
3870. North Greenbush, Town of, New York
3871. North Hempstead, Town of, New York

3872. North Tonawanda, City of, New York
3873. Ogden, Town of, New York
3874. Ogdensburg, City of, New York
3875. Olean, City of, New York
3876. Oneida, City of, New York
3877. Oneida, County of, New York
3878. Oneonta, City of, New York
3879. Onondaga, County of, New York
3880. Onondaga, Town of, New York
3881. Ontario, County of, New York
3882. Ontario, Town of, New York
3883. Orange, County of, New York
3884. Orangetown, Town of, New York
3885. Orchard Park, Town of, New York
3886. Orleans, County of, New York
3887. Ossining, Town of, New York
3888. Ossining, Village of, New York
3889. Oswego, City of, New York
3890. Oswego, County of, New York
3891. Otsego, County of, New York
3892. Owego, Town of, New York
3893. Oyster Bay, Town of, New York
3894. Palm Tree, Town of, New York
3895. Parma, Town of, New York
3896. Patchogue, Village of, New York
3897. Patterson, Town of, New York
3898. Peekskill, City of, New York
3899. Pelham, Town of, New York
3900. Penfield, Town of, New York
3901. Perinton, Town of, New York
3902. Pittsford, Town of, New York
3903. Plattekill, Town of, New York
3904. Plattsburgh, City of, New York
3905. Plattsburgh, Town of, New York
3906. Pomfret, Town of, New York
3907. Port Chester, Village of, New York
3908. Potsdam, Town of, New York
3909. Poughkeepsie, City of, New York
3910. Poughkeepsie, Town of, New York
3911. Putnam, County of, New York
3912. Putnam Valley, Town of, New York
3913. Queens, County of, New York
3914. Queensbury, Town of, New York
3915. Ramapo, Town of, New York
3916. Red Hook, Town of, New York
3917. Rensselaer, County of, New York
3918. Richmond, County of, New York
3919. Riverhead, Town of, New York
3920. Rochester, City of, New York
3921. Rockland, County of, New York
3922. Rockville Centre, Village of, New York

3923. Rome, City of, New York
3924. Rotterdam, Town of, New York
3925. Rye, City of, New York
3926. Rye, Town of, New York
3927. Salina, Town of, New York
3928. Saratoga, County of, New York
3929. Saratoga Springs, City of, New York
3930. Saugerties, Town of, New York
3931. Scarsdale, Village of/ Scarsdale, Town of, New York
3932. Schenectady, City of, New York
3933. Schenectady, County of, New York
3934. Schodack, Town of, New York
3935. Schoharie, County of, New York
3936. Schuyler, County of, New York
3937. Seneca, County of, New York
3938. Shawangunk, Town of, New York
3939. Sleepy Hollow, Village of, New York
3940. Smithtown, Town of, New York
3941. Somers, Town of, New York
3942. Southampton, Town of, New York
3943. Southeast, Town of, New York
3944. Southold, Town of, New York
3945. Spring Valley, Village of, New York
3946. St. Lawrence, County of, New York
3947. Steuben, County of, New York
3948. Stony Point, Town of, New York
3949. Suffern, Village of, New York
3950. Suffolk, County of, New York
3951. Sullivan, County of, New York
3952. Sullivan, Town of, New York
3953. Sweden, Town of, New York
3954. Syracuse, City of, New York
3955. Tarrytown, Village of, New York
3956. Thompson, Town of, New York
3957. Tioga, County of, New York
3958. Tompkins, County of, New York
3959. Tonawanda, City of, New York
3960. Tonawanda, Town of, New York
3961. Troy, City of, New York
3962. Ulster, County of, New York
3963. Ulster, Town of, New York
3964. Union, Town of, New York
3965. Utica, City of, New York
3966. Valley Stream, Village of, New York
3967. Van Buren, Town of, New York
3968. Vestal, Town of, New York
3969. Victor, Town of, New York
3970. Wallkill, Town of, New York
3971. Wappinger, Town of, New York
3972. Warren, County of, New York
3973. Warwick, Town of, New York

3974. Washington, County of, New York
3975. Watertown, City of, New York
3976. Wawarsing, Town of, New York
3977. Wayne, County of, New York
3978. Webster, Town of, New York
3979. West Haverstraw, Village of, New York
3980. West Seneca, Town of, New York
3981. Westbury, Village of, New York
3982. Westchester, County of, New York
3983. Wheatfield, Town of, New York
3984. White Plains, City of, New York
3985. Whitestown, Town of, New York
3986. Wilton, Town of, New York
3987. Woodbury, Town of, New York
3988. Woodbury, Village of, New York
3989. Wyoming, County of, New York
3990. Yates, County of, New York
3991. Yonkers, City of, New York
3992. Yorktown, Town of, New York
3993. Alamance, County of, North Carolina
3994. Albemarle, City of, North Carolina
3995. Alexander, County of, North Carolina
3996. Alleghany, County of, North Carolina
3997. Anson, County of, North Carolina
3998. Apex, Town of, North Carolina
3999. Archdale, City of, North Carolina
4000. Ashe, County of, North Carolina
4001. Asheboro, City of, North Carolina
4002. Asheville, City of, North Carolina
4003. Avery, County of, North Carolina
4004. Beaufort, County of, North Carolina
4005. Belmont, City of, North Carolina
4006. Bertie, County of, North Carolina
4007. Bladen, County of, North Carolina
4008. Boone, Town of, North Carolina
4009. Brunswick, County of, North Carolina
4010. Buncombe, County of, North Carolina
4011. Burke, County of, North Carolina
4012. Burlington, City of, North Carolina
4013. Cabarrus, County of, North Carolina
4014. Caldwell, County of, North Carolina
4015. Camden, County of, North Carolina
4016. Carrboro, Town of, North Carolina
4017. Carteret, County of, North Carolina
4018. Cary, Town of, North Carolina
4019. Caswell, County of, North Carolina
4020. Catawba, County of, North Carolina
4021. Chapel Hill, Town of, North Carolina
4022. Charlotte, City of, North Carolina
4023. Chatham, County of, North Carolina
4024. Cherokee, County of, North Carolina

4025. Chowan, County of, North Carolina
4026. Clay, County of, North Carolina
4027. Clayton, Town of, North Carolina
4028. Clemmons, Village of, North Carolina
4029. Cleveland, County of, North Carolina
4030. Columbus, County of, North Carolina
4031. Concord, City of, North Carolina
4032. Cornelius, Town of, North Carolina
4033. Craven, County of, North Carolina
4034. Cumberland, County of, North Carolina
4035. Currituck, County of, North Carolina
4036. Dare, County of, North Carolina
4037. Davidson, County of, North Carolina
4038. Davidson, Town of, North Carolina
4039. Davie, County of, North Carolina
4040. Duplin, County of, North Carolina
4041. Durham, City of, North Carolina
4042. Durham, County of, North Carolina
4043. Eden, City of, North Carolina
4044. Edgecombe, County of, North Carolina
4045. Elizabeth City, City of, North Carolina
4046. Elon, Town of, North Carolina
4047. Fayetteville, City of, North Carolina
4048. Forsyth, County of, North Carolina
4049. Franklin, County of, North Carolina
4050. Fuquay-Varina, Town of, North Carolina
4051. Garner, Town of, North Carolina
4052. Gaston, County of, North Carolina
4053. Gastonia, City of, North Carolina
4054. Gates, County of, North Carolina
4055. Goldsboro, City of, North Carolina
4056. Graham, City of, North Carolina
4057. Granville, County of, North Carolina
4058. Greene, County of, North Carolina
4059. Greensboro, City of, North Carolina
4060. Greenville, City of, North Carolina
4061. Guilford, County of, North Carolina
4062. Halifax, County of, North Carolina
4063. Harnett, County of, North Carolina
4064. Harrisburg, Town of, North Carolina
4065. Havelock, City of, North Carolina
4066. Haywood, County of, North Carolina
4067. Henderson, City of, North Carolina
4068. Henderson, County of, North Carolina
4069. Hendersonville, City of, North Carolina
4070. Hertford, County of, North Carolina
4071. Hickory, City of, North Carolina
4072. High Point, City of, North Carolina
4073. Hoke, County of, North Carolina
4074. Holly Springs, Town of, North Carolina
4075. Hope Mills, Town of, North Carolina

4076. Huntersville, Town of, North Carolina
4077. Indian Trail, Town of, North Carolina
4078. Iredell, County of, North Carolina
4079. Jackson, County of, North Carolina
4080. Jacksonville, City of, North Carolina
4081. Johnston, County of, North Carolina
4082. Kannapolis, City of, North Carolina
4083. Kernersville, Town of, North Carolina
4084. Kings Mountain, City of, North Carolina
4085. Kinston, City of, North Carolina
4086. Knightdale, Town of, North Carolina
4087. Laurinburg, City of, North Carolina
4088. Lee, County of, North Carolina
4089. Leland, Town of, North Carolina
4090. Lenoir, City of, North Carolina
4091. Lenoir, County of, North Carolina
4092. Lewisville, Town of, North Carolina
4093. Lexington, City of, North Carolina
4094. Lincoln, County of, North Carolina
4095. Lincolnton, City of, North Carolina
4096. Lumberton, City of, North Carolina
4097. Macon, County of, North Carolina
4098. Madison, County of, North Carolina
4099. Martin, County of, North Carolina
4100. Matthews, Town of, North Carolina
4101. McDowell, County of, North Carolina
4102. Mebane, City of, North Carolina
4103. Mecklenburg, County of, North Carolina
4104. Mint Hill, Town of, North Carolina
4105. Mitchell, County of, North Carolina
4106. Monroe, City of, North Carolina
4107. Montgomery, County of, North Carolina
4108. Moore, County of, North Carolina
4109. Mooresville, Town of, North Carolina
4110. Morganton, City of, North Carolina
4111. Morrisville, Town of, North Carolina
4112. Mount Airy, City of, North Carolina
4113. Mount Holly, City of, North Carolina
4114. Nash, County of, North Carolina
4115. New Bern, City of, North Carolina
4116. New Hanover, County of, North Carolina
4117. Newton, City of, North Carolina
4118. Northampton, County of, North Carolina
4119. Onslow, County of, North Carolina
4120. Orange, County of, North Carolina
4121. Pamlico, County of, North Carolina
4122. Pasquotank, County of, North Carolina
4123. Pender, County of, North Carolina
4124. Perquimans, County of, North Carolina
4125. Person, County of, North Carolina
4126. Pinehurst, Village of, North Carolina

4127. Pitt, County of, North Carolina
4128. Polk, County of, North Carolina
4129. Raleigh, City of, North Carolina
4130. Randolph, County of, North Carolina
4131. Reidsville, City of, North Carolina
4132. Richmond, County of, North Carolina
4133. Roanoke Rapids, City of, North Carolina
4134. Robeson, County of, North Carolina
4135. Rockingham, County of, North Carolina
4136. Rocky Mount, City of, North Carolina
4137. Rowan, County of, North Carolina
4138. Rutherford, County of, North Carolina
4139. Salisbury, City of, North Carolina
4140. Sampson, County of, North Carolina
4141. Sanford, City of, North Carolina
4142. Scotland, County of, North Carolina
4143. Shelby, City of, North Carolina
4144. Smithfield, Town of, North Carolina
4145. Southern Pines, Town of, North Carolina
4146. Spring Lake, Town of, North Carolina
4147. Stallings, Town of, North Carolina
4148. Stanly, County of, North Carolina
4149. Statesville, City of, North Carolina
4150. Stokes, County of, North Carolina
4151. Summerfield, Town of, North Carolina
4152. Surry, County of, North Carolina
4153. Swain, County of, North Carolina
4154. Tarboro, Town of, North Carolina
4155. Thomasville, City of, North Carolina
4156. Transylvania, County of, North Carolina
4157. Union, County of, North Carolina
4158. Vance, County of, North Carolina
4159. Wake, County of, North Carolina
4160. Wake Forest, Town of, North Carolina
4161. Warren, County of, North Carolina
4162. Washington, County of, North Carolina
4163. Watauga, County of, North Carolina
4164. Waxhaw, Town of, North Carolina
4165. Wayne, County of, North Carolina
4166. Waynesville, Town of, North Carolina
4167. Weddington, Town of, North Carolina
4168. Wilkes, County of, North Carolina
4169. Wilmington, City of, North Carolina
4170. Wilson, City of, North Carolina
4171. Wilson, County of, North Carolina
4172. Winston-Salem, City of, North Carolina
4173. Yadkin, County of, North Carolina
4174. Yancey, County of, North Carolina
4175. Barnes, County of, North Dakota
4176. Bismarck, City of, North Dakota
4177. Burleigh, County of, North Dakota

4178. Cass, County of, North Dakota
4179. Dickinson, City of, North Dakota
4180. Fargo, City of, North Dakota
4181. Grand Forks, City of, North Dakota
4182. Grand Forks, County of, North Dakota
4183. Jamestown, City of, North Dakota
4184. Mandan, City of, North Dakota
4185. McKenzie, County of, North Dakota
4186. Minot, City of, North Dakota
4187. Morton, County of, North Dakota
4188. Mountrail, County of, North Dakota
4189. Ramsey, County of, North Dakota
4190. Richland, County of, North Dakota
4191. Rolette, County of, North Dakota
4192. Stark, County of, North Dakota
4193. Stutsman, County of, North Dakota
4194. Walsh, County of, North Dakota
4195. Ward, County of, North Dakota
4196. West Fargo, City of, North Dakota
4197. Williams, County of, North Dakota
4198. Williston, City of, North Dakota
4199. Adams, County of, Ohio
4200. Akron, City of, Ohio
4201. Allen, County of, Ohio
4202. Alliance, City of, Ohio
4203. American, Township of, Ohio
4204. Amherst, City of, Ohio
4205. Anderson, Township of, Ohio
4206. Ashland, City of, Ohio
4207. Ashland, County of, Ohio
4208. Ashtabula, City of, Ohio
4209. Ashtabula, County of, Ohio
4210. Ashtabula, Township of, Ohio
4211. Athens, City of, Ohio
4212. Athens, County of, Ohio
4213. Athens, Township of, Ohio
4214. Auglaize, County of, Ohio
4215. Aurora, City of, Ohio
4216. Austintown, Township of, Ohio
4217. Avon, City of, Ohio
4218. Avon Lake, City of, Ohio
4219. Bainbridge, Township of, Ohio
4220. Barberton, City of, Ohio
4221. Batavia, Township of, Ohio
4222. Bath, Township of, Ohio
4223. Bay, Village of, City of, Ohio
4224. Beachwood, City of, Ohio
4225. Beavercreek, City of, Ohio
4226. Beavercreek, Township of, Ohio
4227. Bedford, City of, Ohio
4228. Bedford Heights, City of, Ohio

4229. Bellefontaine, City of, Ohio
4230. Belmont, County of, Ohio
4231. Berea, City of, Ohio
4232. Bethel, Township of, Ohio
4233. Bexley, City of, Ohio
4234. Blue Ash, City of, Ohio
4235. Boardman, Township of, Ohio
4236. Bowling Green, City of, Ohio
4237. Brecksville, City of, Ohio
4238. Brimfield, Township of, Ohio
4239. Broadview Heights, City of, Ohio
4240. Brook Park, City of, Ohio
4241. Brooklyn, City of, Ohio
4242. Brown, County of, Ohio
4243. Brunswick, City of, Ohio
4244. Brunswick Hills, Township of, Ohio
4245. Bucyrus, City of, Ohio
4246. Butler, County of, Ohio
4247. Cambridge, City of, Ohio
4248. Cambridge, Township of, Ohio
4249. Canfield, Township of, Ohio
4250. Canton, City of, Ohio
4251. Canton, Township of, Ohio
4252. Carroll, County of, Ohio
4253. Celina, City of, Ohio
4254. Centerville, City of, Ohio
4255. Champaign, County of, Ohio
4256. Chester, Township of, Ohio
4257. Chillicothe, City of, Ohio
4258. Chippewa, Township of, Ohio
4259. Cincinnati, City of, Ohio
4260. Circleville, City of, Ohio
4261. Clark, County of, Ohio
4262. Clayton, City of, Ohio
4263. Clear Creek, Township of, Ohio
4264. Clermont, County of, Ohio
4265. Cleveland, City of, Ohio
4266. Cleveland Heights, City of, Ohio
4267. Clinton, County of, Ohio
4268. Clinton, Township of, Ohio
4269. Colerain, Township of, Ohio
4270. Columbiana, County of, Ohio
4271. Columbus, City of, Ohio
4272. Concord, Township of, Ohio
4273. Conneaut, City of, Ohio
4274. Copley, Township of, Ohio
4275. Coshocton, City of, Ohio
4276. Coshocton, County of, Ohio
4277. Coventry, Township of, Ohio
4278. Crawford, County of, Ohio
4279. Cuyahoga, County of, Ohio

4280. Cuyahoga Falls, City of, Ohio
4281. Darke, County of, Ohio
4282. Dayton, City of, Ohio
4283. Deerfield, Township of, Ohio
4284. Defiance, City of, Ohio
4285. Defiance, County of, Ohio
4286. Defiance, Township of, Ohio
4287. Delaware, City of, Ohio
4288. Delaware City, Township of, Ohio
4289. Delaware, County of, Ohio
4290. Delhi, Township of, Ohio
4291. Dover, City of, Ohio
4292. Dublin, City of, Ohio
4293. Duchouquet, Township of, Ohio
4294. East Cleveland, City of, Ohio
4295. East Liverpool, City of, Ohio
4296. Eastlake, City of, Ohio
4297. Elyria, City of, Ohio
4298. Englewood, City of, Ohio
4299. Erie, County of, Ohio
4300. Etna, Township of, Ohio
4301. Euclid, City of, Ohio
4302. Fairborn, City of, Ohio
4303. Fairfield, City of, Ohio
4304. Fairfield, County of, Ohio
4305. Fairfield, Township of, Ohio
4306. Fairview Park, City of, Ohio
4307. Falls, Township of, Ohio
4308. Fayette, County of, Ohio
4309. Findlay, City of, Ohio
4310. Forest Park, City of, Ohio
4311. Fostoria, City of, Ohio
4312. Franklin, City of, Ohio
4313. Franklin, County of, Ohio
4314. Franklin, Township of, Ohio
4315. Fremont, City of, Ohio
4316. Fulton, County of, Ohio
4317. Gahanna, City of, Ohio
4318. Gallia, County of, Ohio
4319. Garfield Heights, City of, Ohio
4320. Geauga, County of, Ohio
4321. Geneva, Township of, Ohio
4322. Genoa, Township of, Ohio
4323. Goshen, Township of, Ohio
4324. Granville, Township of, Ohio
4325. Green, City of, Ohio
4326. Green, Township of, Ohio
4327. Greene, County of, Ohio
4328. Greenville, City of, Ohio
4329. Greenville, Township of, Ohio
4330. Grove City, City of, Ohio

4331. Guernsey, County of, Ohio
4332. Hamilton, City of, Ohio
4333. Hamilton, County of, Ohio
4334. Hamilton, Township of, Ohio
4335. Hancock, County of, Ohio
4336. Hardin, County of, Ohio
4337. Harrison, City of, Ohio
4338. Harrison, County of, Ohio
4339. Harrison, Township of, Ohio
4340. Heath, City of, Ohio
4341. Henry, County of, Ohio
4342. Highland, County of, Ohio
4343. Hilliard, City of, Ohio
4344. Hocking, County of, Ohio
4345. Holmes, County of, Ohio
4346. Howland, Township of, Ohio
4347. Hubbard, Township of, Ohio
4348. Huber Heights, City of, Ohio
4349. Hudson, City of, Ohio
4350. Huron, County of, Ohio
4351. Huron, Township of, Ohio
4352. Ironton, City of, Ohio
4353. Jackson, County of, Ohio
4354. Jackson, Township of, Ohio
4355. Jefferson, County of, Ohio
4356. Jefferson, Township of, Ohio
4357. Kent, City of, Ohio
4358. Kettering, City of, Ohio
4359. Knox, County of, Ohio
4360. Lake, County of, Ohio
4361. Lake, Township of, Ohio
4362. Lakewood, City of, Ohio
4363. Lancaster, City of, Ohio
4364. Lancaster City, Township of, Ohio
4365. Lawrence, County of, Ohio
4366. Lawrence, Township of, Ohio
4367. Lebanon, City of, Ohio
4368. Lemon, Township of, Ohio
4369. Liberty, Township of, Ohio
4370. Licking, County of, Ohio
4371. Lima, City of, Ohio
4372. Logan, County of, Ohio
4373. London, City of, Ohio
4374. Lorain, City of, Ohio
4375. Lorain, County of, Ohio
4376. Loveland, City of, Ohio
4377. Lucas, County of, Ohio
4378. Lyndhurst, City of, Ohio
4379. Macedonia, City of, Ohio
4380. Mad River, Township of, Ohio
4381. Madison, County of, Ohio

4382. Madison, Township of, Ohio
4383. Mahoning, County of, Ohio
4384. Mansfield, City of, Ohio
4385. Maple Heights, City of, Ohio
4386. Marietta, City of, Ohio
4387. Marion, City of, Ohio
4388. Marion, County of, Ohio
4389. Marion, Township of, Ohio
4390. Marysville, City of, Ohio
4391. Mason, City of, Ohio
4392. Massillon, City of, Ohio
4393. Maumee, City of, Ohio
4394. Mayfield Heights, City of, Ohio
4395. Medina, City of, Ohio
4396. Medina City, Township of, Ohio
4397. Medina, County of, Ohio
4398. Meigs, County of, Ohio
4399. Mentor, City of, Ohio
4400. Mercer, County of, Ohio
4401. Miami, County of, Ohio
4402. Miami, Township of, Ohio
4403. Miamisburg, City of, Ohio
4404. Middleburg Heights, City of, Ohio
4405. Middletown, City of, Ohio
4406. Mifflin, Township of, Ohio
4407. Monclova, Township of, Ohio
4408. Monroe, City of, Ohio
4409. Monroe, County of, Ohio
4410. Monroe, Township of, Ohio
4411. Montgomery, City of, Ohio
4412. Montgomery, County of, Ohio
4413. Montville, Township of, Ohio
4414. Moorefield, Township of, Ohio
4415. Morgan, County of, Ohio
4416. Morrow, County of, Ohio
4417. Mount Vernon, City of, Ohio
4418. Muskingum, County of, Ohio
4419. New Albany, City of, Ohio
4420. New Franklin, City of, Ohio
4421. New Philadelphia, City of, Ohio
4422. Newark, City of, Ohio
4423. Niles, City of, Ohio
4424. Noble, County of, Ohio
4425. North Canton, City of, Ohio
4426. North Olmsted, City of, Ohio
4427. North Ridgeville, City of, Ohio
4428. North Royalton, City of, Ohio
4429. Norton, City of, Ohio
4430. Norwalk, City of, Ohio
4431. Norwich, Township of, Ohio
4432. Norwood, City of, Ohio

4433. Olmsted, Township of, Ohio
4434. Orange, Township of, Ohio
4435. Oregon, City of, Ohio
4436. Ottawa, County of, Ohio
4437. Oxford, City of, Ohio
4438. Oxford, Township of, Ohio
4439. Painesville, City of, Ohio
4440. Painesville, Township of, Ohio
4441. Paris, Township of, Ohio
4442. Parma, City of, Ohio
4443. Parma Heights, City of, Ohio
4444. Pataskala, City of, Ohio
4445. Paulding, County of, Ohio
4446. Pease, Township of, Ohio
4447. Perkins, Township of, Ohio
4448. Perry, County of, Ohio
4449. Perry, Township of, Ohio
4450. Perrysburg, City of, Ohio
4451. Perrysburg, Township of, Ohio
4452. Pickaway, County of, Ohio
4453. Pickerington, City of, Ohio
4454. Pierce, Township of, Ohio
4455. Pike, County of, Ohio
4456. Piqua, City of, Ohio
4457. Plain, Township of, Ohio
4458. Pleasant, Township of, Ohio
4459. Poland, Township of, Ohio
4460. Portage, County of, Ohio
4461. Portsmouth, City of, Ohio
4462. Powell, City of, Ohio
4463. Prairie, Township of, Ohio
4464. Preble, County of, Ohio
4465. Putnam, County of, Ohio
4466. Ravenna, City of, Ohio
4467. Reading, City of, Ohio
4468. Reynoldsburg, City of, Ohio
4469. Richland, County of, Ohio
4470. Richland, Township of, Ohio
4471. Richmond Heights, City of, Ohio
4472. Riverside, City of, Ohio
4473. Rocky River, City of, Ohio
4474. Ross, County of, Ohio
4475. Sagamore Hills, Township of, Ohio
4476. Salem, City of, Ohio
4477. Sandusky, City of, Ohio
4478. Sandusky, County of, Ohio
4479. Scioto, County of, Ohio
4480. Scioto, Township of, Ohio
4481. Seneca, County of, Ohio
4482. Seven Hills, City of, Ohio
4483. Shaker Heights, City of, Ohio

4484. Sharon, Township of, Ohio
4485. Sharonville, City of, Ohio
4486. Shawnee, Township of, Ohio
4487. Shelby, County of, Ohio
4488. Sidney, City of, Ohio
4489. Solon, City of, Ohio
4490. South Euclid, City of, Ohio
4491. Springboro, City of, Ohio
4492. Springdale, City of, Ohio
4493. Springfield, City of, Ohio
4494. Springfield, Township of, Ohio
4495. St. Marys, Township of, Ohio
4496. Stark, County of, Ohio
4497. Steubenville, City of, Ohio
4498. Stow, City of, Ohio
4499. Streetsboro, City of, Ohio
4500. Strongsville, City of, Ohio
4501. Struthers, City of, Ohio
4502. Summit, County of, Ohio
4503. Sycamore, Township of, Ohio
4504. Sylvania, City of, Ohio
4505. Sylvania, Township of, Ohio
4506. Symmes, Township of, Ohio
4507. Tallmadge, City of, Ohio
4508. Tiffin, City of, Ohio
4509. Tipp City, City of, Ohio
4510. Toledo, City of, Ohio
4511. Trenton, City of, Ohio
4512. Trotwood, City of, Ohio
4513. Troy, City of, Ohio
4514. Trumbull, County of, Ohio
4515. Truro, Township of, Ohio
4516. Turtlecreek, Township of, Ohio
4517. Tuscarawas, County of, Ohio
4518. Twinsburg, City of, Ohio
4519. Union, County of, Ohio
4520. Union, Township of, Ohio
4521. University Heights, City of, Ohio
4522. Upper Arlington, City of, Ohio
4523. Upper, Township of, Ohio
4524. Urbana, City of, Ohio
4525. Urbana, Township of, Ohio
4526. Van Wert, City of, Ohio
4527. Van Wert, County of, Ohio
4528. Vandalia, City of, Ohio
4529. Vermilion, City of, Ohio
4530. Vinton, County of, Ohio
4531. Violet, Township of, Ohio
4532. Wadsworth, City of, Ohio
4533. Warren, City of, Ohio
4534. Warren, County of, Ohio

4535. Warrensville Heights, City of, Ohio
4536. Washington, County of, Ohio
4537. Washington Court House, City of, Ohio
4538. Washington, Township of, Ohio
4539. Wayne, County of, Ohio
4540. Weathersfield, Township of, Ohio
4541. West Carrollton, City of, Ohio
4542. West Chester, Township of, Ohio
4543. Westerville, City of, Ohio
4544. Westlake, City of, Ohio
4545. Whitehall, City of, Ohio
4546. Wickliffe, City of, Ohio
4547. Williams, County of, Ohio
4548. Willoughby, City of, Ohio
4549. Willowick, City of, Ohio
4550. Wilmington, City of, Ohio
4551. Wood, County of, Ohio
4552. Wooster, City of, Ohio
4553. Worthington, City of, Ohio
4554. Wyandot, County of, Ohio
4555. Xenia, City of, Ohio
4556. Youngstown, City of, Ohio
4557. Zanesville, City of, Ohio
4558. Ada, City of, Oklahoma
4559. Adair, County of, Oklahoma
4560. Altus, City of, Oklahoma
4561. Ardmore, City of, Oklahoma
4562. Atoka, County of, Oklahoma
4563. Bartlesville, City of, Oklahoma
4564. Beckham, County of, Oklahoma
4565. Bethany, City of, Oklahoma
4566. Bixby, City of, Oklahoma
4567. Broken Arrow, City of, Oklahoma
4568. Bryan, County of, Oklahoma
4569. Caddo, County of, Oklahoma
4570. Canadian, County of, Oklahoma
4571. Carter, County of, Oklahoma
4572. Cherokee, County of, Oklahoma
4573. Chickasha, City of, Oklahoma
4574. Choctaw, City of, Oklahoma
4575. Choctaw, County of, Oklahoma
4576. Claremore, City of, Oklahoma
4577. Cleveland, County of, Oklahoma
4578. Comanche, County of, Oklahoma
4579. Coweta, City of, Oklahoma
4580. Craig, County of, Oklahoma
4581. Creek, County of, Oklahoma
4582. Custer, County of, Oklahoma
4583. Del City, City of, Oklahoma
4584. Delaware, County of, Oklahoma
4585. Duncan, City of, Oklahoma

4586. Durant, City of, Oklahoma
4587. Edmond, City of, Oklahoma
4588. El Reno, City of, Oklahoma
4589. Elk City, City of, Oklahoma
4590. Enid, City of, Oklahoma
4591. Garfield, County of, Oklahoma
4592. Garvin, County of, Oklahoma
4593. Glenpool, City of, Oklahoma
4594. Grady, County of, Oklahoma
4595. Guthrie, City of, Oklahoma
4596. Guymon, City of, Oklahoma
4597. Haskell, County of, Oklahoma
4598. Hughes, County of, Oklahoma
4599. Jackson, County of, Oklahoma
4600. Jenks, City of, Oklahoma
4601. Johnston, County of, Oklahoma
4602. Kay, County of, Oklahoma
4603. Kingfisher, County of, Oklahoma
4604. Latimer, County of, Oklahoma
4605. Lawton, City of, Oklahoma
4606. Le Flore, County of, Oklahoma
4607. Lincoln, County of, Oklahoma
4608. Logan, County of, Oklahoma
4609. Love, County of, Oklahoma
4610. Marshall, County of, Oklahoma
4611. Mayes, County of, Oklahoma
4612. McAlester, City of, Oklahoma
4613. McClain, County of, Oklahoma
4614. McCurtain, County of, Oklahoma
4615. McIntosh, County of, Oklahoma
4616. Miami, City of, Oklahoma
4617. Midwest City, City of, Oklahoma
4618. Moore, City of, Oklahoma
4619. Murray, County of, Oklahoma
4620. Muskogee, City of, Oklahoma
4621. Muskogee, County of, Oklahoma
4622. Mustang, City of, Oklahoma
4623. Newcastle, City of, Oklahoma
4624. Noble, County of, Oklahoma
4625. Norman, City of, Oklahoma
4626. Nowata, County of, Oklahoma
4627. Okfuskee, County of, Oklahoma
4628. Oklahoma City, City of, Oklahoma
4629. Oklahoma, County of, Oklahoma
4630. Okmulgee, City of, Oklahoma
4631. Okmulgee, County of, Oklahoma
4632. Osage, County of, Oklahoma
4633. Ottawa, County of, Oklahoma
4634. Owasso, City of, Oklahoma
4635. Pawnee, County of, Oklahoma
4636. Payne, County of, Oklahoma

4637. Pittsburg, County of, Oklahoma
4638. Ponca City, City of, Oklahoma
4639. Pontotoc, County of, Oklahoma
4640. Pottawatomie, County of, Oklahoma
4641. Pushmataha, County of, Oklahoma
4642. Rogers, County of, Oklahoma
4643. Sand Springs, City of, Oklahoma
4644. Sapulpa, City of, Oklahoma
4645. Seminole, County of, Oklahoma
4646. Sequoyah, County of, Oklahoma
4647. Shawnee, City of, Oklahoma
4648. Stephens, County of, Oklahoma
4649. Stillwater, City of, Oklahoma
4650. Tahlequah, City of, Oklahoma
4651. Texas, County of, Oklahoma
4652. Tulsa, City of, Oklahoma
4653. Tulsa, County of, Oklahoma
4654. Wagoner, County of, Oklahoma
4655. Warr Acres, City of, Oklahoma
4656. Washington, County of, Oklahoma
4657. Washita, County of, Oklahoma
4658. Weatherford, City of, Oklahoma
4659. Woodward, City of, Oklahoma
4660. Woodward, County of, Oklahoma
4661. Yukon, City of, Oklahoma
4662. Albany, City of, Oregon
4663. Ashland, City of, Oregon
4664. Astoria, City of, Oregon
4665. Baker, County of, Oregon
4666. Beaverton, City of, Oregon
4667. Bend, City of, Oregon
4668. Benton, County of, Oregon
4669. Canby, City of, Oregon
4670. Central Point, City of, Oregon
4671. Clackamas, County of, Oregon
4672. Clatsop, County of, Oregon
4673. Columbia, County of, Oregon
4674. Coos Bay, City of, Oregon
4675. Coos, County of, Oregon
4676. Cornelius, City of, Oregon
4677. Corvallis, City of, Oregon
4678. Cottage Grove, City of, Oregon
4679. Crook, County of, Oregon
4680. Curry, County of, Oregon
4681. Dallas, City of, Oregon
4682. Deschutes, County of, Oregon
4683. Douglas, County of, Oregon
4684. Eugene, City of, Oregon
4685. Forest Grove, City of, Oregon
4686. Gladstone, City of, Oregon
4687. Grants Pass, City of, Oregon

4688. Gresham, City of, Oregon
4689. Happy Valley, City of, Oregon
4690. Hermiston, City of, Oregon
4691. Hillsboro, City of, Oregon
4692. Hood River, County of, Oregon
4693. Independence, City of, Oregon
4694. Jackson, County of, Oregon
4695. Jefferson, County of, Oregon
4696. Josephine, County of, Oregon
4697. Keizer, City of, Oregon
4698. Klamath, County of, Oregon
4699. Klamath Falls, City of, Oregon
4700. La Grande, City of, Oregon
4701. Lake Oswego, City of, Oregon
4702. Lane, County of, Oregon
4703. Lebanon, City of, Oregon
4704. Lincoln, County of, Oregon
4705. Linn, County of, Oregon
4706. Malheur, County of, Oregon
4707. Marion, County of, Oregon
4708. McMinnville, City of, Oregon
4709. Medford, City of, Oregon
4710. Milwaukie, City of, Oregon
4711. Monmouth, City of, Oregon
4712. Morrow, County of, Oregon
4713. Multnomah, County of, Oregon
4714. Newberg, City of, Oregon
4715. Newport, City of, Oregon
4716. Ontario, City of, Oregon
4717. Oregon City, City of, Oregon
4718. Pendleton, City of, Oregon
4719. Polk, County of, Oregon
4720. Portland, City of, Oregon
4721. Prineville, City of, Oregon
4722. Redmond, City of, Oregon
4723. Roseburg, City of, Oregon
4724. Salem, City of, Oregon
4725. Sandy, City of, Oregon
4726. Sherwood, City of, Oregon
4727. Silverton, City of, Oregon
4728. Springfield, City of, Oregon
4729. St. Helens, City of, Oregon
4730. The Dalles, City of, Oregon
4731. Tigard, City of, Oregon
4732. Tillamook, County of, Oregon
4733. Troutdale, City of, Oregon
4734. Tualatin, City of, Oregon
4735. Umatilla, County of, Oregon
4736. Union, County of, Oregon
4737. Wasco, County of, Oregon
4738. Washington, County of, Oregon

4739. West Linn, City of, Oregon
4740. Wilsonville, City of, Oregon
4741. Woodburn, City of, Oregon
4742. Yamhill, County of, Oregon
4743. Abington, Township of, Pennsylvania
4744. Adams, County of, Pennsylvania
4745. Adams, Township of, Pennsylvania
4746. Allegheny, County of, Pennsylvania
4747. Allentown, City of, Pennsylvania
4748. Altoona, City of, Pennsylvania
4749. Amity, Township of, Pennsylvania
4750. Antrim, Township of, Pennsylvania
4751. Armstrong, County of, Pennsylvania
4752. Aston, Township of, Pennsylvania
4753. Baldwin, Borough of, Pennsylvania
4754. Beaver, County of, Pennsylvania
4755. Bedford, County of, Pennsylvania
4756. Bensalem, Township of, Pennsylvania
4757. Berks, County of, Pennsylvania
4758. Bethel Park, Municipality of, Pennsylvania
4759. Bethlehem, City of, Pennsylvania
4760. Bethlehem, Township of, Pennsylvania
4761. Blair, County of, Pennsylvania
4762. Bloomsburg, Town of, Pennsylvania
4763. Bradford, County of, Pennsylvania
4764. Bristol, Township of, Pennsylvania
4765. Buckingham, Township of, Pennsylvania
4766. Bucks, County of, Pennsylvania
4767. Butler, City of, Pennsylvania
4768. Butler, County of, Pennsylvania
4769. Butler, Township of, Pennsylvania
4770. Caln, Township of, Pennsylvania
4771. Cambria, County of, Pennsylvania
4772. Carbon, County of, Pennsylvania
4773. Carlisle, Borough of, Pennsylvania
4774. Cecil, Township of, Pennsylvania
4775. Center, Township of, Pennsylvania
4776. Centre, County of, Pennsylvania
4777. Chambersburg, Borough of, Pennsylvania
4778. Cheltenham, Township of, Pennsylvania
4779. Chester, City of, Pennsylvania
4780. Chester, County of, Pennsylvania
4781. Chestnuthill, Township of, Pennsylvania
4782. Clarion, County of, Pennsylvania
4783. Clearfield, County of, Pennsylvania
4784. Clinton, County of, Pennsylvania
4785. Coal, Township of, Pennsylvania
4786. Coatesville, City of, Pennsylvania
4787. College, Township of, Pennsylvania
4788. Columbia, Borough of, Pennsylvania
4789. Columbia, County of, Pennsylvania

4790. Concord, Township of, Pennsylvania
4791. Coolbaugh, Township of, Pennsylvania
4792. Cranberry, Township of, Pennsylvania
4793. Crawford, County of, Pennsylvania
4794. Cumberland, County of, Pennsylvania
4795. Cumru, Township of, Pennsylvania
4796. Darby, Borough of, Pennsylvania
4797. Dauphin, County of, Pennsylvania
4798. Delaware, County of, Pennsylvania
4799. Derry, Township of, Pennsylvania
4800. Dingman, Township of, Pennsylvania
4801. Douglass, Township of, Pennsylvania
4802. Dover, Township of, Pennsylvania
4803. Doylestown, Township of, Pennsylvania
4804. Dunmore, Borough of, Pennsylvania
4805. East Cocalico, Township of, Pennsylvania
4806. East Goshen, Township of, Pennsylvania
4807. East Hempfield, Township of, Pennsylvania
4808. East Lampeter, Township of, Pennsylvania
4809. East Norriton, Township of, Pennsylvania
4810. East Pennsboro, Township of, Pennsylvania
4811. East Stroudsburg, Borough of, Pennsylvania
4812. East Whiteland, Township of, Pennsylvania
4813. Easton, City of, Pennsylvania
4814. Easttown, Township of, Pennsylvania
4815. Elizabeth, Township of, Pennsylvania
4816. Elizabethtown, Borough of, Pennsylvania
4817. Elk, County of, Pennsylvania
4818. Emmaus, Borough of, Pennsylvania
4819. Ephrata, Borough of, Pennsylvania
4820. Ephrata, Township of, Pennsylvania
4821. Erie, City of, Pennsylvania
4822. Erie, County of, Pennsylvania
4823. Exeter, Township of, Pennsylvania
4824. Fairview, Township of, Pennsylvania
4825. Falls, Township of, Pennsylvania
4826. Fayette, County of, Pennsylvania
4827. Ferguson, Township of, Pennsylvania
4828. Forks, Township of, Pennsylvania
4829. Franconia, Township of, Pennsylvania
4830. Franklin, County of, Pennsylvania
4831. Franklin Park, Borough of, Pennsylvania
4832. Fulton, County of, Pennsylvania
4833. Greene, County of, Pennsylvania
4834. Greene, Township of, Pennsylvania
4835. Greensburg, City of, Pennsylvania
4836. Guilford, Township of, Pennsylvania
4837. Hamilton, Township of, Pennsylvania
4838. Hampden, Township of, Pennsylvania
4839. Hampton, Township of, Pennsylvania
4840. Hanover, Borough of, Pennsylvania

4841. Hanover, Township of, Pennsylvania
4842. Harborcreek, Township of, Pennsylvania
4843. Harrisburg, City of, Pennsylvania
4844. Harrison, Township of, Pennsylvania
4845. Hatfield, Township of, Pennsylvania
4846. Haverford, Township of, Pennsylvania
4847. Hazleton, City of, Pennsylvania
4848. Hempfield, Township of, Pennsylvania
4849. Hermitage, City of, Pennsylvania
4850. Hilltown, Township of, Pennsylvania
4851. Hopewell, Township of, Pennsylvania
4852. Horsham, Township of, Pennsylvania
4853. Huntingdon, County of, Pennsylvania
4854. Indiana, Borough of, Pennsylvania
4855. Indiana, County of, Pennsylvania
4856. Jefferson, County of, Pennsylvania
4857. Jefferson Hills, Borough of, Pennsylvania
4858. Johnstown, City of, Pennsylvania
4859. Juniata, County of, Pennsylvania
4860. Kingston, Borough of, Pennsylvania
4861. Lackawanna, County of, Pennsylvania
4862. Lancaster, City of, Pennsylvania
4863. Lancaster, County of, Pennsylvania
4864. Lancaster, Township of, Pennsylvania
4865. Lansdale, Borough of, Pennsylvania
4866. Lansdowne, Borough of, Pennsylvania
4867. Lawrence, County of, Pennsylvania
4868. Lebanon, City of, Pennsylvania
4869. Lebanon, County of, Pennsylvania
4870. Lehigh, County of, Pennsylvania
4871. Lehigh, Township of, Pennsylvania
4872. Lehman, Township of, Pennsylvania
4873. Limerick, Township of, Pennsylvania
4874. Logan, Township of, Pennsylvania
4875. Lower Allen, Township of, Pennsylvania
4876. Lower Burrell, City of, Pennsylvania
4877. Lower Gwynedd, Township of, Pennsylvania
4878. Lower Macungie, Township of, Pennsylvania
4879. Lower Makefield, Township of, Pennsylvania
4880. Lower Merion, Township of, Pennsylvania
4881. Lower Moreland, Township of, Pennsylvania
4882. Lower Paxton, Township of, Pennsylvania
4883. Lower Pottsgrove, Township of, Pennsylvania
4884. Lower Providence, Township of, Pennsylvania
4885. Lower Salford, Township of, Pennsylvania
4886. Lower Saucon, Township of, Pennsylvania
4887. Lower Southampton, Township of, Pennsylvania
4888. Loyalsock, Township of, Pennsylvania
4889. Luzerne, County of, Pennsylvania
4890. Lycoming, County of, Pennsylvania
4891. Manchester, Township of, Pennsylvania

4892. Manheim, Township of, Pennsylvania
4893. Manor, Township of, Pennsylvania
4894. Marple, Township of, Pennsylvania
4895. McCandless, Township of, Pennsylvania
4896. McKean, County of, Pennsylvania
4897. McKeesport, City of, Pennsylvania
4898. Meadville, City of, Pennsylvania
4899. Mercer, County of, Pennsylvania
4900. Middle Smithfield, Township of, Pennsylvania
4901. Middletown, Township of, Pennsylvania
4902. Mifflin, County of, Pennsylvania
4903. Milford, Township of, Pennsylvania
4904. Millcreek, Township of, Pennsylvania
4905. Monroe, County of, Pennsylvania
4906. Monroeville, Municipality of, Pennsylvania
4907. Montgomery, County of, Pennsylvania
4908. Montgomery, Township of, Pennsylvania
4909. Montour, County of, Pennsylvania
4910. Moon, Township of, Pennsylvania
4911. Mount Joy, Township of, Pennsylvania
4912. Mount Lebanon, Township of, Pennsylvania
4913. Mount Pleasant, Township of, Pennsylvania
4914. Muhlenberg, Township of, Pennsylvania
4915. Munhall, Borough of, Pennsylvania
4916. Murrysville, Municipality of, Pennsylvania
4917. Nanticoke, City of, Pennsylvania
4918. Nether Providence, Township of, Pennsylvania
4919. New Britain, Township of, Pennsylvania
4920. New Castle, City of, Pennsylvania
4921. New Garden, Township of, Pennsylvania
4922. New Hanover, Township of, Pennsylvania
4923. New Kensington, City of, Pennsylvania
4924. Newberry, Township of, Pennsylvania
4925. Newtown, Township of, Pennsylvania
4926. Norristown, Borough of, Pennsylvania
4927. North Fayette, Township of, Pennsylvania
4928. North Huntingdon, Township of, Pennsylvania
4929. North Lebanon, Township of, Pennsylvania
4930. North Middleton, Township of, Pennsylvania
4931. North Strabane, Township of, Pennsylvania
4932. North Union, Township of, Pennsylvania
4933. North Whitehall, Township of, Pennsylvania
4934. Northampton, County of, Pennsylvania
4935. Northampton, Township of, Pennsylvania
4936. Northumberland, County of, Pennsylvania
4937. Palmer, Township of, Pennsylvania
4938. Patton, Township of, Pennsylvania
4939. Penn Hills, Township of, Pennsylvania
4940. Penn, Township of, Pennsylvania
4941. Perry, County of, Pennsylvania
4942. Peters, Township of, Pennsylvania

4943. Philadelphia, City of/ County of, Pennsylvania
4944. Phoenixville, Borough of, Pennsylvania
4945. Pike, County of, Pennsylvania
4946. Pine, Township of, Pennsylvania
4947. Pittsburgh, City of, Pennsylvania
4948. Plum, Borough of, Pennsylvania
4949. Plumstead, Township of, Pennsylvania
4950. Plymouth, Township of, Pennsylvania
4951. Pocono, Township of, Pennsylvania
4952. Potter, County of, Pennsylvania
4953. Pottstown, Borough of, Pennsylvania
4954. Pottsville, City of, Pennsylvania
4955. Radnor, Township of, Pennsylvania
4956. Rapho, Township of, Pennsylvania
4957. Reading, City of, Pennsylvania
4958. Richland, Township of, Pennsylvania
4959. Ridley, Township of, Pennsylvania
4960. Robinson, Township of, Pennsylvania
4961. Ross, Township of, Pennsylvania
4962. Rostraver, Township of, Pennsylvania
4963. Salisbury, Township of, Pennsylvania
4964. Sandy, Township of, Pennsylvania
4965. Schuylkill, County of, Pennsylvania
4966. Scott, Township of, Pennsylvania
4967. Scranton, City of, Pennsylvania
4968. Shaler, Township of, Pennsylvania
4969. Sharon, City of, Pennsylvania
4970. Silver Spring, Township of, Pennsylvania
4971. Skippack, Township of, Pennsylvania
4972. Snyder, County of, Pennsylvania
4973. Somerset, County of, Pennsylvania
4974. Somerset, Township of, Pennsylvania
4975. South Fayette, Township of, Pennsylvania
4976. South Lebanon, Township of, Pennsylvania
4977. South Middleton, Township of, Pennsylvania
4978. South Park, Township of, Pennsylvania
4979. South Union, Township of, Pennsylvania
4980. South Whitehall, Township of, Pennsylvania
4981. Spring Garden, Township of, Pennsylvania
4982. Spring, Township of, Pennsylvania
4983. Springettsbury, Township of, Pennsylvania
4984. Springfield, Township of, Pennsylvania
4985. St. Marys, City of, Pennsylvania
4986. State College, Borough of, Pennsylvania
4987. Stroud, Township of, Pennsylvania
4988. Susquehanna, County of, Pennsylvania
4989. Susquehanna, Township of, Pennsylvania
4990. Swatara, Township of, Pennsylvania
4991. Tioga, County of, Pennsylvania
4992. Towamencin, Township of, Pennsylvania
4993. Tredyffrin, Township of, Pennsylvania

4994. Union, County of, Pennsylvania
4995. Unity, Township of, Pennsylvania
4996. Upper Allen, Township of, Pennsylvania
4997. Upper Chichester, Township of, Pennsylvania
4998. Upper Darby, Township of, Pennsylvania
4999. Upper Dublin, Township of, Pennsylvania
5000. Upper Gwynedd, Township of, Pennsylvania
5001. Upper Macungie, Township of, Pennsylvania
5002. Upper Merion, Township of, Pennsylvania
5003. Upper Moreland, Township of, Pennsylvania
5004. Upper Providence, Township of, Pennsylvania
5005. Upper Saucon, Township of, Pennsylvania
5006. Upper Southampton, Township of, Pennsylvania
5007. Upper St. Clair, Township of, Pennsylvania
5008. Upper Uwchlan, Township of, Pennsylvania
5009. Uwchlan, Township of, Pennsylvania
5010. Venango, County of, Pennsylvania
5011. Warminster, Township of, Pennsylvania
5012. Warren, County of, Pennsylvania
5013. Warrington, Township of, Pennsylvania
5014. Warwick, Township of, Pennsylvania
5015. Washington, City of, Pennsylvania
5016. Washington, County of, Pennsylvania
5017. Washington, Township of, Pennsylvania
5018. Wayne, County of, Pennsylvania
5019. Waynesboro, Borough of, Pennsylvania
5020. West Bradford, Township of, Pennsylvania
5021. West Chester, Borough of, Pennsylvania
5022. West Deer, Township of, Pennsylvania
5023. West Goshen, Township of, Pennsylvania
5024. West Hanover, Township of, Pennsylvania
5025. West Hempfield, Township of, Pennsylvania
5026. West Lampeter, Township of, Pennsylvania
5027. West Manchester, Township of, Pennsylvania
5028. West Mifflin, Borough of, Pennsylvania
5029. West Norriton, Township of, Pennsylvania
5030. West Whiteland, Township of, Pennsylvania
5031. Westmoreland, County of, Pennsylvania
5032. Westtown, Township of, Pennsylvania
5033. White, Township of, Pennsylvania
5034. Whitehall, Borough of, Pennsylvania
5035. Whitehall, Township of, Pennsylvania
5036. Whitemarsh, Township of, Pennsylvania
5037. Whitpain, Township of, Pennsylvania
5038. Wilkes-Barre, City of, Pennsylvania
5039. Wilkinsburg, Borough of, Pennsylvania
5040. Williamsport, City of, Pennsylvania
5041. Willistown, Township of, Pennsylvania
5042. Windsor, Township of, Pennsylvania
5043. Worcester, Township of, Pennsylvania
5044. Wyoming, County of, Pennsylvania

5045. Wyomissing, Borough of, Pennsylvania
5046. Yeadon, Borough of, Pennsylvania
5047. York, City of, Pennsylvania
5048. York, County of, Pennsylvania
5049. York, Township of, Pennsylvania
5050. Adjuntas, Municipality of, Puerto Rico
5051. Aguada, Municipality of, Puerto Rico
5052. Aguadilla, Municipality of, Puerto Rico
5053. Aguas Buenas, Municipality of, Puerto Rico
5054. Aibonito, Municipality of, Puerto Rico
5055. Añasco, Municipality of, Puerto Rico
5056. Arecibo, Municipality of, Puerto Rico
5057. Arroyo, Municipality of, Puerto Rico
5058. Barceloneta, Municipality of, Puerto Rico
5059. Barranquitas, Municipality of, Puerto Rico
5060. Bayamón, Municipality of, Puerto Rico
5061. Cabo Rojo, Municipality of, Puerto Rico
5062. Caguas, Municipality of, Puerto Rico
5063. Camuy, Municipality of, Puerto Rico
5064. Canóvanas, Municipality of, Puerto Rico
5065. Carolina, Municipality of, Puerto Rico
5066. Cataño, Municipality of, Puerto Rico
5067. Cayey, Municipality of, Puerto Rico
5068. Ceiba, Municipality of, Puerto Rico
5069. Ciales, Municipality of, Puerto Rico
5070. Cidra, Municipality of, Puerto Rico
5071. Coamo, Municipality of, Puerto Rico
5072. Comerío, Municipality of, Puerto Rico
5073. Corozal, Municipality of, Puerto Rico
5074. Dorado, Municipality of, Puerto Rico
5075. Fajardo, Municipality of, Puerto Rico
5076. Florida, Municipality of, Puerto Rico
5077. Guánica, Municipality of, Puerto Rico
5078. Guayama, Municipality of, Puerto Rico
5079. Guayanilla, Municipality of, Puerto Rico
5080. Guaynabo, Municipality of, Puerto Rico
5081. Gurabo, Municipality of, Puerto Rico
5082. Hatillo, Municipality of, Puerto Rico
5083. Hormigueros, Municipality of, Puerto Rico
5084. Humacao, Municipality of, Puerto Rico
5085. Isabela, Municipality of, Puerto Rico
5086. Jayuya, Municipality of, Puerto Rico
5087. Juana Díaz, Municipality of, Puerto Rico
5088. Juncos, Municipality of, Puerto Rico
5089. Lajas, Municipality of, Puerto Rico
5090. Lares, Municipality of, Puerto Rico
5091. Las Piedras, Municipality of, Puerto Rico
5092. Loíza, Municipality of, Puerto Rico
5093. Luquillo, Municipality of, Puerto Rico
5094. Manatí, Municipality of, Puerto Rico
5095. Maunabo, Municipality of, Puerto Rico

5096. Mayagüez, Municipality of, Puerto Rico
5097. Moca, Municipality of, Puerto Rico
5098. Morovis, Municipality of, Puerto Rico
5099. Naguabo, Municipality of, Puerto Rico
5100. Naranjito, Municipality of, Puerto Rico
5101. Orocovis, Municipality of, Puerto Rico
5102. Patillas, Municipality of, Puerto Rico
5103. Peñuelas, Municipality of, Puerto Rico
5104. Ponce, Municipality of, Puerto Rico
5105. Quebradillas, Municipality of, Puerto Rico
5106. Rincón, Municipality of, Puerto Rico
5107. Río Grande, Municipality of, Puerto Rico
5108. Sabana Grande, Municipality of, Puerto Rico
5109. Salinas, Municipality of, Puerto Rico
5110. San Germán, Municipality of, Puerto Rico
5111. San Juan, Municipality of, Puerto Rico
5112. San Lorenzo, Municipality of, Puerto Rico
5113. San Sebastián, Municipality of, Puerto Rico
5114. Santa Isabel, Municipality of, Puerto Rico
5115. Toa Alta, Municipality of, Puerto Rico
5116. Toa Baja, Municipality of, Puerto Rico
5117. Trujillo Alto, Municipality of, Puerto Rico
5118. Utuado, Municipality of, Puerto Rico
5119. Vega Alta, Municipality of, Puerto Rico
5120. Vega Baja, Municipality of, Puerto Rico
5121. Villalba, Municipality of, Puerto Rico
5122. Yabucoa, Municipality of, Puerto Rico
5123. Yauco, Municipality of, Puerto Rico
5124. Barrington, Town of, Rhode Island
5125. Bristol, Town of, Rhode Island
5126. Burrillville, Town of, Rhode Island
5127. Central Falls, City of, Rhode Island
5128. Coventry, Town of, Rhode Island
5129. Cranston, City of, Rhode Island
5130. Cumberland, Town of, Rhode Island
5131. East Greenwich, Town of, Rhode Island
5132. East Providence, City of, Rhode Island
5133. Glocester, Town of, Rhode Island
5134. Johnston, Town of, Rhode Island
5135. Lincoln, Town of, Rhode Island
5136. Middletown, Town of, Rhode Island
5137. Narragansett, Town of, Rhode Island
5138. Newport, City of, Rhode Island
5139. North Kingstown, Town of, Rhode Island
5140. North Providence, Town of, Rhode Island
5141. North Smithfield, Town of, Rhode Island
5142. Pawtucket, City of, Rhode Island
5143. Portsmouth, Town of, Rhode Island
5144. Providence, City of, Rhode Island
5145. Scituate, Town of, Rhode Island
5146. Smithfield, Town of, Rhode Island

5147. South Kingstown, Town of, Rhode Island
5148. Tiverton, Town of, Rhode Island
5149. Warren, Town of, Rhode Island
5150. Warwick, City of, Rhode Island
5151. West Warwick, Town of, Rhode Island
5152. Westerly, Town of, Rhode Island
5153. Woonsocket, City of, Rhode Island
5154. Abbeville, County of, South Carolina
5155. Aiken, City of, South Carolina
5156. Aiken, County of, South Carolina
5157. Anderson, City of, South Carolina
5158. Anderson, County of, South Carolina
5159. Bamberg, County of, South Carolina
5160. Barnwell, County of, South Carolina
5161. Beaufort, City of, South Carolina
5162. Beaufort, County of, South Carolina
5163. Berkeley, County of, South Carolina
5164. Bluffton, Town of, South Carolina
5165. Calhoun, County of, South Carolina
5166. Cayce, City of, South Carolina
5167. Charleston, City of, South Carolina
5168. Charleston, County of, South Carolina
5169. Cherokee, County of, South Carolina
5170. Chester, County of, South Carolina
5171. Chesterfield, County of, South Carolina
5172. Clarendon, County of, South Carolina
5173. Clemson, City of, South Carolina
5174. Colleton, County of, South Carolina
5175. Columbia, City of, South Carolina
5176. Conway, City of, South Carolina
5177. Darlington, County of, South Carolina
5178. Dillon, County of, South Carolina
5179. Dorchester, County of, South Carolina
5180. Easley, City of, South Carolina
5181. Edgefield, County of, South Carolina
5182. Fairfield, County of, South Carolina
5183. Florence, City of, South Carolina
5184. Florence, County of, South Carolina
5185. Forest Acres, City of, South Carolina
5186. Fort Mill, Town of, South Carolina
5187. Fountain Inn, City of, South Carolina
5188. Gaffney, City of, South Carolina
5189. Georgetown, County of, South Carolina
5190. Goose Creek, City of, South Carolina
5191. Greenville, City of, South Carolina
5192. Greenville, County of, South Carolina
5193. Greenwood, City of, South Carolina
5194. Greenwood, County of, South Carolina
5195. Greer, City of, South Carolina
5196. Hampton, County of, South Carolina
5197. Hanahan, City of, South Carolina

5198. Hilton Head Island, Town of, South Carolina
5199. Horry, County of, South Carolina
5200. Irmo, Town of, South Carolina
5201. James Island, Town of, South Carolina
5202. Jasper, County of, South Carolina
5203. Kershaw, County of, South Carolina
5204. Lancaster, County of, South Carolina
5205. Laurens, County of, South Carolina
5206. Lee, County of, South Carolina
5207. Lexington, County of, South Carolina
5208. Lexington, Town of, South Carolina
5209. Marion, County of, South Carolina
5210. Marlboro, County of, South Carolina
5211. Mauldin, City of, South Carolina
5212. Moncks Corner, Town of, South Carolina
5213. Mount Pleasant, Town of, South Carolina
5214. Myrtle Beach, City of, South Carolina
5215. Newberry, City of, South Carolina
5216. Newberry, County of, South Carolina
5217. North Augusta, City of, South Carolina
5218. North Charleston, City of, South Carolina
5219. North Myrtle Beach, City of, South Carolina
5220. Oconee, County of, South Carolina
5221. Orangeburg, City of, South Carolina
5222. Orangeburg, County of, South Carolina
5223. Pickens, County of, South Carolina
5224. Port Royal, Town of, South Carolina
5225. Richland, County of, South Carolina
5226. Rock Hill, City of, South Carolina
5227. Saluda, County of, South Carolina
5228. Simpsonville, City of, South Carolina
5229. Spartanburg, City of, South Carolina
5230. Spartanburg, County of, South Carolina
5231. Summerville, Town of, South Carolina
5232. Sumter, City of, South Carolina
5233. Sumter, County of, South Carolina
5234. Tega Cay, City of, South Carolina
5235. Union, County of, South Carolina
5236. West Columbia, City of, South Carolina
5237. Williamsburg, County of, South Carolina
5238. York, County of, South Carolina
5239. Aberdeen, City of, South Dakota
5240. Beadle, County of, South Dakota
5241. Box Elder, City of, South Dakota
5242. Brandon, City of, South Dakota
5243. Brookings, City of, South Dakota
5244. Brookings, County of, South Dakota
5245. Brown, County of, South Dakota
5246. Butte, County of, South Dakota
5247. Clay, County of, South Dakota
5248. Codington, County of, South Dakota

5249. Davison, County of, South Dakota
5250. Hughes, County of, South Dakota
5251. Huron, City of, South Dakota
5252. Lake, County of, South Dakota
5253. Lawrence, County of, South Dakota
5254. Lincoln, County of, South Dakota
5255. Meade, County of, South Dakota
5256. Minnehaha, County of, South Dakota
5257. Mitchell, City of, South Dakota
5258. Oglala Lakota, County of, South Dakota
5259. Pennington, County of, South Dakota
5260. Pierre, City of, South Dakota
5261. Rapid City, City of, South Dakota
5262. Roberts, County of, South Dakota
5263. Sioux Falls, City of, South Dakota
5264. Spearfish, City of, South Dakota
5265. Todd, County of, South Dakota
5266. Union, County of, South Dakota
5267. Vermillion, City of, South Dakota
5268. Watertown, City of, South Dakota
5269. Yankton, City of, South Dakota
5270. Yankton, County of, South Dakota
5271. Anderson, County of, Tennessee
5272. Arlington, Town of, Tennessee
5273. Athens, City of, Tennessee
5274. Bartlett, City of, Tennessee
5275. Bedford, County of, Tennessee
5276. Benton, County of, Tennessee
5277. Bledsoe, County of, Tennessee
5278. Blount, County of, Tennessee
5279. Bradley, County of, Tennessee
5280. Brentwood, City of, Tennessee
5281. Bristol, City of, Tennessee
5282. Campbell, County of, Tennessee
5283. Cannon, County of, Tennessee
5284. Carroll, County of, Tennessee
5285. Carter, County of, Tennessee
5286. Chattanooga, City of, Tennessee
5287. Cheatham, County of, Tennessee
5288. Chester, County of, Tennessee
5289. Claiborne, County of, Tennessee
5290. Clarksville, City of, Tennessee
5291. Cleveland, City of, Tennessee
5292. Clinton, City of, Tennessee
5293. Cocke, County of, Tennessee
5294. Coffee, County of, Tennessee
5295. Collegedale, City of, Tennessee
5296. Collierville, Town of, Tennessee
5297. Columbia, City of, Tennessee
5298. Cookeville, City of, Tennessee
5299. Crockett, County of, Tennessee

5300. Crossville, City of, Tennessee
5301. Cumberland, County of, Tennessee
5302. Decatur, County of, Tennessee
5303. DeKalb, County of, Tennessee
5304. Dickson, City of, Tennessee
5305. Dickson, County of, Tennessee
5306. Dyer, County of, Tennessee
5307. Dyersburg, City of, Tennessee
5308. East Ridge, City of, Tennessee
5309. Elizabethton, City of, Tennessee
5310. Farragut, Town of, Tennessee
5311. Fayette, County of, Tennessee
5312. Fentress, County of, Tennessee
5313. Franklin, City of, Tennessee
5314. Franklin, County of, Tennessee
5315. Gallatin, City of, Tennessee
5316. Germantown, City of, Tennessee
5317. Gibson, County of, Tennessee
5318. Giles, County of, Tennessee
5319. Goodlettsville, City of, Tennessee
5320. Grainger, County of, Tennessee
5321. Greene, County of, Tennessee
5322. Greeneville, Town of, Tennessee
5323. Grundy, County of, Tennessee
5324. Hamblen, County of, Tennessee
5325. Hamilton, County of, Tennessee
5326. Hardeman, County of, Tennessee
5327. Hardin, County of, Tennessee
5328. Hartsville/Trousdale, County of, Tennessee
5329. Hawkins, County of, Tennessee
5330. Haywood, County of, Tennessee
5331. Henderson, County of, Tennessee
5332. Hendersonville, City of, Tennessee
5333. Henry, County of, Tennessee
5334. Hickman, County of, Tennessee
5335. Humphreys, County of, Tennessee
5336. Jackson, City of, Tennessee
5337. Jackson, County of, Tennessee
5338. Jefferson, County of, Tennessee
5339. Johnson City, City of, Tennessee
5340. Johnson, County of, Tennessee
5341. Kingsport, City of, Tennessee
5342. Knox, County of, Tennessee
5343. Knoxville, City of, Tennessee
5344. La Vergne, City of, Tennessee
5345. Lakeland, City of, Tennessee
5346. Lauderdale, County of, Tennessee
5347. Lawrence, County of, Tennessee
5348. Lawrenceburg, City of, Tennessee
5349. Lebanon, City of, Tennessee
5350. Lewis, County of, Tennessee

5351. Lewisburg, City of, Tennessee
5352. Lincoln, County of, Tennessee
5353. Loudon, County of, Tennessee
5354. Macon, County of, Tennessee
5355. Madison, County of, Tennessee
5356. Manchester, City of, Tennessee
5357. Marion, County of, Tennessee
5358. Marshall, County of, Tennessee
5359. Martin, City of, Tennessee
5360. Maryville, City of, Tennessee
5361. Maury, County of, Tennessee
5362. McMinn, County of, Tennessee
5363. McMinnville, City of, Tennessee
5364. McNairy, County of, Tennessee
5365. Meigs, County of, Tennessee
5366. Memphis, City of, Tennessee
5367. Millington, City of, Tennessee
5368. Monroe, County of, Tennessee
5369. Montgomery, County of, Tennessee
5370. Morgan, County of, Tennessee
5371. Morristown, City of, Tennessee
5372. Mount Juliet, City of, Tennessee
5373. Murfreesboro, City of, Tennessee
5374. Nashville-Davidson, Metropolitan Government, Tennessee
5375. Nolensville, Town of, Tennessee
5376. Oak Ridge, City of, Tennessee
5377. Obion, County of, Tennessee
5378. Overton, County of, Tennessee
5379. Paris, City of, Tennessee
5380. Polk, County of, Tennessee
5381. Portland, City of, Tennessee
5382. Putnam, County of, Tennessee
5383. Red Bank, City of, Tennessee
5384. Rhea, County of, Tennessee
5385. Roane, County of, Tennessee
5386. Robertson, County of, Tennessee
5387. Rutherford, County of, Tennessee
5388. Scott, County of, Tennessee
5389. Sequatchie, County of, Tennessee
5390. Sevier, County of, Tennessee
5391. Sevierville, City of, Tennessee
5392. Shelby, County of, Tennessee
5393. Shelbyville, City of, Tennessee
5394. Smith, County of, Tennessee
5395. Smyrna, Town of, Tennessee
5396. Soddy-Daisy, City of, Tennessee
5397. Spring Hill, City of, Tennessee
5398. Springfield, City of, Tennessee
5399. Stewart, County of, Tennessee
5400. Sullivan, County of, Tennessee
5401. Sumner, County of, Tennessee

5402. Tipton, County of, Tennessee
5403. Tullahoma, City of, Tennessee
5404. Unicoi, County of, Tennessee
5405. Union City, City of, Tennessee
5406. Union, County of, Tennessee
5407. Warren, County of, Tennessee
5408. Washington, County of, Tennessee
5409. Wayne, County of, Tennessee
5410. Weakley, County of, Tennessee
5411. White, County of, Tennessee
5412. White House, City of, Tennessee
5413. Williamson, County of, Tennessee
5414. Wilson, County of, Tennessee
5415. Abilene, City of, Texas
5416. Addison, Town of, Texas
5417. Alamo, City of, Texas
5418. Alice, City of, Texas
5419. Allen, City of, Texas
5420. Alton, City of, Texas
5421. Alvin, City of, Texas
5422. Amarillo, City of, Texas
5423. Anderson, County of, Texas
5424. Andrews, City of, Texas
5425. Andrews, County of, Texas
5426. Angelina, County of, Texas
5427. Angleton, City of, Texas
5428. Anna, City of, Texas
5429. Aransas, County of, Texas
5430. Arlington, City of, Texas
5431. Atascosa, County of, Texas
5432. Athens, City of, Texas
5433. Austin, City of, Texas
5434. Austin, County of, Texas
5435. Azle, City of, Texas
5436. Balch Springs, City of, Texas
5437. Bandera, County of, Texas
5438. Bastrop, County of, Texas
5439. Bay City, City of, Texas
5440. Baytown, City of, Texas
5441. Beaumont, City of, Texas
5442. Bedford, City of, Texas
5443. Bee, County of, Texas
5444. Beeville, City of, Texas
5445. Bell, County of, Texas
5446. Bellaire, City of, Texas
5447. Bellmead, City of, Texas
5448. Belton, City of, Texas
5449. Benbrook, City of, Texas
5450. Bexar, County of, Texas
5451. Big Spring, City of, Texas
5452. Blanco, County of, Texas

5453. Boerne, City of, Texas
5454. Bonham, City of, Texas
5455. Borger, City of, Texas
5456. Bosque, County of, Texas
5457. Bowie, County of, Texas
5458. Brazoria, County of, Texas
5459. Brazos, County of, Texas
5460. Brenham, City of, Texas
5461. Brown, County of, Texas
5462. Brownsville, City of, Texas
5463. Brownwood, City of, Texas
5464. Bryan, City of, Texas
5465. Buda, City of, Texas
5466. Burkburnett, City of, Texas
5467. Burleson, City of, Texas
5468. Burleson, County of, Texas
5469. Burnet, County of, Texas
5470. Caldwell, County of, Texas
5471. Calhoun, County of, Texas
5472. Callahan, County of, Texas
5473. Cameron, County of, Texas
5474. Camp, County of, Texas
5475. Canyon, City of, Texas
5476. Carrollton, City of, Texas
5477. Cass, County of, Texas
5478. Cedar Hill, City of, Texas
5479. Cedar Park, City of, Texas
5480. Celina, City of, Texas
5481. Chambers, County of, Texas
5482. Cherokee, County of, Texas
5483. Cibolo, City of, Texas
5484. Clay, County of, Texas
5485. Cleburne, City of, Texas
5486. Clute, City of, Texas
5487. College Station, City of, Texas
5488. Colleyville, City of, Texas
5489. Collin, County of, Texas
5490. Colorado, County of, Texas
5491. Comal, County of, Texas
5492. Comanche, County of, Texas
5493. Conroe, City of, Texas
5494. Converse, City of, Texas
5495. Cooke, County of, Texas
5496. Coppell, City of, Texas
5497. Copperas Cove, City of, Texas
5498. Corinth, City of, Texas
5499. Corpus Christi, City of, Texas
5500. Corsicana, City of, Texas
5501. Coryell, County of, Texas
5502. Crowley, City of, Texas
5503. Dallas, City of, Texas

5504. Dallas, County of, Texas
5505. Dawson, County of, Texas
5506. Deaf Smith, County of, Texas
5507. Deer Park, City of, Texas
5508. Del Rio, City of, Texas
5509. Denison, City of, Texas
5510. Denton, City of, Texas
5511. Denton, County of, Texas
5512. DeSoto, City of, Texas
5513. DeWitt, County of, Texas
5514. Dickinson, City of, Texas
5515. Dimmit, County of, Texas
5516. Donna, City of, Texas
5517. Dumas, City of, Texas
5518. Duncanville, City of, Texas
5519. Duval, County of, Texas
5520. Eagle Pass, City of, Texas
5521. Eastland, County of, Texas
5522. Ector, County of, Texas
5523. Edinburg, City of, Texas
5524. El Campo, City of, Texas
5525. El Paso, City of, Texas
5526. El Paso, County of, Texas
5527. Elgin, City of, Texas
5528. Ellis, County of, Texas
5529. Ennis, City of, Texas
5530. Erath, County of, Texas
5531. Euless, City of, Texas
5532. Fair Oaks Ranch, City of, Texas
5533. Falls, County of, Texas
5534. Fannin, County of, Texas
5535. Farmers Branch, City of, Texas
5536. Fate, City of, Texas
5537. Fayette, County of, Texas
5538. Flower Mound, Town of, Texas
5539. Forest Hill, City of, Texas
5540. Forney, City of, Texas
5541. Fort Bend, County of, Texas
5542. Fort Worth, City of, Texas
5543. Franklin, County of, Texas
5544. Fredericksburg, City of, Texas
5545. Freeport, City of, Texas
5546. Freestone, County of, Texas
5547. Friendswood, City of, Texas
5548. Frio, County of, Texas
5549. Frisco, City of, Texas
5550. Fulshear, City of, Texas
5551. Gaines, County of, Texas
5552. Gainesville, City of, Texas
5553. Galena Park, City of, Texas
5554. Galveston, City of, Texas

5555. Galveston, County of, Texas
5556. Garland, City of, Texas
5557. Gatesville, City of, Texas
5558. Georgetown, City of, Texas
5559. Gillespie, County of, Texas
5560. Glenn Heights, City of, Texas
5561. Gonzales, County of, Texas
5562. Granbury, City of, Texas
5563. Grand Prairie, City of, Texas
5564. Grapevine, City of, Texas
5565. Gray, County of, Texas
5566. Grayson, County of, Texas
5567. Greenville, City of, Texas
5568. Gregg, County of, Texas
5569. Grimes, County of, Texas
5570. Groves, City of, Texas
5571. Guadalupe, County of, Texas
5572. Hale, County of, Texas
5573. Haltom City, City of, Texas
5574. Hardin, County of, Texas
5575. Harker Heights, City of, Texas
5576. Harlingen, City of, Texas
5577. Harris, County of, Texas
5578. Harrison, County of, Texas
5579. Hays, County of, Texas
5580. Henderson, City of, Texas
5581. Henderson, County of, Texas
5582. Hereford, City of, Texas
5583. Hewitt, City of, Texas
5584. Hidalgo, City of, Texas
5585. Hidalgo, County of, Texas
5586. Highland, Village of, City of, Texas
5587. Hill, County of, Texas
5588. Hockley, County of, Texas
5589. Hood, County of, Texas
5590. Hopkins, County of, Texas
5591. Horizon City, City of, Texas
5592. Houston, City of, Texas
5593. Houston, County of, Texas
5594. Howard, County of, Texas
5595. Humble, City of, Texas
5596. Hunt, County of, Texas
5597. Huntsville, City of, Texas
5598. Hurst, City of, Texas
5599. Hutchinson, County of, Texas
5600. Hutto, City of, Texas
5601. Ingleside, City of, Texas
5602. Irving, City of, Texas
5603. Jacinto City, City of, Texas
5604. Jackson, County of, Texas
5605. Jacksonville, City of, Texas

5606. Jasper, County of, Texas
5607. Jefferson, County of, Texas
5608. Jim Wells, County of, Texas
5609. Johnson, County of, Texas
5610. Jones, County of, Texas
5611. Karnes, County of, Texas
5612. Katy, City of, Texas
5613. Kaufman, County of, Texas
5614. Keller, City of, Texas
5615. Kendall, County of, Texas
5616. Kerr, County of, Texas
5617. Kerrville, City of, Texas
5618. Kilgore, City of, Texas
5619. Killeen, City of, Texas
5620. Kingsville, City of, Texas
5621. Kleberg, County of, Texas
5622. Kyle, City of, Texas
5623. La Marque, City of, Texas
5624. La Porte, City of, Texas
5625. Lake Jackson, City of, Texas
5626. Lakeway, City of, Texas
5627. Lamar, County of, Texas
5628. Lamb, County of, Texas
5629. Lampasas, County of, Texas
5630. Lancaster, City of, Texas
5631. Laredo, City of, Texas
5632. Lavaca, County of, Texas
5633. League City, City of, Texas
5634. Leander, City of, Texas
5635. Lee, County of, Texas
5636. Leon, County of, Texas
5637. Leon Valley, City of, Texas
5638. Levelland, City of, Texas
5639. Lewisville, City of, Texas
5640. Liberty, County of, Texas
5641. Limestone, County of, Texas
5642. Little Elm, City of, Texas
5643. Live Oak, City of, Texas
5644. Live Oak, County of, Texas
5645. Llano, County of, Texas
5646. Lockhart, City of, Texas
5647. Longview, City of, Texas
5648. Lubbock, City of, Texas
5649. Lubbock, County of, Texas
5650. Lufkin, City of, Texas
5651. Lumberton, City of, Texas
5652. Madison, County of, Texas
5653. Manor, City of, Texas
5654. Mansfield, City of, Texas
5655. Manvel, City of, Texas
5656. Marshall, City of, Texas

5657. Matagorda, County of, Texas
5658. Maverick, County of, Texas
5659. McAllen, City of, Texas
5660. McKinney, City of, Texas
5661. McLennan, County of, Texas
5662. Medina, County of, Texas
5663. Melissa, City of, Texas
5664. Mercedes, City of, Texas
5665. Mesquite, City of, Texas
5666. Midland, City of, Texas
5667. Midland, County of, Texas
5668. Midlothian, City of, Texas
5669. Milam, County of, Texas
5670. Mineral Wells, City of, Texas
5671. Mission, City of, Texas
5672. Missouri City, City of, Texas
5673. Montague, County of, Texas
5674. Montgomery, County of, Texas
5675. Moore, County of, Texas
5676. Morris, County of, Texas
5677. Mount Pleasant, City of, Texas
5678. Murphy, City of, Texas
5679. Nacogdoches, City of, Texas
5680. Nacogdoches, County of, Texas
5681. Navarro, County of, Texas
5682. Nederland, City of, Texas
5683. New Braunfels, City of, Texas
5684. Newton, County of, Texas
5685. Nolan, County of, Texas
5686. North Richland Hills, City of, Texas
5687. Nueces, County of, Texas
5688. Odessa, City of, Texas
5689. Orange, City of, Texas
5690. Orange, County of, Texas
5691. Palestine, City of, Texas
5692. Palo Pinto, County of, Texas
5693. Pampa, City of, Texas
5694. Panola, County of, Texas
5695. Paris, City of, Texas
5696. Parker, County of, Texas
5697. Pasadena, City of, Texas
5698. Pearland, City of, Texas
5699. Pearsall, City of, Texas
5700. Pecos, City of, Texas
5701. Pecos, County of, Texas
5702. Pflugerville, City of, Texas
5703. Pharr, City of, Texas
5704. Plainview, City of, Texas
5705. Plano, City of, Texas
5706. Pleasanton, City of, Texas
5707. Polk, County of, Texas

5708. Port Arthur, City of, Texas
5709. Port Lavaca, City of, Texas
5710. Port Neches, City of, Texas
5711. Portland, City of, Texas
5712. Potter, County of, Texas
5713. Princeton, City of, Texas
5714. Prosper, Town of, Texas
5715. Rains, County of, Texas
5716. Randall, County of, Texas
5717. Raymondville, City of, Texas
5718. Red Oak, City of, Texas
5719. Red River, County of, Texas
5720. Reeves, County of, Texas
5721. Richardson, City of, Texas
5722. Richmond, City of, Texas
5723. Rio Grande City, City of, Texas
5724. Robertson, County of, Texas
5725. Robinson, City of, Texas
5726. Robstown, City of, Texas
5727. Rockport, City of, Texas
5728. Rockwall, City of, Texas
5729. Rockwall, County of, Texas
5730. Roma, City of, Texas
5731. Rosenberg, City of, Texas
5732. Round Rock, City of, Texas
5733. Rowlett, City of, Texas
5734. Royse City, City of, Texas
5735. Runnels, County of, Texas
5736. Rusk, County of, Texas
5737. Sabine, County of, Texas
5738. Sachse, City of, Texas
5739. Saginaw, City of, Texas
5740. San Angelo, City of, Texas
5741. San Antonio, City of, Texas
5742. San Benito, City of, Texas
5743. San Jacinto, County of, Texas
5744. San Juan, City of, Texas
5745. San Marcos, City of, Texas
5746. San Patricio, County of, Texas
5747. Santa Fe, City of, Texas
5748. Schertz, City of, Texas
5749. Scurry, County of, Texas
5750. Seabrook, City of, Texas
5751. Seagoville, City of, Texas
5752. Seguin, City of, Texas
5753. Selma, City of, Texas
5754. Shelby, County of, Texas
5755. Sherman, City of, Texas
5756. Smith, County of, Texas
5757. Snyder, City of, Texas
5758. Socorro, City of, Texas

5759. South Houston, City of, Texas
5760. Southlake, City of, Texas
5761. Stafford, City of, Texas
5762. Starr, County of, Texas
5763. Stephenville, City of, Texas
5764. Sugar Land, City of, Texas
5765. Sulphur Springs, City of, Texas
5766. Sweetwater, City of, Texas
5767. Tarrant, County of, Texas
5768. Taylor, City of, Texas
5769. Taylor, County of, Texas
5770. Temple, City of, Texas
5771. Terrell, City of, Texas
5772. Terry, County of, Texas
5773. Texarkana, City of, Texas
5774. Texas City, City of, Texas
5775. The Colony, City of, Texas
5776. Titus, County of, Texas
5777. Tom Green, County of, Texas
5778. Tomball, City of, Texas
5779. Travis, County of, Texas
5780. Trinity, County of, Texas
5781. Trophy Club, Town of, Texas
5782. Tyler, City of, Texas
5783. Tyler, County of, Texas
5784. Universal City, City of, Texas
5785. University Park, City of, Texas
5786. Upshur, County of, Texas
5787. Uvalde, City of, Texas
5788. Uvalde, County of, Texas
5789. Val Verde, County of, Texas
5790. Van Zandt, County of, Texas
5791. Vernon, City of, Texas
5792. Victoria, City of, Texas
5793. Victoria, County of, Texas
5794. Vidor, City of, Texas
5795. Waco, City of, Texas
5796. Walker, County of, Texas
5797. Waller, County of, Texas
5798. Ward, County of, Texas
5799. Washington, County of, Texas
5800. Watauga, City of, Texas
5801. Waxahachie, City of, Texas
5802. Weatherford, City of, Texas
5803. Webb, County of, Texas
5804. Webster, City of, Texas
5805. Weslaco, City of, Texas
5806. West University Place, City of, Texas
5807. Wharton, County of, Texas
5808. White Settlement, City of, Texas
5809. Wichita, County of, Texas

5810. Wichita Falls, City of, Texas
5811. Wilbarger, County of, Texas
5812. Willacy, County of, Texas
5813. Williamson, County of, Texas
5814. Wilson, County of, Texas
5815. Wise, County of, Texas
5816. Wood, County of, Texas
5817. Wylie, City of, Texas
5818. Young, County of, Texas
5819. Zapata, County of, Texas
5820. Zavala, County of, Texas
5821. Alpine, City of, Utah
5822. American Fork, City of, Utah
5823. Bluffdale, City of, Utah
5824. Bountiful, City of, Utah
5825. Box Elder, County of, Utah
5826. Brigham City, City of, Utah
5827. Cache, County of, Utah
5828. Carbon, County of, Utah
5829. Cedar City, City of, Utah
5830. Cedar Hills, City of, Utah
5831. Centerville, City of, Utah
5832. Clearfield, City of, Utah
5833. Clinton, City of, Utah
5834. Cottonwood Heights, City of, Utah
5835. Davis, County of, Utah
5836. Draper, City of, Utah
5837. Duchesne, County of, Utah
5838. Eagle Mountain, City of, Utah
5839. Emery, County of, Utah
5840. Farmington, City of, Utah
5841. Grantsville, City of, Utah
5842. Heber, City of, Utah
5843. Herriman, City of, Utah
5844. Highland, City of, Utah
5845. Holladay, City of, Utah
5846. Hurricane, City of, Utah
5847. Iron, County of, Utah
5848. Juab, County of, Utah
5849. Kaysville, City of, Utah
5850. Kearns metro, Township of, Utah
5851. Layton, City of, Utah
5852. Lehi, City of, Utah
5853. Lindon, City of, Utah
5854. Logan, City of, Utah
5855. Magna metro, Township of, Utah
5856. Mapleton, City of, Utah
5857. Midvale, City of, Utah
5858. Millard, County of, Utah
5859. Millcreek, City of, Utah
5860. Morgan, County of, Utah

5861. Murray, City of, Utah
5862. North Logan, City of, Utah
5863. North Ogden, City of, Utah
5864. North Salt Lake, City of, Utah
5865. Ogden, City of, Utah
5866. Orem, City of, Utah
5867. Payson, City of, Utah
5868. Pleasant Grove, City of, Utah
5869. Pleasant View, City of, Utah
5870. Provo, City of, Utah
5871. Riverton, City of, Utah
5872. Roy, City of, Utah
5873. Salt Lake City, City of, Utah
5874. Salt Lake, County of, Utah
5875. San Juan, County of, Utah
5876. Sandy, City of, Utah
5877. Sanpete, County of, Utah
5878. Santaquin, City of, Utah
5879. Saratoga Springs, City of, Utah
5880. Sevier, County of, Utah
5881. Smithfield, City of, Utah
5882. South Jordan, City of, Utah
5883. South Ogden, City of, Utah
5884. South Salt Lake, City of, Utah
5885. Spanish Fork, City of, Utah
5886. Springville, City of, Utah
5887. St. George, City of, Utah
5888. Summit, County of, Utah
5889. Syracuse, City of, Utah
5890. Taylorsville, City of, Utah
5891. Tooele, City of, Utah
5892. Tooele, County of, Utah
5893. Uintah, County of, Utah
5894. Utah, County of, Utah
5895. Vernal, City of, Utah
5896. Vineyard, Town of, Utah
5897. Wasatch, County of, Utah
5898. Washington, City of, Utah
5899. Washington, County of, Utah
5900. Weber, County of, Utah
5901. West Haven, City of, Utah
5902. West Jordan, City of, Utah
5903. West Point, City of, Utah
5904. West Valley City, City of, Utah
5905. Woods Cross, City of, Utah
5906. Addison, County of, Vermont
5907. Bennington, County of, Vermont
5908. Bennington, Town of, Vermont
5909. Brattleboro, Town of, Vermont
5910. Burlington, City of, Vermont
5911. Caledonia, County of, Vermont

5912. Chittenden, County of, Vermont
5913. Colchester, Town of, Vermont
5914. Essex Junction, Village of, Vermont
5915. Essex, Town of, Vermont
5916. Franklin, County of, Vermont
5917. Lamoille, County of, Vermont
5918. Milton, Town of, Vermont
5919. Orange, County of, Vermont
5920. Orleans, County of, Vermont
5921. Rutland, City of, Vermont
5922. Rutland, County of, Vermont
5923. South Burlington, City of, Vermont
5924. Washington, County of, Vermont
5925. Williston, Town of, Vermont
5926. Windham, County of, Vermont
5927. Windsor, County of, Vermont
5928. Accomack, County of, Virginia
5929. Albemarle, County of, Virginia
5930. Alexandria, City of, Virginia
5931. Alleghany, County of, Virginia
5932. Amelia, County of, Virginia
5933. Amherst, County of, Virginia
5934. Appomattox, County of, Virginia
5935. Arlington, County of, Virginia
5936. Augusta, County of, Virginia
5937. Bedford, County of, Virginia
5938. Blacksburg, Town of, Virginia
5939. Botetourt, County of, Virginia
5940. Bristol, City of, Virginia
5941. Brunswick, County of, Virginia
5942. Buchanan, County of, Virginia
5943. Buckingham, County of, Virginia
5944. Campbell, County of, Virginia
5945. Caroline, County of, Virginia
5946. Carroll, County of, Virginia
5947. Charlotte, County of, Virginia
5948. Charlottesville, City of, Virginia
5949. Chesapeake, City of, Virginia
5950. Chesterfield, County of, Virginia
5951. Christiansburg, Town of, Virginia
5952. Clarke, County of, Virginia
5953. Colonial Heights, City of, Virginia
5954. Culpeper, County of, Virginia
5955. Culpeper, Town of, Virginia
5956. Danville, City of, Virginia
5957. Dickenson, County of, Virginia
5958. Dinwiddie, County of, Virginia
5959. Essex, County of, Virginia
5960. Fairfax, City of, Virginia
5961. Fairfax, County of, Virginia
5962. Falls Church, City of, Virginia

5963. Fauquier, County of, Virginia
5964. Floyd, County of, Virginia
5965. Fluvanna, County of, Virginia
5966. Franklin, County of, Virginia
5967. Frederick, County of, Virginia
5968. Fredericksburg, City of, Virginia
5969. Front Royal, Town of, Virginia
5970. Giles, County of, Virginia
5971. Gloucester, County of, Virginia
5972. Goochland, County of, Virginia
5973. Grayson, County of, Virginia
5974. Greene, County of, Virginia
5975. Greensville, County of, Virginia
5976. Halifax, County of, Virginia
5977. Hampton, City of, Virginia
5978. Hanover, County of, Virginia
5979. Harrisonburg, City of, Virginia
5980. Henrico, County of, Virginia
5981. Henry, County of, Virginia
5982. Herndon, Town of, Virginia
5983. Hopewell, City of, Virginia
5984. Isle of Wight, County of, Virginia
5985. James City, County of, Virginia
5986. King George, County of, Virginia
5987. King William, County of, Virginia
5988. Lancaster, County of, Virginia
5989. Lee, County of, Virginia
5990. Leesburg, Town of, Virginia
5991. Loudoun, County of, Virginia
5992. Louisa, County of, Virginia
5993. Lunenburg, County of, Virginia
5994. Lynchburg, City of, Virginia
5995. Madison, County of, Virginia
5996. Manassas, City of, Virginia
5997. Manassas Park, City of, Virginia
5998. Martinsville, City of, Virginia
5999. Mecklenburg, County of, Virginia
6000. Middlesex, County of, Virginia
6001. Montgomery, County of, Virginia
6002. Nelson, County of, Virginia
6003. New Kent, County of, Virginia
6004. Newport News, City of, Virginia
6005. Norfolk, City of, Virginia
6006. Northampton, County of, Virginia
6007. Northumberland, County of, Virginia
6008. Nottoway, County of, Virginia
6009. Orange, County of, Virginia
6010. Page, County of, Virginia
6011. Patrick, County of, Virginia
6012. Petersburg, City of, Virginia
6013. Pittsylvania, County of, Virginia

6014. Poquoson, City of, Virginia
6015. Portsmouth, City of, Virginia
6016. Powhatan, County of, Virginia
6017. Prince Edward, County of, Virginia
6018. Prince George, County of, Virginia
6019. Prince William, County of, Virginia
6020. Pulaski, County of, Virginia
6021. Purcellville, Town of, Virginia
6022. Radford, City of, Virginia
6023. Richmond, City of, Virginia
6024. Roanoke, City of, Virginia
6025. Roanoke, County of, Virginia
6026. Rockbridge, County of, Virginia
6027. Rockingham, County of, Virginia
6028. Russell, County of, Virginia
6029. Salem, City of, Virginia
6030. Scott, County of, Virginia
6031. Shenandoah, County of, Virginia
6032. Smyth, County of, Virginia
6033. Southampton, County of, Virginia
6034. Spotsylvania, County of, Virginia
6035. Stafford, County of, Virginia
6036. Staunton, City of, Virginia
6037. Suffolk, City of, Virginia
6038. Sussex, County of, Virginia
6039. Tazewell, County of, Virginia
6040. Vienna, Town of, Virginia
6041. Virginia Beach, City of, Virginia
6042. Warren, County of, Virginia
6043. Warrenton, Town of, Virginia
6044. Washington, County of, Virginia
6045. Waynesboro, City of, Virginia
6046. Westmoreland, County of, Virginia
6047. Williamsburg, City of, Virginia
6048. Winchester, City of, Virginia
6049. Wise, County of, Virginia
6050. Wythe, County of, Virginia
6051. York, County of, Virginia
6052. Aberdeen, City of, Washington
6053. Adams, County of, Washington
6054. Anacortes, City of, Washington
6055. Arlington, City of, Washington
6056. Asotin, County of, Washington
6057. Auburn, City of, Washington
6058. Bainbridge Island, City of, Washington
6059. Battle Ground, City of, Washington
6060. Bellevue, City of, Washington
6061. Bellingham, City of, Washington
6062. Benton, County of, Washington
6063. Bonney Lake, City of, Washington
6064. Bothell, City of, Washington

6065. Bremerton, City of, Washington
6066. Burien, City of, Washington
6067. Camas, City of, Washington
6068. Centralia, City of, Washington
6069. Chelan, County of, Washington
6070. Cheney, City of, Washington
6071. Clallam, County of, Washington
6072. Clark, County of, Washington
6073. Covington, City of, Washington
6074. Cowlitz, County of, Washington
6075. Des Moines, City of, Washington
6076. Douglas, County of, Washington
6077. East Wenatchee, City of, Washington
6078. Edgewood, City of, Washington
6079. Edmonds, City of, Washington
6080. Ellensburg, City of, Washington
6081. Enumclaw, City of, Washington
6082. Everett, City of, Washington
6083. Federal Way, City of, Washington
6084. Ferndale, City of, Washington
6085. Fife, City of, Washington
6086. Franklin, County of, Washington
6087. Gig Harbor, City of, Washington
6088. Grandview, City of, Washington
6089. Grant, County of, Washington
6090. Grays Harbor, County of, Washington
6091. Island, County of, Washington
6092. Issaquah, City of, Washington
6093. Jefferson, County of, Washington
6094. Kelso, City of, Washington
6095. Kenmore, City of, Washington
6096. Kennewick, City of, Washington
6097. Kent, City of, Washington
6098. King, County of, Washington
6099. Kirkland, City of, Washington
6100. Kitsap, County of, Washington
6101. Kittitas, County of, Washington
6102. Klickitat, County of, Washington
6103. Lacey, City of, Washington
6104. Lake Forest Park, City of, Washington
6105. Lake Stevens, City of, Washington
6106. Lakewood, City of, Washington
6107. Lewis, County of, Washington
6108. Liberty Lake, City of, Washington
6109. Lincoln, County of, Washington
6110. Longview, City of, Washington
6111. Lynden, City of, Washington
6112. Lynnwood, City of, Washington
6113. Maple Valley, City of, Washington
6114. Marysville, City of, Washington
6115. Mason, County of, Washington

6116. Mercer Island, City of, Washington
6117. Mill Creek, City of, Washington
6118. Monroe, City of, Washington
6119. Moses Lake, City of, Washington
6120. Mount Vernon, City of, Washington
6121. Mountlake Terrace, City of, Washington
6122. Mukilteo, City of, Washington
6123. Newcastle, City of, Washington
6124. Oak Harbor, City of, Washington
6125. Okanogan, County of, Washington
6126. Olympia, City of, Washington
6127. Pacific, County of, Washington
6128. Pasco, City of, Washington
6129. Pend Oreille, County of, Washington
6130. Pierce, County of, Washington
6131. Port Angeles, City of, Washington
6132. Port Orchard, City of, Washington
6133. Poulsbo, City of, Washington
6134. Pullman, City of, Washington
6135. Puyallup, City of, Washington
6136. Redmond, City of, Washington
6137. Renton, City of, Washington
6138. Richland, City of, Washington
6139. Sammamish, City of, Washington
6140. San Juan, County of, Washington
6141. SeaTac, City of, Washington
6142. Seattle, City of, Washington
6143. Sedro-Woolley, City of, Washington
6144. Shelton, City of, Washington
6145. Shoreline, City of, Washington
6146. Skagit, County of, Washington
6147. Skamania, County of, Washington
6148. Snohomish, City of, Washington
6149. Snohomish, County of, Washington
6150. Snoqualmie, City of, Washington
6151. Spokane, City of, Washington
6152. Spokane, County of, Washington
6153. Spokane Valley, City of, Washington
6154. Stevens, County of, Washington
6155. Sumner, City of, Washington
6156. Sunnyside, City of, Washington
6157. Tacoma, City of, Washington
6158. Thurston, County of, Washington
6159. Tukwila, City of, Washington
6160. Tumwater, City of, Washington
6161. University Place, City of, Washington
6162. Vancouver, City of, Washington
6163. Walla Walla, City of, Washington
6164. Walla Walla, County of, Washington
6165. Washougal, City of, Washington
6166. Wenatchee, City of, Washington

6167. West Richland, City of, Washington
6168. Whatcom, County of, Washington
6169. Whitman, County of, Washington
6170. Woodinville, City of, Washington
6171. Yakima, City of, Washington
6172. Yakima, County of, Washington
6173. Adams, County of, Wisconsin
6174. Allouez, Village of, Wisconsin
6175. Appleton, City of, Wisconsin
6176. Ashland, County of, Wisconsin
6177. Ashwaubenon, Village of, Wisconsin
6178. Baraboo, City of, Wisconsin
6179. Barron, County of, Wisconsin
6180. Bayfield, County of, Wisconsin
6181. Beaver Dam, City of, Wisconsin
6182. Bellevue, Village of, Wisconsin
6183. Beloit, City of, Wisconsin
6184. Brookfield, City of, Wisconsin
6185. Brown, County of, Wisconsin
6186. Brown Deer, Village of, Wisconsin
6187. Buffalo, County of, Wisconsin
6188. Burlington, City of, Wisconsin
6189. Burnett, County of, Wisconsin
6190. Caledonia, Village of, Wisconsin
6191. Calumet, County of, Wisconsin
6192. Cedarburg, City of, Wisconsin
6193. Chippewa, County of, Wisconsin
6194. Chippewa Falls, City of, Wisconsin
6195. Clark, County of, Wisconsin
6196. Columbia, County of, Wisconsin
6197. Crawford, County of, Wisconsin
6198. Cudahy, City of, Wisconsin
6199. Dane, County of, Wisconsin
6200. De Pere, City of, Wisconsin
6201. DeForest, Village of, Wisconsin
6202. Dodge, County of, Wisconsin
6203. Door, County of, Wisconsin
6204. Douglas, County of, Wisconsin
6205. Dunn, County of, Wisconsin
6206. Eau Claire, City of, Wisconsin
6207. Eau Claire, County of, Wisconsin
6208. Elkhorn, City of, Wisconsin
6209. Fitchburg, City of, Wisconsin
6210. Fond du Lac, City of, Wisconsin
6211. Fond du Lac, County of, Wisconsin
6212. Fort Atkinson, City of, Wisconsin
6213. Fox Crossing, Village of, Wisconsin
6214. Franklin, City of, Wisconsin
6215. Germantown, Village of, Wisconsin
6216. Glendale, City of, Wisconsin
6217. Grafton, Village of, Wisconsin

6218. Grand Chute, Town of, Wisconsin
6219. Grant, County of, Wisconsin
6220. Green Bay, City of, Wisconsin
6221. Green, County of, Wisconsin
6222. Green Lake, County of, Wisconsin
6223. Greendale, Village of, Wisconsin
6224. Greenfield, City of, Wisconsin
6225. Greenville, Town of, Wisconsin
6226. Harrison, Village of, Wisconsin
6227. Hartford, City of, Wisconsin
6228. Hobart, Village of, Wisconsin
6229. Holmen, Village of, Wisconsin
6230. Howard, Village of, Wisconsin
6231. Hudson, City of, Wisconsin
6232. Iowa, County of, Wisconsin
6233. Jackson, County of, Wisconsin
6234. Janesville, City of, Wisconsin
6235. Jefferson, County of, Wisconsin
6236. Juneau, County of, Wisconsin
6237. Kaukauna, City of, Wisconsin
6238. Kenosha, City of, Wisconsin
6239. Kenosha, County of, Wisconsin
6240. Kewaunee, County of, Wisconsin
6241. La Crosse, City of, Wisconsin
6242. La Crosse, County of, Wisconsin
6243. Lafayette, County of, Wisconsin
6244. Langlade, County of, Wisconsin
6245. Lincoln, County of, Wisconsin
6246. Lisbon, Town of, Wisconsin
6247. Little Chute, Village of, Wisconsin
6248. Madison, City of, Wisconsin
6249. Manitowoc, City of, Wisconsin
6250. Manitowoc, County of, Wisconsin
6251. Marathon, County of, Wisconsin
6252. Marinette, City of, Wisconsin
6253. Marinette, County of, Wisconsin
6254. Marquette, County of, Wisconsin
6255. Marshfield, City of, Wisconsin
6256. Menasha, City of, Wisconsin
6257. Menomonee Falls, Village of, Wisconsin
6258. Menomonie, City of, Wisconsin
6259. Mequon, City of, Wisconsin
6260. Middleton, City of, Wisconsin
6261. Milwaukee, City of, Wisconsin
6262. Milwaukee, County of, Wisconsin
6263. Monroe, City of, Wisconsin
6264. Monroe, County of, Wisconsin
6265. Mount Pleasant, Village of, Wisconsin
6266. Muskego, City of, Wisconsin
6267. Neenah, City of, Wisconsin
6268. New Berlin, City of, Wisconsin

6269. Oak Creek, City of, Wisconsin
6270. Oconomowoc, City of, Wisconsin
6271. Oconto, County of, Wisconsin
6272. Onalaska, City of, Wisconsin
6273. Oneida, County of, Wisconsin
6274. Oregon, Village of, Wisconsin
6275. Oshkosh, City of, Wisconsin
6276. Outagamie, County of, Wisconsin
6277. Ozaukee, County of, Wisconsin
6278. Pewaukee, City of, Wisconsin
6279. Pierce, County of, Wisconsin
6280. Platteville, City of, Wisconsin
6281. Pleasant Prairie, Village of, Wisconsin
6282. Plover, Village of, Wisconsin
6283. Polk, County of, Wisconsin
6284. Port Washington, City of, Wisconsin
6285. Portage, City of, Wisconsin
6286. Portage, County of, Wisconsin
6287. Price, County of, Wisconsin
6288. Racine, City of, Wisconsin
6289. Racine, County of, Wisconsin
6290. Richfield, Village of, Wisconsin
6291. Richland, County of, Wisconsin
6292. River Falls, City of, Wisconsin
6293. Rock, County of, Wisconsin
6294. Rusk, County of, Wisconsin
6295. Salem Lakes, Village of, Wisconsin
6296. Sauk, County of, Wisconsin
6297. Sawyer, County of, Wisconsin
6298. Shawano, County of, Wisconsin
6299. Sheboygan, City of, Wisconsin
6300. Sheboygan, County of, Wisconsin
6301. Shorewood, Village of, Wisconsin
6302. South Milwaukee, City of, Wisconsin
6303. St. Croix, County of, Wisconsin
6304. Stevens Point, City of, Wisconsin
6305. Stoughton, City of, Wisconsin
6306. Suamico, Village of, Wisconsin
6307. Sun Prairie, City of, Wisconsin
6308. Superior, City of, Wisconsin
6309. Sussex, Village of, Wisconsin
6310. Taylor, County of, Wisconsin
6311. Trempealeau, County of, Wisconsin
6312. Two Rivers, City of, Wisconsin
6313. Vernon, County of, Wisconsin
6314. Verona, City of, Wisconsin
6315. Vilas, County of, Wisconsin
6316. Walworth, County of, Wisconsin
6317. Washburn, County of, Wisconsin
6318. Washington, County of, Wisconsin
6319. Watertown, City of, Wisconsin

6320. Waukesha, City of, Wisconsin
6321. Waukesha, County of, Wisconsin
6322. Waunakee, Village of, Wisconsin
6323. Waupaca, County of, Wisconsin
6324. Waupun, City of, Wisconsin
6325. Wausau, City of, Wisconsin
6326. Waushara, County of, Wisconsin
6327. Wauwatosa, City of, Wisconsin
6328. West Allis, City of, Wisconsin
6329. West Bend, City of, Wisconsin
6330. Weston, Village of, Wisconsin
6331. Whitefish Bay, Village of, Wisconsin
6332. Whitewater, City of, Wisconsin
6333. Winnebago, County of, Wisconsin
6334. Wisconsin Rapids, City of, Wisconsin
6335. Wood, County of, Wisconsin
6336. Albany, County of, Wyoming
6337. Big Horn, County of, Wyoming
6338. Campbell, County of, Wyoming
6339. Carbon, County of, Wyoming
6340. Casper, City of, Wyoming
6341. Cheyenne, City of, Wyoming
6342. Converse, County of, Wyoming
6343. Evanston, City of, Wyoming
6344. Fremont, County of, Wyoming
6345. Gillette, City of, Wyoming
6346. Goshen, County of, Wyoming
6347. Green River, City of, Wyoming
6348. Jackson, Town of, Wyoming
6349. Laramie, City of, Wyoming
6350. Laramie, County of, Wyoming
6351. Lincoln, County of, Wyoming
6352. Natrona, County of, Wyoming
6353. Park, County of, Wyoming
6354. Riverton, City of, Wyoming
6355. Rock Springs, City of, Wyoming
6356. Sheridan, City of, Wyoming
6357. Sheridan, County of, Wyoming
6358. Sweetwater, County of, Wyoming
6359. Teton, County of, Wyoming
6360. Uinta, County of, Wyoming

EXHIBIT J

Illustrative List of Released Entities

1Life Healthcare, Inc.

Accountable Care Network of Arizona, LLC

Accountable Care Network of Colorado LLC

Accountable Care Network of Florida, LLC

Accountable Care Network of Georgia LLC

Accountable Care Network of Illinois LLC

Accountable Care Network of Misouri LLC

Accountable Care Network of New Jersey, LLC

Accountable Care Network of Pennsylvania, LLC

Accountable Care Network of Tennessee, LLC

Accountable Care Network of Texas, LLC

Accountable Care of New Jersey, LLC

Acumins, Inc.

AGENTRICS, LLC

Alector, Inc.

American Homecare Supply, IV Georgia, LLC

American Occupational Health Management, Inc.

American Occupational Health Management, Inc.

Aromatherapy Associates, Inc

At Home Solutions, Inc.

Avantha Business Solutions, Ltd. (Formerly Salient Business Solutions, Ltd.) *

b.well Connected Health, Inc.

BAP Pharmaceuticals, LLC

Baxter Drug, Inc.

Beauty.com Sales, Inc.

Beauty.com, Inc.

Beeken Petty O'Keefe Fund III LP

Beeken Petty O'Keefe Fund IV LP

Benliro Take Care Health Nevada, P.C.

Bison Acquisition Sub Inc.

Bond Drug Company of Clinton

Bond Drug Company of Clinton (Del.)

Bond Drug Company of Illinois, LLC

Boots Retail Holdings (USA) Inc.

Boots Retail USA Inc.

Bowen Development Company

Bower Take Care Health Nevada P C

BrightSpring Health Services, Inc.

Cancer Care of Naples, L.C.

Cape Fear Home Health Service Inc.

CareCentrix (Area One) Corp.

CareCentrix (Area Three) Corp.

CareCentrix (Area Two) Corp.

CARECENTRIX IPA, INC.

CareCentrix of New Jersey, Inc.

CareCentrix Holdings Inc.

CareCentrix, Inc.

Caremetx, LLC

Carolina I.V. Services, Inc.

CCS Infusion Management, LLC

CCSI Holding 3, LLC

CCX Acquisition, Inc.

CCX NEXT, LLC

CG Transportation, LLC

Chartwell Care Givers, Inc.

Chartwell-Southern New England, L.L.C.

CHDM, Inc.

CHDM, LLC

CHI HOLDING CORPORATION

Circa LLC

CLINICAL HOLDINGS INC.

Clinical Resource Network, Inc.

CLINICAL SPECIALTIES NETWORK SERVICES OF ILLINOIS, I

Clinical Specialties Network Services of Illinois, Inc.,

CLINICAL SPECIALTIES, INC.

CNS Acquisition, Inc.

Collins I.V. Care, LLC

Consolidated Stores, Inc.

Continuum Health Management Solutions, LLC (formerly I-Trax Management Solutions, LLC)

Corinthian Care Group, LLC

Corporate Health Dimensions, Inc.

Creative Options, Inc.

Crescent Healthcare Inc.

Crescent Therafusion Inc.

Critical Care Systems of New York, Inc.

Critical Care Systems, Inc.

CSI MANAGED CARE, INC.

CSI MEDICAL BILLING SERVICES, INC.

CSI NETWORK SERVICES OF INDIANA, INC.

CSI NETWORK SERVICES OF KENTUCKY, INC.

CSI NETWORK SERVICES OF MICHIGAN, INC.

Custom Nutrition Services, Inc.

Cypress Home Medical, Inc.

Cystic Fibrosis Foundation Pharmacy, LLC (Walgreens Specialty Pharmacy, LLC owns 80%)

Cystic Fibrosis Services, Inc.

Cystic Fibrosis Services, LLC

Daylight Beta Holdings, LP

De~Luxe Distributors, Inc.

Deerfield Funding Corporation

DME Options, Inc.

DOVER SUBSIDIARY INC

DR Employee Services LLC

DRI I Inc

drugstore com Inc

Drugstore.com Foundation

drugstore.com LLC

Drugstore.com, LLC

DS Distribution, Inc.

DS Fulfillment, Inc.

DS Non-Pharmaceutical Sales, Inc.

DS Pharmacy, Inc.

DSGC Idaho, Inc

Duane Reade Charitable Foundation

Duane Reade Holdings Inc

Duane Reade Inc.

Duane Reade International LLC

Duane Reade Realty Inc

Duane Reade, a New York General Partnership

Eager Park Pharmacy and Health Services, LLC

East West Distributing Co., LLC

East West Distributing Merger Co., LLC (DE)

Evolvere Health LLC

Excel Healthcare LLC

ExceleraRx, LLC

"Ferbet Take Care Health Louisiana, a Professional Nursing Corporation f/k/a

Randolph Take Care Health Louisiana, a Professional Nursing Corporation. "

Ferbet Take Care Health Maryland, P.C.

Flash Buyer, LLC

Fountain Products Corporation

Freedom Oxygen, Inc.

Full Road Holdings Ltd

Globe Discount City of Arizona, Inc.

Globe Discount City of Louisiana, Inc.

Globe I, LLC

Globe Stores, Inc.

Green Hills Insurance Company, A Risk Retention Group

Grenada Advertising Agency, Inc.

H3 (US 1) LLC

H3 (US 2) LLC

H3 (US 3) LLC

H3 (US 4) LLC

Happy Harry's Discount Drug Stores, Inc.

Happy Harry's Discount Store, Inc.

Happy Harry's, Inc.

HC Group Holdings I, LLC

HC Omega Merger Sub, LLC

Healthbox LLC

Healthcare Clinic Solutions, LLC

Healthcare Options of Minnesota, Inc.

Healthworks Med Group of Oklahoma, P.C.

Healthworks Medgroup of San Antonio, Inc.

HHDH CORP

HLM Venture Partners III, L.P.

Home Care of Boone County, Inc.

Home Care of Columbia, Inc.

Home Drug Company

Home Health of Option Care Inc

Home I.V., Inc.

Home Infusion Therapy of Bullhead City, Inc.

Hometeam Technologies, Inc.

Hummer Whole Health Management, Inc.

Hunterdon Infusion Services LLC

I.V. Associates, Inc.

Infinity Infusion Care, Ltd.

Infinity Infusion II, LLC

Infinity Infusion, LLC

Infusion Specialties, Inc.

Infusion Therapy of Corona, Inc.

Innovation Associates Holdings, Inc.

Innovation Associates, Inc.

Intercom Pharmacy Systems, Inc.

International Travel Service, Inc.

International Vision Direct Corp.

International Vision Direct, Inc.

Ion Merger Sub, Inc.

I-Trax Health Management Solutions, Inc.

IVP NORTHEAST, INC.

Ivpcare Northeast, Inc.

Ivpcare, Inc.

Jim Bain’s Pharmacy, Inc.

Kinnevik US Holding, LLC

Lake Cook Assurance Company

Lake Cook Investments, LLC

Laurel Mountain Medical Supply, LLC

LCA Insurance Co., Inc.

Lensquest, Inc.

Live Whole Health, Inc.

Lord Jim, Inc.

Luxury Mint Corporation

LV Sourcing LLC

LVD Sourcing LLC

Management by Information, Inc.

Market Strategies, LLC

Maximum Health Care Concepts, Inc.

May’s Drug Stores, Inc.

MCA Pharmacy, LLC

McKesson Specialty Pharmaceuticals LLC

Med Mark, Inc.

MedAvail Holdings, Inc.

MedAvail, Inc.

Medcare, Inc.

Medco Online Sales, Inc.

Medepoint.Com, Inc.

Medi Mart Corporation

MEDICATION ADHERENCE SOLUTIONS, LLC (Formerly WALGREENS LONG-TERM CARE PHARMACY, LLC)

Medicenter, Inc.

Mediclaim Corp.

Medmark Data Management Inc.

Medmark Data Management, Inc.

Medmark Holdings Inc.

Medmark, Inc.

MedNow Infusion LLC

Med-X Corporation

Memphis Warehouse Co.

Meridian COMP of New York, Inc.

Mosso's Medical Supply Company, LLC

M-X Corporation

NDES Holdings, LLC

nirvanaHealth, Inc.

North County Home I.V., Inc.

Nutrition Research Laboratories, Inc.

Oak HC/FT VMD Blocker, LLC

OCH US Holding LLC

Onsite Holding, LLC

Ontario Cl 3 Limited

Ontario Cl 4 Limited

Ontario Merger Sub Inc.

Ontario Merger Sub, Inc.

OpCo Hatfield Medical Group, LLC

Option Care Camilla, Inc.

Option Care Capital Services, Inc.

Option Care Enterprises Inc

Option Care Enterprises, Inc. (DE)

Option Care Enterprises, Inc. (PA)

Option Care Foundation, Inc.

Option Care Health, Inc.

Option Care Home Health of California, Inc.

Option Care Home Health of Coweta, Inc.

Option Care Home Health, L.L.C.

Option Care Home Health, LLC (WA)

Option Care Home Infusion, L.L.C.

Option Care Hospice Foundation , Inc.

Option Care Hospice Inc.

Option Care Inc

Option Care Kansas City, LLC

Option Care Nevada, L.L.C.

Option Care of Denver, Inc.

Option Care of New York, Inc.

Option Care of Oklahoma, Inc.

Option Care Phoenix, LLC

Option Care, Inc. (DE)

Option Care, Inc.(CA)

Option Home Health Care - Private Duty, Inc.

Option Home Health Care Services, Inc.

Option Home Health Care Services, Inc.

Option Home Health Care Services-Private Duty, Inc.

Option Home Health Care, Inc.

Option Home Health Inc

Optioncare.Com, Inc.

OptioNet, Inc.

Optionlink, Inc.

Optionmed, Inc.

OptionMed, Inc.

Orlando Warehouse Co.

Orlando Warehouse, Inc.

Pharaoh JV, LLC

Pharm Mart Pharmacy of Warren, Inc.

Pharma Dynamics, Inc.

Pharmacy I.V. Associates, Inc.

Pharmatech Business Services, Inc.

Pharm-mart of Warren, Inc.

Pharm-Mart Pharmacy of Warren, Inc.

Physician Options, Inc.

PMC Ventures, LLC

Polaris Partners VII, L.P.

Polaris Venture Partners VI, L.P.

Prima Vista Water Management Assoc., Inc.

Prime Therapeutics LLC

Prime Therapeutics Specialty Pharmacy LLC

Pro Fitness Health Solutions, LLC

Productive Health Corportation

Pro-Fitness, L.L.C.

Project H3, LLC

Putter Acquisition Sub, Inc.

Rad Online Sales, Inc.

Redmile Private Investments I, L.P.

Rehab Options, Inc.

Rehab Options, Inc.

Rennebohm Drug Stores, Incorporated

Repligen Corporation

Retail Procurement Alliance LLC

Rich Mountain Pharmaceutical Services, Inc.

River City Pharmacy Inc

Riviera Brands, LLC

Robin Hood Restaurants of Illinois, Inc.

Rockville Travilah Square, LLC

RxAlly, LLC

S & G Health Care Management Services, Inc.

"S & G US Holding LLC "

S & W Pharmacy, Inc.

Salient Health Care Services, Inc.

Salient Health Care Services, L.L.C.

Salu Beauty, Inc.

Sanborns Mexico

Sandbox Advantage Fund, L.P.

Scholar Rock Holding Corporation

Schraft's, A Walgreen Specialty Pharmacy, LLC

SeniorMed L.L.C.

Shields Care Management of Worcester, LLC

Shields Health Management Company, LLC

Shields Health Management Holdings, Inc.

Shields Health Network, LLC

Shields Health Resources, LLC

Shields Health Solutions Holdings, LLC

Shields Health Solutions MidCo, LLC

Shields Health Solutions Parent, LLC

Shields Health Solutions Pharmacy, LLC

Shields Pharmacy Equity, LLC

Shields Pharmacy of Berkshire, LLC

Shields Pharmacy of California, LLC

Shields Pharmacy of Camden LLC

Shields Pharmacy of Central Illinois, LLC

Shields Pharmacy of Central New York, LLC

Shields Pharmacy of Chicago Midwest, LLC

Shields Pharmacy of Colorado II, LLC

Shields Pharmacy of Colorado, LLC

Shields Pharmacy of Columbia Maryland, LLC

Shields Pharmacy of Connecticut II, LLC

Shields Pharmacy of Connecticut, LLC

Shields Pharmacy of Eastern Carolina, LLC

Shields Pharmacy of Eastern Texas, LLC

Shields Pharmacy of Georgia, LLC

Shields Pharmacy of Hartford LLC

Shields Pharmacy of Minnesota, LLC

Shields Pharmacy of Mississippi, LLC

Shields Pharmacy of Nevada, LLC

Shields Pharmacy of New Bedford, LLC

Shields Pharmacy of New York II, LLC

Shields Pharmacy of New York, LLC

Shields Pharmacy of Norfolk Virginia, LLC

Shields Pharmacy of North Carolina, LLC

Shields Pharmacy of Ohio, LLC

Shields Pharmacy of Palo Alto, LLC

Shields Pharmacy of Providence LLC

Shields Pharmacy of Rhode Island, LLC

Shields Pharmacy of San Antonio, LLC

Shields Pharmacy of South Carolina, LLC

Shields Pharmacy of St. Louis, LLC

Shields Pharmacy of the Bronx, LLC

Shields Pharmacy of the Southwest Venture, LLC

Shields Pharmacy of the Southwest, LLC

Shields Pharmacy of University LLC

Shields Pharmacy of Virginia, LLC

Shields Pharmacy of Western Florida, LLC

Shields Pharmacy of Western Michigan, LLC

Shields Pharmacy of Western New York, LLC

Shields Specialty Pharmacy of Springfield, LLC

Shields Technology Solutions, LLC

SIC Parent, LLC

SIC Parent, LLC (WRA Partners, LLC owns 51%)

Silk Acquisition Corp.

Sleep Management Solutions LLC

Smart Insurance Co

Smart Insurance Company

Smart Insurance Company Group Holdings, Inc.

Smart Insurance Company Holdings, Inc.

Soap & Glory USA LLC

Solera Health, Inc.

Spa Strategy, Inc.

Spokane Health Care Associates, Inc.

Springville Pharmacy Infusion Therapy, Inc.

Stephen L. LaFrance Holdings, Inc.

Stephen L. LaFrance Pharmacy, Inc.

Summit Medical Group Arizona, LLC

SUNAMERICA AFFORDABLE HOUSING PARTNERS XI

Super D Drugs Acquisition Co.

Superior LuxCo 1 S.a.r.l.

Superior Luxco 3 S.A.R.L.

Superior US 1 LLC

Take Care Employer Solutions, LLC

Take Care Health Arizona, P.C.

Take Care Health Colorado, Inc.

Take Care Health Delaware, P.A.

Take Care Health District of Columbia, P.C.

Take Care Health Georgia, P.C.

Take Care Health Illinois, P.C.

Take Care Health Indiana, P.C.

Take Care Health Kansas, P.A.

Take Care Health Kentucky, P.S.C.

Take Care Health Massachusetts, P.C.

Take Care Health Mississippi, P.C.

Take Care Health Missouri, P.C.

Take Care Health New Jersey, P.A.

Take Care Health Ohio, Inc.

Take Care Health Oklahoma, P.C.

Take Care Health Pennsylvania, PC

Take Care Health Services, P.A.

Take Care Health Systems LLC

Take Care Health Systems, Inc. (FKA I-Trax, Inc.)

Take Care Health Tennessee, P.C.

Take Care Health Texas, P.C.

Take Care Health Wisconsin, S.C.

Take Care Medical Health New York, P.C.

The 1901 Group LLC

The drugstore.com Foundation

The Lane Drug Company

The Patient Safety Research Foundation, Inc.

The PSRF Merger Co., Inc.

Thrifty Payless, Inc.

THV VMD Blocker, LLC

TKH HoldCo, LLC

TMD, Inc.

TPR Holdings LLC

Trinity Home Care, LLC

TSL, Inc.

TURN-KEY PALLIATIVE SERVICES, LLC

Turn-Key Health Holdings, L.P.

Ultra Care, LLC

UMass Memorial Shields Pharmacy, LLC

University Option Care LLC

USA Drug

USA/Super D Franchising, Inc.

VICTORIA MERGER SUB. INC.

Vim, Inc.

Vision Direct Inc

W D Liquor, Inc.

WAB Holdings, LLC

WAG Employee Services Inc.

WagBeau LLC

WagBeau, Inc.

WAGDCO, LLC

WAGHID, LLC

Wag's Restaurants of Illinois, Inc.

Waldoy, L.P

Walgreen Altoona Co.

Walgreen Alumni Association

Walgreen Arizona Drug Co.

Walgreen Benefit Fund

Walgreen Capitol Court, Inc.

Walgreen Co PAC

Walgreen Co Puerto Rico Branch

Walgreen Co.

Walgreen Columbus Co.

Walgreen Community Development

Walgreen Cudahy, Inc.

Walgreen Delaware Co.

Walgreen Drug Stores Historical Foundation

Walgreen Drugs, Inc.

Walgreen Eastern Co., Inc.

Walgreen Fon-Du-Lac, Inc.

Walgreen Fremont Co.

Walgreen Hastings Co.

Walgreen International Investments LLC

Walgreen International S.a.r.l.

Walgreen Investments Co

Walgreen Investments Merger Co., LLC

Walgreen Investments Merger Co., LLC (DE)

Walgreen Kearney Co

Walgreen Laboratories, Inc.

Walgreen Lincoln Co.

Walgreen Louisiana Co., Inc.

Walgreen Market Strategies LLC

Walgreen Medical Supply, Inc.

Walgreen Mercantile Corporation

Walgreen Milwaukee, Inc.

Walgreen National Corporation

Walgreen Network Health Services

Walgreen Nevada Corporation

Walgreen New Berlin, Inc.

Walgreen Oconomowoc, Inc.

Walgreen of Hato Rey Inc.

Walgreen of Hawaii, LLC

Walgreen of Maui, Inc.

Walgreen of Maui, Inc.

Walgreen of Nevada, LLC

Walgreen of New Mexico, Inc.

Walgreen of Puerto Rico, Inc.

Walgreen of San Patricio, Inc.

Walgreen of US Virgin Islands, LLC

Walgreen Oshkosh, Inc.

Walgreen Pharmacy Services Eastern LLC

Walgreen Pharmacy Services Eastern, LLC

Walgreen Pharmacy Services Midwest, LLC

Walgreen Pharmacy Services Southern, LLC

Walgreen Pharmacy Services Western, LLC

Walgreen Pharmacy Services WHS, LLC

Walgreen Pharmacy Strategies, LLC

Walgreen PR Branch

Walgreen Properties, Inc.

Walgreen Racine, Inc.

Walgreen Realty Resources LLC

Walgreen South Dakota, Inc.

Walgreen Southgate Corp.

Walgreen Specialty Holdings, LLC

Walgreen Watertown, Inc.

Walgreen Waukesha, Inc.

Walgreen West Bend, Inc.

Walgreen Wisconsin, Inc.

Walgreen Woodmar, Inc.

Walgreen-Option Care, Inc. {FKA CuraScript Infusion)

Walgreens Advance Care, Inc.

Walgreens Annapolis, LLC

Walgreens Assistance, Inc.

Walgreens Boots Alliance Holdings LLC

Walgreens Boots Alliance Scottish LP

Walgreens Boots Alliance US 1 LLC

Walgreens Boots Alliance US 2 LLC

Walgreens Boots Alliance US 3 LLC

Walgreens Boots Alliance, Inc.

Walgreens Business Services, LLC

Walgreens.com Inc

Walgreens Community Development Corp

Walgreens Health COE LLC

Walgreens Health Holdings, LLC

Walgreens Health Initiatives - IPA, Inc.

Walgreens Health Initiatives, Inc.

Walgreens Health Services II LLC

Walgreens Health Services III LLC

Walgreens Health Services LLC

Walgreens Health Ventures LLC

Walgreens Healthcare Plus, Inc.

Walgreens Home Care Inc

Walgreens Infusion and Respiratory Services, LLC

Walgreens Infusion Services at Legacy Health, LLC (formerly Option Care at Legacy, L.L.C.)

Walgreens Infusion Services Holding, Inc.

Walgreens Infusion Services, Inc. (FKA Option Care,)

Walgreens Investments Co.

Walgreens Long-Term Care Pharmacy LLC(FKA SeniorMed)

Walgreens Mail Service, Inc.

Walgreens Mail Service, LLC

Walgreens Network Health Services LLC

Walgreens of Massachusetts, LLC

Walgreens of New Mexico, Inc.

Walgreens of North Carolina, Inc.

Walgreens Personal Financial Services, LLC

Walgreens Pharmacy Strategies, LLC

Walgreens Sleep and Respiratory Pharmacy LLC

Walgreens Specialty Care Centers LLC

Walgreens Specialty Pharmacy Holdings, Inc.

Walgreens Specialty Pharmacy Holdings, LLC

Walgreens Specialty Pharmacy, LLC

Walgreens Store No 3288 LLC

Walgreens Store No 3332 LLC

Walgreens Store No 3680 LLC

Walgreens Store No 4650 LLC

Walgreens Store No 4651 LLC

Walgreens Store No 5576 LLC

Walgreens Store No 5838 LLC

Walgreens Store No. 7839, LLC

Walgreens Venture Capital, LLC

WALGREENS WELL NETWORK OF MODESTO, LLC (FORMERLY ACCOUNTABLE CARE NETWORK OF MISSOURI, LLC) nc on 5/23/2013

WALGREENS WELL NETWORK OF OAKLAND, LLC (FORMERLY ACCOUNTABLE CARE NETWORK OF GEORGIA, LLC) nc on 5/23/2013

WALGREENS WELL NETWORK OF PALO ALTO, LLC (formerly Walgreens Well Network of Maryland LLC) nc on 5/23/2013

WALGREENS WELL NETWORK OF SACRAMENTO, LLC (FORMERLY ACCOUNTABLE CARE NETWORK OF COLORADO, LLC) NC on 5/23/13

WALGREENS WELL NETWORK OF SAN FRANCISCO, LLC (formerly Walgreens Well Network of California LLC) nc on 5/23/2013

Walgreens.com, Inc.

Walgreens-Optioncare, Inc.

Waltrust Properties, Inc.

WBA Acquisition 3, LLC

WBA Acquisition 4, LLC

WBA Acquisition 5, LLC

WBA Acquisition 6, LLC

WBA Financial, LLC

WBA Innovation Midco, LLC

WBA Innovation Parent, LLC

WBA Innovation, LLC

WBA INVESTMENTS, INC. (FKA WBA INVESTMENTS, LLC)

WBA RxR US LLC

WBA Shields Merger Sub, LLC

WBA US 1 Co.

WBA US 10 LLC

WBA US 4 LLC

WBA US 5 LLC

WBA US 6 LLC

WBA US 7 LLC

WBA US 8 LLC

WBA US 9 LLC

WCAS Shields Holdings, LLC

WD Liquor, Inc.

Wedge Acquisition Company

Well Ventures, LLC

Weymouth Property, Inc .

WHI (PR Branch)

Whole Health Management, LLC

WHP Health Initiatives, Inc.

Worthmore Cosmetics And Vitamins Co.

WRA Partners, LLC

WVC Investments LLC

EXHIBIT K

Subdivision Participation and Release Form

[Draft]

Governmental Entity:	State:
Authorized Official:	
Address 1:	
Address 2:	
City, State, Zip:	
Phone:	
Email:	

The governmental entity identified above ("*Governmental Entity*"), in order to obtain and in consideration for the benefits provided to the Governmental Entity pursuant to the Settlement Agreement dated December [ ], 2022 ("*Walgreens Settlement*"), and acting through the undersigned authorized official, hereby elects to participate in the Walgreens Settlement, release all Released Claims against all Released Entities, and agrees as follows.

1. The Governmental Entity is aware of and has reviewed the Walgreens Settlement, understands that all terms in this Participation and Release Form have the meanings defined therein, and agrees that by executing this Participation and Release Form, the Governmental Entity elects to participate in the Walgreens Settlement and become a Participating Subdivision as provided therein.

2. The Governmental Entity shall promptly, and in any event no later than 14 days after the Reference Date and prior to the filing of the Consent Judgment, dismiss with prejudice any Released Claims that it has filed. With respect to any Released Claims pending in *In re National Prescription Opiate Litigation*, MDL No. 2804, the Governmental Entity authorizes the Plaintiffs' Executive Committee to execute and file on behalf of the Governmental Entity a Stipulation of Dismissal with Prejudice substantially in the form found at [website link to national settlement website to be provided].

3. The Governmental Entity agrees to the terms of the Walgreens Settlement pertaining to Participating Subdivisions as defined therein.

4. By agreeing to the terms of the Walgreens Settlement and becoming a Releasor, the Governmental Entity is entitled to the benefits provided therein, including, if applicable, monetary payments beginning after the Effective Date.

5. The Governmental Entity agrees to use any monies it receives through the Walgreens Settlement solely for the purposes provided therein.

6. The Governmental Entity submits to the jurisdiction of the court in the Governmental Entity's state where the Consent Judgment is filed for purposes limited to that court's role as provided in, and for resolving disputes to the extent provided in, the Walgreens Settlement. The Governmental Entity likewise agrees to arbitrate before the National Arbitration Panel as provided in, and for resolving disputes to the extent otherwise provided in, the Walgreens Settlement.

7. The Governmental Entity has the right to enforce the Walgreens Settlement as provided therein.

8. The Governmental Entity, as a Participating Subdivision, hereby becomes a Releasor for all purposes in the Walgreens Settlement, including without limitation all provisions of Section XI (Release), and along with all departments, agencies, divisions, boards, commissions, districts, instrumentalities of any kind and attorneys, and any person in their official capacity elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, and any other entity identified in the definition of Releasor, provides for a release to the fullest extent of its authority. As a Releasor, the Governmental Entity hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the Walgreens Settlement are intended by the Parties to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of the Governmental Entity to release claims. The Walgreens Settlement shall be a complete bar to any Released Claim.

9. The Governmental Entity hereby takes on all rights and obligations of a Participating Subdivision as set forth in the Walgreens Settlement.

10. In connection with the releases provided for in the Walgreens Settlement, each Governmental Entity expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Governmental Entity hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance,

oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Governmental Entities' decision to participate in the Walgreens Settlement.

11. Nothing herein is intended to modify in any way the terms of the Walgreens Settlement, to which Governmental Entity hereby agrees. To the extent this Participation and Release Form is interpreted differently from the Walgreens Settlement in any respect, the Walgreens Settlement controls.

I have all necessary power and authorization to execute this Participation and Release Form on behalf of the Governmental Entity.

Signature: _____

Name: _____

Title: _____

Date: _____

EXHIBIT L

Settlement Fund Administrator Terms

[Exhibit to be inserted prior to the Reference Date]

EXHIBIT M-1: PAYMENT SCHEDULE

Payment Year	Maximum Annual Fees Payment (See Exhibit M-3)	Maximum Annual Remediation Payment (See Exhibit M-2)	Annual Maximum
Year 1 9/1/22 - 8/31/23	---	$369,445,784	$369,445,784
Year 2 9/1/23 - 8/31/24	$122,393,885	$243,858,900	$366,252,785
Year 3 9/1/24 - 8/31/25	$122,393,885	$243,858,900	$366,252,785
Year 4 9/1/25 - 8/31/26	$122,393,885	$243,858,900	$366,252,785
Year 5 9/1/26 - 8/31/27	$122,393,885	$243,858,900	$366,252,785
Year 6 9/1/27 - 8/31/28	$122,393,885	$243,858,900	$366,252,785
Year 7 9/1/28 - 8/31/29	$122,393,885	$243,858,900	$366,252,785
Year 8 9/1/29 - 8/31/30	---	$369,445,784	$369,445,784
Year 9 9/1/30 - 8/31/31	---	$369,445,784	$369,445,784
Year 10 9/1/31 - 8/31/32	---	$369,445,784	$369,445,784
Year 11 9/1/32 - 8/31/33	---	$369,445,784	$369,445,784
Year 12 9/1/33 - 8/31/34	---	$369,445,784	$369,445,784
Year 13 9/1/34 - 8/31/35	---	$369,445,784	$369,445,784
Year 14 9/1/35 - 8/31/36	---	$369,445,784	$369,445,784
Year 15 9/1/36 - 8/31/37	---	$369,445,784	$369,445,784
Total	**$734,363,310**	**$4,788,165,456**	**$5,522,528,766**

EXHIBIT M-2: MAXIMUM ANNUAL REMEDIATION PAYMENT SCHEDULE

Payment Year	Maximum Base Payments (41%)	Maximum Incentive Payment A (59%)	Maximum Incentive Payment BC (56%)	Maximum Incentive Payment D (10%)	Maximum Annual Remediation Payment
Year 1 The later of December 31, 2022 or five business days after Preliminary Agreement Date	$369,445,784	---	---	---	$369,445,784
Year 2 December 31, 2023	$99,982,150	$143,876,750	$143,876,750	---	$243,858,900
Year 3 March 31, 2025	$99,982,150	$143,876,750	$143,876,750	---	$243,858,900
Year 4 March 31, 2026	$99,982,150	$143,876,750	$143,876,750	---	$243,858,900
Year 5 March 31, 2027	$99,982,150	$143,876,750	$143,876,750	---	$243,858,900
Year 6 March 31, 2028	$99,982,150	$143,876,750	$129,512,255	$47,881,655	$243,858,900
Year 7 March 31, 2029	$99,982,150	$143,876,750	$129,512,255	$47,881,655	$243,858,900
Year 8 March 31, 2030	$124,226,144	$245,219,640	$230,855,143	$47,881,655	$369,445,784
Year 9 March 31, 2031	$124,226,144	$245,219,640	$230,855,143	$47,881,655	$369,445,784
Year 10 March 31, 2032	$124,226,144	$245,219,640	$230,855,143	$47,881,655	$369,445,784
Year 11 March 31, 2033	$124,226,144	$245,219,640	$230,855,143	$47,881,655	$369,445,784
Year 12 March 31, 2034	$124,226,144	$245,219,640	$230,855,143	$47,881,655	$369,445,784
Year 13 March 31, 2035	$124,226,144	$245,219,640	$230,855,143	$47,881,655	$369,445,784
Year 14 March 31, 2036	$124,226,144	$245,219,640	$230,855,143	$47,881,655	$369,445,784
Year 15 December 31, 2036	$124,226,144	$245,219,640	$230,855,143	$47,881,655	$369,445,784
Total	**$1,963,147,836**	**$2,825,017,620**	**$2,681,372,654**	**$478,816,550**	**$4,788,165,456**

NOTES TO EXHIBIT M-2:

1. All figures for the Maximum Base Payment, Maximum Incentive A Payment, and Maximum Incentive Payment BC are maximum figures that reflect the following:
   - An assumption that all Eligible States are Settling States.
   - An assumption that all Settling States earn the full amount of the relevant incentive payment.

2. All figures for the Maximum Incentive Payment D show the amount earned based on all Settling States obtaining its maximum value of 10%, and reflect the following:
   - An assumption that all Eligible States are Settling States.
   - An assumption that all Settling States are eligible for Incentive Payment D in every Payment Year in which Incentive D is paid.

3. All figures for the Maximum Annual Remediation Payment reflect the following:
   - The credit amount of $361,834,542 for Florida's prior settlements have already been applied. The credit amount for Suffolk and Nassau Counties in New York in the amount of 15.31% of New York State's Allocation has not been applied against New York's allocation.
   - An assumption that all Eligible States are Settling States.
   - An assumption that each Settling State earn the maximum amount of the available Incentive Payment by either qualifying for Incentive Payment A, or the combination of obtaining a 100% participation percentage for Incentive Payment BC and earning Incentive Payment D at a value of 3%).

4. Any offsets for Eligible States that are Non-Settling States would be deducted from the Maximum Base Payment, Maximum Incentive Payments (A, BC, and D), and Maximum Annual Remediation Payment by subtracting the amount of the payment times the Overall State Allocation Percentage for each Non-Settling State.

EXHIBIT M-3: ANNUAL FEES PAYMENT SCHEDULE

Payment Year	Maximum Exhibit R Attorney Fee and Cost Funds	Common Benefit Fee on Credits	State Cost Fund	Maximum State Outside Counsel Fee Fund	Maximum Additional Remediation Amount	Maximum Annual Fees Payment
Year 2 December 31, 2023	$98,955,419	$7,477,914	$7,980,276	$3,990,138	$3,990,138	$122,393,885
Year 3 December 31, 2024	$98,955,419	$7,477,914	$7,980,276	$3,990,138	$3,990,138	$122,393,885
Year 4 December 31, 2025	$98,955,419	$7,477,914	$7,980,276	$3,990,138	$3,990,138	$122,393,885
Year 5 December 31, 2026	$98,955,420	$7,477,914	$7,980,275	$3,990,138	$3,990,138	$122,393,885
Year 6 December 31, 2027	$98,955,420	$7,477,914	---	$7,980,275	$7,980,276	$122,393,885
Year 7 December 31, 2028	$98,955,421	$7,477,913	---	$7,980,276	$7,980,275	$122,393,885
Total	**$593,732,518**	**$44,867,483**	**$31,921,103**	**$31,921,103**	**$31,921,103**	**$734,363,310**

Exhibit N
Additional Remediation Amount Allocation Percentages

Alabama	2.0094047523%
American Samoa	0.0215590674%
Arizona	2.9911870812%
California	12.4923284542%
Colorado	2.0922099886%
Connecticut	1.6290775863%
District of Columbia	0.2266153628%
Georgia	3.5107212404%
Guam	0.0604844794%
Hawaii	0.4087756176%
Idaho	0.6193769970%
Illinois	4.1882957440%
Indiana	2.7913607538%
Iowa	0.9341820978%
Kansas	0.9872591950%
Louisiana	1.8447419766%
Maine	0.6664875621%
Maryland	2.6575348718%
Massachusetts	2.9005058228%
Minnesota	1.6334209688%
Missouri	2.5253744735%
Montana	0.3935393398%
N. Mariana Islands	0.0210349545%
Nebraska	0.5252526469%
New Jersey	3.4690785339%
New York	6.7872003052%
North Carolina	4.0924962523%
North Dakota	0.2140841267%
Ohio	5.4856657801%
Oklahoma	1.9292810204%
Oregon	1.7302239375%
Pennsylvania	5.7772011360%
Rhode Island	0.5622563667%
South Carolina	1.9381920268%
Tennessee	3.3847318704%
Texas	7.9239877394%
Vermont	0.3204352512%

Virgin Islands	0.0397474619%
Virginia	2.8709652916%
Washington	2.9198056809%
Wisconsin	2.2138760297%
Wyoming	0.2100401547%

Exhibit O
Adoption of a State-Subdivision Agreement

A State-Subdivision Agreement shall be applied if it meets the requirements of Section V and is approved by the State and by the State's Subdivisions as follows:

1. *Requirements for Approval*. A State-Subdivision Agreement shall be deemed as agreed to when it has been approved by the State and either (a) Subdivisions whose aggregate "Population Percentages," determined as set forth below, total more than sixty percent (60%), or (b) Subdivisions whose aggregate Population Percentages total more than fifty percent (50%) provided that these Subdivisions also represent fifteen percent (15%) or more of the State's counties or parishes (or, in the case of Settling States whose counties and parishes do not function as local governments, 15% of or more of the Settling State's non-county Subdivisions), by number.

2. *Approval Author-ity*. Approval by the State shall be by the Attorney General. Approval by a Subdivision shall be by the appropriate official or legislative body pursuant to the required procedures for that Subdivision to agree to a legally binding settlement.

3. *Population Percentage Calculation*. For purposes of this Exhibit O only, Population Percentages shall be determined as follows: For States with functional counties or parishes[3] the Population Percentage of each county or parish shall be deemed to be equal to (a) (1) two hundred percent (200%) of the population of such county or parish, minus (2) the aggregate population of all Primary Incorporated Municipalities located in such county or parish, divided by (b) two hundred percent (200%) of the State's population. A "*Primary Incorporated Municipality*" means a city, town, village or other municipality incorporated under applicable state law with a population of at least 25,000 that is not located within another incorporated municipality. The Population Percentage of each Primary Incorporated Municipality shall be equal to its population (including the population of any incorporated or unincorporated municipality located therein) divided by two hundred percent (200%) of the State's population; provided that the Population Percentage of a Primary Incorporated Municipality that is not located within a county shall be equal to two hundred percent (200%) of its population (including the population of any incorporated or unincorporated municipality located therein) divided by two hundred percent (200%) of the State's population. For all States that do not have functional counties or parishes, the Population Percentage of each non-county Subdivision (including any incorporated or unincorporated municipality located therein), shall be equal to its population divided by the State's population.

[3] Certain states do not have counties or parishes that have functional governments, including: Alaska, Connecticut, Massachusetts, Rhode Island, and Vermont.

4. *Preexisting Agreements and Statutory Provisions*. A State may include with the notice to its Subdivisions an existing agreement, a proposed agreement, or statutory provisions regarding the distribution and use of settlement funds and have the acceptance of such an agreement or statutory provision be part of the requirements to be an Initial Participating Subdivision.

EXHIBIT P

Pharmacy Controlled Substance Compliance Program & Anti-Diversion Injunctive Terms

I. INTRODUCTION

1. Except where these Injunctive Terms specify a different implementation period, Walgreens shall implement the Injunctive Terms set forth below in Sections II through XVII by the Injunctive Terms Implementation Date (defined below).

2. To the extent that Walgreens already has in place positions, committees, departments, policies or programs that satisfy the Injunctive Terms, no re-naming or other change is required by these Injunctive Terms.

3. Overview

    a. Walgreens will implement or maintain a Controlled Substance Compliance Program ("CSCP").

    b. The CSCP must include written standard operating procedures and/or corporate policies (the "CSCP Policies and Procedures") required by these Injunctive Terms.

    c. The CSCP shall apply during the term of these Injunctive Terms, to each of Walgreens' retail pharmacy stores that dispense Schedule II Designated Controlled Substances and are registered or licensed with each Settling State.

    d. Walgreens shall provide a copy of the relevant CSCP Policies and Procedures to each Settling State within sixty (60) days of the Injunctive Terms Implementation Date. To the extent any implementation is expected to require additional time, the Parties agree to work together in good faith to establish a timeline for implementation. No later than thirty (30) days after the Injunctive Terms Implementation Date, each Settling State shall identify the person or office to whom Walgreens must provide a copy of the relevant CSCP Policies and Procedures and any other State-specific reporting required under these Injunctive Terms.

    e. Settling States shall form the States Injunctive Relief Committee to serve as a point of contact for Walgreens and to perform such other roles as set forth herein. Upon the committee's formation, Settling States shall provide notice to Walgreens of the members of the committee.

4. Compliance with Laws

a. Walgreens acknowledges and agrees that its pharmacies must comply with applicable state and federal laws, regulations, and rules, including those regarding the dispensing of Controlled Substances. The requirements of these Injunctive Terms are in addition to, and not in lieu of, any other requirements of federal, state, or local law. Nothing in the Injunctive Terms shall be construed as relieving Walgreens of the obligation of its pharmacies to comply with all federal, state and local laws, regulations or rules, nor shall any of the provisions of the Injunctive Terms be deemed as permission for Walgreens to engage in any acts or practices prohibited by such laws, regulations or rules.

b. The Injunctive Terms are not intended to and shall not be interpreted to prevent Walgreens from taking or implementing any other compliance or policy steps that are more restrictive or that are necessary to conform with federal, state, or local legal requirements, unless such steps would conflict with State or local law. The Injunctive Terms are not intended to and shall not be interpreted to require Walgreens to inventory any Controlled Substances or any particular Controlled Substances or to require dispensing of any Controlled Substances or of any individual, types, subsets or categories of Controlled Substances prescriptions.

c. In the event that Walgreens determines that there may be a conflict between the Injunctive Terms and the express requirements of federal, state, or local laws, or interpretations of such laws articulated by an agency responsible for enforcing such laws or a court ("Express Interpretations"), such that Walgreens determines that it cannot comply with the Injunctive Terms without violating these express requirements or Express Interpretations, Walgreens shall follow the express requirements of the federal, state or local law or Express Interpretation thereof and shall provide notice to the Settling State(s). Within thirty (30) days after receipt of a notification from Walgreens referenced above, Walgreens and the State shall meet and discuss the potential conflict, and Walgreens shall comply with any reasonable requests from the Settling State as necessary to determine whether there is a conflict between the Injunctive Terms and the express requirements of federal, state, or local laws, or Express Interpretations. In the event that Walgreens believes a court or administrative action brought by a governmental body in a Settling State has commenced against it or its pharmacists for actions required by the Injunctive Terms, then Walgreens may notify the Attorney General of the Settling State of such pending action. If the State agrees that the court or administrative action is a result of actions required by the Injunctive Terms, the State will engage in best efforts to resolve the conflict or assist in achieving resolution of the court or administrative action. Nothing in this paragraph shall (i) limit the right of the Settling State to disagree with Walgreens as to the conflict; (ii) be deemed to relieve Walgreens from following any subsequently enacted law or regulation,

or judicial decisions from a regulatory authority with jurisdiction over controlled substances that is more restrictive than the provisions of the Injunctive Terms, or from following the Injunctive Terms if they are more restrictive than applicable laws at issue in the administrative action if there is no conflict; (iii) be deemed to relieve Walgreens from adhering to the outcome of a court or administrative action when it is determined that there is no conflict; or (iv) limit a Settling State's ability to relieve Walgreens of a duty under these Injunctive Terms if that Settling State determines that that term is in conflict with that Settling State's express legal requirements.

d. Walgreens shall retain all records it is required to create pursuant to its obligations hereunder for a period no shorter than three years, unless otherwise specified. Nothing in these Injunctive Terms shall prevent a Settling State from issuing a lawful subpoena or Civil Investigative Demand (CID) for records pursuant to an applicable law.

5. No Admission and No Use as Evidence. Walgreens does not admit liability or wrongdoing. These Injunctive Terms shall not be considered, construed, or represented to be (1) an admission, concession, or evidence of liability, wrongdoing, or to impose the existence of any legal obligations or requirements other than the requirement to follow these Injunctive Terms, or (2) a waiver or limitation of any defense otherwise available to Walgreens. These Injunctive Terms shall not be offered or received in evidence or otherwise relied on in any action or proceeding for any purpose other than in an action or proceeding to modify or enforce or monitor compliance with these Injunctive Terms.

II. TERM AND SCOPE

1. The term of these Injunctive Terms shall be from the Injunctive Terms Implementation Date until August 15, 2032, unless otherwise specified herein.

2. Except as otherwise stated herein, the Injunctive Terms shall apply to Walgreens' retail pharmacy stores located in, and registered or licensed with, each Settling State that dispense Schedule II Designated Controlled Substances to Patients, including any Schedule II Designated Controlled Substances dispensed by any such retail pharmacy stores that are mailed or shipped to patients in a Settling State. Should Walgreens operate an online pharmacy that is registered or licensed to dispense Schedule II Designated Controlled Substances in any Settling State while these Injunctive Terms are in effect, the Injunctive Terms shall apply to such pharmacy as well.[4]

[4] Walgreens' specialty and mail order pharmacies are not subject to, and are not online pharmacies for purposes of, these Injunctive Terms.

3. These Injunctive Terms may be amended by mutual agreement of a majority of the States Injunctive Relief Committee and Settling Pharmacy. Any such amendments must be in writing.

III. DEFINITIONS

1. The term "Distributor Injunctive Terms" means Exhibit P of the Settlement Agreement, dated as of July 21, 2021, between McKesson Corporation, Cardinal Health, Inc., and AmerisourceBergen Corporation and certain States and subdivisions.

2. The term "Block" means an action taken by Walgreens preventing or otherwise prohibiting any Settling Pharmacy pharmacist from filling prescriptions for Controlled Substances from a specific identified Prescriber.

3. The term "Clearinghouse" means the system established by Section XVII of the Distributor Injunctive Terms.

4. The term "Controlled Substances" means those substances designated under schedules II-V pursuant to the federal Controlled Substances Act.

5. The term "Designated Controlled Substances" shall be limited to: (a) oxycodone; (b) hydrocodone; (c) hydromorphone; (d) tramadol; (e) oxymorphone; (f) morphine; (g) methadone; and (h) fentanyl.

6. The term "Injunctive Terms Implementation Date" means thirty (30) days after the Effective Date of the Settlement Agreement as defined in Section I.V of the Walgreens Settlement Agreement.

7. The term "National Arbitration Panel" is defined in Section I.LL of the Walgreens Settlement Agreement.

8. The term "Patient" means any individual who receives a prescription for a Designated Controlled Substance from a Prescriber, whether legally valid or not, and attempts to fill it at one of Walgreens' pharmacy stores in a Settling State.

9. The term "Prescriber" means any individual that has written a prescription for a Designated Controlled Substance, whether legally valid or not, that is presented to Walgreens in a Settling State.

10. The term "Red Flag(s)" means the enumerated Patient Red Flags, Prescription Red Flags, and Prescriber Red Flags set out in Section IX.

11. The term "Settling State(s)" means each State that is a signatory to the Walgreens Settlement Agreement.

12. The term "States Injunctive Relief Committee" means a committee representing the Settling States composed of between four and eight members designated by the Settling States. The members of the States Injunctive Relief Committee shall be employees of

a Settling State's Office of Attorney General and/or employees of another agency of a Settling State.

13. The term "Walgreens Settlement Agreement" means the settlement agreement dated as of December [ ] between and among the Settling States, the Participating Subdivisions and Walgreens.

IV. CONTROLLED SUBSTANCE COMPLIANCE PERSONNEL

1. Walgreens shall designate a Controlled Substance Compliance Director, or other appropriately titled position, to be a member of the Controlled Substance Compliance Committee (described below in Section VI), and to oversee a Controlled Substance Compliance Department and Walgreens' compliance with 21 C.F.R. 1306.04 and these Injunctive Terms. As used in these Injunctive Terms, the terms "Controlled Substance Compliance Committee" and "Controlled Substance Compliance Department" refer to the entity or entities, however titled, that carry out the functions required by these Injunctive Terms. Notwithstanding the preceding sentence, to the extent an existing position, committee or department carries out the functions required by these Injunctive Terms, any other functions undertaken by such position, committee or department shall not be subject to these Injunctive Terms or oversight by the Settling States pursuant to these Injunctive Terms. The position, committee and department discussed in these Terms may bear different names and need not be limited to the roles and functions set forth herein.

2. The Controlled Substance Compliance Director shall have knowledge of and experience with the laws and regulation of Controlled Substances, in particular the regulations in 21 C.F.R. § 1306.04.

3. The Controlled Substance Compliance Director shall provide at least quarterly reports to the Controlled Substance Compliance Committee (described below in Section VI) regarding Walgreens' compliance with these Injunctive Terms, including the implementation of any changes to the CSCP Policies and Procedures required by these Injunctive Terms.

4. Staffing levels of Walgreens' Controlled Substance Compliance Department shall be reviewed periodically, but at least on an annual basis, by Walgreens' Controlled Substance Compliance Committee to assess whether such staffing levels are sufficient for the Controlled Substance Compliance Department to comply with this Agreement. This review shall include consideration of relevant developments in technology, law, and regulations.

5. Throughout the term of these Injunctive Terms, Walgreens shall maintain a telephone and electronic submission hotline(s) (the "Hotline") to permit employees and/or Patients and/or members of the public to anonymously report suspected inappropriate or illegitimate dispensing, prescribing or diversion of Designated Controlled Substances, violations of the CSCP Policies and Procedures, these Injunctive Terms,

Walgreens' company policy, or other applicable law. The Hotline may be implemented by adding a dedicated option to existing systems that includes reporting regarding Designated Controlled Substances. Walgreens shall publish its Hotline contact information to its employees and Patients in the Settling States. Walgreens shall maintain for the duration of Injunctive Terms a record of each complaint made to the Hotline regarding Designated Controlled Substances and documentation regarding any investigation or response to such complaints. Nothing herein shall require Walgreens to investigate a pharmacist's professional judgment to refuse a prescription that the pharmacist believes was prescribed or is being used for other than a legitimate medical purpose or that the pharmacist believes was not prescribed by an individual Prescriber acting in the usual course of his or her professional practice.

V. INDEPENDENCE

1. Walgreens' Controlled Substance Compliance Department personnel, pharmacists and pharmacist technicians who work at Walgreens' pharmacies within the Settling States, and field personnel who supervise pharmacists and pharmacist technicians (together, "CSCP Employees"), shall not be compensated in whole or in part by commissions, bonuses, incentives or any other monetary or non-pecuniary benefit that depends in material part on revenue or profitability targets or expectations to sales of Controlled Substances. Nothing in these Injunctive Terms shall be interpreted to prevent compensation of employees based on sales volume, revenue or profitability targets/expectations for enterprise-, store-, or pharmacy-wide sales that include Controlled Substances.

2. No CSCP Employees may be terminated, suspended, threatened with or face any other negative employment consequence for failing to meet any revenue or profitability targets or expectations that depends in material part on sales of Controlled Substances. Nothing in these Injunctive Terms shall be interpreted to prevent Walgreens from taking employment action based on sales volume, revenue or profitability targets/expectations for enterprise-, store-, or pharmacy-wide sales that include Controlled Substances.

3. Personnel in Walgreens' Controlled Substance Compliance Department shall not report to Walgreens' sales, marketing, or business development departments, and sales, marketing, or business development departments shall not be authorized to make decisions regarding the promotion, compensation, demotion, admonition, discipline, commendation, periodic performance reviews, hiring, or firing of Controlled Substance Compliance Department personnel. This provision does not apply to an officer or executive to whom both the Controlled Substance Compliance Department and sales, marketing and/or business development departments report.

4. Walgreens' sales, marketing and business development departments are prohibited from interfering with, obstructing, or otherwise exerting control over any Controlled Substance Compliance Department or Controlled Substance Committee decision-

making. This provision does not apply to an officer or executive to whom both the Controlled Substance Compliance Department and sales, marketing and/or business development departments report.

5. To the extent necessary to comply with this section, Walgreens' Controlled Substance Compliance Committee shall review, modify, and direct any changes to any compensation and non-retaliation policies specific to the sale or dispensing of Designated Controlled Substances.

VI. OVERSIGHT

1. To the extent not already established, within thirty (30) business days of the Injunctive Terms Implementation Date, Walgreens shall establish a compliance committee, however titled, that includes representatives from its respective legal, compliance, pharmacy operations and asset protection departments, however named, to provide oversight over the CSCP and its compliance with the Injunctive Terms. For the purposes of reference herein, this committee, however named, shall be referred to as the "Controlled Substance Compliance Committee." Walgreens shall maintain its Controlled Substance Compliance Committee for the duration of the term of the Injunctive Terms. The Controlled Substance Compliance Director shall be a member of the Controlled Substance Compliance Committee.

2. Walgreens' Controlled Substance Compliance Committee shall have quarterly meetings during which the Controlled Substance Compliance Director shall report on, and the Controlled Substance Compliance Committee shall review, among other things, (a) the Prescription Validation Process, including the CSCP Policies and Procedures on identifying and resolving Patient, Prescriber and Prescription Red Flags; (b) the training required under the Injunctive Terms; (c) proactive due diligence and site visits; (d) the Prescriber Review Processes; (e) significant new national and regional diversion trends involving Controlled Substances; (f) Walgreens' adherence to the Injunctive Terms and applicable laws and regulations; and (g) any technology, staffing, or other resource needs for the CSCP. The Controlled Substance Compliance Committee shall have access to all CSCP reports described in the following subsection.

3. On an annual basis, Walgreens' Controlled Substance Compliance Committee shall provide a written report to the President of the Settling Pharmacy's Retail Division, the Chief Financial Officer of the Settlement Pharmacy's Retail Division, the Chief Legal Officer of the Settling Pharmacy's Retail Division, and the corporate Chief Compliance Officer, outlining (a) the Settling Pharmacy's adherence to, and any material deviations from these Injunctive Terms; (b) the allocation of resources sufficient to comply with these Injunctive Terms; and (c) any revisions to the CSCP that the Controlled Substance Compliance Committee has approved. The corporate Chief Compliance Officer shall determine if and when it is appropriate to make a report to the Board or any subcommittee thereof, but shall report at least annually.

4. Walgreens, through its Controlled Substance Compliance Department and Committee, shall, at least once every year, review and oversee any enhancements to the CSCP Policies and Procedures and systems for dispensing activity that the Controlled Substance Compliance Committee deems necessary.

5. The Controlled Substance Compliance Committee shall be responsible for the approval of all material revisions to the CSCP Policies and Procedures, provided that nothing herein shall prevent Walgreens from implementing changes to the CSCP Policies and Procedures pending such review and approval.

VII. MANDATORY TRAINING

1. The CSCP Policies and Procedures shall be published in a form and location readily accessible to all pharmacy and compliance personnel at each of Walgreens' retail pharmacy locations in the Settling States. Online availability is sufficient, so long as pharmacy and compliance personnel have access to a computer with access to the CSCP Policies and Procedures.

2. Walgreens shall launch training for all existing CSCP Employees, to the extent practical (for example, accounting for employee leave), on the CSCP Policies and Procedures required under these Injunctive Terms, including the Prescription Validation Process and corresponding responsibility. The training shall be launched within one hundred twenty (120) days of the Injunctive Terms Implementation Date. All CSCP Employee new hires, to the extent practical, shall be required to participate in such trainings within sixty (60) days of hiring or six (6) months of the Injunctive Terms Implementation Date, whichever is later. Walgreens will further require that every CSCP Employee, to the extent practical, receive such training at least once every three (3) years for the term of these Injunctive Terms.

3. On an annual basis for the duration of these Injunctive Terms, Walgreens shall test its CSCP Employees on their knowledge regarding the CSCP Policies and Procedures required under these Injunctive Terms, including the Prescription Validation Process and corresponding responsibility.

4. It shall be a part of the CSCP Policies and Procedures and all trainings of all CSCP Employees required under these Injunctive Terms that pharmacists shall refuse to dispense Controlled Substances that they believe were prescribed or are being used for other than a legitimate medical purpose or that they believe were not prescribed by an individual Prescriber acting in the usual course of his or her professional practice.

5. All trainings required under these Injunctive Terms shall also make clear that (i) Walgreens' compensation and non-retaliation policies, including pursuant to these Injunctive Terms, prevent CSCP Employees from being compensated or penalized in any way related to revenue or profitability targets or expectations specific to sales of Controlled Substances; and ii) pharmacists will not be penalized in any way for exercising their professional judgment to refuse to fill prescriptions for Controlled Substances pursuant to their corresponding responsibility. To the extent that trainings designed and launched prior to the Effective Date of these Injunctive Terms do not reference these policies, they shall be added by the end of 2023.

VIII. THE PRESCRIPTION VALIDATION PROCESS

1. As part of its CSCP, Walgreens shall maintain a Prescription Validation Process in the CSCP Policies and Procedures, as further described and set forth in this section, that each pharmacist employed by Walgreens in a Settling State must follow when dispensing a prescription for a Controlled Substance. The inclusion of an enumerated Red Flag in these Injunctive Terms shall not be considered, construed, or represented to be an admission, concession, or evidence of any factual or legal contention related to such Red Flag. A Red Flag shall not be interpreted to mean that a prescription is, or is more likely than not, illegitimate and/or not issued in the usual course of professional practice or treatment.

2. A Red Flag will be considered "resolved" if, after further investigation as described below, and given other facts and circumstances surrounding the prescription, a pharmacist determines, in his or her professional judgment, that the facts that triggered the Red Flag do not lead him or her to believe that the prescription was written or is being submitted for an illegitimate medical purpose or outside the usual course of a Prescriber's professional practice.

3. Walgreens' CSCP Policies and Procedures shall provide that if a pharmacist identifies any "Patient Red Flags" associated with a Controlled Substances prescription (described in Section IX(3) below), before filling the prescription the pharmacist must resolve them; and that the method of resolution falls within the judgment of the pharmacist and may include reviewing the Patient's profile and history with the Settling Pharmacy, calling the Prescriber or Prescribers if appropriate, speaking with the Patient if appropriate, calling on the pharmacist's pre-existing knowledge of the Patient or Prescriber, reviewing available Prescription Monitoring Program ("PMP" or "PDMP") data, and/or reviewing other data or information available to the pharmacist.

4. Walgreens' CSCP Policies and Procedures shall provide that if forgery or fraud is suspected, or if the pharmacist identifies any other "Prescription Red Flags" associated with a Controlled Substances prescription (described in Section IX(4) below), the pharmacist must resolve the Prescription Red Flags before filling the prescription; and that the method of resolution falls within the judgment of the pharmacist and may

include reviewing the Patient's profile and history with Walgreens, calling the Prescriber or Prescribers if appropriate, speaking with the Patient if appropriate, calling on the pharmacist's pre-existing knowledge of the Patient or Prescriber, reviewing available PMP or PDMP data, and/or reviewing other data or information available to the pharmacist.

5. Walgreens' CSCP Policies and Procedures shall require that if a pharmacist identifies any "Prescriber Red Flags" associated with a Controlled Substances prescription (described in Section IX(5) below), the pharmacist must resolve them before filling the prescription; and that the method of resolution falls within the judgment of the pharmacist and may include reviewing any Walgreens records regarding the Prescriber, calling the Prescriber if appropriate, speaking with the Patient if appropriate, calling on the pharmacist's pre-existing knowledge of the Patient or Prescriber, reviewing available PMP or PDMP data, and/or reviewing other data or information available to Walgreens.

6. Walgreens' CSCP Policies and Procedures related to Schedule II Designated Controlled Substances shall provide that the resolution of all Red Flags identified by the pharmacist, as well as any prescriptions that were rejected pursuant to Red Flags identified by the pharmacist, and the reasons why they were rejected, must be documented by the pharmacist, unless if based on the pharmacist's pre-existing knowledge of the Patient or Prescriber. Any such records shall be maintained for the duration of these Injunctive Terms. To the extent that a Red Flag is resolved based upon facts or circumstances that are already reflected or documented in Walgreens' records, further documentation of those facts or circumstances is not required for resolution of substantially the same Red Flag on subsequent prescriptions. For example, if a Patient lives fifty-five (55) miles from a Walgreens but works near the pharmacy and that fact is reflected in pharmacy records, no documentation for the resolution of the Red Flag addressing the Patient's distance from the pharmacy is required in connection with individual prescriptions dispensed for that Patient. A lack of documentation shall not be interpreted to create a presumption that a pharmacist did not resolve any identified Red Flags. Nothing in these Injunctive Terms shall require Walgreens to create a record in those instances where the pharmacist rejects a prescription when presented without an effort to resolve any red flags, including but not limited to instances where the pharmacist rejects a prescription for clinical reasons, or where the pharmacist identifies on the face of the prescription a Prescription Red Flag (defined in Section IX below) that causes the pharmacist to conclude without further inquiry that the prescription is invalid.

7. Walgreens' CSCP Policies and Procedures shall provide that, even if all Red Flags are resolved, a pharmacist shall reject a prescription if, in his or her professional judgment, he or she believes that it was written or is being submitted for other than a legitimate medical purpose and/or was written outside the usual course of an individual Prescriber's professional practice.

IX. RED FLAGS

1. Upon request by the Settling States, but no more than annually, and no earlier than four months after the Injunctive Terms Implementation Date, Walgreens shall provide to the Settling States a report (the "Annual Data Report") that sets forth: (1) the total number of prescriptions for Controlled Substances dispensed annually, aggregated nationally and by state; (2) the top twenty-five prescribers of Designated Controlled Substances in each Settling State; (3) the list of prescribers subject to disclosure in section X.5; (4) the specific process, system, metrics or algorithms (if any) sufficient to demonstrate the operational system's ability to identify each category of Red Flag listed in this section; and (5) the total number of prescriptions that pharmacists at the Settling Pharmacy refused to dispense using Walgreens' Good Faith Dispensing worksheet. The Settling States acknowledge that the Good Faith Dispensing worksheet documents the resolution of some Red Flags listed in this section, but does not document the resolution of every Red Flag listed in this section. Upon request, the State Injunctive Relief Committee may request a reasonable sample of completed Good Faith Dispensing worksheets. Unless otherwise required by law, if a Settling State seeks to disclose any data and/or information provided under this provision as part of a proceeding to enforce these Injunctive Terms or otherwise, it shall first provide ten (10) days' notice to Walgreens unless doing so would conflict with applicable law. A Settling State shall not otherwise disclose or provide any data provided under this provision to third parties during or after the Term of these Injunctive Terms unless required to do so by law. If a Settling State is required to disclose or provide any data under this provision to third parties during or after the Term of these Injunctive Terms, it shall first provide ten (10) days' notice to Walgreens unless doing so would conflict with applicable law. All data and/or information provided under this paragraph shall be deemed confidential law enforcement material, to the extent state law permits, and shall not be subject to production unless required by law. Nothing in this paragraph shall be deemed to prevent a Settling State from sharing this material with other State or federal law enforcement agencies.

2. Within the three months following the provision of the Annual Data Reports, either Walgreens or the States Injunctive Relief Committee may propose in writing a meet and confer to discuss potential changes to the scope of one or more categories of Red Flags. At such a meeting, Walgreens or the States Injunctive Relief Committee may provide additional research, information or data available to them beyond that provided in the Annual Data Reports. For example, Walgreens might propose reducing the

threshold for triggering a particular category of Red Flag or consolidating certain Red Flags or subcategories of Red Flags into a single metric, or the States Injunctive Relief Committee might propose increasing the threshold for triggering a particular Red Flag or expanding that Red Flag to include multiple subcategories (*e.g.*, number of prescriptions, distance thresholds).

a. If Walgreens and the States Injunctive Relief Committee agree on such changes to one or more Red Flags, they shall document those changes in writing and they shall become a part of these Injunctive Terms for all intents and purposes.

b. If Walgreens and the States Injunctive Relief Committee cannot agree on the proposed changes during their meeting and confer, the Party seeking the change(s) to the Red Flag(s) may seek a 5-day mediation of the issue at its own expense. If the mediation fails to resolve the dispute between the parties, the party seeking the proposed change(s) may appeal to the National Arbitration Panel to have the National Arbitration Panel modify the Red Flags on the basis that the change(s) would be consistent both with avoiding unnecessary material costs of identifying and resolving Red Flags and materially reducing the diversion of Controlled Substances. In such a proceeding, the Party seeking the proposed change(s) may provide evidence from Annual Data Reports or from other research, data and information.

c. In any such proceedings, there shall be a presumption against imposition of any proposed Red Flags, or proposed modifications to pre-existing Red Flags, that have not been identified by the United States Drug Enforcement Administration (DEA) or other law enforcement agencies tasked with the regulation of Controlled Substances.

d. The Red Flags required by these Injunctive Terms shall at no point be too numerous or complex to be reasonably workable for pharmacists in the context of protecting patient safety, performing corresponding responsibility, drug utilization review, and their other responsibilities. Any dispute over whether the Red Flags required by these Injunctive Terms have become too numerous or complex to be reasonably workable for pharmacists shall be submitted to the National Arbitration Panel. In the event a dispute is submitted to the National Arbitration Panel, it shall be Walgreens' burden to prove that the Red Flag(s) at issue are overly burdensome and that their burdensome nature outweighs any public health benefit.

3. Walgreens' CSCP Policies and Procedures shall direct its pharmacists to treat the following circumstances as "Patient Red Flags":

a. A Patient seeks to fill a Schedule II Designated Controlled Substance prescription more than three days prior to the contemplated exhaustion date of an earlier prescription of the same Schedule II Designated Controlled Substance (e.g., exhaustion of the days' supply assuming the prescription has been taken in accordance with the prescribers' directions on the face of the prescription), provided the previous prescription was also dispensed by the same Settling Pharmacy;

b. A Patient seeks to fill a Designated Controlled Substance prescription from a Prescriber after having filled Designated Controlled Substance prescriptions at the same Walgreens from more than four other Prescribers, from separate practices, in a given 6-month period;[5]

c. To the extent personally known by the dispensing pharmacist, Prescriber has been the subject of more than ten (10) documented refusals to fill within a six-month period;

d. A Patient seeks to fill a Designated Controlled Substance prescription after having filled three other Designated Controlled Substance prescriptions written by multiple Prescribers with overlapping days of supply at Walgreens' pharmacies within thirty (30) days;

e. The distance between a Patient's residence and the Walgreens receiving the Designated Controlled Substance prescription is farther than 50 miles;

f. The Patient resides more than one hundred (100) miles from the Prescriber who issued the Designated Controlled Substances prescription;

g. To the extent personally known by the dispensing pharmacist, a Patient seeks to fill a Designated Controlled Substance prescription after having two other prescriptions for Designated Controlled Substances subjected to documented refusals to fill by a Walgreens pharmacist within the past thirty (30) days;

h. A patient pays in cash for a Designated Controlled Substance despite having prescription drug insurance on file for that medication;

i. Three or more Patients come to the pharmacy together to fill prescriptions for the same Designated Controlled Substances;

j. A Patient requests a Designated Controlled Substance by its slang or street description, such as "Mallinckrodt blues," "M's" or "the blue pill"; and

[5] In Walgreens' sole discretion, for administrative convenience Walgreens may implement this Red Flag without regard to whether Prescribers are at separate practices, thereby resulting in more instances in which the flag occurs.

k. A Patient presenting a prescription for a Designated Controlled Substance appears visibly altered, intoxicated, or incoherent.

4. Walgreens' CSCP Policies and Procedures shall direct its pharmacists to treat the following circumstances as "Prescription Red Flags:"

   a. A Controlled Substance prescription fails to meet the requirements of law;

   b. A Controlled Substance prescription that appears altered, including but not limited to, a photocopied prescription or a prescription in which an altering agent, such as white out, was used;

   c. A Controlled Substance prescription written with misspellings suggesting the prescription may not have been written by a valid Prescriber;

   d. A Controlled Substance prescription using atypical abbreviations suggesting the prescription may not have been written by a valid Prescriber; and

   e. A Controlled Substance prescription written with multiple colors of ink or in multiple different handwritings.

5. Walgreens' CSCP Policies and Procedures shall direct its pharmacists to treat the following circumstances as "Prescriber Red Flags:"

   a. A Prescriber provides a Patient with prescriptions for all three of a Schedule II Designated Controlled Substance, a benzodiazepine, and carisoprodol;

   b. A Prescriber has no office within fifty (50) miles of the retail pharmacy store where a Designated Controlled Substance prescription is submitted; and

   c. A Prescriber of Designated Controlled Substances uses prescriptions that are preprinted or stamped with drug type and amount.

X. PRESCRIBER REVIEW

1. Walgreens shall regularly review the prescribing patterns and practices of Prescribers of Designated Controlled Substances (the "Prescriber Review Process"). The Prescriber Review Process shall employ algorithms, or other means, to review data on Walgreens' retail dispensing for potential Prescribers of concern.

2. Walgreens shall initiate Prescriber Review Process in the following circumstances:

   a. Personnel implementing the Prescriber Review Process become aware that a Prescriber of Designated Controlled Substances located in a Settling State has been the subject of a blanket refusal to fill by one or more of Walgreens' retail pharmacy stores in the Settling States;

b. Personnel implementing the Prescriber Review Process become aware that a Prescriber of Designated Controlled Substances located in a Settling State has been charged or indicted with a crime related to prescribing Designated Controlled Substances by the Federal Government or law enforcement in a Settling State; or

c. Walgreens has received a Hotline complaint that has been investigated and substantiated concerning a Prescriber's illegitimate prescribing of Designated Controlled Substances.

3. Based on the professional judgment of the employees operating the Prescriber Review Process, Walgreens may also initiate the Prescriber Review Process when:

a. Personnel implementing the Prescriber Review Process are notified in writing by law enforcement that a Prescriber of Designated Controlled Substances located in a Settling State is the target of an investigation regarding the prescribing of Controlled Substances;

b. A Prescriber of Designated Controlled Substances was flagged for review by a Walgreens pharmacist in a Settling State (other than through a refusal to fill or blanket refusal to fill) or by field personnel who supervise Walgreens' pharmacies in a Settling State; or

c. A Prescriber of Designated Controlled Substances located in a Settling State was identified through the running of algorithms on Walgreens' retail dispensing.

4. Once Walgreens identifies a Prescriber for further investigation, Walgreens shall review pertinent and available data or information pertaining to the Prescriber, which may include interviews or other information gathered in the discretion of the employees operating the Prescriber Review Process. All data and information collected or created as part of the Prescriber Review Process shall be maintained by Walgreens for the length of these Injunctive Terms. When permitted by law, nothing contained in this Section prevents Walgreens from taking immediate action to Block a Prescriber.

5. If after the Prescriber Review Process those making the decision have not resolved the circumstances that caused Walgreens to further investigate the Prescriber, then the Prescriber shall be Blocked from having Controlled Substance prescriptions filled at Walgreens' retail pharmacies in the Settling States, when permitted by law. A Prescriber may have an opportunity at the discretion of Walgreens to seek future reinstatement by providing information to Walgreens that may resolve its concerns. Nothing in this Section shall limit the right or ability of Walgreens pharmacists to either refuse to fill a given prescription or refuse to fill all prescriptions for Controlled

Substances from a given Prescriber independent of any decision by Walgreens to Block or not Block a given Prescriber. On written demand, on an annual basis, Walgreens shall provide to each Settling State the names of and DEA registration or NPI numbers of Prescribers of Designated Controlled Substances within that Settling State that it has Blocked. Each Settling State shall provide contact information in order to receive such information. For each of the Settling States, on an annual basis, Walgreens shall provide to the Injunctive Relief Committee the number, names and DEA registration or NPI numbers of Prescribers who were: (a) blocked, and (b) the number of prescribers who were reviewed but not blocked.

XI. PROACTIVE DUE DILIGENCE AND SITE VISITS

1. During the term of these Injunctive Terms, Walgreens shall conduct periodic proactive compliance reviews of its retail pharmacy stores in the Settling States to assist with the identification of potential compliance issues related to the dispensing of Designated Controlled Substances at its retail pharmacy stores in the Settling States. This may be satisfied by the use of algorithms, or other electronic means, to analyze data associated with each pharmacy's dispensing of Designated Controlled Substances to identify particular pharmacies for review as required under this Section XI. Documentation of any resulting reviews shall be maintained by Walgreens and made accessible to all Controlled Substance Compliance Department personnel upon request for the duration of these Injunctive Terms.

2. During the term of these Injunctive Terms, Walgreens personnel or qualified third-party compliance consultants shall conduct site visits to each pharmacy in a calendar year. These site visits shall at a minimum consist of a review of Controlled Substance dispensing documentation and recordkeeping; and a review of physical surroundings and other circumstances for any indications of potential non-compliance with these Injunctive Terms or the CSCP Policies and Procedures, or any violations of other applicable laws and regulations related to the dispensing of Controlled Substances.

3. During site visits, Walgreens' personnel or qualified third-party compliance consultants shall interview relevant pharmacy employees, if appropriate, about any potential areas or issues of concern, including potential violations of laws related to the dispensing of Controlled Substances, the CSCP Policies and Procedures, and these Injunctive Terms.

4. Walgreens' personnel or qualified third-party compliance consultants who conduct site visits shall complete a report reflecting the findings of any site visit pursuant to this section. This report shall document areas or issues of concern, including potential violations of law related to the dispensing of Controlled Substances, the CSCP Policies and Procedures, and these Injunctive Terms.

5. The site visit reports described above shall be maintained by Walgreens and made accessible to all Controlled Substance Compliance Department personnel for the duration of these Injunctive Terms. Upon its request, the States Injunctive Relief Committee shall be provided sample reports or a report for a particular store.

XII. THEFT AND LOSS PREVENTION

1. In addition to complying with all theft and loss procedures, policies and precautions required by state and federal law, Walgreens shall maintain for at least three years information regarding the receipt and disposition of inventory of all Designated Controlled Substances at each retail pharmacy store.

2. In addition to any other reporting obligations under state and federal law, Walgreens must provide to each Settling State on a quarterly basis any reports it has made to the DEA regarding the theft or significant loss of Designated Controlled Substances in that Settling State pursuant to 21 C.F.R. §1301.76(b). Each Settling State shall provide contact information in order to receive such reports. There shall be no obligation to provide these reports to Settling States that receive contemporaneous reporting of thefts or significant losses of Designated Controlled Substances to a Settling State's board of pharmacy.

XIII. REPORTING TO LAW ENFORCEMENT

1. The Settling States shall inform Walgreens to what extent their law enforcement authorities would like to receive reports, other than those already required by law or regulation, of any confirmed forged prescriptions. To the extent not already in place, Walgreens shall implement standard operating procedures directing its employees to report any confirmed forged prescriptions for Designated Controlled Substances to those Settling States who have indicated that they want to accept it, within five (5) days of completing any review of such prescription or conduct. The Settling States shall provide contact information in order to receive such reports.

2. Walgreens shall document and for at least two (2) years maintain records of any such reports that are made to Settling States regarding confirmed fraudulent or forged prescriptions, which are maintained centrally.

XIV. ENFORCEMENT OF INJUNCTIVE TERMS

1. Notice of Potential Violations and Opportunity to Cure.

    a. A "Potential Violation" occurs when the Settling State determines, after appropriate investigation and due diligence, that Walgreens is not in substantial compliance with a material aspect of the Injunctive Terms. A Potential

Violation may be for a single retail pharmacy. A violation of this Agreement is not presumed to occur when a pharmacist, pharmacist technician, or other field personnel who supervise pharmacists and/or pharmacist technicians employed by Walgreens violates Walgreens' CSCP Policies and Procedures.

b. Potential Violation Discovered by Settling State.

i. In the event of a Potential Violation identified by a Settling State, the Settling State shall notify Walgreens in writing (the "State's Notice").

ii. Within thirty (30) days of receipt of the State's Notice, Walgreens shall provide a written response to the Settling State. The response shall include Walgreens' position as to the act(s) of non-compliance, including, possibly, a statement setting forth why Walgreens believes it is in substantial compliance with the relevant provision(s) or a statement explaining how the Potential Violation has been addressed.

iii. If the Settling State wishes to meet with Walgreens, Walgreens shall promptly make itself available for such a meeting.

c. If, after review of a written response and any meeting, the Settling State believes that a Potential Violation is ongoing or has not been substantially addressed, it will provide written notice to Walgreens and work in conjunction with Walgreens to devise, within thirty (30) days, a corrective action plan ("Corrective Action Plan") to remedy such Potential Violation, including a reasonable period for implementation of such plan.

d. Within sixty (60) and one hundred twenty (120) days after implementing the Corrective Action Plan, Walgreens will provide a written compliance update to the Settling State and make itself available to meet with the Settling State if requested. If after reviewing the compliance update and any meeting, the Settling State believes a Potential Violation remains ongoing or has not been substantially addressed, the Settling State may commence a 30-day mediation period. If mediation fails to resolve the dispute between the parties, the Settling State may take whatever action it deems necessary, including but not limited to bringing an action to enforce these Injunctive Terms, filing a new action (administrative or civil action) for violation of the Injunctive Terms as allowed by state law, conducting further investigation, or attempting to negotiate an updated Corrective Action Plan with Walgreens. But the Settling State may not seek to reinstate claims that have been released as part of the Settlement Agreement.

e. If Walgreens fails or refuses to provide a written response, to devise or

implement a Corrective Action Plan or to provide a compliance update as required by subsections 1(b), 1(c) and/or 1(d), a Settling State may bring an action to enforce these Injunctive Terms, filing a new action (administrative or civil action) for violation of the Injunctive Terms as allowed by state law, conduct further investigation, or attempt to negotiate an updated Corrective Action Plan with Walgreens. But the Settling State may not seek to reinstate claims that have been released as part of the Settlement Agreement.

f. If, after review of a written response and any meeting, pursuant to subsections 1b. or 1c., above, the Settling State concludes that a Potential Violation is not ongoing or has been substantially addressed, the Settling State will provide written notice of this conclusion to the Settling Pharmacy within thirty (30) days of reaching its conclusion.

2. Enforcement Action. Each Settling State agrees that prior to taking any court or administrative action, other than an action that the Settling State concludes is necessary to address an immediate threat to the health, safety, or welfare of the citizens of the Settling State, or that a public emergency requiring immediate action exists, it will follow the process outlined above. If the Settling State concludes that action is necessary to address an immediate threat to the health, safety, or welfare of the citizens of the Settling State or that a public emergency requiring immediate action exists, it will make best efforts to provide reasonable notice to a Settling Pharmacy prior to initiating any such action.

XV. COMPLIANCE CERTIFICATION

1. Walgreens' Controlled Substance Compliance Director shall, after diligent inquiry, complete an annual compliance certification as set out in Section XV(4).

2. The certification shall be filed annually for the duration of these Injunctive Terms with a Settling State's appropriate licensing and/or regulatory agency and its Attorney General.

3. The certification shall state:

> "I understand the compliance requirements and responsibilities as they relate to [insert name of department], an area under my supervision. My job responsibilities include attempting to achieve compliance with regard to the [insert name of department] with all applicable statutory requirements, obligations of the Injunctive Terms, and applicable policies, and I have taken steps to promote such compliance. To the best of my knowledge, the [insert name of department] is in compliance with the obligations of these Injunctive Terms. I understand that this certification is being provided to and relied upon by the State of [Settling State]."

4. If the Controlled Substance Compliance Director is unable to provide such a certification, the Controlled Substance Compliance Director shall provide a written explanation of the reasons why he or she is unable to provide the certification outlined above.

XVI. DATA SHARING

1. Walgreens shall consent to the provision by its distributors of Walgreens' unblinded "867 Data" (data sent from the distributor to the manufacturer concerning the sale of its products to Walgreens) to opioid manufacturers on any particular Designated Controlled Substances manufactured by them as soon as commercially reasonable and at no cost to the manufacturers, provided that, pursuant to a prior written agreement with Walgreens, the opioid manufacturers agree (a) to ensure the confidentiality of the 867 Data, except as required by law; (b) to implement safeguards and procedures to limit access to and use of the 867 Data, except as required by law; (c) that the 867 Data shall be used solely for compliance purposes as part of their Suspicious Order Monitoring programs; and (d) that the 867 Data shall be shared only with specified personnel and shall not be shared with business or sales personnel.

2. To the extent that Walgreens provide McKesson Corporation, Cardinal Health, Inc., or AmerisourceBergen Corporation (the "Settling Distributors") with Pharmacy Customer Data (as defined in the Distributor Injunctive Terms) for use in their Controlled Substance Monitoring Programs, Walgreens agree that the Settling Distributor(s) may share such Pharmacy Customer Data with the Monitor appointed pursuant to the Distributor Injunctive Terms, provided that the Monitor agrees, pursuant to a prior written agreement with Walgreens, (a) to ensure the confidentiality of the Pharmacy Customer Data; (b) to implement safeguards and procedures to limit access to and use of the Pharmacy Customer Data; (c) that the Pharmacy Customer Data is used solely for the purpose of ensuring the Settling Distributors' compliance with the Distributor Injunctive Terms; and (d) that the Pharmacy Customer Data shall be shared only with specified personnel.

XVII. CLEARINGHOUSE

1. Walgreens will confer with any Settling Distributor that distributes Designated Controlled Substances to its retail pharmacies and the States Injunctive Relief Committee for a period not to exceed six (6) months from the Injunctive Terms Implementation Date to determine: what additional deidentified information, if any, is needed from Walgreens for a Settling Distributor to perform suspicious order monitoring; if additional deidentified information is needed, how the Settling Pharmacy shall provide it to a Settling Distributor; and what information provided by Walgreens to a Settling Distributor may be deposited by the Settling Distributor into the Clearinghouse. For the avoidance of doubt "deidentified" does not refer to Prescribers. If agreements are not reached, the matters in dispute shall be submitted to

arbitration. Due to patient privacy and legal restrictions and other confidentiality and commercial concerns, in connection with any meet and confer described above, Walgreens may not be compelled to provide individual patient-level or prescription-level data, de-identified or otherwise, to the Settling Distributors.

2. Walgreens and Settling Distributors will also determine whether and in what amount each Settling Pharmacy will contribute to the cost of the operation of the Clearinghouse. When Walgreens contributes to the costs of the Clearinghouse, Settling Pharmacy, Settling Distributors and all other participants in the Clearinghouse shall determine an equitable amount of Walgreens' contribution. If agreements are not reached, the matters in dispute shall be submitted to arbitration.

3. Any data provided by Walgreens to a Settling Distributor and/or the Clearinghouse pursuant to these Injunctive Terms shall be treated in compliance with state and federal law, including but not limited to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") and all applicable state and federal privacy laws.

4. No Settling Distributor or other participant in the Clearinghouse shall receive from the Clearinghouse information specific to Walgreens.

EXHIBIT Q

Intentionally Omitted

EXHIBIT R

Agreement on Attorneys' Fees, Costs, and Expenses

This Agreement on Attorneys' Fees, Costs, and Expenses ("Fee Agreement") is entered between Walgreens and the Plaintiffs' Executive Committee appointed in the multidistrict litigation in the Northern District of Ohio, *In re National Prescription Opiate Litigation*, No. 1:17-MD-2804 ("MDL PEC"), in connection with the Walgreens Global Opioid Settlement Agreement ("Walgreens Agreement"). This Fee Agreement becomes effective on the Effective Date of the Walgreens Agreement or the date that the Consent Judgments anticipated under the Walgreens Agreement become final in 25 Settling States (whichever is later).

I. Definitions

A. This Fee Agreement incorporates all defined terms in the Walgreens Agreement, unless otherwise defined herein, and shall be interpreted in a manner consistent with the Walgreens Agreement.

B. "*Applicant*." Any Attorney or MDL Participating Counsel who seeks an award of attorneys' fees from the Attorney Fee Fund pursuant to the procedures established by the MDL Court and the Fee Panel.

C. "*Attorney*." Any of the following retained through a legal contingency fee or hourly fee contract: a solo practitioner, multi-attorney law firm, or other legal representative of a Participating Subdivision or MDL Participating Counsel. This does not include Subdivision in-house attorneys.

D. "*Attorney Fee Fund*." An account consisting of up to $563,732,518.00 allocated to pay attorneys' fees approved pursuant to Section II.B. of this Fee Agreement, established by Order of and under the ongoing jurisdiction of the MDL Court, as provided below.

E. "*Common Benefit*." Work performed for the benefit of all Participating Subdivisions and Tribal Nations, including, but not limited to, pretrial matters, discovery, trial preparation, trial, settlement negotiations, and all other work that advances the interests of the Participating Subdivisions.

F. "*Common Benefit Fund*." The sub fund of the Attorney Fee Fund described in Section II.C.

G. "*Common Benefit Order*." The Ongoing Common Benefit Order (Dkt. #4428) in *In re National Prescription Opiate Litigation*, Case No. 1:17-md-2804, any subsequent amendments or modifications to that order, and any successor orders on Common Benefit.

H. "*Contingency Fee Fund*." The sub fund of the Attorney Fee Fund described in Section II.D.

I. "*Cost and Expense Fund Administrator*." The administrator appointed by the MDL Court on August 12, 2021 (MDL Docket No. 3828), to administer the Cost Fund and its sub funds as provided in the Fee Agreement.

J. "*Cost Fund*." An account consisting $30,000,000, composed of the MDL Direct Cost Fund and the Subdivision Cost and Expense Fund, as provided below.

K. "*Court Common Benefit Fund*." The Common Benefit Fund established by the MDL Court in its orders of July 22, 2021, MDL Docket No. 3794, and May 9, 2022, MDL Docket No. 4428.

L. "*Fee Entitlement*." Any right, entitlement, or expectation, including but not limited to a fee contract, contingent fee contract, agreement, referral arrangement, co-counsel arrangement, State Back-Stop Agreement, or any other arrangement by which counsel could receive compensation or other consideration. For the avoidance of doubt, the scope of Fee Entitlement under paragraph II.G.3.a. does not include any Attorneys' fees associated with representation of a State.

M. "*Fee Panel*." The three-person panel appointed by the MDL Court on August 12, 2021 (MDL Docket No. 3828), to administer and make recommendations for the allocation and distribution of the Attorney Fee Fund and its sub funds as provided in the Fee Agreement.

N. "*Later Litigating State.*" A State that first files a lawsuit bringing a Released Claim against a Released Entity after December 9, 2022.

O. "*MDL Court*." United States District Court for the Northern District of Ohio Eastern Division, Case No. 1:17-md-2804, Judge Dan Aaron Polster.

P. "*MDL Expense Fund*." The cost fund described in Section II.F below.

Q. "*MDL Participating Counsel."* MDL Participating Counsel includes an attorney or firm authorized by MDL 2804 Lead Counsel to perform work for the Common Benefit of Participating Subdivisions. By way of example, it would include insurance counsel and appellant counsel.

R. "*MDL PEC*." The Plaintiffs' Executive Committee appointed by the MDL Court.

S. "*Non-Participating Litigating Subdivision*." A Litigating Subdivision that is not a Participating Subdivision.

T. "*Non-Participating State.*" A State that is not a Participating State.

U. "*Participating Litigating Subdivision*." A Litigating Subdivision that is also a Participating Subdivision.

V. "*Participation Agreement*." An agreement executed by an Attorney that acknowledges the obligation to pay an appropriate MDL Common Benefit Assessment.

W. "*Qualified Tribal Representation.*" Representation by an attorney of a Participating Tribal Government regarding Released Claims against Released Entities. Such counsel are eligible for Common Benefit Fee consideration. The Walgreens Tribal Global Settlement provides for the contribution to the Common Benefit Fund as shall be determined by the MDL Court.

X. "*Qualifying Representation*." Legal services provided for representation of the MDL PEC or Participating Litigating Subdivision regarding Released Claims against Released Entities.

Y. "*State Back-Stop Agreement*." Any agreement by a Settling State and private counsel for Participating Subdivisions in that State (or legislation enacted in that State) to provide, adjust, or guarantee attorneys' fees and costs, whether from the Attorney Fee Fund or any other source recognized in the agreement or legislation.[6]

Z. *"Subdivision Cost and Expense Fund."* The fund created to pay approved Subdivision and Tribal Nations costs and expenses as set forth in Section II.E.

AA. *"Walgreens.*" Walgreen Co. and all of its respective past and present direct or indirect parents, subsidiaries, divisions, affiliates, joint ventures, predecessors, successors, and assigns.

II. Fees and Costs

A. *Total Attorneys' Fees and Costs*

1. Total attorneys' fees and costs to be paid by Walgreens to Attorneys under this Fee Agreement shall be up to, but in no event more than, $593,732,518.00, subject to the reductions and provisions set forth below. The total attorneys' fees and costs consists of up to $563,732,518 for the Attorney Fee Fund, as set forth in Section II, and $30,000,000 in total for the Cost Fund, divided between the Subdivision Cost and Expense Fund and MDL Expense Fund, as set forth in Sections II.E and II.F, respectively. Additionally, Walgreens shall also pay $44,867,483.00 into the Court Common Benefit Fund as a common benefit fund assessment on the Credit set forth in Ex. M-3, and shall be paid on the schedule set forth in Ex. M-3. The

[6] Nothing herein shall be understood to indicate approval for additional State Back-Stop Agreements or modifications of existing State Back-Stop Agreements.

Maximum Attorney Fees and Costs, subject to the reductions set forth herein, are set forth in Ex. M-3 and shall be paid on the schedule in Ex. M-3.

2. If an Eligible State does not join the Agreement by the State Participation Date and is accordingly not a Settling State, the total attorneys' fees and costs to be paid under this Fee Agreement by Walgreens shall be reduced by twelve point four percent (12.4%) times the Remediation Payment amount that would have been allocated to that Non-Settling State as set forth in Section IV.B of the Walgreens Agreement.

3. The total attorneys' fees and costs to be paid under this Fee Agreement by Walgreens shall also be reduced by the amount of the Contingency Fee Fund for Attorneys representing Litigating Subdivisions in any Settling State that do not participate in the Walgreens Agreement ("*Non-Participating Litigating Subdivisions*"), as set forth in Section II.D.4 and II.H.7 below.

4. If Walgreens settles with any Non-Settling State after December 9, 2022, and such settlement allows for the Subdivision(s) in such Non-Settling State to join the settlement, Walgreens agrees to withhold from the attorney fee portion of such settlement a Common Benefit Fund assessment, to be deposited in the Court Common Benefit Fund, of 7.5% times the portion of the Remediation Payment that would have been due to such State if it had participated in the Walgreens Settlement and been awarded its full portion of the Remediation Payment (the "*Walgreens State Settlement CBF Assessment*"). If Walgreens settles with any Subdivision(s) in a Non-Settling State other than in connection with a statewide settlement that includes the relevant State after December 9 2022, then Walgreens agrees to withhold from the attorney fee portion of such settlement a Common Benefit Fund assessment, to be deposited in the Court Common Benefit Fund, of 7.5% times the portion of the Remediation Payment that would have been due to such Subdivision under this Agreement (the "*Walgreens Subdivision CBF Assessment*," and, along with the Walgreens State Settlement CBF Assessment, each a "*Walgreens CBF Assessment*"). If (a) Walgreens settles with a Non-Settling State after December 9, 2022, (b) such settlement does not allow for the Subdivision(s) in such Non-Settling State to join the settlement, and (c) Walgreens later prevails in asserting that Released Claims of Primary Subdivisions in such Non-Settling State were released as a result of such settlement, Walgreens agrees to deposit the Walgreens State Settlement CBF Assessment in the Common Benefit Fund. Any Walgreens CBF Assessment is inclusive of any assessment related to such settlement that would be required by the Common Benefit Order. To the extent that Walgreens is required to pay any additional and/or separate assessment on such settlement as a result of the Common Benefit Order, the Walgreens CBF Assessment shall be reduced by the amount required to be paid pursuant to the Common Benefit Order.

B. *Attorney Fee Fund and Sub Funds*

1. The Attorney Fee Fund shall consist of the Contingency Fee Fund and the Common Benefit Fee Fund. There shall be a split of the Attorney Fee Fund into

the Contingency Fee Fund and the Common Benefit Fund. The split shall be 40% to the Contingency Fee Fund and 60% to the Common Benefit Fund.

2. The Cost Fund shall include the MDL Expense Fund and the Subdivision Cost and Expense Fund. The State Counsel Fee Fund and the State Cost Fund shall be separate funds under the control of the Settling States .

3. It is the intention of the Parties that the Contingency Fee Fund and the Common Benefit Fund shall be administered by the Fee Panel appointed under MDL Docket No. 3828, which will be governed by the provisions of this Fee Agreement and shall design the process and procedures for the allocation of fees pursuant to this Fee Agreement and the MDL Court's Order. The Cost Funds shall be administered by the Cost and Expense Fund Administrator appointed under MDL Docket No. 3828, who will be governed by the provisions of this Agreement and shall design the process and procedures for the allocation of costs pursuant to this Agreement and the MDL Court's Order.

4. The fees to be paid under this Fee Agreement are available for Attorneys engaged in Qualifying Representations and Qualified Trial Representations only. Fees to be paid under this Fee Agreement are not available prior to the Effective Date of the Walgreens Agreement. Fees to be paid under this Fee Agreement are not available for representation of States, Non-Participating Subdivisions, or Non-Litigating Subdivisions and are not available for representation of private hospitals, third-party payors, NAS claimants, personal injury/wrongful death claimants, or any entity other than Participating Litigating Subdivisions. In addition, fees under this Fee Agreement are not available for representation of any individual or entity in matters other than those claims against Released Entities, but may include a reasonable share of representations that involve development of facts for pursuit of opioid-related claims against multiple defendants in the pharmacy, manufacturing, and distribution chain.

5. In no event shall Walgreens be required to pay more into the Attorney Fee Fund than the maximum amount specified in paragraph II.A.1. The amounts allocated to the Contingency Fee Fund and the Common Benefit Fund set by the Fee Panel shall be subject to the reductions set forth in Section II.A.2 and the reductions and refunds set forth below.

6. Awards of fees from the Contingency Fee Fund shall be available to Attorneys with Qualifying Representations of Participating Litigating Subdivisions eligible to receive an allocation under the Walgreens Agreement, as set forth in Exhibit G to the Walgreens Agreement, and shall be made by applying the Mathematical Model attached as Exhibit "A" to this Fee Agreement. The collection of the data and calculations for the Mathematical Model has been a cooperative effort among private counsel for a large number of Litigating Subdivisions. The analysis has been spearheaded by Joseph Tann and Andrew Arnold. The Fee Panel is encouraged to continue working with those counsel in application of the Model. The Fee Panel shall oversee the application of the Model and resolve any questions or disputes concerning the eligibility of a Counsel to participate as required in

Section II.G. The Panel is empowered to hear disputes concerning and ensure the accuracy of the mathematical calculation.

7. As to awards from the Contingency Fee Fund, there shall be no right of appeal.

8. Any appeal of an award of the Fee Panel from the Common Benefit Fund will be made to the MDL Court and be reviewed under an abuse of discretion standard.

C. *Common Benefit Fund* (60% of the Attorney Fee Fund)

1. The maximum potential total Common Benefit Fund payment to be made by Walgreens into the Attorney Fee Fund is $338,239,510.80, and in no event shall it exceed that amount. Walgreens' maximum potential Common Benefit Fund payments are subject to the reductions set forth in Section II.A.2. for Non-Settling States and to the adjustments set forth below and, subject to those reductions, shall be paid on the following yearly schedule:

	Walgreens Shall Pay Common Benefit
Year 2 December 31, 2023	$50,373,251.40
Year 3 December 31, 2024	$50,373,251.40
Year 4 December 31, 2025	$59,373,251.40
Year 5 December 31, 2026	$59,373,250.00
Year 6 December 31, 2027	$59,373,250.00
Year 7	

December 31, 2028	$59,373,250.60
Total	$338,239,510.80

Additionally, Walgreens shall pay $44,867,483.00 into the Court Common Benefit Fund as a common benefit fund assessment on the Credit set forth in Ex. M-3 and shall be paid on the schedule set forth in Ex. M-3.[7]

2. The Common Benefit Fund shall be available to compensate Attorneys engaged in Qualifying Representations of Participating Litigating Subdivisions and Qualified Tribal Representation of Tribal Participating Governments who:

   a. have performed work for the Common Benefit of all Participating Subdivisions and/or Tribal Nations consistent with the provisions to the guidelines established by Judge Polster set forth in MDL 2804 and the Order dated May 1, 2018, under docket number 358, which is included herein by reference; and

   b. satisfy the eligibility criteria set forth in Section II.G.

   For purposes of Common Benefit Fund distribution, notwithstanding paragraph II.A.5, Attorneys representing Tribal Nations litigating against Walgreens have also reached a settlement for Released Claims with Walgreens, and these settlements are the subject of agreements with Walgreens. Attorneys are eligible for Common Benefit consideration provided such agreement with Walgreens became effective under their terms. Such Attorneys must meet the eligibility criteria in Section II.G.

   For purposes of Common Benefit Fund distribution, notwithstanding paragraph II.A.5, MDL Participating Counsel not engaged in Qualifying Representations of Participating Litigating Subdivisions but who performed work for the Common Benefit pursuant to authorization from the MDL Co-Leads and meet the eligibility criteria in Section II.G. shall be eligible.

3. Walgreens' Common Benefit Fund payments under this Fee Agreement satisfy any assessments or withholdings for the Walgreens Agreement that are or could be required under the Common Benefit Order for Settling States and their Participating

[7] For the avoidance of doubt, Walgreens is not required to pay any sums under this Agreement for matters settled prior to December 6, 2022, other than the $44,867,483.00 payment referenced above.

Subdivisions. The Common Benefit Fund shall be overseen by the Fee Panel, which shall determine the allocation of funds to eligible Attorneys consistent with this Fee Agreement and the Common Benefit Order.

4. In assessing the benefits that an Applicant has conferred to Participating Subdivisions (including non-Litigating Subdivisions) and/or Tribes for purposes of any compensation decision, the Fee Panel shall give significant weight to the extent to which (i) the Applicant and his or her clients have contributed to increasing (or reducing) Subdivision Participation in the Walgreens Agreement as of the Initial Participation Date, and (ii) the Applicant and his or her clients have contributed to increasing (or reducing) the amounts achieved under Incentive Payments A-D through participation in the Walgreens Agreement, including the Walgreens Tribal Agreement. The Fee Panel shall also consider additional fee recoveries the Applicant may potentially obtain, including, but not limited to, from attorney fee funds under other settlement agreements, State Back-Stop Agreements, representations of States or Tribal Nations, representations of other clients in opioids-related matters, or through the representation of Subdivision clients, whether they participated in the Walgreens Agreement or not. It is the intent of this provision to recognize that the goal of the Walgreens Agreement is to provide for maximum participation by the Subdivisions, maximum abatement funding for all Subdivisions nationally, and the maximum peace for Released Entities. Therefore, representing one or more Non-Participating States or Non-Participating Subdivision does not further the goal of the Walgreens Agreement, and should not be considered Common Benefit because it does not increase funds available to Participating Subdivisions' abatement programs. Representing one or more Later Litigating Subdivisions is antithetical to the Walgreens Agreement and detracts from Common Benefit; the Fee Panel shall consider this concept of "common detriment" set forth in this paragraph in all of its decision making with respect to the allocation of the Attorney Fee Fund among Applicants, as well as, in its discretion, any reductions provided to Walgreens as set forth in Section II.H.[8] The Fee Panel shall consider the totality of the Applicant's Participating Litigating Subdivisions as compared to the Applicant's Non-Participating Litigating Subdivisions; the Parties recognize that, although the goal is for 100% participation, Applicants with a greater number of clients have a greater probability of having one or more Non-Participating Litigating Subdivisions. As used in this paragraph II.C.4, "client" or "representing" a Subdivision shall include any Litigating Subdivision as to which the Applicant has a Fee Entitlement.

5. As set forth in Section II.H, the Fee Panel must consider the factors described in paragraph II.C.4 to determine how and whether to reduce the amounts to be paid by Walgreens under this Fee Agreement and to determine how to allocate funds among Applicants. They may also, at their discretion, consider other factors. Any reduction in payment obligation or credit to be given Walgreens in this Fee Agreement shall be applied against the last Payment Year and then working backwards. Any reduction to an Applicant not credited to Walgreens shall be allocated to attorneys whose Litigating Subdivision clients participated in the settlement by the Initial Participation Date.

[8] Notwithstanding any provisions set forth herein, it is expressly understood and agreed that continued representation of CT-3 Bellwether jurisdictions, Lake County or Trumbull County, shall not be considered by the Fee Panel as common detriment or adverse to the stated purposes of the Master Settlement Agreement and will not in any way prejudice counsel in seeking common benefit for the work related to the representations of these counties or in any other respect.

D. *Contingency Fee Fund* (40% of the Attorney Fee Fund)

1. The maximum potential total Contingency Fee Fund payment to be made by Walgreens into the Attorney Fee Fund is $225,493,007.20, and in no event shall it exceed that amount. Walgreens' maximum potential Contingency Fee Fund payment shall be subject to the reductions set forth in Section II.A.2 for Non-Settling States and to the adjustments set forth below and, subject to those reductions, shall be paid on the following yearly schedule:

	Walgreens Shall Pay Contingency Fee Fund
Year 2 December 31, 2023	$33,582,167.60
Year 3 December 31, 2024	$33,582,167.60
Year 4 December 31, 2025	$39,582,167.60
Year 5 December 31, 2026	$39,582,168.00
Year 6 December 31, 2027	$39,582,168.00
Year 7 December 31, 2028	$39,582,168.00
Total	$225,493,007.20

2. The Contingency Fee Fund shall be available to compensate Attorneys engaged in Qualifying Representations of Participating Litigating Subdivisions that meet the criteria set forth in Section II.G.

   a. The Contingency Fee Fund shall be available to Attorneys who represent Litigating Subdivisions that are Participating Subdivisions, whether their actions are filed in state or federal court, and meet the eligibility criteria of Section II.G.

   b. Participation in the Contingency Fee Fund by counsel that have a case that is not subject to the jurisdiction of the MDL Court shall not create, provide, or waive jurisdiction of the MDL Court over that Litigating Subdivision, that case or Attorneys, other than to oversee the fairness of the distribution process, and enforcement of this Fee Agreement.

3. The amount owed by Walgreens to the Contingency Fee Fund shall be reduced to reflect the non-joinder of Litigating Subdivisions in Settling States by subtracting the amounts identified by the Fee Panel, pursuant to paragraph II.H.7, that would have been owed to counsel for Non-Participating Litigating Subdivisions in Settling States had such Litigating Subdivisions been Participating Subdivisions.

4. In the event that after the date of the Walgreens Agreement, Walgreens, prior to the Effective Date of the Walgreens Agreement, settles with any Litigating Subdivision that would have been eligible to participate in the Settlement Agreement, and, under such settlement agreement pays attorneys' fees, the Fee Panel shall treat those Litigating Subdivisions as Participating Litigating Subdivisions and, applying the same criteria applicable to all Attorneys for Participating Litigating Subdivisions, determine what amount they would have been paid from the Contingency Fee Fund if they had become Participating Subdivisions under the Walgreens Agreement without such prior settlement. That sum, rather than being paid to the Attorney for the previously settling Litigating Subdivision, shall be returned to Walgreens, except that such refund shall not be greater than the amount paid to the Attorneys under the Litigating Subdivision's prior settlement agreement.

E. *Subdivision Cost and Expense Fund*

1. Walgreens shall pay $22,500,000 into the Subdivision Cost and Expense Fund on the schedule set forth below.

	Cost Fund
Year 2 December 31, 2023	$11,250,000

Year 3 December 31, 2024	$11,250,000

2. The Subdivision Cost and Expense Fund shall be available to compensate Attorneys for costs and expenses arising out of representation of Participating Litigating Subdivisions. No funds in the Subdivision Cost and Expense Fund may be used to compensate the costs incurred by Non-Participating Subdivisions or Non-Litigating Subdivisions or costs and expenses arising out of representation of any such Subdivision. In allocating the Subdivision Cost and Expense Fund, the Administrator shall not allocate any funds for costs incurred after December 9, 2022.

3. During the period between December 9, 2022 and the Effective Date of the Walgreens Agreement, the MDL PEC, as well as Litigating Subdivisions eligible to claim costs from the Subdivision Cost and Expense Fund, shall make best efforts to cease litigation activity against Walgreens, including by jointly seeking stays or severance of claims against Walgreens, where feasible, or postponements if a motion to stay or sever is not feasible or is denied, so long as such actions are not otherwise detrimental to the Litigating Subdivision.

4. In the event that Walgreens, prior to the Effective Date of the Walgreens Agreement, settles with any Litigating Subdivision and, under such settlement agreement, pays costs to the Litigating Subdivision or its Attorney, the MDL Cost and Expense Fund Administrator shall treat those Litigating Subdivisions as Participating Litigating Subdivisions and, using the same criteria applicable to all applicants to the Subdivision Cost and Expense Fund, determine what amount in costs the Litigating Subdivision or its Attorney would have been paid from the Subdivision Cost and Expense Fund if they had settled under the Walgreens Agreement. That sum, rather than being paid to the Attorney or the previously settling Litigating Subdivision, shall be credited and/or returned to Walgreens, except that such sum shall not be greater than the amount paid under the previously settled Litigating Subdivision's settlement agreement.

5. The Cost Fund shall be administered by the Cost Fund and Expense Fund Administrator (MDL Docket No. 3828), who will be governed by the provisions of this Agreement and shall design the process and procedures for the allocation of costs pursuant to this Agreement and the MDL Court's Order.

6. The costs of the Cost and Expense Fund Administrator shall be paid from the Cost Fund and allocated by the Cost and Expense Fund Administrator between the MDL Direct Cost Fund and the Subdivision Cost and Expense Fund to fairly charge each fund the cost incurred in implementing and supervising the specific fund.

7. The Cost and Expense Fund Administrator shall set the process and procedures for submission of and criteria for applications for payment of Subdivisions' and Tribal Nations' costs and expenses. The Cost and Expense Fund Administrator shall receive and evaluate applications from Participating Litigating Subdivisions and litigating Tribal Nations, whether filed in Federal Court or State Court, to seek reimbursement for eligible costs under Section II.E.2 in pursuit of claims against Walgreens. The process shall require a showing that the costs or expenses sought were reasonably incurred in furtherance of active litigation of a designated state or federal bellwether trial-set case, or Common Benefit. The Cost and Expense Fund Administrator shall require transparency from all applicants as to any other sources for compensating Attorneys for Subdivisions and Tribal Nations for costs incurred. If funds remain after the reimbursement of approved out-of-pocket costs, the Cost and Expense Fund Administrator may consider reasonable and appropriate payment for client time, costs, or expenses incurred by recognized trial bellwether plaintiffs. At the conclusion of the process, any funds not allocated by the Cost and Expense Fund Administrator shall be transferred to the Common Benefit Fund established in this Exhibit R.

8. In the event that States and Subdivisions enter into an additional global settlement with a party or parties other than Walgreens that is (a) under the jurisdiction of the MDL Court in MDL No. 2804, (b) creates a separate cost fund, and (c) unless the parties agree to another date, such agreement has an effective date prior to June 30, 2023, the Cost and Expense Fund Administrator shall have the authority to aggregate the Cost Fund with the cost fund created under that global settlement agreement. The Cost and Expense Fund Administrator shall have the authority to address the appropriate procedures and required information to allow the costs to be funded from the appropriate cost fund or shared by two or more cost funds; *provided, however*, that the Subdivision Cost and Expense Fund shall remain subject to the requirements set forth in Section II.E.2. For the avoidance of doubt, the Subdivision Cost and Expense Fund is available only to compensate Attorneys for costs and expenses arising out of representation of Participating Litigating Subdivisions, and no funds in the Subdivision Cost and Expense Fund may be used to compensate the costs incurred by Non-Participating Subdivisions or Non-Litigating Subdivisions or costs and expenses arising out of representation of any such Subdivision.

F. *MDL Expense Fund*

1. Walgreens shall pay $7,500,000 into the MDL Expense Fund on the schedule set forth below.

	MDL Expense Fund
Year 2	$3,750,000

December 31, 2023	
Year 3 December 31, 2024	$3,750,000

2. The MDL Expense Fund shall be released following the Effective Date of this Fee Agreement without any delay to reimburse the MDL Counsel for an agreed-to portion of the expenses incurred, as approved by the Cost and Expense Fund Administrator. The sum deposited into the MDL Expense Fund will be paid directly to the MDL Opiate Capital Account. No funds may be used to compensate the costs incurred by Non-Participating Subdivisions or Non-Litigating Subdivisions, or to compensate any Attorney for costs incurred in representing one or more Non-Participating Subdivisions or Non-Litigating Subdivisions.

3. In allocating the MDL Expense Fund, the Administrator shall not allocate any funds for costs incurred after December 9, 2022, unless the Administrator determines that there are sufficient funds to cover all Subdivision costs incurred prior to December 9, 2022 and that special circumstances exist to justify costs incurred following the public announcement of the Walgreens Agreement, including reasonable costs related to the implementation of the Walgreens Agreement.

G. Eligibility

1. It is the intention of all parties participating in the Fee Panel process that there should be total transparency to the Fee Panel and to all fund participants. In connection with the process to be developed by the Fee Panel, any and all monies in attorney's fees received or awarded, including prior or future Contingency Fees, Common Benefit Fees, referral fees, expenses paid, promises for payment, or any other Fee Entitlement, to any Applicant in any opioid litigation shall be disclosed to the Fee Panel as a condition of participating in the Attorney Fee Fund and prior to an award from the Fee Panel. Any payment, expectation of payment or perceived entitlement to participate in a State Back-Stop Agreement or any other agreement reached with a Settling State or any Subdivision or any other source regarding payment of fees must be disclosed to the Fee Panel. Similarly, any right to payment from any other fund, for example a fund for payment to lawyers representing Settling States or Tribal Nations or Subdivisions shall be disclosed to the Fee Panel. Because it is anticipated that there will be multiple firms listed on contingent fee agreements with Litigating Subdivisions, the Fee Panel shall establish procedures, with input from Attorneys for Participating Litigating Subdivisions, for which party or parties should petition for fees from such groups and to whom the fee shall be paid and thereafter distributed to co-counsel in accordance with applicable agreements. For the avoidance of doubt, all Attorneys that are part of such groups must meet the eligibility criteria in paragraph II.G.3, must be subject to the criteria set forth in paragraph II.C.4, and must be disclosed to the Fee Panel.

2. An Applicant may apply for and recover attorneys' fees from the Common Benefit Fund, the Contingency Fee Fund, and any fund created by a past or future State Back-Stop Agreement, provided the Applicant satisfies the requirements relevant to each such fund and requirements for disclosure to the Fee Panel.

3. An Attorney may not receive any payment from the Attorney Fee Fund (which includes both the Contingency Fee Fund and the Common Benefit Fund) unless the following eligibility criteria are met and annually certified by the Attorney:

   a. The Attorney must expressly waive the enforcement against the Litigating Subdivision client of all Fee Entitlements (other than under State Back-Stop Agreements) arising out of or related to any or all Qualifying Representations of any Participating Litigating Subdivision prior to applying for attorneys' fees from the Attorney Fee Fund. All applications for attorneys' fees under this Fee Agreement shall include an affirmation by the Attorney of such waiver and notice to the client(s) of such waiver. Such waiver shall not preclude the Attorney from submitting such Fee Entitlements to the Fee Panel as a factor for consideration in allocating payments from the Attorney Fee Fund or in connection with a State Back-Stop Agreement. For the avoidance of doubt, no Attorney may recover fees under this Fee Agreement unless the Attorney expressly agrees not to enforce Fee Entitlements as to each and every Participating Litigating Subdivision represented by that Attorney, but such Attorneys may participate in and receive funds from a State Back-Stop Agreement.

   b. The Attorney must represent that s/he has no present intent to represent or participate in the representation of any Later Litigating Subdivision or Later Litigating State with respect to Released Claims against Released Entities.

   c. The Attorney must represent that s/he has not and will not engage in any advertising or solicitation related to Released Claims against Released Entities where such advertising or solicitation relates to a representation of a Subdivision eligible to be a Participating Subdivision after the Reference Date unless the Attorney is recommending participation in the Agreement..

   d. The Attorney must represent s/he will not charge or accept any referral fees for any Released Claims brought against Released Entities by Later Litigating Subdivisions or Later Litigating States. This representation shall not prohibit Attorneys from receiving allocated shares of any future common benefit assessments arising out of settlements or judgments with Later Litigating Subdivisions or Later Litigating States that are the result of the MDL Court's Common Benefit Order.

   e. The Attorney may not have and must represent that s/he does not have a Fee Entitlement related to a Later Litigating Subdivision or Later Litigating State, other than a potential Common Benefit Fee.

f. The Attorney must fully disclose the participation, or the anticipation of participation, in any agreement with a Settling State or Participating Subdivision concerning fees arising out of or related to the Walgreens Agreement, including any fees paid or anticipated to be paid or any State Back-Stop Agreement.

g. The Attorney must identify for the Fee Panel whether s/he utilized state litigation work product or MDL work product, including but not limited to ARCOS data, document repositories, experts developed in the MDL, trial transcripts, or deposition transcripts. The Attorney must identify whether s/he signed the MDL Participation Agreement.

h. Any Attorney who applies for fees from one or both Funds must represent that, having exercised his/her independent judgment, s/he believes the Walgreens Agreement to be fair and will make or has made best efforts to recommend the Agreement to his or her Subdivision clients in Settling States. For avoidance of doubt, each Attorney is expected to exercise his or her independent judgment in the best interest of each client individually before determining whether to recommend joining the settlement. All applications for attorneys' fees or costs under this Section shall include an affirmation by the Attorney in compliance with this Subsection.

4. No Attorney receiving fees under this Fee Agreement may apply for or recover from the Attorney Fee Fund fees arising from representing a Non-Settling State or a Non-Participating Subdivision, provided, however, that this provision is not intended to prohibit Attorneys who do not represent or otherwise have a contractual agreement with such Non-Settling State or Non-Participating Subdivision from receiving allocated shares of any future common benefit assessments that arise out of settlements or judgments involving such Non-Settling State or Non-Participating Subdivision. All applications for attorneys' fees under this Section shall include an affirmation by the Attorney of compliance with this Section.

5. An Attorney who has filed an application under this section and received an award of attorneys' fees shall provide a certification of compliance with the Sections of this Fee Agreement annually during the years upon which they are still entitled to receive attorneys' fee payments under this Agreement. This certification will be done as directed by the Panel.

6. If, at any time, the Attorney is unable to make the representations set forth in this Section, such representations become untrue, or the Attorney falsely represents compliance with the eligibility criteria, the Attorney shall cease to be eligible to receive funds from the Attorney Fee Fund until further review by the Fee Panel of the Attorney's eligibility under and compliance with this Section II.

7. If an Attorney has a Fee Entitlement with a Later Litigating Subdivision or Later Litigating State or otherwise becomes unable to reaffirm compliance with the eligibility criteria set forth above, the Attorney shall notify the Fee Panel. For the

avoidance of doubt, any Attorney who undertakes any new representation of, or has a Fee Entitlement with, a Later Litigating Subdivision or Later Litigating State shall be prohibited from receiving any future funds from the Attorney Fee Fund and be subject to additional obligations as set forth in Subsection 8 below.. If an Attorney fails to notify the Fee Panel of such Fee Entitlement with a Later Litigating Subdivision or Later Litigating State, the Attorney shall be required to refund amounts previously paid. The Fee Panel shall notify Walgreens when it receives notification.

8. To the extent an Attorney who has received compensation from the Attorney Fee Fund based on Qualifying Representations of Participating Litigating Subdivisions under the Walgreens Agreement represents a Later Litigating Subdivision or Later Litigating State, such Attorney shall be obligated to refund such amounts received as compensation from the Attorney Fee Fund to Walgreens. Walgreens or such Attorney may bring any dispute as to whether such Attorney shall be obligated to refund such amounts received from the Attorney Fee Fund to Walgreens, to the Fee Panel. Nothing herein shall require a multi-attorney law firm that has received compensation from the Attorney Fee Fund to refund such amounts if an attorney of the firm that is no longer affiliated with such law firm, after such departure, represents a Later Litigating Subdivision or Later Litigating State, provided that (a) neither the law firm nor any of its other attorneys have any contractual or financial arrangement regarding, stand to benefit directly or indirectly from, or directly or indirectly provide financial or other support of any kind to, the former attorney's representation of the Later Litigating Subdivision or Later Litigating State and (b) if the former attorney was a partner or owner of the multi-attorney law firm at the time that the law firm received compensation from the Attorney Fee Fund, the former attorney shall be obligated to refund such amounts as the former attorney earned as a result of the compensation that the law firm received from the Attorney Fee Fund.

9. In the event that an Attorney is deemed ineligible by the Fee Panel (whether based on its initial application or subsequent recertification), the Fee Panel shall provide notice to the Attorney and give the Attorney 30 days to provide additional information such that the Fee Panel could re-consider the Attorney's eligibility.

10. To the extent that an Attorney has a Fee Entitlement with a Participating Subdivision and is authorized to bring Released Claims against Released Entities, but such authorization is, in scope, less broad than the category of Released Claims set forth in the Walgreens Agreement, such Attorney may participate fully in both the Contingency Fee Fund and the Common Benefit Fund, without any reduction imposed by the Fee Panel due to the scope of the authorization, so long as the Participating Subdivision fully releases all Released Claims against Released Entities.

11. Attorneys applying to the Attorney Fee Fund knowingly and expressly agree to be bound by the decisions of the Fee Panel, subject to the limited appeal rights set forth in this Fee Agreement, and waive the ability to assert the lack of enforceability of the allocation reached through the procedures outlined herein.

12. Applicants are under an ongoing obligation to inform the Fee Panel in writing of any additional fees earned, expected, or received related to any Opioid litigation throughout the period of the Fee Panel's operation.

H. Calculation of Amounts Due

1. The Fee Panel shall be solely responsible for determining the amount of fees to be paid to each Applicant. None of the Released Entities shall have any responsibility, obligation, or liability of any kind whatsoever with respect to how attorneys' fees are calculated under this Section, except that the Fee Panel may receive information from Walgreens as to (a) the identity of Participating, Non-Participating, Litigating, Later Litigating, and Non-Litigating Subdivisions; (b) the impact of non-participation by a Litigating Subdivision as is relevant to the Fee Panel's determination in paragraph II.C.4; and (c) such other information as Walgreens may voluntarily elect to provide.

2. The Fee Panel shall establish procedures for making determinations under this Fee Agreement consistent with this Fee Agreement and orders of the MDL Court. Such procedures may include submission of documentary and/or other evidence, interviews with Applicants and/or other counsel (including counsel for Walgreens) that the Fee Panel deems appropriate, and/or other means of creating a record upon which fee awards will be based.

3. In making determinations under this Fee Agreement, the Fee Panel must apply the eligibility criteria set forth in Section II.G of this Fee Agreement and the criteria set forth in Section II. The Fee Panel shall ensure that payments are only made for Qualifying Representations of Participating Litigating Subdivisions. In addition, the Fee Panel will give consideration in regard to Common Benefit Fund awards to the *Johnson* factors, as well as the following factors (which factors may be applied and given relative weight in the Fee Panel's discretion):

    a. The Applicant's contemporaneously recorded time and labor dedicated to Qualifying Representations along with the Applicant's financial commitment to such Qualifying Representations. Claimed "time" will not be automatically accepted by the Fee Panel but will be critically reviewed and given substantially more weight and consideration if such time was subject to the audit process described in any Pretrial Order(s) governing the collection of common benefit time;

    b. The novelty, time, and complexity of the Qualifying Representations;

    c. The skill requisite to perform legal services properly and undesirability of the case;

    d. The preclusion of other employment by the Applicant due to time dedicated to Qualifying Representations;

e. The Common Benefit, if any, alleged to have been conferred by the Applicant and whether such Common Benefit work product by that Applicant was used by others in parallel litigations against Released Entities whether within or outside the MDL, provided that any Applicant claiming that s/he substantially benefited cases other than those in which s/he entered an appearance as counsel must substantiate such claims by proffering factual support, such as proper supporting affidavits or other documents as determined by the Fee Panel with input from Attorneys for Participating Litigating Subdivisions;

f. Any "common detriment," as set forth in paragraph II.C.4;

g. Any contingent fee agreement or other Fee Entitlement with Participating Subdivisions, enforcement of which, except for State Back-Stop Agreements, are waived in conjunction with the application, the nature and extent of any work for those Participating Subdivisions, whether such Participating Subdivisions actively litigated and, if so, the nature and procedural history of such case(s);

h. The experience, reputation, and ability of the Applicant;

i. Whether the Applicant's clients brought Released Claims against Released Entities;

j. The status of discovery in cases primarily handled by the Applicant;

k. The nature of any work by the Applicant on "bellwether" cases or cases that were similarly active in litigation;

l. Any pressure points successfully asserted by the Applicant in cases against Walgreens or any risk for Walgreens created by the Applicant in cases against Walgreens;

m. Any risk for defendants created by Applicants in cases against Walgreens;

n. Successful and unsuccessful motion practice in cases worked on by the Applicant;

o. The date of filing of any cases filed by the Applicant;

p. Obtaining consolidation of the litigation in the Applicant's jurisdiction;

q. The number and population of entities represented by the Applicant and the fees that would have been awarded under extinguished contingent fee arrangements;

r. Whether the Applicant's clients brought claims against Walgreens prior to the announcement of this settlement on December 9, 2022;

s. Whether the Applicant has had a leadership role in the litigation, whether in state or federal court;

t. Whether the Applicant has had a leadership role in any negotiations aimed at resolving the litigation;

u. Whether the Applicant's cases have survived motions to dismiss;

v. The extent to which the Applicant contributed to the work product used for the common benefit of opioids litigants, including, without limitation, work on ARCOS data, Prescription Data Monitoring Programs, IQVIA data, depositions, document production and analysis experts, motions, briefs and pleadings, trial preparations, and trials;

w. The extent to which litigation occurred prior to and contributed to completion of settlement negotiations, as distinct from litigation that occurred after the announcement of the Walgreens Agreement on December 9, 2022, such latter litigation both being of less value and, the case of litigation filed after the announcement of the Walgreens Agreement on December 9, 2022, resulting in a common detriment to the settlement process, which in both cases should be viewed less favorably; and

x. Any other factors that the Fee Panel finds to be appropriate to consider after input from Applicants to the Attorney Fee Fund.

4. It is possible that the States and Subdivisions that are litigating Opioid cases will enter additional settlements in close proximity of the time for processing the Walgreens Agreement. If there are additional settlements and these settlements create a Common Benefit Attorney Fee Fund to be administered by the Fee Panel, the Fee Panel may:

a. Consolidate the Common Benefit approval process to include evaluation of all Common Benefit Applications for all settlements entered after November 14, 2022;

b. Determine the fair and equitable allocation of the Aggregate Common Benefit Fees that come after December 9, 2022, including consideration of beneficial or detrimental actions taken with respect to any Settling Defendant contributing to the Common Benefit Attorney Fee Fund;

c. Give consideration to the amount and timing of each settlement, including the amount and timing of Common Benefit Fees;

d. The Fee Panel shall abide by the applicable Attorney Fee Agreement in each of the Settlements in Allocating the Common Benefit Fees provided for in the Settlement; and

e. Be guided in their work by the Orders of the Court related to Fees and Costs.

5. The Fee Panel shall develop procedures for receiving a single application, which may be updated or amended based on new information (such as participation by additional Litigating Subdivisions) from each Applicant seeking compensation from each sub fund of the Attorney Fee Fund pursuant to processes and procedures developed by the Fee Panel, which shall not be inconsistent with this Fee Agreement. Any request for attorneys' fees not included on the single application or through the updating/amendment process designed by the Fee Panel shall be deemed waived. For purposes of transparency and to permit the Fee Panel to conduct its work, the application from each Applicant shall, at a minimum, require each Applicant to:

a. Identify all Litigating Subdivisions for which s/he is seeking payment from the Attorney Fee Fund;

b. Identify all Subdivisions in both Settling and Non-Settling States (and, where applicable, Tribal Nations) with respect to which s/he has a Fee Entitlement with respect to Relevant Claims against Released Entities, and identify all co-counsel in such cases;

c. Identify which of those Subdivisions are Participating Subdivisions and which are not (with similar information for Tribal Nations, where applicable);

d. Specify the specific fund or funds within the Attorney Fee Fund from which the Attorney is seeking compensation;

e. Demonstrate his or her eligibility for compensation from the relevant sub funds within the Attorney Fee Fund pursuant to the criteria set forth for the relevant sub fund;

f. Identify any and all Fee Entitlements from representations of States, Tribal Nations, or other plaintiffs related to Released Claims against Released Entities or in opioids-related matters;

g. Notwithstanding "a-f" above, the Panel may consider a supplemental application if the Applicant shows good cause why circumstances exist that will lead to consideration for additional Common Benefit award. Examples would include, but are not limited to, an Applicant having Non-Participating Litigating Subdivision clients that subsequently become Participating Subdivisions, a Bar Date passes that increases participation or an Allocation Agreement is reached.

6. With respect to the Common Benefit Fund, the Fee Panel shall (subject to any applicable MDL Court Order):

    a. Review the applications of all Applicants seeking compensation from the Common Benefit Fund, including determining eligibility for each Applicant as set forth in Section II.G.

    b. Using criteria set forth in Sections II.C and II.G, allocate amounts from the Common Benefit Fund to eligible Applicants, including payment amounts for each Payment Year. In making such allocations, the Panel shall apply the principles set forth in paragraph II.C.5 to the amounts paid to Applicants with a Common Benefit Fee Entitlement.

7. With respect to the Contingency Fee Fund, the Fee Panel shall:

    a. Review the applications of all Attorneys seeking compensation from the Litigating Subdivision Fee Fund, including determining eligibility for each Attorney as set forth in Section II.G.

    b. Apply the Mathematical Model in Exhibit A.

    c. Use such allocations to determine refund amounts owed to Walgreens from the Attorney Fee Fund, and inform Walgreens and the MDL PEC of all such adjustments.

8. To the extent that there is a dispute about the calculations of the Fee Panel related to the amount that Walgreens is required to pay (including application of any reductions or refunds under this Fee Agreement), such disputes shall be presented to the Fee Panel and any disputed funds be paid into/held in escrow. The Fee Panel shall resolve such disputes expeditiously, with either Party having the right to seek review from the MDL Court.

9. For purposes of determination of fee or cost awards, allocations, reductions, and possible reversions under this Fee Agreement, unless specified otherwise a Subdivision will be considered a Non-Participating Subdivision if it is not a Participating Subdivision as of the deadline for the application for the fee at issue (or, if the determination does not involve a specific application, the date on which the record for such determination closes).

10. In the event that the Fee Panel, through the use of the Mathematical Model set forth in Exhibit A, allocates funds from the Contingency Fee Fund for an Attorney based on a Qualifying Representation of a Participating Litigating Subdivision and that Subdivision is in a Settling State in which the Consent Judgment has not been

approved, such funds shall be placed into escrow until the Consent Judgment is approved, after which time they shall be released.

I. Miscellaneous

1. The Fee Panel shall charge an hourly rate approved by the Court. The Pre-Effective Date costs associated with the Cost and Expense Fund Administrator shall be paid from funds in the Cost Fund. Post-Effective Date, the cost of the Fee Panel shall be charged against the applicable Fee Fund based on allocation by the Fee Panel and shall not be otherwise funded by Walgreens.

2. The MDL PEC will seek, and the Attorneys General for Settling States and the Walgreens will not oppose, a Common Benefit Fee Order requiring an assessment of 7.5% on the gross recovery (by judgment or settlement) of any Non-Participating Subdivision that is subject to the federal court jurisdiction, represented by a MDL PEC firm, represented by any Attorney receiving fees from the Common Benefit Fund, represented by any Attorney that signed a Participation Agreement or had been paid in a case otherwise under the jurisdiction of the MDL Court.

3. The MDL PEC shall provide to Walgreens information the PEC has that identifies Attorneys who represent Litigating Subdivisions who are not Participating Subdivisions and who have an obligation to pay a common benefit assessment, either due to the MDL Court's orders or pursuant to a Participation Agreement.

4. The MDL PEC and Walgreens agree that it is a conflict of interest for an Attorney that had represented a Participating Subdivision to represent a Later Litigating Subdivision or Later Litigating State. This Subsection shall be enforceable to the extent permitted by the equivalent to Rules 1.16 and 5.6 of the ABA Model Rules of Professional Conduct in the relevant jurisdictions. The MDL PEC represents that it will comply with this provision in the case of the Walgreens Agreement until the Effective Date of the Walgreens Agreement, as well as thereafter, if the Walgreens Agreement proceeds.

5. Participating Subdivisions agree to instruct their counsel to treat information, work product and expert materials as confidential under Rule 1.6 of the ABA Model Rules of Professional Conduct. Accordingly, an Attorney shall not share information or work product with, or experts or materials to, non-participants (other than the Attorney's own current clients or their lawyers, consultants, experts or other representatives or agents). However, nothing herein shall prevent MDL Leadership or PEC Counsel from fulfilling their obligations in any MDL and the MDL Court Order.

III. Miscellaneous

A. *Termination*. If the Walgreens Agreement does not proceed past the Reference Date, whether because Walgreens does not determine to proceed or for any other reason, this Fee Agreement shall be null and void, Walgreens shall have no obligation to make any payments under this

Fee Agreement, and Walgreens and the MDL PEC shall take such steps as are necessary to restore the *status quo ante*.

B. *MDL Court Consideration*. This Fee Agreement shall be attached as an exhibit to the Walgreens Agreement. This Fee Agreement shall also be submitted by Walgreens and the MDL PEC to the MDL Court for approval pursuant to the motion and order that shall be attached.

1. In the event that the MDL Court, through an order, makes any change to the amounts potentially to be paid by Walgreens under this Fee Agreement, makes any change to the Fee Panel's consideration of the factors set forth in paragraph II.C.4, or any other material change to the draft Order attached as part of Exhibit B or the terms of this Fee Agreement, Walgreens and the MDL PEC shall meet and confer concerning such changes. The MDL Court shall have no authority to increase the payments made by Walgreens related to fees and costs beyond the amounts described in this Fee Agreement.

2. If Walgreens and the MDL PEC are unable to reach agreement and revisions to this Fee Agreement, this Fee Agreement shall be null and void, Walgreens shall have no obligation to make any payments under this Fee Agreement, and Walgreens and the MDL PEC shall take such further steps as are necessary to restore the *status quo ante.*

C. *Amendment*. Once the MDL Court has entered an order implementing this Fee Agreement, this Fee Agreement can only be amended by (1) written agreement of Walgreens and the MDL PEC and (2) approval by the MDL Court.

D. *Jurisdiction and Enforcement*. The MDL Court shall have exclusive and ongoing jurisdiction over the enforcement and implementation of this Fee Agreement as set forth herein. The MDL PEC shall be the Authorized Party to enforce this Fee Agreement, as to the payment obligations of Walgreens as set forth in this Fee Agreement and as to Attorneys making application to the Funds under this Fee Agreement. Solely for purposes of assessing or allocating common benefit fees, the MDL Court will continue to have jurisdiction over the work product developed in the MDL Court by and under the direction of the MDL PEC with respect to claims against Walgreens, including data and documents, depositions, expert reports, briefs and pleadings; and the MDL Court's protective orders, management orders, and other decisions regarding such discovery and other work product, including but not limited to, conditions on its use, will continue in full force and effect. Nothing in this paragraph authorizes the MDL Court to act contrary to this Agreement or to share any of the work product, or provides the MDL Court with jurisdiction over the Walgreens Agreement.

Description of Mathematical Model for the Allocation of the Contingency Fee Funds

Walgreens Settlement Agreement

This document describes the Mathematical Model for allocation of the Contingency Fee Fund described in Exhibit R (Agreement of Attorneys' Fees, Costs, and Expenses) to the Walgreens Settlement Agreement.[9] Awards of fees from the Contingency Fee Funds shall be available to Attorneys with Qualifying Representations of Participating Litigating Subdivisions eligible to receive an allocation under the Walgreens Settlement Agreement.[10] A Fee Panel shall oversee the application of the Model and resolve any questions or disputes concerning the eligibility of a counsel to participate. The Panel is empowered to hear disputes concerning and ensure the accuracy of the mathematical calculations.

In general terms, allocation of the Contingency Fee Fund shall be made by (1) determining the amount of the Settlement Fund that is attributable to each Participating Litigating Subdivision; (2) making certain adjustments to these amounts based on when the Subdivision filed suit and the terms of the applicable fee contract; and (3) dividing the Contingency Fee Fund proportionately among counsel for each Participating Litigating Subdivision based on the amounts calculated in subpart 2.

To collect a fee award from the Contingency Fee Fund, a Participating Litigating Subdivision must have named Walgreens (or any Released Entity) in its lawsuit. The total maximum amount of the Contingency Fee Fund in the Walgreens Settlement Agreement is $225,493,007.20.[11]

Allocation of the Contingency Fee Fund shall be made according to the following steps. These calculations are made only for purpose of determining the percentage share of the Contingency Fee Fund that Attorneys for each Participating Litigating Subdivision should receive, ***not*** for determining the dollar amount each Subdivision will receive.

(1) For each Settling State, attribute 50% of the settlement funds for that State to its Subdivisions according to the Subdivision Allocation Percentage in Exhibit G to the Walgreens Settlement Agreement.

Illustrative example:

- Assume that State A is allocated 1.00000% of the $4,788,165,458 Remediation amount [see Exhibit M of the Walgreens Settlement Agreement].
- 50% of the 1% share allocated to State A is $23,940,827.29.
- Assume that, per Exhibit G of the Agreement, the Subdivision Allocation Percentage for City B in State A is 1.00000000%.

[9] *See* Walgreens Settlement Agreement, Exhibit R § II.D.2.

[10] Walgreens Settlement Agreement, Exhibit R § II.D.2.

[11] Walgreens Settlement Agreement, Exhibit R § II.A.1 & II.D.1.

- For purposes of determining its counsel's share of the Contingency Fee Fund, City B is attributed 1.00000000% of $23,940,827.29, or $239,408.27.

(2) Adjust the amounts in paragraph 1 as follows:

a. *Upward Adjustment for Early Filers.* Increase the amount calculated in paragraph 1 above by 10% for any Litigating Subdivision that named Walgreens in a suit before December 5, 2017, the date the National Prescription Opiate Litigation MDL was formed. If the Litigating Subdivision did not name Walgreens in a suit before December 2, 2022, then fees from the Contingency Fee Fund will not be awarded to Attorneys with otherwise Qualifying Representations of that Participating Litigating Subdivision.

Illustrative Example:

- Assume City C is attributed $1,000,000 under paragraph 1 above.
- If City C named Walgreens before 12/5/2017, the attributed amount would be adjusted to $1,100,000.

b. *Determine Amount Due under Contingency Fee Contract*. Determine the amount that would be due to Attorneys with Qualifying Representations of each Participating Litigating Subdivision under the terms of the applicable fee contract if the Participating Litigating Subdivision were to receive the amount calculated in paragraph 2.a. This amount can be referred to as the Contingency Fee Assumption.

Illustrative Example:

- Continuing the example given in paragraph 2.a, if Attorneys have a 20% contingency fee contract with City C for the relevant litigation, the amount calculated in this step would be 20% of $1,100,000, or $220,000.

In the next step, the Contingency Fee Assumption is used to determine the percentage share of the Contingency Fee Fund due to Attorneys for each Participating Litigating Subdivision.

(3) Divide the Contingency Fee Fund proportionately among Attorneys for each Participating Litigating Subdivision in two ways:

a. *National Fee Pool Calculation.* Determine each Litigating Subdivision's percentage share of all amounts due under contingency fee contracts nationwide by dividing the Contingency Fee Assumption calculated for each Subdivision in paragraph 2.b by the sum of all Contingency Fee Assumptions. Then multiply that percentage by the Contingency Fee Fund to figure each Subdivision's dollar share of the Contingency Fee

Fund (but only if the Subdivision timely named Walgreens in a lawsuit).

Illustrative example:

- $220,000 [from para. 2.b] ÷ $280,000,000 [total amount owed under contingency fee contracts nationwide] = 0.0785714%[12]
- 0.0785714% * $225,493,007.20 [Contingency Fee Fund] = $177,173.01

b. *Separate State Fee Pools Calculation.* Determine each Litigating Subdivision's percentage share of all amounts due under contingency fee contracts statewide by dividing the Contingency Fee Assumption calculated for each Subdivision in paragraph 2.b by the sum of all Contingency Fee Assumptions in the same State. Then multiply that percentage by the portion of the Contingency Fee Fund that corresponds to that State's Overall Allocation Percentage, shown in Exhibit F of the Walgreens Settlement Agreement, to figure each Subdivision's dollar share of the Contingency Fee Fund (but only if the Subdivision timely named Walgreens in a lawsuit).

Illustrative example:

- 1% * $225,493,007.20 = $2,254,930.072 [amount of the Contingency Fee Fund corresponding to State A]
- Assume a total of $2,500,000 is owed under contingency fee contracts for State A.
- $220,000 [from para. 2.b] ÷ $2,500,000 = 8.8%
- 8.8% * $2,254,930.072 = $198,433.85

The award of fees to Attorneys with Qualifying Representations of Participating Litigating Subdivisions will be the average of the final amounts calculated in paragraphs 3.a and 3.b above, less any amounts the Fee Panel is authorized to, and does, withhold.[13]

Paragraph 3.a represents allocation based on a proportional share of a National Fee Pool, while paragraph 3.b represents allocation based on a proportional share of the Separate State Fee Pools. In other words, for the National Fee Pool described above in paragraph 3.a, the contingency fee contract rate is compared to all other contingency fee contract rates in the nation. For the Separate State Fee Pools described above in paragraph 3.b, the contingency fee contract terms are

[12] In this example, $280 million is the amount theoretically owed under all contingency fee contracts for litigation against Walgreens as calculated in paragraph 2.b. This amount is illustrative only; the actual amount will not be known until all litigating subdivisions are identified and the terms of their contingency fee contracts are collected.

[13] The model also enforces a maximum fee award of 20% of the amount calculated in paragraph 2.b. The description in this document of the Mathematical Model is by necessity an abstraction; the precise contours of the calculations are defined in the model itself.

compared to the other contingency fee contract terms in that same State. The National Fee Pool and the Separate State Fee Pools are given equal weighting.

Using the first methodology, Attorneys for two Subdivisions in different States with the same amount calculated under paragraph 2.b would be assigned the same amount under paragraph 3.a. Using the second methodology, Attorneys for the same two Subdivisions would be assigned different amounts under paragraph 3.b because they are in different States. Specifically, the Subdivision in the State with a smaller proportion of Participating Litigating Subdivisions would be allocated more than the Subdivision in the State with a greater proportion of Participating Litigating Subdivisions.

By: _____

Name:

Date: _____

On behalf of Walgreens

By: _____

Name: Paul T. Farrell, Jr.

Date: _____

By: _____

Name: Jayne Conroy

Date: _____

By: _____

Name: Joseph F. Rice

Date: _____

On behalf of Plaintiffs' Executive Committee

EXHIBIT S

Agreement on the State Outside Counsel Fee Fund for Chain Pharmacy Settlements

1. **Definitions**.

   a. "Chain Pharmacy" means any of CVS, Walgreens, and Walmart, and "Chain Pharmacies" means all of the foregoing.
   b. "Multistate Chain Pharmacy Settlement Agreement" means This Settlement Agreement along with any other settlement of opioids-related claims among 30 or more states and a Chain Pharmacy.
   c. "This Settlement Agreement" means the settlement agreement between the Settling States and the Chain Pharmacy to which this Agreement is attached as an Exhibit.
   d. "Settling Chain Pharmacy" means the Chain Pharmacy that is a party to This Settlement Agreement.
   e. "Settling States" has the meaning given such term in the relevant Multistate Chain Pharmacy Settlement Agreement.

2. **Creation of a State Outside Counsel Chain Pharmacies Fee Fund.** The Settling States have agreed to the creation of a state outside counsel fee fund to pay reasonable attorneys' fees of Settling States which have retained outside counsel in connection with litigation against one or more Chain Pharmacies (such fund, the "State Outside Counsel Chain Pharmacies Fee Fund").

3. **State Outside Counsel Chain Pharmacies Fee Fund Administration.** The State Outside Counsel Chain Pharmacies Fee Fund shall be administered separately from any other funds for the payment of attorneys fees or costs in connection with This Settlement Agreement, including any common benefit fund, contingency fee fund for subdivision counsel, state cost fund, or MDL expense fund. If necessary, a committee of Attorneys General shall be convened to oversee the State Outside Counsel Chain Pharmacies Fee Fund (the "Chain Pharmacies Fee Fund Committee"). The Chain Pharmacies Fee Fund Committee shall be appointed by the Settling State Members of the Enforcement Committee and shall be comprised solely of Attorneys General of Settling States that engaged outside counsel to pursue litigation against one or more Chain Pharmacies. The Settlement Fund Administrator (the "Fee Fund Administrator") shall administer the State Outside Counsel Chain Pharmacies Fee Fund according to this Exhibit and, if convened, the guidelines and directives of the Chain Pharmacies Fee Fund Committee.

4. **State Outside Counsel Chain Pharmacies Fee Eligibility.**

   a. To receive any amount from the State Outside Counsel Chain Pharmacies Fee Fund, an outside counsel to a Settling State must have filed and maintained an action in the name of a Settling State or its Attorney General against a Chain

Pharmacy in a state or federal court as of November 1, 2022. No Settling State (or its outside counsel) shall receive funds from both the State Outside Counsel Chain Pharmacies Fee Fund and any "Additional Remediation Amount" as may be provided for in This Settlement Agreement.

b. In addition to the eligibility criteria set forth in Paragraph 4.a, above, and for the avoidance of doubt, only Settling States under This Settlement Agreement are eligible to receive any funds paid into the State Outside Counsel Chain Pharmacies Fee Fund as a result of This Settlement Agreement.

5. **State Outside Counsel Chain Pharmacies Fee Fund Amount.** The Settling Chain Pharmacy shall pay funds into the State Outside Counsel Chain Pharmacies Fee Fund in an amount equal to, and on the schedule identified in, Exhibit M (the "Contribution"). The Settling Chain Pharmacy's Contribution shall subject to a reduction as described in Paragraph 8, below.

6. State Outside Counsel Chain Pharmacies Fee Fund Availability and Calculation of Amount.

a. The State Outside Counsel Chain Pharmacies Fee Fund shall be available to compensate private outside counsel for Settling State Attorneys General for approved fees arising out of representation of the Settling State pursuant to the schedule attached to this agreement as Schedule I (the "Fee Schedule").

b. The Fee Schedule is intended to reflect the fee calculation in subparagraph 6.c, below (the "Fee Calculation"). Subject to adjustments required by Paragraph 8, below, in the event of any discrepancy between the Fee Schedule and the Fee Calculation, the Fee Schedule shall control. Each Settling State, by becoming a Participating State in This Settlement Agreement, agrees that the Fee Schedule reflects the Fee Calculation and waives any right to contest the accuracy of the Fee Schedule, absent manifest error, the exclusion of a Settling State, or the inclusion of a Non-Settling State. The version of the Fee Schedule reflecting any necessary adjustments shall be the "Final Fee Schedule."

c. Fees shall be aggregated across the Multistate Chain Pharmacy Settlement Agreements and be calculated by adding two components: (a) a fixed amount consisting of fifty percent (50%) of the amount of remediation funds allocated to a Settling State and its Subdivisions pursuant to the Multistate Chain Pharmacy Settlement Agreements multiplied by 4.5% (or, if lower, the applicable contingency fee percentage in the Settling State's outside counsel contract); and (b) a proportional percentage of the remaining fee due under that Settling State's contract with its outside counsel assuming that fifty percent (50%) of the Settling State's recovery is allocable to a Settling State (rather than allocable to the Settling State's Participating Subdivisions) so that the fees of all eligible Settling States (minus the fixed amount that would have been allocated to any Non-Settling States had they become Settling States) exhausts the State Outside Counsel Chain Pharmacies Fee Fund. The proportional share percentage will be the same for each Settling State

included in the State Outside Counsel Chain Pharmacies Fee Fund. Fees shall be split proportionally among each Multistate Chain Pharmacy Settlement Agreement, as set forth on the Fee Schedule.

d. All amounts paid will be less any costs or fees of the Fee Fund Administrator. The Fee Schedule reflects a holdback amount of $50,000 for such administrative expenses of the Fee Fund Administrator. The remainder of any unused administrative expenses shall be disbursed pro rata to States receiving monies from the State Outside Counsel Chain Pharmacies Fee Fund at the conclusion of such administration.

7. **Payment by the Fee Fund Administrator**.

a. The Fee Fund Administrator shall hold the Contribution in escrow until the earlier of (1) the last of the three Multistate Chain Pharmacy Settlement Agreements becomes effective or (2) when instructed by the Settling State Members of the Enforcement Committee.

b. Subject to eligibility pursuant to Paragraph 4, above, a Settling State's outside counsel may receive funds from the State Outside Counsel Chain Pharmacies Fee Fund in the following scenarios ("Payment Scenarios"):

   1. The Settling State's outside counsel agrees that the amount listed for such state on the Final Fee Schedule either satisfies in full or exceeds the amounts owed to all such Settling State's outside counsel and such counsel has provided written notice waiving all entitlement to additional fee in respect of any Multistate Chain Pharmacy Settlement Agreement.
   2. The Settling State and its outside counsel enter into a signed writing establishing the amount owed to the counsel, which includes an agreement on the payment of the amount listed for such state on the Final Fee Schedule and waives any right of the State or its outside counsel to additional amounts from the State Outside Counsel Chain Pharmacies Fee Fund.
   3. A final judgment is entered that is no longer appealable, which judgement adjudicates the amount owed to the Settling State's counsel in respect of This Settlement Agreement and directs the Chain Pharmacies Fee Fund Committee how to pay the amount listed on the Final Fee Schedule for such State.

   If no Payment Scenario is applicable with respect to a Settling State, then the Settling State's share shall be placed in an interest-bearing escrow account (less reasonable expenses of the Fee Fund Administrator) and held unless and until a Payment Scenario is applicable.

c. Upon the applicability of a Payment Scenario 1 with respect to a Settling State, the Fee Fund Administrator shall pay that Settling State's outside counsel the amount identified on the Final Fee Schedule for such state or such lesser amount that satisfies the Settling State's obligation to its outside counsel in full. Any remaining allocation to such State shall be paid to the Settling State.

d. Upon the applicability of a Payment Scenario 2 or 3 with respect to a

Settling State, the Fee Fund Administrator shall release monies from the State Outside Counsel Chain Pharmacies Fee Fund in either the amount held by the Fee Fund Administrator, if the amount of the agreement or judgment is equal to or more than the amount held, or the amount indicated in the agreement or in the final judgment, if the amount in the agreement or judgment is less than the amount held.

e. Nothing herein, including the amounts listed in Paragraph 6 above or on any Fee Schedule, shall prevent a Settling State from arguing in any proceeding with its outside counsel that (i) its recovery was less than fifty percent (50%) of the recovery in the settlement agreement down to and including fifteen percent (15%) of the total recovery; (ii) any payment should be discounted by an appropriate discount rate commensurate to the risk of the settlement agreement and the timeline that the Settling State is receiving its payments; (iii) the settlement amount should be lower because the amount a Settling State receives was reduced because such Settling State's outside counsel failed to obtain joinder from a Settling State's Subdivision(s) that the outside counsel also represented; or (iv) any limitation placed by the Settling Chain Pharmacy bars payment of a higher fee to outside counsel.

f. In the event the amount due to the Settling State's outside counsel from an escrow account is less than the total amount of funds escrowed on the account of the Settling State, the balance shall be paid to the Settling State. In no event, other than a State becoming a Non-Settling State, shall funds revert to a Chain Pharmacy.

8. **Reduction of Amounts owed**

a. **Non-Settling States; Reversion and Redistribution.** Amounts owed by the Settling Chain Pharmacy to the State Outside Counsel Chain Pharmacies Fee Fund shall be reduced by amounts allocated to the fixed amount for such State under This Settlement Agreement in the event that a listed State becomes a Non-Settling State. Specifically, the reduction in the amount owed by the Settling Chain Pharmacy shall be calculated as 2.25% times the total Remediation Payments that would have been allocated to the Non-Settling State had it been a Settling State. The payments for the other Settling States reflected in the Fee Schedule shall be adjusted by the Fee Fund Administrator to reflect a recalculated proportional percentage under the Fee Calculation.

b. **Settling States; Redistribution**. If a Settling State under This Settlement Agreement (i) would otherwise be entitled to a payment from the State Outside Counsel Chain Pharmacies Fee Fund and (ii) is eligible to be a "Settling State" under either of the two other Multistate Chain Pharmacy Settlement Agreements but does not become such a "Settling State", then that Settling State's payment from the State Outside Counsel Chain Pharmacies Fee Fund shall be reduced to an amount equal to the Contribution times the Settling State's allocation percentage on Exhibit F, which shall be treated as an additional remediation payment in lieu of a fee payment. The payments for the other Settling States reflected in the Fee Schedule shall be adjusted by

the Fee Fund Administrator to reflect a recalculated proportional percentage under the Fee Calculation.

c. If either or both of the other Chain Pharmacies fail to enter into a Multistate Chain Pharmacy Settlement Agreement, or if such Multistate Chain Pharmacy Settlement Agreements fail to take effect by December 15, 2023, then the Settling Chain Pharmacy and the Enforcement Committee shall renegotiate the terms of Paragraph 8.b in order to permit prompt payment to Settling States that terminated contested litigation with the Settling Chain Pharmacy, and permitting additional time if necessary to finalize payments to the other Settling States. In no event will such renegotiation result in additional reversion of monies in the State Outside Counsel Chain Pharmacies Fee Fund to the Settling Chain Pharmacy.

9. **Interpretation**.

a. This Agreement shall be an Exhibit to each Multistate Chain Pharmacy Settlement Agreement and shall include the Fee Schedule setting forth the presumptive payment calculations for each eligible Settling State. By joining This Settlement Agreement, each State agrees on the presumptive accuracy of the Fee Schedule, absent manifest error, the inclusion of a Non-Settling State, or the exclusion of a Settling State.

b. It is the intent of all parties that the State Outside Counsel Chain Pharmacies Fee Fund function in a similar manner, with similar calculations and mechanics, as the "State Outside Counsel Fee Fund" established in Exhibit S of that certain settlement agreement dated as of July 21, 2021 setting forth the terms of settlement between and among McKesson Corporation, Cardinal Health, Inc., and AmerisourceBergen Corporation, on the one hand, and certain settling states and certain participating subdivisions, on the other hand.

Schedule I to Exhibit S

Fee Schedule

[This Fee Schedule is subject to adjustment pursuant to Paragraph 6.b of Exhibit S)]

State	Total Fee	Walgreens Share	Walmart Share	CVS Share
Alaska	$1,851,826.21	$691,943.15	$416,884.80	$742,998.26
Arkansas	$4,873,566.77	$1,821,030.03	$1,097,141.78	$1,955,394.96
Delaware	$3,726,440.37	$1,392,401.12	$838,899.65	$1,495,139.61
Kentucky	$7,773,195.40	$2,904,489.25	$1,749,908.82	$3,118,797.34
Michigan	$22,162,404.67	$8,281,081.68	$4,989,220.69	$8,892,102.29
Mississippi	$4,641,790.38	$1,734,425.75	$1,044,964.07	$1,862,400.56
Nevada	$9,363,802.33	$3,498,826.64	$2,107,987.70	$3,756,987.99
New Hampshire	$5,985,080.61	$2,236,352.15	$1,347,366.79	$2,401,361.67
New Mexico	$2,748,895.55	$2,748,895.55	$-	$-
Puerto Rico	$6,893,516.73	$2,575,793.38	$1,551,874.76	$2,765,848.60
South Dakota	$1,101,349.40	$411,524.13	$247,936.78	$441,888.49
Utah	$2,884,152.67	$1,204,171.82	$603,818.18	$1,076,162.67
West Virginia	$2,399,292.74	$2,399,292.74	$-	$-
	Admin Expense Holdback	$20,875.66	$10,467.86	$18,656.48
	Total	$31,921,103.05	$16,006,471.88	$28,527,738.91

Excluded States:

- Florida (Walgreens; Walmart; CVS)
- New Mexico (Walmart; CVS)
- West Virginia (Walmart; CVS)

EXHIBIT T

Agreement on the Joint State Cost Fund

1. **Definitions**.

   a. "Opioids Defendant" means Walmart, or such other defendant in opioids-related litigation that enters into a Multistate Settlement after November 1, 2022, and "Opioids Defendants" means all of the foregoing.

   b. "Multistate Settlement" means this Settlement Agreement along with any other settlement of opioids-related claims among 30 or more states and an Opioids Defendant.

   c. "Settlement Agreement" means the settlement agreement between the Settling States and the Opioids Defendant to which this Agreement is attached as an Exhibit.

   d. "Settling Opioids Defendant" means the Opioids Defendant that is a party to the Settlement Agreement.

   e. "Settling States" has the meaning given such term in the Settlement Agreement.

2. **Creation of a State Cost Fund.** The Settling Opioids Defendant and the Settling States agree to the creation of a fund to pay costs and expenses associated with litigation and investigations related to the opioids litigation (such fund, the "State Cost Fund"). The State Cost Fund shall be administered separately from any other funds for the payment of attorneys fees or costs in connection with the Settlement Agreement, including any common benefit fund, contingency fee fund for subdivision counsel, subdivision cost fund, or MDL expense fund. However, the State Cost Fund shall be administered jointly with similar "State Cost Funds" created in other Multistate Settlements after November 1, 2022; any state cost funds jointly administered in this manner shall be referred to as the "Joint State Cost Fund." To the extent permissible and feasible, the Joint State Cost Fund may also be jointly administered with any fund for reimbursement of states' litigation and investigation costs established by a bankruptcy plan, including the Mallinckrodt bankruptcy plan, any plans that may emerge from the bankruptcies of Purdue and Endo, and any similar bankruptcies of opioids defendants. To the extent feasible, the Joint State Cost Fund may also be jointly administered with the State Cost Funds established pursuant to the Distributors Multistate Settlement and the Janssen Multistate Settlement.

3. **State Cost Fund Amount.** The Settling Opioids Defendant shall pay into the State Cost Fund in the amount listed on, and on the schedule set forth in, Exhibit M (the "Settling Opioids Defendant's Contribution") for the purpose paying States' costs and expenses associated with to the opioid litigation.

4. **Joint State Cost Fund Committee.** A committee of Attorneys General or their designated representatives (such committee, the "Joint State Cost Fund Committee") shall oversee the Joint

State Cost Fund. The committee shall be appointed by the Settling State Members of the Enforcement Committee, who shall aim to (i) have equal representation between states that retained contingency fee outside counsel and states that did not retain contingency fee outside counsel with respect to opioids-related litigation, and (ii) maintain consistency of committee membership across state cost funds that compose the Joint State Cost Fund. The Settling State Members of the Enforcement Committee may by majority vote add to or change the composition of the Joint State Cost Fund Committee.

5. **Joint State Cost Fund Administrator.**

a. The Joint State Cost Fund Committee may select an administrator (the "Joint State Cost Fund Administrator"), who shall administer the Joint State Cost Fund and direct payments to Settling States according to the guidelines and directives of the Joint State Cost Fund Committee. While the expenses of the Joint State Cost Fund Administrator shall be reimbursable pursuant to the principles and guidelines listed below, the Joint State Cost Fund Administrator shall first rely on any separate funds that may be set aside for such purpose in any Multistate Settlement.

b. The Joint State Cost Fund Administrator shall be responsible, under the direction and supervision of the Joint State Cost Fund Committee, for receiving and reviewing applications for reimbursement from the Joint State Cost Fund. This may include the creation of an audit process to ensure the integrity of submissions, as well as reimbursement rules to incentivize accurate submissions.

6. **State Cost Fund Guidelines and Principles.**

a. Monies in the State Cost Fund shall be released without any delay to reimburse Settling States for documented costs incurred or paid in connection with litigation and investigation related to the opioid litigation.

b. In allocating the Joint State Cost Fund, the Joint State Cost Fund Committee shall seek to comply with the following principles:

1. Each State Cost Fund should be used to reimburse costs incurred by States that are Settling States in the Multistate Settlement from which funds are paid. (However, the foregoing sentence does not preclude a Non-Settling State that joins a separate Multistate Settlement from participating in the Joint State Cost Fund with respect to contributions made by other Opioids Defendants.)

2. Funds in any State Cost Fund shall be primarily used to reimburse costs incurred prior to the date on which the relevant Multistate Settlement was first made available for participation to eligible States. Regardless of other factors considered in prioritizing payments, all costs incurred prior to January 1, 2023, shall be paid before any costs incurred after that date are paid.

3. The Joint State Cost Fund shall prioritize the reimbursement of the following over reimbursement of any State's litigation or investigation costs:

    - the reasonable costs of the Joint State Cost Fund Administrator;

    - repayment of National Association of Attorneys General grants made in connection with opioid litigation, without regard to when the grants were made;

    - repayment of state-attributable costs of any mediator in connection with negotiations of a Multistate Settlement;

4. The Joint State Cost Fund shall seek to prioritize costs in the following order:

    - litigation-related costs; then

    - investigation-related costs; then

    - settlement and negotiation related costs; then

    - cost shares.

5. Costs incurred by a State's outside counsel that the State is contractually obligated to reimburse shall be treated as costs incurred by a State.

6. As between similar categories of costs (e.g., defendant-specific litigation-related costs), the Joint State Cost Fund shall first reimburse costs incurred by a State's outside counsel that the State is contractually obligated to reimburse out of its recovery, and then reimburse costs directly incurred by States.

7. The Joint State Cost Fund shall be available to reimburse only those costs which have not yet been reimbursed to a State from any other source, including any other fund set aside in a Multistate Settlement or bankruptcy plan for the reimbursement of costs or any individual state settlements.

8. The Joint State Cost Fund should not reimburse expenses that are expected to be reimbursed from another source, such as a bankruptcy debtor, unless such expected reimbursements do not come to fruition within a reasonable amount of time. This includes cost shares paid by states.

9. When coordinating among different state cost funds that each could

be used to reimburse a given expense, the Joint State Cost Fund Committee may set guidelines to equitably distribute reimbursements across all state cost funds in a manner that prioritizes costs unlikely to be otherwise reimbursed to a similarly situated State.

10. The Joint State Cost Fund may deny reimbursement of costs, on either an individual basis or a categorical basis, that a supermajority (75%+) of the Joint State Cost Fund Committee determines to be unreasonable.

11. After all costs identified in the foregoing have been reimbursed, the remaining funds in the Joint State Cost Fund shall be distributed to states in proportion to their allocation of remediation payments in the Mallinckrodt bankruptcy plan. Such distribution shall be treated as a reimbursement for States' unenumerated costs of administering the Multistate Settlements and no subdivision shares shall be carved out of such disbursement, nor shall any attorney's fees be assessed against such distribution (unless individually agreed to by a State).

c. In applying the foregoing principles, the Joint State Cost Fund Committee shall have the discretion to vary their application in order to ensure equity among similarly situated states and to facilitate the ease and speed of administering the Joint State Cost Fund. The Joint State Cost Fund Committee may also apply percentages to approximate costs attributable to a particular Opioids Defendant (or categories of Opioids Defendants) in a manner that seeks to treat similarly situated states equitably.

d. The Joint State Cost Fund Committee shall establish guidelines for the submission and approval of expenses eligible for reimbursement from the Joint State Cost Fund, which guidelines may be coordinated and consolidated with any similar cost funds in other state opioid settlements for purposes of joint administration and efficiency.

e. Unless waived by the Joint State Cost Fund Committee, the Joint State Cost Fund Administrator shall, in accordance with such guidelines, receive from Settling States records sufficient to demonstrate the incurrence and payment of each expense.

f. Where the Joint State Cost Fund Committee determines by a supermajority vote (75%+) that outside counsel for a Settling State has failed to exercise reasonable diligence in reviewing submitted costs for allowability, and such failure has resulted in the reimbursement of unallowed costs to such outside counsel, the Committee shall have the discretion to reduce or recover payments made to such outside counsel in an amount calculated to incentivize the exercise of reasonable diligence.

7. **State Undertakings.** Each State submitting for reimbursement of costs from the Joint State Cost

Fund agrees:

a. to only submit costs allowable under this Joint State Cost Fund Agreement;

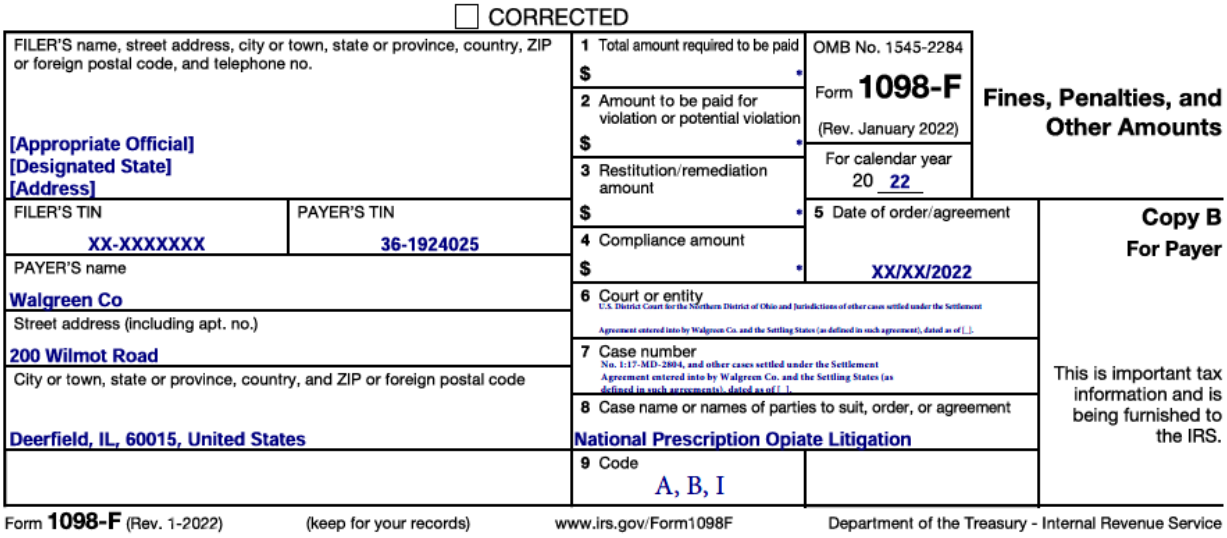
b. to provide all back-up documentation that may be requested with respect to any submitted cost and to make itself available for any questions related to such costs;

c. to exercise reasonable diligence to ensure that all submitted costs are allowable under (i) this Joint State Cost Fund Agreement, (ii) the State's contract with its outside counsel, if relevant, (iii) state law, and (iv) the policies and procedures applicable to the State's retention of outside counsel, if relevant; and

d. to promptly return any excess payments made to the State or its outside counsel from the Joint State Cost Fund, including payments made for costs that were reimbursed from another source or are not allowable hereunder.

EXHIBIT U

IRS Form 1098-F



☐ CORRECTED

FILER'S name, street address, city or town, state or province, country, ZIP or foreign postal code, and telephone no. **[Appropriate Official]** **[Designated State]** **[Address]**	1 Total amount required to be paid $	OMB No. 1545-2284 Form **1098-F** (Rev. January 2022)	**Fines, Penalties, and Other Amounts**
	2 Amount to be paid for violation or potential violation $	For calendar year 20 **22**	
FILER'S TIN **XX-XXXXXXX** PAYER'S TIN **36-1924025**	3 Restitution/remediation amount $	5 Date of order/agreement **XX/XX/2022**	**Copy B** **For Payer**
PAYER'S name **Walgreen Co**	4 Compliance amount $		
Street address (including apt. no.) **200 Wilmot Road**	6 Court or entity **U.S. District Court for the Northern District of Ohio and Jurisdictions of other cases settled under the Settlement Agreement entered into by Walgreen Co. and the Settling States (as defined in such agreement), dated as of [_].**		
City or town, state or province, country, and ZIP or foreign postal code **Deerfield, IL, 60015, United States**	7 Case number **No. 1:17-MD-2804, and other cases settled under the Settlement Agreement entered into by Walgreen Co. and the Settling States (as defined in such agreements), dated as of [_].**		This is important tax information and is being furnished to the IRS.
	8 Case name or names of parties to suit, order, or agreement **National Prescription Opiate Litigation**		
	9 Code A, B, I		

Form **1098-F** (Rev. 1-2022) (keep for your records) www.irs.gov/Form1098F Department of the Treasury - Internal Revenue Service

EXHIBIT V

Intentionally Omitted

Exhibit W

Non-Litigating Threshold Subdivisions Exhibit

[List to be Added]

Exhibit X

Governor's Release of Opioid-Related Claims Pursuant to the Walgreens Settlement Agreement

I, [NAME], Governor of the [Commonwealth]/[State]/[Territory] of [Commonwealth]/[State]/[Territory], hereby authorize Attorney General [NAME] to settle and release, to the maximum extent of my power as Governor, all Released Claims of (1) all of [Commonwealth]/[State]/[Territory]'s past and present executive departments, agencies, divisions, boards, commissions and instrumentalities with regulatory authority to enforce state and federal controlled substances acts and (2) all of [Commonwealth]/[State]/[Territory]'s past and present executive departments, agencies, divisions, boards, commissions and instrumentalities that have the authority to bring Claims related to Covered Conduct seeking money (including abatement and/or remediation) or revocation or suspension of a pharmaceutical distribution or dispensing license. The foregoing authorization is given in connection with Section X.F of that certain settlement agreement dated as of December [●], 2022 setting forth the terms of settlement between and among Walgreens, on the one hand, and certain Settling States and certain Participating Subdivisions on the other hand. This release is intended to be a "release from a State's Governor" as contemplated in such section. Capitalized terms used herein and defined in such settlement agreement have the meanings given to them in such settlement agreement.

_____
Governor of the [Commonwealth]/[State]/[Territory] of [Commonwealth]/[State]/[Territory]

Date: _____

WALMART SETTLEMENT AGREEMENT

TABLE OF CONTENTS

Page

I. Definitions....2

II. Participation by States and Subdivisions; Effectiveness of Agreement....14

III. Injunctive Relief....16

IV. Settlement Payments....16

V. Allocation and Use of Settlement Payments....25

VI. Enforcement....32

VII. Participation by Subdivisions....37

VIII. Additional Remediation....39

IX. Plaintiffs' Attorneys' Fees and Costs....39

X. Release....40

XI. Later Litigating Subdivisions; Non-Settling States....44

XII. Miscellaneous....45

EXHIBIT A - Alleged Harm....A-1

EXHIBIT B - Enforcement Committee Organization Bylaws....B-1

EXHIBIT C - Litigating Subdivisions List....C-1

EXHIBIT D - [Intentionally Omitted]....D-1

EXHIBIT E - List of Opioid Remediation Uses....E-1

EXHIBIT F - List of States and Overall Allocation Percentages....F-1

EXHIBIT G - Subdivisions Eligible to Receive Direct Allocations from the Subdivision Fund and Subdivision Fund Allocation Percentages....G-1

EXHIBIT H - [Intentionally Omitted]....H-1

EXHIBIT I - Primary Subdivisions....I-1

EXHIBIT J - Illustrative List of Released Entities....J-1

EXHIBIT K - Subdivision Settlement Participation Form K-1

EXHIBIT L - Settlement Fund Administrator L-1

EXHIBIT M - Maximum Payment Amounts M-1

EXHIBIT N - Additional Remediation Amount Allocation Percentages N-1

EXHIBIT O - Adoption of a State-Subdivision Agreement O-1

EXHIBIT P - Injunctive Relief P-1

EXHIBIT Q - [Intentionally Omitted] Q-1

EXHIBIT R - Agreement on Attorneys' Fees, Costs, and Expenses R-1

EXHIBIT S - Agreement on the State Outside Counsel Fee Fund S-1

EXHIBIT T - Agreement on the State Cost Fund T-1

EXHIBIT U - IRS Form 1098-F U-1

EXHIBIT V - Walmart Settlement Agreement Sign-on Form V-1

EXHIBIT W - Non-Litigating Threshold Subdivisions List W-1

EXHIBIT X - Governor's Release of Opioid-Related Claims X-1

WALMART SETTLEMENT AGREEMENT

This Settlement Agreement, dated as of November 14, 2022 (the "*Agreement*"), sets forth the terms of settlement between and among the Settling States, Walmart, and the Participating Subdivisions (as those terms are defined below). Upon satisfaction of the conditions set forth in Section II, this Agreement will be binding on all Settling States, Participating Subdivisions, and Walmart. This Agreement will then be submitted for entry as part of Consent Judgments in the respective courts of each of the Settling States, pursuant to the terms set forth in Section II.

WHEREAS, certain States and Subdivisions have filed or could file Actions in various forums against Walmart raising Claims or allegations concerning, related to, based upon, or in connection with the Alleged Harms and/or the Covered Conduct;

WHEREAS, Walmart (i) denies each and all of the Claims and allegations of wrongdoing made by the States and Litigating Subdivisions in each of the Actions and maintains that it has meritorious defenses; (ii) denies all assertions of wrongdoing or liability against Walmart arising out of any of the conduct, statements, acts or omissions alleged, or that could have been alleged, in the Actions already brought or that could be brought by any State or Subdivision related to the Covered Conduct and/or Alleged Harms and contends that the factual allegations made in the current Actions relating to Walmart are false and materially inaccurate; (iii) denies that any State, Subdivision, or resident thereof, was harmed by any conduct of Walmart; (iv) denies liability, denies any wrongdoing, and denies it violated any federal or state statute or common law; and (v) maintains that Walmart would be able to successfully defend against the Claims and allegations at trial, that the facts do not support the allegations, that Walmart engaged in no misconduct or unlawful activity, and that Walmart caused no harm to any State, Subdivisions, or resident thereof;

WHEREAS, the Parties have investigated the facts and analyzed the relevant legal issues regarding the Claims and defenses that have been or could have been asserted in the Actions;

WHEREAS, objective data metrics reported in the federal ARCOS database demonstrate that on a national basis Walmart dispensed on average materially fewer and less potent opioids per store than other major chain pharmacies and many independent pharmacies nationwide, and Walmart's share of opioids distributed and dispensed nationwide was substantially lower than other major chain pharmacies;

WHEREAS, Walmart has implemented policies, procedures, and controls relating to the dispensing of prescription opioid medications and other controlled substances, including pharmacist training and empowerment programs, company-wide limitations on strength and duration of acute opioid prescriptions, and opioid data analytics, which Walmart uses to identify and investigate potentially problematic prescribing practices;

WHEREAS, the Parties have determined that it is preferable to resolve any claims the States and Subdivisions may have through a cooperative and mutually beneficial settlement that provides funding to remediate Alleged Harms;

WHEREAS, the Parties have each considered the costs, delays and uncertainty associated with the prosecution and defense of an action and the continued prosecution and defense of the Actions;

WHEREAS, the Parties believe the settlement set forth herein avoids the uncertainties of litigation and assures that the benefits reflected herein are obtained;

WHEREAS, the States have concluded that the terms of the settlement are fair, reasonable and adequate and in the best interest of the States and all Subdivisions and citizens and residents of the States;

WHEREAS, the Parties have agreed to the terms herein for the sole purpose of settlement, and nothing herein may be taken as or construed to be an admission or concession of any violation of law, rule, or regulation, or of any other matter of fact or law, or of any liability or wrongdoing or lack thereof;

WHEREAS no part of this Agreement, including its statements and commitments, shall constitute evidence of any liability, fault, or wrongdoing, or of any lack thereof;

WHEREAS, unless the contrary is expressly stated, this Agreement is not intended for use by any Party or any third party for any purpose not expressly stated herein, including submission to any court for any purpose other than Court approvals associated with this Agreement;

NOW, THEREFORE, IT IS HEREBY AGREED by and between the States, Participating Subdivisions, and Walmart, by and through their respective counsel, as follows:

I. Definitions

For all sections of this Agreement except Exhibit E and Exhibit P, the following definitions apply:

A. "*Remediation Accounts Fund*" means the component of the Settlement Fund described in Section V.E.

B. "*Actions*" means any lawsuit by a Settling State or Participating Subdivision asserting any Released Claim against one or more Released Entities.

C. "*Additional Remediation Amount*" means the amount available to the Settling States totaling up to $16,006,471.88.

D. "*Advisory Committee*" has the meaning set forth in Section V.E.2.d.

E. "*Agreement*" has the definition set forth in the preamble, including all exhibits.

F. "*Alleged Harms*" means the alleged past, present, and future financial and societal harms and related expenditures arising out of the alleged misuse and abuse of Products, non-exclusive examples of which are described in the documents listed on Exhibit A, including those expenditures that have allegedly arisen as a result of the physical and bodily injuries sustained by individuals suffering from opioid-related addiction, abuse, death, and other related diseases and disorders, and that have allegedly been caused by Walmart.

G. "*Allocation Statute*" means a state law that governs allocation, distribution, and/or use of some or all of the Settlement Fund amounts allocated to that State and/or its Subdivisions. In addition to modifying the allocation as set forth in Section V.D.2, an Allocation Statute may, without limitation, contain a Statutory Trust, further restrict expenditures of funds, form an advisory committee, establish oversight and reporting requirements, or address other default provisions and other matters related to the funds. An Allocation Statute is not required to address all three (3) types of funds comprising the Settlement Fund or all default provisions.

H. "*Appropriate Official*" has the meaning set forth in Section XII.F.3.

I. "*Base Payment*" has the meaning set forth in Section IV.D.

J. "*Bankruptcy Code*" means Title 11 of the United States Code, 11 U.S.C. §§ 101, *et seq.*

K. "*Bar*" means either: (1) a law barring Subdivisions in a State from maintaining Released Claims against Released Entities (either through a direct bar or through a grant of authority to release claims and the exercise of such authority in full); or (2) a ruling by the highest court of the State (or, in a State with a single intermediate court of appeals, the intermediate court of appeals when not subject to further review by the highest court of the State) setting forth the general principle that Subdivisions in the State may not maintain any Released Claims against Released Entities, whether on the ground of this Agreement (or the release in it) or otherwise. For the avoidance of doubt, a law or ruling that is conditioned or predicated upon payment by a Released Entity (apart from payments made by Walmart under this Agreement) shall not constitute a Bar.

L. "*Case-Specific Resolution*" means either: (1) a law barring the Subdivision at issue from maintaining any Released Claims against any Released Entities (either through a direct bar or through a grant of authority to release claims and the exercise of such authority in full); or (2) a ruling by a court of competent jurisdiction over the Subdivision at issue that the Subdivision may not maintain any Released Claims at issue against any Released Entities, whether on the ground of this Agreement (or the release in it) or otherwise. For the avoidance of doubt, a law or ruling that is conditioned or predicated upon payment by a Released Entity (apart from payments made by Walmart under this Agreement) shall not constitute a Case-Specific Resolution.

M. "*Claim*" means any past, present or future cause of action, claim for relief, cross-claim or counterclaim, theory of liability, demand, derivative claim, request, assessment, charge, covenant, damage, debt, lien, loss, penalty, judgment, right, obligation, dispute, suit, contract, controversy, agreement, *parens patriae* claim, promise, performance, warranty, omission, or grievance of any nature whatsoever, whether legal, equitable, statutory, regulatory or administrative, whether arising under federal, state or local common law, statute, regulation, guidance, ordinance or principles of equity, whether filed or unfiled, whether asserted or unasserted, whether known or unknown, whether accrued or unaccrued, whether foreseen, unforeseen or unforeseeable, whether discovered or undiscovered, whether suspected or unsuspected, whether fixed or contingent, and whether existing or hereafter arising, in all such cases, including but not limited to any request for declaratory, injunctive, or equitable relief, compensatory, punitive, or statutory damages, absolute liability, strict liability, restitution,

abatement, subrogation, contribution, indemnity, apportionment, disgorgement, reimbursement, attorney fees, expert fees, consultant fees, fines, penalties, expenses, costs or any other legal, equitable, civil, administrative, or regulatory remedy whatsoever.

N. "*Claim-Over*" means a Claim asserted by a Non-Released Entity against a Released Entity on the basis of contribution, indemnity, or other claim-over on any theory relating to a Non-Party Covered Conduct Claim asserted by a Releasor.

O. "*Consent Judgment*" means a state-specific consent judgment in a form to be agreed by the Settling States and Walmart prior to the State Participation Date that, among other things, (1) approves this Agreement and (2) provides for the release set forth in Section X.A, including the dismissal with prejudice of any Released Claims that the Settling State has brought against Released Entities.

P. "*Covered Conduct*" means any actual or alleged act, failure to act, negligence, statement, error, omission, breach of any duty, conduct, event, transaction, agreement, misstatement, misleading statement or other activity of any kind whatsoever from the beginning of time through the Threshold Subdivision Participation Date (and any past, present, or future consequence of any such act, failure to act, negligence, statement, error, omission, breach of duty, conduct, event, transaction, agreement, misstatement, misleading statement or other activity) relating in any way to (a) the distribution, dispensing, delivery, monitoring, reporting, supply, sale, prescribing, physical security, warehousing, coverage, purchases, reimbursement, discovery, development, manufacture, packaging, repackaging, marketing, promotion, advertising, labeling, recall, withdrawal, or use or abuse of any Product; orders, prescriptions, formularies, guidelines, payments or rebates for any Product; policies, practices and/or operating procedures, insurance, claim or benefit administration, claim adjudication, plan design, data and sales thereof, relating to any Product; and any system, plan, policy or advocacy relating to any Product, including, but not limited to, any unbranded promotion, marketing, programs, or campaigns relating to any Product; (b) the characteristics, properties, risks, or benefits of any Product; (c) the reporting, disclosure, nonreporting or non-disclosure to federal, state or other regulators of orders or prescriptions, related to any Product; (d) the purchasing, selling, acquiring, disposing of, importing, exporting, handling, processing, packaging, supplying, distributing, or converting of any Product; or (e) controls against diversion, corresponding responsibility, and suspicious order monitoring; *provided, however*, that as to any Claim that a Releasor has brought or could bring, Covered Conduct does not include noncompliance with statutory or administrative supply security standards concerning cleanliness of facilities or stopping counterfeit products, so long as such standards apply to the storage and distribution of both controlled and non-controlled pharmaceuticals.

Q. "*Deposit Date*" means fifteen (15) days after the Effective Date.

R. "*Designated State*" means New York.

S. "*Effective Date*" has the meaning set forth in Section II.C.

T. "*Eligible State*" means the states, commonwealths, and territories of the United States of America, as well as the District of Columbia and Puerto Rico, but excluding New Mexico,

West Virginia, and any Separately Settling State. The use of non-capitalized "state" to describe something (*e.g.*, "state court") shall also be read to include parallel entities in commonwealths, territories, and the District of Columbia (*e.g.*, "territorial court").

U. "*Enforcement Committee*" means a committee consisting of certain representatives of the Settling States and of the Participating Subdivisions selected and operating pursuant to the organizational bylaws set forth at Exhibit B. Notice pursuant to Section XII.Q shall be provided when there are changes in membership or contact information.

V. "*Final Order*" means an order or judgment of a court of competent jurisdiction with respect to the applicable subject matter (1) which has not been reversed or superseded by a modified or amended order, is not currently stayed, and as to which any right to appeal or seek *certiorari*, review, reargument, stay, or rehearing has expired, and as to which no appeal or petition for certiorari, review, reargument, stay, or rehearing is pending, or (2) as to which an appeal has been taken or petition for *certiorari*, review, reargument, stay, or rehearing has been filed and (a) such appeal or petition for *certiorari*, review, reargument, stay, or rehearing has been resolved by the highest court to which the order or judgment was appealed or from which certiorari, review, reargument, stay, or rehearing was sought, or (b) the time to appeal further or seek certiorari, review, reargument, stay, or rehearing has expired and no such further appeal or petition for certiorari, review, reargument, stay, or rehearing is pending.

W. "*First Subdivision Participation Date*" has the meaning set forth in Section IV.C.3.a.

X. "*Global Settlement Remediation Amount*" means the remediation and abatement amount of up to $2,393,794,118.64.

Y. "*Global Settlement Amount*" means the sum of (a) the Remediation Payment, (b) the Additional Remediation Amount, and (c) any attorneys' fees and costs set forth in Exhibit R, Exhibit S and Exhibit T.

Z. "*Implementation Administrator*" means the vendor agreed to by Walmart and the Enforcement Committee and retained by Walmart to provide notice pursuant to Section VII.A and to manage the initial joinder period for Subdivisions, including the issuance and receipt of Subdivision Participation Forms.

AA. "*Incentive BC Subdivisions*" has the meaning set forth in Section IV.E.2.a.

BB. "*Incentive Payment A*" means the incentive payment described in Section IV.E.1.

CC. "*Incentive Payment BC*" means the incentive payment described in Section IV.E.2.

DD. "*Incentive Payment D*" means the incentive payment described in Section IV.E.3.

EE. "*Injunctive Relief Terms*" means the terms described in Section III and set forth in Exhibit P.

FF. "*Later Litigating Subdivision*" means a Subdivision (or Subdivision official asserting the right of or for the Subdivision to recover for Alleged Harms to the Subdivision and/or the people thereof) that: (1) first files a lawsuit bringing a Released Claim against a Released Entity after the Threshold Subdivision Participation Date; or (2) adds a Released Claim against a Released Entity after the Threshold Subdivision Participation Date to a lawsuit brought before the Threshold Subdivision Participation Date that, prior to the Threshold Subdivision Participation Date, did not include any Released Claims against a Released Entity; or (3) (a) was a Litigating Subdivision whose Released Claims against Released Entities were resolved by a legislative Bar or legislative Case-Specific Resolution as of the Threshold Subdivision Participation Date, (b) such legislative Bar or legislative Case-Specific Resolution is subject to a Revocation Event after the Threshold Subdivision Participation Date, and (c) the earlier of the date of completion of opening statements in a trial in an action brought by a Subdivision in that Settling State that includes a Released Claim against a Released Entity or one hundred eighty (180) days from the Revocation Event passes without a Bar or Case-Specific Resolution being implemented as to that Litigating Subdivision or the Litigating Subdivision's Released Claims being dismissed; or (4) (a) was a Litigating Subdivision whose Released Claims against Released Entities were resolved by a judicial Bar or judicial Case-Specific Resolution as of the Threshold Subdivision Participation Date, (b) such judicial Bar or judicial Case-Specific Resolution is subject to a Revocation Event after the Threshold Subdivision Participation Date, and (c) such Litigating Subdivision takes any action in its lawsuit asserting a Released Claim against a Released Entity other than seeking a stay or dismissal.

GG. "*Litigating Subdivisions*" means all Subdivisions that have brought any Released Claim against any Released Entity as of the Threshold Subdivision Participation Date. Attached as Exhibit C is a list of the Litigating Subdivisions in each Eligible State and Separately Settling State. Exhibit C will be updated (including with any corrections) periodically, and a final version of Exhibit C will be attached hereto as of the Threshold Subdivision Participation Date.

HH. "*National Arbitration Panel*" means the panel comprised as described in Section VI.F.3.b.

II. "*National Disputes*" has the meaning set forth in Section VI.F.3.a.

JJ. "*Non-Litigating Subdivision*" means any Subdivision that is neither a Litigating Subdivision nor a Later Litigating Subdivision.

KK. "*Non-Litigating Threshold Subdivision*" means (a) all general-purpose Subdivisions with a population equal to or greater than 30,000 that have not brought a Released Claim against any Released Entity as of the Threshold Subdivision Participation Date and (b) all general-purpose Subdivisions with populations between 10,000 and 30,000 that have not brought Released Claim against any Released Entity but have brought a claim related to opioid products, including any Claims related to the Covered Conduct and/or Alleged Harms, against McKesson, AmerisourceBergen, Cardinal Health, Janssen Pharmaceuticals, or any parents, subsidiaries, divisions, predecessors, successors, and assigns of McKesson, AmerisourceBergen, Cardinal Health, or Janssen Pharmaceuticals. Attached as Exhibit W is a list of the Non-Litigating Threshold Subdivisions in each Eligible State and Separately Settling State. Exhibit W will be

updated (including with any corrections) periodically, and a final version of Exhibit W will be attached hereto as of the Threshold Subdivision Participation Date.

LL. "*Non-Participating Subdivision*" means any Subdivision that is not a Participating Subdivision.

MM. "*Non-Party Covered Conduct Claim*" means a Claim against any Non-Released Entity involving, arising out of, or related to Alleged Harms and/or Covered Conduct (or conduct that would be Covered Conduct if engaged in by a Released Entity).

NN. "*Non-Party Settlement*" means a settlement by any Releasor that settles any Non-Party Covered Conduct Claim and includes a release of any Non-Released Entity.

OO. "*Non-Released Entity*" means an entity that is not a Released Entity.

PP. "*Non-Settling State*" means any Eligible State that is not a Settling State.

QQ. "*Opioid Remediation*" means care, treatment, and other programs and expenditures (including reimbursement for past such programs or expenditures[1] except where this Agreement restricts the use of funds solely to future Opioid Remediation) designed to remediate Alleged Harms, including to (1) address the misuse and abuse of opioid products, (2) treat or mitigate opioid use or related disorders, or (3) mitigate other alleged effects of, including on those injured as a result of, the opioid epidemic. Exhibit E provides a non-exhaustive list of expenditures that qualify as being paid for Opioid Remediation. Qualifying expenditures may include reasonable related administrative expenses.

RR. "*Overall Allocation Percentage*" means a Settling State's percentage as set forth in Exhibit F.

SS. "*Participating Population Levels*" has the meaning set forth in Section II.B.1.

TT. "*Participating Subdivision*" means any Subdivision in a Settling State that joins the settlement and meets the requirements for becoming a Participating Subdivision under Section VII.B or Section VII.C, as applicable.

UU. "*Parties*" means Walmart and the Settling States (each, a "*Party*").

VV. "*Payment Year*" means the calendar year during which the applicable Payout Amount is made in accordance with Section IV.B. Payment Year 1 is 2023, Payment Year 2 is 2024 and so forth.

WW. "*Payout Amount*" means the total amount payable to the Settling States by the Settlement Fund Administrator for each Payment Year, as calculated by the Settlement Fund Administrator pursuant to Section IV.B. For the avoidance of doubt, this term does not include amounts paid pursuant to Section VIII and Section IX.

[1] Reimbursement includes amounts paid to any governmental entities for past expenditures or programs.

XX. *"Percentage of Incentive BC Subdivision Population*" has the meaning set forth in Section IV.E.2.a.

YY. "*Primary Fire District*" means a fire district that covers a population of 25,000, or 0.20% of an Eligible State's population if an Eligible State's population is greater than 18 million. If not easily calculable from state data sources and agreed to between the Eligible State and Walmart, a fire district's population is calculated by dividing the population of the county or counties a fire district serves by the number of fire districts in the county or counties. "Primary Fire Districts" shall mean fire districts as identified in connection with the implementation of the July 21, 2021 Janssen Settlement Agreement.

ZZ. "*Primary Subdivision*" means any General-Purpose Government (including, but not limited to, a municipality, county, county subdivision, city, town, township, parish, village, borough, gore, or any other entities that provide municipal-type government) with a population over 10,000. Attached as Exhibit I is an agreed list of the Primary Subdivisions in each State.

AAA. "*Prior Litigating Subdivision*" means a Subdivision (or Subdivision official) that brought any Released Claim against any Released Entity prior to the Threshold Subdivision Participation Date and all such Released Claims were separately settled or finally adjudicated prior to the Threshold Subdivision Participation Date; *provided*, *however*, that if the final adjudication was pursuant to a Bar, such Subdivision shall not be considered a Prior Litigating Subdivision. Notwithstanding the prior sentence, Walmart and the Settling State of the relevant Subdivision may agree in writing that the Subdivision shall not be considered a Prior Litigating Subdivision.

BBB. "*Product*" means any chemical substance, whether used for medicinal or non-medicinal purposes, and whether natural, synthetic, or semi-synthetic, or any finished pharmaceutical product made from or with such substance, that is (1) an opioid or opiate, as well as any product containing any such substance; (2) a benzodiazepine, a muscle relaxer, carisoprodol, zolpidem, or gabapentin; or (3) a combination or "cocktail" of any stimulant or other chemical substance prescribed, sold, bought, or dispensed to be used together that includes opioids or opiates. "Product" shall include, but is not limited to, any substance consisting of or containing buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, oxycodone, oxymorphone, tapentadol, tramadol, opium, heroin, carfentanil, diazepam, estazolam, quazepam, alprazolam, clonazepam, oxazepam, flurazepam, triozolam, temazepam, midazolam, carisoprodol, gabapentin, or any variant of these substances or any similar substance. Notwithstanding the foregoing, nothing in this section prohibits a Settling State from taking administrative or regulatory action related to benzodiazepine (including, but not limited to, diazepam, estazolam, quazepam, alprazolam, clonazepam, oxazepam, flurazepam, triozolam, temazepam, and midazolam), a muscle relaxer, carisoprodol, zolpidem, or gabapentin that is wholly independent from the use of such drugs in combination with opioids, provided such action does not seek money (including abatement and/or remediation) for conduct prior to the Effective Date.

CCC. "*Released Claims*" means any and all Claims that directly or indirectly are based on, arise out of, or in any way relate to or concern Covered Conduct and/or Alleged Harms occurring prior to the Threshold Subdivision Participation Date. Without limiting the foregoing, "Released Claims" include any Claims that have been asserted against the Released Entities by

any Settling State or any of its Litigating Subdivisions or Litigating Special Districts in any federal, state or local action or proceeding (whether judicial, arbitral, or administrative) based on, arising out of or relating to, in whole or in part, the Covered Conduct and/or Alleged Harms, or any such Claims that could be or could have been asserted now or in the future in those actions or in any comparable action or proceeding brought by a State, any of its Subdivisions or Special Districts, or any Releasors (whether or not such State, Subdivision, Special District, or Releasor has brought such action or proceeding). Released Claims also include all Claims asserted in any proceeding to be dismissed pursuant to the Agreement, whether or not such claims relate to Covered Conduct and/or Alleged Harms. The Parties intend that "Released Claims" be interpreted broadly. This Agreement does not release Claims by private individuals. It is the intent of the Parties that Claims by private individuals be treated in accordance with applicable law. Released Claims is also used herein to describe Claims brought by a Later Litigating Subdivision or other non-party Subdivision or Special District that would have been Released Claims if they had been brought by a Releasor against a Released Entity.

DDD. "*Released Entities*" means Walmart and (1) all of Walmart's past and present direct or indirect parents, subsidiaries, divisions, predecessors, successors, and assigns; (2) the past and present direct or indirect subsidiaries, divisions, and joint ventures, of any of the foregoing; (3) all of Walmart's insurers (solely in their role as insurers with respect to the Released Claims); (4) all of Walmart's, or of any entity described in subsection (1), past and present joint ventures; and (5) the respective past and present officers, directors, members, shareholders (solely in their capacity as shareholders of the foregoing entities), partners, trustees, and employees of any of the foregoing (for actions that occurred during and related to their work for, or employment with, Walmart). Any person or entity described in subsections (3)-(5) shall be a Released Entity solely in the capacity described in such clause and shall not be a Released Entity with respect to its conduct in any other capacity. For the avoidance of doubt, any joint venture partner of a joint venture in subsection (2) or (4) is not a Released Entity unless such entity independently falls within subsections (1)-(5) above. An illustrative list of Walmart's present joint ventures, subsidiaries and affiliates and predecessor entities is set forth in Exhibit J. With respect to joint ventures (including predecessor entities), only entities listed on Exhibit J are Released Entities. Current or former Defendants in *In re: National Prescription Opiate Litigation*, No. 1: 17-md-2804 (N.D. Ohio) ("*MDL*") (or in other pending litigation asserting a Claim for Covered Conduct, as identified in the *"National Opiate Litigation – Case and Defendant Extract"* provided to Walmart by the Plaintiffs' Executive Committee on November 12, 2022) not identified in Exhibit J are not considered Released Entities, provided, however, that any Walmart entities that fall within clauses (1)-(5) above against whom Released Claims are brought in the MDL on or after November 14, 2022 shall be considered Released Entities even if not listed on Exhibit J. For the avoidance of doubt, any entity acquired, or joint venture entered into, by Walmart after the Threshold Subdivision Participation Date is not a Released Entity.

EEE. "*Releasors*" means (1) each Settling State; (2) each Participating Subdivision; and (3) without limitation and to the maximum extent of the power of each Settling State's Attorney General and/or Participating Subdivision to release Claims, (a) the Settling State's and Participating Subdivision's departments, agencies, divisions, boards, commissions, Subdivisions, districts, instrumentalities of any kind and attorneys, including its Attorney General, and any person in their official capacity whether elected or appointed to serve any of the foregoing, and any agency, person, or other entity claiming by or through any of the foregoing, (b) any public

entities, public instrumentalities, public educational institutions, unincorporated districts, fire districts, irrigation districts, water districts, law enforcement districts, emergency services districts, school districts, hospital districts and other Special Districts in a Settling State, and (c) any person or entity acting in a *parens patriae*, sovereign, quasi-sovereign, private attorney general, qui tam, taxpayer, or other capacity seeking relief on behalf of or generally applicable to the general public with respect to a Settling State or Subdivision in a Settling State, whether or not any of them participate in the Agreement. The inclusion of a specific reference to a type of entity in this definition shall not be construed as meaning that the entity is not a Subdivision. Each Settling State's Attorney General represents that he or she has or has obtained (or will obtain no later than the Threshold Subdivision Participation Date) the authority set forth in Section X.G. In addition to being a Releasor as provided herein, a Participating Subdivision shall also provide the Subdivision Participation Agreement referenced in Section VII providing for a release to the fullest extent of the Participating Subdivision's authority.

FFF. "*Remediation Payment*" has the meaning set forth in Section IV.B.1.[2]

GGG. "*Revocation Event*" means, with respect to a Bar, Settlement Class Resolution, or Case-Specific Resolution, a revocation, rescission, reversal, overruling, or interpretation that in any way limits the effect of such Bar, Settlement Class Resolution, or Case-Specific Resolution on Released Claims, or any other action or event that otherwise deprives the Bar, Settlement Class Resolution, or Case-Specific Resolution of force or effect in any material respect.

HHH. "*Second Subdivision Participation Date*" has the meaning set forth in Section IV.C.3.b.

III. "*Separately Settling State*" means each of Alabama, Florida, and any other Eligible State that, prior to the State Participation Date, enters into a settlement agreement with Walmart that is separate from this Agreement and resolves substantially all Released Claims against Walmart.

JJJ. "*Settlement Class Resolution*" means a class action resolution in a court of competent jurisdiction in a Settling State (that is not successfully removed to federal court) with respect to a class of Subdivisions in that Settling State that (1) conforms with that Settling State's statutes, case law, and rules of procedure regarding class actions; (2) is approved and entered as an order of a court of competent jurisdiction in that Settling State and such order has become a Final Order; (3) is binding on all Non-Participating Subdivisions in that Settling State (other than opt outs as permitted under the next sentence); (4) provides that all such Non-Participating Subdivisions may not bring any Released Claims against any Released Entities, whether on the ground of this Agreement (or the releases herein) or otherwise; and (5) does not impose any costs

[2] The total maximum amount of this settlement is up to $3,011,242,061, which includes (i) up to $2,393,794,118.64 in the Remediation Payment; (ii) up to $297,720,376.93 in Subdivision Attorneys' Fees, Expenses and Costs; (iii) up to $48,019,415.63 in the State Outside Counsel Fee Fund, State Cost Fund and Additional Remediation Amount; (iv) a credit of $215,567,502.95 for Walmart's settlement with the state of Florida and its subdivisions; (v) a credit of $48,963,983.74 for Walmart's settlement with the state of Alabama and its subdivisions; (vi) a credit of $1,051,663.05 for ineligible subdivisions Lake County and Trumbull County of Ohio; and (vii) a credit of $6,125,000.00 for Walmart's settlement with Nassau County and Suffolk County of New York. In no event shall Walmart's payment obligation under this Agreement exceed the sum of (i)-(iii) above.

or obligations on Walmart other than those provided for in this Agreement, or contain any provision inconsistent with any provision of this Agreement. If applicable state law requires that opt-out rights be afforded to members of the class, a class action resolution otherwise meeting the foregoing requirements shall qualify as a Settlement Class Resolution unless Subdivisions collectively representing more than one percent (1%) of the total population of that Settling State opt out. In seeking certification of any Settlement Class, the applicable Settling State and Participating Subdivisions shall make clear that certification is sought solely for settlement purposes and shall have no applicability beyond approval of the settlement for which certification is sought. Nothing in this Agreement constitutes an admission by any Party that class certification would be appropriate for litigation purposes in any case or for purposes unrelated to this Agreement.

KKK. "*Settlement Fund*" means the interest-bearing fund established pursuant to this Agreement into which the payment under Section IV is made. The Settlement Fund is comprised of the Remediation Accounts Fund, State Fund, and Subdivision Fund.

LLL. "*Settlement Fund Administrator*" means the entity that determines the payments and reversions due under Section IV and Section VIII, including annually determining the Payout Amount and calculating Incentive Payments, administers the Settlement Fund, and distributes amounts into three sub-funds (the Remediation Accounts Fund, State Fund, and Subdivision Fund) pursuant to this Agreement. The duties of the Settlement Fund Administrator shall be governed by this Agreement. Prior to the Threshold Subdivision Participation Date, Walmart and the Enforcement Committee shall agree to selection and removal processes for and the identity of the Settlement Fund Administrator, and a detailed description of the Settlement Fund Administrator's duties and responsibilities, including a detailed mechanism for paying the Settlement Fund Administrator's fees and costs, all of which shall be appended to the Agreement as Exhibit L.

MMM."*Settling State*" means an Eligible State that has entered into this Agreement with Walmart and delivers an executed State Participation Form and executed releases in accordance with Section II.A.

NNN. "*State Fund*" means the component of the Settlement Fund described in Section V.C.

OOO. "*State Participation Form*" means the form attached as Exhibit V.

PPP. "*State Participation Date*" has the meaning set forth in Section II.A.1.

QQQ. "*State Participation Threshold*" has the meaning set forth in Section II.A.2.

RRR. "*State-Subdivision Agreement*" means an agreement that a Settling State reaches with the Subdivisions in that Settling State regarding the allocation, distribution, and/or use of funds allocated to that Settling State and to its Subdivisions. A State-Subdivision Agreement shall be effective if approved pursuant to the provisions of Exhibit O or if adopted by statute. Preexisting agreements addressing funds other than those allocated pursuant to this Agreement shall qualify if the approval requirements of Exhibit O are met. A Settling State and its Subdivisions may revise a State-Subdivision Agreement if approved pursuant to the provisions of Exhibit O, or if such revision is adopted by statute.

SSS. "*Statutory Trust*" means a trust fund established by state law to receive funds allocated to a Settling State's Remediation Accounts Fund and restrict any expenditures made using funds from such Settling State's Remediation Accounts Fund to Opioid Remediation, subject to reasonable administrative expenses. A Settling State may give a Statutory Trust authority to allocate one (1) or more of the three (3) types of funds comprising such State's Settlement Fund, but this is not required.

TTT. "*Sub-Fund(s)*" means the Remediation Accounts Fund, State Fund, and Subdivision Fund, individually or collectively, as applicable.

UUU. "*Subdivision*" means any (1) General-Purpose Government (including, but not limited to, a municipality, county, county subdivision, city, town, township, parish, village, borough, gore, or any other entities that provide municipal-type government), School District, or Special District within a Settling State, and (2) any other subdivision or subdivision official or sub-entity of or located within a Settling State (whether political, geographical or otherwise, whether functioning or non-functioning, regardless of population overlap, and including, but not limited to, nonfunctioning governmental units and public institutions) that has filed a lawsuit that includes a Released Claim against a Released Entity in a direct, *parens patriae*, or any other capacity. "General-Purpose Government," "School District," and "Special District" shall correspond to the "five basic types of local governments" recognized by the U.S. Census Bureau and match the 2017 list of Governmental Units.[3] The three (3) General-Purpose Governments are county, municipal, and township governments; the two (2) special purpose governments are School Districts and Special Districts.[4] The terms "Fire District," "Health District," "Hospital District," and "Library District" shall correspond to categories of Special Districts recognized by the U.S. Census Bureau.[5] References to a Settling State's Subdivisions or to a Subdivision "in," "of," or "within" such Settling State include Subdivisions located within the Settling State even if they are not formally or legally a sub-entity of such Settling State; *provided*, *however*, that a "health district" that includes any of the following words or phrases in its name shall not be considered a Subdivision: mosquito, pest, insect, spray, vector, animal, air quality, air pollution, clean air, coastal water, tuberculosis, and sanitary. Each of Lake and Trumbull Counties of Ohio shall not be considered "Subdivisions" for purposes of this Agreement.

VVV. "*Subdivision Allocation Percentage*" means the portion of a Settling State's Subdivision Fund set forth in Exhibit G that a Subdivision will receive pursuant to Section V.C or Section V.D if it becomes a Participating Subdivision. The aggregate Subdivision Allocation

[3] https://www.census.gov/data/datasets/2017/econ/gus/public-use-files.html.

[4] *E.g.*, U.S. Census Bureau, "Technical Documentation: 2017 Public Use Files for State and Local Government Organization" at 7 (noting that "the Census Bureau recognizes five basic types of local governments," that three of those are "general purpose governments" (county governments, municipal governments, and township governments), and that the other two are "school district and special district governments"), https://www2.census.gov/programs-surveys/gus/datasets/2017/2017_gov_org_meth_tech_doc.pdf.

[5] A list of 2017 Government Units provided by the Census Bureau identifies 38,542 Special Districts and categorizes them by "FUNCTION_NAME." "Govt_Units_2017_Final" spreadsheet, "Special District" sheet, included in "Independent Governments - list of governments with reference information," https://www.census.gov/data/datasets/2017/econ/gus/public-use-files.html. As used herein, "fire district" corresponds to Special District function name "24 – Local Fire Protection," "Health District" corresponds to Special District function name "32 – Health," "Hospital District" corresponds to Special District function name "40 – Hospitals," and "Library District" corresponds to Special District function name "52 – Libraries." *See id.*

Percentage of all Subdivisions receiving a Subdivision Allocation Percentage in each State shall equal one hundred percent (100%). Immediately upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3) that addresses allocation from the Subdivision Fund, whether before or after the Threshold Subdivision Participation Date, Exhibit G will automatically be amended to reflect the allocation from the Subdivision Fund pursuant to the State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3. The Subdivision Allocation Percentages contained in Exhibit G may not change once notice is distributed pursuant to Section VII.A, except upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3) that addresses allocation from the Subdivision Fund. For the avoidance of doubt, no Subdivision not listed on Exhibit G shall receive an allocation from the Subdivision Fund, and no provision of this Agreement shall be interpreted to create such an entitlement.

WWW. "*Subdivision Fund*" means the component of the Settlement Fund described in Section V.C.

XXX. "*Subdivision Participation Agreement*" means the form of agreement attached as Exhibit K that Participating Subdivisions must execute and return to the Settlement Fund Administrator.

YYY. "*Subdivision Participation Thresholds*" has the meaning set forth in Section II.B.

ZZZ. "*Third Subdivision Participation Date*" has the meaning set forth in Section IV.C.3.c.

AAAA. "*Threshold Motion*" means a motion to dismiss or equivalent dispositive motion made at the outset of litigation under applicable procedure. A Threshold Motion must include as potential grounds for dismissal any applicable Bar or the relevant release by a Settling State or Participating Subdivision provided under this Agreement and, where appropriate under applicable law, any applicable limitations defense.

BBBB."*Threshold State*" means the District of Columbia, Puerto Rico, and the states of the United States of America, excluding New Mexico and West Virginia.

CCCC."*Threshold Subdivision Participation Date*" has the meaning set forth in Section II.B.1.

DDDD. "*Total Remediation Amount*" means the aggregate amount paid or incurred by Walmart hereunder other than amounts paid as attorneys' fees and costs or identified pursuant to Section V.B.2 as being used to pay attorneys' fees, investigation costs or litigation costs.

EEEE. "*Walmart*" means Walmart Inc.

II. Participation by States and Subdivisions; Effectiveness of Agreement

A. *State Participation Threshold*.

1. On November 14, 2022, this Agreement shall be distributed to all Eligible States by the Enforcement Committee. The Eligible States' Attorneys General shall then have until December 15, 2022, or such later date as agreed to in writing by Walmart and the Enforcement Committee prior to December 15, 2022 (the "*State Participation Date*"), to decide whether to become Settling States. Eligible States that determine to become Settling States shall sign a Participation Form, in the form attached as Exhibit V, on or before the State Participation Date and provide it to Walmart and the Enforcement Committee.

2. To meet the State Participation Threshold, more than 85% of all Threshold States, by number of such states (the "*State Participation Threshold*"), must have joined this Agreement as Settling States on or before the State Participation Date. For purposes of calculating the State Participation Threshold, each Separately Settling State that is also a Threshold State shall be included in both the numerator and the denominator for purposes of calculating whether the State Participation Threshold has been satisfied. For the avoidance of doubt, to be satisfied, the State Participation Threshold requires that 43 or more of the 50 Threshold States (a) become Settling States by signing a Participation Form or (b) be included in both the numerator and the denominator for purposes of calculating the State Participation Threshold by virtue of being a Separately Setting State that is also a Threshold State.

3. Within the first business day on or after three (3) calendar days after the State Participation Date, the Enforcement Committee will deliver all signed State Participation Forms to Walmart. If the State Participation Threshold has not been satisfied by the State Participation Date, this Agreement will have no further effect and all releases and other commitments or obligations contained herein or in State Participation Forms will be void, provided, however, that on or after the State Participation Date, Walmart shall have the unilateral right in its sole discretion to extend the State Participation Date or to proceed with the Settlement if the State Participation Threshold has not been satisfied.

B. *Subdivision Participation Thresholds*.

1. If the State Participation Threshold has been satisfied by the State Participation Date, each of the Settling States will use reasonable efforts to ensure that, by April 18, 2023, or such later date as agreed to in writing by Walmart and the Enforcement Committee prior to April 18, 2023 (the "*Threshold Subdivision Participation Date*"), the Settling States have met the following "*Subdivision Participation Thresholds*": (1) more than 85% of the aggregate population of all Litigating Subdivisions located in the Settling States and Separately Settling States (calculated on an aggregated basis and not a State-by-State basis): (a) have become Participating Subdivisions by executing a Subdivision Participation Agreement, including a release (subject to Section VII.D), in accordance with Section VII.C, (b) are subject to a Bar or Case-Specific Resolution or (c) have joined a settlement between Walmart and a Separately Settling State by executing a participation

form, including a release; and (2) more than 85% of the aggregate population of all Non-Litigating Threshold Subdivisions located in the Settling States and Separately Settling States (calculated on an aggregated basis and not a State-by-State basis): (a) have become Participating Subdivisions by executing a Subdivision Participation Agreement, including a release (subject to Section VII.D), in accordance with Section VII.B, (b) are subject to a Bar or Case-Specific Resolution, or (c) have joined a settlement between Walmart and a Separately Settling State by executing a participation form, including a release (together, the "*Participating Population Levels*"). For the avoidance of doubt, for purposes of calculating the Participating Population Levels for the Subdivision Participation Thresholds, all Litigating Subdivisions and Non-Litigating Threshold Subdivisions located in Separately Settling States shall be included in the respective denominators for purposes of calculating whether the Subdivision Participation Thresholds have been satisfied, and any such Litigating Subdivisions or Non-Litigating Threshold Subdivisions located in Separately Settling States that have joined such separate settlement agreement with Walmart by executing a participation form, including a release, shall be included in the respective numerators for purposes of calculating whether the Subdivision Participation Thresholds have been satisfied.[6]

2. As soon as practicable following the Threshold Subdivision Participation Date, the Settlement Fund Administrator shall calculate the Participating Population Levels and determine whether the Subdivision Participation Thresholds have been met.

a. As soon as practicable following calculation of the Participating Population Levels, the Settlement Fund Administrator shall give notice to Walmart, the Settling States, and the Enforcement Committee of the Participating Population Levels and whether the Subdivision Participation Thresholds have been met.

b. Within ten (10) calendar days of the notice provided by the Settlement Fund Administrator, any Party or the Enforcement Committee may dispute, in writing, the calculation of the Participating Population Levels or the determination of whether the Subdivision Participation Thresholds have been met. Such disputing party must provide a written notice of dispute to the Settlement Fund Administrator, the Enforcement Committee, and Walmart (and the affected Settling State, as applicable) identifying the nature of the dispute.

c. Within ten (10) calendar days of the sending of a written notice of dispute, any affected party may submit a response, in writing, to the Settlement Fund Administrator, the Enforcement Committee, Walmart, and the disputing Party (and the affected Settling State, as applicable) identifying the basis for disagreement with the notice of dispute.

[6] For purposes of calculating the Participating Population Levels for the Subdivision Participation Thresholds, the populations of Lake and Trumbull Counties of Ohio and Nassau and Suffolk Counties of New York shall be excluded entirely from both the numerator and denominator of the Subdivision Participation Thresholds of both the Litigating Subdivisions and Non-Litigating Threshold Subdivisions. Nassau and Suffolk Counties of New York also shall be excluded from both the numerator and denominator for purposes of calculating New York's Incentive BC Subdivision participation.

d. After the time period for a response to be filed has passed, the Settlement Fund Administrator, the Enforcement Committee, Walmart, and the disputing Party (and the affected Settling State, as applicable) shall meet and confer within ten (10) calendar days in an attempt to resolve the dispute. If no resolution is reached, disputes described in this subsection shall be handled in accordance with the terms of Section VI.F.3.

3. If the Subdivision Participation Thresholds are not satisfied by the Threshold Subdivision Participation Date, then any and all releases, commitments or obligations contained herein or in State Participation Forms or Subdivision Participation Agreements shall be void, provided, however, that on or after the Threshold Subdivision Participation Date, Walmart shall have the unilateral right in its sole discretion to extend the Threshold Subdivision Participation Date or to proceed with the Settlement if one or both of the Subdivision Participation Thresholds have not been satisfied.

C. *Conditions to Effectiveness*. If (1) the State Participation Threshold is met by the State Participation Date and (2) the Subdivision Participation Thresholds are met by the Threshold Subdivision Participation Date, then this Agreement will be deemed effective fifteen (15) days after (a) the Threshold Subdivision Participation Date, or (b) such time as the Settlement Fund Administrator has completed the Participating Population Level calculations necessary to determine whether the Subdivision Participation Thresholds have been achieved, the Settlement Fund Administrator has provided notice of such calculations and determinations to the Parties, and any disputes concerning such calculations and determinations have been resolved subject to Section II.B.2.a-d, whichever is later (the "*Effective Date*"). Subject to Walmart's unilateral right in its sole discretion to extend the State Participation Date and/or the Threshold Subdivision Participation Date if the State Participation Threshold or Subdivision Participation Thresholds have not been met by their respective deadlines, or to proceed with the Settlement if one or more of the State Participation Threshold or Subdivision Participation Thresholds have not been met, as set forth in Sections II.A.3 and II.B.3, if either of the foregoing clauses (1) or (2) is not satisfied by the State Participation Date or the Threshold Subdivision Participation Date, respectively, then any and all commitments or obligations (including any and all releases) contained herein or in any State Participation Form or Subdivision Participation Agreement shall be void.

D. *Consent Judgments*. Promptly after the Effective Date, the Parties will proceed to file the Consent Judgments, and the obligations in the State Participation Forms and Subdivision Participation Agreements will become effective and binding as of the Effective Date.

III. Injunctive Relief

A. *Injunctive Relief*. As part of the Consent Judgments, the Parties agree to the entry of the injunctive relief terms as set forth in Exhibit P.

IV. Settlement Payments

A. *Settlement Fund*. All payments under this Section IV shall be made into the Settlement Fund. The Settlement Fund shall be allocated and used only as specified in Section V.

B. *Payment by Walmart*.

1. Provided the conditions set out in Sections II.A-C are met, within seven (7) calendar days after the Effective Date, the Settlement Fund Administrator shall determine the amount representing the maximum total allocation of opioid remediation and abatement payments for the Settling States (the "*Remediation Payment*"), as calculated by multiplying (a) the total allocation percentages accorded to the Settling States in accordance with Exhibit F by (b) the Global Settlement Remediation Amount.

2. Fifteen (15) calendar days after the Effective Date (the "*Deposit Date*"), Walmart shall deposit the Remediation Payment into the Settlement Fund. The Remediation Payment shall be distributed to the Settling States and/or refunded to Walmart by the Settlement Fund Administrator consistent with the terms of this Agreement. Any interest earned on the Remediation Payment within the Settlement Fund, to the extent not used to pay the fees for the Settlement Fund Administrator, shall become and remain part of the Remediation Payment within the Settlement Fund and be made available for payments on a pro rata basis to the eventual recipients of the funds (either to Walmart in the case of refund or to the applicable Settling State) in accordance with this Agreement.

3. The Settlement Fund Administrator shall determine the Remediation Payment to be deposited by Walmart on the Deposit Date pursuant to Section IV.B.1. The allocation for each Settling State shall be based on the percentages set out in Exhibit F. For the avoidance of doubt, each of West Virginia, New Mexico, Florida, Alabama, and any other Separately Settling State are not eligible to receive payments under this Agreement.

C. *Payments to Settling States and Reversions to Walmart*.

1. *Payments and Refunds*. Subject to the terms of this Section IV.C.1, Settling States shall be eligible to receive payments under this Agreement over a period not to exceed six (6) years. Such payments shall be paid from the Settlement Fund by the Settlement Fund Administrator. Settling States shall be eligible for at most two payments from the Payout Amount in Payment Year 1 and one payment of the Payout Amount for each of Payment Years 2 through 6. Walmart shall be refunded any portion of the Remediation Payment that Settling States failed to earn in a given Payment Year and that Settling States are not able to earn in future years, as well as accrued interest on such amounts, as of the First Subdivision Participation Date and each subsequent anniversary of the First Subdivision Participation Date. The Settlement Fund Administrator will retain sufficient funds in the Settlement Fund in Payment Years 1 and 2 to pay amounts owed to Settling States due to additional Subdivision participation in Payment Years 2 and/or 3.

2. *Procedure for Calculation of Payments and Refunds*; *Disputes*.

a. Calculation of Payments and Refunds. As soon as practicable following the Threshold Subdivision Participation Date, after determining the Remediation Payment in accordance with Section IV.B, and as soon as practical after each of the First, Second, and Third Subdivision Participation Dates, and as soon as practical after each of the Incentive Payment D Look-Back Dates, the

Settlement Fund Administrator shall calculate (1) the Payout Amount (including the amount of the Settlement Fund to be allocated to the Settlement Fund Administrator in costs and fees pursuant to Section V.C.4); (2) the amount to be received by each Settling State; (3) the amount to be received by the separate types of funds for each Settling State (if applicable); (4) the allocation to be received by each Settling State's Participating Subdivisions listed on Exhibit G; and (5) the amount of any refund due to Walmart, and the Settlement Fund Administrator shall give notice to Walmart, the Settling States, and the Enforcement Committee of each such amount in clauses (1) through (5). If Walmart and the Enforcement Committee inform the Settlement Fund Administrator that they agree on the amounts to be calculated pursuant to clauses (1), (2), and (5) above, the Settlement Fund Administrator shall treat those amounts as the calculated amount. If a Settling State informs the Settlement Fund Administrator that it and its Participating Subdivisions listed on Exhibit G have reached consensus on the amounts to be calculated pursuant to clauses (3) and/or (4) above, the Settlement Fund Administrator shall use those amounts so long as they are consistent with the amount calculated pursuant to clause (2). The Payout Amount shall be based on each Settling State's eligibility to receive one or more Incentive Payment(s) as set out in Section IV.E. For the avoidance of doubt, any Subdivision not listed on Exhibit G shall not receive an allocation from the Subdivision Fund, and no provision of this Agreement shall be interpreted to create such an entitlement.

b. Notice of Dispute. Within twenty-one (21) calendar days of the notice provided by the Settlement Fund Administrator, (1) Walmart, any Settling State or the Enforcement Committee may dispute, in writing, the calculation of the Payout Amount (including the amount allocated for Settlement Fund Administrator costs and fees), whether a Settling State qualifies for an Incentive Payment, or the amount to be received by a Settling State and/or its Participating Subdivisions listed on Exhibit G and (2) a Participating Subdivision may dispute, in writing, the calculation of the amounts under Section IV.C.2.a clauses 3 or 4 solely with respect to such amounts calculated for the Settling State in which it is located and without disputing the amounts calculated under Section IV.C.2.a clauses 1, 2, or 5. A dispute will be deemed invalid and disregarded if it challenges the allocations adopted by a State-Subdivision Agreement approved pursuant to the provisions of Exhibit O or by statute. Such disputing party must provide a written notice of dispute to the Settlement Fund Administrator, the Enforcement Committee, any affected Settling State or Participating Subdivision, and Walmart identifying the nature of the dispute, the amount of money that is disputed, and the Settling State(s) or Participating Subdivision(s) affected.

c. Response to Notice of Dispute. Within twenty-one (21) calendar days of the sending of a written notice of dispute, any affected party may submit a response, in writing, to the Settlement Fund Administrator, the Enforcement Committee, any affected Settling State or Participating Subdivision, and Walmart identifying the basis for disagreement with the notice of dispute.

d. Resolution of Disputes. If no response is filed within the specified time period, the Settlement Fund Administrator shall adjust the amount calculated consistent with the written notice of dispute, the Settlement Fund Administrator shall pay the adjusted Payout Amount, and the dispute shall be considered finally resolved. If a written response to the written notice of dispute is timely sent to the Settlement Fund Administrator, the Settlement Fund Administrator shall notify Walmart and the Enforcement Committee of the preliminary amount to be paid out by the Settlement Fund Administrator, which shall be the smaller of the amount originally calculated by the Settling Administrator or the amount that would be consistent with the notice of dispute, *provided*, *however*, that in no circumstances shall the preliminary amount to be paid to a Settling State be higher than the maximum amount of Incentive Payment A for that Payment Year.

e. Final resolution of such disputes shall be handled in accordance with the terms of Section VI.F and the Settlement Fund Administrator shall not distribute any amount subject to a dispute being resolved under Section VI.F until such time when the dispute is finally resolved.

3. *Timing of Payments and Reversions*.

a. Payment to the Settling States from the Settlement Fund of the Base Payment will be made as soon as practicable following the Threshold Subdivision Participation Date and the Settlement Fund Administrator's calculation of payment amounts, provision of notice to the Parties, and resolution of any disputes, as applicable and as set forth in Section IV.C.2.a-e (the "*Payout Procedure*"). Any additional payments to the Settling States and/or any reversion to Walmart for Payment Year 1 will be made as soon as practicable following July 15, 2023 or such later date agreed to in writing by Walmart and the Enforcement Committee (the "*First Subdivision Participation Date*") and the Settlement Fund Administrator's completion of the Payout Procedure.

b. In Payment Year 2, payment to the Settling States and/or any reversion to Walmart will be based on Subdivision Participation as of July 15, 2024 or such later date agreed to in writing by Walmart and the Enforcement Committee (the "*Second Subdivision Participation Date*") and will be made as soon as practicable following the Settlement Fund Administrator's completion of the Payout Procedure, as applicable.

c. In Payment Year 3, payment to the Settling States and/or any reversion to Walmart will be based on (i) Subdivision Participation as of July 15, 2025 or such later date agreed to in writing by Walmart and the Enforcement Committee (the "*Third Subdivision Participation Date*") and (ii) eligibility for Incentive D, as set forth in Section IV.E.3, and will be made as soon as practicable following the Settlement Fund Administrator's completion of the Payout Procedure, as applicable.

d. In Payment Years 4 through 6, payment to the Settling States and/or any reversion to Walmart will be based on eligibility for Incentive Payment D, as set forth in Section IV.E.3. Payment will be made as soon as practicable following the Settlement Fund Administrator's completion of the Payout Procedure, as applicable.

e. The Settlement Fund Administrator may combine the payments under this Section IV with funds to be distributed by other comparable opioid settlements. In determining when payments for each Payment Year will be made, the Settlement Fund Administrator may take into account the timeline for the availability of disbursements under other comparable opioid settlements.

D. *Base Payment.* Each Settling State will receive a base payment equal to thirty-eight percent (38%) of such Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount (the "*Base Payment*"). The Base Payment shall be made as soon as practicable after the Effective Date.

E. *Incentive Payments.* Each Settling State shall be eligible to receive additional incentive payments totaling up to a maximum of sixty two percent (62%) of such Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount, with the actual amount depending on whether and the extent to which the criteria set forth below are met in such Settling State. In no event shall any Settling State receive more than one hundred percent (100%) of its respective Overall Allocation Percentage of the Global Settlement Remediation Amount under this Agreement. The incentive payments shall be divided among three (3) categories, referred to as Incentive Payments A, BC, and D. As applicable, Incentive Payments A and BC will be paid in at most three payments in Payment Years 1 through 3: one payment in Payment Year 1, one payment in Payment Year 2, and one payment in Payment Year 3. Incentive Payment D will be paid over four installments in Payment Years 3 through 6, provided a Settling State remains eligible to receive Incentive Payment D throughout that period and has not otherwise earned Incentive Payment A. The incentive payments shall be determined by the Settlement Fund Administrator and made with respect to a specific Settling State based on its eligibility for that Payment Year under the criteria set forth below.

1. Incentive Payment A. Incentive Payment A shall be equal to sixty-two (62%) of a Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount, provided such Settling State becomes eligible for Incentive Payment A and subject to Section IV.E.1.a. Incentive Payment A is mutually exclusive with Incentive Payments BC and D; if a Settling State receives Incentive Payment A, such Settling State is not eligible for Incentive Payments BC or D. If a Settling State is not eligible for Incentive Payment A by the Third Subdivision Participation Date, it shall not be eligible for Incentive Payment A in any succeeding year. Eligibility for Incentive Payment A is as follows:

a. A Settling State is eligible for Incentive Payment A if, as of the First Subdivision Participation Date in Payment Year 1, the Second Subdivision Participation Date in Payment Year 2, or the Third Subdivision Participation Date in Payment Year 3, (i) there is a Bar in that State in full force and effect; (ii) there

is a Settlement Class Resolution in that State in full force and effect; (iii) there is a ruling from the State's highest court barring all Subdivisions from bringing or maintaining Released Claims; (iv) the Released Claims of all of the following entities are released through the execution of Subdivision Participation Agreements: (1) all Litigating Subdivisions, (2) all Non-Litigating Primary Subdivisions, (3) all non-litigating School Districts with a K-12 student enrollment of at least 25,000 or 0.10% of a State's population, whichever is greater, (4) all non-litigating Health Districts and Hospital Districts that have at least one hundred twenty-five (125) hospital beds in one or more hospitals rendering services in that district, and (5) all Primary Fire Districts; or (v) a combination of the actions in clauses (i)-(v) has achieved the same level of resolution of Claims by Subdivisions (*e.g.*, a Bar against future litigation combined with full joinder by Litigating Subdivisions). For the avoidance of doubt, subsection (iv) cannot be satisfied unless all Litigating Subdivisions are Participating Subdivisions or there is a Case-Specific Resolution against any such Subdivisions that are not Participating Subdivisions. Each Settling State that believes it qualifies for Incentive A shall provide notice to Walmart, the Enforcement Committee, and the Settlement Fund Administrator, including data sources or other information establishing such Settling State's entitlement to Incentive A, by the First, Second, or Third Participation Dates, as applicable. Walmart and the Enforcement Committee shall meet and confer in order to agree on data sources for purposes of this Section IV.E.1.a prior to the State Participation Date. For the avoidance of doubt, any disputes regarding whether a Settling State qualifies for Incentive A shall be handled in accordance with the Payout Procedure.

b. If a Settling State becomes eligible for Incentive A in Payment Years 2 or 3, then the Settling State shall be entitled to receive the remaining incentive payments that the Settling State could have earned (the "*Remaining Incentive Payments*"), which equals (i) ninety-seven percent (97%) of such Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount, representing the maximum Incentive Payment BC, minus any Incentive Payment BC amounts previously paid to such Settling State in Payment Year 1 (or, if such Settling State first becomes eligible for Incentive Payment A in Payment Year 3, the sum of any Incentive Payment BC payment amounts previously paid to the Settling State in Payment Years 1 and 2), the resulting difference of which shall be reduced by 12.5% if Incentive Payment A is achieved in Payment Year 2 or by 25% if Incentive Payment A is achieved in Payment Year 3; and (ii) three percent (3%) of such Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount, representing Incentive Payment D, as described in Section IV.E.3.

2. Incentive Payment BC. If a Settling State does not qualify for Incentive Payment A, it may still qualify to receive up to fifty-nine percent (59%) of the Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount under Incentive Payment BC. A Settling State may earn Incentive Payment BC in Payment Years 1 through 3 and may receive, when combined with the Settling State's Base Payment, a

maximum of up to 97% of the Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount. Eligibility for Incentive Payment BC is as follows:

a. Subject to Section IV.E.1, the amount of Incentive Payment BC for which a Settling State is eligible shall be determined based on the aggregate population of the Settling State's Incentive BC Subdivisions that participate in the Agreement or have had their claims resolved through a Case-Specific Resolution, divided by the aggregate population of all of the Settling State's Incentive BC Subdivisions. The Settling State's Incentive BC Subdivisions are (i) all Litigating Subdivisions (including School Districts and Special Districts) and (ii) all Non-Litigating Threshold Subdivisions (collectively, all Litigating Subdivisions and all Non-Litigating Threshold Subdivisions are "*Incentive BC Subdivisions*"). The percentage of the Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount, inclusive of the Base Payment, to which the Settling State is entitled shall be determined according to the table of Incentive BC payment levels below:

Percentage of Incentive BC Subdivision Population[7]	**Percentage of Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount (includes the Base Payment)**
Participation of 85% but less than 86%	Payment of 43%
Participation of 86% but less than 87%	Payment of 46%
Participation of 87% but less than 88%	Payment of 49%
Participation of 88% but less than 89%	Payment of 52%
Participation of 89% but less than 90%	Payment of 55%
Participation of 90% but less than 91%	Payment of 58%
Participation of 91% but less than 92%	Payment of 61%
Participation of 92% but less than 93%	Payment of 64%
Participation of 93% but less than 94%	Payment of 67%
Participation of 94% but less than 95%	Payment of 70%
Participation of 95% but less than 96%	Payment of 75%
Participation of 96% but less than 97%	Payment of 79.5%
Participation of 97% but less than 98%	Payment of 84%
Participation of 98% but less than 99%	Payment of 88.5%
Participation of 99% but less than 100%	Payment of 93% o

[7] The "Percentage of Incentive BC Subdivision Population" shall be determined by the aggregate population of the Settling State's Incentive BC Subdivisions that participate in the Agreement or have had their claims resolved through a Case-Specific Resolution divided by the aggregate population of the Settling State's Incentive BC Subdivisions. In calculating the Settling State's population that resides in Incentive BC Subdivisions, the population of the Settling State's Incentive BC Subdivisions shall be the sum of the population of all Incentive BC Subdivisions in the Settling State, notwithstanding that persons may be included within the population of more than one Incentive BC Subdivision. An individual Subdivision shall not be included more than once in either the numerator or denominator of the calculation regardless if it (or any of its officials) is named more than once as plaintiffs in the same lawsuit; *provided*, *however*, that for the avoidance of doubt, no Subdivision will be excluded from the numerator or denominator under this sentence unless a Subdivision otherwise counted in the denominator has the authority to release the Claims (consistent with Section XI) of the Subdivision to be excluded.

Participation of 100%	Payment of 97%

b. For Payment Year 1, the Settlement Fund Administrator shall calculate and allocate Incentive Payment BC payments to Settling States based on the Settling State's Incentive BC Subdivision Population participation rate as of the First Subdivision Participation Date. Payments to the Settling States and/or any refund to Walmart shall be made as soon as practicable after the Settlement Fund Administrator's completion of the Payout Procedure, as applicable.

c. For Payment Year 2, additional payments of Incentive Payment BC shall be made to any Settling State for which the Settling State's Incentive BC Subdivision Population participation rate as of the Second Subdivision Participation Date results in a higher payment level than for Payment Year 1. Any Incentive Payment BC payment to a Settling State in Payment Year 2 will be 87.5% of the difference between (i) the Incentive BC payment calculated pursuant to Section IV.E.2.a using the Second Subdivision Participation Date and (ii) the Incentive BC payment calculated pursuant to Section IV.E.2.a using the First Subdivision Participation Date. Any payments to Settling States or reversion to Walmart will be made as soon as practicable following the Settlement Fund Administrator's completion of the Payout Procedure, as applicable.

d. For Payment Year 3, additional payments of Incentive Payment BC shall be made to any Settling State for which the Settling State's Incentive BC Subdivision Population participation rate as of the Third Subdivision Participation Date results in a higher payment level than for Payment Year 2. Any Incentive Payment BC payment to a Settling State in Payment Year 3 will be 75% of the difference between (i) the Incentive BC payment calculated pursuant to Section IV.E.2.a using the Third Subdivision Participation Date and (ii) the Incentive BC payment calculated pursuant to Section IV.E.2.a using the Second Subdivision Participation Date. Any payments to Settling States or reversion to Walmart will be made as soon as practicable following the Settlement Fund Administrator's completion of the Payout Procedure, as applicable.

e. The Settlement Fund Administrator shall withhold sufficient funds from Participating Subdivisions in each Payment Year to pay Non-Participating Subdivisions listed on Exhibit G for the Payment Year if they become Participating Subdivisions by the Second Subdivision Participation Date or Third Subdivision Participation Date. If such Non-Participating Subdivisions do not become Participating Subdivisions by the Third Subdivision Participation Date, such withheld funds will be allocated to Participating Subdivisions based on the allocation percentages on Exhibit G. For the avoidance of doubt, nothing in this subsection allows a Non-Participating Subdivision to receive funds until and unless it becomes a Participating Subdivision.

3. Incentive Payment D. Incentive Payment D shall be applied starting at Payment Year 3 and the amount of Incentive Payment D in each year will depend on (i) the Settling State's eligibility as set out in Section IV.E.3.a and (ii) the Percentage of

Incentive BC Subdivision Population achieved by the Settling State as of the Third Subdivision Participation Date. Incentive Payment D shall be equal to between three percent (3%) and fifteen percent (15%) of the of the Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount. The Incentive Payment D may be earned in each of Payment Years 3 through 6. Eligibility for Incentive Payment D is as follows:

a. A Settling State is eligible for Incentive Payment D if there has been no Later Litigating Subdivision (for purposes of Incentive Payment D, Later Litigating Subdivisions are limited to (i) a Primary Subdivision; (ii) a school district with a K-12 student enrollment of at least 25,000 or 0.10% of the State's population, whichever is greater; (iii) a health district or hospital district that has at least one hundred twenty-five (125) hospital beds in one or more hospitals rendering services in that district; and (iv) Primary Fire Districts) in that State that has had a Claim against a Released Entity survive more than six (6) months after denial in whole or in part of a Threshold Motion as of July 15 of Payment Years 3 to 6 (each, an "*Incentive Payment D Look-Back Date*").

b. To the extent a Settling State achieves a Percentage of Incentive BC Subdivision Population of 95% or above as of the Third Subdivision Participation Date, the level of Incentive Payment D is reduced according to the schedule below. The following portions of Incentive Payment D are paid in equal installments in Payment Years 3 through 6:

Percentage of Incentive BC Subdivision Population as of the Third Subdivision Participation Date	**Incentive Payment D Amount as a Percentage of Settling State's Overall Allocation Percentage of the Global Settlement Remediation Amount**
Participation below 95%	15%
Participation of 95% but less than 96%	13%
Participation of 96% but less than 97%	11%
Participation of 97% but less than 98%	9%
Participation of 98% but less than 99%	7%
Participation of 99% but less than 100%	5%
Participation of 100%	3%

c. The Settlement Fund Administrator shall determine a Settling State's eligibility for Incentive Payment D as of the Incentive Payment D Look-Back Date in Payment Years 3 through 6. If a Later Litigating Subdivision's lawsuit in that Settling State survives more than six (6) months after denial in whole or in part of a Threshold Motion, that State shall not be eligible for Incentive Payment D for the Payment Year in which that occurs and any subsequent Payment Year. Prior to the Incentive Payment D Look-Back Date in Payment Years 3 through 6, Walmart may provide the Settlement Fund Administrator and the

Enforcement Committee with notice identifying any Settling State(s) it believes do not qualify for Incentive Payment D and information supporting its belief.

d. If, at any time within six (6) years of the Threshold Subdivision Participation Date, any Subdivision becomes a Later Litigating Subdivision (as that term is limited by Section IV.E.3.a), then Walmart shall, within thirty (30) days of Walmart or any Released Entity being served or otherwise informed of the prosecution of such Released Claims, provide notice to the Settling State in which such Released Claims are being pursued and shall give the relevant Settling State a reasonable opportunity to extinguish the Released Claims without any payment or any other obligations being imposed upon any Released Entities (apart from the Global Settlement Amount payable by Walmart under the Agreement or the Injunctive Relief Terms imposed on it). The relevant Settling State and Walmart shall confer and use reasonable efforts to promptly resolve the lawsuit so that it is dismissed with prejudice. Nothing in this subsection creates an obligation for a Settling State to make a monetary payment or incur any other obligation to an entity filing a lawsuit.

e. Notwithstanding Section IV.E.3, a Settling State can become re-eligible for Incentive Payment D if the lawsuit that survived a Threshold Motion is dismissed pursuant to a later motion on grounds included in the Threshold Motion, in which case the Settling State shall be eligible for any missed payments of Incentive Payment D in the following Payment Year, less any litigation fees and costs incurred by Walmart in the interim, except that if the dismissal motion occurs after the completion of opening statements in such action, the Settling State shall not be eligible for Incentive Payment D.

V. Allocation and Use of Settlement Payments

A. *Components of Settlement Fund*. The Settlement Fund shall be comprised of a Remediation Accounts Fund, a State Fund, and a Subdivision Fund for each Settling State. The payment made under Section IV into the Settlement Fund shall be initially allocated among those three (3) Sub-Funds and distributed and used as provided below or as provided for by a State-Subdivision Agreement (or other State-specific allocation of funds).

B. *Use of Settlement Payments*.

1. It is the intent of the Parties that the payments disbursed from the Settlement Fund to Settling States and Participating Subdivisions be for Opioid Remediation to address Alleged Harms, subject to exceptions that must be documented in accordance with Section V.B.2. In no event may less than eighty-five percent (85%) of Walmart's maximum payment amounts, distributed pursuant to Section IV, Section VIII, and Section IX as set forth on Exhibit M over the entirety of all Payment Years (but not in any single Payment Year) be spent on Opioid Remediation.

2. While disfavored by the Parties, a Settling State or a Participating Subdivision may, subject to the limitation in the second sentence of Section V.B.1, use

monies from the Settlement Fund (that have not been restricted by this Agreement solely to future Opioid Remediation) for purposes that do not qualify as Opioid Remediation, provided that if, at any time, a Settling State or a Participating Subdivision listed on Exhibit G uses any monies from the Settlement Fund for a purpose that does not qualify as Opioid Remediation, such Settling State or Participating Subdivision listed on Exhibit G shall identify such amounts and report to the Settlement Fund Administrator and Walmart how such funds were used, including if used to pay attorneys' fees, investigation costs, litigation costs, or costs related to the operation and enforcement of this Agreement, respectively. It is the intent of the Parties that the reporting under this Section V.B.2 shall be available to the public. For the avoidance of doubt, (a) any amounts not identified under this Section V.B.2 as used to pay attorneys' fees, investigation costs, or litigation costs shall be included in the "*Total Remediation Amount*" for purposes of Section V.F and (b) Participating Subdivisions not listed on Exhibit G may only use monies from the Settlement Fund for purposes that qualify as Opioid Remediation.

C. *Allocation of Settlement Fund*. The allocation of the Settlement Fund allows for different approaches to be taken in different States, such as through a State-Subdivision Agreement. Given the uniqueness of States and their Subdivisions, Settling States and their Subdivisions are encouraged to enter into State-Subdivision Agreements in order to direct the allocation of their portion of the Settlement Fund. This Agreement has no effect on the ability of Settling States and their Subdivisions to internally agree on the allocation of their portion of the Settlement Fund. As set out below, the Settlement Fund Administrator will make an initial allocation to three (3) state-level Sub-Funds. The Settlement Fund Administrator will then, for each Settling State and its Participating Subdivisions, apply the terms of this Agreement and any relevant State-Subdivision Agreement, Statutory Trust, Allocation Statute, or voluntary redistribution of funds as set out below before disbursing the funds.

1. Base Payments. The Settlement Fund Administrator will allocate Base Payments under Section IV.D on a State-specific basis in proportion to each Settling State's respective Overall Allocation Percentage. Base Payments for each Settling State will then be allocated fifteen percent (15%) to its State Fund, seventy percent (70%) to its Remediation Accounts Fund, and fifteen percent (15%) to its Subdivision Fund. Amounts may be reallocated and will be distributed as provided in Section V.D.

2. Incentive Payments. The Settlement Fund Administrator will treat incentive payments under Section IV.E on a State-specific basis in proportion to each Settling State's respective Overall Allocation Percentage. Incentive payments for which a Settling State is eligible under Section IV.E will be allocated fifteen percent (15%) to its State Fund, seventy percent (70%) to its Remediation Accounts Fund, and fifteen percent (15%) to its Subdivision Fund. Amounts may be reallocated and will be distributed as provided in Section V.D.

3. Settlement Fund Administrator. Prior to the Threshold Subdivision Participation Date, Walmart and the Enforcement Committee will agree to a detailed mechanism consistent with the foregoing for the Settlement Fund Administrator to follow in allocating, apportioning, and distributing payments, which shall then be appended hereto as Exhibit L.

4. Settlement Fund Administrator Costs. Any costs and fees associated with or arising out of the duties of the Settlement Fund Administrator as described in Exhibit L shall be paid from the interest accrued in the Settlement Fund; *provided*, *however*, that if such accrued interest is insufficient to pay the entirety of any such costs and fees, Walmart shall pay fifty percent (50%) of the additional amount and fifty percent (50%) shall be paid out of the Settlement Fund.

D. *Settlement Fund Reallocation and Distribution*.

As set forth below, within a particular Settling State's account, amounts contained in the Sub-Funds may be reallocated and distributed per a State-Subdivision Agreement or other means. If the apportionment of amounts is not addressed and controlled under Section V.D.1 and Section V.D.2, then the default provisions of Section V.D.4 apply. It is not necessary that a State-Subdivision Agreement or other means of allocating funds pursuant to Section V.D.1 and Section V.D.2 address all of the Sub-Funds. For example, a Statutory Trust might only address disbursements from a Settling State's Remediation Accounts Fund.

1. Distribution by State-Subdivision Agreement. If a Settling State has a State-Subdivision Agreement, amounts apportioned to that State's State Fund, Remediation Accounts Fund, and Subdivision Fund under Section V.C shall be reallocated and distributed as provided by that agreement. Any State-Subdivision Agreement entered into or amended after November 14, 2022 shall be applied only if it requires: (a) that all amounts be used for Opioid Remediation, except as allowed by Section V.B.2, and (b) that at least seventy percent (70%) of amounts be used solely for future Opioid Remediation.[8] For a State-Subdivision Agreement to be applied to the relevant portion of the Payout Amount, notice must be provided to Walmart and the Settlement Fund Administrator at least ten (10) business days prior to the Settlement Fund Administrator issuing payment to Settling States pursuant to the Payout Procedure.

2. Distribution by Allocation Statute. If a Settling State has an Allocation Statute and/or a Statutory Trust that addresses allocation or distribution of amounts apportioned to such State's State Fund, Remediation Accounts Fund, and/or Subdivision Fund and that, to the extent any or all such Sub-Funds are addressed, requires (1) all amounts to be used for Opioid Remediation, except as allowed by Section V.B.2, and (2) at least seventy percent (70%) of all amounts to be used solely for future Opioid Remediation,[9] then, to the extent allocation or distribution is addressed, the amounts apportioned to that State's State Fund, Remediation Accounts Fund, and Subdivision Fund under Section V.C shall be allocated and distributed as addressed and provided by the applicable Allocation Statute or Statutory Trust. For the avoidance of doubt, an Allocation Statute or Statutory Trust need not address all three (3) Sub-Funds that comprise the Settlement Fund, and if the applicable Allocation Statute or Statutory Trust does not

[8] Future Opioid Remediation includes amounts paid to satisfy any future demand by another governmental entity to make a required reimbursement in connection with the past care and treatment of a person related to the Alleged Harms.

[9] Future Opioid Remediation includes amounts paid to satisfy any future demand by another governmental entity to make a required reimbursement in connection with the past care and treatment of a person related to the Alleged Harms.

address distribution of all or some of these three (3) Sub-Funds, the applicable Allocation Statute or Statutory Trust does not replace the default provisions described in Section V.D.4 of any such unaddressed fund. For example, if an Allocation Statute or Statutory Trust that meets the requirements of this Section V.D.2 only addresses funds restricted to remediation and abatement, then the default provisions in this Agreement concerning allocation among the three (3) Sub-Funds and the distribution of the State Fund and Subdivision Fund for that State would still apply, while the distribution of the applicable State's Remediation Accounts Fund would be governed by the qualifying Allocation Statute or Statutory Trust.

3. Voluntary Redistribution. A Settling State may choose to reallocate all or a portion of its State Fund to its Remediation Accounts Fund. A Participating Subdivision included on Exhibit G may choose to reallocate all or a portion of its allocation from the Subdivision Fund to the State's Remediation Accounts Fund or to another Participating Subdivision. The Settlement Fund Administrator is not required to honor voluntary redistribution for which notice is provided to it less than sixty (60) days prior to the Payment Date.

4. Distribution in the Absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust. If Section V.D.1 and Section V.D.2 do not apply, amounts apportioned to that State's State Fund, Remediation Accounts Fund, and Subdivision Fund under Section V.C shall be distributed as follows:

a. Amounts apportioned to that State's State Fund shall be distributed to that State.

b. Amounts apportioned to that State's Remediation Accounts Fund shall be distributed consistent with Section V.E. Each Settling State shall submit to the Settlement Fund Administrator a designation of a lead state agency or other entity to serve as the single point of contact for that Settling State's funding requests from the Remediation Accounts Fund and other communications with the Settlement Fund Administrator. The designation of an individual entity is for administrative purposes only and such designation shall not limit funding to such entity or even require that such entity receive funds from this Agreement. The designated entity shall be the only entity authorized to request funds from the Settlement Fund Administrator to be disbursed from that Settling State's Remediation Accounts Fund. If a Settling State has established a Statutory Trust, then that Settling State's single point of contact may direct the Settlement Fund Administrator to release the State's Remediation Accounts Fund to the Statutory Trust.

c. Amounts apportioned to that State's Subdivision Fund shall be distributed to Participating Subdivisions in that State included on Exhibit G per the Subdivision Allocation Percentage listed in Exhibit G. Section V.F shall govern amounts that would otherwise be distributed to Non-Participating Subdivisions listed in Exhibit G. For the avoidance of doubt and notwithstanding any other provision in this Agreement, no Non-Participating Subdivision will receive any

amount from the Settlement Fund, regardless of whether such Subdivision is included on Exhibit G.

d. Special Districts shall not be allocated funds from the Subdivision Fund, except through a voluntary redistribution allowed by Section V.D.3. A Settling State may allocate funds from its State Fund or Remediation Accounts Fund for Special Districts.

5. Restrictions on Distribution. No amounts may be distributed from the Subdivision Fund contrary to Section VII, *i.e.*, no amounts may be distributed directly to Non-Participating Subdivisions to the extent such a distribution would violate Section VII.E or Section VII.F. Amounts allocated to the Subdivision Fund that cannot be distributed by virtue of the preceding sentence shall be distributed into the sub-account in the Remediation Accounts Fund for the Settling State in which the Subdivision is located, unless those payments are redirected elsewhere by a State-Subdivision Agreement described in Section V.D.1 or by an Allocation Statute or a Statutory Trust described in Section V.D.2.

E. *Provisions Regarding the Remediation Accounts Fund*.

1. State-Subdivision Agreement, Allocation Statute, and Statutory Trust Fund Provisions. A State-Subdivision Agreement, Allocation Statute, or Statutory Trust may govern the operation and use of amounts in that State's Remediation Accounts Fund so long as it complies with the requirements of Section V.D.1 or Section V.D.2, as applicable, and all direct payments to Subdivisions comply with Section VII.E through Section VII.G.

2. Absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust. In the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust that addresses distribution, the Remediation Accounts Fund will be used solely for future Opioid Remediation[10] and the following shall apply with respect to a Settling State:

a. *Regional Remediation*.

(i) At least fifty percent (50%) of distributions for remediation from a State's Remediation Accounts Fund shall be annually allocated and tracked to the regional level. A Settling State may allow the Advisory Committee established pursuant to Section V.E.2.d to define its regions and assign regional allocations percentages. Otherwise, a Settling State shall (A) define its initial regions, which shall consist of one (1) or more General-Purpose Subdivision(s) and which shall be designated by the state agency with primary responsibility for substance abuse disorder services employing, to the maximum extent practical, existing regions established in that State for opioid abuse treatment or other public health purposes; (B) assign initial regional allocation percentages to the regions based on the

[10] Future Opioid Remediation includes amounts paid to satisfy any future demand by another governmental entity to make a required reimbursement in connection with the past care and treatment of a person related to the Alleged Harms.

Subdivision Allocation Percentages in Exhibit G and an assumption that all Subdivisions included on Exhibit G will become Participating Subdivisions.

(ii) This minimum regional expenditure percentage is calculated using the Settling State's initial Remediation Accounts Fund allocation and does not include any additional amounts a Settling State has directed to its Remediation Accounts Fund from its State Fund, or any other amounts directed to the fund. A Settling State may dedicate more than fifty percent (50%) of its Remediation Accounts Fund to the regional expenditure and may annually adjust the percentage of its Remediation Accounts Fund dedicated to regional expenditures as long as the percentage remains above the minimum amount.

(iii) The Settling State (A) has the authority to adjust the definition of the regions, and (B) may annually revise the percentages allocated to each region to reflect the number of General-Purpose Subdivisions in each region that are Non-Participating Subdivisions.

b. *Subdivision Block Grants.* Certain Subdivisions shall be eligible to receive regional allocation funds in the form of block grants for future Opioid Remediation.[11] A Participating Subdivision eligible for block grants is a county or parish (or in the case of States that do not have counties or parishes that function as political subdivisions, a city) that (1) does not contain a Litigating Subdivision or a Later Litigating Subdivision for which it has the authority to end the litigation through a release, bar or other action, (2) either (i) has a population of 400,000 or more or (ii) in the case of California has a population of 750,000 or more, and (3) has funded or otherwise managed an established health care or treatment infrastructure (*e.g.*, health department or similar agency). Each Subdivision eligible to receive block grants shall be assigned its own region.

c. *Small States.* Notwithstanding the provisions of Section V.E.2.a, Settling States with populations under four (4) million that do not have existing regions described in Section V.E.2.a shall not be required to establish regions. However, such a Settling State that contains one (1) or more Subdivisions eligible for block grants under Section V.E.2.c shall be divided regionally so that each block-grant eligible Subdivision is a region and the remainder of the state is a region.

d. *Advisory Committee.* The Settling State shall designate an Opioid Settlement Remediation Advisory Committee (the "*Advisory Committee*") to provide input and recommendations regarding remediation spending from that Settling State's Remediation Accounts Fund. A Settling State may elect to use an existing advisory committee or similar entity (created outside of a State-

[11] Future Opioid Remediation includes amounts paid to satisfy any future demand by another governmental entity to make a required reimbursement in connection with the past care and treatment of a person related to the Alleged Harms.

Subdivision Agreement or Allocation Statute); *provided*, *however*, the Advisory Committee or similar entity shall meet the following requirements:

(i) Written guidelines that establish the formation and composition of the Advisory Committee, terms of service for members, contingency for removal or resignation of members, a schedule of meetings, and any other administrative details;

(ii) Composition that includes at least an equal number of local representatives as state representatives;

(iii) A process for receiving input from Subdivisions and other communities regarding how the opioid crisis is affecting their communities, their abatement needs, and proposals for abatement strategies and responses; and

(iv) A process by which Advisory Committee recommendations for expenditures for Opioid Remediation will be made to and considered by the appropriate state agencies.

3. Remediation Accounts Fund Reporting. The Settlement Fund Administrator shall track and assist in the report of remediation disbursements as agreed to between Walmart and the Enforcement Committee.

F. *Nature of Payment*. Walmart, the Settling States, and the Participating Subdivisions each acknowledge and agree that notwithstanding anything to the contrary in this Agreement, including, but not limited to, the scope of the Released Claims:

1. They have entered into this Agreement to avoid the delay, expense, inconvenience, and uncertainty of further litigation;

2. (a) The Settling States and Participating Subdivisions sought restitution and remediation (within the meaning of 26 U.S.C. § 162(f)(2)(A) and 26 C.F.R. § 1.162-21(e)(4)(i), (ii)) as damages for the Alleged Harms; (b) the Total Remediation Amount is less than or equal to the amount, in the aggregate, of the Alleged Harms allegedly suffered by the Settling States and Participating Subdivisions; and (c) the portion of the Total Remediation Amount received by each Settling State or Participating Subdivision is less than or equal to the amount of the Alleged Harms allegedly suffered by such Settling State or Participating Subdivision;

3. The payment of the Total Remediation Amount by Walmart constitutes restitution and remediation (within the meaning of 26 U.S.C. § 162(f)(2)(A) and 26 C.F.R. § 1.162-21(e)(4)(i), (ii)) for alleged damage or harm (as compensation for alleged damage or harm arising out of alleged bodily injury) allegedly caused by Walmart in order to restore, in whole or in part, the Settling States, Participating Subdivisions, and persons to the same position or condition that they would be in had the Settling States, Participating Subdivisions, and persons not suffered the Alleged Harms, and constitutes restitution and

remediation for alleged damage or harm allegedly caused by the potential violation of a law and/or is an amount paid to come into compliance with the law; and

4. For the avoidance of doubt: (a) the entire Total Remediation Amount is properly characterized as described in Section V.F, (b) no portion of the Total Remediation Amount represents reimbursement to any Settling State or Participating Subdivision or other person or entity for the fees or costs of any investigation or litigation, including without limitation attorneys' fees, (c) no portion of the Global Settlement Amount represents the disgorgement of any allegedly ill-gotten gains, and (d) no portion of the Global Settlement Amount is paid for or in place of any fine, penalty, punitive damages, or other punitive assessments.

VI. Enforcement

A. *Enforceability.* This Agreement is enforceable only by the Settling States and Walmart; *provided*, *however*, that Released Entities may enforce Section X and Participating Subdivisions have the enforcement rights described in Section VI.D. Except to the extent allowed by the Injunctive Relief Terms, Settling States and Participating Subdivisions shall not have enforcement rights with respect to either the terms of this Agreement that apply only to or in other States or any Consent Judgment entered into by another Settling State. Participating Subdivisions shall not have enforcement rights against Walmart with respect to this Agreement or any Consent Judgment except that Participating Subdivisions shall have enforcement rights as set forth herein as to payments that would be allocated to the Subdivision Fund or Remediation Accounts Fund pursuant to Section V; *provided*, *however*, that each Settling State shall allow Participating Subdivisions in such Settling State to notify it of any perceived violations of this Agreement or the applicable Consent Judgment.

B. *Jurisdiction.* Walmart consents to the jurisdiction of the court in which the Consent Judgment is filed, limited to resolution of disputes identified in Section VI.F.2 for resolution in that court.

C. *Specific Terms Dispute Resolution*.

1. Any dispute that is addressed by the provisions set forth in the Injunctive Relief Terms shall be resolved as provided therein.

2. In the event that Walmart believes that the eighty-five percent (85%) requirement established in Section V.B.1 is not being satisfied, Walmart may request that Walmart and the Enforcement Committee meet and confer regarding the use of funds to implement Section V.B.1. The completion of such meet-and-confer process is a precondition to further action regarding any such dispute. Further action concerning Section V.B.1 shall (i) be limited to Walmart obtaining a reversion of its Payout Amount by no more than five percent (5%) of the difference between the actual amount of Opioid Remediation and the eighty-five percent (85%) requirement established in Section V.B.1; and (ii) only reduce payments to those Settling States and their Participating Subdivisions that are below the eighty-five percent (85%) requirement established in Section V.B.1;

provided that Walmart shall not obtain a reversion of funds restricted to future Opioid Remediation.

D. *State-Subdivision Enforcement*.

1. A Subdivision shall not have enforcement rights against a Settling State in which it is located with respect to this Agreement or any Consent Judgment except that a Participating Subdivision listed on Exhibit G shall have enforcement rights (a) as provided for in a State-Subdivision Agreement, Allocation Statute, or Statutory Trust with respect to intrastate allocation (b) in the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust, to address allegations that (i) the Settling State's use of Remediation Accounts Fund monies were not used for uses similar to or in the nature of those uses contained in Exhibit E; or (ii) a Settling State failed to pay funds directly from the Remediation Accounts Fund to a Participating Subdivision eligible to receive a block grant pursuant to Section V.E.2.b.

2. A Settling State shall have enforcement rights against a Participating Subdivision located in its territory (a) as provided for in a State-Subdivision Agreement, Allocation Statute, or Statutory Trust; or (b) in the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust, to address allegations that the Participating Subdivisions' uses of Remediation Accounts Fund monies were not used for purposes similar to or in the nature of those uses contained in Exhibit E.

3. As between Settling States and Participating Subdivisions, the above rights are contractual in nature and nothing herein is intended to limit, restrict, change or alter any other existing rights under law.

E. *Subdivision Payment Enforcement.* A Participating Subdivision listed on Exhibit G shall have the same right as a Settling State pursuant to Section VI.F.3.a(iv) to seek resolution regarding the failure by Walmart to make its Payout Amount.

F. *Other Terms Regarding Dispute Resolution*.

1. Except as provided by Section VI.C, the parties to a dispute shall promptly meet and confer in good faith to resolve any dispute. If the parties cannot resolve the dispute informally, and unless otherwise agreed in writing, they shall follow the remaining provisions of this Section VI.F to resolve the dispute.

2. Except to the extent provided by Section VI.C or Section VI.F.3, all disputes shall be resolved in either the court that entered the relevant Consent Judgment or, if no such Consent Judgment was entered, a state or territorial court with jurisdiction located wherever the seat of the relevant state government is located.

a. State court proceedings shall be governed by the rules and procedures of the relevant forum.

b. For the avoidance of doubt, disputes to be resolved in state court include, but are not limited to, the following:

(i) disputes concerning whether expenditures qualify as Opioid Remediation;

(ii) disputes between a Settling State and its Participating Subdivisions as provided by Section VI.D, except to the extent the State-Subdivision Agreement provides for other dispute resolution mechanisms. For the avoidance of doubt, disputes between a Settling State and any Participating Subdivision shall not be considered National Disputes;

(iii) whether this Agreement and relevant Consent Judgment are binding under state law;

(iv) the extent of the Attorney General's or other participating entity's authority under state law, including the extent of the authority to release claims;

(v) whether the definition of a Bar, a Case-Specific Resolution, Final Order, lead state agency as described in Section V.D.4.b, Later Litigating Subdivision, Litigating Subdivision, or Threshold Motion have been met; and

(vi) all other disputes not specifically identified in Section VI.C or Section VI.F.3.

c. Any Party may request that the National Arbitration Panel provide an interpretation of any provision of the settlement that is relevant to the state court determination, and the National Arbitration Panel shall make reasonable best efforts to supply such interpretation within the earlier of thirty (30) calendar days or the time period required by the state court proceedings. Any Party may submit that interpretation to the state court to the extent permitted by, and for such weight provided by, the state court's rules and procedures. If requested by a Party, the National Arbitration Panel shall request that its interpretation be accepted in the form of an *amicus curiae* brief, and any attorneys' fees and costs for preparing any such filing shall be paid for by the requesting Party.

3. National Disputes involving a Settling State, a Participating Subdivision that has enforcement rights pursuant to Section VI.A, and/or Walmart (together, "*Participating Parties*") shall be resolved by the National Arbitration Panel.

a. National Disputes are disputes that are not addressed by Section VI.C, and which are exceptions to Section VI.F.2's presumption of resolution in state courts because they involve issues of interpretation of terms contained in this Agreement applicable to all Settling States without reference to a particular State's law. Disputes between a Settling State and any Participating Subdivision shall not be considered National Disputes. National Disputes are limited to the following:

(i) the amount of withholding attributable to Non-Settling States;

(ii) issues involving the scope and definition of Product;

(iii) interpretation and application of the terms Alleged Harms," "Covered Conduct," "Released Entities," and "Released Claims";

(iv) the failure by the Settlement Fund Administrator to pay the Payout Amount or the Additional Remediation Amount in a Payment Year, but for the avoidance of doubt, disputes between Walmart and a Settling State over the amounts owed only to that state that do not affect any other Settling State shall not be considered National Disputes;

(v) the interpretation and application of any most-favored-nation provision in Section XII.E;

(vi) questions regarding the performance and/or removal of the Settlement Fund Administrator;

(vii) disputes involving liability of successor entities;

(viii) disputes that require a determination of the sufficiency of participation in order to qualify for Incentive Payments A, BC or D;

(ix) disputes requiring the interpretation of Agreement terms that are national in scope or impact, which shall mean disputes requiring the interpretation of Agreement terms that (i) concretely affect four (4) or more Settling States; and (ii) do not turn on unique definitions and interpretations under state law; and

(x) any dispute subject to resolution under Section VI.F.1 but for which all parties to the dispute agree to arbitration before the National Arbitration Panel under the provisions of this Section VI.F.2.

b. The National Arbitration Panel shall be comprised of three (3) arbitrators. One (1) arbitrator shall be chosen by Walmart, one (1) arbitrator shall be chosen by the Enforcement Committee with due input from Participating Subdivisions listed on Exhibit G, and the third arbitrator shall be agreed upon by the first two (2) arbitrators. The membership of the National Arbitration Panel is intended to remain constant throughout the term of this Agreement, but in the event that replacements are required, the retiring arbitrator shall be replaced by the party that selected him/her.

c. The National Arbitration Panel shall make reasonable best efforts to decide all matters within one hundred eighty (180) calendar days of filing, and in no event shall it take longer than one (1) year.

d. The National Arbitration Panel shall conduct all proceedings in a reasonably streamlined process consistent with an opportunity for the parties to be heard. Issues shall be resolved without the need for live witnesses where feasible,

and with a presumption in favor of remote participation to minimize the burdens on the Participating Parties.

e. To the extent allowed under state law, a Settling State, a Participating Subdivision that has enforcement rights pursuant to Section VI.A, and (at any Participating Party's request) the National Arbitration Panel may certify to an appropriate state court any question of state law. The National Arbitration Panel shall be bound by a final state court determination of such a certified question. The time period for the arbitration shall be tolled during the course of the certification process.

f. The arbitrators will give due deference to any authoritative interpretation of state law, including any declaratory judgment or similar relief obtained by a Settling State, a Participating Subdivision that has enforcement rights pursuant to Section VI.A, or Walmart on a state law issue.

g. The decisions of the National Arbitration Panel shall be binding on Settling States, Participating Subdivisions, Walmart, and the Settlement Fund Administrator. In any proceeding before the National Arbitration Panel involving a dispute between a Settling State and Walmart whose resolution could prejudice the rights of a Participating Subdivision(s) in that Settling State, such Participating Subdivision(s) shall be allowed to file a statement of view in the proceeding.

h. Nothing herein shall be construed so as to limit or otherwise restrict a State from seeking injunctive or other equitable relief in state court to protect the health, safety, or welfare of its citizens.

i. Each Participating Party shall bear its own costs in any arbitration or court proceeding arising under this Section VI. The costs for the arbitrators on the National Arbitration Panel shall be divided and paid equally by the disputing sides for each individual dispute, *e.g.*, a dispute between Walmart and Settling States/Participating Subdivisions shall be split fifty percent (50%) by Walmart and fifty percent (50%) by the Settling States/Participating Subdivisions that are parties to the dispute; a dispute between a Settling State and a Participating Subdivision shall be split fifty percent (50%) by the Settling State that is party to the dispute and fifty percent (50%) by any Participating Subdivisions that are parties to the dispute.

4. Prior to initiating an action to enforce pursuant to this Section VI.F, the complaining Participating Party must:

a. Provide written notice to the Enforcement Committee of its complaint, including the provision of the Consent Judgment and/or Agreement that the practice appears to violate, as well as the basis for its interpretation of the disputed provision. The Enforcement Committee shall establish a reasonable process and timeline for obtaining additional information from the involved parties; *provided*, *however*, that the date the Enforcement Committee establishes for

obtaining additional information from the parties shall not be more than forty-five (45) calendar days following the notice. The Enforcement Committee may advise the involved parties of its views on the complaint and/or seek to resolve the complaint informally.

b. Wait to commence any enforcement action until thirty (30) calendar days after the date that the Enforcement Committee establishes for obtaining additional information from the involved parties.

5. If the Participating Parties to a dispute cannot agree on the proper forum for resolution of the dispute under the provisions of Section VI.F.1 or Section VI.F.2, a committee comprising the Enforcement Committee and sufficient representatives of Walmart such that the members of the Enforcement Committee have a majority of one (1) member will determine, within twenty-eight (28) calendar days of receiving notification of the dispute relating to the proper forum, the forum where the dispute will be initiated. The forum identified by such committee shall be the sole forum for resolving the issue of which forum will hear the substantive dispute, and the committee's identification of such forum in the first instance shall not be entitled to deference by the forum selected.

G. *No Effect.* Nothing in this Agreement shall be interpreted to limit the Settling States' Civil Investigative Demand ("*CID*") or investigative subpoena authority, to the extent such authority exists under applicable state law and the CID or investigative subpoena is issued pursuant to such authority, and Walmart reserves all of its rights in connection with a CID or investigative subpoena issued pursuant to such authority.

VII. Participation by Subdivisions

A. *Notice.* Prior to the State Participation Date, the Parties shall agree on a vendor to serve as the Implementation Administrator and provide notice pursuant to this Section VII.A. No later than fifteen (15) calendar days after the State Participation Date, the Implementation Administrator shall send individual written notice (which may be delivered via e-mail or other electronic means) of the opportunity to participate in this Agreement and the requirements of participation to all Subdivisions in the Settling States that are (1) Litigating Subdivisions or (2) Non-Litigating Subdivisions listed on Exhibit G. To the extent a Special District is entitled to an allocation for a direct payment through its inclusion in Exhibit G pursuant to a State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution, the Implementation Administrator, with the cooperation of the Settling States, shall also send individual written notice (which may be delivered via e-mail or other electronic means) of the opportunity to participate in this Agreement and the requirements of participation to such Special Districts. Unless otherwise agreed by the Parties, the version of Exhibit G used for notice shall be the one in place as of the State Participation Date. Notice (which may be delivered via e-mail or other electronic means) shall also be provided simultaneously to counsel of record for Litigating Subdivisions and known counsel for Non-Litigating Subdivisions and Special Districts listed on Exhibit G. The notice will include that the deadline for becoming a Participating Subdivision is the Threshold Subdivision Participation Date. Nothing contained herein shall preclude a Settling State from providing further notice to or otherwise contacting any of its Subdivisions about becoming a Participating

Subdivision, including beginning any of the activities described in this paragraph prior to the State Participation Date.

B. *Requirements for Becoming a Participating Subdivision—Non-Litigating Subdivisions*. A Non-Litigating Subdivision in a Settling State may become a Participating Subdivision by returning an executed Subdivision Participation Agreement to the Settlement Fund Administrator (subject to Section VII.D) specifying (1) that the Subdivision agrees to the terms of this Agreement pertaining to Subdivisions, (2) that the Subdivision releases all Released Claims against all Released Entities, (3) that the Subdivision agrees to use monies it receives, if any, from the Settlement Fund pursuant to the applicable requirements of Section V; *provided*, *however*, that Non-Litigating Subdivisions may only use monies originating from the Settlement Fund for purposes that qualify as Opioid Remediation, and (4) that the Subdivision submits to the jurisdiction of the court where the relevant state seat of government is located for purposes limited to that court's role under this Agreement. The required Participation Agreement is attached as Exhibit K.

C. *Requirements for Becoming a Participating Subdivision—Litigating Subdivisions/Later Litigating Subdivisions*. A Litigating Subdivision or Later Litigating Subdivision in a Settling State may become a Participating Subdivision by returning an executed Subdivision Participation Agreement to the Settlement Fund Administrator (subject to Section VII.D) and upon prompt dismissal with prejudice of its lawsuit following the Threshold Subdivision Participation Date or the date on which the conditions for effectiveness in Section II.C have been met, whichever is later. A Settling State may require each Litigating Subdivision in that State to specify on the Participation Agreement whether its counsel has waived any contingency fee contract with that Participating Subdivision and whether, if eligible, it intends to seek fees pursuant to Exhibit R. The Settlement Fund Administrator shall provide quarterly reports of this information to the parties organized by Settling State. A Litigating Subdivision or Later Litigating Subdivision may not become a Participating Subdivision after the completion of opening statements in a trial of the lawsuit it brought that includes a Released Claim against a Released Entity. For avoidance of doubt, where a subdivision official other than a General-Purpose Government has filed a lawsuit that includes a Released Claim against a Released Entity in a direct, *parens patriae*, or any other capacity, that Subdivision may become a Participating Subdivision only if, in addition to the other requirements of this Section VII.C, the lawsuit filed by the subdivision official has also been dismissed with prejudice.

D. All Subdivision Participation Agreements returned to the Settlement Fund Administrator prior to the Effective Date (if any) shall be held by the Settlement Fund Administrator until the Effective Date, at which time the obligations created by such forms and releases in them become effective. If, for any reason, the Settlement Agreement does not become effective, all obligations created by such forms and releases in them shall be void *ab initio* and all Settlement Participation Forms shall be returned to Counsel for Litigating Subdivisions or to the Subdivisions not represented by counsel or destroyed to the extent that such destruction is not prohibited by then-existing document preservation obligations.

E. *Ineligible Subdivisions*. Subdivisions in Non-Settling States and Prior Litigating Subdivisions are not eligible to be Participating Subdivisions.

F. *Non-Participating Subdivisions*. Non-Participating Subdivisions shall not directly receive any portion of any Payout Amount, including from the State Fund and direct distributions from the Remediation Accounts Fund; however, a Settling State may choose to fund future Opioid Remediation that indirectly benefits Non-Participating Subdivisions.

G. *Unpaid Allocations to Non-Participating Subdivisions*. Any payments allocated pursuant to Section V.D to a Non-Participating Subdivision that cannot be paid pursuant to this Section VII will either be allocated to the Settlement Fund for the Settling State in which the Non-Participating Subdivision is located, unless those payments are redirected elsewhere by a State-Subdivision Agreement or by a Statutory Trust, or be refunded to Walmart, if such funds may no longer be earned by the applicable Settling State pursuant to Section IV.C.1.

VIII. Additional Remediation

A. *Additional Remediation Amount.* Pursuant to the maximum payment amounts set forth in Exhibit M and subject to the reduction specified in Section VIII.B, Walmart shall pay an Additional Remediation Amount to the Settling States.

B. *Reduction of Additional Remediation Amount.* The amounts owed by Walmart pursuant to this Section VIII shall be reduced by the allocations set forth on Exhibit N for any Non-Settling States.

C. *Use of Funds.* All funds paid as an Additional Remediation Amount shall be part of the Total Remediation Amount, shall be used for Opioid Remediation, except as allowed by Section V.B.2, and shall be governed by the same requirements as specified in Section V.F. Such funds shall be disbursed by the Settlement Fund Administrator to the relevant Settling States as allocated by Exhibit N as part of the first payment in Payment Year 1.

D. For the avoidance of doubt, (1) notwithstanding anything to the contrary in Section VIII.C, but subject to the limitation in the second sentence of Section V.B.1 and the identification and reporting requirements in Section V.B.2, a Settling State that retained outside counsel in connection with the investigation of one or more Chain Pharmacies, as that term is defined in Exhibit S, that receives an Additional Remediation Amount because the Settling State was not otherwise eligible to receive funds from the State Outside Counsel Fee Fund may choose to have the Additional Remediation Amount designated to pay the Settling State's outside counsel, and may instruct the Settlement Fund Administrator to pay those funds directly to the Settling State's outside counsel, and (2) Additional Remediation Amount funds, including funds designated by a Settling State to pay its outside counsel under this paragraph, shall not be subject to allocation as provided in Sections V.C through V.E.

IX. Plaintiffs' Attorneys' Fees and Costs

The Agreement on Attorneys' Fees, Costs, and Expenses is set forth in Exhibit R and incorporated herein by reference. The Agreement on the State Outside Counsel Fee Fund and Agreement on the Joint State Cost Fund are set forth in Exhibit S and Exhibit T, respectively, and are incorporated herein by reference.

X. Release

A. *Scope.* As of the Threshold Subdivision Participation Date, the Released Entities are hereby released and forever discharged from all of the Releasors' Released Claims. Each Settling State (for itself and its Releasors) and Participating Subdivision (for itself and its Releasors) hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim; or to cause, assist in bringing or permit to be brought, filed, or claimed; or to otherwise seek to establish liability for any Released Claim against any Released Entity in any forum whatsoever. The releases provided for in this Agreement are broad, shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to any Released Claim, and extend to the full extent of the power of each Settling State and its Attorney General to release claims. This Agreement shall be a complete bar to any Released Claim.

B. *Claim-Over and Non-Party Settlement*.

1. It is the intent of the Parties that:

a. Released Entities should not seek contribution or indemnification (other than pursuant to an insurance contract), from other parties for their payment obligations under this Agreement;

b. the payments made under this Agreement shall be the sole payments made by the Released Entities to the Releasors involving, arising out of, or related to Alleged Harms and/or Covered Conduct (or conduct that would be Covered Conduct if engaged in by a Released Entity);

c. Claims by Releasors against non-Parties shall not result in additional payments by Released Entities, whether through contribution, indemnification or any other means; and

d. the Agreement meets the requirements of the Uniform Contribution Among Joint Tortfeasors Act and any similar state law or doctrine that reduces or discharges a released party's liability to any other parties.

The provisions of this Section X.B are to be implemented consistent with these principles. This Agreement and the releases and dismissals provided for herein are made in good faith.

2. No Released Entity shall seek to recover for amounts paid under this Agreement based on indemnification, contribution, or any other theory from a manufacturer, pharmacy, hospital, pharmacy benefit manager, health insurer, third-party vendor, trade association, distributor, or health care practitioner; *provided* that a Released Entity shall be relieved of this prohibition with respect to any entity that asserts a Claim-Over against it. For the avoidance of doubt, nothing herein shall prohibit a Released Entity from recovering amounts owed pursuant to insurance contracts.

3. If any Releasor enters into a Non-Party Settlement on or after the Effective Date, including in any bankruptcy case or through any plan of reorganization (whether individually or as a class of creditors), the Releasor will include (or in the case of a Non-

Party Settlement made in connection with a bankruptcy case, will cause the debtor to include), unless prohibited from doing so under applicable law, in the Non-Party Settlement a prohibition on contribution or indemnity of any kind substantially equivalent to that required from Walmart in Section X.B.2, or a release from such Non-Released Entity in favor of the Released Entities (in a form equivalent to the releases contained in this Agreement) of any Claim-Over. The obligation to obtain the prohibition and/or release required by this subsection is a material term of this Agreement.

4. If any Releasor obtains a judgment with respect to a Non-Party Covered Conduct Claim against a Non-Released Entity that does not contain the prohibition described in Section X.B.3, or any Releasor files a Non-Party Covered Conduct Claim against a Non-Released Entity in bankruptcy or a Releasor is prevented for any reason from obtaining a prohibition/release in a Non-Party Settlement as provided in Section X.B.3, and such Non-Released Entity asserts a Claim-Over against a Released Entity, the Released Entity shall be relieved of the prohibition in Section X.B.2 with respect to that Non-Released Entity and that Releasor and Walmart shall take the following actions to ensure that the Released Entities do not pay more with respect to Alleged Harms and/or Covered Conduct to Releasors or to Non-Released Entities than the amounts owed under this Settlement Agreement by Walmart:

a. Walmart shall notify that Releasor of the Claim-Over within sixty (60) calendar days of the assertion of the Claim-Over or sixty (60) calendar days of the Effective Date of this Agreement, whichever is later;

b. Walmart and that Releasor shall meet and confer concerning the means to hold Released Entities harmless and ensure that they are not required to pay more with respect to Alleged Harms and/or Covered Conduct than the amounts owed by Walmart under this Agreement;

c. That Releasor and Walmart shall take steps sufficient and permissible under the law of the State of the Releasor to hold Released Entities harmless from the Claim-Over and ensure Released Entities are not required to pay more with respect to Alleged Harms and/or Covered Conduct than the amounts owed by Walmart under this Agreement. Such steps may include, where permissible:

(i) Filing of motions to dismiss or such other appropriate motion by Walmart or Released Entities, and supported by Releasors, in response to any claim filed in litigation or arbitration;

(ii) Reduction of that Releasors' Claim and any judgment it has obtained or may obtain against such Non-Released Entity by whatever amount is necessary to extinguish such Claim-Over under applicable law, up to the amount that Releasor has obtained, may obtain, or has authority to control from such Non-Released Entity;

(iii) Placement into escrow of funds paid by the Non-Released Entities such that those funds are available to satisfy the Claim-Over;

(iv) Return of monies paid by Walmart to that Releasor under this Agreement to permit satisfaction of a judgment against or settlement with the Non-Released Entity to satisfy the Claim-Over;

(v) Payment of monies to Walmart by that Releasor to ensure Walmart is held harmless from such Claim-Over, up to the amount that Releasor has obtained, may obtain, or has authority to control from such Non-Released Entity;

(vi) Credit to Walmart under this Agreement to reduce the overall amounts to be paid under the Agreement such that it is held harmless from the Claim-Over; and

(vii) Such other actions as that Releasor and Walmart may devise to hold Walmart harmless from the Claim-Over.

d. The actions of that Releasor and Walmart taken pursuant to clause (c) above must, in combination, ensure Walmart is not required to pay more with respect to Alleged Harms and/or Covered Conduct than the amounts owed by Walmart under this Agreement.

e. In the event of any dispute over the sufficiency of the actions taken pursuant to clause (c) above, Releasor and Walmart may seek review by the National Arbitration Panel, or, upon consent of the parties to the dispute, by the state court where the relevant Consent Judgment was filed. The National Arbitration Panel shall have authority to order a remedy, including one or more of the actions specified in clause (c), sufficient to hold Released Entities fully harmless. In the event that the Panel's actions do not result in Released Entities being held fully harmless, Walmart shall have a claim for breach of this Agreement by Releasors, with the remedy being payment of sufficient funds to hold Walmart harmless from the Claim-Over. For the avoidance of doubt, the prior sentence does not limit or eliminate any other remedy that Walmart may have.

5. To the extent that the Claim-Over is based on a contractual indemnity, the obligations under Section X.B.4 shall extend solely to a Non-Party Covered Conduct Claim against a pharmacy, distributor, clinic, hospital or other purchaser or dispenser of Products, a manufacturer that sold Products, a consultant, and/or a pharmacy benefit manager or other third-party payor. Walmart shall notify the Settling States, to the extent permitted by applicable law, in the event that any of these types of Non-Released Entity asserts a Claim-Over arising out of contractual indemnity against it.

C. *Indemnification and Contribution Prohibited.* No Released Entity shall seek to recover for amounts paid under this Agreement based on indemnification, contribution, or any other theory, from a manufacturer, pharmacy, hospital, pharmacy benefit manager, health insurer, third-party vendor, trade association, distributor, or health care practitioner; *provided* that a

Released Entity shall be relieved of this prohibition with respect to any entity that asserts a Claim-Over against it. For the avoidance of doubt, nothing herein shall prohibit a Released Entity from recovering amounts owed pursuant to insurance contracts. For the avoidance of doubt, nothing herein shall prohibit a Released Entity from recovering amounts owed pursuant to insurance contracts.

D. *General Release*. In connection with the releases provided for in this Agreement, each Settling State (for itself and its Releasors) and Participating Subdivision (for itself and its Releasors) expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any State or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent**. A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release and that if known by him or her, would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Settling State (for itself and its Releasors) and Participating Subdivision (for itself and its Releasors) hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date even if Releasors do not know or suspect such claims to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and even if knowledge of the existence of such claims would materially affect the Settling States' decision to enter into this Agreement or the Participating Subdivisions' decision to participate in this Agreement.

E. *Assigned Interest Waiver*. To the extent that any Settling State has any direct or indirect interest in any rights of a third-party that is a debtor under the Bankruptcy Code as a result of a claim arising out of Covered Conduct or Alleged Harms by way of assignment or otherwise, including as a result of being the beneficiary of a trust or other distribution entity, to assert claims against Walmart (whether derivatively or otherwise), under any legal or equitable theory, including for indemnification, contribution, or subrogation, such Settling State waives the right to assert any such claim, or to receive a distribution or any benefit on account of such claim and such claim, distribution, or benefit shall be deemed assigned to Walmart.

F. *Res Judicata*. Nothing in this Agreement shall be deemed to reduce the scope of the res judicata or claim preclusive effect that the settlement memorialized in this Agreement, and/or any Consent Judgment or other judgment entered on this Agreement, gives rise to under applicable law.

G. *Representation and Warranty*. The signatories hereto on behalf of their respective Settling States expressly represent and warrant that they have (or will obtain no later than the Threshold Subdivision Participation Date) the authority to settle and release, to the maximum extent of the State's power, all Released Claims of (1) their respective Settling States, (2) all past

and present executive departments, state agencies, divisions, boards, commissions and instrumentalities with the regulatory authority to enforce state and federal controlled substances acts, and (3) any of their respective Settling State's past and present executive departments, agencies, divisions, boards, commissions and instrumentalities that have the authority to bring Claims related to Alleged Harms and/or Covered Conduct seeking money (including abatement and/or remediation) or revocation of a pharmaceutical distribution or dispensing license. For the purposes of clause (3) above, executive departments, agencies, divisions, boards, commissions, and instrumentalities are those that are under the executive authority or direct control of the State's Governor. Also for the purposes of clause (3), a release from a State's Governor, to be materially similar to that in Exhibit X, is sufficient to demonstrate that the appropriate releases have been obtained.

H. *Effectiveness*. The releases set forth in this Agreement shall not be impacted in any way by any dispute that exists, has existed, or may later exist between or among the Releasors. Nor shall such releases be impacted in any way by any current or future law, regulation, ordinance, or court or agency order limiting, seizing, or controlling the distribution or use of the Settlement Fund or any portion thereof, or by the enactment of future laws, or by any seizure of the Settlement Fund or any portion thereof.

I. *Cooperation*. Settling States will meet and confer with Walmart and simultaneously make reasonable efforts to resolve any action filed by a Subdivision involving any Covered Conduct, Alleged Harms, or a Product that remains pending against Walmart after the First Subdivision Participation Date or that is filed by a Subdivision against Walmart after November 14, 2022. Releasors (i) will not encourage any person or entity to bring or maintain any Released Claim against any Released Entity and (ii) will reasonably cooperate with and not oppose any effort by a Released Entity to secure the prompt dismissal of any and all Released Claims.

J. *Non-Released Claims.* Notwithstanding the foregoing or anything in the definition of Released Claims, this Agreement does not waive, release or limit any criminal liability, Claims for liability under tax law, Claims under securities law by a State Releasor as investor, Claims against parties who are not Released Entities, Claims by private individuals, and any Claims arising under this Agreement for enforcement of this Agreement.

XI. Later Litigating Subdivisions; Non-Settling States

A. *Released Claims against Released Entities.* If a Later Litigating Subdivision in a Settling State maintains a lawsuit for a Released Claim against a Released Entity after the Effective Date, the Released Entity shall take ordinary and reasonable measures to defend the action, including filing a Threshold Motion with respect to the Released Claim. The Released Entity shall further notify the Settling State and Settlement Fund Administrator immediately upon notice of a Later Litigating Subdivision bringing a lawsuit for a Released Claim and shall not oppose a Settling State's submission in support of the Threshold Motion. Walmart shall give the relevant Settling State a reasonable opportunity to extinguish the Released Claims without any payment or any other obligations being imposed upon any Released Entities (apart from the Global Settlement Amount payable by Walmart under the Agreement or the Injunctive Relief Terms incurred by it). The relevant Settling State and Walmart shall confer and use reasonable efforts to promptly resolve

the lawsuit so that it is dismissed with prejudice. Nothing in this subsection creates an obligation for a Settling State to make a monetary payment or incur any other obligation to an entity filing a lawsuit.

B. *Non-Settling States.* Non-Settling States shall not be eligible for any payments or have any rights in connection with this Agreement.

C. *Settlement Class Resolution Opt Outs.* If a Settling State is eligible for Incentive Payment A on the basis of a Settlement Class Resolution, and a Primary Subdivision that opted out of the Settlement Class Resolution maintains a lawsuit asserting a Released Claim against a Released Entity, the Released Entity shall take ordinary and reasonable measures to defend the action, including filing a Threshold Motion with respect to the Released Claim. The Settling State shall seek to obtain either dismissal of the lawsuit in cooperation with Walmart, or a release of the Primary Subdivision's claims.

D. *Revoked Bar, Settlement Class Resolution, or Case-Specific Resolution.* If a Settling State received any Payout Amounts that included any incentive payments earned as a result of the existence of a Bar, Settlement Class Resolution, or Case-Specific Resolution in a Settling State, and there is subsequently a Revocation Event with respect to that Bar, Settlement Class Resolution, or Case-Specific Resolution after the determination of the amount of such Payout Amount, that Settling State shall seek to obtain a release of the claims impacted by the Revocation Event, including but not limited to defending the legality of the Bar, obtaining a dismissal of the claims made against the Released Entity, and obtaining releases from impacted Subdivisions.

XII. Miscellaneous

A. *Population of General-Purpose Governments.* The population figures for General-Purpose Governments shall be the published U.S. Census Bureau's population estimates for July 1, 2019, released May 2020. These population figures shall remain unchanged during the term of this Agreement.[12]

B. *Population of Special Districts*. For any purpose in this Agreement in which the population of a Special District is used other than Section IV.E.1.a and Section IV.E.3.b: (a) School Districts' populations will be measured by the number of students enrolled who are eligible under the Individuals with Disabilities Education Act ("*IDEA*") or Section 504 of the Rehabilitation Act of 1973; (b) Health Districts' and Hospital Districts' populations will be measured at twenty-five percent (25%) of discharges; and (c) all other Special Districts' (including fire districts' and library districts') populations will be measured at ten percent (10%) of the population served. For the avoidance of doubt, this means that California healthcare districts will be measured at ten percent (10%) of their membership. Walmart and the Enforcement Committee shall meet and confer in order to agree on data sources for purposes of this Section XII.B prior to the State Participation Date.

[12] The estimates for counties and parishes were accessed at https://www.census.gov/data/datasets/time-series/demo/popest/2010s-countiestotal.html. The estimates for cities and towns can currently be found at https://www.census.gov/data/datasets/time-series/demo/popest/2010s-total-cities-and-towns.html.

C. *Population Associated with Sheriffs*. For any purpose in this Agreement in which the population associated with a lawsuit by a sheriff is used, the population will be measured at twenty percent (20%) of the capacity of the jail(s) operated by the sheriff.

D. *No Admission.* The Parties intend the settlement as described herein to be a final and complete resolution of all disputes between Walmart and all Releasors. Walmart is entering into this Agreement solely for the purposes of settlement, to resolve all Actions and Released Claims and thereby avoid significant expense, inconvenience and uncertainty. Walmart denies the allegations in the Actions and denies any civil or criminal liability in the Actions. Nothing contained herein may be taken as or deemed to be an admission or concession by Walmart of: (i) any violation of any law, regulation, or ordinance; (ii) any fault, liability, or wrongdoing; (iii) the strength or weakness of any Claim or defense or allegation made in any Action, or in any other past, present or future proceeding relating to any Covered Conduct, Alleged Harms, or any Product; (iv) the legal viability of the Claims and theories in any Action, including but not limited to the legal viability of the relief sought; or (v) any other matter of fact or law. Nothing in this Agreement shall be construed or used to prohibit any Released Entity from engaging in the conduct of its business relating to any Product in accordance with the Injunctive Relief Terms and applicable laws and regulations.

E. *Most-Favored-Nation Provision*.

1. If, after the Effective Date, Walmart enters into any settlement agreement with any Non-Settling State that resolves Claims similar in scope to the Claims released by a Settling State under this Agreement on overall payment terms that are more favorable to such Non-Settling State than the overall payment terms of the Agreement (after due consideration of relevant differences in population or other appropriate factors), then the Settling States may elect to seek review, pursuant to Section XII.E.3, of the overall payment terms of this Agreement and the Non-Settling State agreement so that such Settling State(s) may obtain, with respect to Walmart, overall payment terms at least as favorable as those obtained by such Non-Settling State. "*Overall payment terms*" refers to consideration of all payment terms of the two agreements, taken together, including, but not limited to the amounts of payments, the timing of payments, and conditions or contingencies on payments.

2. For any settlement with a Non-Settling State involving Released Claims that is entered into after the Effective Date, Walmart shall provide the Enforcement Committee with a copy of the settlement agreement or relevant consent judgment within thirty (30) calendar days of the consummation of such settlement. The Enforcement Committee will promptly distribute such copy to all Settling States.

3. In the event that one or more Settling State(s) believes that the overall payment terms of an agreement by Walmart with a Non-Settling State are more favorable to the Non-Settling State, based on the totality of the considerations set forth in Section XII.E.1, the Settling State(s) and Walmart shall engage in the following process:

a. The Settling State(s) shall provide notice, within sixty (60) calendar days of the date on which the Enforcement Committee provides a settlement

agreement or consent judgment to Walmart of their intent to seek revision of this Agreement to provide payment terms that are, on an overall basis, as favorable as those obtained by the Non-Settling State. To the extent allowed by law, such notice shall be confidential and not disclosed publicly and shall provide, in detail, the basis for the State's belief that it is entitled to a revision of the Agreement.

b. Walmart shall, within thirty (30) calendar days, provide a response to the Settling State(s), explaining its position, in detail, as to whether is the Settling State(s) are entitled to more favorable overall payment terms than those provided for in this Agreement.

c. In the event the Settling State(s) and Walmart do not reach agreement as to the application of Section XII.E.1, the Settling State(s) may petition the National Arbitration Panel to seek a ruling from the Panel as to the applicability of Section XII.E.1, provided that the Settling State(s) may seek such review only if at least five (5) Settling States co-sign the petition. The Panel shall consider submissions and argument by the parties pursuant to the procedures set forth in Section VI.F.3.

d. The Settling State and Walmart shall be bound by the determination of the National Arbitration Panel.

4. This Section XII.E does not apply to, and there is no ability of any Settling State to seek or obtain revision of this Agreement based on, any Non-Settling State agreement with Walmart that is entered into with: (a) a Non-Settling State after a date ninety (90) calendar days prior to the scheduled start date of a trial between Walmart and the Non-Settling State or any severed or bifurcated portion thereof, provided that, where, in order to complete a settlement, a Non-Settling State and Walmart jointly request an adjournment of the scheduled start date of a trial within ninety (90) days of that date, this exception will apply as if the trial date had not been adjourned; (b) a Non-Settling State that previously litigated to judgment a case related to opioids against any manufacturer, distributor, or pharmacy; or (c) a Non-Settling State that has obtained any court order or judicial determination that grants judgment (in whole or in part) against Walmart. For avoidance of doubt, the National Arbitration Panel shall have no power to review agreements described in this paragraph.

5. This Section XII.E does not apply to, and there is no ability of any Settling State to seek or obtain revision of this Agreement based on, any agreement between Walmart and Non-Participating Subdivisions.

6. This Section XII.E will not apply to any agreement entered into more than eighteen (18) months after the Effective Date.

F. *Tax Cooperation and Reporting*.

1. Upon request by Walmart, the Settling States and Participating Subdivisions agree to perform such further acts and to execute and deliver such further documents as may be reasonably necessary for Walmart to establish the statements set forth in Section

V.F to the satisfaction of their tax advisors, their independent financial auditors, the Internal Revenue Service, or any other governmental authority, including as contemplated by Treasury Regulations Section 1.162-21(b)(3)(ii) and any subsequently proposed or finalized relevant regulations or administrative guidance.

2. Without limiting the generality of Section XII.F.1, each Settling State and Participating Subdivision shall cooperate in good faith with Walmart with respect to any tax claim, dispute, investigation, audit, examination, contest, litigation, or other proceeding relating to this Agreement.

3. The Designated State, on behalf of all Settling States and Participating Subdivisions, shall designate one of its officers or employees to act as the "appropriate official" within the meaning of Treasury Regulations Section 1.6050X-1(f)(1)(ii)(B) (the "*Appropriate Official*"). The Designated State shall direct and ensure that the Appropriate Official timely (a) files (i) at the time this Agreement becomes binding on the Parties, an IRS Form 1098-F in the form attached as Exhibit U with respect to Walmart and (ii) any legally required returns or amended returns with any applicable governmental authority, or any returns requested by Walmart, and (b) provides to Walmart a copy of (i) the IRS Form 1098-F filed with respect to Walmart and (ii) any legally required written statement pursuant to any applicable law and any other document referred to in clause (a)(ii) above. Any such form, return, or statement shall be prepared and filed in a manner fully consistent with Section V.F.

4. Any return, amended return, or written statement filed or provided pursuant to Section XII.F.3, and any similar document, shall be prepared and filed in a manner consistent with reporting the Global Settlement Amount as the "Total amount to be paid" pursuant to this Agreement in Box 1 of IRS Form 1098-F and the Total Remediation Amount as "Restitution/remediation amount" in Box 2 of IRS Form 1098-F, as reflected in the attached Exhibit U. If the Designated State or Appropriate Official shall be required to file any return, amended return, or written statement contemplated by this Section XII.F other than an IRS Form 1098-F in the form attached as Exhibit U, the Designated State shall direct and ensure that the Appropriate Official provides to Walmart a draft of such return, amended return, or written statement no later than sixty (60) calendar days prior to the due date thereof, and shall accept any reasonable revisions from Walmart on the return, amended return, or written statement.

5. For the avoidance of doubt, neither Walmart nor the Settling States and Participating Subdivisions make any warranty or representation to any Settling State, Participating Subdivision, or Releasor as to the tax consequences of the payment of the Total Remediation Amount (or any portion thereof).

G. *No Third-Party Beneficiaries.* Except as expressly provided in this Agreement, no portion of this Agreement shall provide any rights to, or be enforceable by, any person or entity that is not a Settling State or Released Entity. No Settling State may assign or otherwise convey any right to enforce any provision of this Agreement.

H. *Calculation*. Any figure or percentage referred to in this Agreement shall be carried to seven decimal places.

I. *Construction*. None of the Parties and no Participating Subdivision shall be considered to be the drafter of this Agreement or of any of its provisions for the purpose of any statute, case law, or rule of interpretation or construction that would or might cause any provision to be construed against the drafter of this Agreement. The headings of the provisions of this Agreement are not binding and are for reference only and do not affect the meaning of this Agreement.

J. *Cooperation*. Each Party and each Participating Subdivision agrees to use reasonable efforts and to cooperate with the other Parties and Participating Subdivisions to cause this Agreement and Consent Judgments to become effective, to obtain all necessary approvals, consents and authorizations, if any, and to execute all documents and to take such other action as may be appropriate in connection herewith. Consistent with the foregoing, each Party and each Participating Subdivision agrees that it will not directly or indirectly assist or encourage any challenge to this Agreement or any Consent Judgment by any other person, and will support the integrity and enforcement of the terms of this Agreement and the Consent Judgments.

K. *Entire Agreement*. This Agreement, including its exhibits and any other attachments, embodies the entire agreement and understanding between and among the Parties and Participating Subdivisions relating to the subject matter hereof and supersedes (1) all prior agreements and understandings relating to such subject matter, whether written or oral and (2) all purportedly contemporaneous oral agreements and understandings relating to such subject matter.

L. *Execution*. This Agreement may be executed in counterparts and by different signatories on separate counterparts, each of which shall be deemed an original, but all of which shall together be one and the same Agreement. One or more counterparts of this Agreement may be delivered by facsimile or electronic transmission with the intent that it or they shall constitute an original counterpart hereof. One or more counterparts of this Agreement may be signed by electronic signature.

M. *Good Faith and Voluntary Entry*. Each Party warrants and represents that it negotiated the terms of this Agreement in good faith. Each of the Parties and Participating Subdivisions warrants and represents that it freely and voluntarily entered into this Agreement without any degree of duress or compulsion. The Parties and Participating Subdivisions state that no promise of any kind or nature whatsoever (other than the written terms of this Agreement) was made to them to induce them to enter into this Agreement.

N. *Legal Obligations*. Nothing in this Agreement shall relieve Walmart of the obligation to comply with all state and federal laws, regulations or rules, nor does any provision herein permit any acts or practices prohibited by such laws, regulations, or rules. Except with respect to the Injunctive Relief Terms, in the event of a conflict between this Agreement and any requirement or requirements of federal, state, or local laws, such that Walmart cannot comply with this Agreement without violating such a requirement or requirements, Walmart shall document such conflicts and notify the Attorney(s) General of the relevant Settling State(s) that it intends to comply with the requirement or requirements to the extent necessary to eliminate the conflict.

With respect to the Injunctive Relief Terms, in the event of such a conflict, the procedures set forth in Exhibit P at § I(4)(c) of the Injunctive Relief Terms will be followed.

O. *No Prevailing Party.* The Parties and Participating Subdivisions each agree that they are not the prevailing party in this action, for purposes of any claim for fees, costs, or expenses as prevailing parties arising under common law or under the terms of any statute, because the Parties and Participating Subdivisions have reached a good faith settlement. The Parties and Participating Subdivisions each further waive any right to challenge or contest the validity of this Agreement on any ground, including, without limitation, that any term is unconstitutional or is preempted by, or in conflict with, any current or future law. Nothing in the previous sentence shall modify, or be construed to conflict with, Section XII.N.

P. *Non-Admissibility*. Neither this Agreement nor any act performed or document executed pursuant to or in furtherance of this Agreement: (i) is or may be deemed to be or may be used as an admission or evidence relating to any matter of fact or law alleged in the Actions, the strength or weakness of any Claim or defense or allegation made in those cases, or any wrongdoing, fault, or liability of any Released Entities; or (ii) is or may be deemed to be or may be used as an admission or evidence relating to any liability, fault or omission of Released Entities in any civil, criminal or administrative proceeding in any court, administrative agency or other tribunal. Neither this Agreement nor any act performed or document executed pursuant to or in furtherance of this Agreement shall be admissible in any proceeding for any purpose, except to enforce the terms of this Agreement, and except that Released Entities may file or use this Agreement in any action (1) involving a determination regarding insurance coverage; (2) involving a determination of the taxable income or tax liability of any Released Entities; (3) to support a defense or counterclaim based on principles of res judicata, collateral estoppel, release, good-faith settlement, judgment bar or reduction or on any other theory of claim preclusion or issue preclusion or similar defense or counterclaim; (4) to support a Claim for contribution and/or indemnification; or (5) to support any other argument or defense by a Released Entities that the Remediation Payment provides a measure of compensation for Alleged Harms or otherwise satisfy the relief sought.

Q. *Notices.* All notices or other communications under this Agreement shall be in writing (including, but not limited to, electronic communications) and shall be given to the recipients indicated below:

For the Attorney(s) General:

Josh Stein, Attorney General
North Carolina Department of Justice
Attn: Daniel Mosteller, Deputy General Counsel
PO Box 629
Raleigh, NC 27602
Dmosteller@ncdoj.gov

Dave Yost, Attorney General
Ohio Attorney's General Office
Attn: Jonathan Blanton, First Assistant Attorney General

30 East Broad Street
Columbus, OH 43215
Jonathan.Blanton@OhioAGO.gov

Letitia James, Attorney General
New York State Office of the Attorney General
Attn: Jennifer Levy, First Deputy Attorney General
28 Liberty Street
New York, NY 10005
Jennifer.Levy@ag.ny.gov

For the Plaintiffs' Executive Committee:

Paul T. Farrell, Jr.
Farrell & Fuller, LLP
270 Munoz Rivera Ave., Suite 201
San Juan, Puerto Rico 00918
paul@farrellfuller.com

Jayne Conroy
Simmons Hanly Conroy LLC
112 Madison Avenue, 7th Floor
New York, NY 10016-7416
JConroy@simmonsfirm.com

Joseph F. Rice
Motley Rice LLC
28 Bridgeside Blvd.
Mount Pleasant, SC 29464
jrice@motleyrice.com

For Walmart:

Karen Roberts
Executive Vice President and General Counsel
Walmart, Inc.
702 S.W. 8th Street
Bentonville, AR 72716
Karen.Roberts@walmartlegal.com

Notices to Walmart's attorneys shall be delivered to:

David W. Ogden
Charles C. Speth
Wilmer Cutler Pickering Hale and Dorr LLP
1875 Pennsylvania Avenue, NW
Washington, DC 20006

David.Ogden@wilmerhale.com
Charles.Speth@wilmerhale.com

Brian K. Mahanna
Wilmer Cutler Pickering Hale and Dorr LLP
7 World Trade Center
250 Greenwich Street
New York, NY 10007
Brian.Mahanna@wilmerhale.com

Any Party or the Plaintiffs' Executive Committee may change or add the contact information of the persons designated to receive notice on its behalf by notice given (effective upon the giving of such notice) as provided in this Section XII.Q.

R. *No Waiver*. The waiver of any rights conferred hereunder shall be effective only if made by written instrument executed by the waiving Party or Parties. The waiver by any Party of any breach of this Agreement shall not be deemed to be or construed as a waiver of any other breach, whether prior, subsequent, or contemporaneous, nor shall such waiver be deemed to be or construed as a waiver by any other Party.

S. *Severability.* In the event any one or more immaterial provisions of this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement.

T. *Preservation of Privilege.* Nothing contained in this Agreement or any Consent Judgment, and no act required to be performed pursuant to this Agreement or any Consent Judgment, is intended to constitute, cause, or effect any waiver (in whole or in part) of any attorney-client privilege, work product protection, or common interest/joint defense privilege, and each Party and Participating Subdivision agrees that it shall not make or cause to be made in any forum any assertion to the contrary.

U. *Successors*.

1. This Agreement shall be binding upon, and inure to the benefit of, Walmart and its respective successors and assigns.

2. Walmart shall not sell the majority of its voting stock or substantially all its assets without obtaining the acquiror's agreement that it will constitute a successor with respect to Walmart's obligations under this Agreement.

3. Walmart shall not in one (1) transaction, or a series of related transactions, sell, or transfer assets (other than sales or transfers of inventories, or sales or transfers to an entity owed directly or indirectly by Walmart) having a fair market value equal to twenty-five percent (25%) or more of the consolidated assets of Walmart where the sale or transfer transaction is announced after the Effective Date, is not for fair consideration, and would foreseeably and unreasonably jeopardize Walmart's ability to make the payments under this Agreement that are due on or before the third Payment Date following the close

of a sale or transfer transaction. The above restriction shall not apply if Walmart obtains the acquiror's agreement that it will be either a guarantor of or successor to the percentage of Walmart's remaining payment obligations under this Agreement equal to the percentage of Walmart's consolidated assets being sold or transferred in such transaction. Percentages under this section shall be determined in accordance with the United States generally accepted accounting principles and as of the date of Walmart's most recent publicly filed consolidated balance sheet prior to the date of entry into the sale or transfer agreement at issue. This Section XII.U.3 shall be enforceable solely by the Enforcement Committee, and any objection under this Section XII.U.3 not raised within twenty (20) calendar days from the date that Walmart transmits notice of the transaction to the Enforcement Committee is waived. Any dispute under this Section XII.U.3 shall be a National Dispute as described in Section VI.F.3 and must be raised exclusively with the National Arbitration Panel as described therein within twenty (20) calendar days of the announcement, and the sole remedy shall be an order enjoining the transaction.

4. The restrictions set forth in Sections XII.U.2-3 shall expire sixty (60) days after Walmart satisfies the payment terms in Section IV.B.

V. *Waiver*. Walmart, for good and valuable consideration the receipt of which is acknowledged, hereby (a) waives, foregoes and relinquishes all rights to utilize and/or seek relief under any of the following laws of the State of Texas for the restructuring of its debts or liabilities related to Released Claims, Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement: Tex. Bus. Orgs. Code § 10.003 (Contents of Plan of Merger: More Than One Successor) or any other statute of Subchapter A of Chapter 10 of Tex. Bus. Orgs. Code to the extent such statute relates to multi-successor mergers (and/or any other similar laws or statutes in any other state or territory); Tex. Bus. Orgs. Code §§ 11.01–11.414 (Winding Up and Termination of Domestic Entity); or Tex. Bus. & Com. Code §§ 23.01–23.33 (Assignments for the Benefit of Creditors) (collectively, the "Texas Statutes"), and (b) agrees, warrants and represents that it will not file, request or petition for relief under the Texas Statutes related to its debts or liabilities related to Released Claims, Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement, in each case until ninety (90) days after Walmart satisfies the payment terms in Section IV.B. The foregoing waiver and relinquishment includes, without limitation, until ninety (90) days after Walmart satisfies the payment terms in Section IV.B, Walmart's rights to execute a divisional merger or equivalent transaction or restructuring related to its debts or liabilities related to Released Claims, Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement that in each case has the intent or foreseeable effect of (i) separating material assets from material liabilities and (ii) assigning or allocating all or a substantial portion of those liabilities to any subsidiary or affiliate that files for relief under chapter 11 of the Bankruptcy Code, or pursuant to which such subsidiary or affiliate that files for relief under chapter 11 of the Bankruptcy Code would be assuming or retaining all or a substantial portion of those liabilities.

W. *Modification, Amendment, Alteration.* In the event the Plaintiffs' Executive Committee, the Executive Committee of the State Attorneys General, or Walmart concludes prior to December 1, 2022 that technical corrections are required to this Agreement, the Plaintiffs' Executive Committee, the Executive Committee of the State Attorneys General, and Walmart shall

meet and confer and make such amendments as they agree are appropriate. Except as otherwise provided in this Agreement, after the State Participation Date, any modification, amendment, or alteration of this Agreement by the Parties shall be binding only if evidenced in writing signed by Walmart, along with the signatures of at least two-thirds of the Settling States along with a representation from each such Settling State that either: (1) the Advisory Committee or similar entity established or recognized by that Settling State (either pursuant to Section V.E.2.d, by a State-Subdivision Agreement, or by statute) voted in favor of the modification, amendment or alteration of this Agreement including at least one member appointed by the Participating Subdivisions; or (2) in States without any Advisory Committee, that 50.1% (by population) of the Participating Subdivisions expressed approval of the modification, amendment, or alteration of this Agreement in a writing.

X. *Termination*.

1. Unless otherwise agreed to by Walmart and the Settling State in question, this Agreement or the Consent Judgment as to that Settling State and all of its terms (except Section XII.P and any other non-admissibility provisions, which shall continue in full force and effect) shall be canceled and terminated with respect to the Settling State, and the Agreement and all orders issued by the courts in the Settling State pursuant to the Agreement shall become null and void and of no effect, only if one or more of the following conditions applies:

a. a Consent Judgment approving this Agreement without modification of any of the Agreement's terms has not been entered as to the Settling State by a court of competent jurisdiction on or before one hundred eighty (180) days after the Effective Date; or

b. this Agreement has been disapproved by a court of competent jurisdiction to which it was presented for approval and/or entry (or, in the event of an appeal from or review of a decision of such a court to approve this Agreement and the Consent Judgment, by the court hearing such appeal or conducting such review), and the time to appeal from such disapproval has expired, or, in the event of an appeal from such disapproval, the appeal has been dismissed or the disapproval has been affirmed by the court of last resort to which such appeal has been taken and such dismissal or disapproval has become no longer subject to further appeal (including, without limitation, review by the United States Supreme Court).

2. If this Agreement is terminated with respect to a Settling State for whatever reason pursuant to Section XII.X.1, then:

a. an applicable statute of limitation or any similar time requirement (excluding any statute of repose) shall be tolled from the date the Settling State signed this Agreement until the later of the time permitted by applicable law or for one year from the date of such termination, with the effect that Walmart and the Settling State in question shall be in the same position with respect to the statute of limitation as they were at the time the Settling State filed its action; and

b. Walmart and the Settling State in question shall jointly move the relevant court of competent jurisdiction for an order reinstating the actions and claims dismissed pursuant to the terms of this Agreement governing dismissal, with the effect that Walmart and the Settling State in question shall be in the same position with respect to those actions and claims as they were at the time the action or claim was stayed or dismissed.

3. Unless Walmart and the Enforcement Committee agree otherwise, this Agreement, with the exception of the Injunctive Relief Terms that have their own provisions on duration, shall terminate as to all Parties after the Payout Amount in Payment Year 6 is paid, *provided* that Walmart has performed its payment obligations under the Agreement as of that date. Notwithstanding any other provision in this Section XII.X.3 or in this Agreement, all releases under this Agreement will remain effective in perpetuity.

Y. *Governing Law.* Except (1) as otherwise provided in this Agreement or (2) as necessary, in the sole judgment of the National Arbitration Panel, to promote uniformity of interpretation for matters within the scope of the National Arbitration Panel's authority, this Agreement shall be governed by and interpreted in accordance with the respective laws of each Settling State, without regard to the conflict of law rules of such Settling State, that is seeking to enforce the Agreement against Walmart or against which Walmart is seeking enforcement. Notwithstanding any other provision in this subsection on governing law, any disputes relating to the Settlement Fund Escrow shall be governed by and interpreted in accordance with the law of the state where the escrow agent has its primary place of business.

EXHIBIT A

Alleged Harms

The following expert reports that were filed in connection with the case captioned *In re: National Prescription Opiate Litigation*, No. 1: 17-md-2804 (N.D. Ohio) provide non-exclusive examples of Alleged Harms:

1. Expert report of G. Caleb Alexander, dated April 16, 2021.

2. Expert report of David Cutler, dated April 16, 2021; supplemental expert report of David Cutler, dated April 21, 2021; and second supplemental expert report of David Cutler, dated May 10, 2021.

3. Expert report of David Herzberg, dated April 16, 2021.

4. Expert report of Katherine M. Keyes, Ph.D., dated April 16, 2021; supplemental expert report of Katherine M. Keyes, Ph.D, dated June 2, 2021.

5. Expert report of Dr. Anna Lembke, dated April 16, 2021.

6. Expert report of Harvey Rosen, dated April 16, 2021.

7. Expert report of Nancy Young, dated April 16, 2021.

EXHIBIT B

Enforcement Committee Organization Bylaws

ARTICLE I

These bylaws constitute the code of rules adopted by the Settling States and Participating Subdivisions for the creation of an Enforcement Committee (the "Committee") to exist and operate during the term of the Agreement in connection with Walmart and shall control the regulation and management of the Committee's affairs.

ARTICLE II
Purpose

The Committee is organized for the sole purpose of evaluating and taking such action as deemed reasonable, necessary, and appropriate by the members of the Committee on the matters delegated to the Committee under that certain Settlement Agreement between the Settling States and Walmart dated November 14, 2022.

ARTICLE III
Members of the Committee

(1) Number of Members

The Committee will consist of sixteen (16) members (the "Members"). Upon majority resolution of the Committee, the number of Members may be increased or decreased from time to time, but in no event shall a decrease have the effect of decreasing the total number of Members to less than seven Members.

(2) Initial Members

The Committee initially will consist of ten (10) Settling State Members and six (6) Participating Subdivision Members; three (3) of the Participating Subdivisions shall be counties and three (3) shall be municipalities. The initial Settling State Members are representatives from: Connecticut, Delaware, Illinois, Indiana, Louisiana, New York, North Carolina, Ohio, Tennessee, and Texas. The initial Participating Subdivision Members are: [●]. Until fifteen (15) months from the Effective Date contained in the Settlement Agreement, the Participating Subdivisions may designate their outside counsel to serve as their representative. After fifteen (15) months from the Effective Date, an employee or official of the Participating Subdivision must be the designated as the representative of the Participating Subdivision.

(3) Term of Members

The term of office for Members of the Committee will be until the end of the term of the Settlement Agreement unless and until a Member withdraws or resigns from the Committee.

(4) Resignation

Any Member may resign at any time by delivering written notice to the Chairperson of the Committee. Such resignation shall take effect upon receipt or, if later, at the time specified in the notice.

(5) Removal

(a) Any Member may be removed without cause, at any time, by a majority of the entire Committee, at a Regular or Special Meeting called for that purpose. Any Member under consideration of removal must first be notified about the consideration by written notice at least five days prior to the meeting at which the vote takes place.

(b) In the event that any Member is not a Settling State or a Participating Subdivision or the Member subsequently becomes a Later Litigating Subdivision, the Member shall be removed immediately without notice or vote of the Committee.

(6) Vacancies

In the event of a vacancy, the Members of the same type (Settling State or Participating Subdivision) shall select another Settling State or Participating Subdivision to fill that Member's position.

(7) Compensation

Members shall not receive any salaries or other compensation for their services, but, by resolution of the Committee, may be reimbursed for any actual expenses incurred in the performance of their duties for the Committee, as long as a majority of disinterested Members approve the reimbursement. Any reimbursement shall be sought from the Settlement Fund Administrator.

ARTICLE IV
Conflicts of Interest and Code of Ethics

If a Member, agent, or employee of the Committee has a conflict of interest, he or she may not participate in a vote, discussion, or decision about the matter. Each Member shall follow any applicable state or local law with respect to conflicts, gifts, and ethics.

ARTICLE V
Committee Meetings

(1) Place of Meetings

Meetings of the Committee will be held at any place that the Chairperson may designate, including by telephonic or electronic means.

(2) Regular Meetings

Regular meetings of the Committee shall be held as deemed necessary by the Chairperson or any three members.

(3) Notice of Meetings

Written notice of the date, time, place and subject of each meeting must be provided to the Members at least 72 hours before the scheduled time of the meeting, except when there is an emergency or urgent public necessity.

(4) Quorum

A majority of the incumbent Members (not counting vacancies) shall constitute a quorum for the purposes of convening a meeting or conducting business.

(5) Voting and Proxy

When it is necessary to vote on any matter before the Committee, Members may vote by electronic means as provided in these Bylaws. Proxy voting is permitted. In order for a matter to pass, the matter must have a majority vote of Members present and must have at least one vote from a Settling State Member and a Participating Subdivision Member. In the event that there is a Quorum, but no Settling State or Participating Subdivision Member is present, then a matter may pass with a simple majority vote.

(6) Minutes

The Committee shall prepare and keep minutes. The minutes must state the subject of each deliberation and indicate each vote, order, decision, or other action taken.

ARTICLE VI
Officers

(1) Roster of Officers

The Committee shall have a Chairperson, a Vice Chairperson, and a Secretary. The Committee may have at its discretion, such other officers as may be appointed by the Members of the Committee. One person may hold two or more offices, except those serving as Chairperson.

(2) Election and Removal of Officers

All officers shall serve two-year terms. The election shall be conducted at the first meeting of the fiscal year. Officers shall remain in office until their successors have been selected. Officers may serve consecutive terms without limit. The election of officers shall be by majority vote of the Members of the Committee attending the meeting.

(3) Vacancies

If a vacancy occurs during the term of office for any elected officer, the Members of the Committee shall elect a new officer to fill the remainder of the term as soon as practical, by majority vote of Members present.

(4) Chairperson

The Chairperson will supervise and control the affairs of the Committee and shall exercise such supervisory powers as may be given him/her by the Members of the Committee. The Chairperson will perform all duties incident to such office and such other duties as may be provided in these bylaws or as may be prescribed from time to time by the Committee. The Chairperson shall preside at all meetings and shall exercise parliamentary control in accordance with Robert's Rules of Order.

(5) Vice Chairperson

The Vice Chairperson shall act in place of the Chairperson in the event of the Chairperson's absence, inability, or refusal to act, and shall exercise and discharge such other duties as may be required by the Committee. The Vice Chairperson shall serve as the parliamentarian and interpret any ambiguities of the bylaws.

(6) Secretary

The Secretary will keep and maintain all records related to the Committee and take minutes of all meetings.

(7) Records

All elected officers and committee chairpersons shall relinquish their records to the Chairperson immediately upon the completion of their term of office or completion of a project.

(8) Resignation

An officer may resign the office while not resigning membership from the Committee, by submitting a letter to the Chairperson. Vacancies occurring in any office shall be appointed for the remainder of the term.

ARTICLE VII
Duties

(1) Prior to the Effective Date

The Committee shall be responsible for any additional negotiations with Walmart, including, but not limited to, negotiating extensions of any periods created by the Settlement Agreement, except that any additional negotiations related to the Injunctive Relief Terms (Exhibit P) shall be handled by the States Injunctive Relief Committee in accordance with the terms of Exhibit P.

(2) After the Effective Date

The Committee shall establish procedures for the receipt of notices that a dispute exists concerning the Agreement and review of such disputes, pursuant to Section [●] of the Agreement. Members may engage with Walmart, Settling States, and Participating Subdivisions attempting to resolve any dispute without further action by the Committee. The Committee may request additional information from Walmart, Settling States, and Participating Subdivisions to the extent the Committee believes such information is necessary to understand, resolve, or provide advice related to a dispute. The Committee shall endeavor to provide advice relative to the dispute no later than 60 days after receipt of notice.

ARTICLE VIII
Rules of Procedure

The proceedings and business of the Committee shall be governed by Robert's Rules of Order unless otherwise waived by the Committee.

ARTICLE IX
Operations

(1) Records

The Committee will keep correct and complete records and will also keep minutes of the proceedings of the Committee meetings and Committees. The Committee will keep such records at its principal place of business at a place designated by the Chairperson**.**

All elected officers and committee chairpersons shall relinquish their records to the Chairperson, immediately upon the completion of their term of office.

(2) Inspection of Books and Records

The minutes of a meeting are public records and shall be available for public inspection and copying on request to the Committee's Chairperson or the Chairperson's designee.

(3) Amendments

The bylaws may be amended at any time by a vote of a majority of Members present and must have at least one vote from a Settling State Member and a Participating Subdivision Member. In the event that there is a Quorum, but no Settling State or Participating Subdivision Member is present, then a matter may pass with a simple majority vote.

EXHIBIT C

Litigating Subdivisions Exhibit

1. Alabaster, City of, Alabama
2. Albertville, City of, Alabama
3. Arab, City of, Alabama
4. Ashville, City of, Alabama
5. Athens, City of, Alabama
6. Attalla, City of, Alabama
7. Auburn, City of, Alabama
8. Baldwin, County of, Alabama
9. Bay Minette, City of, Alabama
10. Berry, Town of, Alabama
11. Bessemer, City of, Alabama
12. Bibb, County of, Alabama
13. Birmingham, City of, Alabama
14. Boaz, City of, Alabama
15. Brewton, City of, Alabama
16. Bridgeport, City of, Alabama
17. Brookwood, Town of, Alabama
18. Butler, Town of, Alabama
19. Calera, City of, Alabama
20. Calhoun, County of, Alabama
21. Camp Hill, Town of, Alabama
22. Carbon Hill, City of, Alabama
23. Cedar Bluff, Town of, Alabama
24. Centre, City of, Alabama
25. Centreville, City of, Alabama
26. Cherokee, County of, Alabama
27. Cherokee, Town of, Alabama
28. Childersburg, City of, Alabama
29. Chilton, County of, Alabama
30. Clanton, City of, Alabama
31. Coffee, County of, Alabama
32. Columbiana, City of, Alabama
33. Cordova, City of, Alabama
34. Cullman, City of, Alabama
35. Cullman, County of, Alabama
36. Dadeville, City of, Alabama
37. Dallas, County of, Alabama
38. Daphne, City of, Alabama
39. Decatur, City of, Alabama
40. Demopolis, City of, Alabama
41. Dora, City of, Alabama
42. Double Springs, Town of, Alabama
43. Douglas, Town of, Alabama
44. East Brewton, City of, Alabama
45. Elmore, County of, Alabama
46. Enterprise, City of, Alabama
47. Etowah, (Sheriff of) County of, Alabama
48. Fairhope, City of, Alabama
49. Fayette, City of, Alabama
50. Fayette, County of, Alabama/ Fayette, (Sheriff of) County of, Alabama
51. Florence, City of, Alabama
52. Foley, City of, Alabama
53. Fort Deposit, Town of, Alabama
54. Fort Payne, City of, Alabama
55. Franklin, County of, Alabama
56. Fultondale, City of, Alabama
57. Gadsden, City of, Alabama
58. Geraldine, Town of, Alabama
59. Gilbertown, Town of, Alabama
60. Grant, Town of, Alabama
61. Graysville, City of, Alabama
62. Guin, City of, Alabama
63. Gulf Shores, City of, Alabama
64. Guntersville, City of, Alabama
65. Haleyville, City of, Alabama
66. Hamilton, City of, Alabama
67. Hartselle, City of, Alabama
68. Helena, City of, Alabama
69. Henagar, City of, Alabama
70. Homewood, City of, Alabama
71. Hueytown, City of, Alabama
72. Huntsville, City of, Alabama
73. Irondale, City of, Alabama
74. Jackson, County of, Alabama
75. Jacksonville, City of, Alabama
76. Jasper, City of, Alabama
77. Jefferson, County of, Alabama/ Jefferson, (Sheriff of) County of, Alabama
78. Jefferson County Board of Health, Alabama
79. Lamar, County of, Alabama/ Lamar, (Sheriff of) County of, Alabama

80. Lauderdale, County of, Alabama
81. Lawrence, County of, Alabama
82. Leesburg, City of, Alabama
83. Leighton, Town of, Alabama
84. Lincoln, City of, Alabama
85. Loxley, Town of, Alabama
86. Madison, County of, Alabama
87. Marengo, County of, Alabama
88. Marion, County of, Alabama
89. Marshall, County of, Alabama
90. Millbrook, City of, Alabama
91. Mobile, City of, Alabama
92. Mobile, County of, Alabama
93. Moody, City of, Alabama
94. Morgan, County of, Alabama
95. Moulton, City of, Alabama
96. Mountain Brook, City of, Alabama
97. Munford, Town of, Alabama
98. Nauvoo, Town of, Alabama
99. New Hope, City of, Alabama
100. Northport, City of, Alabama
101. Oakman, Town of, Alabama
102. Opelika, City of, Alabama
103. Opp, City of, Alabama
104. Ozark, City of, Alabama
105. Parrish, City of/ Town of, Alabama
106. Pelham, City of, Alabama
107. Phenix City, City of, Alabama
108. Pickens, County of, Alabama
109. Piedmont, City of, Alabama
110. Pike, County of, Alabama
111. Pleasant Grove, City of, Alabama
112. Prichard, City of, Alabama
113. Ragland, Town of, Alabama
114. Rainbow City, City of, Alabama
115. Randolph, County of, Alabama
116. Red Bay, City of, Alabama
117. Roanoke, City of, Alabama
118. Robertsdale, City of, Alabama
119. Russellville, City of, Alabama
120. Saraland, City of, Alabama
121. Scottsboro, City of, Alabama
122. Selma, City of, Alabama
123. Semmes, City of, Alabama
124. Sheffield, City of, Alabama
125. Sipsey, Town of, Alabama
126. Slocomb, City of, Alabama
127. Spanish Fort, City of, Alabama
128. Springville, City of, Alabama
129. Sumiton, City of, Alabama
130. Summerdale, Town of, Alabama
131. Sylacauga, City of, Alabama
132. Talladega, County of, Alabama
133. Tallapoosa, County of, Alabama
134. Thomasville, City of, Alabama
135. Troy, City of, Alabama
136. Trussville, City of, Alabama
137. Tuscaloosa, County of, Alabama
138. Tuscumbia, City of, Alabama
139. Vernon, City of, Alabama
140. Vestavia Hills, City of, Alabama
141. Walker, County of, Alabama
142. West Blocton, Town of, Alabama
143. Wetumpka, City of, Alabama
144. Winfield, City of, Alabama
145. Winston, County of, Alabama
146. Woodville, Town of, Alabama
147. Cochise, County of, Arizona
148. Kingman, City of, Arizona
149. Maricopa, County of, Arizona
150. Mohave, County of, Arizona
151. Navajo, County of, Arizona
152. Phoenix, City of, Arizona
153. Pinal, County of, Arizona
154. Prescott, City of, Arizona
155. Yuma, County of, Arizona
156. Jefferson, County of, Arkansas
157. Pulaski, County of, Arkansas
158. Amador, County of, California
159. Board of Education of the Pleasant Valley School District, California
160. Butte, County of, California
161. Calaveras, County of, California
162. Chico, City of, California
163. Chula Vista, City of, California
164. Clearlake, City of, California
165. Del Norte, County of, California
166. El Dorado, County of, California
167. Eureka, City of, California
168. Fresno, County of, California
169. Humboldt, County of, California

170. Huntington Beach, City of, California
171. Imperial, County of, California
172. Inyo, County of, California
173. Laguna Beach, City of, California
174. Lakeport, City of, California
175. Lassen, County of, California
176. Lassen County Office of Education, California
177. Madera, County of, California
178. Mariposa, County of, California
179. Mendocino, County of, California
180. Merced, County of, California
181. Modoc, County of, California
182. Mono, County of, California
183. Monterey, County of, California
184. Nevada, County of, California
185. Placer, County of, California
186. Plumas, County of, California
187. Riverside, County of, California
188. Sacramento, County of, California
189. San Bernardino, County of, California
190. San Diego, County of, California
191. San Jose, City of, California
192. San Leandro Unified School District, California
193. San Luis Obispo, County of, California
194. Santa Barbara, County of, California
195. Santa Clara, County of, California/ Santa Clara, (District Attorney of) County of, California
196. Shasta, County of, California
197. Siskiyou, County of, California
198. Susanville Elementary School District, California
199. Sutter, County of, California
200. Tehama, County of, California
201. Trinity, County of, California
202. Tulare, County of, California
203. Tuolumne, County of, California
204. Yolo, County of, California
205. Yuba, County of, California
206. Adams, (Board of Commissioners) County of, Colorado
207. Alamosa, City of/ Town of, Colorado
208. Alamosa, County of, Colorado
209. Arapahoe, (Board of Commissioners) County of, Colorado
210. Aurora, City of, Colorado
211. Black Hawk, City of, Colorado
212. Boulder, (Board of Commissioners) County of, Colorado
213. Brighton, City of, Colorado
214. Broomfield, City of/ County of, Colorado
215. Chaffee, County of, Colorado
216. Commerce City, City of, Colorado
217. Conejos, County of, Colorado
218. Denver, City of/ County of, Colorado
219. Federal Heights, City of, Colorado
220. Fremont, (Board of Commissioners) County of, Colorado
221. Greeley, City of, Colorado
222. Hudson, Town of, Colorado
223. Jefferson, (Board of Commissioners) County of, Colorado
224. Lakewood, City of, Colorado
225. Larmier, (Board of Commissioners) County of, Colorado
226. Las Animas, County of, Colorado
227. Mesa, County of, Colorado
228. Northglenn, City of, Colorado
229. Otero, County of, Colorado
230. Pueblo, County of, Colorado
231. Sheridan, City of, Colorado
232. Teller, (Board of Commissioners) County of, Colorado
233. Thornton, City of, Colorado
234. Westminster, City of, Colorado
235. Wheat Ridge, City of, Colorado
236. Beacon Falls, Town of, Connecticut
237. Berlin, Town of, Connecticut
238. Bethlehem, Town of, Connecticut
239. Bridgeport, City of, Connecticut
240. Bristol, City of, Connecticut
241. Coventry, Town of, Connecticut
242. East Hartford, Town of, Connecticut

243. Enfield, Town of, Connecticut
244. Fairfield, Town of, Connecticut
245. Middlebury, Town of, Connecticut
246. Middletown, City of, Connecticut
247. Milford, City of/ Town of, Connecticut
248. Monroe, City of/ Town of, Connecticut
249. Naugatuck, Borough of/ Town of, Connecticut
250. New Milford, Town of, Connecticut
251. Newtown, Town of, Connecticut
252. North Haven, Town of, Connecticut
253. Norwich, City of, Connecticut
254. Oxford, Town of, Connecticut
255. Prospect, Town of, Connecticut
256. Roxbury, Town of, Connecticut
257. Seymour, Town of, Connecticut
258. Shelton, City of, Connecticut
259. Southbury, Town of, Connecticut
260. Southington, Town of, Connecticut
261. Stratford, Town of, Connecticut
262. Thomaston, Town of, Connecticut
263. Tolland, Town of, Connecticut
264. Torrington, City of, Connecticut
265. Waterbury, City of, Connecticut
266. West Haven, City of, Connecticut
267. Wethersfield, Town of, Connecticut
268. Windham, Town of, Connecticut
269. Wolcott, Town of, Connecticut
270. Woodbury, Town of, Connecticut
271. Sussex, County of, Delaware
272. Alachua, County of, Florida
273. Apopka, City of, Florida
274. Bay, County of, Florida
275. Bradenton, City of, Florida
276. Bradford, County of, Florida
277. Brevard, County of, Florida
278. Broward, County of, Florida
279. Clay, County of, Florida
280. Clearwater, City of, Florida
281. Coconut Creek, City of, Florida
282. Coral Springs, City of, Florida
283. Daytona Beach, City of, Florida
284. Daytona Beach Shores, City of, Florida
285. Deerfield Beach, City of, Florida
286. Deltona, City of, Florida
287. Dixie, County of, Florida
288. Eatonville, Town of, Florida
289. Escambia, County of, Florida
290. Florida City, City of, Florida
291. Fort Lauderdale, City of, Florida
292. Fort Pierce, City of, Florida
293. Gilchrist, County of, Florida
294. Hallandale Beach, City of, Florida
295. Hamilton, County of, Florida
296. Homestead, City of, Florida
297. Jackson, County of, Florida
298. Lake, County of, Florida
299. Lauderhill, City of, Florida
300. Lee, County of, Florida
301. Leon, County of, Florida
302. Levy, County of, Florida
303. Lynn Haven, City of, Florida
304. Manatee, County of, Florida
305. Marion, County of, Florida
306. Miami Gardens, City of, Florida
307. Miami-Dade, County of, Florida
308. Miami-Dade County School Board, Florida
309. Miramar, City of, Florida
310. Monroe, County of, Florida
311. New Port Richey, City of, Florida
312. Niceville, City of, Florida
313. North Miami, City of, Florida
314. Ocala, City of, Florida
315. Ocoee, City of, Florida
316. Okaloosa, County of, Florida
317. Orange, County of, Florida
318. Orlando, City of, Florida
319. Ormond Beach, City of, Florida
320. Osceola, County of, Florida
321. Oviedo, City of, Florida
322. Palatka, City of, Florida
323. Palm Bay, City of, Florida
324. Palm Beach, County of, Florida
325. Palmetto, City of, Florida
326. Panama City, City of, Florida
327. Pasco, County of, Florida
328. Pembroke Pines, City of, Florida
329. Pensacola, City of, Florida

330. Pinellas, County of, Florida
331. Pinellas Park, City of, Florida
332. Pompano Beach, City of, Florida
333. Port St. Lucie, City of, Florida
334. Putnam, County of, Florida
335. Putnam County School Board, Florida
336. Sanford, City of, Florida
337. Santa Rosa, County of, Florida
338. Sarasota, City of, Florida
339. Seminole, County of, Florida
340. St. Augustine, City of, Florida
341. St. Johns, County of, Florida
342. St. Lucie, County of, Florida
343. St. Petersburg, City of, Florida
344. Suwannee, County of, Florida
345. Sweetwater, City of, Florida
346. Tallahassee, City of, Florida
347. Taylor, County of, Florida
348. Union, County of, Florida
349. Volusia, County of, Florida
350. Walton, County of, Florida
351. Albany, City of, Georgia
352. Appling, County of, Georgia/ Appling, (Sheriff of) County of, Georgia
353. Athens-Clarke County, Unified Government of, Georgia
354. Atlanta, City of, Georgia
355. Augusta, City of, Georgia
356. Bainbridge, City of, Georgia
357. Baldwin, County of, Georgia/ Baldwin, (Sheriff of) County of, Georgia
358. Banks, County of, Georgia
359. Bartow, County of, Georgia
360. Ben Hill, County of, Georgia
361. Bibb, County of, Georgia/ Bibb, (Sheriff of) County of, Georgia
362. Brantley, County of, Georgia
363. Bulloch, County of, Georgia
364. Burke, County of, Georgia
365. Butts, County of, Georgia
366. Camden, County of, Georgia
367. Candler, County of, Georgia
368. Carroll, County of, Georgia
369. Catoosa, County of, Georgia
370. Charlton, County of, Georgia
371. Cherokee, County of, Georgia
372. Clay, County of, Georgia
373. Clayton, County of, Georgia
374. Clinch, County of, Georgia
375. Cobb, County of, Georgia
376. Coffee, County of, Georgia/ Coffee, (Sheriff of) County of, Georgia
377. Columbia, County of, Georgia
378. Columbus, City of, Georgia
379. Cook, County of, Georgia
380. Crisp, County of, Georgia/ Crisp, (Sheriff of) County of, Georgia
381. Dade, County of, Georgia
382. Dawson, County of, Georgia
383. Decatur, County of, Georgia
384. DeKalb, County of, Georgia
385. Dooly, County of, Georgia
386. Dougherty, County of, Georgia
387. Early, County of, Georgia
388. Effingham, County of, Georgia
389. Elbert, County of, Georgia
390. Emanuel, County of, Georgia
391. Evans, County of, Georgia
392. Fayette, County of, Georgia
393. Fitzgerald, City of, Georgia
394. Forsyth, County of, Georgia
395. Fulton, County of, Georgia
396. Gainesville, City of, Georgia
397. Glascock, County of, Georgia
398. Glynn, County of, Georgia/ Glynn, (Sheriff of) County of, Georgia
399. Grady, County of, Georgia
400. Greene, County of, Georgia
401. Gwinnett, County of, Georgia
402. Habersham, County of, Georgia
403. Hall, County of, Georgia
404. Hancock, County of, Georgia
405. Henry, County of, Georgia
406. Houston, County of, Georgia/ Houston, (Sheriff of) County of, Georgia
407. Irwin, County of, Georgia
408. Jackson, County of, Georgia
409. Jasper, County of, Georgia

410. Jeff Davis, County of, Georgia/ Jeff Davis, (Sheriff of) County of, Georgia
411. Jefferson, County of, Georgia
412. Johnson, County of, Georgia
413. Jones, County of, Georgia
414. Laurens, County of, Georgia
415. Lee, County of, Georgia
416. Liberty, County of, Georgia
417. Lincoln, County of, Georgia
418. Long, County of, Georgia
419. Lowndes, County of, Georgia
420. Lumpkin, County of, Georgia
421. Macon-Bibb County, Consolidated Government of, Georgia
422. Madison, County of, Georgia
423. McDuffie, County of, Georgia
424. McIntosh, County of, Georgia
425. Milledgeville, City of, Georgia
426. Monroe, County of, Georgia
427. Montgomery, County of, Georgia
428. Newton, County of, Georgia
429. Oconee, County of, Georgia
430. Oglethorpe, County of, Georgia
431. Pike, County of, Georgia
432. Polk, County of, Georgia
433. Pulaski, County of, Georgia
434. Rabun, County of, Georgia
435. Randolph, County of, Georgia
436. Rockdale, County of, Georgia
437. Rome, City of, Georgia
438. Savannah, City of, Georgia
439. Screven, County of, Georgia
440. Seminole, County of, Georgia
441. Spalding, County of, Georgia
442. Springfield, City of, Georgia
443. Stephens, County of, Georgia
444. Sumter, County of, Georgia
445. Taliaferro, County of, Georgia
446. Tattnall, County of, Georgia
447. Tift, County of, Georgia/ Tift, (Sheriff of) County of, Georgia
448. Tifton, City of, Georgia
449. Toombs, County of, Georgia
450. Towns, County of, Georgia
451. Troup, County of, Georgia
452. Twiggs, County of, Georgia
453. Union, County of, Georgia
454. Walton, County of, Georgia
455. Ware, County of, Georgia/ Ware, (Sheriff of) County of, Georgia
456. Warren, County of, Georgia
457. Washington, County of, Georgia
458. Wayne, County of, Georgia/ Wayne, (Sheriff of) County of, Georgia
459. Wilkes, County of, Georgia
460. Worth, County of, Georgia
461. Kaua'i, County of, Hawaii
462. Ada, County of, Idaho
463. Adams, County of, Idaho
464. Bingham, County of, Idaho
465. Blaine, County of, Idaho
466. Boise, County of, Idaho
467. Bonneville, County of, Idaho
468. Camas, County of, Idaho
469. Canyon, County of, Idaho
470. Caribou, County of, Idaho
471. Cassia, County of, Idaho
472. Elmore, County of, Idaho
473. Gooding, County of, Idaho
474. Latah, County of, Idaho
475. Minidoka, County of, Idaho
476. Owyhee, County of, Idaho
477. Payette, County of, Idaho
478. Board of Education of East Aurora, School District 131, Illinois
479. Board of Education of Joliet Township High School, District 204, Illinois
480. Board of Education of Thornton Fractional Township High Schools, District 215, Illinois
481. Board of Education of Thornton Township High Schools, District 205, Illinois
482. Boone, County of, Illinois
483. Bureau, County of, Illinois
484. Calhoun, County of, Illinois
485. Champaign, County of, Illinois
486. Chicago, City of, Illinois
487. Chicago School District No. 299, Illinois

488. Christian, County of, Illinois
489. Coles, County of, Illinois
490. Cook, County of, Illinois
491. Dekalb, County of, Illinois
492. DuPage, County of, Illinois
493. Effingham, County of, Illinois
494. Franklin, County of, Illinois
495. Harrisburg, City of, Illinois
496. Henry, County of, Illinois
497. Herrin, City of, Illinois
498. Jefferson, County of, Illinois
499. Jersey, County of, Illinois
500. Johnson, County of, Illinois
501. Kane, County of, Illinois
502. Kankakee, County of, Illinois
503. Kendall, County of, Illinois
504. Lawrence, County of, Illinois
505. Lee, County of, Illinois
506. Livingston, County of, Illinois
507. Logan, County of, Illinois
508. Macon, County of, Illinois
509. Macoupin, County of, Illinois
510. Marion, City of, Illinois
511. Marion, County of, Illinois
512. McHenry, County of, Illinois
513. Piatt, County of, Illinois
514. Princeton, City of, Illinois
515. Putnam, County of, Illinois
516. Rock Island, County of, Illinois
517. Rockford, City of, Illinois
518. Saline, County of, Illinois
519. Sangamon, County of, Illinois
520. Schuyler, County of, Illinois
521. Shelby, County of, Illinois
522. Stephenson, County of, Illinois
523. Union, County of, Illinois
524. West Frankfort, City of, Illinois
525. White, County of, Illinois
526. Will, County of, Illinois
527. Winnebago, County of, Illinois
528. Alexandria, City of, Indiana
529. Allen, County of, Indiana
530. Atlanta, Town of, Indiana
531. Beech Grove, City of, Indiana
532. Benton, County of, Indiana
533. Bloomington, City of, Indiana
534. Brownstown, Town of, Indiana
535. Chandler, Town of, Indiana
536. Connersville, City of, Indiana
537. Danville, Town of, Indiana
538. Delaware, County of, Indiana
539. Elwood, City of, Indiana
540. Evansville, City of, Indiana
541. Fishers, City of, Indiana
542. Fort Wayne, City of, Indiana
543. Franklin, City of, Indiana
544. Franklin, County of, Indiana
545. Gary, City of, Indiana
546. Greenwood, City of, Indiana
547. Hammond, City of, Indiana
548. Harrison, County of, Indiana
549. Howard, County of, Indiana
550. Huntington, City of, Indiana
551. Indianapolis-Marion County, Consolidated Government of, Indiana
552. Jackson, County of, Indiana
553. Jasper, City of, Indiana
554. Jay, County of, Indiana
555. Jeffersonville, City of, Indiana
556. Jennings, County of, Indiana
557. Lafayette, City of, Indiana
558. Lake, County of, Indiana
559. LaPorte, County of, Indiana
560. Lawrence, City of, Indiana
561. Lawrence, County of, Indiana
562. Logansport, City of, Indiana
563. Madison, City of, Indiana
564. Madison, County of, Indiana
565. Marshall, County of, Indiana
566. Martinsville, City of, Indiana
567. Mooresville, Town of, Indiana
568. Monroe, County of, Indiana
569. Morgan, County of, Indiana
570. Muncie, City of, Indiana
571. New Albany, Township of/ City of, Indiana
572. New Castle, City of, Indiana
573. Noblesville, Township of/ City of, Indiana
574. Pendleton, Town of, Indiana
575. Plainfield, Town of, Indiana

576. Porter, County of, Indiana
577. Portland, City of, Indiana
578. Pulaski, County of, Indiana
579. Richmond, City of, Indiana
580. Ripley, County of, Indiana
581. Scott, County of, Indiana
582. Seymour, City of, Indiana
583. Sheridan, Town of, Indiana
584. South Bend, City of, Indiana
585. St. Joseph, County of, Indiana
586. Terre Haute, City of, Indiana
587. Tippecanoe, County of, Indiana
588. Upland, Town of, Indiana
589. Vanderburgh, County of, Indiana
590. Vigo, County of, Indiana
591. West Lafayette, City of, Indiana
592. Westfield, City of, Indiana
593. Zionsville, Town of, Indiana
594. Adair, County of, Iowa
595. Adams, County of, Iowa
596. Allamakee, County of, Iowa
597. Appanoose, County of, Iowa
598. Audubon, County of, Iowa
599. Benton, County of, Iowa
600. Black Hawk, County of, Iowa
601. Bremer, County of, Iowa
602. Buchanan, County of, Iowa
603. Buena Vista, County of, Iowa
604. Calhoun, County of, Iowa
605. Carroll, County of, Iowa
606. Cedar, County of, Iowa
607. Cerro Gordo, County of, Iowa
608. Cherokee, County of, Iowa
609. Chickasaw, County of, Iowa
610. Clay, County of, Iowa
611. Clayton, County of, Iowa
612. Clinton, County of, Iowa
613. Dallas, County of, Iowa
614. Delaware, County of, Iowa
615. Des Moines, County of, Iowa
616. Emmet, County of, Iowa
617. Fayette, County of, Iowa
618. Fremont, County of, Iowa
619. Hamilton, County of, Iowa
620. Hancock, County of, Iowa
621. Hardin, County of, Iowa
622. Harrison, County of, Iowa
623. Henry, County of, Iowa
624. Howard, County of, Iowa
625. Humboldt, County of, Iowa
626. Ida, County of, Iowa
627. Jasper, County of, Iowa
628. Johnson, County of, Iowa
629. Jones, County of, Iowa
630. Keokuk, County of, Iowa
631. Lee, County of, Iowa
632. Lyon, County of, Iowa
633. Madison, County of, Iowa
634. Mahaska, County of, Iowa
635. Marion, County of, Iowa
636. Mills, County of, Iowa
637. Mitchell, County of, Iowa
638. Monroe, County of, Iowa
639. Montgomery, County of, Iowa
640. Muscatine, County of, Iowa
641. O'Brien, County of, Iowa
642. Osceola, County of, Iowa
643. Plymouth, County of, Iowa
644. Pocahontas, County of, Iowa
645. Polk, County of, Iowa
646. Pottawattamie, County of, Iowa
647. Poweshiek, County of, Iowa
648. Sac, County of, Iowa
649. Scott, County of, Iowa
650. Shelby, County of, Iowa
651. Sioux, County of, Iowa
652. Tama, County of, Iowa
653. Taylor, County of, Iowa
654. Union, County of, Iowa
655. Webster, County of, Iowa
656. Winnebago, County of, Iowa
657. Winneshiek, County of, Iowa
658. Worth, County of, Iowa
659. Wright, County of, Iowa
660. Allen, County of, Kansas
661. Barber, County of, Kansas
662. Bourbon, County of, Kansas
663. Cherokee, County of, Kansas
664. Cowley, County of, Kansas
665. Crawford, County of, Kansas
666. Dickinson, County of, Kansas
667. Elk, County of, Kansas

668. Elkhardt, City of, Kansas
669. Finney, County of, Kansas/ Finney, (Board of County Commissioners of) County of, Kansas
670. Ford, (Board of County Commissioners of) County of, Kansas
671. Greenwood, County of, Kansas
672. Harvey, County of, Kansas
673. Johnson, County of, Kansas
674. Kansas, City of, Kansas
675. Leavenworth, County of, Kansas
676. Manter, City of, Kansas
677. Meade, County of, Kansas
678. Montgomery, County of, Kansas
679. Morton, County of, Kansas
680. Neosho, County of, Kansas
681. Overland Park, City of, Kansas
682. Pratt, County of, Kansas
683. Reno, County of, Kansas
684. Sedgwick, County of, Kansas
685. Seward, County of, Kansas
686. Stanton, County of, Kansas
687. Ulysses, City of, Kansas
688. Wabaunsee, County of, Kansas
689. Wichita, City of, Kansas
690. Wyandotte, County of, Kansas
691. Adair, County of, Kentucky
692. Anderson, County of, Kentucky
693. Bell, County of, Kentucky
694. Bellefonte, City of, Kentucky
695. Benham, City of, Kentucky
696. Board of Education of Breathitt County Public Schools, Kentucky
697. Board of Education of Bullitt County Public Schools, Kentucky
698. Board of Education of Estill County Public Schools, Kentucky
699. Board of Education of Fayette County Public Schools, Kentucky
700. Board of Education of Harrison County Public Schools, Kentucky
701. Board of Education of Hart County Public Schools, Kentucky
702. Board of Education of Jefferson County Public Schools, Kentucky
703. Board of Education of Johnson County Public School District, Kentucky
704. Board of Education of LaRue County Public Schools, Kentucky
705. Board of Education of Lawrence County Public Schools, Kentucky
706. Board of Education of Martin County Public Schools, Kentucky
707. Board of Education of Menifee County Public Schools, Kentucky
708. Board of Education of Owsley County Public Schools, Kentucky
709. Board of Education of Wolfe County Public Schools, Kentucky
710. Boone, County of, Kentucky
711. Bourbon, County of, Kentucky
712. Boyd, County of, Kentucky
713. Boyle, County of, Kentucky
714. Breckinridge, County of, Kentucky
715. Buckhorn, City of, Kentucky
716. Campbell, County of, Kentucky
717. Christian, County of, Kentucky
718. Clark, County of, Kentucky
719. Covington, City of, Kentucky
720. Edmonson, County of, Kentucky
721. Estill, County of, Kentucky
722. Floyd, County of, Kentucky
723. Franklin, County of, Kentucky
724. Grant, County of, Kentucky
725. Green, County of, Kentucky
726. Greenup, City of, Kentucky
727. Hardin, County of, Kentucky
728. Harlan, City of, Kentucky
729. Harlan, County of, Kentucky
730. Henderson, City of, Kentucky
731. Henderson, County of, Kentucky
732. Hopkins, County of, Kentucky
733. Hyden, City of, Kentucky
734. Jenkins, City of, Kentucky
735. Jessamine, County of, Kentucky
736. Kenton, County of, Kentucky
737. Knott, County of, Kentucky
738. Knox, County of, Kentucky
739. Lawrence, County of, Kentucky
740. Letcher, County of, Kentucky

741. Lexington-Fayette, Urban County of, Kentucky
742. Lincoln, County of, Kentucky
743. London, City of, Kentucky
744. Louisville/Jefferson, County Metro Government of, Kentucky
745. Loyall, City of, Kentucky
746. Lynch, City of, Kentucky
747. Madison, County of, Kentucky
748. Manchester, City of, Kentucky
749. Marshall, County of, Kentucky
750. McCracken, County of, Kentucky
751. Meade, County of, Kentucky
752. Monroe, County of, Kentucky
753. Montgomery, County of, Kentucky
754. Morehead, City of, Kentucky
755. Ohio, County of, Kentucky
756. Oldham, County of, Kentucky
757. Owsley, County of, Kentucky
758. Paducah, City of, Kentucky
759. Perry, County of, Kentucky
760. Pike, County of, Kentucky
761. Pineville, City of, Kentucky
762. Pippa Passes, City of, Kentucky
763. Prestonsburg, City of, Kentucky
764. Pulaski, County of, Kentucky
765. Rowan, County of, Kentucky
766. Russell, City of, Kentucky
767. Scott, County of, Kentucky
768. Shelby, County of, Kentucky
769. South Shore, City of, Kentucky
770. Union, County of, Kentucky
771. Vanceburg, City of, Kentucky
772. Warren, County of, Kentucky
773. Wayne, County of, Kentucky
774. Whitesburg, City of, Kentucky
775. Whitley, County of, Kentucky
776. Worthington, City of, Kentucky
777. Alexandria, City of, Louisiana
778. Allen, Parish of, Louisiana/ Allen, (Sheriff of) Parish of, Louisiana
779. Ascension, Parish of, Louisiana / Ascension, (Sheriff of) Parish of, Louisiana
780. Ascension Parish School Board, Louisiana
781. Assumption, Parish of, Louisiana/ Assumption, (Police Jury of) Parish of, Louisiana/ Assumption, (Sheriff of) Parish of, Louisiana
782. Avoyelles, Parish of, Louisiana/ Avoyelles, (Police Jury of) Parish of, Louisiana/ Avoyelles, (Sheriff of) Parish of, Louisiana
783. Baldwin, Town of, Louisiana
784. Bastrop, City of, Louisiana
785. Baton Rouge, City of, Louisiana
786. Beauregard, Parish of, Louisiana
787. Benton Fire Protection District No. 4, Louisiana
788. Berwick, Town of, Louisiana
789. Bogalusa, City of, Louisiana
790. Bossier City, City of, Louisiana
791. Bossier, Parish of, Louisiana
792. Caddo Fire Protection District No. 1, Louisiana
793. Caddo, Parish of, Louisiana
794. Calcasieu, Parish of, Louisiana/ Calcasieu, (Police Jury of) Parish of, Louisiana/ Calcasieu, (Sheriff of) Parish of, Louisiana
795. Caldwell, Parish of, Louisiana
796. Catahoula, Parish of, Louisiana/ Catahoula, (Sheriff of) Parish of, Louisiana
797. Claiborne, Parish of, Louisiana
798. Concordia, Parish of, Louisiana/ Concordia, (Sheriff of) Parish of, Louisiana
799. Delhi, Town of, Louisiana
800. De Soto Fire Protection District No. 8, Louisiana
801. Donaldsonville, City of, Louisiana
802. East Baton Rouge, Parish of, Louisiana/ East Baton Rouge, (Sheriff of) Parish of, Louisiana
803. East Carroll, Parish of, Louisiana/ East Carroll, (Sheriff of) Parish of, Louisiana
804. Eunice, City of, Louisiana
805. Evangeline, Parish of, Louisiana/ Evangeline, (Police Jury of) Parish

of, Louisiana/ Evangeline, (Sheriff of) Parish of, Louisiana
806. Ferriday, Town of, Louisiana
807. Franklin, City of, Louisiana
808. Franklin, Parish of, Louisiana
809. Gramercy, Town of, Louisiana
810. Grant, Parish of, Louisiana/ Grant, (Sheriff of) Parish of, Louisiana
811. Iberia, Parish of, Louisiana/ Iberia, (Sheriff of) Parish of, Louisiana
812. Iberia Parish School Board, Louisiana
813. Jackson, (Police Jury of) Parish of, Louisiana
814. Jefferson Davis, Parish of, Louisiana/ Jefferson Davis, (Police Jury of) Parish of, Louisiana/ Jefferson Davis, (Sheriff of) Parish of, Louisiana
815. Jefferson, Parish of, Louisiana/ Jefferson, (Sheriff of) Parish of, Louisiana
816. Kenner, City of, Louisiana
817. Lafayette, Parish of, Louisiana/ Lafayette, (Sheriff of) Parish of, Louisiana
818. Lafourche, Parish of, Louisiana
819. Lafourche Parish School Board, Louisiana
820. Lake Charles, City of, Louisiana
821. Lake Providence, Town of, Louisiana
822. LaSalle, Parish of, Louisiana
823. Lutcher, Town of, Louisiana
824. Madisonville, Town of, Louisiana
825. Mandeville, City of, Louisiana
826. Monroe, City of, Louisiana
827. Morehouse, Parish of, Louisiana/ Morehouse, (Sheriff of) Parish of, Louisiana
828. Natchitoches, City of, Louisiana/ Natchitoches, Parish of, Louisiana
829. New Iberia, City of, Louisiana
830. New Orleans, City of, Louisiana/ New Orleans, (Sheriff of) City of, Louisiana
831. New Roads, City of, Louisiana
832. Opelousas, City of, Louisiana
833. Orleans, Parish of, Louisiana/ Orleans, (Sheriff of) Parish of, Louisiana
834. Ouachita, Parish of, Louisiana/ Ouachita, (Police Jury of) Parish of, Louisiana/ Ouachita, (Sheriff of) Parish of, Louisiana
835. Patterson, City of, Louisiana
836. Pearl River, Town of, Louisiana
837. Pineville, City of, Louisiana
838. Pointe Coupee, Parish of, Louisiana
839. Prevost Memorial Hospital, Louisiana
840. Rapides, Parish of, Louisiana/ Rapides, (District Attorney of) Parish of, Louisiana/ Rapides, (Sheriff of) Parish of, Louisiana
841. Red River Fire Protection District, Louisiana
842. Red River, Parish of, Louisiana
843. Richland, Parish of, Louisiana/ Richland, (Sheriff of) Parish of, Louisiana
844. Richwood, Town of, Louisiana
845. Sabine, Parish of, Louisiana/ Sabine, (Police Jury of) Parish of, Louisiana/ Sabine, (Sheriff of) Parish of, Louisiana
846. Saint Martinville, City of, Louisiana
847. Shreveport, City of, Louisiana
848. Slidell, City of, Louisiana
849. St. Bernard, Parish of, Louisiana/ St. Bernard, (Sheriff of) Parish of, Louisiana
850. St. Bernard Parish School Board, Louisiana
851. St. Charles, Parish of, Louisiana/ St. Charles, (Sheriff of) Parish of, Louisiana
852. St. James, Parish of, Louisiana
853. St. James Parish School Board, Louisiana
854. St. John the Baptist, Parish of, Louisiana

855. St. Landry, Parish of, Louisiana/ St. Landry, (President of) Parish of, Louisiana/ St. Landry, (Sheriff of) Parish of, Louisiana
856. St. Martin, Parish of, Louisiana
857. St. Mary, Parish of, Louisiana/ St. Mary, (Sheriff of) Parish of, Louisiana
858. St. Mary Parish School Board, Louisiana
859. St. Tammany Fire Protection District No. 1, Louisiana
860. St. Tammany Fire Protection District No. 2, Louisiana
861. St. Tammany Fire Protection District No. 3, Louisiana
862. St. Tammany Fire Protection District No. 4, Louisiana
863. St. Tammany Fire Protection District No. 5, Louisiana
864. St. Tammany Fire Protection District No. 12, Louisiana
865. St. Tammany Fire Protection District No. 13, Louisiana
866. St. Tammany, Parish of, Louisiana/ St. Tammany, (Coroner's Office of) Parish of, Louisiana/ St. Tammany, (Sheriff of) Parish of, Louisiana
867. Tensas, Parish of, Louisiana/ Tensas, (Sheriff of) Parish of, Louisiana
868. Union, Parish of, Louisiana
869. Vermillion, (Police Jury of) Parish of, Louisiana
870. Vernon, Parish of, Louisiana/ Vernon, (Sheriff of) Parish of, Louisiana
871. Washington, Parish of, Louisiana/ Washington, (Sheriff of) Parish of, Louisiana
872. Webster, Parish of, Louisiana
873. West Ascension Parish Hospital Service District, Louisiana
874. West Baton Rouge Fire Protection District No. 1, Louisiana
875. West Baton Rouge, Parish of, Louisiana
876. West Carroll, Parish of, Louisiana/ West Carroll, (Sheriff of) Parish of, Louisiana
877. West Monroe, Parish of, Louisiana
878. Winn, Parish of, Louisiana/ Winn, (District Attorney of) Parish of, Louisiana
879. Androscoggin, County of, Maine
880. Aroostook, County of, Maine
881. Auburn, City of, Maine
882. Augusta, City of, Maine
883. Bangor, City of, Maine
884. Biddeford, City of, Maine
885. Board of Education of Bangor School Department, Maine
886. Board of Education of Cape Elizabeth School Department, Maine
887. Board of Education of Ellsworth School Department, Maine
888. Board of Education of Maine Regional School Unit 10, Maine
889. Board of Education of Maine Regional School Unit 13, Maine
890. Board of Education of Maine Regional School Unit 25, Maine
891. Board of Education of Maine Regional School Unit 26, Maine
892. Board of Education of Maine Regional School Unit 29, Maine
893. Board of Education of Maine Regional School Unit 34, Maine
894. Board of Education of Maine Regional School Unit 40, Maine
895. Board of Education of Maine Regional School Unit 50, Maine
896. Board of Education of Maine Regional School Unit 57, Maine
897. Board of Education of Maine Regional School Unit 60, Maine
898. Board of Education of Maine Regional School Unit 71, Maine
899. Board of Education of Maine Regional School Unit 9, Maine
900. Board of Education of Maine School Administrative District 11, Maine

901. Board of Education of Maine School Administrative District 15, Maine
902. Board of Education of Maine School Administrative District 28/Five Town Central School District, Maine
903. Board of Education of Maine School Administrative District 35, Maine
904. Board of Education of Maine School Administrative District 44, Maine
905. Board of Education of Maine School Administrative District 53, Maine
906. Board of Education of Maine School Administrative District 55, Maine
907. Board of Education of Maine School Administrative District 6, Maine
908. Board of Education of Maine School Administrative District 61, Maine
909. Board of Education of Maine School Administrative District 72, Maine
910. Board of Education of Portland School Department, Maine
911. Board of Education of Scarborough School Department, Maine
912. Board of Education of South Portland School Department, Maine
913. Board of Education of St. George Municipal School District, Maine
914. Board of Education of Waterville School Department, Maine
915. Calais, City of, Maine
916. Cumberland, County of, Maine
917. Kennebec, County of, Maine
918. Knox, County of, Maine
919. Lewiston, City of, Maine
920. Lincoln, County of, Maine
921. Penobscot, County of, Maine
922. Portland, City of, Maine
923. Rockland, City of, Maine
924. Saco, City of, Maine
925. Sagadahoc, County of, Maine
926. Sanford, City of, Maine
927. Somerset, County of, Maine
928. Waldo, County of, Maine
929. Washington, County of, Maine
930. Waterville, City of, Maine
931. York, County of, Maine
932. Aberdeen, City of, Maryland
933. Allegany, County of, Maryland
934. Baltimore City Board of School Commissioners, Maryland
935. Bel Air, Town of, Maryland
936. Berlin, Town of, Maryland
937. Bowie, City of, Maryland
938. Calvert, County of, Maryland
939. Cambridge, City of, Maryland
940. Caroline, County of, Maryland
941. Cecil, County of, Maryland
942. Charles, County of, Maryland
943. Charlestown, Town of, Maryland
944. Cumberland, City of, Maryland
945. Dorchester, County of, Maryland
946. Frederick, City of, Maryland
947. Frederick, County of, Maryland
948. Frostburg, City of, Maryland
949. Garrett, County of, Maryland
950. Grantsville, Town of/ City of, Maryland
951. Hagerstown, City of, Maryland
952. Harford, County of, Maryland
953. Havre De Grace, City of, Maryland
954. Laurel, City of, Maryland
955. Mountain Lake Park, Town of, Maryland
956. North East, Town of, Maryland
957. Oakland, Town of, Maryland
958. Perryville, Town of, Maryland
959. Prince George's, County of, Maryland
960. Rockville, City of, Maryland
961. Seat Pleasant, City of, Maryland
962. Somerset, County of, Maryland
963. St. Mary's, County of, Maryland
964. Talbot, County of, Maryland
965. Vienna, Town of, Maryland
966. Washington, County of, Maryland
967. Westminster, City of, Maryland
968. Wicomico, County of, Maryland
969. Acushnet, Town of, Massachusetts
970. Agawam, City of, Massachusetts
971. Amesbury, City of, Massachusetts
972. Aquinnah, Town of, Massachusetts
973. Athol, Town of, Massachusetts

974. Auburn, Town of, Massachusetts
975. Ayer, Town of, Massachusetts
976. Barnstable, Town of, Massachusetts
977. Belchertown, Town of, Massachusetts
978. Beverly, City of, Massachusetts
979. Billerica, Town of, Massachusetts
980. Brewster, Town of, Massachusetts
981. Bridgewater, Town of, Massachusetts
982. Brockton, City of, Massachusetts
983. Brookline, Town of, Massachusetts
984. Cambridge, City of, Massachusetts
985. Canton, Town of, Massachusetts
986. Carver, Town of, Massachusetts
987. Charlton, Town of, Massachusetts
988. Chelmsford, Town of, Massachusetts
989. Chicopee, City of, Massachusetts
990. Clarksburg, Town of, Massachusetts
991. Clinton, Town of, Massachusetts
992. Danvers, Town of, Massachusetts
993. Dedham, Town of, Massachusetts
994. Dennis, Town of, Massachusetts
995. Douglas, Town of, Massachusetts
996. Dudley, Town of, Massachusetts
997. East Bridgewater, Town of, Massachusetts
998. Eastham, Town of, Massachusetts
999. Easthampton, City of, Massachusetts
1000. Easton, Town of, Massachusetts
1001. Everett, City of, Massachusetts
1002. Fairhaven, Town of, Massachusetts
1003. Falmouth, Town of, Massachusetts
1004. Fitchburg, City of, Massachusetts
1005. Framingham, City of, Massachusetts
1006. Freetown, Town of, Massachusetts
1007. Georgetown, Town of, Massachusetts
1008. Gloucester, City of, Massachusetts
1009. Grafton, Town of, Massachusetts
1010. Greenfield, City of, Massachusetts
1011. Hanson, Town of, Massachusetts
1012. Haverhill, City of, Massachusetts
1013. Holliston, Town of, Massachusetts
1014. Holyoke, City of, Massachusetts
1015. Hopedale, Town of, Massachusetts
1016. Hull, Town of, Massachusetts
1017. Kingston, Town of, Massachusetts
1018. Lakeville, Town of, Massachusetts
1019. Leicester, Town of, Massachusetts
1020. Leominster, City of, Massachusetts
1021. Leverett, Town of, Massachusetts
1022. Longmeadow, Town of, Massachusetts
1023. Lowell, City of, Massachusetts
1024. Ludlow, Town of, Massachusetts
1025. Lunenburg, Town of, Massachusetts
1026. Lynn, City of, Massachusetts
1027. Lynnfield, Town of, Massachusetts
1028. Malden, City of, Massachusetts
1029. Marblehead, Town of, Massachusetts
1030. Marshfield, Town of, Massachusetts
1031. Mashpee, Town of, Massachusetts
1032. Mattapoisett, Town of, Massachusetts
1033. Medford, City of, Massachusetts
1034. Melrose, City of, Massachusetts
1035. Methuen, City of, Massachusetts
1036. Middleborough, Town of, Massachusetts
1037. Milford, Town of, Massachusetts
1038. Millbury, Town of, Massachusetts
1039. Millis, Town of, Massachusetts
1040. Natick, Town of, Massachusetts
1041. New Bedford, Town of/ City of, Massachusetts
1042. Newburyport, City of, Massachusetts
1043. North Adams, City of, Massachusetts
1044. North Andover, Town of, Massachusetts
1045. North Attleborough, Town of, Massachusetts
1046. North Reading, Town of, Massachusetts
1047. Northampton, City of, Massachusetts
1048. Northbridge, Town of, Massachusetts
1049. Norton, Town of, Massachusetts
1050. Norwell, Town of, Massachusetts
1051. Norwood, Town of, Massachusetts
1052. Orange, Town of, Massachusetts
1053. Oxford, Town of, Massachusetts

1054. Palmer, City of, Massachusetts
1055. Peabody, City of, Massachusetts
1056. Pembroke, Town of, Massachusetts
1057. Pittsfield, City of, Massachusetts
1058. Plainville, Town of, Massachusetts
1059. Plymouth, Town of, Massachusetts
1060. Provincetown, Town of, Massachusetts
1061. Randolph, Town of/ City of, Massachusetts
1062. Rehoboth, Town of, Massachusetts
1063. Rockland, Town of, Massachusetts
1064. Salem, City of, Massachusetts
1065. Salisbury, Town of, Massachusetts
1066. Sandwich, Town of, Massachusetts
1067. Scituate, Town of, Massachusetts
1068. Seekonk, Town of, Massachusetts
1069. Sheffield, Town of, Massachusetts
1070. Shirley, Town of, Massachusetts
1071. Somerset, Town of, Massachusetts
1072. South Hadley, Town of, Massachusetts
1073. Southbridge, City of, Massachusetts
1074. Spencer, Town of, Massachusetts
1075. Springfield, City of, Massachusetts
1076. Stoneham, Town of, Massachusetts
1077. Stoughton, Town of, Massachusetts
1078. Sturbridge, Town of, Massachusetts
1079. Sudbury, Town of, Massachusetts
1080. Sutton, Town of, Massachusetts
1081. Swampscott, Town of, Massachusetts
1082. Templeton, Town of, Massachusetts
1083. Tewksbury, Town of, Massachusetts
1084. Truro, Town of, Massachusetts
1085. Tyngsborough, Town of, Massachusetts
1086. Upton, Town of, Massachusetts
1087. Wakefield, Town of, Massachusetts
1088. Walpole, Town of, Massachusetts
1089. Ware, Town of, Massachusetts
1090. Warren, Town of, Massachusetts
1091. Watertown, City of, Massachusetts
1092. Wellfleet, Town of, Massachusetts
1093. West Boylston, Town of, Massachusetts
1094. West Bridgewater, Town of, Massachusetts
1095. West Springfield, City of, Massachusetts
1096. Westborough, Town of, Massachusetts
1097. Westford, Town of, Massachusetts
1098. Williamsburg, Town of, Massachusetts
1099. Wilmington, Town of, Massachusetts
1100. Winchendon, Town of, Massachusetts
1101. Woburn, City of, Massachusetts
1102. Worcester, City of, Massachusetts
1103. Alcona, County of, Michigan
1104. Alger, County of, Michigan
1105. Alpena, County of, Michigan
1106. Antrim, County of, Michigan
1107. Arenac, County of, Michigan
1108. Baraga, County of, Michigan
1109. Benzie, County of, Michigan
1110. Berrien, County of, Michigan
1111. Branch, County of, Michigan
1112. Calhoun, County of, Michigan
1113. Canton, Charter Township of, Michigan
1114. Cass, County of, Michigan
1115. Charlevoix, County of, Michigan
1116. Chippewa, County of, Michigan
1117. Clinton, County of, Michigan
1118. Clinton, Village of, Michigan
1119. Crawford, County of, Michigan
1120. Delta, County of, Michigan
1121. Detroit, City of, Michigan
1122. Dickinson, County of, Michigan
1123. East Lansing, City of, Michigan
1124. Eaton, County of, Michigan
1125. Escanaba, City of, Michigan
1126. Genesee, County of, Michigan
1127. Grand Rapids, City of, Michigan
1128. Grand Traverse, County of, Michigan
1129. Gratiot, County of, Michigan
1130. Hillsdale, County of, Michigan
1131. Houghton, County of, Michigan

1132. Huron Charter Township, Township of, Michigan
1133. Ingham, County of, Michigan
1134. Ionia, County of, Michigan
1135. Iosco, County of, Michigan
1136. Iron, County of, Michigan
1137. Iron Mountain, City of, Michigan
1138. Isabella, County of, Michigan
1139. Jackson, City of, Michigan
1140. Kalamazoo, County of, Michigan
1141. Kent, County of, Michigan
1142. Lake, County of, Michigan
1143. Lansing, City of, Michigan
1144. Leelanau, County of, Michigan
1145. Lenawee, County of, Michigan
1146. Livingston, County of, Michigan
1147. Livonia, City of, Michigan
1148. Luce, County of, Michigan
1149. Macomb, County of, Michigan
1150. Manistee, County of, Michigan
1151. Marquette, County of, Michigan
1152. Mason, County of, Michigan
1153. Monroe, County of, Michigan
1154. Montcalm, County of, Michigan
1155. Montmorency, County of, Michigan
1156. Muskegon, County of, Michigan
1157. Newaygo, County of, Michigan
1158. Northville, City of, Michigan
1159. Northville, Charter Township of, Michigan
1160. Oceana, County of, Michigan
1161. Ogemaw, County of, Michigan
1162. Ontongon, County of, Michigan
1163. Osceola, County of, Michigan
1164. Otsego, County of, Michigan
1165. Pittsfield Charter Township, Township of, Michigan
1166. Pontiac, City of, Michigan
1167. Presque Isle, County of, Michigan
1168. Romulus, City of, Michigan
1169. Roscommon, County of, Michigan
1170. Saginaw, County of, Michigan
1171. Sanilac, County of, Michigan
1172. Sault Ste. Marie, City of, Michigan
1173. Shiawassee, County of, Michigan
1174. St. Clair, County of, Michigan
1175. Traverse, City of, Michigan
1176. Tuscola, County of, Michigan
1177. Van Buren Charter Township, Township of, Michigan
1178. Washtenaw, County of, Michigan
1179. Wayne, City of, Michigan
1180. Wayne, County of, Michigan
1181. Westland, City of, Michigan
1182. Wexford, County of, Michigan
1183. Anoka, County of, Minnesota
1184. Big Stone, County of, Minnesota
1185. Board of Education of Minnetonka School District No. 276, Minnesota
1186. Dakota, County of, Minnesota
1187. Douglas, County of, Minnesota
1188. Itasca, County of, Minnesota
1189. McLeod, County of, Minnesota
1190. Meeker, County of, Minnesota
1191. Morrison, County of, Minnesota
1192. Mower, County of, Minnesota
1193. St. Louis, County of, Minnesota
1194. St. Paul, City of, Minnesota
1195. Washington, County of, Minnesota
1196. Winona, County of, Minnesota
1197. Adams, County of, Mississippi
1198. Amite, County of, Mississippi
1199. Amory, City of, Mississippi
1200. Arcola, Town of, Mississippi
1201. Bolivar, County of, Mississippi
1202. Brookhaven, City of, Mississippi
1203. Centreville, Town of, Mississippi
1204. Clarksdale, City of, Mississippi
1205. Columbia, City of, Mississippi
1206. Covington, County of, Mississippi
1207. DeSoto, County of, Mississippi
1208. Forrest, County of, Mississippi
1209. Greenwood, City of, Mississippi
1210. Grenada, City of, Mississippi
1211. Grenada, County of, Mississippi
1212. Gulfport, City of, Mississippi
1213. Harrison, County of, Mississippi
1214. Hattiesburg, City of, Mississippi
1215. Hinds, County of, Mississippi
1216. Holly Springs, City of, Mississippi
1217. Indianola, City of, Mississippi
1218. Issaquena, County of, Mississippi

1219. Iuka, City of, Mississippi
1220. Jackson, City of, Mississippi
1221. Jonestown, Town of, Mississippi
1222. Lafayette, County of, Mississippi
1223. Laurel, City of, Mississippi
1224. Leflore, County of, Mississippi
1225. Lincoln, County of, Mississippi
1226. Long Beach, City of, Mississippi
1227. Lumberton, City of, Mississippi
1228. Madison, County of, Mississippi
1229. Marion, County of, Mississippi
1230. Marshall, County of, Mississippi
1231. Meridian, City of, Mississippi
1232. Monroe, County of, Mississippi
1233. Mound Bayou, City of, Mississippi
1234. Neshoba, County of, Mississippi
1235. New Albany, City of, Mississippi
1236. Pascagoula, City of, Mississippi
1237. Pearl River, County of, Mississippi
1238. Philadelphia, City of, Mississippi
1239. Prentiss, County of, Mississippi
1240. Scott, County of, Mississippi
1241. Stone, County of, Mississippi
1242. Summit, Town of, Mississippi
1243. Sunflower, County of, Mississippi
1244. Tippah, County of, Mississippi
1245. Union, County of, Mississippi
1246. Washington, County of, Mississippi
1247. Wiggins, City of, Mississippi
1248. Audrain, County of, Missouri
1249. Barry, County of, Missouri
1250. Barton, County of, Missouri
1251. Boone, County of, Missouri
1252. Buchanan, County of, Missouri
1253. Butler, County of, Missouri
1254. Callaway, County of, Missouri
1255. Camden, County of, Missouri
1256. Cape Girardeau, County of, Missouri
1257. Cass, County of, Missouri
1258. Chariton, County of, Missouri
1259. Christian, County of, Missouri
1260. Clinton, County of, Missouri
1261. Cole, County of, Missouri
1262. Crawford, County of, Missouri
1263. Dent, County of, Missouri
1264. Douglas, County of, Missouri
1265. Dunklin, County of, Missouri
1266. Franklin, County of, Missouri
1267. Gasconade, County of, Missouri
1268. Greene, County of, Missouri
1269. Harrisonville, Town of, Missouri
1270. Henry, County of, Missouri
1271. Howell, County of, Missouri
1272. Independence, City of, Missouri
1273. Iron, County of, Missouri
1274. Jackson, County of, Missouri
1275. Jasper, County of, Missouri
1276. Jefferson, County of, Missouri
1277. Johnson, County of, Missouri
1278. Joplin, City of, Missouri
1279. Kansas, City of, Missouri
1280. Knox, County of, Missouri
1281. Lafayette, County of, Missouri
1282. Lawrence, County of, Missouri
1283. Lewis, County of, Missouri
1284. Lincoln, County of, Missouri
1285. Livingston, County of, Missouri
1286. Madison, County of, Missouri
1287. Maries, County of, Missouri
1288. McDonald, County of, Missouri
1289. Miller, County of, Missouri
1290. Moniteau, County of, Missouri
1291. Montgomery, County of, Missouri
1292. Morgan, County of, Missouri
1293. Nodaway, County of, Missouri
1294. Osage, County of, Missouri
1295. Ozark, County of, Missouri
1296. Pemiscot, County of, Missouri
1297. Perry, County of, Missouri
1298. Pettis, County of, Missouri
1299. Phelps, County of, Missouri
1300. Pike, County of, Missouri
1301. Polk, County of, Missouri
1302. Pulaski, County of, Missouri
1303. Randolph, County of, Missouri
1304. Ray, County of, Missouri
1305. Reynolds, County of, Missouri
1306. Ripley, County of, Missouri
1307. Schuyler, County of, Missouri
1308. Scott, County of, Missouri
1309. Sedalia, City of, Missouri
1310. Shannon, County of, Missouri

1311. Shelby, County of, Missouri
1312. Springfield, City of, Missouri
1313. St. Charles, County of, Missouri
1314. St. Francois, County of, Missouri
1315. St. Joseph, City of, Missouri
1316. St. Louis, County of, Missouri
1317. Ste. Genevieve, County of, Missouri
1318. Stone, County of, Missouri
1319. Taney, County of, Missouri
1320. Texas, County of, Missouri
1321. Vernon, County of, Missouri
1322. Warren, County of, Missouri
1323. Washington, County of, Missouri
1324. Webster, County of, Missouri
1325. Wright, County of, Missouri
1326. Anaconda-Deer Lodge, County of, Montana
1327. Cascade, County of, Montana
1328. Gallatin, County of, Montana
1329. Great Falls, City of, Montana
1330. Lake, County of, Montana
1331. Missoula, City of, Montana
1332. Missoula, County of, Montana
1333. Douglas, County of, Nebraska
1334. Lincoln, County of, Nebraska
1335. Sarpy, County of, Nebraska
1336. South Sioux, City of, Nebraska
1337. Carson, City of, Nevada
1338. Churchill, County of, Nevada
1339. Clark, County of, Nevada
1340. Douglas, County of, Nevada
1341. Esmeralda, County of, Nevada
1342. Fernley, City of, Nevada
1343. Henderson, City of, Nevada
1344. Humboldt, County of, Nevada
1345. Las Vegas, City of, Nevada
1346. North Las Vegas, City of, Nevada
1347. Nye, County of, Nevada
1348. Sparks, City of, Nevada
1349. Washoe, County of, Nevada
1350. West Wendover, City of, Nevada
1351. Belknap, County of, New Hampshire
1352. Belmont, Town of, New Hampshire
1353. Berlin, City of, New Hampshire
1354. Board of Education of Goshen School District, New Hampshire
1355. Board of Education of Kearsarge Regional School Unit-School Administrative Unit 65, New Hampshire
1356. Board of Education of Lebanon School District, New Hampshire
1357. Board of Education of Pittsfield School District, New Hampshire
1358. Board of Education of Tamworth School District, New Hampshire
1359. Carroll, County of, New Hampshire
1360. Cheshire, County of, New Hampshire
1361. Claremont, City of, New Hampshire
1362. Concord, City of, New Hampshire
1363. Coos, County of, New Hampshire
1364. Derry, Town of, New Hampshire
1365. Franklin, City of, New Hampshire
1366. Grafton, County of, New Hampshire
1367. Hillsborough, County of, New Hampshire
1368. Keene, City of, New Hampshire
1369. Laconia, City of, New Hampshire
1370. Londonderry, Town of, New Hampshire
1371. Manchester, City of, New Hampshire
1372. Nashua, City of, New Hampshire
1373. Rochester, City of, New Hampshire
1374. Rockingham, County of, New Hampshire
1375. Strafford, County of, New Hampshire
1376. Sullivan, County of, New Hampshire
1377. Barnegat, Township of, New Jersey
1378. Bayonne, City of, New Jersey
1379. Burlington, County of, New Jersey
1380. Clifton, City of, New Jersey
1381. Clinton, Town of, New Jersey
1382. Elizabeth, City of, New Jersey
1383. Hudson, County of, New Jersey
1384. Hunterdon, County of, New Jersey
1385. Ocean, County of, New Jersey
1386. Paramus, Borough of, New Jersey
1387. Ridgefield, Borough of, New Jersey
1388. Saddlebrook, Township of, New Jersey

1389. Trenton, City of, New Jersey
1390. Vineland, City of, New Jersey
1391. Albany, City of, New York
1392. Allegany, County of, New York
1393. Amityville, Village of, New York
1394. Amsterdam, City of, New York
1395. Auburn, City of, New York
1396. Babylon, Village of, New York
1397. Bellmore Fire District, New York
1398. Bellport, Village of, New York
1399. Board of Education of Rochester City School District, New York
1400. Brookhaven, Town of, New York
1401. Broome, County of, New York
1402. Buffalo, City of, New York
1403. Centereach Fire District, New York
1404. Centerport Fire District, New York
1405. Clarkstown, Town of, New York
1406. Clinton, County of, New York
1407. Columbia, County of, New York
1408. Cortland, County of, New York
1409. Dutchess, County of, New York
1410. East Hampton, Village of, New York
1411. East Rockaway, Village of, New York
1412. Erie, County of, New York
1413. Farmingdale, Village of, New York
1414. Floral Park, Village of, New York
1415. Franklin, County of, New York
1416. Fulton, County of, New York
1417. Garden City, Village of, New York
1418. Genesee, County of, New York
1419. Geneva, City of, New York
1420. Great Neck, Village of, New York
1421. Greene, County of, New York
1422. Greenport, Village of, New York
1423. Hamilton, County of, New York
1424. Hauppauge Fire District, New York
1425. Haverstraw, Town of, New York
1426. Hempstead, Town of, New York
1427. Hempstead, Village of, New York
1428. Herkimer, County of, New York
1429. Herkimer, Town of, New York
1430. Hicksville Water District, New York
1431. Huntington, Town of, New York
1432. Island Park, Village of, New York
1433. Islandia, Village of, New York
1434. Islip Terrace Fire District, New York
1435. Islip, Town of, New York
1436. Ithaca, City of, New York
1437. Jefferson, County of, New York
1438. Kingston, City of, New York
1439. Lackawanna, City of, New York
1440. Lake Grove, Village of, New York
1441. Lawrence, Village of, New York
1442. Levittown Fire District, New York
1443. Lewis, County of, New York
1444. Lindenhurst, Village of, New York
1445. Lloyd Harbor, Village of, New York
1446. Long Beach, City of, New York
1447. Lynbrook, Village of, New York
1448. Massapequa Park, Village of, New York
1449. Melville Fire District, New York
1450. Mill Neck, Village of, New York
1451. Miller Place Fire District, New York
1452. Monroe, County of, New York
1453. Montgomery, County of, New York
1454. Mount Sinai Fire District, New York
1455. Nassau, County of, New York
1456. Nesconset Fire District, New York
1457. New Hyde Park, Village of, New York
1458. New York, City of, New York
1459. Niagara, County of, New York
1460. Nissequogue, Village of, New York
1461. North Hempstead, Town of, New York
1462. North Merrick Fire District, New York
1463. North Patchogue Fire District, New York
1464. Northport, Village of, New York
1465. Ogdensburg, City of, New York
1466. Old Westbury, Village of, New York
1467. Oneida, County of, New York
1468. Onondaga, County of, New York
1469. Ontario, County of, New York
1470. Orange, County of, New York
1471. Orangetown, Town of, New York
1472. Oswego, County of, New York

1473. Oyster Bay, Town of, New York
1474. Patchogue, Village of, New York
1475. Plattsburgh, City of, New York
1476. Poquott, Village of, New York
1477. Port Washington North, Village of, New York
1478. Port Washington Water District, New York
1479. Poughkeepsie, City of, New York
1480. Poughkeepsie, Town of, New York
1481. Ramapo, Town of, New York
1482. Rensselaer, County of, New York
1483. Ridge Fire District, New York
1484. Riverhead, Town of, New York
1485. Rochester, City of, New York
1486. Rome, City of, New York
1487. Rosalyn Water District, New York
1488. Saltaire, Village of, New York
1489. Saratoga, County of, New York
1490. Saratoga Springs, City of, New York
1491. Schenectady, City of, New York
1492. Schenectady, County of, New York
1493. Schoharie, County of, New York
1494. Schuyler, County of, New York
1495. Seneca, County of, New York
1496. Smithtown Fire District, New York
1497. Smithtown, Town of, New York
1498. South Farmingdale Fire District, New York
1499. Southampton, Town of, New York
1500. Southold, Town of, New York
1501. Southwestern Central School District, New York
1502. St. James Fire District, New York
1503. St. Lawrence, County of, New York
1504. Steuben, County of, New York
1505. Stewart Manor, Village of, New York
1506. Stony Brook Fire District, New York
1507. Stony Point, City of, New York
1508. Suffern, Village of, New York
1509. Suffolk, County of, New York
1510. Sullivan, County of, New York
1511. Syracuse, City of, New York
1512. The Branch, Village of, New York
1513. Tompkins, County of, New York
1514. Troy, City of, New York
1515. Ulster, County of, New York
1516. Uniondale Fire District, New York
1517. Utica, City of, New York
1518. Valley Stream, Village of, New York
1519. Washington, County of, New York
1520. West Hampton Dunes, Village of, New York
1521. West Haverstraw, Village of, New York
1522. Westbury, Village of, New York
1523. Westchester, County of, New York
1524. Wyoming, County of, New York
1525. Yonkers, City of, New York
1526. Alamance, County of, North Carolina
1527. Alexander, County of, North Carolina
1528. Anson, County of, North Carolina
1529. Ashe, County of, North Carolina
1530. Beaufort, County of, North Carolina
1531. Bladen, County of, North Carolina
1532. Brunswick, County of, North Carolina
1533. Buncombe, County of, North Carolina
1534. Burke, County of, North Carolina
1535. Cabarrus, County of, North Carolina
1536. Caldwell, County of, North Carolina
1537. Camden, County of, North Carolina
1538. Canton, Town of, North Carolina
1539. Carteret, County of, North Carolina
1540. Caswell, County of, North Carolina
1541. Catawba, County of, North Carolina
1542. Chatham, County of, North Carolina
1543. Cherokee, County of, North Carolina
1544. Cleveland, County of, North Carolina
1545. Columbus, County of, North Carolina
1546. Craven, County of, North Carolina
1547. Cumberland, County of, North Carolina
1548. Dare, County of, North Carolina
1549. Davidson, County of, North Carolina

1550. Davie, County of, North Carolina
1551. Duplin, County of, North Carolina
1552. Durham, County of, North Carolina
1553. Fayetteville, City of, North Carolina
1554. Forsyth, County of, North Carolina
1555. Franklin, County of, North Carolina
1556. Gaston, County of, North Carolina
1557. Granville, County of, North Carolina
1558. Greene, County of, North Carolina
1559. Greensboro, City of, North Carolina
1560. Guilford, County of, North Carolina
1561. Halifax, County of, North Carolina
1562. Haywood, County of, North Carolina
1563. Henderson, City of, North Carolina
1564. Hickory, City of, North Carolina
1565. Iredell, County of, North Carolina
1566. Jacksonville, City of, North Carolina
1567. Lee, County of, North Carolina
1568. Lenoir, County of, North Carolina
1569. Lincoln, County of, North Carolina
1570. Martin, County of, North Carolina
1571. McDowell, County of, North Carolina
1572. Mecklenburg, County of, North Carolina
1573. Mitchell, County of, North Carolina
1574. Moore, County of, North Carolina
1575. New Hanover, County of, North Carolina
1576. Onslow, County of, North Carolina
1577. Orange, County of, North Carolina
1578. Pamlico, County of, North Carolina
1579. Pasquotank, County of, North Carolina
1580. Person, County of, North Carolina
1581. Pitt, County of, North Carolina
1582. Randolph, County of, North Carolina
1583. Richmond, County of, North Carolina
1584. Robeson, County of, North Carolina
1585. Rockingham, County of, North Carolina
1586. Rowan, County of, North Carolina
1587. Rutherford, County of, North Carolina
1588. Sampson, County of, North Carolina
1589. Scotland, County of, North Carolina
1590. Surry, County of, North Carolina
1591. Vance, County of, North Carolina
1592. Watauga, County of, North Carolina
1593. Wayne, County of, North Carolina
1594. Wilkes, County of, North Carolina
1595. Wilmington, City of, North Carolina
1596. Winston-Salem, City of, North Carolina
1597. Barnes, County of, North Dakota
1598. Benson, County of, North Dakota
1599. Bismarck, City of, North Dakota
1600. Burleigh, County of, North Dakota
1601. Devils Lake, City of, North Dakota
1602. Dickey, County of, North Dakota
1603. Dunn, County of, North Dakota
1604. Eddy, County of, North Dakota
1605. Foster, County of, North Dakota
1606. Grand Forks, County of, North Dakota
1607. Lamoure, County of, North Dakota
1608. Lisbon, City of, North Dakota
1609. McKenzie, County of, North Dakota
1610. McLean, County of, North Dakota
1611. Mercer, County of, North Dakota
1612. Mountrail, County of, North Dakota
1613. Pembina, County of, North Dakota
1614. Pierce, County of, North Dakota
1615. Ramsey, County of, North Dakota
1616. Ransom, County of, North Dakota
1617. Richland, County of, North Dakota
1618. Rolette, County of, North Dakota
1619. Sargent, County of, North Dakota
1620. Stark, County of, North Dakota
1621. Towner, County of, North Dakota
1622. Walsh, County of, North Dakota
1623. Ward, County of, North Dakota
1624. Wells, County of, North Dakota
1625. Williams, County of, North Dakota
1626. Adams, County of, Ohio
1627. Akron, City of, Ohio
1628. Allen, County of, Ohio
1629. Alliance, City of, Ohio
1630. Ashland, City of, Ohio
1631. Ashland, County of, Ohio
1632. Ashtabula, County of, Ohio

1633. Athens, County of, Ohio
1634. Auglaize, County of, Ohio
1635. Aurora, City of, Ohio
1636. Barberton, City of, Ohio
1637. Belmont, County of, Ohio
1638. Board of Education of Boardman Local Schools, Ohio
1639. Board of Education of Liberty Local Schools, Ohio
1640. Boston Heights, Village of, Ohio
1641. Boston, Township of, Ohio
1642. Broadview Heights, City of, Ohio
1643. Brooklyn Heights, Village of, Ohio
1644. Butler, County of, Ohio
1645. Canton, City of, Ohio
1646. Champaign, County of, Ohio
1647. Cincinnati, City of, Ohio
1648. Clermont, County of, Ohio
1649. Cleveland, City of, Ohio
1650. Clinton, County of, Ohio
1651. Clinton, Village of, Ohio
1652. Columbiana, County of, Ohio
1653. Copley, Township of, Ohio
1654. Coshocton, County of, Ohio
1655. Coventry, Township of, Ohio
1656. Crawford, County of, Ohio
1657. Cuyahoga, County of, Ohio
1658. Cuyahoga Falls, City of, Ohio
1659. Darke, County of, Ohio
1660. Dayton, City of, Ohio
1661. Delaware, County of, Ohio
1662. East Cleveland, City of, Ohio
1663. Elyria, City of, Ohio
1664. Erie, County of, Ohio
1665. Euclid, City of, Ohio
1666. Fairfield, City of, Ohio
1667. Fairfield, County of, Ohio
1668. Fairlawn, City of, Ohio
1669. Fayette, County of, Ohio
1670. Findlay, City of, Ohio
1671. Franklin, County of, Ohio
1672. Fulton, County of, Ohio
1673. Gallia, County of, Ohio
1674. Garfield Heights, City of, Ohio
1675. Geauga, County of, Ohio
1676. Green, City of, Ohio
1677. Guernsey, County of, Ohio
1678. Hamilton, City of, Ohio
1679. Hamilton, County of, Ohio
1680. Hancock, County of, Ohio
1681. Harrison, County of, Ohio
1682. Hocking, County of, Ohio
1683. Huron, City of, Ohio
1684. Huron, County of, Ohio
1685. Ironton, City of, Ohio
1686. Jackson, County of, Ohio
1687. Jefferson, County of, Ohio
1688. Kent, City of, Ohio
1689. Knox, County of, Ohio
1690. Lake, County of, Ohio
1691. Lakemore, Village of, Ohio
1692. Lawrence, County of, Ohio
1693. Lebanon, City of, Ohio
1694. Lexington, Village of, Ohio
1695. Licking, County of, Ohio
1696. Lima, City of, Ohio
1697. Logan, County of, Ohio
1698. Lorain, City of, Ohio
1699. Lorain, County of, Ohio
1700. Lucas, County of, Ohio
1701. Lyndhurst, City of, Ohio
1702. Macedonia, City of, Ohio
1703. Marietta, City of, Ohio
1704. Marion, County of, Ohio
1705. Massillon, City of, Ohio
1706. Mayfield Heights, City of, Ohio
1707. Meigs, County of, Ohio
1708. Mercer, County of, Ohio
1709. Middletown, City of, Ohio
1710. Mogadore, Village of, Ohio
1711. Montgomery, (Board of County Commissioners of) County of, Ohio
1712. Munroe Falls, City of, Ohio
1713. Muskingum, County of, Ohio
1714. New Franklin, City of, Ohio
1715. Newburgh Heights, Village of, Ohio
1716. Noble, County of, Ohio
1717. North Olmsted, City of, Ohio
1718. North Ridgeville, City of, Ohio
1719. North Royalton, City of, Ohio
1720. Norton, City of, Ohio
1721. Olmsted Falls, City of, Ohio

1722. Ottawa, County of, Ohio
1723. Painesville, City of, Ohio
1724. Parma, City of, Ohio
1725. Parma Heights, City of, Ohio
1726. Peninsula, Village of, Ohio
1727. Pike, County of, Ohio
1728. Portage, County of, Ohio
1729. Portsmouth, City of, Ohio
1730. Ravenna, City of, Ohio
1731. Richfield, Village of, Ohio
1732. Ross, County of, Ohio
1733. Sandusky, County of, Ohio
1734. Scioto, County of, Ohio
1735. Seneca, County of, Ohio
1736. Seven Hills, City of, Ohio
1737. Shelby, County of, Ohio
1738. Silver Lake, Village of, Ohio
1739. Springfield, Township of, Ohio
1740. St. Marys, City of, Ohio
1741. Stark, County of, Ohio
1742. Stow, City of, Ohio
1743. Strongsville, City of, Ohio
1744. Summit, County of, Ohio / Summit, (Public Health District of) County of, Ohio
1745. Tallmadge, City of, Ohio
1746. Toledo, City of, Ohio
1747. Trumbull, County of, Ohio
1748. Tuscarawas, County of, Ohio
1749. Valley Fire District, Ohio
1750. Van Wert, County of, Ohio
1751. Warren, City of, Ohio
1752. Warrensville Heights, City of, Ohio
1753. Washington, County of, Ohio
1754. Wayne, County of, Ohio
1755. Wickliffe, City of, Ohio
1756. Williams, County of, Ohio
1757. Wyandot, County of, Ohio
1758. Ada, City of, Oklahoma
1759. Altus, City of, Oklahoma
1760. Anadarko, City of, Oklahoma
1761. Atoka, (Board of County Commissioners of) County of, Oklahoma
1762. Beckham, (Board of County Commissioners of) County of, Oklahoma
1763. Bethany, City of, Oklahoma
1764. Broken Arrow, City of, Oklahoma
1765. Caddo, (Board of County Commissioners of) County of, Oklahoma
1766. Choctaw, (Board of County Commissioners of) County of, Oklahoma
1767. Cimarron, (Board of County Commissioners of) County of, Oklahoma
1768. Cleveland, (Board of County Commissioners of) County of, Oklahoma
1769. Coal, (Board of County Commissioners of) County of, Oklahoma
1770. Comanche, County of, Oklahoma
1771. Craig, (Board of County Commissioners of) County of, Oklahoma
1772. Creek, (Board of County Commissioners of) County of, Oklahoma
1773. Custer, (Board of County Commissioners of) County of, Oklahoma
1774. Delaware, County of, Oklahoma
1775. Dewey, (Board of County Commissioners of) County of, Oklahoma
1776. Edmond, City of, Oklahoma
1777. El Reno, City of, Oklahoma
1778. Elk City, City of, Oklahoma
1779. Enid, City of, Oklahoma
1780. Garvin, County of, Oklahoma
1781. Grady, (Board of County Commissioners of) County of, Oklahoma
1782. Greer, (Board of County Commissioners of) County of, Oklahoma
1783. Guthrie, City of, Oklahoma

1784. Harmon, (Board of County Commissioners of) County of, Oklahoma
1785. Harper, (Board of County Commissioners of) County of, Oklahoma
1786. Haskell, (Board of County Commissioners of) County of, Oklahoma
1787. Hughes, (Board of County Commissioners of) County of, Oklahoma
1788. Jackson, (Board of County Commissioners of) County of, Oklahoma
1789. Jefferson, (Board of County Commissioners of) County of, Oklahoma
1790. Jenks, City of, Oklahoma
1791. Johnston, (Board of County Commissioners of) County of, Oklahoma
1792. Kay, (Board of County Commissioners of) County of, Oklahoma
1793. Kiowa, (Board of County Commissioners of) County of, Oklahoma
1794. Latimer, (Board of County Commissioners of) County of, Oklahoma
1795. Lawton, City of, Oklahoma
1796. LeFlore, (Board of County Commissioners of) County of, Oklahoma
1797. Lincoln, (Board of County Commissioners of) County of, Oklahoma
1798. Logan, (Board of County Commissioners of) County of, Oklahoma
1799. Love, (Board of County Commissioners of) County of, Oklahoma
1800. Major, (Board of County Commissioners of) County of, Oklahoma
1801. Mayes, (Board of County Commissioners of) County of, Oklahoma
1802. McClain, County of, Oklahoma
1803. McCurtain, (Board of County Commissioners of) County of, Oklahoma
1804. Midwest City, City of, Oklahoma
1805. Muskogee, City of, Oklahoma
1806. Muskogee, (Board of County Commissioners of) County of, Oklahoma
1807. Mustang, City of, Oklahoma
1808. Noble, (Board of County Commissioners of) County of, Oklahoma
1809. Nowata, (Board of County Commissioners of) County of, Oklahoma
1810. Okfuskee, County of, Oklahoma
1811. Oklahoma City, City of, Oklahoma
1812. Oklahoma, County of, Oklahoma
1813. Okmulgee, (Board of County Commissioners of) County of, Oklahoma
1814. Osage, County of, Oklahoma
1815. Ottawa, County of, Oklahoma
1816. Owasso, City of, Oklahoma
1817. Pawnee, County of, Oklahoma
1818. Payne, (Board of County Commissioners of) County of, Oklahoma
1819. Pittsburg, (Board of County Commissioners of) County of, Oklahoma
1820. Ponca City, City of, Oklahoma
1821. Pottawatomie, (Board of County Commissioners of) County of, Oklahoma
1822. Roger Mills, (Board of County Commissioners of) County of, Oklahoma

1823. Rogers, (Board of County Commissioners of) County of, Oklahoma
1824. Seminole, City of, Oklahoma
1825. Seminole, County of, Oklahoma
1826. Shawnee, City of, Oklahoma
1827. Stephens, (Board of County Commissioners of) County of, Oklahoma
1828. Texas, (Board of County Commissioners of) County of, Oklahoma
1829. Tillman, County of, Oklahoma
1830. Tulsa, City of, Oklahoma
1831. Tulsa, County of, Oklahoma
1832. Washington, (Board of County Commissioners of) County of, Oklahoma
1833. Woods, (Board of County Commissioners of) County of, Oklahoma
1834. Woodward, (Board of County Commissioners of) County of, Oklahoma
1835. Yukon, City of, Oklahoma
1836. Clackamas, County of, Oregon
1837. Clatsop, County of, Oregon
1838. Columbia, County of, Oregon
1839. Coos, County of, Oregon
1840. Jackson, County of, Oregon
1841. Josephine, County of, Oregon
1842. Lane, County of, Oregon
1843. Multnomah, County of, Oregon
1844. Portland, City of, Oregon
1845. Washington, County of, Oregon
1846. Yamhill, County of, Oregon
1847. Adams, County of, Pennsylvania
1848. Allegheny, (District Attorney of) County of, Pennsylvania
1849. Armstrong, County of, Pennsylvania
1850. Beaver, County of, Pennsylvania/ Beaver, (District Attorney of) County of, Pennsylvania
1851. Bedford, County of, Pennsylvania
1852. Bensalem, Township of, Pennsylvania
1853. Berks, (District Attorney of) County of, Pennsylvania
1854. Bradford, County of, Pennsylvania
1855. Bristol, Township of, Pennsylvania
1856. Bucks, County of, Pennsylvania/ Bucks, (District Attorney of) County of, Pennsylvania
1857. Cambria, County of, Pennsylvania
1858. Carbon, County of, Pennsylvania
1859. Chester, (District Attorney of) County of, Pennsylvania
1860. Clarion, County of, Pennsylvania
1861. Clearfield, (District Attorney of) County of, Pennsylvania
1862. Clinton, County of, Pennsylvania
1863. Coatesville, City of, Pennsylvania
1864. Columbia, County of, Pennsylvania
1865. Dauphin, County of, Pennsylvania/ Dauphin, (District Attorney of) County of, Pennsylvania
1866. Delaware, County of, Pennsylvania/ Delaware, (District Attorney of) County of, Pennsylvania
1867. Edwardsville, Borough of, Pennsylvania
1868. Erie, County of, Pennsylvania/ Erie, (District Attorney of) County of, Pennsylvania
1869. Exeter, Township of, Pennsylvania
1870. Fairview, Township of, Pennsylvania
1871. Fayette, County of, Pennsylvania
1872. Forty Fort, Borough of, Pennsylvania
1873. Franklin, County of, Pennsylvania
1874. Greene, County of, Pennsylvania
1875. Hanover, Township of, Pennsylvania
1876. Hazleton, City of, Pennsylvania
1877. Huntington, County of, Pennsylvania
1878. Indiana, County of, Pennsylvania
1879. Kingston, Borough of, Pennsylvania
1880. Lackawanna, County of, Pennsylvania
1881. Lawrence, County of, Pennsylvania/ Lawrence, (District Attorney of) County of, Pennsylvania

1882. Lehigh, County of, Pennsylvania/ Lehigh, (District Attorney of) County of, Pennsylvania
1883. Lock Haven, City of, Pennsylvania
1884. Lower Makefield, Township of, Pennsylvania
1885. Luzerne, County of, Pennsylvania
1886. Lycoming, County of, Pennsylvania
1887. Mercer, County of, Pennsylvania
1888. Middletown, Township of, Pennsylvania
1889. Monroe, County of, Pennsylvania
1890. Morrisville, Borough of, Pennsylvania
1891. Nanticoke, City of, Pennsylvania
1892. Newtown, Township of, Pennsylvania
1893. Norristown, Municipality of, Pennsylvania
1894. Northampton, (District Attorney of) County of, Pennsylvania
1895. Northumberland, County of, Pennsylvania
1896. Philadelphia, City of/ County of, Pennsylvania/ Philadelphia, (District Attorney of) City of/ County of, Pennsylvania
1897. Pike, County of, Pennsylvania
1898. Pittsburgh, City of, Pennsylvania
1899. Plains Township, Township of, Pennsylvania
1900. Schuylkill, County of, Pennsylvania
1901. Sugar Notch, Borough of, Pennsylvania
1902. Tioga, County of, Pennsylvania
1903. Warminster, Township of, Pennsylvania
1904. Warrington, Township of, Pennsylvania
1905. Washington, County of, Pennsylvania
1906. West Norriton, Township of, Pennsylvania
1907. West Pittston, Borough of, Pennsylvania
1908. Westmoreland, County of, Pennsylvania/ Westmoreland, (District Attorney of) County of, Pennsylvania
1909. Wilkes-Barre, City of, Pennsylvania
1910. Wilkes-Barre, Township of, Pennsylvania
1911. Wright, Township of, Pennsylvania
1912. Wyoming, Borough of, Pennsylvania
1913. Wyoming, County of, Pennsylvania/ Wyoming, (District Attorney of) County of, Pennsylvania
1914. Aibonito, Municipality of, Puerto Rico
1915. Aguada, Municipality of, Puerto Rico
1916. Aguadilla, Municipality of, Puerto Rico
1917. Anasco, Municipality of, Puerto Rico
1918. Barranquitas, Municipality of, Puerto Rico
1919. Cabo Rojo, Municipality of, Puerto Rico
1920. Camuy, Municipality of, Puerto Rico
1921. Canovanas, Municipality of, Puerto Rico
1922. Cayey, Municipality of, Puerto Rico
1923. Comerio, Municipality of, Puerto Rico
1924. Dorado, Municipality of, Puerto Rico
1925. Fajardo, Municipality of, Puerto Rico
1926. Guanica, Municipality of, Puerto Rico
1927. Guayanilla, Municipality of, Puerto Rico
1928. Hatillo, Municipality of, Puerto Rico
1929. Isabela, Municipality of, Puerto Rico
1930. Jayuya, Municipality of, Puerto Rico
1931. Juana Diaz, Municipality of, Puerto Rico
1932. Juncos, Municipality of, Puerto Rico
1933. Lares, Municipality of, Puerto Rico
1934. Las Marias, Municipality of, Puerto Rico
1935. Loiza, Municipality of, Puerto Rico

1936. Manati, Municipality of, Puerto Rico
1937. Maricao, Municipality of, Puerto Rico
1938. Moca, Municipality of, Puerto Rico
1939. Morovis, Municipality of, Puerto Rico
1940. Orocovis, Municipality of, Puerto Rico
1941. Penuelas, Municipality of, Puerto Rico
1942. Ponce, Municipality of, Puerto Rico
1943. Quebradillas, Municipality of, Puerto Rico
1944. Rincon, Municipality of, Puerto Rico
1945. Rio Grande, Municipality of, Puerto Rico
1946. Sabana Grande, Municipality of, Puerto Rico
1947. Salinas, Municipality of, Puerto Rico
1948. San German, Municipality of, Puerto Rico
1949. San Juan, Municipality of, Puerto Rico
1950. San Lorenzo, Municipality of, Puerto Rico
1951. Santa Isabel, Municipality of, Puerto Rico
1952. Vega Alta, Municipality of, Puerto Rico
1953. Yabucoa, Municipality of, Puerto Rico
1954. Burrillville, Town of, Rhode Island
1955. Central Falls, City of, Rhode Island
1956. Charlestown, Town of, Rhode Island
1957. Coventry, Town of, Rhode Island
1958. Cranston, City of, Rhode Island
1959. Cumberland, Town of, Rhode Island
1960. East Greenwich, Town of, Rhode Island
1961. East Providence, City of, Rhode Island
1962. Foster, Town of, Rhode Island
1963. Glocester, Town of, Rhode Island
1964. Hopkinton, Town of, Rhode Island
1965. Jamestown, Town of, Rhode Island
1966. Johnston, Town of, Rhode Island
1967. Middletown, Town of, Rhode Island
1968. Narragansett, Town of, Rhode Island
1969. Newport, City of, Rhode Island
1970. North Kingstown, Town of, Rhode Island
1971. North Providence, Town of, Rhode Island
1972. Pawtucket, City of, Rhode Island
1973. Portsmouth, Town of, Rhode Island
1974. Richmond, Town of, Rhode Island
1975. Scituate, Town of, Rhode Island
1976. Smithfield, Town of, Rhode Island
1977. South Kingstown, Town of, Rhode Island
1978. Warwick, City of, Rhode Island
1979. West Greenwich, Town of, Rhode Island
1980. West Warwick, Town of, Rhode Island
1981. Westerly, Town of, Rhode Island
1982. Woonsocket, City of, Rhode Island
1983. Abbeville, County of, South Carolina
1984. Aiken, County of, South Carolina
1985. Allendale, County of, South Carolina
1986. Anderson, County of, South Carolina
1987. Bamberg, County of, South Carolina
1988. Barnwell, County of, South Carolina
1989. Beaufort, County of, South Carolina
1990. Berkeley, County of, South Carolina
1991. Calhoun, County of, South Carolina
1992. Charleston, City of, South Carolina
1993. Charleston, County of, South Carolina
1994. Cherokee, County of, South Carolina
1995. Chester, City of, South Carolina
1996. Chester, County of, South Carolina
1997. Chesterfield, County of, South Carolina
1998. Clarendon, County of, South Carolina
1999. Colleton, County of, South Carolina
2000. Dillon, County of, South Carolina
2001. Dorchester, County of, South Carolina
2002. Edgefield, County of, South Carolina
2003. Fairfield, County of, South Carolina

2004. Florence, County of, South Carolina
2005. Georgetown, City of, South Carolina
2006. Georgetown, County of, South Carolina
2007. Greenville, County of, South Carolina
2008. Greenwood, County of, South Carolina
2009. Hampton, County of, South Carolina
2010. Horry, County of, South Carolina
2011. Jasper, County of, South Carolina
2012. Kershaw, County of, South Carolina
2013. Lancaster, County of, South Carolina
2014. Laurens, County of, South Carolina
2015. Lee, County of, South Carolina
2016. Lexington, County of, South Carolina
2017. Marion, County of, South Carolina
2018. Marlboro, County of, South Carolina
2019. McCormick, County of, South Carolina
2020. Mt. Pleasant, Town of, South Carolina
2021. Myrtle Beach, City of, South Carolina
2022. Newberry, County of, South Carolina
2023. North Charleston, City of, South Carolina
2024. Oconee, County of, South Carolina
2025. Orangeburg, City of, South Carolina
2026. Orangeburg, County of, South Carolina
2027. Pickens, County of, South Carolina
2028. Richland, County of, South Carolina
2029. Saluda, County of, South Carolina
2030. Spartanburg, County of, South Carolina
2031. Summerville, Town of, South Carolina
2032. Sumter, County of, South Carolina
2033. Union, County of, South Carolina
2034. Williamsburg, County of, South Carolina
2035. York, County of, South Carolina
2036. Pennington, County of, South Dakota
2037. Alexandria, Town of, Tennessee
2038. Algood, City of, Tennessee
2039. Anderson, County of, Tennessee
2040. Arlington, Town of, Tennessee
2041. Baxter, Town of, Tennessee
2042. Bedford, County of, Tennessee
2043. Bledsoe, County of, Tennessee
2044. Blount, County of, Tennessee
2045. Bradley, County of, Tennessee
2046. Campbell, County of, Tennessee
2047. Celina, City of, Tennessee
2048. Centertown, Town of, Tennessee
2049. Claiborne, County of, Tennessee
2050. Clarksville, City of, Tennessee
2051. Clay, County of, Tennessee
2052. Clifton, City of, Tennessee
2053. Cocke, County of, Tennessee
2054. Columbia, City of, Tennessee
2055. Cookeville, City of, Tennessee
2056. Cornersville, Town of, Tennessee
2057. Crossville, City of, Tennessee
2058. Cumberland, County of, Tennessee
2059. Dekalb, County of, Tennessee
2060. Eagleville, City of, Tennessee
2061. Fayetteville, City of, Tennessee
2062. Fentress, County of, Tennessee
2063. Franklin, County of, Tennessee
2064. Gatlinburg, City of, Tennessee
2065. Giles, County of, Tennessee
2066. Grainger, County of, Tennessee
2067. Greene, County of, Tennessee
2068. Grundy, County of, Tennessee
2069. Hamblen County Board of Education, Tennessee
2070. Hamilton, County of, Tennessee
2071. Hancock County Board of Education, Tennessee
2072. Hawkins, County of, Tennessee
2073. Haywood, County of, Tennessee
2074. Henderson, County of, Tennessee
2075. Jefferson, County of, Tennessee
2076. Knox, County of, Tennessee
2077. Knoxville, City of, Tennessee
2078. La Vergene, City of, Tennessee

2079. Lauderdale, County of, Tennessee
2080. Lewisburg, City of, Tennessee
2081. Lexington, City of, Tennessee
2082. Loudon, County of, Tennessee
2083. Madison, County of, Tennessee
2084. Marion, County of, Tennessee
2085. Marshall, County of, Tennessee
2086. McMinn, County of, Tennessee
2087. Meigs, County of, Tennessee
2088. Millington, City of, Tennessee
2089. Monroe, County of, Tennessee
2090. Montgomery, County of, Tennessee
2091. Moore, County of, Tennessee
2092. Mount Pleasant, City of, Tennessee
2093. Murfreesboro, City of, Tennessee
2094. Pickett, County of, Tennessee
2095. Polk, County of, Tennessee
2096. Putnam, County of, Tennessee
2097. Rhea, County of, Tennessee
2098. Roane, County of, Tennessee
2099. Rutherford, County of, Tennessee
2100. Rutledge, City of, Tennessee
2101. Scott, County of, Tennessee
2102. Sequatchie, County of, Tennessee
2103. Sevier, County of, Tennessee
2104. Shelbyville, City of, Tennessee
2105. Smith, County of, Tennessee
2106. Smithville, City of, Tennessee
2107. Sparta, City of, Tennessee
2108. Spencer, City of, Tennessee
2109. Spring Hill, City of, Tennessee
2110. Union, County of, Tennessee
2111. Van Buren, County of, Tennessee
2112. Warren, County of, Tennessee
2113. Wartrace, Town of, Tennessee
2114. Washington, County of, Tennessee
2115. Wayne, County of, Tennessee
2116. White, County of, Tennessee
2117. Williamson, County of, Tennessee
2118. Angelina, County of, Texas
2119. Bailey, County of, Texas
2120. Bexar, County of, Texas
2121. Bowie, County of, Texas
2122. Bowie, Town of, Texas
2123. Brazos, County of, Texas
2124. Burleson, County of, Texas
2125. Cherokee, County of, Texas
2126. Childress, County of, Texas
2127. Clay, County of, Texas
2128. Coryell, County of, Texas
2129. Dallas, County of, Texas
2130. Duval, County of, Texas
2131. Eagle Pass, City of, Texas
2132. Ellis, County of, Texas
2133. Freestone, County of, Texas
2134. Henderson, County of, Texas
2135. Jim Hogg, County of, Texas
2136. Jim Wells, County of, Texas
2137. Johnson, County of, Texas
2138. Jones, County of, Texas
2139. Kaufman, County of, Texas
2140. Kendall, County of, Texas
2141. Kleberg, County of, Texas
2142. Lamar, County of, Texas
2143. Laredo, City of, Texas
2144. Maverick, County of, Texas
2145. McLennan, County of, Texas
2146. Montgomery, County of, Texas
2147. Nolan, County of, Texas
2148. Polk, County of, Texas
2149. Rockwall, County of, Texas
2150. Rusk, County of, Texas
2151. San Antonio, City of, Texas
2152. Smith, County of, Texas
2153. Stephens, County of, Texas
2154. Tarrant, County of, Texas
2155. Titus, County of, Texas
2156. Upshur, County of, Texas
2157. Webb, County of, Texas
2158. Wichita, County of, Texas
2159. Williamson, County of, Texas
2160. Zavala, County of, Texas
2161. Beaver, County of, Utah
2162. Cache, County of, Utah
2163. Daggett, County of, Utah
2164. Duchesne, County of, Utah
2165. Emery, County of, Utah
2166. Garfield, County of, Utah
2167. Juab, County of, Utah
2168. Kane, County of, Utah
2169. Piute, County of, Utah
2170. Rich, County of, Utah

2171. Salt Lake, County of, Utah
2172. Sevier, County of, Utah
2173. Summit, County of, Utah
2174. Tooele, County of, Utah
2175. Uintah, County of, Utah
2176. Utah, County of, Utah
2177. Wasatch, County of, Utah
2178. Washington, County of, Utah
2179. Wayne, County of, Utah
2180. Weber, County of, Utah
2181. Bennington, Town of, Vermont
2182. St. Albans, City of, Vermont
2183. Accomack, County of, Virginia
2184. Alexandria, City of, Virginia
2185. Alleghany, County of, Virginia
2186. Amherst, County of, Virginia
2187. Arlington, County of, Virginia
2188. Botetourt, County of, Virginia
2189. Bristol, City of, Virginia
2190. Buena Vista, City of, Virginia
2191. Charlotte, County of, Virginia
2192. Chesapeake, City of, Virginia
2193. Chesterfield, County of, Virginia
2194. Covington, City of, Virginia
2195. Culpeper, County of, Virginia
2196. Cumberland, County of, Virginia
2197. Danville, City of, Virginia
2198. Dickenson, County of, Virginia
2199. Dinwiddie, County of, Virginia
2200. Emporia, City of, Virginia
2201. Fairfax, City of, Virginia
2202. Fairfax, County of, Virginia
2203. Fauquier, County of, Virginia
2204. Floyd, County of, Virginia
2205. Franklin, County of, Virginia
2206. Frederick, County of, Virginia
2207. Fredericksburg, City of, Virginia
2208. Galax, City of, Virginia
2209. Giles, County of, Virginia
2210. Goochland, County of, Virginia
2211. Greensville, County of, Virginia
2212. Halifax, County of, Virginia
2213. Henrico, County of, Virginia
2214. Henry, County of, Virginia
2215. Hopewell, City of, Virginia
2216. Isle of Wight, County of, Virginia
2217. King and Queen, County of, Virginia
2218. Lee, County of, Virginia
2219. Lexington, City of, Virginia
2220. Loudoun, County of, Virginia
2221. Louisa, County of, Virginia
2222. Madison, County of, Virginia
2223. Mecklenburg, County of, Virginia
2224. Montgomery, County of, Virginia
2225. Norfolk, City of, Virginia
2226. Northampton, County of, Virginia
2227. Northumberland, County of, Virginia
2228. Norton, City of, Virginia
2229. Page, County of, Virginia
2230. Patrick, County of, Virginia
2231. Pittsylvania, County of, Virginia
2232. Prince George, County of, Virginia
2233. Prince William, County of, Virginia
2234. Pulaski, County of, Virginia
2235. Radford, City of, Virginia
2236. Richmond, City of, Virginia
2237. Richmond, County of, Virginia
2238. Roanoke, City of, Virginia
2239. Roanoke, County of, Virginia
2240. Rockbridge, County of, Virginia
2241. Russell, County of, Virginia
2242. Salem, City of, Virginia
2243. Scott, County of, Virginia
2244. Shenandoah, County of, Virginia
2245. Smyth, County of, Virginia
2246. Stafford, County of, Virginia
2247. Tazewell, County of, Virginia
2248. Virginia Beach, City of, Virginia
2249. Warren, County of, Virginia
2250. Washington, County of, Virginia
2251. Waynesboro, City of, Virginia
2252. Westmoreland, County of, Virginia
2253. Winchester, City of, Virginia
2254. Wise, County of, Virginia
2255. Wythe, County of, Virginia
2256. Anacortes, City of, Washington
2257. Bainbridge Island, City of, Washington
2258. Burlington, City of, Washington
2259. Chelan, County of, Washington
2260. Clark, County of, Washington
2261. Clallam, County of, Washington

2262. Everett, City of, Washington
2263. Franklin, County of, Washington
2264. Island, County of, Washington
2265. Jefferson, County of, Washington
2266. Kent, City of, Washington
2267. King, County of, Washington
2268. Kirkland, City of, Washington
2269. Kitsap, County of, Washington
2270. Lakewood, City of, Washington
2271. Lewis, County of, Washington
2272. Pierce, County of, Washington
2273. Skagit, County of, Washington
2274. Spokane, City of, Washington
2275. Spokane, County of, Washington
2276. Snohomish, County of, Washington
2277. Tacoma, City of, Washington
2278. Thurston, County of, Washington
2279. Walla Walla, County of, Washington
2280. Whitman, County of, Washington
2281. Adams, County of, Wisconsin
2282. Ashland, County of, Wisconsin
2283. Barron, County of, Wisconsin
2284. Bayfield, County of, Wisconsin
2285. Brown, County of, Wisconsin
2286. Buffalo, County of, Wisconsin
2287. Burnett, County of, Wisconsin
2288. Calumet, County of, Wisconsin
2289. Chippewa, County of, Wisconsin
2290. Clark, County of, Wisconsin
2291. Columbia, County of, Wisconsin
2292. Crawford, County of, Wisconsin
2293. Dane, County of, Wisconsin
2294. Dodge, County of, Wisconsin
2295. Door, County of, Wisconsin
2296. Douglas, County of, Wisconsin
2297. Dunn, County of, Wisconsin
2298. Eau Claire, County of, Wisconsin
2299. Florence, County of, Wisconsin
2300. Fond du Lac, County of, Wisconsin
2301. Forest, County of, Wisconsin
2302. Grant, County of, Wisconsin
2303. Green, County of, Wisconsin
2304. Green Lake, County of, Wisconsin
2305. Iowa, County of, Wisconsin
2306. Iron, County of, Wisconsin
2307. Jackson, County of, Wisconsin
2308. Jefferson, County of, Wisconsin
2309. Juneau, County of, Wisconsin
2310. Kenosha, City of, Wisconsin
2311. Kenosha, County of, Wisconsin
2312. Kewaunee, County of, Wisconsin
2313. La Crosse, County of, Wisconsin
2314. Lafayette, County of, Wisconsin
2315. Langlade, County of, Wisconsin
2316. Lincoln, County of, Wisconsin
2317. Manitowoc, County of, Wisconsin
2318. Marathon, County of, Wisconsin
2319. Marinette, County of, Wisconsin
2320. Marquette, County of, Wisconsin
2321. Menominee, County of, Wisconsin
2322. Milwaukee, City of, Wisconsin
2323. Milwaukee, County of, Wisconsin
2324. Monroe, County of, Wisconsin
2325. Oconto, County of, Wisconsin
2326. Oneida, County of, Wisconsin
2327. Outagamie, County of, Wisconsin
2328. Ozaukee, County of, Wisconsin
2329. Pepin, County of, Wisconsin
2330. Pierce, County of, Wisconsin
2331. Pleasant Prairie, Village of, Wisconsin
2332. Portage, County of, Wisconsin
2333. Price, County of, Wisconsin
2334. Racine, County of, Wisconsin
2335. Richland, County of, Wisconsin
2336. Rock, County of, Wisconsin
2337. Rusk, County of, Wisconsin
2338. Sauk, County of, Wisconsin
2339. Sawyer, County of, Wisconsin
2340. Shawano, County of, Wisconsin
2341. Sheboygan, County of, Wisconsin
2342. St. Croix, County of, Wisconsin
2343. Taylor, County of, Wisconsin
2344. Trempealeau, County of, Wisconsin
2345. Vernon, County of, Wisconsin
2346. Vilas, County of, Wisconsin
2347. Walworth, County of, Wisconsin
2348. Washburn, County of, Wisconsin
2349. Washington, County of, Wisconsin
2350. Waukesha, County of, Wisconsin
2351. Waupaca, County of, Wisconsin
2352. Waushara, County of, Wisconsin

2353. Winnebago, County of, Wisconsin
2354. Wood, County of, Wisconsin
2355. Carbon, County of, Wyoming
2356. Casper, City of, Wyoming
2357. Cheyenne, City of, Wyoming
2358. Green River, City of, Wyoming
2359. Riverton, City of, Wyoming
2360. Rock Springs, City of, Wyoming
2361. Sweetwater, County of, Wyoming

EXHIBIT D

[Intentionally Omitted]

EXHIBIT E

List of Opioid Remediation Uses

Schedule A
Core Strategies

Settling States and Participating Subdivisions listed on Exhibit G may choose from among the abatement strategies listed in Schedule B. However, priority may be given to the following core abatement strategies ("*Core Strategies*").[1]

A. NALOXONE OR OTHER FDA-APPROVED DRUG TO REVERSE OPIOID OVERDOSES

1. Expand training for first responders, schools, community support groups and families; and

2. Increase distribution to individuals who are uninsured or whose insurance does not cover the needed service.

B. MEDICATION-ASSISTED TREATMENT *("MAT")* DISTRIBUTION AND OTHER OPIOID-RELATED TREATMENT

1. Increase distribution of MAT to individuals who are uninsured or whose insurance does not cover the needed service;

2. Provide education to school-based and youth-focused programs that discourage or prevent misuse;

3. Provide MAT education and awareness training to healthcare providers, EMTs, law enforcement, and other first responders; and

4. Provide treatment and recovery support services such as residential and inpatient treatment, intensive outpatient treatment, outpatient therapy or counseling, and recovery housing that allow or integrate medication and with other support services.

[1] As used in this Schedule A, words like "expand," "fund," "provide" or the like shall not indicate a preference for new or existing programs.

C. PREGNANT & POSTPARTUM WOMEN

1. Expand Screening, Brief Intervention, and Referral to Treatment ("*SBIRT*") services to non-Medicaid eligible or uninsured pregnant women;

2. Expand comprehensive evidence-based treatment and recovery services, including MAT, for women with cooccurring Opioid Use Disorder ("*OUD*") and other Substance Use Disorder ("*SUD*")/Mental Health disorders for uninsured individuals for up to 12 months postpartum; and

3. Provide comprehensive wrap-around services to individuals with OUD, including housing, transportation, job placement/training, and childcare.

D. EXPANDING TREATMENT FOR NEONATAL ABSTINENCE SYNDROME *("NAS")*

1. Expand comprehensive evidence-based and recovery support for NAS babies;

2. Expand services for better continuum of care with infant-need dyad; and

3. Expand long-term treatment and services for medical monitoring of NAS babies and their families.

E. EXPANSION OF WARM HAND-OFF PROGRAMS AND RECOVERY SERVICES

1. Expand services such as navigators and on-call teams to begin MAT in hospital emergency departments;

2. Expand warm hand-off services to transition to recovery services;

3. Broaden scope of recovery services to include co-occurring SUD or mental health conditions;

4. Provide comprehensive wrap-around services to individuals in recovery, including housing, transportation, job placement/training, and childcare; and

5. Hire additional social workers or other behavioral health workers to facilitate expansions above.

F. TREATMENT FOR INCARCERATED POPULATION

1. Provide evidence-based treatment and recovery support, including MAT for persons with OUD and co-occurring SUD/MH disorders within and transitioning out of the criminal justice system; and

2. Increase funding for jails to provide treatment to inmates with OUD.

G. PREVENTION PROGRAMS

1. Funding for media campaigns to prevent opioid use (similar to the FDA's "Real Cost" campaign to prevent youth from misusing tobacco);

2. Funding for evidence-based prevention programs in schools;

3. Funding for medical provider education and outreach regarding best prescribing practices for opioids consistent with CDC guidelines, including providers at hospitals (academic detailing);

4. Funding for community drug disposal programs; and

5. Funding and training for first responders to participate in prearrest diversion programs, post-overdose response teams, or similar strategies that connect at-risk individuals to behavioral health services and supports.

H. EXPANDING SYRINGE SERVICE PROGRAMS

1. Provide comprehensive syringe services programs with more wrap-around services, including linkage to OUD treatment, access to sterile syringes and linkage to care and treatment of infectious diseases.

I. EVIDENCE-BASED DATA COLLECTION AND RESEARCH ANALYZING THE EFFECTIVENESS OF THE ABATEMENT STRATEGIES WITHIN THE STATE

Schedule B
Approved Uses

Support treatment of Opioid Use Disorder (OUD) and any co-occurring Substance Use Disorder or Mental Health (SUD/MH) conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

PART ONE: TREATMENT

A. TREAT OPIOID USE DISORDER (OUD)

Support treatment of Opioid Use Disorder ("*OUD*") and any co-occurring Substance Use Disorder or Mental Health ("*SUD/MH*") conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:[2]

1. Expand availability of treatment for OUD and any co-occurring SUD/MH conditions, including all forms of Medication-Assisted Treatment ("*MAT*") approved by the U.S. Food and Drug Administration.

2. Support and reimburse evidence-based services that adhere to the American Society of Addiction Medicine ("*ASAM*") continuum of care for OUD and any co-occurring SUD/MH conditions.

3. Expand telehealth to increase access to treatment for OUD and any co-occurring SUD/MH conditions, including MAT, as well as counseling, psychiatric support, and other treatment and recovery support services.

4. Improve oversight of Opioid Treatment Programs ("*OTPs*") to assure evidence-based or evidence-informed practices such as adequate methadone dosing and low threshold approaches to treatment.

5. Support mobile intervention, treatment, and recovery services, offered by qualified professionals and service providers, such as peer recovery coaches, for persons with OUD and any co-occurring SUD/MH conditions and for persons who have experienced an opioid overdose.

6. Provide treatment of trauma for individuals with OUD (*e.g.*, violence, sexual assault, human trafficking, or adverse childhood experiences) and family members (*e.g.*, surviving family members after an overdose or overdose fatality), and training of health care personnel to identify and address such trauma.

7. Support evidence-based withdrawal management services for people with OUD and any co-occurring mental health conditions.

[2] As used in this Schedule B, words like "expand," "fund," "provide" or the like shall not indicate a preference for new or existing programs.

8. Provide training on MAT for health care providers, first responders, students, or other supporting professionals, such as peer recovery coaches or recovery outreach specialists, including telementoring to assist community-based providers in rural or underserved areas.

9. Support workforce development for addiction professionals who work with persons with OUD and any co-occurring SUD/MH conditions.

10. Offer fellowships for addiction medicine specialists for direct patient care, instructors, and clinical research for treatments.

11. Offer scholarships and supports for behavioral health practitioners or workers involved in addressing OUD and any co-occurring SUD/MH or mental health conditions, including, but not limited to, training, scholarships, fellowships, loan repayment programs, or other incentives for providers to work in rural or underserved areas.

12. Provide funding and training for clinicians to obtain a waiver under the federal Drug Addiction Treatment Act of 2000 ("*DATA 2000*") to prescribe MAT for OUD, and provide technical assistance and professional support to clinicians who have obtained a DATA 2000 waiver.

13. Disseminate web-based training curricula, such as the American Academy of Addiction Psychiatry's Provider Clinical Support Service-Opioids web-based training curriculum and motivational interviewing.

14. Develop and disseminate new curricula, such as the American Academy of Addiction Psychiatry's Provider Clinical Support Service for Medication-Assisted Treatment.

B. SUPPORT PEOPLE IN TREATMENT AND RECOVERY

Support people in recovery from OUD and any co-occurring SUD/MH conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the programs or strategies that:

1. Provide comprehensive wrap-around services to individuals with OUD and any cooccurring SUD/MH conditions, including housing, transportation, education, job placement, job training, or childcare.

2. Provide the full continuum of care of treatment and recovery services for OUD and any co-occurring SUD/MH conditions, including supportive housing, peer support services and counseling, community navigators, case management, and connections to community-based services.

3. Provide counseling, peer-support, recovery case management and residential treatment with access to medications for those who need it to persons with OUD and any co-occurring SUD/MH conditions.

4. Provide access to housing for people with OUD and any co-occurring SUD/MH conditions, including supportive housing, recovery housing, housing assistance programs, training for housing providers, or recovery housing programs that allow or integrate FDA-approved mediation with other support services.

5. Provide community support services, including social and legal services, to assist in deinstitutionalizing persons with OUD and any co-occurring SUD/MH conditions.

6. Support or expand peer-recovery centers, which may include support groups, social events, computer access, or other services for persons with OUD and any cooccurring SUD/MH conditions.

7. Provide or support transportation to treatment or recovery programs or services for persons with OUD and any co-occurring SUD/MH conditions.

8. Provide employment training or educational services for persons in treatment for or recovery from OUD and any co-occurring SUD/MH conditions.

9. Identify successful recovery programs such as physician, pilot, and college recovery programs, and provide support and technical assistance to increase the number and capacity of high-quality programs to help those in recovery.

10. Engage non-profits, faith-based communities, and community coalitions to support people in treatment and recovery and to support family members in their efforts to support the person with OUD in the family.

11. Provide training and development of procedures for government staff to appropriately interact and provide social and other services to individuals with or in recovery from OUD, including reducing stigma.

12. Support stigma reduction efforts regarding treatment and support for persons with OUD, including reducing the stigma on effective treatment.

13. Create or support culturally appropriate services and programs for persons with OUD and any co-occurring SUD/MH conditions, including new Americans.

14. Create and/or support recovery high schools.

15. Hire or train behavioral health workers to provide or expand any of the services or supports listed above.

C. CONNECT PEOPLE WHO NEED HELP TO THE HELP THEY NEED (CONNECTIONS TO CARE)

Provide connections to care for people who have—or are at risk of developing—OUD and any co-occurring SUD/MH conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Ensure that health care providers are screening for OUD and other risk factors and know how to appropriately counsel and treat (or refer if necessary) a patient for OUD treatment.

2. Fund SBIRT programs to reduce the transition from use to disorders, including SBIRT services to pregnant women who are uninsured or not eligible for Medicaid.

3. Provide training and long-term implementation of SBIRT in key systems (health, schools, colleges, criminal justice, and probation), with a focus on youth and young adults when transition from misuse to opioid disorder is common.

4. Purchase automated versions of SBIRT and support ongoing costs of the technology.

5. Expand services such as navigators and on-call teams to begin MAT in hospital emergency departments.

6. Provide training for emergency room personnel treating opioid overdose patients on post-discharge planning, including community referrals for MAT, recovery case management or support services.

7. Support hospital programs that transition persons with OUD and any co-occurring SUD/MH conditions, or persons who have experienced an opioid overdose, into clinically appropriate follow-up care through a bridge clinic or similar approach.

8. Support crisis stabilization centers that serve as an alternative to hospital emergency departments for persons with OUD and any co-occurring SUD/MH conditions or persons that have experienced an opioid overdose.

9. Support the work of Emergency Medical Systems, including peer support specialists, to connect individuals to treatment or other appropriate services following an opioid overdose or other opioid-related adverse event.

10. Provide funding for peer support specialists or recovery coaches in emergency departments, detox facilities, recovery centers, recovery housing, or similar settings; offer services, supports, or connections to care to persons with OUD and any co-occurring SUD/MH conditions or to persons who have experienced an opioid overdose.

11. Expand warm hand-off services to transition to recovery services.

12. Create or support school-based contacts that parents can engage with to seek immediate treatment services for their child; and support prevention, intervention, treatment, and recovery programs focused on young people.

13. Develop and support best practices on addressing OUD in the workplace.

14. Support assistance programs for health care providers with OUD.

15. Engage non-profits and the faith community as a system to support outreach for treatment.

16. Support centralized call centers that provide information and connections to appropriate services and supports for persons with OUD and any co-occurring SUD/MH conditions.

D. ADDRESS THE NEEDS OF CRIMINAL JUSTICE-INVOLVED PERSONS

Address the needs of persons with OUD and any co-occurring SUD/MH conditions who are involved in, are at risk of becoming involved in, or are transitioning out of the criminal justice system through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Support pre-arrest or pre-arraignment diversion and deflection strategies for persons with OUD and any co-occurring SUD/MH conditions, including established strategies such as:

    1. Self-referral strategies such as the Angel Programs or the Police Assisted Addiction Recovery Initiative ("*PAARI*");

    2. Active outreach strategies such as the Drug Abuse Response Team ("*DART*") model;

    3. "Naloxone Plus" strategies, which work to ensure that individuals who have received naloxone to reverse the effects of an overdose are then linked to treatment programs or other appropriate services;

    4. Officer prevention strategies, such as the Law Enforcement Assisted Diversion ("*LEAD*") model;

    5. Officer intervention strategies such as the Leon County, Florida Adult Civil Citation Network or the Chicago Westside Narcotics Diversion to Treatment Initiative; or

    6. Co-responder and/or alternative responder models to address OUD-related 911 calls with greater SUD expertise.

2. Support pre-trial services that connect individuals with OUD and any co-occurring SUD/MH conditions to evidence-informed treatment, including MAT, and related services.

3. Support treatment and recovery courts that provide evidence-based options for persons with OUD and any co-occurring SUD/MH conditions.

4. Provide evidence-informed treatment, including MAT, recovery support, harm reduction, or other appropriate services to individuals with OUD and any cooccurring SUD/MH conditions who are incarcerated in jail or prison.

5. Provide evidence-informed treatment, including MAT, recovery support, harm reduction, or other appropriate services to individuals with OUD and any cooccurring SUD/MH conditions who are leaving jail or prison or have recently left jail or prison, are on probation or parole, are under community corrections supervision, or are in re-entry programs or facilities.

6. Support critical time interventions ("*CTI*"), particularly for individuals living with dual-diagnosis OUD/serious mental illness, and services for individuals who face immediate risks and service needs and risks upon release from correctional settings.

7. Provide training on best practices for addressing the needs of criminal justice-involved persons with OUD and any co-occurring SUD/MH conditions to law enforcement, correctional, or judicial personnel or to providers of treatment, recovery, harm reduction, case management, or other services offered in connection with any of the strategies described in this section.

E. ADDRESS THE NEEDS OF PREGNANT OR PARENTING WOMEN AND THEIR FAMILIES, INCLUDING BABIES WITH NEONATAL ABSTINENCE SYNDROME

Address the needs of pregnant or parenting women with OUD and any co-occurring SUD/MH conditions, and the needs of their families, including babies with neonatal abstinence syndrome ("*NAS*"), through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Support evidence-based or evidence-informed treatment, including MAT, recovery services and supports, and prevention services for pregnant women—or women who could become pregnant—who have OUD and any co-occurring SUD/MH conditions, and other measures to educate and provide support to families affected by Neonatal Abstinence Syndrome.

2. Expand comprehensive evidence-based treatment and recovery services, including MAT, for uninsured women with OUD and any co-occurring SUD/MH conditions for up to 12 months postpartum.

3. Provide training for obstetricians or other healthcare personnel who work with pregnant women and their families regarding treatment of OUD and any co-occurring SUD/MH conditions.

4. Expand comprehensive evidence-based treatment and recovery support for NAS babies; expand services for better continuum of care with infant-need dyad; and expand long-term treatment and services for medical monitoring of NAS babies and their families.

5. Provide training to health care providers who work with pregnant or parenting women on best practices for compliance with federal requirements that children born with NAS get referred to appropriate services and receive a plan of safe care.

6. Provide child and family supports for parenting women with OUD and any cooccurring SUD/MH conditions.

7. Provide enhanced family support and child care services for parents with OUD and any co-occurring SUD/MH conditions.

8. Provide enhanced support for children and family members suffering trauma as a result of addiction in the family; and offer trauma-informed behavioral health treatment for adverse childhood events.

9. Offer home-based wrap-around services to persons with OUD and any co-occurring SUD/MH conditions, including, but not limited to, parent skills training.

10. Provide support for Children's Services—Fund additional positions and services, including supportive housing and other residential services, relating to children being removed from the home and/or placed in foster care due to custodial opioid use.

PART TWO: PREVENTION

F. PREVENT OVER-PRESCRIBING AND ENSURE APPROPRIATE PRESCRIBING AND DISPENSING OF OPIOIDS

Support efforts to prevent over-prescribing and ensure appropriate prescribing and dispensing of opioids through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Funding medical provider education and outreach regarding best prescribing practices for opioids consistent with the Guidelines for Prescribing Opioids for Chronic Pain from the U.S. Centers for Disease Control and Prevention, including providers at hospitals (academic detailing).

2. Training for health care providers regarding safe and responsible opioid prescribing, dosing, and tapering patients off opioids.

3. Continuing Medical Education (CME) on appropriate prescribing of opioids.

4. Providing Support for non-opioid pain treatment alternatives, including training providers to offer or refer to multi-modal, evidence-informed treatment of pain.

5. Supporting enhancements or improvements to Prescription Drug Monitoring Programs ("*PDMPs*"), including, but not limited to, improvements that:

1. Increase the number of prescribers using PDMPs;

2. Improve point-of-care decision-making by increasing the quantity, quality, or format of data available to prescribers using PDMPs, by improving the interface that prescribers use to access PDMP data, or both; or

3. Enable states to use PDMP data in support of surveillance or intervention strategies, including MAT referrals and follow-up for individuals identified within PDMP data as likely to experience OUD in a manner that complies with all relevant privacy and security laws and rules.

6. Ensuring PDMPs incorporate available overdose/naloxone deployment data, including the United States Department of Transportation's Emergency Medical Technician overdose database in a manner that complies with all relevant privacy and security laws and rules.

7. Increasing electronic prescribing to prevent diversion or forgery.

8. Educating dispensers on appropriate opioid dispensing.

G. PREVENT MISUSE OF OPIOIDS

Support efforts to discourage or prevent misuse of opioids through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Funding media campaigns to prevent opioid misuse.

2. Corrective advertising or affirmative public education campaigns based on evidence.

3. Public education relating to drug disposal.

4. Drug take-back disposal or destruction programs.

5. Funding community anti-drug coalitions that engage in drug prevention efforts.

6. Supporting community coalitions in implementing evidence-informed prevention, such as reduced social access and physical access, stigma reduction—including staffing, educational campaigns, support for people in treatment or recovery, or training of coalitions in evidence-informed implementation, including the Strategic Prevention Framework developed by the U.S. Substance Abuse and Mental Health Services Administration ("*SAMHSA*").

7. Engaging non-profits and faith-based communities as systems to support prevention.

8. Funding evidence-based prevention programs in schools or evidence-informed school and community education programs and campaigns for students, families, school employees, school athletic programs, parent-teacher and student associations, and others.

9. School-based or youth-focused programs or strategies that have demonstrated effectiveness in preventing drug misuse and seem likely to be effective in preventing the uptake and use of opioids.

10. Create or support community-based education or intervention services for families, youth, and adolescents at risk for OUD and any co-occurring SUD/MH conditions.

11. Support evidence-informed programs or curricula to address mental health needs of young people who may be at risk of misusing opioids or other drugs, including emotional modulation and resilience skills.

12. Support greater access to mental health services and supports for young people, including services and supports provided by school nurses, behavioral health workers or other school staff, to address mental health needs in young people that (when not properly addressed) increase the risk of opioid or another drug misuse.

H. PREVENT OVERDOSE DEATHS AND OTHER HARMS (HARM REDUCTION)

Support efforts to prevent or reduce overdose deaths or other opioid-related harms through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Increased availability and distribution of naloxone and other drugs that treat overdoses for first responders, overdose patients, individuals with OUD and their friends and family members, schools, community navigators and outreach workers, persons being released from jail or prison, or other members of the general public.

2. Public health entities providing free naloxone to anyone in the community.

3. Training and education regarding naloxone and other drugs that treat overdoses for first responders, overdose patients, patients taking opioids, families, schools, community support groups, and other members of the general public.

4. Enabling school nurses and other school staff to respond to opioid overdoses, and provide them with naloxone, training, and support.

5. Expanding, improving, or developing data tracking software and applications for overdoses/naloxone revivals.

6. Public education relating to emergency responses to overdoses.

7. Public education relating to immunity and Good Samaritan laws.

8. Educating first responders regarding the existence and operation of immunity and Good Samaritan laws.

9. Syringe service programs and other evidence-informed programs to reduce harms associated with intravenous drug use, including supplies, staffing, space, peer support services, referrals to treatment, fentanyl checking, connections to care, and the full range of harm reduction and treatment services provided by these programs.

10. Expanding access to testing and treatment for infectious diseases such as HIV and Hepatitis C resulting from intravenous opioid use.

11. Supporting mobile units that offer or provide referrals to harm reduction services, treatment, recovery supports, health care, or other appropriate services to persons that use opioids or persons with OUD and any co-occurring SUD/MH conditions.

12. Providing training in harm reduction strategies to health care providers, students, peer recovery coaches, recovery outreach specialists, or other professionals that provide care to persons who use opioids or persons with OUD and any co-occurring SUD/MH conditions.

13. Supporting screening for fentanyl in routine clinical toxicology testing.

PART THREE: OTHER STRATEGIES

I. FIRST RESPONDERS

In addition to items in section C, D and H relating to first responders, support the following:

1. Education of law enforcement or other first responders regarding appropriate practices and precautions when dealing with fentanyl or other drugs.

2. Provision of wellness and support services for first responders and others who experience secondary trauma associated with opioid-related emergency events.

J. LEADERSHIP, PLANNING AND COORDINATION

Support efforts to provide leadership, planning, coordination, facilitations, training and technical assistance to abate the opioid epidemic through activities, programs, or strategies that may include, but are not limited to, the following:

1. Statewide, regional, local or community regional planning to identify root causes of addiction and overdose, goals for reducing harms related to the opioid epidemic, and areas and populations with the greatest needs for treatment intervention services, and to support training and technical assistance and other

strategies to abate the opioid epidemic described in this opioid abatement strategy list.

2. A dashboard to (a) share reports, recommendations, or plans to spend opioid settlement funds; (b) to show how opioid settlement funds have been spent; (c) to report program or strategy outcomes; or (d) to track, share or visualize key opioid- or health-related indicators and supports as identified through collaborative statewide, regional, local or community processes.

3. Invest in infrastructure or staffing at government or not-for-profit agencies to support collaborative, cross-system coordination with the purpose of preventing overprescribing, opioid misuse, or opioid overdoses, treating those with OUD and any co-occurring SUD/MH conditions, supporting them in treatment or recovery, connecting them to care, or implementing other strategies to abate the opioid epidemic described in this opioid abatement strategy list.

4. Provide resources to staff government oversight and management of opioid abatement programs.

K. TRAINING

In addition to the training referred to throughout this document, support training to abate the opioid epidemic through activities, programs, or strategies that may include, but are not limited to, those that:

1. Provide funding for staff training or networking programs and services to improve the capability of government, community, and not-for-profit entities to abate the opioid crisis.

2. Support infrastructure and staffing for collaborative cross-system coordination to prevent opioid misuse, prevent overdoses, and treat those with OUD and any cooccurring SUD/MH conditions, or implement other strategies to abate the opioid epidemic described in this opioid abatement strategy list (*e.g.*, health care, primary care, pharmacies, PDMPs, etc.).

L. RESEARCH

Support opioid abatement research that may include, but is not limited to, the following:

1. Monitoring, surveillance, data collection and evaluation of programs and strategies described in this opioid abatement strategy list.

2. Research non-opioid treatment of chronic pain.

3. Research on improved service delivery for modalities such as SBIRT that demonstrate promising but mixed results in populations vulnerable to opioid use disorders.

4. Research on novel harm reduction and prevention efforts such as the provision of fentanyl test strips.

5. Research on innovative supply-side enforcement efforts such as improved detection of mail-based delivery of synthetic opioids.

6. Expanded research on swift/certain/fair models to reduce and deter opioid misuse within criminal justice populations that build upon promising approaches used to address other substances (*e.g.*, Hawaii HOPE and Dakota 24/7).

7. Epidemiological surveillance of OUD-related behaviors in critical populations, including individuals entering the criminal justice system, including, but not limited to approaches modeled on the Arrestee Drug Abuse Monitoring ("*ADAM*") system.

8. Qualitative and quantitative research regarding public health risks and harm reduction opportunities within illicit drug markets, including surveys of market participants who sell or distribute illicit opioids.

9. Geospatial analysis of access barriers to MAT and their association with treatment engagement and treatment outcomes.

EXHIBIT F

List of States and Overall Allocation Percentages

Alaska	0.2557955294%
American Samoa	0.0191834392%
Arizona	2.6615833823%
Arkansas	1.0444409688%
California	11.1157787586%
Colorado	1.8616660165%
Connecticut	1.4495669159%
Delaware	0.4952425518%
District of Columbia	0.2016442528%
Georgia	3.1238692398%
Guam	0.0538195977%
Hawaii	0.3637319771%
Idaho	0.5511268529%
Illinois	3.7267807228%
Indiana	2.4837762383%
Iowa	0.8312430751%
Kansas	0.8784715219%
Kentucky	2.2366652249%
Louisiana	1.6414669014%
Maine	0.5930462294%
Maryland	2.3646968446%
Massachusetts	2.5808944372%
Michigan	3.8115795226%
Minnesota	1.4534316941%
Mississippi	0.9662576251%
Missouri	2.2470994124%
Montana	0.3501746091%
N. Mariana Islands	0.0187170792%
Nebraska	0.4673742159%
Nevada	1.3464414888%
New Hampshire	0.6481247935%
New Jersey	3.0868152098%
New York	5.7834378670%
North Carolina	3.6415375306%
North Dakota	0.1904938536%
Ohio	4.8372585804%

Oklahoma	1.7166904525%
Oregon	1.5395677885%
Pennsylvania	5.1406020829%
Puerto Rico	0.7956080574%
Rhode Island	0.5003004364%
South Carolina	1.7246195407%
South Dakota	0.2220685158%
Tennessee	3.0117628404%
Texas	7.0508308295%
Utah	1.2847240804%
Vermont	0.2851259773%
Virgin Islands	0.0353676254%
Virginia	2.5546090245%
Washington	2.5980676129%
Wisconsin	1.9699254815%
Wyoming	0.1868954934%

EXHIBIT G

Subdivisions Eligible to Receive Direct Allocations from the Subdivision Fund and Default Subdivision Fund Allocation Percentages

The Subdivisions set forth on this Exhibit G are eligible to receive direct allocations from the Subdivision Fund, if such Subdivisions are otherwise eligible to receive such funds under this Agreement. By default, the Subdivisions set forth on this Exhibit G shall include all Subdivisions set forth on Exhibit G of the national opioid settlement agreement dated July 21, 2021 with Janssen Pharmaceuticals, Inc., et al., including all amendments up to the State Participation Date of this Agreement. A State may elect to add any additional Subdivisions to this Exhibit G at any time prior to the Threshold Subdivision Participation Date.

Immediately upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection V.D.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection V.D.3) that addresses allocation from the Subdivision Fund, whether before or after the Threshold Subdivision Participation Date, this Exhibit G will automatically be amended to reflect the allocation from the Subdivision Fund pursuant to the State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection V.D.3.

For the avoidance of doubt, inclusion on this Exhibit G shall not create any claim for any amount of the Settlement Fund, and no such amounts shall be allocated or distributed to any Subdivision included herein if such Subdivision does not otherwise meet all requirements to receive any such funds pursuant to the Agreement.

State ID	Qualifying Subdivision	Consolidated State Allocation
AK1	Anchorage Municipality, Alaska	47.6578000000%
AK2	Fairbanks City, Alaska	5.1226000000%
AK3	Fairbanks North Star Borough, Alaska	10.9627000000%
AK4	Juneau City and Borough, Alaska	5.2324000000%
AK5	Kenai Peninsula Borough, Alaska	9.4922000000%
AK6	Ketchikan Gateway Borough, Alaska	2.2406000000%
AK7	Kodiak Island Borough, Alaska	2.1839000000%
AK8	Matanuska-Susitna Borough, Alaska	15.4726000000%
AK9	Wasilla City, Alaska	1.6351000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
AZ1	Apache County, Arizona	0.3907470000%
AZ2	Apache Junction City, Arizona	0.2201340000%
AZ3	Avondale City, Arizona	0.5677140000%
AZ4	Benson City, Arizona	0.0652960000%
AZ5	Bisbee City, Arizona	0.0643685000%
AZ6	Buckeye City, Arizona	0.2664780000%
AZ7	Bullhead City, Arizona	0.6416380000%
AZ8	Camp Verde Town, Arizona	0.0416227000%
AZ9	Carefree Town, Arizona	0.0231720000%
AZ10	Casa Grande City, Arizona	0.2125144000%
AZ11	Cave Creek Town, Arizona	0.0347580000%
AZ12	Chandler City, Arizona	1.6567980000%
AZ13	Chino Valley Town, Arizona	0.0291788000%
AZ14	Clarkdale Town, Arizona	0.0308952000%
AZ15	Clifton Town, Arizona	0.0102870000%
AZ16	Cochise County, Arizona	1.1773685000%
AZ17	Coconino County, Arizona	1.2011808000%
AZ18	Colorado City Town, Arizona	0.0298778000%
AZ19	Coolidge City, Arizona	0.0644448000%
AZ20	Cottonwood City, Arizona	0.2098299000%
AZ21	Dewey-Humboldt Town, Arizona	0.0660814000%
AZ22	Douglas City, Arizona	0.1565620000%
AZ23	Duncan Town, Arizona	0.0002520000%
AZ24	Eagar Town, Arizona	0.1425540000%
AZ25	El Mirage City, Arizona	0.2259270000%
AZ26	Eloy City, Arizona	1.3418328000%
AZ27	Flagstaff City, Arizona	0.3114360000%
AZ28	Florence Town, Arizona	0.0456484000%
AZ29	Fountain Hills Town, Arizona	0.0984810000%
AZ30	Fredonia Town, Arizona	0.0052328000%
AZ31	Gila Bend Town, Arizona	0.0173790000%
AZ32	Gila County, Arizona	0.7780446000%
AZ33	Gilbert Town, Arizona	0.9906030000%
AZ34	Glendale City, Arizona	1.5235590000%
AZ35	Globe City, Arizona	0.1168266000%
AZ36	Goodyear City, Arizona	0.4402680000%
AZ37	Graham County, Arizona	0.4476494000%
AZ38	Greenlee County, Arizona	0.0794610000%
AZ39	Guadalupe Town, Arizona	0.0000000000%
AZ40	Hayden Town, Arizona	0.0263802000%
AZ41	Holbrook City, Arizona	0.0575625000%
AZ42	Huachuca City Town, Arizona	0.0168805000%
AZ43	Jerome Town, Arizona	0.0012873000%
AZ44	Kearny Town, Arizona	0.0107408000%
AZ45	Kingman City, Arizona	0.4853918000%
AZ46	La Paz County, Arizona	0.2670171000%
AZ47	Lake Havasu City, Arizona	0.6793526000%
AZ48	Litchfield Park City, Arizona	0.0231720000%
AZ49	Mammoth Town, Arizona	0.0061376000%

State ID	Qualifying Subdivision	Consolidated State Allocation
AZ50	Marana Town, Arizona	0.3841282000%
AZ51	Maricopa City, Arizona	0.1047228000%
AZ52	Maricopa County, Arizona	29.8513290000%
AZ53	Mesa City, Arizona	3.5105580000%
AZ54	Miami Town, Arizona	0.0309482000%
AZ55	Mohave County, Arizona	3.0617398000%
AZ56	Navajo County, Arizona	1.0789515000%
AZ57	Nogales City, Arizona	0.0834350000%
AZ58	Oro Valley Town, Arizona	0.3207284000%
AZ59	Page City, Arizona	0.0575608000%
AZ60	Paradise Valley Town, Arizona	0.1969620000%
AZ61	Parker Town, Arizona	0.0156219000%
AZ62	Patagonia Town, Arizona	0.0024790000%
AZ63	Payson Town, Arizona	0.1846614000%
AZ64	Peoria City, Arizona	0.8747430000%
AZ65	Phoenix City, Arizona	12.3275040000%
AZ66	Pima County, Arizona	13.4612693000%
AZ67	Pima Town, Arizona	0.0159618000%
AZ68	Pinal County, Arizona	2.0334636000%
AZ69	Pinetop-Lakeside Town, Arizona	0.0729125000%
AZ70	Prescott City, Arizona	0.5917289000%
AZ71	Prescott Valley Town, Arizona	0.3471419000%
AZ72	Quartzsite Town, Arizona	0.0183911000%
AZ73	Queen Creek Town, Arizona	0.0637230000%
AZ74	Safford City, Arizona	0.1929077000%
AZ75	Sahuarita Town, Arizona	0.1510407000%
AZ76	San Luis City, Arizona	0.0963840000%
AZ77	Santa Cruz County, Arizona	0.2840860000%
AZ78	Scottsdale City, Arizona	2.3114070000%
AZ79	Sedona City, Arizona	0.0690392000%
AZ80	Show Low City, Arizona	0.1441365000%
AZ81	Sierra Vista City, Arizona	0.3084865000%
AZ82	Snowflake Town, Arizona	0.0451290000%
AZ83	Somerton City, Arizona	0.0449792000%
AZ84	South Tucson City, Arizona	0.0578057000%
AZ85	Springerville Town, Arizona	0.0740370000%
AZ86	St. Johns City, Arizona	0.0826620000%
AZ87	Star Valley Town, Arizona	0.0039970000%
AZ88	Superior Town, Arizona	0.0168784000%
AZ89	Surprise City, Arizona	0.5677140000%
AZ90	Taylor Town, Arizona	0.0411380000%
AZ91	Tempe City, Arizona	1.8943110000%
AZ92	Thatcher Town, Arizona	0.0624092000%
AZ93	Tolleson City, Arizona	0.1564110000%
AZ94	Tombstone City, Arizona	0.0215180000%
AZ95	Tucson City, Arizona	4.2720277000%
AZ96	Tusayan Town, Arizona	0.0113096000%
AZ97	Wellton Town, Arizona	0.0122488000%
AZ98	Wickenburg Town, Arizona	0.0579300000%

State ID	Qualifying Subdivision	Consolidated State Allocation
AZ99	Willcox City, Arizona	0.0443345000%
AZ100	Williams City, Arizona	0.0324096000%
AZ101	Winkelman Town, Arizona	0.0011420000%
AZ102	Winslow City, Arizona	0.0950165000%
AZ103	Yavapai County, Arizona	2.9740921000%
AZ104	Youngtown, Arizona	0.0289650000%
AZ105	Yuma City, Arizona	0.5285056000%
AZ106	Yuma County, Arizona	1.3258824000%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR1	Adona City, Arkansas	0.0020790506%
AR2	Alexander City, Arkansas	0.0103476018%
AR3	Alicia Town, Arkansas	0.0002309579%
AR4	Allport Town, Arkansas	0.0026587350%
AR5	Alma City, Arkansas	0.1875236673%
AR6	Almyra Town, Arkansas	0.0010881066%
AR7	Alpena Town, Arkansas	0.0141319347%
AR8	Altheimer City, Arkansas	0.0071081808%
AR9	Altus City, Arkansas	0.0161149675%
AR10	Amagon Town, Arkansas	0.0016587759%
AR11	Amity City, Arkansas	0.0105947297%
AR12	Anthonyville Town, Arkansas	0.0010978372%
AR13	Antoine Town, Arkansas	0.0010576270%
AR14	Arkadelphia City, Arkansas	0.2710593166%
AR15	Arkansas City, Arkansas	0.0026365550%
AR16	Arkansas County, Arkansas	0.2272004928%
AR17	Ash Flat City, Arkansas	0.0560964456%
AR18	Ashdown City, Arkansas	0.0210645360%
AR19	Ashley County, Arkansas	0.3024558569%
AR20	Atkins City, Arkansas	0.0507540769%
AR21	Aubrey Town, Arkansas	0.0021166850%
AR22	Augusta City, Arkansas	0.0134645321%
AR23	Austin City, Arkansas	0.0201747613%
AR24	Avoca Town, Arkansas	0.0030227727%
AR25	Bald Knob City, Arkansas	0.1048227005%
AR26	Banks Town, Arkansas	0.0006822846%
AR27	Barling City, Arkansas	0.1588678563%
AR28	Bassett Town, Arkansas	0.0011499243%
AR29	Batesville City, Arkansas	0.1318965785%
AR30	Bauxite Town, Arkansas	0.0049816222%
AR31	Baxter County, Arkansas	0.8690235470%
AR32	Bay City, Arkansas	0.0250493472%
AR33	Bearden City, Arkansas	0.0161101022%
AR34	Beaver Town, Arkansas	0.0051365958%
AR35	Beebe City, Arkansas	0.2412092213%
AR36	Beedeville Town, Arkansas	0.0018030172%
AR37	Bella Vista City, Arkansas	0.5136648745%
AR38	Bellefonte Town, Arkansas	0.0008435545%
AR39	Belleville City, Arkansas	0.0050880860%
AR40	Ben Lomond Town, Arkansas	0.0012499489%
AR41	Benton City, Arkansas	1.3762616667%
AR42	Benton County, Arkansas	1.9493524156%
AR43	Bentonville City, Arkansas	1.3212148347%
AR44	Bergman Town, Arkansas	0.0080191338%
AR45	Berryville City, Arkansas	0.1767673815%
AR47	Big Flat Town, Arkansas	0.0005552148%
AR48	Bigelow Town, Arkansas	0.0028351731%
AR49	Biggers Town, Arkansas	0.0002571446%
AR50	Birdsong Town, Arkansas	0.0001210597%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR51	Black Oak Town, Arkansas	0.0003079439%
AR52	Black Rock City, Arkansas	0.0020552966%
AR53	Black Springs Town, Arkansas	0.0007714338%
AR54	Blevins City, Arkansas	0.0042289340%
AR55	Blue Eye Town, Arkansas	0.0007084713%
AR56	Blue Mountain Town, Arkansas	0.0023457827%
AR57	Bluff City Town, Arkansas	0.0001956131%
AR58	Blytheville City, Arkansas	0.3444881956%
AR59	Bodcaw Town, Arkansas	0.0004892473%
AR60	Bonanza City, Arkansas	0.0271534397%
AR61	Bono City, Arkansas	0.0166311169%
AR62	Boone County, Arkansas	0.6844345049%
AR63	Booneville City, Arkansas	0.2395670446%
AR64	Bradford City, Arkansas	0.0196136795%
AR65	Bradley City, Arkansas	0.0127167093%
AR66	Bradley County, Arkansas	0.0903557767%
AR67	Branch City, Arkansas	0.0001595527%
AR68	Briarcliff City, Arkansas	0.0001841653%
AR69	Brinkley City, Arkansas	0.0788794288%
AR70	Brookland City, Arkansas	0.0336729211%
AR71	Bryant City, Arkansas	1.0536173112%
AR72	Buckner City, Arkansas	0.0065180504%
AR73	Bull Shoals City, Arkansas	0.0692543217%
AR74	Burdette Town, Arkansas	0.0001210597%
AR75	Cabot City, Arkansas	0.9626014299%
AR76	Caddo Valley Town, Arkansas	0.0447599031%
AR77	Caldwell Town, Arkansas	0.0042239256%
AR78	Cale Town, Arkansas	0.0007827384%
AR79	Calhoun County, Arkansas	0.1397959405%
AR80	Calico Rock City, Arkansas	0.0024459503%
AR81	Calion City, Arkansas	0.0029361993%
AR82	Camden City, Arkansas	0.4098542963%
AR83	Cammack Village City, Arkansas	0.0112054660%
AR84	Campbell Station City, Arkansas	0.0043090681%
AR85	Caraway City, Arkansas	0.0225855098%
AR86	Carlisle City, Arkansas	0.1468534652%
AR87	Carroll County, Arkansas	0.5928260605%
AR88	Carthage City, Arkansas	0.0016610654%
AR89	Casa Town, Arkansas	0.0015121018%
AR90	Cash Town, Arkansas	0.0012319187%
AR91	Caulksville Town, Arkansas	0.0006928738%
AR92	Cave City, Arkansas	0.0850463202%
AR93	Cave Springs City, Arkansas	0.0320796835%
AR94	Cedarville City, Arkansas	0.0178802072%
AR95	Centerton City, Arkansas	0.1131077079%
AR96	Central City Town, Arkansas	0.0174268772%
AR97	Charleston City, Arkansas	0.0410054775%
AR98	Cherokee Village City, Arkansas	0.2125413902%
AR99	Cherry Valley City, Arkansas	0.0081466329%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR100	Chester Town, Arkansas	0.0004361585%
AR101	Chicot County, Arkansas	0.2832352637%
AR102	Chidester City, Arkansas	0.0007419559%
AR103	Clarendon City, Arkansas	0.0270484068%
AR104	Clark County, Arkansas	0.3342708117%
AR105	Clarksville City, Arkansas	0.2458837581%
AR106	Clay County, Arkansas	0.0479674136%
AR107	Cleburne County, Arkansas	0.3503158049%
AR108	Cleveland County, Arkansas	0.1143679597%
AR109	Clinton City, Arkansas	0.0824034689%
AR110	Coal Hill City, Arkansas	0.1328713526%
AR111	Colt City, Arkansas	0.0085205444%
AR112	Columbia County, Arkansas	0.0671663991%
AR113	Concord Town, Arkansas	0.0150785188%
AR114	Conway City, Arkansas	2.0922743015%
AR115	Conway County, Arkansas	0.5138971203%
AR116	Corning City, Arkansas	0.0191809554%
AR117	Cotter City, Arkansas	0.0233925747%
AR118	Cotton Plant City, Arkansas	0.0024986099%
AR119	Cove Town, Arkansas	0.0001777260%
AR120	Coy Town, Arkansas	0.0078196572%
AR121	Craighead County, Arkansas	0.9265189050%
AR122	Crawford County, Arkansas	0.9565887967%
AR123	Crawfordsville Town, Arkansas	0.0037229444%
AR124	Crittenden County, Arkansas	0.4864689351%
AR125	Cross County, Arkansas	0.3114968436%
AR126	Crossett City, Arkansas	0.2482926464%
AR127	Cushman City, Arkansas	0.0031235127%
AR128	Daisy Town, Arkansas	0.0019036142%
AR129	Dallas County, Arkansas	0.1170103816%
AR130	Damascus Town, Arkansas	0.0328833141%
AR131	Danville City, Arkansas	0.0554598088%
AR132	Dardanelle City, Arkansas	0.1270318663%
AR133	Datto Town, Arkansas	0.0002041989%
AR134	De Queen City, Arkansas	0.1825177187%
AR135	De Valls Bluff City, Arkansas	0.0153369512%
AR136	Decatur City, Arkansas	0.0461206088%
AR137	Delaplaine Town, Arkansas	0.0012409338%
AR138	Delight City, Arkansas	0.0019036142%
AR139	Dell Town, Arkansas	0.0049627334%
AR140	Denning Town, Arkansas	0.0066893371%
AR141	Dermott City, Arkansas	0.0098811069%
AR142	Des Arc City, Arkansas	0.0461902968%
AR143	Desha County, Arkansas	0.1880442527%
AR144	Dewitt City, Arkansas	0.0561472449%
AR145	Diamond City, Arkansas	0.0067481498%
AR146	Diaz City, Arkansas	0.0144799456%
AR147	Dierks City, Arkansas	0.0109843817%
AR148	Donaldson Town, Arkansas	0.0097288521%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR149	Dover City, Arkansas	0.0357561215%
AR150	Drew County, Arkansas	0.4314342663%
AR151	Dumas City, Arkansas	0.0345209116%
AR152	Dyer City, Arkansas	0.0039248537%
AR153	Dyess Town, Arkansas	0.0004842389%
AR154	Earle City, Arkansas	0.0169920066%
AR155	East Camden Town, Arkansas	0.0077825952%
AR156	Edmondson Town, Arkansas	0.0080664988%
AR157	Egypt Town, Arkansas	0.0007186312%
AR158	El Dorado City, Arkansas	0.7549722601%
AR159	Elaine City, Arkansas	0.0061272536%
AR160	Elkins City, Arkansas	0.0584820092%
AR161	Elm Springs City, Arkansas	0.0169270407%
AR162	Emerson Town, Arkansas	0.0007712907%
AR163	Emmet City, Arkansas	0.0006732695%
AR164	England City, Arkansas	0.1277733929%
AR165	Enola Town, Arkansas	0.0166283981%
AR166	Etowah Town, Arkansas	0.0016945500%
AR167	Eudora City, Arkansas	0.0090127967%
AR168	Eureka Springs City, Arkansas	0.3891361972%
AR169	Evening Shade City, Arkansas	0.0112877465%
AR170	Everton Town, Arkansas	0.0023825585%
AR171	Fairfield Bay City, Arkansas	0.0994183710%
AR172	Fargo Town, Arkansas	0.0003540210%
AR173	Farmington City, Arkansas	0.0908450240%
AR174	Faulkner County, Arkansas	1.0072116540%
AR175	Fayetteville City, Arkansas	2.1103658624%
AR176	Felsenthal Town, Arkansas	0.0017181610%
AR177	Fifty-Six City, Arkansas	0.0004614866%
AR178	Fisher City, Arkansas	0.0019605666%
AR179	Flippin City, Arkansas	0.0956901320%
AR180	Fordyce City, Arkansas	0.0545063561%
AR181	Foreman City, Arkansas	0.0020583016%
AR182	Forrest City, Arkansas	0.2961090931%
AR183	Fort Smith City, Arkansas	3.8434930088%
AR184	Fouke City, Arkansas	0.0054372418%
AR185	Fountain Hill Town, Arkansas	0.0007150537%
AR186	Fountain Lake Town, Arkansas	0.0028270166%
AR187	Fourche Town, Arkansas	0.0009659021%
AR188	Franklin County, Arkansas	0.5981687154%
AR189	Franklin Town, Arkansas	0.0147063245%
AR190	Fredonia (Biscoe) Town, Arkansas	0.0078030580%
AR191	Friendship Town, Arkansas	0.0051302995%
AR192	Fulton County, Arkansas	0.4958178657%
AR193	Fulton Town, Arkansas	0.0066352466%
AR194	Garfield Town, Arkansas	0.0074476060%
AR195	Garland County, Arkansas	1.7334588443%
AR196	Garland Town, Arkansas	0.0002891982%
AR197	Garner Town, Arkansas	0.0077934705%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR198	Gassville City, Arkansas	0.0727563250%
AR199	Gateway Town, Arkansas	0.0062878080%
AR200	Gentry City, Arkansas	0.0904861377%
AR201	Georgetown, Arkansas	0.0040265954%
AR202	Gilbert Town, Arkansas	0.0024831554%
AR203	Gillett City, Arkansas	0.0114616089%
AR204	Gillham Town, Arkansas	0.0013801668%
AR205	Gilmore City, Arkansas	0.0000954454%
AR206	Glenwood City, Arkansas	0.0480021861%
AR207	Goshen Town, Arkansas	0.0031660124%
AR208	Gosnell City, Arkansas	0.0272347186%
AR209	Gould City, Arkansas	0.0171248002%
AR210	Grady City, Arkansas	0.0313103962%
AR211	Grannis City, Arkansas	0.0009242610%
AR212	Grant County, Arkansas	0.2664481715%
AR213	Gravette City, Arkansas	0.0803454535%
AR214	Green Forest City, Arkansas	0.1176088116%
AR215	Greenbrier City, Arkansas	0.0720066419%
AR216	Greene County, Arkansas	0.5298528213%
AR217	Greenland City, Arkansas	0.0237445924%
AR218	Greenway City, Arkansas	0.0004757962%
AR219	Greenwood City, Arkansas	0.2310067194%
AR220	Greers Ferry City, Arkansas	0.0499860774%
AR221	Griffithville Town, Arkansas	0.0045461792%
AR222	Grubbs City, Arkansas	0.0056885194%
AR223	Guion Town, Arkansas	0.0188333737%
AR224	Gum Springs Town, Arkansas	0.0030512489%
AR225	Gurdon City, Arkansas	0.0633258293%
AR226	Guy City, Arkansas	0.0155481618%
AR227	Hackett City, Arkansas	0.0171567108%
AR228	Hamburg City, Arkansas	0.0524650830%
AR229	Hampton City, Arkansas	0.0149258347%
AR230	Hardy City, Arkansas	0.0225704847%
AR231	Harrell Town, Arkansas	0.0015608978%
AR232	Harrisburg City, Arkansas	0.0610374284%
AR233	Harrison City, Arkansas	0.7509041666%
AR234	Hartford City, Arkansas	0.0079703379%
AR235	Hartman City, Arkansas	0.0041808536%
AR236	Haskell City, Arkansas	0.0719017520%
AR237	Hatfield Town, Arkansas	0.0003119506%
AR238	Havana City, Arkansas	0.0028832535%
AR239	Haynes Town, Arkansas	0.0021807923%
AR240	Hazen City, Arkansas	0.0648458015%
AR241	Heber Springs City, Arkansas	0.3767547633%
AR242	Hector Town, Arkansas	0.0046732490%
AR243	Helena-West Helena City, Arkansas	0.1739214762%
AR244	Hempstead County, Arkansas	0.2734659153%
AR245	Hermitage City, Arkansas	0.0121839606%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR246	Hickory Ridge City, Arkansas	0.0037770349%
AR247	Higden Town, Arkansas	0.0085654767%
AR248	Higginson Town, Arkansas	0.0151972889%
AR249	Highfill Town, Arkansas	0.0156011076%
AR250	Highland City, Arkansas	0.0298718460%
AR251	Hindsville Town, Arkansas	0.0033816590%
AR252	Holland City, Arkansas	0.0148864831%
AR253	Holly Grove City, Arkansas	0.0044608936%
AR254	Hope City, Arkansas	0.2248866206%
AR255	Horatio City, Arkansas	0.0029417800%
AR256	Horseshoe Bend City, Arkansas	0.1112109623%
AR257	Horseshoe Lake Town, Arkansas	0.0014319677%
AR258	Hot Spring County, Arkansas	0.4782149797%
AR259	Hot Springs City, Arkansas	3.5617977507%
AR260	Houston Town, Arkansas	0.0052922849%
AR261	Howard County, Arkansas	0.1730249760%
AR262	Hoxie City, Arkansas	0.0120318489%
AR263	Hughes City, Arkansas	0.0113608689%
AR264	Humnoke City, Arkansas	0.0148176536%
AR265	Humphrey City, Arkansas	0.0142685920%
AR266	Hunter Town, Arkansas	0.0001735762%
AR267	Huntington City, Arkansas	0.0062142563%
AR268	Huntsville City, Arkansas	0.0854508543%
AR269	Huttig City, Arkansas	0.0090756161%
AR270	Imboden Town, Arkansas	0.0007621325%
AR271	Independence County, Arkansas	1.0893020276%
AR272	Izard County, Arkansas	0.5513048629%
AR273	Jackson County, Arkansas	0.1817241049%
AR274	Jacksonport Town, Arkansas	0.0050680525%
AR275	Jacksonville City, Arkansas	2.6389305280%
AR276	Jasper City, Arkansas	0.0070526594%
AR277	Jefferson County, Arkansas	0.5992841535%
AR278	Jennette Town, Arkansas	0.0012409338%
AR279	Jericho Town, Arkansas	0.0009641849%
AR281	Johnson City, Arkansas	0.1307711237%
AR282	Johnson County, Arkansas	0.3131687844%
AR283	Joiner City, Arkansas	0.0294738943%
AR284	Jonesboro City, Arkansas	2.1740597362%
AR285	Judsonia City, Arkansas	0.0470208295%
AR286	Junction City, Arkansas	0.0041819983%
AR287	Keiser City, Arkansas	0.0065363668%
AR288	Kensett City, Arkansas	0.0362397881%
AR289	Kibler City, Arkansas	0.0431741065%
AR290	Kingsland City, Arkansas	0.0062036672%
AR291	Knobel City, Arkansas	0.0009218283%
AR292	Knoxville Town, Arkansas	0.0058832739%
AR293	Lafayette County, Arkansas	0.0910619584%
AR294	Lafe Town, Arkansas	0.0028363178%
AR295	Lagrange Town, Arkansas	0.0008239503%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR296	Lake City, Arkansas	0.0259733220%
AR297	Lake View City, Arkansas	0.0047133160%
AR298	Lake Village City, Arkansas	0.0224886334%
AR299	Lakeview City, Arkansas	0.0193402219%
AR300	Lamar City, Arkansas	0.1021685446%
AR301	Lavaca City, Arkansas	0.0302604964%
AR302	Lawrence County, Arkansas	0.4807663922%
AR303	Leachville City, Arkansas	0.0232401768%
AR304	Lead Hill Town, Arkansas	0.0069168607%
AR305	Lee County, Arkansas	0.0989039387%
AR306	Leola Town, Arkansas	0.0013687190%
AR307	Lepanto City, Arkansas	0.0682260295%
AR308	Leslie City, Arkansas	0.0254444370%
AR309	Lewisville City, Arkansas	0.0166148039%
AR310	Lincoln City, Arkansas	0.0464338472%
AR311	Lincoln County, Arkansas	0.1387881111%
AR312	Little Flock City, Arkansas	0.0530723850%
AR313	Little River County, Arkansas	0.3040825791%
AR314	Little Rock City, Arkansas	6.7135694892%
AR315	Lockesburg City, Arkansas	0.0062672021%
AR316	Logan County, Arkansas	0.5058103018%
AR317	London City, Arkansas	0.0142372538%
AR318	Lonoke City, Arkansas	0.2452247983%
AR319	Lonoke County, Arkansas	0.5819398431%
AR320	Louann Town, Arkansas	0.0002119261%
AR321	Luxora City, Arkansas	0.0119226662%
AR322	Lynn Town, Arkansas	0.0001385175%
AR323	Madison City, Arkansas	0.0058260353%
AR324	Madison County, Arkansas	0.3196927018%
AR325	Magazine City, Arkansas	0.0318730520%
AR326	Magness Town, Arkansas	0.0014179443%
AR327	Magnolia City, Arkansas	0.5824169272%
AR328	Malvern City, Arkansas	0.3835695961%
AR329	Mammoth Spring City, Arkansas	0.0072408314%
AR330	Manila City, Arkansas	0.0409124647%
AR331	Mansfield City, Arkansas	0.0007997669%
AR332	Marianna City, Arkansas	0.0846648246%
AR333	Marie Town, Arkansas	0.0009849339%
AR334	Marion City, Arkansas	0.1126915829%
AR335	Marion County, Arkansas	0.3952336867%
AR336	Marked Tree City, Arkansas	0.0992021520%
AR337	Marmaduke City, Arkansas	0.0391761304%
AR338	Marvell City, Arkansas	0.0610375715%
AR339	Maumelle City, Arkansas	0.2572012688%
AR340	Mayflower City, Arkansas	0.0608694329%
AR341	Maynard Town, Arkansas	0.0013140561%
AR342	McCaskill Town, Arkansas	0.0012894435%
AR343	McCrory City, Arkansas	0.0147483949%
AR344	McDougal Town, Arkansas	0.0001189133%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR345	McGehee City, Arkansas	0.0429993856%
AR346	McNab Town, Arkansas	0.0009151028%
AR347	Mcrae City, Arkansas	0.0307843730%
AR348	Melbourne City, Arkansas	0.0687295865%
AR349	Mena City, Arkansas	0.7716866592%
AR350	Menifee Town, Arkansas	0.0106144770%
AR351	Midland Town, Arkansas	0.0002701664%
AR352	Miller County, Arkansas	0.3769094507%
AR353	Mineral Springs City, Arkansas	0.0133569235%
AR354	Minturn Town, Arkansas	0.0002323889%
AR355	Mississippi County, Arkansas	0.4561503415%
AR356	Mitchellville City, Arkansas	0.0000190318%
AR357	Monette City, Arkansas	0.0230987974%
AR358	Monroe County, Arkansas	0.0751267203%
AR359	Montgomery County, Arkansas	0.2264091685%
AR360	Monticello City, Arkansas	0.0526747196%
AR361	Montrose City, Arkansas	0.0059883068%
AR362	Moorefield Town, Arkansas	0.0009616092%
AR363	Moro Town, Arkansas	0.0019858947%
AR364	Morrilton City, Arkansas	0.2597150469%
AR365	Morrison Bluff Town, Arkansas	0.0001732900%
AR366	Mount Ida City, Arkansas	0.0133550632%
AR367	Mount Pleasant Town, Arkansas	0.0122294653%
AR368	Mount Vernon Town, Arkansas	0.0071675659%
AR369	Mountain Home City, Arkansas	0.8447100025%
AR370	Mountain Pine City, Arkansas	0.0111311989%
AR371	Mountainburg City, Arkansas	0.0505877986%
AR372	Mulberry City, Arkansas	0.0839496278%
AR373	Murfreesboro City, Arkansas	0.0401878235%
AR374	Nashville City, Arkansas	0.1174004630%
AR375	Nevada County, Arkansas	0.1042972498%
AR376	Newark City, Arkansas	0.0743959259%
AR377	Newport City, Arkansas	0.2957024125%
AR378	Newton County, Arkansas	0.2538955941%
AR379	Norfork City, Arkansas	0.0071735760%
AR380	Norman Town, Arkansas	0.0054255078%
AR381	Norphlet City, Arkansas	0.0199309247%
AR382	North Little Rock City, Arkansas	1.6145764729%
AR383	Oak Grove Heights Town, Arkansas	0.0108133813%
AR384	Oak Grove Town, Arkansas	0.0031881924%
AR385	Oakhaven Town, Arkansas	0.0008458440%
AR386	Oden Town, Arkansas	0.0002086349%
AR387	Ogden City, Arkansas	0.0000829960%
AR388	Oil Trough Town, Arkansas	0.0018456600%
AR389	O'Kean Town, Arkansas	0.0001714297%
AR390	Okolona Town, Arkansas	0.0019046158%
AR391	Ola City, Arkansas	0.0262882776%
AR392	Omaha Town, Arkansas	0.0030405167%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR393	Oppelo City, Arkansas	0.0090335457%
AR394	Osceola City, Arkansas	0.2492878833%
AR395	Ouachita County, Arkansas	0.2913601460%
AR396	Oxford City, Arkansas	0.0264156336%
AR397	Ozan Town, Arkansas	0.0011369025%
AR398	Ozark City, Arkansas	0.1131238778%
AR399	Palestine City, Arkansas	0.0190803585%
AR400	Pangburn City, Arkansas	0.0157168727%
AR401	Paragould City, Arkansas	1.0056390223%
AR402	Paris City, Arkansas	0.1616167421%
AR403	Parkdale City, Arkansas	0.0007150537%
AR404	Parkin City, Arkansas	0.0145157198%
AR405	Patmos Town, Arkansas	0.0012638292%
AR406	Patterson City, Arkansas	0.0019780244%
AR407	Pea Ridge City, Arkansas	0.1099874863%
AR408	Peach Orchard City, Arkansas	0.0002743162%
AR409	Perla Town, Arkansas	0.0015089537%
AR410	Perry County, Arkansas	0.2411764522%
AR411	Perry Town, Arkansas	0.0054813155%
AR412	Perrytown, Arkansas	0.0014218079%
AR413	Perryville City, Arkansas	0.0413931262%
AR414	Phillips County, Arkansas	0.3245121955%
AR415	Piggott City, Arkansas	0.3895380125%
AR416	Pike County, Arkansas	0.3481536152%
AR417	Pindall Town, Arkansas	0.0030350790%
AR418	Pine Bluff City, Arkansas	0.9840818047%
AR419	Pineville Town, Arkansas	0.0022012551%
AR420	Plainview City, Arkansas	0.0125505741%
AR421	Pleasant Plains Town, Arkansas	0.0024498139%
AR422	Plumerville City, Arkansas	0.0292462276%
AR423	Pocahontas City, Arkansas	0.4671181241%
AR424	Poinsett County, Arkansas	0.4009911787%
AR425	Polk County, Arkansas	0.0691418478%
AR426	Pollard City, Arkansas	0.0004521853%
AR427	Pope County, Arkansas	0.8568421621%
AR428	Portia Town, Arkansas	0.0009455824%
AR429	Portland City, Arkansas	0.0081334680%
AR430	Pottsville City, Arkansas	0.0356473681%
AR431	Powhatan Town, Arkansas	0.0001556891%
AR432	Poyen Town, Arkansas	0.0022812461%
AR433	Prairie County, Arkansas	0.0903177130%
AR434	Prairie Grove City, Arkansas	0.0877670159%
AR435	Prattsville Town, Arkansas	0.0011406231%
AR436	Prescott City, Arkansas	0.0925564594%
AR437	Pulaski County, Arkansas	2.3536109191%
AR438	Pyatt Town, Arkansas	0.0061435666%
AR439	Quitman City, Arkansas	0.0720876345%
AR440	Randolph County, Arkansas	0.0533049170%
AR441	Ratcliff City, Arkansas	0.0038192484%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR442	Ravenden Springs Town, Arkansas	0.0001143342%
AR443	Ravenden Town, Arkansas	0.0021246984%
AR444	Rector City, Arkansas	0.0056501695%
AR445	Redfield City, Arkansas	0.0199888788%
AR446	Reed Town, Arkansas	0.0009294125%
AR447	Reyno City, Arkansas	0.0001714297%
AR448	Rison City, Arkansas	0.0266158258%
AR449	Rockport City, Arkansas	0.0466258829%
AR450	Roe Town, Arkansas	0.0006297682%
AR451	Rogers City, Arkansas	1.7409808606%
AR452	Rondo Town, Arkansas	0.0001282146%
AR453	Rose Bud Town, Arkansas	0.0201332633%
AR454	Rosston Town, Arkansas	0.0012719857%
AR455	Rudy Town, Arkansas	0.0043610122%
AR456	Russell Town, Arkansas	0.0072738867%
AR457	Russellville City, Arkansas	0.9171601007%
AR458	Salem City, Arkansas	0.0044962385%
AR459	Salesville City, Arkansas	0.0064404921%
AR460	Saline County, Arkansas	1.0800200662%
AR461	Scott County, Arkansas	0.3380405487%
AR462	Scranton City, Arkansas	0.0072753177%
AR463	Searcy City, Arkansas	0.9880873649%
AR464	Searcy County, Arkansas	0.2116252857%
AR465	Sebastian County, Arkansas	2.1934833834%
AR466	Sedgwick Town, Arkansas	0.0005311746%
AR467	Sevier County, Arkansas	0.2613059949%
AR468	Shannon Hills City, Arkansas	0.0498163648%
AR469	Sharp County, Arkansas	0.2811885530%
AR470	Sheridan City, Arkansas	0.2276671308%
AR471	Sherrill Town, Arkansas	0.0025761682%
AR472	Sherwood City, Arkansas	0.4241829888%
AR473	Shirley Town, Arkansas	0.0009145304%
AR474	Sidney Town, Arkansas	0.0035774152%
AR475	Siloam Springs City, Arkansas	0.7477783644%
AR476	Smackover City, Arkansas	0.0008007686%
AR477	Smithville Town, Arkansas	0.0001624146%
AR478	South Lead Hill Town, Arkansas	0.0018313504%
AR479	Sparkman City, Arkansas	0.0035065824%
AR480	Springdale City, Arkansas	2.0136786333%
AR481	Springtown, Arkansas	0.0002924895%
AR482	St Francis County, Arkansas	0.2044215163%
AR483	St. Charles Town, Arkansas	0.0024664131%
AR484	St. Francis City, Arkansas	0.0007137659%
AR485	St. Joe Town, Arkansas	0.0076757020%
AR486	St. Paul Town, Arkansas	0.0041619648%
AR487	Stamps City, Arkansas	0.0180207281%
AR488	Star City, Arkansas	0.0564865270%
AR489	Stephens City, Arkansas	0.0116586529%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR490	Stone County, Arkansas	0.2837768844%
AR491	Strawberry Town, Arkansas	0.0006928738%
AR492	Strong City, Arkansas	0.0029361993%
AR493	Stuttgart City, Arkansas	0.2203815101%
AR494	Subiaco Town, Arkansas	0.0109146937%
AR495	Success Town, Arkansas	0.0001784415%
AR496	Sulphur Rock Town, Arkansas	0.0032654646%
AR497	Sulphur Springs City, Arkansas	0.0120908047%
AR498	Summit City, Arkansas	0.0074467474%
AR499	Sunset Town, Arkansas	0.0016041130%
AR500	Swifton City, Arkansas	0.0178930859%
AR501	Taylor City, Arkansas	0.0014103602%
AR502	Texarkana City, Arkansas	0.7683955804%
AR503	Thornton City, Arkansas	0.0022437548%
AR504	Tillar City, Arkansas	0.0003265465%
AR505	Tinsman Town, Arkansas	0.0003150987%
AR506	Tollette Town, Arkansas	0.0032731918%
AR507	Tontitown City, Arkansas	0.0610355681%
AR508	Traskwood City, Arkansas	0.0177678764%
AR509	Trumann City, Arkansas	0.2319945153%
AR510	Tuckerman City, Arkansas	0.0405439909%
AR511	Tull Town, Arkansas	0.0030797252%
AR512	Tupelo Town, Arkansas	0.0005171511%
AR513	Turrell City, Arkansas	0.0090687475%
AR514	Twin Groves Town, Arkansas	0.0156102657%
AR515	Tyronza City, Arkansas	0.0382955139%
AR516	Ulm Town, Arkansas	0.0000897216%
AR517	Union County, Arkansas	0.4520045466%
AR518	Valley Springs Town, Arkansas	0.0032716177%
AR519	Van Buren City, Arkansas	1.7649031789%
AR520	Van Buren County, Arkansas	0.3641848711%
AR521	Vandervoort Town, Arkansas	0.0000659675%
AR522	Victoria Town, Arkansas	0.0005446257%
AR523	Vilonia City, Arkansas	0.1035441323%
AR524	Viola Town, Arkansas	0.0032700437%
AR525	Wabbaseka Town, Arkansas	0.0082530968%
AR526	Waldenburg Town, Arkansas	0.0023526513%
AR527	Waldo City, Arkansas	0.0028426141%
AR528	Waldron City, Arkansas	0.1501465474%
AR529	Walnut Ridge City, Arkansas	0.0315460763%
AR530	Ward City, Arkansas	0.1482609634%
AR531	Warren City, Arkansas	0.1331456688%
AR532	Washington City, Arkansas	0.0014218079%
AR533	Washington County, Arkansas	2.0141562897%
AR534	Watson City, Arkansas	0.0000569524%
AR535	Weiner City, Arkansas	0.0115016760%
AR536	Weldon Town, Arkansas	0.0015514534%
AR537	West Fork City, Arkansas	0.0278779379%
AR538	West Memphis City, Arkansas	0.6402086383%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR539	West Point Town, Arkansas	0.0031173596%
AR540	Western Grove Town, Arkansas	0.0057204300%
AR541	Wheatley City, Arkansas	0.0050976735%
AR542	Whelen Springs Town, Arkansas	0.0002381128%
AR543	White County, Arkansas	0.9979591705%
AR544	White Hall City, Arkansas	0.0551959387%
AR545	Wickes Town, Arkansas	0.0001422380%
AR546	Widener Town, Arkansas	0.0014565804%
AR547	Wiederkehr Village City, Arkansas	0.0015955272%
AR548	Williford Town, Arkansas	0.0025041906%
AR549	Willisville Town, Arkansas	0.0003913692%
AR550	Wilmar City, Arkansas	0.0018078825%
AR551	Wilmot City, Arkansas	0.0171605744%
AR552	Wilson City, Arkansas	0.0038733390%
AR553	Wilton City, Arkansas	0.0002323889%
AR554	Winchester Town, Arkansas	0.0011094280%
AR555	Winslow City, Arkansas	0.0059329284%
AR556	Winthrop City, Arkansas	0.0004315794%
AR557	Woodruff County, Arkansas	0.2136270641%
AR558	Wooster Town, Arkansas	0.0052930004%
AR559	Wrightsville City, Arkansas	0.0089014675%
AR560	Wynne City, Arkansas	0.1541190523%
AR561	Yell County, Arkansas	0.5032932325%
AR562	Yellville City, Arkansas	0.0268081476%
AR563	Zinc Town, Arkansas	0.0018492375%
AR564	Keo Town, Arkansas	0.0137063654%
AR565	Letona Town, Arkansas	0.0096119422%
AR567	Lexa Town, Arkansas	0.0073056542%
AR568	Lonsdale Town, Arkansas	0.0009432928%
AR569	Lowell City, Arkansas	0.2449366017%
AR570	Marshall City, Arkansas	0.0391797079%
AR571	McNeil City, Arkansas	0.0006390694%
AR572	Mountain View City, Arkansas	0.1444262605%
AR573	Nimmons Town, Arkansas	0.0001405209%

State ID	Qualifying Subdivision	Consolidated State Allocation
CA1	Adelanto City, California	
CA2	Agoura Hills City, California	
CA3	Alameda City, California	
CA4	Alameda County, California	
CA5	Albany City, California	
CA6	Alhambra City, California	
CA7	Aliso Viejo City, California	
CA9	Amador County, California	
CA10	American Canyon City, California	
CA11	Anaheim City, California	
CA12	Anderson City, California	
CA13	Antioch City, California	
CA14	Apple Valley Town, California	
CA15	Arcadia City, California	
CA16	Arcata City, California	
CA17	Arroyo Grande City, California	
CA18	Artesia City, California	
CA19	Arvin City, California	
CA20	Atascadero City, California	
CA21	Atwater City, California	
CA22	Auburn City, California	
CA23	Avenal City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA24	Azusa City, California	
CA25	Bakersfield City, California	
CA26	Baldwin Park City, California	
CA27	Banning City, California	
CA28	Barstow City, California	
CA29	Beaumont City, California	
CA30	Bell City, California	
CA31	Bell Gardens City, California	
CA32	Bellflower City, California	
CA33	Belmont City, California	
CA34	Benicia City, California	
CA35	Berkeley City, California	
CA36	Beverly Hills City, California	
CA37	Blythe City, California	
CA38	Brawley City, California	
CA39	Brea City, California	
CA40	Brentwood City, California	
CA41	Buena Park City, California	
CA42	Burbank City, California	
CA43	Burlingame City, California	
CA44	Butte County, California	
CA45	Calabasas City, California	
CA46	Calaveras County, California	
CA47	Calexico City, California	
CA48	California City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA49	Camarillo City, California	
CA50	Campbell City, California	
CA51	Canyon Lake City, California	
CA52	Capitola City, California	
CA53	Carlsbad City, California	
CA54	Carpinteria City, California	
CA55	Carson City, California	
CA56	Cathedral City, California	
CA57	Ceres City, California	
CA58	Cerritos City, California	
CA59	Chico City, California	
CA60	Chino City, California	
CA61	Chino Hills City, California	
CA62	Chowchilla City, California	
CA63	Chula Vista City, California	
CA64	Citrus Heights City, California	
CA65	Claremont City, California	
CA66	Clayton City, California	
CA67	Clearlake City, California	
CA68	Clovis City, California	
CA69	Coachella City, California	
CA70	Coalinga City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA71	Colton City, California	
CA72	Colusa County, California	
CA73	Commerce City, California	
CA74	Compton City, California	
CA75	Concord City, California	
CA76	Contra Costa County, California	
CA77	Corcoran City, California	
CA78	Corona City, California	
CA79	Coronado City, California	
CA80	Costa Mesa City, California	
CA81	Covina City, California	
CA82	Cudahy City, California	
CA83	Culver City, California	
CA84	Cupertino City, California	
CA85	Cypress City, California	
CA86	Daly City, California	
CA87	Dana Point City, California	
CA88	Danville Town, California	
CA89	Davis City, California	
CA90	Del Norte County, California	
CA91	Delano City, California	
CA92	Desert Hot Springs City, California	
CA93	Diamond Bar City, California	
CA94	Dinuba City, California	
CA95	Dixon City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA96	Downey City, California	
CA97	Duarte City, California	
CA98	Dublin City, California	
CA99	East Palo Alto City, California	
CA100	Eastvale City, California	
CA101	El Cajon City, California	
CA102	El Centro City, California	
CA103	El Cerrito City, California	
CA104	El Dorado County, California	
CA105	El Monte City, California	
CA106	El Paso De Robles (Paso Robles) City, California	
CA107	El Segundo City, California	
CA108	Elk Grove City, California	
CA109	Emeryville City, California	
CA110	Encinitas City, California	
CA111	Escondido City, California	
CA112	Eureka City, California	
CA113	Exeter City, California	
CA114	Fairfield City, California	
CA115	Farmersville City, California	
CA116	Fillmore City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA117	Folsom City, California	
CA118	Fontana City, California	
CA119	Fortuna City, California	
CA120	Foster City, California	
CA121	Fountain Valley City, California	
CA122	Fremont City, California	
CA123	Fresno City, California	
CA124	Fresno County, California	
CA125	Fullerton City, California	
CA126	Galt City, California	
CA127	Garden Grove City, California	
CA128	Gardena City, California	
CA129	Gilroy City, California	
CA130	Glendale City, California	
CA131	Glendora City, California	
CA132	Glenn County, California	
CA133	Goleta City, California	
CA134	Grand Terrace City, California	
CA135	Grass Valley City, California	
CA136	Greenfield City, California	
CA137	Grover Beach City, California	
CA138	Half Moon Bay City, California	
CA139	Hanford City, California	
CA140	Hawaiian Gardens City, California	
CA141	Hawthorne City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA142	Hayward City, California	
CA143	Healdsburg City, California	
CA144	Hemet City, California	
CA145	Hercules City, California	
CA146	Hermosa Beach City, California	
CA147	Hesperia City, California	
CA148	Highland City, California	
CA149	Hillsborough Town, California	
CA150	Hollister City, California	
CA151	Humboldt County, California	
CA152	Huntington Beach City, California	
CA153	Huntington Park City, California	
CA154	Imperial Beach City, California	
CA155	Imperial City, California	
CA156	Imperial County, California	
CA157	Indio City, California	
CA158	Inglewood City, California	
CA159	Inyo County, California	
CA160	Irvine City, California	
CA161	Jurupa Valley City, California	
CA162	Kerman City, California	
CA163	Kern County, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA164	King City, California	
CA165	Kings County, California	
CA166	Kingsburg City, California	
CA167	La Cañada Flintridge City, California	
CA168	La Habra City, California	
CA169	La Mesa City, California	
CA170	La Mirada City, California	
CA171	La Palma City, California	
CA172	La Puente City, California	
CA173	La Quinta City, California	
CA174	La Verne City, California	
CA175	Lafayette City, California	
CA176	Laguna Beach City, California	
CA177	Laguna Hills City, California	
CA178	Laguna Niguel City, California	
CA179	Laguna Woods City, California	
CA180	Lake County, California	
CA181	Lake Elsinore City, California	
CA182	Lake Forest City, California	
CA183	Lakeport City, California	
CA184	Lakewood City, California	
CA185	Lancaster City, California	
CA186	Larkspur City, California	
CA187	Lassen County, California	
CA188	Lathrop City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA189	Lawndale City, California	
CA190	Lemon Grove City, California	
CA191	Lemoore City, California	
CA192	Lincoln City, California	
CA193	Lindsay City, California	
CA194	Livermore City, California	
CA195	Livingston City, California	
CA196	Lodi City, California	
CA197	Loma Linda City, California	
CA198	Lomita City, California	
CA199	Lompoc City, California	
CA200	Long Beach City, California	
CA201	Los Alamitos City, California	
CA202	Los Altos City, California	
CA203	Los Angeles City, California	
CA204	Los Angeles County, California	
CA205	Los Banos City, California	
CA206	Los Gatos Town, California	
CA207	Lynwood City, California	
CA208	Madera City, California	
CA209	Madera County, California	
CA210	Malibu City, California	Allocations in California
CA211	Manhattan Beach City, California	will be made in
CA212	Manteca City, California	accordance with the
CA213	Marin County, California	California State-
CA214	Marina City, California	Subdivision Agreement.
CA215	Mariposa County, California	
CA216	Martinez City, California	
CA217	Marysville City, California	
CA218	Maywood City, California	
CA219	McFarland City, California	
CA220	Mendocino County, California	
CA221	Mendota City, California	
CA222	Menifee City, California	
CA223	Menlo Park City, California	
CA224	Merced City, California	
CA225	Merced County, California	
CA226	Mill Valley City, California	
CA227	Millbrae City, California	
CA228	Milpitas City, California	
CA229	Mission Viejo City, California	
CA230	Modesto City, California	
CA231	Modoc County, California	
CA232	Mono County, California	
CA233	Monrovia City, California	
CA234	Montclair City, California	
CA235	Montebello City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA236	Monterey City, California	
CA237	Monterey County, California	
CA238	Monterey Park City, California	
CA239	Moorpark City, California	
CA240	Moraga Town, California	
CA241	Moreno Valley City, California	
CA242	Morgan Hill City, California	
CA243	Morro Bay City, California	
CA244	Mountain View City, California	
CA245	Murrieta City, California	
CA246	Napa City, California	
CA247	Napa County, California	
CA248	National City, California	
CA249	Nevada County, California	
CA250	Newark City, California	
CA251	Newman City, California	
CA252	Newport Beach City, California	
CA253	Norco City, California	
CA254	Norwalk City, California	
CA255	Novato City, California	
CA256	Oakdale City, California	
CA257	Oakland City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA258	Oakley City, California	
CA259	Oceanside City, California	
CA260	Ontario City, California	
CA261	Orange City, California	
CA262	Orange County, California	
CA263	Orange Cove City, California	
CA264	Orinda City, California	
CA265	Oroville City, California	
CA266	Oxnard City, California	
CA267	Pacific Grove City, California	
CA268	Pacifica City, California	
CA269	Palm Desert City, California	
CA270	Palm Springs City, California	
CA271	Palmdale City, California	
CA272	Palo Alto City, California	
CA273	Palos Verdes Estates City, California	
CA274	Paramount City, California	
CA275	Parlier City, California	
CA276	Pasadena City, California	
CA277	Patterson City, California	
CA278	Perris City, California	
CA279	Petaluma City, California	
CA280	Pico Rivera City, California	
CA281	Piedmont City, California	
CA282	Pinole City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA283	Pittsburg City, California	
CA284	Placentia City, California	
CA285	Placer County, California	
CA286	Placerville City, California	
CA287	Pleasant Hill City, California	
CA288	Pleasanton City, California	
CA289	Plumas County, California	
CA290	Pomona City, California	
CA291	Port Hueneme City, California	
CA292	Porterville City, California	
CA293	Poway City, California	
CA294	Rancho Cordova City, California	
CA295	Rancho Cucamonga City, California	
CA296	Rancho Mirage City, California	
CA297	Rancho Palos Verdes City, California	
CA298	Rancho Santa Margarita City, California	
CA299	Red Bluff City, California	
CA300	Redding City, California	
CA301	Redlands City, California	
CA302	Redondo Beach City, California	
CA303	Redwood City, California	Allocations in California
CA304	Reedley City, California	will be made in
CA305	Rialto City, California	accordance with the
CA306	Richmond City, California	California State-
CA307	Ridgecrest City, California	Subdivision Agreement.
CA308	Ripon City, California	
CA309	Riverbank City, California	
CA310	Riverside City, California	
CA311	Riverside County, California	
CA312	Rocklin City, California	
CA313	Rohnert Park City, California	
CA314	Rosemead City, California	
CA315	Roseville City, California	
CA316	Sacramento City, California	
CA317	Sacramento County, California	
CA318	Salinas City, California	
CA319	San Anselmo Town, California	
CA320	San Benito County, California	
CA321	San Bernardino City, California	
CA322	San Bernardino County, California	
CA323	San Bruno City, California	
CA324	San Buenaventura (Ventura) City, California	
CA325	San Carlos City, California	
CA326	San Clemente City, California	
CA327	San Diego City, California	
CA328	San Diego County, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA329	San Dimas City, California	
CA330	San Fernando City, California	
CA331	San Francisco City, California	
CA332	San Gabriel City, California	
CA333	San Jacinto City, California	
CA334	San Joaquin County, California	
CA335	San Jose City, California	
CA336	San Juan Capistrano City, California	
CA337	San Leandro City, California	
CA338	San Luis Obispo City, California	
CA339	San Luis Obispo County, California	
CA340	San Marcos City, California	
CA341	San Marino City, California	
CA342	San Mateo City, California	
CA343	San Mateo County, California	
CA344	San Pablo City, California	
CA345	San Rafael City, California	
CA346	San Ramon City, California	
CA347	Sanger City, California	
CA348	Santa Ana City, California	
CA349	Santa Barbara City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA350	Santa Barbara County, California	
CA351	Santa Clara City, California	
CA352	Santa Clara County, California	
CA353	Santa Clarita City, California	
CA354	Santa Cruz City, California	
CA355	Santa Cruz County, California	
CA356	Santa Fe Springs City, California	
CA357	Santa Maria City, California	
CA358	Santa Monica City, California	
CA359	Santa Paula City, California	
CA360	Santa Rosa City, California	
CA361	Santee City, California	
CA362	Saratoga City, California	
CA363	Scotts Valley City, California	
CA364	Seal Beach City, California	
CA365	Seaside City, California	
CA366	Selma City, California	
CA367	Shafter City, California	
CA368	Shasta County, California	
CA369	Shasta Lake City, California	
CA371	Sierra Madre City, California	
CA372	Signal Hill City, California	
CA373	Simi Valley City, California	
CA374	Siskiyou County, California	
CA375	Solana Beach City, California	
CA376	Solano County, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA377	Soledad City, California	
CA378	Sonoma City, California	
CA379	Sonoma County, California	
CA380	South El Monte City, California	
CA381	South Gate City, California	
CA382	South Lake Tahoe City, California	
CA383	South Pasadena City, California	
CA384	South San Francisco City, California	
CA385	Stanislaus County, California	
CA386	Stanton City, California	
CA387	Stockton City, California	
CA388	Suisun City, California	
CA389	Sunnyvale City, California	
CA390	Susanville City, California	
CA391	Sutter County, California	
CA392	Tehachapi City, California	
CA393	Tehama County, California	
CA394	Temecula City, California	
CA395	Temple City, California	
CA396	Thousand Oaks City, California	
CA397	Torrance City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA398	Tracy City, California	
CA399	Trinity County, California	
CA400	Truckee Town, California	
CA401	Tulare City, California	
CA402	Tulare County, California	
CA403	Tuolumne County, California	
CA404	Turlock City, California	
CA405	Tustin City, California	
CA406	Twentynine Palms City, California	
CA407	Ukiah City, California	
CA408	Union City, California	
CA409	Upland City, California	
CA410	Vacaville City, California	
CA411	Vallejo City, California	
CA412	Ventura County, California	
CA413	Victorville City, California	
CA414	Visalia City, California	
CA415	Vista City, California	
CA416	Walnut City, California	
CA417	Walnut Creek City, California	
CA418	Wasco City, California	
CA419	Watsonville City, California	
CA420	West Covina City, California	
CA421	West Hollywood City, California	
CA422	West Sacramento City, California	
CA423	Westminster City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA424	Whittier City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA425	Wildomar City, California	
CA426	Windsor Town, California	
CA427	Woodland City, California	
CA428	Yolo County, California	
CA429	Yorba Linda City, California	
CA430	Yuba City, California	
CA431	Yuba County, California	
CA432	Yucaipa City, California	
CA433	Yucca Valley Town, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO1	Adams County, Colorado	
CO2	Alamosa City, Colorado	
CO3	Alamosa County, Colorado	
CO4	Arapahoe County, Colorado	
CO5	Archuleta County, Colorado	
CO6	Arvada City, Colorado	
CO7	Aurora City, Colorado	
CO8	Baca County, Colorado	
CO9	Bent County, Colorado	
CO10	Black Hawk City, Colorado	
CO11	Boulder City, Colorado	
CO12	Boulder County, Colorado	
CO13	Brighton City, Colorado	
CO14	Broomfield City, Colorado	
CO15	Cañon City, Colorado	
CO16	Castle Pines City, Colorado	
CO17	Castle Rock Town, Colorado	
CO18	Centennial City, Colorado	
CO19	Chaffee County, Colorado	
CO20	Cheyenne County, Colorado	
CO21	Clear Creek County, Colorado	
CO22	Colorado Springs City, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO23	Commerce City, Colorado	
CO24	Conejos County, Colorado	
CO25	Costilla County, Colorado	
CO26	Crowley County, Colorado	
CO27	Custer County, Colorado	
CO28	Delta County, Colorado	
CO29	Denver City, Colorado	
CO30	Dolores County, Colorado	
CO31	Douglas County, Colorado	
CO32	Durango City, Colorado	
CO33	Eagle County, Colorado	
CO34	El Paso County, Colorado	
CO35	Elbert County, Colorado	
CO36	Englewood City, Colorado	
CO37	Erie Town, Colorado	
CO38	Evans City, Colorado	
CO39	Federal Heights City, Colorado	
CO40	Firestone Town, Colorado	
CO41	Fort Collins City, Colorado	
CO42	Fort Morgan City, Colorado	
CO43	Fountain City, Colorado	
CO44	Frederick Town, Colorado	
CO45	Fremont County, Colorado	
CO46	Fruita City, Colorado	
CO47	Garfield County, Colorado	
CO48	Gilpin County, Colorado	
CO49	Golden City, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO50	Grand County, Colorado	
CO51	Grand Junction City, Colorado	
CO52	Greeley City, Colorado	
CO53	Greenwood Village City, Colorado	
CO54	Gunnison County, Colorado	
CO55	Hinsdale County, Colorado	
CO56	Hudson Town, Colorado	
CO57	Huerfano County, Colorado	
CO58	Jackson County, Colorado	
CO59	Jefferson County, Colorado	
CO60	Johnstown, Colorado	
CO61	Kiowa County, Colorado	
CO62	Kit Carson County, Colorado	
CO63	La Plata County, Colorado	
CO64	Lafayette City, Colorado	
CO65	Lake County, Colorado	
CO66	Lakewood City, Colorado	
CO67	Larimer County, Colorado	
CO68	Las Animas County, Colorado	
CO69	Lincoln County, Colorado	
CO70	Littleton City, Colorado	
CO71	Logan County, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO72	Lone Tree City, Colorado	
CO73	Longmont City, Colorado	
CO74	Louisville City, Colorado	
CO75	Loveland City, Colorado	
CO76	Mesa County, Colorado	
CO77	Mineral County, Colorado	
CO78	Moffat County, Colorado	
CO79	Montezuma County, Colorado	
CO80	Montrose City, Colorado	
CO81	Montrose County, Colorado	
CO82	Morgan County, Colorado	
CO83	Northglenn City, Colorado	
CO84	Otero County, Colorado	
CO85	Ouray County, Colorado	
CO86	Park County, Colorado	
CO87	Parker Town, Colorado	
CO88	Phillips County, Colorado	
CO89	Pitkin County, Colorado	
CO90	Prowers County, Colorado	
CO91	Pueblo City, Colorado	
CO92	Pueblo County, Colorado	
CO93	Rio Blanco County, Colorado	
CO94	Rio Grande County, Colorado	
CO95	Routt County, Colorado	
CO96	Saguache County, Colorado	
CO97	San Juan County, Colorado	
CO98	San Miguel County, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO99	Sedgwick County, Colorado	
CO100	Sheridan City, Colorado	
CO101	Steamboat Springs City, Colorado	
CO102	Sterling City, Colorado	
CO103	Summit County, Colorado	
CO104	Superior Town, Colorado	
CO105	Teller County, Colorado	
CO106	Thornton City, Colorado	
CO107	Washington County, Colorado	
CO108	Weld County, Colorado	
CO109	Wellington Town, Colorado	
CO110	Westminster City, Colorado	
CO111	Wheat Ridge City, Colorado	
CO112	Windsor Town, Colorado	
CO113	Yuma County, Colorado	
CO114	Aguilar Town, Colorado	
CO115	Akron Town, Colorado	
CO116	Alma Town, Colorado	
CO117	Antonito Town, Colorado	
CO118	Arriba Town, Colorado	
CO119	Aspen City, Colorado	
CO120	Ault Town, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO121	Avon Town, Colorado	
CO122	Basalt Town, Colorado	
CO123	Bayfield Town, Colorado	
CO124	Bennett Town, Colorado	
CO125	Berthoud Town, Colorado	
CO126	Bethune Town, Colorado	
CO127	Blanca Town, Colorado	
CO128	Blue River Town, Colorado	
CO129	Boone Town, Colorado	
CO130	Bow Mar Town, Colorado	
CO131	Branson Town, Colorado	
CO132	Breckenridge Town, Colorado	
CO133	Brookside Town, Colorado	
CO134	Brush City, Colorado	
CO135	Buena Vista Town, Colorado	
CO136	Burlington City, Colorado	
CO137	Calhan Town, Colorado	
CO138	Campo Town, Colorado	
CO139	Carbondale Town, Colorado	
CO140	Cedaredge Town, Colorado	
CO141	Center Town, Colorado	
CO142	Central City, Colorado	
CO143	Cheraw Town, Colorado	
CO144	Cherry Hills Village City, Colorado	
CO145	Cheyenne Wells Town, Colorado	
CO146	City Of Creede Town, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO147	Coal Creek Town, Colorado	
CO148	Cokedale Town, Colorado	
CO149	Collbran Town, Colorado	
CO150	Columbine Valley Town, Colorado	
CO151	Cortez City, Colorado	
CO152	Craig City, Colorado	
CO153	Crawford Town, Colorado	
CO154	Crested Butte Town, Colorado	
CO155	Crestone Town, Colorado	
CO156	Cripple Creek City, Colorado	
CO157	Crook Town, Colorado	
CO158	Crowley Town, Colorado	
CO159	Dacono City, Colorado	
CO160	De Beque Town, Colorado	
CO161	Deer Trail Town, Colorado	
CO162	Del Norte Town, Colorado	
CO163	Delta City, Colorado	
CO164	Dillon Town, Colorado	
CO165	Dinosaur Town, Colorado	
CO166	Dolores Town, Colorado	
CO167	Dove Creek Town, Colorado	
CO168	Eads Town, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO169	Eagle Town, Colorado	
CO170	Eaton Town, Colorado	
CO171	Eckley Town, Colorado	
CO172	Edgewater City, Colorado	
CO173	Elizabeth Town, Colorado	
CO174	Empire Town, Colorado	
CO175	Estes Park Town, Colorado	
CO176	Fairplay Town, Colorado	
CO177	Flagler Town, Colorado	
CO178	Fleming Town, Colorado	
CO179	Florence City, Colorado	
CO180	Fort Lupton City, Colorado	
CO181	Fowler Town, Colorado	
CO182	Foxfield Town, Colorado	
CO183	Fraser Town, Colorado	
CO184	Frisco Town, Colorado	
CO185	Garden City Town, Colorado	
CO186	Genoa Town, Colorado	
CO187	Georgetown Town, Colorado	
CO188	Gilcrest Town, Colorado	
CO189	Glendale City, Colorado	
CO190	Glenwood Springs City, Colorado	
CO191	Granada Town, Colorado	
CO192	Granby Town, Colorado	
CO193	Grand Lake Town, Colorado	
CO194	Green Mountain Falls Town, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO195	Grover Town, Colorado	
CO196	Gunnison City, Colorado	
CO197	Gypsum Town, Colorado	
CO198	Hartman Town, Colorado	
CO199	Haswell Town, Colorado	
CO200	Haxtun Town, Colorado	
CO201	Hayden Town, Colorado	
CO202	Hillrose Town, Colorado	
CO203	Holly Town, Colorado	
CO204	Holyoke City, Colorado	
CO205	Hooper Town, Colorado	
CO206	Hot Sulphur Springs Town, Colorado	
CO207	Hotchkiss Town, Colorado	
CO208	Hugo Town, Colorado	
CO209	Idaho Springs City, Colorado	
CO210	Ignacio Town, Colorado	
CO211	Iliff Town, Colorado	
CO212	Jamestown Town, Colorado	
CO213	Julesburg Town, Colorado	
CO214	Keenesburg Town, Colorado	
CO215	Kersey Town, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO216	Kim Town, Colorado	
CO217	Kiowa Town, Colorado	
CO218	Kit Carson Town, Colorado	
CO219	Kremmling Town, Colorado	
CO220	La Jara Town, Colorado	
CO221	La Junta City, Colorado	
CO222	La Salle Town, Colorado	
CO223	La Veta Town, Colorado	
CO224	Lake City Town, Colorado	
CO225	Lakeside Town, Colorado	
CO226	Lamar City, Colorado	
CO227	Larkspur Town, Colorado	
CO228	Las Animas City, Colorado	
CO229	Leadville City, Colorado	
CO230	Limon Town, Colorado	
CO231	Lochbuie Town, Colorado	
CO232	Log Lane Village Town, Colorado	
CO233	Lyons Town, Colorado	
CO234	Manassa Town, Colorado	
CO235	Mancos Town, Colorado	
CO236	Manitou Springs City, Colorado	
CO237	Manzanola Town, Colorado	
CO238	Marble Town, Colorado	
CO239	Mead Town, Colorado	
CO240	Meeker Town, Colorado	
CO241	Merino Town, Colorado	
CO242	Milliken Town, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO243	Minturn Town, Colorado	
CO244	Moffat Town, Colorado	
CO245	Monte Vista City, Colorado	
CO246	Montezuma Town, Colorado	
CO247	Monument Town, Colorado	
CO248	Morrison Town, Colorado	
CO249	Mount Crested Butte Town, Colorado	
CO250	Mountain View Town, Colorado	
CO251	Mountain Village Town, Colorado	
CO252	Naturita Town, Colorado	
CO253	Nederland Town, Colorado	
CO254	New Castle Town, Colorado	
CO255	Norwood Town, Colorado	
CO256	Nucla Town, Colorado	
CO257	Nunn Town, Colorado	
CO258	Oak Creek Town, Colorado	
CO259	Olathe Town, Colorado	
CO260	Olney Springs Town, Colorado	
CO261	Ophir Town, Colorado	
CO262	Orchard City Town, Colorado	
CO263	Ordway Town, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO264	Otis Town, Colorado	
CO265	Ouray City, Colorado	
CO266	Ovid Town, Colorado	
CO267	Pagosa Springs Town, Colorado	
CO268	Palisade Town, Colorado	
CO269	Palmer Lake Town, Colorado	
CO270	Paoli Town, Colorado	
CO271	Paonia Town, Colorado	
CO272	Parachute Town, Colorado	
CO273	Peetz Town, Colorado	
CO274	Pierce Town, Colorado	
CO275	Pitkin Town, Colorado	
CO276	Platteville Town, Colorado	
CO277	Poncha Springs Town, Colorado	
CO278	Pritchett Town, Colorado	
CO279	Ramah Town, Colorado	
CO280	Rangely Town, Colorado	
CO281	Raymer (New Raymer) Town, Colorado	
CO282	Red Cliff Town, Colorado	
CO283	Rico Town, Colorado	
CO284	Ridgway Town, Colorado	
CO285	Rifle City, Colorado	
CO286	Rockvale Town, Colorado	
CO287	Rocky Ford City, Colorado	
CO288	Romeo Town, Colorado	
CO289	Rye Town, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO290	Saguache Town, Colorado	
CO291	Salida City, Colorado	
CO292	San Luis Town, Colorado	
CO293	Sanford Town, Colorado	
CO294	Sawpit Town, Colorado	
CO295	Sedgwick Town, Colorado	
CO296	Seibert Town, Colorado	
CO297	Severance Town, Colorado	
CO298	Sheridan Lake Town, Colorado	
CO299	Silt Town, Colorado	
CO300	Silver Cliff Town, Colorado	
CO301	Silver Plume Town, Colorado	
CO302	Silverthorne Town, Colorado	
CO303	Silverton Town, Colorado	
CO304	Simla Town, Colorado	
CO305	Snowmass Village Town, Colorado	
CO306	South Fork Town, Colorado	
CO307	Springfield Town, Colorado	
CO308	Starkville Town, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO309	Stratton Town, Colorado	
CO310	Sugar City Town, Colorado	
CO311	Swink Town, Colorado	
CO312	Telluride Town, Colorado	
CO313	Timnath Town, Colorado	
CO314	Trinidad City, Colorado	
CO315	Two Buttes Town, Colorado	
CO316	Vail Town, Colorado	
CO317	Victor City, Colorado	
CO318	Vilas Town, Colorado	
CO319	Vona Town, Colorado	
CO320	Walden Town, Colorado	
CO321	Walsenburg City, Colorado	
CO322	Walsh Town, Colorado	
CO323	Ward Town, Colorado	
CO324	Westcliffe Town, Colorado	
CO325	Wiggins Town, Colorado	
CO326	Wiley Town, Colorado	
CO327	Williamsburg Town, Colorado	
CO328	Winter Park Town, Colorado	
CO329	Woodland Park City, Colorado	
CO330	Wray City, Colorado	
CO331	Yampa Town, Colorado	
CO332	Yuma City, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CT1	Andover Town, Connecticut	0.0513214640%
CT2	Ansonia City, Connecticut	0.5316052437%
CT3	Ashford Town, Connecticut	0.1096965130%
CT4	Avon Town, Connecticut	0.5494886534%
CT5	Barkhamsted Town, Connecticut	0.0620629520%
CT6	Beacon Falls Town, Connecticut	0.1953947308%
CT7	Berlin Town, Connecticut	0.5215629385%
CT8	Bethany Town, Connecticut	0.1039156068%
CT9	Bethel Town, Connecticut	0.3522422145%
CT10	Bethlehem Town, Connecticut	0.0078647202%
CT11	Bloomfield Town, Connecticut	0.4888368136%
CT12	Bolton Town, Connecticut	0.1520831395%
CT13	Bozrah Town, Connecticut	0.0582057867%
CT14	Branford Town, Connecticut	0.8903816954%
CT15	Bridgeport City, Connecticut	3.2580743095%
CT16	Bridgewater Town, Connecticut	0.0118125935%
CT17	Bristol City, Connecticut	1.3355768908%
CT18	Brookfield Town, Connecticut	0.3087903124%
CT19	Brooklyn Town, Connecticut	0.1880661562%
CT20	Burlington Town, Connecticut	0.2348761319%
CT21	Canaan Town, Connecticut	0.0343343640%
CT22	Canterbury Town, Connecticut	0.1354310071%
CT23	Canton Town, Connecticut	0.2669011966%
CT24	Chaplin Town, Connecticut	0.0523959290%
CT25	Cheshire Town, Connecticut	0.9783113499%
CT26	Chester Town, Connecticut	0.0772387574%
CT27	Clinton Town, Connecticut	0.5348726093%
CT28	Colchester Town, Connecticut	0.6134395770%
CT29	Colebrook Town, Connecticut	0.0296870114%
CT30	Columbia Town, Connecticut	0.1005666237%
CT31	Cornwall Town, Connecticut	0.0486027928%
CT32	Coventry Town, Connecticut	0.3460011479%
CT33	Cromwell Town, Connecticut	0.4750451453%
CT34	Danbury City, Connecticut	1.1556465907%
CT35	Darien Town, Connecticut	0.6429649345%
CT36	Deep River Town, Connecticut	0.0924563595%
CT37	Derby City, Connecticut	0.3503125449%
CT38	Durham Town, Connecticut	0.0079309232%
CT39	East Granby Town, Connecticut	0.1455975170%
CT40	East Haddam Town, Connecticut	0.3145696377%
CT41	East Hampton Town, Connecticut	0.4637546663%
CT42	East Hartford Town, Connecticut	1.2645454069%
CT43	East Haven Town, Connecticut	0.8590923735%
CT44	East Lyme Town, Connecticut	0.6375826296%
CT45	East Windsor Town, Connecticut	0.2419743793%
CT46	Eastford Town, Connecticut	0.0446651958%
CT47	Easton Town, Connecticut	0.1354961231%
CT48	Ellington Town, Connecticut	0.4010047839%
CT49	Enfield Town, Connecticut	0.9173431190%

State ID	Qualifying Subdivision	Consolidated State Allocation
CT50	Essex Town, Connecticut	0.1431870357%
CT51	Fairfield Town, Connecticut	1.4212308415%
CT52	Farmington Town, Connecticut	0.6572091547%
CT53	Franklin Town, Connecticut	0.0446032416%
CT54	Glastonbury Town, Connecticut	1.0420644550%
CT55	Goshen Town, Connecticut	0.0030464255%
CT56	Granby Town, Connecticut	0.2928405247%
CT57	Greenwich Town, Connecticut	1.5644702467%
CT58	Griswold Town, Connecticut	0.3865570141%
CT59	Groton Town, Connecticut	1.4033874500%
CT60	Guilford Town, Connecticut	0.8399392493%
CT61	Haddam Town, Connecticut	0.0151716553%
CT62	Hamden Town, Connecticut	1.7724359413%
CT63	Hampton Town, Connecticut	0.0429454985%
CT64	Hartford City, Connecticut	5.3268549899%
CT65	Hartland Town, Connecticut	0.0359782738%
CT66	Harwinton Town, Connecticut	0.0126363764%
CT67	Hebron Town, Connecticut	0.1593443254%
CT68	Kent Town, Connecticut	0.0835899976%
CT69	Killingly Town, Connecticut	0.6116898413%
CT70	Killingworth Town, Connecticut	0.2652963170%
CT71	Lebanon Town, Connecticut	0.2746607824%
CT72	Ledyard Town, Connecticut	0.5514380850%
CT73	Lisbon Town, Connecticut	0.1156355161%
CT74	Litchfield Town, Connecticut	0.3481982974%
CT75	Lyme Town, Connecticut	0.0023141411%
CT76	Madison Town, Connecticut	0.7594223560%
CT77	Manchester Town, Connecticut	1.3929765818%
CT78	Mansfield Town, Connecticut	0.3058754037%
CT79	Marlborough Town, Connecticut	0.0766010346%
CT80	Meriden City, Connecticut	1.8508778149%
CT81	Middlebury Town, Connecticut	0.0276033951%
CT82	Middlefield Town, Connecticut	0.0075627554%
CT83	Middletown City, Connecticut	1.5343128975%
CT84	Milford City, Connecticut	1.8215679630%
CT85	Monroe Town, Connecticut	0.4307375445%
CT86	Montville Town, Connecticut	0.5806185940%
CT87	Morris Town, Connecticut	0.0099785725%
CT88	Naugatuck Borough, Connecticut	1.0644527326%
CT89	New Britain City, Connecticut	1.5740557511%
CT90	New Canaan Town, Connecticut	0.6136187204%
CT91	New Fairfield Town, Connecticut	0.2962030448%
CT92	New Hartford Town, Connecticut	0.1323482193%
CT93	New Haven City, Connecticut	5.8061427601%
CT94	New London City, Connecticut	1.0536729060%
CT95	New Milford Town, Connecticut	1.0565475001%
CT96	Newington Town, Connecticut	0.7132456565%
CT97	Newtown, Connecticut	0.5964476353%
CT98	Norfolk Town, Connecticut	0.0442819100%

State ID	Qualifying Subdivision	Consolidated State Allocation
CT99	North Branford Town, Connecticut	0.4795791623%
CT100	North Canaan Town, Connecticut	0.0913148022%
CT101	North Haven Town, Connecticut	0.7922543069%
CT102	North Stonington Town, Connecticut	0.1803885830%
CT103	Norwalk City, Connecticut	1.5918210823%
CT104	Norwich City, Connecticut	1.1639182124%
CT105	Old Lyme Town, Connecticut	0.0247921386%
CT106	Old Saybrook Town, Connecticut	0.4181170767%
CT107	Orange Town, Connecticut	0.3683598812%
CT108	Oxford Town, Connecticut	0.3955127994%
CT109	Plainfield Town, Connecticut	0.5352043161%
CT110	Plainville Town, Connecticut	0.3937549612%
CT111	Plymouth Town, Connecticut	0.4213382978%
CT112	Pomfret Town, Connecticut	0.1174722050%
CT113	Portland Town, Connecticut	0.3205523149%
CT114	Preston Town, Connecticut	0.1319895374%
CT115	Prospect Town, Connecticut	0.3056173107%
CT116	Putnam Town, Connecticut	0.2953254103%
CT117	Redding Town, Connecticut	0.1726435223%
CT118	Ridgefield Town, Connecticut	0.6645173744%
CT119	Rocky Hill Town, Connecticut	0.3929175425%
CT120	Roxbury Town, Connecticut	0.0037924445%
CT121	Salem Town, Connecticut	0.1075219911%
CT122	Salisbury Town, Connecticut	0.1052257347%
CT123	Scotland Town, Connecticut	0.0395212218%
CT124	Seymour Town, Connecticut	0.5301171581%
CT125	Sharon Town, Connecticut	0.0761294123%
CT126	Shelton City, Connecticut	0.5601099879%
CT127	Sherman Town, Connecticut	0.0494382353%
CT128	Simsbury Town, Connecticut	0.6988446241%
CT129	Somers Town, Connecticut	0.2491740063%
CT130	South Windsor Town, Connecticut	0.7310935932%
CT131	Southbury Town, Connecticut	0.0581965974%
CT132	Southington Town, Connecticut	0.9683065927%
CT133	Sprague Town, Connecticut	0.0874709763%
CT134	Stafford Town, Connecticut	0.3388202949%
CT135	Stamford City, Connecticut	2.9070395589%
CT136	Sterling Town, Connecticut	0.0949826467%
CT137	Stonington Town, Connecticut	0.5576891315%
CT138	Stratford Town, Connecticut	0.9155695700%
CT139	Suffield Town, Connecticut	0.3402792315%
CT140	Thomaston Town, Connecticut	0.2664061562%
CT141	Thompson Town, Connecticut	0.2673479187%
CT142	Tolland Town, Connecticut	0.4342020371%
CT143	Torrington City, Connecticut	1.3652460176%
CT144	Trumbull Town, Connecticut	0.7617744403%
CT145	Union Town, Connecticut	0.0153941764%

State ID	Qualifying Subdivision	Consolidated State Allocation
CT146	Vernon Town, Connecticut	0.7027162157%
CT147	Voluntown, Connecticut	0.0733181557%
CT148	Wallingford Town, Connecticut	1.5350353996%
CT149	Warren Town, Connecticut	0.0489758024%
CT150	Washington Town, Connecticut	0.1553517897%
CT151	Waterbury City, Connecticut	4.6192219654%
CT152	Waterford Town, Connecticut	0.7608802056%
CT153	Watertown, Connecticut	0.6868118808%
CT154	West Hartford Town, Connecticut	1.6216697477%
CT155	West Haven City, Connecticut	1.4026972589%
CT156	Westbrook Town, Connecticut	0.2586999280%
CT157	Weston Town, Connecticut	0.3664201329%
CT158	Westport Town, Connecticut	0.8921084083%
CT159	Wethersfield Town, Connecticut	0.6208707168%
CT160	Willington Town, Connecticut	0.0975268185%
CT161	Wilton Town, Connecticut	0.6378099925%
CT162	Winchester Town, Connecticut	0.3760305376%
CT163	Windham Town, Connecticut	1.0108949901%
CT164	Windsor Locks Town, Connecticut	0.3174167624%
CT165	Windsor Town, Connecticut	0.7548324123%
CT166	Wolcott Town, Connecticut	0.5443693820%
CT167	Woodbridge Town, Connecticut	0.2435300513%
CT168	Woodbury Town, Connecticut	0.3411988605%
CT169	Woodmont Borough, Connecticut	0.0173159412%
CT170	Woodstock Town, Connecticut	0.1817110623%

State ID	Qualifying Subdivision	Consolidated State Allocation
DE1	Dover City, Delaware	25.00000000% ($1.00)
DE2	Kent County, Delaware	25.00000000% ($1.00)
DE3	Middletown, Delaware	0.0000000000%
DE4	Milford City, Delaware	0.0000000000%
DE5	New Castle County, Delaware	0.0000000000%
DE6	Newark City, Delaware	0.0000000000%
DE7	Seaford City, Delaware	25.00000000% ($1.00)
DE8	Smyrna Town, Delaware	0.0000000000%
DE9	Sussex County, Delaware	25.00000000% ($1.00)
DE10	Wilmington City, Delaware	0.0000000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA1	Acworth City, Georgia	0.1010066057%
GA2	Adel City, Georgia	0.0545649432%
GA3	Albany City, Georgia	0.3157843012%
GA4	Alma City, Georgia	0.0720108615%
GA5	Alpharetta City, Georgia	0.2110377863%
GA6	Americus City, Georgia	0.0651732444%
GA7	Appling County, Georgia	0.1891925647%
GA8	Arlington City, Georgia	0.0057755147%
GA9	Athens-Clarke County Unified Government, Georgia	1.3856330305%
GA10	Atkinson County, Georgia	0.0986720780%
GA11	Atlanta City, Georgia	2.9922320659%
GA12	Augusta-Richmond County Consolidated Government, Georgia	2.7761021713%
GA13	Bacon County, Georgia	0.1326313298%
GA14	Bainbridge City, Georgia	0.0569861790%
GA15	Baker County, Georgia	0.0138992540%
GA16	Baldwin County, Georgia	0.2940093402%
GA17	Banks County, Georgia	0.2108287241%
GA18	Barrow County, Georgia	0.7562315570%
GA19	Bartow County, Georgia	1.0945235112%
GA20	Ben Hill County, Georgia	0.0834031458%
GA21	Berrien County, Georgia	0.1225733642%
GA22	Blackshear City, Georgia	0.0349161927%
GA23	Blakely City, Georgia	0.0158441397%
GA24	Bleckley County, Georgia	0.1430561858%
GA25	Brantley County, Georgia	0.2875410777%
GA26	Braselton Town, Georgia	0.0371467624%
GA27	Brookhaven City, Georgia	0.0913450445%
GA28	Brooks County, Georgia	0.1455943886%
GA29	Brunswick City, Georgia	0.1020085339%
GA30	Bryan County, Georgia	0.2289883650%
GA31	Buford City, Georgia	0.0023586547%
GA32	Bulloch County, Georgia	0.4088475182%
GA33	Burke County, Georgia	0.1875413288%
GA34	Butts County, Georgia	0.3178860983%
GA35	Calhoun City, Georgia	0.1780085402%
GA36	Calhoun County, Georgia	0.0360783561%
GA37	Camden County, Georgia	0.3387009665%
GA38	Candler County, Georgia	0.0990882539%
GA39	Canton City, Georgia	0.1378274535%
GA40	Carroll County, Georgia	1.4108548814%
GA41	Carrollton City, Georgia	0.4395018339%
GA42	Cartersville City, Georgia	0.2991406477%
GA43	Catoosa County, Georgia	1.0548339612%
GA44	Chamblee City, Georgia	0.0537051979%
GA45	Charlton County, Georgia	0.1046313818%
GA46	Chatham County, Georgia	1.4544033708%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA47	Chattooga County, Georgia	0.3317513109%
GA48	Cherokee County, Georgia	2.1190683851%
GA49	Clarkston City, Georgia	0.0175253481%
GA50	Clay County, Georgia	0.0274637104%
GA51	Clayton County, Georgia	1.6728881377%
GA52	Clinch County, Georgia	0.0617206810%
GA53	Cobb County, Georgia	5.8580801967%
GA54	Coffee County, Georgia	0.4164755944%
GA55	College Park City, Georgia	0.1805996391%
GA56	Colquitt County, Georgia	0.2578612394%
GA57	Columbia County, Georgia	1.2905730633%
GA58	Columbus City, Georgia	1.8227140298%
GA59	Conyers City, Georgia	0.1202231912%
GA60	Cook County, Georgia	0.0973405674%
GA61	Cordele City, Georgia	0.0583989534%
GA62	Covington City, Georgia	0.1969084378%
GA63	Coweta County, Georgia	0.9767276305%
GA64	Crawford County, Georgia	0.1282569558%
GA65	Crisp County, Georgia	0.1296658905%
GA66	Cusseta-Chattahoochee County Unified Government, Georgia	0.0695538650%
GA67	Dade County, Georgia	0.1799465490%
GA68	Dallas City, Georgia	0.0916776643%
GA69	Dalton City, Georgia	0.3628092518%
GA70	Damascus City, Georgia	0.0005040301%
GA71	Dawson City, Georgia	0.0138696254%
GA72	Dawson County, Georgia	0.3192782415%
GA73	Decatur City, Georgia	0.1040340531%
GA74	Decatur County, Georgia	0.1633371087%
GA75	Dekalb County, Georgia	4.0579602979%
GA76	Demorest City, Georgia	0.0233539880%
GA77	Dodge County, Georgia	0.3228398634%
GA78	Dooly County, Georgia	0.0758970226%
GA79	Doraville City, Georgia	0.0619484258%
GA80	Dougherty County, Georgia	0.4519146718%
GA81	Douglas City, Georgia	0.2364366638%
GA82	Douglas County, Georgia	1.2411219485%
GA83	Douglasville City, Georgia	0.2313289102%
GA84	Dublin City, Georgia	0.1598683843%
GA85	Duluth City, Georgia	0.1174400509%
GA86	Dunwoody City, Georgia	0.0823645400%
GA87	Early County, Georgia	0.0433467628%
GA88	East Point City, Georgia	0.2308433908%
GA89	Echols County, Georgia	0.0262187359%
GA90	Effingham County, Georgia	0.4370293068%
GA91	Elbert County, Georgia	0.2655117233%
GA92	Emanuel County, Georgia	0.2278497555%
GA93	Evans County, Georgia	0.1156959749%
GA94	Fairburn City, Georgia	0.0542552469%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA95	Fannin County, Georgia	0.5651805280%
GA96	Fayette County, Georgia	0.6527012475%
GA97	Fayetteville City, Georgia	0.1201203794%
GA98	Fitzgerald City, Georgia	0.0569093853%
GA99	Floyd County, Georgia	0.9887350092%
GA100	Forest Park City, Georgia	0.1455200592%
GA101	Forsyth County, Georgia	1.7110664570%
GA102	Franklin County, Georgia	0.5550296650%
GA103	Fulton County, Georgia	3.2792330120%
GA104	Gainesville City, Georgia	0.3640437388%
GA105	Georgetown-Quitman County Unified Government, Georgia	0.0176595651%
GA106	Gilmer County, Georgia	0.4239021158%
GA107	Glascock County, Georgia	0.0283662653%
GA108	Glynn County, Georgia	0.7968809706%
GA109	Gordon County, Georgia	0.4175279543%
GA110	Grady County, Georgia	0.1716497947%
GA111	Greene County, Georgia	0.1737385827%
GA112	Griffin City, Georgia	0.2287480123%
GA113	Grovetown City, Georgia	0.0632622854%
GA114	Gwinnett County, Georgia	4.8912732775%
GA115	Habersham County, Georgia	0.4635124652%
GA116	Hall County, Georgia	1.5772937095%
GA117	Hancock County, Georgia	0.0536800967%
GA118	Haralson County, Georgia	1.0934912667%
GA119	Harris County, Georgia	0.2037540782%
GA120	Hart County, Georgia	0.2935398099%
GA121	Heard County, Georgia	0.1232058232%
GA122	Henry County, Georgia	1.9715208583%
GA123	Hinesville City, Georgia	0.2572364025%
GA124	Holly Springs City, Georgia	0.0823108417%
GA125	Houston County, Georgia	0.8378076437%
GA126	Irwin County, Georgia	0.0610553841%
GA127	Jackson County, Georgia	0.9201220386%
GA128	Jasper County, Georgia	0.1152245534%
GA129	Jeff Davis County, Georgia	0.3659791686%
GA130	Jefferson City, Georgia	0.0881783943%
GA131	Jefferson County, Georgia	0.1517559349%
GA132	Jenkins County, Georgia	0.0808740550%
GA133	Johns Creek City, Georgia	0.1877697040%
GA134	Johnson County, Georgia	0.0876584323%
GA135	Jones County, Georgia	0.2773521617%
GA136	Kennesaw City, Georgia	0.1446191663%
GA137	Kingsland City, Georgia	0.1313198199%
GA138	Lagrange City, Georgia	0.2069622772%
GA139	Lakeland City, Georgia	0.0155232109%
GA140	Lamar County, Georgia	0.2083015245%
GA141	Lanier County, Georgia	0.0574613256%
GA142	Laurens County, Georgia	0.5249834521%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA143	Lawrenceville City, Georgia	0.1647173317%
GA144	Lee County, Georgia	0.2162850866%
GA145	Liberty County, Georgia	0.2931642086%
GA146	Lilburn City, Georgia	0.0538355752%
GA147	Lincoln County, Georgia	0.1000487479%
GA148	Loganville City, Georgia	0.1468681321%
GA149	Long County, Georgia	0.1216766548%
GA150	Lowndes County, Georgia	0.6253829866%
GA151	Lumpkin County, Georgia	0.3139555802%
GA152	Macon County, Georgia	0.1110857755%
GA153	Macon-Bibb County Unified Government, Georgia	2.0265214623%
GA154	Madison County, Georgia	0.5114434091%
GA155	Marietta City, Georgia	0.7354006996%
GA156	Marion County, Georgia	0.0615218771%
GA157	McDonough City, Georgia	0.0803644086%
GA158	McDuffie County, Georgia	0.2216409869%
GA159	McIntosh County, Georgia	0.1678759014%
GA160	Meriwether County, Georgia	0.2015834534%
GA161	Milledgeville City, Georgia	0.1343842887%
GA162	Miller County, Georgia	0.0562389307%
GA163	Milton City, Georgia	0.0765630644%
GA164	Mitchell County, Georgia	0.1842864232%
GA165	Monroe City, Georgia	0.1616058698%
GA166	Monroe County, Georgia	0.2463868890%
GA167	Montgomery County, Georgia	0.0685440855%
GA168	Morgan County, Georgia	0.1807932852%
GA169	Moultrie City, Georgia	0.1150272968%
GA170	Murray County, Georgia	0.5636808736%
GA171	Nashville City, Georgia	0.0288042758%
GA172	Newnan City, Georgia	0.2037973462%
GA173	Newton County, Georgia	0.6206699754%
GA174	Norcross City, Georgia	0.0762036242%
GA175	Oconee County, Georgia	0.2721000475%
GA176	Oglethorpe County, Georgia	0.1461658711%
GA177	Paulding County, Georgia	1.7495211188%
GA178	Peach County, Georgia	0.2319656673%
GA179	Peachtree City, Georgia	0.2219833492%
GA180	Peachtree Corners City, Georgia	0.2099400952%
GA181	Perry City, Georgia	0.0954580908%
GA182	Pickens County, Georgia	0.3905362384%
GA183	Pierce County, Georgia	0.2012068205%
GA184	Pike County, Georgia	0.1072270653%
GA185	Polk County, Georgia	0.7130941429%
GA186	Pooler City, Georgia	0.0516303360%
GA187	Powder Springs City, Georgia	0.0633430906%
GA188	Pulaski County, Georgia	0.1671565625%
GA189	Putnam County, Georgia	0.2061208707%
GA190	Rabun County, Georgia	0.3170130000%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA191	Randolph County, Georgia	0.0382245100%
GA192	Richmond Hill City, Georgia	0.0716382402%
GA193	Riverdale City, Georgia	0.0684460876%
GA194	Rockdale County, Georgia	0.7947696030%
GA195	Rome City, Georgia	0.3719383578%
GA196	Roswell City, Georgia	0.2174642134%
GA197	Sandy Springs City, Georgia	0.2590143480%
GA198	Savannah City, Georgia	1.1246685243%
GA199	Schley County, Georgia	0.0238356678%
GA200	Screven County, Georgia	0.1132053955%
GA201	Seminole County, Georgia	0.0804817769%
GA202	Smyrna City, Georgia	0.2661908888%
GA203	Snellville City, Georgia	0.0758688840%
GA204	Spalding County, Georgia	0.5900646014%
GA205	Springfield City, Georgia	0.0124802329%
GA206	St. Marys City, Georgia	0.0962803562%
GA207	Statesboro City, Georgia	0.1844690660%
GA208	Stephens County, Georgia	0.7520555284%
GA209	Stewart County, Georgia	0.0419742764%
GA210	Stockbridge City, Georgia	0.0302698888%
GA211	Sugar Hill City, Georgia	0.0106058369%
GA212	Sumter County, Georgia	0.1314426325%
GA213	Suwanee City, Georgia	0.0700562332%
GA214	Talbot County, Georgia	0.0410357316%
GA215	Taliaferro County, Georgia	0.0068637499%
GA216	Tattnall County, Georgia	0.2930768128%
GA217	Taylor County, Georgia	0.0819435502%
GA218	Telfair County, Georgia	0.1855378735%
GA219	Terrell County, Georgia	0.0334710962%
GA220	Thomas County, Georgia	0.2077911904%
GA221	Thomasville City, Georgia	0.1281973547%
GA222	Tift County, Georgia	0.2088288220%
GA223	Tifton City, Georgia	0.1416502311%
GA224	Toombs County, Georgia	0.2423104056%
GA225	Towns County, Georgia	0.2454408368%
GA226	Treutlen County, Georgia	0.0571447522%
GA227	Troup County, Georgia	0.4334095739%
GA228	Tucker City, Georgia	0.0615225648%
GA229	Turner County, Georgia	0.0490657711%
GA230	Twiggs County, Georgia	0.0640416265%
GA231	Union City, Georgia	0.1531538090%
GA232	Union County, Georgia	0.2949759089%
GA233	Upson County, Georgia	0.3355566667%
GA234	Valdosta City, Georgia	0.2598246932%
GA235	Vidalia City, Georgia	0.1252530050%
GA236	Villa Rica City, Georgia	0.1397113628%
GA237	Walker County, Georgia	0.8453605309%
GA238	Walton County, Georgia	0.8194381956%
GA239	Ware County, Georgia	0.5170078559%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA240	Warner Robins City, Georgia	0.3969845574%
GA241	Warren County, Georgia	0.0447828045%
GA242	Warwick City, Georgia	0.0103298381%
GA243	Washington County, Georgia	0.1959988913%
GA244	Waycross City, Georgia	0.1358274367%
GA245	Wayne County, Georgia	0.6609347902%
GA246	Webster County Unified Government, Georgia	0.0143656323%
GA247	Wheeler County, Georgia	0.0675300652%
GA248	White County, Georgia	0.3873386988%
GA249	Whitfield County, Georgia	0.7644288806%
GA250	Wilcox County, Georgia	0.0828696590%
GA251	Wilkes County, Georgia	0.0976306068%
GA252	Wilkinson County, Georgia	0.0847297279%
GA253	Winder City, Georgia	0.2007720766%
GA254	Woodbury City, Georgia	0.0085236394%
GA255	Woodstock City, Georgia	0.1942956763%
GA256	Worth County, Georgia	0.1491832321%
GA257	Rincon town, Georgia	0.0275488139%
GA258	South Fulton City, Georgia	0.2561412300%
GA259	Stonecrest City, Georgia	0.0904388800%
GA260	Ashburn City, Georgia	0.0207294209%
GA261	Chatsworth City, Georgia	0.1226056863%
GA262	Dawsonville City, Georgia	0.0022440946%
GA263	Helen City, Georgia	0.0478552392%
GA264	Jackson City, Georgia	0.0568159148%
GA265	Ringgold City, Georgia	0.0585728853%

State ID	Qualifying Subdivision	Consolidated State Allocation
HI1	Hawaii County, Hawaii	18.2671692501%
HI2	Kalawao, Hawaii	0.0034501514%
HI3	Kauai County, Hawaii	5.7006273580%
HI4	Maui County, Hawaii	13.9979969296%
HI5	City and County of Honolulu, Hawaii	62.0307563109%

State ID	Qualifying Subdivision	Consolidated State Allocation
ID1	Ada County, Idaho	13.2776278333%
ID2	Adams County, Idaho	0.1446831902%
ID3	Ammon City, Idaho	0.0812916024%
ID4	Bannock County, Idaho	3.0595589832%
ID5	Bear Lake County, Idaho	0.6082712041%
ID6	Benewah County, Idaho	0.6526829809%
ID7	Bingham County, Idaho	1.6421270812%
ID8	Blackfoot City, Idaho	0.6283857401%
ID9	Blaine County, Idaho	0.9137717551%
ID10	Boise City, Idaho	12.7586409110%
ID11	Boise County, Idaho	0.3309644652%
ID12	Bonner County, Idaho	2.5987361786%
ID13	Bonneville County, Idaho	3.7761253875%
ID14	Boundary County, Idaho	0.8788284447%
ID15	Burley City, Idaho	0.4485975363%
ID16	Butte County, Idaho	0.1839745518%
ID17	Caldwell City, Idaho	1.1958553249%
ID18	Camas County, Idaho	0.0422073443%
ID19	Canyon County, Idaho	5.0120113688%
ID20	Caribou County, Idaho	0.4396183832%
ID21	Cassia County, Idaho	0.7270235866%
ID22	Chubbuck City, Idaho	0.4841935447%
ID23	Clark County, Idaho	0.0420924425%
ID24	Clearwater County, Idaho	0.4890418390%
ID25	Coeur D'Alene City, Idaho	2.7593778237%
ID26	Custer County, Idaho	0.2133243878%
ID27	Eagle City, Idaho	0.1711876661%
ID28	Elmore County, Idaho	0.8899512165%
ID29	Franklin County, Idaho	0.5753624958%
ID30	Fremont County, Idaho	0.5716071696%
ID31	Garden City, Idaho	0.5582782838%
ID32	Gem County, Idaho	1.3784025725%
ID33	Gooding County, Idaho	0.6966472013%
ID34	Hayden City, Idaho	0.0047132146%
ID35	Idaho County, Idaho	0.8474305547%
ID36	Idaho Falls City, Idaho	3.8875027578%
ID37	Jefferson County, Idaho	0.9842670749%
ID38	Jerome City, Idaho	0.4169017424%
ID39	Jerome County, Idaho	0.6223444291%
ID40	Kootenai County, Idaho	5.6394798565%
ID41	Kuna City, Idaho	0.1849461724%
ID42	Latah County, Idaho	1.2943861166%
ID43	Lemhi County, Idaho	0.4880814284%
ID44	Lewis County, Idaho	0.2882543555%
ID45	Lewiston City, Idaho	2.0176549375%
ID46	Lincoln County, Idaho	0.1930184422%
ID47	Madison County, Idaho	1.2748404845%
ID48	Meridian City, Idaho	2.4045650754%
ID49	Minidoka County, Idaho	0.9140620922%

State ID	Qualifying Subdivision	Consolidated State Allocation
ID50	Moscow City, Idaho	0.6590552650%
ID51	Mountain Home City, Idaho	0.5706694591%
ID52	Nampa City, Idaho	3.3274647954%
ID53	Nez Perce County, Idaho	1.2765833482%
ID54	Oneida County, Idaho	0.2371656647%
ID55	Owyhee County, Idaho	0.5554298409%
ID56	Payette County, Idaho	1.2750728102%
ID57	Pocatello City, Idaho	2.9494898116%
ID58	Post Falls City, Idaho	0.6781328826%
ID59	Power County, Idaho	0.3505171035%
ID60	Preston City, Idaho	0.1496220047%
ID61	Rexburg City, Idaho	0.1336231941%
ID62	Shoshone County, Idaho	1.2841091340%
ID63	Star City, Idaho	0.0001322772%
ID64	Teton County, Idaho	0.4258195211%
ID65	Twin Falls City, Idaho	1.8245765222%
ID66	Twin Falls County, Idaho	3.3104301873%
ID67	Valley County, Idaho	0.8074710814%
ID68	Washington County, Idaho	0.4917358652%

State ID	Qualifying Subdivision	Consolidated State Allocation
IL1	Adams County, Illinois	
IL3	Addison Village, Illinois	
IL4	Alexander County, Illinois	
IL6	Algonquin Village, Illinois	
IL10	Anna City, Illinois	
IL13	Arlington Heights Village, Illinois	
IL14	Aurora City, Illinois	
IL19	Bartlett Village, Illinois	
IL22	Bedford Park Village, Illinois	
IL23	Belleville City, Illinois	
IL24	Bellwood Village, Illinois	
IL27	Bensenville Village, Illinois	
IL28	Benton City, Illinois	
IL30	Berkeley Village, Illinois	
IL31	Berwyn City, Illinois	
IL37	Bloomington City, Illinois	
IL39	Bolingbrook Village, Illinois	
IL40	Bond County, Illinois	
IL41	Boone County, Illinois	
IL46	Bridgeview Village, Illinois	
IL47	Broadview Village, Illinois	
IL49	Brown County, Illinois	Allocations in Illinois
IL51	Buffalo Grove Village, Illinois	will be made in
IL52	Burbank City, Illinois	accordance with the
IL53	Bureau County, Illinois	Illinois Opioid Allocation
IL56	Calhoun County, Illinois	Agreement.
IL57	Calumet City, Illinois	
IL63	Carbondale City, Illinois	
IL65	Carol Stream Village, Illinois	
IL66	Carpentersville Village, Illinois	
IL67	Carroll County, Illinois	
IL70	Cass County, Illinois	
IL75	Champaign City, Illinois	
IL76	Champaign County, Illinois	
IL84	Chicago City, Illinois	
IL85	Chicago Heights City, Illinois	
IL86	Chicago Ridge Village, Illinois	
IL87	Christian County, Illinois	
IL88	Clark County, Illinois	
IL89	Clay County, Illinois	
IL90	Clinton County, Illinois	
IL91	Coles County, Illinois	
IL96	Cook County, Illinois	
IL99	Countryside City, Illinois	
IL100	Crawford County, Illinois	
IL104	Crystal Lake City, Illinois	
IL106	Cumberland County, Illinois	

State ID	Qualifying Subdivision	Consolidated State Allocation
IL107	Danville City, Illinois	
IL110	De Witt County, Illinois	
IL111	Decatur City, Illinois	
IL114	Dekalb City, Illinois	
IL115	Dekalb County, Illinois	
IL117	Des Plaines City, Illinois	
IL120	Dolton Village, Illinois	
IL122	Douglas County, Illinois	
IL125	Downers Grove Village, Illinois	
IL127	Dupage County, Illinois	
IL131	Edgar County, Illinois	
IL132	Edwards County, Illinois	
IL136	Effingham County, Illinois	
IL138	Elgin City, Illinois	
IL141	Elk Grove Village, Illinois	
IL142	Elmhurst City, Illinois	
IL144	Evanston City, Illinois	
IL145	Evergreen Park Village, Illinois	
IL147	Fayette County, Illinois	
IL150	Ford County, Illinois	
IL151	Forest Park Village, Illinois	
IL155	Franklin County, Illinois	Allocations in Illinois will be made in accordance with the Illinois Opioid Allocation Agreement.
IL156	Franklin Park Village, Illinois	
IL160	Fulton County, Illinois	
IL162	Galesburg City, Illinois	
IL163	Gallatin County, Illinois	
IL168	Glendale Heights Village, Illinois	
IL169	Glenview Village, Illinois	
IL174	Granite City, Illinois	
IL177	Greene County, Illinois	
IL180	Grundy County, Illinois	
IL181	Gurnee Village, Illinois	
IL182	Hamilton County, Illinois	
IL183	Hancock County, Illinois	
IL184	Hanover Park Village, Illinois	
IL186	Hardin County, Illinois	
IL188	Harrisburg City, Illinois	
IL190	Harvey City, Illinois	
IL191	Harwood Heights Village, Illinois	
IL193	Henderson County, Illinois	
IL194	Henry County, Illinois	
IL195	Herrin City, Illinois	
IL199	Hillside Village, Illinois	
IL201	Hodgkins Village, Illinois	
IL202	Hoffman Estates Village, Illinois	
IL206	Iroquois County, Illinois	
IL207	Jackson County, Illinois	

State ID	Qualifying Subdivision	Consolidated State Allocation
IL210	Jasper County, Illinois	
IL211	Jefferson County, Illinois	
IL212	Jersey County, Illinois	
IL213	Jo Daviess County, Illinois	
IL214	Johnson County, Illinois	
IL215	Joliet City, Illinois	
IL218	Kane County, Illinois	
IL219	Kankakee City, Illinois	
IL220	Kankakee County, Illinois	
IL222	Kendall County, Illinois	
IL224	Knox County, Illinois	
IL225	La Grange Park Village, Illinois	
IL227	Lake County, Illinois	
IL233	Lasalle County, Illinois	
IL234	Lawrence County, Illinois	
IL235	Lee County, Illinois	
IL247	Livingston County, Illinois	
IL250	Logan County, Illinois	
IL251	Lombard Village, Illinois	
IL254	Lyons Township, Illinois	
IL255	Lyons Village, Illinois	
IL259	Macon County, Illinois	Allocations in Illinois will be made in accordance with the Illinois Opioid Allocation Agreement.
IL260	Macoupin County, Illinois	
IL261	Madison County, Illinois	
IL266	Marion City, Illinois	
IL267	Marion County, Illinois	
IL269	Marshall County, Illinois	
IL270	Mason County, Illinois	
IL271	Massac County, Illinois	
IL275	Maywood Village, Illinois	
IL276	McCook Village, Illinois	
IL277	McDonough County, Illinois	
IL279	McHenry County, Illinois	
IL281	McLean County, Illinois	
IL283	Melrose Park Village, Illinois	
IL284	Menard County, Illinois	
IL285	Mercer County, Illinois	
IL286	Merrionette Park Village, Illinois	
IL287	Metropolis City, Illinois	
IL292	Moline City, Illinois	
IL295	Monroe County, Illinois	
IL296	Montgomery County, Illinois	
IL299	Morgan County, Illinois	
IL304	Moultrie County, Illinois	
IL305	Mount Prospect Village, Illinois	
IL307	Mundelein Village, Illinois	
IL309	Naperville City, Illinois	

State ID	Qualifying Subdivision	Consolidated State Allocation
IL317	Normal Town, Illinois	
IL322	North Riverside Village, Illinois	
IL323	Northbrook Village, Illinois	
IL325	Northlake City, Illinois	
IL329	Oak Lawn Village, Illinois	
IL331	Oak Park Village, Illinois	
IL333	Ogle County, Illinois	
IL334	Orland Park Village, Illinois	
IL337	Oswego Village, Illinois	
IL341	Palatine Village, Illinois	
IL342	Palos Heights City, Illinois	
IL343	Palos Hills City, Illinois	
IL346	Park Ridge City, Illinois	
IL347	Pekin City, Illinois	
IL350	Peoria City, Illinois	
IL351	Peoria County, Illinois	
IL352	Perry County, Illinois	
IL354	Piatt County, Illinois	
IL355	Pike County, Illinois	
IL356	Plainfield Village, Illinois	
IL360	Pope County, Illinois	
IL361	Posen Village, Illinois	Allocations in Illinois will be made in accordance with the Illinois Opioid Allocation Agreement.
IL362	Princeton City, Illinois	
IL365	Pulaski County, Illinois	
IL366	Putnam County, Illinois	
IL367	Quincy City, Illinois	
IL369	Randolph County, Illinois	
IL373	Richland County, Illinois	
IL376	River Forest Village, Illinois	
IL377	River Grove Village, Illinois	
IL380	Riverside Village, Illinois	
IL381	Rock Island City, Illinois	
IL382	Rock Island County, Illinois	
IL384	Rockford City, Illinois	
IL388	Romeoville Village, Illinois	
IL395	Saline County, Illinois	
IL396	Sangamon County, Illinois	
IL399	Schaumburg Village, Illinois	
IL400	Schiller Park Village, Illinois	
IL401	Schuyler County, Illinois	
IL402	Scott County, Illinois	
IL403	Sesser City, Illinois	
IL404	Shelby County, Illinois	
IL408	Skokie Village, Illinois	
IL413	Springfield City, Illinois	
IL414	St Clair County, Illinois	
IL415	St. Charles City, Illinois	

State ID	Qualifying Subdivision	Consolidated State Allocation
IL416	Stark County, Illinois	
IL417	Stephenson County, Illinois	
IL421	Stone Park Village, Illinois	
IL422	Streamwood Village, Illinois	
IL423	Streator City, Illinois	
IL425	Summit Village, Illinois	
IL431	Tazewell County, Illinois	
IL433	Tinley Park Village, Illinois	
IL436	Union County, Illinois	
IL437	Urbana City, Illinois	
IL438	Vermilion County, Illinois	
IL441	Wabash County, Illinois	Allocations in Illinois will be made in accordance with the Illinois Opioid Allocation Agreement.
IL442	Warren County, Illinois	
IL446	Washington County, Illinois	
IL451	Waukegan City, Illinois	
IL453	Wayne County, Illinois	
IL456	West Frankfort City, Illinois	
IL461	Wheaton City, Illinois	
IL463	Wheeling Village, Illinois	
IL464	White County, Illinois	
IL465	Whiteside County, Illinois	
IL466	Will County, Illinois	
IL467	Williamson County, Illinois	
IL470	Winnebago County, Illinois	
IL475	Woodford County, Illinois	
IL476	Woodridge Village, Illinois	
IL485	Cicero Town, Illinois	

State ID	Qualifying Subdivision	Consolidated State Allocation
IN1	Adams County, Indiana	0.3093066943%
IN2	Advance Town, Indiana	0.0005697863%
IN3	Akron Town, Indiana	0.0003285254%
IN4	Alamo Town, Indiana	0.0005749195%
IN5	Albany Town, Indiana	0.0256968486%
IN6	Albion Town, Indiana	0.0216621457%
IN7	Alexandria City, Indiana	0.1062420448%
IN8	Alfordsville Town, Indiana	0.0001539963%
IN9	Allen County, Indiana	1.5529191846%
IN10	Alton Town, Indiana	0.0000307993%
IN11	Altona Town, Indiana	0.0012473700%
IN12	Ambia Town, Indiana	0.0006519177%
IN13	Amboy Town, Indiana	0.0004825217%
IN14	Amo Town, Indiana	0.0005749195%
IN15	Anderson City, Indiana	1.3828918739%
IN16	Andrews Town, Indiana	0.0060520544%
IN17	Angola City, Indiana	0.0947539211%
IN18	Arcadia Town, Indiana	0.0063138481%
IN19	Argos Town, Indiana	0.0167907295%
IN20	Ashley Town, Indiana	0.0062368500%
IN21	Atlanta Town, Indiana	0.0011652386%
IN22	Attica City, Indiana	0.0207587007%
IN23	Auburn City, Indiana	0.1472615249%
IN24	Aurora City, Indiana	0.0094399730%
IN25	Austin City, Indiana	0.0232277747%
IN26	Avilla Town, Indiana	0.0199579200%
IN27	Avon Town, Indiana	0.0164108720%
IN28	Bainbridge Town, Indiana	0.0014783644%
IN29	Bargersville Town, Indiana	0.0121041089%
IN30	Bartholomew County, Indiana	1.1839235258%
IN31	Batesville City, Indiana	0.1547046792%
IN32	Battle Ground Town, Indiana	0.0136286722%
IN33	Bedford City, Indiana	0.3269803359%
IN34	Beech Grove City, Indiana	0.0544736232%
IN35	Benton County, Indiana	0.0744315432%
IN36	Berne City, Indiana	0.0028078658%
IN37	Bethany Town, Indiana	0.0002720601%
IN38	Beverly Shores Town, Indiana	0.0154458285%
IN39	Bicknell City, Indiana	0.0013295014%
IN40	Birdseye Town, Indiana	0.0029464625%
IN41	Blackford County, Indiana	0.2715365360%
IN42	Bloomfield Town, Indiana	0.0042862302%
IN43	Bloomingdale Town, Indiana	0.0026025374%
IN44	Bloomington City, Indiana	0.8390231543%
IN45	Blountsville Town, Indiana	0.0002566605%
IN46	Bluffton City, Indiana	0.1002977878%
IN47	Boone County, Indiana	0.6762798684%
IN48	Boonville City, Indiana	0.1007854427%
IN49	Borden Town, Indiana	0.0017504246%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN50	Boston Town, Indiana	0.0005697863%
IN51	Boswell Town, Indiana	0.0021097493%
IN52	Bourbon Town, Indiana	0.0173040505%
IN53	Brazil City, Indiana	0.0626816258%
IN54	Bremen Town, Indiana	0.0529387935%
IN55	Bristol Town, Indiana	0.0158462189%
IN56	Brook Town, Indiana	0.0037369768%
IN57	Brooklyn Town, Indiana	0.0065705086%
IN58	Brooksburg Town, Indiana	0.0009547770%
IN59	Brookston Town, Indiana	0.0116677860%
IN60	Brookville Town, Indiana	0.0538935705%
IN61	Brown County, Indiana	0.1879165471%
IN62	Brownsburg Town, Indiana	0.1125918254%
IN63	Brownstown, Indiana	0.0033622525%
IN64	Bruceville Town, Indiana	0.0002412609%
IN65	Bryant Town, Indiana	0.0003747243%
IN66	Bunker Hill Town, Indiana	0.0010985069%
IN67	Burket Town, Indiana	0.0011139065%
IN68	Burlington Town, Indiana	0.0063805799%
IN69	Burnettsville Town, Indiana	0.0004619889%
IN70	Burns Harbor Town, Indiana	0.0397977762%
IN71	Butler City, Indiana	0.0239156248%
IN72	Cadiz Town, Indiana	0.0002823265%
IN73	Cambridge City Town, Indiana	0.0241517525%
IN74	Camden Town, Indiana	0.0064216456%
IN75	Campbellsburg Town, Indiana	0.0081874698%
IN76	Cannelburg Town, Indiana	0.0002258612%
IN77	Cannelton City, Indiana	0.0018325559%
IN78	Carbon Town, Indiana	0.0026846688%
IN79	Carlisle Town, Indiana	0.0017658242%
IN80	Carmel City, Indiana	0.3676250917%
IN81	Carroll County, Indiana	0.1629794136%
IN82	Carthage Town, Indiana	0.0013141017%
IN83	Cass County, Indiana	0.3389612478%
IN84	Cayuga Town, Indiana	0.0078486779%
IN85	Cedar Grove Town, Indiana	0.0004055236%
IN86	Cedar Lake Town, Indiana	0.0511678360%
IN87	Center Point Town, Indiana	0.0016374940%
IN88	Centerville Town, Indiana	0.0350752231%
IN89	Chalmers Town, Indiana	0.0006827169%
IN90	Chandler Town, Indiana	0.0347518309%
IN91	Charlestown City, Indiana	0.0146039821%
IN92	Chesterfield Town, Indiana	0.0379036217%
IN93	Chesterton Town, Indiana	0.2160003384%
IN94	Chrisney Town, Indiana	0.0032339222%
IN95	Churubusco Town, Indiana	0.0000564653%
IN96	Cicero Town, Indiana	0.0173297165%
IN97	Clark County, Indiana	1.9376070659%
IN98	Clarks Hill Town, Indiana	0.0040603690%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN99	Clarksville Town, Indiana	0.1071762890%
IN100	Clay City Town, Indiana	0.0057697279%
IN101	Clay County, Indiana	0.2954521608%
IN102	Claypool Town, Indiana	0.0024690740%
IN103	Clayton Town, Indiana	0.0006981165%
IN104	Clear Lake Town, Indiana	0.0019762858%
IN105	Clifford Town, Indiana	0.0002309944%
IN106	Clinton City, Indiana	0.0336584572%
IN107	Clinton County, Indiana	0.2744214000%
IN108	Cloverdale Town, Indiana	0.0050202793%
IN109	Coatesville Town, Indiana	0.0007494486%
IN110	Colfax Town, Indiana	0.0046147557%
IN111	Columbia City, Indiana	0.0886402681%
IN112	Columbus City, Indiana	0.0764283618%
IN113	Connersville City, Indiana	0.4636161164%
IN114	Converse Town, Indiana	0.0045736900%
IN115	Corunna Town, Indiana	0.0016374940%
IN116	Corydon Town, Indiana	0.0069811654%
IN117	Country Club Heights Town, Indiana	0.0012217040%
IN118	Covington City, Indiana	0.0257122483%
IN119	Crandall Town, Indiana	0.0000153996%
IN120	Crane Town, Indiana	0.0015656290%
IN121	Crawford County, Indiana	0.1338946464%
IN122	Crawfordsville City, Indiana	0.2738413473%
IN123	Cromwell Town, Indiana	0.0034546502%
IN124	Crothersville Town, Indiana	0.0018222895%
IN125	Crown Point City, Indiana	0.1246189362%
IN126	Culver Town, Indiana	0.0289821030%
IN127	Cynthiana Town, Indiana	0.0032749879%
IN128	Dale Town, Indiana	0.0059750563%
IN129	Daleville Town, Indiana	0.0199784528%
IN130	Dana Town, Indiana	0.0050510785%
IN131	Danville Town, Indiana	0.0039474384%
IN132	Darlington Town, Indiana	0.0074790868%
IN133	Darmstadt Town, Indiana	0.0109491367%
IN134	Daviess County, Indiana	0.3758998260%
IN135	Dayton Town, Indiana	0.0114727241%
IN136	DeKalb County, Indiana	0.2773473296%
IN137	De Motte Town, Indiana	0.0070940960%
IN138	Dearborn County, Indiana	0.9577234994%
IN139	Decatur City, Indiana	0.0090909147%
IN140	Decatur County, Indiana	0.3533239690%
IN141	Decker Town, Indiana	0.0001231970%
IN142	Delaware County, Indiana	1.2035734533%
IN143	Delphi City, Indiana	0.0177249737%
IN144	Denver Town, Indiana	0.0006005856%
IN145	Dillsboro Town, Indiana	0.0060007223%
IN146	Dublin Town, Indiana	0.0051588759%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN147	Dubois County, Indiana	0.2728968366%
IN148	Dugger Town, Indiana	0.0023407437%
IN149	Dune Acres Town, Indiana	0.0046917538%
IN150	Dunkirk City, Indiana	0.0079872746%
IN151	Dunreith Town, Indiana	0.0003387919%
IN152	Dupont Town, Indiana	0.0039782377%
IN153	Dyer Town, Indiana	0.0533186510%
IN154	Earl Park Town, Indiana	0.0009188446%
IN155	East Chicago City, Indiana	0.4621018195%
IN156	East Germantown, Indiana	0.0015861619%
IN157	Eaton Town, Indiana	0.0166418664%
IN158	Economy Town, Indiana	0.0007648483%
IN159	Edgewood Town, Indiana	0.0243673473%
IN160	Edinburgh Town, Indiana	0.0198963215%
IN161	Edwardsport Town, Indiana	0.0001488631%
IN162	Elberfeld Town, Indiana	0.0031569241%
IN163	Elizabeth Town, Indiana	0.0000153996%
IN164	Elizabethtown, Indiana	0.0005133210%
IN165	Elkhart City, Indiana	0.5425802839%
IN166	Elkhart County, Indiana	1.1662652839%
IN167	Ellettsville Town, Indiana	0.0677789032%
IN168	Elnora Town, Indiana	0.0013551674%
IN169	Elwood City, Indiana	0.2112777853%
IN170	English Town, Indiana	0.0003747243%
IN171	Etna Green Town, Indiana	0.0033725189%
IN172	Evansville City, Indiana	1.9321196646%
IN173	Fairland Town, Indiana	0.0005133210%
IN174	Fairmount Town, Indiana	0.0104409489%
IN175	Fairview Park Town, Indiana	0.0093373088%
IN176	Farmersburg Town, Indiana	0.0039731044%
IN177	Farmland Town, Indiana	0.0182074954%
IN178	Fayette County, Indiana	0.2945127834%
IN179	Ferdinand Town, Indiana	0.0189415444%
IN180	Fillmore Town, Indiana	0.0010420416%
IN181	Fishers City, Indiana	0.1521842732%
IN182	Flora Town, Indiana	0.0175966435%
IN183	Floyd County, Indiana	1.5760956272%
IN184	Fort Branch Town, Indiana	0.0073250905%
IN185	Fort Wayne City, Indiana	2.7340040454%
IN186	Fortville Town, Indiana	0.0152712994%
IN187	Fountain City Town, Indiana	0.0045993560%
IN188	Fountain County, Indiana	0.1640779205%
IN189	Fowler Town, Indiana	0.0093886409%
IN190	Fowlerton Town, Indiana	0.0022688788%
IN191	Francesville Town, Indiana	0.0011498390%
IN192	Francisco Town, Indiana	0.0027668001%
IN193	Frankfort City, Indiana	0.1520302769%
IN194	Franklin City, Indiana	0.1074072834%
IN195	Franklin County, Indiana	0.2948618417%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN196	Frankton Town, Indiana	0.0115548554%
IN197	Fremont Town, Indiana	0.0201427156%
IN198	French Lick Town, Indiana	0.0211642243%
IN199	Fulton County, Indiana	0.2359941908%
IN200	Fulton Town, Indiana	0.0002925930%
IN201	Galveston Town, Indiana	0.0012730360%
IN202	Garrett City, Indiana	0.0387249353%
IN203	Gary City, Indiana	0.7295266544%
IN204	Gas City, Indiana	0.0544736232%
IN205	Gaston Town, Indiana	0.0083209332%
IN206	Geneva Town, Indiana	0.0008367132%
IN207	Gentryville Town, Indiana	0.0017966235%
IN208	Georgetown, Indiana	0.0044864254%
IN209	Gibson County, Indiana	0.2588523744%
IN210	Glenwood Town, Indiana	0.0027103348%
IN211	Goodland Town, Indiana	0.0046352885%
IN212	Goshen City, Indiana	0.2386377939%
IN213	Gosport Town, Indiana	0.0097736316%
IN214	Grabill Town, Indiana	0.0057543283%
IN215	Grandview Town, Indiana	0.0048406169%
IN216	Grant County, Indiana	0.7449878825%
IN217	Greencastle City, Indiana	0.0286279115%
IN218	Greendale City, Indiana	0.0136543383%
IN219	Greene County, Indiana	0.4315540875%
IN220	Greenfield City, Indiana	0.0612289274%
IN221	Greens Fork Town, Indiana	0.0017504246%
IN222	Greensboro Town, Indiana	0.0002720601%
IN223	Greensburg City, Indiana	0.0195369968%
IN224	Greentown, Indiana	0.0017452914%
IN225	Greenville Town, Indiana	0.0009291110%
IN226	Greenwood City, Indiana	0.1803758618%
IN227	Griffin Town, Indiana	0.0010112423%
IN228	Griffith Town, Indiana	0.0696165923%
IN229	Hagerstown, Indiana	0.0234433695%
IN230	Hamilton County, Indiana	2.0269762499%
IN231	Hamilton Town, Indiana	0.0034341174%
IN232	Hamlet Town, Indiana	0.0188234806%
IN233	Hammond City, Indiana	1.0770244302%
IN234	Hancock County, Indiana	0.8954422640%
IN235	Hanover Town, Indiana	0.0079667417%
IN236	Hardinsburg Town, Indiana	0.0034649167%
IN237	Harmony Town, Indiana	0.0043529620%
IN238	Harrison County, Indiana	0.5610033742%
IN239	Hartford City, Indiana	0.1033058488%
IN240	Hartsville Town, Indiana	0.0003849907%
IN241	Haubstadt Town, Indiana	0.0066783060%
IN242	Hazleton Town, Indiana	0.0014937641%
IN243	Hebron Town, Indiana	0.0722037301%
IN244	Hendricks County, Indiana	1.5700846384%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN245	Henry County, Indiana	1.1653207733%
IN246	Highland Town, Indiana	0.0864997196%
IN247	Hillsboro Town, Indiana	0.0040501026%
IN248	Hobart City, Indiana	0.1594631648%
IN249	Holland Town, Indiana	0.0044453598%
IN250	Holton Town, Indiana	0.0060058556%
IN251	Hope Town, Indiana	0.0036805115%
IN252	Howard County, Indiana	1.8693507742%
IN253	Hudson Town, Indiana	0.0029669953%
IN254	Huntertown, Indiana	0.0415225347%
IN255	Huntingburg City, Indiana	0.0455829037%
IN256	Huntington City, Indiana	0.2487142849%
IN257	Huntington County, Indiana	0.2617013059%
IN258	Hymera Town, Indiana	0.0020173515%
IN259	Indian Village Town, Indiana	0.0006005856%
IN260	Indianapolis City, Indiana	15.8348539612%
IN261	Ingalls Town, Indiana	0.0015194301%
IN262	Jackson County, Indiana	0.7183516565%
IN263	Jamestown, Indiana	0.0010471748%
IN264	Jasonville City, Indiana	0.0039628380%
IN265	Jasper City, Indiana	0.0892100544%
IN266	Jasper County, Indiana	0.4269598647%
IN267	Jay County, Indiana	0.3117552354%
IN268	Jefferson County, Indiana	0.3577898616%
IN269	Jeffersonville City, Indiana	0.1772754031%
IN270	Jennings County, Indiana	0.4175198917%
IN271	Johnson County, Indiana	1.7413644524%
IN272	Jonesboro City, Indiana	0.0065499758%
IN273	Jonesville Town, Indiana	0.0001847956%
IN274	Kempton Town, Indiana	0.0027462673%
IN275	Kendallville City, Indiana	0.0955393022%
IN276	Kennard Town, Indiana	0.0009034449%
IN277	Kentland Town, Indiana	0.0053796040%
IN278	Kewanna Town, Indiana	0.0005389870%
IN279	Kingman Town, Indiana	0.0037934421%
IN280	Kingsbury Town, Indiana	0.0012935689%
IN281	Kingsford Heights Town, Indiana	0.0045942228%
IN282	Kirklin Town, Indiana	0.0053282719%
IN283	Knightstown, Indiana	0.0036856447%
IN284	Knightsville Town, Indiana	0.0053026058%
IN285	Knox City, Indiana	0.0998614649%
IN286	Knox County, Indiana	0.5298755895%
IN287	Kokomo City, Indiana	0.2824600066%
IN288	Kosciusko County, Indiana	0.4936351277%
IN289	Kouts Town, Indiana	0.0383502110%
IN290	La Crosse Town, Indiana	0.0028283986%
IN291	La Fontaine Town, Indiana	0.0017555578%
IN292	La Paz Town, Indiana	0.0034187178%
IN293	La Porte City, Indiana	0.1637904607%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN294	La Porte County, Indiana	0.7761413333%
IN295	Laconia Town, Indiana	0.0000051332%
IN296	Ladoga Town, Indiana	0.0108156732%
IN297	Lafayette City, Indiana	1.0122433215%
IN298	Lagrange County, Indiana	0.2088446438%
IN299	Lagrange Town, Indiana	0.0232996396%
IN300	Lagro Town, Indiana	0.0008264468%
IN301	Lake County, Indiana	1.8344141478%
IN302	Lake Station City, Indiana	0.0738514905%
IN303	Lakeville Town, Indiana	0.0035470480%
IN304	Lanesville Town, Indiana	0.0000513321%
IN305	Lapel Town, Indiana	0.0216570125%
IN306	Larwill Town, Indiana	0.0024998732%
IN307	Laurel Town, Indiana	0.0013295014%
IN308	Lawrence City, Indiana	0.1413634668%
IN309	Lawrence County, Indiana	0.4144758982%
IN310	Lawrenceburg City, Indiana	0.0397721101%
IN311	Leavenworth Town, Indiana	0.0001385967%
IN312	Lebanon City, Indiana	0.0221087349%
IN313	Leesburg Town, Indiana	0.0032236558%
IN314	Leo-Cedarville Town, Indiana	0.0196037285%
IN315	Lewisville Town, Indiana	0.0006981165%
IN316	Liberty Town, Indiana	0.0173399830%
IN317	Ligonier City, Indiana	0.0407012211%
IN318	Linden Town, Indiana	0.0066885725%
IN319	Linton City, Indiana	0.0214516841%
IN320	Little York Town, Indiana	0.0026795356%
IN321	Livonia Town, Indiana	0.0017966235%
IN322	Lizton Town, Indiana	0.0006827169%
IN323	Logansport City, Indiana	0.0184076906%
IN324	Long Beach Town, Indiana	0.0039115059%
IN325	Loogootee City, Indiana	0.0178533039%
IN326	Losantville Town, Indiana	0.0065191765%
IN327	Lowell Town, Indiana	0.0413531388%
IN328	Lynn Town, Indiana	0.0149633068%
IN329	Lynnville Town, Indiana	0.0045377575%
IN330	Lyons Town, Indiana	0.0016426272%
IN331	Mackey Town, Indiana	0.0006159852%
IN332	Macy Town, Indiana	0.0002617937%
IN333	Madison City, Indiana	0.1309584504%
IN334	Madison County, Indiana	1.3792626945%
IN335	Marengo Town, Indiana	0.0004825217%
IN336	Marion City, Indiana	0.7936558454%
IN337	Markle Town, Indiana	0.0068887677%
IN338	Markleville Town, Indiana	0.0080540063%
IN339	Marshall County, Indiana	0.2679792216%
IN340	Marshall Town, Indiana	0.0025409389%
IN341	Martin County, Indiana	0.0865151193%
IN342	Martinsville City, Indiana	0.0794004904%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN343	Matthews Town, Indiana	0.0050818778%
IN344	Mauckport Town, Indiana	0.0000051332%
IN345	McCordsville Town, Indiana	0.0170833225%
IN346	Mecca Town, Indiana	0.0025460721%
IN347	Medaryville Town, Indiana	0.0008110472%
IN348	Medora Town, Indiana	0.0008007807%
IN349	Mellott Town, Indiana	0.0014732312%
IN350	Mentone Town, Indiana	0.0056311312%
IN351	Merom Town, Indiana	0.0005903191%
IN352	Merrillville Town, Indiana	0.1076947432%
IN353	Miami County, Indiana	0.2157180118%
IN354	Michiana Shores Town, Indiana	0.0016066947%
IN355	Michigan City, Indiana	0.5192652447%
IN356	Michigantown, Indiana	0.0030593931%
IN357	Middlebury Town, Indiana	0.0186335519%
IN358	Middletown, Indiana	0.0039063727%
IN359	Milan Town, Indiana	0.0291463657%
IN360	Milford Town, Indiana	0.0156562901%
IN361	Millersburg Town, Indiana	0.0043940277%
IN362	Millhousen Town, Indiana	0.0001693959%
IN363	Milltown, Indiana	0.0004773885%
IN364	Milton Town, Indiana	0.0000564653%
IN365	Mishawaka City, Indiana	0.5537912143%
IN366	Mitchell City, Indiana	0.0424721785%
IN367	Modoc Town, Indiana	0.0044453598%
IN368	Monon Town, Indiana	0.0132898804%
IN369	Monroe City Town, Indiana	0.0002669269%
IN370	Monroe County, Indiana	1.1604288242%
IN371	Monroe Town, Indiana	0.0007597151%
IN372	Monroeville Town, Indiana	0.0067501710%
IN373	Monrovia Town, Indiana	0.0058929249%
IN374	Monterey Town, Indiana	0.0002874598%
IN375	Montezuma Town, Indiana	0.0078948768%
IN376	Montgomery County, Indiana	0.3881322652%
IN377	Montgomery Town, Indiana	0.0003028594%
IN378	Monticello City, Indiana	0.0859504662%
IN379	Montpelier City, Indiana	0.0238026942%
IN380	Mooreland Town, Indiana	0.0007083830%
IN381	Moores Hill Town, Indiana	0.0009804431%
IN382	Mooresville Town, Indiana	0.0679534323%
IN383	Morgan County, Indiana	1.1892004656%
IN384	Morgantown, Indiana	0.0033263200%
IN385	Morocco Town, Indiana	0.0043324291%
IN386	Morristown, Indiana	0.0014218991%
IN387	Mount Auburn Town, Indiana	0.0004568557%
IN388	Mount Ayr Town, Indiana	0.0004619889%
IN389	Mount Carmel Town, Indiana	0.0002207280%
IN390	Mount Etna Town, Indiana	0.0009496438%
IN391	Mount Summit Town, Indiana	0.0006724505%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN392	Mount Vernon City, Indiana	0.0528001968%
IN393	Mulberry Town, Indiana	0.0102048212%
IN394	Muncie City, Indiana	1.1426730513%
IN395	Munster Town, Indiana	0.1401776953%
IN396	Napoleon Town, Indiana	0.0029207964%
IN397	Nappanee City, Indiana	0.0750937273%
IN398	Nashville Town, Indiana	0.0122940377%
IN399	New Albany City, Indiana	0.1005493151%
IN400	New Amsterdam Town, Indiana	0.0000000000%
IN401	New Carlisle Town, Indiana	0.0260048412%
IN402	New Castle City, Indiana	0.0525435363%
IN403	New Chicago Town, Indiana	0.0302397394%
IN404	New Harmony Town, Indiana	0.0046404217%
IN405	New Haven City, Indiana	0.1210256893%
IN406	New Market Town, Indiana	0.0055849323%
IN407	New Middletown, Indiana	0.0000102664%
IN408	New Palestine Town, Indiana	0.0039269056%
IN409	New Pekin Town, Indiana	0.0237000300%
IN410	New Point Town, Indiana	0.0004311896%
IN411	New Richmond Town, Indiana	0.0029464625%
IN412	New Ross Town, Indiana	0.0030542599%
IN413	New Whiteland Town, Indiana	0.0149735732%
IN414	Newberry Town, Indiana	0.0004311896%
IN415	Newburgh Town, Indiana	0.0335968586%
IN416	Newport Town, Indiana	0.0042554310%
IN417	Newton County, Indiana	0.1317386983%
IN418	Newtown, Indiana	0.0019352201%
IN419	Noble County, Indiana	0.3308610426%
IN420	Noblesville City, Indiana	0.1813255057%
IN421	North Judson Town, Indiana	0.0550690756%
IN422	North Liberty Town, Indiana	0.0258405785%
IN423	North Manchester Town, Indiana	0.0190904075%
IN424	North Salem Town, Indiana	0.0007289158%
IN425	North Vernon City, Indiana	0.1513680928%
IN426	North Webster Town, Indiana	0.0116061875%
IN427	Oakland City, Indiana	0.0117550506%
IN428	Oaktown, Indiana	0.0003028594%
IN429	Odon Town, Indiana	0.0001129306%
IN430	Ogden Dunes Town, Indiana	0.0007545819%
IN431	Ohio County, Indiana	0.0605102780%
IN432	Oldenburg Town, Indiana	0.0017555578%
IN433	Onward Town, Indiana	0.0000205328%
IN434	Oolitic Town, Indiana	0.0059288574%
IN435	Orange County, Indiana	0.1597198253%
IN436	Orestes Town, Indiana	0.0064113791%
IN437	Orland Town, Indiana	0.0025255393%
IN438	Orleans Town, Indiana	0.0250859967%
IN439	Osceola Town, Indiana	0.0333607310%
IN440	Osgood Town, Indiana	0.0249576664%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN441	Ossian Town, Indiana	0.0269134194%
IN442	Otterbein Town, Indiana	0.0047636188%
IN443	Owen County, Indiana	0.2265234186%
IN444	Owensville Town, Indiana	0.0056362644%
IN445	Oxford Town, Indiana	0.0039166391%
IN446	Palmyra Town, Indiana	0.0000821314%
IN447	Paoli Town, Indiana	0.0428417696%
IN448	Paragon Town, Indiana	0.0022226799%
IN449	Parke County, Indiana	0.1418203225%
IN450	Parker City Town, Indiana	0.0194291994%
IN451	Patoka Town, Indiana	0.0042605642%
IN452	Patriot Town, Indiana	0.0022740120%
IN453	Pendleton Town, Indiana	0.0746163388%
IN454	Pennville Town, Indiana	0.0010009759%
IN455	Perry County, Indiana	0.2167651867%
IN456	Perrysville Town, Indiana	0.0037934421%
IN457	Peru City, Indiana	0.1826036749%
IN458	Petersburg City, Indiana	0.0103588175%
IN459	Pierceton Town, Indiana	0.0102869526%
IN460	Pike County, Indiana	0.1238284218%
IN461	Pine Village Town, Indiana	0.0008880453%
IN462	Pittsboro Town, Indiana	0.0022842784%
IN463	Plainfield Town, Indiana	0.1021046776%
IN464	Plainville Town, Indiana	0.0007186494%
IN465	Plymouth City, Indiana	0.1356142717%
IN466	Poneto Town, Indiana	0.0011087733%
IN467	Portage City, Indiana	0.4894412953%
IN468	Porter County, Indiana	1.1076491603%
IN469	Porter Town, Indiana	0.1634722017%
IN470	Portland City, Indiana	0.0123299701%
IN471	Posey County, Indiana	0.1942714610%
IN472	Poseyville Town, Indiana	0.0044658926%
IN473	Pottawattamie Park Town, Indiana	0.0012319704%
IN474	Princes Lakes Town, Indiana	0.0039063727%
IN475	Princeton City, Indiana	0.0453005772%
IN476	Pulaski County, Indiana	0.1885530652%
IN477	Putnam County, Indiana	0.4476056348%
IN478	Randolph County, Indiana	0.1948463805%
IN479	Redkey Town, Indiana	0.0011601054%
IN480	Remington Town, Indiana	0.0024228751%
IN481	Rensselaer City, Indiana	0.0101278231%
IN482	Reynolds Town, Indiana	0.0007083830%
IN483	Richland Town, Indiana	0.0026898020%
IN484	Richmond City, Indiana	0.6900830697%
IN485	Ridgeville Town, Indiana	0.0178943696%
IN486	Riley Town, Indiana	0.0014629648%
IN487	Ripley County, Indiana	0.2963915383%
IN488	Rising Sun City, Indiana	0.0356090769%
IN489	River Forest Town, Indiana	0.0003439251%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN490	Roachdale Town, Indiana	0.0017760906%
IN491	Roann Town, Indiana	0.0009599102%
IN492	Roanoke Town, Indiana	0.0123402365%
IN493	Rochester City, Indiana	0.0090652486%
IN494	Rockport City, Indiana	0.0104768814%
IN495	Rockville Town, Indiana	0.0245162104%
IN496	Rome City Town, Indiana	0.0125096325%
IN497	Rosedale Town, Indiana	0.0056105984%
IN498	Roseland Town, Indiana	0.0028283986%
IN499	Rossville Town, Indiana	0.0134079442%
IN500	Royal Center Town, Indiana	0.0001796623%
IN501	Rush County, Indiana	0.2195011875%
IN502	Rushville City, Indiana	0.0154047628%
IN503	Russellville Town, Indiana	0.0006929833%
IN504	Russiaville Town, Indiana	0.0008059140%
IN505	Salamonia Town, Indiana	0.0002258612%
IN506	Salem City, Indiana	0.0949284502%
IN507	Saltillo Town, Indiana	0.0012833025%
IN508	Sandborn Town, Indiana	0.0002053284%
IN509	Santa Claus Town, Indiana	0.0075252857%
IN510	Saratoga Town, Indiana	0.0045018251%
IN511	Schererville Town, Indiana	0.1304861951%
IN512	Schneider Town, Indiana	0.0009342442%
IN513	Scott County, Indiana	1.2220735416%
IN514	Scottsburg City, Indiana	0.0625019635%
IN515	Seelyville Town, Indiana	0.0082952672%
IN516	Sellersburg Town, Indiana	0.0135722069%
IN517	Selma Town, Indiana	0.0080899388%
IN518	Seymour City, Indiana	0.0450541831%
IN519	Shadeland Town, Indiana	0.0129356889%
IN520	Shamrock Lakes Town, Indiana	0.0030901923%
IN521	Sharpsville Town, Indiana	0.0050818778%
IN522	Shelburn Town, Indiana	0.0044402265%
IN523	Shelby County, Indiana	0.0450541831%
IN524	Shelbyville City, Indiana	0.5457372080%
IN525	Sheridan Town, Indiana	0.0121657074%
IN526	Shipshewana Town, Indiana	0.0047174199%
IN527	Shirley Town, Indiana	0.0011806383%
IN528	Shoals Town, Indiana	0.0066988389%
IN529	Sidney Town, Indiana	0.0004773885%
IN530	Silver Lake Town, Indiana	0.0053128722%
IN531	Somerville Town, Indiana	0.0016939593%
IN532	South Bend City, Indiana	1.3582319336%
IN533	South Whitley Town, Indiana	0.0000564653%
IN534	Southport City, Indiana	0.0003490583%
IN535	Speedway Town, Indiana	0.0716390770%
IN536	Spencer County, Indiana	0.1563113739%
IN537	Spencer Town, Indiana	0.0335301269%
IN538	Spiceland Town, Indiana	0.0016836928%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN539	Spring Grove Town, Indiana	0.0014167659%
IN540	Spring Lake Town, Indiana	0.0003079926%
IN541	Springport Town, Indiana	0.0002771933%
IN542	Spurgeon Town, Indiana	0.0006827169%
IN543	St. Joseph County, Indiana	1.3360462005%
IN544	St. Joe Town, Indiana	0.0029823949%
IN545	St. John Town, Indiana	0.0653868274%
IN546	St. Leon Town, Indiana	0.0011190398%
IN547	St. Paul Town, Indiana	0.0016220943%
IN548	Starke County, Indiana	0.5754687596%
IN549	State Line City Town, Indiana	0.0005800527%
IN550	Staunton Town, Indiana	0.0035419148%
IN551	Steuben County, Indiana	0.2289052280%
IN552	Stilesville Town, Indiana	0.0004517225%
IN553	Stinesville Town, Indiana	0.0014321656%
IN554	Straughn Town, Indiana	0.0004260564%
IN555	Sullivan City, Indiana	0.0150608378%
IN556	Sullivan County, Indiana	0.4997077150%
IN557	Sulphur Springs Town, Indiana	0.0007494486%
IN558	Summitville Town, Indiana	0.0154098960%
IN559	Sunman Town, Indiana	0.0161336786%
IN560	Swayzee Town, Indiana	0.0084954623%
IN561	Sweetser Town, Indiana	0.0043786280%
IN562	Switz City Town, Indiana	0.0006570509%
IN563	Switzerland County, Indiana	0.1390381227%
IN564	Syracuse Town, Indiana	0.0288332399%
IN565	Tell City, Indiana	0.0071351617%
IN566	Tennyson Town, Indiana	0.0014372988%
IN567	Terre Haute City, Indiana	1.0172687340%
IN568	Thorntown, Indiana	0.0019968186%
IN569	Tippecanoe County, Indiana	0.9836513425%
IN570	Tipton City, Indiana	0.0756840464%
IN571	Tipton County, Indiana	0.1461219523%
IN572	Topeka Town, Indiana	0.0102510201%
IN573	Town of Pines Town, Indiana	0.0177506398%
IN574	Trafalgar Town, Indiana	0.0034751831%
IN575	Trail Creek Town, Indiana	0.0070068315%
IN576	Troy Town, Indiana	0.0003695911%
IN577	Ulen Town, Indiana	0.0001385967%
IN578	Union City, Indiana	0.0467276095%
IN579	Union County, Indiana	0.0788666365%
IN580	Uniondale Town, Indiana	0.0020532840%
IN581	Universal Town, Indiana	0.0029823949%
IN582	Upland Town, Indiana	0.0132693475%
IN583	Utica Town, Indiana	0.0015553626%
IN584	Valparaiso City, Indiana	0.4508549566%
IN585	Van Buren Town, Indiana	0.0074585540%
IN586	Vanderburgh County, Indiana	1.8730004864%
IN587	Veedersburg Town, Indiana	0.0174477804%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN588	Vera Cruz Town, Indiana	0.0005287206%
IN589	Vermillion County, Indiana	0.1479237090%
IN590	Vernon Town, Indiana	0.0044556262%
IN591	Versailles Town, Indiana	0.0325753499%
IN592	Vevay Town, Indiana	0.0222627312%
IN593	Vigo County, Indiana	0.7949340146%
IN594	Vincennes City, Indiana	0.0141984585%
IN595	Wabash City, Indiana	0.0616549838%
IN596	Wabash County, Indiana	0.5254353629%
IN597	Wakarusa Town, Indiana	0.0133566121%
IN598	Walkerton Town, Indiana	0.0293414277%
IN599	Wallace Town, Indiana	0.0007443154%
IN600	Walton Town, Indiana	0.0010215088%
IN601	Wanatah Town, Indiana	0.0034289842%
IN602	Warren County, Indiana	0.0576818794%
IN603	Warren Town, Indiana	0.0076587491%
IN604	Warrick County, Indiana	0.3991430003%
IN605	Warsaw City, Indiana	0.2580772597%
IN606	Washington City, Indiana	0.0149581736%
IN607	Washington County, Indiana	0.3404396122%
IN608	Waterloo Town, Indiana	0.0127970922%
IN609	Waveland Town, Indiana	0.0037215772%
IN610	Wayne County, Indiana	0.7657876490%
IN611	Waynetown, Indiana	0.0084133310%
IN612	Wells County, Indiana	0.2019866754%
IN613	West Baden Springs Town, Indiana	0.0054822681%
IN614	West College Corner Town, Indiana	0.0065345762%
IN615	West Harrison Town, Indiana	0.0004773885%
IN616	West Lafayette City, Indiana	0.2612290506%
IN617	West Lebanon Town, Indiana	0.0029772617%
IN618	West Terre Haute Town, Indiana	0.0180175667%
IN619	Westfield City, Indiana	0.1106874046%
IN620	Westport Town, Indiana	0.0022021470%
IN621	Westville Town, Indiana	0.0405164256%
IN622	Wheatfield Town, Indiana	0.0014064995%
IN623	Wheatland Town, Indiana	0.0002361277%
IN624	White County, Indiana	0.2045738132%
IN625	Whiteland Town, Indiana	0.0126892948%
IN626	Whitestown, Indiana	0.0075560849%
IN627	Whitewater Town, Indiana	0.0002977262%
IN628	Whiting City, Indiana	0.0746933369%
IN629	Whitley County, Indiana	0.3073920070%
IN630	Wilkinson Town, Indiana	0.0006365180%
IN631	Williamsport Town, Indiana	0.0094553726%
IN632	Winamac Town, Indiana	0.0021559481%
IN633	Winchester City, Indiana	0.0715004804%
IN634	Windfall City Town, Indiana	0.0058877917%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN635	Winfield Town, Indiana	0.0246548070%
IN636	Wingate Town, Indiana	0.0023253441%
IN637	Winona Lake Town, Indiana	0.0964016815%
IN638	Winslow Town, Indiana	0.0028489315%
IN639	Wolcott Town, Indiana	0.0013397678%
IN640	Wolcottville Town, Indiana	0.0086494586%
IN641	Woodburn City, Indiana	0.0082131358%
IN642	Woodlawn Heights Town, Indiana	0.0012217040%
IN643	Worthington Town, Indiana	0.0026128038%
IN644	Yeoman Town, Indiana	0.0014578316%
IN645	Yorktown, Indiana	0.0901956307%
IN646	Zanesville Town, Indiana	0.0025922710%
IN647	Zionsville Town, Indiana	0.0375853627%
IN648	Cumberland Town, Indiana	0.0148247101%

State ID	Qualifying Subdivision	Consolidated State Allocation
IA1	Adair County, Iowa	0.2556895492%
IA2	Adams County, Iowa	0.1116738610%
IA3	Allamakee County, Iowa	0.4458620571%
IA7	Appanoose County, Iowa	0.5319573473%
IA8	Audubon County, Iowa	0.1208090649%
IA9	Benton County, Iowa	0.5190077951%
IA11	Black Hawk County, Iowa	3.3423948145%
IA13	Boone County, Iowa	0.8229376316%
IA14	Bremer County, Iowa	0.7313291658%
IA15	Buchanan County, Iowa	0.3770114677%
IA16	Buena Vista County, Iowa	0.3269761930%
IA18	Butler County, Iowa	0.2707546223%
IA19	Calhoun County, Iowa	0.1889544807%
IA20	Carroll County, Iowa	0.6033080977%
IA21	Cass County, Iowa	0.3356626501%
IA22	Cedar County, Iowa	0.3655363695%
IA25	Cerro Gordo County, Iowa	1.6302973365%
IA26	Cherokee County, Iowa	0.2378358349%
IA27	Chickasaw County, Iowa	0.2431246372%
IA28	Clarke County, Iowa	0.3046029568%
IA29	Clay County, Iowa	0.2957241797%
IA30	Clayton County, Iowa	0.4574012621%
IA32	Clinton County, Iowa	1.4586196098%
IA36	Crawford County, Iowa	0.3305341145%
IA37	Dallas County, Iowa	1.4775951912%
IA39	Davis County, Iowa	0.1538560657%
IA40	Decatur County, Iowa	0.2531573348%
IA41	Delaware County, Iowa	0.3021348491%
IA43	Des Moines County, Iowa	1.5679856298%
IA44	Dickinson County, Iowa	0.3322329419%
IA46	Dubuque County, Iowa	2.7454332795%
IA47	Emmet County, Iowa	0.1753318082%
IA49	Fayette County, Iowa	0.5284635324%
IA50	Floyd County, Iowa	0.3285468070%
IA53	Franklin County, Iowa	0.2107187034%
IA54	Fremont County, Iowa	0.2047888342%
IA55	Greene County, Iowa	0.3578435662%
IA57	Grundy County, Iowa	0.3230977380%
IA58	Guthrie County, Iowa	0.2308482053%
IA59	Hamilton County, Iowa	0.3501828163%
IA60	Hancock County, Iowa	0.1901084012%
IA61	Hardin County, Iowa	0.4491314985%
IA62	Harrison County, Iowa	0.6178282639%
IA63	Henry County, Iowa	0.4451248302%
IA64	Howard County, Iowa	0.1714212999%
IA65	Humboldt County, Iowa	0.1929611491%
IA66	Ida County, Iowa	0.1680556985%
IA69	Iowa County, Iowa	0.2658504602%
IA70	Jackson County, Iowa	0.5490417812%

State ID	Qualifying Subdivision	Consolidated State Allocation
IA71	Jasper County, Iowa	1.6780568235%
IA72	Jefferson County, Iowa	0.5728253647%
IA73	Johnson County, Iowa	3.8223936863%
IA75	Jones County, Iowa	0.3884865660%
IA77	Keokuk County, Iowa	0.1980255779%
IA78	Kossuth County, Iowa	0.3482275621%
IA80	Lee County, Iowa	1.4586837165%
IA81	Linn County, Iowa	7.3285811041%
IA82	Louisa County, Iowa	0.3358870235%
IA83	Lucas County, Iowa	0.3300533143%
IA84	Lyon County, Iowa	0.1619335092%
IA85	Madison County, Iowa	0.4031349456%
IA86	Mahaska County, Iowa	0.7161999860%
IA88	Marion County, Iowa	1.1788259436%
IA89	Marshall County, Iowa	1.0363488161%
IA92	Mills County, Iowa	0.4947113580%
IA93	Mitchell County, Iowa	0.1894673343%
IA94	Monona County, Iowa	0.4457658971%
IA95	Monroe County, Iowa	0.2157510788%
IA96	Montgomery County, Iowa	0.5308995868%
IA98	Muscatine County, Iowa	1.0607414131%
IA102	O Brien County, Iowa	0.2348228203%
IA103	Osceola County, Iowa	0.1453939821%
IA106	Page County, Iowa	0.5824093155%
IA107	Palo Alto County, Iowa	0.1666132978%
IA110	Plymouth County, Iowa	0.4452850969%
IA111	Pocahontas County, Iowa	0.1165780231%
IA112	Polk County, Iowa	22.8108926250%
IA113	Pottawattamie County, Iowa	3.6145597841%
IA114	Poweshiek County, Iowa	0.4747100695%
IA115	Ringgold County, Iowa	0.1195910378%
IA116	Sac County, Iowa	0.2200782807%
IA117	Scott County, Iowa	8.8614042123%
IA118	Shelby County, Iowa	0.2859158555%
IA120	Sioux County, Iowa	0.4096738283%
IA123	Story County, Iowa	2.1665177789%
IA124	Tama County, Iowa	0.3449901740%
IA125	Taylor County, Iowa	0.1784409829%
IA126	Union County, Iowa	0.4629785445%
IA128	Van Buren County, Iowa	0.1525418785%
IA129	Wapello County, Iowa	1.0026607483%
IA130	Warren County, Iowa	1.3316563022%
IA131	Washington County, Iowa	0.5543626368%
IA135	Wayne County, Iowa	0.2440541843%
IA136	Webster County, Iowa	1.5957758817%
IA138	Winnebago County, Iowa	0.2340535400%
IA139	Winneshiek County, Iowa	0.3674595703%
IA140	Woodbury County, Iowa	2.5662230163%
IA141	Worth County, Iowa	0.2345663935%

State ID	Qualifying Subdivision	Consolidated State Allocation
IA142	Wright County, Iowa	0.2810437467%

State ID	Qualifying Subdivision	Consolidated State Allocation
KS1	Allen County, Kansas	0.2469590982%
KS2	Anderson County, Kansas	0.1033070846%
KS3	Andover City, Kansas	0.2965259109%
KS4	Arkansas City, Kansas	0.2517607353%
KS5	Atchison City, Kansas	0.2261465530%
KS6	Atchison County, Kansas	0.2081347289%
KS7	Barber County, Kansas	0.0868011735%
KS8	Barton County, Kansas	0.3334574382%
KS9	Bourbon County, Kansas	0.2875114592%
KS10	Brown County, Kansas	0.1232303153%
KS11	Butler County, Kansas	0.8706438812%
KS12	Chase County, Kansas	0.0336082678%
KS14	Cherokee County, Kansas	0.3919995171%
KS17	Clay County, Kansas	0.1042947986%
KS19	Coffey County, Kansas	0.1060232980%
KS20	Comanche County, Kansas	0.0219636398%
KS21	Cowley County, Kansas	0.6897088195%
KS22	Crawford County, Kansas	0.7714110714%
KS24	Derby City, Kansas	0.5453586914%
KS25	Dickinson County, Kansas	0.3638160245%
KS26	Dodge City, Kansas	0.5788024418%
KS28	Douglas County, Kansas	1.5924288685%
KS29	Edwards County, Kansas	0.0357396506%
KS30	El Dorado City, Kansas	0.2788280508%
KS31	Elk County, Kansas	0.0499335801%
KS32	Elkhart City, Kansas	0.0460427074%
KS33	Ellis County, Kansas	0.3726150991%
KS34	Ellsworth County, Kansas	0.0784192915%
KS35	Emporia City, Kansas	0.5314129512%
KS37	Finney County, Kansas	0.7153826866%
KS38	Ford County, Kansas	0.6591551252%
KS39	Franklin County, Kansas	0.3340422689%
KS40	Garden City, Kansas	0.5639674708%
KS41	Gardner City, Kansas	0.4851729540%
KS42	Geary County, Kansas	0.4187127502%
KS43	Gove County, Kansas	0.0340631361%
KS44	Graham County, Kansas	0.0310480092%
KS45	Grant County, Kansas	0.1409572980%
KS47	Great Bend City, Kansas	0.3231811438%
KS48	Greeley County Unified Government, Kansas	0.0155434990%
KS49	Greenwood County, Kansas	0.1168768440%
KS50	Hamilton County, Kansas	0.0315158737%
KS51	Harper County, Kansas	0.0693479184%
KS52	Harvey County, Kansas	0.6829965673%
KS53	Haskell County, Kansas	0.0509842361%
KS54	Hays City, Kansas	0.4517508922%
KS55	Haysville City, Kansas	0.2470109420%
KS57	Hutchinson City, Kansas	0.8720750695%

State ID	Qualifying Subdivision	Consolidated State Allocation
KS58	Jackson County, Kansas	0.1711734320%
KS59	Jefferson County, Kansas	0.2473443746%
KS61	Johnson County, Kansas	12.0944030669%
KS62	Junction City, Kansas	0.4741551685%
KS63	Kansas City, Kansas	4.4060498188%
KS64	Kearny County, Kansas	0.0486709060%
KS65	Kingman County, Kansas	0.0906357539%
KS66	Kiowa County, Kansas	0.0319187570%
KS67	Labette County, Kansas	0.2545442897%
KS69	Lansing City, Kansas	0.2592649750%
KS70	Lawrence City, Kansas	2.1351947685%
KS71	Leavenworth City, Kansas	0.7793565010%
KS72	Leavenworth County, Kansas	1.6381480759%
KS73	Leawood City, Kansas	0.7519204801%
KS74	Lenexa City, Kansas	1.2179424409%
KS75	Liberal City, Kansas	0.4082002757%
KS78	Logan County, Kansas	0.0355057183%
KS79	Lyon County, Kansas	0.4294606379%
KS80	Manhattan City, Kansas	1.1916559134%
KS81	Manter City, Kansas	0.0039724166%
KS83	Marshall County, Kansas	0.1254396755%
KS84	McPherson City, Kansas	0.2822331538%
KS85	McPherson County, Kansas	0.3697169383%
KS86	Meade County, Kansas	0.0802482625%
KS87	Merriam City, Kansas	0.2413502294%
KS88	Miami County, Kansas	0.4462127868%
KS90	Montgomery County, Kansas	0.6274462063%
KS92	Morton County, Kansas	0.0505510276%
KS94	Neosho County, Kansas	0.3172684471%
KS95	Ness County, Kansas	0.0359735829%
KS96	Newton City, Kansas	0.4065302570%
KS98	Olathe City, Kansas	3.0725090086%
KS99	Osage County, Kansas	0.2049506509%
KS101	Ottawa City, Kansas	0.2675066256%
KS103	Overland Park City, Kansas	5.2622788811%
KS104	Pawnee County, Kansas	0.0827340421%
KS105	Phillips County, Kansas	0.0673335017%
KS106	Pittsburg City, Kansas	0.4330770471%
KS107	Pottawatomie County, Kansas	0.3212929608%
KS108	Prairie Village City, Kansas	0.4839800835%
KS109	Pratt County, Kansas	0.1817885063%
KS110	Rawlins County, Kansas	0.0326335501%
KS111	Reno County, Kansas	1.2307721233%
KS112	Republic County, Kansas	0.0589509291%
KS113	Rice County, Kansas	0.1216707669%
KS114	Riley County, Kansas	0.9513505103%
KS117	Russell County, Kansas	0.0884263937%
KS118	Salina City, Kansas	1.0036161498%
KS119	Saline County, Kansas	0.7008350540%

State ID	Qualifying Subdivision	Consolidated State Allocation
KS120	Scott County, Kansas	0.0622519732%
KS121	Sedgwick County, Kansas	10.3553321948%
KS122	Seward County, Kansas	0.4190277852%
KS123	Shawnee City, Kansas	1.4379077560%
KS124	Shawnee County, Kansas	3.5054886950%
KS125	Sheridan County, Kansas	0.0327505162%
KS126	Sherman County, Kansas	0.0750792587%
KS127	Smith County, Kansas	0.0460586624%
KS130	Stanton County, Kansas	0.0392178776%
KS131	Stevens County, Kansas	0.0700237227%
KS132	Sumner County, Kansas	0.2934290296%
KS133	Thomas County, Kansas	0.1000970142%
KS134	Topeka City, Kansas	2.7014829146%
KS135	Trego County, Kansas	0.0358436205%
KS136	Ulysses City, Kansas	0.1478592097%
KS137	Wabaunsee County, Kansas	0.1375513777%
KS138	Wallace County, Kansas	0.0199622194%
KS139	Washington County, Kansas	0.0705305759%
KS140	Wichita City, Kansas	10.4437497448%
KS141	Wichita County, Kansas	0.0269541947%
KS142	Wilson County, Kansas	0.1086745303%
KS143	Winfield City, Kansas	0.2560767576%
KS145	Abilene City, Kansas	0.1327990164%
KS146	Anthony City, Kansas	0.0440711418%
KS147	Augusta City, Kansas	0.2017035526%
KS148	Baxter Springs City, Kansas	0.0844335409%
KS149	Bel Aire City, Kansas	0.1836803642%
KS150	Belleville City, Kansas	0.0399286280%
KS151	Beloit City, Kansas	0.0772980066%
KS152	Bentley City, Kansas	0.0111696053%
KS153	Benton City, Kansas	0.0187605992%
KS154	Bonner Springs City, Kansas	0.1727710215%
KS155	Burlingame City, Kansas	0.0191726818%
KS156	Burrton City, Kansas	0.0185220252%
KS157	Caney City, Kansas	0.0422493033%
KS158	Chanute City, Kansas	0.1950017894%
KS159	Cheney City, Kansas	0.0471292279%
KS160	Coffeyville City, Kansas	0.1988623520%
KS161	Colby City, Kansas	0.1152746647%
KS162	Concordia City, Kansas	0.1064040461%
KS163	Edwardsville City, Kansas	0.0976201818%
KS164	Ellsworth City, Kansas	0.0636559061%
KS165	Enterprise City, Kansas	0.0167652523%
KS166	Eudora City, Kansas	0.1386549260%
KS167	Fairway City, Kansas	0.0859517397%
KS168	Fall River City, Kansas	0.0030797747%
KS169	Fort Scott City, Kansas	0.1658740613%
KS170	Galena City, Kansas	0.0612484766%
KS171	Garden Plain City, Kansas	0.0197799613%

State ID	Qualifying Subdivision	Consolidated State Allocation
KS172	Garnett City, Kansas	0.0706613091%
KS173	Goddard City, Kansas	0.1076186052%
KS174	Halstead City, Kansas	0.0439843876%
KS175	Harper City, Kansas	0.0280433004%
KS176	Herington City, Kansas	0.0485823611%
KS177	Hiawatha City, Kansas	0.0670393205%
KS178	Highland City, Kansas	0.0213849143%
KS179	Hillsboro City, Kansas	0.0599037863%
KS180	Hoisington City, Kansas	0.0531803345%
KS181	Hugoton City, Kansas	0.0797705018%
KS182	Humboldt City, Kansas	0.0385622491%
KS183	Independence City, Kansas	0.1827043793%
KS184	Iola City, Kansas	0.1141685485%
KS185	Johnson City City, Kansas	0.0286505799%
KS186	Kechi City, Kansas	0.0457411605%
KS187	Kingman City, Kansas	0.0599688519%
KS188	Leoti City, Kansas	0.0307977467%
KS189	Lincoln Center City, Kansas	0.0257876908%
KS190	Longton City, Kansas	0.0066366975%
KS191	Maize City, Kansas	0.1142336141%
KS192	Marysville City, Kansas	0.0705094892%
KS193	Meade City, Kansas	0.0329449136%
KS194	Medicine Lodge City, Kansas	0.0391261515%
KS195	Mission City, Kansas	0.2141310941%
KS196	Mission Hills City, Kansas	0.0766256614%
KS197	Moundridge City, Kansas	0.0403623991%
KS198	Mount Hope City, Kansas	0.0174809746%
KS199	Neodesha City, Kansas	0.0479533930%
KS200	North Newton City, Kansas	0.0382152322%
KS201	Norton City, Kansas	0.0587542929%
KS202	Oakley City, Kansas	0.0440277647%
KS203	Osawatomie City, Kansas	0.0915907637%
KS204	Park City City, Kansas	0.1722721848%
KS205	Parsons City, Kansas	0.2052387869%
KS206	Phillipsburg City, Kansas	0.0524863008%
KS207	Pleasanton City, Kansas	0.0251153456%
KS208	Pratt City, Kansas	0.1401731248%
KS209	Rantoul City, Kansas	0.0040557596%
KS210	Roeland Park City, Kansas	0.1442722615%
KS211	Russell City, Kansas	0.0950609324%
KS212	Sabetha City, Kansas	0.0553491899%
KS213	Satanta City, Kansas	0.0243128691%
KS214	Scott City, Kansas	0.0810284379%
KS215	Sedgwick City, Kansas	0.0359379341%
KS216	Spring Hill City, Kansas	0.1707106089%
KS217	Sterling City, Kansas	0.0471942936%
KS218	Sublette City, Kansas	0.0287156456%
KS219	Syracuse City, Kansas	0.0353740316%
KS220	Tonganoxie City, Kansas	0.1234078725%

State ID	Qualifying Subdivision	Consolidated State Allocation
KS221	Tribune City, Kansas	0.0157025131%
KS222	Valley Falls City, Kansas	0.0249852143%
KS223	Wakeeney City, Kansas	0.0376947069%
KS224	Wamego City, Kansas	0.1023265980%
KS225	Washington City, Kansas	0.0230983101%
KS226	Weir City, Kansas	0.0137505433%
KS227	Wellington City, Kansas	0.1637485830%
KS228	Westwood City, Kansas	0.0356126057%
KS229	Wilson City, Kansas	0.0154639390%
KS230	Wyandotte County, Kansas	3.2916925050%

State ID	Qualifying Subdivision	Consolidated State Allocation
KY1	Adair County, Kentucky	0.2072149972%
KY2	Allen County, Kentucky	0.3652932746%
KY3	Anderson County, Kentucky	0.3621159370%
KY4	Ashland City, Kentucky	0.9834499202%
KY5	Ballard County, Kentucky	0.1275818571%
KY6	Bardstown City, Kentucky	0.2352870373%
KY7	Barren County, Kentucky	0.3122030586%
KY8	Bath County, Kentucky	0.1600781328%
KY9	Bell County, Kentucky	0.6418579913%
KY12	Berea City, Kentucky	0.1673960319%
KY13	Boone County, Kentucky	2.0430819725%
KY14	Bourbon County, Kentucky	0.2554835051%
KY15	Bowling Green City, Kentucky	0.6707865957%
KY16	Boyd County, Kentucky	0.8927787584%
KY17	Boyle County, Kentucky	0.3790292999%
KY18	Bracken County, Kentucky	0.1275577166%
KY19	Breathitt County, Kentucky	0.5390554414%
KY20	Breckinridge County, Kentucky	0.3244963382%
KY22	Bullitt County, Kentucky	1.0630204077%
KY23	Butler County, Kentucky	0.1624898322%
KY24	Caldwell County, Kentucky	0.1441008473%
KY25	Calloway County, Kentucky	0.0270405279%
KY26	Campbell County, Kentucky	1.0519698931%
KY27	Campbellsville City, Kentucky	0.2769609681%
KY28	Carlisle County, Kentucky	0.0604084438%
KY29	Carroll County, Kentucky	0.2541479356%
KY30	Carter County, Kentucky	0.6015849596%
KY31	Casey County, Kentucky	0.2668572392%
KY32	Christian County, Kentucky	0.4386166388%
KY33	Clark County, Kentucky	0.6110238861%
KY34	Clay County, Kentucky	0.7834161044%
KY35	Clinton County, Kentucky	0.3920484376%
KY36	Columbia City, Kentucky	0.0941274300%
KY37	Covington City, Kentucky	1.7146827203%
KY38	Crittenden County, Kentucky	0.2010231527%
KY39	Cumberland County, Kentucky	0.1857249004%
KY40	Danville City, Kentucky	0.2799464970%
KY41	Daviess County, Kentucky	1.1263935276%
KY42	Edmonson County, Kentucky	0.1884368528%
KY44	Elliott County, Kentucky	0.1458221479%
KY45	Erlanger City, Kentucky	0.3397777298%
KY46	Estill County, Kentucky	0.4049309515%
KY47	Fleming County, Kentucky	0.1823914480%
KY48	Florence City, Kentucky	0.7389020512%
KY49	Floyd County, Kentucky	1.9179322449%
KY50	Fort Thomas City, Kentucky	0.3651296923%
KY51	Frankfort City, Kentucky	0.4254271088%
KY52	Franklin County, Kentucky	0.4438483122%
KY53	Fulton County, Kentucky	0.1040009320%

State ID	Qualifying Subdivision	Consolidated State Allocation
KY54	Gallatin County, Kentucky	0.2347861459%
KY55	Garrard County, Kentucky	0.3127117464%
KY56	Georgetown City, Kentucky	0.2129888920%
KY57	Glasgow City, Kentucky	0.4100978120%
KY58	Grant County, Kentucky	0.5343736918%
KY59	Graves County, Kentucky	0.2447866907%
KY60	Grayson City, Kentucky	0.1405700912%
KY61	Grayson County, Kentucky	0.4371371187%
KY62	Green County, Kentucky	0.1363993307%
KY64	Greenup County, Kentucky	0.6872346204%
KY65	Hancock County, Kentucky	0.1001482246%
KY66	Hardin County, Kentucky	1.6677965130%
KY68	Harlan County, Kentucky	0.9236857078%
KY69	Harrison County, Kentucky	0.2078604027%
KY70	Hart County, Kentucky	0.2333469695%
KY71	Henderson City, Kentucky	0.5644511762%
KY72	Henderson County, Kentucky	0.3796057595%
KY73	Henry County, Kentucky	0.2263086115%
KY74	Hickman County, Kentucky	0.0533625713%
KY76	Hopkins County, Kentucky	0.5493362318%
KY77	Hopkinsville City, Kentucky	0.5662686160%
KY79	Independence City, Kentucky	0.1255237640%
KY81	Jackson County, Kentucky	0.1930879337%
KY83	Jefferson County, Kentucky	14.4939132925%
KY84	Jeffersontown City, Kentucky	0.1981991396%
KY85	Jenkins City, Kentucky	0.0688654541%
KY86	Jessamine County, Kentucky	0.6407795601%
KY87	Johnson County, Kentucky	0.6400798620%
KY88	Kenton County, Kentucky	2.5731398261%
KY89	Knott County, Kentucky	0.4910894879%
KY90	Knox County, Kentucky	0.8060755114%
KY91	Larue County, Kentucky	0.1917133825%
KY92	Laurel County, Kentucky	0.9215642107%
KY93	Lawrence County, Kentucky	0.4474957316%
KY94	Lawrenceburg City, Kentucky	0.0804801232%
KY95	Lee County, Kentucky	0.2235931366%
KY96	Leslie County, Kentucky	0.5525464926%
KY97	Letcher County, Kentucky	0.6327552468%
KY98	Lewis County, Kentucky	0.2492484050%
KY99	Lexington-Fayette Urban County, Kentucky	6.2597070666%
KY100	Lincoln County, Kentucky	0.4109182594%
KY101	Livingston County, Kentucky	0.2056037847%
KY102	Logan County, Kentucky	0.3022584972%
KY103	London City, Kentucky	0.1961505806%
KY106	Lyndon City, Kentucky	0.0748780766%
KY107	Lyon County, Kentucky	0.1367346673%
KY108	Madison County, Kentucky	1.1073052673%
KY109	Madisonville City, Kentucky	0.3927355489%

State ID	Qualifying Subdivision	Consolidated State Allocation
KY110	Magoffin County, Kentucky	0.3084779576%
KY111	Manchester City, Kentucky	0.1800397241%
KY112	Marion County, Kentucky	0.2018769929%
KY113	Marshall County, Kentucky	0.6110803392%
KY114	Martin County, Kentucky	0.4692913886%
KY115	Mason County, Kentucky	0.1741746215%
KY116	McCracken County, Kentucky	0.3377504933%
KY117	McCreary County, Kentucky	0.3011869230%
KY118	McLean County, Kentucky	0.1433881867%
KY119	Meade County, Kentucky	0.3762152436%
KY120	Menifee County, Kentucky	0.1152561711%
KY121	Mercer County, Kentucky	0.2841928256%
KY122	Metcalfe County, Kentucky	0.1167070889%
KY123	Monroe County, Kentucky	0.2890192303%
KY124	Montgomery County, Kentucky	0.5746052526%
KY125	Morehead City, Kentucky	0.1176937487%
KY126	Morgan County, Kentucky	0.0505889526%
KY127	Morganfield City, Kentucky	0.1082087956%
KY129	Muhlenberg County, Kentucky	0.5338036196%
KY130	Murray City, Kentucky	0.5765962314%
KY131	Nelson County, Kentucky	0.4816564321%
KY132	Newport City, Kentucky	0.7312996326%
KY133	Nicholas County, Kentucky	0.1324383199%
KY134	Nicholasville City, Kentucky	0.3723153354%
KY135	Ohio County, Kentucky	0.4467150643%
KY136	Oldham County, Kentucky	0.7333447161%
KY137	Owen County, Kentucky	0.2198857418%
KY138	Owensboro City, Kentucky	0.5118319344%
KY139	Owsley County, Kentucky	0.1294761331%
KY140	Paducah City, Kentucky	1.1041080161%
KY141	Paintsville City, Kentucky	0.3642660363%
KY142	Pendleton County, Kentucky	0.3094900729%
KY143	Perry County, Kentucky	1.4848386091%
KY144	Pike County, Kentucky	1.9294441527%
KY145	Pineville City, Kentucky	0.0736606264%
KY147	Powell County, Kentucky	0.5788951657%
KY148	Prestonsburg City, Kentucky	0.4197933602%
KY149	Pulaski County, Kentucky	0.8723902940%
KY151	Richmond City, Kentucky	0.5069051167%
KY152	Robertson County, Kentucky	0.0346199801%
KY153	Rockcastle County, Kentucky	0.4380501830%
KY154	Rowan County, Kentucky	0.4245058255%
KY155	Russell City, Kentucky	0.1455248537%
KY156	Russell County, Kentucky	0.5599110288%
KY158	Scott County, Kentucky	0.6332443967%
KY159	Shelby County, Kentucky	0.5093783884%
KY160	Shelbyville City, Kentucky	0.1168374662%
KY161	Shepherdsville City, Kentucky	0.1717991328%
KY162	Shively City, Kentucky	0.1040826057%

State ID	Qualifying Subdivision	Consolidated State Allocation
KY163	Simpson County, Kentucky	0.2049906448%
KY164	Somerset City, Kentucky	0.3108498299%
KY166	Spencer County, Kentucky	0.2447695951%
KY167	St. Matthews City, Kentucky	0.1131834246%
KY168	Taylor County, Kentucky	0.1908446071%
KY169	Todd County, Kentucky	0.1788746408%
KY170	Trigg County, Kentucky	0.2047738501%
KY171	Trimble County, Kentucky	0.1174427629%
KY172	Union County, Kentucky	0.2531192882%
KY175	Warren County, Kentucky	0.9893070387%
KY176	Washington County, Kentucky	0.1549834119%
KY177	Wayne County, Kentucky	0.3477965951%
KY178	Webster County, Kentucky	0.2371207742%
KY179	West Liberty City, Kentucky	0.1691975502%
KY181	Whitley County, Kentucky	1.5794132485%
KY182	Winchester City, Kentucky	0.4646999075%
KY183	Wolfe County, Kentucky	0.2600699609%
KY184	Woodford County, Kentucky	0.2675359435%
KY186	Albany City, Kentucky	0.1264298304%
KY187	Alexandria City, Kentucky	0.1080131826%
KY192	Barbourville City, Kentucky	0.0730470168%
KY193	Beattyville City, Kentucky	0.1448233239%
KY195	Bellevue City, Kentucky	0.0965704087%
KY205	Carrollton City, Kentucky	0.0887635005%
KY206	Catlettsburg City, Kentucky	0.1263485793%
KY207	Cave City City, Kentucky	0.0700133478%
KY208	Central City City, Kentucky	0.0844674819%
KY211	Cold Spring City, Kentucky	0.0750717640%
KY212	Corbin City, Kentucky	0.2036058550%
KY215	Crittenden City, Kentucky	0.1485297325%
KY216	Cynthiana City, Kentucky	0.2429917006%
KY218	Dayton City, Kentucky	0.1369669607%
KY220	Dry Ridge City, Kentucky	0.1124383105%
KY222	Edgewood City, Kentucky	0.0997328111%
KY228	Flatwoods City, Kentucky	0.0815134672%
KY230	Flemingsburg City, Kentucky	0.0974474500%
KY231	Fort Mitchell City, Kentucky	0.1045834032%
KY232	Fort Wright City, Kentucky	0.0888485558%
KY233	Franklin City, Kentucky	0.1059281781%
KY238	Harrodsburg City, Kentucky	0.1433328138%
KY240	Hazard City, Kentucky	0.2853655644%
KY242	Highland Heights City, Kentucky	0.1099203272%
KY247	Irvine City, Kentucky	0.0767877105%
KY252	La Grange City, Kentucky	0.0727992716%
KY255	Lebanon City, Kentucky	0.1122041854%
KY256	Leitchfield City, Kentucky	0.1135380642%
KY258	Louisa City, Kentucky	0.0866211036%
KY259	Ludlow City, Kentucky	0.0669617849%
KY261	Martin City, Kentucky	0.2943288201%

State ID	Qualifying Subdivision	Consolidated State Allocation
KY262	Mayfield City, Kentucky	0.2929381596%
KY263	Maysville City, Kentucky	0.1796298526%
KY264	Middlesborough City, Kentucky	0.9627869870%
KY267	Morgantown City, Kentucky	0.1066840944%
KY268	Mount Sterling City, Kentucky	0.1357736978%
KY269	Mount Vernon City, Kentucky	0.1195254191%
KY275	Owingsville City, Kentucky	0.1120741368%
KY276	Paris City, Kentucky	0.1357848757%
KY278	Pikeville City, Kentucky	0.9232553122%
KY280	Princeton City, Kentucky	0.1044295429%
KY283	Russellville City, Kentucky	0.1019054071%
KY286	Southgate City, Kentucky	0.0952700635%
KY288	Stanford City, Kentucky	0.0735805495%
KY291	Taylor Mill City, Kentucky	0.1020398235%
KY294	Union City, Kentucky	0.1260059161%
KY295	Versailles City, Kentucky	0.1700135829%
KY297	Walton City, Kentucky	0.0725720505%
KY301	Wilder City, Kentucky	0.1271712342%
KY302	Williamsburg City, Kentucky	0.2511273232%
KY303	Williamstown City, Kentucky	0.1029710636%

State ID	Qualifying Subdivision	Consolidated State Allocation
LA2	Acadia Parish, Louisiana	
LA3	Alexandria City, Louisiana	
LA4	Allen Parish, Louisiana	
LA5	Ascension Parish, Louisiana	
LA6	Assumption Parish, Louisiana	
LA7	Avoyelles Parish, Louisiana	
LA9	Baldwin Town, Louisiana	
LA10	Bastrop City, Louisiana	
LA12	Beauregard Parish, Louisiana	
LA13	Berwick Town, Louisiana	
LA14	Bienville Parish, Louisiana	
LA15	Bogalusa City, Louisiana	
LA16	Bossier City, Louisiana	
LA17	Bossier Parish, Louisiana	
LA19	Caddo Parish, Louisiana	
LA20	Calcasieu Parish, Louisiana	
LA21	Caldwell Parish, Louisiana	
LA22	Cameron Parish, Louisiana	
LA23	Catahoula Parish, Louisiana	
LA25	Claiborne Parish, Louisiana	
LA26	Concordia Parish, Louisiana	
LA27	Covington City, Louisiana	Allocations in Louisiana
LA29	De Soto Parish, Louisiana	will be made in
LA30	Delhi Town, Louisiana	accordance with the
LA32	Donaldsonville City, Louisiana	Louisiana State-Local
LA33	East Carroll Parish, Louisiana	Government Opioid
LA34	East Feliciana Parish, Louisiana	Litigation Memorandum
LA35	Eunice City, Louisiana	of Understanding.
LA36	Evangeline Parish, Louisiana	
LA37	Ferriday Town, Louisiana	
LA38	Franklin City, Louisiana	
LA39	Franklin Parish, Louisiana	
LA41	Gramercy Town, Louisiana	
LA42	Grant Parish, Louisiana	
LA43	Gretna City, Louisiana	
LA46	Iberia Parish, Louisiana	
LA47	Iberville Parish, Louisiana	
LA48	Jackson Parish, Louisiana	
LA49	Jean Lafitte Town, Louisiana	
LA50	Jefferson Davis Parish, Louisiana	
LA51	Jefferson Parish, Louisiana	
LA52	Kenner City, Louisiana	
LA54	Lafourche Parish, Louisiana	
LA55	Lake Charles City, Louisiana	
LA56	Lake Providence Town, Louisiana	
LA57	Lasalle Parish, Louisiana	
LA58	Lincoln Parish, Louisiana	
LA59	Livingston Parish, Louisiana	
LA60	Lutcher Town, Louisiana	

State ID	Qualifying Subdivision	Consolidated State Allocation
LA61	Madison Parish, Louisiana	
LA62	Madisonville Town, Louisiana	
LA63	Mandeville City, Louisiana	
LA65	Monroe City, Louisiana	
LA66	Morehouse Parish, Louisiana	
LA67	Morgan City, Louisiana	
LA68	Natchitoches City, Louisiana	
LA69	Natchitoches Parish, Louisiana	
LA70	New Iberia City, Louisiana	
LA72	New Roads City, Louisiana	
LA73	Opelousas City, Louisiana	
LA74	Ouachita Parish, Louisiana	
LA75	Patterson City, Louisiana	
LA76	Pearl River Town, Louisiana	
LA77	Pineville City, Louisiana	
LA78	Plaquemines Parish, Louisiana	
LA79	Pointe Coupee Parish, Louisiana	
LA80	Rapides Parish, Louisiana	
LA81	Red River Parish, Louisiana	
LA82	Richland Parish, Louisiana	
LA83	Richwood Town, Louisiana	
LA85	Sabine Parish, Louisiana	Allocations in Louisiana will be made in accordance with the Louisiana State-Local Government Opioid Litigation Memorandum of Understanding.
LA86	Shreveport City, Louisiana	
LA87	Slidell City, Louisiana	
LA88	St Bernard Parish, Louisiana	
LA89	St Charles Parish, Louisiana	
LA90	St Helena Parish, Louisiana	
LA91	St James Parish, Louisiana	
LA92	St John The Baptist Parish, Louisiana	
LA93	St Landry Parish, Louisiana	
LA94	St Martin Parish, Louisiana	
LA95	St Mary Parish, Louisiana	
LA96	St Tammany Parish, Louisiana	
LA97	St. Martinville City, Louisiana	
LA99	Tangipahoa Parish, Louisiana	
LA100	Tensas Parish, Louisiana	
LA102	Union Parish, Louisiana	
LA103	Vermilion Parish, Louisiana	
LA104	Vernon Parish, Louisiana	
LA105	Washington Parish, Louisiana	
LA106	Webster Parish, Louisiana	
LA107	West Baton Rouge Parish, Louisiana	
LA108	West Carroll Parish, Louisiana	
LA109	West Feliciana Parish, Louisiana	
LA110	West Monroe City, Louisiana	
LA111	Westwego City, Louisiana	
LA112	Winn Parish, Louisiana	

State ID	Qualifying Subdivision	Consolidated State Allocation
LA115	East Baton Rouge Parish, Louisiana	
LA116	Lafayette Parish, Louisiana	
LA117	Orleans Parish, Louisiana	
LA118	Terrebonne Parish, Louisiana	
LA119	Sheriff of Acadia Parish, Louisiana	
LA120	Sheriff of Allen Parish, Louisiana	
LA121	Sheriff of Ascension Parish, Louisiana	
LA122	Sheriff of Assumption Parish, Louisiana	
LA123	Sheriff of Avoyelles Parish, Louisiana	
LA124	Sheriff of Beauregard Parish, Louisiana	
LA125	Sheriff of Bienville Parish, Louisiana	
LA126	Sheriff of Bossier Parish, Louisiana	
LA127	Sheriff of Caddo Parish, Louisiana	
LA128	Sheriff of Calcasieu Parish, Louisiana	Allocations in Louisiana will be made in accordance with the Louisiana State-Local Government Opioid Litigation Memorandum of Understanding.
LA129	Sheriff of Caldwell Parish, Louisiana	
LA130	Sheriff of Cameron Parish, Louisiana	
LA131	Sheriff of Catahoula Parish, Louisiana	
LA132	Sheriff of Claiborne Parish, Louisiana	
LA133	Sheriff of Concordia Parish, Louisiana	
LA134	Sheriff of De Soto Parish, Louisiana	
LA135	Sheriff of East Baton Rouge Parish, Louisiana	
LA136	Sheriff of East Carroll Parish, Louisiana	
LA137	Sheriff of East Feliciana Parish, Louisiana	
LA138	Sheriff of Evangeline Parish, Louisiana	
LA139	Sheriff of Franklin Parish, Louisiana	
LA140	Sheriff of Grant Parish, Louisiana	
LA141	Sheriff of Iberia Parish, Louisiana	
LA142	Sheriff of Iberville Parish, Louisiana	

State ID	Qualifying Subdivision	Consolidated State Allocation
LA143	Sheriff of Jackson Parish, Louisiana	
LA144	Sheriff of Jefferson Davis Parish, Louisiana	
LA145	Sheriff of Jefferson Parish, Louisiana	
LA146	Sheriff of Lafayette Parish, Louisiana	
LA147	Sheriff of Lafourche Parish, Louisiana	
LA148	Sheriff of Lasalle Parish, Louisiana	
LA149	Sheriff of Lincoln Parish, Louisiana	
LA150	Sheriff of Livingston Parish, Louisiana	
LA151	Sheriff of Madison Parish, Louisiana	
LA152	Sheriff of Morehouse Parish, Louisiana	
LA153	Sheriff of Natchitoches Parish, Louisiana	Allocations in Louisiana will be made in accordance with the Louisiana State-Local Government Opioid Litigation Memorandum of Understanding.
LA154	Sheriff of Orleans Parish, Louisiana	
LA155	Sheriff of Ouachita Parish, Louisiana	
LA156	Sheriff of Plaquemines Parish, Louisiana	
LA157	Sheriff of Pointe Coupee Parish, Louisiana	
LA158	Sheriff of Rapides Parish, Louisiana	
LA159	Sheriff of Red River Parish, Louisiana	
LA160	Sheriff of Richland Parish, Louisiana	
LA161	Sheriff of Sabine Parish, Louisiana	
LA162	Sheriff of St Bernard Parish, Louisiana	
LA163	Sheriff of St Charles Parish, Louisiana	
LA164	Sheriff of St Helena Parish, Louisiana	
LA165	Sheriff of St James Parish, Louisiana	
LA166	Sheriff of St John The Baptist Parish, Louisiana	
LA167	Sheriff of St Landry Parish, Louisiana	

State ID	Qualifying Subdivision	Consolidated State Allocation
LA168	Sheriff of St Martin Parish, Louisiana	
LA169	Sheriff of St Mary Parish, Louisiana	
LA170	Sheriff of St Tammany Parish, Louisiana	
LA171	Sheriff of Tangipahoa Parish, Louisiana	
LA172	Sheriff of Tensas Parish, Louisiana	
LA173	Sheriff of Terrebonne Parish, Louisiana	Allocations in Louisiana will be made in accordance with the Louisiana State-Local Government Opioid Litigation Memorandum of Understanding.
LA174	Sheriff of Union Parish, Louisiana	
LA175	Sheriff of Vermilion Parish, Louisiana	
LA176	Sheriff of Vernon Parish, Louisiana	
LA177	Sheriff of Washington Parish, Louisiana	
LA178	Sheriff of Webster Parish, Louisiana	
LA179	Sheriff of West Baton Rouge Parish, Louisiana	
LA180	Sheriff of West Carroll Parish, Louisiana	
LA181	Sheriff of West Feliciana Parish, Louisiana	
LA182	Sheriff of Winn Parish, Louisiana	

State ID	Qualifying Subdivision	Consolidated State Allocation
ME1	Androscoggin County, Maine	1.6799535986%
ME2	Aroostook County, Maine	4.0537116218%
ME3	Auburn City, Maine	2.6283332826%
ME4	Augusta City, Maine	3.6779545807%
ME5	Bangor City, Maine	5.2042873123%
ME6	Biddeford City, Maine	2.7393997300%
ME7	Brunswick Town, Maine	1.6113929261%
ME8	Calais City, Maine	0.8369049504%
ME9	Cumberland County, Maine	3.5025701951%
ME10	Falmouth Town, Maine	1.2353278939%
ME11	Franklin County, Maine	1.9717572454%
ME12	Gorham Town, Maine	1.4582940317%
ME13	Hancock County, Maine	3.8494340111%
ME14	Kennebec County, Maine	4.9959268385%
ME15	Kennebunk Town, Maine	0.2185679049%
ME16	Knox County, Maine	2.1010369789%
ME17	Lewiston City, Maine	4.3451006968%
ME18	Lincoln County, Maine	2.1621727981%
ME19	Orono Town, Maine	0.2094180830%
ME20	Oxford County, Maine	3.8454418782%
ME21	Penobscot County, Maine	6.7801027597%
ME22	Piscataquis County, Maine	1.2760851978%
ME23	Portland City, Maine	7.2016026249%
ME24	Rockland City, Maine	0.6184398003%
ME25	Saco City, Maine	0.4366518238%
ME26	Sagadahoc County, Maine	1.9708146889%
ME27	Sanford City, Maine	2.6908215844%
ME28	Scarborough Town, Maine	1.8363769930%
ME29	Somerset County, Maine	3.6977198467%
ME30	South Portland City, Maine	2.2275994495%
ME31	Standish Town, Maine	0.0664145731%
ME32	Waldo County, Maine	2.4723925078%
ME33	Washington County, Maine	2.6998574469%
ME34	Waterville City, Maine	2.8132809688%
ME35	Wells Town, Maine	0.2541311729%
ME36	Westbrook City, Maine	1.5416150467%
ME37	Windham Town, Maine	0.1935482073%
ME38	York County, Maine	6.7950503019%
ME39	York Town, Maine	2.1005084476%

State ID	Qualifying Subdivision	Consolidated State Allocation
MD1	Aberdeen City, Maryland	0.0372796529%
MD2	Allegany County, Maryland	1.6120411494%
MD3	Annapolis City, Maryland	0.2413230958%
MD4	Anne Arundel County, Maryland	9.5850095156%
MD5	Baltimore City, Maryland	20.9970334354%
MD6	Baltimore County, Maryland	17.7565394434%
MD7	Bel Air Town, Maryland	0.0322364280%
MD8	Berlin Town, Maryland	0.0109236186%
MD9	Bowie City, Maryland	0.0263270946%
MD10	Calvert County, Maryland	1.6948343688%
MD11	Cambridge City, Maryland	0.0196746185%
MD12	Caroline County, Maryland	0.5865017850%
MD13	Carroll County, Maryland	2.9605563001%
MD14	Cecil County, Maryland	3.7958577634%
MD15	Charles County, Maryland	1.9663409179%
MD16	Charlestown, Maryland	0.0013846587%
MD17	College Park City, Maryland	0.0050334845%
MD18	Cottage City Town, Maryland	0.0015972023%
MD19	Cumberland City, Maryland	0.1627132426%
MD20	Dorchester County, Maryland	0.3951913125%
MD21	Easton Town, Maryland	0.0630108370%
MD22	Elkton Town, Maryland	0.0884110160%
MD23	Forest Heights Town, Maryland	0.0014812182%
MD24	Frederick City, Maryland	0.1530889274%
MD25	Frederick County, Maryland	3.4957333212%
MD26	Frostburg City, Maryland	0.0194678741%
MD27	Gaithersburg City, Maryland	0.0243966914%
MD28	Garrett County, Maryland	0.3513434690%
MD29	Grantsville Town, Maryland	0.0002207076%
MD30	Greenbelt City, Maryland	0.0369938028%
MD31	Hagerstown City, Maryland	0.1829328174%
MD32	Harford County, Maryland	5.1958110720%
MD33	Havre De Grace City, Maryland	0.0458009931%
MD34	Howard County, Maryland	3.2487213744%
MD35	Hyattsville City, Maryland	0.0127377562%
MD36	Kent County, Maryland	0.4683852152%
MD37	Laurel City, Maryland	0.0300516480%
MD38	Montgomery County, Maryland	8.5574378958%
MD39	Mountain Lake Park Town, Maryland	0.0001004445%
MD40	New Carrollton City, Maryland	0.0062727689%
MD41	North Brentwood Town, Maryland	0.0000662686%
MD42	North East Town, Maryland	0.0183814522%
MD43	Oakland Town, Maryland	0.0011777453%
MD44	Perryville Town, Maryland	0.0184160785%
MD45	Prince Georges County, Maryland	7.1382650655%
MD46	Queen Annes County, Maryland	0.7381792535%
MD47	Rockville City, Maryland	0.0611045878%
MD48	Salisbury City, Maryland	0.1347806691%

State ID	Qualifying Subdivision	Consolidated State Allocation
MD49	Seat Pleasant City, Maryland	0.0040128808%
MD50	Somerset County, Maryland	0.3875128839%
MD51	St Marys County, Maryland	1.3684562511%
MD52	Takoma Park City, Maryland	0.0195596479%
MD53	Talbot County, Maryland	0.4896824850%
MD54	Upper Marlboro Town, Maryland	0.0009443695%
MD55	Vienna Town, Maryland	0.0001582676%
MD56	Washington County, Maryland	3.0474490505%
MD57	Westminster City, Maryland	0.0440087573%
MD58	Wicomico County, Maryland	1.6694422411%
MD59	Worcester County, Maryland	0.9876031064%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA1	Abington Town, Massachusetts	0.2400899791%
MA2	Acton Town, Massachusetts	0.1586479343%
MA3	Acushnet Town, Massachusetts	0.1547305792%
MA4	Adams Town, Massachusetts	0.0189731986%
MA5	Agawam Town City, Massachusetts	0.4341901730%
MA6	Alford Town, Massachusetts	0.0007449491%
MA7	Amesbury Town City, Massachusetts	0.2580959424%
MA8	Amherst Town, Massachusetts	0.3675897982%
MA9	Andover Town, Massachusetts	0.7102727131%
MA10	Aquinnah Town, Massachusetts	0.0049293930%
MA11	Arlington Town, Massachusetts	0.3350233330%
MA12	Ashburnham Town, Massachusetts	0.0140160133%
MA13	Ashby Town, Massachusetts	0.0069876989%
MA14	Ashfield Town, Massachusetts	0.0027296132%
MA15	Ashland Town, Massachusetts	0.1613930923%
MA16	Athol Town, Massachusetts	0.0359559233%
MA17	Attleboro City, Massachusetts	0.9357205930%
MA18	Auburn Town, Massachusetts	0.3036683195%
MA19	Avon Town, Massachusetts	0.0739889948%
MA20	Ayer Town, Massachusetts	0.0179210686%
MA21	Barnstable County, Massachusetts	0.0639482242%
MA22	Barnstable Town City, Massachusetts	0.8578313582%
MA23	Barre Town, Massachusetts	0.0096522017%
MA24	Becket Town, Massachusetts	0.0067279376%
MA25	Bedford Town, Massachusetts	0.1982937972%
MA26	Belchertown, Massachusetts	0.3492785905%
MA27	Bellingham Town, Massachusetts	0.1961076781%
MA28	Belmont Town, Massachusetts	0.2420315678%
MA29	Berkley Town, Massachusetts	0.1212759115%
MA30	Berlin Town, Massachusetts	0.0397753511%
MA31	Bernardston Town, Massachusetts	0.0040751589%
MA32	Beverly City, Massachusetts	0.4801566147%
MA33	Billerica Town, Massachusetts	0.3870913124%
MA34	Blackstone Town, Massachusetts	0.0221473318%
MA35	Blandford Town, Massachusetts	0.0009007116%
MA36	Bolton Town, Massachusetts	0.0110088433%
MA37	Boston City, Massachusetts	10.5767780349%
MA38	Bourne Town, Massachusetts	0.3783946742%
MA39	Boxborough Town, Massachusetts	0.0399298051%
MA40	Boxford Town, Massachusetts	0.0912309051%
MA41	Boylston Town, Massachusetts	0.0562367737%
MA42	Braintree Town City, Massachusetts	0.4457226214%
MA43	Brewster Town, Massachusetts	0.1284470083%
MA44	Bridgewater Town, Massachusetts	0.0570448443%
MA45	Brimfield Town, Massachusetts	0.0355644757%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA46	Bristol County, Massachusetts	0.1015083030%
MA47	Brockton City, Massachusetts	2.1170344615%
MA48	Brookfield Town, Massachusetts	0.0372953453%
MA49	Brookline Town, Massachusetts	0.8244968622%
MA50	Buckland Town, Massachusetts	0.0031396937%
MA51	Burlington Town, Massachusetts	0.3034752912%
MA52	Cambridge City, Massachusetts	4.3053779748%
MA53	Canton Town, Massachusetts	0.2909840866%
MA54	Carlisle Town, Massachusetts	0.0526144568%
MA55	Carver Town, Massachusetts	0.2179547901%
MA56	Charlemont Town, Massachusetts	0.0066765925%
MA57	Charlton Town, Massachusetts	0.0305379405%
MA58	Chatham Town, Massachusetts	0.1685335181%
MA59	Chelmsford Town, Massachusetts	0.3162632088%
MA60	Chelsea City, Massachusetts	0.5236031155%
MA61	Cheshire Town, Massachusetts	0.0015830626%
MA62	Chester Town, Massachusetts	0.0096828727%
MA63	Chesterfield Town, Massachusetts	0.0168042468%
MA64	Chicopee City, Massachusetts	0.8816952708%
MA65	Chilmark Town, Massachusetts	0.0062328576%
MA66	Clarksburg Town, Massachusetts	0.0303920178%
MA67	Clinton Town, Massachusetts	0.2371744557%
MA68	Cohasset Town, Massachusetts	0.1430861241%
MA69	Colrain Town, Massachusetts	0.0016018525%
MA70	Concord Town, Massachusetts	0.1749597704%
MA71	Conway Town, Massachusetts	0.0354590115%
MA72	Cummington Town, Massachusetts	0.0009757143%
MA73	Dalton Town, Massachusetts	0.0123034626%
MA74	Danvers Town, Massachusetts	0.4037368656%
MA75	Dartmouth Town, Massachusetts	0.5505881937%
MA76	Dedham Town, Massachusetts	0.3188835370%
MA77	Deerfield Town, Massachusetts	0.0872700035%
MA78	Dennis Town, Massachusetts	0.0970183530%
MA79	Dighton Town, Massachusetts	0.0228752705%
MA80	Douglas Town, Massachusetts	0.1659192613%
MA81	Dover Town, Massachusetts	0.0683428114%
MA82	Dracut Town, Massachusetts	0.2045887296%
MA83	Dudley Town, Massachusetts	0.0179390734%
MA84	Dukes County, Massachusetts	0.0054256244%
MA85	Dunstable Town, Massachusetts	0.0041607864%
MA86	Duxbury Town, Massachusetts	0.3742011756%
MA87	East Bridgewater Town, Massachusetts	0.2308047825%
MA88	East Brookfield Town, Massachusetts	0.0052365739%
MA89	East Longmeadow Town, Massachusetts	0.2715713403%
MA90	Eastham Town, Massachusetts	0.0786916528%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA91	Easthampton Town City, Massachusetts	0.2670463228%
MA92	Easton Town, Massachusetts	0.5676857515%
MA93	Edgartown, Massachusetts	0.0809809332%
MA94	Egremont Town, Massachusetts	0.0050750540%
MA95	Erving Town, Massachusetts	0.0513752128%
MA96	Essex Town, Massachusetts	0.0113333487%
MA97	Everett City, Massachusetts	0.4368228534%
MA98	Fairhaven Town, Massachusetts	0.3265362625%
MA99	Fall River City, Massachusetts	2.1055901006%
MA100	Falmouth Town, Massachusetts	0.6632841320%
MA101	Fitchburg City, Massachusetts	0.6913634212%
MA102	Florida Town, Massachusetts	0.0170875086%
MA103	Foxborough Town, Massachusetts	0.2588100112%
MA104	Framingham Town, Massachusetts	0.6902310022%
MA105	Franklin Town City, Massachusetts	0.4506715894%
MA106	Freetown, Massachusetts	0.0347111837%
MA107	Gardner City, Massachusetts	0.3080580392%
MA108	Georgetown, Massachusetts	0.1361143365%
MA109	Gill Town, Massachusetts	0.0032293514%
MA110	Gloucester City, Massachusetts	0.4219402015%
MA111	Goshen Town, Massachusetts	0.0020598761%
MA112	Gosnold Town, Massachusetts	0.0011645031%
MA113	Grafton Town, Massachusetts	0.2787903277%
MA114	Granby Town, Massachusetts	0.1421420753%
MA115	Granville Town, Massachusetts	0.0205788719%
MA116	Great Barrington Town, Massachusetts	0.0238735954%
MA117	Greenfield Town City, Massachusetts	0.4522917084%
MA118	Groton Town, Massachusetts	0.0112861907%
MA119	Groveland Town, Massachusetts	0.0109548289%
MA120	Hadley Town, Massachusetts	0.1036658447%
MA121	Halifax Town, Massachusetts	0.0744074497%
MA122	Hamilton Town, Massachusetts	0.0148754814%
MA123	Hampden Town, Massachusetts	0.0086441416%
MA124	Hancock Town, Massachusetts	0.0080083205%
MA125	Hanover Town, Massachusetts	0.2979987927%
MA126	Hanson Town, Massachusetts	0.0306151413%
MA127	Hardwick Town, Massachusetts	0.0046489576%
MA128	Harvard Town, Massachusetts	0.1646144358%
MA129	Harwich Town, Massachusetts	0.2864309104%
MA130	Hatfield Town, Massachusetts	0.0627393895%
MA131	Haverhill City, Massachusetts	0.8142937865%
MA132	Hawley Town, Massachusetts	0.0002691301%
MA133	Heath Town, Massachusetts	0.0011790011%
MA134	Hingham Town, Massachusetts	0.4828724626%
MA135	Hinsdale Town, Massachusetts	0.0037015067%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA136	Holbrook Town, Massachusetts	0.1222501079%
MA137	Holden Town, Massachusetts	0.0343745879%
MA138	Holland Town, Massachusetts	0.0238040885%
MA139	Holliston Town, Massachusetts	0.1672190621%
MA140	Holyoke City, Massachusetts	0.9664659552%
MA141	Hopedale Town, Massachusetts	0.1372305825%
MA142	Hopkinton Town, Massachusetts	0.2027514537%
MA143	Hubbardston Town, Massachusetts	0.0076647112%
MA144	Hudson Town, Massachusetts	0.1994512345%
MA145	Hull Town, Massachusetts	0.1954841045%
MA146	Huntington Town, Massachusetts	0.0026561285%
MA147	Ipswich Town, Massachusetts	0.2079635850%
MA148	Kingston Town, Massachusetts	0.1369378473%
MA149	Lakeville Town, Massachusetts	0.0202228058%
MA150	Lancaster Town, Massachusetts	0.0116656002%
MA151	Lanesborough Town, Massachusetts	0.0575248505%
MA152	Lawrence City, Massachusetts	1.4758837913%
MA153	Lee Town, Massachusetts	0.1519018348%
MA154	Leicester Town, Massachusetts	0.1926291380%
MA155	Lenox Town, Massachusetts	0.1609461124%
MA156	Leominster City, Massachusetts	0.7902530708%
MA157	Leverett Town, Massachusetts	0.0395342227%
MA158	Lexington Town, Massachusetts	0.5090924410%
MA159	Leyden Town, Massachusetts	0.0007689206%
MA160	Lincoln Town, Massachusetts	0.1099619285%
MA161	Littleton Town, Massachusetts	0.1043597104%
MA162	Longmeadow Town, Massachusetts	0.2992108201%
MA163	Lowell City, Massachusetts	1.0242474790%
MA164	Ludlow Town, Massachusetts	0.3042665608%
MA165	Lunenburg Town, Massachusetts	0.1916440550%
MA166	Lynn City, Massachusetts	1.5917595154%
MA167	Lynnfield Town, Massachusetts	0.2333154069%
MA168	Malden City, Massachusetts	0.4659742140%
MA169	Manchester-By-The-Sea Town, Massachusetts	0.0201100664%
MA170	Mansfield Town, Massachusetts	0.6816694002%
MA171	Marblehead Town, Massachusetts	0.3485912672%
MA172	Marion Town, Massachusetts	0.0698025620%
MA173	Marlborough City, Massachusetts	0.3668295136%
MA174	Marshfield Town, Massachusetts	0.4930551259%
MA175	Mashpee Town, Massachusetts	0.3459150927%
MA176	Mattapoisett Town, Massachusetts	0.0843720139%
MA177	Maynard Town, Massachusetts	0.1014940666%
MA178	Medfield Town, Massachusetts	0.2083772770%
MA179	Medford City, Massachusetts	0.3972200658%
MA180	Medway Town, Massachusetts	0.1940731867%
MA181	Melrose City, Massachusetts	0.2296395466%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA182	Mendon Town, Massachusetts	0.0164096065%
MA183	Merrimac Town, Massachusetts	0.0100336001%
MA184	Methuen Town City, Massachusetts	0.7149217230%
MA185	Middleborough Town, Massachusetts	0.3933419654%
MA186	Middlefield Town, Massachusetts	0.0003252381%
MA187	Middleton Town, Massachusetts	0.0917093411%
MA188	Milford Town, Massachusetts	0.5323916620%
MA189	Millbury Town, Massachusetts	0.2332340712%
MA190	Millis Town, Massachusetts	0.0999797258%
MA191	Millville Town, Massachusetts	0.0062130209%
MA192	Milton Town, Massachusetts	0.3520463069%
MA193	Monroe Town, Massachusetts	0.0001025332%
MA194	Monson Town, Massachusetts	0.1266258006%
MA195	Montague Town, Massachusetts	0.0291412591%
MA196	Monterey Town, Massachusetts	0.0042137017%
MA197	Montgomery Town, Massachusetts	0.0002324400%
MA198	Mt Washington Town, Massachusetts	0.0001746048%
MA199	Nahant Town, Massachusetts	0.0355497159%
MA200	Nantucket Town, Massachusetts	0.1102324194%
MA201	Natick Town, Massachusetts	0.3421702489%
MA202	Needham Town, Massachusetts	0.4914063771%
MA203	New Ashford Town, Massachusetts	0.0002677169%
MA204	New Bedford City, Massachusetts	2.3617391681%
MA205	New Braintree Town, Massachusetts	0.0013480056%
MA206	New Marlborough Town, Massachusetts	0.0032940955%
MA207	New Salem Town, Massachusetts	0.0024476600%
MA208	Newbury Town, Massachusetts	0.0135400372%
MA209	Newburyport City, Massachusetts	0.2905748435%
MA210	Newton City, Massachusetts	1.0088865481%
MA211	Norfolk County, Massachusetts	0.0563017795%
MA212	Norfolk Town, Massachusetts	0.0892988423%
MA213	North Adams City, Massachusetts	0.3428675166%
MA214	North Andover Town, Massachusetts	0.4494773051%
MA215	North Attleborough Town, Massachusetts	0.6369959028%
MA216	North Brookfield Town, Massachusetts	0.0698725924%
MA217	North Reading Town, Massachusetts	0.1664230820%
MA218	Northampton City, Massachusetts	0.5405649568%
MA219	Northborough Town, Massachusetts	0.2422641125%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA220	Northbridge Town, Massachusetts	0.2823159735%
MA221	Northfield Town, Massachusetts	0.0153010544%
MA222	Norton Town, Massachusetts	0.4563834066%
MA223	Norwell Town, Massachusetts	0.2753854817%
MA224	Norwood Town, Massachusetts	0.3412282413%
MA225	Oak Bluffs Town, Massachusetts	0.0769116887%
MA226	Oakham Town, Massachusetts	0.0026269230%
MA227	Orange Town, Massachusetts	0.1376712816%
MA228	Orleans Town, Massachusetts	0.0935051641%
MA229	Otis Town, Massachusetts	0.0035269019%
MA230	Oxford Town, Massachusetts	0.2336229019%
MA231	Palmer Town City, Massachusetts	0.1621757259%
MA232	Paxton Town, Massachusetts	0.0115100470%
MA233	Peabody City, Massachusetts	0.7162928627%
MA234	Pelham Town, Massachusetts	0.0235476246%
MA235	Pembroke Town, Massachusetts	0.3388218249%
MA236	Pepperell Town, Massachusetts	0.0102363113%
MA237	Peru Town, Massachusetts	0.0011523603%
MA238	Petersham Town, Massachusetts	0.0159775433%
MA239	Phillipston Town, Massachusetts	0.0039835646%
MA240	Pittsfield City, Massachusetts	1.1541979937%
MA241	Plainfield Town, Massachusetts	0.0004986914%
MA242	Plainville Town, Massachusetts	0.0738004154%
MA243	Plymouth County, Massachusetts	0.0008974666%
MA244	Plymouth Town, Massachusetts	1.0727134492%
MA245	Plympton Town, Massachusetts	0.0311939123%
MA246	Princeton Town, Massachusetts	0.0094015998%
MA247	Provincetown, Massachusetts	0.0895015011%
MA248	Quincy City, Massachusetts	1.0277365393%
MA249	Randolph Town, Massachusetts	0.3517891103%
MA250	Raynham Town, Massachusetts	0.0739771661%
MA251	Reading Town, Massachusetts	0.2463903024%
MA252	Rehoboth Town, Massachusetts	0.0342848256%
MA253	Revere City, Massachusetts	0.5754964378%
MA254	Richmond Town, Massachusetts	0.0346755405%
MA255	Rochester Town, Massachusetts	0.0656757963%
MA256	Rockland Town, Massachusetts	0.3048431858%
MA257	Rockport Town, Massachusetts	0.1188536886%
MA258	Rowe Town, Massachusetts	0.0242459391%
MA259	Rowley Town, Massachusetts	0.0134543050%
MA260	Royalston Town, Massachusetts	0.0020739031%
MA261	Russell Town, Massachusetts	0.0012348998%
MA262	Rutland Town, Massachusetts	0.0122272562%
MA263	Salem City, Massachusetts	0.6254547137%
MA264	Salisbury Town, Massachusetts	0.0319290215%
MA265	Sandisfield Town, Massachusetts	0.0020719142%
MA266	Sandwich Town, Massachusetts	0.4944903815%
MA267	Saugus Town, Massachusetts	0.3330802265%
MA268	Savoy Town, Massachusetts	0.0103246605%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA269	Scituate Town, Massachusetts	0.3938536371%
MA270	Seekonk Town, Massachusetts	0.3325159013%
MA271	Sharon Town, Massachusetts	0.3157804286%
MA272	Sheffield Town, Massachusetts	0.0066580643%
MA273	Shelburne Town, Massachusetts	0.0145706034%
MA274	Sherborn Town, Massachusetts	0.0361347676%
MA275	Shirley Town, Massachusetts	0.0049654026%
MA276	Shrewsbury Town, Massachusetts	0.6471205738%
MA277	Shutesbury Town, Massachusetts	0.0358178516%
MA278	Somerset Town, Massachusetts	0.2943717652%
MA279	Somerville City, Massachusetts	0.5538327759%
MA280	South Hadley Town, Massachusetts	0.3289508962%
MA281	Southampton Town, Massachusetts	0.0773861993%
MA282	Southborough Town, Massachusetts	0.2173688486%
MA283	Southbridge Town City, Massachusetts	0.2906114812%
MA284	Southwick Town, Massachusetts	0.0165255910%
MA285	Spencer Town, Massachusetts	0.0203153945%
MA286	Springfield City, Massachusetts	3.4410224370%
MA287	Sterling Town, Massachusetts	0.0196759620%
MA288	Stockbridge Town, Massachusetts	0.0092305018%
MA289	Stoneham Town, Massachusetts	0.1669780908%
MA290	Stoughton Town, Massachusetts	0.3118943726%
MA291	Stow Town, Massachusetts	0.0087733680%
MA292	Sturbridge Town, Massachusetts	0.1235688557%
MA293	Sudbury Town, Massachusetts	0.1950193814%
MA294	Sunderland Town, Massachusetts	0.0394445127%
MA295	Sutton Town, Massachusetts	0.1720631416%
MA296	Swampscott Town, Massachusetts	0.2802270489%
MA297	Swansea Town, Massachusetts	0.3127370397%
MA298	Taunton City, Massachusetts	1.3156698571%
MA299	Templeton Town, Massachusetts	0.0167725290%
MA300	Tewksbury Town, Massachusetts	0.2526508477%
MA301	Tisbury Town, Massachusetts	0.0665566713%
MA302	Tolland Town, Massachusetts	0.0005593530%
MA303	Topsfield Town, Massachusetts	0.0713350646%
MA304	Townsend Town, Massachusetts	0.0093843801%
MA305	Truro Town, Massachusetts	0.0604250384%
MA306	Tyngsborough Town, Massachusetts	0.1162396935%
MA307	Tyringham Town, Massachusetts	0.0012803829%
MA308	Upton Town, Massachusetts	0.0211017442%
MA309	Uxbridge Town, Massachusetts	0.2255606716%
MA310	Wakefield Town, Massachusetts	0.2116065761%
MA311	Wales Town, Massachusetts	0.0147604390%
MA312	Walpole Town, Massachusetts	0.3194149930%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA313	Waltham City, Massachusetts	0.5322671985%
MA314	Ware Town, Massachusetts	0.2035588439%
MA315	Wareham Town, Massachusetts	0.3595394490%
MA316	Warren Town, Massachusetts	0.0179304373%
MA317	Warwick Town, Massachusetts	0.0065997057%
MA318	Washington Town, Massachusetts	0.0004074112%
MA319	Watertown Town City, Massachusetts	0.2540965713%
MA320	Wayland Town, Massachusetts	0.2147389946%
MA321	Webster Town, Massachusetts	0.2405963644%
MA322	Wellesley Town, Massachusetts	0.4811483972%
MA323	Wellfleet Town, Massachusetts	0.0667808417%
MA324	Wendell Town, Massachusetts	0.0010508215%
MA325	Wenham Town, Massachusetts	0.0112119209%
MA326	West Boylston Town, Massachusetts	0.1222726663%
MA327	West Bridgewater Town, Massachusetts	0.1467598909%
MA328	West Brookfield Town, Massachusetts	0.0059191866%
MA329	West Newbury Town, Massachusetts	0.0086981560%
MA330	West Springfield Town City, Massachusetts	0.4627594653%
MA331	West Stockbridge Town, Massachusetts	0.0028401544%
MA332	West Tisbury Town, Massachusetts	0.0099183484%
MA333	Westborough Town, Massachusetts	0.5070384269%
MA334	Westfield City, Massachusetts	0.6538385669%
MA335	Westford Town, Massachusetts	0.2939962811%
MA336	Westhampton Town, Massachusetts	0.0199373981%
MA337	Westminster Town, Massachusetts	0.0226744436%
MA338	Weston Town, Massachusetts	0.2254658323%
MA339	Westport Town, Massachusetts	0.2811335179%
MA340	Westwood Town, Massachusetts	0.2903783084%
MA341	Weymouth Town City, Massachusetts	0.5656639786%
MA342	Whately Town, Massachusetts	0.0314223222%
MA343	Whitman Town, Massachusetts	0.0448742719%
MA344	Wilbraham Town, Massachusetts	0.0313150261%
MA345	Williamsburg Town, Massachusetts	0.0343998679%
MA346	Williamstown, Massachusetts	0.0783021941%
MA347	Wilmington Town, Massachusetts	0.2467559990%
MA348	Winchendon Town, Massachusetts	0.1830720373%
MA349	Winchester Town, Massachusetts	0.2570095300%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA350	Windsor Town, Massachusetts	0.0005238144%
MA351	Winthrop Town City, Massachusetts	0.1505890537%
MA352	Woburn City, Massachusetts	0.3503541163%
MA353	Worcester City, Massachusetts	3.7929503518%
MA354	Worthington Town, Massachusetts	0.0015069609%
MA355	Wrentham Town, Massachusetts	0.0961794021%
MA356	Yarmouth Town, Massachusetts	0.1308391883%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI1	Ada Township, Michigan	0.0042278554%
MI2	Adrian City, Michigan	0.0328126789%
MI3	Alcona County, Michigan	0.0934629817%
MI4	Alger County, Michigan	0.0879525875%
MI5	Algoma Township, Michigan	0.0016941585%
MI6	Allegan County, Michigan	0.4460242903%
MI7	Allen Park City, Michigan	0.0620457416%
MI8	Allendale Charter Township, Michigan	0.0044901249%
MI9	Alpena County, Michigan	0.3552566921%
MI10	Alpine Charter Township, Michigan	0.0014679355%
MI11	Ann Arbor City, Michigan	0.2674253148%
MI12	Antrim County, Michigan	0.2666725680%
MI13	Antwerp Township, Michigan	0.0007581775%
MI14	Arenac County, Michigan	0.1805504304%
MI15	Auburn Hills City, Michigan	0.0679438259%
MI16	Bangor Charter Township, Michigan	0.0063071908%
MI17	Baraga County, Michigan	0.0830045795%
MI18	Barry County, Michigan	0.2499588316%
MI19	Bath Charter Township, Michigan	0.0310575579%
MI20	Battle Creek City, Michigan	0.1976545014%
MI21	Bay City, Michigan	0.0662640083%
MI22	Bay County, Michigan	1.1889740912%
MI23	Bedford Township, Michigan	0.0238194433%
MI24	Benton Charter Township, Michigan	0.0523760917%
MI25	Benzie County, Michigan	0.1559708495%
MI26	Berkley City, Michigan	0.0207220905%
MI27	Berrien County, Michigan	1.4353008205%
MI28	Beverly Hills Village, Michigan	0.0265585450%
MI29	Big Rapids City, Michigan	0.0141485793%
MI30	Birmingham City, Michigan	0.0595211261%
MI278	Blackman Charter Township, Michigan	0.0000000000%
MI31	Bloomfield Charter Township, Michigan	0.1382971973%
MI32	Branch County, Michigan	0.3823019725%
MI33	Brandon Charter Township, Michigan	0.0172309269%
MI34	Brighton Township, Michigan	0.0005844508%
MI35	Brownstown Charter Township, Michigan	0.0597655290%
MI36	Burton City, Michigan	0.0191573337%
MI37	Byron Township, Michigan	0.0082898139%
MI38	Cadillac City, Michigan	0.0572782844%
MI39	Caledonia Charter Township, Kent County, Michigan	0.0026644035%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI40	Calhoun County, Michigan	1.7844560932%
MI41	Cannon Township, Michigan	0.0031972842%
MI42	Canton Charter Township, Michigan	0.2635380816%
MI43	Cascade Charter Township, Michigan	0.0117082940%
MI44	Cass County, Michigan	0.4127454052%
MI45	Charlevoix County, Michigan	0.2142857345%
MI46	Cheboygan County, Michigan	0.3054122146%
MI47	Chesterfield Charter Township, Michigan	0.1219762582%
MI48	Chippewa County, Michigan	0.2775926422%
MI49	Clare County, Michigan	0.2705014687%
MI50	Clawson City, Michigan	0.0134773906%
MI51	Clinton Charter Township, Michigan	0.6524315825%
MI52	Clinton County, Michigan	0.5402667258%
MI53	Coldwater City, Michigan	0.0074666730%
MI54	Commerce Charter Township, Michigan	0.0192121087%
MI55	Comstock Charter Township, Michigan	0.0081656838%
MI56	Cooper Charter Township, Michigan	0.0009266020%
MI57	Crawford County, Michigan	0.2886252314%
MI58	Davison Township, Michigan	0.0085451532%
MI59	Dearborn City, Michigan	0.2895118016%
MI60	Dearborn Heights City, Michigan	0.1017944247%
MI61	Delhi Charter Township, Michigan	0.0190090980%
MI62	Delta Charter Township, Michigan	0.0391807240%
MI63	Delta County, Michigan	0.2697501609%
MI64	Detroit City, Michigan	7.3863527308%
MI65	Dewitt Charter Township, Michigan	0.0355251274%
MI66	Dickinson County, Michigan	0.2772928270%
MI67	East Bay Township, Michigan	0.0014150822%
MI68	East Grand Rapids City, Michigan	0.0200332982%
MI69	East Lansing City, Michigan	0.1928772515%
MI70	Eastpointe City, Michigan	0.1620457585%
MI71	Eaton County, Michigan	1.0040379149%
MI72	Egelston Township, Michigan	0.0057198661%
MI73	Emmet County, Michigan	0.1751859110%
MI74	Emmett Charter Township, Michigan	0.0078634499%
MI75	Escanaba City, Michigan	0.0187485817%
MI76	Farmington City, Michigan	0.0212789632%
MI77	Farmington Hills City, Michigan	0.1595279696%
MI78	Fenton Charter Township, Michigan	0.0017899625%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI79	Fenton City, Michigan	0.0463367531%
MI80	Ferndale City, Michigan	0.0860957347%
MI81	Flat Rock City, Michigan	0.0165965372%
MI82	Flint Charter Township, Michigan	0.0247094958%
MI83	Flint City, Michigan	2.8492826162%
MI84	Flushing Charter Township, Michigan	0.0036163716%
MI85	Fort Gratiot Charter Township, Michigan	0.0091219411%
MI86	Fraser City, Michigan	0.0773787868%
MI87	Frenchtown Charter Township, Michigan	0.0472286300%
MI88	Fruitport Charter Township, Michigan	0.0124893804%
MI89	Gaines Township, Kent County, Michigan	0.0086869609%
MI90	Garden City, Michigan	0.0348032319%
MI91	Garfield Charter Township, Michigan	0.0003928875%
MI92	Genesee Charter Township, Michigan	0.0125078610%
MI93	Genesee County, Michigan	2.1444091585%
MI94	Genoa Township, Michigan	0.0000730563%
MI95	Georgetown Charter Township, Michigan	0.0069588066%
MI96	Gladwin County, Michigan	0.2077497604%
MI97	Gogebic County, Michigan	0.0721438406%
MI98	Grand Blanc Charter Township, Michigan	0.0202728576%
MI99	Grand Haven Charter Township, Michigan	0.0108943696%
MI100	Grand Haven City, Michigan	0.0335954698%
MI101	Grand Rapids Charter Township, Michigan	0.0036296214%
MI102	Grand Rapids City, Michigan	1.3440305744%
MI103	Grand Traverse County, Michigan	0.9563577517%
MI104	Grandville City, Michigan	0.0268602038%
MI105	Gratiot County, Michigan	0.3525171058%
MI106	Green Oak Township, Michigan	0.0310802595%
MI107	Grosse Ile Township, Michigan	0.0206969233%
MI108	Grosse Pointe Park City, Michigan	0.0273525288%
MI109	Grosse Pointe Woods City, Michigan	0.0194917954%
MI110	Hamburg Township, Michigan	0.0327814289%
MI111	Hamtramck City, Michigan	0.1045696825%
MI112	Harper Woods City, Michigan	0.0291877050%
MI113	Harrison Charter Township, Michigan	0.1197690060%
MI114	Hartland Township, Michigan	0.0002817888%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI115	Hazel Park City, Michigan	0.0425097355%
MI116	Highland Charter Township, Michigan	0.0169953269%
MI117	Highland Park City, Michigan	0.0226020911%
MI118	Hillsdale County, Michigan	0.4179676993%
MI119	Holland Charter Township, Michigan	0.0168424444%
MI120	Holland City, Michigan	0.0955964916%
MI121	Holly Township, Michigan	0.0023667091%
MI122	Houghton County, Michigan	0.2492719347%
MI123	Huron Charter Township, Michigan	0.0404726791%
MI124	Huron County, Michigan	0.1691383539%
MI125	Independence Charter Township, Michigan	0.0476500991%
MI126	Ingham County, Michigan	2.3910799665%
MI127	Inkster City, Michigan	0.0963789326%
MI128	Ionia City, Michigan	0.0259372614%
MI129	Ionia County, Michigan	0.5298085345%
MI130	Iosco County, Michigan	0.3597971837%
MI131	Iron County, Michigan	0.1234778574%
MI132	Iron Mountain City, Michigan	0.0102890396%
MI133	Isabella County, Michigan	0.6406627159%
MI134	Jackson City, Michigan	0.1975960490%
MI135	Jackson County, Michigan	0.6266962818%
MI136	Kalamazoo Charter Township, Michigan	0.0300335110%
MI137	Kalamazoo City, Michigan	0.2186435127%
MI138	Kalamazoo County, Michigan	2.1433241424%
MI139	Kalkaska County, Michigan	0.0950485976%
MI140	Kent County, Michigan	3.0032910409%
MI141	Kentwood City, Michigan	0.0821691991%
MI142	Keweenaw County, Michigan	0.0039070602%
MI143	Lake County, Michigan	0.0815750583%
MI144	Lansing City, Michigan	0.6157258774%
MI145	Lapeer County, Michigan	0.4570551035%
MI146	Leelanau County, Michigan	0.1385869050%
MI147	Lenawee County, Michigan	0.8823790089%
MI148	Lenox Township, Michigan	0.0064611477%
MI149	Leoni Township, Michigan	0.0052492697%
MI150	Lincoln Charter Township, Michigan	0.0103038346%
MI151	Lincoln Park City, Michigan	0.0917234908%
MI152	Livingston County, Michigan	1.4441655813%
MI153	Livonia City, Michigan	0.4479739512%
MI154	Luce County, Michigan	0.0715137120%
MI155	Lyon Charter Township, Michigan	0.0034804545%
MI156	Mackinac County, Michigan	0.0525087280%
MI157	Macomb County, Michigan	8.9600697690%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI158	Macomb Township, Michigan	0.0624612667%
MI159	Madison Heights City, Michigan	0.0833167256%
MI160	Manistee County, Michigan	0.3495467119%
MI161	Marion Township, Livingston County, Michigan	0.0001148028%
MI162	Marquette City, Michigan	0.0180973752%
MI163	Marquette County, Michigan	0.6035272233%
MI164	Mason County, Michigan	0.2785769407%
MI165	Mecosta County, Michigan	0.1917457546%
MI166	Melvindale City, Michigan	0.0300027854%
MI167	Menominee County, Michigan	0.0912256468%
MI168	Meridian Charter Township, Michigan	0.0408752583%
MI169	Midland City, Michigan	0.1745254871%
MI170	Midland County, Michigan	0.3108652798%
MI171	Milford Charter Township, Michigan	0.0037106999%
MI172	Missaukee County, Michigan	0.0578937210%
MI173	Monitor Charter Township, Michigan	0.0025502597%
MI174	Monroe Charter Township, Michigan	0.0069121111%
MI175	Monroe City, Michigan	0.1213473624%
MI176	Monroe County, Michigan	1.7767045087%
MI177	Montcalm County, Michigan	0.6957831869%
MI178	Montmorency County, Michigan	0.0985847841%
MI179	Mount Clemens City, Michigan	0.0290390165%
MI180	Mount Morris Charter Township, Michigan	0.0143743799%
MI181	Mount Pleasant City, Michigan	0.0206549613%
MI182	Mundy Charter Township, Michigan	0.0087055516%
MI183	Muskegon Charter Township, Michigan	0.0208333463%
MI184	Muskegon City, Michigan	0.1009248080%
MI185	Muskegon County, Michigan	1.9100367830%
MI186	Muskegon Heights City, Michigan	0.0288916451%
MI187	New Baltimore City, Michigan	0.0277364435%
MI188	Newaygo County, Michigan	0.5231811022%
MI189	Niles City, Michigan	0.0336753397%
MI190	Niles Township, Michigan	0.0124323128%
MI191	Northville Charter Township, Michigan	0.0937410207%
MI192	Norton Shores City, Michigan	0.0405173975%
MI193	Novi City, Michigan	0.0846232347%
MI194	Oak Park City, Michigan	0.0599120079%
MI195	Oakland Charter Township, Michigan	0.0158387451%
MI196	Oakland County, Michigan	6.0626269110%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI197	Oceana County, Michigan	0.2437641356%
MI198	Oceola Township, Michigan	0.0002087325%
MI199	Ogemaw County, Michigan	0.6231250992%
MI200	Ontonagon County, Michigan	0.0564870701%
MI201	Orion Charter Township, Michigan	0.0279774995%
MI202	Osceola County, Michigan	0.2155121164%
MI203	Oscoda County, Michigan	0.0566748663%
MI204	Oshtemo Charter Township, Michigan	0.0071811704%
MI205	Otsego County, Michigan	0.3179204956%
MI206	Ottawa County, Michigan	0.8561297014%
MI207	Owosso City, Michigan	0.0346613348%
MI208	Oxford Charter Township, Michigan	0.0127384634%
MI209	Park Township, Ottawa County, Michigan	0.0040071188%
MI210	Pittsfield Charter Township, Michigan	0.0274648128%
MI211	Plainfield Charter Township, Michigan	0.0085009554%
MI212	Plymouth Charter Township, Michigan	0.0357383127%
MI213	Pontiac City, Michigan	0.3248498872%
MI214	Port Huron Charter Township, Michigan	0.0083327500%
MI215	Port Huron City, Michigan	0.1504374166%
MI216	Portage City, Michigan	0.0567022991%
MI217	Presque Isle County, Michigan	0.1629846266%
MI218	Redford Charter Township, Michigan	0.1223763279%
MI219	Riverview City, Michigan	0.0278625766%
MI220	Rochester City, Michigan	0.0230459632%
MI221	Rochester Hills City, Michigan	0.0390185719%
MI222	Romulus City, Michigan	0.1043054243%
MI223	Roscommon County, Michigan	0.4301835283%
MI224	Roseville City, Michigan	0.2467127304%
MI225	Royal Oak City, Michigan	0.1498737243%
MI226	Saginaw Charter Township, Michigan	0.0399524841%
MI227	Saginaw City, Michigan	0.2486892685%
MI228	Saginaw County, Michigan	1.8697499899%
MI229	Sanilac County, Michigan	0.3884583961%
MI230	Sault Ste. Marie City, Michigan	0.1102861372%
MI231	Schoolcraft County, Michigan	0.0455825815%
MI232	Scio Charter Township, Michigan	0.0029747576%
MI233	Shelby Charter Township, Michigan	0.2924370238%
MI234	Shiawassee County, Michigan	0.8126038392%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI235	South Lyon City, Michigan	0.0149498906%
MI236	Southfield City, Michigan	0.2271237501%
MI237	Southfield Township, Michigan	0.0000642545%
MI238	Southgate City, Michigan	0.0512897499%
MI239	Spring Lake Township, Michigan	0.0060017466%
MI240	Springfield Charter Township, Michigan	0.0025808909%
MI241	St Clair County, Michigan	2.2355263751%
MI242	St Joseph County, Michigan	0.2462634133%
MI243	St. Clair Shores City, Michigan	0.1962330188%
MI244	Sterling Heights City, Michigan	1.0160154348%
MI245	Sturgis City, Michigan	0.0345993898%
MI246	Summit Township, Jackson County, Michigan	0.0084993840%
MI247	Superior Charter Township, Michigan	0.0069991428%
MI248	Taylor City, Michigan	0.2173451175%
MI249	Texas Charter Township, Michigan	0.0030056684%
MI250	Thomas Township, Michigan	0.0073384407%
MI251	Traverse City, Michigan	0.0694748526%
MI252	Trenton City, Michigan	0.0278175688%
MI253	Troy City, Michigan	0.1362571155%
MI254	Tuscola County, Michigan	0.4964108264%
MI255	Tyrone Township, Livingston County, Michigan	0.0055627194%
MI256	Union Charter Township, Michigan	0.0000295731%
MI257	Van Buren Charter Township, Michigan	0.0769291242%
MI258	Van Buren County, Michigan	0.4404295489%
MI259	Vienna Charter Township, Genesee County, Michigan	0.0049907472%
MI260	Walker City, Michigan	0.0333201255%
MI261	Warren City, Michigan	1.2684334598%
MI262	Washington Township, Macomb County, Michigan	0.0466960473%
MI263	Washtenaw County, Michigan	2.6615283392%
MI264	Waterford Charter Township, Michigan	0.1262119884%
MI265	Wayne City, Michigan	0.0938477408%
MI266	Wayne County, Michigan	11.4087490300%
MI267	West Bloomfield Charter Township, Michigan	0.1514104788%
MI268	Westland City, Michigan	0.3653115305%
MI269	Wexford County, Michigan	0.3345380363%
MI270	White Lake Charter Township, Michigan	0.0337978902%
MI271	Wixom City, Michigan	0.0213271541%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI272	Woodhaven City, Michigan	0.0330180645%
MI273	Wyandotte City, Michigan	0.0563902282%
MI274	Wyoming City, Michigan	0.1474722212%
MI275	Ypsilanti Charter Township, Michigan	0.0334144094%
MI276	Ypsilanti City, Michigan	0.0518771364%
MI277	Zeeland Charter Township, Michigan	0.0035509487%

State ID	Qualifying Subdivision	Consolidated State Allocation
MN1	Aitkin County, Minnesota	0.5760578506%
MN4	Andover City, Minnesota	0.1364919451%
MN6	Anoka County, Minnesota	5.0386504681%
MN7	Apple Valley City, Minnesota	0.2990817345%
MN10	Becker County, Minnesota	0.6619330684%
MN11	Beltrami County, Minnesota	0.7640787093%
MN13	Benton County, Minnesota	0.6440948102%
MN15	Big Stone County, Minnesota	0.1194868775%
MN16	Blaine City, Minnesota	0.4249516913%
MN17	Bloomington City, Minnesota	0.4900195550%
MN18	Blue Earth County, Minnesota	0.6635420705%
MN20	Brooklyn Center City, Minnesota	0.1413853902%
MN21	Brooklyn Park City, Minnesota	0.2804136235%
MN22	Brown County, Minnesota	0.3325325416%
MN24	Burnsville City, Minnesota	0.5135361297%
MN25	Carlton County, Minnesota	0.9839591749%
MN26	Carver County, Minnesota	1.1452829660%
MN27	Cass County, Minnesota	0.8895681513%
MN31	Chippewa County, Minnesota	0.2092611794%
MN32	Chisago County, Minnesota	0.9950193750%
MN33	Clay County, Minnesota	0.9428475282%
MN34	Clearwater County, Minnesota	0.1858592043%
MN37	Cook County, Minnesota	0.1074594960%
MN38	Coon Rapids City, Minnesota	0.5772642445%
MN39	Cottage Grove City, Minnesota	0.2810994719%
MN40	Cottonwood County, Minnesota	0.1739065270%
MN41	Crow Wing County, Minnesota	1.1394859175%
MN43	Dakota County, Minnesota	4.4207140603%
MN44	Dodge County, Minnesota	0.2213963258%
MN45	Douglas County, Minnesota	0.6021779472%
MN46	Duluth City, Minnesota	1.1502115380%
MN47	Eagan City, Minnesota	0.3657951576%
MN49	Eden Prairie City, Minnesota	0.2552171573%
MN50	Edina City, Minnesota	0.1973054822%
MN54	Faribault County, Minnesota	0.2169409335%
MN57	Fillmore County, Minnesota	0.2329591105%
MN59	Freeborn County, Minnesota	0.3507169824%
MN62	Goodhue County, Minnesota	0.5616542387%
MN64	Grant County, Minnesota	0.0764556498%
MN67	Hennepin County, Minnesota	19.0624622262%
MN70	Houston County, Minnesota	0.3099019273%
MN71	Hubbard County, Minnesota	0.4582368775%
MN74	Inver Grove Heights City, Minnesota	0.2193400520%
MN75	Isanti County, Minnesota	0.7712992708%
MN76	Itasca County, Minnesota	1.1406408131%
MN77	Jackson County, Minnesota	0.1408950444%
MN78	Kanabec County, Minnesota	0.3078966750%
MN79	Kandiyohi County, Minnesota	0.1581167542%

State ID	Qualifying Subdivision	Consolidated State Allocation
MN80	Kittson County, Minnesota	0.0812834506%
MN81	Koochiching County, Minnesota	0.2612581866%
MN82	Lac Qui Parle County, Minnesota	0.0985665133%
MN83	Lake County, Minnesota	0.1827750321%
MN84	Lake of the Woods County, Minnesota	0.1123105028%
MN85	Lakeville City, Minnesota	0.2822249627%
MN86	Le Sueur County, Minnesota	0.3225703347%
MN87	Lincoln County, Minnesota	0.1091919984%
MN90	Lyon County, Minnesota	0.2935118186%
MN91	Mahnomen County, Minnesota	0.1416417688%
MN92	Mankato City, Minnesota	0.3698584321%
MN93	Maple Grove City, Minnesota	0.1814019047%
MN94	Maplewood City, Minnesota	0.1875101678%
MN96	Marshall County, Minnesota	0.1296352091%
MN97	Martin County, Minnesota	0.2543064014%
MN98	McLeod County, Minnesota	0.1247104518%
MN99	Meeker County, Minnesota	0.3744031515%
MN101	Mille Lacs County, Minnesota	0.9301506696%
MN102	Minneapolis City, Minnesota	4.8777618689%
MN103	Minnetonka City, Minnesota	0.1967231071%
MN105	Moorhead City, Minnesota	0.4337377038%
MN106	Morrison County, Minnesota	0.7178981419%
MN108	Mower County, Minnesota	0.5801769149%
MN109	Murray County, Minnesota	0.1348775389%
MN113	Nicollet County, Minnesota	0.1572381053%
MN114	Nobles County, Minnesota	0.1562005112%
MN115	Norman County, Minnesota	0.1087596675%
MN118	North St. Paul City, Minnesota	0.0575844069%
MN121	Olmsted County, Minnesota	1.9236715095%
MN123	Otter Tail County, Minnesota	0.8336175419%
MN125	Pennington County, Minnesota	0.3082576395%
MN126	Pine County, Minnesota	0.5671222707%
MN127	Pipestone County, Minnesota	0.1535154503%
MN128	Plymouth City, Minnesota	0.1762541473%
MN129	Polk County, Minnesota	0.8654291474%
MN130	Pope County, Minnesota	0.1870129873%
MN132	Proctor City, Minnesota	0.0214374128%
MN134	Ramsey County, Minnesota	7.1081424150%
MN135	Red Lake County, Minnesota	0.0532649128%
MN137	Redwood County, Minnesota	0.2809842367%
MN138	Renville County, Minnesota	0.2706888807%
MN139	Rice County, Minnesota	0.2674764398%
MN140	Richfield City, Minnesota	0.2534018444%
MN142	Rochester City, Minnesota	0.7363082849%
MN143	Rock County, Minnesota	0.2043437336%
MN145	Roseau County, Minnesota	0.2517872793%
MN147	Roseville City, Minnesota	0.1721905549%
MN150	Savage City, Minnesota	0.1883576635%

State ID	Qualifying Subdivision	Consolidated State Allocation
MN151	Scott County, Minnesota	1.3274301646%
MN152	Shakopee City, Minnesota	0.2879873611%
MN153	Sherburne County, Minnesota	1.2543449472%
MN155	Sibley County, Minnesota	0.2393480708%
MN157	St Louis County, Minnesota	4.7407767170%
MN158	St. Cloud City, Minnesota	0.7330089009%
MN159	St. Louis Park City, Minnesota	0.1476314588%
MN161	St. Paul City, Minnesota	3.7475206798%
MN163	Stearns County, Minnesota	2.4158085321%
MN164	Steele County, Minnesota	0.3969975263%
MN165	Stevens County, Minnesota	0.1439474275%
MN167	Swift County, Minnesota	0.1344167568%
MN168	Todd County, Minnesota	0.4180909817%
MN169	Traverse County, Minnesota	0.0903964134%
MN172	Wabasha County, Minnesota	0.3103038997%
MN174	Wadena County, Minnesota	0.2644094337%
MN175	Waseca County, Minnesota	0.2857912156%
MN176	Washington County, Minnesota	3.0852862513%
MN177	Watonwan County, Minnesota	0.1475626356%
MN181	Wilkin County, Minnesota	0.0937962507%
MN184	Winona County, Minnesota	0.7755267356%
MN185	Woodbury City, Minnesota	0.4677270172%
MN187	Wright County, Minnesota	1.6985269385%
MN188	Yellow Medicine County, Minnesota	0.1742264836%

State ID	Qualifying Subdivision	Consolidated State Allocation
MS1	Adams County, Mississippi	0.8956930256%
MS2	Alcorn County, Mississippi	0.0576362452%
MS3	Amite County, Mississippi	0.2746164929%
MS4	Amory City, Mississippi	0.2116793450%
MS5	Arcola Town, Mississippi	0.0010556367%
MS6	Attala County, Mississippi	0.4297756502%
MS7	Bay St. Louis City, Mississippi	0.0311287683%
MS8	Benton County, Mississippi	0.1960984974%
MS9	Biloxi City, Mississippi	0.6645430129%
MS10	Bolivar County, Mississippi	0.5038616841%
MS11	Brandon City, Mississippi	0.5570720591%
MS12	Brookhaven City, Mississippi	0.4683584117%
MS13	Byram City, Mississippi	0.0546025247%
MS14	Caledonia Town, Mississippi	0.0029950314%
MS15	Calhoun County, Mississippi	0.4153642017%
MS16	Canton City, Mississippi	0.3608383968%
MS17	Carroll County, Mississippi	0.2031873312%
MS18	Charleston City, Mississippi	0.0470339459%
MS19	Chickasaw County, Mississippi	0.5109289507%
MS21	Claiborne County, Mississippi	0.1646839236%
MS22	Clarke County, Mississippi	0.5114179153%
MS23	Clarksdale City, Mississippi	0.2773833408%
MS24	Clay County, Mississippi	0.1860006383%
MS25	Cleveland City, Mississippi	0.1374693414%
MS26	Clinton City, Mississippi	0.3236377422%
MS27	Coahoma County, Mississippi	0.4236538797%
MS28	Columbia City, Mississippi	0.1695070569%
MS29	Columbus City, Mississippi	0.7040334045%
MS30	Copiah County, Mississippi	0.7218083365%
MS31	Corinth City, Mississippi	1.5766265587%
MS32	Covington County, Mississippi	0.6154970684%
MS33	Desoto County, Mississippi	2.2451071357%
MS34	Diamondhead City, Mississippi	0.0001700675%
MS35	D'Iberville City, Mississippi	0.0448052883%
MS36	Forrest County, Mississippi	3.0519047573%
MS37	Franklin County, Mississippi	0.2573415560%
MS38	Gautier City, Mississippi	0.1317718341%
MS39	George County, Mississippi	1.0370803395%
MS40	Greene County, Mississippi	0.2945486312%
MS41	Greenville City, Mississippi	0.0840582768%
MS42	Greenwood City, Mississippi	0.5924200813%
MS43	Grenada City, Mississippi	0.0559331010%
MS44	Grenada County, Mississippi	0.5257141196%
MS45	Gulfport City, Mississippi	8.3397025495%
MS46	Hancock County, Mississippi	2.4053819819%
MS47	Harrison County, Mississippi	1.2833704733%
MS48	Hattiesburg City, Mississippi	0.3234604308%
MS49	Hernando City, Mississippi	0.4422243258%
MS50	Hinds County, Mississippi	2.0886225058%

State ID	Qualifying Subdivision	Consolidated State Allocation
MS51	Holly Springs City, Mississippi	0.1628357363%
MS52	Holmes County, Mississippi	0.3324473362%
MS53	Horn Lake City, Mississippi	0.6520350689%
MS54	Humphreys County, Mississippi	0.1373820850%
MS55	Indianola City, Mississippi	0.0232047435%
MS56	Issaquena County, Mississippi	0.0175702913%
MS57	Itawamba County, Mississippi	1.0517575083%
MS58	Iuka City, Mississippi	0.2854580062%
MS59	Jackson City, Mississippi	2.6937777267%
MS60	Jackson County, Mississippi	7.6559251195%
MS61	Jasper County, Mississippi	0.3922495132%
MS62	Jefferson County, Mississippi	0.0985248779%
MS63	Jefferson Davis County, Mississippi	0.3514408929%
MS64	Jones County, Mississippi	2.2234728410%
MS65	Jonestown, Mississippi	0.0093341195%
MS66	Kemper County, Mississippi	0.2223493091%
MS67	Kosciusko City, Mississippi	0.0408594923%
MS68	Lafayette County, Mississippi	0.7049370835%
MS69	Lamar County, Mississippi	1.3105353358%
MS70	Lauderdale County, Mississippi	1.4707252306%
MS71	Laurel City, Mississippi	0.1485722943%
MS72	Lawrence County, Mississippi	0.3428558606%
MS73	Leake County, Mississippi	0.5798006796%
MS74	Leakesville Town, Mississippi	0.0098357610%
MS75	Lee County, Mississippi	1.4759031513%
MS76	Leflore County, Mississippi	0.1018315625%
MS77	Lincoln County, Mississippi	0.5740717271%
MS78	Long Beach City, Mississippi	0.1390600402%
MS79	Lowndes County, Mississippi	0.9390202250%
MS80	Lumberton City, Mississippi	0.0397836057%
MS81	Madison City, Mississippi	0.5726048335%
MS82	Madison County, Mississippi	1.0788558585%
MS83	Marion County, Mississippi	1.6274197695%
MS84	Marshall County, Mississippi	0.6280998419%
MS85	McComb City, Mississippi	1.1131798538%
MS86	McLain Town, Mississippi	0.0044584678%
MS87	Meridian City, Mississippi	1.1164172272%
MS88	Monroe County, Mississippi	0.8130759595%
MS90	Morton City, Mississippi	0.0606772097%
MS91	Moss Point City, Mississippi	0.0032841297%
MS92	Mound Bayou City, Mississippi	0.0140956794%
MS93	Natchez City, Mississippi	0.1092519702%
MS94	Neshoba County, Mississippi	1.0186206925%
MS95	Nettleton City, Mississippi	0.0307845175%
MS96	New Albany City, Mississippi	0.2729319523%
MS97	Newton County, Mississippi	0.5457847155%
MS98	Noxubee County, Mississippi	0.1848315685%
MS99	Ocean Springs City, Mississippi	0.1196690556%

State ID	Qualifying Subdivision	Consolidated State Allocation
MS100	Oktibbeha County, Mississippi	0.7876142411%
MS101	Olive Branch City, Mississippi	1.0910656493%
MS102	Oxford City, Mississippi	0.6004720270%
MS103	Panola County, Mississippi	1.1256622795%
MS104	Pascagoula City, Mississippi	0.2495759096%
MS105	Pearl City, Mississippi	1.1956946818%
MS106	Pearl River County, Mississippi	3.0542096408%
MS107	Perry County, Mississippi	0.3691053552%
MS108	Petal City, Mississippi	0.0271880761%
MS109	Philadelphia City, Mississippi	0.1154094664%
MS110	Picayune City, Mississippi	0.5891117503%
MS111	Pike County, Mississippi	0.1094837756%
MS112	Pontotoc County, Mississippi	1.1485245831%
MS113	Prentiss County, Mississippi	0.7977710394%
MS114	Quitman City, Mississippi	0.0879535299%
MS115	Quitman County, Mississippi	0.2137706975%
MS116	Rankin County, Mississippi	3.4671179892%
MS117	Ridgeland City, Mississippi	0.7137364699%
MS118	Scott County, Mississippi	0.6318707959%
MS119	Shannon Town, Mississippi	0.0293681665%
MS121	Shubuta Town, Mississippi	0.0061495937%
MS122	Simpson County, Mississippi	0.9197186369%
MS123	Smith County, Mississippi	0.3871907879%
MS124	Southaven City, Mississippi	1.5563837550%
MS125	Starkville City, Mississippi	0.1006690780%
MS126	Stone County, Mississippi	0.5647624674%
MS127	Summit Town, Mississippi	0.0051138779%
MS128	Sunflower County, Mississippi	0.4655797100%
MS129	Tallahatchie County, Mississippi	0.2608094178%
MS130	Tate County, Mississippi	1.1559202957%
MS131	Tippah County, Mississippi	0.6673123304%
MS132	Tishomingo County, Mississippi	1.3186009463%
MS133	Tunica County, Mississippi	0.1788884264%
MS134	Tupelo City, Mississippi	1.4776375761%
MS135	Union County, Mississippi	0.4956551465%
MS136	Verona City, Mississippi	0.0613981442%
MS137	Vicksburg City, Mississippi	0.7338152977%
MS138	Walthall County, Mississippi	0.4949654924%
MS139	Warren County, Mississippi	0.5605232929%
MS140	Washington County, Mississippi	0.9202227479%
MS141	Wayne County, Mississippi	0.9416871398%
MS142	Waynesboro City, Mississippi	0.0134634829%
MS143	Webb Town, Mississippi	0.0120400527%
MS145	West Point City, Mississippi	0.2116459242%
MS146	Wiggins City, Mississippi	0.1726599728%
MS148	Winston County, Mississippi	0.5339853585%
MS149	Yalobusha County, Mississippi	0.2986570860%
MS150	Yazoo City, Mississippi	0.2540246640%
MS151	Yazoo County, Mississippi	0.4224067732%

State ID	Qualifying Subdivision	Consolidated State Allocation
MO1	Adair County, Missouri	
MO2	Andrew County, Missouri	
MO3	Arnold City, Missouri	
MO4	Atchison County, Missouri	
MO5	Audrain County, Missouri	
MO6	Ballwin City, Missouri	
MO7	Barry County, Missouri	
MO8	Barton County, Missouri	
MO9	Bates County, Missouri	
MO10	Bellefontaine Neighbors City, Missouri	
MO11	Belton City, Missouri	
MO12	Benton County, Missouri	
MO13	Blue Springs City, Missouri	
MO14	Bolivar City, Missouri	
MO15	Bollinger County, Missouri	
MO16	Boone County, Missouri	
MO17	Branson City, Missouri	Allocations in Missouri will be made in accordance with the Memorandum of Understanding Between the State of Missouri and its Political Subdivisions on Proceeds Relating to the Settlement of Opioid Litigation and with the ancillary Memorandum of Understanding Between the Litigating Subdivisions of the State of Missouri.
MO18	Bridgeton City, Missouri	
MO19	Buchanan County, Missouri	
MO20	Butler County, Missouri	
MO21	Caldwell County, Missouri	
MO22	Callaway County, Missouri	
MO23	Camden County, Missouri	
MO24	Cape Girardeau City, Missouri	
MO25	Cape Girardeau County, Missouri	
MO26	Carroll County, Missouri	
MO27	Carter County, Missouri	
MO28	Carthage City, Missouri	
MO29	Cass County, Missouri	
MO30	Cedar County, Missouri	
MO31	Chariton County, Missouri	
MO32	Chesterfield City, Missouri	
MO33	Christian County, Missouri	
MO34	Clark County, Missouri	
MO35	Clay County, Missouri	
MO36	Clayton City, Missouri	
MO37	Clinton County, Missouri	
MO38	Cole County, Missouri	
MO39	Columbia City, Missouri	
MO40	Cooper County, Missouri	
MO41	Crawford County, Missouri	
MO42	Crestwood City, Missouri	
MO43	Creve Coeur City, Missouri	
MO44	Dade County, Missouri	
MO45	Dallas County, Missouri	
MO46	Dardenne Prairie City, Missouri	
MO47	Daviess County, Missouri	
MO48	De Kalb County, Missouri	

State ID	Qualifying Subdivision	Consolidated State Allocation
MO49	Dent County, Missouri	
MO50	Douglas County, Missouri	
MO51	Dunklin County, Missouri	
MO52	Eureka City, Missouri	
MO53	Excelsior Springs City, Missouri	
MO54	Farmington City, Missouri	
MO55	Ferguson City, Missouri	
MO56	Festus City, Missouri	
MO57	Florissant City, Missouri	
MO58	Franklin County, Missouri	
MO59	Fulton City, Missouri	
MO60	Gasconade County, Missouri	
MO61	Gentry County, Missouri	
MO62	Gladstone City, Missouri	
MO63	Grain Valley City, Missouri	
MO64	Grandview City, Missouri	
MO65	Greene County, Missouri	
MO66	Grundy County, Missouri	Allocations in Missouri
MO67	Hannibal City, Missouri	will be made in
MO68	Harrison County, Missouri	accordance with the
MO69	Harrisonville City, Missouri	Memorandum of
MO70	Hazelwood City, Missouri	Understanding Between
MO71	Henry County, Missouri	the State of Missouri and
MO72	Hickory County, Missouri	its Political Subdivisions
MO73	Holt County, Missouri	on Proceeds Relating to
MO74	Howard County, Missouri	the Settlement of Opioid
MO75	Howell County, Missouri	Litigation and with the
MO76	Independence City, Missouri	ancillary Memorandum
MO77	Iron County, Missouri	of Understanding
MO78	Jackson City, Missouri	Between the Litigating
MO79	Jackson County, Missouri	Subdivisions of the State
MO80	Jasper County, Missouri	of Missouri.
MO81	Jefferson City, Missouri	
MO82	Jefferson County, Missouri	
MO83	Jennings City, Missouri	
MO84	Johnson County, Missouri	
MO85	Joplin City, Missouri	
MO86	Kansas City, Missouri	
MO87	Kearney City, Missouri	
MO88	Kennett City, Missouri	
MO89	Kirksville City, Missouri	
MO90	Kirkwood City, Missouri	
MO91	Knox County, Missouri	
MO92	Laclede County, Missouri	
MO93	Lafayette County, Missouri	
MO94	Lake St. Louis City, Missouri	
MO95	Lawrence County, Missouri	
MO96	Lebanon City, Missouri	
MO97	Lee's Summit City, Missouri	

State ID	Qualifying Subdivision	Consolidated State Allocation
MO98	Lewis County, Missouri	
MO99	Liberty City, Missouri	
MO100	Lincoln County, Missouri	
MO101	Linn County, Missouri	
MO102	Livingston County, Missouri	
MO103	Macon County, Missouri	
MO104	Madison County, Missouri	
MO105	Manchester City, Missouri	
MO106	Maries County, Missouri	
MO107	Marion County, Missouri	
MO108	Marshall City, Missouri	
MO109	Maryland Heights City, Missouri	
MO110	Maryville City, Missouri	
MO111	McDonald County, Missouri	
MO112	Mercer County, Missouri	
MO113	Mexico City, Missouri	
MO114	Miller County, Missouri	
MO115	Mississippi County, Missouri	Allocations in Missouri
MO116	Moberly City, Missouri	will be made in
MO117	Moniteau County, Missouri	accordance with the
MO118	Monroe County, Missouri	Memorandum of
MO119	Montgomery County, Missouri	Understanding Between
MO120	Morgan County, Missouri	the State of Missouri and
MO121	Neosho City, Missouri	its Political Subdivisions
MO122	New Madrid County, Missouri	on Proceeds Relating to
MO123	Newton County, Missouri	the Settlement of Opioid
MO124	Nixa City, Missouri	Litigation and with the
MO125	Nodaway County, Missouri	ancillary Memorandum
MO126	O'Fallon City, Missouri	of Understanding
MO127	Oregon County, Missouri	Between the Litigating
MO128	Osage County, Missouri	Subdivisions of the State
MO129	Overland City, Missouri	of Missouri.
MO130	Ozark City, Missouri	
MO131	Ozark County, Missouri	
MO132	Pemiscot County, Missouri	
MO133	Perry County, Missouri	
MO134	Pettis County, Missouri	
MO135	Phelps County, Missouri	
MO136	Pike County, Missouri	
MO137	Platte County, Missouri	
MO138	Polk County, Missouri	
MO139	Poplar Bluff City, Missouri	
MO140	Pulaski County, Missouri	
MO141	Putnam County, Missouri	
MO142	Ralls County, Missouri	
MO143	Randolph County, Missouri	
MO144	Ray County, Missouri	
MO145	Raymore City, Missouri	
MO146	Raytown City, Missouri	

State ID	Qualifying Subdivision	Consolidated State Allocation
MO147	Republic City, Missouri	
MO148	Reynolds County, Missouri	
MO149	Ripley County, Missouri	
MO150	Rolla City, Missouri	
MO151	Saline County, Missouri	
MO152	Schuyler County, Missouri	
MO153	Scotland County, Missouri	
MO154	Scott County, Missouri	
MO155	Sedalia City, Missouri	
MO156	Shannon County, Missouri	
MO157	Shelby County, Missouri	
MO158	Sikeston City, Missouri	
MO159	Smithville City, Missouri	
MO160	Springfield City, Missouri	
MO161	St Charles County, Missouri	
MO162	St Clair County, Missouri	
MO163	St Francois County, Missouri	
MO164	St Louis County, Missouri	Allocations in Missouri
MO165	St. Ann City, Missouri	will be made in
MO166	St. Charles City, Missouri	accordance with the
MO167	St. Joseph City, Missouri	Memorandum of
MO168	St. Louis City, Missouri	Understanding Between
MO169	St. Peters City, Missouri	the State of Missouri and
MO170	Ste Genevieve County, Missouri	its Political Subdivisions
MO171	Stoddard County, Missouri	on Proceeds Relating to
MO172	Stone County, Missouri	the Settlement of Opioid
MO173	Sullivan County, Missouri	Litigation and with the
MO174	Taney County, Missouri	ancillary Memorandum
MO175	Texas County, Missouri	of Understanding
MO176	Town and Country City, Missouri	Between the Litigating
MO177	Troy City, Missouri	Subdivisions of the State
MO178	Union City, Missouri	of Missouri.
MO179	University City, Missouri	
MO180	Vernon County, Missouri	
MO181	Warren County, Missouri	
MO182	Warrensburg City, Missouri	
MO183	Washington City, Missouri	
MO184	Washington County, Missouri	
MO185	Wayne County, Missouri	
MO186	Webb City, Missouri	
MO187	Webster County, Missouri	
MO188	Webster Groves City, Missouri	
MO189	Wentzville City, Missouri	
MO190	West Plains City, Missouri	
MO191	Wildwood City, Missouri	
MO192	Worth County, Missouri	
MO193	Wright County, Missouri	
MO194	Northeast Ambulance and Fire Protection District, Missouri	

State ID	Qualifying Subdivision	Consolidated State Allocation
MO195	Kinloch Fire Protection District, Missouri	Allocations in Missouri will be made in accordance with the Memorandum of Understanding Between the State of Missouri and its Political Subdivisions on Proceeds Relating to the Settlement of Opioid Litigation and with the ancillary Memorandum of Understanding Between the Litigating Subdivisions of the State of Missouri.
MO196	Citizens Memorial Hospital District D/B/A Citizens Memorial Hospital, Missouri	

State ID	Qualifying Subdivision	Consolidated State Allocation
MT1	Anaconda-Deer Lodge County, Montana	1.4480190514%
MT2	Beaverhead County, Montana	0.6841480225%
MT3	Big Horn County, Montana	0.8504903609%
MT4	Billings City, Montana	9.1331142413%
MT5	Blaine County, Montana	0.3691094337%
MT6	Bozeman City, Montana	2.0161886507%
MT7	Broadwater County, Montana	0.4143251264%
MT8	Butte-Silver Bow, Montana	5.6101260434%
MT9	Carbon County, Montana	0.7105360522%
MT10	Carter County, Montana	0.0374679104%
MT11	Cascade County, Montana	3.8993050480%
MT12	Chouteau County, Montana	0.4053063424%
MT13	Custer County, Montana	1.5139056450%
MT14	Daniels County, Montana	0.1787602908%
MT15	Dawson County, Montana	0.7800682133%
MT16	Fallon County, Montana	0.1543582011%
MT17	Fergus County, Montana	0.8667027669%
MT18	Flathead County, Montana	8.0141785369%
MT19	Gallatin County, Montana	4.0205572717%
MT20	Garfield County, Montana	0.0398838599%
MT21	Glacier County, Montana	1.5230709367%
MT22	Golden Valley County, Montana	0.0264303648%
MT23	Granite County, Montana	0.1831398237%
MT24	Great Falls City, Montana	4.3577779784%
MT25	Helena City, Montana	1.7360655042%
MT26	Hill County, Montana	1.8438532922%
MT27	Jefferson County, Montana	0.7770843087%
MT28	Judith Basin County, Montana	0.0614804228%
MT29	Kalispell City, Montana	2.4735432710%
MT30	Lake County, Montana	3.6175099064%
MT31	Lewis and Clark County, Montana	4.9326712334%
MT32	Liberty County, Montana	0.1210395973%
MT33	Lincoln County, Montana	2.1915597624%
MT34	Madison County, Montana	0.5498047673%
MT35	McCone County, Montana	0.0823035394%
MT36	Meagher County, Montana	0.0912086373%
MT37	Mineral County, Montana	0.7546909914%
MT38	Missoula City, Montana	4.4312558575%
MT39	Missoula County, Montana	8.0272833629%
MT40	Musselshell County, Montana	0.3895510594%
MT41	Park County, Montana	2.0831835653%
MT42	Petroleum County, Montana	0.0144742922%
MT43	Phillips County, Montana	0.2085622347%
MT44	Pondera County, Montana	0.4003873948%
MT45	Powder River County, Montana	0.1504386452%
MT46	Powell County, Montana	0.8872723490%
MT47	Prairie County, Montana	0.0572069653%
MT48	Ravalli County, Montana	3.6906819270%

State ID	Qualifying Subdivision	Consolidated State Allocation
MT49	Richland County, Montana	0.7541525281%
MT50	Roosevelt County, Montana	0.8182976782%
MT51	Rosebud County, Montana	0.5641981949%
MT52	Sanders County, Montana	1.0679134558%
MT53	Sheridan County, Montana	0.2700355225%
MT54	Stillwater County, Montana	0.5055604014%
MT55	Sweet Grass County, Montana	0.2836540766%
MT56	Teton County, Montana	0.5735903832%
MT57	Toole County, Montana	0.3258040487%
MT58	Treasure County, Montana	0.0226554138%
MT59	Valley County, Montana	0.5598291268%
MT60	Wheatland County, Montana	0.0720998508%
MT61	Wibaux County, Montana	0.0630373047%
MT62	Yellowstone County, Montana	7.3090889550%

State ID	Qualifying Subdivision	Consolidated State Allocation
NE1	Adams County, Nebraska	0.7130410264%
NE2	Antelope County, Nebraska	0.2406339800%
NE3	Arthur County, Nebraska	0.0110831278%
NE4	Banner County, Nebraska	0.0183674606%
NE5	Beatrice City, Nebraska	0.9248205382%
NE6	Bellevue City, Nebraska	2.4787880023%
NE7	Blaine County, Nebraska	0.0123640997%
NE8	Boone County, Nebraska	0.2533407507%
NE9	Box Butte County, Nebraska	0.7492533620%
NE10	Boyd County, Nebraska	0.0902847433%
NE11	Brown County, Nebraska	0.1375135354%
NE12	Buffalo County, Nebraska	0.9630320332%
NE13	Burt County, Nebraska	0.3365661770%
NE14	Butler County, Nebraska	0.2899805672%
NE15	Cass County, Nebraska	1.2356339344%
NE16	Cedar County, Nebraska	0.3502588009%
NE17	Chase County, Nebraska	0.1707898814%
NE18	Cherry County, Nebraska	0.3082161558%
NE19	Cheyenne County, Nebraska	0.7408263023%
NE20	Clay County, Nebraska	0.1772971991%
NE21	Colfax County, Nebraska	0.2670475913%
NE22	Columbus City, Nebraska	0.7291294061%
NE23	Cuming County, Nebraska	0.4019883978%
NE24	Custer County, Nebraska	0.4848137961%
NE25	Dakota County, Nebraska	0.3940917673%
NE26	Dawes County, Nebraska	0.6577293164%
NE27	Dawson County, Nebraska	0.7540316373%
NE28	Deuel County, Nebraska	0.1500055852%
NE29	Dixon County, Nebraska	0.2144571499%
NE30	Dodge County, Nebraska	1.8317996330%
NE31	Douglas County, Nebraska	14.9119111455%
NE32	Dundy County, Nebraska	0.1513630330%
NE33	Fillmore County, Nebraska	0.3541443667%
NE34	Franklin County, Nebraska	0.1630162987%
NE35	Fremont City, Nebraska	0.1476946393%
NE36	Frontier County, Nebraska	0.0732649260%
NE37	Furnas County, Nebraska	0.2315426581%
NE38	Gage County, Nebraska	0.5390651380%
NE39	Garden County, Nebraska	0.1132118364%
NE40	Garfield County, Nebraska	0.1104479177%
NE41	Gosper County, Nebraska	0.0528581072%
NE42	Grand Island City, Nebraska	1.5052861196%
NE43	Grant County, Nebraska	0.0167075406%
NE44	Greeley County, Nebraska	0.1006996872%
NE45	Hall County, Nebraska	1.3023214397%
NE46	Hamilton County, Nebraska	0.3285553228%
NE47	Harlan County, Nebraska	0.1831157431%
NE48	Hastings City, Nebraska	0.7738158635%
NE49	Hayes County, Nebraska	0.0464208924%

State ID	Qualifying Subdivision	Consolidated State Allocation
NE50	Hitchcock County, Nebraska	0.1428727336%
NE51	Holt County, Nebraska	0.4319086269%
NE52	Hooker County, Nebraska	0.0195391111%
NE53	Howard County, Nebraska	0.3117590505%
NE54	Jefferson County, Nebraska	0.4621587809%
NE55	Johnson County, Nebraska	0.3674281385%
NE56	Kearney City, Nebraska	1.3128662946%
NE57	Kearney County, Nebraska	0.3284087439%
NE58	Keith County, Nebraska	0.5586120928%
NE59	Keya Paha County, Nebraska	0.0207700795%
NE60	Kimball County, Nebraska	0.2074517582%
NE61	Knox County, Nebraska	0.4262180329%
NE62	La Vista City, Nebraska	0.6948539706%
NE63	Lancaster County, Nebraska	7.9530599340%
NE64	Lexington City, Nebraska	0.2672235840%
NE65	Lincoln City, Nebraska	8.9584993437%
NE66	Lincoln County, Nebraska	0.7588461895%
NE67	Logan County, Nebraska	0.0192253637%
NE68	Loup County, Nebraska	0.0163070224%
NE69	Madison County, Nebraska	1.0198085515%
NE70	McPherson County, Nebraska	0.0133651501%
NE71	Merrick County, Nebraska	0.5571149293%
NE72	Morrill County, Nebraska	0.2640807173%
NE73	Nance County, Nebraska	0.1820220392%
NE74	Nemaha County, Nebraska	0.5862140225%
NE75	Norfolk City, Nebraska	0.6855964607%
NE76	North Platte City, Nebraska	1.2668714124%
NE77	Nuckolls County, Nebraska	0.2606241030%
NE78	Omaha City, Nebraska	16.7836032733%
NE79	Otoe County, Nebraska	0.8114537890%
NE80	Papillion City, Nebraska	1.1943452635%
NE81	Pawnee County, Nebraska	0.2449303588%
NE82	Perkins County, Nebraska	0.0938742100%
NE83	Phelps County, Nebraska	0.4453164270%
NE84	Pierce County, Nebraska	0.2791606931%
NE85	Platte County, Nebraska	0.5054632790%
NE86	Polk County, Nebraska	0.2126035890%
NE87	Red Willow County, Nebraska	0.6782282985%
NE88	Richardson County, Nebraska	0.6780640713%
NE89	Rock County, Nebraska	0.0420632348%
NE90	Saline County, Nebraska	0.6431415318%
NE91	Sarpy County, Nebraska	4.1205096407%
NE92	Saunders County, Nebraska	0.9147340487%
NE93	Scotts Bluff County, Nebraska	1.8428925654%
NE94	Scottsbluff City, Nebraska	0.5159537183%
NE95	Seward County, Nebraska	0.7637450614%
NE96	Sheridan County, Nebraska	0.1814092513%
NE97	Sherman County, Nebraska	0.1198260243%
NE98	Sioux County, Nebraska	0.0355730752%

State ID	Qualifying Subdivision	Consolidated State Allocation
NE99	South Sioux City, Nebraska	0.4431368628%
NE100	Stanton County, Nebraska	0.2162062918%
NE101	Thayer County, Nebraska	0.2059575361%
NE102	Thomas County, Nebraska	0.0173570958%
NE103	Thurston County, Nebraska	0.2564159657%
NE104	Valley County, Nebraska	0.3103957199%
NE105	Washington County, Nebraska	0.7878555706%
NE106	Wayne County, Nebraska	0.3510034608%
NE107	Webster County, Nebraska	0.1652355715%
NE108	Wheeler County, Nebraska	0.0210156849%
NE109	York County, Nebraska	0.8321939645%
NE110	Region 1 Behavioral Health Authority, Nebraska	0.0000000000%
NE111	Region II Human Services, Nebraska	0.0000000000%
NE112	Region 3 Behavioral Health Services, Nebraska	0.0000000000%
NE113	Region 4 Behavioral Health System, Nebraska	0.0000000000%
NE114	Region V Systems, Nebraska	0.0000000000%
NE115	Region 6 Behavioral Healthcare, Nebraska	0.0000000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
NV1	Boulder City, Nevada	0.1478660452%
NV2	Carson City, Nevada	1.8146007537%
NV3	Churchill County, Nevada	0.7013051988%
NV4	Clark County, Nevada	66.9248026834%
NV5	Douglas County, Nevada	1.6601462472%
NV7	Elko County, Nevada	1.0825745225%
NV8	Ely City, Nevada	0.0066172807%
NV9	Esmeralda County, Nevada	0.0497291448%
NV10	Eureka County, Nevada	0.1033573623%
NV11	Fernley City, Nevada	0.0144506991%
NV12	Henderson City, Nevada	2.3020643974%
NV13	Humboldt County, Nevada	1.0192724731%
NV14	Lander County, Nevada	0.3627438791%
NV15	Las Vegas City, Nevada	4.7206970773%
NV16	Lincoln County, Nevada	0.2373284219%
NV17	Lyon County, Nevada	1.5721396872%
NV18	Mesquite City, Nevada	0.1465069544%
NV19	Mineral County, Nevada	0.5992930253%
NV20	North Las Vegas City, Nevada	2.4258866892%
NV21	Nye County, Nevada	1.6016841576%
NV22	Pershing County, Nevada	0.3624498791%
NV23	Reno City, Nevada	1.3562863383%
NV24	Sparks City, Nevada	0.4253229218%
NV25	Storey County, Nevada	0.1263908620%
NV26	Washoe County, Nevada	9.1139488828%
NV27	West Wendover City, Nevada	0.0564015794%
NV28	White Pine County, Nevada	1.0458576594%
NV29	Central Lyon Fire Protection District, Nevada	0.0150922618%
NV30	North Lyon Fire Protection District, Nevada	0.0051829150%

State ID	Qualifying Subdivision	Consolidated State Allocation
NH3	Belknap County, New Hampshire	2.868905%
NH4	Belmont Town, New Hampshire	0.530951%
NH5	Berlin City, New Hampshire	0.684196%
NH6	Carroll County, New Hampshire	3.637455%
NH7	Cheshire County, New Hampshire	3.877305%
NH8	Claremont City, New Hampshire	0.940017%
NH9	Concord City, New Hampshire	3.191730%
NH11	Coos County, New Hampshire	1.585665%
NH12	Derry Town, New Hampshire	2.491200%
NH13	Dover City, New Hampshire	2.376792%
NH16	Franklin City, New Hampshire	0.634542%
NH18	Grafton County, New Hampshire	6.614598%
NH21	Hillsborough County, New Hampshire	15.676694%
NH24	Keene City, New Hampshire	1.673068%
NH25	Laconia City, New Hampshire	1.224729%
NH27	Londonderry Town, New Hampshire	1.874806%
NH28	Manchester City, New Hampshire	8.396484%
NH29	Merrimack County, New Hampshire	7.339228%
NH32	Nashua City, New Hampshire	6.629407%
NH36	Rochester City, New Hampshire	2.358716%
NH37	Rockingham County, New Hampshire	18.441209%
NH40	Strafford County, New Hampshire	4.766215%
NH41	Sullivan County, New Hampshire	2.186088%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ1	Aberdeen Township, New Jersey	0.0797396894%
NJ2	Asbury Park City, New Jersey	0.3916349671%
NJ3	Atlantic City, New Jersey	1.2847690915%
NJ4	Atlantic County, New Jersey	2.8915764045%
NJ5	Barnegat Township, New Jersey	0.1626638814%
NJ6	Bayonne City, New Jersey	0.8502340058%
NJ7	Beachwood Borough, New Jersey	0.0492329228%
NJ8	Belleville Township, New Jersey	0.0872090223%
NJ9	Bellmawr Borough, New Jersey	0.0640989992%
NJ10	Bergen County, New Jersey	4.9446361090%
NJ11	Bergenfield Borough, New Jersey	0.0618076073%
NJ12	Berkeley Heights Township, New Jersey	0.0272673062%
NJ13	Berkeley Township, New Jersey	0.2619731788%
NJ14	Bernards Township, New Jersey	0.0910577073%
NJ15	Bloomfield Township, New Jersey	0.1173874959%
NJ16	Bordentown Township, New Jersey	0.0545891482%
NJ17	Bound Brook Borough, New Jersey	0.0527105023%
NJ18	Branchburg Township, New Jersey	0.0561024563%
NJ19	Brick Township, New Jersey	0.5908193174%
NJ20	Bridgeton City, New Jersey	0.2079614154%
NJ21	Bridgewater Township, New Jersey	0.1828057629%
NJ22	Burlington County, New Jersey	4.4940916659%
NJ23	Burlington Township, New Jersey	0.1157900630%
NJ24	Camden City, New Jersey	1.6603828843%
NJ25	Camden County, New Jersey	6.8741218172%
NJ26	Cape May County, New Jersey	1.2842777540%
NJ27	Carteret Borough, New Jersey	0.1794847100%
NJ28	Cedar Grove Township, New Jersey	0.0187911021%
NJ29	Chatham Township, New Jersey	0.0498541051%
NJ30	Cherry Hill Township, New Jersey	0.3440044947%
NJ31	Cinnaminson Township, New Jersey	0.0701648926%
NJ32	Clark Township, New Jersey	0.0429898704%
NJ33	Cliffside Park Borough, New Jersey	0.1142449150%
NJ34	Clifton City, New Jersey	0.3535258812%
NJ35	Clinton Town, New Jersey	0.0294193343%
NJ36	Clinton Township, New Jersey	0.0799778554%
NJ37	Collingswood Borough, New Jersey	0.1128930571%
NJ38	Cranford Township, New Jersey	0.0684441330%
NJ39	Cumberland County, New Jersey	0.9862828059%
NJ40	Delran Township, New Jersey	0.0837486054%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ41	Denville Township, New Jersey	0.0795654377%
NJ42	Deptford Township, New Jersey	0.2200095463%
NJ43	Dover Town, New Jersey	0.1186530251%
NJ44	Dumont Borough, New Jersey	0.0403826120%
NJ45	East Brunswick Township, New Jersey	0.0972927881%
NJ46	East Greenwich Township, New Jersey	0.0212104162%
NJ47	East Hanover Township, New Jersey	0.0890156417%
NJ48	East Orange City, New Jersey	1.2844844553%
NJ49	East Windsor Township, New Jersey	0.0422463462%
NJ50	Eatontown Borough, New Jersey	0.0974794194%
NJ51	Edgewater Borough, New Jersey	0.0546948904%
NJ52	Edison Township, New Jersey	2.4018132631%
NJ53	Egg Harbor Township, New Jersey	0.1572891336%
NJ54	Elizabeth City, New Jersey	0.7646308101%
NJ55	Elmwood Park Borough, New Jersey	0.0462435391%
NJ56	Englewood City, New Jersey	0.6429812736%
NJ57	Essex County, New Jersey	1.4898498664%
NJ58	Evesham Township, New Jersey	0.1745115947%
NJ59	Ewing Township, New Jersey	0.0839796907%
NJ60	Fair Lawn Borough, New Jersey	0.0699332916%
NJ61	Fairview Borough, New Jersey	0.0347025484%
NJ62	Florence Township, New Jersey	0.0676007282%
NJ63	Florham Park Borough, New Jersey	0.0674975182%
NJ64	Fort Lee Borough, New Jersey	0.1848366682%
NJ65	Franklin Lakes Borough, New Jersey	0.0273076336%
NJ66	Franklin Township, Gloucester County, New Jersey	0.0870963870%
NJ67	Franklin Township, Somerset County, New Jersey	0.3236022203%
NJ68	Freehold Borough, New Jersey	0.0816675723%
NJ69	Freehold Township, New Jersey	0.1512818556%
NJ70	Galloway Township, New Jersey	0.0846515634%
NJ71	Garfield City, New Jersey	0.0989196224%
NJ72	Glassboro Borough, New Jersey	0.1948186777%
NJ73	Glen Rock Borough, New Jersey	0.0253178060%
NJ74	Gloucester City, New Jersey	0.1325275640%
NJ75	Gloucester County, New Jersey	4.7022029491%
NJ76	Gloucester Township, New Jersey	0.3259502581%
NJ77	Guttenberg Town, New Jersey	0.0382186733%
NJ78	Hackensack City, New Jersey	0.2554139785%
NJ79	Haddon Township, New Jersey	0.0831057121%
NJ80	Haddonfield Borough, New Jersey	0.0710479214%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ81	Hamilton Township, Atlantic County, New Jersey	0.0939608561%
NJ82	Hamilton Township, Mercer County, New Jersey	0.1394262176%
NJ83	Hammonton Town, New Jersey	0.0463451547%
NJ84	Hanover Township, New Jersey	0.0711651990%
NJ85	Harrison Town, New Jersey	0.2059190684%
NJ86	Harrison Township, New Jersey	0.0478487561%
NJ87	Hasbrouck Heights Borough, New Jersey	0.0360845581%
NJ88	Hawthorne Borough, New Jersey	0.0380122534%
NJ89	Hazlet Township, New Jersey	0.0810519234%
NJ90	Highland Park Borough, New Jersey	0.0606246554%
NJ91	Hillsborough Township, New Jersey	0.1405113053%
NJ92	Hillsdale Borough, New Jersey	0.0247027667%
NJ93	Hillside Township, New Jersey	0.1085603967%
NJ94	Hoboken City, New Jersey	0.1803633309%
NJ95	Holmdel Township, New Jersey	0.1058875828%
NJ96	Hopatcong Borough, New Jersey	0.0677558479%
NJ97	Hopewell Township, Mercer County, New Jersey	0.0275878151%
NJ98	Howell Township, New Jersey	0.2067529072%
NJ99	Hudson County, New Jersey	0.9363280231%
NJ100	Hunterdon County, New Jersey	0.8037645396%
NJ101	Irvington Township, New Jersey	0.9244040630%
NJ102	Jackson Township, New Jersey	0.2670097394%
NJ103	Jefferson Township, New Jersey	0.0866198206%
NJ104	Jersey City, New Jersey	0.9916102863%
NJ105	Kearny Town, New Jersey	0.1071857960%
NJ106	Lacey Township, New Jersey	0.1502291236%
NJ107	Lakewood Township, New Jersey	0.7730028665%
NJ108	Lawrence Township, Mercer County, New Jersey	0.0644503163%
NJ109	Lincoln Park Borough, New Jersey	0.0595261565%
NJ110	Linden City, New Jersey	0.2495261821%
NJ111	Lindenwold Borough, New Jersey	0.1004455914%
NJ112	Little Egg Harbor Township, New Jersey	0.1465902816%
NJ113	Little Falls Township, New Jersey	0.0348320180%
NJ114	Little Ferry Borough, New Jersey	0.0258966914%
NJ115	Livingston Township, New Jersey	0.0484285793%
NJ116	Lodi Borough, New Jersey	0.1078340351%
NJ117	Long Branch City, New Jersey	0.5243184480%
NJ118	Lower Township, New Jersey	0.0710329159%
NJ119	Lumberton Township, New Jersey	0.0461973502%
NJ120	Lyndhurst Township, New Jersey	0.0645354727%
NJ121	Madison Borough, New Jersey	0.1424930674%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ122	Mahwah Township, New Jersey	0.0610985020%
NJ123	Manalapan Township, New Jersey	0.1318410608%
NJ124	Manchester Township, New Jersey	0.2136801182%
NJ125	Mantua Township, New Jersey	0.0853984170%
NJ126	Manville Borough, New Jersey	0.0574532358%
NJ127	Maple Shade Township, New Jersey	0.1058088976%
NJ128	Maplewood Township, New Jersey	0.0589307182%
NJ129	Marlboro Township, New Jersey	0.1588151495%
NJ130	Medford Township, New Jersey	0.1130775783%
NJ131	Mercer County, New Jersey	1.1117204895%
NJ132	Metuchen Borough, New Jersey	0.0339468322%
NJ133	Middle Township, New Jersey	0.0695160908%
NJ134	Middlesex Borough, New Jersey	0.0317606196%
NJ135	Middlesex County, New Jersey	2.2387299770%
NJ136	Middletown Township, New Jersey	0.3292948041%
NJ137	Millburn Township, New Jersey	0.0627532842%
NJ138	Millstone Township, New Jersey	0.0066098909%
NJ139	Millville City, New Jersey	0.2397981412%
NJ140	Monmouth County, New Jersey	4.4617935668%
NJ141	Monroe Township, Gloucester County, New Jersey	0.2271632002%
NJ142	Monroe Township, Middlesex County, New Jersey	0.1024216796%
NJ143	Montclair Township, New Jersey	0.5843666564%
NJ144	Montgomery Township, New Jersey	0.0805666350%
NJ145	Montville Township, New Jersey	0.0902727303%
NJ146	Moorestown Township, New Jersey	0.1000871936%
NJ147	Morris County, New Jersey	2.3575766204%
NJ148	Morris Township, New Jersey	0.1125747053%
NJ149	Morristown, New Jersey	0.2369807115%
NJ150	Mount Laurel Township, New Jersey	0.1725831491%
NJ151	Mount Olive Township, New Jersey	0.1068809023%
NJ152	Neptune Township, New Jersey	0.2450351195%
NJ153	New Brunswick City, New Jersey	1.8327331194%
NJ154	New Milford Borough, New Jersey	0.0368443070%
NJ155	New Providence Borough, New Jersey	0.0258412178%
NJ156	Newark City, New Jersey	1.7760400546%
NJ157	North Arlington Borough, New Jersey	0.0408890956%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ158	North Bergen Township, New Jersey	0.1110635074%
NJ159	North Brunswick Township, New Jersey	0.1217197343%
NJ160	North Plainfield Borough, New Jersey	0.1454941742%
NJ161	Nutley Township, New Jersey	0.0574061090%
NJ162	Oakland Borough, New Jersey	0.0335231134%
NJ163	Ocean City, New Jersey	0.1910428164%
NJ164	Ocean County, New Jersey	4.9497293624%
NJ165	Ocean Township, Monmouth County, New Jersey	0.1387263032%
NJ166	Old Bridge Township, New Jersey	0.1263966779%
NJ167	Orange City Township, New Jersey	0.5609302630%
NJ168	Palisades Park Borough, New Jersey	0.0366345109%
NJ169	Paramus Borough, New Jersey	0.1129786355%
NJ170	Parsippany-Troy Hills Township, New Jersey	0.2342890939%
NJ171	Passaic City, New Jersey	0.4984612868%
NJ172	Passaic County, New Jersey	2.1805505203%
NJ173	Paterson City, New Jersey	0.9805526614%
NJ174	Pemberton Township, New Jersey	0.1182059071%
NJ175	Pennsauken Township, New Jersey	0.3221185950%
NJ176	Pennsville Township, New Jersey	0.0340920576%
NJ177	Pequannock Township, New Jersey	0.0769477223%
NJ178	Perth Amboy City, New Jersey	0.3436749356%
NJ179	Phillipsburg Town, New Jersey	0.1544595119%
NJ180	Pine Hill Borough, New Jersey	0.0482528270%
NJ181	Piscataway Township, New Jersey	0.1067019613%
NJ182	Plainfield City, New Jersey	0.3012229667%
NJ183	Plainsboro Township, New Jersey	0.0503298743%
NJ184	Pleasantville City, New Jersey	0.1421175070%
NJ185	Point Pleasant Borough, New Jersey	0.1109970141%
NJ186	Pompton Lakes Borough, New Jersey	0.0290573727%
NJ187	Princeton, New Jersey	0.0503970240%
NJ188	Rahway City, New Jersey	0.1444485698%
NJ189	Ramsey Borough, New Jersey	0.0402523452%
NJ190	Randolph Township, New Jersey	0.0853331898%
NJ191	Raritan Township, New Jersey	0.1071670391%
NJ192	Readington Township, New Jersey	0.0850076166%
NJ193	Red Bank Borough, New Jersey	0.1420636747%
NJ194	Ridgefield Borough, New Jersey	0.0201153405%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ195	Ridgefield Park Village, New Jersey	0.0392827532%
NJ196	Ridgewood Village, New Jersey	0.0849185213%
NJ197	Ringwood Borough, New Jersey	0.0309822545%
NJ198	River Edge Borough, New Jersey	0.0266057498%
NJ199	Robbinsville Township, New Jersey	0.0338593312%
NJ200	Rockaway Township, New Jersey	0.1290497970%
NJ201	Roselle Borough, New Jersey	0.0912325687%
NJ202	Roselle Park Borough, New Jersey	0.0316673040%
NJ203	Roxbury Township, New Jersey	0.1057717120%
NJ204	Rutherford Borough, New Jersey	0.0459830524%
NJ205	Saddle Brook Township, New Jersey	0.0390656888%
NJ206	Salem County, New Jersey	0.9344056735%
NJ207	Sayreville Borough, New Jersey	0.1477057086%
NJ208	Scotch Plains Township, New Jersey	0.0484433504%
NJ209	Secaucus Town, New Jersey	0.0516659295%
NJ210	Somers Point City, New Jersey	0.0439926621%
NJ211	Somerset County, New Jersey	1.4647125488%
NJ212	Somerville Borough, New Jersey	0.0756287358%
NJ213	South Brunswick Township, New Jersey	0.1037777110%
NJ214	South Orange Village Township, New Jersey	0.0488891085%
NJ215	South Plainfield Borough, New Jersey	0.0899775902%
NJ216	South River Borough, New Jersey	0.0421568288%
NJ217	Southampton Township, New Jersey	0.0127996268%
NJ218	Sparta Township, New Jersey	0.1069549921%
NJ219	Springfield Township, Union County, New Jersey	0.0573437423%
NJ220	Stafford Township, New Jersey	0.2155115906%
NJ221	Summit City, New Jersey	0.5428090174%
NJ222	Sussex County, New Jersey	1.2735318221%
NJ223	Teaneck Township, New Jersey	0.1723477966%
NJ224	Tenafly Borough, New Jersey	0.0450713724%
NJ225	Tinton Falls Borough, New Jersey	0.0881640307%
NJ226	Toms River Township, New Jersey	0.5620940829%
NJ227	Totowa Borough, New Jersey	0.0342545863%
NJ228	Trenton City, New Jersey	1.9352906929%
NJ229	Union City, New Jersey	0.9841875644%
NJ230	Union County, New Jersey	1.7400474523%
NJ231	Union Township, Union County, New Jersey	0.2247240506%
NJ232	Upper Township, New Jersey	0.0173930552%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ233	Vernon Township, New Jersey	0.0783616187%
NJ234	Verona Township, New Jersey	0.0234318917%
NJ235	Vineland City, New Jersey	0.5000169856%
NJ236	Voorhees Township, New Jersey	0.1406021825%
NJ237	Waldwick Borough, New Jersey	0.0421770394%
NJ238	Wall Township, New Jersey	0.1650847899%
NJ239	Wallington Borough, New Jersey	0.0235956865%
NJ240	Wanaque Borough, New Jersey	0.0311245257%
NJ241	Wantage Township, New Jersey	0.0091403397%
NJ242	Warren County, New Jersey	1.0382472049%
NJ243	Warren Township, New Jersey	0.0736326246%
NJ244	Washington Township, Gloucester County, New Jersey	0.2470375143%
NJ245	Washington Township, Morris County, New Jersey	0.0524274135%
NJ246	Waterford Township, New Jersey	0.0648566849%
NJ247	Wayne Township, New Jersey	0.1724444886%
NJ248	Weehawken Township, New Jersey	0.0282451513%
NJ249	West Caldwell Township, New Jersey	0.0246748189%
NJ250	West Deptford Township, New Jersey	0.1402059895%
NJ251	West Milford Township, New Jersey	0.0644752630%
NJ252	West New York Town, New Jersey	0.6157331463%
NJ253	West Orange Township, New Jersey	0.1051193933%
NJ254	West Windsor Township, New Jersey	0.0458605228%
NJ255	Westfield Town, New Jersey	0.0887745684%
NJ256	Westwood Borough, New Jersey	0.0348328152%
NJ257	Willingboro Township, New Jersey	0.2091808026%
NJ258	Winslow Township, New Jersey	0.1817978600%
NJ259	Woodbridge Township, New Jersey	0.3688029685%
NJ260	Woodland Park Borough, New Jersey	0.0292498655%
NJ261	Woolwich Township, New Jersey	0.0599291958%
NJ262	Wyckoff Township, New Jersey	0.0296665036%

State ID	Qualifying Subdivision	Consolidated State Allocation
NY1	Albany City, New York	
NY2	Albany County, New York	
NY3	Allegany County, New York	
NY4	Broome County, New York	
NY5	Buffalo City, New York	
NY6	Cattaraugus County, New York	
NY7	Cayuga County, New York	
NY8	Chautauqua County, New York	
NY9	Chemung County, New York	
NY10	Chenango County, New York	
NY11	Clinton County, New York	
NY12	Columbia County, New York	
NY13	Cortland County, New York	
NY14	Delaware County, New York	
NY15	Dutchess County, New York	
NY16	Erie County, New York	
NY17	Essex County, New York	
NY18	Franklin County, New York	
NY19	Fulton County, New York	
NY20	Genesee County, New York	
NY21	Greene County, New York	
NY22	Hamilton County, New York	Allocations in New York will be made in accordance with the New York Agreement.
NY23	Herkimer County, New York	
NY24	Jefferson County, New York	
NY25	Lewis County, New York	
NY26	Livingston County, New York	
NY27	Madison County, New York	
NY28	Monroe County, New York	
NY29	Montgomery County, New York	
NY30	Nassau County, New York	
NY31	New York City, New York	
NY32	Niagara County, New York	
NY33	Oneida County, New York	
NY34	Onondaga County, New York	
NY35	Ontario County, New York	
NY36	Orange County, New York	
NY37	Orleans County, New York	
NY38	Oswego County, New York	
NY39	Otsego County, New York	
NY40	Putnam County, New York	
NY41	Rensselaer County, New York	
NY42	Rochester City, New York	
NY43	Rockland County, New York	
NY44	Saratoga County, New York	
NY45	Schenectady County, New York	
NY46	Schoharie County, New York	
NY47	Schuyler County, New York	

State ID	Qualifying Subdivision	Consolidated State Allocation
NY48	Seneca County, New York	
NY49	St Lawrence County, New York	
NY50	Steuben County, New York	
NY51	Suffolk County, New York	
NY52	Sullivan County, New York	
NY53	Syracuse City, New York	
NY54	Tioga County, New York	
NY55	Tompkins County, New York	
NY56	Ulster County, New York	
NY57	Warren County, New York	
NY58	Washington County, New York	
NY59	Wayne County, New York	
NY60	Westchester County, New York	
NY61	Wyoming County, New York	
NY62	Yates County, New York	
NY63	Yonkers City, New York	Allocations in New York will be made in accordance with the New York Agreement.
NY64	Geneva City, New York	
NY65	Herkimer Village, New York	
NY66	Lackawanna City, New York	
NY67	Rome City, New York	
NY68	Utica City, New York	
NY69	Plattsburgh City, New York	
NY70	Saratoga Springs City, New York	
NY71	Schenectady City, New York	
NY72	Troy City, New York	
NY73	Amherst Town, New York	
NY74	Amsterdam City, New York	
NY75	Auburn City, New York	
NY76	Cheektowaga Town, New York	
NY77	Ithaca City, New York	
NY78	Lancaster Town, New York	
NY79	Mount Vernon City, New York	
NY80	Ogdensburg City, New York	
NY81	Poughkeepsie City, New York	
NY82	Tonawanda Town, New York	

State ID	Qualifying Subdivision	Consolidated State Allocation
NC1	Alamance County, North Carolina	1.3780289676%
NC2	Alexander County, North Carolina	0.5100078796%
NC3	Alleghany County, North Carolina	0.1490905989%
NC4	Anson County, North Carolina	0.1821929604%
NC5	Ashe County, North Carolina	0.3386391883%
NC6	Asheville City, North Carolina	0.2358147243%
NC7	Avery County, North Carolina	0.2659967669%
NC8	Beaufort County, North Carolina	0.4778884349%
NC9	Bertie County, North Carolina	0.1394685751%
NC10	Bladen County, North Carolina	0.4292178095%
NC11	Brunswick County, North Carolina	2.1132385076%
NC12	Buncombe County, North Carolina	2.5115878573%
NC13	Burke County, North Carolina	2.0901968270%
NC14	Cabarrus County, North Carolina	1.6695734466%
NC15	Caldwell County, North Carolina	1.2763011462%
NC16	Camden County, North Carolina	0.0730364004%
NC17	Canton Town, North Carolina	0.0114538232%
NC18	Carteret County, North Carolina	1.1284655939%
NC19	Cary Town, North Carolina	0.1441516454%
NC20	Caswell County, North Carolina	0.1729202375%
NC21	Catawba County, North Carolina	2.0726952227%
NC22	Charlotte City, North Carolina	1.2474838144%
NC23	Chatham County, North Carolina	0.4498143831%
NC24	Cherokee County, North Carolina	0.7827591529%
NC25	Chowan County, North Carolina	0.1137055961%
NC26	Clay County, North Carolina	0.2244299489%
NC27	Cleveland County, North Carolina	1.1199280277%
NC28	Columbus County, North Carolina	1.2209369390%
NC29	Concord City, North Carolina	0.2274558703%
NC30	Craven County, North Carolina	1.3368601902%
NC31	Cumberland County, North Carolina	2.6372996596%
NC32	Currituck County, North Carolina	0.1867785513%
NC33	Dare County, North Carolina	0.5331267313%
NC34	Davidson County, North Carolina	1.9402695304%
NC35	Davie County, North Carolina	0.5131475269%
NC36	Duplin County, North Carolina	0.3827851474%
NC37	Durham City, North Carolina	0.3804050267%
NC38	Durham County, North Carolina	1.7979943624%
NC39	Edgecombe County, North Carolina	0.4171019390%
NC40	Fayetteville City, North Carolina	0.3097690552%
NC41	Forsyth County, North Carolina	3.0684508095%
NC42	Franklin County, North Carolina	0.5005036433%
NC43	Gaston County, North Carolina	3.0981738869%
NC44	Gastonia City, North Carolina	0.2577638238%
NC45	Gates County, North Carolina	0.0795675166%
NC46	Graham County, North Carolina	0.1834845617%
NC47	Granville County, North Carolina	0.5901034093%

State ID	Qualifying Subdivision	Consolidated State Allocation
NC48	Greene County, North Carolina	0.1232748186%
NC49	Greensboro City, North Carolina	0.5273916964%
NC50	Greenville City, North Carolina	0.1626564747%
NC51	Guilford County, North Carolina	3.3750152311%
NC52	Halifax County, North Carolina	0.4531611740%
NC53	Harnett County, North Carolina	0.9889807722%
NC54	Haywood County, North Carolina	0.8033151101%
NC55	Henderson City, North Carolina	0.0322534788%
NC56	Henderson County, North Carolina	1.3815950870%
NC57	Hertford County, North Carolina	0.2068430501%
NC58	Hickory City, North Carolina	0.0948758357%
NC59	High Point City, North Carolina	0.2064287629%
NC60	Hoke County, North Carolina	0.3324858046%
NC61	Hyde County, North Carolina	0.0272373541%
NC62	Iredell County, North Carolina	2.1159313745%
NC63	Jackson County, North Carolina	0.5077577313%
NC64	Jacksonville City, North Carolina	0.0950098698%
NC65	Johnston County, North Carolina	1.2508874682%
NC66	Jones County, North Carolina	0.0879669870%
NC67	Lee County, North Carolina	0.6531156836%
NC68	Lenoir County, North Carolina	0.6042825926%
NC69	Lincoln County, North Carolina	0.9268336271%
NC70	Macon County, North Carolina	0.2377764961%
NC71	Madison County, North Carolina	0.2328822206%
NC72	Martin County, North Carolina	0.5875445765%
NC73	McDowell County, North Carolina	0.4667676661%
NC74	Mecklenburg County, North Carolina	5.0383012599%
NC75	Mitchell County, North Carolina	0.3093141516%
NC76	Montgomery County, North Carolina	0.2260505430%
NC77	Moore County, North Carolina	0.9717391128%
NC78	Nash County, North Carolina	0.8456536396%
NC79	New Hanover County, North Carolina	2.8972648920%
NC80	Northampton County, North Carolina	0.1209962389%
NC81	Onslow County, North Carolina	1.6440013647%
NC82	Orange County, North Carolina	1.0558394190%
NC83	Pamlico County, North Carolina	0.1199361510%
NC84	Pasquotank County, North Carolina	0.3748162108%
NC85	Pender County, North Carolina	0.5857493319%
NC86	Perquimans County, North Carolina	0.1118331803%
NC87	Person County, North Carolina	0.4030242967%
NC88	Pitt County, North Carolina	1.3690080664%
NC89	Polk County, North Carolina	0.2661429860%
NC90	Raleigh City, North Carolina	0.5667246127%

State ID	Qualifying Subdivision	Consolidated State Allocation
NC91	Randolph County, North Carolina	1.5254339862%
NC92	Richmond County, North Carolina	0.7491328400%
NC93	Robeson County, North Carolina	1.3597353436%
NC94	Rockingham County, North Carolina	1.3653688375%
NC95	Rowan County, North Carolina	2.3352192879%
NC96	Rutherford County, North Carolina	0.9289416180%
NC97	Sampson County, North Carolina	0.6195137405%
NC98	Scotland County, North Carolina	0.4491482742%
NC99	Stanly County, North Carolina	0.7249742086%
NC100	Stokes County, North Carolina	0.6239531124%
NC101	Surry County, North Carolina	1.4108267061%
NC102	Swain County, North Carolina	0.2811629286%
NC103	Transylvania County, North Carolina	0.4975955095%
NC104	Tyrrell County, North Carolina	0.0414409072%
NC105	Union County, North Carolina	1.4667026799%
NC106	Vance County, North Carolina	0.5362582553%
NC107	Wake County, North Carolina	4.9024556672%
NC108	Warren County, North Carolina	0.1063905835%
NC109	Washington County, North Carolina	0.0747707205%
NC110	Watauga County, North Carolina	0.4696757999%
NC111	Wayne County, North Carolina	0.9706993331%
NC112	Wilkes County, North Carolina	1.9971771606%
NC113	Wilmington City, North Carolina	0.1194974940%
NC114	Wilson County, North Carolina	0.6464708415%
NC115	Winston-Salem City, North Carolina	0.4944599238%
NC116	Yadkin County, North Carolina	0.5621471451%
NC117	Yancey County, North Carolina	0.3821149769%

State ID	Qualifying Subdivision	Consolidated State Allocation
ND1	Adams County, North Dakota	0.3266859369%
ND2	Barnes County, North Dakota	1.1596409120%
ND3	Benson County, North Dakota	0.8243618844%
ND4	Billings County, North Dakota	0.0531198558%
ND5	Bismarck City, North Dakota	7.8720018475%
ND6	Bottineau County, North Dakota	0.6564106964%
ND7	Bowman County, North Dakota	0.3537618912%
ND8	Burke County, North Dakota	0.1340272238%
ND9	Burleigh County, North Dakota	5.9258321732%
ND10	Cass County, North Dakota	9.2593207065%
ND11	Cavalier County, North Dakota	0.4775832577%
ND12	Devils Lake City, North Dakota	0.3622623619%
ND13	Dickey County, North Dakota	0.6064663883%
ND14	Dickinson City, North Dakota	1.0573324109%
ND15	Divide County, North Dakota	0.1925705034%
ND16	Dunn County, North Dakota	0.5017615248%
ND17	Eddy County, North Dakota	0.2227970127%
ND18	Emmons County, North Dakota	0.7218887252%
ND19	Fargo City, North Dakota	12.8639966005%
ND20	Foster County, North Dakota	0.3938546507%
ND21	Golden Valley County, North Dakota	0.2278631874%
ND22	Grand Forks City, North Dakota	7.1999971538%
ND23	Grand Forks County, North Dakota	5.4639296523%
ND24	Grant County, North Dakota	0.2093626818%
ND25	Griggs County, North Dakota	0.2073426807%
ND26	Hettinger County, North Dakota	0.2096684753%
ND27	Jamestown City, North Dakota	0.7024664288%
ND28	Kidder County, North Dakota	0.3074782839%
ND29	La Moure County, North Dakota	0.3036088203%
ND30	Lisbon City, North Dakota	0.1372424658%
ND31	Logan County, North Dakota	0.1641331799%
ND32	Mandan City, North Dakota	1.1262932510%
ND33	McHenry County, North Dakota	0.3973374621%
ND34	McIntosh County, North Dakota	0.2870077627%
ND35	McKenzie County, North Dakota	1.2312553926%
ND36	McLean County, North Dakota	1.1384661837%
ND37	Mercer County, North Dakota	1.1241071216%
ND38	Minot City, North Dakota	2.8909627339%
ND39	Morton County, North Dakota	2.6703636118%
ND40	Mountrail County, North Dakota	1.1142893867%
ND41	Nelson County, North Dakota	0.4740975060%
ND42	Oliver County, North Dakota	0.2228234756%
ND43	Pembina County, North Dakota	1.2530005434%
ND44	Pierce County, North Dakota	0.7284574044%
ND45	Ramsey County, North Dakota	1.2734343106%
ND46	Ransom County, North Dakota	0.6183673413%
ND47	Renville County, North Dakota	0.2860845016%

State ID	Qualifying Subdivision	Consolidated State Allocation
ND48	Richland County, North Dakota	2.4309493698%
ND49	Rolette County, North Dakota	1.8198034592%
ND50	Sargent County, North Dakota	0.5773674924%
ND51	Sheridan County, North Dakota	0.0895886685%
ND52	Sioux County, North Dakota	0.6666209643%
ND53	Slope County, North Dakota	0.0470907257%
ND54	Stark County, North Dakota	3.3526741338%
ND55	Steele County, North Dakota	0.2434939387%
ND56	Stutsman County, North Dakota	1.9758860377%
ND57	Towner County, North Dakota	0.1807489391%
ND58	Traill County, North Dakota	1.0587643476%
ND59	Walsh County, North Dakota	2.0521094729%
ND60	Ward County, North Dakota	3.4849842097%
ND61	Wells County, North Dakota	0.4346604383%
ND62	West Fargo City, North Dakota	1.8417059171%
ND63	Williams County, North Dakota	2.3067369406%
ND64	Williston City, North Dakota	1.5016973817%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1	Aberdeen Village, Ohio	0.0087437716%
OH2	Ada Village, Ohio	0.0077636351%
OH3	Adams County, Ohio	0.3473544585%
OH4	Adams Township, Champaign County, Ohio	0.0001374611%
OH5	Adams Township, Clinton County, Ohio	0.0003122525%
OH6	Adams Township, Darke County, Ohio	0.0016731027%
OH7	Adams Township, Monroe County, Ohio	0.0000311703%
OH8	Adams Township, Muskingum County, Ohio	0.0001003092%
OH9	Adams Township, Seneca County, Ohio	0.0003810303%
OH10	Adams Township, Washington County, Ohio	0.0001169753%
OH11	Adamsville Village, Ohio	0.0000910884%
OH12	Addyston Village, Ohio	0.0025217854%
OH13	Adelphi Village, Ohio	0.0020068066%
OH14	Adena Village, Ohio	0.0003568983%
OH15	Aid Township, Ohio	0.0003303244%
OH16	Akron City, Ohio	0.8812077621%
OH17	Albany Village, Ohio	0.0019488925%
OH18	Alexander Township, Ohio	0.0001250626%
OH19	Alexandria Village, Ohio	0.0005560173%
OH20	Alger Village, Ohio	0.0005166462%
OH21	Allen County, Ohio	0.4092999560%
OH22	Allen Township, Darke County, Ohio	0.0006643202%
OH23	Allen Township, Hancock County, Ohio	0.0005903230%
OH24	Allen Township, Ottawa County, Ohio	0.0005976710%
OH25	Allen Township, Union County, Ohio	0.0028518922%
OH26	Alliance City, Ohio	0.0889490116%
OH27	Amanda Township, Fairfield County, Ohio	0.0018577114%
OH28	Amanda Township, Hancock County, Ohio	0.0001616361%
OH29	Amanda Village, Ohio	0.0005782400%
OH30	Amberley Village, Ohio	0.0192140009%
OH31	Amboy Township, Ohio	0.0017244001%
OH32	Amelia Village, Ohio	0.0138770427%
OH33	American Township, Ohio	0.0193901533%
OH34	Ames Township, Ohio	0.0004272973%
OH35	Amesville Village, Ohio	0.0000937970%
OH36	Amherst City, Ohio	0.0344767089%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH37	Amherst Township, Ohio	0.0134400730%
OH38	Amsterdam Village, Ohio	0.0003984552%
OH39	Anderson Township, Ohio	0.0760877775%
OH40	Andover Township, Ohio	0.0010566751%
OH41	Andover Village, Ohio	0.0040505880%
OH42	Anna Village, Ohio	0.0028751504%
OH43	Ansonia Village, Ohio	0.0014885693%
OH44	Antioch Village, Ohio	0.0000311703%
OH45	Antwerp Village, Ohio	0.0009282725%
OH46	Apple Creek Village, Ohio	0.0004832518%
OH47	Aquilla Village, Ohio	0.0000095709%
OH48	Arcadia Village, Ohio	0.0000210830%
OH49	Arcanum Village, Ohio	0.0034200188%
OH50	Archbold Village, Ohio	0.0168893369%
OH51	Arlington Heights Village, Ohio	0.0024048815%
OH52	Arlington Village, Ohio	0.0017280808%
OH53	Ashland City, Ohio	0.0677959091%
OH54	Ashland County, Ohio	0.2064379332%
OH55	Ashley Village, Ohio	0.0012125812%
OH56	Ashtabula City, Ohio	0.0931048204%
OH57	Ashtabula County, Ohio	0.7429130666%
OH58	Ashtabula Township, Ohio	0.0174821031%
OH59	Ashville Village, Ohio	0.0024582550%
OH60	Athalia Village, Ohio	0.0000173855%
OH61	Athens City, Ohio	0.0700871751%
OH62	Athens County, Ohio	0.4584170235%
OH63	Athens Township, Athens County, Ohio	0.0025846274%
OH64	Athens Township, Harrison County, Ohio	0.0003148983%
OH65	Attica Village, Ohio	0.0007921419%
OH66	Atwater Township, Ohio	0.0004753019%
OH67	Auburn Township, Crawford County, Ohio	0.0007613308%
OH68	Auburn Township, Geauga County, Ohio	0.0067953249%
OH69	Auburn Township, Tuscarawas County, Ohio	0.0000098536%
OH70	Auglaize County, Ohio	0.1648586210%
OH71	Auglaize Township, Allen County, Ohio	0.0010226874%
OH72	Auglaize Township, Paulding County, Ohio	0.0000730923%
OH73	Augusta Township, Ohio	0.0004684152%
OH74	Aurelius Township, Ohio	0.0000083554%
OH75	Aurora City, Ohio	0.0294524674%
OH76	Austinburg Township, Ohio	0.0004813742%
OH77	Austintown Township, Ohio	0.0890063352%
OH78	Avon City, Ohio	0.0729757005%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH79	Avon Lake City, Ohio	0.0663140992%
OH80	Bailey Lakes Village, Ohio	0.0000813388%
OH81	Bainbridge Township, Ohio	0.0406379571%
OH82	Bainbridge Village, Ohio	0.0022724133%
OH83	Bairdstown Village, Ohio	0.0000612234%
OH84	Ballville Township, Ohio	0.0021521086%
OH85	Baltic Village, Ohio	0.0009410120%
OH86	Baltimore Village, Ohio	0.0031532207%
OH87	Barberton City, Ohio	0.1164193916%
OH88	Barlow Township, Ohio	0.0003258598%
OH89	Barnesville Village, Ohio	0.0106861443%
OH90	Barnhill Village, Ohio	0.0006601909%
OH91	Bartlow Township, Ohio	0.0001082864%
OH92	Batavia Township, Ohio	0.0000517157%
OH93	Batavia Village, Ohio	0.0047750818%
OH94	Batesville Village, Ohio	0.0000517432%
OH95	Bath Township, Allen County, Ohio	0.0088564730%
OH96	Bath Township, Greene County, Ohio	0.0001754181%
OH97	Bath Township, Summit County, Ohio	0.0489522386%
OH98	Baughman Township, Ohio	0.0001353105%
OH99	Bay Township, Ohio	0.0000549583%
OH100	Bay View Village, Ohio	0.0012986334%
OH101	Bay Village City, Ohio	0.0295102794%
OH102	Bazetta Township, Ohio	0.0331455317%
OH103	Beach City Village, Ohio	0.0006531299%
OH104	Beachwood City, Ohio	0.0573216138%
OH105	Beallsville Village, Ohio	0.0001580913%
OH106	Bearfield Township, Ohio	0.0005486478%
OH107	Beaver Township, Mahoning County, Ohio	0.0148139167%
OH108	Beaver Township, Pike County, Ohio	0.0003380168%
OH109	Beaver Village, Ohio	0.0001859093%
OH110	Beavercreek City, Ohio	0.0843658046%
OH111	Beavercreek Township, Ohio	0.1348759090%
OH112	Beaverdam Village, Ohio	0.0000749971%
OH113	Bedford City, Ohio	0.0429793572%
OH114	Bedford Heights City, Ohio	0.0386687782%
OH115	Bedford Township, Ohio	0.0000306151%
OH116	Bellaire Village, Ohio	0.0010264323%
OH117	Bellbrook City, Ohio	0.0237949542%
OH118	Belle Center Village, Ohio	0.0005231767%
OH119	Belle Valley Village, Ohio	0.0001073626%
OH120	Bellefontaine City, Ohio	0.0729400123%
OH121	Bellevue City, Ohio	0.0299834456%
OH122	Bellville Village, Ohio	0.0011239941%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH123	Belmont County, Ohio	0.4904799617%
OH124	Belmont Village, Ohio	0.0011248573%
OH125	Belmore Village, Ohio	0.0002483511%
OH126	Beloit Village, Ohio	0.0037587550%
OH127	Belpre City, Ohio	0.0099429019%
OH128	Belpre Township, Ohio	0.0009358025%
OH129	Bennington Township, Licking County, Ohio	0.0005560173%
OH130	Bennington Township, Morrow County, Ohio	0.0001476031%
OH131	Bentleyville Village, Ohio	0.0019992236%
OH132	Benton Ridge Village, Ohio	0.0000914068%
OH133	Benton Township, Hocking County, Ohio	0.0001089904%
OH134	Benton Township, Ottawa County, Ohio	0.0007968947%
OH135	Benton Township, Paulding County, Ohio	0.0002485139%
OH136	Benton Township, Pike County, Ohio	0.0003718185%
OH137	Berea City, Ohio	0.0293403849%
OH138	Bergholz Village, Ohio	0.0002390731%
OH139	Berkey Village, Ohio	0.0003639406%
OH140	Berkshire Township, Ohio	0.0000742397%
OH141	Berlin Heights Village, Ohio	0.0009142379%
OH142	Berlin Township, Delaware County, Ohio	0.0000164977%
OH143	Berlin Township, Erie County, Ohio	0.0001350579%
OH144	Berlin Township, Holmes County, Ohio	0.0000814306%
OH145	Berlin Township, Mahoning County, Ohio	0.0014985886%
OH146	Bern Township, Ohio	0.0001354845%
OH147	Berne Township, Ohio	0.0001629571%
OH148	Bethel Township, Clark County, Ohio	0.0138134025%
OH149	Bethel Township, Monroe County, Ohio	0.0000498724%
OH150	Bethel Village, Ohio	0.0057576798%
OH151	Bethesda Village, Ohio	0.0006889751%
OH152	Bethlehem Township, Coshocton County, Ohio	0.0000765378%
OH153	Bethlehem Township, Stark County, Ohio	0.0015140738%
OH154	Bettsville Village, Ohio	0.0009525757%
OH155	Beverly Village, Ohio	0.0019551589%
OH156	Bexley City, Ohio	0.0458668476%
OH157	Big Island Township, Ohio	0.0005578783%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH158	Black Creek Township, Ohio	0.0001534027%
OH159	Blakeslee Village, Ohio	0.0000628635%
OH160	Blanchard Township, Hancock County, Ohio	0.0001475808%
OH161	Blanchard Township, Putnam County, Ohio	0.0006457128%
OH162	Blanchester Village, Ohio	0.0114641267%
OH163	Blendon Township, Ohio	0.0282639366%
OH164	Bloom Township, Fairfield County, Ohio	0.0118551321%
OH165	Bloom Township, Morgan County, Ohio	0.0001713719%
OH166	Bloom Township, Scioto County, Ohio	0.0000852977%
OH167	Bloom Township, Seneca County, Ohio	0.0009926842%
OH168	Bloomdale Village, Ohio	0.0005693772%
OH169	Bloomfield Township, Jackson County, Ohio	0.0013260530%
OH170	Bloomfield Township, Logan County, Ohio	0.0000099754%
OH171	Bloomingburg Village, Ohio	0.0002078369%
OH172	Bloomingdale Village, Ohio	0.0002231349%
OH173	Bloominggrove Township, Ohio	0.0001784118%
OH174	Bloomville Village, Ohio	0.0004411930%
OH175	Blue Ash City, Ohio	0.0851895858%
OH176	Blue Creek Township, Ohio	0.0000767469%
OH177	Blue Rock Township, Ohio	0.0001103402%
OH178	Bluffton Village, Ohio	0.0052836661%
OH179	Boardman Township, Ohio	0.1408673271%
OH180	Bokescreek Township, Ohio	0.0013367015%
OH181	Bolivar Village, Ohio	0.0004434118%
OH182	Boston Heights Village, Ohio	0.0077201699%
OH183	Boston Township, Ohio	0.0003662503%
OH184	Botkins Village, Ohio	0.0019522626%
OH185	Bowerston Village, Ohio	0.0000572542%
OH186	Bowersville Village, Ohio	0.0000916319%
OH187	Bowling Green City, Ohio	0.0752741164%
OH188	Bowling Green Township, Ohio	0.0000370678%
OH189	Braceville Township, Ohio	0.0037680877%
OH190	Bradford Village, Ohio	0.0028661348%
OH191	Bradner Village, Ohio	0.0009183503%
OH192	Brady Lake Village, Ohio	0.0002559318%
OH193	Brady Township, Ohio	0.0005029083%
OH194	Bratenahl Village, Ohio	0.0051323943%
OH195	Bratton Township, Ohio	0.0000790580%
OH196	Brecksville City, Ohio	0.0241013127%
OH197	Bremen Village, Ohio	0.0006844200%
OH198	Brewster Village, Ohio	0.0058880648%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH199	Brice Village, Ohio	0.0005574892%
OH200	Bridgeport Village, Ohio	0.0050477971%
OH201	Bridgewater Township, Ohio	0.0004164709%
OH202	Brighton Township, Ohio	0.0000194784%
OH203	Brimfield Township, Ohio	0.0111960000%
OH204	Bristol Township, Morgan County, Ohio	0.0001285289%
OH205	Bristol Township, Trumbull County, Ohio	0.0252513027%
OH206	Broadview Heights City, Ohio	0.0226789401%
OH207	Bronson Township, Ohio	0.0009334281%
OH208	Brook Park City, Ohio	0.0389572037%
OH209	Brookfield Township, Noble County, Ohio	0.0000517432%
OH210	Brookfield Township, Trumbull County, Ohio	0.0346459468%
OH211	Brooklyn City, Ohio	0.0212407634%
OH212	Brooklyn Heights Village, Ohio	0.0100909430%
OH213	Brookside Village, Ohio	0.0001124857%
OH214	Brookville City, Ohio	0.0216648650%
OH215	Broughton Village, Ohio	0.0000073092%
OH216	Brown County, Ohio	0.4653422837%
OH217	Brown Township, Carroll County, Ohio	0.0009477238%
OH218	Brown Township, Darke County, Ohio	0.0007873425%
OH219	Brown Township, Delaware County, Ohio	0.0000082489%
OH220	Brown Township, Franklin County, Ohio	0.0003894787%
OH221	Brown Township, Knox County, Ohio	0.0039027192%
OH222	Brown Township, Miami County, Ohio	0.0006132702%
OH223	Brown Township, Paulding County, Ohio	0.0001315662%
OH224	Brown Township, Vinton County, Ohio	0.0000390135%
OH225	Brunswick City, Ohio	0.1197413086%
OH226	Brunswick Hills Township, Ohio	0.0200631640%
OH227	Brush Creek Township, Jefferson County, Ohio	0.0001275057%
OH228	Brush Creek Township, Scioto County, Ohio	0.0011088700%
OH229	Brushcreek Township, Ohio	0.0059850824%
OH230	Bryan City, Ohio	0.0285400457%
OH231	Buchtel Village, Ohio	0.0001849243%
OH232	Buckeye Lake Village, Ohio	0.0040562680%
OH233	Buckland Village, Ohio	0.0001068314%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH234	Bucks Township, Ohio	0.0002857543%
OH235	Bucyrus City, Ohio	0.0467130847%
OH236	Bucyrus Township, Ohio	0.0002175231%
OH237	Buffalo Township, Ohio	0.0000689910%
OH238	Burbank Village, Ohio	0.0001559017%
OH239	Burgoon Village, Ohio	0.0001532454%
OH240	Burkettsville Village, Ohio	0.0000203512%
OH241	Burlington Township, Ohio	0.0012973736%
OH242	Burton Township, Ohio	0.0022682986%
OH243	Burton Village, Ohio	0.0036177927%
OH244	Butler County, Ohio	2.6887406714%
OH245	Butler Township, Columbiana County, Ohio	0.0017704304%
OH246	Butler Township, Darke County, Ohio	0.0006643202%
OH247	Butler Township, Mercer County, Ohio	0.0021025197%
OH248	Butler Township, Montgomery County, Ohio	0.0308007959%
OH249	Butler Township, Richland County, Ohio	0.0003925059%
OH250	Butler Village, Ohio	0.0004817118%
OH251	Butlerville Village, Ohio	0.0001866800%
OH252	Byesville Village, Ohio	0.0018493145%
OH253	Byrd Township, Ohio	0.0018293707%
OH254	Cadiz Township, Ohio	0.0013359320%
OH255	Cadiz Village, Ohio	0.0042081859%
OH256	Caesarscreek Township, Ohio	0.0004643421%
OH257	Cairo Village, Ohio	0.0000409075%
OH258	Caldwell Village, Ohio	0.0017937650%
OH259	Caledonia Village, Ohio	0.0007098142%
OH260	Cambridge City, Ohio	0.0668200845%
OH261	Cambridge Township, Ohio	0.0000951853%
OH262	Camden Township, Ohio	0.0003116539%
OH263	Camden Village, Ohio	0.0031099397%
OH264	Camp Creek Township, Ohio	0.0001943597%
OH265	Campbell City, Ohio	0.0206854359%
OH266	Canaan Township, Morrow County, Ohio	0.0000885618%
OH267	Canaan Township, Wayne County, Ohio	0.0002435589%
OH268	Canal Fulton City, Ohio	0.0143391696%
OH269	Canal Winchester City, Ohio	0.0017001990%
OH270	Canfield City, Ohio	0.0340253310%
OH271	Canfield Township, Ohio	0.0024198521%
OH272	Canton City, Ohio	0.4906093929%
OH273	Canton Township, Ohio	0.0238293446%
OH274	Cardington Village, Ohio	0.0026450469%
OH275	Carey Village, Ohio	0.0048237347%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH276	Carlisle Township, Ohio	0.0046455904%
OH277	Carlisle Village, Ohio	0.0081658806%
OH278	Carroll County, Ohio	0.1274960868%
OH279	Carroll Township, Ohio	0.0031394902%
OH280	Carroll Village, Ohio	0.0008718207%
OH281	Carrollton Village, Ohio	0.0061329714%
OH282	Carryall Township, Ohio	0.0000511646%
OH283	Carthage Township, Ohio	0.0002397033%
OH284	Cass Township, Muskingum County, Ohio	0.0002006185%
OH285	Cass Township, Richland County, Ohio	0.0007850118%
OH286	Casstown Village, Ohio	0.0005337723%
OH287	Castalia Village, Ohio	0.0011427974%
OH288	Castine Village, Ohio	0.0005289957%
OH289	Catawba Island Township, Ohio	0.0060247984%
OH290	Catawba Village, Ohio	0.0002313575%
OH291	Cecil Village, Ohio	0.0000109638%
OH292	Cedarville Township, Ohio	0.0036837809%
OH293	Cedarville Village, Ohio	0.0036321873%
OH294	Celina City, Ohio	0.0165674940%
OH295	Center Township, Carroll County, Ohio	0.0001634007%
OH296	Center Township, Columbiana County, Ohio	0.0003327877%
OH297	Center Township, Guernsey County, Ohio	0.0001903706%
OH298	Center Township, Mercer County, Ohio	0.0004241134%
OH299	Center Township, Monroe County, Ohio	0.0005361288%
OH300	Center Township, Morgan County, Ohio	0.0000535537%
OH301	Center Township, Noble County, Ohio	0.0001724774%
OH302	Center Township, Williams County, Ohio	0.0005107662%
OH303	Center Township, Wood County, Ohio	0.0002510158%
OH304	Centerburg Village, Ohio	0.0041342364%
OH305	Centerville City, Ohio	0.0591550598%
OH306	Centerville Village, Ohio	0.0005060807%
OH307	Cessna Township, Ohio	0.0001110677%
OH308	Chagrin Falls Township, Ohio	0.0000039510%
OH309	Chagrin Falls Village, Ohio	0.0125168784%
OH310	Champaign County, Ohio	0.2269483026%
OH311	Champion Township, Ohio	0.0283714840%
OH312	Chardon City, Ohio	0.0479405386%
OH313	Chardon Township, Ohio	0.0039336317%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH314	Charlestown Township, Ohio	0.0000121872%
OH315	Chatfield Township, Ohio	0.0008265878%
OH316	Chatfield Village, Ohio	0.0000870092%
OH317	Chatham Township, Ohio	0.0003778818%
OH318	Chauncey Village, Ohio	0.0000833751%
OH319	Cherry Fork Village, Ohio	0.0004264208%
OH320	Cherry Valley Township, Ohio	0.0004696334%
OH321	Chesapeake Village, Ohio	0.0021905725%
OH322	Cheshire Township, Ohio	0.0010496489%
OH323	Cheshire Village, Ohio	0.0001686936%
OH324	Chester Township, Clinton County, Ohio	0.0019181224%
OH325	Chester Township, Geauga County, Ohio	0.0252766944%
OH326	Chester Township, Morrow County, Ohio	0.0005136587%
OH327	Chester Township, Wayne County, Ohio	0.0004213956%
OH328	Chesterhill Village, Ohio	0.0000958805%
OH329	Chesterville Village, Ohio	0.0000531371%
OH330	Cheviot City, Ohio	0.0177109500%
OH331	Chickasaw Village, Ohio	0.0003251707%
OH332	Chillicothe City, Ohio	0.3116747707%
OH333	Chilo Village, Ohio	0.0001537865%
OH334	Chippewa Lake Village, Ohio	0.0005077787%
OH335	Chippewa Township, Ohio	0.0025863636%
OH336	Christiansburg Village, Ohio	0.0002537744%
OH337	Cincinnati City, Ohio	1.9225774768%
OH338	Circleville City, Ohio	0.3452050773%
OH339	Circleville Township, Ohio	0.0006412839%
OH340	Claibourne Township, Ohio	0.0000211028%
OH341	Claridon Township, Ohio	0.0025745668%
OH342	Clarington Village, Ohio	0.0000498724%
OH343	Clark County, Ohio	1.2151983585%
OH344	Clark Township, Brown County, Ohio	0.0053640868%
OH345	Clark Township, Clinton County, Ohio	0.0010928837%
OH346	Clarksburg Village, Ohio	0.0000295119%
OH347	Clarksfield Township, Ohio	0.0007412517%
OH348	Clarksville Village, Ohio	0.0004237712%
OH349	Clay Center Village, Ohio	0.0000618280%
OH350	Clay Township, Auglaize County, Ohio	0.0004451307%
OH351	Clay Township, Highland County, Ohio	0.0003613635%
OH352	Clay Township, Montgomery County, Ohio	0.0058148642%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH353	Clay Township, Muskingum County, Ohio	0.0004012369%
OH354	Clay Township, Ottawa County, Ohio	0.0026311263%
OH355	Clay Township, Scioto County, Ohio	0.0064826249%
OH356	Clay Township, Tuscarawas County, Ohio	0.0000492680%
OH357	Clayton City, Ohio	0.0375148659%
OH358	Clayton Township, Ohio	0.0004303120%
OH359	Clear Creek Township, Ohio	0.0874295648%
OH360	Clearcreek Township, Ohio	0.0010918129%
OH361	Clermont County, Ohio	1.9148422650%
OH362	Cleveland City, Ohio	1.8006406770%
OH363	Cleveland Heights City, Ohio	0.0861404621%
OH364	Cleves Village, Ohio	0.0031981583%
OH365	Clifton Village, Ohio	0.0002996729%
OH366	Clinton County, Ohio	0.4003299792%
OH367	Clinton Township, Franklin County, Ohio	0.0107832149%
OH368	Clinton Township, Fulton County, Ohio	0.0006481787%
OH369	Clinton Township, Seneca County, Ohio	0.0007420064%
OH370	Clinton Township, Shelby County, Ohio	0.0005501831%
OH371	Clinton Township, Vinton County, Ohio	0.0002860993%
OH372	Clinton Township, Wayne County, Ohio	0.0001933007%
OH373	Clinton Village, Ohio	0.0011373034%
OH374	Cloverdale Village, Ohio	0.0001986809%
OH375	Clyde City, Ohio	0.0219912947%
OH376	Coal Grove Village, Ohio	0.0050070228%
OH377	Coal Township, Jackson County, Ohio	0.0004972699%
OH378	Coal Township, Perry County, Ohio	0.0003550074%
OH379	Coalton Village, Ohio	0.0024310971%
OH380	Coitsville Township, Ohio	0.0048028536%
OH381	Coldwater Village, Ohio	0.0054593322%
OH382	Colerain Township, Belmont County, Ohio	0.0006046108%
OH383	Colerain Township, Hamilton County, Ohio	0.1398087860%
OH384	College Corner Village, Ohio	0.0022611881%
OH385	College Township, Ohio	0.0028608916%
OH386	Columbia Township, Hamilton County, Ohio	0.0091268592%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH387	Columbia Township, Lorain County, Ohio	0.0044508068%
OH388	Columbia Township, Meigs County, Ohio	0.0000676625%
OH389	Columbiana City, Ohio	0.0212455929%
OH390	Columbiana County, Ohio	0.6832396894%
OH391	Columbus City, Ohio	4.0358741733%
OH392	Columbus Grove Village, Ohio	0.0013907661%
OH393	Commercial Point Village, Ohio	0.0008841945%
OH394	Concord Township, Delaware County, Ohio	0.0132064120%
OH395	Concord Township, Fayette County, Ohio	0.0003201811%
OH396	Concord Township, Highland County, Ohio	0.0000677557%
OH397	Concord Township, Lake County, Ohio	0.0329119594%
OH398	Concord Township, Miami County, Ohio	0.0048266640%
OH399	Concord Township, Ross County, Ohio	0.0034233759%
OH400	Conesville Village, Ohio	0.0001949904%
OH401	Congress Township, Morrow County, Ohio	0.0000354247%
OH402	Congress Township, Wayne County, Ohio	0.0000386601%
OH403	Congress Village, Ohio	0.0001394121%
OH404	Conneaut City, Ohio	0.0500864015%
OH405	Continental Village, Ohio	0.0013742094%
OH406	Convoy Village, Ohio	0.0015735393%
OH407	Coolville Village, Ohio	0.0002918128%
OH408	Copley Township, Ohio	0.0644889601%
OH409	Corning Village, Ohio	0.0010865378%
OH410	Cortland City, Ohio	0.0349699000%
OH411	Corwin Village, Ohio	0.0004993129%
OH412	Coshocton City, Ohio	0.0177337984%
OH413	Coshocton County, Ohio	0.1889793769%
OH414	Coventry Township, Ohio	0.0112670146%
OH415	Covington Village, Ohio	0.0077226624%
OH416	Craig Beach Village, Ohio	0.0004176394%
OH417	Cranberry Township, Ohio	0.0001631423%
OH418	Crane Township, Paulding County, Ohio	0.0001169477%
OH419	Crane Township, Wyandot County, Ohio	0.0005667045%
OH420	Crawford County, Ohio	0.2595376809%
OH421	Crawford Township, Coshocton County, Ohio	0.0002372670%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH422	Crawford Township, Wyandot County, Ohio	0.0001079437%
OH423	Crestline Village, Ohio	0.0166501207%
OH424	Creston Village, Ohio	0.0007596505%
OH425	Cridersville Village, Ohio	0.0045581388%
OH426	Crooksville Village, Ohio	0.0043353934%
OH427	Crosby Township, Ohio	0.0044757516%
OH428	Cross Creek Township, Ohio	0.0061202713%
OH429	Crown City Village, Ohio	0.0005435682%
OH430	Cumberland Village, Ohio	0.0007050617%
OH431	Custar Village, Ohio	0.0000244893%
OH432	Cuyahoga Falls City, Ohio	0.1811685822%
OH433	Cuyahoga Heights Village, Ohio	0.0193798260%
OH434	Cygnet Village, Ohio	0.0002510158%
OH435	Cynthian Township, Ohio	0.0000266218%
OH436	Dallas Township, Ohio	0.0001522662%
OH437	Dalton Village, Ohio	0.0011945985%
OH438	Damascus Township, Ohio	0.0007850761%
OH439	Danbury Township, Ohio	0.0038539475%
OH440	Danville Village, Ohio	0.0021828768%
OH441	Darby Township, Madison County, Ohio	0.0011346056%
OH442	Darby Township, Union County, Ohio	0.0004220559%
OH443	Darbyville Village, Ohio	0.0000242911%
OH444	Darke County, Ohio	0.2651621760%
OH445	Dayton City, Ohio	1.3353086202%
OH446	De Graff Village, Ohio	0.0013067754%
OH447	Decatur Township, Lawrence County, Ohio	0.0001043130%
OH448	Decatur Township, Washington County, Ohio	0.0001169753%
OH449	Deer Park City, Ohio	0.0107468140%
OH450	Deercreek Township, Ohio	0.0004275226%
OH451	Deerfield Township, Portage County, Ohio	0.0008693556%
OH452	Deerfield Township, Ross County, Ohio	0.0015346168%
OH453	Deerfield Township, Warren County, Ohio	0.1151454582%
OH454	Deersville Village, Ohio	0.0000209231%
OH455	Defiance City, Ohio	0.0658767007%
OH456	Defiance County, Ohio	0.1709704524%
OH457	Defiance Township, Ohio	0.0007172505%
OH458	Delaware City, Ohio	0.1151374756%
OH459	Delaware County, Ohio	0.4816174702%
OH460	Delaware Township, Defiance County, Ohio	0.0015007088%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH461	Delaware Township, Delaware County, Ohio	0.0075064553%
OH462	Delaware Township, Hancock County, Ohio	0.0001335254%
OH463	Delhi Township, Ohio	0.0630446356%
OH464	Dellroy Village, Ohio	0.0002505477%
OH465	Delphos City, Ohio	0.0171051813%
OH466	Delta Village, Ohio	0.0085241620%
OH467	Dennison Village, Ohio	0.0062570335%
OH468	Deshler Village, Ohio	0.0009475056%
OH469	Dexter City Village, Ohio	0.0000689910%
OH470	Dillonvale Village, Ohio	0.0012431801%
OH471	Dinsmore Township, Ohio	0.0004170743%
OH472	Dodson Township, Ohio	0.0105924667%
OH473	Donnelsville Village, Ohio	0.0002721853%
OH474	Dorset Township, Ohio	0.0001174083%
OH475	Dover City, Ohio	0.0416708574%
OH476	Dover Township, Athens County, Ohio	0.0005002505%
OH477	Dover Township, Tuscarawas County, Ohio	0.0000886824%
OH478	Dover Township, Union County, Ohio	0.0005124965%
OH479	Doylestown Village, Ohio	0.0020721837%
OH480	Dresden Village, Ohio	0.0028086586%
OH481	Dublin City, Ohio	0.0949912950%
OH482	Dublin Township, Ohio	0.0004331371%
OH483	Duchouquet Township, Ohio	0.0010861190%
OH484	Dunham Township, Ohio	0.0004344797%
OH485	Dunkirk Village, Ohio	0.0005233559%
OH486	Dupont Village, Ohio	0.0006622696%
OH487	Eagle Township, Brown County, Ohio	0.0090538344%
OH488	Eagle Township, Vinton County, Ohio	0.0002210767%
OH489	East Canton Village, Ohio	0.0024838727%
OH490	East Cleveland City, Ohio	0.0558083674%
OH491	East Liverpool City, Ohio	0.0368861843%
OH492	East Palestine Village, Ohio	0.0165861370%
OH493	East Sparta Village, Ohio	0.0004354199%
OH494	East Union Township, Ohio	0.0003556733%
OH495	Eastlake City, Ohio	0.0700788770%
OH496	Eaton City, Ohio	0.0615604375%
OH497	Eaton Township, Ohio	0.0004480024%
OH498	Eden Township, Licking County, Ohio	0.0004448138%
OH499	Eden Township, Seneca County, Ohio	0.0001102982%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH500	Eden Township, Wyandot County, Ohio	0.0000944507%
OH501	Edgerton Village, Ohio	0.0042354308%
OH502	Edinburg Township, Ohio	0.0011740363%
OH503	Edison Village, Ohio	0.0001948360%
OH504	Edon Village, Ohio	0.0013908558%
OH505	Eldorado Village, Ohio	0.0003273621%
OH506	Elgin Village, Ohio	0.0000619504%
OH507	Elida Village, Ohio	0.0011181382%
OH508	Elizabeth Township, Lawrence County, Ohio	0.0009562023%
OH509	Elizabeth Township, Miami County, Ohio	0.0000454274%
OH510	Elk Township, Noble County, Ohio	0.0000344955%
OH511	Elk Township, Vinton County, Ohio	0.0002600903%
OH512	Elkrun Township, Ohio	0.0004259682%
OH513	Ellsworth Township, Ohio	0.0001965362%
OH514	Elmore Village, Ohio	0.0016556174%
OH515	Elmwood Place Village, Ohio	0.0045008025%
OH516	Elyria City, Ohio	0.2638149975%
OH517	Elyria Township, Ohio	0.0007693955%
OH518	Empire Village, Ohio	0.0010041070%
OH519	Englewood City, Ohio	0.0628005329%
OH520	Enon Village, Ohio	0.0038378123%
OH521	Erie County, Ohio	0.4532438208%
OH522	Erie Township, Ohio	0.0006045408%
OH523	Euclid City, Ohio	0.0936790366%
OH524	Evendale Village, Ohio	0.0340357530%
OH525	Fairborn City, Ohio	0.1544298717%
OH526	Fairfax Village, Ohio	0.0079411190%
OH527	Fairfield City, Ohio	0.2893759753%
OH528	Fairfield County, Ohio	0.6244843622%
OH529	Fairfield Township, Butler County, Ohio	0.0801075425%
OH530	Fairfield Township, Columbiana County, Ohio	0.0024759402%
OH531	Fairfield Township, Huron County, Ohio	0.0006726173%
OH532	Fairfield Township, Tuscarawas County, Ohio	0.0004138510%
OH533	Fairfield Township, Washington County, Ohio	0.0000501323%
OH534	Fairlawn City, Ohio	0.0675346202%
OH535	Fairport Harbor Village, Ohio	0.0091069372%
OH536	Fairview Park City, Ohio	0.0218966352%
OH537	Fairview Village, Ohio	0.0000924858%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH538	Falls Township, Hocking County, Ohio	0.0002873384%
OH539	Falls Township, Muskingum County, Ohio	0.0022068032%
OH540	Farmer Township, Ohio	0.0002869002%
OH541	Farmersville Village, Ohio	0.0013667928%
OH542	Farmington Township, Ohio	0.0015345154%
OH543	Fayette County, Ohio	0.2554820842%
OH544	Fayette Township, Ohio	0.0013386832%
OH545	Fayette Village, Ohio	0.0012352086%
OH546	Fayetteville Village, Ohio	0.0029455968%
OH547	Fearing Township, Ohio	0.0004177690%
OH548	Felicity Village, Ohio	0.0030684641%
OH549	Findlay City, Ohio	0.1162163280%
OH550	Fitchville Township, Ohio	0.0003431721%
OH551	Flatrock Township, Ohio	0.0001691974%
OH552	Fletcher Village, Ohio	0.0012151836%
OH553	Florence Township, Erie County, Ohio	0.0013194115%
OH554	Florence Township, Williams County, Ohio	0.0002671700%
OH555	Florida Village, Ohio	0.0015566164%
OH556	Flushing Township, Ohio	0.0005905501%
OH557	Flushing Village, Ohio	0.0004640036%
OH558	Forest Park City, Ohio	0.0861415180%
OH559	Forest Village, Ohio	0.0023324226%
OH560	Fort Jennings Village, Ohio	0.0004221969%
OH561	Fort Loramie Village, Ohio	0.0012778446%
OH562	Fort Recovery Village, Ohio	0.0009926059%
OH563	Fostoria City, Ohio	0.0512205361%
OH564	Fowler Township, Ohio	0.0047569976%
OH565	Frankfort Village, Ohio	0.0079678326%
OH566	Franklin City, Ohio	0.0535002847%
OH567	Franklin County, Ohio	5.7883029997%
OH568	Franklin Township, Adams County, Ohio	0.0010014012%
OH569	Franklin Township, Brown County, Ohio	0.0023874837%
OH570	Franklin Township, Clermont County, Ohio	0.0034132353%
OH571	Franklin Township, Columbiana County, Ohio	0.0006123293%
OH572	Franklin Township, Coshocton County, Ohio	0.0002449208%
OH573	Franklin Township, Darke County, Ohio	0.0004797868%
OH574	Franklin Township, Franklin County, Ohio	0.0440874644%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH575	Franklin Township, Fulton County, Ohio	0.0000733787%
OH576	Franklin Township, Jackson County, Ohio	0.0003038871%
OH577	Franklin Township, Mercer County, Ohio	0.0012091744%
OH578	Franklin Township, Portage County, Ohio	0.0001990581%
OH579	Franklin Township, Richland County, Ohio	0.0008563765%
OH580	Franklin Township, Shelby County, Ohio	0.0011802315%
OH581	Franklin Township, Tuscarawas County, Ohio	0.0031235899%
OH582	Franklin Township, Warren County, Ohio	0.0035372089%
OH583	Frazeysburg Village, Ohio	0.0003209896%
OH584	Fredericksburg Village, Ohio	0.0001198464%
OH585	Fredericktown Village, Ohio	0.0055729507%
OH586	Freedom Township, Portage County, Ohio	0.0004265530%
OH587	Freedom Township, Wood County, Ohio	0.0012305895%
OH588	Freeport Township, Ohio	0.0002576440%
OH589	Freeport Village, Ohio	0.0001049661%
OH590	Fremont City, Ohio	0.0724844646%
OH591	Fulton County, Ohio	0.1830065436%
OH592	Fulton Village, Ohio	0.0001234266%
OH593	Fultonham Village, Ohio	0.0000100309%
OH594	Gahanna City, Ohio	0.0724048588%
OH595	Galena Village, Ohio	0.0001402305%
OH596	Galion City, Ohio	0.0440049221%
OH597	Gallia County, Ohio	0.3272280412%
OH598	Gallipolis Village, Ohio	0.0421733929%
OH599	Gambier Village, Ohio	0.0019348227%
OH600	Gann Village, Ohio	0.0000330739%
OH601	Garfield Heights City, Ohio	0.0512449222%
OH602	Garrettsville Village, Ohio	0.0040959299%
OH603	Gasper Township, Ohio	0.0060234621%
OH604	Gates Mills Village, Ohio	0.0065784730%
OH605	Geauga County, Ohio	0.4034987358%
OH606	Geneva City, Ohio	0.0306905423%
OH607	Geneva Township, Ohio	0.0015497902%
OH608	Geneva-On-The-Lake Village, Ohio	0.0052011898%
OH609	Genoa Township, Ohio	0.0490971668%
OH610	Genoa Village, Ohio	0.0023769444%
OH611	Georgetown Village, Ohio	0.0263243336%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH612	German Township, Auglaize County, Ohio	0.0003115915%
OH613	German Township, Clark County, Ohio	0.0120986353%
OH614	German Township, Fulton County, Ohio	0.0012718979%
OH615	German Township, Harrison County, Ohio	0.0002671864%
OH616	German Township, Montgomery County, Ohio	0.0069298793%
OH617	Germantown City, Ohio	0.0166173231%
OH618	Gettysburg Village, Ohio	0.0016993673%
OH619	Gibson Township, Ohio	0.0000992606%
OH620	Gibsonburg Village, Ohio	0.0033999699%
OH621	Gilboa Village, Ohio	0.0001572890%
OH622	Gilead Township, Ohio	0.0002952061%
OH623	Girard City, Ohio	0.0699056997%
OH624	Glandorf Village, Ohio	0.0007698884%
OH625	Glendale Village, Ohio	0.0089682038%
OH626	Glenford Village, Ohio	0.0004004647%
OH627	Glenmont Village, Ohio	0.0000756142%
OH628	Glenwillow Village, Ohio	0.0043105790%
OH629	Gloria Glens Park Village, Ohio	0.0002361762%
OH630	Glouster Village, Ohio	0.0025846274%
OH631	Gnadenhutten Village, Ohio	0.0020889623%
OH632	Golf Manor Village, Ohio	0.0149804075%
OH633	Good Hope Township, Ohio	0.0000544952%
OH634	Gordon Village, Ohio	0.0000369067%
OH635	Gorham Township, Ohio	0.0003913532%
OH636	Goshen Township, Auglaize County, Ohio	0.0000178052%
OH637	Goshen Township, Belmont County, Ohio	0.0007592787%
OH638	Goshen Township, Champaign County, Ohio	0.0009305060%
OH639	Goshen Township, Clermont County, Ohio	0.0551461609%
OH640	Goshen Township, Hardin County, Ohio	0.0002665626%
OH641	Goshen Township, Mahoning County, Ohio	0.0098390939%
OH642	Goshen Township, Tuscarawas County, Ohio	0.0000492680%
OH643	Grafton Township, Ohio	0.0022594905%
OH644	Grafton Village, Ohio	0.0066908189%
OH645	Grand Prairie Township, Ohio	0.0006880499%
OH646	Grand Rapids Township, Ohio	0.0003306061%
OH647	Grand Rapids Village, Ohio	0.0005020315%
OH648	Grand River Village, Ohio	0.0044444886%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH649	Grand Township, Ohio	0.0000371919%
OH650	Grandview Heights City, Ohio	0.0363742583%
OH651	Grandview Township, Ohio	0.0005932320%
OH652	Granger Township, Ohio	0.0028459226%
OH653	Granville Township, Licking County, Ohio	0.0126030583%
OH654	Granville Township, Mercer County, Ohio	0.0015971931%
OH655	Granville Village, Ohio	0.0103882561%
OH656	Gratiot Village, Ohio	0.0002067581%
OH657	Gratis Village, Ohio	0.0064162966%
OH658	Graysville Village, Ohio	0.0000309746%
OH659	Green Camp Township, Ohio	0.0011901403%
OH660	Green Camp Village, Ohio	0.0002045554%
OH661	Green City, Ohio	0.0847580205%
OH662	Green Creek Township, Ohio	0.0006872280%
OH663	Green Springs Village, Ohio	0.0016423298%
OH664	Green Township, Adams County, Ohio	0.0000263527%
OH665	Green Township, Brown County, Ohio	0.0034727036%
OH666	Green Township, Clark County, Ohio	0.0007485095%
OH667	Green Township, Clinton County, Ohio	0.0001561262%
OH668	Green Township, Fayette County, Ohio	0.0001235787%
OH669	Green Township, Gallia County, Ohio	0.0009184428%
OH670	Green Township, Hamilton County, Ohio	0.0953852812%
OH671	Green Township, Harrison County, Ohio	0.0005725423%
OH672	Green Township, Hocking County, Ohio	0.0033142996%
OH673	Green Township, Mahoning County, Ohio	0.0033902496%
OH674	Green Township, Monroe County, Ohio	0.0000062341%
OH675	Green Township, Ross County, Ohio	0.0105357346%
OH676	Green Township, Scioto County, Ohio	0.0218077775%
OH677	Green Township, Shelby County, Ohio	0.0000621174%
OH678	Greene County, Ohio	0.9063855073%
OH679	Greene Township, Ohio	0.0000341003%
OH680	Greenfield Township, Fairfield County, Ohio	0.0084982150%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH681	Greenfield Township, Huron County, Ohio	0.0011256045%
OH682	Greenfield Village, Ohio	0.0148836578%
OH683	Greenhills Village, Ohio	0.0082250286%
OH684	Greensburg Township, Ohio	0.0001324539%
OH685	Greenville City, Ohio	0.0550893674%
OH686	Greenville Township, Ohio	0.0140737464%
OH687	Greenwich Village, Ohio	0.0017844949%
OH688	Groton Township, Ohio	0.0005921768%
OH689	Grove City, Ohio	0.0733060057%
OH690	Groveport City, Ohio	0.0125549613%
OH691	Grover Hill Village, Ohio	0.0001863854%
OH692	Guernsey County, Ohio	0.2910222727%
OH693	Guilford Township, Ohio	0.0060579183%
OH694	Gustavus Township, Ohio	0.0000511505%
OH695	Guyan Township, Ohio	0.0003561309%
OH696	Hambden Township, Ohio	0.0039432026%
OH697	Hamden Village, Ohio	0.0009493296%
OH698	Hamer Township, Ohio	0.0000451704%
OH699	Hamersville Village, Ohio	0.0007131445%
OH700	Hamilton City, Ohio	0.6764224012%
OH701	Hamilton County, Ohio	5.8561869769%
OH702	Hamilton Township, Franklin County, Ohio	0.0255910434%
OH703	Hamilton Township, Jackson County, Ohio	0.0005248960%
OH704	Hamilton Township, Lawrence County, Ohio	0.0009909733%
OH705	Hamilton Township, Warren County, Ohio	0.0450761424%
OH706	Hamler Village, Ohio	0.0004060738%
OH707	Hancock County, Ohio	0.2855617267%
OH708	Hanging Rock Village, Ohio	0.0019993320%
OH709	Hanover Township, Butler County, Ohio	0.0098235954%
OH710	Hanover Township, Columbiana County, Ohio	0.0013178391%
OH711	Hanover Township, Licking County, Ohio	0.0043184009%
OH712	Hanover Village, Ohio	0.0008062251%
OH713	Hanoverton Village, Ohio	0.0010440744%
OH714	Harbor View Village, Ohio	0.0001526700%
OH715	Hardin County, Ohio	0.2235793641%
OH716	Harding Township, Ohio	0.0000272955%
OH717	Hardy Township, Ohio	0.0013901375%
OH718	Harlan Township, Ohio	0.0030485156%
OH719	Harlem Township, Ohio	0.0049245646%
OH720	Harmony Township, Clark County, Ohio	0.0018916876%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH721	Harmony Township, Morrow County, Ohio	0.0001180824%
OH722	Harpersfield Township, Ohio	0.0005048559%
OH723	Harpster Village, Ohio	0.0000822938%
OH724	Harris Township, Ohio	0.0004190567%
OH725	Harrisburg Village, Ohio	0.0002978367%
OH726	Harrison City, Ohio	0.0560804997%
OH727	Harrison County, Ohio	0.0770641930%
OH728	Harrison Township, Champaign County, Ohio	0.0001374611%
OH729	Harrison Township, Gallia County, Ohio	0.0002811560%
OH730	Harrison Township, Hamilton County, Ohio	0.0022712769%
OH731	Harrison Township, Henry County, Ohio	0.0000203037%
OH732	Harrison Township, Knox County, Ohio	0.0000165369%
OH733	Harrison Township, Licking County, Ohio	0.0003058095%
OH734	Harrison Township, Vinton County, Ohio	0.0000199508%
OH735	Harrison Township, Montgomery County, Ohio	0.0328749640%
OH736	Harrison Township, Muskingum County, Ohio	0.0004112679%
OH737	Harrison Township, Paulding County, Ohio	0.0000657831%
OH738	Harrison Township, Perry County, Ohio	0.0020762554%
OH739	Harrison Township, Pickaway County, Ohio	0.0068306454%
OH740	Harrison Township, Preble County, Ohio	0.0015877060%
OH741	Harrison Township, Scioto County, Ohio	0.0071650064%
OH742	Harrison Township, Van Wert County, Ohio	0.0001858511%
OH743	Harrison Township, Vinton County, Ohio	0.0005201806%
OH744	Harrisville Township, Ohio	0.0067192115%
OH745	Harrisville Village, Ohio	0.0000619645%
OH746	Harrod Village, Ohio	0.0000673593%
OH747	Harrison Township, Vinton County, Ohio	0.0007413564%
OH748	Hartford Township, Trumbull County, Ohio	0.0014833648%
OH749	Hartford Village, Ohio	0.0002502078%
OH750	Hartland Township, Ohio	0.0000960882%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH751	Hartsgrove Township, Ohio	0.0005870417%
OH752	Hartville Village, Ohio	0.0099058031%
OH753	Harveysburg Village, Ohio	0.0012100978%
OH754	Haskins Village, Ohio	0.0008938610%
OH755	Haviland Village, Ohio	0.0000511646%
OH756	Hayesville Village, Ohio	0.0000894727%
OH757	Heath City, Ohio	0.0429986695%
OH758	Hebron Village, Ohio	0.0150402674%
OH759	Helena Village, Ohio	0.0000542548%
OH760	Hemlock Village, Ohio	0.0003549573%
OH761	Henrietta Township, Ohio	0.0004674808%
OH762	Henry County, Ohio	0.1089766836%
OH763	Hicksville Township, Ohio	0.0002096578%
OH764	Hicksville Village, Ohio	0.0077242363%
OH765	Higginsport Village, Ohio	0.0015866304%
OH766	Highland County, Ohio	0.3882850462%
OH767	Highland Heights City, Ohio	0.0224853394%
OH768	Highland Hills Village, Ohio	0.0015764629%
OH769	Highland Township, Defiance County, Ohio	0.0027365866%
OH770	Highland Township, Muskingum County, Ohio	0.0001705257%
OH771	Highland Village, Ohio	0.0000677557%
OH772	Hilliard City, Ohio	0.0500136505%
OH773	Hills and Dales Village, Ohio	0.0006069453%
OH774	Hillsboro City, Ohio	0.0707143136%
OH775	Hinckley Township, Ohio	0.0165323306%
OH776	Hiram Township, Ohio	0.0008287315%
OH777	Hiram Village, Ohio	0.0032539898%
OH778	Hocking County, Ohio	0.2559590488%
OH779	Holgate Village, Ohio	0.0002774838%
OH780	Holiday City Village, Ohio	0.0000613051%
OH781	Holland Village, Ohio	0.0097536077%
OH782	Hollansburg Village, Ohio	0.0003567645%
OH783	Holloway Village, Ohio	0.0002671536%
OH784	Holmes County, Ohio	0.1337033098%
OH785	Holmes Township, Ohio	0.0003480370%
OH786	Holmesville Village, Ohio	0.0000436236%
OH787	Homer Township, Medina County, Ohio	0.0010864103%
OH788	Homer Township, Morgan County, Ohio	0.0001820827%
OH789	Hopedale Village, Ohio	0.0002767288%
OH790	Hopewell Township, Licking County, Ohio	0.0002502078%
OH791	Hopewell Township, Muskingum County, Ohio	0.0007422883%
OH792	Hopewell Township, Perry County, Ohio	0.0012909360%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH793	Hopewell Township, Seneca County, Ohio	0.0001303525%
OH794	Howard Township, Ohio	0.0000496108%
OH795	Howland Township, Ohio	0.0502639031%
OH796	Hoytville Village, Ohio	0.0002378935%
OH797	Hubbard City, Ohio	0.0289341396%
OH798	Hubbard Township, Ohio	0.0153110532%
OH799	Huber Heights City, Ohio	0.1252489167%
OH800	Hudson City, Ohio	0.0660214283%
OH801	Hunting Valley Village, Ohio	0.0076690112%
OH802	Huntington Township, Brown County, Ohio	0.0072244638%
OH803	Huntington Township, Ross County, Ohio	0.0066106570%
OH804	Huntsburg Township, Ohio	0.0006508198%
OH805	Huntsville Village, Ohio	0.0008479077%
OH806	Huron City, Ohio	0.0302737409%
OH807	Huron County, Ohio	0.3638859630%
OH808	Huron Township, Ohio	0.0007791800%
OH809	Independence City, Ohio	0.0311578609%
OH810	Independence Township, Ohio	0.0000751984%
OH811	Irondale Village, Ohio	0.0001593821%
OH812	Ironton City, Ohio	0.0888572696%
OH813	Island Creek Township, Ohio	0.0026616805%
OH814	Israel Township, Ohio	0.0004746750%
OH815	Ithaca Village, Ohio	0.0003813690%
OH816	Jackson Center Village, Ohio	0.0015263144%
OH817	Jackson City, Ohio	0.0556665988%
OH818	Jackson County, Ohio	0.4838159524%
OH819	Jackson Township, Allen County, Ohio	0.0004227108%
OH820	Jackson Township, Ashland County, Ohio	0.0000162678%
OH821	Jackson Township, Auglaize County, Ohio	0.0003115915%
OH822	Jackson Township, Brown County, Ohio	0.0004961005%
OH823	Jackson Township, Clermont County, Ohio	0.0014652778%
OH824	Jackson Township, Coshocton County, Ohio	0.0005510719%
OH825	Jackson Township, Crawford County, Ohio	0.0000108762%
OH826	Jackson Township, Franklin County, Ohio	0.0661350150%
OH827	Jackson Township, Guernsey County, Ohio	0.0010334405%
OH828	Jackson Township, Hardin County, Ohio	0.0015327348%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH829	Jackson Township, Highland County, Ohio	0.0000451704%
OH830	Jackson Township, Jackson County, Ohio	0.0001105044%
OH831	Jackson Township, Mahoning County, Ohio	0.0058960862%
OH832	Jackson Township, Monroe County, Ohio	0.0000561065%
OH833	Jackson Township, Montgomery County, Ohio	0.0086323757%
OH834	Jackson Township, Muskingum County, Ohio	0.0011435253%
OH835	Jackson Township, Noble County, Ohio	0.0001207342%
OH836	Jackson Township, Monroe County, Ohio	0.0001534939%
OH837	Jackson Township, Pickaway County, Ohio	0.0001894702%
OH838	Jackson Township, Pike County, Ohio	0.0004309715%
OH839	Jackson Township, Richland County, Ohio	0.0004638706%
OH840	Jackson Township, Sandusky County, Ohio	0.0004340387%
OH841	Jackson Township, Seneca County, Ohio	0.0004311659%
OH842	Jackson Township, Shelby County, Ohio	0.0013665838%
OH843	Jackson Township, Stark County, Ohio	0.1371869620%
OH844	Jackson Township, Union County, Ohio	0.0001416902%
OH845	Jackson Township, Vinton County, Ohio	0.0000910316%
OH846	Jackson Township, Wood County, Ohio	0.0001346914%
OH847	Jackson Township, Wyandot County, Ohio	0.0001214367%
OH848	Jacksonburg Village, Ohio	0.0002870780%
OH849	Jacksonville Village, Ohio	0.0008441727%
OH850	Jamestown Village, Ohio	0.0034877253%
OH851	Jefferson County, Ohio	0.6622324840%
OH852	Jefferson Township, Adams County, Ohio	0.0007642272%
OH853	Jefferson Township, Brown County, Ohio	0.0006821382%
OH854	Jefferson Township, Clinton County, Ohio	0.0014720474%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH855	Jefferson Township, Coshocton County, Ohio	0.0000612302%
OH856	Jefferson Township, Crawford County, Ohio	0.0004567985%
OH857	Jefferson Township, Fayette County, Ohio	0.0005898074%
OH858	Jefferson Township, Franklin County, Ohio	0.0261561693%
OH859	Jefferson Township, Greene County, Ohio	0.0000619123%
OH860	Jefferson Township, Guernsey County, Ohio	0.0000679895%
OH861	Jefferson Township, Jackson County, Ohio	0.0000828783%
OH862	Jefferson Township, Knox County, Ohio	0.0006284039%
OH863	Jefferson Township, Logan County, Ohio	0.0002493846%
OH864	Jefferson Township, Madison County, Ohio	0.0262668976%
OH865	Jefferson Township, Montgomery County, Ohio	0.0133322246%
OH866	Jefferson Township, Muskingum County, Ohio	0.0005015462%
OH867	Jefferson Township, Noble County, Ohio	0.0000172477%
OH868	Jefferson Township, Preble County, Ohio	0.0008020371%
OH869	Jefferson Township, Richland County, Ohio	0.0017662765%
OH870	Jefferson Township, Ross County, Ohio	0.0009148677%
OH871	Jefferson Township, Scioto County, Ohio	0.0036109358%
OH872	Jefferson Township, Tuscarawas County, Ohio	0.0008079949%
OH873	Jefferson Township, Williams County, Ohio	0.0002200224%
OH874	Jefferson Village, Ohio	0.0039566613%
OH875	Jeffersonville Village, Ohio	0.0000112344%
OH876	Jenera Village, Ohio	0.0001194701%
OH877	Jennings Township, Ohio	0.0002731862%
OH878	Jerome Township, Ohio	0.0044044550%
OH879	Jeromesville Village, Ohio	0.0003085668%
OH880	Jerry City Village, Ohio	0.0003417298%
OH881	Jersey Township, Ohio	0.0017699883%
OH882	Jerusalem Township, Ohio	0.0021563480%
OH883	Jerusalem Village, Ohio	0.0000311703%
OH884	Jewett Village, Ohio	0.0001813051%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH885	Johnson Township, Ohio	0.0002326265%
OH886	Johnston Township, Ohio	0.0002216522%
OH887	Johnstown Village, Ohio	0.0092206199%
OH888	Junction City Village, Ohio	0.0017212480%
OH889	Kalida Village, Ohio	0.0022682733%
OH890	Kelleys Island Village, Ohio	0.0028777715%
OH891	Kent City, Ohio	0.0513285414%
OH892	Kenton City, Ohio	0.0306658035%
OH893	Kettering City, Ohio	0.3384195127%
OH894	Kettlersville Village, Ohio	0.0000266218%
OH895	Killbuck Township, Ohio	0.0002093931%
OH896	Killbuck Village, Ohio	0.0010702314%
OH897	Kingston Township, Ohio	0.0000164977%
OH898	Kingston Village, Ohio	0.0076824625%
OH899	Kingsville Township, Ohio	0.0011036385%
OH900	Kinsman Township, Ohio	0.0020801208%
OH901	Kipton Village, Ohio	0.0000973918%
OH902	Kirby Village, Ohio	0.0000472254%
OH903	Kirkersville Village, Ohio	0.0005560173%
OH904	Kirkwood Township, Ohio	0.0000140607%
OH905	Kirtland City, Ohio	0.0223930205%
OH906	Kirtland Hills Village, Ohio	0.0096850050%
OH907	Knox County, Ohio	0.3115395206%
OH908	Knox Township, Columbiana County, Ohio	0.0005191487%
OH909	Knox Township, Guernsey County, Ohio	0.0002039685%
OH910	Knox Township, Jefferson County, Ohio	0.0010041070%
OH911	Knox Township, Vinton County, Ohio	0.0001170406%
OH912	La Grange Township, Ohio	0.0042170664%
OH913	La Rue Village, Ohio	0.0006694539%
OH914	Lafayette Township, Ohio	0.0073805047%
OH915	Lafayette Village, Ohio	0.0000886329%
OH916	Lagrange Village, Ohio	0.0054247251%
OH917	Lake County, Ohio	1.2794251773%
OH918	Lake Township, Stark County, Ohio	0.0367336076%
OH919	Lake Township, Wood County, Ohio	0.0141058613%
OH920	Lakeline Village, Ohio	0.0000947652%
OH921	Lakemore Village, Ohio	0.0083562888%
OH922	Lakeview Village, Ohio	0.0008279569%
OH923	Lakewood City, Ohio	0.1008106545%
OH924	Lancaster City, Ohio	0.1565040398%
OH925	Latty Township, Ohio	0.0000877108%
OH926	Latty Village, Ohio	0.0000219277%
OH927	Laura Village, Ohio	0.0001135686%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH928	Laurel Township, Ohio	0.0001089904%
OH929	Laurelville Village, Ohio	0.0007183460%
OH930	Lawrence County, Ohio	0.5322395718%
OH931	Lawrence Township, Lawrence County, Ohio	0.0093186258%
OH932	Lawrence Township, Stark County, Ohio	0.0140521883%
OH933	Lawrence Township, Tuscarawas County, Ohio	0.0052322595%
OH934	Lawrence Township, Washington County, Ohio	0.0000334215%
OH935	Lebanon City, Ohio	0.0873597515%
OH936	Lebanon Township, Ohio	0.0004736376%
OH937	Lee Township, Athens County, Ohio	0.0005836255%
OH938	Lee Township, Carroll County, Ohio	0.0000980404%
OH939	Lee Township, Monroe County, Ohio	0.0000872768%
OH940	Leesburg Township, Ohio	0.0001989692%
OH941	Leesburg Village, Ohio	0.0054882077%
OH942	Leesville Village, Ohio	0.0000217868%
OH943	Leetonia Village, Ohio	0.0074544436%
OH944	Leipsic Village, Ohio	0.0030629968%
OH945	Lemon Township, Ohio	0.0041524079%
OH946	Lenox Township, Ohio	0.0002582984%
OH947	Leroy Township, Ohio	0.0053731877%
OH948	Letart Township, Ohio	0.0005413001%
OH949	Lewis Township, Ohio	0.0039998104%
OH950	Lewisburg Village, Ohio	0.0132254277%
OH951	Lewisville Village, Ohio	0.0001745536%
OH952	Lexington Township, Ohio	0.0014349065%
OH953	Lexington Village, Ohio	0.0093220146%
OH954	Liberty Center Village, Ohio	0.0002842517%
OH955	Liberty Township, Adams County, Ohio	0.0005534059%
OH956	Liberty Township, Butler County, Ohio	0.1149425287%
OH957	Liberty Township, Clinton County, Ohio	0.0016058699%
OH958	Liberty Township, Crawford County, Ohio	0.0001413900%
OH959	Liberty Township, Darke County, Ohio	0.0010825959%
OH960	Liberty Township, Delaware County, Ohio	0.0646792482%
OH961	Liberty Township, Guernsey County, Ohio	0.0001631748%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH962	Liberty Township, Hancock County, Ohio	0.0013703927%
OH963	Liberty Township, Hardin County, Ohio	0.0010773571%
OH964	Liberty Township, Henry County, Ohio	0.0006632539%
OH965	Liberty Township, Highland County, Ohio	0.0016487208%
OH966	Liberty Township, Jackson County, Ohio	0.0018785750%
OH967	Liberty Township, Knox County, Ohio	0.0003803498%
OH968	Liberty Township, Licking County, Ohio	0.0000926695%
OH969	Liberty Township, Logan County, Ohio	0.0003591138%
OH970	Liberty Township, Mercer County, Ohio	0.0002526633%
OH971	Liberty Township, Putnam County, Ohio	0.0002235160%
OH972	Liberty Township, Seneca County, Ohio	0.0003409218%
OH973	Liberty Township, Trumbull County, Ohio	0.0688997396%
OH974	Liberty Township, Union County, Ohio	0.0017726349%
OH975	Liberty Township, Wood County, Ohio	0.0002142817%
OH976	Lick Township, Ohio	0.0000552522%
OH977	Licking County, Ohio	0.7119059883%
OH978	Licking Township, Licking County, Ohio	0.0031507646%
OH979	Licking Township, Muskingum County, Ohio	0.0012839582%
OH980	Lima City, Ohio	0.1727455397%
OH981	Limaville Village, Ohio	0.0003869608%
OH982	Lincoln Heights Village, Ohio	0.0083419326%
OH983	Lincoln Township, Ohio	0.0001771237%
OH984	Lindsey Village, Ohio	0.0006510581%
OH985	Linndale Village, Ohio	0.0028091858%
OH986	Lisbon Village, Ohio	0.0009584285%
OH987	Litchfield Township, Ohio	0.0019838797%
OH988	Lithopolis Village, Ohio	0.0014069809%
OH989	Liverpool Township, Columbiana County, Ohio	0.0053112911%
OH990	Liverpool Township, Medina County, Ohio	0.0054202427%
OH991	Lockbourne Village, Ohio	0.0000076368%
OH992	Lockington Village, Ohio	0.0000443696%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH993	Lockland Village, Ohio	0.0146296956%
OH994	Lodi Township, Ohio	0.0003856097%
OH995	Lodi Village, Ohio	0.0068845348%
OH996	Logan City, Ohio	0.0081742815%
OH997	Logan County, Ohio	0.2671308245%
OH998	Logan Township, Ohio	0.0001602471%
OH999	London City, Ohio	0.0432082694%
OH1000	Londonderry Township, Ohio	0.0001223811%
OH1001	Lorain City, Ohio	0.2833225817%
OH1002	Lorain County, Ohio	1.3357776870%
OH1003	Lordstown Village, Ohio	0.0208012082%
OH1004	Lore City Village, Ohio	0.0001903706%
OH1005	Lostcreek Township, Ohio	0.0008063368%
OH1006	Loudon Township, Carroll County, Ohio	0.0003703748%
OH1007	Loudon Township, Seneca County, Ohio	0.0000802169%
OH1008	Loudonville Village, Ohio	0.0063961356%
OH1009	Louisville City, Ohio	0.0170110645%
OH1010	Loveland City, Ohio	0.0476149868%
OH1011	Lowell Village, Ohio	0.0000835538%
OH1012	Lowellville Village, Ohio	0.0039921417%
OH1013	Lower Salem Village, Ohio	0.0000220891%
OH1014	Lucas County, Ohio	3.1972089435%
OH1015	Lucas Village, Ohio	0.0007671706%
OH1016	Luckey Village, Ohio	0.0005693772%
OH1017	Ludlow Falls Village, Ohio	0.0002558525%
OH1018	Ludlow Township, Ohio	0.0000501323%
OH1019	Lykens Township, Ohio	0.0000217523%
OH1020	Lynchburg Village, Ohio	0.0028908592%
OH1021	Lyndhurst City, Ohio	0.0338761729%
OH1022	Lynn Township, Ohio	0.0000111068%
OH1023	Lyons Village, Ohio	0.0001442518%
OH1024	Macedonia City, Ohio	0.0527014847%
OH1025	Macksburg Village, Ohio	0.0000477742%
OH1026	Mad River Township, Champaign County, Ohio	0.0003806616%
OH1027	Mad River Township, Clark County, Ohio	0.0132962505%
OH1028	Madeira City, Ohio	0.0133187012%
OH1029	Madison County, Ohio	0.2562654482%
OH1030	Madison Township, Butler County, Ohio	0.0065436778%
OH1031	Madison Township, Clark County, Ohio	0.0028035083%
OH1032	Madison Township, Columbiana County, Ohio	0.0001863611%
OH1033	Madison Township, Fayette County, Ohio	0.0003651188%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1034	Madison Township, Franklin County, Ohio	0.0648596631%
OH1035	Madison Township, Guernsey County, Ohio	0.0001087832%
OH1036	Madison Township, Hancock County, Ohio	0.0001546084%
OH1037	Madison Township, Highland County, Ohio	0.0000451704%
OH1038	Madison Township, Lake County, Ohio	0.0185550292%
OH1039	Madison Township, Licking County, Ohio	0.0016124501%
OH1040	Madison Township, Muskingum County, Ohio	0.0000200618%
OH1041	Madison Township, Pickaway County, Ohio	0.0005781272%
OH1042	Madison Township, Richland County, Ohio	0.0162443911%
OH1043	Madison Township, Sandusky County, Ohio	0.0010398844%
OH1044	Madison Township, Scioto County, Ohio	0.0090415557%
OH1045	Madison Township, Williams County, Ohio	0.0001650168%
OH1046	Madison Village, Ohio	0.0069557668%
OH1047	Magnetic Springs Village, Ohio	0.0003286007%
OH1048	Magnolia Village, Ohio	0.0039121470%
OH1049	Mahoning County, Ohio	1.6000258367%
OH1050	Maineville Village, Ohio	0.0020362222%
OH1051	Malaga Township, Ohio	0.0000561065%
OH1052	Malinta Village, Ohio	0.0000609111%
OH1053	Malta Village, Ohio	0.0001392397%
OH1054	Malvern Village, Ohio	0.0005882424%
OH1055	Manchester Township, Ohio	0.0013966912%
OH1056	Manchester Village, Ohio	0.0025562084%
OH1057	Mansfield City, Ohio	0.2140405926%
OH1058	Mantua Township, Ohio	0.0000649985%
OH1059	Mantua Village, Ohio	0.0015884020%
OH1060	Maple Heights City, Ohio	0.0395380059%
OH1061	Marble Cliff Village, Ohio	0.0004658471%
OH1062	Marblehead Village, Ohio	0.0019235388%
OH1063	Marengo Village, Ohio	0.0002597814%
OH1064	Margaretta Township, Ohio	0.0078229674%
OH1065	Mariemont Village, Ohio	0.0153812210%
OH1066	Marietta City, Ohio	0.0852917164%
OH1067	Marietta Township, Ohio	0.0002088845%
OH1068	Marion City, Ohio	0.2496505326%
OH1069	Marion County, Ohio	0.3374233828%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1070	Marion Township, Allen County, Ohio	0.0001840837%
OH1071	Marion Township, Clinton County, Ohio	0.0020965523%
OH1072	Marion Township, Fayette County, Ohio	0.0007695582%
OH1073	Marion Township, Hardin County, Ohio	0.0006108726%
OH1074	Marion Township, Henry County, Ohio	0.0000947506%
OH1075	Marion Township, Hocking County, Ohio	0.0001634856%
OH1076	Marion Township, Marion County, Ohio	0.0526451142%
OH1077	Marion Township, Mercer County, Ohio	0.0015069562%
OH1078	Marion Township, Pike County, Ohio	0.0001943597%
OH1079	Mark Township, Ohio	0.0001324155%
OH1080	Marlboro Township, Delaware County, Ohio	0.0001979724%
OH1081	Marlboro Township, Stark County, Ohio	0.0048193068%
OH1082	Marseilles Township, Ohio	0.0000067465%
OH1083	Marseilles Village, Ohio	0.0000067465%
OH1084	Marshall Township, Ohio	0.0006323861%
OH1085	Marshallville Village, Ohio	0.0004600557%
OH1086	Martins Ferry City, Ohio	0.0347299689%
OH1087	Martinsburg Village, Ohio	0.0000165369%
OH1088	Martinsville Village, Ohio	0.0006022012%
OH1089	Mary Ann Township, Ohio	0.0009452294%
OH1090	Marysville City, Ohio	0.0386422342%
OH1091	Mason City, Ohio	0.1510527828%
OH1092	Mason Township, Ohio	0.0000347710%
OH1093	Massie Township, Ohio	0.0001279911%
OH1094	Massillon City, Ohio	0.1194930798%
OH1095	Matamoras Village, Ohio	0.0003175044%
OH1096	Maumee City, Ohio	0.0830057490%
OH1097	Mayfield Heights City, Ohio	0.0460098010%
OH1098	Mayfield Village, Ohio	0.0222206201%
OH1099	McArthur Village, Ohio	0.0034201873%
OH1100	McClure Village, Ohio	0.0000744469%
OH1101	McComb Village, Ohio	0.0019536880%
OH1102	McConnelsville Village, Ohio	0.0038344466%
OH1103	McDonald Township, Ohio	0.0004331642%
OH1104	McDonald Village, Ohio	0.0085762358%
OH1105	McGuffey Village, Ohio	0.0000111068%
OH1106	McKean Township, Ohio	0.0016773188%
OH1107	McLean Township, Ohio	0.0000088739%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1108	Mead Township, Ohio	0.0016310431%
OH1109	Mecca Township, Ohio	0.0015686157%
OH1110	Mechanicsburg Village, Ohio	0.0059742716%
OH1111	Medina City, Ohio	0.0850942672%
OH1112	Medina County, Ohio	0.7825696764%
OH1113	Medina Township, Ohio	0.0180792844%
OH1114	Meigs County, Ohio	0.1986571471%
OH1115	Meigs Township, Ohio	0.0019764498%
OH1116	Meigsville Township, Ohio	0.0000749752%
OH1117	Melrose Village, Ohio	0.0001123652%
OH1118	Mendon Village, Ohio	0.0000902369%
OH1119	Mentor City, Ohio	0.2495262895%
OH1120	Mentor-On-The-Lake City, Ohio	0.0195974466%
OH1121	Mercer County, Ohio	0.1655486085%
OH1122	Mesopotamia Township, Ohio	0.0029496795%
OH1123	Metamora Village, Ohio	0.0001589872%
OH1124	Meyers Lake Village, Ohio	0.0015027860%
OH1125	Miami County, Ohio	0.5778482109%
OH1126	Miami Township, Clermont County, Ohio	0.2187745945%
OH1127	Miami Township, Greene County, Ohio	0.0056649739%
OH1128	Miami Township, Hamilton County, Ohio	0.0222368033%
OH1129	Miami Township, Logan County, Ohio	0.0002394092%
OH1130	Miami Township, Montgomery County, Ohio	0.1354683508%
OH1131	Miamisburg City, Ohio	0.1660413479%
OH1132	Middle Point Village, Ohio	0.0010159860%
OH1133	Middleburg Heights City, Ohio	0.0377244809%
OH1134	Middlebury Township, Ohio	0.0002811281%
OH1135	Middlefield Village, Ohio	0.0110639374%
OH1136	Middleport Village, Ohio	0.0066985891%
OH1137	Middleton Township, Columbiana County, Ohio	0.0013311506%
OH1138	Middleton Township, Wood County, Ohio	0.0032264709%
OH1139	Middletown City, Ohio	0.5826547123%
OH1140	Midland Village, Ohio	0.0000223037%
OH1141	Midvale Village, Ohio	0.0004926798%
OH1142	Midway Village, Ohio	0.0006778443%
OH1143	Mifflin Township, Ashland County, Ohio	0.0003416231%
OH1144	Mifflin Township, Franklin County, Ohio	0.0915733216%
OH1145	Mifflin Township, Pike County, Ohio	0.0001267563%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1146	Mifflin Township, Richland County, Ohio	0.0080552911%
OH1147	Mifflin Township, Wyandot County, Ohio	0.0001214367%
OH1148	Mifflin Village, Ohio	0.0001545438%
OH1149	Milan Township, Ohio	0.0020258680%
OH1150	Milan Village, Ohio	0.0040820332%
OH1151	Milford Center Village, Ohio	0.0000633084%
OH1152	Milford City, Ohio	0.0751522099%
OH1153	Milford Township, Butler County, Ohio	0.0015672512%
OH1154	Milford Township, Defiance County, Ohio	0.0002979348%
OH1155	Mill Creek Township, Coshocton County, Ohio	0.0000229613%
OH1156	Mill Creek Township, Williams County, Ohio	0.0000628635%
OH1157	Mill Township, Ohio	0.0121593375%
OH1158	Millbury Village, Ohio	0.0009905091%
OH1159	Millcreek Township, Ohio	0.0000180881%
OH1160	Milledgeville Village, Ohio	0.0000257235%
OH1161	Miller City Village, Ohio	0.0000248351%
OH1162	Miller Township, Ohio	0.0008599212%
OH1163	Millersburg Village, Ohio	0.0018263731%
OH1164	Millersport Village, Ohio	0.0058664571%
OH1165	Millville Village, Ohio	0.0076100550%
OH1166	Millwood Township, Ohio	0.0000543916%
OH1167	Milton Center Village, Ohio	0.0000061223%
OH1168	Milton Township, Ashland County, Ohio	0.0000162678%
OH1169	Milton Township, Mahoning County, Ohio	0.0048642711%
OH1170	Miltonsburg Village, Ohio	0.0000172975%
OH1171	Mineral City Village, Ohio	0.0026506173%
OH1172	Minerva Park Village, Ohio	0.0030776456%
OH1173	Minerva Village, Ohio	0.0118214870%
OH1174	Mingo Junction Village, Ohio	0.0074909571%
OH1175	Minster Village, Ohio	0.0056442578%
OH1176	Mississinawa Township, Ohio	0.0003444623%
OH1177	Mogadore Village, Ohio	0.0107618198%
OH1178	Monclova Township, Ohio	0.0108181339%
OH1179	Monday Creek Township, Ohio	0.0000430312%
OH1180	Monroe City, Ohio	0.1198391105%
OH1181	Monroe County, Ohio	0.0768222745%
OH1182	Monroe Township, Adams County, Ohio	0.0016865705%
OH1183	Monroe Township, Allen County, Ohio	0.0002727166%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1184	Monroe Township, Carroll County, Ohio	0.0010130841%
OH1185	Monroe Township, Clermont County, Ohio	0.0034821896%
OH1186	Monroe Township, Darke County, Ohio	0.0006151113%
OH1187	Monroe Township, Guernsey County, Ohio	0.0001903706%
OH1188	Monroe Township, Harrison County, Ohio	0.0003530677%
OH1189	Monroe Township, Knox County, Ohio	0.0021828768%
OH1190	Monroe Township, Licking County, Ohio	0.0160503654%
OH1191	Monroe Township, Logan County, Ohio	0.0001895323%
OH1192	Monroe Township, Muskingum County, Ohio	0.0001203711%
OH1193	Monroe Township, Perry County, Ohio	0.0000753046%
OH1194	Monroe Township, Pickaway County, Ohio	0.0003740823%
OH1195	Monroe Township, Preble County, Ohio	0.0020296448%
OH1196	Monroe Township, Putnam County, Ohio	0.0007698884%
OH1197	Monroe Township, Richland County, Ohio	0.0011596765%
OH1198	Monroeville Village, Ohio	0.0057515643%
OH1199	Monterey Township, Ohio	0.0001158972%
OH1200	Montezuma Village, Ohio	0.0003248528%
OH1201	Montgomery City, Ohio	0.0491831661%
OH1202	Montgomery County, Ohio	5.1644746001%
OH1203	Montgomery Township, Marion County, Ohio	0.0007252418%
OH1204	Montgomery Township, Wood County, Ohio	0.0011448768%
OH1205	Montpelier Village, Ohio	0.0054141221%
OH1206	Montville Township, Geauga County, Ohio	0.0005742528%
OH1207	Montville Township, Medina County, Ohio	0.0202875314%
OH1208	Moorefield Township, Ohio	0.0090773788%
OH1209	Moraine City, Ohio	0.0890573422%
OH1210	Moreland Hills Village, Ohio	0.0034611065%
OH1211	Morgan County, Ohio	0.0873568346%
OH1212	Morgan Township, Ashtabula County, Ohio	0.0013032327%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1213	Morgan Township, Butler County, Ohio	0.0060266465%
OH1214	Morgan Township, Gallia County, Ohio	0.0004498495%
OH1215	Morgan Township, Knox County, Ohio	0.0013394926%
OH1216	Morgan Township, Scioto County, Ohio	0.0014216283%
OH1217	Morral Village, Ohio	0.0008926053%
OH1218	Morris Township, Ohio	0.0000330739%
OH1219	Morristown Village, Ohio	0.0004780643%
OH1220	Morrow County, Ohio	0.2192732037%
OH1221	Morrow Village, Ohio	0.0015475289%
OH1222	Moscow Village, Ohio	0.0010343137%
OH1223	Moulton Township, Ohio	0.0002403706%
OH1224	Mount Blanchard Village, Ohio	0.0000632489%
OH1225	Mount Cory Village, Ohio	0.0001194701%
OH1226	Mount Eaton Village, Ohio	0.0003286112%
OH1227	Mount Gilead Village, Ohio	0.0047705309%
OH1228	Mount Healthy City, Ohio	0.0150472097%
OH1229	Mount Orab Village, Ohio	0.0858253892%
OH1230	Mount Pleasant Township, Ohio	0.0009562924%
OH1231	Mount Pleasant Village, Ohio	0.0001593821%
OH1232	Mount Sterling Village, Ohio	0.0092167280%
OH1233	Mount Vernon City, Ohio	0.0916146794%
OH1234	Mount Victory Village, Ohio	0.0003726928%
OH1235	Mowrystown Village, Ohio	0.0099826658%
OH1236	Munroe Falls City, Ohio	0.0144765234%
OH1237	Munson Township, Ohio	0.0126431327%
OH1238	Murray City Village, Ohio	0.0003666041%
OH1239	Muskingum County, Ohio	0.5186890264%
OH1240	Muskingum Township, Ohio	0.0034591272%
OH1241	Mutual Village, Ohio	0.0000512624%
OH1242	Napoleon City, Ohio	0.0200262083%
OH1243	Napoleon Township, Ohio	0.0008595230%
OH1244	Nashville Village, Ohio	0.0001163295%
OH1245	Navarre Village, Ohio	0.0045125337%
OH1246	Nellie Village, Ohio	0.0000766034%
OH1247	Nelsonville City, Ohio	0.0153618582%
OH1248	Nevada Village, Ohio	0.0000539719%
OH1249	Neville Village, Ohio	0.0000172386%
OH1250	New Albany City, Ohio	0.0355984449%
OH1251	New Alexandria Village, Ohio	0.0001593821%
OH1252	New Athens Village, Ohio	0.0001049661%
OH1253	New Bavaria Village, Ohio	0.0001925555%
OH1254	New Bloomington Village, Ohio	0.0006286558%
OH1255	New Boston Village, Ohio	0.0217793450%
OH1256	New Bremen Village, Ohio	0.0076829566%
OH1257	New Carlisle City, Ohio	0.0121258538%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1258	New Concord Village, Ohio	0.0073426360%
OH1259	New Franklin City, Ohio	0.0293867642%
OH1260	New Haven Township, Ohio	0.0016334992%
OH1261	New Holland Village, Ohio	0.0001903085%
OH1262	New Jasper Township, Ohio	0.0016406755%
OH1263	New Knoxville Village, Ohio	0.0011840478%
OH1264	New Lebanon Village, Ohio	0.0058388430%
OH1265	New Lexington Village, Ohio	0.0129954223%
OH1266	New London Township, Ohio	0.0002882646%
OH1267	New London Village, Ohio	0.0030473682%
OH1268	New Madison Village, Ohio	0.0016608005%
OH1269	New Market Township, Ohio	0.0002484374%
OH1270	New Miami Village, Ohio	0.0024074272%
OH1271	New Middletown Village, Ohio	0.0007615778%
OH1272	New Paris Village, Ohio	0.0016204423%
OH1273	New Philadelphia City, Ohio	0.0774788253%
OH1274	New Richmond Village, Ohio	0.0330808011%
OH1275	New Riegel Village, Ohio	0.0002406507%
OH1276	New Russia Township, Ohio	0.0008375698%
OH1277	New Straitsville Village, Ohio	0.0021300444%
OH1278	New Vienna Village, Ohio	0.0009144537%
OH1279	New Washington Village, Ohio	0.0012290055%
OH1280	New Waterford Village, Ohio	0.0048586998%
OH1281	New Weston Village, Ohio	0.0000861156%
OH1282	Newark City, Ohio	0.1777772576%
OH1283	Newark Township, Ohio	0.0018255901%
OH1284	Newberry Township, Ohio	0.0019874499%
OH1285	Newburgh Heights Village, Ohio	0.0042789708%
OH1286	Newbury Township, Ohio	0.0027755552%
OH1287	Newcomerstown Village, Ohio	0.0076759513%
OH1288	Newton Falls Village, Ohio	0.0365044154%
OH1289	Newton Township, Licking County, Ohio	0.0011027676%
OH1290	Newton Township, Muskingum County, Ohio	0.0020262466%
OH1291	Newton Township, Pike County, Ohio	0.0002281614%
OH1292	Newton Township, Trumbull County, Ohio	0.0026939270%
OH1293	Newtonsville Village, Ohio	0.0005516340%
OH1294	Newtown Village, Ohio	0.0057282940%
OH1295	Ney Village, Ohio	0.0000662077%
OH1296	Nile Township, Ohio	0.0052315920%
OH1297	Niles City, Ohio	0.1643806952%
OH1298	Nimishillen Township, Ohio	0.0122610291%
OH1299	Noble County, Ohio	0.0987433126%
OH1300	Noble Township, Auglaize County, Ohio	0.0000089026%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1301	Noble Township, Defiance County, Ohio	0.0003420733%
OH1302	Noble Township, Noble County, Ohio	0.0008278915%
OH1303	North Baltimore Village, Ohio	0.0034529973%
OH1304	North Bend Village, Ohio	0.0025608089%
OH1305	North Bloomfield Township, Ohio	0.0004132886%
OH1306	North Canton City, Ohio	0.0524878920%
OH1307	North College Hill City, Ohio	0.0194144077%
OH1308	North Fairfield Village, Ohio	0.0000686344%
OH1309	North Hampton Village, Ohio	0.0018236413%
OH1310	North Kingsville Village, Ohio	0.0058586766%
OH1311	North Lewisburg Village, Ohio	0.0040569220%
OH1312	North Olmsted City, Ohio	0.0399884238%
OH1313	North Perry Village, Ohio	0.0021416939%
OH1314	North Randall Village, Ohio	0.0010272691%
OH1315	North Ridgeville City, Ohio	0.1099748579%
OH1316	North Robinson Village, Ohio	0.0000652569%
OH1317	North Royalton City, Ohio	0.0490362937%
OH1318	North Star Village, Ohio	0.0006041028%
OH1319	North Township, Ohio	0.0006202542%
OH1320	Northfield Center Township, Ohio	0.0055419447%
OH1321	Northfield Village, Ohio	0.0204907382%
OH1322	Northwest Township, Ohio	0.0003378915%
OH1323	Northwood City, Ohio	0.0154037964%
OH1324	Norton City, Ohio	0.0374368018%
OH1325	Norwalk City, Ohio	0.0671930963%
OH1326	Norwalk Township, Ohio	0.0009746088%
OH1327	Norwich Township, Franklin County, Ohio	0.0881825657%
OH1328	Norwich Township, Huron County, Ohio	0.0005490754%
OH1329	Norwich Village, Ohio	0.0000776491%
OH1330	Norwood City, Ohio	0.1133550899%
OH1331	Nottingham Township, Ohio	0.0002290169%
OH1332	Oak Harbor Village, Ohio	0.0043210926%
OH1333	Oak Hill Village, Ohio	0.0009945397%
OH1334	Oakwood City, Ohio	0.0665292396%
OH1335	Oakwood Village, Cuyahoga County, Ohio	0.0160412015%
OH1336	Oakwood Village, Paulding County, Ohio	0.0006103209%
OH1337	Oberlin City, Ohio	0.0523286319%
OH1338	Obetz Village, Ohio	0.0012677151%
OH1339	Octa Village, Ohio	0.0000132032%
OH1340	Ohio City Village, Ohio	0.0013381279%
OH1341	Ohio Township, Clermont County, Ohio	0.0024995915%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1342	Ohio Township, Monroe County, Ohio	0.0002805325%
OH1343	Old Washington Village, Ohio	0.0016589439%
OH1344	Olive Township, Meigs County, Ohio	0.0005413001%
OH1345	Olive Township, Noble County, Ohio	0.0002069729%
OH1346	Olmsted Falls City, Ohio	0.0116318466%
OH1347	Olmsted Township, Ohio	0.0148163807%
OH1348	Ontario City, Ohio	0.0192773910%
OH1349	Orange Township, Ashland County, Ohio	0.0004880329%
OH1350	Orange Township, Carroll County, Ohio	0.0003703748%
OH1351	Orange Township, Delaware County, Ohio	0.0531556020%
OH1352	Orange Township, Meigs County, Ohio	0.0003383126%
OH1353	Orange Township, Shelby County, Ohio	0.0011891054%
OH1354	Orange Village, Ohio	0.0100237754%
OH1355	Orangeville Village, Ohio	0.0005285553%
OH1356	Oregon City, Ohio	0.0936692081%
OH1357	Orrville City, Ohio	0.0089614214%
OH1358	Orwell Township, Ohio	0.0004813742%
OH1359	Orwell Village, Ohio	0.0054712290%
OH1360	Osgood Village, Ohio	0.0000984178%
OH1361	Osnaburg Township, Ohio	0.0017515756%
OH1362	Ostrander Village, Ohio	0.0001237328%
OH1363	Ottawa County, Ohio	0.2393019717%
OH1364	Ottawa Hills Village, Ohio	0.0134021121%
OH1365	Ottawa Village, Ohio	0.0047352274%
OH1366	Ottoville Village, Ohio	0.0010927448%
OH1367	Otway Village, Ohio	0.0001137303%
OH1368	Owensville Village, Ohio	0.0008791667%
OH1369	Oxford City, Ohio	0.0794612533%
OH1370	Oxford Township, Butler County, Ohio	0.1101599888%
OH1371	Oxford Township, Coshocton County, Ohio	0.0002143057%
OH1372	Oxford Township, Guernsey County, Ohio	0.0001223811%
OH1373	Oxford Township, Tuscarawas County, Ohio	0.0000788288%
OH1374	Painesville City, Ohio	0.0828627046%
OH1375	Painesville Township, Ohio	0.0334236916%
OH1376	Paint Township, Fayette County, Ohio	0.0000280861%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1377	Paint Township, Highland County, Ohio	0.0002710226%
OH1378	Paint Township, Holmes County, Ohio	0.0004187862%
OH1379	Paint Township, Madison County, Ohio	0.0000155425%
OH1380	Paint Township, Ross County, Ohio	0.0003836542%
OH1381	Paint Township, Wayne County, Ohio	0.0001894347%
OH1382	Palestine Village, Ohio	0.0005121741%
OH1383	Palmer Township, Ohio	0.0000584877%
OH1384	Palmyra Township, Ohio	0.0008124819%
OH1385	Pandora Village, Ohio	0.0009188990%
OH1386	Paris Township, Portage County, Ohio	0.0001503091%
OH1387	Paris Township, Stark County, Ohio	0.0010390703%
OH1388	Parkman Township, Ohio	0.0008613792%
OH1389	Parma City, Ohio	0.1543116176%
OH1390	Parma Heights City, Ohio	0.0326118418%
OH1391	Parral Village, Ohio	0.0000098536%
OH1392	Pataskala City, Ohio	0.0174033408%
OH1393	Patterson Village, Ohio	0.0000841761%
OH1394	Paulding County, Ohio	0.0839721160%
OH1395	Paulding Township, Ohio	0.0001534939%
OH1396	Paulding Village, Ohio	0.0016847781%
OH1397	Paxton Township, Ohio	0.0010329152%
OH1398	Payne Village, Ohio	0.0005664655%
OH1399	Pease Township, Ohio	0.0005202465%
OH1400	Pebble Township, Ohio	0.0003464673%
OH1401	Pee Pee Township, Ohio	0.0015041749%
OH1402	Peebles Village, Ohio	0.0067989872%
OH1403	Pemberville Village, Ohio	0.0012856905%
OH1404	Peninsula Village, Ohio	0.0050407601%
OH1405	Penn Township, Ohio	0.0001392397%
OH1406	Pepper Pike City, Ohio	0.0193758750%
OH1407	Perkins Township, Ohio	0.0512077107%
OH1408	Perry County, Ohio	0.2380485965%
OH1409	Perry Township, Allen County, Ohio	0.0045543679%
OH1410	Perry Township, Brown County, Ohio	0.0143559087%
OH1411	Perry Township, Columbiana County, Ohio	0.0048853229%
OH1412	Perry Township, Fayette County, Ohio	0.0003538844%
OH1413	Perry Township, Franklin County, Ohio	0.0091642053%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1414	Perry Township, Lake County, Ohio	0.0025586608%
OH1415	Perry Township, Lawrence County, Ohio	0.0009214313%
OH1416	Perry Township, Licking County, Ohio	0.0016309840%
OH1417	Perry Township, Logan County, Ohio	0.0026933538%
OH1418	Perry Township, Monroe County, Ohio	0.0000872768%
OH1419	Perry Township, Muskingum County, Ohio	0.0027986277%
OH1420	Perry Township, Pickaway County, Ohio	0.0000291493%
OH1421	Perry Township, Pike County, Ohio	0.0001267563%
OH1422	Perry Township, Putnam County, Ohio	0.0000082784%
OH1423	Perry Township, Richland County, Ohio	0.0004103471%
OH1424	Perry Township, Stark County, Ohio	0.0537347763%
OH1425	Perry Township, Wood County, Ohio	0.0001040797%
OH1426	Perry Village, Ohio	0.0054300469%
OH1427	Perrysburg City, Ohio	0.0576846462%
OH1428	Perrysburg Township, Ohio	0.0342177338%
OH1429	Perrysville Village, Ohio	0.0008459238%
OH1430	Peru Township, Huron County, Ohio	0.0000274538%
OH1431	Peru Township, Morrow County, Ohio	0.0000708495%
OH1432	Phillipsburg Village, Ohio	0.0041962937%
OH1433	Philo Village, Ohio	0.0010532470%
OH1434	Pickaway County, Ohio	0.0934088328%
OH1435	Pickaway Township, Ohio	0.0005441197%
OH1436	Pickerington City, Ohio	0.0350194279%
OH1437	Pierce Township, Ohio	0.0721778605%
OH1438	Pierpont Township, Ohio	0.0011858243%
OH1439	Pike County, Ohio	0.3072066041%
OH1440	Pike Township, Brown County, Ohio	0.0024184900%
OH1441	Pike Township, Clark County, Ohio	0.0026810249%
OH1442	Pike Township, Perry County, Ohio	0.0022268646%
OH1443	Pike Township, Stark County, Ohio	0.0021276201%
OH1444	Piketon Village, Ohio	0.0023999196%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1445	Pioneer Village, Ohio	0.0028760068%
OH1446	Piqua City, Ohio	0.0869480927%
OH1447	Pitsburg Village, Ohio	0.0005659024%
OH1448	Pitt Township, Ohio	0.0002833522%
OH1449	Plain City Village, Ohio	0.0102501421%
OH1450	Plain Township, Franklin County, Ohio	0.0388485937%
OH1451	Plain Township, Stark County, Ohio	0.0464019090%
OH1452	Plain Township, Wayne County, Ohio	0.0002976831%
OH1453	Plain Township, Wood County, Ohio	0.0002693828%
OH1454	Plainfield Village, Ohio	0.0000153076%
OH1455	Pleasant City Village, Ohio	0.0008654831%
OH1456	Pleasant Hill Village, Ohio	0.0002839214%
OH1457	Pleasant Plain Village, Ohio	0.0000116356%
OH1458	Pleasant Township, Brown County, Ohio	0.0012092450%
OH1459	Pleasant Township, Clark County, Ohio	0.0032390047%
OH1460	Pleasant Township, Fairfield County, Ohio	0.0068849393%
OH1461	Pleasant Township, Franklin County, Ohio	0.0137844922%
OH1462	Pleasant Township, Hancock County, Ohio	0.0002811062%
OH1463	Pleasant Township, Henry County, Ohio	0.0002233406%
OH1464	Pleasant Township, Knox County, Ohio	0.0045641970%
OH1465	Pleasant Township, Marion County, Ohio	0.0096326984%
OH1466	Pleasant Township, Perry County, Ohio	0.0001828826%
OH1467	Pleasant Township, Seneca County, Ohio	0.0003208676%
OH1468	Pleasant Township, Van Wert County, Ohio	0.0002849717%
OH1469	Pleasantville Village, Ohio	0.0000570350%
OH1470	Plymouth Township, Ohio	0.0017493844%
OH1471	Plymouth Village, Ohio	0.0065060016%
OH1472	Poland Township, Ohio	0.0148262002%
OH1473	Poland Village, Ohio	0.0061663235%
OH1474	Polk Township, Ohio	0.0010767393%
OH1475	Polk Village, Ohio	0.0000406694%
OH1476	Pomeroy Village, Ohio	0.0093881741%
OH1477	Port Clinton City, Ohio	0.0145364578%
OH1478	Port Jefferson Village, Ohio	0.0003105872%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1479	Port Washington Village, Ohio	0.0003251687%
OH1480	Port William Village, Ohio	0.0010928837%
OH1481	Portage County, Ohio	0.9187057360%
OH1482	Portage Township, Hancock County, Ohio	0.0001686637%
OH1483	Portage Township, Ottawa County, Ohio	0.0000480885%
OH1484	Portage Township, Wood County, Ohio	0.0001408137%
OH1485	Portage Village, Ohio	0.0016040519%
OH1486	Porter Township, Delaware County, Ohio	0.0036954857%
OH1487	Porter Township, Scioto County, Ohio	0.0395496982%
OH1488	Portsmouth City, Ohio	0.2233662325%
OH1489	Potsdam Village, Ohio	0.0000227137%
OH1490	Powell City, Ohio	0.0184361841%
OH1491	Powhatan Point Village, Ohio	0.0016591645%
OH1492	Prairie Township, Franklin County, Ohio	0.0344574120%
OH1493	Prairie Township, Holmes County, Ohio	0.0003867956%
OH1494	Preble County, Ohio	0.3067055248%
OH1495	Proctorville Village, Ohio	0.0018254771%
OH1496	Prospect Village, Ohio	0.0011157566%
OH1497	Providence Township, Ohio	0.0026476678%
OH1498	Pulaski Township, Ohio	0.0002907439%
OH1499	Pultney Township, Ohio	0.0018560145%
OH1500	Pusheta Township, Ohio	0.0002670784%
OH1501	Put In Bay Township, Ohio	0.0034623699%
OH1502	Put-In-Bay Village, Ohio	0.0040050827%
OH1503	Putnam County, Ohio	0.1372967601%
OH1504	Quaker City Village, Ohio	0.0004351328%
OH1505	Quincy Village, Ohio	0.0003391631%
OH1506	Raccoon Township, Ohio	0.0003561309%
OH1507	Racine Village, Ohio	0.0010826003%
OH1508	Radnor Township, Ohio	0.0001814747%
OH1509	Randolph Township, Ohio	0.0013730943%
OH1510	Range Township, Ohio	0.0007149570%
OH1511	Rarden Township, Ohio	0.0020471447%
OH1512	Rarden Village, Ohio	0.0005117862%
OH1513	Ravenna City, Ohio	0.0218557620%
OH1514	Ravenna Township, Ohio	0.0059636168%
OH1515	Rawson Village, Ohio	0.0001405531%
OH1516	Rayland Village, Ohio	0.0003984552%
OH1517	Reading City, Ohio	0.0457344992%
OH1518	Reading Township, Ohio	0.0019364040%
OH1519	Recovery Township, Ohio	0.0000812132%
OH1520	Reily Township, Ohio	0.0012764211%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1521	Reminderville Village, Ohio	0.0151415568%
OH1522	Rendville Village, Ohio	0.0001828826%
OH1523	Republic Village, Ohio	0.0011130095%
OH1524	Reynoldsburg City, Ohio	0.0697130845%
OH1525	Rice Township, Ohio	0.0003978688%
OH1526	Richfield Township, Henry County, Ohio	0.0023349246%
OH1527	Richfield Township, Lucas County, Ohio	0.0047039321%
OH1528	Richfield Township, Summit County, Ohio	0.0095996121%
OH1529	Richfield Village, Ohio	0.0399887454%
OH1530	Richland County, Ohio	0.7455113947%
OH1531	Richland Township, Allen County, Ohio	0.0002999883%
OH1532	Richland Township, Belmont County, Ohio	0.0026715361%
OH1533	Richland Township, Clinton County, Ohio	0.0005798975%
OH1534	Richland Township, Darke County, Ohio	0.0002952534%
OH1535	Richland Township, Fairfield County, Ohio	0.0003503579%
OH1536	Richland Township, Holmes County, Ohio	0.0001483201%
OH1537	Richland Township, Wyandot County, Ohio	0.0001079437%
OH1538	Richmond Heights City, Ohio	0.0218650269%
OH1539	Richmond Township, Ashtabula County, Ohio	0.0003170025%
OH1540	Richmond Township, Huron County, Ohio	0.0015099572%
OH1541	Richmond Village, Ohio	0.0007609773%
OH1542	Richwood Village, Ohio	0.0014048433%
OH1543	Ridgefield Township, Ohio	0.0003431721%
OH1544	Ridgeville Township, Ohio	0.0002165727%
OH1545	Ridgeway Village, Ohio	0.0003864298%
OH1546	Riley Township, Ohio	0.0007202182%
OH1547	Rio Grande Village, Ohio	0.0014432672%
OH1548	Ripley Township, Holmes County, Ohio	0.0000348988%
OH1549	Ripley Township, Huron County, Ohio	0.0000137269%
OH1550	Ripley Village, Ohio	0.0111932679%
OH1551	Risingsun Village, Ohio	0.0004530528%
OH1552	Rittman City, Ohio	0.0059649971%
OH1553	Riverlea Village, Ohio	0.0001680104%
OH1554	Riverside City, Ohio	0.0817797700%
OH1555	Roaming Shores Village, Ohio	0.0034987688%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1556	Rochester Township, Ohio	0.0013537465%
OH1557	Rochester Village, Ohio	0.0000194784%
OH1558	Rock Creek Village, Ohio	0.0002113350%
OH1559	Rockford Village, Ohio	0.0018408327%
OH1560	Rocky Ridge Village, Ohio	0.0002129632%
OH1561	Rocky River City, Ohio	0.0503638414%
OH1562	Rogers Village, Ohio	0.0005457718%
OH1563	Rome Township, Ashtabula County, Ohio	0.0014206410%
OH1564	Rome Township, Athens County, Ohio	0.0002813909%
OH1565	Rome Township, Lawrence County, Ohio	0.0010605153%
OH1566	Rome Village, Ohio	0.0002586036%
OH1567	Rootstown Township, Ohio	0.0026527533%
OH1568	Rose Township, Ohio	0.0004793086%
OH1569	Roseville Village, Ohio	0.0016522526%
OH1570	Ross County, Ohio	1.0109583321%
OH1571	Ross Township, Butler County, Ohio	0.0261747113%
OH1572	Ross Township, Greene County, Ohio	0.0002579678%
OH1573	Ross Township, Jefferson County, Ohio	0.0004940844%
OH1574	Rossburg Village, Ohio	0.0000984178%
OH1575	Rossford City, Ohio	0.0126977241%
OH1576	Roswell Village, Ohio	0.0002759007%
OH1577	Roundhead Township, Ohio	0.0002332423%
OH1578	Royalton Township, Ohio	0.0009661532%
OH1579	Rumley Township, Ohio	0.0006297965%
OH1580	Rush Creek Township, Ohio	0.0026562014%
OH1581	Rush Township, Scioto County, Ohio	0.0047482384%
OH1582	Rush Township, Tuscarawas County, Ohio	0.0000689752%
OH1583	Rushcreek Township, Ohio	0.0004189662%
OH1584	Rushsylvania Village, Ohio	0.0000099754%
OH1585	Rushville Village, Ohio	0.0000244436%
OH1586	Russell Township, Ohio	0.0185770784%
OH1587	Russells Point Village, Ohio	0.0022943385%
OH1588	Russellville Village, Ohio	0.0057671685%
OH1589	Russia Village, Ohio	0.0003460829%
OH1590	Rutland Village, Ohio	0.0004567220%
OH1591	Sabina Village, Ohio	0.0072933257%
OH1592	Sagamore Hills Township, Ohio	0.0226207726%
OH1593	Salem City, Ohio	0.0383095249%
OH1594	Salem Township, Auglaize County, Ohio	0.0001157340%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1595	Salem Township, Champaign County, Ohio	0.0003806616%
OH1596	Salem Township, Columbiana County, Ohio	0.0009051824%
OH1597	Salem Township, Muskingum County, Ohio	0.0003912060%
OH1598	Salem Township, Ottawa County, Ohio	0.0007213271%
OH1599	Salem Township, Shelby County, Ohio	0.0010648705%
OH1600	Salem Township, Tuscarawas County, Ohio	0.0026407637%
OH1601	Salem Township, Warren County, Ohio	0.0074583911%
OH1602	Salem Township, Washington County, Ohio	0.0005013228%
OH1603	Salesville Village, Ohio	0.0000679895%
OH1604	Salineville Village, Ohio	0.0034609917%
OH1605	Salisbury Township, Ohio	0.0003552282%
OH1606	Salt Creek Township, Hocking County, Ohio	0.0001833021%
OH1607	Salt Creek Township, Holmes County, Ohio	0.0000465318%
OH1608	Salt Creek Township, Wayne County, Ohio	0.0001391765%
OH1609	Salt Lick Township, Ohio	0.0000430312%
OH1610	Salt Rock Township, Ohio	0.0007066458%
OH1611	Saltcreek Township, Ohio	0.0003935151%
OH1612	Sandusky City, Ohio	0.1261336610%
OH1613	Sandusky County, Ohio	0.3072903644%
OH1614	Sandusky Township, Crawford County, Ohio	0.0000108762%
OH1615	Sandusky Township, Sandusky County, Ohio	0.0015100930%
OH1616	Sandy Township, Stark County, Ohio	0.0049479536%
OH1617	Sandy Township, Tuscarawas County, Ohio	0.0006897517%
OH1618	Sarahsville Village, Ohio	0.0000689910%
OH1619	Sardinia Village, Ohio	0.0044028921%
OH1620	Savannah Village, Ohio	0.0002294615%
OH1621	Saybrook Township, Ohio	0.0161906113%
OH1622	Scio Village, Ohio	0.0001526779%
OH1623	Scioto County, Ohio	0.9401796346%
OH1624	Scioto Township, Delaware County, Ohio	0.0019714756%
OH1625	Scioto Township, Pickaway County, Ohio	0.0062913839%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1626	Scioto Township, Pike County, Ohio	0.0002619631%
OH1627	Scioto Township, Ross County, Ohio	0.0146969071%
OH1628	Scipio Township, Meigs County, Ohio	0.0004736376%
OH1629	Scipio Township, Seneca County, Ohio	0.0005615183%
OH1630	Scott Township, Marion County, Ohio	0.0001301716%
OH1631	Scott Township, Sandusky County, Ohio	0.0009313747%
OH1632	Scott Village, Ohio	0.0006416289%
OH1633	Seal Township, Ohio	0.0013351665%
OH1634	Seaman Village, Ohio	0.0025035030%
OH1635	Sebring Village, Ohio	0.0078737318%
OH1636	Seneca County, Ohio	0.2801274556%
OH1637	Seneca Township, Monroe County, Ohio	0.0000124681%
OH1638	Seneca Township, Noble County, Ohio	0.0000172477%
OH1639	Senecaville Village, Ohio	0.0007886782%
OH1640	Seven Hills City, Ohio	0.0208535620%
OH1641	Seven Mile Village, Ohio	0.0013087356%
OH1642	Seville Village, Ohio	0.0055383307%
OH1643	Shadyside Village, Ohio	0.0078177582%
OH1644	Shaker Heights City, Ohio	0.1048407101%
OH1645	Shalersville Township, Ohio	0.0000934354%
OH1646	Sharon Township, Franklin County, Ohio	0.0053763338%
OH1647	Sharon Township, Medina County, Ohio	0.0058099333%
OH1648	Sharon Township, Richland County, Ohio	0.0000802853%
OH1649	Sharonville City, Ohio	0.1284229161%
OH1650	Shawnee Hills Village, Ohio	0.0030520752%
OH1651	Shawnee Township, Ohio	0.0289829613%
OH1652	Shawnee Village, Ohio	0.0005916790%
OH1653	Sheffield Lake City, Ohio	0.0113266702%
OH1654	Sheffield Township, Ashtabula County, Ohio	0.0012562693%
OH1655	Sheffield Township, Lorain County, Ohio	0.0039054125%
OH1656	Sheffield Village, Ohio	0.0383431647%
OH1657	Shelby City, Ohio	0.0301426674%
OH1658	Shelby County, Ohio	0.2601922372%
OH1659	Sherrodsville Village, Ohio	0.0010675510%
OH1660	Sherwood Village, Ohio	0.0012358778%
OH1661	Shiloh Village, Ohio	0.0001516500%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1662	Shreve Village, Ohio	0.0012061965%
OH1663	Sidney City, Ohio	0.0768126600%
OH1664	Silver Lake Village, Ohio	0.0087129009%
OH1665	Silverton Village, Ohio	0.0117488480%
OH1666	Sinking Spring Village, Ohio	0.0018697801%
OH1667	Smith Township, Belmont County, Ohio	0.0011670394%
OH1668	Smith Township, Mahoning County, Ohio	0.0056258490%
OH1669	Smithfield Township, Ohio	0.0003028259%
OH1670	Smithfield Village, Ohio	0.0021516579%
OH1671	Smithville Village, Ohio	0.0012448566%
OH1672	Solon City, Ohio	0.0575665779%
OH1673	Somerford Township, Ohio	0.0018806477%
OH1674	Somers Township, Ohio	0.0009493500%
OH1675	Somerset Village, Ohio	0.0013447250%
OH1676	Somerville Village, Ohio	0.0001615723%
OH1677	South Amherst Village, Ohio	0.0020257501%
OH1678	South Bloomfield Township, Ohio	0.0004782339%
OH1679	South Bloomfield Village, Ohio	0.0012874261%
OH1680	South Charleston Village, Ohio	0.0026810249%
OH1681	South Euclid City, Ohio	0.0416202012%
OH1682	South Lebanon Village, Ohio	0.0058643200%
OH1683	South Point Village, Ohio	0.0061370801%
OH1684	South Russell Village, Ohio	0.0067283287%
OH1685	South Salem Village, Ohio	0.0005572426%
OH1686	South Solon Village, Ohio	0.0007460421%
OH1687	South Vienna Village, Ohio	0.0009118207%
OH1688	South Webster Village, Ohio	0.0024736332%
OH1689	South Zanesville Village, Ohio	0.0015547932%
OH1690	Southington Township, Ohio	0.0014492645%
OH1691	Sparta Village, Ohio	0.0000770825%
OH1692	Spencer Township, Allen County, Ohio	0.0001636300%
OH1693	Spencer Township, Guernsey County, Ohio	0.0001631748%
OH1694	Spencer Township, Lucas County, Ohio	0.0024565990%
OH1695	Spencer Township, Medina County, Ohio	0.0000708528%
OH1696	Spencer Village, Ohio	0.0016178066%
OH1697	Spencerville Village, Ohio	0.0025294469%
OH1698	Sprigg Township, Ohio	0.0001054107%
OH1699	Spring Valley Township, Ohio	0.0070786377%
OH1700	Spring Valley Village, Ohio	0.0001444620%
OH1701	Springboro City, Ohio	0.0299889938%
OH1702	Springdale City, Ohio	0.0692154947%
OH1703	Springfield City, Ohio	0.4735887613%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1704	Springfield Township, Clark County, Ohio	0.0105063514%
OH1705	Springfield Township, Gallia County, Ohio	0.0009746740%
OH1706	Springfield Township, Hamilton County, Ohio	0.1053972703%
OH1707	Springfield Township, Jefferson County, Ohio	0.0002231349%
OH1708	Springfield Township, Lucas County, Ohio	0.0432543386%
OH1709	Springfield Township, Mahoning County, Ohio	0.0039675747%
OH1710	Springfield Township, Richland County, Ohio	0.0177162881%
OH1711	Springfield Township, Ross County, Ohio	0.0053121351%
OH1712	Springfield Township, Summit County, Ohio	0.0469667767%
OH1713	Springfield Township, Williams County, Ohio	0.0004950504%
OH1714	St Albans Township, Ohio	0.0043369348%
OH1715	St Clair Township, Butler County, Ohio	0.0005493458%
OH1716	St Clair Township, Columbiana County, Ohio	0.0167991211%
OH1717	St Marys Township, Ohio	0.0002136628%
OH1718	St. Bernard Village, Ohio	0.0379854367%
OH1719	St. Clairsville City, Ohio	0.0187569954%
OH1720	St. Henry Village, Ohio	0.0014076956%
OH1721	St. Louisville Village, Ohio	0.0003799451%
OH1722	St. Marys City, Ohio	0.0281144576%
OH1723	St. Paris Village, Ohio	0.0038066155%
OH1724	Stafford Village, Ohio	0.0000249362%
OH1725	Stark County, Ohio	1.5315796664%
OH1726	Starr Township, Ohio	0.0001436692%
OH1727	Staunton Township, Ohio	0.0003747763%
OH1728	Sterling Township, Ohio	0.0043408795%
OH1729	Steubenville City, Ohio	0.1367338744%
OH1730	Steubenville Township, Ohio	0.0000318764%
OH1731	Stock Township, Harrison County, Ohio	0.0003339830%
OH1732	Stock Township, Noble County, Ohio	0.0000344955%
OH1733	Stockport Village, Ohio	0.0002249256%
OH1734	Stokes Township, Logan County, Ohio	0.0047782092%
OH1735	Stokes Township, Madison County, Ohio	0.0007615846%
OH1736	Stone Creek Village, Ohio	0.0001379503%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1737	Stonelick Township, Ohio	0.0184280231%
OH1738	Stoutsville Village, Ohio	0.0000733307%
OH1739	Stow City, Ohio	0.1475892163%
OH1740	Strasburg Village, Ohio	0.0032911011%
OH1741	Stratton Village, Ohio	0.0014981914%
OH1742	Streetsboro City, Ohio	0.0206045399%
OH1743	Strongsville City, Ohio	0.0739396664%
OH1744	Struthers City, Ohio	0.0252671862%
OH1745	Stryker Village, Ohio	0.0016737417%
OH1746	Suffield Township, Ohio	0.0026771277%
OH1747	Sugar Bush Knolls Village, Ohio	0.0000982645%
OH1748	Sugar Creek Township, Allen County, Ohio	0.0002727166%
OH1749	Sugar Creek Township, Putnam County, Ohio	0.0001655674%
OH1750	Sugar Creek Township, Wayne County, Ohio	0.0003634054%
OH1751	Sugar Grove Village, Ohio	0.0001955486%
OH1752	Sugarcreek Township, Ohio	0.0470017417%
OH1753	Sugarcreek Village, Ohio	0.0027688605%
OH1754	Sullivan Township, Ohio	0.0017162492%
OH1755	Summerfield Village, Ohio	0.0001212800%
OH1756	Summit Township, Ohio	0.0000062341%
OH1757	Summitville Village, Ohio	0.0004792142%
OH1758	Sunbury Village, Ohio	0.0082323543%
OH1759	Sunfish Township, Ohio	0.0000676034%
OH1760	Swan Creek Township, Ohio	0.0048429959%
OH1761	Swanton Township, Ohio	0.0015012549%
OH1762	Swanton Village, Ohio	0.0072434936%
OH1763	Switzerland Township, Ohio	0.0001807876%
OH1764	Sycamore Township, Hamilton County, Ohio	0.0584269292%
OH1765	Sycamore Township, Wyandot County, Ohio	0.0002766058%
OH1766	Sycamore Village, Ohio	0.0012008738%
OH1767	Sylvania City, Ohio	0.0526622027%
OH1768	Sylvania Township, Ohio	0.1247952267%
OH1769	Symmes Township, Hamilton County, Ohio	0.0305202839%
OH1770	Symmes Township, Lawrence County, Ohio	0.0000521565%
OH1771	Syracuse Village, Ohio	0.0005413001%
OH1772	Tallmadge City, Ohio	0.0580737905%
OH1773	Tarlton Village, Ohio	0.0002242634%
OH1774	Tate Township, Ohio	0.0267197716%
OH1775	Taylor Creek Township, Ohio	0.0001110677%
OH1776	Terrace Park Village, Ohio	0.0056698421%
OH1777	Texas Township, Ohio	0.0002936562%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1778	The Village of Indian Hill City, Ohio	0.0264202950%
OH1779	Thompson Township, Delaware County, Ohio	0.0002474656%
OH1780	Thompson Township, Geauga County, Ohio	0.0022491568%
OH1781	Thorn Township, Ohio	0.0007422882%
OH1782	Thornville Village, Ohio	0.0006131946%
OH1783	Thurston Village, Ohio	0.0013688400%
OH1784	Tiffin City, Ohio	0.0703803061%
OH1785	Tiffin Township, Ohio	0.0005075927%
OH1786	Tiltonsville Village, Ohio	0.0016575735%
OH1787	Timberlake Village, Ohio	0.0023312243%
OH1788	Tipp City, Ohio	0.0376479790%
OH1789	Tiro Village, Ohio	0.0000326285%
OH1790	Toledo City, Ohio	1.0197706186%
OH1791	Tontogany Village, Ohio	0.0001897924%
OH1792	Toronto City, Ohio	0.0279077997%
OH1793	Townsend Township, Huron County, Ohio	0.0006177098%
OH1794	Townsend Township, Sandusky County, Ohio	0.0000271274%
OH1795	Tremont City Village, Ohio	0.0006396354%
OH1796	Trenton City, Ohio	0.0416371797%
OH1797	Trenton Township, Ohio	0.0000577420%
OH1798	Trimble Township, Ohio	0.0023032365%
OH1799	Trimble Village, Ohio	0.0004320101%
OH1800	Trotwood City, Ohio	0.0811683100%
OH1801	Troy City, Ohio	0.0899917302%
OH1802	Troy Township, Ashland County, Ohio	0.0002358826%
OH1803	Troy Township, Athens County, Ohio	0.0008754383%
OH1804	Troy Township, Geauga County, Ohio	0.0026032794%
OH1805	Troy Township, Richland County, Ohio	0.0034790294%
OH1806	Troy Township, Wood County, Ohio	0.0027734180%
OH1807	Trumbull County, Ohio	2.0203599712%
OH1808	Trumbull Township, Ohio	0.0006457459%
OH1809	Truro Township, Ohio	0.0493339720%
OH1810	Tully Township, Ohio	0.0007929647%
OH1811	Turtle Creek Township, Ohio	0.0003372090%
OH1812	Turtlecreek Township, Ohio	0.0071325956%
OH1813	Tuscarawas County, Ohio	0.3721703206%
OH1814	Tuscarawas Township, Ohio	0.0020979323%
OH1815	Tuscarawas Village, Ohio	0.0003842902%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1816	Twin Township, Darke County, Ohio	0.0003813690%
OH1817	Twin Township, Ross County, Ohio	0.0052531114%
OH1818	Twinsburg City, Ohio	0.0833508485%
OH1819	Tymochtee Township, Ohio	0.0003170847%
OH1820	Uhrichsville City, Ohio	0.0101787647%
OH1821	Union City Village, Ohio	0.0076150778%
OH1822	Union City, Ohio	0.0198982889%
OH1823	Union County, Ohio	0.3002174205%
OH1824	Union Township, Auglaize County, Ohio	0.0001691497%
OH1825	Union Township, Carroll County, Ohio	0.0000762536%
OH1826	Union Township, Champaign County, Ohio	0.0000211479%
OH1827	Union Township, Clermont County, Ohio	0.3185341547%
OH1828	Union Township, Clinton County, Ohio	0.0085869431%
OH1829	Union Township, Fayette County, Ohio	0.0014043033%
OH1830	Union Township, Highland County, Ohio	0.0112248527%
OH1831	Union Township, Lawrence County, Ohio	0.0011822137%
OH1832	Union Township, Licking County, Ohio	0.0076823054%
OH1833	Union Township, Logan County, Ohio	0.0001197046%
OH1834	Union Township, Mercer County, Ohio	0.0004692319%
OH1835	Union Township, Miami County, Ohio	0.0038499743%
OH1836	Union Township, Muskingum County, Ohio	0.0003209896%
OH1837	Union Township, Pike County, Ohio	0.0001098555%
OH1838	Union Township, Ross County, Ohio	0.0119227921%
OH1839	Union Township, Tuscarawas County, Ohio	0.0002167791%
OH1840	Union Township, Union County, Ohio	0.0002502189%
OH1841	Union Township, Van Wert County, Ohio	0.0002973617%
OH1842	Union Township, Warren County, Ohio	0.0079936267%
OH1843	Unionville Center Village, Ohio	0.0001475046%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1844	Uniopolis Village, Ohio	0.0002492732%
OH1845	Unity Township, Ohio	0.0000798690%
OH1846	University Heights City, Ohio	0.0306916388%
OH1847	Upper Arlington City, Ohio	0.1198448950%
OH1848	Upper Sandusky City, Ohio	0.0108550896%
OH1849	Upper Township, Ohio	0.0007475763%
OH1850	Urbana City, Ohio	0.0575116162%
OH1851	Urbancrest Village, Ohio	0.0003436577%
OH1852	Utica Village, Ohio	0.0044986588%
OH1853	Valley Hi Village, Ohio	0.0001316045%
OH1854	Valley Township, Guernsey County, Ohio	0.0005439160%
OH1855	Valley Township, Scioto County, Ohio	0.0018196842%
OH1856	Valley View Village, Ohio	0.0158831601%
OH1857	Valleyview Village, Ohio	0.0016037359%
OH1858	Van Buren Township, Darke County, Ohio	0.0003444623%
OH1859	Van Buren Township, Putnam County, Ohio	0.0002317943%
OH1860	Van Buren Township, Shelby County, Ohio	0.0003904525%
OH1861	Van Buren Village, Ohio	0.0001188906%
OH1862	Van Wert City, Ohio	0.0528808311%
OH1863	Van Wert County, Ohio	0.1122540604%
OH1864	Vandalia City, Ohio	0.0967305650%
OH1865	Vanlue Village, Ohio	0.0001114793%
OH1866	Venedocia Village, Ohio	0.0000371702%
OH1867	Venice Township, Ohio	0.0000100271%
OH1868	Vermilion City, Ohio	0.0432196320%
OH1869	Vermilion Township, Ohio	0.0012778552%
OH1870	Vermillion Township, Ohio	0.0004880329%
OH1871	Vernon Township, Crawford County, Ohio	0.0000108762%
OH1872	Vernon Township, Scioto County, Ohio	0.0038952614%
OH1873	Vernon Township, Trumbull County, Ohio	0.0006308563%
OH1874	Verona Village, Ohio	0.0012373333%
OH1875	Versailles Village, Ohio	0.0100017096%
OH1876	Vienna Township, Ohio	0.0042113922%
OH1877	Vinton County, Ohio	0.1090168446%
OH1878	Vinton Township, Ohio	0.0001170406%
OH1879	Vinton Village, Ohio	0.0005060807%
OH1880	Violet Township, Ohio	0.0621844457%
OH1881	Virginia Township, Ohio	0.0000841915%
OH1882	Wabash Township, Ohio	0.0000492089%
OH1883	Wadsworth City, Ohio	0.0760959559%
OH1884	Waite Hill Village, Ohio	0.0053068521%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1885	Wakeman Village, Ohio	0.0018119487%
OH1886	Walbridge Village, Ohio	0.0029019871%
OH1887	Waldo Township, Ohio	0.0000743838%
OH1888	Waldo Village, Ohio	0.0004160980%
OH1889	Walnut Township, Fairfield County, Ohio	0.0087100593%
OH1890	Walnut Township, Gallia County, Ohio	0.0001499498%
OH1891	Walton Hills Village, Ohio	0.0099526568%
OH1892	Wapakoneta City, Ohio	0.0275268850%
OH1893	Ward Township, Ohio	0.0001486233%
OH1894	Warren City, Ohio	0.3520178232%
OH1895	Warren County, Ohio	1.0504230532%
OH1896	Warren Township, Belmont County, Ohio	0.0000984250%
OH1897	Warren Township, Jefferson County, Ohio	0.0004303316%
OH1898	Warren Township, Trumbull County, Ohio	0.0001534515%
OH1899	Warren Township, Tuscarawas County, Ohio	0.0002069255%
OH1900	Warren Township, Washington County, Ohio	0.0008773149%
OH1901	Warrensville Heights City, Ohio	0.0361164097%
OH1902	Warsaw Village, Ohio	0.0003911414%
OH1903	Warwick Township, Ohio	0.0008474093%
OH1904	Washington County, Ohio	0.3325608246%
OH1905	Washington Court House City, Ohio	0.0376016242%
OH1906	Washington Township, Auglaize County, Ohio	0.0023680955%
OH1907	Washington Township, Belmont County, Ohio	0.0000843643%
OH1908	Washington Township, Brown County, Ohio	0.0011782387%
OH1909	Washington Township, Carroll County, Ohio	0.0002178675%
OH1910	Washington Township, Clermont County, Ohio	0.0305984481%
OH1911	Washington Township, Clinton County, Ohio	0.0029440948%
OH1912	Washington Township, Columbiana County, Ohio	0.0006256408%
OH1913	Washington Township, Coshocton County, Ohio	0.0000841915%
OH1914	Washington Township, Darke County, Ohio	0.0003198579%
OH1915	Washington Township, Defiance County, Ohio	0.0003531079%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1916	Washington Township, Franklin County, Ohio	0.1225330619%
OH1917	Washington Township, Guernsey County, Ohio	0.0000951853%
OH1918	Washington Township, Hancock County, Ohio	0.0008925122%
OH1919	Washington Township, Harrison County, Ohio	0.0003339830%
OH1920	Washington Township, Henry County, Ohio	0.0002571801%
OH1921	Washington Township, Highland County, Ohio	0.0004065339%
OH1922	Washington Township, Hocking County, Ohio	0.0002427514%
OH1923	Washington Township, Holmes County, Ohio	0.0000261741%
OH1924	Washington Township, Jackson County, Ohio	0.0003315132%
OH1925	Washington Township, Lawrence County, Ohio	0.0000695420%
OH1926	Washington Township, Licking County, Ohio	0.0008154920%
OH1927	Washington Township, Logan County, Ohio	0.0017756185%
OH1928	Washington Township, Lucas County, Ohio	0.0071150384%
OH1929	Washington Township, Mercer County, Ohio	0.0001173080%
OH1930	Washington Township, Miami County, Ohio	0.0009766897%
OH1931	Washington Township, Monroe County, Ohio	0.0000062341%
OH1932	Washington Township, Montgomery County, Ohio	0.1316317394%
OH1933	Washington Township, Morrow County, Ohio	0.0002420690%
OH1934	Washington Township, Muskingum County, Ohio	0.0014845767%
OH1935	Washington Township, Paulding County, Ohio	0.0000402008%
OH1936	Washington Township, Pickaway County, Ohio	0.0003983733%
OH1937	Washington Township, Preble County, Ohio	0.0006874604%
OH1938	Washington Township, Richland County, Ohio	0.0012132000%
OH1939	Washington Township, Sandusky County, Ohio	0.0006510581%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1940	Washington Township, Scioto County, Ohio	0.0113445935%
OH1941	Washington Township, Shelby County, Ohio	0.0000798653%
OH1942	Washington Township, Stark County, Ohio	0.0006531299%
OH1943	Washington Township, Wood County, Ohio	0.0002265264%
OH1944	Washingtonville Village, Ohio	0.0014015930%
OH1945	Waterford Township, Ohio	0.0050048725%
OH1946	Waterloo Township, Ohio	0.0006670006%
OH1947	Watertown Township, Ohio	0.0001503968%
OH1948	Waterville City, Ohio	0.0124831621%
OH1949	Waterville Township, Ohio	0.0015558460%
OH1950	Wauseon City, Ohio	0.0277126990%
OH1951	Waverly Village, Ohio	0.0077490360%
OH1952	Wayne County, Ohio	0.2257675097%
OH1953	Wayne Lakes Village, Ohio	0.0075166600%
OH1954	Wayne Township, Adams County, Ohio	0.0012649279%
OH1955	Wayne Township, Ashtabula County, Ohio	0.0005165967%
OH1956	Wayne Township, Auglaize County, Ohio	0.0004273255%
OH1957	Wayne Township, Belmont County, Ohio	0.0000562429%
OH1958	Wayne Township, Butler County, Ohio	0.0007432325%
OH1959	Wayne Township, Champaign County, Ohio	0.0014909244%
OH1960	Wayne Township, Clermont County, Ohio	0.0020513889%
OH1961	Wayne Township, Clinton County, Ohio	0.0002007337%
OH1962	Wayne Township, Columbiana County, Ohio	0.0005990178%
OH1963	Wayne Township, Darke County, Ohio	0.0000369067%
OH1964	Wayne Township, Fayette County, Ohio	0.0001404303%
OH1965	Wayne Township, Jefferson County, Ohio	0.0021038433%
OH1966	Wayne Township, Monroe County, Ohio	0.0000062341%
OH1967	Wayne Township, Muskingum County, Ohio	0.0001404329%
OH1968	Wayne Township, Noble County, Ohio	0.0000862387%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1969	Wayne Township, Pickaway County, Ohio	0.0000437239%
OH1970	Wayne Township, Tuscarawas County, Ohio	0.0003941438%
OH1971	Wayne Township, Warren County, Ohio	0.0038164622%
OH1972	Wayne Village, Ohio	0.0008081483%
OH1973	Waynesburg Village, Ohio	0.0012073007%
OH1974	Waynesfield Village, Ohio	0.0007567223%
OH1975	Waynesville Village, Ohio	0.0046309511%
OH1976	Weathersfield Township, Ohio	0.0249955502%
OH1977	Weller Township, Ohio	0.0004460294%
OH1978	Wellington Village, Ohio	0.0164981765%
OH1979	Wells Township, Ohio	0.0100888848%
OH1980	Wellston City, Ohio	0.0406103723%
OH1981	Wellsville Village, Ohio	0.0125660620%
OH1982	Wesley Township, Ohio	0.0001253307%
OH1983	West Alexandria Village, Ohio	0.0099845432%
OH1984	West Carrollton City, Ohio	0.0603546931%
OH1985	West Chester Township, Ohio	0.3737167118%
OH1986	West Elkton Village, Ohio	0.0026843690%
OH1987	West Farmington Village, Ohio	0.0001875519%
OH1988	West Jefferson Village, Ohio	0.0159155640%
OH1989	West Lafayette Village, Ohio	0.0026252451%
OH1990	West Leipsic Village, Ohio	0.0002152376%
OH1991	West Liberty Village, Ohio	0.0035013600%
OH1992	West Manchester Village, Ohio	0.0025206880%
OH1993	West Mansfield Village, Ohio	0.0000798031%
OH1994	West Millgrove Village, Ohio	0.0001102020%
OH1995	West Milton Village, Ohio	0.0098350376%
OH1996	West Rushville Village, Ohio	0.0001070525%
OH1997	West Salem Village, Ohio	0.0004987159%
OH1998	West Township, Ohio	0.0005857063%
OH1999	West Union Village, Ohio	0.0111998820%
OH2000	West Unity Village, Ohio	0.0014694352%
OH2001	Westerville City, Ohio	0.2122517954%
OH2002	Westfield Center Village, Ohio	0.0015469538%
OH2003	Westfield Township, Ohio	0.0022200558%
OH2004	Westlake City, Ohio	0.0470647273%
OH2005	Westland Township, Ohio	0.0000407937%
OH2006	Weston Township, Ohio	0.0001040797%
OH2007	Weston Village, Ohio	0.0009305950%
OH2008	Wharton Village, Ohio	0.0000269859%
OH2009	Wheeling Township, Belmont County, Ohio	0.0005343072%
OH2010	Wheeling Township, Guernsey County, Ohio	0.0000407937%
OH2011	Whetstone Township, Ohio	0.0003262846%
OH2012	White Eyes Township, Ohio	0.0001913444%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH2013	Whitehall City, Ohio	0.0708163966%
OH2014	Whitehouse Village, Ohio	0.0191159792%
OH2015	Whitewater Township, Ohio	0.0072647461%
OH2016	Wickliffe City, Ohio	0.0543194216%
OH2017	Wilkesville Township, Ohio	0.0005461896%
OH2018	Wilkesville Village, Ohio	0.0001034151%
OH2019	Willard City, Ohio	0.0338504955%
OH2020	Williams County, Ohio	0.1507467614%
OH2021	Williamsburg Township, Ohio	0.0138253270%
OH2022	Williamsburg Village, Ohio	0.0064127452%
OH2023	Williamsfield Township, Ohio	0.0004696334%
OH2024	Williamsport Village, Ohio	0.0004226644%
OH2025	Willoughby City, Ohio	0.1356374532%
OH2026	Willoughby Hills City, Ohio	0.0528410843%
OH2027	Willowick City, Ohio	0.0540256495%
OH2028	Wills Township, Ohio	0.0001087832%
OH2029	Willshire Village, Ohio	0.0006690639%
OH2030	Wilmington City, Ohio	0.1278227818%
OH2031	Wilmot Village, Ohio	0.0024343932%
OH2032	Wilson Township, Ohio	0.0006914162%
OH2033	Wilson Village, Ohio	0.0001415832%
OH2034	Winchester Village, Ohio	0.0033994936%
OH2035	Windham Township, Ohio	0.0001218723%
OH2036	Windham Village, Ohio	0.0030305573%
OH2037	Windsor Township, Ashtabula County, Ohio	0.0006340051%
OH2038	Windsor Township, Lawrence County, Ohio	0.0007128053%
OH2039	Windsor Township, Morgan County, Ohio	0.0004926943%
OH2040	Wintersville Village, Ohio	0.0169582518%
OH2041	Wood County, Ohio	0.6017827347%
OH2042	Woodlawn Village, Ohio	0.0240822158%
OH2043	Woodmere Village, Ohio	0.0007072352%
OH2044	Woodsfield Village, Ohio	0.0011221301%
OH2045	Woodstock Village, Ohio	0.0001517571%
OH2046	Woodville Township, Ohio	0.0019622167%
OH2047	Woodville Village, Ohio	0.0034270973%
OH2048	Wooster City, Ohio	0.4046402646%
OH2049	Wooster Township, Ohio	0.0017358405%
OH2050	Worthington City, Ohio	0.0819890902%
OH2051	Worthington Township, Ohio	0.0017573559%
OH2052	Wren Village, Ohio	0.0008301349%
OH2053	Wyandot County, Ohio	0.0959147354%
OH2054	Wyoming City, Ohio	0.0220280462%
OH2055	Xenia City, Ohio	0.1268376308%
OH2056	Xenia Township, Ohio	0.0075532986%
OH2057	Yankee Lake Village, Ohio	0.0000341003%
OH2058	Yellow Creek Township, Ohio	0.0010782320%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH2059	Yellow Springs Village, Ohio	0.0142295064%
OH2060	York Township, Athens County, Ohio	0.0005523599%
OH2061	York Township, Fulton County, Ohio	0.0061882726%
OH2062	York Township, Medina County, Ohio	0.0023145263%
OH2063	York Township, Sandusky County, Ohio	0.0006239306%
OH2064	York Township, Tuscarawas County, Ohio	0.0007784341%
OH2065	York Township, Van Wert County, Ohio	0.0001115107%
OH2066	Yorkshire Village, Ohio	0.0007627380%
OH2067	Yorkville Village, Ohio	0.0011795516%
OH2068	Youngstown City, Ohio	0.5751891038%
OH2069	Zaleski Village, Ohio	0.0000780271%
OH2070	Zane Township, Ohio	0.0012568985%
OH2071	Zanesfield Village, Ohio	0.0001257699%
OH2072	Zanesville City, Ohio	0.1371227251%
OH2073	Zoar Village, Ohio	0.0002364863%

State ID	Qualifying Subdivision	Consolidated State Allocation
OK1	Ada City, Oklahoma	0.8751127538%
OK2	Adair County, Oklahoma	0.4266209709%
OK3	Alfalfa County, Oklahoma	0.0752358760%
OK4	Altus City, Oklahoma	0.0622184471%
OK5	Anadarko City, Oklahoma	0.2177062552%
OK6	Ardmore City, Oklahoma	0.8834203994%
OK7	Atoka County, Oklahoma	0.3570166411%
OK8	Bartlesville City, Oklahoma	0.7616370548%
OK9	Beaver County, Oklahoma	0.0784743727%
OK10	Beckham County, Oklahoma	0.2846460130%
OK11	Bethany City, Oklahoma	0.2482441625%
OK12	Bixby City, Oklahoma	0.2557077913%
OK13	Blaine County, Oklahoma	0.1909298641%
OK14	Broken Arrow City, Oklahoma	1.9405732012%
OK15	Bryan County, Oklahoma	0.5253079080%
OK16	Burns Flat Town, Oklahoma	0.0297825750%
OK17	Caddo County, Oklahoma	0.4845736458%
OK18	Canadian County, Oklahoma	0.5808839408%
OK19	Carter County, Oklahoma	1.0204659663%
OK20	Cherokee County, Oklahoma	0.0547155245%
OK21	Chickasha City, Oklahoma	0.1510124411%
OK22	Choctaw City, Oklahoma	0.0613538158%
OK23	Choctaw County, Oklahoma	0.4004199348%
OK24	Cimarron County, Oklahoma	0.0722904419%
OK25	Claremore City, Oklahoma	0.7190775254%
OK26	Cleveland County, Oklahoma	0.2725422694%
OK27	Coal County, Oklahoma	0.1610866236%
OK28	Comanche County, Oklahoma	2.0790341012%
OK29	Cotton County, Oklahoma	0.1077265239%
OK30	Coweta City, Oklahoma	0.3910652406%
OK31	Craig County, Oklahoma	0.2892248732%
OK32	Creek County, Oklahoma	1.2474865281%
OK33	Custer County, Oklahoma	0.4049880250%
OK34	Del City, Oklahoma	0.2643825434%
OK35	Delaware County, Oklahoma	0.8410533842%
OK36	Dewey County, Oklahoma	0.0676712782%
OK37	Duncan City, Oklahoma	0.8937861298%
OK38	Durant City, Oklahoma	0.7336303563%
OK39	Edmond City, Oklahoma	1.4615935748%
OK40	El Reno City, Oklahoma	0.2053992273%
OK41	Elk City, Oklahoma	0.3587477547%
OK42	Ellis County, Oklahoma	0.0583375351%
OK43	Enid City, Oklahoma	0.7392412881%
OK44	Garfield County, Oklahoma	0.2542221165%
OK45	Garvin County, Oklahoma	0.8411004189%
OK46	Glenpool City, Oklahoma	0.1608895657%
OK47	Grady County, Oklahoma	1.0545977812%
OK48	Grant County, Oklahoma	0.0405478903%
OK49	Greer County, Oklahoma	0.1583252054%

State ID	Qualifying Subdivision	Consolidated State Allocation
OK50	Guthrie City, Oklahoma	0.1856265512%
OK51	Guymon City, Oklahoma	0.0547591936%
OK52	Harmon County, Oklahoma	0.0673861249%
OK53	Harper County, Oklahoma	0.0522026584%
OK54	Haskell County, Oklahoma	0.2531508354%
OK55	Hughes County, Oklahoma	0.2061436213%
OK56	Jackson County, Oklahoma	0.4801048418%
OK57	Jefferson County, Oklahoma	0.3090924602%
OK58	Jenks City, Oklahoma	0.1806228639%
OK59	Johnston County, Oklahoma	0.4472082986%
OK60	Kay County, Oklahoma	0.5067583031%
OK61	Kingfisher County, Oklahoma	0.2717757463%
OK62	Kiowa County, Oklahoma	0.2298382701%
OK63	Latimer County, Oklahoma	0.3148762172%
OK64	Lawton City, Oklahoma	0.3312681144%
OK65	Le Flore County, Oklahoma	1.4166392289%
OK66	Lincoln County, Oklahoma	0.6999457500%
OK67	Logan County, Oklahoma	0.5399784520%
OK68	Love County, Oklahoma	0.2288662752%
OK69	Major County, Oklahoma	0.0852741304%
OK70	Marshall County, Oklahoma	0.2609426135%
OK71	Mayes County, Oklahoma	1.2431623622%
OK72	McAlester City, Oklahoma	1.2318612380%
OK73	McClain County, Oklahoma	0.6643227071%
OK74	McCurtain County, Oklahoma	0.8951427325%
OK75	McIntosh County, Oklahoma	0.6473819592%
OK76	Miami City, Oklahoma	0.3080134381%
OK77	Midwest City, Oklahoma	1.3662006673%
OK78	Moore City, Oklahoma	0.2533704430%
OK79	Murray County, Oklahoma	0.5297956437%
OK80	Muskogee City, Oklahoma	2.5039385148%
OK81	Muskogee County, Oklahoma	0.1783839604%
OK82	Mustang City, Oklahoma	0.1655020823%
OK83	Newcastle City, Oklahoma	0.2606099206%
OK84	Noble County, Oklahoma	0.1688783176%
OK85	Norman City, Oklahoma	4.4189589851%
OK86	Nowata County, Oklahoma	0.1569775216%
OK87	Okfuskee County, Oklahoma	0.2609296558%
OK88	Oklahoma City, Oklahoma	14.3489114350%
OK89	Oklahoma County, Oklahoma	3.3422940072%
OK90	Okmulgee City, Oklahoma	0.5086746948%
OK91	Okmulgee County, Oklahoma	0.4742639531%
OK92	Osage County, Oklahoma	0.5896618496%
OK93	Ottawa County, Oklahoma	0.3159777890%
OK94	Owasso City, Oklahoma	0.7456266521%
OK95	Pawnee County, Oklahoma	0.6201145221%
OK96	Payne County, Oklahoma	0.6719554590%
OK97	Pittsburg County, Oklahoma	0.1253496540%
OK98	Ponca City, Oklahoma	0.4343605817%

State ID	Qualifying Subdivision	Consolidated State Allocation
OK99	Pontotoc County, Oklahoma	0.3451006157%
OK100	Pottawatomie County, Oklahoma	0.8536612997%
OK101	Pushmataha County, Oklahoma	0.3982344607%
OK102	Roger Mills County, Oklahoma	0.0439550052%
OK103	Rogers County, Oklahoma	1.2081401690%
OK104	Sand Springs City, Oklahoma	0.3849881687%
OK105	Sapulpa City, Oklahoma	1.1421081226%
OK106	Seminole City, Oklahoma	0.2214634802%
OK107	Seminole County, Oklahoma	0.4144393970%
OK108	Sequoyah County, Oklahoma	1.5345087624%
OK109	Shawnee City, Oklahoma	1.3614784311%
OK110	Stephens County, Oklahoma	0.8246887486%
OK111	Stillwater City, Oklahoma	0.8442351700%
OK112	Tahlequah City, Oklahoma	1.5329176592%
OK113	Texas County, Oklahoma	0.3711376613%
OK114	Tillman County, Oklahoma	0.1988848754%
OK115	Tulsa City, Oklahoma	11.8499277217%
OK116	Tulsa County, Oklahoma	5.3498014970%
OK117	Wagoner County, Oklahoma	0.8686244855%
OK118	Warr Acres City, Oklahoma	0.1616160377%
OK119	Washington County, Oklahoma	0.3936750370%
OK120	Washita County, Oklahoma	0.1931168527%
OK121	Weatherford City, Oklahoma	0.1872773945%
OK122	Woods County, Oklahoma	0.1975804400%
OK123	Woodward City, Oklahoma	0.2327716722%
OK124	Woodward County, Oklahoma	0.1781706634%
OK125	Yukon City, Oklahoma	0.3103071173%

State ID	Qualifying Subdivision	Consolidated State Allocation
OR1	Albany City, Oregon	1.1574421234%
OR2	Ashland City, Oregon	0.5725593238%
OR3	Astoria City, Oregon	0.1859283065%
OR4	Baker County, Oregon	0.4771636205%
OR5	Beaverton City, Oregon	0.9709676029%
OR6	Bend City, Oregon	0.9443519043%
OR7	Benton County, Oregon	1.0219885306%
OR8	Canby City, Oregon	0.1716812437%
OR9	Central Point City, Oregon	0.1718730043%
OR10	Clackamas County, Oregon	7.7713142577%
OR11	Clatsop County, Oregon	1.1423692099%
OR12	Columbia County, Oregon	1.0096699413%
OR13	Coos Bay City, Oregon	0.2538945929%
OR14	Coos County, Oregon	1.5633002470%
OR15	Cornelius City, Oregon	0.0949750265%
OR16	Corvallis City, Oregon	0.6633711425%
OR17	Cottage Grove City, Oregon	0.0910229575%
OR18	Crook County, Oregon	0.3513229911%
OR19	Curry County, Oregon	0.7612961295%
OR20	Dallas City, Oregon	0.1606964683%
OR21	Deschutes County, Oregon	2.2569753600%
OR22	Douglas County, Oregon	2.5689481047%
OR23	Eugene City, Oregon	2.7611039932%
OR24	Forest Grove City, Oregon	0.2522169415%
OR26	Gladstone City, Oregon	0.1181360032%
OR28	Grants Pass City, Oregon	0.8232581895%
OR29	Gresham City, Oregon	0.9831942718%
OR30	Happy Valley City, Oregon	0.0103506009%
OR32	Hermiston City, Oregon	0.1316304314%
OR33	Hillsboro City, Oregon	1.5083519364%
OR34	Hood River County, Oregon	0.3553687498%
OR35	Independence City, Oregon	0.0808970601%
OR36	Jackson County, Oregon	4.0769510640%
OR37	Jefferson County, Oregon	0.3674692915%
OR38	Josephine County, Oregon	1.6536523798%
OR39	Keizer City, Oregon	0.1916558451%
OR40	Klamath County, Oregon	1.2169628601%
OR41	Klamath Falls City, Oregon	0.3209275214%
OR42	La Grande City, Oregon	0.2715648669%
OR44	Lake Oswego City, Oregon	0.6934160342%
OR45	Lane County, Oregon	6.3326808234%
OR46	Lebanon City, Oregon	0.3269345282%
OR47	Lincoln County, Oregon	1.5190343268%
OR48	Linn County, Oregon	1.8185376689%
OR49	Malheur County, Oregon	0.5014027023%
OR50	Marion County, Oregon	4.1636475308%
OR51	McMinnville City, Oregon	0.4803592635%
OR52	Medford City, Oregon	1.5540758598%
OR53	Milwaukie City, Oregon	0.2113647118%

State ID	Qualifying Subdivision	Consolidated State Allocation
OR54	Monmouth City, Oregon	0.0706960930%
OR55	Morrow County, Oregon	0.1351544937%
OR56	Multnomah County, Oregon	13.9643815662%
OR57	Newberg City, Oregon	0.4093257361%
OR58	Newport City, Oregon	0.1908392623%
OR59	Ontario City, Oregon	0.1869780182%
OR60	Oregon City, Oregon	0.2765040475%
OR61	Pendleton City, Oregon	0.3521049458%
OR62	Polk County, Oregon	0.7074299681%
OR63	Portland City, Oregon	8.2736702858%
OR64	Prineville City, Oregon	0.0924861843%
OR65	Redmond City, Oregon	0.1550311086%
OR66	Roseburg City, Oregon	0.6370799877%
OR67	Salem City, Oregon	3.0438221421%
OR68	Sandy City, Oregon	0.0775015682%
OR70	Sherwood City, Oregon	0.1404204928%
OR71	Silverton City, Oregon	0.0775630731%
OR72	Springfield City, Oregon	1.1667234659%
OR73	St. Helens City, Oregon	0.1964453077%
OR74	The Dalles City, Oregon	0.1723418738%
OR75	Tigard City, Oregon	0.5049875956%
OR76	Tillamook County, Oregon	0.9001228870%
OR77	Troutdale City, Oregon	0.0899929610%
OR78	Tualatin City, Oregon	0.1551565618%
OR79	Umatilla County, Oregon	0.9738633884%
OR80	Union County, Oregon	0.4153841374%
OR82	Wasco County, Oregon	0.4116278731%
OR83	Washington County, Oregon	7.2167622210%
OR84	West Linn City, Oregon	0.1600504983%
OR86	Wilsonville City, Oregon	0.1383351396%
OR87	Woodburn City, Oregon	0.2069349266%
OR88	Yamhill County, Oregon	1.4120246444%

State ID	Qualifying Subdivision	Consolidated State Allocation
PA2	Adams County, Pennsylvania	
PA4	Aliquippa City, Pennsylvania	
PA5	Allegheny County, Pennsylvania	
PA6	Allentown City, Pennsylvania	
PA10	Armstrong County, Pennsylvania	
PA13	Beaver County, Pennsylvania	
PA14	Bedford County, Pennsylvania	
PA15	Bensalem Township, Pennsylvania	
PA16	Berks County, Pennsylvania	
PA20	Blair County, Pennsylvania	
PA22	Bradford County, Pennsylvania	
PA23	Bristol Township, Pennsylvania	
PA25	Bucks County, Pennsylvania	
PA27	Butler County, Pennsylvania	
PA30	Cambria County, Pennsylvania	
PA31	Cameron County, Pennsylvania	
PA32	Carbon County, Pennsylvania	
PA36	Centre County, Pennsylvania	
PA40	Chester County, Pennsylvania	
PA42	Clarion County, Pennsylvania	
PA43	Clearfield County, Pennsylvania	
PA44	Clinton County, Pennsylvania	
PA46	Coatesville City, Pennsylvania	Allocations in Pennsylvania will be made in accordance with the Pennsylvania Trust and Allocation Order.
PA49	Columbia County, Pennsylvania	
PA53	Crawford County, Pennsylvania	
PA54	Cumberland County, Pennsylvania	
PA57	Dauphin County, Pennsylvania	
PA58	Delaware County, Pennsylvania	
PA76	Edwardsville Borough, Pennsylvania	
PA79	Elk County, Pennsylvania	
PA84	Erie County, Pennsylvania	
PA85	Exeter Borough, Pennsylvania	
PA90	Fayette County, Pennsylvania	
PA92	Forest County, Pennsylvania	
PA94	Forty Fort Borough, Pennsylvania	
PA96	Franklin County, Pennsylvania	
PA98	Fulton County, Pennsylvania	
PA99	Greene County, Pennsylvania	
PA107	Hanover Township, Luzerne County, Pennsylvania	
PA114	Hazleton City, Pennsylvania	
PA120	Huntingdon County, Pennsylvania	
PA122	Indiana County, Pennsylvania	
PA123	Jefferson County, Pennsylvania	
PA126	Juniata County, Pennsylvania	
PA127	Kingston Borough, Pennsylvania	
PA128	Lackawanna County, Pennsylvania	
PA130	Lancaster County, Pennsylvania	

State ID	Qualifying Subdivision	Consolidated State Allocation
PA134	Lawrence County, Pennsylvania	
PA136	Lebanon County, Pennsylvania	
PA137	Lehigh County, Pennsylvania	
PA141	Lock Haven City, Pennsylvania	
PA147	Lower Makefield Township, Pennsylvania	
PA155	Lower Southampton Township, Pennsylvania	
PA157	Luzerne County, Pennsylvania	
PA158	Lycoming County, Pennsylvania	
PA348	Mahoning Township, Lawrence County, Pennsylvania	
PA164	McKean County, Pennsylvania	
PA167	Mercer County, Pennsylvania	
PA169	Middletown Township, Bucks County, Pennsylvania	
PA171	Mifflin County, Pennsylvania	
PA174	Monroe County, Pennsylvania	
PA176	Montgomery County, Pennsylvania	
PA178	Montour County, Pennsylvania	
PA180	Morrisville Borough, Pennsylvania	Allocations in Pennsylvania will be made in accordance with the Pennsylvania Trust and Allocation Order.
PA187	Nanticoke City, Pennsylvania	
PA190	New Castle City, Pennsylvania	
PA195	Newtown Township, Bucks County, Pennsylvania	
PA197	Norristown Borough, Pennsylvania	
PA205	Northampton County, Pennsylvania	
PA207	Northumberland County, Pennsylvania	
PA213	Perry County, Pennsylvania	
PA215	Philadelphia City, Pennsylvania	
PA217	Pike County, Pennsylvania	
PA219	Pittsburgh City, Pennsylvania	
PA220	Plains Township, Pennsylvania	
PA225	Potter County, Pennsylvania	
PA241	Schuylkill County, Pennsylvania	
PA248	Snyder County, Pennsylvania	
PA249	Somerset County, Pennsylvania	
PA265	Sugar Notch Borough, Pennsylvania	
PA266	Sullivan County, Pennsylvania	
PA267	Susquehanna County, Pennsylvania	
PA270	Tioga County, Pennsylvania	
PA273	Union County, Pennsylvania	

State ID	Qualifying Subdivision	Consolidated State Allocation
PA349	Union Township, Lawrence County, Pennsylvania	
PA290	Venango County, Pennsylvania	
PA350	Wampum Borough, Pennsylvania	
PA291	Warminster Township, Pennsylvania	
PA292	Warren County, Pennsylvania	
PA293	Warrington Township, Bucks County, Pennsylvania	
PA297	Washington County, Pennsylvania	
PA299	Wayne County, Pennsylvania	
PA310	West Norriton Township, Pennsylvania	
PA311	West Pittston Borough, Pennsylvania	
PA313	Westmoreland County, Pennsylvania	
PA320	Wilkes Barre Township, Pennsylvania	
PA321	Wilkes-Barre City, Pennsylvania	
PA327	Wright Township, Pennsylvania	
PA328	Wyoming Borough, Pennsylvania	
PA329	Wyoming County, Pennsylvania	
PA333	York County, Pennsylvania	
PA335	Fairview Township, Luzerne County, Pennsylvania	Allocations in Pennsylvania will be made in accordance with the Pennsylvania Trust and Allocation Order.
PA336	District Attorney of Allegheny County, Pennsylvania	
PA337	District Attorney of Berks County, Pennsylvania	
PA338	District Attorney of Bucks County, Pennsylvania	
PA339	District Attorney of Chester County, Pennsylvania	
PA340	District Attorney of Clearfield County, Pennsylvania	
PA341	District Attorney of Dauphin County, Pennsylvania	
PA342	District Attorney of Delaware County, Pennsylvania	
PA343	District Attorney of Erie County, Pennsylvania	
PA344	District Attorney of Lehigh County, Pennsylvania	
PA345	District Attorney of Northampton County, Pennsylvania	
PA346	District Attorney of Philadelphia County, Pennsylvania	

State ID	Qualifying Subdivision	Consolidated State Allocation
PA347	District Attorney of Westmoreland County, Pennsylvania	Allocations in Pennsylvania will be made in accordance with the Pennsylvania Trust and Allocation Order.
PA351	Southeastern Pennsylvania Transportation Authority, Pennsylvania	

State ID	Qualifying Subdivision	Consolidated State Allocation
PR1	Adjuntas, Puerto Rico	0.4468461493%
PR2	Aguada, Puerto Rico	0.9238661758%
PR3	Aguadilla, Puerto Rico	1.6156167759%
PR4	Aguas Buenas, Puerto Rico	0.7490858028%
PR5	Aibonito, Puerto Rico	0.7959428477%
PR6	Anasco, Puerto Rico	0.5050154853%
PR7	Arecibo, Puerto Rico	1.3074850692%
PR8	Arroyo, Puerto Rico	2.0592191012%
PR9	Barceloneta, Puerto Rico	0.5768569406%
PR10	Barranquitas, Puerto Rico	0.7167107056%
PR11	Bayamon, Puerto Rico	5.7282390971%
PR12	Cabo Rojo, Puerto Rico	1.1570847420%
PR13	Caguas, Puerto Rico	4.7119895861%
PR14	Camuy, Puerto Rico	0.7759381807%
PR15	Canovanas, Puerto Rico	1.0721780377%
PR16	Carolina, Puerto Rico	4.3228006165%
PR17	Catano, Puerto Rico	0.7612066695%
PR18	Cayey, Puerto Rico	1.3596493469%
PR19	Ceiba, Puerto Rico	0.2896687707%
PR20	Ciales, Puerto Rico	0.4533215195%
PR21	Cidra, Puerto Rico	1.1671492158%
PR22	Coamo, Puerto Rico	0.9970822347%
PR23	Comerio, Puerto Rico	0.5268640655%
PR24	Corozal, Puerto Rico	0.8595048594%
PR25	Culebra, Puerto Rico	0.0380175870%
PR26	Dorado, Puerto Rico	0.8970759382%
PR27	Fajardo, Puerto Rico	1.1102770585%
PR28	Florida, Puerto Rico	0.2695408253%
PR29	Guanica, Puerto Rico	0.4269617539%
PR30	Guayama, Puerto Rico	1.3293151076%
PR31	Guayanilla, Puerto Rico	0.4886780984%
PR32	Guaynabo, Puerto Rico	2.3185934725%
PR33	Gurabo, Puerto Rico	0.9866291335%
PR34	Hatillo, Puerto Rico	1.0577790273%
PR35	Hormigueros, Puerto Rico	0.3963005262%
PR36	Humacao, Puerto Rico	1.8829438530%
PR37	Isabela, Puerto Rico	1.0062900243%
PR38	Jayuya, Puerto Rico	0.3757431113%
PR39	Juana Diaz, Puerto Rico	1.7179648597%
PR40	Juncos, Puerto Rico	0.9543672919%
PR41	Lajas, Puerto Rico	0.5633742491%
PR42	Lares, Puerto Rico	0.6852103333%
PR43	Las Marias, Puerto Rico	0.2285582941%
PR44	Las Piedras, Puerto Rico	0.8440153869%
PR45	Loiza, Puerto Rico	0.7971240145%
PR46	Luquillo, Puerto Rico	0.5035020683%
PR47	Manati, Puerto Rico	1.3858134207%
PR48	Maricao, Puerto Rico	0.1311593846%
PR49	Maunabo, Puerto Rico	0.2983734242%

State ID	Qualifying Subdivision	Consolidated State Allocation
PR50	Mayaguez, Puerto Rico	2.7384221211%
PR51	Moca, Puerto Rico	0.9400143856%
PR52	Morovis, Puerto Rico	0.7678286207%
PR53	Naguabo, Puerto Rico	0.6776685553%
PR54	Naranjito, Puerto Rico	0.6713715879%
PR55	Orocovis, Puerto Rico	0.5209419444%
PR56	Patillas, Puerto Rico	0.4307397840%
PR57	Penuelas, Puerto Rico	0.5782731381%
PR58	Ponce, Puerto Rico	5.1762853836%
PR59	Quebradillas, Puerto Rico	0.6086201563%
PR60	Rincon, Puerto Rico	0.3607312171%
PR61	Rio Grande, Puerto Rico	1.2995118170%
PR62	Sabana Grande, Puerto Rico	0.5625075422%
PR63	Salinas, Puerto Rico	0.8069301551%
PR64	San German, Puerto Rico	0.9914753253%
PR65	San Juan, Puerto Rico	13.8003700360%
PR66	San Lorenzo, Puerto Rico	1.0322446251%
PR67	San Sebastian, Puerto Rico	0.9222442638%
PR68	Santa Isabel, Puerto Rico	0.5210354055%
PR69	Toa Alta, Puerto Rico	1.7552873773%
PR70	Toa Baja, Puerto Rico	2.1783919223%
PR71	Trujillo Alto, Puerto Rico	1.9136501824%
PR72	Utuado, Puerto Rico	0.7718304061%
PR73	Vega Alta, Puerto Rico	0.9338331796%
PR74	Vega Baja, Puerto Rico	1.6886509241%
PR75	Vieques, Puerto Rico	0.1979351524%
PR76	Villalba, Puerto Rico	0.5576736281%
PR77	Yabucoa, Puerto Rico	0.8842993409%
PR78	Yauco, Puerto Rico	1.1383015829%

State ID	Qualifying Subdivision	Consolidated State Allocation
RI1	Barrington Town, Rhode Island	2.3000539202%
RI2	Bristol Town, Rhode Island	1.0821868960%
RI3	Burrillville Town, Rhode Island	1.3272036109%
RI4	Central Falls City, Rhode Island	0.9147584689%
RI5	Charlestown, Rhode Island	0.5887860100%
RI6	Coventry Town, Rhode Island	3.5886939036%
RI7	Cranston City, Rhode Island	7.8869595262%
RI8	Cumberland Town, Rhode Island	2.4742003754%
RI9	East Greenwich Town, Rhode Island	1.7467671439%
RI10	East Providence City, Rhode Island	4.3247728580%
RI11	Exeter Town, Rhode Island	0.0071810640%
RI12	Foster Town, Rhode Island	0.2489021533%
RI13	Glocester Town, Rhode Island	0.8508469130%
RI14	Hopkinton Town, Rhode Island	0.7098006614%
RI15	Jamestown, Rhode Island	0.4220295287%
RI16	Johnston Town, Rhode Island	3.0898685140%
RI17	Lincoln Town, Rhode Island	2.1171973520%
RI18	Little Compton Town, Rhode Island	0.2663017745%
RI19	Middletown, Rhode Island	1.2877439601%
RI20	Narragansett Town, Rhode Island	1.2760123800%
RI21	New Shoreham Town, Rhode Island	0.2118269375%
RI22	Newport City, Rhode Island	2.3339316695%
RI23	North Kingstown, Rhode Island	2.6500524514%
RI24	North Providence Town, Rhode Island	2.5306229398%
RI25	North Smithfield Town, Rhode Island	1.1299013506%
RI26	Pawtucket City, Rhode Island	5.9652217345%
RI27	Portsmouth Town, Rhode Island	1.2807429020%
RI28	Providence City, Rhode Island	21.4858080262%
RI29	Richmond Town, Rhode Island	0.0818789542%
RI30	Scituate Town, Rhode Island	1.0248588645%
RI31	Smithfield Town, Rhode Island	1.7724673574%
RI32	South Kingstown, Rhode Island	2.3282747894%
RI33	Tiverton Town, Rhode Island	0.9907730639%
RI34	Warren Town, Rhode Island	0.1394116029%
RI35	Warwick City, Rhode Island	9.9418184427%
RI36	West Greenwich Town, Rhode Island	0.7104734659%
RI37	West Warwick Town, Rhode Island	3.0239943495%
RI38	Westerly Town, Rhode Island	2.0135754535%
RI39	Woonsocket City, Rhode Island	3.8740986306%

State ID	Qualifying Subdivision	Consolidated State Allocation
SC1	Abbeville County, South Carolina	0.3350059823%
SC2	Aiken City, South Carolina	0.7838026892%
SC3	Aiken County, South Carolina	2.5661670597%
SC4	Allendale County, South Carolina	0.1220441823%
SC5	Anderson City, South Carolina	1.1735303052%
SC6	Anderson County, South Carolina	3.3392231904%
SC7	Bamberg County, South Carolina	0.2705913372%
SC8	Barnwell County, South Carolina	0.4653224769%
SC9	Beaufort City, South Carolina	0.0769982478%
SC10	Beaufort County, South Carolina	2.3364418352%
SC11	Berkeley County, South Carolina	2.0961440294%
SC12	Bluffton Town, South Carolina	0.0481968917%
SC13	Calhoun County, South Carolina	0.1833260393%
SC14	Cayce City, South Carolina	0.2572136960%
SC15	Charleston City, South Carolina	2.3004340552%
SC16	Charleston County, South Carolina	3.8016438488%
SC17	Cherokee County, South Carolina	0.9440700745%
SC18	Chester City, South Carolina	0.1299573133%
SC19	Chester County, South Carolina	0.3947965211%
SC20	Chesterfield County, South Carolina	0.9443488664%
SC21	Clarendon County, South Carolina	0.5705383575%
SC22	Clemson City, South Carolina	0.3311616877%
SC23	Colleton County, South Carolina	0.8589365535%
SC24	Columbia City, South Carolina	2.3918060702%
SC25	Conway City, South Carolina	0.2894739402%
SC26	Darlington County, South Carolina	1.6906462867%
SC27	Dillon County, South Carolina	0.6608411417%
SC28	Dorchester County, South Carolina	1.6015765975%
SC29	Easley City, South Carolina	0.8565835771%
SC30	Edgefield County, South Carolina	0.3586097074%
SC31	Fairfield County, South Carolina	0.3536421891%
SC32	Florence City, South Carolina	1.0065336904%
SC33	Florence County, South Carolina	2.2059006272%
SC34	Forest Acres City, South Carolina	0.0995929056%
SC35	Fort Mill Town, South Carolina	0.1714974802%
SC36	Fountain Inn City, South Carolina	0.1975697094%
SC37	Gaffney City, South Carolina	0.2044353782%
SC38	Georgetown City, South Carolina	0.2626233562%
SC39	Georgetown County, South Carolina	1.1895098900%
SC40	Goose Creek City, South Carolina	0.5473575768%
SC41	Greenville City, South Carolina	2.2705648395%
SC42	Greenville County, South Carolina	7.1502328364%
SC43	Greenwood City, South Carolina	0.0308220618%
SC44	Greenwood County, South Carolina	1.3388944490%
SC45	Greer City, South Carolina	0.5590564672%

State ID	Qualifying Subdivision	Consolidated State Allocation
SC46	Hampton County, South Carolina	0.3450376919%
SC47	Hanahan City, South Carolina	0.2279684840%
SC48	Hilton Head Island Town, South Carolina	0.2323878458%
SC49	Horry County, South Carolina	5.2166718879%
SC50	Irmo Town, South Carolina	0.0942740906%
SC51	James Island Town, South Carolina	0.0461551887%
SC52	Jasper County, South Carolina	0.4278548317%
SC53	Kershaw County, South Carolina	1.0780892823%
SC54	Lancaster County, South Carolina	1.4809282603%
SC55	Laurens County, South Carolina	1.3598442946%
SC56	Lee County, South Carolina	0.2176621820%
SC57	Lexington County, South Carolina	4.4881391605%
SC58	Lexington Town, South Carolina	0.2342104062%
SC59	Marion County, South Carolina	0.6973242307%
SC60	Marlboro County, South Carolina	0.4878238042%
SC61	Mauldin City, South Carolina	0.4253253929%
SC62	McCormick County, South Carolina	0.1281623493%
SC63	Moncks Corner Town, South Carolina	0.1965426445%
SC64	Mount Pleasant Town, South Carolina	0.5750801889%
SC65	Myrtle Beach City, South Carolina	1.9068234068%
SC66	Newberry City, South Carolina	0.0344864657%
SC67	Newberry County, South Carolina	0.5656551710%
SC68	North Augusta City, South Carolina	0.5139678525%
SC69	North Charleston City, South Carolina	1.7751090959%
SC70	North Myrtle Beach City, South Carolina	0.6366313248%
SC71	Oconee County, South Carolina	2.8099515214%
SC72	Orangeburg City, South Carolina	0.0468940344%
SC73	Orangeburg County, South Carolina	1.4543982912%
SC74	Pickens County, South Carolina	2.8143347165%
SC75	Port Royal Town, South Carolina	0.0206098617%
SC76	Richland County, South Carolina	3.8816723839%
SC77	Rock Hill City, South Carolina	1.3120073555%
SC78	Saluda County, South Carolina	0.2604801809%
SC79	Simpsonville City, South Carolina	0.3497064495%
SC80	Spartanburg City, South Carolina	1.1890308958%
SC81	Spartanburg County, South Carolina	6.4084293395%
SC82	Summerville Town, South Carolina	0.6446011912%
SC83	Sumter City, South Carolina	0.5390642671%

State ID	Qualifying Subdivision	Consolidated State Allocation
SC84	Sumter County, South Carolina	0.9480995733%
SC85	Tega Cay City, South Carolina	0.0433365022%
SC86	Union County, South Carolina	0.6499524020%
SC87	West Columbia City, South Carolina	0.3943858322%
SC88	Williamsburg County, South Carolina	0.4931357629%
SC89	York County, South Carolina	2.5800878865%

State ID	Qualifying Subdivision	Consolidated State Allocation
SD1	Aberdeen City, South Dakota	1.7806789284%
SD2	Aurora County, South Dakota	0.1283252150%
SD3	Beadle County, South Dakota	0.8743032704%
SD4	Bennett County, South Dakota	0.1895703332%
SD5	Bon Homme County, South Dakota	0.6047162426%
SD6	Box Elder City, South Dakota	0.2251076107%
SD7	Brandon City, South Dakota	0.4012895918%
SD8	Brookings City, South Dakota	2.4259611863%
SD9	Brookings County, South Dakota	0.2802421588%
SD10	Brown County, South Dakota	1.7764564315%
SD11	Brule County, South Dakota	0.8045710091%
SD12	Buffalo County, South Dakota	0.1823519926%
SD13	Butte County, South Dakota	0.8926544344%
SD14	Campbell County, South Dakota	0.0682419048%
SD15	Charles Mix County, South Dakota	0.8084433424%
SD16	Clark County, South Dakota	0.2550260601%
SD17	Clay County, South Dakota	0.4415194932%
SD18	Codington County, South Dakota	0.8721266365%
SD19	Corson County, South Dakota	0.3429322421%
SD20	Custer County, South Dakota	1.0868471426%
SD21	Davison County, South Dakota	0.6815458005%
SD22	Day County, South Dakota	0.3921680475%
SD23	Deuel County, South Dakota	0.4035008098%
SD24	Dewey County, South Dakota	0.3699996685%
SD25	Douglas County, South Dakota	0.2891518759%
SD26	Edmunds County, South Dakota	0.2529348056%
SD27	Fall River County, South Dakota	2.1968904590%
SD28	Faulk County, South Dakota	0.2772473959%
SD29	Grant County, South Dakota	0.6923230564%
SD30	Gregory County, South Dakota	0.5555128599%
SD31	Haakon County, South Dakota	0.1774497029%
SD32	Hamlin County, South Dakota	0.3340117176%
SD33	Hand County, South Dakota	0.2401311401%
SD34	Hanson County, South Dakota	0.1484271966%
SD35	Harding County, South Dakota	0.0620805393%
SD36	Hughes County, South Dakota	0.8137066032%
SD37	Huron City, South Dakota	0.8308959590%
SD38	Hutchinson County, South Dakota	0.5659237410%
SD39	Hyde County, South Dakota	0.0640529112%
SD40	Jackson County, South Dakota	0.1437421380%
SD41	Jerauld County, South Dakota	0.3258250234%
SD42	Jones County, South Dakota	0.0451732597%
SD43	Kingsbury County, South Dakota	0.3721763025%
SD44	Lake County, South Dakota	0.8273932428%
SD45	Lawrence County, South Dakota	2.3838237581%
SD46	Lincoln County, South Dakota	1.2611723923%
SD47	Lyman County, South Dakota	0.3239942300%

State ID	Qualifying Subdivision	Consolidated State Allocation
SD48	Marshall County, South Dakota	0.5625107271%
SD49	McCook County, South Dakota	0.3047773840%
SD50	McPherson County, South Dakota	0.1613184030%
SD51	Meade County, South Dakota	3.2698326502%
SD52	Mellette County, South Dakota	0.1848247525%
SD53	Miner County, South Dakota	0.1616739703%
SD54	Minnehaha County, South Dakota	12.2243522517%
SD55	Mitchell City, South Dakota	1.5031732329%
SD56	Moody County, South Dakota	0.4743937985%
SD57	Oglala Lakota County, South Dakota	1.3919692864%
SD58	Pennington County, South Dakota	8.0611767283%
SD59	Perkins County, South Dakota	0.3755374403%
SD60	Pierre City, South Dakota	0.6216678331%
SD61	Potter County, South Dakota	0.1893444561%
SD62	Rapid City, South Dakota	6.9492723574%
SD63	Roberts County, South Dakota	0.9943780269%
SD64	Sanborn County, South Dakota	0.1141857404%
SD65	Sioux Falls City, South Dakota	21.6732660428%
SD66	Spearfish City, South Dakota	0.8208633410%
SD67	Spink County, South Dakota	0.7324773052%
SD68	Stanley County, South Dakota	0.1733882380%
SD69	Sully County, South Dakota	0.0632218131%
SD70	Todd County, South Dakota	1.0677859248%
SD71	Tripp County, South Dakota	0.6252580903%
SD72	Turner County, South Dakota	0.6536969906%
SD73	Union County, South Dakota	1.4531041680%
SD74	Vermillion City, South Dakota	0.5912781760%
SD75	Walworth County, South Dakota	0.5615110318%
SD76	Watertown City, South Dakota	1.6132964277%
SD77	Yankton City, South Dakota	1.2219897393%
SD78	Yankton County, South Dakota	1.4233435084%
SD79	Ziebach County, South Dakota	0.3085103004%

State ID	Qualifying Subdivision	Consolidated State Allocation
TN3	Anderson County, Tennessee	1.2063249026%
TN5	Arlington Town, Tennessee	0.0036566309%
TN8	Bartlett City, Tennessee	0.0730561566%
TN10	Bedford County, Tennessee	0.5762663555%
TN12	Benton County, Tennessee	0.5216608068%
TN13	Bledsoe County, Tennessee	0.1398580820%
TN14	Blount County, Tennessee	1.9196465581%
TN15	Bradley County, Tennessee	1.0430217552%
TN16	Brentwood City, Tennessee	0.0478208600%
TN17	Bristol City, Tennessee	0.5426871150%
TN19	Campbell County, Tennessee	1.5974370559%
TN20	Cannon County, Tennessee	0.3205453949%
TN21	Carroll County, Tennessee	0.4438060785%
TN22	Carter County, Tennessee	0.8435596891%
TN27	Chattanooga City, Tennessee	0.4981237028%
TN28	Cheatham County, Tennessee	0.8209998781%
TN29	Chester County, Tennessee	0.1751399118%
TN30	Claiborne County, Tennessee	1.1929412357%
TN31	Clarksville City, Tennessee	0.2296815192%
TN32	Clay County, Tennessee	0.3261509170%
TN33	Cleveland City, Tennessee	0.5531282252%
TN36	Cocke County, Tennessee	0.8746257470%
TN37	Coffee County, Tennessee	0.8953551698%
TN39	Collierville Town, Tennessee	0.0617375387%
TN41	Columbia City, Tennessee	0.0390894158%
TN42	Cookeville City, Tennessee	0.8404101920%
TN45	Crockett County, Tennessee	0.1232062476%
TN47	Cumberland County, Tennessee	0.8784847959%
TN48	Dandridge Town, Tennessee	0.0109089663%
TN49	De Kalb County, Tennessee	0.4478425886%
TN50	Decatur County, Tennessee	0.3607195939%
TN51	Decatur Town, Tennessee	0.0050599481%
TN53	Dickson County, Tennessee	0.8341347308%
TN56	Dyer County, Tennessee	0.4019088559%
TN64	Fayette County, Tennessee	0.3157083831%
TN66	Fentress County, Tennessee	0.5526714656%
TN67	Franklin City, Tennessee	0.1089989646%
TN68	Franklin County, Tennessee	0.6323371108%
TN69	Gallatin City, Tennessee	0.0760079674%
TN70	Gatlinburg City, Tennessee	0.0507819668%
TN71	Germantown City, Tennessee	0.0687501047%
TN72	Gibson County, Tennessee	0.4940695219%
TN73	Giles County, Tennessee	0.4604367666%
TN75	Grainger County, Tennessee	0.4671260668%
TN76	Greene County, Tennessee	1.2127967101%
TN78	Grundy County, Tennessee	0.3896858892%
TN79	Hamblen County, Tennessee	2.2614488604%
TN80	Hamilton County, Tennessee	4.2055530346%
TN81	Hancock County, Tennessee	0.2089065376%

State ID	Qualifying Subdivision	Consolidated State Allocation
TN82	Hardeman County, Tennessee	0.2150658408%
TN83	Hardin County, Tennessee	0.5683946644%
TN84	Hartsville/Trousdale County, Tennessee	0.1139641522%
TN85	Hawkins County, Tennessee	1.0968095083%
TN86	Haywood County, Tennessee	0.1104263592%
TN87	Henderson County, Tennessee	0.2498867656%
TN88	Hendersonville City, Tennessee	0.1137407554%
TN89	Henry County, Tennessee	0.6661685991%
TN90	Hickman County, Tennessee	0.2804089244%
TN91	Houston County, Tennessee	0.1198735525%
TN92	Humphreys County, Tennessee	0.2441608982%
TN93	Jackson City, Tennessee	0.0431370644%
TN94	Jackson County, Tennessee	0.2780985367%
TN95	Jefferson County, Tennessee	0.8912247367%
TN96	Johnson City, Tennessee	1.0682855260%
TN97	Johnson County, Tennessee	0.2282065978%
TN98	Kingsport City, Tennessee	0.9871149359%
TN99	Knox County, Tennessee	9.1809198144%
TN100	Knoxville City, Tennessee	1.5417816888%
TN101	La Vergne City, Tennessee	0.0518950147%
TN102	Lake County, Tennessee	0.0671464632%
TN104	Lauderdale County, Tennessee	0.2733775153%
TN105	Lawrence County, Tennessee	0.6992850503%
TN107	Lebanon City, Tennessee	0.1110258247%
TN108	Lewis County, Tennessee	0.1528225920%
TN110	Lexington City, Tennessee	0.0796867496%
TN112	Lincoln County, Tennessee	0.4060784411%
TN115	Loudon County, Tennessee	0.8992484296%
TN116	Lynchburg, Moore County Metropolitan Government, Tennessee	0.0579106070%
TN118	Macon County, Tennessee	0.3091017000%
TN119	Madison County, Tennessee	0.8907256845%
TN121	Marion County, Tennessee	0.3637161259%
TN122	Marshall County, Tennessee	0.5422227344%
TN124	Maryville City, Tennessee	0.3223901040%
TN125	Maury County, Tennessee	1.0772540178%
TN126	McMinn County, Tennessee	0.9297273747%
TN128	McNairy County, Tennessee	0.4269884656%
TN129	Meigs County, Tennessee	0.2016450737%
TN130	Memphis City, Tennessee	4.9079216307%
TN131	Millington City, Tennessee	0.0212200583%
TN133	Monroe County, Tennessee	0.7506735593%
TN135	Montgomery County, Tennessee	1.6758545682%
TN136	Morgan County, Tennessee	0.5132562715%
TN138	Morristown City, Tennessee	0.3919462797%
TN139	Mount Juliet City, Tennessee	0.0577622481%
TN141	Murfreesboro City, Tennessee	0.7283549414%

State ID	Qualifying Subdivision	Consolidated State Allocation
TN142	Nashville-Davidson Metropolitan Government, Tennessee	8.9810236006%
TN145	Oak Ridge City, Tennessee	0.9598050011%
TN146	Obion County, Tennessee	0.3198033491%
TN147	Overton County, Tennessee	0.5461670803%
TN149	Perry County, Tennessee	0.0857864664%
TN151	Pickett County, Tennessee	0.1471132648%
TN152	Pigeon Forge City, Tennessee	0.0877322588%
TN154	Polk County, Tennessee	0.3220131560%
TN157	Putnam County, Tennessee	0.3930896023%
TN159	Rhea County, Tennessee	0.5404420504%
TN160	Ripley City, Tennessee	0.0190759934%
TN161	Roane County, Tennessee	1.6361535854%
TN162	Robertson County, Tennessee	0.9333043197%
TN163	Rutherford County, Tennessee	2.5756978154%
TN164	Scott County, Tennessee	0.5189341096%
TN165	Sequatchie County, Tennessee	0.2433974548%
TN166	Sevier County, Tennessee	1.4412782095%
TN168	Shelby County, Tennessee	3.5255489082%
TN170	Smith County, Tennessee	0.5711842980%
TN172	Smyrna Town, Tennessee	0.1314691656%
TN176	Spring Hill City, Tennessee	0.0244598773%
TN179	Stewart County, Tennessee	0.1459273147%
TN180	Sullivan County, Tennessee	1.4573397906%
TN181	Sumner County, Tennessee	1.7449087187%
TN182	Tipton County, Tennessee	0.6312749815%
TN184	Unicoi County, Tennessee	0.3464527663%
TN186	Union County, Tennessee	0.5606745148%
TN187	Van Buren County, Tennessee	0.0479172535%
TN189	Warren County, Tennessee	0.5719112694%
TN191	Washington County, Tennessee	1.1061046159%
TN192	Wayne County, Tennessee	0.2328717594%
TN194	Weakley County, Tennessee	0.3874777573%
TN195	White County, Tennessee	0.4162394991%
TN197	Williamson County, Tennessee	1.6843304984%
TN198	Wilson County, Tennessee	1.4019072760%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1	Abbott City, Texas	0.0004586670%
TX2	Abernathy City, Texas	0.0000733330%
TX3	Abilene City, Texas	0.3758786670%
TX4	Ackerly City, Texas	0.0000140000%
TX5	Addison Town, Texas	0.0387293330%
TX6	Adrian City, Texas	0.0001206670%
TX7	Agua Dulce City, Texas	0.0000286670%
TX8	Alamo City, Texas	0.0147473330%
TX9	Alamo Heights City, Texas	0.0187986670%
TX10	Alba Town, Texas	0.0021306670%
TX11	Albany City, Texas	0.0001200000%
TX12	Aledo City, Texas	0.0002206670%
TX13	Alice City, Texas	0.0475273330%
TX14	Allen City, Texas	0.2100540000%
TX15	Alma Town, Texas	0.0007380000%
TX16	Alpine City, Texas	0.0197906670%
TX17	Alto Town, Texas	0.0025113330%
TX18	Alton City, Texas	0.0076933330%
TX19	Alvarado City, Texas	0.0193526670%
TX20	Alvin City, Texas	0.0759746670%
TX21	Alvord Town, Texas	0.0002386670%
TX22	Amarillo City, Texas	0.6584406670%
TX23	Ames City, Texas	0.0037140000%
TX24	Amherst City, Texas	0.0000146670%
TX25	Anahuac City, Texas	0.0003613330%
TX26	Anderson City, Texas	0.0000126670%
TX27	Anderson County, Texas	0.1791753330%
TX28	Andrews City, Texas	0.0126553330%
TX29	Andrews County, Texas	0.0250706670%
TX30	Angelina County, Texas	0.1533040000%
TX31	Angleton City, Texas	0.0418606670%
TX32	Angus City, Texas	0.0002206670%
TX33	Anna City, Texas	0.0060500000%
TX34	Annetta North Town, Texas	0.0000226670%
TX35	Annetta South Town, Texas	0.0004013330%
TX36	Annetta Town, Texas	0.0039706670%
TX37	Annona Town, Texas	0.0004920000%
TX38	Anson City, Texas	0.0034226670%
TX39	Anthony Town, Texas	0.0030093330%
TX40	Anton City, Texas	0.0002960000%
TX41	Appleby City, Texas	0.0010340000%
TX42	Aquilla City, Texas	0.0001386670%
TX43	Aransas County, Texas	0.1776746670%
TX44	Aransas Pass City, Texas	0.0385420000%
TX45	Archer City, Texas	0.0070360000%
TX46	Archer County, Texas	0.0303560000%
TX47	Arcola City, Texas	0.0048600000%
TX48	Argyle City, Texas	0.0076040000%
TX49	Arlington City, Texas	0.4905353330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX50	Armstrong County, Texas	0.0006493330%
TX51	Arp City, Texas	0.0013393330%
TX52	Asherton City, Texas	0.0000746670%
TX53	Aspermont Town, Texas	0.0000060000%
TX54	Atascosa County, Texas	0.1179353330%
TX55	Athens City, Texas	0.0706280000%
TX56	Atlanta City, Texas	0.0206633330%
TX57	Aubrey City, Texas	0.0100940000%
TX58	Aurora City, Texas	0.0012326670%
TX59	Austin City, Texas	3.2518106670%
TX60	Austin County, Texas	0.0506866670%
TX61	Austwell City, Texas	0.0000726670%
TX62	Avery Town, Texas	0.0000920000%
TX63	Avinger Town, Texas	0.0007433330%
TX64	Azle City, Texas	0.0214753330%
TX65	Bailey City, Texas	0.0006333330%
TX66	Bailey County, Texas	0.0102513330%
TX67	Bailey's Prairie Village, Texas	0.0037360000%
TX68	Baird City, Texas	0.0018680000%
TX69	Balch Springs City, Texas	0.0182386670%
TX70	Balcones Heights City, Texas	0.0158740000%
TX71	Ballinger City, Texas	0.0061146670%
TX72	Balmorhea City, Texas	0.0000420000%
TX73	Bandera City, Texas	0.0019286670%
TX74	Bandera County, Texas	0.0578766670%
TX75	Bangs City, Texas	0.0020333330%
TX76	Bardwell City, Texas	0.0002413330%
TX77	Barry City, Texas	0.0001333330%
TX78	Barstow City, Texas	0.0000406670%
TX79	Bartlett City, Texas	0.0022493330%
TX80	Bartonville Town, Texas	0.0059246670%
TX81	Bastrop City, Texas	0.0308800000%
TX82	Bastrop County, Texas	0.2293066670%
TX83	Bay City, Texas	0.0386080000%
TX84	Baylor County, Texas	0.0198880000%
TX85	Bayou Vista City, Texas	0.0041600000%
TX86	Bayside Town, Texas	0.0001613330%
TX87	Baytown City, Texas	0.1440440000%
TX88	Bayview Town, Texas	0.0000273330%
TX89	Beach City, Texas	0.0083366670%
TX90	Bear Creek Village, Texas	0.0006040000%
TX91	Beasley City, Texas	0.0000866670%
TX92	Beaumont City, Texas	0.4553400000%
TX93	Beckville City, Texas	0.0008313330%
TX94	Bedford City, Texas	0.0628760000%
TX95	Bedias City, Texas	0.0023166670%
TX96	Bee Cave City, Texas	0.0085753330%
TX97	Bee County, Texas	0.0652293330%
TX98	Beeville City, Texas	0.0160180000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX99	Bell County, Texas	0.4338320000%
TX100	Bellaire City, Texas	0.0275093330%
TX101	Bellevue City, Texas	0.0000373330%
TX102	Bellmead City, Texas	0.0096580000%
TX103	Bells Town, Texas	0.0012606670%
TX104	Bellville City, Texas	0.0049920000%
TX105	Belton City, Texas	0.0484533330%
TX106	Benavides City, Texas	0.0001013330%
TX107	Benbrook City, Texas	0.0292793330%
TX108	Benjamin City, Texas	0.0006340000%
TX109	Berryville Town, Texas	0.0095860000%
TX110	Bertram City, Texas	0.0001213330%
TX111	Beverly Hills City, Texas	0.0028906670%
TX112	Bevil Oaks City, Texas	0.0003660000%
TX113	Bexar County, Texas	4.6714346670%
TX114	Big Lake City, Texas	0.0003646670%
TX115	Big Sandy Town, Texas	0.0030526670%
TX116	Big Spring City, Texas	0.1266186670%
TX117	Big Wells City, Texas	0.0001573330%
TX118	Bishop City, Texas	0.0054753330%
TX119	Bishop Hills Town, Texas	0.0002153330%
TX120	Blackwell City, Texas	0.0000206670%
TX121	Blanco City, Texas	0.0041273330%
TX122	Blanco County, Texas	0.0328153330%
TX123	Blanket Town, Texas	0.0000980000%
TX124	Bloomburg Town, Texas	0.0006733330%
TX125	Blooming Grove Town, Texas	0.0002346670%
TX126	Blossom City, Texas	0.0001320000%
TX127	Blue Mound City, Texas	0.0019253330%
TX128	Blue Ridge City, Texas	0.0008966670%
TX129	Blum Town, Texas	0.0010813330%
TX130	Boerne City, Texas	0.0303840000%
TX131	Bogata City, Texas	0.0024326670%
TX132	Bonham City, Texas	0.0672726670%
TX133	Bonney Village, Texas	0.0016733330%
TX134	Booker Town, Texas	0.0006906670%
TX135	Borden County, Texas	0.0006666670%
TX136	Borger City, Texas	0.0464533330%
TX137	Bosque County, Texas	0.0473820000%
TX138	Bovina City, Texas	0.0001153330%
TX139	Bowie City, Texas	0.0557466670%
TX140	Bowie County, Texas	0.1554600000%
TX141	Boyd Town, Texas	0.0046353330%
TX142	Brackettville City, Texas	0.0000053330%
TX143	Brady City, Texas	0.0183200000%
TX144	Brazoria City, Texas	0.0076913330%
TX145	Brazoria County, Texas	0.6807266670%
TX146	Brazos Bend City, Texas	0.0003080000%
TX147	Brazos Country City, Texas	0.0006013330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX148	Brazos County, Texas	0.2280580000%
TX149	Breckenridge City, Texas	0.0159840000%
TX150	Bremond City, Texas	0.0037026670%
TX151	Brenham City, Texas	0.0365000000%
TX152	Brewster County, Texas	0.0400580000%
TX153	Briarcliff Village, Texas	0.0003813330%
TX154	Briaroaks City, Texas	0.0000380000%
TX155	Bridge City, Texas	0.0538373330%
TX156	Bridgeport City, Texas	0.0222006670%
TX157	Briscoe County, Texas	0.0006513330%
TX158	Broaddus Town, Texas	0.0000206670%
TX159	Bronte Town, Texas	0.0000660000%
TX160	Brooks County, Texas	0.0138066670%
TX161	Brookshire City, Texas	0.0042706670%
TX162	Brookside Village City, Texas	0.0007400000%
TX163	Brown County, Texas	0.1289446670%
TX164	Browndell City, Texas	0.0001013330%
TX165	Brownfield City, Texas	0.0096346670%
TX166	Brownsboro City, Texas	0.0021173330%
TX167	Brownsville City, Texas	0.2833713330%
TX168	Brownwood City, Texas	0.1110480000%
TX169	Bruceville-Eddy City, Texas	0.0011280000%
TX170	Bryan City, Texas	0.1645980000%
TX171	Bryson City, Texas	0.0008186670%
TX172	Buckholts Town, Texas	0.0007420000%
TX173	Buda City, Texas	0.0071893330%
TX174	Buffalo City, Texas	0.0079106670%
TX175	Buffalo Gap Town, Texas	0.0000586670%
TX176	Buffalo Springs Village, Texas	0.0001253330%
TX177	Bullard Town, Texas	0.0049913330%
TX178	Bulverde City, Texas	0.0096240000%
TX179	Bunker Hill Village City, Texas	0.0003146670%
TX180	Burkburnett City, Texas	0.0252293330%
TX181	Burke City, Texas	0.0007426670%
TX182	Burleson City, Texas	0.1011860000%
TX183	Burleson County, Texas	0.0468293330%
TX184	Burnet City, Texas	0.0222300000%
TX185	Burnet County, Texas	0.1265526670%
TX186	Burton City, Texas	0.0006246670%
TX187	Byers City, Texas	0.0000513330%
TX188	Bynum Town, Texas	0.0002533330%
TX189	Cactus City, Texas	0.0031860000%
TX190	Caddo Mills City, Texas	0.0000286670%
TX191	Caldwell City, Texas	0.0121633330%
TX192	Caldwell County, Texas	0.0576086670%
TX193	Calhoun County, Texas	0.0852840000%
TX194	Callahan County, Texas	0.0085960000%
TX195	Callisburg City, Texas	0.0000673330%
TX196	Calvert City, Texas	0.0005146670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX197	Cameron City, Texas	0.0073940000%
TX198	Cameron County, Texas	0.3580173330%
TX199	Camp County, Texas	0.0192340000%
TX200	Camp Wood City, Texas	0.0002813330%
TX201	Campbell City, Texas	0.0007440000%
TX202	Canadian City, Texas	0.0007266670%
TX203	Caney City Town, Texas	0.0013366670%
TX204	Canton City, Texas	0.0378226670%
TX205	Canyon City, Texas	0.0175006670%
TX206	Carbon Town, Texas	0.0004133330%
TX207	Carl's Corner Town, Texas	0.0000320000%
TX208	Carmine City, Texas	0.0002566670%
TX209	Carrizo Springs City, Texas	0.0011140000%
TX210	Carrollton City, Texas	0.2068366670%
TX211	Carson County, Texas	0.0196620000%
TX212	Carthage City, Texas	0.0126180000%
TX213	Cashion Community City, Texas	0.0002146670%
TX214	Cass County, Texas	0.0621033330%
TX215	Castle Hills City, Texas	0.0085200000%
TX216	Castro County, Texas	0.0029466670%
TX217	Castroville City, Texas	0.0030166670%
TX218	Cedar Hill City, Texas	0.0467513330%
TX219	Cedar Park City, Texas	0.1237113330%
TX220	Celeste City, Texas	0.0008533330%
TX221	Celina City, Texas	0.0121886670%
TX222	Center City, Texas	0.0392253330%
TX223	Centerville City, Texas	0.0002566670%
TX224	Chambers County, Texas	0.1021253330%
TX225	Chandler City, Texas	0.0115760000%
TX226	Channing City, Texas	0.0000013330%
TX227	Charlotte City, Texas	0.0028380000%
TX228	Cherokee County, Texas	0.1044080000%
TX229	Chester Town, Texas	0.0007826670%
TX230	Chico City, Texas	0.0019520000%
TX231	Childress City, Texas	0.0252773330%
TX232	Childress County, Texas	0.0337213330%
TX233	Chillicothe City, Texas	0.0001146670%
TX234	China City, Texas	0.0003480000%
TX235	China Grove Town, Texas	0.0003986670%
TX236	Chireno City, Texas	0.0010453330%
TX237	Christine Town, Texas	0.0002360000%
TX238	Cibolo City, Texas	0.0091266670%
TX239	Cisco City, Texas	0.0048120000%
TX240	Clarendon City, Texas	0.0000760000%
TX241	Clarksville City, Texas	0.0139273330%
TX242	Clarksville City, Texas	0.0000360000%
TX243	Claude City, Texas	0.0000173330%
TX244	Clay County, Texas	0.0480333330%
TX245	Clear Lake Shores City, Texas	0.0044546670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX246	Cleburne City, Texas	0.1521226670%
TX247	Cleveland City, Texas	0.0645980000%
TX248	Clifton City, Texas	0.0066260000%
TX249	Clint Town, Texas	0.0002500000%
TX250	Clute City, Texas	0.0342333330%
TX251	Clyde City, Texas	0.0115246670%
TX252	Coahoma Town, Texas	0.0015273330%
TX253	Cochran County, Texas	0.0022593330%
TX254	Cockrell Hill City, Texas	0.0003413330%
TX255	Coffee City Town, Texas	0.0007246670%
TX256	Coke County, Texas	0.0036813330%
TX257	Coldspring City, Texas	0.0002980000%
TX258	Coleman City, Texas	0.0036280000%
TX259	Coleman County, Texas	0.0027760000%
TX260	College Station City, Texas	0.1720980000%
TX261	Colleyville City, Texas	0.0306993330%
TX262	Collin County, Texas	0.8444806670%
TX263	Collingsworth County, Texas	0.0128226670%
TX264	Collinsville Town, Texas	0.0012206670%
TX265	Colmesneil City, Texas	0.0014740000%
TX266	Colorado City, Texas	0.0056033330%
TX267	Colorado County, Texas	0.0327226670%
TX268	Columbus City, Texas	0.0045780000%
TX269	Comal County, Texas	0.2640946670%
TX270	Comanche City, Texas	0.0110020000%
TX271	Comanche County, Texas	0.0339760000%
TX272	Combes Town, Texas	0.0011400000%
TX273	Combine City, Texas	0.0012613330%
TX274	Commerce City, Texas	0.0225793330%
TX275	Como Town, Texas	0.0002766670%
TX276	Concho County, Texas	0.0025726670%
TX277	Conroe City, Texas	0.3111140000%
TX278	Converse City, Texas	0.0184620000%
TX279	Cooke County, Texas	0.1336340000%
TX280	Cool City, Texas	0.0004873330%
TX281	Coolidge Town, Texas	0.0001620000%
TX282	Cooper City, Texas	0.0002413330%
TX283	Coppell City, Texas	0.0577286670%
TX284	Copper Canyon Town, Texas	0.0003260000%
TX285	Copperas Cove City, Texas	0.0889946670%
TX286	Corinth City, Texas	0.0501986670%
TX287	Corpus Christi City, Texas	1.2084713330%
TX288	Corral City Town, Texas	0.0000953330%
TX289	Corrigan Town, Texas	0.0142120000%
TX290	Corsicana City, Texas	0.0582066670%
TX291	Coryell County, Texas	0.0824393330%
TX292	Cottle County, Texas	0.0005833330%
TX293	Cottonwood City, Texas	0.0001926670%
TX294	Cottonwood Shores City, Texas	0.0008020000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX295	Cotulla City, Texas	0.0008340000%
TX296	Coupland City, Texas	0.0001773330%
TX297	Cove City, Texas	0.0002580000%
TX298	Covington City, Texas	0.0003460000%
TX299	Coyote Flats City, Texas	0.0009813330%
TX300	Crandall City, Texas	0.0080626670%
TX301	Crane City, Texas	0.0070660000%
TX302	Crane County, Texas	0.0174306670%
TX303	Cranfills Gap City, Texas	0.0000853330%
TX304	Crawford Town, Texas	0.0002553330%
TX305	Creedmoor City, Texas	0.0000106670%
TX306	Cresson City, Texas	0.0007240000%
TX307	Crockett City, Texas	0.0156020000%
TX308	Crockett County, Texas	0.0121400000%
TX309	Crosby County, Texas	0.0122586670%
TX310	Crosbyton City, Texas	0.0009986670%
TX311	Cross Plains Town, Texas	0.0032513330%
TX312	Cross Roads Town, Texas	0.0001626670%
TX313	Cross Timber Town, Texas	0.0003613330%
TX314	Crowell City, Texas	0.0042233330%
TX315	Crowley City, Texas	0.0148966670%
TX316	Crystal City, Texas	0.0129413330%
TX317	Cuero City, Texas	0.0164593330%
TX318	Culberson County, Texas	0.0005260000%
TX319	Cumby City, Texas	0.0035466670%
TX320	Cuney Town, Texas	0.0004040000%
TX321	Cushing City, Texas	0.0007466670%
TX322	Cut and Shoot City, Texas	0.0014273330%
TX323	Daingerfield City, Texas	0.0083173330%
TX324	Daisetta City, Texas	0.0035800000%
TX325	Dalhart City, Texas	0.0077393330%
TX326	Dallam County, Texas	0.0144573330%
TX327	Dallas City, Texas	1.9999346670%
TX328	Dallas County, Texas	5.6921940000%
TX329	Dalworthington Gardens City, Texas	0.0040400000%
TX330	Danbury City, Texas	0.0028206670%
TX331	Darrouzett Town, Texas	0.0000673330%
TX332	Dawson County, Texas	0.0312740000%
TX333	Dawson Town, Texas	0.0004000000%
TX334	Dayton City, Texas	0.0314146670%
TX335	Dayton Lakes City, Texas	0.0000253330%
TX336	De Kalb City, Texas	0.0006900000%
TX337	De Leon City, Texas	0.0054786670%
TX338	De Witt County, Texas	0.0459300000%
TX339	Deaf Smith County, Texas	0.0230213330%
TX340	Dean City, Texas	0.0000940000%
TX341	Decatur City, Texas	0.0377793330%
TX342	Decordova City, Texas	0.0091853330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX343	Deer Park City, Texas	0.0329253330%
TX344	Del Rio City, Texas	0.0393706670%
TX345	Dell City, Texas	0.0000100000%
TX346	Delta County, Texas	0.0203893330%
TX347	Denison City, Texas	0.1402840000%
TX348	Denton City, Texas	0.3055560000%
TX349	Denton County, Texas	0.7548653330%
TX350	Denver City Town, Texas	0.0014026670%
TX351	Deport City, Texas	0.0000280000%
TX352	Desoto City, Texas	0.0482666670%
TX353	Detroit Town, Texas	0.0006433330%
TX354	Devers City, Texas	0.0001273330%
TX355	Devine City, Texas	0.0029026670%
TX356	Diboll City, Texas	0.0170220000%
TX357	Dickens City, Texas	0.0000473330%
TX358	Dickens County, Texas	0.0012486670%
TX359	Dickinson City, Texas	0.0557886670%
TX360	Dilley City, Texas	0.0017553330%
TX361	Dimmit County, Texas	0.0221960000%
TX362	Dimmitt City, Texas	0.0006746670%
TX363	Dish Town, Texas	0.0000126670%
TX364	Dodd City Town, Texas	0.0008073330%
TX365	Dodson Town, Texas	0.0002980000%
TX366	Domino Town, Texas	0.0001306670%
TX367	Donley County, Texas	0.0149133330%
TX368	Donna City, Texas	0.0091986670%
TX369	Dorchester City, Texas	0.0001540000%
TX370	Double Oak Town, Texas	0.0031766670%
TX371	Douglassville Town, Texas	0.0003826670%
TX372	Dripping Springs City, Texas	0.0005406670%
TX373	Driscoll City, Texas	0.0000260000%
TX374	Dublin City, Texas	0.0096520000%
TX375	Dumas City, Texas	0.0174860000%
TX376	Duncanville City, Texas	0.0388853330%
TX377	Duval County, Texas	0.0327393330%
TX378	Eagle Lake City, Texas	0.0032546670%
TX379	Eagle Pass City, Texas	0.0373366670%
TX380	Early City, Texas	0.0098920000%
TX381	Earth City, Texas	0.0001613330%
TX382	East Bernard City, Texas	0.0037026670%
TX383	East Mountain City, Texas	0.0016626670%
TX384	East Tawakoni City, Texas	0.0018153330%
TX385	Eastland City, Texas	0.0105973330%
TX386	Eastland County, Texas	0.0348500000%
TX387	Easton City, Texas	0.0002193330%
TX388	Ector City, Texas	0.0007386670%
TX389	Ector County, Texas	0.3200000000%
TX390	Edcouch City, Texas	0.0027340000%
TX391	Eden City, Texas	0.0003313330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX392	Edgecliff Village Town, Texas	0.0014880000%
TX393	Edgewood Town, Texas	0.0087693330%
TX394	Edinburg City, Texas	0.0805893330%
TX395	Edmonson Town, Texas	0.0000906670%
TX396	Edna City, Texas	0.0121293330%
TX397	Edom City, Texas	0.0014326670%
TX398	Edwards County, Texas	0.0006500000%
TX399	El Campo City, Texas	0.0211333330%
TX400	El Cenizo City, Texas	0.0004140000%
TX401	El Lago City, Texas	0.0037360000%
TX402	El Paso City, Texas	0.8162473330%
TX403	El Paso County, Texas	1.7280806670%
TX404	Eldorado City, Texas	0.0000333330%
TX405	Electra City, Texas	0.0104773330%
TX406	Elgin City, Texas	0.0175226670%
TX407	Elkhart Town, Texas	0.0002006670%
TX408	Ellis County, Texas	0.2102480000%
TX409	Elmendorf City, Texas	0.0004973330%
TX410	Elsa City, Texas	0.0051466670%
TX411	Emhouse Town, Texas	0.0000553330%
TX412	Emory City, Texas	0.0025853330%
TX413	Enchanted Oaks Town, Texas	0.0008660000%
TX414	Encinal City, Texas	0.0010100000%
TX415	Ennis City, Texas	0.0545593330%
TX416	Erath County, Texas	0.0684106670%
TX417	Escobares City, Texas	0.0000266670%
TX418	Estelline Town, Texas	0.0006060000%
TX419	Euless City, Texas	0.0618826670%
TX420	Eureka City, Texas	0.0002226670%
TX421	Eustace City, Texas	0.0013926670%
TX422	Evant Town, Texas	0.0013786670%
TX423	Everman City, Texas	0.0051280000%
TX424	Fair Oaks Ranch City, Texas	0.0053846670%
TX425	Fairchilds Village, Texas	0.0000540000%
TX426	Fairfield City, Texas	0.0008300000%
TX427	Fairview Town, Texas	0.0214966670%
TX428	Falfurrias City, Texas	0.0014806670%
TX429	Falls City, Texas	0.0000273330%
TX430	Falls County, Texas	0.0230146670%
TX431	Fannin County, Texas	0.0877686670%
TX432	Farmers Branch City, Texas	0.0630213330%
TX433	Farmersville City, Texas	0.0070213330%
TX434	Farwell City, Texas	0.0002286670%
TX435	Fate City, Texas	0.0023153330%
TX436	Fayette County, Texas	0.0616266670%
TX437	Fayetteville City, Texas	0.0002606670%
TX438	Ferris City, Texas	0.0092486670%
TX439	Fisher County, Texas	0.0036786670%
TX440	Flatonia Town, Texas	0.0037740000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX441	Florence City, Texas	0.0026326670%
TX442	Floresville City, Texas	0.0144660000%
TX443	Flower Mound Town, Texas	0.1435040000%
TX444	Floyd County, Texas	0.0060326670%
TX445	Floydada City, Texas	0.0042380000%
TX446	Foard County, Texas	0.0038426670%
TX447	Follett City, Texas	0.0001413330%
TX448	Forest Hill City, Texas	0.0174213330%
TX449	Forney City, Texas	0.0534080000%
TX450	Forsan City, Texas	0.0003840000%
TX451	Fort Bend County, Texas	1.0044793330%
TX452	Fort Stockton City, Texas	0.0029406670%
TX453	Fort Worth City, Texas	1.4138600000%
TX454	Franklin City, Texas	0.0026206670%
TX455	Franklin County, Texas	0.0171886670%
TX456	Frankston Town, Texas	0.0001826670%
TX457	Fredericksburg City, Texas	0.0376573330%
TX458	Freeport City, Texas	0.0486486670%
TX459	Freer City, Texas	0.0021806670%
TX460	Freestone County, Texas	0.0336633330%
TX461	Friendswood City, Texas	0.0935533330%
TX462	Frio County, Texas	0.0133026670%
TX463	Friona City, Texas	0.0018986670%
TX464	Frisco City, Texas	0.2702060000%
TX465	Fritch City, Texas	0.0030320000%
TX466	Frost City, Texas	0.0002140000%
TX467	Fruitvale City, Texas	0.0015626670%
TX468	Fulshear City, Texas	0.0035146670%
TX469	Fulton Town, Texas	0.0010680000%
TX470	Gaines County, Texas	0.0362313330%
TX471	Gainesville City, Texas	0.1026533330%
TX472	Galena Park City, Texas	0.0087286670%
TX473	Gallatin City, Texas	0.0008353330%
TX474	Galveston City, Texas	0.3254580000%
TX475	Galveston County, Texas	0.7493953330%
TX476	Ganado City, Texas	0.0036733330%
TX477	Garden Ridge City, Texas	0.0075673330%
TX478	Garland City, Texas	0.2801626670%
TX479	Garrett Town, Texas	0.0016733330%
TX480	Garrison City, Texas	0.0023700000%
TX481	Gary City Town, Texas	0.0003000000%
TX482	Garza County, Texas	0.0059626670%
TX483	Gatesville City, Texas	0.0179960000%
TX484	George West City, Texas	0.0041380000%
TX485	Georgetown City, Texas	0.1505973330%
TX486	Gholson City, Texas	0.0010033330%
TX487	Giddings City, Texas	0.0084493330%
TX488	Gillespie County, Texas	0.0421273330%
TX489	Gilmer City, Texas	0.0226340000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX490	Gladewater City, Texas	0.0164253330%
TX491	Glasscock County, Texas	0.0006666670%
TX492	Glen Rose City, Texas	0.0003600000%
TX493	Glenn Heights City, Texas	0.0110620000%
TX494	Godley City, Texas	0.0020766670%
TX495	Goldsmith City, Texas	0.0004513330%
TX496	Goldthwaite City, Texas	0.0008166670%
TX497	Goliad City, Texas	0.0023753330%
TX498	Goliad County, Texas	0.0231066670%
TX499	Golinda City, Texas	0.0000666670%
TX500	Gonzales City, Texas	0.0099213330%
TX501	Gonzales County, Texas	0.0221533330%
TX502	Goodlow City, Texas	0.0001473330%
TX503	Goodrich City, Texas	0.0064286670%
TX504	Gordon City, Texas	0.0002433330%
TX505	Goree City, Texas	0.0004993330%
TX506	Gorman City, Texas	0.0020713330%
TX507	Graford City, Texas	0.0000153330%
TX508	Graham City, Texas	0.1569520000%
TX509	Granbury City, Texas	0.0478233330%
TX510	Grand Prairie City, Texas	0.2969593330%
TX511	Grand Saline City, Texas	0.0242753330%
TX512	Grandfalls Town, Texas	0.0000433330%
TX513	Grandview City, Texas	0.0044000000%
TX514	Granger City, Texas	0.0018273330%
TX515	Granite Shoals City, Texas	0.0078893330%
TX516	Granjeno City, Texas	0.0000286670%
TX517	Grapeland City, Texas	0.0048580000%
TX518	Grapevine City, Texas	0.0861300000%
TX519	Gray County, Texas	0.0439226670%
TX520	Grays Prairie Village, Texas	0.0000113330%
TX521	Grayson County, Texas	0.3593886670%
TX522	Greenville City, Texas	0.1354080000%
TX523	Gregg County, Texas	0.1624960000%
TX524	Gregory City, Texas	0.0031313330%
TX525	Grey Forest City, Texas	0.0003160000%
TX526	Grimes County, Texas	0.0632520000%
TX527	Groesbeck City, Texas	0.0038300000%
TX528	Groom Town, Texas	0.0006433330%
TX529	Groves City, Texas	0.0271680000%
TX530	Groveton City, Texas	0.0058846670%
TX531	Gruver City, Texas	0.0007773330%
TX532	Guadalupe County, Texas	0.0978826670%
TX533	Gun Barrel City, Texas	0.0242013330%
TX534	Gunter City, Texas	0.0030726670%
TX535	Gustine Town, Texas	0.0000226670%
TX536	Hackberry Town, Texas	0.0000626670%
TX537	Hale Center City, Texas	0.0040280000%
TX538	Hale County, Texas	0.0527666670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX539	Hall County, Texas	0.0059553330%
TX540	Hallettsville City, Texas	0.0045966670%
TX541	Hallsburg City, Texas	0.0001813330%
TX542	Hallsville City, Texas	0.0068260000%
TX543	Haltom City, Texas	0.0478666670%
TX544	Hamilton City, Texas	0.0023873330%
TX545	Hamilton County, Texas	0.0442380000%
TX546	Hamlin City, Texas	0.0031040000%
TX547	Hansford County, Texas	0.0109440000%
TX548	Happy Town, Texas	0.0002180000%
TX549	Hardeman County, Texas	0.0101460000%
TX550	Hardin City, Texas	0.0000666670%
TX551	Hardin County, Texas	0.2532000000%
TX552	Harker Heights City, Texas	0.0757873330%
TX553	Harlingen City, Texas	0.1102860000%
TX554	Harris County, Texas	9.9774680000%
TX555	Harrison County, Texas	0.1239400000%
TX556	Hart City, Texas	0.0000573330%
TX557	Hartley County, Texas	0.0005240000%
TX558	Haskell City, Texas	0.0072193330%
TX559	Haskell County, Texas	0.0146740000%
TX560	Haslet City, Texas	0.0012720000%
TX561	Hawk Cove City, Texas	0.0004493330%
TX562	Hawkins City, Texas	0.0052880000%
TX563	Hawley City, Texas	0.0006206670%
TX564	Hays City, Texas	0.0003373330%
TX565	Hays County, Texas	0.3529926670%
TX566	Hearne City, Texas	0.0112160000%
TX567	Heath City, Texas	0.0191673330%
TX568	Hebron Town, Texas	0.0004580000%
TX569	Hedley City, Texas	0.0000466670%
TX570	Hedwig Village City, Texas	0.0087113330%
TX571	Helotes City, Texas	0.0105266670%
TX572	Hemphill City, Texas	0.0053566670%
TX573	Hemphill County, Texas	0.0095960000%
TX574	Hempstead City, Texas	0.0141600000%
TX575	Henderson City, Texas	0.0399773330%
TX576	Henderson County, Texas	0.2186433330%
TX577	Henrietta City, Texas	0.0018133330%
TX578	Hereford City, Texas	0.0136153330%
TX579	Hewitt City, Texas	0.0131840000%
TX580	Hickory Creek Town, Texas	0.0110066670%
TX581	Hico City, Texas	0.0036893330%
TX582	Hidalgo City, Texas	0.0177473330%
TX583	Hidalgo County, Texas	0.8354020000%
TX584	Hideaway City, Texas	0.0006146670%
TX585	Higgins City, Texas	0.0000286670%
TX586	Highland Haven City, Texas	0.0002133330%
TX587	Highland Park Town, Texas	0.0289220000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX588	Highland Village City, Texas	0.0335433330%
TX589	Hill Country Village City, Texas	0.0043233330%
TX590	Hill County, Texas	0.0849846670%
TX591	Hillcrest Village, Texas	0.0035633330%
TX592	Hillsboro City, Texas	0.0310726670%
TX593	Hilshire Village City, Texas	0.0005726670%
TX594	Hitchcock City, Texas	0.0191973330%
TX595	Hockley County, Texas	0.0309380000%
TX596	Holiday Lakes Town, Texas	0.0011966670%
TX597	Holland Town, Texas	0.0000513330%
TX598	Holliday City, Texas	0.0039400000%
TX599	Hollywood Park Town, Texas	0.0062826670%
TX600	Hondo City, Texas	0.0768586670%
TX601	Honey Grove City, Texas	0.0047973330%
TX602	Hood County, Texas	0.1947366670%
TX603	Hooks City, Texas	0.0018013330%
TX604	Hopkins County, Texas	0.0996786670%
TX605	Horizon City, Texas	0.0050133330%
TX606	Horseshoe Bay City, Texas	0.0321153330%
TX607	Houston City, Texas	4.6811953330%
TX608	Houston County, Texas	0.0524320000%
TX609	Howard County, Texas	0.0595533330%
TX610	Howardwick City, Texas	0.0000560000%
TX611	Howe Town, Texas	0.0061180000%
TX612	Hubbard City, Texas	0.0024233330%
TX613	Hudson City, Texas	0.0045600000%
TX614	Hudson Oaks City, Texas	0.0104246670%
TX615	Hudspeth County, Texas	0.0006566670%
TX616	Hughes Springs City, Texas	0.0029613330%
TX617	Humble City, Texas	0.0493013330%
TX618	Hunt County, Texas	0.2065673330%
TX619	Hunters Creek Village City, Texas	0.0098053330%
TX620	Huntington City, Texas	0.0058613330%
TX621	Huntsville City, Texas	0.0535820000%
TX622	Hurst City, Texas	0.0661246670%
TX623	Hutchins City, Texas	0.0063673330%
TX624	Hutchinson County, Texas	0.0497533330%
TX625	Hutto City, Texas	0.0255640000%
TX626	Huxley City, Texas	0.0004920000%
TX627	Idalou City, Texas	0.0013326670%
TX628	Impact Town, Texas	0.0000053330%
TX629	Indian Lake Town, Texas	0.0003153330%
TX630	Industry City, Texas	0.0004026670%
TX631	Ingleside City, Texas	0.0269913330%
TX632	Ingleside on the Bay City, Texas	0.0000946670%
TX633	Ingram City, Texas	0.0034953330%
TX634	Iola City, Texas	0.0021093330%
TX635	Iowa Colony Village, Texas	0.0027266670%
TX636	Iowa Park City, Texas	0.0156580000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX637	Iraan City, Texas	0.0000373330%
TX638	Iredell City, Texas	0.0001440000%
TX639	Irion County, Texas	0.0060700000%
TX640	Irving City, Texas	0.2852120000%
TX641	Italy Town, Texas	0.0035660000%
TX642	Itasca City, Texas	0.0057960000%
TX643	Ivanhoe City, Texas	0.0000173330%
TX644	Jacinto City, Texas	0.0094273330%
TX645	Jack County, Texas	0.0098660000%
TX646	Jacksboro City, Texas	0.0155026670%
TX647	Jackson County, Texas	0.0253226670%
TX648	Jacksonville City, Texas	0.0534526670%
TX649	Jamaica Beach City, Texas	0.0032753330%
TX650	Jarrell City, Texas	0.0016153330%
TX651	Jasper City, Texas	0.0522813330%
TX652	Jasper County, Texas	0.1659033330%
TX653	Jayton City, Texas	0.0000420000%
TX654	Jeff Davis County, Texas	0.0056666670%
TX655	Jefferson City, Texas	0.0074626670%
TX656	Jefferson County, Texas	0.5044093330%
TX657	Jersey Village City, Texas	0.0242313330%
TX658	Jewett City, Texas	0.0062253330%
TX659	Jim Hogg County, Texas	0.0084786670%
TX660	Jim Wells County, Texas	0.1110260000%
TX661	Joaquin City, Texas	0.0005400000%
TX662	Johnson City, Texas	0.0023873330%
TX663	Johnson County, Texas	0.2724613330%
TX664	Jolly City, Texas	0.0000173330%
TX665	Jones County, Texas	0.0146673330%
TX666	Jones Creek Village, Texas	0.0033853330%
TX667	Jonestown City, Texas	0.0042793330%
TX668	Josephine City, Texas	0.0005873330%
TX669	Joshua City, Texas	0.0137460000%
TX670	Jourdanton City, Texas	0.0064000000%
TX671	Junction City, Texas	0.0032166670%
TX672	Justin City, Texas	0.0057166670%
TX673	Karnes City, Texas	0.0077546670%
TX674	Karnes County, Texas	0.0234993330%
TX675	Katy City, Texas	0.0349780000%
TX676	Kaufman City, Texas	0.0184046670%
TX677	Kaufman County, Texas	0.2353646670%
TX678	Keene City, Texas	0.0255306670%
TX679	Keller City, Texas	0.0527926670%
TX680	Kemah City, Texas	0.0188833330%
TX681	Kemp City, Texas	0.0042793330%
TX682	Kempner City, Texas	0.0002200000%
TX683	Kendall County, Texas	0.0670953330%
TX684	Kendleton City, Texas	0.0000086670%
TX685	Kenedy City, Texas	0.0004506670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX686	Kenedy County, Texas	0.0006666670%
TX687	Kenefick Town, Texas	0.0002773330%
TX688	Kennard City, Texas	0.0000880000%
TX689	Kennedale City, Texas	0.0140160000%
TX690	Kent County, Texas	0.0006260000%
TX691	Kerens City, Texas	0.0012826670%
TX692	Kermit City, Texas	0.0037680000%
TX693	Kerr County, Texas	0.1456346670%
TX694	Kerrville City, Texas	0.1269046670%
TX695	Kilgore City, Texas	0.0703886670%
TX696	Killeen City, Texas	0.3571000000%
TX697	Kimble County, Texas	0.0136533330%
TX698	King County, Texas	0.0006666670%
TX699	Kingsville City, Texas	0.0133886670%
TX700	Kinney County, Texas	0.0014280000%
TX701	Kirby City, Texas	0.0058346670%
TX702	Kirbyville City, Texas	0.0071266670%
TX703	Kirvin Town, Texas	0.0000013330%
TX704	Kleberg County, Texas	0.0827393330%
TX705	Knollwood City, Texas	0.0007733330%
TX706	Knox City Town, Texas	0.0013080000%
TX707	Knox County, Texas	0.0078200000%
TX708	Kosse Town, Texas	0.0016453330%
TX709	Kountze City, Texas	0.0131440000%
TX710	Kress City, Texas	0.0001240000%
TX711	Krugerville City, Texas	0.0010053330%
TX712	Krum City, Texas	0.0064406670%
TX713	Kurten Town, Texas	0.0004573330%
TX714	Kyle City, Texas	0.0345566670%
TX715	La Feria City, Texas	0.0069206670%
TX716	La Grange City, Texas	0.0064153330%
TX717	La Grulla City, Texas	0.0011386670%
TX718	La Joya City, Texas	0.0056380000%
TX719	La Marque City, Texas	0.0659533330%
TX720	La Porte City, Texas	0.0610213330%
TX721	La Salle County, Texas	0.0099833330%
TX722	La Vernia City, Texas	0.0021446670%
TX723	La Villa City, Texas	0.0003813330%
TX724	La Ward City, Texas	0.0002140000%
TX725	Lacoste City, Texas	0.0001060000%
TX726	Lacy-Lakeview City, Texas	0.0077326670%
TX727	Ladonia Town, Texas	0.0013406670%
TX728	Lago Vista City, Texas	0.0091786670%
TX729	Laguna Vista Town, Texas	0.0024593330%
TX730	Lake Bridgeport City, Texas	0.0001546670%
TX731	Lake City Town, Texas	0.0019453330%
TX732	Lake Dallas City, Texas	0.0168760000%
TX733	Lake Jackson City, Texas	0.0505206670%
TX734	Lake Tanglewood Village, Texas	0.0004086670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX735	Lake Worth City, Texas	0.0133673330%
TX736	Lakeport City, Texas	0.0003086670%
TX737	Lakeside City Town, Texas	0.0001480000%
TX738	Lakeside Town, San Patricio County, Texas	0.0029826670%
TX739	Lakeside Town, Tarrant County, Texas	0.0029826670%
TX740	Lakeview Town, Texas	0.0002846670%
TX741	Lakeway City, Texas	0.0211046670%
TX742	Lakewood Village City, Texas	0.0003713330%
TX743	Lamar County, Texas	0.0943986670%
TX744	Lamb County, Texas	0.0337873330%
TX745	Lamesa City, Texas	0.0197706670%
TX746	Lampasas City, Texas	0.0188073330%
TX747	Lampasas County, Texas	0.0285453330%
TX748	Lancaster City, Texas	0.0604353330%
TX749	Laredo City, Texas	0.5087826670%
TX750	Latexo City, Texas	0.0000826670%
TX751	Lavaca County, Texas	0.0306486670%
TX752	Lavon City, Texas	0.0049566670%
TX753	Lawn Town, Texas	0.0000386670%
TX754	League City, Texas	0.2016120000%
TX755	Leakey City, Texas	0.0001706670%
TX756	Leander City, Texas	0.0590940000%
TX757	Leary City, Texas	0.0005313330%
TX758	Lee County, Texas	0.0203046670%
TX759	Lefors Town, Texas	0.0001060000%
TX760	Leon County, Texas	0.0449286670%
TX761	Leon Valley City, Texas	0.0155053330%
TX762	Leona City, Texas	0.0005886670%
TX763	Leonard City, Texas	0.0056700000%
TX764	Leroy City, Texas	0.0001173330%
TX765	Levelland City, Texas	0.0312320000%
TX766	Lewisville City, Texas	0.2547293330%
TX767	Lexington Town, Texas	0.0015453330%
TX768	Liberty City, Texas	0.0482286670%
TX769	Liberty County, Texas	0.3541413330%
TX770	Liberty Hill City, Texas	0.0018533330%
TX771	Limestone County, Texas	0.0904560000%
TX772	Lincoln Park Town, Texas	0.0004513330%
TX773	Lindale City, Texas	0.0161346670%
TX774	Linden City, Texas	0.0024406670%
TX775	Lindsay City, Texas	0.0008186670%
TX776	Lipan City, Texas	0.0000293330%
TX777	Lipscomb County, Texas	0.0067546670%
TX778	Little Elm City, Texas	0.0462173330%
TX779	Little River-Academy City, Texas	0.0005320000%
TX780	Littlefield City, Texas	0.0051186670%
TX781	Live Oak City, Texas	0.0218266670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX782	Live Oak County, Texas	0.0264773330%
TX783	Liverpool City, Texas	0.0009566670%
TX784	Livingston Town, Texas	0.0487766670%
TX785	Llano City, Texas	0.0154140000%
TX786	Llano County, Texas	0.0770980000%
TX787	Lockhart City, Texas	0.0327000000%
TX788	Lockney Town, Texas	0.0022006670%
TX789	Log Cabin City, Texas	0.0013066670%
TX790	Lometa City, Texas	0.0007840000%
TX791	Lone Oak City, Texas	0.0011366670%
TX792	Lone Star City, Texas	0.0055220000%
TX793	Longview City, Texas	0.3215026670%
TX794	Loraine Town, Texas	0.0001253330%
TX795	Lorena City, Texas	0.0022600000%
TX796	Lorenzo City, Texas	0.0075720000%
TX797	Los Fresnos City, Texas	0.0074566670%
TX798	Los Indios Town, Texas	0.0001060000%
TX799	Lott City, Texas	0.0010106670%
TX800	Lovelady City, Texas	0.0001660000%
TX801	Loving County, Texas	0.0006666670%
TX802	Lowry Crossing City, Texas	0.0005220000%
TX803	Lubbock City, Texas	0.2132446670%
TX804	Lubbock County, Texas	0.9198126670%
TX805	Lucas City, Texas	0.0035106670%
TX806	Lueders City, Texas	0.0003386670%
TX807	Lufkin City, Texas	0.1877280000%
TX808	Luling City, Texas	0.0196140000%
TX809	Lumberton City, Texas	0.0244060000%
TX810	Lyford City, Texas	0.0020473330%
TX811	Lynn County, Texas	0.0041833330%
TX812	Lytle City, Texas	0.0048153330%
TX813	Mabank Town, Texas	0.0129620000%
TX814	Madison County, Texas	0.0329946670%
TX815	Madisonville City, Texas	0.0076386670%
TX816	Magnolia City, Texas	0.0173540000%
TX817	Malakoff City, Texas	0.0084093330%
TX818	Malone Town, Texas	0.0002926670%
TX819	Manor City, Texas	0.0083326670%
TX820	Mansfield City, Texas	0.1005253330%
TX821	Manvel City, Texas	0.0082033330%
TX822	Marble Falls City, Texas	0.0246926670%
TX823	Marfa City, Texas	0.0000433330%
TX824	Marietta Town, Texas	0.0002253330%
TX825	Marion City, Texas	0.0001833330%
TX826	Marion County, Texas	0.0364853330%
TX827	Marlin City, Texas	0.0144226670%
TX828	Marquez City, Texas	0.0008813330%
TX829	Marshall City, Texas	0.0722473330%
TX830	Mart City, Texas	0.0006186670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX831	Martin County, Texas	0.0072413330%
TX832	Martindale City, Texas	0.0016246670%
TX833	Mason City, Texas	0.0005180000%
TX834	Mason County, Texas	0.0020893330%
TX835	Matador Town, Texas	0.0008020000%
TX836	Matagorda County, Texas	0.0901593330%
TX837	Mathis City, Texas	0.0104800000%
TX838	Maud City, Texas	0.0002820000%
TX839	Maverick County, Texas	0.0772793330%
TX840	Maypearl City, Texas	0.0006573330%
TX841	McAllen City, Texas	0.2429493330%
TX842	McCamey City, Texas	0.0003613330%
TX843	McCulloch County, Texas	0.0133473330%
TX844	McGregor City, Texas	0.0061033330%
TX845	McKinney City, Texas	0.3002553330%
TX846	McLean Town, Texas	0.0000093330%
TX847	McLendon-Chisholm City, Texas	0.0002740000%
TX848	McLennan County, Texas	0.3530940000%
TX849	McMullen County, Texas	0.0006666670%
TX850	Meadow Town, Texas	0.0007473330%
TX851	Meadowlakes City, Texas	0.0006033330%
TX852	Meadows Place City, Texas	0.0120986670%
TX853	Medina County, Texas	0.0322366670%
TX854	Megargel Town, Texas	0.0004073330%
TX855	Melissa City, Texas	0.0102540000%
TX856	Melvin Town, Texas	0.0002300000%
TX857	Memphis City, Texas	0.0048020000%
TX858	Menard City, Texas	0.0006606670%
TX859	Menard County, Texas	0.0098113330%
TX860	Mercedes City, Texas	0.0142940000%
TX861	Meridian City, Texas	0.0023640000%
TX862	Merkel Town, Texas	0.0067446670%
TX863	Mertens Town, Texas	0.0001593330%
TX864	Mertzon City, Texas	0.0000193330%
TX865	Mesquite City, Texas	0.2071393330%
TX866	Mexia City, Texas	0.0140640000%
TX867	Miami City, Texas	0.0003033330%
TX868	Midland City, Texas	0.3478993330%
TX869	Midland County, Texas	0.1866180000%
TX870	Midlothian City, Texas	0.0638660000%
TX871	Midway City, Texas	0.0000520000%
TX872	Milam County, Texas	0.0649240000%
TX873	Milano City, Texas	0.0006026670%
TX874	Mildred Town, Texas	0.0001906670%
TX875	Miles City, Texas	0.0000620000%
TX876	Milford Town, Texas	0.0041180000%
TX877	Miller's Cove Town, Texas	0.0000646670%
TX878	Millican Town, Texas	0.0002780000%
TX879	Mills County, Texas	0.0132873330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX880	Millsap Town, Texas	0.0000226670%
TX881	Mineola City, Texas	0.0324793330%
TX882	Mineral Wells City, Texas	0.0613740000%
TX883	Mingus City, Texas	0.0001260000%
TX884	Mission City, Texas	0.0831786670%
TX885	Missouri City, Texas	0.1397553330%
TX886	Mitchell County, Texas	0.0139000000%
TX887	Mobeetie City, Texas	0.0000346670%
TX888	Mobile City, Texas	0.0013560000%
TX889	Monahans City, Texas	0.0038993330%
TX890	Mont Belvieu City, Texas	0.0131126670%
TX891	Montague County, Texas	0.0631973330%
TX892	Montgomery City, Texas	0.0012560000%
TX893	Montgomery County, Texas	1.8006073330%
TX894	Moody City, Texas	0.0005520000%
TX895	Moore County, Texas	0.0270846670%
TX896	Moore Station City, Texas	0.0005146670%
TX897	Moran City, Texas	0.0000333330%
TX898	Morgan City, Texas	0.0004033330%
TX899	Morgan's Point City, Texas	0.0020700000%
TX900	Morgan's Point Resort City, Texas	0.0053493330%
TX901	Morris County, Texas	0.0355520000%
TX902	Morton City, Texas	0.0001113330%
TX903	Motley County, Texas	0.0022293330%
TX904	Moulton Town, Texas	0.0006660000%
TX905	Mount Calm City, Texas	0.0004033330%
TX906	Mount Enterprise City, Texas	0.0012213330%
TX907	Mount Pleasant City, Texas	0.0437893330%
TX908	Mount Vernon Town, Texas	0.0040326670%
TX909	Mountain City, Texas	0.0010320000%
TX910	Muenster City, Texas	0.0031040000%
TX911	Muleshoe City, Texas	0.0032733330%
TX912	Mullin Town, Texas	0.0002560000%
TX913	Munday City, Texas	0.0013646670%
TX914	Murchison City, Texas	0.0015346670%
TX915	Murphy City, Texas	0.0345953330%
TX916	Mustang Ridge City, Texas	0.0016413330%
TX917	Mustang Town, Texas	0.0000046670%
TX918	Nacogdoches City, Texas	0.1373280000%
TX919	Nacogdoches County, Texas	0.1323886670%
TX920	Naples City, Texas	0.0028160000%
TX921	Nash City, Texas	0.0053326670%
TX922	Nassau Bay City, Texas	0.0074980000%
TX923	Natalia City, Texas	0.0004166670%
TX924	Navarro County, Texas	0.0690086670%
TX925	Navarro Town, Texas	0.0002226670%
TX926	Navasota City, Texas	0.0251173330%
TX927	Nazareth City, Texas	0.0000826670%
TX928	Nederland City, Texas	0.0297233330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX929	Needville City, Texas	0.0068940000%
TX930	Nevada City, Texas	0.0001580000%
TX931	New Berlin City, Texas	0.0000026670%
TX932	New Boston City, Texas	0.0046353330%
TX933	New Braunfels City, Texas	0.2048753330%
TX934	New Chapel Hill City, Texas	0.0001920000%
TX935	New Deal Town, Texas	0.0002253330%
TX936	New Fairview City, Texas	0.0015560000%
TX937	New Home City, Texas	0.0000060000%
TX938	New Hope Town, Texas	0.0006826670%
TX939	New London City, Texas	0.0027526670%
TX940	New Summerfield City, Texas	0.0002946670%
TX941	New Waverly City, Texas	0.0017080000%
TX942	Newark City, Texas	0.0003466670%
TX943	Newcastle City, Texas	0.0006093330%
TX944	Newton City, Texas	0.0040680000%
TX945	Newton County, Texas	0.1053373330%
TX946	Neylandville Town, Texas	0.0001086670%
TX947	Niederwald City, Texas	0.0000106670%
TX948	Nixon City, Texas	0.0015220000%
TX949	Nocona City, Texas	0.0110240000%
TX950	Nolan County, Texas	0.0335080000%
TX951	Nolanville City, Texas	0.0028313330%
TX952	Nome City, Texas	0.0002606670%
TX953	Noonday City, Texas	0.0001506670%
TX954	Nordheim City, Texas	0.0004646670%
TX955	Normangee Town, Texas	0.0041280000%
TX956	North Cleveland City, Texas	0.0000700000%
TX957	North Richland Hills City, Texas	0.0976126670%
TX958	Northlake Town, Texas	0.0059366670%
TX959	Novice City, Texas	0.0000506670%
TX960	Nueces County, Texas	0.9119546670%
TX961	Oak Grove Town, Texas	0.0018460000%
TX962	Oak Leaf City, Texas	0.0004080000%
TX963	Oak Point City, Texas	0.0060073330%
TX964	Oak Ridge North City, Texas	0.0223413330%
TX965	Oak Ridge Town, Cooke County, Texas	0.0002386670%
TX966	Oak Ridge Town, Kaufman County, Texas	0.0002386670%
TX967	Oak Valley Town, Texas	0.0000046670%
TX968	Oakwood Town, Texas	0.0000986670%
TX969	O'Brien City, Texas	0.0000506670%
TX970	Ochiltree County, Texas	0.0103173330%
TX971	Odem City, Texas	0.0049466670%
TX972	Odessa City, Texas	0.3727753330%
TX973	O'Donnell City, Texas	0.0000180000%
TX974	Oglesby City, Texas	0.0000193330%
TX975	Old River-Winfree City, Texas	0.0144353330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX976	Oldham County, Texas	0.0068786670%
TX977	Olmos Park City, Texas	0.0065340000%
TX978	Olney City, Texas	0.0040586670%
TX979	Olton City, Texas	0.0007980000%
TX980	Omaha City, Texas	0.0027900000%
TX981	Onalaska City, Texas	0.0211026670%
TX982	Opdyke West Town, Texas	0.0003193330%
TX983	Orange City, Texas	0.2075593330%
TX984	Orange County, Texas	0.4598786670%
TX985	Orange Grove City, Texas	0.0011180000%
TX986	Orchard City, Texas	0.0005780000%
TX987	Ore City, Texas	0.0045373330%
TX988	Overton City, Texas	0.0052666670%
TX989	Ovilla City, Texas	0.0089273330%
TX990	Oyster Creek City, Texas	0.0064220000%
TX991	Paducah Town, Texas	0.0000833330%
TX992	Paint Rock Town, Texas	0.0000940000%
TX993	Palacios City, Texas	0.0093573330%
TX994	Palestine City, Texas	0.1186726670%
TX995	Palisades Village, Texas	0.0001600000%
TX996	Palm Valley City, Texas	0.0012786670%
TX997	Palmer Town, Texas	0.0084440000%
TX998	Palmhurst City, Texas	0.0031066670%
TX999	Palmview City, Texas	0.0050513330%
TX1000	Palo Pinto County, Texas	0.0830806670%
TX1001	Pampa City, Texas	0.0448180000%
TX1002	Panhandle Town, Texas	0.0063573330%
TX1003	Panola County, Texas	0.0537993330%
TX1004	Panorama Village City, Texas	0.0008613330%
TX1005	Pantego Town, Texas	0.0085986670%
TX1006	Paradise City, Texas	0.0000346670%
TX1007	Paris City, Texas	0.1341200000%
TX1008	Parker City, Texas	0.0068713330%
TX1009	Parker County, Texas	0.3175026670%
TX1010	Parmer County, Texas	0.0105773330%
TX1011	Pasadena City, Texas	0.2376906670%
TX1012	Pattison City, Texas	0.0007653330%
TX1013	Patton Village City, Texas	0.0061786670%
TX1014	Payne Springs Town, Texas	0.0011800000%
TX1015	Pearland City, Texas	0.2225013330%
TX1016	Pearsall City, Texas	0.0077133330%
TX1017	Pecan Gap City, Texas	0.0004793330%
TX1018	Pecan Hill City, Texas	0.0001526670%
TX1019	Pecos City, Texas	0.0050813330%
TX1020	Pecos County, Texas	0.0313313330%
TX1021	Pelican Bay City, Texas	0.0007993330%
TX1022	Penelope Town, Texas	0.0002766670%
TX1023	Penitas City, Texas	0.0002080000%
TX1024	Perryton City, Texas	0.0155760000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1025	Petersburg City, Texas	0.0011273330%
TX1026	Petrolia City, Texas	0.0000113330%
TX1027	Petronila City, Texas	0.0000033330%
TX1028	Pflugerville City, Texas	0.0576053330%
TX1029	Pharr City, Texas	0.0964806670%
TX1030	Pilot Point City, Texas	0.0077420000%
TX1031	Pine Forest City, Texas	0.0025960000%
TX1032	Pine Island Town, Texas	0.0020940000%
TX1033	Pinehurst City, Texas	0.0217806670%
TX1034	Pineland City, Texas	0.0027586670%
TX1035	Piney Point Village City, Texas	0.0104920000%
TX1036	Pittsburg City, Texas	0.0136840000%
TX1037	Plains Town, Texas	0.0000860000%
TX1038	Plainview City, Texas	0.0401986670%
TX1039	Plano City, Texas	0.7677386670%
TX1040	Pleak Village, Texas	0.0001800000%
TX1041	Pleasant Valley Town, Texas	0.0002053330%
TX1042	Pleasanton City, Texas	0.0193406670%
TX1043	Plum Grove City, Texas	0.0001720000%
TX1044	Point Blank City, Texas	0.0002366670%
TX1045	Point City, Texas	0.0010126670%
TX1046	Point Comfort City, Texas	0.0002980000%
TX1047	Point Venture Village, Texas	0.0003920000%
TX1048	Polk County, Texas	0.2472206670%
TX1049	Ponder Town, Texas	0.0008546670%
TX1050	Port Aransas City, Texas	0.0206813330%
TX1051	Port Arthur City, Texas	0.2452966670%
TX1052	Port Isabel City, Texas	0.0065346670%
TX1053	Port Lavaca City, Texas	0.0078346670%
TX1054	Port Neches City, Texas	0.0258993330%
TX1055	Portland City, Texas	0.0510113330%
TX1056	Post City, Texas	0.0015546670%
TX1057	Post Oak Bend City Town, Texas	0.0006893330%
TX1058	Poteet City, Texas	0.0045113330%
TX1059	Poth Town, Texas	0.0026493330%
TX1060	Potter County, Texas	0.2478006670%
TX1061	Pottsboro Town, Texas	0.0082013330%
TX1062	Powell Town, Texas	0.0000733330%
TX1063	Poynor Town, Texas	0.0007866670%
TX1064	Prairie View City, Texas	0.0050666670%
TX1065	Premont City, Texas	0.0022140000%
TX1066	Presidio City, Texas	0.0000986670%
TX1067	Presidio County, Texas	0.0005246670%
TX1068	Primera Town, Texas	0.0019720000%
TX1069	Princeton City, Texas	0.0128300000%
TX1070	Progreso City, Texas	0.0053813330%
TX1071	Progreso Lakes City, Texas	0.0000260000%
TX1072	Prosper Town, Texas	0.0151800000%
TX1073	Providence Village Town, Texas	0.0003386670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1074	Putnam Town, Texas	0.0000093330%
TX1075	Pyote Town, Texas	0.0000146670%
TX1076	Quanah City, Texas	0.0001380000%
TX1077	Queen City, Texas	0.0032246670%
TX1078	Quinlan City, Texas	0.0048693330%
TX1079	Quintana Town, Texas	0.0003280000%
TX1080	Quitaque City, Texas	0.0000053330%
TX1081	Quitman City, Texas	0.0104126670%
TX1082	Rains County, Texas	0.0354600000%
TX1083	Ralls City, Texas	0.0026446670%
TX1084	Rancho Viejo Town, Texas	0.0025573330%
TX1085	Randall County, Texas	0.1854173330%
TX1086	Ranger City, Texas	0.0081240000%
TX1087	Rankin City, Texas	0.0010753330%
TX1088	Ransom Canyon Town, Texas	0.0006200000%
TX1089	Ravenna City, Texas	0.0004566670%
TX1090	Raymondville City, Texas	0.0049773330%
TX1091	Reagan County, Texas	0.0168100000%
TX1092	Real County, Texas	0.0033820000%
TX1093	Red Lick City, Texas	0.0000153330%
TX1094	Red Oak City, Texas	0.0178953330%
TX1095	Red River County, Texas	0.0195373330%
TX1096	Redwater City, Texas	0.0007053330%
TX1097	Reeves County, Texas	0.0689000000%
TX1098	Refugio County, Texas	0.0308106670%
TX1099	Refugio Town, Texas	0.0058926670%
TX1100	Reklaw City, Texas	0.0007573330%
TX1101	Reno City, Lamar County, Texas	0.0074426670%
TX1102	Reno City, Parker County, Texas	0.0025273330%
TX1103	Retreat Town, Texas	0.0000346670%
TX1104	Rhome City, Texas	0.0081900000%
TX1105	Rice City, Texas	0.0013146670%
TX1106	Richardson City, Texas	0.1735433330%
TX1107	Richland Hills City, Texas	0.0162920000%
TX1108	Richland Springs Town, Texas	0.0014893330%
TX1109	Richland Town, Texas	0.0001400000%
TX1110	Richmond City, Texas	0.0517373330%
TX1111	Richwood City, Texas	0.0080746670%
TX1112	Riesel City, Texas	0.0007453330%
TX1113	Rio Bravo City, Texas	0.0056986670%
TX1114	Rio Grande City, Texas	0.0172980000%
TX1115	Rio Hondo City, Texas	0.0023666670%
TX1116	Rio Vista City, Texas	0.0029460000%
TX1117	Rising Star Town, Texas	0.0012886670%
TX1118	River Oaks City, Texas	0.0079446670%
TX1119	Riverside City, Texas	0.0005720000%
TX1120	Roanoke City, Texas	0.0001833330%
TX1121	Roaring Springs Town, Texas	0.0003073330%
TX1122	Robert Lee City, Texas	0.0000566670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1123	Roberts County, Texas	0.0003646670%
TX1124	Robertson County, Texas	0.0297613330%
TX1125	Robinson City, Texas	0.0120013330%
TX1126	Robstown City, Texas	0.0267693330%
TX1127	Roby City, Texas	0.0002853330%
TX1128	Rochester Town, Texas	0.0004493330%
TX1129	Rockdale City, Texas	0.0139820000%
TX1130	Rockport City, Texas	0.0361686670%
TX1131	Rocksprings Town, Texas	0.0000166670%
TX1132	Rockwall City, Texas	0.0762053330%
TX1133	Rockwall County, Texas	0.1125466670%
TX1134	Rocky Mound Town, Texas	0.0001866670%
TX1135	Rogers Town, Texas	0.0025453330%
TX1136	Rollingwood City, Texas	0.0031693330%
TX1137	Roma City, Texas	0.0110860000%
TX1138	Roman Forest Town, Texas	0.0057400000%
TX1139	Ropesville City, Texas	0.0014146670%
TX1140	Roscoe City, Texas	0.0005186670%
TX1141	Rose City, Texas	0.0026746670%
TX1142	Rose Hill Acres City, Texas	0.0015406670%
TX1143	Rosebud City, Texas	0.0009926670%
TX1144	Rosenberg City, Texas	0.0843953330%
TX1145	Ross City, Texas	0.0000980000%
TX1146	Rosser Village, Texas	0.0003660000%
TX1147	Rotan City, Texas	0.0009953330%
TX1148	Round Mountain Town, Texas	0.0003026670%
TX1149	Round Rock City, Texas	0.3173280000%
TX1150	Round Top Town, Texas	0.0000933330%
TX1151	Rowlett City, Texas	0.0666420000%
TX1152	Roxton City, Texas	0.0000313330%
TX1153	Royse City, Texas	0.0156626670%
TX1154	Rule Town, Texas	0.0005333330%
TX1155	Runaway Bay City, Texas	0.0046206670%
TX1156	Runge Town, Texas	0.0001700000%
TX1157	Runnels County, Texas	0.0225540000%
TX1158	Rusk City, Texas	0.0119940000%
TX1159	Rusk County, Texas	0.1009266670%
TX1160	Sabinal City, Texas	0.0012073330%
TX1161	Sabine County, Texas	0.0309860000%
TX1162	Sachse City, Texas	0.0156000000%
TX1163	Sadler City, Texas	0.0006166670%
TX1164	Saginaw City, Texas	0.0213153330%
TX1165	Salado Village, Texas	0.0021400000%
TX1166	San Angelo City, Texas	0.3576726670%
TX1167	San Antonio City, Texas	2.9102773330%
TX1168	San Augustine City, Texas	0.0167880000%
TX1169	San Augustine County, Texas	0.0252360000%
TX1170	San Benito City, Texas	0.0266766670%
TX1171	San Diego City, Texas	0.0078473330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1172	San Elizario City, Texas	0.0052206670%
TX1173	San Felipe Town, Texas	0.0009986670%
TX1174	San Jacinto County, Texas	0.1315986670%
TX1175	San Juan City, Texas	0.0192300000%
TX1176	San Leanna Village, Texas	0.0000240000%
TX1177	San Marcos City, Texas	0.2171253330%
TX1178	San Patricio City, Texas	0.0028086670%
TX1179	San Patricio County, Texas	0.1812773330%
TX1180	San Perlita City, Texas	0.0014793330%
TX1181	San Saba City, Texas	0.0067046670%
TX1182	San Saba County, Texas	0.0117080000%
TX1183	Sanctuary Town, Texas	0.0000113330%
TX1184	Sandy Oaks City, Texas	0.0065753330%
TX1185	Sandy Point City, Texas	0.0010913330%
TX1186	Sanford Town, Texas	0.0002053330%
TX1187	Sanger City, Texas	0.0148246670%
TX1188	Sansom Park City, Texas	0.0001486670%
TX1189	Santa Anna Town, Texas	0.0002193330%
TX1190	Santa Clara City, Texas	0.0000580000%
TX1191	Santa Fe City, Texas	0.0221813330%
TX1192	Santa Rosa Town, Texas	0.0014253330%
TX1193	Savoy City, Texas	0.0015660000%
TX1194	Schertz City, Texas	0.0400733330%
TX1195	Schleicher County, Texas	0.0037966670%
TX1196	Schulenburg City, Texas	0.0017066670%
TX1197	Scotland City, Texas	0.0000986670%
TX1198	Scottsville City, Texas	0.0004720000%
TX1199	Scurry County, Texas	0.0487440000%
TX1200	Scurry Town, Texas	0.0007400000%
TX1201	Seabrook City, Texas	0.0201800000%
TX1202	Seadrift City, Texas	0.0006606670%
TX1203	Seagoville City, Texas	0.0114040000%
TX1204	Seagraves City, Texas	0.0050206670%
TX1205	Sealy City, Texas	0.0137580000%
TX1206	Seguin City, Texas	0.2510253330%
TX1207	Selma City, Texas	0.0149526670%
TX1208	Seminole City, Texas	0.0107280000%
TX1209	Seven Oaks City, Texas	0.0026113330%
TX1210	Seven Points City, Texas	0.0049680000%
TX1211	Seymour City, Texas	0.0094786670%
TX1212	Shackelford County, Texas	0.0008586670%
TX1213	Shady Shores Town, Texas	0.0003960000%
TX1214	Shallowater City, Texas	0.0012713330%
TX1215	Shamrock City, Texas	0.0028853330%
TX1216	Shavano Park City, Texas	0.0021186670%
TX1217	Shelby County, Texas	0.0732833330%
TX1218	Shenandoah City, Texas	0.0314146670%
TX1219	Shepherd City, Texas	0.0000980000%
TX1220	Sherman City, Texas	0.2203900000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1221	Sherman County, Texas	0.0052866670%
TX1222	Shiner City, Texas	0.0026946670%
TX1223	Shoreacres City, Texas	0.0006386670%
TX1224	Silsbee City, Texas	0.0442946670%
TX1225	Silverton City, Texas	0.0000093330%
TX1226	Simonton City, Texas	0.0012706670%
TX1227	Sinton City, Texas	0.0157720000%
TX1228	Skellytown, Texas	0.0002666670%
TX1229	Slaton City, Texas	0.0001026670%
TX1230	Smiley City, Texas	0.0004366670%
TX1231	Smith County, Texas	0.5059740000%
TX1232	Smithville City, Texas	0.0113393330%
TX1233	Smyer Town, Texas	0.0002000000%
TX1234	Snook City, Texas	0.0009480000%
TX1235	Snyder City, Texas	0.0060120000%
TX1236	Socorro City, Texas	0.0074166670%
TX1237	Somerset City, Texas	0.0010180000%
TX1238	Somervell County, Texas	0.0380506670%
TX1239	Somerville City, Texas	0.0025373330%
TX1240	Sonora City, Texas	0.0048913330%
TX1241	Sour Lake City, Texas	0.0119040000%
TX1242	South Houston City, Texas	0.0170800000%
TX1243	South Mountain Town, Texas	0.0001026670%
TX1244	South Padre Island Town, Texas	0.0204193330%
TX1245	Southlake City, Texas	0.0472306670%
TX1246	Southmayd City, Texas	0.0047306670%
TX1247	Southside Place City, Texas	0.0005900000%
TX1248	Spearman City, Texas	0.0093333330%
TX1249	Splendora City, Texas	0.0051706670%
TX1250	Spofford City, Texas	0.0000046670%
TX1251	Spring Valley Village City, Texas	0.0109360000%
TX1252	Springlake Town, Texas	0.0000020000%
TX1253	Springtown City, Texas	0.0094960000%
TX1254	Spur City, Texas	0.0002846670%
TX1255	St. Hedwig Town, Texas	0.0000740000%
TX1256	St. Jo City, Texas	0.0049066670%
TX1257	St. Paul Town, Texas	0.0000140000%
TX1258	Stafford City, Texas	0.0500966670%
TX1259	Stagecoach Town, Texas	0.0020240000%
TX1260	Stamford City, Texas	0.0002653330%
TX1261	Stanton City, Texas	0.0025586670%
TX1262	Staples City, Texas	0.0000126670%
TX1263	Star Harbor City, Texas	0.0001006670%
TX1264	Starr County, Texas	0.0665973330%
TX1265	Stephens County, Texas	0.0234960000%
TX1266	Stephenville City, Texas	0.0556480000%
TX1267	Sterling City, Texas	0.0000413330%
TX1268	Sterling County, Texas	0.0006260000%
TX1269	Stinnett City, Texas	0.0027313330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1270	Stockdale City, Texas	0.0004940000%
TX1271	Stonewall County, Texas	0.0012146670%
TX1272	Stratford City, Texas	0.0055853330%
TX1273	Strawn City, Texas	0.0006580000%
TX1274	Streetman Town, Texas	0.0000033330%
TX1275	Sudan City, Texas	0.0000213330%
TX1276	Sugar Land City, Texas	0.2143740000%
TX1277	Sullivan City, Texas	0.0040806670%
TX1278	Sulphur Springs City, Texas	0.0830686670%
TX1279	Sun Valley City, Texas	0.0000026670%
TX1280	Sundown City, Texas	0.0017280000%
TX1281	Sunnyvale Town, Texas	0.0021653330%
TX1282	Sunray City, Texas	0.0017140000%
TX1283	Sunrise Beach Village City, Texas	0.0013886670%
TX1284	Sunset Valley City, Texas	0.0062833330%
TX1285	Surfside Beach City, Texas	0.0043533330%
TX1286	Sutton County, Texas	0.0043606670%
TX1287	Sweeny City, Texas	0.0030020000%
TX1288	Sweetwater City, Texas	0.0454986670%
TX1289	Swisher County, Texas	0.0048340000%
TX1290	Taft City, Texas	0.0039073330%
TX1291	Tahoka City, Texas	0.0002866670%
TX1292	Talco City, Texas	0.0002480000%
TX1293	Talty Town, Texas	0.0060826670%
TX1294	Tarrant County, Texas	4.1141060000%
TX1295	Tatum City, Texas	0.0006480000%
TX1296	Taylor City, Texas	0.0386300000%
TX1297	Taylor County, Texas	0.2340520000%
TX1298	Taylor Lake Village City, Texas	0.0002746670%
TX1299	Taylor Landing City, Texas	0.0001020000%
TX1300	Teague City, Texas	0.0011426670%
TX1301	Tehuacana Town, Texas	0.0000080000%
TX1302	Temple City, Texas	0.1871646670%
TX1303	Tenaha Town, Texas	0.0031453330%
TX1304	Terrell City, Texas	0.0991373330%
TX1305	Terrell County, Texas	0.0038246670%
TX1306	Terrell Hills City, Texas	0.0065720000%
TX1307	Terry County, Texas	0.0169486670%
TX1308	Texarkana City, Texas	0.1280626670%
TX1309	Texas City, Texas	0.1991346670%
TX1310	Texhoma City, Texas	0.0001040000%
TX1311	Texline Town, Texas	0.0005766670%
TX1312	The Colony City, Texas	0.0761980000%
TX1313	The Hills Village, Texas	0.0006693330%
TX1314	Thompsons Town, Texas	0.0012646670%
TX1315	Thorndale City, Texas	0.0010633330%
TX1316	Thornton Town, Texas	0.0001800000%
TX1317	Thorntonville Town, Texas	0.0000580000%
TX1318	Thrall City, Texas	0.0005500000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1319	Three Rivers City, Texas	0.0031126670%
TX1320	Throckmorton County, Texas	0.0037966670%
TX1321	Throckmorton Town, Texas	0.0000193330%
TX1322	Tiki Island Village, Texas	0.0014520000%
TX1323	Timbercreek Canyon Village, Texas	0.0002460000%
TX1324	Timpson City, Texas	0.0084280000%
TX1325	Tioga Town, Texas	0.0015933330%
TX1326	Tira Town, Texas	0.0001233330%
TX1327	Titus County, Texas	0.0470740000%
TX1328	Toco City, Texas	0.0000026670%
TX1329	Todd Mission City, Texas	0.0011200000%
TX1330	Tolar City, Texas	0.0015793330%
TX1331	Tom Bean City, Texas	0.0015286670%
TX1332	Tom Green County, Texas	0.1882846670%
TX1333	Tomball City, Texas	0.0230800000%
TX1334	Tool City, Texas	0.0098580000%
TX1335	Toyah Town, Texas	0.0000266670%
TX1336	Travis County, Texas	3.1356486670%
TX1337	Trent Town, Texas	0.0000420000%
TX1338	Trenton City, Texas	0.0020593330%
TX1339	Trinidad City, Texas	0.0039060000%
TX1340	Trinity City, Texas	0.0157680000%
TX1341	Trinity County, Texas	0.0705106670%
TX1342	Trophy Club Town, Texas	0.0195800000%
TX1343	Troup City, Texas	0.0052786670%
TX1344	Troy City, Texas	0.0035466670%
TX1345	Tulia City, Texas	0.0059406670%
TX1346	Turkey City, Texas	0.0004913330%
TX1347	Tuscola City, Texas	0.0000920000%
TX1348	Tye City, Texas	0.0011773330%
TX1349	Tyler City, Texas	0.4825526670%
TX1350	Tyler County, Texas	0.0878286670%
TX1351	Uhland City, Texas	0.0010300000%
TX1352	Uncertain City, Texas	0.0001233330%
TX1353	Union Grove City, Texas	0.0006626670%
TX1354	Union Valley City, Texas	0.0004440000%
TX1355	Universal City, Texas	0.0189520000%
TX1356	University Park City, Texas	0.0338886670%
TX1357	Upshur County, Texas	0.0855333330%
TX1358	Upton County, Texas	0.0056660000%
TX1359	Uvalde City, Texas	0.0122926670%
TX1360	Uvalde County, Texas	0.0241626670%
TX1361	Val Verde County, Texas	0.0785433330%
TX1362	Valentine Town, Texas	0.0001380000%
TX1363	Valley Mills City, Texas	0.0014853330%
TX1364	Valley View City, Texas	0.0012160000%
TX1365	Van Alstyne City, Texas	0.0291660000%
TX1366	Van City, Texas	0.0041373330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1367	Van Horn Town, Texas	0.0001406670%
TX1368	Van Zandt County, Texas	0.1658313330%
TX1369	Vega City, Texas	0.0006493330%
TX1370	Venus Town, Texas	0.0065280000%
TX1371	Vernon City, Texas	0.0542246670%
TX1372	Victoria City, Texas	0.0563986670%
TX1373	Victoria County, Texas	0.3472573330%
TX1374	Vidor City, Texas	0.0637466670%
TX1375	Vinton Village, Texas	0.0004146670%
TX1376	Volente Village, Texas	0.0002220000%
TX1377	Von Ormy City, Texas	0.0003420000%
TX1378	Waco City, Texas	0.3413380000%
TX1379	Waelder City, Texas	0.0022846670%
TX1380	Wake Village City, Texas	0.0001160000%
TX1381	Walker County, Texas	0.1230826670%
TX1382	Waller City, Texas	0.0075300000%
TX1383	Waller County, Texas	0.0841373330%
TX1384	Wallis City, Texas	0.0017986670%
TX1385	Walnut Springs City, Texas	0.0001220000%
TX1386	Ward County, Texas	0.0452800000%
TX1387	Warren City, Texas	0.0000440000%
TX1388	Washington County, Texas	0.0558180000%
TX1389	Waskom City, Texas	0.0035640000%
TX1390	Watauga City, Texas	0.0221440000%
TX1391	Waxahachie City, Texas	0.1013960000%
TX1392	Weatherford City, Texas	0.1385813330%
TX1393	Webb County, Texas	0.3368693330%
TX1394	Webberville Village, Texas	0.0008533330%
TX1395	Webster City, Texas	0.0354680000%
TX1396	Weimar City, Texas	0.0038866670%
TX1397	Weinert City, Texas	0.0001560000%
TX1398	Weir City, Texas	0.0002953330%
TX1399	Wellington City, Texas	0.0060740000%
TX1400	Wellman City, Texas	0.0002553330%
TX1401	Wells Town, Texas	0.0009046670%
TX1402	Weslaco City, Texas	0.0492993330%
TX1403	West City, Texas	0.0023480000%
TX1404	West Columbia City, Texas	0.0119720000%
TX1405	West Lake Hills City, Texas	0.0113706670%
TX1406	West Orange City, Texas	0.0283013330%
TX1407	West Tawakoni City, Texas	0.0046633330%
TX1408	West University Place City, Texas	0.0231146670%
TX1409	Westbrook City, Texas	0.0000286670%
TX1410	Westlake Town, Texas	0.0276933330%
TX1411	Weston City, Texas	0.0001773330%
TX1412	Weston Lakes City, Texas	0.0001260000%
TX1413	Westover Hills Town, Texas	0.0030060000%
TX1414	Westworth Village City, Texas	0.0052280000%
TX1415	Wharton City, Texas	0.0211333330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1416	Wharton County, Texas	0.0485913330%
TX1417	Wheeler City, Texas	0.0002980000%
TX1418	Wheeler County, Texas	0.0175153330%
TX1419	White Deer Town, Texas	0.0008486670%
TX1420	White Oak City, Texas	0.0102033330%
TX1421	White Settlement City, Texas	0.0155360000%
TX1422	Whiteface Town, Texas	0.0001033330%
TX1423	Whitehouse City, Texas	0.0193446670%
TX1424	Whitesboro City, Texas	0.0126213330%
TX1425	Whitewright Town, Texas	0.0047320000%
TX1426	Whitney Town, Texas	0.0000486670%
TX1427	Wichita County, Texas	0.3682473330%
TX1428	Wichita Falls City, Texas	0.5550493330%
TX1429	Wickett Town, Texas	0.0000580000%
TX1430	Wilbarger County, Texas	0.0367493330%
TX1431	Willacy County, Texas	0.0163873330%
TX1432	Williamson County, Texas	0.7973246670%
TX1433	Willis City, Texas	0.0162560000%
TX1434	Willow Park City, Texas	0.0178246670%
TX1435	Wills Point City, Texas	0.0291766670%
TX1436	Wilmer City, Texas	0.0002840000%
TX1437	Wilson City, Texas	0.0000080000%
TX1438	Wilson County, Texas	0.0806893330%
TX1439	Wimberley City, Texas	0.0004826670%
TX1440	Windcrest City, Texas	0.0086053330%
TX1441	Windom Town, Texas	0.0007246670%
TX1442	Windthorst Town, Texas	0.0022566670%
TX1443	Winfield City, Texas	0.0001933330%
TX1444	Wink City, Texas	0.0000800000%
TX1445	Winkler County, Texas	0.0407753330%
TX1446	Winnsboro City, Texas	0.0191940000%
TX1447	Winona Town, Texas	0.0002126670%
TX1448	Winters City, Texas	0.0041526670%
TX1449	Wise County, Texas	0.1927160000%
TX1450	Wixon Valley City, Texas	0.0002940000%
TX1451	Wolfe City, Texas	0.0036440000%
TX1452	Wolfforth City, Texas	0.0026813330%
TX1453	Wood County, Texas	0.1780320000%
TX1454	Woodbranch City, Texas	0.0064113330%
TX1455	Woodcreek City, Texas	0.0002386670%
TX1456	Woodloch Town, Texas	0.0006746670%
TX1457	Woodsboro Town, Texas	0.0007533330%
TX1458	Woodson Town, Texas	0.0000813330%
TX1459	Woodville Town, Texas	0.0135600000%
TX1460	Woodway City, Texas	0.0171420000%
TX1461	Wortham Town, Texas	0.0002506670%
TX1462	Wylie City, Texas	0.0764720000%
TX1463	Yantis Town, Texas	0.0013813330%
TX1464	Yoakum City, Texas	0.0134733330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1465	Yoakum County, Texas	0.0232826670%
TX1466	Yorktown City, Texas	0.0036313330%
TX1467	Young County, Texas	0.0294133330%
TX1468	Zapata County, Texas	0.0376533330%
TX1469	Zavala County, Texas	0.0254313330%
TX1470	Zavalla City, Texas	0.0007253330%

State ID	Qualifying Subdivision	Consolidated State Allocation
UT3	Beaver County, Utah	0.2280000000%
UT6	Box Elder County, Utah	1.4640000000%
UT8	Cache County, Utah	2.6490000000%
UT9	Carbon County, Utah	2.7180000000%
UT16	Daggett County, Utah	0.0280000000%
UT17	Davis County, Utah	8.6950000000%
UT19	Duchesne County, Utah	0.6410000000%
UT21	Emery County, Utah	0.9380000000%
UT23	Garfield County, Utah	0.1470000000%
UT24	Grand County, Utah	0.3040000000%
UT31	Iron County, Utah	1.6220000000%
UT32	Juab County, Utah	0.3520000000%
UT33	Kane County, Utah	0.4390000000%
UT41	Millard County, Utah	0.3550000000%
UT42	Morgan County, Utah	0.2160000000%
UT50	Piute County, Utah	0.0220000000%
UT54	Rich County, Utah	0.0610000000%
UT58	Salt Lake County, Utah	42.2710000000%
UT59	San Juan County, Utah	0.2490000000%
UT61	Sanpete County, Utah	1.0130000000%
UT64	Sevier County, Utah	0.6610000000%
UT72	Summit County, Utah	0.9440000000%
UT76	Tooele County, Utah	2.2330000000%
UT77	Uintah County, Utah	0.8660000000%
UT78	Utah County, Utah	15.4260000000%
UT81	Wasatch County, Utah	0.6010000000%
UT83	Washington County, Utah	4.8650000000%
UT84	Wayne County, Utah	0.1090000000%
UT85	Weber County, Utah	9.8830000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT1	Addison County, Vermont	0.7355948910%
VT2	Albany Town, Vermont	0.0345075405%
VT3	Albany Village, Vermont	0.0160668267%
VT4	Alburgh Town, Vermont	0.0606145322%
VT5	Alburgh Village, Vermont	0.0525580527%
VT6	Andover Town, Vermont	0.0012398034%
VT7	Arlington Town, Vermont	0.0885559202%
VT8	Athens Town, Vermont	0.0006484140%
VT9	Bakersfield Town, Vermont	0.0549127180%
VT10	Baltimore Town, Vermont	0.0024796068%
VT11	Barnard Town, Vermont	0.0830636232%
VT12	Barnet Town, Vermont	0.0471074029%
VT13	Barre City, Vermont	2.1256028600%
VT14	Barre Town, Vermont	1.3320832015%
VT15	Barton Town, Vermont	0.3252065150%
VT16	Barton Village, Vermont	0.0324162133%
VT17	Bellows Falls Village, Vermont	0.9422159742%
VT18	Belvidere Town, Vermont	0.0049931720%
VT19	Bennington County, Vermont	0.9901518348%
VT20	Bennington Town, Vermont	2.4851413569%
VT21	Benson Town, Vermont	0.0225970986%
VT22	Berlin Town, Vermont	0.5526473249%
VT23	Bethel Town, Vermont	0.0892626402%
VT24	Bloomfield Town, Vermont	0.0119245379%
VT25	Bolton Town, Vermont	0.1874031696%
VT26	Bradford Town, Vermont	0.7724442824%
VT27	Braintree Town, Vermont	0.0619908100%
VT28	Brandon Town, Vermont	0.5039156835%
VT29	Brattleboro Town, Vermont	2.8616648398%
VT30	Bridgewater Town, Vermont	0.2045592293%
VT31	Bridport Town, Vermont	0.0525426753%
VT32	Brighton Town, Vermont	0.1371312246%
VT33	Bristol Town, Vermont	0.4536168281%
VT34	Brookfield Town, Vermont	0.0181094589%
VT35	Brookline Town, Vermont	0.0142663887%
VT36	Brownington Town, Vermont	0.0209132726%
VT37	Brunswick Town, Vermont	0.0071549790%
VT38	Burke Town, Vermont	0.0035553845%
VT39	Burlington City, Vermont	10.6984139884%
VT40	Cabot Town, Vermont	0.0223388863%
VT41	Calais Town, Vermont	0.0461347819%
VT42	Caledonia County, Vermont	0.8505961058%
VT43	Cambridge Town, Vermont	0.0682410850%
VT44	Cambridge Village, Vermont	0.0012481328%
VT45	Canaan Town, Vermont	0.1359388349%
VT46	Castleton Town, Vermont	0.4255786906%
VT47	Cavendish Town, Vermont	0.0216955982%
VT48	Charleston Town, Vermont	0.0460098405%
VT49	Charlotte Town, Vermont	0.2587947007%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT50	Chelsea Town, Vermont	0.0097511978%
VT51	Chester Town, Vermont	0.3719262791%
VT52	Chittenden County, Vermont	0.6721150355%
VT53	Chittenden Town, Vermont	0.0203372606%
VT54	Clarendon Town, Vermont	0.0632716198%
VT55	Colchester Town, Vermont	2.5489633597%
VT56	Concord Town, Vermont	0.0166940968%
VT57	Corinth Town, Vermont	0.0626872784%
VT58	Cornwall Town, Vermont	0.0577966224%
VT59	Coventry Town, Vermont	0.0376445314%
VT60	Craftsbury Town, Vermont	0.0501924950%
VT61	Danby Town, Vermont	0.0082858591%
VT62	Danville Town, Vermont	0.0302198071%
VT63	Derby Center Village, Vermont	0.0488117321%
VT64	Derby Line Village, Vermont	0.0549242511%
VT65	Derby Town, Vermont	0.5855806035%
VT66	Dorset Town, Vermont	0.0697288490%
VT67	Dover Town, Vermont	0.6426262960%
VT68	Dummerston Town, Vermont	0.0577133282%
VT69	East Haven Town, Vermont	0.0107321482%
VT70	East Montpelier Town, Vermont	0.1121807421%
VT71	Eden Town, Vermont	0.0299596726%
VT72	Elmore Town, Vermont	0.0195568572%
VT73	Enosburg Falls Village, Vermont	0.0515847910%
VT74	Enosburgh Town, Vermont	0.0873609676%
VT75	Essex County, Vermont	0.3791972294%
VT76	Essex Junction Village, Vermont	0.1451319610%
VT77	Essex Town, Vermont	1.8402135758%
VT78	Fair Haven Town, Vermont	0.3879168595%
VT79	Fairfax Town, Vermont	0.1256334098%
VT80	Fairfield Town, Vermont	0.0981770508%
VT81	Fairlee Town, Vermont	0.0592042959%
VT82	Fayston Town, Vermont	0.0053417265%
VT83	Ferrisburgh Town, Vermont	0.1296046250%
VT84	Fletcher Town, Vermont	0.0216321664%
VT85	Franklin County, Vermont	1.4110871894%
VT86	Franklin Town, Vermont	0.0432643327%
VT87	Georgia Town, Vermont	0.2512668196%
VT88	Goshen Town, Vermont	0.0148872515%
VT89	Grafton Town, Vermont	0.0220479971%
VT90	Grand Isle County, Vermont	0.4312958821%
VT91	Grand Isle Town, Vermont	0.1561992085%
VT92	Granville Town, Vermont	0.0131355086%
VT93	Greensboro Town, Vermont	0.2645567430%
VT94	Groton Town, Vermont	0.0719938128%
VT95	Guildhall Town, Vermont	0.0155017070%
VT96	Guilford Town, Vermont	0.0032420698%
VT97	Halifax Town, Vermont	0.0155632167%
VT98	Hancock Town, Vermont	0.0534179060%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT99	Hardwick Town, Vermont	0.7839350493%
VT100	Hartford Town, Vermont	3.2053851113%
VT101	Hartland Town, Vermont	0.0483504099%
VT102	Highgate Town, Vermont	0.2362905072%
VT103	Hinesburg Town, Vermont	0.2869757200%
VT104	Holland Town, Vermont	0.0010456636%
VT105	Hubbardton Town, Vermont	0.0632716198%
VT106	Huntington Town, Vermont	0.0422712086%
VT107	Hyde Park Town, Vermont	0.0374497510%
VT108	Hyde Park Village, Vermont	0.0025481644%
VT109	Ira Town, Vermont	0.0067788733%
VT110	Irasburg Town, Vermont	0.0909740173%
VT111	Isle La Motte Town, Vermont	0.0520666164%
VT112	Jacksonville Village, Vermont	0.0061977355%
VT113	Jamaica Town, Vermont	0.0259384809%
VT114	Jay Town, Vermont	0.0031369909%
VT115	Jeffersonville Village, Vermont	0.0039462269%
VT116	Jericho Town, Vermont	0.0422712086%
VT117	Johnson Town, Vermont	0.2812873611%
VT118	Johnson Village, Vermont	0.1616364031%
VT119	Killington Town, Vermont	0.2124125988%
VT120	Kirby Town, Vermont	0.0008886859%
VT121	Lamoille County, Vermont	1.1151624597%
VT122	Landgrove Town, Vermont	0.0125511672%
VT123	Leicester Town, Vermont	0.0481639588%
VT124	Lincoln Town, Vermont	0.0718080025%
VT125	Londonderry Town, Vermont	0.0382589870%
VT126	Lowell Town, Vermont	0.0481011678%
VT127	Ludlow Town, Vermont	0.7209171567%
VT128	Ludlow Village, Vermont	0.2940730337%
VT129	Lunenburg Town, Vermont	0.0965880521%
VT130	Lyndon Town, Vermont	0.4559618826%
VT131	Lyndonville Village, Vermont	0.0079994549%
VT132	Maidstone Town, Vermont	0.0214642963%
VT133	Manchester Town, Vermont	0.6972897719%
VT134	Manchester Village, Vermont	0.0076701221%
VT135	Marlboro Town, Vermont	0.0129695608%
VT136	Marshfield Town, Vermont	0.0174828296%
VT137	Marshfield Village, Vermont	0.0171445266%
VT138	Mendon Town, Vermont	0.0971672678%
VT139	Middlebury Town, Vermont	1.3520936922%
VT140	Middlesex Town, Vermont	0.0165114901%
VT141	Middletown Springs Town, Vermont	0.0587525845%
VT142	Milton Town, Vermont	0.9332579943%
VT143	Monkton Town, Vermont	0.0210170701%
VT144	Montgomery Town, Vermont	0.0432643327%
VT145	Montpelier City, Vermont	2.1358012840%
VT146	Moretown, Vermont	0.0140831413%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT147	Morgan Town, Vermont	0.0271878951%
VT148	Morristown, Vermont	0.5887893556%
VT149	Morrisville Village, Vermont	0.2266450291%
VT150	Mount Holly Town, Vermont	0.0918947396%
VT151	Mount Tabor Town, Vermont	0.0241034437%
VT152	New Haven Town, Vermont	0.1313563678%
VT153	Newbury Town, Vermont	0.0536325490%
VT154	Newbury Village, Vermont	0.0020894051%
VT155	Newfane Town, Vermont	0.0603069840%
VT156	Newfane Village, Vermont	0.0032420698%
VT157	Newport City, Vermont	1.2443589426%
VT158	Newport Town, Vermont	0.5761696308%
VT159	North Bennington Village, Vermont	0.1073823506%
VT160	North Hero Town, Vermont	0.0916986776%
VT161	North Troy Village, Vermont	0.0345075405%
VT162	Northfield Town, Vermont	0.5366215046%
VT163	Norton Town, Vermont	0.0131169276%
VT164	Norwich Town, Vermont	0.4866039276%
VT165	Old Bennington Village, Vermont	0.0014256137%
VT166	Orange County, Vermont	0.5836866196%
VT167	Orange Town, Vermont	0.0271641883%
VT168	Orleans County, Vermont	0.4475510820%
VT169	Orleans Village, Vermont	0.1150249216%
VT170	Orwell Town, Vermont	0.0350284502%
VT171	Panton Town, Vermont	0.0402823974%
VT172	Pawlet Town, Vermont	0.0497138732%
VT173	Peacham Town, Vermont	0.0373299353%
VT174	Perkinsville Village, Vermont	0.0463135443%
VT175	Peru Town, Vermont	0.0034861862%
VT176	Pittsfield Town, Vermont	0.0090387113%
VT177	Pittsford Town, Vermont	0.2538406130%
VT178	Plainfield Town, Vermont	0.0684736682%
VT179	Plymouth Town, Vermont	0.0681866233%
VT180	Pomfret Town, Vermont	0.0750052216%
VT181	Poultney Town, Vermont	0.1634522185%
VT182	Poultney Village, Vermont	0.3218151562%
VT183	Pownal Town, Vermont	0.1568905511%
VT184	Proctor Town, Vermont	0.1581796903%
VT185	Putney Town, Vermont	0.1348803568%
VT186	Randolph Town, Vermont	1.0482675385%
VT187	Reading Town, Vermont	0.0006195813%
VT188	Readsboro Town, Vermont	0.0495075597%
VT189	Richford Town, Vermont	0.3377954850%
VT190	Richmond Town, Vermont	0.3085809759%
VT191	Ripton Town, Vermont	0.0402823974%
VT192	Rochester Town, Vermont	0.1090982129%
VT193	Rockingham Town, Vermont	0.4824558723%
VT194	Roxbury Town, Vermont	0.0082557450%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT195	Royalton Town, Vermont	0.1989804344%
VT196	Rutland City, Vermont	6.2978142029%
VT197	Rutland County, Vermont	1.5426293676%
VT198	Rutland Town, Vermont	0.3201255637%
VT199	Ryegate Town, Vermont	0.0515514733%
VT200	Salisbury Town, Vermont	0.0271468887%
VT201	Sandgate Town, Vermont	0.0257994435%
VT202	Saxtons River Village, Vermont	0.0156375408%
VT203	Searsburg Town, Vermont	0.0118540581%
VT204	Shaftsbury Town, Vermont	0.0697288490%
VT205	Sharon Town, Vermont	0.1462910330%
VT206	Sheffield Town, Vermont	0.0302198071%
VT207	Shelburne Town, Vermont	0.7838991687%
VT208	Sheldon Town, Vermont	0.1372817951%
VT209	Shoreham Town, Vermont	0.0359043216%
VT210	Shrewsbury Town, Vermont	0.0323893028%
VT211	South Burlington City, Vermont	4.2811506559%
VT212	South Hero Town, Vermont	0.0559519744%
VT213	Springfield Town, Vermont	2.0400160607%
VT214	St Albans Town, Vermont	0.7155280165%
VT215	St George Town, Vermont	0.0117419312%
VT216	St Johnsbury Town, Vermont	1.7171904807%
VT217	St. Albans City, Vermont	3.9012902759%
VT218	Stamford Town, Vermont	0.0495075597%
VT219	Stannard Town, Vermont	0.0017773719%
VT220	Starksboro Town, Vermont	0.0070056900%
VT221	Stockbridge Town, Vermont	0.0737654182%
VT222	Stowe Town, Vermont	0.9395659345%
VT223	Strafford Town, Vermont	0.0821896740%
VT224	Stratton Town, Vermont	0.1614672516%
VT225	Sudbury Town, Vermont	0.0135583873%
VT226	Sunderland Town, Vermont	0.0341673154%
VT227	Sutton Town, Vermont	0.0364412494%
VT228	Swanton Town, Vermont	0.1297936389%
VT229	Swanton Village, Vermont	0.5715903674%
VT230	Thetford Town, Vermont	0.2618926073%
VT231	Tinmouth Town, Vermont	0.0120520422%
VT232	Topsham Town, Vermont	0.0592042959%
VT233	Townshend Town, Vermont	0.0596585701%
VT234	Troy Town, Vermont	0.0365988678%
VT235	Underhill Town, Vermont	0.0897092257%
VT236	Vergennes City, Vermont	1.4746932678%
VT237	Vernon Town, Vermont	0.3196917927%
VT238	Vershire Town, Vermont	0.0006964684%
VT239	Victory Town, Vermont	0.0095397585%
VT240	Waitsfield Town, Vermont	0.0485631307%
VT241	Walden Town, Vermont	0.0071107690%
VT242	Wallingford Town, Vermont	0.0165710775%
VT243	Waltham Town, Vermont	0.0201411987%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT244	Warren Town, Vermont	0.0480774609%
VT245	Washington County, Vermont	0.9081281087%
VT246	Washington Town, Vermont	0.0529360806%
VT247	Waterbury Town, Vermont	0.4584350821%
VT248	Waterford Town, Vermont	0.0577729156%
VT249	Waterville Town, Vermont	0.0004158307%
VT250	Weathersfield Town, Vermont	0.1692264346%
VT251	Wells River Village, Vermont	0.1107474397%
VT252	Wells Town, Vermont	0.0444407043%
VT253	West Burke Village, Vermont	0.0017773719%
VT254	West Fairlee Town, Vermont	0.0090547294%
VT255	West Haven Town, Vermont	0.0090387113%
VT256	West Rutland Town, Vermont	0.1212713522%
VT257	West Windsor Town, Vermont	0.0210760168%
VT258	Westfield Town, Vermont	0.0250965679%
VT259	Westford Town, Vermont	0.0657557117%
VT260	Westminster Town, Vermont	0.0752217867%
VT261	Westminster Village, Vermont	0.0079763888%
VT262	Westmore Town, Vermont	0.0365988678%
VT263	Weston Town, Vermont	0.0291344185%
VT264	Weybridge Town, Vermont	0.0245199151%
VT265	Wheelock Town, Vermont	0.0222203522%
VT266	Whiting Town, Vermont	0.0026269736%
VT267	Whitingham Town, Vermont	0.0901365894%
VT268	Williston Town, Vermont	1.4048183334%
VT269	Wilmington Town, Vermont	0.4344700351%
VT270	Windham County, Vermont	0.7048785219%
VT271	Windham Town, Vermont	0.0155632167%
VT272	Windsor County, Vermont	0.7909631647%
VT273	Windsor Town, Vermont	1.5118803214%
VT274	Winhall Town, Vermont	0.3772340472%
VT275	Winooski City, Vermont	1.3620774732%
VT276	Wolcott Town, Vermont	0.0337047118%
VT277	Woodbury Town, Vermont	0.0267099141%
VT278	Woodford Town, Vermont	0.0383512514%
VT279	Woodstock Town, Vermont	0.5151181240%
VT280	Woodstock Village, Vermont	0.3241960913%
VT281	Worcester Town, Vermont	0.0233102258%

State ID	Qualifying Subdivision	Consolidated State Allocation
VA1	Accomack County, Virginia	0.3480034800%
VA2	Albemarle County, Virginia	0.8630086301%
VA3	Alexandria City, Virginia	1.1620116201%
VA4	Alleghany County, Virginia	0.2130021300%
VA5	Amelia County, Virginia	0.1000010000%
VA6	Amherst County, Virginia	0.2990029900%
VA7	Appomattox County, Virginia	0.1330013300%
VA8	Arlington County, Virginia	1.3780137801%
VA9	Augusta County, Virginia	0.8350083501%
VA10	Bath County, Virginia	0.0370003700%
VA11	Bedford County, Virginia	0.7770077701%
VA12	Bland County, Virginia	0.1470014700%
VA13	Botetourt County, Virginia	0.3620036200%
VA14	Bristol City, Virginia	0.4340043400%
VA15	Brunswick County, Virginia	0.1070010700%
VA16	Buchanan County, Virginia	0.9290092901%
VA17	Buckingham County, Virginia	0.1270012700%
VA18	Buena Vista City, Virginia	0.0780007800%
VA19	Campbell County, Virginia	0.4560045600%
VA20	Caroline County, Virginia	0.3180031800%
VA21	Carroll County, Virginia	0.4400044000%
VA22	Charles City County, Virginia	0.0730007300%
VA23	Charlotte County, Virginia	0.1380013800%
VA24	Charlottesville City, Virginia	0.4630046300%
VA25	Chesapeake City, Virginia	2.9120291203%
VA26	Chesterfield County, Virginia	4.0880408804%
VA27	Clarke County, Virginia	0.1250012500%
VA28	Colonial Heights City, Virginia	0.2830028300%
VA29	Covington City, Virginia	0.1000010000%
VA30	Craig County, Virginia	0.0700007000%
VA31	Culpeper County, Virginia	0.7900079001%
VA32	Cumberland County, Virginia	0.1000010000%
VA33	Danville City, Virginia	0.6370063701%
VA34	Dickenson County, Virginia	0.9480094801%
VA35	Dinwiddie County, Virginia	0.1960019600%
VA36	Emporia City, Virginia	0.0500005000%
VA37	Essex County, Virginia	0.1010010100%
VA38	Fairfax City, Virginia	0.2690026900%
VA39	Fairfax County, Virginia	8.6720867209%
VA40	Falls Church City, Virginia	0.1020010200%
VA41	Fauquier County, Virginia	1.2100121001%
VA42	Floyd County, Virginia	0.1820018200%
VA43	Fluvanna County, Virginia	0.1940019400%
VA44	Franklin City, Virginia	0.0790007900%
VA45	Franklin County, Virginia	0.9540095401%
VA46	Frederick County, Virginia	1.2770127701%
VA47	Fredericksburg City, Virginia	0.5240052401%
VA48	Galax City, Virginia	0.1390013900%
VA49	Giles County, Virginia	0.4090040900%

State ID	Qualifying Subdivision	Consolidated State Allocation
VA50	Gloucester County, Virginia	0.4240042400%
VA51	Goochland County, Virginia	0.2250022500%
VA52	Grayson County, Virginia	0.2240022400%
VA53	Greene County, Virginia	0.1780017800%
VA54	Greensville County, Virginia	0.1240012400%
VA55	Halifax County, Virginia	0.3530035300%
VA56	Hampton City, Virginia	1.5380153802%
VA57	Hanover County, Virginia	1.0790107901%
VA58	Harrisonburg City, Virginia	0.5230052301%
VA59	Henrico County, Virginia	4.4730447304%
VA60	Henry County, Virginia	1.2200122001%
VA61	Highland County, Virginia	0.0230002300%
VA62	Hopewell City, Virginia	0.3440034400%
VA63	Isle of Wight County, Virginia	0.3560035600%
VA64	James City County, Virginia	0.6120061201%
VA65	King and Queen County, Virginia	0.0720007200%
VA66	King George County, Virginia	0.3060030600%
VA67	King William County, Virginia	0.1780017800%
VA68	Lancaster County, Virginia	0.1350013500%
VA69	Lee County, Virginia	0.5560055601%
VA70	Lexington City, Virginia	0.0930009300%
VA71	Loudoun County, Virginia	2.5670256703%
VA72	Louisa County, Virginia	0.4490044900%
VA73	Lunenburg County, Virginia	0.0880008800%
VA74	Lynchburg City, Virginia	0.8160081601%
VA75	Madison County, Virginia	0.1630016300%
VA76	Manassas City, Virginia	0.4520045200%
VA77	Manassas Park City, Virginia	0.0950009500%
VA78	Martinsville City, Virginia	0.4940049400%
VA79	Mathews County, Virginia	0.0880008800%
VA80	Mecklenburg County, Virginia	0.3440034400%
VA81	Middlesex County, Virginia	0.1080010800%
VA82	Montgomery County, Virginia	1.2050120501%
VA83	Nelson County, Virginia	0.1470014700%
VA84	New Kent County, Virginia	0.1560015600%
VA85	Newport News City, Virginia	2.0470204702%
VA86	Norfolk City, Virginia	3.3880338803%
VA87	Northampton County, Virginia	0.1220012200%
VA88	Northumberland County, Virginia	0.1290012900%
VA89	Norton City, Virginia	0.1100011000%
VA90	Nottoway County, Virginia	0.1330013300%
VA91	Orange County, Virginia	0.6380063801%
VA92	Page County, Virginia	0.4100041000%
VA93	Patrick County, Virginia	0.3290032900%
VA94	Petersburg City, Virginia	0.3950039500%
VA95	Pittsylvania County, Virginia	0.7500075001%
VA96	Poquoson City, Virginia	0.1860018600%
VA97	Portsmouth City, Virginia	1.9370193702%
VA98	Powhatan County, Virginia	0.2620026200%

State ID	Qualifying Subdivision	Consolidated State Allocation
VA99	Prince Edward County, Virginia	0.1900019000%
VA100	Prince George County, Virginia	0.3510035100%
VA101	Prince William County, Virginia	3.5560355604%
VA102	Pulaski County, Virginia	1.0610106101%
VA103	Radford City, Virginia	0.2470024700%
VA104	Rappahannock County, Virginia	0.0910009100%
VA105	Richmond City, Virginia	4.2250422504%
VA106	Richmond County, Virginia	0.0840008400%
VA107	Roanoke City, Virginia	1.8590185902%
VA108	Roanoke County, Virginia	1.4980149801%
VA109	Rockbridge County, Virginia	0.2350023500%
VA110	Rockingham County, Virginia	0.6140061401%
VA111	Russell County, Virginia	1.0640106401%
VA112	Salem City, Virginia	0.7860078601%
VA113	Scott County, Virginia	0.4210042100%
VA114	Shenandoah County, Virginia	0.6600066001%
VA115	Smyth County, Virginia	0.5920059201%
VA116	Southampton County, Virginia	0.1370013700%
VA117	Spotsylvania County, Virginia	1.4170141701%
VA118	Stafford County, Virginia	1.4430144301%
VA119	Staunton City, Virginia	0.4400044000%
VA120	Suffolk City, Virginia	0.7100071001%
VA121	Surry County, Virginia	0.0580005800%
VA122	Sussex County, Virginia	0.0810008100%
VA123	Tazewell County, Virginia	1.6060160602%
VA124	Virginia Beach City, Virginia	4.8590485905%
VA125	Warren County, Virginia	0.7660076601%
VA126	Washington County, Virginia	0.9960099601%
VA127	Waynesboro City, Virginia	0.3630036300%
VA128	Westmoreland County, Virginia	0.2230022300%
VA129	Williamsburg City, Virginia	0.0860008600%
VA130	Winchester City, Virginia	0.6490064901%
VA131	Wise County, Virginia	1.7560175602%
VA132	Wythe County, Virginia	0.6420064201%
VA133	York County, Virginia	0.5610056101%

State ID	Qualifying Subdivision	Consolidated State Allocation
WA1	Aberdeen City, Washington	0.2491525333%
WA2	Adams County, Washington	0.1638732475%
WA3	Anacortes City, Washington	0.1774962906%
WA4	Arlington City, Washington	0.2620524080%
WA5	Asotin County, Washington	0.4694498386%
WA6	Auburn City, Washington	0.3251297029%
WA7	Bainbridge Island City, Washington	0.1364686014%
WA8	Battle Ground City, Washington	0.1384729857%
WA9	Bellevue City, Washington	1.1300592573%
WA10	Bellingham City, Washington	0.8978614577%
WA11	Benton County, Washington	1.4848831892%
WA12	Bonney Lake City, Washington	0.1190773864%
WA13	Bothell City, Washington	0.4476161304%
WA14	Bremerton City, Washington	0.6193374389%
WA15	Burien City, Washington	0.0270962921%
WA16	Burlington City, Washington	0.1146861661%
WA17	Camas City, Washington	0.2691592724%
WA18	Centralia City, Washington	0.1909990353%
WA19	Chelan County, Washington	0.7434914485%
WA20	Cheney City, Washington	0.1238454349%
WA21	Clallam County, Washington	1.3076983401%
WA22	Clark County, Washington	4.5149775326%
WA23	Columbia County, Washington	0.0561699537%
WA24	Covington City, Washington	0.0118134406%
WA25	Cowlitz County, Washington	1.7226945990%
WA26	Des Moines City, Washington	0.1179764526%
WA27	Douglas County, Washington	0.3932175175%
WA28	East Wenatchee City, Washington	0.0799810865%
WA29	Edgewood City, Washington	0.0048016791%
WA30	Edmonds City, Washington	0.3058936009%
WA31	Ellensburg City, Washington	0.0955824915%
WA32	Enumclaw City, Washington	0.0537768326%
WA33	Everett City, Washington	1.9258363241%
WA34	Federal Way City, Washington	0.3061452240%
WA35	Ferndale City, Washington	0.0646101891%
WA36	Ferry County, Washington	0.1153487994%
WA37	Fife City, Washington	0.1955185481%
WA38	Franklin County, Washington	0.3361237144%
WA39	Garfield County, Washington	0.0321982209%
WA40	Gig Harbor City, Washington	0.0859963345%
WA41	Grandview City, Washington	0.0530606109%
WA42	Grant County, Washington	0.9932572167%
WA43	Grays Harbor County, Washington	0.9992429138%
WA44	Island County, Washington	0.6820422610%
WA45	Issaquah City, Washington	0.1876240107%
WA46	Jefferson County, Washington	0.4417137380%
WA47	Kelso City, Washington	0.1331145270%
WA48	Kenmore City, Washington	0.0204441024%

State ID	Qualifying Subdivision	Consolidated State Allocation
WA49	Kennewick City, Washington	0.5415650564%
WA50	Kent City, Washington	0.5377397676%
WA51	King County, Washington	13.9743722662%
WA52	Kirkland City, Washington	0.5453525246%
WA53	Kitsap County, Washington	2.6294133668%
WA54	Kittitas County, Washington	0.3855704683%
WA55	Klickitat County, Washington	0.2211673457%
WA56	Lacey City, Washington	0.2348627221%
WA57	Lake Forest Park City, Washington	0.0525439124%
WA58	Lake Stevens City, Washington	0.1385202891%
WA59	Lakewood City, Washington	0.5253640894%
WA60	Lewis County, Washington	1.0777377479%
WA61	Liberty Lake City, Washington	0.0389636519%
WA62	Lincoln County, Washington	0.1712669645%
WA63	Longview City, Washington	0.6162736905%
WA64	Lynden City, Washington	0.0827115612%
WA65	Lynnwood City, Washington	0.7704629214%
WA66	Maple Valley City, Washington	0.0093761587%
WA67	Marysville City, Washington	0.3945067827%
WA68	Mason County, Washington	0.8089918012%
WA69	Mercer Island City, Washington	0.1751797481%
WA70	Mill Creek City, Washington	0.1227939546%
WA71	Monroe City, Washington	0.1771621898%
WA72	Moses Lake City, Washington	0.2078293909%
WA73	Mount Vernon City, Washington	0.2801063665%
WA74	Mountlake Terrace City, Washington	0.2108935805%
WA75	Mukilteo City, Washington	0.2561790702%
WA76	Newcastle City, Washington	0.0033117880%
WA77	Oak Harbor City, Washington	0.2511550431%
WA78	Okanogan County, Washington	0.6145043345%
WA79	Olympia City, Washington	0.6039423385%
WA80	Pacific County, Washington	0.4895416466%
WA81	Pasco City, Washington	0.4278056066%
WA82	Pend Oreille County, Washington	0.2566374940%
WA83	Pierce County, Washington	7.2310164020%
WA84	Port Angeles City, Washington	0.4598370527%
WA85	Port Orchard City, Washington	0.1009497162%
WA86	Poulsbo City, Washington	0.0773748246%
WA87	Pullman City, Washington	0.2214837491%
WA88	Puyallup City, Washington	0.3845704814%
WA89	Redmond City, Washington	0.4839486007%
WA90	Renton City, Washington	0.7652626920%
WA91	Richland City, Washington	0.4756779517%
WA92	Sammamish City, Washington	0.0224369090%
WA93	San Juan County, Washington	0.2101495171%
WA94	Seatac City, Washington	0.1481551278%
WA95	Seattle City, Washington	6.6032403816%

State ID	Qualifying Subdivision	Consolidated State Allocation
WA96	Sedro-Woolley City, Washington	0.0661146351%
WA97	Shelton City, Washington	0.1239179888%
WA98	Shoreline City, Washington	0.0435834501%
WA99	Skagit County, Washington	1.0526023961%
WA100	Skamania County, Washington	0.1631931925%
WA101	Snohomish City, Washington	0.0861097964%
WA102	Snohomish County, Washington	6.9054415622%
WA103	Snoqualmie City, Washington	0.0649164481%
WA104	Spokane City, Washington	3.0872078287%
WA105	Spokane County, Washington	5.5623859292%
WA106	Spokane Valley City, Washington	0.0684217500%
WA107	Stevens County, Washington	0.7479240179%
WA108	Sumner City, Washington	0.1083157569%
WA109	Sunnyside City, Washington	0.1213478384%
WA110	Tacoma City, Washington	3.2816374617%
WA111	Thurston County, Washington	2.3258492094%
WA112	Tukwila City, Washington	0.3032205739%
WA113	Tumwater City, Washington	0.2065982350%
WA114	University Place City, Washington	0.0353733363%
WA115	Vancouver City, Washington	1.7306605325%
WA116	Wahkiakum County, Washington	0.0596582197%
WA117	Walla Walla City, Washington	0.3140768654%
WA118	Walla Walla County, Washington	0.5543870294%
WA119	Washougal City, Washington	0.1279328220%
WA120	Wenatchee City, Washington	0.2968333494%
WA121	West Richland City, Washington	0.0459360490%
WA122	Whatcom County, Washington	1.3452637306%
WA123	Whitman County, Washington	0.2626805837%
WA124	Woodinville City, Washington	0.0185516364%
WA125	Yakima City, Washington	0.6060410539%
WA126	Yakima County, Washington	1.9388392959%

State ID	Qualifying Subdivision	Consolidated State Allocation
WI1	Adams County, Wisconsin	0.3270000000%
WI4	Ashland County, Wisconsin	0.2250000000%
WI7	Barron County, Wisconsin	0.4780000000%
WI8	Bayfield County, Wisconsin	0.1240000000%
WI13	Brown County, Wisconsin	2.9000000000%
WI15	Buffalo County, Wisconsin	0.1260000000%
WI17	Burnett County, Wisconsin	0.2240000000%
WI19	Calumet County, Wisconsin	0.3860000000%
WI21	Chippewa County, Wisconsin	0.6960000000%
WI23	Clark County, Wisconsin	0.2610000000%
WI24	Columbia County, Wisconsin	1.0760000000%
WI25	Crawford County, Wisconsin	0.1950000000%
WI26	Cudahy City, Wisconsin	0.0870000000%
WI27	Dane County, Wisconsin	8.2480000000%
WI30	Dodge County, Wisconsin	1.3020000000%
WI31	Door County, Wisconsin	0.2820000000%
WI32	Douglas County, Wisconsin	0.5540000000%
WI33	Dunn County, Wisconsin	0.4420000000%
WI35	Eau Claire County, Wisconsin	1.1770000000%
WI38	Florence County, Wisconsin	0.0530000000%
WI40	Fond Du Lac County, Wisconsin	1.1960000000%
WI41	Forest County, Wisconsin	0.1270000000%
WI43	Franklin City, Wisconsin	0.1550000000%
WI48	Grant County, Wisconsin	0.4980000000%
WI50	Green County, Wisconsin	0.4660000000%
WI51	Green Lake County, Wisconsin	0.2800000000%
WI53	Greenfield City, Wisconsin	0.1630000000%
WI61	Iowa County, Wisconsin	0.2790000000%
WI62	Iron County, Wisconsin	0.0610000000%
WI63	Jackson County, Wisconsin	0.2360000000%
WI65	Jefferson County, Wisconsin	1.0510000000%
WI66	Juneau County, Wisconsin	0.4380000000%
WI68	Kenosha City, Wisconsin	0.4840000000%
WI69	Kenosha County, Wisconsin	3.7120000000%
WI70	Kewaunee County, Wisconsin	0.1560000000%
WI72	La Crosse County, Wisconsin	1.6490000000%
WI73	Lafayette County, Wisconsin	0.1340000000%
WI74	Langlade County, Wisconsin	0.3120000000%
WI75	Lincoln County, Wisconsin	0.3500000000%
WI80	Manitowoc County, Wisconsin	1.4030000000%
WI81	Marathon County, Wisconsin	1.2590000000%
WI82	Marinette City, Wisconsin	0.0320000000%
WI83	Marinette County, Wisconsin	0.5030000000%
WI84	Marquette County, Wisconsin	0.2460000000%
WI87	Menominee County, Wisconsin	0.0800000000%
WI92	Milwaukee City, Wisconsin	7.8150000000%
WI93	Milwaukee County, Wisconsin	25.2210000000%
WI95	Monroe County, Wisconsin	0.6550000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
WI96	Mount Pleasant Village, Wisconsin	0.1170000000%
WI100	Oak Creek City, Wisconsin	0.1660000000%
WI102	Oconto County, Wisconsin	0.3360000000%
WI104	Oneida County, Wisconsin	0.5260000000%
WI107	Outagamie County, Wisconsin	1.8360000000%
WI108	Ozaukee County, Wisconsin	1.0360000000%
WI109	Pepin County, Wisconsin	0.0550000000%
WI111	Pierce County, Wisconsin	0.3870000000%
WI113	Pleasant Prairie Village, Wisconsin	0.0590000000%
WI118	Portage County, Wisconsin	0.7290000000%
WI119	Price County, Wisconsin	0.1490000000%
WI121	Racine County, Wisconsin	3.2080000000%
WI123	Richland County, Wisconsin	0.2180000000%
WI125	Rock County, Wisconsin	2.9470000000%
WI126	Rusk County, Wisconsin	0.1590000000%
WI128	Sauk County, Wisconsin	1.2260000000%
WI129	Sawyer County, Wisconsin	0.2580000000%
WI130	Shawano County, Wisconsin	0.4180000000%
WI132	Sheboygan County, Wisconsin	1.4100000000%
WI134	South Milwaukee City, Wisconsin	0.0960000000%
WI135	St Croix County, Wisconsin	0.8290000000%
WI138	Sturtevant Village, Wisconsin	0.0180000000%
WI141	Superior City, Wisconsin	0.0890000000%
WI143	Taylor County, Wisconsin	0.1590000000%
WI145	Trempealeau County, Wisconsin	0.3200000000%
WI147	Union Grove Village, Wisconsin	0.0070000000%
WI148	Vernon County, Wisconsin	0.3220000000%
WI150	Vilas County, Wisconsin	0.4680000000%
WI151	Walworth County, Wisconsin	1.5730000000%
WI152	Washburn County, Wisconsin	0.1850000000%
WI153	Washington County, Wisconsin	1.9910000000%
WI156	Waukesha County, Wisconsin	6.0350000000%
WI158	Waupaca County, Wisconsin	0.6060000000%
WI161	Waushara County, Wisconsin	0.2310000000%
WI162	Wauwatosa City, Wisconsin	0.3090000000%
WI163	West Allis City, Wisconsin	0.3780000000%
WI168	Winnebago County, Wisconsin	2.1760000000%
WI170	Wood County, Wisconsin	0.8420000000%
WI171	Yorkville Town, Wisconsin	0.0020000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
WY1	Albany County, Wyoming	1.6329876137%
WY2	Big Horn County, Wyoming	3.0324432485%
WY3	Campbell County, Wyoming	4.4393335213%
WY4	Carbon County, Wyoming	3.6968556043%
WY5	Casper City, Wyoming	7.3503611059%
WY6	Cheyenne City, Wyoming	1.2286265328%
WY7	Converse County, Wyoming	1.8962432493%
WY8	Crook County, Wyoming	0.5448669885%
WY9	Evanston City, Wyoming	1.9702405199%
WY10	Fremont County, Wyoming	6.7374838437%
WY11	Gillette City, Wyoming	1.7410635670%
WY12	Goshen County, Wyoming	1.6361202905%
WY13	Green River City, Wyoming	0.6122218672%
WY14	Hot Springs County, Wyoming	0.8557309329%
WY15	Jackson Town, Wyoming	0.5598544963%
WY16	Johnson County, Wyoming	0.9322427236%
WY17	Laramie City, Wyoming	3.4181078811%
WY18	Laramie County, Wyoming	15.5855269922%
WY19	Lincoln County, Wyoming	3.1228011914%
WY20	Natrona County, Wyoming	7.9000169472%
WY21	Niobrara County, Wyoming	0.1540280861%
WY22	Park County, Wyoming	5.7964268009%
WY23	Platte County, Wyoming	1.7507027157%
WY24	Riverton City, Wyoming	1.2744483314%
WY25	Rock Springs City, Wyoming	1.5261479738%
WY26	Sheridan City, Wyoming	0.3405187102%
WY27	Sheridan County, Wyoming	3.9149494912%
WY28	Sublette County, Wyoming	0.7136740477%
WY29	Sweetwater County, Wyoming	7.6391306020%
WY30	Teton County, Wyoming	1.3290900349%
WY31	Uinta County, Wyoming	4.3911508108%
WY32	Washakie County, Wyoming	1.5007597928%
WY33	Weston County, Wyoming	0.7758434851%

EXHIBIT H

[Intentionally Omitted]

EXHIBIT I

Primary Subdivisions

1. Alabaster, City of, Alabama
2. Albertville, City of, Alabama
3. Alexander City, City of, Alabama
4. Anniston, City of, Alabama
5. Athens, City of, Alabama
6. Auburn, City of, Alabama
7. Autauga, County of, Alabama
8. Baldwin, County of, Alabama
9. Barbour, County of, Alabama
10. Bessemer, City of, Alabama
11. Bibb, County of, Alabama
12. Birmingham, City of, Alabama
13. Blount, County of, Alabama
14. Bullock, County of, Alabama
15. Butler, County of, Alabama
16. Calera, City of, Alabama
17. Calhoun, County of, Alabama
18. Center Point, City of, Alabama
19. Chambers, County of, Alabama
20. Chelsea, City of, Alabama
21. Cherokee, County of, Alabama
22. Chilton, County of, Alabama
23. Choctaw, County of, Alabama
24. Clarke, County of, Alabama
25. Clay, County of, Alabama
26. Cleburne, County of, Alabama
27. Coffee, County of, Alabama
28. Colbert, County of, Alabama
29. Conecuh, County of, Alabama
30. Coosa, County of, Alabama
31. Covington, County of, Alabama
32. Crenshaw, County of, Alabama
33. Cullman, City of, Alabama
34. Cullman, County of, Alabama
35. Dale, County of, Alabama
36. Dallas, County of, Alabama
37. Daphne, City of, Alabama
38. Decatur, City of, Alabama
39. DeKalb, County of, Alabama
40. Dothan, City of, Alabama
41. Elmore, County of, Alabama
42. Enterprise, City of, Alabama
43. Escambia, County of, Alabama
44. Etowah, County of, Alabama
45. Eufaula, City of, Alabama
46. Fairfield, City of, Alabama
47. Fairhope, City of, Alabama
48. Fayette, County of, Alabama
49. Florence, City of, Alabama
50. Foley, City of, Alabama
51. Fort Payne, City of, Alabama
52. Franklin, County of, Alabama
53. Gadsden, City of, Alabama
54. Gardendale, City of, Alabama
55. Geneva, County of, Alabama
56. Gulf Shores, City of, Alabama
57. Hale, County of, Alabama
58. Hartselle, City of, Alabama
59. Helena, City of, Alabama
60. Henry, County of, Alabama
61. Homewood, City of, Alabama
62. Hoover, City of, Alabama
63. Houston, County of, Alabama
64. Hueytown, City of, Alabama
65. Huntsville, City of, Alabama
66. Irondale, City of, Alabama
67. Jackson, County of, Alabama
68. Jacksonville, City of, Alabama
69. Jasper, City of, Alabama
70. Jefferson, County of, Alabama
71. Lamar, County of, Alabama
72. Lauderdale, County of, Alabama
73. Lawrence, County of, Alabama
74. Lee, County of, Alabama
75. Leeds, City of, Alabama
76. Limestone, County of, Alabama
77. Macon, County of, Alabama
78. Madison, City of, Alabama
79. Madison, County of, Alabama
80. Marengo, County of, Alabama
81. Marion, County of, Alabama
82. Marshall, County of, Alabama
83. Millbrook, City of, Alabama
84. Mobile, City of, Alabama
85. Mobile, County of, Alabama
86. Monroe, County of, Alabama

87. Montgomery, City of, Alabama
88. Montgomery, County of, Alabama
89. Moody, City of, Alabama
90. Morgan, County of, Alabama
91. Mountain Brook, City of, Alabama
92. Muscle Shoals, City of, Alabama
93. Northport, City of, Alabama
94. Opelika, City of, Alabama
95. Oxford, City of, Alabama
96. Ozark, City of, Alabama
97. Pelham, City of, Alabama
98. Pell City, City of, Alabama
99. Phenix City, City of, Alabama
100. Pickens, County of, Alabama
101. Pike, County of, Alabama
102. Pike Road, Town of, Alabama
103. Prattville, City of, Alabama
104. Prichard, City of, Alabama
105. Randolph, County of, Alabama
106. Russell, County of, Alabama
107. Saraland, City of, Alabama
108. Scottsboro, City of, Alabama
109. Selma, City of, Alabama
110. Shelby, County of, Alabama
111. St. Clair, County of, Alabama
112. Sumter, County of, Alabama
113. Sylacauga, City of, Alabama
114. Talladega, City of, Alabama
115. Talladega, County of, Alabama
116. Tallapoosa, County of, Alabama
117. Troy, City of, Alabama
118. Trussville, City of, Alabama
119. Tuscaloosa, City of, Alabama
120. Tuscaloosa, County of, Alabama
121. Vestavia Hills, City of, Alabama
122. Walker, County of, Alabama
123. Washington, County of, Alabama
124. Wilcox, County of, Alabama
125. Winston, County of, Alabama
126. Anchorage, Municipality of, Alaska
127. Fairbanks, City of, Alaska
128. Fairbanks North Star, Borough of, Alaska
129. Juneau, City of/ Borough of, Alaska
130. Kenai Peninsula, Borough of, Alaska
131. Ketchikan Gateway, Borough of, Alaska
132. Kodiak Island, Borough of, Alaska
133. Matanuska-Susitna, Borough of, Alaska
134. Wasilla, City of, Alaska
135. Apache, County of, Arizona
136. Apache Junction, City of, Arizona
137. Avondale, City of, Arizona
138. Buckeye, City of, Arizona
139. Bullhead City, City of, Arizona
140. Camp Verde, Town of, Arizona
141. Casa Grande, City of, Arizona
142. Chandler, City of, Arizona
143. Chino Valley, Town of, Arizona
144. Cochise, County of, Arizona
145. Coconino, County of, Arizona
146. Coolidge, City of, Arizona
147. Cottonwood, City of, Arizona
148. Douglas, City of, Arizona
149. El Mirage, City of, Arizona
150. Eloy, City of, Arizona
151. Flagstaff, City of, Arizona
152. Florence, Town of, Arizona
153. Fountain Hills, Town of, Arizona
154. Gila, County of, Arizona
155. Gilbert, Town of, Arizona
156. Glendale, City of, Arizona
157. Goodyear, City of, Arizona
158. Graham, County of, Arizona
159. Kingman, City of, Arizona
160. La Paz, County of, Arizona
161. Lake Havasu City, City of, Arizona
162. Marana, Town of, Arizona
163. Maricopa, City of, Arizona
164. Maricopa, County of, Arizona
165. Mesa, City of, Arizona
166. Mohave, County of, Arizona
167. Navajo, County of, Arizona
168. Nogales, City of, Arizona
169. Oro Valley, Town of, Arizona
170. Paradise Valley, Town of, Arizona
171. Payson, Town of, Arizona
172. Peoria, City of, Arizona
173. Phoenix, City of, Arizona
174. Pima, County of, Arizona

175. Pinal, County of, Arizona
176. Prescott, City of, Arizona
177. Prescott Valley, Town of, Arizona
178. Queen Creek, Town of, Arizona
179. Sahuarita, Town of, Arizona
180. San Luis, City of, Arizona
181. Santa Cruz, County of, Arizona
182. Scottsdale, City of, Arizona
183. Sedona, City of, Arizona
184. Show Low, City of, Arizona
185. Sierra Vista, City of, Arizona
186. Somerton, City of, Arizona
187. Surprise, City of, Arizona
188. Tempe, City of, Arizona
189. Tucson, City of, Arizona
190. Yavapai, County of, Arizona
191. Yuma, City of, Arizona
192. Yuma, County of, Arizona
193. Arkadelphia, City of, Arkansas
194. Arkansas, County of, Arkansas
195. Ashley, County of, Arkansas
196. Batesville, City of, Arkansas
197. Baxter, County of, Arkansas
198. Bella Vista, City of, Arkansas
199. Benton, City of, Arkansas
200. Benton, County of, Arkansas
201. Bentonville, City of, Arkansas
202. Blytheville, City of, Arkansas
203. Boone, County of, Arkansas
204. Bradley, County of, Arkansas
205. Bryant, City of, Arkansas
206. Cabot, City of, Arkansas
207. Camden, City of, Arkansas
208. Carroll, County of, Arkansas
209. Centerton, City of, Arkansas
210. Chicot, County of, Arkansas
211. Clark, County of, Arkansas
212. Clay, County of, Arkansas
213. Cleburne, County of, Arkansas
214. Columbia, County of, Arkansas
215. Conway, City of, Arkansas
216. Conway, County of, Arkansas
217. Craighead, County of, Arkansas
218. Crawford, County of, Arkansas
219. Crittenden, County of, Arkansas
220. Cross, County of, Arkansas
221. Desha, County of, Arkansas
222. Drew, County of, Arkansas
223. El Dorado, City of, Arkansas
224. Faulkner, County of, Arkansas
225. Fayetteville, City of, Arkansas
226. Forrest City, City of, Arkansas
227. Fort Smith, City of, Arkansas
228. Franklin, County of, Arkansas
229. Fulton, County of, Arkansas
230. Garland, County of, Arkansas
231. Grant, County of, Arkansas
232. Greene, County of, Arkansas
233. Harrison, City of, Arkansas
234. Helena-West Helena, City of, Arkansas
235. Hempstead, County of, Arkansas
236. Hot Spring, County of, Arkansas
237. Hot Springs, City of, Arkansas
238. Howard, County of, Arkansas
239. Independence, County of, Arkansas
240. Izard, County of, Arkansas
241. Jackson, County of, Arkansas
242. Jacksonville, City of, Arkansas
243. Jefferson, County of, Arkansas
244. Johnson, County of, Arkansas
245. Jonesboro, City of, Arkansas
246. Lawrence, County of, Arkansas
247. Lincoln, County of, Arkansas
248. Little River, County of, Arkansas
249. Little Rock, City of, Arkansas
250. Logan, County of, Arkansas
251. Lonoke, County of, Arkansas
252. Madison, County of, Arkansas
253. Magnolia, City of, Arkansas
254. Malvern, City of, Arkansas
255. Marion, City of, Arkansas
256. Marion, County of, Arkansas
257. Maumelle, City of, Arkansas
258. Miller, County of, Arkansas
259. Mississippi, County of, Arkansas
260. Mountain Home, City of, Arkansas
261. North Little Rock, City of, Arkansas
262. Ouachita, County of, Arkansas
263. Paragould, City of, Arkansas
264. Perry, County of, Arkansas
265. Phillips, County of, Arkansas

266. Pike, County of, Arkansas
267. Pine Bluff, City of, Arkansas
268. Poinsett, County of, Arkansas
269. Polk, County of, Arkansas
270. Pope, County of, Arkansas
271. Pulaski, County of, Arkansas
272. Randolph, County of, Arkansas
273. Rogers, City of, Arkansas
274. Russellville, City of, Arkansas
275. Saline, County of, Arkansas
276. Scott, County of, Arkansas
277. Searcy, City of, Arkansas
278. Sebastian, County of, Arkansas
279. Sevier, County of, Arkansas
280. Sharp, County of, Arkansas
281. Sherwood, City of, Arkansas
282. Siloam Springs, City of, Arkansas
283. Springdale, City of, Arkansas
284. St. Francis, County of, Arkansas
285. Stone, County of, Arkansas
286. Texarkana, City of, Arkansas
287. Union, County of, Arkansas
288. Van Buren, City of, Arkansas
289. Van Buren, County of, Arkansas
290. Washington, County of, Arkansas
291. West Memphis, City of, Arkansas
292. White, County of, Arkansas
293. Yell, County of, Arkansas
294. Adelanto, City of, California
295. Agoura Hills, City of, California
296. Alameda, City of, California
297. Alameda, County of, California
298. Albany, City of, California
299. Alhambra, City of, California
300. Aliso Viejo, City of, California
301. Amador, County of, California
302. American Canyon, City of, California
303. Anaheim, City of, California
304. Anderson, City of, California
305. Antioch, City of, California
306. Apple Valley, Town of, California
307. Arcadia, City of, California
308. Arcata, City of, California
309. Arroyo Grande, City of, California
310. Artesia, City of, California
311. Arvin, City of, California
312. Atascadero, City of, California
313. Atwater, City of, California
314. Auburn, City of, California
315. Avenal, City of, California
316. Azusa, City of, California
317. Bakersfield, City of, California
318. Baldwin Park, City of, California
319. Banning, City of, California
320. Barstow, City of, California
321. Beaumont, City of, California
322. Bell, City of, California
323. Bell Gardens, City of, California
324. Bellflower, City of, California
325. Belmont, City of, California
326. Benicia, City of, California
327. Berkeley, City of, California
328. Beverly Hills, City of, California
329. Blythe, City of, California
330. Brawley, City of, California
331. Brea, City of, California
332. Brentwood, City of, California
333. Buena Park, City of, California
334. Burbank, City of, California
335. Burlingame, City of, California
336. Butte, County of, California
337. Calabasas, City of, California
338. Calaveras, County of, California
339. Calexico, City of, California
340. California City, City of, California
341. Camarillo, City of, California
342. Campbell, City of, California
343. Canyon Lake, City of, California
344. Capitola, City of, California
345. Carlsbad, City of, California
346. Carpinteria, City of, California
347. Carson, City of, California
348. Cathedral City, City of, California
349. Ceres, City of, California
350. Cerritos, City of, California
351. Chico, City of, California
352. Chino, City of, California
353. Chino Hills, City of, California
354. Chowchilla, City of, California
355. Chula Vista, City of, California
356. Citrus Heights, City of, California

357. Claremont, City of, California
358. Clayton, City of, California
359. Clearlake, City of, California
360. Clovis, City of, California
361. Coachella, City of, California
362. Coalinga, City of, California
363. Colton, City of, California
364. Colusa, County of, California
365. Commerce, City of, California
366. Compton, City of, California
367. Concord, City of, California
368. Contra Costa, County of, California
369. Corcoran, City of, California
370. Corona, City of, California
371. Coronado, City of, California
372. Costa Mesa, City of, California
373. Covina, City of, California
374. Cudahy, City of, California
375. Culver City, City of, California
376. Cupertino, City of, California
377. Cypress, City of, California
378. Daly City, City of, California
379. Dana Point, City of, California
380. Danville, Town of, California
381. Davis, City of, California
382. Del Norte, County of, California
383. Delano, City of, California
384. Desert Hot Springs, City of, California
385. Diamond Bar, City of, California
386. Dinuba, City of, California
387. Dixon, City of, California
388. Downey, City of, California
389. Duarte, City of, California
390. Dublin, City of, California
391. East Palo Alto, City of, California
392. Eastvale, City of, California
393. El Cajon, City of, California
394. El Centro, City of, California
395. El Cerrito, City of, California
396. El Dorado, County of, California
397. El Monte, City of, California
398. El Paso de Robles (Paso Robles), City of, California
399. El Segundo, City of, California
400. Elk Grove, City of, California
401. Emeryville, City of, California
402. Encinitas, City of, California
403. Escondido, City of, California
404. Eureka, City of, California
405. Exeter, City of, California
406. Fairfield, City of, California
407. Farmersville, City of, California
408. Fillmore, City of, California
409. Folsom, City of, California
410. Fontana, City of, California
411. Fortuna, City of, California
412. Foster City, City of, California
413. Fountain Valley, City of, California
414. Fremont, City of, California
415. Fresno, City of, California
416. Fresno, County of, California
417. Fullerton, City of, California
418. Galt, City of, California
419. Garden Grove, City of, California
420. Gardena, City of, California
421. Gilroy, City of, California
422. Glendale, City of, California
423. Glendora, City of, California
424. Glenn, County of, California
425. Goleta, City of, California
426. Grand Terrace, City of, California
427. Grass Valley, City of, California
428. Greenfield, City of, California
429. Grover Beach, City of, California
430. Half Moon Bay, City of, California
431. Hanford, City of, California
432. Hawaiian Gardens, City of, California
433. Hawthorne, City of, California
434. Hayward, City of, California
435. Healdsburg, City of, California
436. Hemet, City of, California
437. Hercules, City of, California
438. Hermosa Beach, City of, California
439. Hesperia, City of, California
440. Highland, City of, California
441. Hillsborough, Town of, California
442. Hollister, City of, California
443. Humboldt, County of, California
444. Huntington Beach, City of, California

445. Huntington Park, City of, California
446. Imperial Beach, City of, California
447. Imperial, City of, California
448. Imperial, County of, California
449. Indio, City of, California
450. Inglewood, City of, California
451. Inyo, County of, California
452. Irvine, City of, California
453. Jurupa Valley, City of, California
454. Kerman, City of, California
455. Kern, County of, California
456. King City, City of, California
457. Kings, County of, California
458. Kingsburg, City of, California
459. La Cañada Flintridge, City of, California
460. La Habra, City of, California
461. La Mesa, City of, California
462. La Mirada, City of, California
463. La Palma, City of, California
464. La Puente, City of, California
465. La Quinta, City of, California
466. La Verne, City of, California
467. Lafayette, City of, California
468. Laguna Beach, City of, California
469. Laguna Hills, City of, California
470. Laguna Niguel, City of, California
471. Laguna Woods, City of, California
472. Lake, County of, California
473. Lake Elsinore, City of, California
474. Lake Forest, City of, California
475. Lakewood, City of, California
476. Lancaster, City of, California
477. Larkspur, City of, California
478. Lassen, County of, California
479. Lathrop, City of, California
480. Lawndale, City of, California
481. Lemon Grove, City of, California
482. Lemoore, City of, California
483. Lincoln, City of, California
484. Lindsay, City of, California
485. Livermore, City of, California
486. Livingston, City of, California
487. Lodi, City of, California
488. Loma Linda, City of, California
489. Lomita, City of, California
490. Lompoc, City of, California
491. Long Beach, City of, California
492. Los Alamitos, City of, California
493. Los Altos, City of, California
494. Los Angeles, City of, California
495. Los Angeles, County of, California
496. Los Banos, City of, California
497. Los Gatos, Town of, California
498. Lynwood, City of, California
499. Madera, City of, California
500. Madera, County of, California
501. Malibu, City of, California
502. Manhattan Beach, City of, California
503. Manteca, City of, California
504. Marin, County of, California
505. Marina, City of, California
506. Mariposa, County of, California
507. Martinez, City of, California
508. Marysville, City of, California
509. Maywood, City of, California
510. McFarland, City of, California
511. Mendocino, County of, California
512. Mendota, City of, California
513. Menifee, City of, California
514. Menlo Park, City of, California
515. Merced, City of, California
516. Merced, County of, California
517. Mill Valley, City of, California
518. Millbrae, City of, California
519. Milpitas, City of, California
520. Mission Viejo, City of, California
521. Modesto, City of, California
522. Mono, County of, California
523. Monrovia, City of, California
524. Montclair, City of, California
525. Montebello, City of, California
526. Monterey, City of, California
527. Monterey, County of, California
528. Monterey Park, City of, California
529. Moorpark, City of, California
530. Moraga, Town of, California
531. Moreno Valley, City of, California
532. Morgan Hill, City of, California
533. Morro Bay, City of, California
534. Mountain View, City of, California
535. Murrieta, City of, California

536. Napa, City of, California
537. Napa, County of, California
538. National City, City of, California
539. Nevada, County of, California
540. Newark, City of, California
541. Newman, City of, California
542. Newport Beach, City of, California
543. Norco, City of, California
544. Norwalk, City of, California
545. Novato, City of, California
546. Oakdale, City of, California
547. Oakland, City of, California
548. Oakley, City of, California
549. Oceanside, City of, California
550. Ontario, City of, California
551. Orange, City of, California
552. Orange, County of, California
553. Orange Cove, City of, California
554. Orinda, City of, California
555. Oroville, City of, California
556. Oxnard, City of, California
557. Pacific Grove, City of, California
558. Pacifica, City of, California
559. Palm Desert, City of, California
560. Palm Springs, City of, California
561. Palmdale, City of, California
562. Palo Alto, City of, California
563. Palos Verdes Estates, City of, California
564. Paramount, City of, California
565. Parlier, City of, California
566. Pasadena, City of, California
567. Patterson, City of, California
568. Perris, City of, California
569. Petaluma, City of, California
570. Pico Rivera, City of, California
571. Piedmont, City of, California
572. Pinole, City of, California
573. Pittsburg, City of, California
574. Placentia, City of, California
575. Placer, County of, California
576. Placerville, City of, California
577. Pleasant Hill, City of, California
578. Pleasanton, City of, California
579. Plumas, County of, California
580. Pomona, City of, California
581. Port Hueneme, City of, California
582. Porterville, City of, California
583. Poway, City of, California
584. Rancho Cordova, City of, California
585. Rancho Cucamonga, City of, California
586. Rancho Mirage, City of, California
587. Rancho Palos Verdes, City of, California
588. Rancho Santa Margarita, City of, California
589. Red Bluff, City of, California
590. Redding, City of, California
591. Redlands, City of, California
592. Redondo Beach, City of, California
593. Redwood City, City of, California
594. Reedley, City of, California
595. Rialto, City of, California
596. Richmond, City of, California
597. Ridgecrest, City of, California
598. Ripon, City of, California
599. Riverbank, City of, California
600. Riverside, City of, California
601. Riverside, County of, California
602. Rocklin, City of, California
603. Rohnert Park, City of, California
604. Rosemead, City of, California
605. Roseville, City of, California
606. Sacramento, City of, California
607. Sacramento, County of, California
608. Salinas, City of, California
609. San Anselmo, Town of, California
610. San Benito, County of, California
611. San Bernardino, City of, California
612. San Bernardino, County of, California
613. San Bruno, City of, California
614. San Buenaventura (Ventura), City of, California
615. San Carlos, City of, California
616. San Clemente, City of, California
617. San Diego, City of, California
618. San Diego, County of, California
619. San Dimas, City of, California
620. San Fernando, City of, California

621. San Francisco, City of/ County of, California
622. San Gabriel, City of, California
623. San Jacinto, City of, California
624. San Joaquin, County of, California
625. San Jose, City of, California
626. San Juan Capistrano, City of, California
627. San Leandro, City of, California
628. San Luis Obispo, City of, California
629. San Luis Obispo, County of, California
630. San Marcos, City of, California
631. San Marino, City of, California
632. San Mateo, City of, California
633. San Mateo, County of, California
634. San Pablo, City of, California
635. San Rafael, City of, California
636. San Ramon, City of, California
637. Sanger, City of, California
638. Santa Ana, City of, California
639. Santa Barbara, City of, California
640. Santa Barbara, County of, California
641. Santa Clara, City of, California
642. Santa Clara, County of, California
643. Santa Clarita, City of, California
644. Santa Cruz, City of, California
645. Santa Cruz, County of, California
646. Santa Fe Springs, City of, California
647. Santa Maria, City of, California
648. Santa Monica, City of, California
649. Santa Paula, City of, California
650. Santa Rosa, City of, California
651. Santee, City of, California
652. Saratoga, City of, California
653. Scotts Valley, City of, California
654. Seal Beach, City of, California
655. Seaside, City of, California
656. Selma, City of, California
657. Shafter, City of, California
658. Shasta, County of, California
659. Shasta Lake, City of, California
660. Sierra Madre, City of, California
661. Signal Hill, City of, California
662. Simi Valley, City of, California
663. Siskiyou, County of, California
664. Solana Beach, City of, California
665. Solano, County of, California
666. Soledad, City of, California
667. Sonoma, City of, California
668. Sonoma, County of, California
669. South El Monte, City of, California
670. South Gate, City of, California
671. South Lake Tahoe, City of, California
672. South Pasadena, City of, California
673. South San Francisco, City of, California
674. Stanislaus, County of, California
675. Stanton, City of, California
676. Stockton, City of, California
677. Suisun City, City of, California
678. Sunnyvale, City of, California
679. Susanville, City of, California
680. Sutter, County of, California
681. Tehachapi, City of, California
682. Tehama, County of, California
683. Temecula, City of, California
684. Temple City, City of, California
685. Thousand Oaks, City of, California
686. Torrance, City of, California
687. Tracy, City of, California
688. Trinity, County of, California
689. Truckee, Town of, California
690. Tulare, City of, California
691. Tulare, County of, California
692. Tuolumne, County of, California
693. Turlock, City of, California
694. Tustin, City of, California
695. Twentynine Palms, City of, California
696. Ukiah, City of, California
697. Union City, City of, California
698. Upland, City of, California
699. Vacaville, City of, California
700. Vallejo, City of, California
701. Ventura, County of, California
702. Victorville, City of, California
703. Visalia, City of, California
704. Vista, City of, California
705. Walnut, City of, California
706. Walnut Creek, City of, California

707. Wasco, City of, California
708. Watsonville, City of, California
709. West Covina, City of, California
710. West Hollywood, City of, California
711. West Sacramento, City of, California
712. Westminster, City of, California
713. Whittier, City of, California
714. Wildomar, City of, California
715. Windsor, Town of, California
716. Woodland, City of, California
717. Yolo, County of, California
718. Yorba Linda, City of, California
719. Yuba City, City of, California
720. Yuba, County of, California
721. Yucaipa, City of, California
722. Yucca Valley, Town of, California
723. Adams, County of, Colorado
724. Alamosa, County of, Colorado
725. Arapahoe, County of, Colorado
726. Archuleta, County of, Colorado
727. Arvada, City of, Colorado
728. Aurora, City of, Colorado
729. Boulder, City of, Colorado
730. Boulder, County of, Colorado
731. Brighton, City of, Colorado
732. Broomfield, City of/ County of, Colorado
733. Cañon City, City of, Colorado
734. Castle Pines, City of, Colorado
735. Castle Rock, Town of, Colorado
736. Centennial, City of, Colorado
737. Chaffee, County of, Colorado
738. Colorado Springs, City of, Colorado
739. Commerce City, City of, Colorado
740. Delta, County of, Colorado
741. Denver, City of/ County of, Colorado
742. Douglas, County of, Colorado
743. Durango, City of, Colorado
744. Eagle, County of, Colorado
745. El Paso, County of, Colorado
746. Elbert, County of, Colorado
747. Englewood, City of, Colorado
748. Erie, Town of, Colorado
749. Evans, City of, Colorado
750. Federal Heights, City of, Colorado
751. Firestone, Town of, Colorado
752. Fort Collins, City of, Colorado
753. Fort Morgan, City of, Colorado
754. Fountain, City of, Colorado
755. Frederick, Town of, Colorado
756. Fremont, County of, Colorado
757. Fruita, City of, Colorado
758. Garfield, County of, Colorado
759. Golden, City of, Colorado
760. Grand, County of, Colorado
761. Grand Junction, City of, Colorado
762. Greeley, City of, Colorado
763. Greenwood, Village of/ City of, Colorado
764. Gunnison, County of, Colorado
765. Jefferson, County of, Colorado
766. Johnstown, Town of, Colorado
767. La Plata, County of, Colorado
768. Lafayette, City of, Colorado
769. Lakewood, City of, Colorado
770. Larimer, County of, Colorado
771. Las Animas, County of, Colorado
772. Littleton, City of, Colorado
773. Logan, County of, Colorado
774. Lone Tree, City of, Colorado
775. Longmont, City of, Colorado
776. Louisville, City of, Colorado
777. Loveland, City of, Colorado
778. Mesa, County of, Colorado
779. Moffat, County of, Colorado
780. Montezuma, County of, Colorado
781. Montrose, City of, Colorado
782. Montrose, County of, Colorado
783. Morgan, County of, Colorado
784. Northglenn, City of, Colorado
785. Otero, County of, Colorado
786. Park, County of, Colorado
787. Parker, Town of, Colorado
788. Pitkin, County of, Colorado
789. Prowers, County of, Colorado
790. Pueblo, City of, Colorado
791. Pueblo, County of, Colorado
792. Rio Grande, County of, Colorado
793. Routt, County of, Colorado
794. Steamboat Springs, City of, Colorado

795. Sterling, City of, Colorado
796. Summit, County of, Colorado
797. Superior, Town of, Colorado
798. Teller, County of, Colorado
799. Thornton, City of, Colorado
800. Weld, County of, Colorado
801. Wellington, Town of, Colorado
802. Westminster, City of, Colorado
803. Wheat Ridge, City of, Colorado
804. Windsor, Town of, Colorado
805. Yuma, County of, Colorado
806. Ansonia, Town of/ City of, Connecticut
807. Avon, Town of, Connecticut
808. Berlin, Town of, Connecticut
809. Bethel, Town of, Connecticut
810. Bloomfield, Town of, Connecticut
811. Branford, Town of, Connecticut
812. Bridgeport, Town of/ City of, Connecticut
813. Bristol, City of/ Town of, Connecticut
814. Brookfield, Town of, Connecticut
815. Canton, Town of, Connecticut
816. Cheshire, Town of, Connecticut
817. Clinton, Town of, Connecticut
818. Colchester, Town of, Connecticut
819. Coventry, Town of, Connecticut
820. Cromwell, Town of, Connecticut
821. Danbury, City of/ Town of, Connecticut
822. Darien, Town of, Connecticut
823. Derby, City of/ Town of, Connecticut
824. East Hampton, Town of, Connecticut
825. East Hartford, Town of, Connecticut
826. East Haven, Town of, Connecticut
827. East Lyme, Town of, Connecticut
828. East Windsor, Town of, Connecticut
829. Ellington, Town of, Connecticut
830. Enfield, Town of, Connecticut
831. Fairfield, Town of, Connecticut
832. Farmington, Town of, Connecticut
833. Glastonbury, Town of, Connecticut
834. Granby, Town of, Connecticut
835. Greenwich, Town of, Connecticut
836. Griswold, Town of, Connecticut
837. Groton, Town of, Connecticut
838. Guilford, Town of, Connecticut
839. Hamden, Town of, Connecticut
840. Hartford, City of/ Town of, Connecticut
841. Killingly, Town of, Connecticut
842. Ledyard, Town of, Connecticut
843. Madison, Town of, Connecticut
844. Manchester, Town of, Connecticut
845. Mansfield, Town of, Connecticut
846. Meriden, City of/ Town of, Connecticut
847. Middletown, City of/ Town of, Connecticut
848. Milford, City of, Connecticut
849. Milford, Town of, Connecticut
850. Monroe, Town of, Connecticut
851. Montville, Town of, Connecticut
852. Naugatuck, Borough of/ Town of, Connecticut
853. New Britain, Town of/ City of, Connecticut
854. New Canaan, Town of, Connecticut
855. New Fairfield, Town of, Connecticut
856. New Haven, Town of/ City of, Connecticut
857. New London, City of/ Town of, Connecticut
858. New Milford, Town of, Connecticut
859. Newington, Town of, Connecticut
860. Newtown, Town of, Connecticut
861. North Branford, Town of, Connecticut
862. North Haven, Town of, Connecticut
863. Norwalk, City of/ Town of, Connecticut
864. Norwich, City of/ Town of, Connecticut
865. Old Saybrook, Town of, Connecticut
866. Orange, Town of, Connecticut
867. Oxford, Town of, Connecticut
868. Plainfield, Town of, Connecticut
869. Plainville, Town of, Connecticut
870. Plymouth, Town of, Connecticut
871. Ridgefield, Town of, Connecticut

872. Rocky Hill, Town of, Connecticut
873. Seymour, Town of, Connecticut
874. Shelton, City of/ Town of, Connecticut
875. Simsbury, Town of, Connecticut
876. Somers, Town of, Connecticut
877. South Windsor, Town of, Connecticut
878. Southbury, Town of, Connecticut
879. Southington, Town of, Connecticut
880. Stafford, Town of, Connecticut
881. Stamford, City of/ Town of, Connecticut
882. Stonington, Town of, Connecticut
883. Stratford, Town of, Connecticut
884. Suffield, Town of, Connecticut
885. Tolland, Town of, Connecticut
886. Torrington, City of/ Town of, Connecticut
887. Trumbull, Town of, Connecticut
888. Vernon, Town of, Connecticut
889. Wallingford, Town of, Connecticut
890. Waterbury, City of/ Town of, Connecticut
891. Waterford, Town of, Connecticut
892. Watertown, Town of, Connecticut
893. West Hartford, Town of, Connecticut
894. West Haven, City of/ Town of, Connecticut
895. Weston, Town of, Connecticut
896. Westport, Town of, Connecticut
897. Wethersfield, Town of, Connecticut
898. Wilton, Town of, Connecticut
899. Winchester, Town of, Connecticut
900. Windham, Town of, Connecticut
901. Windsor Locks, Town of, Connecticut
902. Windsor, Town of, Connecticut
903. Wolcott, Town of, Connecticut
904. Dover, City of, Delaware
905. Kent, County of, Delaware
906. Middletown, Town of, Delaware
907. Milford, City of, Delaware
908. New Castle, County of, Delaware
909. Newark, City of, Delaware
910. Smyrna, Town of, Delaware
911. Sussex, County of, Delaware
912. Wilmington, City of, Delaware
913. Alachua, County of, Florida
914. Altamonte Springs, City of, Florida
915. Apopka, City of, Florida
916. Atlantic Beach, City of, Florida
917. Auburndale, City of, Florida
918. Aventura, City of, Florida
919. Avon Park, City of, Florida
920. Baker, County of, Florida
921. Bartow, City of, Florida
922. Bay, County of, Florida
923. Belle Glade, City of, Florida
924. Boca Raton, City of, Florida
925. Bonita Springs, City of, Florida
926. Boynton Beach, City of, Florida
927. Bradenton, City of, Florida
928. Bradford, County of, Florida
929. Brevard, County of, Florida
930. Broward, County of, Florida
931. Calhoun, County of, Florida
932. Callaway, City of, Florida
933. Cape Canaveral, City of, Florida
934. Cape Coral, City of, Florida
935. Casselberry, City of, Florida
936. Charlotte, County of, Florida
937. Citrus, County of, Florida
938. Clay, County of, Florida
939. Clearwater, City of, Florida
940. Clermont, City of, Florida
941. Cocoa Beach, City of, Florida
942. Cocoa, City of, Florida
943. Coconut Creek, City of, Florida
944. Collier, County of, Florida
945. Columbia, County of, Florida
946. Cooper City, City of, Florida
947. Coral Gables, City of, Florida
948. Coral Springs, City of, Florida
949. Crestview, City of, Florida
950. Cutler Bay, Town of, Florida
951. Dania Beach, City of, Florida
952. Davie, Town of, Florida
953. Daytona Beach, City of, Florida
954. DeBary, City of, Florida
955. Deerfield Beach, City of, Florida
956. DeLand, City of, Florida

957. Delray Beach, City of, Florida
958. Deltona, City of, Florida
959. DeSoto, County of, Florida
960. Destin, City of, Florida
961. Dixie, County of, Florida
962. Doral, City of, Florida
963. Dunedin, City of, Florida
964. Duval, County of/ Jacksonville, City of, Florida
965. Edgewater, City of, Florida
966. Escambia, County of, Florida
967. Estero, Village of, Florida
968. Eustis, City of, Florida
969. Fernandina Beach, City of, Florida
970. Flagler, County of, Florida
971. Florida City, City of, Florida
972. Fort Lauderdale, City of, Florida
973. Fort Myers, City of, Florida
974. Fort Pierce, City of, Florida
975. Fort Walton Beach, City of, Florida
976. Franklin, County of, Florida
977. Fruitland Park, City of, Florida
978. Gadsden, County of, Florida
979. Gainesville, City of, Florida
980. Gilchrist, County of, Florida
981. Glades, County of, Florida
982. Greenacres, City of, Florida
983. Groveland, City of, Florida
984. Gulf, County of, Florida
985. Gulfport, City of, Florida
986. Haines City, City of, Florida
987. Hallandale Beach, City of, Florida
988. Hamilton, County of, Florida
989. Hardee, County of, Florida
990. Hendry, County of, Florida
991. Hernando, County of, Florida
992. Hialeah, City of, Florida
993. Hialeah Gardens, City of, Florida
994. Highlands, County of, Florida
995. Hillsborough, County of, Florida
996. Holly Hill, City of, Florida
997. Hollywood, City of, Florida
998. Holmes, County of, Florida
999. Homestead, City of, Florida
1000. Indian River, County of, Florida
1001. Jackson, County of, Florida
1002. Jacksonville Beach, City of, Florida
1003. Jefferson, County of, Florida
1004. Jupiter, Town of, Florida
1005. Key Biscayne, Village of, Florida
1006. Key West, City of, Florida
1007. Kissimmee, City of, Florida
1008. Lady Lake, Town of, Florida
1009. Lake City, City of, Florida
1010. Lake, County of, Florida
1011. Lake Mary, City of, Florida
1012. Lake Wales, City of, Florida
1013. Lake Worth, City of, Florida
1014. Lakeland, City of, Florida
1015. Lantana, Town of, Florida
1016. Largo, City of, Florida
1017. Lauderdale Lakes, City of, Florida
1018. Lauderhill, City of, Florida
1019. Lee, County of, Florida
1020. Leesburg, City of, Florida
1021. Leon, County of, Florida
1022. Levy, County of, Florida
1023. Lighthouse Point, City of, Florida
1024. Longwood, City of, Florida
1025. Lynn Haven, City of, Florida
1026. Madison, County of, Florida
1027. Maitland, City of, Florida
1028. Manatee, County of, Florida
1029. Marco Island, City of, Florida
1030. Margate, City of, Florida
1031. Marion, County of, Florida
1032. Martin, County of, Florida
1033. Melbourne, City of, Florida
1034. Miami Beach, City of, Florida
1035. Miami, City of, Florida
1036. Miami Gardens, City of, Florida
1037. Miami Lakes, Town of, Florida
1038. Miami Shores, Village of, Florida
1039. Miami Springs, City of, Florida
1040. Miami-Dade, County of, Florida
1041. Milton, City of, Florida
1042. Minneola, City of, Florida
1043. Miramar, City of, Florida
1044. Monroe, County of, Florida
1045. Mount Dora, City of, Florida
1046. Naples, City of, Florida
1047. Nassau, County of, Florida

1048. New Port Richey, City of, Florida
1049. New Smyrna Beach, City of, Florida
1050. Niceville, City of, Florida
1051. North Lauderdale, City of, Florida
1052. North Miami Beach, City of, Florida
1053. North Miami, City of, Florida
1054. North Palm Beach, Village of, Florida
1055. North Port, City of, Florida
1056. Oakland Park, City of, Florida
1057. Ocala, City of, Florida
1058. Ocoee, City of, Florida
1059. Okaloosa, County of, Florida
1060. Okeechobee, County of, Florida
1061. Oldsmar, City of, Florida
1062. Opa-locka, City of, Florida
1063. Orange City, City of, Florida
1064. Orange, County of, Florida
1065. Orlando, City of, Florida
1066. Ormond Beach, City of, Florida
1067. Osceola, County of, Florida
1068. Oviedo, City of, Florida
1069. Palatka, City of, Florida
1070. Palm Bay, City of, Florida
1071. Palm Beach, County of, Florida
1072. Palm Beach Gardens, City of, Florida
1073. Palm Coast, City of, Florida
1074. Palm Springs, Village of, Florida
1075. Palmetto Bay, Village of, Florida
1076. Palmetto, City of, Florida
1077. Panama City Beach, City of, Florida
1078. Panama City, City of, Florida
1079. Parkland, City of, Florida
1080. Pasco, County of, Florida
1081. Pembroke Pines, City of, Florida
1082. Pensacola, City of, Florida
1083. Pinecrest, Village of, Florida
1084. Pinellas, County of, Florida
1085. Pinellas Park, City of, Florida
1086. Plant City, City of, Florida
1087. Plantation, City of, Florida
1088. Polk, County of, Florida
1089. Pompano Beach, City of, Florida
1090. Port Orange, City of, Florida
1091. Port St. Lucie, City of, Florida
1092. Punta Gorda, City of, Florida
1093. Putnam, County of, Florida
1094. Riviera Beach, City of, Florida
1095. Rockledge, City of, Florida
1096. Royal Palm Beach, Village of, Florida
1097. Safety Harbor, City of, Florida
1098. Sanford, City of, Florida
1099. Santa Rosa, County of, Florida
1100. Sarasota, City of, Florida
1101. Sarasota, County of, Florida
1102. Satellite Beach, City of, Florida
1103. Sebastian, City of, Florida
1104. Sebring, City of, Florida
1105. Seminole, City of, Florida
1106. Seminole, County of, Florida
1107. South Daytona, City of, Florida
1108. South Miami, City of, Florida
1109. St. Augustine, City of, Florida
1110. St. Cloud, City of, Florida
1111. St. Johns, County of, Florida
1112. St. Lucie, County of, Florida
1113. St. Petersburg, City of, Florida
1114. Stuart, City of, Florida
1115. Sumter, County of, Florida
1116. Sunny Isles Beach, City of, Florida
1117. Sunrise, City of, Florida
1118. Suwannee, County of, Florida
1119. Sweetwater, City of, Florida
1120. Tallahassee, City of, Florida
1121. Tamarac, City of, Florida
1122. Tampa, City of, Florida
1123. Tarpon Springs, City of, Florida
1124. Tavares, City of, Florida
1125. Taylor, County of, Florida
1126. Temple Terrace, City of, Florida
1127. Titusville, City of, Florida
1128. Union, County of, Florida
1129. Venice, City of, Florida
1130. Vero Beach, City of, Florida
1131. Volusia, County of, Florida
1132. Wakulla, County of, Florida
1133. Walton, County of, Florida
1134. Washington, County of, Florida
1135. Wellington, Village of, Florida
1136. West Melbourne, City of, Florida

1137. West Palm Beach, City of, Florida
1138. West Park, City of, Florida
1139. Weston, City of, Florida
1140. Wilton Manors, City of, Florida
1141. Winter Garden, City of, Florida
1142. Winter Haven, City of, Florida
1143. Winter Park, City of, Florida
1144. Winter Springs, City of, Florida
1145. Zephyrhills, City of, Florida
1146. Acworth, City of, Georgia
1147. Albany, City of, Georgia
1148. Alpharetta, City of, Georgia
1149. Americus, City of, Georgia
1150. Appling, County of, Georgia
1151. Athens-Clarke County, Unified Government of, Georgia
1152. Atlanta, City of, Georgia
1153. Augusta-Richmond County, Consolidated Government of, Georgia
1154. Bacon, County of, Georgia
1155. Bainbridge, City of, Georgia
1156. Baldwin, County of, Georgia
1157. Banks, County of, Georgia
1158. Barrow, County of, Georgia
1159. Bartow, County of, Georgia
1160. Ben Hill, County of, Georgia
1161. Berrien, County of, Georgia
1162. Bleckley, County of, Georgia
1163. Brantley, County of, Georgia
1164. Braselton, Town of, Georgia
1165. Brookhaven, City of, Georgia
1166. Brooks, County of, Georgia
1167. Brunswick, City of, Georgia
1168. Bryan, County of, Georgia
1169. Buford, City of, Georgia
1170. Bulloch, County of, Georgia
1171. Burke, County of, Georgia
1172. Butts, County of, Georgia
1173. Calhoun, City of, Georgia
1174. Camden, County of, Georgia
1175. Candler, County of, Georgia
1176. Canton, City of, Georgia
1177. Carroll, County of, Georgia
1178. Carrollton, City of, Georgia
1179. Cartersville, City of, Georgia
1180. Catoosa, County of, Georgia
1181. Chamblee, City of, Georgia
1182. Charlton, County of, Georgia
1183. Chatham, County of, Georgia
1184. Chattooga, County of, Georgia
1185. Cherokee, County of, Georgia
1186. Clarkston, City of, Georgia
1187. Clayton, County of, Georgia
1188. Cobb, County of, Georgia
1189. Coffee, County of, Georgia
1190. College Park, City of, Georgia
1191. Colquitt, County of, Georgia
1192. Columbia, County of, Georgia
1193. Columbus, City of, Georgia
1194. Columbus, City of/ Muscogee, County of, Georgia
1195. Conyers, City of, Georgia
1196. Cook, County of, Georgia
1197. Cordele, City of, Georgia
1198. Covington, City of, Georgia
1199. Coweta, County of, Georgia
1200. Crawford, County of, Georgia
1201. Crisp, County of, Georgia
1202. Cusseta-Chattahoochee County, Unified Government of, Georgia
1203. Dade, County of, Georgia
1204. Dallas, City of, Georgia
1205. Dalton, City of, Georgia
1206. Dawson, County of, Georgia
1207. Decatur, City of, Georgia
1208. Decatur, County of, Georgia
1209. DeKalb, County of, Georgia
1210. Dodge, County of, Georgia
1211. Dooly, County of, Georgia
1212. Doraville, City of, Georgia
1213. Dougherty, County of, Georgia
1214. Douglas, City of, Georgia
1215. Douglas, County of, Georgia
1216. Douglasville, City of, Georgia
1217. Dublin, City of, Georgia
1218. Duluth, City of, Georgia
1219. Dunwoody, City of, Georgia
1220. Early, County of, Georgia
1221. East Point, City of, Georgia
1222. Effingham, County of, Georgia
1223. Elbert, County of, Georgia

1224. Emanuel, County of, Georgia
1225. Evans, County of, Georgia
1226. Fairburn, City of, Georgia
1227. Fannin, County of, Georgia
1228. Fayette, County of, Georgia
1229. Fayetteville, City of, Georgia
1230. Floyd, County of, Georgia
1231. Forest Park, City of, Georgia
1232. Forsyth, County of, Georgia
1233. Franklin, County of, Georgia
1234. Fulton, County of, Georgia
1235. Gainesville, City of, Georgia
1236. Gilmer, County of, Georgia
1237. Glynn, County of, Georgia
1238. Gordon, County of, Georgia
1239. Grady, County of, Georgia
1240. Greene, County of, Georgia
1241. Griffin, City of, Georgia
1242. Grovetown, City of, Georgia
1243. Gwinnett, County of, Georgia
1244. Habersham, County of, Georgia
1245. Hall, County of, Georgia
1246. Haralson, County of, Georgia
1247. Harris, County of, Georgia
1248. Hart, County of, Georgia
1249. Heard, County of, Georgia
1250. Henry, County of, Georgia
1251. Hinesville, City of, Georgia
1252. Holly Springs, City of, Georgia
1253. Houston, County of, Georgia
1254. Jackson, County of, Georgia
1255. Jasper, County of, Georgia
1256. Jeff Davis, County of, Georgia
1257. Jefferson, City of, Georgia
1258. Jefferson, County of, Georgia
1259. Johns Creek, City of, Georgia
1260. Jones, County of, Georgia
1261. Kennesaw, City of, Georgia
1262. Kingsland, City of, Georgia
1263. LaGrange, City of, Georgia
1264. Lamar, County of, Georgia
1265. Lanier, County of, Georgia
1266. Laurens, County of, Georgia
1267. Lawrenceville, City of, Georgia
1268. Lee, County of, Georgia
1269. Liberty, County of, Georgia
1270. Lilburn, City of, Georgia
1271. Loganville, City of, Georgia
1272. Long, County of, Georgia
1273. Lowndes, County of, Georgia
1274. Lumpkin, County of, Georgia
1275. Macon, County of, Georgia
1276. Macon-Bibb, County of, Georgia
1277. Madison, County of, Georgia
1278. Marietta, City of, Georgia
1279. McDonough, City of, Georgia
1280. McDuffie, County of, Georgia
1281. McIntosh, County of, Georgia
1282. Meriwether, County of, Georgia
1283. Milledgeville, City of, Georgia
1284. Milton, City of, Georgia
1285. Mitchell, County of, Georgia
1286. Monroe, City of, Georgia
1287. Monroe, County of, Georgia
1288. Morgan, County of, Georgia
1289. Moultrie, City of, Georgia
1290. Murray, County of, Georgia
1291. Newnan, City of, Georgia
1292. Newton, County of, Georgia
1293. Norcross, City of, Georgia
1294. Oconee, County of, Georgia
1295. Oglethorpe, County of, Georgia
1296. Paulding, County of, Georgia
1297. Peach, County of, Georgia
1298. Peachtree City, City of, Georgia
1299. Peachtree Corners, City of, Georgia
1300. Perry, City of, Georgia
1301. Pickens, County of, Georgia
1302. Pierce, County of, Georgia
1303. Pike, County of, Georgia
1304. Polk, County of, Georgia
1305. Pooler, City of, Georgia
1306. Powder Springs, City of, Georgia
1307. Pulaski, County of, Georgia
1308. Putnam, County of, Georgia
1309. Rabun, County of, Georgia
1310. Richmond Hill, City of, Georgia
1311. Rincon, City of, Georgia
1312. Riverdale, City of, Georgia
1313. Rockdale, County of, Georgia
1314. Rome, City of, Georgia
1315. Roswell, City of, Georgia

1316. Sandy Springs, City of, Georgia
1317. Savannah, City of, Georgia
1318. Screven, County of, Georgia
1319. Smyrna, City of, Georgia
1320. Snellville, City of, Georgia
1321. South Fulton, City of, Georgia
1322. Spalding, County of, Georgia
1323. St. Marys, City of, Georgia
1324. Statesboro, City of, Georgia
1325. Stephens, County of, Georgia
1326. Stockbridge, City of, Georgia
1327. Stonecrest, City of, Georgia
1328. Sugar Hill, City of, Georgia
1329. Sumter, County of, Georgia
1330. Suwanee, City of, Georgia
1331. Tattnall, County of, Georgia
1332. Telfair, County of, Georgia
1333. Thomas, County of, Georgia
1334. Thomasville, City of, Georgia
1335. Tift, County of, Georgia
1336. Tifton, City of, Georgia
1337. Toombs, County of, Georgia
1338. Towns, County of, Georgia
1339. Troup, County of, Georgia
1340. Tucker, City of, Georgia
1341. Union City, City of, Georgia
1342. Union, County of, Georgia
1343. Upson, County of, Georgia
1344. Valdosta, City of, Georgia
1345. Vidalia, City of, Georgia
1346. Villa Rica, City of, Georgia
1347. Walker, County of, Georgia
1348. Walton, County of, Georgia
1349. Ware, County of, Georgia
1350. Warner Robins, City of, Georgia
1351. Washington, County of, Georgia
1352. Waycross, City of, Georgia
1353. Wayne, County of, Georgia
1354. White, County of, Georgia
1355. Whitfield, County of, Georgia
1356. Winder, City of, Georgia
1357. Woodstock, City of, Georgia
1358. Worth, County of, Georgia
1359. Hawaii, County of, Hawaii
1360. Honolulu, County of/ City of, Hawaii
1361. Kauai, County of, Hawaii
1362. Maui, County of, Hawaii
1363. Ada, County of, Idaho
1364. Ammon, City of, Idaho
1365. Bannock, County of, Idaho
1366. Bingham, County of, Idaho
1367. Blackfoot, City of, Idaho
1368. Blaine, County of, Idaho
1369. Boise City, City of, Idaho
1370. Bonner, County of, Idaho
1371. Bonneville, County of, Idaho
1372. Boundary, County of, Idaho
1373. Burley, City of, Idaho
1374. Caldwell, City of, Idaho
1375. Canyon, County of, Idaho
1376. Cassia, County of, Idaho
1377. Chubbuck, City of, Idaho
1378. Coeur d'Alene, City of, Idaho
1379. Eagle, City of, Idaho
1380. Elmore, County of, Idaho
1381. Franklin, County of, Idaho
1382. Fremont, County of, Idaho
1383. Garden City, City of, Idaho
1384. Gem, County of, Idaho
1385. Gooding, County of, Idaho
1386. Hayden, City of, Idaho
1387. Idaho, County of, Idaho
1388. Idaho Falls, City of, Idaho
1389. Jefferson, County of, Idaho
1390. Jerome, City of, Idaho
1391. Jerome, County of, Idaho
1392. Kootenai, County of, Idaho
1393. Kuna, City of, Idaho
1394. Latah, County of, Idaho
1395. Lewiston, City of, Idaho
1396. Madison, County of, Idaho
1397. Meridian, City of, Idaho
1398. Minidoka, County of, Idaho
1399. Moscow, City of, Idaho
1400. Mountain Home, City of, Idaho
1401. Nampa, City of, Idaho
1402. Nez Perce, County of, Idaho
1403. Owyhee, County of, Idaho
1404. Payette, County of, Idaho
1405. Pocatello, City of, Idaho
1406. Post Falls, City of, Idaho

1407. Rexburg, City of, Idaho
1408. Shoshone, County of, Idaho
1409. Star, City of, Idaho
1410. Teton, County of, Idaho
1411. Twin Falls, City of, Idaho
1412. Twin Falls, County of, Idaho
1413. Valley, County of, Idaho
1414. Washington, County of, Idaho
1415. Adams, County of, Illinois
1416. Addison Township, Illinois
1417. Addison, Village of, Illinois
1418. Algonquin Township, Illinois
1419. Algonquin, Village of, Illinois
1420. Alsip, Village of, Illinois
1421. Alton, City of, Illinois
1422. Alton Township, Illinois
1423. Antioch Township, Illinois
1424. Antioch, Village of, Illinois
1425. Arlington Heights, Village of, Illinois
1426. Aurora, City of, Illinois
1427. Aurora Township, Illinois
1428. Aux Sable Township, Illinois
1429. Avon Township, Illinois
1430. Barrington Township, Illinois
1431. Barrington, Village of, Illinois
1432. Bartlett, Village of, Illinois
1433. Batavia, City of, Illinois
1434. Batavia Township, Illinois
1435. Beach Park, Village of, Illinois
1436. Belleville, City of, Illinois
1437. Bellwood, Village of, Illinois
1438. Belvidere, City of, Illinois
1439. Belvidere Township, Illinois
1440. Bensenville, Village of, Illinois
1441. Benton Township, Illinois
1442. Berwyn, City of, Illinois
1443. Berwyn Township, Illinois
1444. Blackberry Township, Illinois
1445. Bloom Township, Illinois
1446. Bloomingdale Township, Illinois
1447. Bloomingdale, Village of, Illinois
1448. Bloomington, City of, Illinois
1449. Bloomington City Township, Illinois
1450. Blue Island, City of, Illinois
1451. Bolingbrook, Village of, Illinois
1452. Bond, County of, Illinois
1453. Boone, County of, Illinois
1454. Bourbonnais Township, Illinois
1455. Bourbonnais, Village of, Illinois
1456. Bradley, Village of, Illinois
1457. Bremen Township, Illinois
1458. Bridgeview, Village of, Illinois
1459. Bristol Township, Illinois
1460. Brookfield, Village of, Illinois
1461. Bruce Township, Illinois
1462. Buffalo Grove, Village of, Illinois
1463. Burbank, City of, Illinois
1464. Bureau, County of, Illinois
1465. Burr Ridge, Village of, Illinois
1466. Cahokia, Village of, Illinois
1467. Calumet City, City of, Illinois
1468. Calumet Township, Illinois
1469. Campton Hills, Village of, Illinois
1470. Campton Township, Illinois
1471. Canton, City of, Illinois
1472. Canton Township, Illinois
1473. Capital Township, Illinois
1474. Carbondale, City of, Illinois
1475. Carbondale Township, Illinois
1476. Carol Stream, Village of, Illinois
1477. Carpentersville, Village of, Illinois
1478. Carroll, County of, Illinois
1479. Cary, Village of, Illinois
1480. Caseyville Township, Illinois
1481. Cass, County of, Illinois
1482. Centralia, City of, Illinois
1483. Centralia Township, Illinois
1484. Centreville Township, Illinois
1485. Champaign, City of, Illinois
1486. Champaign City Township, Illinois
1487. Champaign, County of, Illinois
1488. Champaign Township, Illinois
1489. Channahon Township, Illinois
1490. Channahon, Village of, Illinois
1491. Charleston, City of, Illinois
1492. Charleston Township, Illinois
1493. Chatham, Village of, Illinois
1494. Cherry Valley Township, Illinois
1495. Chicago, City of, Illinois
1496. Chicago Heights, City of, Illinois
1497. Chicago Ridge, Village of, Illinois

1498. Christian, County of, Illinois
1499. Cicero, Town of/ Township of, Illinois
1500. Clark, County of, Illinois
1501. Clay, County of, Illinois
1502. Clinton, County of, Illinois
1503. Coles, County of, Illinois
1504. Collinsville, City of, Illinois
1505. Collinsville Township, Illinois
1506. Coloma Township, Illinois
1507. Columbia, City of, Illinois
1508. Cook, County of, Illinois
1509. Cortland Township, Illinois
1510. Country Club Hills, City of, Illinois
1511. Crawford, County of, Illinois
1512. Crest Hill, City of, Illinois
1513. Crestwood, Village of, Illinois
1514. Crete Township, Illinois
1515. Crystal Lake, City of, Illinois
1516. Cuba Township, Illinois
1517. Cumberland, County of, Illinois
1518. Cunningham Township, Illinois
1519. Danville, City of, Illinois
1520. Danville Township, Illinois
1521. Darien, City of, Illinois
1522. De Witt, County of, Illinois
1523. Decatur, City of, Illinois
1524. Decatur Township, Illinois
1525. Deerfield, Village of, Illinois
1526. DeKalb, City of, Illinois
1527. DeKalb, County of, Illinois
1528. DeKalb Township, Illinois
1529. Des Plaines, City of, Illinois
1530. Dixon, City of, Illinois
1531. Dixon Township, Illinois
1532. Dolton, Village of, Illinois
1533. Dorr Township, Illinois
1534. Douglas, County of, Illinois
1535. Douglas Township, Illinois
1536. Downers Grove Township, Illinois
1537. Downers Grove, Village of, Illinois
1538. Du Page Township, Illinois
1539. Dundee Township, Illinois
1540. DuPage, County of, Illinois
1541. East Moline, City of, Illinois
1542. East Peoria, City of, Illinois
1543. East St. Louis, City of, Illinois
1544. East St. Louis Township, Illinois
1545. Edgar, County of, Illinois
1546. Edwardsville, City of, Illinois
1547. Edwardsville Township, Illinois
1548. Effingham, City of, Illinois
1549. Effingham, County of, Illinois
1550. Ela Township, Illinois
1551. Elgin, City of, Illinois
1552. Elgin Township, Illinois
1553. Elk Grove Township, Illinois
1554. Elk Grove Village, Village of, Illinois
1555. Elmhurst, City of, Illinois
1556. Elmwood Park, Village of, Illinois
1557. Evanston, City of, Illinois
1558. Evergreen Park, Village of, Illinois
1559. Fairview Heights, City of, Illinois
1560. Fayette, County of, Illinois
1561. Flagg Township, Illinois
1562. Fondulac Township, Illinois
1563. Ford, County of, Illinois
1564. Forest Park, Village of, Illinois
1565. Fox Lake, Village of, Illinois
1566. Frankfort Township, Illinois
1567. Frankfort, Village of, Illinois
1568. Franklin, County of, Illinois
1569. Franklin Park, Village of, Illinois
1570. Freeport, City of, Illinois
1571. Freeport Township, Illinois
1572. Fremont Township, Illinois
1573. Fulton, County of, Illinois
1574. Galesburg, City of, Illinois
1575. Galesburg City Township, Illinois
1576. Geneva, City of, Illinois
1577. Geneva Township, Illinois
1578. Glen Carbon, Village of, Illinois
1579. Glen Ellyn, Village of, Illinois
1580. Glendale Heights, Village of, Illinois
1581. Glenview, Village of, Illinois
1582. Godfrey Township, Illinois
1583. Godfrey, Village of, Illinois
1584. Grafton Township, Illinois
1585. Granite City, City of, Illinois
1586. Granite City Township, Illinois
1587. Grant Township, Illinois

1588. Grayslake, Village of, Illinois
1589. Greene, County of, Illinois
1590. Greenwood Township, Illinois
1591. Groveland Township, Illinois
1592. Grundy, County of, Illinois
1593. Gurnee, Village of, Illinois
1594. Hampton Township, Illinois
1595. Hancock, County of, Illinois
1596. Hanover Park, Village of, Illinois
1597. Hanover Township, Illinois
1598. Harlem Township, Illinois
1599. Harrisburg Township, Illinois
1600. Harvey, City of, Illinois
1601. Hazel Crest, Village of, Illinois
1602. Henry, County of, Illinois
1603. Herrin, City of, Illinois
1604. Hickory Hills, City of, Illinois
1605. Hickory Point Township, Illinois
1606. Highland Park, City of, Illinois
1607. Hinsdale, Village of, Illinois
1608. Hoffman Estates, Village of, Illinois
1609. Homer Glen, Village of, Illinois
1610. Homer Township, Illinois
1611. Homewood, Village of, Illinois
1612. Huntley, Village of, Illinois
1613. Iroquois, County of, Illinois
1614. Jackson, County of, Illinois
1615. Jacksonville, City of, Illinois
1616. Jarvis Township, Illinois
1617. Jefferson, County of, Illinois
1618. Jersey, County of, Illinois
1619. Jo Daviess, County of, Illinois
1620. Johnson, County of, Illinois
1621. Joliet, City of, Illinois
1622. Joliet Township, Illinois
1623. Justice, Village of, Illinois
1624. Kane, County of, Illinois
1625. Kankakee, City of, Illinois
1626. Kankakee, County of, Illinois
1627. Kankakee Township, Illinois
1628. Kendall, County of, Illinois
1629. Kewanee, City of, Illinois
1630. Knox, County of, Illinois
1631. La Grange Park, Village of, Illinois
1632. La Grange, Village of, Illinois
1633. Lake, County of, Illinois
1634. Lake Forest, City of, Illinois
1635. Lake in the Hills, Village of, Illinois
1636. Lake Villa Township, Illinois
1637. Lake Zurich, Village of, Illinois
1638. Lansing, Village of, Illinois
1639. LaSalle, County of, Illinois
1640. LaSalle Township, Illinois
1641. Lawrence, County of, Illinois
1642. Lee, County of, Illinois
1643. Lemont Township, Illinois
1644. Lemont, Village of, Illinois
1645. Leyden Township, Illinois
1646. Libertyville Township, Illinois
1647. Libertyville, Village of, Illinois
1648. Limestone Township, Illinois
1649. Lincoln, City of, Illinois
1650. Lincolnwood, Village of, Illinois
1651. Lindenhurst, Village of, Illinois
1652. Lisle Township, Illinois
1653. Lisle, Village of, Illinois
1654. Little Rock Township, Illinois
1655. Livingston, County of, Illinois
1656. Lockport, City of, Illinois
1657. Lockport Township, Illinois
1658. Logan, County of, Illinois
1659. Lombard, Village of, Illinois
1660. Long Creek Township, Illinois
1661. Loves Park, City of, Illinois
1662. Lyons Township, Illinois
1663. Lyons, Village of, Illinois
1664. Machesney Park, Village of, Illinois
1665. Macomb, City of, Illinois
1666. Macomb City Township, Illinois
1667. Macon, County of, Illinois
1668. Macoupin, County of, Illinois
1669. Madison, County of, Illinois
1670. Mahomet Township, Illinois
1671. Maine Township, Illinois
1672. Manhattan Township, Illinois
1673. Manteno Township, Illinois
1674. Marion, City of, Illinois
1675. Marion, County of, Illinois
1676. Markham, City of, Illinois
1677. Marshall, County of, Illinois
1678. Mason, County of, Illinois
1679. Massac, County of, Illinois

1680. Matteson, Village of, Illinois
1681. Mattoon, City of, Illinois
1682. Mattoon, Township of, Illinois
1683. Maywood, Village of, Illinois
1684. McDonough, County of, Illinois
1685. McHenry, City of, Illinois
1686. McHenry, County of, Illinois
1687. McHenry, Township of, Illinois
1688. McLean, County of, Illinois
1689. Medina, Township of, Illinois
1690. Melrose Park, Village of, Illinois
1691. Menard, County of, Illinois
1692. Mercer, County of, Illinois
1693. Midlothian, Village of, Illinois
1694. Milton Township, Illinois
1695. Minooka, Village of, Illinois
1696. Mokena, Village of, Illinois
1697. Moline, City of, Illinois
1698. Moline, Township of, Illinois
1699. Monee, Township of, Illinois
1700. Monroe, County of, Illinois
1701. Montgomery, County of, Illinois
1702. Montgomery, Village of, Illinois
1703. Moraine, Township of, Illinois
1704. Morgan, County of, Illinois
1705. Morris, City of, Illinois
1706. Morton Grove, Village of, Illinois
1707. Morton, Township of, Illinois
1708. Morton, Village of, Illinois
1709. Moultrie, County of, Illinois
1710. Mount Prospect, Village of, Illinois
1711. Mount Vernon, City of, Illinois
1712. Mount Vernon, Township of, Illinois
1713. Mundelein, Village of, Illinois
1714. Nameoki, Township of, Illinois
1715. Naperville, City of, Illinois
1716. Naperville, Township of, Illinois
1717. New Lenox, Township of, Illinois
1718. New Lenox, Village of, Illinois
1719. New Trier, Township of, Illinois
1720. Newell, Township of, Illinois
1721. Niles, Township of, Illinois
1722. Niles, Village of, Illinois
1723. Normal, Town of, Illinois
1724. Normal, Township of, Illinois
1725. Norridge, Village of, Illinois
1726. North Aurora, Village of, Illinois
1727. North Chicago, City of, Illinois
1728. Northbrook, Village of, Illinois
1729. Northfield, Township of, Illinois
1730. Northlake, City of, Illinois
1731. Norwood Park, Township of, Illinois
1732. Nunda, Township of, Illinois
1733. Oak Forest, City of, Illinois
1734. Oak Lawn, Village of, Illinois
1735. Oak Park, Township of, Illinois
1736. Oak Park, Village of, Illinois
1737. O'Fallon, City of, Illinois
1738. O'Fallon, Township of, Illinois
1739. Ogle, County of, Illinois
1740. Orland Park, Village of, Illinois
1741. Orland, Township of, Illinois
1742. Oswego, Township of, Illinois
1743. Oswego, Village of, Illinois
1744. Ottawa, City of, Illinois
1745. Ottawa, Township of, Illinois
1746. Palatine, Township of, Illinois
1747. Palatine, Village of, Illinois
1748. Palos Heights, City of, Illinois
1749. Palos Hills, City of, Illinois
1750. Palos, Township of, Illinois
1751. Park Forest, Village of, Illinois
1752. Park Ridge, City of, Illinois
1753. Pekin, City of, Illinois
1754. Pekin, Township of, Illinois
1755. Peoria, City of, Illinois
1756. Peoria City Township, Illinois
1757. Peoria, County of, Illinois
1758. Perry, County of, Illinois
1759. Peru, Township of, Illinois
1760. Piatt, County of, Illinois
1761. Pike, County of, Illinois
1762. Plainfield, Township of, Illinois
1763. Plainfield, Village of, Illinois
1764. Plano, City of, Illinois
1765. Pontiac, City of, Illinois
1766. Pontiac, Township of, Illinois
1767. Prospect Heights, City of, Illinois
1768. Proviso, Township of, Illinois
1769. Quincy, City of, Illinois
1770. Quincy, Township of, Illinois
1771. Randolph, County of, Illinois

1772. Rantoul, Township of,Illinois
1773. Rantoul, Village of, Illinois
1774. Rich, Township of, Illinois
1775. Richland, County of, Illinois
1776. Richton Park, Village of, Illinois
1777. River Forest, Township of, Illinois
1778. River Forest, Village of, Illinois
1779. Riverdale, Village of, Illinois
1780. Riverside, Township of, Illinois
1781. Rock Island, City of, Illinois
1782. Rock Island, County of, Illinois
1783. Rock Island, Township of, Illinois
1784. Rockford, City of, Illinois
1785. Rockford, Township of, Illinois
1786. Rockton, Township of, Illinois
1787. Rolling Meadows, City of, Illinois
1788. Romeoville, Village of, Illinois
1789. Roscoe, Township of, Illinois
1790. Roscoe, Village of, Illinois
1791. Roselle, Village of, Illinois
1792. Round Lake Beach, Village of, Illinois
1793. Round Lake, Village of, Illinois
1794. Rutland, Township of, Illinois
1795. Saline, County of, Illinois
1796. Sangamon, County of, Illinois
1797. Sauk Village, Village of, Illinois
1798. Schaumburg, Township of, Illinois
1799. Schaumburg, Village of, Illinois
1800. Schiller Park, Village of, Illinois
1801. Shelby, County of, Illinois
1802. Shields, Township of, Illinois
1803. Shiloh Valley, Township of, Illinois
1804. Shiloh, Village of, Illinois
1805. Shorewood, Village of, Illinois
1806. Skokie, Village of, Illinois
1807. South Elgin, Village of, Illinois
1808. South Holland, Village of, Illinois
1809. South Moline, Township of, Illinois
1810. South Rock Island, Township of, Illinois
1811. Springfield, City of, Illinois
1812. St. Charles, City of, Illinois
1813. St. Charles, Township of, Illinois
1814. St. Clair, County of, Illinois
1815. St. Clair, Township of, Illinois
1816. Stephenson, County of, Illinois
1817. Sterling, City of, Illinois
1818. Sterling, Township of, Illinois
1819. Stickney, Township of, Illinois
1820. Streamwood, Village of, Illinois
1821. Streator, City of, Illinois
1822. Sugar Grove, Township of, Illinois
1823. Summit, Village of, Illinois
1824. Swansea, Village of, Illinois
1825. Sycamore, City of, Illinois
1826. Sycamore, Township of, Illinois
1827. Taylorville, City of, Illinois
1828. Taylorville, Township of, Illinois
1829. Tazewell, County of, Illinois
1830. Thornton, Township of, Illinois
1831. Tinley Park, Village of, Illinois
1832. Troy, City of, Illinois
1833. Troy, Township of, Illinois
1834. Union, County of, Illinois
1835. Urbana, City of, Illinois
1836. Vermilion, County of, Illinois
1837. Vernon Hills, Village of, Illinois
1838. Vernon, Township of, Illinois
1839. Villa Park, Village of, Illinois
1840. Wabash, County of, Illinois
1841. Warren, County of, Illinois
1842. Warren, Township of, Illinois
1843. Warrenville, City of, Illinois
1844. Washington, City of, Illinois
1845. Washington, County of, Illinois
1846. Washington, Township of, Illinois
1847. Waterloo, City of, Illinois
1848. Wauconda, Township of, Illinois
1849. Wauconda, Village of, Illinois
1850. Waukegan, City of, Illinois
1851. Waukegan, Township of, Illinois
1852. Wayne, County of, Illinois
1853. Wayne, Township of, Illinois
1854. West Chicago, City of, Illinois
1855. West Deerfield, Township of, Illinois
1856. Westchester, Village of, Illinois
1857. Western Springs, Village of, Illinois
1858. Westmont, Village of, Illinois
1859. Wheatland, Township of, Illinois
1860. Wheaton, City of, Illinois
1861. Wheeling, Township of, Illinois

1862. Wheeling, Village of, Illinois
1863. White, County of, Illinois
1864. Whiteside, County of, Illinois
1865. Will, County of, Illinois
1866. Williamson, County of, Illinois
1867. Wilmette, Village of, Illinois
1868. Winfield, Township of, Illinois
1869. Winnebago, County of, Illinois
1870. Winnetka, Village of, Illinois
1871. Wood Dale, City of, Illinois
1872. Wood River, City of, Illinois
1873. Wood River, Township of, Illinois
1874. Woodford, County of, Illinois
1875. Woodridge, Village of, Illinois
1876. Woodside, Township of, Illinois
1877. Woodstock, City of, Illinois
1878. Worth, Township of, Illinois
1879. Worth, Village of, Illinois
1880. York, Township of, Illinois
1881. Yorkville, City of, Illinois
1882. Zion, City of, Illinois
1883. Zion, Township of, Illinois
1884. Aboite, Township of, Indiana
1885. Adams, County of, Indiana
1886. Adams, Township of, Indiana
1887. Addison, Township of, Indiana
1888. Allen, County of, Indiana
1889. Anderson, City of, Indiana
1890. Anderson, Township of, Indiana
1891. Auburn, City of, Indiana
1892. Avon, Town of, Indiana
1893. Bainbridge, Township of, Indiana
1894. Bartholomew, County of, Indiana
1895. Baugo, Township of, Indiana
1896. Bedford, City of, Indiana
1897. Beech Grove, City of, Indiana
1898. Blackford, County of, Indiana
1899. Bloomington, City of, Indiana
1900. Bloomington, Township of, Indiana
1901. Bluffton, City of, Indiana
1902. Boon, Township of, Indiana
1903. Boone, County of, Indiana
1904. Brown, County of, Indiana
1905. Brown, Township of, Indiana
1906. Brownsburg, Town of, Indiana
1907. Calumet, Township of, Indiana
1908. Carmel, City of, Indiana
1909. Carroll, County of, Indiana
1910. Cass, County of, Indiana
1911. Cedar Creek, Township of, Indiana
1912. Cedar Lake, Town of, Indiana
1913. Center, Township of, Indiana
1914. Centre, Township of, Indiana
1915. Charlestown, Township of, Indiana
1916. Chesterton, Town of, Indiana
1917. Clark, County of, Indiana
1918. Clarksville, Town of, Indiana
1919. Clay, County of, Indiana
1920. Clay, Township of, Indiana
1921. Cleveland, Township of, Indiana
1922. Clinton, County of, Indiana
1923. Columbia, Township of, Indiana
1924. Columbus, City of, Indiana
1925. Columbus, Township of, Indiana
1926. Concord, Township of, Indiana
1927. Connersville, City of, Indiana
1928. Connersville, Township of, Indiana
1929. Coolspring, Township of, Indiana
1930. Crawford, County of, Indiana
1931. Crawfordsville, City of, Indiana
1932. Crown Point, City of, Indiana
1933. Danville, Town of, Indiana
1934. Daviess, County of, Indiana
1935. Dearborn, County of, Indiana
1936. Decatur, County of, Indiana
1937. Decatur, Township of, Indiana
1938. DeKalb, County of, Indiana
1939. Delaware, County of, Indiana
1940. Delaware, Township of, Indiana
1941. Dubois, County of, Indiana
1942. Dyer, Town of, Indiana
1943. East Chicago, City of, Indiana
1944. Eel, Township of, Indiana
1945. Elkhart, City of, Indiana
1946. Elkhart, County of, Indiana
1947. Elkhart, Township of, Indiana
1948. Evansville, City of, Indiana
1949. Fairfield, Township of, Indiana
1950. Fall Creek, Township of, Indiana
1951. Fayette, County of, Indiana
1952. Fishers, City of, Indiana
1953. Floyd, County of, Indiana

1954. Fort Wayne, City of, Indiana
1955. Fountain, County of, Indiana
1956. Frankfort, City of, Indiana
1957. Franklin, City of, Indiana
1958. Franklin, County of, Indiana
1959. Franklin, Township of, Indiana
1960. Fulton, County of, Indiana
1961. Gary, City of, Indiana
1962. Georgetown, Township of, Indiana
1963. Gibson, County of, Indiana
1964. Goshen, City of, Indiana
1965. Grant, County of, Indiana
1966. Greencastle, City of, Indiana
1967. Greencastle, Township of, Indiana
1968. Greene, County of, Indiana
1969. Greenfield, City of, Indiana
1970. Greensburg, City of, Indiana
1971. Greenwood, City of, Indiana
1972. Griffith, Town of, Indiana
1973. Guilford, Township of, Indiana
1974. Hamilton, County of, Indiana
1975. Hammond, City of, Indiana
1976. Hancock, County of, Indiana
1977. Hanover, Township of, Indiana
1978. Harris, Township of, Indiana
1979. Harrison, County of, Indiana
1980. Harrison, Township of, Indiana
1981. Hendricks, County of, Indiana
1982. Henry, County of, Indiana
1983. Henry, Township of, Indiana
1984. Highland, Town of, Indiana
1985. Hobart, City of, Indiana
1986. Hobart, Township of, Indiana
1987. Honey Creek, Township of, Indiana
1988. Howard, County of, Indiana
1989. Huntington, City of, Indiana
1990. Huntington, County of, Indiana
1991. Huntington, Township of, Indiana
1992. Jackson, County of, Indiana
1993. Jackson, Township of, Indiana
1994. Jasper, City of, Indiana
1995. Jasper, County of, Indiana
1996. Jay, County of, Indiana
1997. Jefferson, County of, Indiana
1998. Jefferson, Township of, Indiana
1999. Jeffersonville, City of, Indiana
2000. Jeffersonville, Township of, Indiana
2001. Jennings, County of, Indiana
2002. Johnson, County of, Indiana
2003. Keener, Township of, Indiana
2004. Knight, Township of, Indiana
2005. Knox, County of, Indiana
2006. Kokomo, City of, Indiana
2007. Kosciusko, County of, Indiana
2008. La Porte, City of, Indiana
2009. Lafayette, City of, Indiana
2010. LaGrange, County of, Indiana
2011. Lake, County of, Indiana
2012. Lake Station, City of, Indiana
2013. LaPorte, County of, Indiana
2014. Lawrence, City of, Indiana
2015. Lawrence, County of, Indiana
2016. Lawrence, Township of, Indiana
2017. Lawrenceburg, Township of, Indiana
2018. Lebanon, City of, Indiana
2019. Lincoln, Township of, Indiana
2020. Logansport, City of, Indiana
2021. Lost Creek, Township of, Indiana
2022. Madison, City of, Indiana
2023. Madison, County of, Indiana
2024. Madison, Township of, Indiana
2025. Marion, City of, Indiana
2026. Marion, County of/ Indianapolis, City of, Indiana
2027. Marshall, County of, Indiana
2028. Martin, County of, Indiana
2029. Martinsville, City of, Indiana
2030. Merrillville, Town of, Indiana
2031. Miami, County of, Indiana
2032. Michigan City, City of, Indiana
2033. Michigan, Township of, Indiana
2034. Mill, Township of, Indiana
2035. Mishawaka, City of, Indiana
2036. Monroe, County of, Indiana
2037. Montgomery, County of, Indiana
2038. Morgan, County of, Indiana
2039. Muncie, City of, Indiana
2040. Munster, Town of, Indiana
2041. New Albany, City of, Indiana
2042. New Albany, Township of, Indiana
2043. New Castle, City of, Indiana
2044. New Haven, City of, Indiana

2045. Newton, County of, Indiana
2046. Noble, County of, Indiana
2047. Noble, Township of, Indiana
2048. Noblesville, City of, Indiana
2049. Noblesville, Township of, Indiana
2050. North, Township of, Indiana
2051. Ohio, Township of, Indiana
2052. Orange, County of, Indiana
2053. Osolo, Township of, Indiana
2054. Owen, County of, Indiana
2055. Parke, County of, Indiana
2056. Patoka, Township of, Indiana
2057. Penn, Township of, Indiana
2058. Perry, County of, Indiana
2059. Perry, Township of, Indiana
2060. Peru, City of, Indiana
2061. Peru, Township of, Indiana
2062. Pigeon, Township of, Indiana
2063. Pike, County of, Indiana
2064. Pike, Township of, Indiana
2065. Pipe Creek, Township of, Indiana
2066. Plainfield, Town of, Indiana
2067. Pleasant, Township of, Indiana
2068. Portage, City of, Indiana
2069. Portage, Township of, Indiana
2070. Porter, County of, Indiana
2071. Posey, County of, Indiana
2072. Pulaski, County of, Indiana
2073. Putnam, County of, Indiana
2074. Randolph, County of, Indiana
2075. Richland, Township of, Indiana
2076. Richmond, City of, Indiana
2077. Ripley, County of, Indiana
2078. Ross, Township of, Indiana
2079. Rush, County of, Indiana
2080. Schererville, Town of, Indiana
2081. Scott, County of, Indiana
2082. Seymour, City of, Indiana
2083. Shawswick, Township of, Indiana
2084. Shelby, County of, Indiana
2085. Shelbyville, City of, Indiana
2086. Silver Creek, Township of, Indiana
2087. South Bend, City of, Indiana
2088. Speedway, Town of, Indiana
2089. Spencer, County of, Indiana
2090. St. John, Town of, Indiana
2091. St. John, Township of, Indiana
2092. St. Joseph, County of, Indiana
2093. St. Joseph, Township of, Indiana
2094. Starke, County of, Indiana
2095. Steuben, County of, Indiana
2096. Sugar Creek, Township of, Indiana
2097. Sullivan, County of, Indiana
2098. Switzerland, County of, Indiana
2099. Terre Haute, City of, Indiana
2100. Tippecanoe, County of, Indiana
2101. Tipton, County of, Indiana
2102. Troy, Township of, Indiana
2103. Union, Township of, Indiana
2104. Valparaiso, City of, Indiana
2105. Van Buren, Township of, Indiana
2106. Vanderburgh, County of, Indiana
2107. Vermillion, County of, Indiana
2108. Vernon, Township of, Indiana
2109. Vigo, County of, Indiana
2110. Vincennes, City of, Indiana
2111. Vincennes, Township of, Indiana
2112. Wabash, County of, Indiana
2113. Wabash, Township of, Indiana
2114. Warren, Township of, Indiana
2115. Warrick, County of, Indiana
2116. Warsaw, City of, Indiana
2117. Washington, City of, Indiana
2118. Washington, County of, Indiana
2119. Washington, Township of, Indiana
2120. Wayne, County of, Indiana
2121. Wayne, Township of, Indiana
2122. Wea, Township of, Indiana
2123. Wells, County of, Indiana
2124. West Lafayette, City of, Indiana
2125. Westchester, Township of, Indiana
2126. Westfield, City of, Indiana
2127. White, County of, Indiana
2128. White River, Township of, Indiana
2129. Whitley, County of, Indiana
2130. Winfield, Township of, Indiana
2131. Yorktown, Town of, Indiana
2132. Zionsville, Town of, Indiana
2133. Allamakee, County of, Iowa
2134. Altoona, City of, Iowa
2135. Ames, City of, Iowa
2136. Ankeny, City of, Iowa

2137. Appanoose, County of, Iowa
2138. Benton, County of, Iowa
2139. Bettendorf, City of, Iowa
2140. Black Hawk, County of, Iowa
2141. Boone, City of, Iowa
2142. Boone, County of, Iowa
2143. Bremer, County of, Iowa
2144. Buchanan, County of, Iowa
2145. Buena Vista, County of, Iowa
2146. Burlington, City of, Iowa
2147. Butler, County of, Iowa
2148. Carroll, County of, Iowa
2149. Cass, County of, Iowa
2150. Cedar, County of, Iowa
2151. Cedar Falls, City of, Iowa
2152. Cedar Rapids, City of, Iowa
2153. Cerro Gordo, County of, Iowa
2154. Cherokee, County of, Iowa
2155. Chickasaw, County of, Iowa
2156. Clay, County of, Iowa
2157. Clayton, County of, Iowa
2158. Clinton, City of, Iowa
2159. Clinton, County of, Iowa
2160. Clive, City of, Iowa
2161. Coralville, City of, Iowa
2162. Council Bluffs, City of, Iowa
2163. Crawford, County of, Iowa
2164. Dallas, County of, Iowa
2165. Davenport, City of, Iowa
2166. Delaware, County of, Iowa
2167. Des Moines, City of, Iowa
2168. Des Moines, County of, Iowa
2169. Dickinson, County of, Iowa
2170. Dubuque, City of, Iowa
2171. Dubuque, County of, Iowa
2172. Fairfield, City of, Iowa
2173. Fayette, County of, Iowa
2174. Floyd, County of, Iowa
2175. Fort Dodge, City of, Iowa
2176. Fort Madison, City of, Iowa
2177. Franklin, County of, Iowa
2178. Grimes, City of, Iowa
2179. Grundy, County of, Iowa
2180. Guthrie, County of, Iowa
2181. Hamilton, County of, Iowa
2182. Hancock, County of, Iowa
2183. Hardin, County of, Iowa
2184. Harrison, County of, Iowa
2185. Henry, County of, Iowa
2186. Indianola, City of, Iowa
2187. Iowa City, City of, Iowa
2188. Iowa, County of, Iowa
2189. Jackson, County of, Iowa
2190. Jasper, County of, Iowa
2191. Jefferson, County of, Iowa
2192. Johnson, County of, Iowa
2193. Johnston, City of, Iowa
2194. Jones, County of, Iowa
2195. Keokuk, City of, Iowa
2196. Keokuk, County of, Iowa
2197. Kossuth, County of, Iowa
2198. Le Mars, City of, Iowa
2199. Lee, County of, Iowa
2200. Linn, County of, Iowa
2201. Louisa, County of, Iowa
2202. Lyon, County of, Iowa
2203. Madison, County of, Iowa
2204. Mahaska, County of, Iowa
2205. Marion, City of, Iowa
2206. Marion, County of, Iowa
2207. Marshall, County of, Iowa
2208. Marshalltown, City of, Iowa
2209. Mason City, City of, Iowa
2210. Mills, County of, Iowa
2211. Mitchell, County of, Iowa
2212. Muscatine, City of, Iowa
2213. Muscatine, County of, Iowa
2214. Newton, City of, Iowa
2215. North Liberty, City of, Iowa
2216. Norwalk, City of, Iowa
2217. O'Brien, County of, Iowa
2218. Oskaloosa, City of, Iowa
2219. Ottumwa, City of, Iowa
2220. Page, County of, Iowa
2221. Pella, City of, Iowa
2222. Pleasant Hill, City of, Iowa
2223. Plymouth, County of, Iowa
2224. Polk, County of, Iowa
2225. Pottawattamie, County of, Iowa
2226. Poweshiek, County of, Iowa
2227. Scott, County of, Iowa
2228. Shelby, County of, Iowa

2229. Sioux City, City of, Iowa
2230. Sioux, County of, Iowa
2231. Spencer, City of, Iowa
2232. Storm Lake, City of, Iowa
2233. Story, County of, Iowa
2234. Tama, County of, Iowa
2235. Union, County of, Iowa
2236. Urbandale, City of, Iowa
2237. Wapello, County of, Iowa
2238. Warren, County of, Iowa
2239. Washington, County of, Iowa
2240. Waterloo, City of, Iowa
2241. Waukee, City of, Iowa
2242. Waverly, City of, Iowa
2243. Webster, County of, Iowa
2244. West Des Moines, City of, Iowa
2245. Winnebago, County of, Iowa
2246. Winneshiek, County of, Iowa
2247. Woodbury, County of, Iowa
2248. Wright, County of, Iowa
2249. Allen, County of, Kansas
2250. Andover, City of, Kansas
2251. Arkansas City, City of, Kansas
2252. Atchison, City of, Kansas
2253. Atchison, County of, Kansas
2254. Barton, County of, Kansas
2255. Bourbon, County of, Kansas
2256. Bruno, Township of, Kansas
2257. Butler, County of, Kansas
2258. Cherokee, County of, Kansas
2259. Cowley, County of, Kansas
2260. Crawford, County of, Kansas
2261. Derby, City of, Kansas
2262. Dickinson, County of, Kansas
2263. Dodge City, City of, Kansas
2264. Douglas, County of, Kansas
2265. El Dorado, City of, Kansas
2266. Ellis, County of, Kansas
2267. Emporia, City of, Kansas
2268. Fairmount, Township of, Kansas
2269. Finney, County of, Kansas
2270. Ford, County of, Kansas
2271. Franklin, County of, Kansas
2272. Garden City, City of, Kansas
2273. Gardner, City of, Kansas
2274. Geary, County of, Kansas
2275. Great Bend, City of, Kansas
2276. Harvey, County of, Kansas
2277. Hays, City of, Kansas
2278. Haysville, City of, Kansas
2279. Haysville, City of, Kansas
2280. Hutchinson, City of, Kansas
2281. Jackson, County of, Kansas
2282. Jefferson, County of, Kansas
2283. Johnson, County of, Kansas
2284. Junction City, City of, Kansas
2285. Kansas City, City of, Kansas
2286. Kansas City, City of, Kansas
2287. Labette, County of, Kansas
2288. Lansing, City of, Kansas
2289. Lawrence, City of, Kansas
2290. Lawrence, City of, Kansas
2291. Leavenworth, City of, Kansas
2292. Leavenworth, County of, Kansas
2293. Leawood, City of, Kansas
2294. Lenexa, City of, Kansas
2295. Liberal, City of, Kansas
2296. Lyon, County of, Kansas
2297. Madison, Township of, Kansas
2298. Manhattan, City of, Kansas
2299. Marion, County of, Kansas
2300. McPherson, City of, Kansas
2301. McPherson, County of, Kansas
2302. Merriam, City of, Kansas
2303. Miami, County of, Kansas
2304. Montgomery, County of, Kansas
2305. Nemaha, County of, Kansas
2306. Neosho, County of, Kansas
2307. Newton, City of, Kansas
2308. Olathe, City of, Kansas
2309. Osage, County of, Kansas
2310. Ottawa, City of, Kansas
2311. Overland Park, City of, Kansas
2312. Pittsburg, City of, Kansas
2313. Pottawatomie, County of, Kansas
2314. Prairie, Village of, City of, Kansas
2315. Reno, County of, Kansas
2316. Riley, County of, Kansas
2317. Riverside, Township of, Kansas
2318. Rockford, Township of, Kansas
2319. Salina, City of, Kansas
2320. Saline, County of, Kansas

2321. Sedgwick, County of, Kansas
2322. Seward, County of, Kansas
2323. Shawnee, City of, Kansas
2324. Shawnee, County of, Kansas
2325. Soldier, Township of, Kansas
2326. Sumner, County of, Kansas
2327. Topeka, City of, Kansas
2328. Wichita, City of, Kansas
2329. Winfield, City of, Kansas
2330. Wyandotte, County of, Kansas
2331. Adair, County of, Kentucky
2332. Allen, County of, Kentucky
2333. Anderson, County of, Kentucky
2334. Ashland, City of, Kentucky
2335. Bardstown, City of, Kentucky
2336. Barren, County of, Kentucky
2337. Bath, County of, Kentucky
2338. Bell, County of, Kentucky
2339. Berea, City of, Kentucky
2340. Boone, County of, Kentucky
2341. Bourbon, County of, Kentucky
2342. Bowling Green, City of, Kentucky
2343. Boyd, County of, Kentucky
2344. Boyle, County of, Kentucky
2345. Breathitt, County of, Kentucky
2346. Breckinridge, County of, Kentucky
2347. Bullitt, County of, Kentucky
2348. Butler, County of, Kentucky
2349. Caldwell, County of, Kentucky
2350. Calloway, County of, Kentucky
2351. Campbell, County of, Kentucky
2352. Campbellsville, City of, Kentucky
2353. Carroll, County of, Kentucky
2354. Carter, County of, Kentucky
2355. Casey, County of, Kentucky
2356. Christian, County of, Kentucky
2357. Clark, County of, Kentucky
2358. Clay, County of, Kentucky
2359. Clinton, County of, Kentucky
2360. Covington, City of, Kentucky
2361. Danville, City of, Kentucky
2362. Daviess, County of, Kentucky
2363. Edmonson, County of, Kentucky
2364. Elizabethtown, City of, Kentucky
2365. Erlanger, City of, Kentucky
2366. Estill, County of, Kentucky
2367. Fleming, County of, Kentucky
2368. Florence, City of, Kentucky
2369. Floyd, County of, Kentucky
2370. Fort Thomas, City of, Kentucky
2371. Frankfort, City of, Kentucky
2372. Franklin, County of, Kentucky
2373. Garrard, County of, Kentucky
2374. Georgetown, City of, Kentucky
2375. Glasgow, City of, Kentucky
2376. Grant, County of, Kentucky
2377. Graves, County of, Kentucky
2378. Grayson, County of, Kentucky
2379. Green, County of, Kentucky
2380. Greenup, County of, Kentucky
2381. Hardin, County of, Kentucky
2382. Harlan, County of, Kentucky
2383. Harrison, County of, Kentucky
2384. Hart, County of, Kentucky
2385. Henderson, City of, Kentucky
2386. Henderson, County of, Kentucky
2387. Henry, County of, Kentucky
2388. Hopkins, County of, Kentucky
2389. Hopkinsville, City of, Kentucky
2390. Independence, City of, Kentucky
2391. Jackson, County of, Kentucky
2392. Jeffersontown, City of, Kentucky
2393. Jessamine, County of, Kentucky
2394. Johnson, County of, Kentucky
2395. Kenton, County of, Kentucky
2396. Knott, County of, Kentucky
2397. Knox, County of, Kentucky
2398. Larue, County of, Kentucky
2399. Laurel, County of, Kentucky
2400. Lawrence, County of, Kentucky
2401. Lawrenceburg, City of, Kentucky
2402. Letcher, County of, Kentucky
2403. Lewis, County of, Kentucky
2404. Lexington-Fayette, Urban County of, Kentucky
2405. Lincoln, County of, Kentucky
2406. Logan, County of, Kentucky
2407. Louisville/Jefferson, County Metro of, Kentucky
2408. Lyndon, City of, Kentucky
2409. Madison, County of, Kentucky
2410. Madisonville, City of, Kentucky

2411. Magoffin, County of, Kentucky
2412. Marion, County of, Kentucky
2413. Marshall, County of, Kentucky
2414. Martin, County of, Kentucky
2415. Mason, County of, Kentucky
2416. McCracken, County of, Kentucky
2417. McCreary, County of, Kentucky
2418. Meade, County of, Kentucky
2419. Mercer, County of, Kentucky
2420. Metcalfe, County of, Kentucky
2421. Monroe, County of, Kentucky
2422. Montgomery, County of, Kentucky
2423. Morgan, County of, Kentucky
2424. Mount Washington, City of, Kentucky
2425. Muhlenberg, County of, Kentucky
2426. Murray, City of, Kentucky
2427. Nelson, County of, Kentucky
2428. Newport, City of, Kentucky
2429. Nicholasville, City of, Kentucky
2430. Ohio, County of, Kentucky
2431. Oldham, County of, Kentucky
2432. Owen, County of, Kentucky
2433. Owensboro, City of, Kentucky
2434. Paducah, City of, Kentucky
2435. Pendleton, County of, Kentucky
2436. Perry, County of, Kentucky
2437. Pike, County of, Kentucky
2438. Powell, County of, Kentucky
2439. Pulaski, County of, Kentucky
2440. Radcliff, City of, Kentucky
2441. Richmond, City of, Kentucky
2442. Rockcastle, County of, Kentucky
2443. Rowan, County of, Kentucky
2444. Russell, County of, Kentucky
2445. Scott, County of, Kentucky
2446. Shelby, County of, Kentucky
2447. Shelbyville, City of, Kentucky
2448. Shepherdsville, City of, Kentucky
2449. Shively, City of, Kentucky
2450. Simpson, County of, Kentucky
2451. Somerset, City of, Kentucky
2452. Spencer, County of, Kentucky
2453. St. Matthews, City of, Kentucky
2454. Taylor, County of, Kentucky
2455. Todd, County of, Kentucky
2456. Trigg, County of, Kentucky
2457. Union, County of, Kentucky
2458. Warren, County of, Kentucky
2459. Washington, County of, Kentucky
2460. Wayne, County of, Kentucky
2461. Webster, County of, Kentucky
2462. Whitley, County of, Kentucky
2463. Winchester, City of, Kentucky
2464. Woodford, County of, Kentucky
2465. Morgan, County of, Kentucky

Louisiana

2466. Abbeville, City of, Louisiana
2467. Acadia, Parish of, Louisiana
2468. Alexandria, City of, Louisiana
2469. Allen, Parish of, Louisiana
2470. Ascension, Parish of, Louisiana
2471. Assumption, Parish of, Louisiana
2472. Avoyelles, Parish of, Louisiana
2473. Baker, City of, Louisiana
2474. Bastrop, City of, Louisiana
2475. Baton Rouge, City of, Louisiana
2476. Beauregard, Parish of, Louisiana
2477. Bienville, Parish of, Louisiana
2478. Bogalusa, City of, Louisiana
2479. Bossier City, City of, Louisiana
2480. Bossier, Parish of, Louisiana
2481. Broussard, City of, Louisiana
2482. Caddo, Parish of, Louisiana
2483. Calcasieu, Parish of, Louisiana
2484. Central, City of, Louisiana
2485. Claiborne, Parish of, Louisiana
2486. Concordia, Parish of, Louisiana
2487. Covington, City of, Louisiana
2488. Crowley, City of, Louisiana
2489. De Soto, Parish of, Louisiana
2490. DeRidder, City of, Louisiana
2491. East Baton Rouge, Parish of, Louisiana
2492. East Feliciana, Parish of, Louisiana
2493. Evangeline, Parish of, Louisiana
2494. Franklin, Parish of, Louisiana
2495. Gonzales, City of, Louisiana
2496. Grant, Parish of, Louisiana
2497. Gretna, City of, Louisiana
2498. Hammond, City of, Louisiana
2499. Iberia, Parish of, Louisiana

2500. Iberville, Parish of, Louisiana
2501. Jackson, Parish of, Louisiana
2502. Jefferson Davis, Parish of, Louisiana
2503. Jefferson, Parish of, Louisiana
2504. Kenner, City of, Louisiana
2505. Lafayette, City of, Louisiana
2506. Lafayette, Parish of, Louisiana
2507. Lafourche, Parish of, Louisiana
2508. Lake Charles, City of, Louisiana
2509. LaSalle, Parish of, Louisiana
2510. Lincoln, Parish of, Louisiana
2511. Livingston, Parish of, Louisiana
2512. Madison, Parish of, Louisiana
2513. Mandeville, City of, Louisiana
2514. Minden, City of, Louisiana
2515. Monroe, City of, Louisiana
2516. Morehouse, Parish of, Louisiana
2517. Morgan City, City of, Louisiana
2518. Natchitoches, City of, Louisiana
2519. Natchitoches, Parish of, Louisiana
2520. New Iberia, City of, Louisiana
2521. New Orleans, City of, Louisiana
2522. Orleans, Parish of, Louisiana
2523. Opelousas, City of, Louisiana
2524. Ouachita, Parish of, Louisiana
2525. Pineville, City of, Louisiana
2526. Plaquemines, Parish of, Louisiana
2527. Pointe Coupee, Parish of, Louisiana
2528. Rapides, Parish of, Louisiana
2529. Richland, Parish of, Louisiana
2530. Ruston, City of, Louisiana
2531. Sabine, Parish of, Louisiana
2532. Shreveport, City of, Louisiana
2533. Slidell, City of, Louisiana
2534. St. Bernard, Parish of, Louisiana
2535. St. Charles, Parish of, Louisiana
2536. St. Helena, Parish of, Louisiana
2537. St. James, Parish of, Louisiana
2538. St. John the Baptist, Parish of, Louisiana
2539. St. Landry, Parish of, Louisiana
2540. St. Martin, Parish of, Louisiana
2541. St. Mary, Parish of, Louisiana
2542. St. Tammany, Parish of, Louisiana
2543. Sulphur, City of, Louisiana
2544. Tangipahoa, Parish of, Louisiana
2545. Terrebonne, Parish of/ Houma, City of, Louisiana
2546. Thibodaux, City of, Louisiana
2547. Union, Parish of, Louisiana
2548. Vermilion, Parish of, Louisiana
2549. Vernon, Parish of, Louisiana
2550. Washington, Parish of, Louisiana
2551. Webster, Parish of, Louisiana
2552. West Baton Rouge, Parish of, Louisiana
2553. West Carroll, Parish of, Louisiana
2554. West Feliciana, Parish of, Louisiana
2555. West Monroe, City of, Louisiana
2556. Winn, Parish of, Louisiana
2557. Youngsville, City of, Louisiana
2558. Zachary, City of, Louisiana
2559. Androscoggin, County of, Maine
2560. Aroostook, County of, Maine
2561. Auburn, City of, Maine
2562. Augusta, City of, Maine
2563. Bangor, City of, Maine
2564. Biddeford, City of, Maine
2565. Brunswick, Town of, Maine
2566. Cumberland, County of, Maine
2567. Falmouth, Town of, Maine
2568. Franklin, County of, Maine
2569. Gorham, Town of, Maine
2570. Hancock, County of, Maine
2571. Kennebec, County of, Maine
2572. Kennebunk, Town of, Maine
2573. Knox, County of, Maine
2574. Lewiston, City of, Maine
2575. Lincoln, County of, Maine
2576. Orono, Town of, Maine
2577. Oxford, County of, Maine
2578. Penobscot, County of, Maine
2579. Piscataquis, County of, Maine
2580. Portland, City of, Maine
2581. Saco, City of, Maine
2582. Sagadahoc, County of, Maine
2583. Sanford, City of, Maine
2584. Scarborough, Town of, Maine
2585. Somerset, County of, Maine
2586. South Portland, City of, Maine
2587. Standish, Town of, Maine
2588. Waldo, County of, Maine

2589. Washington, County of, Maine
2590. Waterville, City of, Maine
2591. Wells, Town of, Maine
2592. Westbrook, City of, Maine
2593. Windham, Town of, Maine
2594. York, County of, Maine
2595. York, Town of, Maine
2596. Aberdeen, City of, Maryland
2597. Allegany, County of, Maryland
2598. Annapolis, City of, Maryland
2599. Anne Arundel, County of, Maryland
2600. Baltimore, City of, Maryland
2601. Baltimore, County of, Maryland
2602. Bel Air, Town of, Maryland
2603. Bowie, City of, Maryland
2604. Calvert, County of, Maryland
2605. Cambridge, City of, Maryland
2606. Caroline, County of, Maryland
2607. Carroll, County of, Maryland
2608. Cecil, County of, Maryland
2609. Charles, County of, Maryland
2610. College Park, City of, Maryland
2611. Cumberland, City of, Maryland
2612. Dorchester, County of, Maryland
2613. Easton, Town of, Maryland
2614. Elkton, Town of, Maryland
2615. Frederick, City of, Maryland
2616. Frederick, County of, Maryland
2617. Gaithersburg, City of, Maryland
2618. Garrett, County of, Maryland
2619. Greenbelt, City of, Maryland
2620. Hagerstown, City of, Maryland
2621. Harford, County of, Maryland
2622. Havre de Grace, City of, Maryland
2623. Howard, County of, Maryland
2624. Hyattsville, City of, Maryland
2625. Kent, County of, Maryland
2626. Laurel, City of, Maryland
2627. Montgomery, County of, Maryland
2628. New Carrollton, City of, Maryland
2629. Prince George's, County of, Maryland
2630. Queen Anne's, County of, Maryland
2631. Rockville, City of, Maryland
2632. Salisbury, City of, Maryland
2633. Somerset, County of, Maryland
2634. St. Mary's, County of, Maryland
2635. Takoma Park, City of, Maryland
2636. Talbot, County of, Maryland
2637. Washington, County of, Maryland
2638. Westminster, City of, Maryland
2639. Wicomico, County of, Maryland
2640. Worcester, County of, Maryland
2641. Abington, Town of, Massachusetts
2642. Acton, Town of, Massachusetts
2643. Acushnet, Town of, Massachusetts
2644. Agawam, Town of/ City of, Massachusetts
2645. Amesbury, Town of/ City of, Massachusetts
2646. Amherst, Town of, Massachusetts
2647. Andover, Town of, Massachusetts
2648. Arlington, Town of, Massachusetts
2649. Ashland, Town of, Massachusetts
2650. Athol, Town of, Massachusetts
2651. Attleboro, City of, Massachusetts
2652. Auburn, Town of, Massachusetts
2653. Barnstable, County of, Massachusetts
2654. Barnstable, Town of/ City of, Massachusetts
2655. Bedford, Town of, Massachusetts
2656. Belchertown, Town of, Massachusetts
2657. Bellingham, Town of, Massachusetts
2658. Belmont, Town of, Massachusetts
2659. Beverly, City of, Massachusetts
2660. Billerica, Town of, Massachusetts
2661. Boston, City of, Massachusetts
2662. Bourne, Town of, Massachusetts
2663. Braintree, Town of/ City of, Massachusetts
2664. Bridgewater, Town of/ City of, Massachusetts
2665. Bristol, County of, Massachusetts
2666. Brockton, City of, Massachusetts
2667. Brookline, Town of, Massachusetts
2668. Burlington, Town of, Massachusetts
2669. Cambridge, City of, Massachusetts
2670. Canton, Town of, Massachusetts
2671. Carver, Town of, Massachusetts
2672. Charlton, Town of, Massachusetts

2673. Chelmsford, Town of, Massachusetts
2674. Chelsea, City of, Massachusetts
2675. Chicopee, City of, Massachusetts
2676. Clinton, Town of, Massachusetts
2677. Concord, Town of, Massachusetts
2678. Danvers, Town of, Massachusetts
2679. Dartmouth, Town of, Massachusetts
2680. Dedham, Town of, Massachusetts
2681. Dennis, Town of, Massachusetts
2682. Dracut, Town of, Massachusetts
2683. Dudley, Town of, Massachusetts
2684. Dukes, County of, Massachusetts
2685. Duxbury, Town of, Massachusetts
2686. East Bridgewater, Town of, Massachusetts
2687. East Longmeadow, Town of, Massachusetts
2688. Easthampton, Town of, City of, Massachusetts
2689. Easton, Town of, Massachusetts
2690. Everett, City of, Massachusetts
2691. Fairhaven, Town of, Massachusetts
2692. Fall River, City of, Massachusetts
2693. Falmouth, Town of, Massachusetts
2694. Fitchburg, City of, Massachusetts
2695. Foxborough, Town of, Massachusetts
2696. Framingham, City of, Massachusetts
2697. Franklin, Town of, City of, Massachusetts
2698. Gardner, City of, Massachusetts
2699. Gloucester, City of, Massachusetts
2700. Grafton, Town of, Massachusetts
2701. Greenfield, Town of, City of, Massachusetts
2702. Groton, Town of, Massachusetts
2703. Hanover, Town of, Massachusetts
2704. Hanson, Town of, Massachusetts
2705. Harwich, Town of, Massachusetts
2706. Haverhill, City of, Massachusetts
2707. Hingham, Town of, Massachusetts
2708. Holbrook, Town of, Massachusetts
2709. Holden, Town of, Massachusetts
2710. Holliston, Town of, Massachusetts
2711. Holyoke, City of, Massachusetts
2712. Hopkinton, Town of, Massachusetts
2713. Hudson, Town of, Massachusetts
2714. Hull, Town of, Massachusetts
2715. Ipswich, Town of, Massachusetts
2716. Kingston, Town of, Massachusetts
2717. Lakeville, Town of, Massachusetts
2718. Lawrence, City of, Massachusetts
2719. Leicester, Town of, Massachusetts
2720. Leominster, City of, Massachusetts
2721. Lexington, Town of, Massachusetts
2722. Littleton, Town of, Massachusetts
2723. Longmeadow, Town of, Massachusetts
2724. Lowell, City of, Massachusetts
2725. Ludlow, Town of, Massachusetts
2726. Lunenburg, Town of, Massachusetts
2727. Lynn, City of, Massachusetts
2728. Lynnfield, Town of, Massachusetts
2729. Malden, City of, Massachusetts
2730. Mansfield, Town of, Massachusetts
2731. Marblehead, Town of, Massachusetts
2732. Marlborough, City of, Massachusetts
2733. Marshfield, Town of, Massachusetts
2734. Mashpee, Town of, Massachusetts
2735. Maynard, Town of, Massachusetts
2736. Medfield, Town of, Massachusetts
2737. Medford, City of, Massachusetts
2738. Medway, Town of, Massachusetts
2739. Melrose, City of, Massachusetts
2740. Methuen, Town of, City of, Massachusetts
2741. Middleborough, Town of, Massachusetts
2742. Middleton, Town of, Massachusetts
2743. Milford, Town of, Massachusetts
2744. Millbury, Town of, Massachusetts
2745. Milton, Town of, Massachusetts
2746. Nantucket, Town of/ County of, Massachusetts
2747. Natick, Town of, Massachusetts
2748. Needham, Town of, Massachusetts
2749. New Bedford, City of, Massachusetts
2750. Newburyport, City of, Massachusetts
2751. Newton, City of, Massachusetts
2752. Norfolk, County of, Massachusetts
2753. Norfolk, Town of, Massachusetts
2754. North Adams, City of, Massachusetts

2755. North Andover, Town of, Massachusetts
2756. North Attleborough, Town of, Massachusetts
2757. North Reading, Town of, Massachusetts
2758. Northampton, City of, Massachusetts
2759. Northborough, Town of, Massachusetts
2760. Northbridge, Town of, Massachusetts
2761. Norton, Town of, Massachusetts
2762. Norwell, Town of, Massachusetts
2763. Norwood, Town of, Massachusetts
2764. Oxford, Town of, Massachusetts
2765. Palmer, Town of/ City of, Massachusetts
2766. Peabody, City of, Massachusetts
2767. Pembroke, Town of, Massachusetts
2768. Pepperell, Town of, Massachusetts
2769. Pittsfield, City of, Massachusetts
2770. Plymouth, County of, Massachusetts
2771. Plymouth, Town of, Massachusetts
2772. Quincy, City of, Massachusetts
2773. Randolph, Town of/ City of, Massachusetts
2774. Raynham, Town of, Massachusetts
2775. Reading, Town of, Massachusetts
2776. Rehoboth, Town of, Massachusetts
2777. Revere, City of, Massachusetts
2778. Rockland, Town of, Massachusetts
2779. Salem, City of, Massachusetts
2780. Sandwich, Town of, Massachusetts
2781. Saugus, Town of, Massachusetts
2782. Scituate, Town of, Massachusetts
2783. Seekonk, Town of, Massachusetts
2784. Sharon, Town of, Massachusetts
2785. Shrewsbury, Town of, Massachusetts
2786. Somerset, Town of, Massachusetts
2787. Somerville, City of, Massachusetts
2788. South Hadley, Town of, Massachusetts
2789. Southborough, Town of, Massachusetts
2790. Southbridge, Town of/ City of, Massachusetts
2791. Spencer, Town of, Massachusetts
2792. Springfield, City of, Massachusetts
2793. Stoneham, Town of, Massachusetts
2794. Stoughton, Town of, Massachusetts
2795. Sudbury, Town of, Massachusetts
2796. Swampscott, Town of, Massachusetts
2797. Swansea, Town of, Massachusetts
2798. Taunton, City of, Massachusetts
2799. Tewksbury, Town of, Massachusetts
2800. Tyngsborough, Town of, Massachusetts
2801. Uxbridge, Town of, Massachusetts
2802. Wakefield, Town of, Massachusetts
2803. Walpole, Town of, Massachusetts
2804. Waltham, City of, Massachusetts
2805. Wareham, Town of, Massachusetts
2806. Watertown, Town of/ City of, Massachusetts
2807. Wayland, Town of, Massachusetts
2808. Webster, Town of, Massachusetts
2809. Wellesley, Town of, Massachusetts
2810. West Springfield, Town of/ City of, Massachusetts
2811. Westborough, Town of, Massachusetts
2812. Westfield, City of, Massachusetts
2813. Westford, Town of, Massachusetts
2814. Weston, Town of, Massachusetts
2815. Westport, Town of, Massachusetts
2816. Westwood, Town of, Massachusetts
2817. Weymouth, Town of/ City of, Massachusetts
2818. Whitman, Town of, Massachusetts
2819. Wilbraham, Town of, Massachusetts
2820. Wilmington, Town of, Massachusetts
2821. Winchendon, Town of, Massachusetts
2822. Winchester, Town of, Massachusetts
2823. Winthrop, Town of/ City of, Massachusetts
2824. Woburn, City of, Massachusetts
2825. Worcester, City of, Massachusetts
2826. Wrentham, Town of, Massachusetts
2827. Yarmouth, Town of, Massachusetts

2828. Ada, Township of, Michigan
2829. Adrian, City of, Michigan
2830. Alcona, County of, Michigan
2831. Algoma, Township of, Michigan
2832. Allegan, County of, Michigan
2833. Allen Park, City of, Michigan
2834. Allendale, Charter Township of, Michigan
2835. Alpena, County of, Michigan
2836. Alpine, Township of, Michigan
2837. Ann Arbor, City of, Michigan
2838. Antrim, County of, Michigan
2839. Antwerp, Township of, Michigan
2840. Arenac, County of, Michigan
2841. Auburn Hills, City of, Michigan
2842. Bangor, Charter Township of, Michigan
2843. Barry, County of, Michigan
2844. Bath, Charter Township of, Michigan
2845. Battle Creek, City of, Michigan
2846. Bay City, City of, Michigan
2847. Bay, County of, Michigan
2848. Bedford, Township of, Michigan
2849. Benton, Charter Township of, Michigan
2850. Benzie, County of, Michigan
2851. Berkley, City of, Michigan
2852. Berrien, County of, Michigan
2853. Beverly Hills, Village of, Michigan
2854. Big Rapids, City of, Michigan
2855. Birmingham, City of, Michigan
2856. Blackman, Charter Township of, Michigan
2857. Bloomfield, Charter Township of, Michigan
2858. Branch, County of, Michigan
2859. Brandon, Charter Township of, Michigan
2860. Brighton, Township of, Michigan
2861. Brownstown, Charter Township of, Michigan
2862. Burton, City of, Michigan
2863. Byron, Township of, Michigan
2864. Cadillac, City of, Michigan
2865. Caledonia, Township of, Michigan
2866. Calhoun, County of, Michigan
2867. Cannon, Township of, Michigan
2868. Canton, Charter Township of, Michigan
2869. Cascade, Charter Township of, Michigan
2870. Cass, County of, Michigan
2871. Charlevoix, County of, Michigan
2872. Cheboygan, County of, Michigan
2873. Chesterfield, Township of, Michigan
2874. Chippewa, County of, Michigan
2875. Clare, County of, Michigan
2876. Clawson, City of, Michigan
2877. Clinton, Charter Township of, Michigan
2878. Clinton, County of, Michigan
2879. Coldwater, City of, Michigan
2880. Commerce, Charter Township of, Michigan
2881. Comstock, Charter Township of, Michigan
2882. Cooper, Charter Township of, Michigan
2883. Crawford, County of, Michigan
2884. Davison, Township of, Michigan
2885. Dearborn, City of, Michigan
2886. Dearborn Heights, City of, Michigan
2887. Delhi, Charter Township of, Michigan
2888. Delta, Charter Township of, Michigan
2889. Delta, County of, Michigan
2890. Detroit, City of, Michigan
2891. DeWitt, Charter Township of, Michigan
2892. Dickinson, County of, Michigan
2893. East Bay, Township of, Michigan
2894. East Grand Rapids, City of, Michigan
2895. East Lansing, City of, Michigan
2896. Eastpointe, City of, Michigan
2897. Eaton, County of, Michigan
2898. Egelston, Township of, Michigan
2899. Emmet, County of, Michigan
2900. Emmett, Charter Township of, Michigan

2901. Escanaba, City of, Michigan
2902. Farmington, City of, Michigan
2903. Farmington Hills, City of, Michigan
2904. Fenton, Charter Township of, Michigan
2905. Fenton, City of, Michigan
2906. Ferndale, City of, Michigan
2907. Flat Rock, City of, Michigan
2908. Flint, Charter Township of, Michigan
2909. Flint, City of, Michigan
2910. Flushing, Charter Township of, Michigan
2911. Fort Gratiot, Charter Township of, Michigan
2912. Fraser, City of, Michigan
2913. Frenchtown, Township of, Michigan
2914. Fruitport, Charter Township of, Michigan
2915. Gaines, Charter Township of, Michigan
2916. Garden City, City of, Michigan
2917. Garfield, Charter Township of, Michigan
2918. Genesee, Charter Township of, Michigan
2919. Genesee, County of, Michigan
2920. Genoa, Township of, Michigan
2921. Georgetown, Charter Township of, Michigan
2922. Gladwin, County of, Michigan
2923. Gogebic, County of, Michigan
2924. Grand Blanc, Charter Township of, Michigan
2925. Grand Haven, Charter Township of, Michigan
2926. Grand Haven, City of, Michigan
2927. Grand Rapids, Charter Township of, Michigan
2928. Grand Rapids, City of, Michigan
2929. Grand Traverse, County of, Michigan
2930. Grandville, City of, Michigan
2931. Gratiot, County of, Michigan
2932. Green Oak, Township of, Michigan
2933. Grosse Ile, Township of, Michigan
2934. Grosse Pointe Park, City of, Michigan
2935. Grosse Pointe Woods, City of, Michigan
2936. Hamburg, Township of, Michigan
2937. Hamtramck, City of, Michigan
2938. Harper Woods, City of, Michigan
2939. Harrison, Charter Township of, Michigan
2940. Hartland, Township of, Michigan
2941. Hazel Park, City of, Michigan
2942. Highland, Charter Township of, Michigan
2943. Highland Park, City of, Michigan
2944. Hillsdale, County of, Michigan
2945. Holland, Charter Township of, Michigan
2946. Holland, City of, Michigan
2947. Holly, Township of, Michigan
2948. Houghton, County of, Michigan
2949. Huron, Charter Township of, Michigan
2950. Huron, County of, Michigan
2951. Independence, Charter Township of, Michigan
2952. Ingham, County of, Michigan
2953. Inkster, City of, Michigan
2954. Ionia, City of, Michigan
2955. Ionia, County of, Michigan
2956. Iosco, County of, Michigan
2957. Iron, County of, Michigan
2958. Isabella, County of, Michigan
2959. Jackson, City of, Michigan
2960. Jackson, County of, Michigan
2961. Kalamazoo, Charter Township of, Michigan
2962. Kalamazoo, City of, Michigan
2963. Kalamazoo, County of, Michigan
2964. Kalkaska, County of, Michigan
2965. Kent, County of, Michigan
2966. Kentwood, City of, Michigan
2967. Lake, County of, Michigan
2968. Lansing, City of, Michigan
2969. Lapeer, County of, Michigan
2970. Leelanau, County of, Michigan
2971. Lenawee, County of, Michigan

2972. Lenox, Township of, Michigan
2973. Leoni, Township of, Michigan
2974. Lincoln, Charter Township of, Michigan
2975. Lincoln Park, City of, Michigan
2976. Livingston, County of, Michigan
2977. Livonia, City of, Michigan
2978. Lyon, Charter Township of, Michigan
2979. Mackinac, County of, Michigan
2980. Macomb, County of, Michigan
2981. Macomb, Township of, Michigan
2982. Madison Heights, City of, Michigan
2983. Manistee, County of, Michigan
2984. Marion, Township of, Michigan
2985. Marquette, City of, Michigan
2986. Marquette, County of, Michigan
2987. Mason, County of, Michigan
2988. Mecosta, County of, Michigan
2989. Melvindale, City of, Michigan
2990. Menominee, County of, Michigan
2991. Meridian, Charter Township of, Michigan
2992. Midland, City of, Michigan
2993. Midland, County of, Michigan
2994. Milford, Charter Township of, Michigan
2995. Missaukee, County of, Michigan
2996. Monitor, Charter Township of, Michigan
2997. Monroe, Charter Township of, Michigan
2998. Monroe, City of, Michigan
2999. Monroe, County of, Michigan
3000. Montcalm, County of, Michigan
3001. Mount Clemens, City of, Michigan
3002. Mount Morris, Township of, Michigan
3003. Mount Pleasant, City of, Michigan
3004. Mundy, Township of, Michigan
3005. Muskegon, Charter Township of, Michigan
3006. Muskegon, City of, Michigan
3007. Muskegon, County of, Michigan
3008. Muskegon Heights, City of, Michigan
3009. New Baltimore, City of, Michigan
3010. Newaygo, County of, Michigan
3011. Niles, City of, Michigan
3012. Niles, Township of, Michigan
3013. Northville, Township of, Michigan
3014. Norton Shores, City of, Michigan
3015. Novi, City of, Michigan
3016. Oak Park, City of, Michigan
3017. Oakland, Charter Township of, Michigan
3018. Oakland, County of, Michigan
3019. Oceana, County of, Michigan
3020. Oceola, Township of, Michigan
3021. Ogemaw, County of, Michigan
3022. Orion, Charter Township of, Michigan
3023. Osceola, County of, Michigan
3024. Oshtemo, Charter Township of, Michigan
3025. Otsego, County of, Michigan
3026. Ottawa, County of, Michigan
3027. Owosso, City of, Michigan
3028. Oxford, Charter Township of, Michigan
3029. Park, Township of, Michigan
3030. Pittsfield, Charter Township of, Michigan
3031. Plainfield, Charter Township of, Michigan
3032. Plymouth, Charter Township of, Michigan
3033. Pontiac, City of, Michigan
3034. Port Huron, Charter Township of, Michigan
3035. Port Huron, City of, Michigan
3036. Portage, City of, Michigan
3037. Presque Isle, County of, Michigan
3038. Redford, Charter Township of, Michigan
3039. Riverview, City of, Michigan
3040. Rochester, City of, Michigan
3041. Rochester Hills, City of, Michigan
3042. Romulus, City of, Michigan
3043. Roscommon, County of, Michigan
3044. Roseville, City of, Michigan
3045. Royal Oak, City of, Michigan

3046. Saginaw, Charter Township of, Michigan
3047. Saginaw, City of, Michigan
3048. Saginaw, County of, Michigan
3049. Sanilac, County of, Michigan
3050. Sault Ste. Marie, City of, Michigan
3051. Scio, Township of, Michigan
3052. Shelby, Charter Township of, Michigan
3053. Shiawassee, County of, Michigan
3054. South Lyon, City of, Michigan
3055. Southfield, City of, Michigan
3056. Southfield, Township of, Michigan
3057. Southgate, City of, Michigan
3058. Spring Lake, Township of, Michigan
3059. Springfield, Charter Township of, Michigan
3060. St. Clair, County of, Michigan
3061. St. Clair Shores, City of, Michigan
3062. St. Joseph, County of, Michigan
3063. Sterling Heights, City of, Michigan
3064. Sturgis, City of, Michigan
3065. Summit, Township of, Michigan
3066. Superior, Charter Township of, Michigan
3067. Taylor, City of, Michigan
3068. Texas, Charter Township of, Michigan
3069. Thomas, Township of, Michigan
3070. Traverse City, City of, Michigan
3071. Trenton, City of, Michigan
3072. Troy, City of, Michigan
3073. Tuscola, County of, Michigan
3074. Tyrone, Township of, Michigan
3075. Union, Charter Township of, Michigan
3076. Van Buren, Charter Township of, Michigan
3077. Van Buren, County of, Michigan
3078. Vienna, Charter Township of, Michigan
3079. Walker, City of, Michigan
3080. Warren, City of, Michigan
3081. Washington, Township of, Michigan
3082. Washtenaw, County of, Michigan
3083. Waterford, Charter Township of, Michigan
3084. Wayne, City of, Michigan
3085. Wayne, County of, Michigan
3086. West Bloomfield, Charter Township of, Michigan
3087. Westland, City of, Michigan
3088. Wexford, County of, Michigan
3089. White Lake, Charter Township of, Michigan
3090. Wixom, City of, Michigan
3091. Woodhaven, City of, Michigan
3092. Wyandotte, City of, Michigan
3093. Wyoming, City of, Michigan
3094. Ypsilanti, Charter Township of, Michigan
3095. Ypsilanti, City of, Michigan
3096. Zeeland, Charter Township of, Michigan
3097. Aitkin, County of, Minnesota
3098. Albert Lea, City of, Minnesota
3099. Alexandria, City of, Minnesota
3100. Andover, City of, Minnesota
3101. Anoka, City of, Minnesota
3102. Anoka, County of, Minnesota
3103. Apple Valley, City of, Minnesota
3104. Arden Hills, City of, Minnesota
3105. Austin, City of, Minnesota
3106. Becker, County of, Minnesota
3107. Beltrami, County of, Minnesota
3108. Bemidji, City of, Minnesota
3109. Benton, County of, Minnesota
3110. Big Lake, City of, Minnesota
3111. Blaine, City of, Minnesota
3112. Bloomington, City of, Minnesota
3113. Blue Earth, County of, Minnesota
3114. Brainerd, City of, Minnesota
3115. Brooklyn Center, City of, Minnesota
3116. Brooklyn Park, City of, Minnesota
3117. Brown, County of, Minnesota
3118. Buffalo, City of, Minnesota
3119. Burnsville, City of, Minnesota
3120. Carlton, County of, Minnesota
3121. Carver, County of, Minnesota
3122. Cass, County of, Minnesota
3123. Champlin, City of, Minnesota

3124. Chanhassen, City of, Minnesota
3125. Chaska, City of, Minnesota
3126. Chippewa, County of, Minnesota
3127. Chisago, County of, Minnesota
3128. Clay, County of, Minnesota
3129. Cloquet, City of, Minnesota
3130. Columbia Heights, City of, Minnesota
3131. Coon Rapids, City of, Minnesota
3132. Cottage Grove, City of, Minnesota
3133. Cottonwood, County of, Minnesota
3134. Crow Wing, County of, Minnesota
3135. Crystal, City of, Minnesota
3136. Dakota, County of, Minnesota
3137. Dodge, County of, Minnesota
3138. Douglas, County of, Minnesota
3139. Duluth, City of, Minnesota
3140. Eagan, City of, Minnesota
3141. East Bethel, City of, Minnesota
3142. Eden Prairie, City of, Minnesota
3143. Edina, City of, Minnesota
3144. Elk River, City of, Minnesota
3145. Fairmont, City of, Minnesota
3146. Faribault, City of, Minnesota
3147. Faribault, County of, Minnesota
3148. Farmington, City of, Minnesota
3149. Fergus Falls, City of, Minnesota
3150. Fillmore, County of, Minnesota
3151. Forest Lake, City of, Minnesota
3152. Freeborn, County of, Minnesota
3153. Fridley, City of, Minnesota
3154. Golden Valley, City of, Minnesota
3155. Goodhue, County of, Minnesota
3156. Grand Rapids, City of, Minnesota
3157. Ham Lake, City of, Minnesota
3158. Hastings, City of, Minnesota
3159. Hennepin, County of, Minnesota
3160. Hibbing, City of, Minnesota
3161. Hopkins, City of, Minnesota
3162. Houston, County of, Minnesota
3163. Hubbard, County of, Minnesota
3164. Hugo, City of, Minnesota
3165. Hutchinson, City of, Minnesota
3166. Inver Grove Heights, City of, Minnesota
3167. Isanti, County of, Minnesota
3168. Itasca, County of, Minnesota
3169. Kanabec, County of, Minnesota
3170. Kandiyohi, County of, Minnesota
3171. Koochiching, County of, Minnesota
3172. Lake, County of, Minnesota
3173. Lakeville, City of, Minnesota
3174. Le Sueur, County of, Minnesota
3175. Lino Lakes, City of, Minnesota
3176. Little Canada, City of, Minnesota
3177. Lyon, County of, Minnesota
3178. Mankato, City of, Minnesota
3179. Maple Grove, City of, Minnesota
3180. Maplewood, City of, Minnesota
3181. Marshall, City of, Minnesota
3182. Martin, County of, Minnesota
3183. McLeod, County of, Minnesota
3184. Meeker, County of, Minnesota
3185. Mendota Heights, City of, Minnesota
3186. Mille Lacs, County of, Minnesota
3187. Minneapolis, City of, Minnesota
3188. Minnetonka, City of, Minnesota
3189. Monticello, City of, Minnesota
3190. Moorhead, City of, Minnesota
3191. Morrison, County of, Minnesota
3192. Mounds View, City of, Minnesota
3193. Mower, County of, Minnesota
3194. New Brighton, City of, Minnesota
3195. New Hope, City of, Minnesota
3196. New Ulm, City of, Minnesota
3197. Nicollet, County of, Minnesota
3198. Nobles, County of, Minnesota
3199. North Branch, City of, Minnesota
3200. North Mankato, City of, Minnesota
3201. North St. Paul, City of, Minnesota
3202. Northfield, City of, Minnesota
3203. Oakdale, City of, Minnesota
3204. Olmsted, County of, Minnesota
3205. Otsego, City of, Minnesota
3206. Otter Tail, County of, Minnesota
3207. Owatonna, City of, Minnesota
3208. Pennington, County of, Minnesota
3209. Pine, County of, Minnesota
3210. Plymouth, City of, Minnesota
3211. Polk, County of, Minnesota
3212. Pope, County of, Minnesota
3213. Prior Lake, City of, Minnesota

3214. Ramsey, City of, Minnesota
3215. Ramsey, County of, Minnesota
3216. Red Wing, City of, Minnesota
3217. Redwood, County of, Minnesota
3218. Renville, County of, Minnesota
3219. Rice, County of, Minnesota
3220. Richfield, City of, Minnesota
3221. Robbinsdale, City of, Minnesota
3222. Rochester, City of, Minnesota
3223. Rogers, City of, Minnesota
3224. Roseau, County of, Minnesota
3225. Rosemount, City of, Minnesota
3226. Roseville, City of, Minnesota
3227. Sartell, City of, Minnesota
3228. Sauk Rapids, City of, Minnesota
3229. Savage, City of, Minnesota
3230. Scott, County of, Minnesota
3231. Shakopee, City of, Minnesota
3232. Sherburne, County of, Minnesota
3233. Shoreview, City of, Minnesota
3234. Sibley, County of, Minnesota
3235. South St. Paul, City of, Minnesota
3236. St. Cloud, City of, Minnesota
3237. St. Louis, County of, Minnesota
3238. St. Louis Park, City of, Minnesota
3239. St. Michael, City of, Minnesota
3240. St. Paul, City of, Minnesota
3241. St. Peter, City of, Minnesota
3242. Stearns, County of, Minnesota
3243. Steele, County of, Minnesota
3244. Stillwater, City of, Minnesota
3245. Todd, County of, Minnesota
3246. Vadnais Heights, City of, Minnesota
3247. Victoria, City of, Minnesota
3248. Wabasha, County of, Minnesota
3249. Waconia, City of, Minnesota
3250. Wadena, County of, Minnesota
3251. Waseca, County of, Minnesota
3252. Washington, County of, Minnesota
3253. Watonwan, County of, Minnesota
3254. West St. Paul, City of, Minnesota
3255. White Bear Lake, City of, Minnesota
3256. White Bear, Township of, Minnesota
3257. Willmar, City of, Minnesota
3258. Winona, City of, Minnesota
3259. Winona, County of, Minnesota
3260. Woodbury, City of, Minnesota
3261. Worthington, City of, Minnesota
3262. Wright, County of, Minnesota
3263. Adams, County of, Mississippi
3264. Alcorn, County of, Mississippi
3265. Amite, County of, Mississippi
3266. Attala, County of, Mississippi
3267. Bay St. Louis, City of, Mississippi
3268. Biloxi, City of, Mississippi
3269. Bolivar, County of, Mississippi
3270. Brandon, City of, Mississippi
3271. Brookhaven, City of, Mississippi
3272. Byram, City of, Mississippi
3273. Calhoun, County of, Mississippi
3274. Canton, City of, Mississippi
3275. Chickasaw, County of, Mississippi
3276. Clarke, County of, Mississippi
3277. Clarksdale, City of, Mississippi
3278. Clay, County of, Mississippi
3279. Cleveland, City of, Mississippi
3280. Clinton, City of, Mississippi
3281. Coahoma, County of, Mississippi
3282. Columbus, City of, Mississippi
3283. Copiah, County of, Mississippi
3284. Corinth, City of, Mississippi
3285. Covington, County of, Mississippi
3286. DeSoto, County of, Mississippi
3287. D'Iberville, City of, Mississippi
3288. Forrest, County of, Mississippi
3289. Gautier, City of, Mississippi
3290. George, County of, Mississippi
3291. Greene, County of, Mississippi
3292. Greenville, City of, Mississippi
3293. Greenwood, City of, Mississippi
3294. Grenada, City of, Mississippi
3295. Grenada, County of, Mississippi
3296. Gulfport, City of, Mississippi
3297. Hancock, County of, Mississippi
3298. Harrison, County of, Mississippi
3299. Hattiesburg, City of, Mississippi
3300. Hernando, City of, Mississippi
3301. Hinds, County of, Mississippi
3302. Holmes, County of, Mississippi
3303. Horn Lake, City of, Mississippi
3304. Itawamba, County of, Mississippi
3305. Jackson, City of, Mississippi

3306. Jackson, County of, Mississippi
3307. Jasper, County of, Mississippi
3308. Jefferson Davis, County of, Mississippi
3309. Jones, County of, Mississippi
3310. Lafayette, County of, Mississippi
3311. Lamar, County of, Mississippi
3312. Lauderdale, County of, Mississippi
3313. Laurel, City of, Mississippi
3314. Lawrence, County of, Mississippi
3315. Leake, County of, Mississippi
3316. Lee, County of, Mississippi
3317. Leflore, County of, Mississippi
3318. Lincoln, County of, Mississippi
3319. Long Beach, City of, Mississippi
3320. Lowndes, County of, Mississippi
3321. Madison, City of, Mississippi
3322. Madison, County of, Mississippi
3323. Marion, County of, Mississippi
3324. Marshall, County of, Mississippi
3325. McComb, City of, Mississippi
3326. Meridian, City of, Mississippi
3327. Monroe, County of, Mississippi
3328. Moss Point, City of, Mississippi
3329. Natchez, City of, Mississippi
3330. Neshoba, County of, Mississippi
3331. Newton, County of, Mississippi
3332. Noxubee, County of, Mississippi
3333. Ocean Springs, City of, Mississippi
3334. Oktibbeha, County of, Mississippi
3335. Olive Branch, City of, Mississippi
3336. Oxford, City of, Mississippi
3337. Panola, County of, Mississippi
3338. Pascagoula, City of, Mississippi
3339. Pearl, City of, Mississippi
3340. Pearl River, County of, Mississippi
3341. Perry, County of, Mississippi
3342. Petal, City of, Mississippi
3343. Picayune, City of, Mississippi
3344. Pike, County of, Mississippi
3345. Pontotoc, County of, Mississippi
3346. Prentiss, County of, Mississippi
3347. Rankin, County of, Mississippi
3348. Ridgeland, City of, Mississippi
3349. Scott, County of, Mississippi
3350. Simpson, County of, Mississippi
3351. Smith, County of, Mississippi
3352. Southaven, City of, Mississippi
3353. Starkville, City of, Mississippi
3354. Stone, County of, Mississippi
3355. Sunflower, County of, Mississippi
3356. Tallahatchie, County of, Mississippi
3357. Tate, County of, Mississippi
3358. Tippah, County of, Mississippi
3359. Tishomingo, County of, Mississippi
3360. Tupelo, City of, Mississippi
3361. Union, County of, Mississippi
3362. Vicksburg, City of, Mississippi
3363. Walthall, County of, Mississippi
3364. Warren, County of, Mississippi
3365. Washington, County of, Mississippi
3366. Wayne, County of, Mississippi
3367. West Point, City of, Mississippi
3368. Winston, County of, Mississippi
3369. Yalobusha, County of, Mississippi
3370. Yazoo City, City of, Mississippi
3371. Yazoo, County of, Mississippi
3372. Adair, County of, Missouri
3373. Andrew, County of, Missouri
3374. Arnold, City of, Missouri
3375. Audrain, County of, Missouri
3376. Ballwin, City of, Missouri
3377. Barry, County of, Missouri
3378. Barton, County of, Missouri
3379. Bates, County of, Missouri
3380. Bellefontaine Neighbors, City of, Missouri
3381. Belton, City of, Missouri
3382. Benton, County of, Missouri
3383. Blue Springs, City of, Missouri
3384. Bolivar, City of, Missouri
3385. Bollinger, County of, Missouri
3386. Boone, County of, Missouri
3387. Branson, City of, Missouri
3388. Bridgeton, City of, Missouri
3389. Buchanan, County of, Missouri
3390. Butler, County of, Missouri
3391. Callaway, County of, Missouri
3392. Camden, County of, Missouri
3393. Cape Girardeau, City of, Missouri
3394. Cape Girardeau, County of, Missouri
3395. Carthage, City of, Missouri

3396. Cass, County of, Missouri
3397. Cedar, County of, Missouri
3398. Chesterfield, City of, Missouri
3399. Christian, County of, Missouri
3400. Clay, County of, Missouri
3401. Clayton, City of, Missouri
3402. Clinton, County of, Missouri
3403. Cole, County of, Missouri
3404. Columbia, City of, Missouri
3405. Cooper, County of, Missouri
3406. Crawford, County of, Missouri
3407. Crestwood, City of, Missouri
3408. Creve Coeur, City of, Missouri
3409. Dallas, County of, Missouri
3410. Dardenne Prairie, City of, Missouri
3411. DeKalb, County of, Missouri
3412. Dent, County of, Missouri
3413. Douglas, County of, Missouri
3414. Dunklin, County of, Missouri
3415. Eureka, City of, Missouri
3416. Excelsior Springs, City of, Missouri
3417. Farmington, City of, Missouri
3418. Ferguson, City of, Missouri
3419. Festus, City of, Missouri
3420. Florissant, City of, Missouri
3421. Franklin, County of, Missouri
3422. Fulton, City of, Missouri
3423. Gasconade, County of, Missouri
3424. Gladstone, City of, Missouri
3425. Grain Valley, City of, Missouri
3426. Grandview, City of, Missouri
3427. Greene, County of, Missouri
3428. Hannibal, City of, Missouri
3429. Harrisonville, City of, Missouri
3430. Hazelwood, City of, Missouri
3431. Henry, County of, Missouri
3432. Howard, County of, Missouri
3433. Howell, County of, Missouri
3434. Independence, City of, Missouri
3435. Independence, Township of, Missouri
3436. Iron, County of, Missouri
3437. Jackson, City of, Missouri
3438. Jackson, County of, Missouri
3439. Jasper, County of, Missouri
3440. Jefferson City, City of, Missouri
3441. Jefferson, County of, Missouri
3442. Jennings, City of, Missouri
3443. Johnson, County of, Missouri
3444. Joplin, City of, Missouri
3445. Kansas City, City of, Missouri
3446. Kearney, City of, Missouri
3447. Kennett, City of, Missouri
3448. Kirksville, City of, Missouri
3449. Kirkwood, City of, Missouri
3450. Laclede, County of, Missouri
3451. Lafayette, County of, Missouri
3452. Lake St. Louis, City of, Missouri
3453. Lawrence, County of, Missouri
3454. Lebanon, City of, Missouri
3455. Lee's Summit, City of, Missouri
3456. Liberty, City of, Missouri
3457. Liberty, Township of, Missouri
3458. Lincoln, County of, Missouri
3459. Linn, County of, Missouri
3460. Livingston, County of, Missouri
3461. Macon, County of, Missouri
3462. Madison, County of, Missouri
3463. Manchester, City of, Missouri
3464. Marion, County of, Missouri
3465. Marshall, City of, Missouri
3466. Maryland Heights, City of, Missouri
3467. Maryville, City of, Missouri
3468. McDonald, County of, Missouri
3469. Mexico, City of, Missouri
3470. Miller, County of, Missouri
3471. Mississippi, County of, Missouri
3472. Moberly, City of, Missouri
3473. Moniteau, County of, Missouri
3474. Montgomery, County of, Missouri
3475. Morgan, County of, Missouri
3476. Neosho, City of, Missouri
3477. New Madrid, County of, Missouri
3478. Newton, County of, Missouri
3479. Nixa, City of, Missouri
3480. Nodaway, County of, Missouri
3481. O'Fallon, City of, Missouri
3482. Oregon, County of, Missouri
3483. Osage, County of, Missouri
3484. Overland, City of, Missouri
3485. Ozark, City of, Missouri
3486. Pemiscot, County of, Missouri

3487. Perry, County of, Missouri
3488. Pettis, County of, Missouri
3489. Phelps, County of, Missouri
3490. Pike, County of, Missouri
3491. Platte, County of, Missouri
3492. Polk, County of, Missouri
3493. Polk, Township of, Missouri
3494. Poplar Bluff, City of, Missouri
3495. Pulaski, County of, Missouri
3496. Ralls, County of, Missouri
3497. Randolph, County of, Missouri
3498. Ray, County of, Missouri
3499. Raymore, City of, Missouri
3500. Raytown, City of, Missouri
3501. Republic, City of, Missouri
3502. Ripley, County of, Missouri
3503. Rolla, City of, Missouri
3504. Saline, County of, Missouri
3505. Scott, County of, Missouri
3506. Sedalia, City of, Missouri
3507. Sikeston, City of, Missouri
3508. Smithville, City of, Missouri
3509. Springfield, City of, Missouri
3510. St. Ann, City of, Missouri
3511. St. Charles, City of, Missouri
3512. St. Charles, County of, Missouri
3513. St. Francois, County of, Missouri
3514. St. Joseph, City of, Missouri
3515. St. Louis, City of, Missouri
3516. St. Louis, County of, Missouri
3517. St. Peters, City of, Missouri
3518. Ste. Genevieve, County of, Missouri
3519. Stoddard, County of, Missouri
3520. Stone, County of, Missouri
3521. Taney, County of, Missouri
3522. Texas, County of, Missouri
3523. Town and Country, City of, Missouri
3524. Troy, City of, Missouri
3525. Union, City of, Missouri
3526. University City, City of, Missouri
3527. Vernon, County of, Missouri
3528. Warren, County of, Missouri
3529. Warrensburg, City of, Missouri
3530. Washington, City of, Missouri
3531. Washington, County of, Missouri
3532. Wayne, County of, Missouri
3533. Webb City, City of, Missouri
3534. Webster, County of, Missouri
3535. Webster Groves, City of, Missouri
3536. Wentzville, City of, Missouri
3537. West Plains, City of, Missouri
3538. Wildwood, City of, Missouri
3539. Wright, County of, Missouri
3540. Big Horn, County of, Montana
3541. Billings, City of, Montana
3542. Bozeman, City of, Montana
3543. Butte-Silver Bow, Montana
3544. Carbon, County of, Montana
3545. Cascade, County of, Montana
3546. Custer, County of, Montana
3547. Fergus, County of, Montana
3548. Flathead, County of, Montana
3549. Gallatin, County of, Montana
3550. Glacier, County of, Montana
3551. Great Falls, City of, Montana
3552. Helena, City of, Montana
3553. Hill, County of, Montana
3554. Jefferson, County of, Montana
3555. Kalispell, City of, Montana
3556. Lake, County of, Montana
3557. Lewis and Clark, County of, Montana
3558. Lincoln, County of, Montana
3559. Missoula, City of, Montana
3560. Missoula, County of, Montana
3561. Park, County of, Montana
3562. Ravalli, County of, Montana
3563. Richland, County of, Montana
3564. Roosevelt, County of, Montana
3565. Sanders, County of, Montana
3566. Yellowstone, County of, Montana
3567. Adams, County of, Nebraska
3568. Beatrice, City of, Nebraska
3569. Bellevue, City of, Nebraska
3570. Box Butte, County of, Nebraska
3571. Buffalo, County of, Nebraska
3572. Cass, County of, Nebraska
3573. Colfax, County of, Nebraska
3574. Columbus, City of, Nebraska
3575. Custer, County of, Nebraska
3576. Dakota, County of, Nebraska
3577. Dawson, County of, Nebraska

3578. Dodge, County of, Nebraska
3579. Douglas, County of, Nebraska
3580. Fremont, City of, Nebraska
3581. Gage, County of, Nebraska
3582. Grand Island, City of, Nebraska
3583. Hall, County of, Nebraska
3584. Hastings, City of, Nebraska
3585. Holt, County of, Nebraska
3586. Kearney, City of, Nebraska
3587. La Vista, City of, Nebraska
3588. Lancaster, County of, Nebraska
3589. Lexington, City of, Nebraska
3590. Lincoln, City of, Nebraska
3591. Lincoln, County of, Nebraska
3592. Madison, County of, Nebraska
3593. Norfolk, City of, Nebraska
3594. North Platte, City of, Nebraska
3595. Omaha, City of, Nebraska
3596. Otoe, County of, Nebraska
3597. Papillion, City of, Nebraska
3598. Platte, County of, Nebraska
3599. Red Willow, County of, Nebraska
3600. Saline, County of, Nebraska
3601. Sarpy, County of, Nebraska
3602. Saunders, County of, Nebraska
3603. Scotts Bluff, County of, Nebraska
3604. Scottsbluff, City of, Nebraska
3605. Seward, County of, Nebraska
3606. South Sioux City, City of, Nebraska
3607. Washington, County of, Nebraska
3608. York, County of, Nebraska
3609. Boulder City, City of, Nevada
3610. Carson, City of, Nevada
3611. Churchill, County of, Nevada
3612. Clark, County of, Nevada
3613. Douglas, County of, Nevada
3614. Elko, City of, Nevada
3615. Elko, County of, Nevada
3616. Fernley, City of, Nevada
3617. Henderson, City of, Nevada
3618. Humboldt, County of, Nevada
3619. Las Vegas, City of, Nevada
3620. Lyon, County of, Nevada
3621. Mesquite, City of, Nevada
3622. North Las Vegas, City of, Nevada
3623. Nye, County of, Nevada
3624. Reno, City of, Nevada
3625. Sparks, City of, Nevada
3626. Washoe, County of, Nevada
3627. Amherst, Town of, New Hampshire
3628. Bedford, Town of, New Hampshire
3629. Belknap, County of, New Hampshire
3630. Berlin, City of, New Hampshire
3631. Carroll, County of, New Hampshire
3632. Cheshire, County of, New Hampshire
3633. Claremont, City of, New Hampshire
3634. Concord, City of, New Hampshire
3635. Conway, Town of, New Hampshire
3636. Coos, County of, New Hampshire
3637. Derry, Town of, New Hampshire
3638. Dover, City of, New Hampshire
3639. Durham, Town of, New Hampshire
3640. Exeter, Town of, New Hampshire
3641. Goffstown, Town of, New Hampshire
3642. Grafton, County of, New Hampshire
3643. Hampton, Town of, New Hampshire
3644. Hanover, Town of, New Hampshire
3645. Hillsborough, County of, New Hampshire
3646. Hooksett, Town of, New Hampshire
3647. Hudson, Town of, New Hampshire
3648. Keene, City of, New Hampshire
3649. Laconia, City of, New Hampshire
3650. Lebanon, City of, New Hampshire
3651. Londonderry, Town of, New Hampshire
3652. Manchester, City of, New Hampshire
3653. Merrimack, County of, New Hampshire
3654. Merrimack, Town of, New Hampshire
3655. Milford, Town of, New Hampshire
3656. Nashua, City of, New Hampshire
3657. Pelham, Town of, New Hampshire
3658. Portsmouth, City of, New Hampshire
3659. Raymond, Town of, New Hampshire
3660. Rochester, City of, New Hampshire
3661. Rockingham, County of, New Hampshire
3662. Salem, Town of, New Hampshire

3663. Somersworth, City of, New Hampshire
3664. Strafford, County of, New Hampshire
3665. Sullivan, County of, New Hampshire
3666. Windham, Town of, New Hampshire
3667. Aberdeen, Township of, New Jersey
3668. Asbury Park, City of, New Jersey
3669. Atlantic City, City of, New Jersey
3670. Atlantic, County of, New Jersey
3671. Barnegat, Township of, New Jersey
3672. Bayonne, City of, New Jersey
3673. Beachwood, Borough of, New Jersey
3674. Belleville, Township of, New Jersey
3675. Bellmawr, Borough of, New Jersey
3676. Bergen, County of, New Jersey
3677. Bergenfield, Borough of, New Jersey
3678. Berkeley Heights, Township of, New Jersey
3679. Berkeley, Township of, New Jersey
3680. Bernards, Township of, New Jersey
3681. Bloomfield, Township of, New Jersey
3682. Bordentown, Township of, New Jersey
3683. Bound Brook, Borough of, New Jersey
3684. Branchburg, Township of, New Jersey
3685. Brick, Township of, New Jersey
3686. Bridgeton, City of, New Jersey
3687. Bridgewater, Township of, New Jersey
3688. Burlington, County of, New Jersey
3689. Burlington, Township of, New Jersey
3690. Camden, City of, New Jersey
3691. Camden, County of, New Jersey
3692. Cape May, County of, New Jersey
3693. Carteret, Borough of, New Jersey
3694. Cedar Grove, Township of, New Jersey
3695. Chatham, Township of, New Jersey
3696. Cherry Hill, Township of, New Jersey
3697. Cinnaminson, Township of, New Jersey
3698. City of Orange, Township of, New Jersey
3699. Clark, Township of, New Jersey
3700. Cliffside Park, Borough of, New Jersey
3701. Clifton, City of, New Jersey
3702. Clinton, Township of, New Jersey
3703. Collingswood, Borough of, New Jersey
3704. Cranford, Township of, New Jersey
3705. Cumberland, County of, New Jersey
3706. Delran, Township of, New Jersey
3707. Denville, Township of, New Jersey
3708. Deptford, Township of, New Jersey
3709. Dover, Town of, New Jersey
3710. Dumont, Borough of, New Jersey
3711. East Brunswick, Township of, New Jersey
3712. East Greenwich, Township of, New Jersey
3713. East Hanover, Township of, New Jersey
3714. East Orange, City of, New Jersey
3715. East Windsor, Township of, New Jersey
3716. Eatontown, Borough of, New Jersey
3717. Edgewater, Borough of, New Jersey
3718. Edison, Township of, New Jersey
3719. Egg Harbor, Township of, New Jersey
3720. Elizabeth, City of, New Jersey
3721. Elmwood Park, Borough of, New Jersey
3722. Englewood, City of, New Jersey
3723. Essex, County of, New Jersey
3724. Evesham, Township of, New Jersey
3725. Ewing, Township of, New Jersey
3726. Fair Lawn, Borough of, New Jersey
3727. Fairview, Borough of, New Jersey
3728. Florence, Township of, New Jersey
3729. Florham Park, Borough of, New Jersey
3730. Fort Lee, Borough of, New Jersey

3731. Franklin Lakes, Borough of, New Jersey
3732. Franklin, Township of, New Jersey
3733. Freehold, Borough of, New Jersey
3734. Freehold, Township of, New Jersey
3735. Galloway, Township of, New Jersey
3736. Garfield, City of, New Jersey
3737. Glassboro, Borough of, New Jersey
3738. Glen Rock, Borough of, New Jersey
3739. Gloucester City, City of, New Jersey
3740. Gloucester, County of, New Jersey
3741. Gloucester, Township of, New Jersey
3742. Guttenberg, Town of, New Jersey
3743. Hackensack, City of, New Jersey
3744. Haddon, Township of, New Jersey
3745. Haddonfield, Borough of, New Jersey
3746. Hamilton, Township of, New Jersey
3747. Hammonton, Town of, New Jersey
3748. Hanover, Township of, New Jersey
3749. Harrison, Town of, New Jersey
3750. Harrison, Township of, New Jersey
3751. Hasbrouck Heights, Borough of, New Jersey
3752. Hawthorne, Borough of, New Jersey
3753. Hazlet, Township of, New Jersey
3754. Highland Park, Borough of, New Jersey
3755. Hillsborough, Township of, New Jersey
3756. Hillsdale, Borough of, New Jersey
3757. Hillside, Township of, New Jersey
3758. Hoboken, City of, New Jersey
3759. Holmdel, Township of, New Jersey
3760. Hopatcong, Borough of, New Jersey
3761. Hopewell, Township of, New Jersey
3762. Howell, Township of, New Jersey
3763. Hudson, County of, New Jersey
3764. Hunterdon, County of, New Jersey
3765. Irvington, Township of, New Jersey
3766. Jackson, Township of, New Jersey
3767. Jefferson, Township of, New Jersey
3768. Jersey City, City of, New Jersey
3769. Kearny, Town of, New Jersey
3770. Lacey, Township of, New Jersey
3771. Lakewood, Township of, New Jersey
3772. Lawrence, Township of, New Jersey
3773. Lincoln Park, Borough of, New Jersey
3774. Linden, City of, New Jersey
3775. Lindenwold, Borough of, New Jersey
3776. Little Egg Harbor, Township of, New Jersey
3777. Little Falls, Township of, New Jersey
3778. Little Ferry, Borough of, New Jersey
3779. Livingston, Township of, New Jersey
3780. Lodi, Borough of, New Jersey
3781. Long Branch, City of, New Jersey
3782. Lower, Township of, New Jersey
3783. Lumberton, Township of, New Jersey
3784. Lyndhurst, Township of, New Jersey
3785. Madison, Borough of, New Jersey
3786. Mahwah, Township of, New Jersey
3787. Manalapan, Township of, New Jersey
3788. Manchester, Township of, New Jersey
3789. Mantua, Township of, New Jersey
3790. Manville, Borough of, New Jersey
3791. Maple Shade, Township of, New Jersey
3792. Maplewood, Township of, New Jersey
3793. Marlboro, Township of, New Jersey
3794. Medford, Township of, New Jersey
3795. Mercer, County of, New Jersey
3796. Metuchen, Borough of, New Jersey
3797. Middle, Township of, New Jersey
3798. Middlesex, Borough of, New Jersey
3799. Middlesex, County of, New Jersey
3800. Middletown, Township of, New Jersey
3801. Millburn, Township of, New Jersey
3802. Millstone, Township of, New Jersey
3803. Millville, City of, New Jersey
3804. Monmouth, County of, New Jersey
3805. Monroe, Township of, New Jersey

3806. Montclair, Township of, New Jersey
3807. Montgomery, Township of, New Jersey
3808. Montville, Township of, New Jersey
3809. Moorestown, Township of, New Jersey
3810. Morris, County of, New Jersey
3811. Morris, Township of, New Jersey
3812. Morristown, Town of, New Jersey
3813. Mount Laurel, Township of, New Jersey
3814. Mount Olive, Township of, New Jersey
3815. Neptune, Township of, New Jersey
3816. New Brunswick, City of, New Jersey
3817. New Milford, Borough of, New Jersey
3818. New Providence, Borough of, New Jersey
3819. Newark, City of, New Jersey
3820. North Arlington, Borough of, New Jersey
3821. North Bergen, Township of, New Jersey
3822. North Brunswick, Township of, New Jersey
3823. North Plainfield, Borough of, New Jersey
3824. Nutley, Township of, New Jersey
3825. Oakland, Borough of, New Jersey
3826. Ocean City, City of, New Jersey
3827. Ocean, County of, New Jersey
3828. Ocean, Township of, New Jersey
3829. Old Bridge, Township of, New Jersey
3830. Palisades Park, Borough of, New Jersey
3831. Paramus, Borough of, New Jersey
3832. Parsippany-Troy Hills, Township of, New Jersey
3833. Passaic, City of, New Jersey
3834. Passaic, County of, New Jersey
3835. Paterson, City of, New Jersey
3836. Pemberton, Township of, New Jersey
3837. Pennsauken, Township of, New Jersey
3838. Pennsville, Township of, New Jersey
3839. Pequannock, Township of, New Jersey
3840. Perth Amboy, City of, New Jersey
3841. Phillipsburg, Town of, New Jersey
3842. Pine Hill, Borough of, New Jersey
3843. Piscataway, Township of, New Jersey
3844. Plainfield, City of, New Jersey
3845. Plainsboro, Township of, New Jersey
3846. Pleasantville, City of, New Jersey
3847. Point Pleasant, Borough of, New Jersey
3848. Pompton Lakes, Borough of, New Jersey
3849. Princeton, New Jersey
3850. Rahway, City of, New Jersey
3851. Ramsey, Borough of, New Jersey
3852. Randolph, Township of, New Jersey
3853. Raritan, Township of, New Jersey
3854. Readington, Township of, New Jersey
3855. Red Bank, Borough of, New Jersey
3856. Ridgefield, Borough of, New Jersey
3857. Ridgefield Park, Village of, New Jersey
3858. Ridgewood, Village of, New Jersey
3859. Ringwood, Borough of, New Jersey
3860. River Edge, Borough of, New Jersey
3861. Robbinsville, Township of, New Jersey
3862. Rockaway, Township of, New Jersey
3863. Roselle, Borough of, New Jersey
3864. Roselle Park, Borough of, New Jersey
3865. Roxbury, Township of, New Jersey
3866. Rutherford, Borough of, New Jersey
3867. Saddle Brook, Township of, New Jersey
3868. Salem, County of, New Jersey
3869. Sayreville, Borough of, New Jersey
3870. Scotch Plains, Township of, New Jersey
3871. Secaucus, Town of, New Jersey

3872. Somers Point, City of, New Jersey
3873. Somerset, County of, New Jersey
3874. Somerville, Borough of, New Jersey
3875. South Brunswick, Township of, New Jersey
3876. South Orange Village, Township of, New Jersey
3877. South Plainfield, Borough of, New Jersey
3878. South River, Borough of, New Jersey
3879. Southampton, Township of, New Jersey
3880. Sparta, Township of, New Jersey
3881. Springfield, Township of, New Jersey
3882. Stafford, Township of, New Jersey
3883. Summit, City of, New Jersey
3884. Sussex, County of, New Jersey
3885. Teaneck, Township of, New Jersey
3886. Tenafly, Borough of, New Jersey
3887. Tinton Falls, Borough of, New Jersey
3888. Toms River, Township of, New Jersey
3889. Totowa, Borough of, New Jersey
3890. Trenton, City of, New Jersey
3891. Union City, City of, New Jersey
3892. Union, County of, New Jersey
3893. Union, Township of, New Jersey
3894. Upper, Township of, New Jersey
3895. Vernon, Township of, New Jersey
3896. Verona, Township of, New Jersey
3897. Vineland, City of, New Jersey
3898. Voorhees, Township of, New Jersey
3899. Waldwick, Borough of, New Jersey
3900. Wall, Township of, New Jersey
3901. Wallington, Borough of, New Jersey
3902. Wanaque, Borough of, New Jersey
3903. Wantage, Township of, New Jersey
3904. Warren, County of, New Jersey
3905. Warren, Township of, New Jersey
3906. Washington, Township of, New Jersey
3907. Waterford, Township of, New Jersey
3908. Wayne, Township of, New Jersey
3909. Weehawken, Township of, New Jersey
3910. West Caldwell, Township of, New Jersey
3911. West Deptford, Township of, New Jersey
3912. West Milford, Township of, New Jersey
3913. West New York, Town of, New Jersey
3914. West Orange, Township of, New Jersey
3915. West Windsor, Township of, New Jersey
3916. Westfield, Town of, New Jersey
3917. Westwood, Borough of, New Jersey
3918. Willingboro, Township of, New Jersey
3919. Winslow, Township of, New Jersey
3920. Woodbridge, Township of, New Jersey
3921. Woodland Park, Borough of, New Jersey
3922. Woolwich, Township of, New Jersey
3923. Wyckoff, Township of, New Jersey
3924. Albany, City of, New York
3925. Albany, County of, New York
3926. Allegany, County of, New York
3927. Amherst, Town of, New York
3928. Amsterdam, City of, New York
3929. Arcadia, Town of, New York
3930. Auburn, City of, New York
3931. Aurora, Town of, New York
3932. Babylon, Town of, New York
3933. Babylon, Village of, New York
3934. Ballston, Town of, New York
3935. Batavia, City of, New York
3936. Bath, Town of, New York
3937. Beacon, City of, New York
3938. Bedford, Town of, New York
3939. Beekman, Town of, New York
3940. Bethlehem, Town of, New York
3941. Binghamton, City of, New York
3942. Blooming Grove, Town of, New York
3943. Brighton, Town of, New York

3944. Bronx, County of, New York
3945. Brookhaven, Town of, New York
3946. Broome, County of, New York
3947. Brunswick, Town of, New York
3948. Buffalo, City of, New York
3949. Camillus, Town of, New York
3950. Canandaigua, City of, New York
3951. Canandaigua, Town of, New York
3952. Canton, Town of, New York
3953. Carmel, Town of, New York
3954. Catskill, Town of, New York
3955. Cattaraugus, County of, New York
3956. Cayuga, County of, New York
3957. Chautauqua, County of, New York
3958. Cheektowaga, Town of, New York
3959. Chemung, County of, New York
3960. Chenango, County of, New York
3961. Chenango, Town of, New York
3962. Chester, Town of, New York
3963. Chili, Town of, New York
3964. Cicero, Town of, New York
3965. Clarence, Town of, New York
3966. Clarkstown, Town of, New York
3967. Clay, Town of, New York
3968. Clifton Park, Town of, New York
3969. Clinton, County of, New York
3970. Cohoes, City of, New York
3971. Colonie, Town of, New York
3972. Columbia, County of, New York
3973. Corning, City of, New York
3974. Cornwall, Town of, New York
3975. Cortland, City of, New York
3976. Cortland, County of, New York
3977. Cortlandt, Town of, New York
3978. De Witt, Town of, New York
3979. Delaware, County of, New York
3980. Depew, Village of, New York
3981. Dobbs Ferry, Village of, New York
3982. Dryden, Town of, New York
3983. Dunkirk, City of, New York
3984. Dutchess, County of, New York
3985. East Fishkill, Town of, New York
3986. East Greenbush, Town of, New York
3987. East Hampton, Town of, New York
3988. Eastchester, Town of, New York
3989. Elma, Town of, New York
3990. Elmira, City of, New York
3991. Endicott, Village of, New York
3992. Erie, County of, New York
3993. Essex, County of, New York
3994. Evans, Town of, New York
3995. Fallsburg, Town of, New York
3996. Farmington, Town of, New York
3997. Fishkill, Town of, New York
3998. Floral Park, Village of, New York
3999. Franklin, County of, New York
4000. Fredonia, Village of, New York
4001. Freeport, Village of, New York
4002. Fulton, City of, New York
4003. Fulton, County of, New York
4004. Garden City, Village of, New York
4005. Gates, Town of, New York
4006. Geddes, Town of, New York
4007. Genesee, County of, New York
4008. Geneseo, Town of, New York
4009. Geneva, City of, New York
4010. German Flatts, Town of, New York
4011. Glen Cove, City of, New York
4012. Glens Falls, City of, New York
4013. Glenville, Town of, New York
4014. Gloversville, City of, New York
4015. Goshen, Town of, New York
4016. Grand Island, Town of, New York
4017. Great Neck, Village of, New York
4018. Greece, Town of, New York
4019. Greenburgh, Town of, New York
4020. Greene, County of, New York
4021. Guilderland, Town of, New York
4022. Halfmoon, Town of, New York
4023. Hamburg, Town of, New York
4024. Harrison, Town of, New York
4025. Harrison, Village of, New York
4026. Haverstraw, Town of, New York
4027. Haverstraw, Village of, New York
4028. Hempstead, Town of, New York
4029. Hempstead, Village of, New York
4030. Henrietta, Town of, New York
4031. Herkimer, County of, New York
4032. Highlands, Town of, New York
4033. Horseheads, Town of, New York
4034. Huntington, Town of, New York
4035. Hyde Park, Town of, New York

4036. Irondequoit, Town of, New York
4037. Islip, Town of, New York
4038. Ithaca, City of, New York
4039. Ithaca, Town of, New York
4040. Jamestown, City of, New York
4041. Jefferson, County of, New York
4042. Johnson City, Village of, New York
4043. Kenmore, Village of, New York
4044. Kent, Town of, New York
4045. Kings, County of, New York
4046. Kingsbury, Town of, New York
4047. Kingston, City of, New York
4048. Kirkland, Town of, New York
4049. Kiryas Joel, Village of, New York
4050. La Grange, Town of, New York
4051. Lackawanna, City of, New York
4052. Lake Grove, Village of, New York
4053. Lancaster, Town of, New York
4054. Lancaster, Village of, New York
4055. Lansing, Town of, New York
4056. Le Ray, Town of, New York
4057. Lewis, County of, New York
4058. Lewisboro, Town of, New York
4059. Lewiston, Town of, New York
4060. Lindenhurst, Village of, New York
4061. Livingston, County of, New York
4062. Lloyd, Town of, New York
4063. Lockport, City of, New York
4064. Lockport, Town of, New York
4065. Long Beach, City of, New York
4066. Lynbrook, Village of, New York
4067. Lysander, Town of, New York
4068. Madison, County of, New York
4069. Malone, Town of, New York
4070. Malta, Town of, New York
4071. Mamakating, Town of, New York
4072. Mamaroneck, Town of, New York
4073. Mamaroneck, Village of, New York
4074. Manlius, Town of, New York
4075. Massapequa Park, Village of, New York
4076. Massena, Town of, New York
4077. Massena, Village of, New York
4078. Middletown, City of, New York
4079. Milton, Town of, New York
4080. Mineola, Village of, New York
4081. Monroe, County of, New York
4082. Monroe, Town of, New York
4083. Montgomery, County of, New York
4084. Montgomery, Town of, New York
4085. Moreau, Town of, New York
4086. Mount Kisco, Village of/ Town of, New York
4087. Mount Pleasant, Town of, New York
4088. Mount Vernon, City of, New York
4089. Nassau, County of, New York
4090. New Castle, Town of, New York
4091. New Hartford, Town of, New York
4092. New Paltz, Town of, New York
4093. New Rochelle, City of, New York
4094. New Windsor, Town of, New York
4095. New York, City of, New York
4096. New York, County of, New York
4097. Newburgh, City of, New York
4098. Newburgh, Town of, New York
4099. Niagara, County of, New York
4100. Niagara Falls, City of, New York
4101. Niskayuna, Town of, New York
4102. North Castle, Town of, New York
4103. North Greenbush, Town of, New York
4104. North Hempstead, Town of, New York
4105. North Tonawanda, City of, New York
4106. Ogden, Town of, New York
4107. Ogdensburg, City of, New York
4108. Olean, City of, New York
4109. Oneida, City of, New York
4110. Oneida, County of, New York
4111. Oneonta, City of, New York
4112. Onondaga, County of, New York
4113. Onondaga, Town of, New York
4114. Ontario, County of, New York
4115. Ontario, Town of, New York
4116. Orange, County of, New York
4117. Orangetown, Town of, New York
4118. Orchard Park, Town of, New York
4119. Orleans, County of, New York
4120. Ossining, Town of, New York
4121. Ossining, Village of, New York
4122. Oswego, City of, New York

4123. Oswego, County of, New York
4124. Otsego, County of, New York
4125. Owego, Town of, New York
4126. Oyster Bay, Town of, New York
4127. Palm Tree, Town of, New York
4128. Parma, Town of, New York
4129. Patchogue, Village of, New York
4130. Patterson, Town of, New York
4131. Peekskill, City of, New York
4132. Pelham, Town of, New York
4133. Penfield, Town of, New York
4134. Perinton, Town of, New York
4135. Pittsford, Town of, New York
4136. Plattekill, Town of, New York
4137. Plattsburgh, City of, New York
4138. Plattsburgh, Town of, New York
4139. Pomfret, Town of, New York
4140. Port Chester, Village of, New York
4141. Potsdam, Town of, New York
4142. Poughkeepsie, City of, New York
4143. Poughkeepsie, Town of, New York
4144. Putnam, County of, New York
4145. Putnam Valley, Town of, New York
4146. Queens, County of, New York
4147. Queensbury, Town of, New York
4148. Ramapo, Town of, New York
4149. Red Hook, Town of, New York
4150. Rensselaer, County of, New York
4151. Richmond, County of, New York
4152. Riverhead, Town of, New York
4153. Rochester, City of, New York
4154. Rockland, County of, New York
4155. Rockville Centre, Village of, New York
4156. Rome, City of, New York
4157. Rotterdam, Town of, New York
4158. Rye, City of, New York
4159. Rye, Town of, New York
4160. Salina, Town of, New York
4161. Saratoga, County of, New York
4162. Saratoga Springs, City of, New York
4163. Saugerties, Town of, New York
4164. Scarsdale, Village of/ Scarsdale, Town of, New York
4165. Schenectady, City of, New York
4166. Schenectady, County of, New York
4167. Schodack, Town of, New York
4168. Schoharie, County of, New York
4169. Schuyler, County of, New York
4170. Seneca, County of, New York
4171. Shawangunk, Town of, New York
4172. Sleepy Hollow, Village of, New York
4173. Smithtown, Town of, New York
4174. Somers, Town of, New York
4175. Southampton, Town of, New York
4176. Southeast, Town of, New York
4177. Southold, Town of, New York
4178. Spring Valley, Village of, New York
4179. St. Lawrence, County of, New York
4180. Steuben, County of, New York
4181. Stony Point, Town of, New York
4182. Suffern, Village of, New York
4183. Suffolk, County of, New York
4184. Sullivan, County of, New York
4185. Sullivan, Town of, New York
4186. Sweden, Town of, New York
4187. Syracuse, City of, New York
4188. Tarrytown, Village of, New York
4189. Thompson, Town of, New York
4190. Tioga, County of, New York
4191. Tompkins, County of, New York
4192. Tonawanda, City of, New York
4193. Tonawanda, Town of, New York
4194. Troy, City of, New York
4195. Ulster, County of, New York
4196. Ulster, Town of, New York
4197. Union, Town of, New York
4198. Utica, City of, New York
4199. Valley Stream, Village of, New York
4200. Van Buren, Town of, New York
4201. Vestal, Town of, New York
4202. Victor, Town of, New York
4203. Wallkill, Town of, New York
4204. Wappinger, Town of, New York
4205. Warren, County of, New York
4206. Warwick, Town of, New York
4207. Washington, County of, New York
4208. Watertown, City of, New York
4209. Wawarsing, Town of, New York
4210. Wayne, County of, New York
4211. Webster, Town of, New York

4212. West Haverstraw, Village of, New York
4213. West Seneca, Town of, New York
4214. Westbury, Village of, New York
4215. Westchester, County of, New York
4216. Wheatfield, Town of, New York
4217. White Plains, City of, New York
4218. Whitestown, Town of, New York
4219. Wilton, Town of, New York
4220. Woodbury, Town of, New York
4221. Woodbury, Village of, New York
4222. Wyoming, County of, New York
4223. Yates, County of, New York
4224. Yonkers, City of, New York
4225. Yorktown, Town of, New York
4226. Alamance, County of, North Carolina
4227. Albemarle, City of, North Carolina
4228. Alexander, County of, North Carolina
4229. Alleghany, County of, North Carolina
4230. Anson, County of, North Carolina
4231. Apex, Town of, North Carolina
4232. Archdale, City of, North Carolina
4233. Ashe, County of, North Carolina
4234. Asheboro, City of, North Carolina
4235. Asheville, City of, North Carolina
4236. Avery, County of, North Carolina
4237. Beaufort, County of, North Carolina
4238. Belmont, City of, North Carolina
4239. Bertie, County of, North Carolina
4240. Bladen, County of, North Carolina
4241. Boone, Town of, North Carolina
4242. Brunswick, County of, North Carolina
4243. Buncombe, County of, North Carolina
4244. Burke, County of, North Carolina
4245. Burlington, City of, North Carolina
4246. Cabarrus, County of, North Carolina
4247. Caldwell, County of, North Carolina
4248. Camden, County of, North Carolina
4249. Carrboro, Town of, North Carolina
4250. Carteret, County of, North Carolina
4251. Cary, Town of, North Carolina
4252. Caswell, County of, North Carolina
4253. Catawba, County of, North Carolina
4254. Chapel Hill, Town of, North Carolina
4255. Charlotte, City of, North Carolina
4256. Chatham, County of, North Carolina
4257. Cherokee, County of, North Carolina
4258. Chowan, County of, North Carolina
4259. Clay, County of, North Carolina
4260. Clayton, Town of, North Carolina
4261. Clemmons, Village of, North Carolina
4262. Cleveland, County of, North Carolina
4263. Columbus, County of, North Carolina
4264. Concord, City of, North Carolina
4265. Cornelius, Town of, North Carolina
4266. Craven, County of, North Carolina
4267. Cumberland, County of, North Carolina
4268. Currituck, County of, North Carolina
4269. Dare, County of, North Carolina
4270. Davidson, County of, North Carolina
4271. Davidson, Town of, North Carolina
4272. Davie, County of, North Carolina
4273. Duplin, County of, North Carolina
4274. Durham, City of, North Carolina
4275. Durham, County of, North Carolina
4276. Eden, City of, North Carolina
4277. Edgecombe, County of, North Carolina
4278. Elizabeth City, City of, North Carolina
4279. Elon, Town of, North Carolina
4280. Fayetteville, City of, North Carolina
4281. Forsyth, County of, North Carolina
4282. Franklin, County of, North Carolina
4283. Fuquay-Varina, Town of, North Carolina
4284. Garner, Town of, North Carolina
4285. Gaston, County of, North Carolina
4286. Gastonia, City of, North Carolina
4287. Gates, County of, North Carolina
4288. Goldsboro, City of, North Carolina
4289. Graham, City of, North Carolina

4290. Granville, County of, North Carolina
4291. Greene, County of, North Carolina
4292. Greensboro, City of, North Carolina
4293. Greenville, City of, North Carolina
4294. Guilford, County of, North Carolina
4295. Halifax, County of, North Carolina
4296. Harnett, County of, North Carolina
4297. Harrisburg, Town of, North Carolina
4298. Havelock, City of, North Carolina
4299. Haywood, County of, North Carolina
4300. Henderson, City of, North Carolina
4301. Henderson, County of, North Carolina
4302. Hendersonville, City of, North Carolina
4303. Hertford, County of, North Carolina
4304. Hickory, City of, North Carolina
4305. High Point, City of, North Carolina
4306. Hoke, County of, North Carolina
4307. Holly Springs, Town of, North Carolina
4308. Hope Mills, Town of, North Carolina
4309. Huntersville, Town of, North Carolina
4310. Indian Trail, Town of, North Carolina
4311. Iredell, County of, North Carolina
4312. Jackson, County of, North Carolina
4313. Jacksonville, City of, North Carolina
4314. Johnston, County of, North Carolina
4315. Kannapolis, City of, North Carolina
4316. Kernersville, Town of, North Carolina
4317. Kings Mountain, City of, North Carolina
4318. Kinston, City of, North Carolina
4319. Knightdale, Town of, North Carolina
4320. Laurinburg, City of, North Carolina
4321. Lee, County of, North Carolina
4322. Leland, Town of, North Carolina
4323. Lenoir, City of, North Carolina
4324. Lenoir, County of, North Carolina
4325. Lewisville, Town of, North Carolina
4326. Lexington, City of, North Carolina
4327. Lincoln, County of, North Carolina
4328. Lincolnton, City of, North Carolina
4329. Lumberton, City of, North Carolina
4330. Macon, County of, North Carolina
4331. Madison, County of, North Carolina
4332. Martin, County of, North Carolina
4333. Matthews, Town of, North Carolina
4334. McDowell, County of, North Carolina
4335. Mebane, City of, North Carolina
4336. Mecklenburg, County of, North Carolina
4337. Mint Hill, Town of, North Carolina
4338. Mitchell, County of, North Carolina
4339. Monroe, City of, North Carolina
4340. Montgomery, County of, North Carolina
4341. Moore, County of, North Carolina
4342. Mooresville, Town of, North Carolina
4343. Morganton, City of, North Carolina
4344. Morrisville, Town of, North Carolina
4345. Mount Airy, City of, North Carolina
4346. Mount Holly, City of, North Carolina
4347. Nash, County of, North Carolina
4348. New Bern, City of, North Carolina
4349. New Hanover, County of, North Carolina
4350. Newton, City of, North Carolina
4351. Northampton, County of, North Carolina
4352. Onslow, County of, North Carolina
4353. Orange, County of, North Carolina
4354. Pamlico, County of, North Carolina
4355. Pasquotank, County of, North Carolina
4356. Pender, County of, North Carolina
4357. Perquimans, County of, North Carolina
4358. Person, County of, North Carolina
4359. Pinehurst, Village of, North Carolina
4360. Pitt, County of, North Carolina
4361. Polk, County of, North Carolina
4362. Raleigh, City of, North Carolina
4363. Randolph, County of, North Carolina
4364. Reidsville, City of, North Carolina

4365. Richmond, County of, North Carolina
4366. Roanoke Rapids, City of, North Carolina
4367. Robeson, County of, North Carolina
4368. Rockingham, County of, North Carolina
4369. Rocky Mount, City of, North Carolina
4370. Rowan, County of, North Carolina
4371. Rutherford, County of, North Carolina
4372. Salisbury, City of, North Carolina
4373. Sampson, County of, North Carolina
4374. Sanford, City of, North Carolina
4375. Scotland, County of, North Carolina
4376. Shelby, City of, North Carolina
4377. Smithfield, Town of, North Carolina
4378. Southern Pines, Town of, North Carolina
4379. Spring Lake, Town of, North Carolina
4380. Stallings, Town of, North Carolina
4381. Stanly, County of, North Carolina
4382. Statesville, City of, North Carolina
4383. Stokes, County of, North Carolina
4384. Summerfield, Town of, North Carolina
4385. Surry, County of, North Carolina
4386. Swain, County of, North Carolina
4387. Tarboro, Town of, North Carolina
4388. Thomasville, City of, North Carolina
4389. Transylvania, County of, North Carolina
4390. Union, County of, North Carolina
4391. Vance, County of, North Carolina
4392. Wake, County of, North Carolina
4393. Wake Forest, Town of, North Carolina
4394. Warren, County of, North Carolina
4395. Washington, County of, North Carolina
4396. Watauga, County of, North Carolina
4397. Waxhaw, Town of, North Carolina
4398. Wayne, County of, North Carolina
4399. Waynesville, Town of, North Carolina
4400. Weddington, Town of, North Carolina
4401. Wilkes, County of, North Carolina
4402. Wilmington, City of, North Carolina
4403. Wilson, City of, North Carolina
4404. Wilson, County of, North Carolina
4405. Winston-Salem, City of, North Carolina
4406. Yadkin, County of, North Carolina
4407. Yancey, County of, North Carolina
4408. Barnes, County of, North Dakota
4409. Bismarck, City of, North Dakota
4410. Burleigh, County of, North Dakota
4411. Cass, County of, North Dakota
4412. Dickinson, City of, North Dakota
4413. Fargo, City of, North Dakota
4414. Grand Forks, City of, North Dakota
4415. Grand Forks, County of, North Dakota
4416. Jamestown, City of, North Dakota
4417. Mandan, City of, North Dakota
4418. McKenzie, County of, North Dakota
4419. Minot, City of, North Dakota
4420. Morton, County of, North Dakota
4421. Mountrail, County of, North Dakota
4422. Ramsey, County of, North Dakota
4423. Richland, County of, North Dakota
4424. Rolette, County of, North Dakota
4425. Stark, County of, North Dakota
4426. Stutsman, County of, North Dakota
4427. Walsh, County of, North Dakota
4428. Ward, County of, North Dakota
4429. West Fargo, City of, North Dakota
4430. Williams, County of, North Dakota
4431. Williston, City of, North Dakota
4432. Adams, County of, Ohio
4433. Akron, City of, Ohio
4434. Allen, County of, Ohio
4435. Alliance, City of, Ohio
4436. American, Township of, Ohio
4437. Amherst, City of, Ohio
4438. Anderson, Township of, Ohio
4439. Ashland, City of, Ohio
4440. Ashland, County of, Ohio

4441. Ashtabula, City of, Ohio
4442. Ashtabula, County of, Ohio
4443. Ashtabula, Township of, Ohio
4444. Athens, City of, Ohio
4445. Athens, County of, Ohio
4446. Athens, Township of, Ohio
4447. Auglaize, County of, Ohio
4448. Aurora, City of, Ohio
4449. Austintown, Township of, Ohio
4450. Avon, City of, Ohio
4451. Avon Lake, City of, Ohio
4452. Bainbridge, Township of, Ohio
4453. Barberton, City of, Ohio
4454. Batavia, Township of, Ohio
4455. Bath, Township of, Ohio
4456. Bay, Village of, City of, Ohio
4457. Beachwood, City of, Ohio
4458. Beavercreek, City of, Ohio
4459. Beavercreek, Township of, Ohio
4460. Bedford, City of, Ohio
4461. Bedford Heights, City of, Ohio
4462. Bellefontaine, City of, Ohio
4463. Belmont, County of, Ohio
4464. Berea, City of, Ohio
4465. Bethel, Township of, Ohio
4466. Bexley, City of, Ohio
4467. Blue Ash, City of, Ohio
4468. Boardman, Township of, Ohio
4469. Bowling Green, City of, Ohio
4470. Brecksville, City of, Ohio
4471. Brimfield, Township of, Ohio
4472. Broadview Heights, City of, Ohio
4473. Brook Park, City of, Ohio
4474. Brooklyn, City of, Ohio
4475. Brown, County of, Ohio
4476. Brunswick, City of, Ohio
4477. Brunswick Hills, Township of, Ohio
4478. Bucyrus, City of, Ohio
4479. Butler, County of, Ohio
4480. Cambridge, City of, Ohio
4481. Cambridge, Township of, Ohio
4482. Canfield, Township of, Ohio
4483. Canton, City of, Ohio
4484. Canton, Township of, Ohio
4485. Carroll, County of, Ohio
4486. Celina, City of, Ohio
4487. Centerville, City of, Ohio
4488. Champaign, County of, Ohio
4489. Chester, Township of, Ohio
4490. Chillicothe, City of, Ohio
4491. Chippewa, Township of, Ohio
4492. Cincinnati, City of, Ohio
4493. Circleville, City of, Ohio
4494. Clark, County of, Ohio
4495. Clayton, City of, Ohio
4496. Clear Creek, Township of, Ohio
4497. Clermont, County of, Ohio
4498. Cleveland, City of, Ohio
4499. Cleveland Heights, City of, Ohio
4500. Clinton, County of, Ohio
4501. Clinton, Township of, Ohio
4502. Colerain, Township of, Ohio
4503. Columbiana, County of, Ohio
4504. Columbus, City of, Ohio
4505. Concord, Township of, Ohio
4506. Conneaut, City of, Ohio
4507. Copley, Township of, Ohio
4508. Coshocton, City of, Ohio
4509. Coshocton, County of, Ohio
4510. Coventry, Township of, Ohio
4511. Crawford, County of, Ohio
4512. Cuyahoga, County of, Ohio
4513. Cuyahoga Falls, City of, Ohio
4514. Darke, County of, Ohio
4515. Dayton, City of, Ohio
4516. Deerfield, Township of, Ohio
4517. Defiance, City of, Ohio
4518. Defiance, County of, Ohio
4519. Defiance, Township of, Ohio
4520. Delaware, City of, Ohio
4521. Delaware City, Township of, Ohio
4522. Delaware, County of, Ohio
4523. Delhi, Township of, Ohio
4524. Dover, City of, Ohio
4525. Dublin, City of, Ohio
4526. Duchouquet, Township of, Ohio
4527. East Cleveland, City of, Ohio
4528. East Liverpool, City of, Ohio
4529. Eastlake, City of, Ohio
4530. Elyria, City of, Ohio
4531. Englewood, City of, Ohio
4532. Erie, County of, Ohio

4533. Etna, Township of, Ohio
4534. Euclid, City of, Ohio
4535. Fairborn, City of, Ohio
4536. Fairfield, City of, Ohio
4537. Fairfield, County of, Ohio
4538. Fairfield, Township of, Ohio
4539. Fairview Park, City of, Ohio
4540. Falls, Township of, Ohio
4541. Fayette, County of, Ohio
4542. Findlay, City of, Ohio
4543. Forest Park, City of, Ohio
4544. Fostoria, City of, Ohio
4545. Franklin, City of, Ohio
4546. Franklin, County of, Ohio
4547. Franklin, Township of, Ohio
4548. Fremont, City of, Ohio
4549. Fulton, County of, Ohio
4550. Gahanna, City of, Ohio
4551. Gallia, County of, Ohio
4552. Garfield Heights, City of, Ohio
4553. Geauga, County of, Ohio
4554. Geneva, Township of, Ohio
4555. Genoa, Township of, Ohio
4556. Goshen, Township of, Ohio
4557. Granville, Township of, Ohio
4558. Green, City of, Ohio
4559. Green, Township of, Ohio
4560. Greene, County of, Ohio
4561. Greenville, City of, Ohio
4562. Greenville, Township of, Ohio
4563. Grove City, City of, Ohio
4564. Guernsey, County of, Ohio
4565. Hamilton, City of, Ohio
4566. Hamilton, County of, Ohio
4567. Hamilton, Township of, Ohio
4568. Hancock, County of, Ohio
4569. Hardin, County of, Ohio
4570. Harrison, City of, Ohio
4571. Harrison, County of, Ohio
4572. Harrison, Township of, Ohio
4573. Heath, City of, Ohio
4574. Henry, County of, Ohio
4575. Highland, County of, Ohio
4576. Hilliard, City of, Ohio
4577. Hocking, County of, Ohio
4578. Holmes, County of, Ohio
4579. Howland, Township of, Ohio
4580. Hubbard, Township of, Ohio
4581. Huber Heights, City of, Ohio
4582. Hudson, City of, Ohio
4583. Huron, County of, Ohio
4584. Huron, Township of, Ohio
4585. Ironton, City of, Ohio
4586. Jackson, County of, Ohio
4587. Jackson, Township of, Ohio
4588. Jefferson, County of, Ohio
4589. Jefferson, Township of, Ohio
4590. Kent, City of, Ohio
4591. Kettering, City of, Ohio
4592. Knox, County of, Ohio
4593. Lake, County of, Ohio
4594. Lake, Township of, Ohio
4595. Lakewood, City of, Ohio
4596. Lancaster, City of, Ohio
4597. Lancaster City, Township of, Ohio
4598. Lawrence, County of, Ohio
4599. Lawrence, Township of, Ohio
4600. Lebanon, City of, Ohio
4601. Lemon, Township of, Ohio
4602. Liberty, Township of, Ohio
4603. Licking, County of, Ohio
4604. Lima, City of, Ohio
4605. Logan, County of, Ohio
4606. London, City of, Ohio
4607. Lorain, City of, Ohio
4608. Lorain, County of, Ohio
4609. Loveland, City of, Ohio
4610. Lucas, County of, Ohio
4611. Lyndhurst, City of, Ohio
4612. Macedonia, City of, Ohio
4613. Mad River, Township of, Ohio
4614. Madison, County of, Ohio
4615. Madison, Township of, Ohio
4616. Mahoning, County of, Ohio
4617. Mansfield, City of, Ohio
4618. Maple Heights, City of, Ohio
4619. Marietta, City of, Ohio
4620. Marion, City of, Ohio
4621. Marion, County of, Ohio
4622. Marion, Township of, Ohio
4623. Marysville, City of, Ohio
4624. Mason, City of, Ohio

4625. Massillon, City of, Ohio
4626. Maumee, City of, Ohio
4627. Mayfield Heights, City of, Ohio
4628. Medina, City of, Ohio
4629. Medina City, Township of, Ohio
4630. Medina, County of, Ohio
4631. Meigs, County of, Ohio
4632. Mentor, City of, Ohio
4633. Mercer, County of, Ohio
4634. Miami, County of, Ohio
4635. Miami, Township of, Ohio
4636. Miamisburg, City of, Ohio
4637. Middleburg Heights, City of, Ohio
4638. Middletown, City of, Ohio
4639. Mifflin, Township of, Ohio
4640. Monclova, Township of, Ohio
4641. Monroe, City of, Ohio
4642. Monroe, County of, Ohio
4643. Monroe, Township of, Ohio
4644. Montgomery, City of, Ohio
4645. Montgomery, County of, Ohio
4646. Montville, Township of, Ohio
4647. Moorefield, Township of, Ohio
4648. Morgan, County of, Ohio
4649. Morrow, County of, Ohio
4650. Mount Vernon, City of, Ohio
4651. Muskingum, County of, Ohio
4652. New Albany, City of, Ohio
4653. New Franklin, City of, Ohio
4654. New Philadelphia, City of, Ohio
4655. Newark, City of, Ohio
4656. Niles, City of, Ohio
4657. Noble, County of, Ohio
4658. North Canton, City of, Ohio
4659. North Olmsted, City of, Ohio
4660. North Ridgeville, City of, Ohio
4661. North Royalton, City of, Ohio
4662. Norton, City of, Ohio
4663. Norwalk, City of, Ohio
4664. Norwich, Township of, Ohio
4665. Norwood, City of, Ohio
4666. Olmsted, Township of, Ohio
4667. Orange, Township of, Ohio
4668. Oregon, City of, Ohio
4669. Ottawa, County of, Ohio
4670. Oxford, City of, Ohio
4671. Oxford, Township of, Ohio
4672. Painesville, City of, Ohio
4673. Painesville, Township of, Ohio
4674. Paris, Township of, Ohio
4675. Parma, City of, Ohio
4676. Parma Heights, City of, Ohio
4677. Pataskala, City of, Ohio
4678. Paulding, County of, Ohio
4679. Pease, Township of, Ohio
4680. Perkins, Township of, Ohio
4681. Perry, County of, Ohio
4682. Perry, Township of, Ohio
4683. Perrysburg, City of, Ohio
4684. Perrysburg, Township of, Ohio
4685. Pickaway, County of, Ohio
4686. Pickerington, City of, Ohio
4687. Pierce, Township of, Ohio
4688. Pike, County of, Ohio
4689. Piqua, City of, Ohio
4690. Plain, Township of, Ohio
4691. Pleasant, Township of, Ohio
4692. Poland, Township of, Ohio
4693. Portage, County of, Ohio
4694. Portsmouth, City of, Ohio
4695. Powell, City of, Ohio
4696. Prairie, Township of, Ohio
4697. Preble, County of, Ohio
4698. Putnam, County of, Ohio
4699. Ravenna, City of, Ohio
4700. Reading, City of, Ohio
4701. Reynoldsburg, City of, Ohio
4702. Richland, County of, Ohio
4703. Richland, Township of, Ohio
4704. Richmond Heights, City of, Ohio
4705. Riverside, City of, Ohio
4706. Rocky River, City of, Ohio
4707. Ross, County of, Ohio
4708. Sagamore Hills, Township of, Ohio
4709. Salem, City of, Ohio
4710. Sandusky, City of, Ohio
4711. Sandusky, County of, Ohio
4712. Scioto, County of, Ohio
4713. Scioto, Township of, Ohio
4714. Seneca, County of, Ohio
4715. Seven Hills, City of, Ohio
4716. Shaker Heights, City of, Ohio

4717. Sharon, Township of, Ohio
4718. Sharonville, City of, Ohio
4719. Shawnee, Township of, Ohio
4720. Shelby, County of, Ohio
4721. Sidney, City of, Ohio
4722. Solon, City of, Ohio
4723. South Euclid, City of, Ohio
4724. Springboro, City of, Ohio
4725. Springdale, City of, Ohio
4726. Springfield, City of, Ohio
4727. Springfield, Township of, Ohio
4728. St. Marys, Township of, Ohio
4729. Stark, County of, Ohio
4730. Steubenville, City of, Ohio
4731. Stow, City of, Ohio
4732. Streetsboro, City of, Ohio
4733. Strongsville, City of, Ohio
4734. Struthers, City of, Ohio
4735. Summit, County of, Ohio
4736. Sycamore, Township of, Ohio
4737. Sylvania, City of, Ohio
4738. Sylvania, Township of, Ohio
4739. Symmes, Township of, Ohio
4740. Tallmadge, City of, Ohio
4741. Tiffin, City of, Ohio
4742. Tipp City, City of, Ohio
4743. Toledo, City of, Ohio
4744. Trenton, City of, Ohio
4745. Trotwood, City of, Ohio
4746. Troy, City of, Ohio
4747. Trumbull, County of, Ohio
4748. Truro, Township of, Ohio
4749. Turtlecreek, Township of, Ohio
4750. Tuscarawas, County of, Ohio
4751. Twinsburg, City of, Ohio
4752. Union, County of, Ohio
4753. Union, Township of, Ohio
4754. University Heights, City of, Ohio
4755. Upper Arlington, City of, Ohio
4756. Upper, Township of, Ohio
4757. Urbana, City of, Ohio
4758. Urbana, Township of, Ohio
4759. Van Wert, City of, Ohio
4760. Van Wert, County of, Ohio
4761. Vandalia, City of, Ohio
4762. Vermilion, City of, Ohio
4763. Vinton, County of, Ohio
4764. Violet, Township of, Ohio
4765. Wadsworth, City of, Ohio
4766. Warren, City of, Ohio
4767. Warren, County of, Ohio
4768. Warrensville Heights, City of, Ohio
4769. Washington, County of, Ohio
4770. Washington Court House, City of, Ohio
4771. Washington, Township of, Ohio
4772. Wayne, County of, Ohio
4773. Weathersfield, Township of, Ohio
4774. West Carrollton, City of, Ohio
4775. West Chester, Township of, Ohio
4776. Westerville, City of, Ohio
4777. Westlake, City of, Ohio
4778. Whitehall, City of, Ohio
4779. Wickliffe, City of, Ohio
4780. Williams, County of, Ohio
4781. Willoughby, City of, Ohio
4782. Willowick, City of, Ohio
4783. Wilmington, City of, Ohio
4784. Wood, County of, Ohio
4785. Wooster, City of, Ohio
4786. Worthington, City of, Ohio
4787. Wyandot, County of, Ohio
4788. Xenia, City of, Ohio
4789. Youngstown, City of, Ohio
4790. Zanesville, City of, Ohio
4791. Ada, City of, Oklahoma
4792. Adair, County of, Oklahoma
4793. Altus, City of, Oklahoma
4794. Ardmore, City of, Oklahoma
4795. Atoka, County of, Oklahoma
4796. Bartlesville, City of, Oklahoma
4797. Beckham, County of, Oklahoma
4798. Bethany, City of, Oklahoma
4799. Bixby, City of, Oklahoma
4800. Broken Arrow, City of, Oklahoma
4801. Bryan, County of, Oklahoma
4802. Caddo, County of, Oklahoma
4803. Canadian, County of, Oklahoma
4804. Carter, County of, Oklahoma
4805. Cherokee, County of, Oklahoma
4806. Chickasha, City of, Oklahoma
4807. Choctaw, City of, Oklahoma

4808. Choctaw, County of, Oklahoma
4809. Claremore, City of, Oklahoma
4810. Cleveland, County of, Oklahoma
4811. Comanche, County of, Oklahoma
4812. Coweta, City of, Oklahoma
4813. Craig, County of, Oklahoma
4814. Creek, County of, Oklahoma
4815. Custer, County of, Oklahoma
4816. Del City, City of, Oklahoma
4817. Delaware, County of, Oklahoma
4818. Duncan, City of, Oklahoma
4819. Durant, City of, Oklahoma
4820. Edmond, City of, Oklahoma
4821. El Reno, City of, Oklahoma
4822. Elk City, City of, Oklahoma
4823. Enid, City of, Oklahoma
4824. Garfield, County of, Oklahoma
4825. Garvin, County of, Oklahoma
4826. Glenpool, City of, Oklahoma
4827. Grady, County of, Oklahoma
4828. Guthrie, City of, Oklahoma
4829. Guymon, City of, Oklahoma
4830. Haskell, County of, Oklahoma
4831. Hughes, County of, Oklahoma
4832. Jackson, County of, Oklahoma
4833. Jenks, City of, Oklahoma
4834. Johnston, County of, Oklahoma
4835. Kay, County of, Oklahoma
4836. Kingfisher, County of, Oklahoma
4837. Latimer, County of, Oklahoma
4838. Lawton, City of, Oklahoma
4839. Le Flore, County of, Oklahoma
4840. Lincoln, County of, Oklahoma
4841. Logan, County of, Oklahoma
4842. Love, County of, Oklahoma
4843. Marshall, County of, Oklahoma
4844. Mayes, County of, Oklahoma
4845. McAlester, City of, Oklahoma
4846. McClain, County of, Oklahoma
4847. McCurtain, County of, Oklahoma
4848. McIntosh, County of, Oklahoma
4849. Miami, City of, Oklahoma
4850. Midwest City, City of, Oklahoma
4851. Moore, City of, Oklahoma
4852. Murray, County of, Oklahoma
4853. Muskogee, City of, Oklahoma
4854. Muskogee, County of, Oklahoma
4855. Mustang, City of, Oklahoma
4856. Newcastle, City of, Oklahoma
4857. Noble, County of, Oklahoma
4858. Norman, City of, Oklahoma
4859. Nowata, County of, Oklahoma
4860. Okfuskee, County of, Oklahoma
4861. Oklahoma City, City of, Oklahoma
4862. Oklahoma, County of, Oklahoma
4863. Okmulgee, City of, Oklahoma
4864. Okmulgee, County of, Oklahoma
4865. Osage, County of, Oklahoma
4866. Ottawa, County of, Oklahoma
4867. Owasso, City of, Oklahoma
4868. Pawnee, County of, Oklahoma
4869. Payne, County of, Oklahoma
4870. Pittsburg, County of, Oklahoma
4871. Ponca City, City of, Oklahoma
4872. Pontotoc, County of, Oklahoma
4873. Pottawatomie, County of, Oklahoma
4874. Pushmataha, County of, Oklahoma
4875. Rogers, County of, Oklahoma
4876. Sand Springs, City of, Oklahoma
4877. Sapulpa, City of, Oklahoma
4878. Seminole, County of, Oklahoma
4879. Sequoyah, County of, Oklahoma
4880. Shawnee, City of, Oklahoma
4881. Stephens, County of, Oklahoma
4882. Stillwater, City of, Oklahoma
4883. Tahlequah, City of, Oklahoma
4884. Texas, County of, Oklahoma
4885. Tulsa, City of, Oklahoma
4886. Tulsa, County of, Oklahoma
4887. Wagoner, County of, Oklahoma
4888. Warr Acres, City of, Oklahoma
4889. Washington, County of, Oklahoma
4890. Washita, County of, Oklahoma
4891. Weatherford, City of, Oklahoma
4892. Woodward, City of, Oklahoma
4893. Woodward, County of, Oklahoma
4894. Yukon, City of, Oklahoma
4895. Albany, City of, Oregon
4896. Ashland, City of, Oregon
4897. Astoria, City of, Oregon
4898. Baker, County of, Oregon
4899. Beaverton, City of, Oregon

4900. Bend, City of, Oregon
4901. Benton, County of, Oregon
4902. Canby, City of, Oregon
4903. Central Point, City of, Oregon
4904. Clackamas, County of, Oregon
4905. Clatsop, County of, Oregon
4906. Columbia, County of, Oregon
4907. Coos Bay, City of, Oregon
4908. Coos, County of, Oregon
4909. Cornelius, City of, Oregon
4910. Corvallis, City of, Oregon
4911. Cottage Grove, City of, Oregon
4912. Crook, County of, Oregon
4913. Curry, County of, Oregon
4914. Dallas, City of, Oregon
4915. Deschutes, County of, Oregon
4916. Douglas, County of, Oregon
4917. Eugene, City of, Oregon
4918. Forest Grove, City of, Oregon
4919. Gladstone, City of, Oregon
4920. Grants Pass, City of, Oregon
4921. Gresham, City of, Oregon
4922. Happy Valley, City of, Oregon
4923. Hermiston, City of, Oregon
4924. Hillsboro, City of, Oregon
4925. Hood River, County of, Oregon
4926. Independence, City of, Oregon
4927. Jackson, County of, Oregon
4928. Jefferson, County of, Oregon
4929. Josephine, County of, Oregon
4930. Keizer, City of, Oregon
4931. Klamath, County of, Oregon
4932. Klamath Falls, City of, Oregon
4933. La Grande, City of, Oregon
4934. Lake Oswego, City of, Oregon
4935. Lane, County of, Oregon
4936. Lebanon, City of, Oregon
4937. Lincoln, County of, Oregon
4938. Linn, County of, Oregon
4939. Malheur, County of, Oregon
4940. Marion, County of, Oregon
4941. McMinnville, City of, Oregon
4942. Medford, City of, Oregon
4943. Milwaukie, City of, Oregon
4944. Monmouth, City of, Oregon
4945. Morrow, County of, Oregon
4946. Multnomah, County of, Oregon
4947. Newberg, City of, Oregon
4948. Newport, City of, Oregon
4949. Ontario, City of, Oregon
4950. Oregon City, City of, Oregon
4951. Pendleton, City of, Oregon
4952. Polk, County of, Oregon
4953. Portland, City of, Oregon
4954. Prineville, City of, Oregon
4955. Redmond, City of, Oregon
4956. Roseburg, City of, Oregon
4957. Salem, City of, Oregon
4958. Sandy, City of, Oregon
4959. Sherwood, City of, Oregon
4960. Silverton, City of, Oregon
4961. Springfield, City of, Oregon
4962. St. Helens, City of, Oregon
4963. The Dalles, City of, Oregon
4964. Tigard, City of, Oregon
4965. Tillamook, County of, Oregon
4966. Troutdale, City of, Oregon
4967. Tualatin, City of, Oregon
4968. Umatilla, County of, Oregon
4969. Union, County of, Oregon
4970. Wasco, County of, Oregon
4971. Washington, County of, Oregon
4972. West Linn, City of, Oregon
4973. Wilsonville, City of, Oregon
4974. Woodburn, City of, Oregon
4975. Yamhill, County of, Oregon
4976. Abington, Township of, Pennsylvania
4977. Adams, County of, Pennsylvania
4978. Adams, Township of, Pennsylvania
4979. Allegheny, County of, Pennsylvania
4980. Allentown, City of, Pennsylvania
4981. Altoona, City of, Pennsylvania
4982. Amity, Township of, Pennsylvania
4983. Antrim, Township of, Pennsylvania
4984. Armstrong, County of, Pennsylvania
4985. Aston, Township of, Pennsylvania
4986. Baldwin, Borough of, Pennsylvania
4987. Beaver, County of, Pennsylvania
4988. Bedford, County of, Pennsylvania
4989. Bensalem, Township of, Pennsylvania

4990. Berks, County of, Pennsylvania
4991. Bethel Park, Municipality of, Pennsylvania
4992. Bethlehem, City of, Pennsylvania
4993. Bethlehem, Township of, Pennsylvania
4994. Blair, County of, Pennsylvania
4995. Bloomsburg, Town of, Pennsylvania
4996. Bradford, County of, Pennsylvania
4997. Bristol, Township of, Pennsylvania
4998. Buckingham, Township of, Pennsylvania
4999. Bucks, County of, Pennsylvania
5000. Butler, City of, Pennsylvania
5001. Butler, County of, Pennsylvania
5002. Butler, Township of, Pennsylvania
5003. Caln, Township of, Pennsylvania
5004. Cambria, County of, Pennsylvania
5005. Carbon, County of, Pennsylvania
5006. Carlisle, Borough of, Pennsylvania
5007. Cecil, Township of, Pennsylvania
5008. Center, Township of, Pennsylvania
5009. Centre, County of, Pennsylvania
5010. Chambersburg, Borough of, Pennsylvania
5011. Cheltenham, Township of, Pennsylvania
5012. Chester, City of, Pennsylvania
5013. Chester, County of, Pennsylvania
5014. Chestnuthill, Township of, Pennsylvania
5015. Clarion, County of, Pennsylvania
5016. Clearfield, County of, Pennsylvania
5017. Clinton, County of, Pennsylvania
5018. Coal, Township of, Pennsylvania
5019. Coatesville, City of, Pennsylvania
5020. College, Township of, Pennsylvania
5021. Columbia, Borough of, Pennsylvania
5022. Columbia, County of, Pennsylvania
5023. Concord, Township of, Pennsylvania
5024. Coolbaugh, Township of, Pennsylvania
5025. Cranberry, Township of, Pennsylvania
5026. Crawford, County of, Pennsylvania
5027. Cumberland, County of, Pennsylvania
5028. Cumru, Township of, Pennsylvania
5029. Darby, Borough of, Pennsylvania
5030. Dauphin, County of, Pennsylvania
5031. Delaware, County of, Pennsylvania
5032. Derry, Township of, Pennsylvania
5033. Dingman, Township of, Pennsylvania
5034. Douglass, Township of, Pennsylvania
5035. Dover, Township of, Pennsylvania
5036. Doylestown, Township of, Pennsylvania
5037. Dunmore, Borough of, Pennsylvania
5038. East Cocalico, Township of, Pennsylvania
5039. East Goshen, Township of, Pennsylvania
5040. East Hempfield, Township of, Pennsylvania
5041. East Lampeter, Township of, Pennsylvania
5042. East Norriton, Township of, Pennsylvania
5043. East Pennsboro, Township of, Pennsylvania
5044. East Stroudsburg, Borough of, Pennsylvania
5045. East Whiteland, Township of, Pennsylvania
5046. Easton, City of, Pennsylvania
5047. Easttown, Township of, Pennsylvania
5048. Elizabeth, Township of, Pennsylvania
5049. Elizabethtown, Borough of, Pennsylvania
5050. Elk, County of, Pennsylvania
5051. Emmaus, Borough of, Pennsylvania
5052. Ephrata, Borough of, Pennsylvania
5053. Ephrata, Township of, Pennsylvania
5054. Erie, City of, Pennsylvania
5055. Erie, County of, Pennsylvania
5056. Exeter, Township of, Pennsylvania
5057. Fairview, Township of, Pennsylvania

5058. Falls, Township of, Pennsylvania
5059. Fayette, County of, Pennsylvania
5060. Ferguson, Township of, Pennsylvania
5061. Forks, Township of, Pennsylvania
5062. Franconia, Township of, Pennsylvania
5063. Franklin, County of, Pennsylvania
5064. Franklin Park, Borough of, Pennsylvania
5065. Fulton, County of, Pennsylvania
5066. Greene, County of, Pennsylvania
5067. Greene, Township of, Pennsylvania
5068. Greensburg, City of, Pennsylvania
5069. Guilford, Township of, Pennsylvania
5070. Hamilton, Township of, Pennsylvania
5071. Hampden, Township of, Pennsylvania
5072. Hampton, Township of, Pennsylvania
5073. Hanover, Borough of, Pennsylvania
5074. Hanover, Township of, Pennsylvania
5075. Harborcreek, Township of, Pennsylvania
5076. Harrisburg, City of, Pennsylvania
5077. Harrison, Township of, Pennsylvania
5078. Hatfield, Township of, Pennsylvania
5079. Haverford, Township of, Pennsylvania
5080. Hazleton, City of, Pennsylvania
5081. Hempfield, Township of, Pennsylvania
5082. Hermitage, City of, Pennsylvania
5083. Hilltown, Township of, Pennsylvania
5084. Hopewell, Township of, Pennsylvania
5085. Horsham, Township of, Pennsylvania
5086. Huntingdon, County of, Pennsylvania
5087. Indiana, Borough of, Pennsylvania
5088. Indiana, County of, Pennsylvania
5089. Jefferson, County of, Pennsylvania
5090. Jefferson Hills, Borough of, Pennsylvania
5091. Johnstown, City of, Pennsylvania
5092. Juniata, County of, Pennsylvania
5093. Kingston, Borough of, Pennsylvania
5094. Lackawanna, County of, Pennsylvania
5095. Lancaster, City of, Pennsylvania
5096. Lancaster, County of, Pennsylvania
5097. Lancaster, Township of, Pennsylvania
5098. Lansdale, Borough of, Pennsylvania
5099. Lansdowne, Borough of, Pennsylvania
5100. Lawrence, County of, Pennsylvania
5101. Lebanon, City of, Pennsylvania
5102. Lebanon, County of, Pennsylvania
5103. Lehigh, County of, Pennsylvania
5104. Lehigh, Township of, Pennsylvania
5105. Lehman, Township of, Pennsylvania
5106. Limerick, Township of, Pennsylvania
5107. Logan, Township of, Pennsylvania
5108. Lower Allen, Township of, Pennsylvania
5109. Lower Burrell, City of, Pennsylvania
5110. Lower Gwynedd, Township of, Pennsylvania
5111. Lower Macungie, Township of, Pennsylvania
5112. Lower Makefield, Township of, Pennsylvania
5113. Lower Merion, Township of, Pennsylvania
5114. Lower Moreland, Township of, Pennsylvania
5115. Lower Paxton, Township of, Pennsylvania
5116. Lower Pottsgrove, Township of, Pennsylvania
5117. Lower Providence, Township of, Pennsylvania
5118. Lower Salford, Township of, Pennsylvania
5119. Lower Saucon, Township of, Pennsylvania
5120. Lower Southampton, Township of, Pennsylvania

5121. Loyalsock, Township of, Pennsylvania
5122. Luzerne, County of, Pennsylvania
5123. Lycoming, County of, Pennsylvania
5124. Manchester, Township of, Pennsylvania
5125. Manheim, Township of, Pennsylvania
5126. Manor, Township of, Pennsylvania
5127. Marple, Township of, Pennsylvania
5128. McCandless, Township of, Pennsylvania
5129. McKean, County of, Pennsylvania
5130. McKeesport, City of, Pennsylvania
5131. Meadville, City of, Pennsylvania
5132. Mercer, County of, Pennsylvania
5133. Middle Smithfield, Township of, Pennsylvania
5134. Middletown, Township of, Pennsylvania
5135. Mifflin, County of, Pennsylvania
5136. Milford, Township of, Pennsylvania
5137. Millcreek, Township of, Pennsylvania
5138. Monroe, County of, Pennsylvania
5139. Monroeville, Municipality of, Pennsylvania
5140. Montgomery, County of, Pennsylvania
5141. Montgomery, Township of, Pennsylvania
5142. Montour, County of, Pennsylvania
5143. Moon, Township of, Pennsylvania
5144. Mount Joy, Township of, Pennsylvania
5145. Mount Lebanon, Township of, Pennsylvania
5146. Mount Pleasant, Township of, Pennsylvania
5147. Muhlenberg, Township of, Pennsylvania
5148. Munhall, Borough of, Pennsylvania
5149. Murrysville, Municipality of, Pennsylvania
5150. Nanticoke, City of, Pennsylvania
5151. Nether Providence, Township of, Pennsylvania
5152. New Britain, Township of, Pennsylvania
5153. New Castle, City of, Pennsylvania
5154. New Garden, Township of, Pennsylvania
5155. New Hanover, Township of, Pennsylvania
5156. New Kensington, City of, Pennsylvania
5157. Newberry, Township of, Pennsylvania
5158. Newtown, Township of, Pennsylvania
5159. Norristown, Borough of, Pennsylvania
5160. North Fayette, Township of, Pennsylvania
5161. North Huntingdon, Township of, Pennsylvania
5162. North Lebanon, Township of, Pennsylvania
5163. North Middleton, Township of, Pennsylvania
5164. North Strabane, Township of, Pennsylvania
5165. North Union, Township of, Pennsylvania
5166. North Whitehall, Township of, Pennsylvania
5167. Northampton, County of, Pennsylvania
5168. Northampton, Township of, Pennsylvania
5169. Northumberland, County of, Pennsylvania
5170. Palmer, Township of, Pennsylvania
5171. Patton, Township of, Pennsylvania
5172. Penn Hills, Township of, Pennsylvania
5173. Penn, Township of, Pennsylvania
5174. Perry, County of, Pennsylvania
5175. Peters, Township of, Pennsylvania
5176. Philadelphia, City of/ County of, Pennsylvania

5177. Phoenixville, Borough of, Pennsylvania
5178. Pike, County of, Pennsylvania
5179. Pine, Township of, Pennsylvania
5180. Pittsburgh, City of, Pennsylvania
5181. Plum, Borough of, Pennsylvania
5182. Plumstead, Township of, Pennsylvania
5183. Plymouth, Township of, Pennsylvania
5184. Pocono, Township of, Pennsylvania
5185. Potter, County of, Pennsylvania
5186. Pottstown, Borough of, Pennsylvania
5187. Pottsville, City of, Pennsylvania
5188. Radnor, Township of, Pennsylvania
5189. Rapho, Township of, Pennsylvania
5190. Reading, City of, Pennsylvania
5191. Richland, Township of, Pennsylvania
5192. Ridley, Township of, Pennsylvania
5193. Robinson, Township of, Pennsylvania
5194. Ross, Township of, Pennsylvania
5195. Rostraver, Township of, Pennsylvania
5196. Salisbury, Township of, Pennsylvania
5197. Sandy, Township of, Pennsylvania
5198. Schuylkill, County of, Pennsylvania
5199. Scott, Township of, Pennsylvania
5200. Scranton, City of, Pennsylvania
5201. Shaler, Township of, Pennsylvania
5202. Sharon, City of, Pennsylvania
5203. Silver Spring, Township of, Pennsylvania
5204. Skippack, Township of, Pennsylvania
5205. Snyder, County of, Pennsylvania
5206. Somerset, County of, Pennsylvania
5207. Somerset, Township of, Pennsylvania
5208. South Fayette, Township of, Pennsylvania
5209. South Lebanon, Township of, Pennsylvania
5210. South Middleton, Township of, Pennsylvania
5211. South Park, Township of, Pennsylvania
5212. South Union, Township of, Pennsylvania
5213. South Whitehall, Township of, Pennsylvania
5214. Spring Garden, Township of, Pennsylvania
5215. Spring, Township of, Pennsylvania
5216. Springettsbury, Township of, Pennsylvania
5217. Springfield, Township of, Pennsylvania
5218. St. Marys, City of, Pennsylvania
5219. State College, Borough of, Pennsylvania
5220. Stroud, Township of, Pennsylvania
5221. Susquehanna, County of, Pennsylvania
5222. Susquehanna, Township of, Pennsylvania
5223. Swatara, Township of, Pennsylvania
5224. Tioga, County of, Pennsylvania
5225. Towamencin, Township of, Pennsylvania
5226. Tredyffrin, Township of, Pennsylvania
5227. Union, County of, Pennsylvania
5228. Unity, Township of, Pennsylvania
5229. Upper Allen, Township of, Pennsylvania
5230. Upper Chichester, Township of, Pennsylvania
5231. Upper Darby, Township of, Pennsylvania
5232. Upper Dublin, Township of, Pennsylvania
5233. Upper Gwynedd, Township of, Pennsylvania
5234. Upper Macungie, Township of, Pennsylvania
5235. Upper Merion, Township of, Pennsylvania

5236. Upper Moreland, Township of, Pennsylvania
5237. Upper Providence, Township of, Pennsylvania
5238. Upper Saucon, Township of, Pennsylvania
5239. Upper Southampton, Township of, Pennsylvania
5240. Upper St. Clair, Township of, Pennsylvania
5241. Upper Uwchlan, Township of, Pennsylvania
5242. Uwchlan, Township of, Pennsylvania
5243. Venango, County of, Pennsylvania
5244. Warminster, Township of, Pennsylvania
5245. Warren, County of, Pennsylvania
5246. Warrington, Township of, Pennsylvania
5247. Warwick, Township of, Pennsylvania
5248. Washington, City of, Pennsylvania
5249. Washington, County of, Pennsylvania
5250. Washington, Township of, Pennsylvania
5251. Wayne, County of, Pennsylvania
5252. Waynesboro, Borough of, Pennsylvania
5253. West Bradford, Township of, Pennsylvania
5254. West Chester, Borough of, Pennsylvania
5255. West Deer, Township of, Pennsylvania
5256. West Goshen, Township of, Pennsylvania
5257. West Hanover, Township of, Pennsylvania
5258. West Hempfield, Township of, Pennsylvania
5259. West Lampeter, Township of, Pennsylvania
5260. West Manchester, Township of, Pennsylvania
5261. West Mifflin, Borough of, Pennsylvania
5262. West Norriton, Township of, Pennsylvania
5263. West Whiteland, Township of, Pennsylvania
5264. Westmoreland, County of, Pennsylvania
5265. Westtown, Township of, Pennsylvania
5266. White, Township of, Pennsylvania
5267. Whitehall, Borough of, Pennsylvania
5268. Whitehall, Township of, Pennsylvania
5269. Whitemarsh, Township of, Pennsylvania
5270. Whitpain, Township of, Pennsylvania
5271. Wilkes-Barre, City of, Pennsylvania
5272. Wilkinsburg, Borough of, Pennsylvania
5273. Williamsport, City of, Pennsylvania
5274. Willistown, Township of, Pennsylvania
5275. Windsor, Township of, Pennsylvania
5276. Worcester, Township of, Pennsylvania
5277. Wyoming, County of, Pennsylvania
5278. Wyomissing, Borough of, Pennsylvania
5279. Yeadon, Borough of, Pennsylvania
5280. York, City of, Pennsylvania
5281. York, County of, Pennsylvania
5282. York, Township of, Pennsylvania
5283. Adjuntas, Municipality of, Puerto Rico
5284. Aguada, Municipality of, Puerto Rico
5285. Aguadilla, Municipality of, Puerto Rico
5286. Aguas Buenas, Municipality of, Puerto Rico
5287. Aibonito, Municipality of, Puerto Rico
5288. Añasco, Municipality of, Puerto Rico

5289. Arecibo, Municipality of, Puerto Rico
5290. Arroyo, Municipality of, Puerto Rico
5291. Barceloneta, Municipality of, Puerto Rico
5292. Barranquitas, Municipality of, Puerto Rico
5293. Bayamón, Municipality of, Puerto Rico
5294. Cabo Rojo, Municipality of, Puerto Rico
5295. Caguas, Municipality of, Puerto Rico
5296. Camuy, Municipality of, Puerto Rico
5297. Canóvanas, Municipality of, Puerto Rico
5298. Carolina, Municipality of, Puerto Rico
5299. Cataño, Municipality of, Puerto Rico
5300. Cayey, Municipality of, Puerto Rico
5301. Ceiba, Municipality of, Puerto Rico
5302. Ciales, Municipality of, Puerto Rico
5303. Cidra, Municipality of, Puerto Rico
5304. Coamo, Municipality of, Puerto Rico
5305. Comerío, Municipality of, Puerto Rico
5306. Corozal, Municipality of, Puerto Rico
5307. Dorado, Municipality of, Puerto Rico
5308. Fajardo, Municipality of, Puerto Rico
5309. Florida, Municipality of, Puerto Rico
5310. Guánica, Municipality of, Puerto Rico
5311. Guayama, Municipality of, Puerto Rico
5312. Guayanilla, Municipality of, Puerto Rico
5313. Guaynabo, Municipality of, Puerto Rico
5314. Gurabo, Municipality of, Puerto Rico
5315. Hatillo, Municipality of, Puerto Rico
5316. Hormigueros, Municipality of, Puerto Rico
5317. Humacao, Municipality of, Puerto Rico
5318. Isabela, Municipality of, Puerto Rico
5319. Jayuya, Municipality of, Puerto Rico
5320. Juana Díaz, Municipality of, Puerto Rico
5321. Juncos, Municipality of, Puerto Rico
5322. Lajas, Municipality of, Puerto Rico
5323. Lares, Municipality of, Puerto Rico
5324. Las Piedras, Municipality of, Puerto Rico
5325. Loíza, Municipality of, Puerto Rico
5326. Luquillo, Municipality of, Puerto Rico
5327. Manatí, Municipality of, Puerto Rico
5328. Maunabo, Municipality of, Puerto Rico
5329. Mayagüez, Municipality of, Puerto Rico
5330. Moca, Municipality of, Puerto Rico
5331. Morovis, Municipality of, Puerto Rico
5332. Naguabo, Municipality of, Puerto Rico
5333. Naranjito, Municipality of, Puerto Rico
5334. Orocovis, Municipality of, Puerto Rico
5335. Patillas, Municipality of, Puerto Rico
5336. Peñuelas, Municipality of, Puerto Rico
5337. Ponce, Municipality of, Puerto Rico
5338. Quebradillas, Municipality of, Puerto Rico
5339. Rincón, Municipality of, Puerto Rico
5340. Río Grande, Municipality of, Puerto Rico
5341. Sabana Grande, Municipality of, Puerto Rico
5342. Salinas, Municipality of, Puerto Rico
5343. San Germán, Municipality of, Puerto Rico
5344. San Juan, Municipality of, Puerto Rico
5345. San Lorenzo, Municipality of, Puerto Rico
5346. San Sebastián, Municipality of, Puerto Rico

5347. Santa Isabel, Municipality of, Puerto Rico
5348. Toa Alta, Municipality of, Puerto Rico
5349. Toa Baja, Municipality of, Puerto Rico
5350. Trujillo Alto, Municipality of, Puerto Rico
5351. Utuado, Municipality of, Puerto Rico
5352. Vega Alta, Municipality of, Puerto Rico
5353. Vega Baja, Municipality of, Puerto Rico
5354. Villalba, Municipality of, Puerto Rico
5355. Yabucoa, Municipality of, Puerto Rico
5356. Yauco, Municipality of, Puerto Rico
5357. Barrington, Town of, Rhode Island
5358. Bristol, Town of, Rhode Island
5359. Burrillville, Town of, Rhode Island
5360. Central Falls, City of, Rhode Island
5361. Coventry, Town of, Rhode Island
5362. Cranston, City of, Rhode Island
5363. Cumberland, Town of, Rhode Island
5364. East Greenwich, Town of, Rhode Island
5365. East Providence, City of, Rhode Island
5366. Glocester, Town of, Rhode Island
5367. Johnston, Town of, Rhode Island
5368. Lincoln, Town of, Rhode Island
5369. Middletown, Town of, Rhode Island
5370. Narragansett, Town of, Rhode Island
5371. Newport, City of, Rhode Island
5372. North Kingstown, Town of, Rhode Island
5373. North Providence, Town of, Rhode Island
5374. North Smithfield, Town of, Rhode Island
5375. Pawtucket, City of, Rhode Island
5376. Portsmouth, Town of, Rhode Island
5377. Providence, City of, Rhode Island
5378. Scituate, Town of, Rhode Island
5379. Smithfield, Town of, Rhode Island
5380. South Kingstown, Town of, Rhode Island
5381. Tiverton, Town of, Rhode Island
5382. Warren, Town of, Rhode Island
5383. Warwick, City of, Rhode Island
5384. West Warwick, Town of, Rhode Island
5385. Westerly, Town of, Rhode Island
5386. Woonsocket, City of, Rhode Island
5387. Abbeville, County of, South Carolina
5388. Aiken, City of, South Carolina
5389. Aiken, County of, South Carolina
5390. Anderson, City of, South Carolina
5391. Anderson, County of, South Carolina
5392. Bamberg, County of, South Carolina
5393. Barnwell, County of, South Carolina
5394. Beaufort, City of, South Carolina
5395. Beaufort, County of, South Carolina
5396. Berkeley, County of, South Carolina
5397. Bluffton, Town of, South Carolina
5398. Calhoun, County of, South Carolina
5399. Cayce, City of, South Carolina
5400. Charleston, City of, South Carolina
5401. Charleston, County of, South Carolina
5402. Cherokee, County of, South Carolina
5403. Chester, County of, South Carolina
5404. Chesterfield, County of, South Carolina
5405. Clarendon, County of, South Carolina
5406. Clemson, City of, South Carolina
5407. Colleton, County of, South Carolina
5408. Columbia, City of, South Carolina
5409. Conway, City of, South Carolina
5410. Darlington, County of, South Carolina
5411. Dillon, County of, South Carolina
5412. Dorchester, County of, South Carolina
5413. Easley, City of, South Carolina
5414. Edgefield, County of, South Carolina
5415. Fairfield, County of, South Carolina
5416. Florence, City of, South Carolina
5417. Florence, County of, South Carolina
5418. Forest Acres, City of, South Carolina

5419. Fort Mill, Town of, South Carolina
5420. Fountain Inn, City of, South Carolina
5421. Gaffney, City of, South Carolina
5422. Georgetown, County of, South Carolina
5423. Goose Creek, City of, South Carolina
5424. Greenville, City of, South Carolina
5425. Greenville, County of, South Carolina
5426. Greenwood, City of, South Carolina
5427. Greenwood, County of, South Carolina
5428. Greer, City of, South Carolina
5429. Hampton, County of, South Carolina
5430. Hanahan, City of, South Carolina
5431. Hilton Head Island, Town of, South Carolina
5432. Horry, County of, South Carolina
5433. Irmo, Town of, South Carolina
5434. James Island, Town of, South Carolina
5435. Jasper, County of, South Carolina
5436. Kershaw, County of, South Carolina
5437. Lancaster, County of, South Carolina
5438. Laurens, County of, South Carolina
5439. Lee, County of, South Carolina
5440. Lexington, County of, South Carolina
5441. Lexington, Town of, South Carolina
5442. Marion, County of, South Carolina
5443. Marlboro, County of, South Carolina
5444. Mauldin, City of, South Carolina
5445. Moncks Corner, Town of, South Carolina
5446. Mount Pleasant, Town of, South Carolina
5447. Myrtle Beach, City of, South Carolina
5448. Newberry, City of, South Carolina
5449. Newberry, County of, South Carolina
5450. North Augusta, City of, South Carolina
5451. North Charleston, City of, South Carolina
5452. North Myrtle Beach, City of, South Carolina
5453. Oconee, County of, South Carolina
5454. Orangeburg, City of, South Carolina
5455. Orangeburg, County of, South Carolina
5456. Pickens, County of, South Carolina
5457. Port Royal, Town of, South Carolina
5458. Richland, County of, South Carolina
5459. Rock Hill, City of, South Carolina
5460. Saluda, County of, South Carolina
5461. Simpsonville, City of, South Carolina
5462. Spartanburg, City of, South Carolina
5463. Spartanburg, County of, South Carolina
5464. Summerville, Town of, South Carolina
5465. Sumter, City of, South Carolina
5466. Sumter, County of, South Carolina
5467. Tega Cay, City of, South Carolina
5468. Union, County of, South Carolina
5469. West Columbia, City of, South Carolina
5470. Williamsburg, County of, South Carolina
5471. York, County of, South Carolina
5472. Aberdeen, City of, South Dakota
5473. Beadle, County of, South Dakota
5474. Box Elder, City of, South Dakota
5475. Brandon, City of, South Dakota
5476. Brookings, City of, South Dakota
5477. Brookings, County of, South Dakota
5478. Brown, County of, South Dakota
5479. Butte, County of, South Dakota
5480. Clay, County of, South Dakota
5481. Codington, County of, South Dakota
5482. Davison, County of, South Dakota
5483. Hughes, County of, South Dakota
5484. Huron, City of, South Dakota
5485. Lake, County of, South Dakota
5486. Lawrence, County of, South Dakota
5487. Lincoln, County of, South Dakota
5488. Meade, County of, South Dakota
5489. Minnehaha, County of, South Dakota
5490. Mitchell, City of, South Dakota

5491. Oglala Lakota, County of, South Dakota
5492. Pennington, County of, South Dakota
5493. Pierre, City of, South Dakota
5494. Rapid City, City of, South Dakota
5495. Roberts, County of, South Dakota
5496. Sioux Falls, City of, South Dakota
5497. Spearfish, City of, South Dakota
5498. Todd, County of, South Dakota
5499. Union, County of, South Dakota
5500. Vermillion, City of, South Dakota
5501. Watertown, City of, South Dakota
5502. Yankton, City of, South Dakota
5503. Yankton, County of, South Dakota
5504. Anderson, County of, Tennessee
5505. Arlington, Town of, Tennessee
5506. Athens, City of, Tennessee
5507. Bartlett, City of, Tennessee
5508. Bedford, County of, Tennessee
5509. Benton, County of, Tennessee
5510. Bledsoe, County of, Tennessee
5511. Blount, County of, Tennessee
5512. Bradley, County of, Tennessee
5513. Brentwood, City of, Tennessee
5514. Bristol, City of, Tennessee
5515. Campbell, County of, Tennessee
5516. Cannon, County of, Tennessee
5517. Carroll, County of, Tennessee
5518. Carter, County of, Tennessee
5519. Chattanooga, City of, Tennessee
5520. Cheatham, County of, Tennessee
5521. Chester, County of, Tennessee
5522. Claiborne, County of, Tennessee
5523. Clarksville, City of, Tennessee
5524. Cleveland, City of, Tennessee
5525. Clinton, City of, Tennessee
5526. Cocke, County of, Tennessee
5527. Coffee, County of, Tennessee
5528. Collegedale, City of, Tennessee
5529. Collierville, Town of, Tennessee
5530. Columbia, City of, Tennessee
5531. Cookeville, City of, Tennessee
5532. Crockett, County of, Tennessee
5533. Crossville, City of, Tennessee
5534. Cumberland, County of, Tennessee
5535. Decatur, County of, Tennessee
5536. DeKalb, County of, Tennessee
5537. Dickson, City of, Tennessee
5538. Dickson, County of, Tennessee
5539. Dyer, County of, Tennessee
5540. Dyersburg, City of, Tennessee
5541. East Ridge, City of, Tennessee
5542. Elizabethton, City of, Tennessee
5543. Farragut, Town of, Tennessee
5544. Fayette, County of, Tennessee
5545. Fentress, County of, Tennessee
5546. Franklin, City of, Tennessee
5547. Franklin, County of, Tennessee
5548. Gallatin, City of, Tennessee
5549. Germantown, City of, Tennessee
5550. Gibson, County of, Tennessee
5551. Giles, County of, Tennessee
5552. Goodlettsville, City of, Tennessee
5553. Grainger, County of, Tennessee
5554. Greene, County of, Tennessee
5555. Greeneville, Town of, Tennessee
5556. Grundy, County of, Tennessee
5557. Hamblen, County of, Tennessee
5558. Hamilton, County of, Tennessee
5559. Hardeman, County of, Tennessee
5560. Hardin, County of, Tennessee
5561. Hartsville/Trousdale, County of, Tennessee
5562. Hawkins, County of, Tennessee
5563. Haywood, County of, Tennessee
5564. Henderson, County of, Tennessee
5565. Hendersonville, City of, Tennessee
5566. Henry, County of, Tennessee
5567. Hickman, County of, Tennessee
5568. Humphreys, County of, Tennessee
5569. Jackson, City of, Tennessee
5570. Jackson, County of, Tennessee
5571. Jefferson, County of, Tennessee
5572. Johnson City, City of, Tennessee
5573. Johnson, County of, Tennessee
5574. Kingsport, City of, Tennessee
5575. Knox, County of, Tennessee
5576. Knoxville, City of, Tennessee
5577. La Vergne, City of, Tennessee
5578. Lakeland, City of, Tennessee
5579. Lauderdale, County of, Tennessee

5580. Lawrence, County of, Tennessee
5581. Lawrenceburg, City of, Tennessee
5582. Lebanon, City of, Tennessee
5583. Lewis, County of, Tennessee
5584. Lewisburg, City of, Tennessee
5585. Lincoln, County of, Tennessee
5586. Loudon, County of, Tennessee
5587. Macon, County of, Tennessee
5588. Madison, County of, Tennessee
5589. Manchester, City of, Tennessee
5590. Marion, County of, Tennessee
5591. Marshall, County of, Tennessee
5592. Martin, City of, Tennessee
5593. Maryville, City of, Tennessee
5594. Maury, County of, Tennessee
5595. McMinn, County of, Tennessee
5596. McMinnville, City of, Tennessee
5597. McNairy, County of, Tennessee
5598. Meigs, County of, Tennessee
5599. Memphis, City of, Tennessee
5600. Millington, City of, Tennessee
5601. Monroe, County of, Tennessee
5602. Montgomery, County of, Tennessee
5603. Morgan, County of, Tennessee
5604. Morristown, City of, Tennessee
5605. Mount Juliet, City of, Tennessee
5606. Murfreesboro, City of, Tennessee
5607. Nashville-Davidson, Metropolitan Government, Tennessee
5608. Nolensville, Town of, Tennessee
5609. Oak Ridge, City of, Tennessee
5610. Obion, County of, Tennessee
5611. Overton, County of, Tennessee
5612. Paris, City of, Tennessee
5613. Polk, County of, Tennessee
5614. Portland, City of, Tennessee
5615. Putnam, County of, Tennessee
5616. Red Bank, City of, Tennessee
5617. Rhea, County of, Tennessee
5618. Roane, County of, Tennessee
5619. Robertson, County of, Tennessee
5620. Rutherford, County of, Tennessee
5621. Scott, County of, Tennessee
5622. Sequatchie, County of, Tennessee
5623. Sevier, County of, Tennessee
5624. Sevierville, City of, Tennessee
5625. Shelby, County of, Tennessee
5626. Shelbyville, City of, Tennessee
5627. Smith, County of, Tennessee
5628. Smyrna, Town of, Tennessee
5629. Soddy-Daisy, City of, Tennessee
5630. Spring Hill, City of, Tennessee
5631. Springfield, City of, Tennessee
5632. Stewart, County of, Tennessee
5633. Sullivan, County of, Tennessee
5634. Sumner, County of, Tennessee
5635. Tipton, County of, Tennessee
5636. Tullahoma, City of, Tennessee
5637. Unicoi, County of, Tennessee
5638. Union City, City of, Tennessee
5639. Union, County of, Tennessee
5640. Warren, County of, Tennessee
5641. Washington, County of, Tennessee
5642. Wayne, County of, Tennessee
5643. Weakley, County of, Tennessee
5644. White, County of, Tennessee
5645. White House, City of, Tennessee
5646. Williamson, County of, Tennessee
5647. Wilson, County of, Tennessee
5648. Abilene, City of, Texas
5649. Addison, Town of, Texas
5650. Alamo, City of, Texas
5651. Alice, City of, Texas
5652. Allen, City of, Texas
5653. Alton, City of, Texas
5654. Alvin, City of, Texas
5655. Amarillo, City of, Texas
5656. Anderson, County of, Texas
5657. Andrews, City of, Texas
5658. Andrews, County of, Texas
5659. Angelina, County of, Texas
5660. Angleton, City of, Texas
5661. Anna, City of, Texas
5662. Aransas, County of, Texas
5663. Arlington, City of, Texas
5664. Atascosa, County of, Texas
5665. Athens, City of, Texas
5666. Austin, City of, Texas
5667. Austin, County of, Texas
5668. Azle, City of, Texas
5669. Balch Springs, City of, Texas
5670. Bandera, County of, Texas

5671. Bastrop, County of, Texas
5672. Bay City, City of, Texas
5673. Baytown, City of, Texas
5674. Beaumont, City of, Texas
5675. Bedford, City of, Texas
5676. Bee, County of, Texas
5677. Beeville, City of, Texas
5678. Bell, County of, Texas
5679. Bellaire, City of, Texas
5680. Bellmead, City of, Texas
5681. Belton, City of, Texas
5682. Benbrook, City of, Texas
5683. Bexar, County of, Texas
5684. Big Spring, City of, Texas
5685. Blanco, County of, Texas
5686. Boerne, City of, Texas
5687. Bonham, City of, Texas
5688. Borger, City of, Texas
5689. Bosque, County of, Texas
5690. Bowie, County of, Texas
5691. Brazoria, County of, Texas
5692. Brazos, County of, Texas
5693. Brenham, City of, Texas
5694. Brown, County of, Texas
5695. Brownsville, City of, Texas
5696. Brownwood, City of, Texas
5697. Bryan, City of, Texas
5698. Buda, City of, Texas
5699. Burkburnett, City of, Texas
5700. Burleson, City of, Texas
5701. Burleson, County of, Texas
5702. Burnet, County of, Texas
5703. Caldwell, County of, Texas
5704. Calhoun, County of, Texas
5705. Callahan, County of, Texas
5706. Cameron, County of, Texas
5707. Camp, County of, Texas
5708. Canyon, City of, Texas
5709. Carrollton, City of, Texas
5710. Cass, County of, Texas
5711. Cedar Hill, City of, Texas
5712. Cedar Park, City of, Texas
5713. Celina, City of, Texas
5714. Chambers, County of, Texas
5715. Cherokee, County of, Texas
5716. Cibolo, City of, Texas
5717. Clay, County of, Texas
5718. Cleburne, City of, Texas
5719. Clute, City of, Texas
5720. College Station, City of, Texas
5721. Colleyville, City of, Texas
5722. Collin, County of, Texas
5723. Colorado, County of, Texas
5724. Comal, County of, Texas
5725. Comanche, County of, Texas
5726. Conroe, City of, Texas
5727. Converse, City of, Texas
5728. Cooke, County of, Texas
5729. Coppell, City of, Texas
5730. Copperas Cove, City of, Texas
5731. Corinth, City of, Texas
5732. Corpus Christi, City of, Texas
5733. Corsicana, City of, Texas
5734. Coryell, County of, Texas
5735. Crowley, City of, Texas
5736. Dallas, City of, Texas
5737. Dallas, County of, Texas
5738. Dawson, County of, Texas
5739. Deaf Smith, County of, Texas
5740. Deer Park, City of, Texas
5741. Del Rio, City of, Texas
5742. Denison, City of, Texas
5743. Denton, City of, Texas
5744. Denton, County of, Texas
5745. DeSoto, City of, Texas
5746. DeWitt, County of, Texas
5747. Dickinson, City of, Texas
5748. Dimmit, County of, Texas
5749. Donna, City of, Texas
5750. Dumas, City of, Texas
5751. Duncanville, City of, Texas
5752. Duval, County of, Texas
5753. Eagle Pass, City of, Texas
5754. Eastland, County of, Texas
5755. Ector, County of, Texas
5756. Edinburg, City of, Texas
5757. El Campo, City of, Texas
5758. El Paso, City of, Texas
5759. El Paso, County of, Texas
5760. Elgin, City of, Texas
5761. Ellis, County of, Texas
5762. Ennis, City of, Texas

5763. Erath, County of, Texas
5764. Euless, City of, Texas
5765. Fair Oaks Ranch, City of, Texas
5766. Falls, County of, Texas
5767. Fannin, County of, Texas
5768. Farmers Branch, City of, Texas
5769. Fate, City of, Texas
5770. Fayette, County of, Texas
5771. Flower Mound, Town of, Texas
5772. Forest Hill, City of, Texas
5773. Forney, City of, Texas
5774. Fort Bend, County of, Texas
5775. Fort Worth, City of, Texas
5776. Franklin, County of, Texas
5777. Fredericksburg, City of, Texas
5778. Freeport, City of, Texas
5779. Freestone, County of, Texas
5780. Friendswood, City of, Texas
5781. Frio, County of, Texas
5782. Frisco, City of, Texas
5783. Fulshear, City of, Texas
5784. Gaines, County of, Texas
5785. Gainesville, City of, Texas
5786. Galena Park, City of, Texas
5787. Galveston, City of, Texas
5788. Galveston, County of, Texas
5789. Garland, City of, Texas
5790. Gatesville, City of, Texas
5791. Georgetown, City of, Texas
5792. Gillespie, County of, Texas
5793. Glenn Heights, City of, Texas
5794. Gonzales, County of, Texas
5795. Granbury, City of, Texas
5796. Grand Prairie, City of, Texas
5797. Grapevine, City of, Texas
5798. Gray, County of, Texas
5799. Grayson, County of, Texas
5800. Greenville, City of, Texas
5801. Gregg, County of, Texas
5802. Grimes, County of, Texas
5803. Groves, City of, Texas
5804. Guadalupe, County of, Texas
5805. Hale, County of, Texas
5806. Haltom City, City of, Texas
5807. Hardin, County of, Texas
5808. Harker Heights, City of, Texas
5809. Harlingen, City of, Texas
5810. Harris, County of, Texas
5811. Harrison, County of, Texas
5812. Hays, County of, Texas
5813. Henderson, City of, Texas
5814. Henderson, County of, Texas
5815. Hereford, City of, Texas
5816. Hewitt, City of, Texas
5817. Hidalgo, City of, Texas
5818. Hidalgo, County of, Texas
5819. Highland, Village of, City of, Texas
5820. Hill, County of, Texas
5821. Hockley, County of, Texas
5822. Hood, County of, Texas
5823. Hopkins, County of, Texas
5824. Horizon City, City of, Texas
5825. Houston, City of, Texas
5826. Houston, County of, Texas
5827. Howard, County of, Texas
5828. Humble, City of, Texas
5829. Hunt, County of, Texas
5830. Huntsville, City of, Texas
5831. Hurst, City of, Texas
5832. Hutchinson, County of, Texas
5833. Hutto, City of, Texas
5834. Ingleside, City of, Texas
5835. Irving, City of, Texas
5836. Jacinto City, City of, Texas
5837. Jackson, County of, Texas
5838. Jacksonville, City of, Texas
5839. Jasper, County of, Texas
5840. Jefferson, County of, Texas
5841. Jim Wells, County of, Texas
5842. Johnson, County of, Texas
5843. Jones, County of, Texas
5844. Karnes, County of, Texas
5845. Katy, City of, Texas
5846. Kaufman, County of, Texas
5847. Keller, City of, Texas
5848. Kendall, County of, Texas
5849. Kerr, County of, Texas
5850. Kerrville, City of, Texas
5851. Kilgore, City of, Texas
5852. Killeen, City of, Texas
5853. Kingsville, City of, Texas
5854. Kleberg, County of, Texas

5855. Kyle, City of, Texas
5856. La Marque, City of, Texas
5857. La Porte, City of, Texas
5858. Lake Jackson, City of, Texas
5859. Lakeway, City of, Texas
5860. Lamar, County of, Texas
5861. Lamb, County of, Texas
5862. Lampasas, County of, Texas
5863. Lancaster, City of, Texas
5864. Laredo, City of, Texas
5865. Lavaca, County of, Texas
5866. League City, City of, Texas
5867. Leander, City of, Texas
5868. Lee, County of, Texas
5869. Leon, County of, Texas
5870. Leon Valley, City of, Texas
5871. Levelland, City of, Texas
5872. Lewisville, City of, Texas
5873. Liberty, County of, Texas
5874. Limestone, County of, Texas
5875. Little Elm, City of, Texas
5876. Live Oak, City of, Texas
5877. Live Oak, County of, Texas
5878. Llano, County of, Texas
5879. Lockhart, City of, Texas
5880. Longview, City of, Texas
5881. Lubbock, City of, Texas
5882. Lubbock, County of, Texas
5883. Lufkin, City of, Texas
5884. Lumberton, City of, Texas
5885. Madison, County of, Texas
5886. Manor, City of, Texas
5887. Mansfield, City of, Texas
5888. Manvel, City of, Texas
5889. Marshall, City of, Texas
5890. Matagorda, County of, Texas
5891. Maverick, County of, Texas
5892. McAllen, City of, Texas
5893. McKinney, City of, Texas
5894. McLennan, County of, Texas
5895. Medina, County of, Texas
5896. Melissa, City of, Texas
5897. Mercedes, City of, Texas
5898. Mesquite, City of, Texas
5899. Midland, City of, Texas
5900. Midland, County of, Texas
5901. Midlothian, City of, Texas
5902. Milam, County of, Texas
5903. Mineral Wells, City of, Texas
5904. Mission, City of, Texas
5905. Missouri City, City of, Texas
5906. Montague, County of, Texas
5907. Montgomery, County of, Texas
5908. Moore, County of, Texas
5909. Morris, County of, Texas
5910. Mount Pleasant, City of, Texas
5911. Murphy, City of, Texas
5912. Nacogdoches, City of, Texas
5913. Nacogdoches, County of, Texas
5914. Navarro, County of, Texas
5915. Nederland, City of, Texas
5916. New Braunfels, City of, Texas
5917. Newton, County of, Texas
5918. Nolan, County of, Texas
5919. North Richland Hills, City of, Texas
5920. Nueces, County of, Texas
5921. Odessa, City of, Texas
5922. Orange, City of, Texas
5923. Orange, County of, Texas
5924. Palestine, City of, Texas
5925. Palo Pinto, County of, Texas
5926. Pampa, City of, Texas
5927. Panola, County of, Texas
5928. Paris, City of, Texas
5929. Parker, County of, Texas
5930. Pasadena, City of, Texas
5931. Pearland, City of, Texas
5932. Pearsall, City of, Texas
5933. Pecos, City of, Texas
5934. Pecos, County of, Texas
5935. Pflugerville, City of, Texas
5936. Pharr, City of, Texas
5937. Plainview, City of, Texas
5938. Plano, City of, Texas
5939. Pleasanton, City of, Texas
5940. Polk, County of, Texas
5941. Port Arthur, City of, Texas
5942. Port Lavaca, City of, Texas
5943. Port Neches, City of, Texas
5944. Portland, City of, Texas
5945. Potter, County of, Texas
5946. Princeton, City of, Texas

5947. Prosper, Town of, Texas
5948. Rains, County of, Texas
5949. Randall, County of, Texas
5950. Raymondville, City of, Texas
5951. Red Oak, City of, Texas
5952. Red River, County of, Texas
5953. Reeves, County of, Texas
5954. Richardson, City of, Texas
5955. Richmond, City of, Texas
5956. Rio Grande City, City of, Texas
5957. Robertson, County of, Texas
5958. Robinson, City of, Texas
5959. Robstown, City of, Texas
5960. Rockport, City of, Texas
5961. Rockwall, City of, Texas
5962. Rockwall, County of, Texas
5963. Roma, City of, Texas
5964. Rosenberg, City of, Texas
5965. Round Rock, City of, Texas
5966. Rowlett, City of, Texas
5967. Royse City, City of, Texas
5968. Runnels, County of, Texas
5969. Rusk, County of, Texas
5970. Sabine, County of, Texas
5971. Sachse, City of, Texas
5972. Saginaw, City of, Texas
5973. San Angelo, City of, Texas
5974. San Antonio, City of, Texas
5975. San Benito, City of, Texas
5976. San Jacinto, County of, Texas
5977. San Juan, City of, Texas
5978. San Marcos, City of, Texas
5979. San Patricio, County of, Texas
5980. Santa Fe, City of, Texas
5981. Schertz, City of, Texas
5982. Scurry, County of, Texas
5983. Seabrook, City of, Texas
5984. Seagoville, City of, Texas
5985. Seguin, City of, Texas
5986. Selma, City of, Texas
5987. Shelby, County of, Texas
5988. Sherman, City of, Texas
5989. Smith, County of, Texas
5990. Snyder, City of, Texas
5991. Socorro, City of, Texas
5992. South Houston, City of, Texas
5993. Southlake, City of, Texas
5994. Stafford, City of, Texas
5995. Starr, County of, Texas
5996. Stephenville, City of, Texas
5997. Sugar Land, City of, Texas
5998. Sulphur Springs, City of, Texas
5999. Sweetwater, City of, Texas
6000. Tarrant, County of, Texas
6001. Taylor, City of, Texas
6002. Taylor, County of, Texas
6003. Temple, City of, Texas
6004. Terrell, City of, Texas
6005. Terry, County of, Texas
6006. Texarkana, City of, Texas
6007. Texas City, City of, Texas
6008. The Colony, City of, Texas
6009. Titus, County of, Texas
6010. Tom Green, County of, Texas
6011. Tomball, City of, Texas
6012. Travis, County of, Texas
6013. Trinity, County of, Texas
6014. Trophy Club, Town of, Texas
6015. Tyler, City of, Texas
6016. Tyler, County of, Texas
6017. Universal City, City of, Texas
6018. University Park, City of, Texas
6019. Upshur, County of, Texas
6020. Uvalde, City of, Texas
6021. Uvalde, County of, Texas
6022. Val Verde, County of, Texas
6023. Van Zandt, County of, Texas
6024. Vernon, City of, Texas
6025. Victoria, City of, Texas
6026. Victoria, County of, Texas
6027. Vidor, City of, Texas
6028. Waco, City of, Texas
6029. Walker, County of, Texas
6030. Waller, County of, Texas
6031. Ward, County of, Texas
6032. Washington, County of, Texas
6033. Watauga, City of, Texas
6034. Waxahachie, City of, Texas
6035. Weatherford, City of, Texas
6036. Webb, County of, Texas
6037. Webster, City of, Texas
6038. Weslaco, City of, Texas

6039. West University Place, City of, Texas
6040. Wharton, County of, Texas
6041. White Settlement, City of, Texas
6042. Wichita, County of, Texas
6043. Wichita Falls, City of, Texas
6044. Wilbarger, County of, Texas
6045. Willacy, County of, Texas
6046. Williamson, County of, Texas
6047. Wilson, County of, Texas
6048. Wise, County of, Texas
6049. Wood, County of, Texas
6050. Wylie, City of, Texas
6051. Young, County of, Texas
6052. Zapata, County of, Texas
6053. Zavala, County of, Texas
6054. Alpine, City of, Utah
6055. American Fork, City of, Utah
6056. Bluffdale, City of, Utah
6057. Bountiful, City of, Utah
6058. Box Elder, County of, Utah
6059. Brigham City, City of, Utah
6060. Cache, County of, Utah
6061. Carbon, County of, Utah
6062. Cedar City, City of, Utah
6063. Cedar Hills, City of, Utah
6064. Centerville, City of, Utah
6065. Clearfield, City of, Utah
6066. Clinton, City of, Utah
6067. Cottonwood Heights, City of, Utah
6068. Davis, County of, Utah
6069. Draper, City of, Utah
6070. Duchesne, County of, Utah
6071. Eagle Mountain, City of, Utah
6072. Emery, County of, Utah
6073. Farmington, City of, Utah
6074. Grantsville, City of, Utah
6075. Heber, City of, Utah
6076. Herriman, City of, Utah
6077. Highland, City of, Utah
6078. Holladay, City of, Utah
6079. Hurricane, City of, Utah
6080. Iron, County of, Utah
6081. Juab, County of, Utah
6082. Kaysville, City of, Utah
6083. Kearns metro, Township of, Utah
6084. Layton, City of, Utah
6085. Lehi, City of, Utah
6086. Lindon, City of, Utah
6087. Logan, City of, Utah
6088. Magna metro, Township of, Utah
6089. Mapleton, City of, Utah
6090. Midvale, City of, Utah
6091. Millard, County of, Utah
6092. Millcreek, City of, Utah
6093. Morgan, County of, Utah
6094. Murray, City of, Utah
6095. North Logan, City of, Utah
6096. North Ogden, City of, Utah
6097. North Salt Lake, City of, Utah
6098. Ogden, City of, Utah
6099. Orem, City of, Utah
6100. Payson, City of, Utah
6101. Pleasant Grove, City of, Utah
6102. Pleasant View, City of, Utah
6103. Provo, City of, Utah
6104. Riverton, City of, Utah
6105. Roy, City of, Utah
6106. Salt Lake City, City of, Utah
6107. Salt Lake, County of, Utah
6108. San Juan, County of, Utah
6109. Sandy, City of, Utah
6110. Sanpete, County of, Utah
6111. Santaquin, City of, Utah
6112. Saratoga Springs, City of, Utah
6113. Sevier, County of, Utah
6114. Smithfield, City of, Utah
6115. South Jordan, City of, Utah
6116. South Ogden, City of, Utah
6117. South Salt Lake, City of, Utah
6118. Spanish Fork, City of, Utah
6119. Springville, City of, Utah
6120. St. George, City of, Utah
6121. Summit, County of, Utah
6122. Syracuse, City of, Utah
6123. Taylorsville, City of, Utah
6124. Tooele, City of, Utah
6125. Tooele, County of, Utah
6126. Uintah, County of, Utah
6127. Utah, County of, Utah
6128. Vernal, City of, Utah
6129. Vineyard, Town of, Utah

6130. Wasatch, County of, Utah
6131. Washington, City of, Utah
6132. Washington, County of, Utah
6133. Weber, County of, Utah
6134. West Haven, City of, Utah
6135. West Jordan, City of, Utah
6136. West Point, City of, Utah
6137. West Valley City, City of, Utah
6138. Woods Cross, City of, Utah
6139. Addison, County of, Vermont
6140. Bennington, County of, Vermont
6141. Bennington, Town of, Vermont
6142. Brattleboro, Town of, Vermont
6143. Burlington, City of, Vermont
6144. Caledonia, County of, Vermont
6145. Chittenden, County of, Vermont
6146. Colchester, Town of, Vermont
6147. Essex Junction, Village of, Vermont
6148. Essex, Town of, Vermont
6149. Franklin, County of, Vermont
6150. Lamoille, County of, Vermont
6151. Milton, Town of, Vermont
6152. Orange, County of, Vermont
6153. Orleans, County of, Vermont
6154. Rutland, City of, Vermont
6155. Rutland, County of, Vermont
6156. South Burlington, City of, Vermont
6157. Washington, County of, Vermont
6158. Williston, Town of, Vermont
6159. Windham, County of, Vermont
6160. Windsor, County of, Vermont
6161. Accomack, County of, Virginia
6162. Albemarle, County of, Virginia
6163. Alexandria, City of, Virginia
6164. Alleghany, County of, Virginia
6165. Amelia, County of, Virginia
6166. Amherst, County of, Virginia
6167. Appomattox, County of, Virginia
6168. Arlington, County of, Virginia
6169. Augusta, County of, Virginia
6170. Bedford, County of, Virginia
6171. Blacksburg, Town of, Virginia
6172. Botetourt, County of, Virginia
6173. Bristol, City of, Virginia
6174. Brunswick, County of, Virginia
6175. Buchanan, County of, Virginia
6176. Buckingham, County of, Virginia
6177. Campbell, County of, Virginia
6178. Caroline, County of, Virginia
6179. Carroll, County of, Virginia
6180. Charlotte, County of, Virginia
6181. Charlottesville, City of, Virginia
6182. Chesapeake, City of, Virginia
6183. Chesterfield, County of, Virginia
6184. Christiansburg, Town of, Virginia
6185. Clarke, County of, Virginia
6186. Colonial Heights, City of, Virginia
6187. Culpeper, County of, Virginia
6188. Culpeper, Town of, Virginia
6189. Danville, City of, Virginia
6190. Dickenson, County of, Virginia
6191. Dinwiddie, County of, Virginia
6192. Essex, County of, Virginia
6193. Fairfax, City of, Virginia
6194. Fairfax, County of, Virginia
6195. Falls Church, City of, Virginia
6196. Fauquier, County of, Virginia
6197. Floyd, County of, Virginia
6198. Fluvanna, County of, Virginia
6199. Franklin, County of, Virginia
6200. Frederick, County of, Virginia
6201. Fredericksburg, City of, Virginia
6202. Front Royal, Town of, Virginia
6203. Giles, County of, Virginia
6204. Gloucester, County of, Virginia
6205. Goochland, County of, Virginia
6206. Grayson, County of, Virginia
6207. Greene, County of, Virginia
6208. Greensville, County of, Virginia
6209. Halifax, County of, Virginia
6210. Hampton, City of, Virginia
6211. Hanover, County of, Virginia
6212. Harrisonburg, City of, Virginia
6213. Henrico, County of, Virginia
6214. Henry, County of, Virginia
6215. Herndon, Town of, Virginia
6216. Hopewell, City of, Virginia
6217. Isle of Wight, County of, Virginia
6218. James City, County of, Virginia
6219. King George, County of, Virginia
6220. King William, County of, Virginia
6221. Lancaster, County of, Virginia

6222. Lee, County of, Virginia
6223. Leesburg, Town of, Virginia
6224. Loudoun, County of, Virginia
6225. Louisa, County of, Virginia
6226. Lunenburg, County of, Virginia
6227. Lynchburg, City of, Virginia
6228. Madison, County of, Virginia
6229. Manassas, City of, Virginia
6230. Manassas Park, City of, Virginia
6231. Martinsville, City of, Virginia
6232. Mecklenburg, County of, Virginia
6233. Middlesex, County of, Virginia
6234. Montgomery, County of, Virginia
6235. Nelson, County of, Virginia
6236. New Kent, County of, Virginia
6237. Newport News, City of, Virginia
6238. Norfolk, City of, Virginia
6239. Northampton, County of, Virginia
6240. Northumberland, County of, Virginia
6241. Nottoway, County of, Virginia
6242. Orange, County of, Virginia
6243. Page, County of, Virginia
6244. Patrick, County of, Virginia
6245. Petersburg, City of, Virginia
6246. Pittsylvania, County of, Virginia
6247. Poquoson, City of, Virginia
6248. Portsmouth, City of, Virginia
6249. Powhatan, County of, Virginia
6250. Prince Edward, County of, Virginia
6251. Prince George, County of, Virginia
6252. Prince William, County of, Virginia
6253. Pulaski, County of, Virginia
6254. Purcellville, Town of, Virginia
6255. Radford, City of, Virginia
6256. Richmond, City of, Virginia
6257. Roanoke, City of, Virginia
6258. Roanoke, County of, Virginia
6259. Rockbridge, County of, Virginia
6260. Rockingham, County of, Virginia
6261. Russell, County of, Virginia
6262. Salem, City of, Virginia
6263. Scott, County of, Virginia
6264. Shenandoah, County of, Virginia
6265. Smyth, County of, Virginia
6266. Southampton, County of, Virginia
6267. Spotsylvania, County of, Virginia
6268. Stafford, County of, Virginia
6269. Staunton, City of, Virginia
6270. Suffolk, City of, Virginia
6271. Sussex, County of, Virginia
6272. Tazewell, County of, Virginia
6273. Vienna, Town of, Virginia
6274. Virginia Beach, City of, Virginia
6275. Warren, County of, Virginia
6276. Warrenton, Town of, Virginia
6277. Washington, County of, Virginia
6278. Waynesboro, City of, Virginia
6279. Westmoreland, County of, Virginia
6280. Williamsburg, City of, Virginia
6281. Winchester, City of, Virginia
6282. Wise, County of, Virginia
6283. Wythe, County of, Virginia
6284. York, County of, Virginia
6285. Aberdeen, City of, Washington
6286. Adams, County of, Washington
6287. Anacortes, City of, Washington
6288. Arlington, City of, Washington
6289. Asotin, County of, Washington
6290. Auburn, City of, Washington
6291. Bainbridge Island, City of, Washington
6292. Battle Ground, City of, Washington
6293. Bellevue, City of, Washington
6294. Bellingham, City of, Washington
6295. Benton, County of, Washington
6296. Bonney Lake, City of, Washington
6297. Bothell, City of, Washington
6298. Bremerton, City of, Washington
6299. Burien, City of, Washington
6300. Camas, City of, Washington
6301. Centralia, City of, Washington
6302. Chelan, County of, Washington
6303. Cheney, City of, Washington
6304. Clallam, County of, Washington
6305. Clark, County of, Washington
6306. Covington, City of, Washington
6307. Cowlitz, County of, Washington
6308. Des Moines, City of, Washington
6309. Douglas, County of, Washington
6310. East Wenatchee, City of, Washington
6311. Edgewood, City of, Washington

6312. Edmonds, City of, Washington
6313. Ellensburg, City of, Washington
6314. Enumclaw, City of, Washington
6315. Everett, City of, Washington
6316. Federal Way, City of, Washington
6317. Ferndale, City of, Washington
6318. Fife, City of, Washington
6319. Franklin, County of, Washington
6320. Gig Harbor, City of, Washington
6321. Grandview, City of, Washington
6322. Grant, County of, Washington
6323. Grays Harbor, County of, Washington
6324. Island, County of, Washington
6325. Issaquah, City of, Washington
6326. Jefferson, County of, Washington
6327. Kelso, City of, Washington
6328. Kenmore, City of, Washington
6329. Kennewick, City of, Washington
6330. Kent, City of, Washington
6331. King, County of, Washington
6332. Kirkland, City of, Washington
6333. Kitsap, County of, Washington
6334. Kittitas, County of, Washington
6335. Klickitat, County of, Washington
6336. Lacey, City of, Washington
6337. Lake Forest Park, City of, Washington
6338. Lake Stevens, City of, Washington
6339. Lakewood, City of, Washington
6340. Lewis, County of, Washington
6341. Liberty Lake, City of, Washington
6342. Lincoln, County of, Washington
6343. Longview, City of, Washington
6344. Lynden, City of, Washington
6345. Lynnwood, City of, Washington
6346. Maple Valley, City of, Washington
6347. Marysville, City of, Washington
6348. Mason, County of, Washington
6349. Mercer Island, City of, Washington
6350. Mill Creek, City of, Washington
6351. Monroe, City of, Washington
6352. Moses Lake, City of, Washington
6353. Mount Vernon, City of, Washington
6354. Mountlake Terrace, City of, Washington
6355. Mukilteo, City of, Washington
6356. Newcastle, City of, Washington
6357. Oak Harbor, City of, Washington
6358. Okanogan, County of, Washington
6359. Olympia, City of, Washington
6360. Pacific, County of, Washington
6361. Pasco, City of, Washington
6362. Pend Oreille, County of, Washington
6363. Pierce, County of, Washington
6364. Port Angeles, City of, Washington
6365. Port Orchard, City of, Washington
6366. Poulsbo, City of, Washington
6367. Pullman, City of, Washington
6368. Puyallup, City of, Washington
6369. Redmond, City of, Washington
6370. Renton, City of, Washington
6371. Richland, City of, Washington
6372. Sammamish, City of, Washington
6373. San Juan, County of, Washington
6374. SeaTac, City of, Washington
6375. Seattle, City of, Washington
6376. Sedro-Woolley, City of, Washington
6377. Shelton, City of, Washington
6378. Shoreline, City of, Washington
6379. Skagit, County of, Washington
6380. Skamania, County of, Washington
6381. Snohomish, City of, Washington
6382. Snohomish, County of, Washington
6383. Snoqualmie, City of, Washington
6384. Spokane, City of, Washington
6385. Spokane, County of, Washington
6386. Spokane Valley, City of, Washington
6387. Stevens, County of, Washington
6388. Sumner, City of, Washington
6389. Sunnyside, City of, Washington
6390. Tacoma, City of, Washington
6391. Thurston, County of, Washington
6392. Tukwila, City of, Washington
6393. Tumwater, City of, Washington
6394. University Place, City of, Washington
6395. Vancouver, City of, Washington
6396. Walla Walla, City of, Washington
6397. Walla Walla, County of, Washington
6398. Washougal, City of, Washington
6399. Wenatchee, City of, Washington

6400. West Richland, City of, Washington
6401. Whatcom, County of, Washington
6402. Whitman, County of, Washington
6403. Woodinville, City of, Washington
6404. Yakima, City of, Washington
6405. Yakima, County of, Washington
6406. Adams, County of, Wisconsin
6407. Allouez, Village of, Wisconsin
6408. Appleton, City of, Wisconsin
6409. Ashland, County of, Wisconsin
6410. Ashwaubenon, Village of, Wisconsin
6411. Baraboo, City of, Wisconsin
6412. Barron, County of, Wisconsin
6413. Bayfield, County of, Wisconsin
6414. Beaver Dam, City of, Wisconsin
6415. Bellevue, Village of, Wisconsin
6416. Beloit, City of, Wisconsin
6417. Brookfield, City of, Wisconsin
6418. Brown, County of, Wisconsin
6419. Brown Deer, Village of, Wisconsin
6420. Buffalo, County of, Wisconsin
6421. Burlington, City of, Wisconsin
6422. Burnett, County of, Wisconsin
6423. Caledonia, Village of, Wisconsin
6424. Calumet, County of, Wisconsin
6425. Cedarburg, City of, Wisconsin
6426. Chippewa, County of, Wisconsin
6427. Chippewa Falls, City of, Wisconsin
6428. Clark, County of, Wisconsin
6429. Columbia, County of, Wisconsin
6430. Crawford, County of, Wisconsin
6431. Cudahy, City of, Wisconsin
6432. Dane, County of, Wisconsin
6433. De Pere, City of, Wisconsin
6434. DeForest, Village of, Wisconsin
6435. Dodge, County of, Wisconsin
6436. Door, County of, Wisconsin
6437. Douglas, County of, Wisconsin
6438. Dunn, County of, Wisconsin
6439. Eau Claire, City of, Wisconsin
6440. Eau Claire, County of, Wisconsin
6441. Elkhorn, City of, Wisconsin
6442. Fitchburg, City of, Wisconsin
6443. Fond du Lac, City of, Wisconsin
6444. Fond du Lac, County of, Wisconsin
6445. Fort Atkinson, City of, Wisconsin
6446. Fox Crossing, Village of, Wisconsin
6447. Franklin, City of, Wisconsin
6448. Germantown, Village of, Wisconsin
6449. Glendale, City of, Wisconsin
6450. Grafton, Village of, Wisconsin
6451. Grand Chute, Town of, Wisconsin
6452. Grant, County of, Wisconsin
6453. Green Bay, City of, Wisconsin
6454. Green, County of, Wisconsin
6455. Green Lake, County of, Wisconsin
6456. Greendale, Village of, Wisconsin
6457. Greenfield, City of, Wisconsin
6458. Greenville, Town of, Wisconsin
6459. Harrison, Village of, Wisconsin
6460. Hartford, City of, Wisconsin
6461. Hobart, Village of, Wisconsin
6462. Holmen, Village of, Wisconsin
6463. Howard, Village of, Wisconsin
6464. Hudson, City of, Wisconsin
6465. Iowa, County of, Wisconsin
6466. Jackson, County of, Wisconsin
6467. Janesville, City of, Wisconsin
6468. Jefferson, County of, Wisconsin
6469. Juneau, County of, Wisconsin
6470. Kaukauna, City of, Wisconsin
6471. Kenosha, City of, Wisconsin
6472. Kenosha, County of, Wisconsin
6473. Kewaunee, County of, Wisconsin
6474. La Crosse, City of, Wisconsin
6475. La Crosse, County of, Wisconsin
6476. Lafayette, County of, Wisconsin
6477. Langlade, County of, Wisconsin
6478. Lincoln, County of, Wisconsin
6479. Lisbon, Town of, Wisconsin
6480. Little Chute, Village of, Wisconsin
6481. Madison, City of, Wisconsin
6482. Manitowoc, City of, Wisconsin
6483. Manitowoc, County of, Wisconsin
6484. Marathon, County of, Wisconsin
6485. Marinette, City of, Wisconsin
6486. Marinette, County of, Wisconsin
6487. Marquette, County of, Wisconsin
6488. Marshfield, City of, Wisconsin
6489. Menasha, City of, Wisconsin
6490. Menomonee Falls, Village of, Wisconsin

6491. Menomonie, City of, Wisconsin
6492. Mequon, City of, Wisconsin
6493. Middleton, City of, Wisconsin
6494. Milwaukee, City of, Wisconsin
6495. Milwaukee, County of, Wisconsin
6496. Monroe, City of, Wisconsin
6497. Monroe, County of, Wisconsin
6498. Mount Pleasant, Village of, Wisconsin
6499. Muskego, City of, Wisconsin
6500. Neenah, City of, Wisconsin
6501. New Berlin, City of, Wisconsin
6502. Oak Creek, City of, Wisconsin
6503. Oconomowoc, City of, Wisconsin
6504. Oconto, County of, Wisconsin
6505. Onalaska, City of, Wisconsin
6506. Oneida, County of, Wisconsin
6507. Oregon, Village of, Wisconsin
6508. Oshkosh, City of, Wisconsin
6509. Outagamie, County of, Wisconsin
6510. Ozaukee, County of, Wisconsin
6511. Pewaukee, City of, Wisconsin
6512. Pierce, County of, Wisconsin
6513. Platteville, City of, Wisconsin
6514. Pleasant Prairie, Village of, Wisconsin
6515. Plover, Village of, Wisconsin
6516. Polk, County of, Wisconsin
6517. Port Washington, City of, Wisconsin
6518. Portage, City of, Wisconsin
6519. Portage, County of, Wisconsin
6520. Price, County of, Wisconsin
6521. Racine, City of, Wisconsin
6522. Racine, County of, Wisconsin
6523. Richfield, Village of, Wisconsin
6524. Richland, County of, Wisconsin
6525. River Falls, City of, Wisconsin
6526. Rock, County of, Wisconsin
6527. Rusk, County of, Wisconsin
6528. Salem Lakes, Village of, Wisconsin
6529. Sauk, County of, Wisconsin
6530. Sawyer, County of, Wisconsin
6531. Shawano, County of, Wisconsin
6532. Sheboygan, City of, Wisconsin
6533. Sheboygan, County of, Wisconsin
6534. Shorewood, Village of, Wisconsin
6535. South Milwaukee, City of, Wisconsin
6536. St. Croix, County of, Wisconsin
6537. Stevens Point, City of, Wisconsin
6538. Stoughton, City of, Wisconsin
6539. Suamico, Village of, Wisconsin
6540. Sun Prairie, City of, Wisconsin
6541. Superior, City of, Wisconsin
6542. Sussex, Village of, Wisconsin
6543. Taylor, County of, Wisconsin
6544. Trempealeau, County of, Wisconsin
6545. Two Rivers, City of, Wisconsin
6546. Vernon, County of, Wisconsin
6547. Verona, City of, Wisconsin
6548. Vilas, County of, Wisconsin
6549. Walworth, County of, Wisconsin
6550. Washburn, County of, Wisconsin
6551. Washington, County of, Wisconsin
6552. Watertown, City of, Wisconsin
6553. Waukesha, City of, Wisconsin
6554. Waukesha, County of, Wisconsin
6555. Waunakee, Village of, Wisconsin
6556. Waupaca, County of, Wisconsin
6557. Waupun, City of, Wisconsin
6558. Wausau, City of, Wisconsin
6559. Waushara, County of, Wisconsin
6560. Wauwatosa, City of, Wisconsin
6561. West Allis, City of, Wisconsin
6562. West Bend, City of, Wisconsin
6563. Weston, Village of, Wisconsin
6564. Whitefish Bay, Village of, Wisconsin
6565. Whitewater, City of, Wisconsin
6566. Winnebago, County of, Wisconsin
6567. Wisconsin Rapids, City of, Wisconsin
6568. Wood, County of, Wisconsin
6569. Albany, County of, Wyoming
6570. Big Horn, County of, Wyoming
6571. Campbell, County of, Wyoming
6572. Carbon, County of, Wyoming
6573. Casper, City of, Wyoming
6574. Cheyenne, City of, Wyoming
6575. Converse, County of, Wyoming
6576. Evanston, City of, Wyoming
6577. Fremont, County of, Wyoming

6578. Gillette, City of, Wyoming
6579. Goshen, County of, Wyoming
6580. Green River, City of, Wyoming
6581. Jackson, Town of, Wyoming
6582. Laramie, City of, Wyoming
6583. Laramie, County of, Wyoming
6584. Lincoln, County of, Wyoming
6585. Natrona, County of, Wyoming
6586. Park, County of, Wyoming
6587. Riverton, City of, Wyoming
6588. Rock Springs, City of, Wyoming
6589. Sheridan, City of, Wyoming
6590. Sheridan, County of, Wyoming
6591. Sweetwater, County of, Wyoming
6592. Teton, County of, Wyoming
6593. Uinta, County of, Wyoming

EXHIBIT J

Illustrative List of Released Entities

Wal-Mart
Wal-Mart Inc.
Wal-Mart, Inc.
Wal-Mart Stores
Wal-Mart Stores, Inc.
Walmart Stores, Inc.
Wal-Mart Stores Inc.
Walmart Inc.
Walmart Inc., Walmart Stores East
Wal-Mart Inc f/k/a Walmart Stores, Inc.
Wal-Mart Inc. f/k/a Walmart Stores, Inc.
Walmart Inc. (f/k/a Wal-Mart Stores)
Walmart Inc. f/k/a Wal-Mart Stores, Inc.
Walmart, Inc.
Walmart, Inc. f/k/a Wal-Mart Stores Inc. d/b/a Wal-Mart Warehouse #46
Walmart Inc. f/k/a Wal-Mart Stores, Inc. d/b/a Wal-Mart Pharmacy Warehouse #32
Walmart Inc. f/k/a Wal-Mart Stores, Inc. d/b/a Wal-Mart Pharmacy Warehouse #45
Walmart, Inc. f/k/a Wal-Mart Stores, Inc.
WAL-MART INC. f/k/a WAL-MART STORES, INC.
Walmart, Inc. f/k/a Wal-Mart Stores, Inc. d/b/a Wal-Mart Pharmacies a/k/a Wal-Mart Pharmacy 10-1218
Walmart, Inc. f/k/a Wal-Mart Stores, Inc. d/b/a Wal-Mart Pharmacies a/k/a Wal-Mart Pharmacy 10-1381
Walmart, Inc. f/k/a Wal-Mart Stores, Inc. d/b/a Wal-Mart Pharmacies a/k/a Wal-Mart Pharmacy 10-2778
Walmart, Inc. f/k/a Wal-Mart Stores, Inc. d/b/a Wal-Mart Pharmacies a/k/a Wal-Mart Pharmacy 10-3751
Walmart, Inc. f/k/a Wal-Mart Stores, Inc. d/b/a Wal-Mart Pharmacies a/k/a Wal-Mart Pharmacy 10-4430
Walmart Inc., f/k/a Wal-Mart Stores East, LP, Individually and d/b/a Wal-Mart Pharmacy Warehouses
Walmart Stores East, L.P.
Wal-Mart Stores East
Wal-Mart Stores East L.P.
Wal-Mart Stores East d/b/a Wal-Mart Pharmacy Warehouse #45
Wal-Mart Stores East d/b/a Wal-Mart Pharmacy Warehouse #46
Wal-Mart Stores East, Inc.
Wal-Mart Stores East, LLC
Wal-Mart Stores East, LLC f/k/a Wal-Mart Stores East Inc.
Wal-Mart Stores East, LP
Wal-Mart Stores East, LP d/b/a Wal-Mart Pharmacy Warehouse
Wal-Mart Stores East, LP, individually and d/b/a Wal-Mart Pharmacy Warehouse
Wal-Mart Stores East, LP, individually and d/b/a Wal-Mart Pharmacy Warehouse #1

Wal-Mart Stores East, LP, individually and d/b/a Wal-Mart Pharmacy Warehouse #45
Wal-Mart Stores East, LP, individually and d/b/a Wal-Mart Pharmacy Warehouse #46
Wal-Mart Stores East, LP d/b/a Wal-Mart Pharmacy Warehouse #1
Wal-Mart Stores East, LP d/b/a Wal-Mart Pharmacy Warehouse #32
Wal-Mart Stores East, LP d/b/a Wal-Mart Pharmacy Warehouse #34
Wal-Mart Stores East, LP d/b/a Wal-Mart Pharmacy Warehouse #45
Wal-Mart Stores East, LP d/b/a Walmart Pharmacy Warehouse #46
Wal-Mart Stores East, LP d/b/a Wal-Mart Pharmacy 10-3251
Wal-Mart Stores East I, LP
Wal-Mart Stores East I, LP f/k/a Wal-Mart Stores East d/b/a Walmart #20
Wal-Mart Stores East I, LP f/k/a Wal-Mart Stores East, LP d/b/a Walmart #34
Wal-Mart Stores East I, LP f/k/a Wal-Mart Stores East, LP d/b/a Walmart #48
Wal-Mart Stores East I, LP f/k/a Wal-Mart Stores East d/b/a Walmart #92
Wal-Mart Stores East I, LP f/k/a Wal-Mart Stores East, LP d/b/a Walmart #338
Wal-Mart Stores East I, LP f/k/a Wal-Mart Stores East, LP d/b/a Walmart #914
Wal-Mart Stores East I, LP f/k/a Wal-Mart Stores East, LP d/b/a Walmart #4282
Wal-Mart Stores East I, LP f/k/a Wal-Mart Stores East, LP d/b/a Walmart #5261
Wal-Mart Pharmacy
Wal-Mart Pharmacy Warehouse
Wal-Mart Pharmacy Warehouse #1
Wal-Mart Pharmacy Warehouse #32
Wal-Mart Pharmacy Warehouse #45
Wal-Mart Pharmacy Warehouse #46
Wal-Mart Pharmacy 10-0696
Wal-Mart Pharmacy 10-1218
Walmart Pharmacy
Walmart Pharmacy 10-1381
Walmart Pharmacy 10-2289
Walmart Pharmacy Warehouse
Wal-Mart Pharmacy 10-2778
Wal-Mart Pharmacy 10-3251
Wal-Mart Pharmacy 10-3751
Wal-Mart Pharmacy 10-4430
Wal-Mart Pharmacy 10-5296
Wal-Mart Pharmacy 10-5397
Wal-Mart Pharmacy Wholesale
Wal-Mart Stores Texas, LLC
Wal-Mart.com USA, LLC
Wal-Mart Puerto Rico, Inc.
Sam’s West, Inc.
Sam’s East, Inc.
WSE Investment LLC
WSE Management LLC
Wal-Mart Property Company
Wal-Mart Real Estate Business Trust
Sam’s Property Company

Sam’s Real Estate Business Trust
Wal-Mart de Mexico Canada Corp.
Wal-Mart Canada Corp
Flipkart Private Limited
Flipkart Walmart Chile S.A.
Walmart Chile
Massmart Holdings Ltd.
Qomolangma Holdings Ltd.
ClarusONE Sourcing Services, LLP

EXHIBIT K

Subdivision Participation Form

Governmental Entity:	State:
Authorized Official:	
Address 1:	
Address 2:	
City, State, Zip:	
Phone:	
Email:	

The governmental entity identified above ("Governmental Entity"), in order to obtain and in consideration for the benefits provided to the Governmental Entity pursuant to the Settlement Agreement dated November 14, 2022 ("Walmart Settlement"), and acting through the undersigned authorized official, hereby elects to participate in the Walmart Settlement, release all Released Claims against all Released Entities, and agrees as follows.

1. The Governmental Entity is aware of and has reviewed the Walmart Settlement, understands that all terms in this Election and Release have the meanings defined therein, and agrees that by this Election, the Governmental Entity elects to participate in the Walmart Settlement and become a Participating Subdivision as provided therein.

2. The Governmental Entity shall promptly, and in any event within 14 days of the Effective Date and prior to the filing of the Consent Judgment, dismiss with prejudice any Released Claims that it has filed. With respect to any Released Claims pending in In re National Prescription Opiate Litigation, MDL No. 2804, the Governmental Entity authorizes the Plaintiffs' Executive Committee to execute and file on behalf of the Governmental Entity a Stipulation of Dismissal With Prejudice substantially in the form found at https://nationalopioidsettlement.com/.

3. The Governmental Entity agrees to the terms of the Walmart Settlement pertaining to Subdivisions as defined therein.

4. By agreeing to the terms of the Walmart Settlement and becoming a Releasor, the Governmental Entity is entitled to the benefits provided therein, including, if applicable, monetary payments beginning after the Effective Date.

5. The Governmental Entity agrees to use any monies it receives through the Walmart Settlement solely for the purposes provided therein.

6. The Governmental Entity submits to the jurisdiction of the court in the Governmental Entity's state where the Consent Judgment is filed for purposes limited to that court's role as provided in, and for resolving disputes to the extent provided in, the Walmart Settlement.

7. The Governmental Entity has the right to enforce the Walmart Settlement as provided therein.

8. The Governmental Entity, as a Participating Subdivision, hereby becomes a Releasor for all purposes in the Walmart Settlement, including but not limited to all provisions of Section X (Release), and along with all departments, agencies, divisions, boards, commissions, districts, instrumentalities of any kind and attorneys, and any person in their official capacity elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, and any other entity identified in the definition of Releasor, provides for a release to the fullest extent of its authority. As a Releasor, the Governmental Entity hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the Walmart Settlement are intended by the Parties to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of the Governmental Entity to release claims. The Walmart Settlement shall be a complete bar to any Released Claim.

9. In connection with the releases provided for in the Walmart Settlement, each Governmental Entity expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

   > **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her, would have materially affected his or her settlement with the debtor or released party.

   A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Governmental Entity hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Governmental Entities' decision to participate in the Walmart Settlement.

10. Nothing herein is intended to modify in any way the terms of the Walmart Settlement, to which Governmental Entity hereby agrees. To the extent this Election and Release is interpreted differently from the Walmart Settlement in any respect, the Walmart Settlement controls.

I have all necessary power and authorization to execute this Election and Release on behalf of the Governmental Entity.

Signature: _____

Name: _____

Title: _____

Date: _____

EXHIBIT L

Settlement Fund Administrator Terms

[Exhibit to be inserted prior to the Threshold Subdivision Participation Date.]

EXHIBIT M

Maximum Payment Amounts

The below reflects the maximum possible payment assuming all Eligible States and Subdivisions become Settling States and Participating Subdivisions, respectively. Walmart shall deposit the amounts payable to the State Outside Counsel Fee Fund and the State Cost Fund into the Settlement Fund on the Deposit Date and those amounts shall be disbursed by the Settlement Fund Administrator consistent with Exhibits S and T.

Payment Category	Amount
Remediation	$2,393,794,118.64
Subdivision Attorneys' Fees, Expenses and Costs	$297,720,376.93
State Outside Counsel Fee Fund	$16,006,471.88
State Cost Fund	$16,006,471.88
Additional Remediation	$16,006,471.88
Total	**$2,739,533,911.21**

EXHIBIT N

Additional Remediation Amount Allocation Percentages

American Samoa	0.02200115975%
Arizona	3.05252465675%
California	12.74849736613%
Colorado	2.13511305177%
Connecticut	1.66248361102%
District of Columbia	0.23126235968%
Georgia	3.58271243432%
Guam	0.06172478010%
Hawaii	0.41715801047%
Idaho	0.63207800237%
Illinois	4.27418134712%
Indiana	2.84860067110%
Iowa	0.95333852745%
Kansas	1.00750402880%
Louisiana	1.88257043645%
Maine	0.68015462142%
Maryland	2.71203054235%
Massachusetts	2.95998387959%
Minnesota	1.66691605927%
Missouri	2.57716004997%
Montana	0.40160929605%
N. Mariana Islands	0.02146629937%
Nebraska	0.53602352921%
New Jersey	3.54021579836%
New York	6.92637929997%
North Carolina	4.17641738164%
North Dakota	0.21847415675%
Ohio	5.59815538035%
Oklahoma	1.96884304616%
Oregon	1.76570407913%
Pennsylvania	5.89566898881%
Rhode Island	0.57378605088%
South Carolina	1.97793678247%
Tennessee	3.45413951394%
Texas	8.08647780880%
Vermont	0.32700612791%

Virgin Islands	0.04056252728%
Virginia	2.92983758737%
Washington	2.97967950241%
Wisconsin	2.25927398859%
Wyoming	0.21434725869%

EXHIBIT O

Adoption of a State-Subdivision Agreement

A State-Subdivision Agreement shall be applied if it meets the requirements of Section V of the Settlement Agreement and is approved by the State and by the State's Subdivisions as follows:

1. *Requirements for Approval*. A State-Subdivision Agreement shall be deemed as agreed to when it has been approved by the State and either (a) Subdivisions whose aggregate "Population Percentages," determined as set forth below, total more than sixty percent (60%), or (b) Subdivisions whose aggregate Population Percentages total more than fifty percent (50%) provided that these Participating Subdivisions also represent fifteen percent (15%) or more of the State's counties or parishes (or, in the case of Settling States whose counties and parishes do not function as local governments, 15% of or more of the Settling State's non-county Subdivisions), by number.

2. *Approval Authority*. Approval by the State shall be by the Attorney General. Approval by a Subdivision shall be by the appropriate official or legislative body pursuant to the required procedures for that Subdivision to agree to a legally binding settlement.

3. *Population Percentage Calculation*. For purposes of this Exhibit O only, Population Percentages shall be determined as follows: For States with functional counties or parishes[1], the Population Percentage of each county or parish shall be deemed to be equal to (a) (1) 200% of the population of such county or parish, minus (2) the aggregate population of all Primary Incorporated Municipalities located in such county or parish, divided by (b) 200% of the State's population. A "Primary Incorporated Municipality" means a city, town, village or other municipality incorporated under applicable state law with a population of at least 25,000 that is not located within another incorporated municipality. The Population Percentage of each Primary Incorporated Municipality shall be equal to its population (including the population of any incorporated or unincorporated municipality located therein) divided by 200% of the State's population; *provided* that the Population Percentage of a Primary Incorporated Municipality that is not located within a county shall be equal to 200% of its population (including the population of any incorporated or unincorporated municipality located therein) divided by 200% of the State's population. For all States that do not have functional counties or parishes, the Population Percentage of each non-county Subdivision (including any incorporated or unincorporated municipality located therein), shall be equal to its population divided by the State's population.

4. *Preexisting Agreements and Statutory Provisions*. A State may include with the notice to its Subdivisions an existing agreement, a proposed agreement, or statutory provisions regarding the distribution and use of settlement funds and have the acceptance of such an agreement or statutory provision be part of the requirements to be a Participating Subdivision.

[1] Certain states do not have counties or parishes that have functional governments, including: Alaska, Connecticut, Massachusetts, Rhode Island, and Vermont.

5. *Revised Agreements*. A State-Subdivision Agreement that has been revised, supplemented, or refined shall be applied if it meets the requirements of Section V and is approved by the State and by the State's Subdivisions pursuant to the terms above.

EXHIBIT P

Injunctive Relief

As part of this Settlement Agreement, Walmart agrees to implement the injunctive relief terms reflected in Exhibit F to Walmart's agreement with the State of Florida dated October 19, 2022, attached hereto as Appendix A ("Walmart-Florida Injunctive Relief Terms"), within 90 days of the Effective Date of the Settlement Agreement, provided, however, that the parties agree that those terms will be withdrawn and Walmart will implement the Pharmacy Controlled Substance Compliance Program & Anti-Diversion Injunctive Terms ("Injunctive Terms") set out below if each Chain Pharmacy (defined as CVS and Walgreens) agrees to implement materially the same Injunctive Terms on a nationwide basis pursuant to a binding agreement with state attorneys general. To the extent there is a dispute between the Settling States and Walmart regarding whether the Injunctive Terms imposed on other pharmacies are materially the same as these Injunctive Terms, such dispute shall be heard by the National Arbitration Panel. If any Injunctive Term is found to be materially different, only that term and any co-dependent terms, as applicable, would be invalidated and inoperative. However, in no event shall the Injunctive Terms be any less stringent than those applied in the Walmart-Florida Injunctive Relief Terms. In the event a Settling State later settles with Albertsons or Kroger (or a merged company involving one or more of them), the Settling State shall impose materially the same Injunctive Terms as part of any settlement.

* * *

Pharmacy Controlled Substance Compliance Program & Anti-Diversion Injunctive Terms

I. INTRODUCTION

1. Except where these Injunctive Terms specify a different implementation period, Walmart shall implement the Injunctive Terms set forth below in Sections II through XVII by the Injunctive Terms Implementation Date (defined below).

2. To the extent that Walmart already has in place committees, departments, policies or programs that satisfy the Injunctive Terms, no re-naming or other change is required by these Injunctive Terms.

3. Overview

    a. Walmart will implement or maintain a Controlled Substance Compliance Program ("CSCP").

    b. The CSCP must include written standard operating procedures and/or corporate policies (the "CSCP Policies and Procedures") required by these Injunctive Terms.

c. The CSCP shall apply during the term of these Injunctive Terms, to each of Walmart's retail pharmacy stores that dispense Schedule II Designated Controlled Substances and are registered or licensed with each Settling State.

d. Walmart shall provide a copy of the relevant CSCP Policies and Procedures to each Settling State within 60 days of the Injunctive Terms Implementation Date. To the extent any implementation is expected to require additional time, the Parties agree to work together in good faith to establish a timeline for implementation. No later than 30 days after the Injunctive Terms Implementation Date, each Settling State shall identify the person or office to whom Walmart must provide a copy of the relevant CSCP Policies and Procedures and any other State-specific reporting required under these Injunctive Terms.

4. Compliance with Laws

a. Walmart acknowledges and agrees that its pharmacies must comply with applicable state and federal laws, regulations, and rules, including those regarding the dispensing of Controlled Substances. The requirements of these Injunctive Terms are in addition to, and not in lieu of, any other requirements of federal, state, or local law. Nothing in the Injunctive Terms shall be construed as relieving Walmart of the obligation of its pharmacies to comply with all federal, state and local laws, regulations or rules, nor shall any of the provisions of the Injunctive Terms be deemed as permission for Walmart to engage in any acts or practices prohibited by such laws, regulations or rules.

b. The Injunctive Terms are not intended to and shall not be interpreted to prevent Walmart from taking or implementing any other compliance or policy steps necessary to conform with federal, state, or local legal requirements.

c. In the event that Walmart 1) determines that there may be a conflict between the Injunctive Terms and the requirements of federal, state, or local laws, or interpretations of such laws articulated by an agency responsible for enforcing such laws, such that Walmart determines that it cannot comply with the Injunctive Terms without violating these requirements or express interpretations; or 2) believes a court or administrative action brought by a governmental body in a Settling State has commenced against it or its pharmacists for actions required by the Injunctive Terms, then Walmart may notify the Attorney General of the Settling State of such potential conflict or potential or pending action. Within thirty (30) days after receipt of a notification from Walmart referenced above, Walmart and the State shall meet and discuss the potential conflict, and Walmart shall comply with any reasonable requests from the Settling State as necessary to determine whether there is a conflict between the Injunctive Terms and the requirements of federal, state, or local

laws, or the express interpretations thereof by an agency responsible for their enforcement, or a conflict with the Injunctive Terms giving rise to the court or administrative action. If the State agrees that there is a conflict or that the court or administrative action is a result of actions required by the Injunctive Terms, the State will engage in best efforts to resolve the conflict or assist in achieving resolution of the court or administrative action. Nothing in this paragraph shall (i) limit the right of the State to disagree with Walmart as to the conflict; or (ii) be deemed to relieve Walmart from following any subsequently enacted law or regulation, or judicial decisions from a regulatory authority with jurisdiction over controlled substances that is more restrictive than the provisions of the Injunctive Terms, or from following the Injunctive Terms if they are more restrictive than applicable laws at issue in the administrative action; or (iii) be deemed to relieve Walmart from adhering to the outcome of the court or administrative action when it is determined there is no conflict..

d. Walmart shall retain all records it is required to create pursuant to its obligations hereunder in an electronic or otherwise easily accessible format and a Settling State shall have the right to review and copy such records upon request and after reasonable notice for the term of these Injunctive Terms. Nothing in these Injunctive Terms shall waive any applicable privilege that may be asserted over any such record. Unless otherwise required by law, if a Settling State seeks to disclose any records created and obtained from Walmart under this provision as part of a proceeding to enforce these Injunctive Terms against Walmart, it shall first provide ten (10) days' notice to Walmart unless doing so would conflict with applicable law. A Settling State shall not otherwise disclose or provide any records created by and obtained from Walmart under this provision to third parties during or after the Term of these Injunctive Terms unless required to do so by law. If a Settling State is required to disclose or provide any records created by and obtained from Walmart under this provision to third parties during or after the Term of these Injunctive Terms, it shall first provide ten (10) days' notice to Walmart unless doing so would conflict with applicable law. This notification requirement shall not apply to documents obtained by a Settling State or its agencies that are required to be produced to the Settling State or its agencies by law or regulation, nor shall it apply to documents obtained by a Settling State or its agencies that are shared with federal, state, or local law enforcement. This notification requirement shall also not apply to documents obtained by a Settling State or its agencies from other sources.

5. No Admission and No Use as Evidence. Walmart does not admit liability or wrongdoing. These Injunctive Terms shall not be considered, construed, or represented to be (1) an admission, concession, or evidence of liability or wrongdoing or (2) a waiver or limitation of any defense otherwise available to Walmart. These Injunctive Terms shall not be offered or received in evidence in any action or proceeding for any purpose other than in an action or proceeding arising under or relating to these Injunctive Terms.

II. TERM AND SCOPE

1. The term of these Injunctive Terms shall be from the Injunctive Terms Implementation Date until ten years from the Injunctive Terms Implementation Date, unless otherwise specified herein.

2. Except as otherwise stated herein, the Injunctive Terms shall apply to Walmart's retail pharmacy stores registered or licensed with each Settling State that dispense Schedule II Designated Controlled Substances to Patients and to Schedule II Designated Controlled Substances dispensed to patients in each Settling State by its mail-order pharmacy. Should Walmart operate an online pharmacy that is registered or licensed to dispense Schedule II Designated Controlled Substances in any Settling State while these Injunctive Terms are in effect, the Injunctive Terms shall apply to such online pharmacy as well.

3. This agreement may be amended by mutual agreement of a majority of the States Injunctive Relief Committee and Walmart. Any such amendments must be in writing.

III. DEFINITIONS

1. The term "Distributor Injunctive Terms" means Exhibit P of the Settlement Agreement, dated as of July 21, 2021, between McKesson Corporation, Cardinal Health, Inc., and AmerisourceBergen Corporation and certain States and subdivisions.

2. The term "Block" means an action taken by Walmart preventing or otherwise prohibiting any Walmart pharmacist from filling prescriptions for Controlled Substances from a specific identified prescriber.

3. The term "Clearinghouse" means the system established by Section XVII of the Distributor Injunctive Terms.

4. The term "Clearinghouse Advisory Panel" is as defined in Section XVII.B.4 of the Distributor Injunctive Terms.

5. The term "Controlled Substances" means those substances designated under schedules II-V pursuant to the federal Controlled Substances Act and the laws and regulations of the Settling State that incorporate the federal Controlled Substances Act. Controlled Substances shall also include gabapentin, except for purposes of dispensing in States that do not treat gabapentin as a controlled substance or similar designation (e.g., "drug of concern").

6. The term "Designated Controlled Substances" shall be limited to: (a) oxycodone; (b) hydrocodone; (c) hydromorphone; (d) tramadol; (e) oxymorphone; (f) morphine; (g) methadone; and (h) fentanyl.

7. The term "Effective Date" is defined in Section II.C of the Walmart Settlement Agreement.

8. The term "Injunctive Terms Implementation Date" means (i) 90 days after the Effective Date of the Settlement Agreement, or (ii) 90 days after CVS and Walgreens have agreed to implement materially the same Injunctive Terms nationwide pursuant to a binding agreement with state attorneys general and such Injunctive Terms imposed upon CVS and Walgreens have become effective, whichever is later. To the extent there is a dispute between the Settling States and Walmart regarding whether the Injunctive Terms imposed on other pharmacies are materially the same as these Injunctive Terms, such dispute shall be heard by the National Arbitration Panel. If any Injunctive Term is found to be materially different, only that term and any co-dependent terms, as applicable, would be invalidated and inoperative. However, in no event shall the Injunctive Terms be any less stringent than those applied in the Walmart-Florida Injunctive Relief Terms.

9. The term "National Arbitration Panel" is defined in Section VI.F.3.b of the Walmart Settlement Agreement.

10. The term "Patient" means any individual who receives a prescription for a Designated Controlled Substance from a Prescriber, whether legally valid or not, and attempts to fill it at one of Walmart's retail pharmacy stores in a Settling State.

11. The term "Prescriber" means any individual that has written a prescription, whether legally valid or not, that is presented to a Walmart pharmacy in a Settling State.

12. The term "Red Flag(s)" means the enumerated Patient Red Flags, Prescription Red Flags, and Prescriber Red Flags set out in Section IX.

13. The term "Settling State(s)" is defined in Section I.MMM of the Walmart Settlement Agreement.

14. The term "States Injunctive Relief Committee" means a committee representing the Settling States composed of between four and eight members designated by the Settling States.

IV. CONTROLLED SUBSTANCE COMPLIANCE PERSONNEL

1. Walmart shall designate a Controlled Substance Compliance Director, or other appropriately titled position, to be a member of the Controlled Substance Compliance Committee (described below in Section VI), and to oversee a Controlled Substance Compliance Department and Walmart's compliance with 21 C.F.R. 1306 these Injunctive Terms. As used in these Injunctive Terms, the terms "Controlled Substance Compliance Committee" and "Controlled Substance Compliance Department" refer to the entity or entities, however titled, that carry out the functions required by these Injunctive Terms. Notwithstanding the preceding sentence, to the extent an existing position, committee or department carries out the functions required by these Injunctive Terms, any other functions undertaken by such position, committee or department shall not be subject to these Injunctive Terms or oversight by the Settling States pursuant to these Injunctive Terms. The position, committee and department discussed in these Terms may bear different names and need not be limited to the roles and functions set forth herein.

2. The Controlled Substance Compliance Director shall have knowledge of and experience with the laws and regulation of Controlled Substances, in particular laws and regulations regarding 21 C.F.R. 1306 and requiring effective controls against the potential diversion of Controlled Substances.

3. The Controlled Substance Compliance Director shall provide at least quarterly reports to the Controlled Substance Compliance Committee (described below in Section VI) regarding Walmart's compliance with these Injunctive Terms, including the implementation of any changes to the CSCP Policies and Procedures required by these Injunctive Terms.

4. Staffing levels of Walmart's Controlled Substance Compliance Department shall be reviewed periodically, but at least on an annual basis, by Walmart's Controlled Substance Compliance Committee to assess whether such staffing levels are sufficient for the Controlled Substance Compliance Department to comply with this Agreement. This review shall include consideration of relevant developments in technology, law, and regulations.

5. Throughout the term of these Injunctive Terms, Walmart shall maintain a telephone and electronic submission hotline(s) (the "Hotline") to permit employees and/or Patients to anonymously report suspected inappropriate or illegitimate dispensing, prescribing or diversion of Designated Controlled Substances, violations of the CSCP Policies and Procedures, these Injunctive Terms, Walmart's company policy, or other applicable law. The Hotline may be implemented by adding a dedicated option to existing systems that includes reporting regarding Designated Controlled Substances. Walmart shall publish its Hotline contact information to its employees and Patients in the Settling States. Walmart shall maintain for the duration of Injunctive Terms a record of each complaint made to the Hotline regarding Designated Controlled Substances and

documentation regarding any investigation or response to such complaints. Nothing herein shall require Walmart to investigate a pharmacist's professional judgment to refuse a prescription that the pharmacist believes was prescribed or is being used for other than a legitimate medical purpose or that the pharmacist believes was not prescribed by an individual Prescriber acting in the usual course of his or her professional practice.

V. INDEPENDENCE

1. Walmart's Controlled Substance Compliance Department personnel, pharmacists and pharmacist technicians who work at Walmart's pharmacies within the Settling States, and field personnel who supervise pharmacists and pharmacist technicians (together, "CSCP Employees"), shall not be compensated in whole or in part by commissions, bonuses, incentives or any other monetary or non-pecuniary benefit that depends in any part on revenue or profitability targets or expectations for sales of Controlled Substances. Nothing in these Injunctive Terms shall be interpreted to prevent compensation of employees based on sales volume, revenue or profitability targets/expectations for enterprise-, store-, or pharmacy-wide sales that include Controlled Substances.

2. No CSCP Employees may be terminated, suspended, threatened with or face any other negative employment consequence for failing to meet any revenue or profitability targets or expectations for sales of Controlled Substances. Nothing in these Injunctive Terms shall be interpreted to prevent Walmart from taking employment action based on sales volume, revenue or profitability targets/expectations for enterprise-, store-, or pharmacy-wide sales that include Controlled Substances.

3. Personnel in Walmart's Controlled Substance Compliance Department shall not report to Walmart's sales, marketing, or business development personnel, and sales, marketing, or business development personnel shall not be authorized to make decisions regarding the promotion, compensation, demotion, admonition, discipline, commendation, periodic performance reviews, hiring, or firing of Controlled Substance Compliance Department personnel.

4. Walmart's sales, marketing and business development department personnel are prohibited from interfering with, obstructing, or otherwise exerting control over any Controlled Substance Compliance Department or Controlled Substance Committee decision-making.

5. Notwithstanding the prior paragraph, Walmart pharmacy operations personnel may sit on the Controlled Substance Compliance Committee and pharmacists and pharmacy managers may sit on the Controlled Substance Compliance Committee provided that they do not have voting privileges.

6. To the extent necessary to comply with this section, Walmart's Controlled Substance Compliance Committee shall review, modify, and direct any changes to any compensation and non-retaliation policies specific to the sale or dispensing of Designated Controlled Substances.

VI. OVERSIGHT

1. To the extent not already established, within thirty (30) business days of the Injunctive Terms Implementation Date, Walmart shall establish a compliance committee, however titled, that includes representatives from its respective legal, compliance, pharmacy operations and finance departments, however named, to provide oversight over the CSCP and its compliance with the Injunctive Terms. For the purposes of reference herein, this committee, however named, shall be referred to as the "Controlled Substance Compliance Committee." Walmart shall maintain its Controlled Substance Compliance Committee for the duration of the term of the Injunctive Terms. The Controlled Substance Compliance Director shall be a member of the Controlled Substance Compliance Committee.

2. Walmart's Controlled Substance Compliance Committee shall have quarterly meetings during which the Controlled Substance Compliance Director shall report on, and the Controlled Substance Compliance Committee shall review, among other things, (a) the Prescription Validation Process, including the CSCP Policies and Procedures on identifying and resolving Patient, Prescriber and Prescription Red Flags; (b) the training required under the Injunctive Terms; (c) proactive due diligence and site visits; (d) the Prescriber Review Processes; (e) significant new national and regional diversion trends involving Controlled Substances; (f) Walmart's adherence to the Injunctive Terms and applicable laws and regulations; and (g) any technology, staffing, or other resource needs for the CSCP. The Controlled Substance Compliance Committee shall have access to all CSCP reports described in the following subsection.

3. On an annual basis, Walmart's Controlled Substance Compliance Committee shall provide a written report to Walmart's President, Chief Financial Officer, Chief Legal Officer, and Chief Compliance Officer, as well as its Board of Directors, outlining (a) Walmart's adherence to, and any material deviations from these Injunctive Terms; (b) the allocation of resources sufficient to comply with these Injunctive Terms; and (c) any revisions to the CSCP that the Controlled Substance Compliance Committee has approved. The Board of Directors or a committee thereof shall document in its minutes its review of the annual Controlled Substance Compliance Committee reports.

4. Walmart, through its Controlled Substance Compliance Department and Committee, shall, at least once every year, review and oversee any enhancements to the CSCP Policies and Procedures and systems for dispensing activity that the Controlled Substance Compliance Committee deems necessary.

5. The Controlled Substance Compliance Committee shall be responsible for the approval of all material revisions to the CSCP Policies and Procedures, provided that nothing herein shall prevent Walmart from implementing changes to the CSCP Policies and Procedures pending such review and approval.

VII. MANDATORY TRAINING

1. The CSCP Policies and Procedures shall be published in a form and location readily accessible to all pharmacy and compliance personnel at each Walmart pharmacy location in the Settling States. Online availability is sufficient, so long as pharmacy and compliance personnel have access to a computer with access to the CSCP Policies and Procedures.

2. Walmart shall implement policies and procedures requiring that, to the extent practical (for example, accounting for employee leave), within 90 days of the Injunctive Terms Implementation Date, all existing CSCP Employees must complete a training on the CSCP Policies and Procedures required under these Injunctive Terms, including the Prescription Validation Process and their corresponding responsibility. These policies and procedures shall further require that all new hires must complete such trainings within 60 days of hiring or 6 months of the Injunctive Terms Implementation Date, whichever is later. Walmart will further ensure that every CSCP Employee will receive such training at least once every 3 years for the term of these Injunctive Terms.

3. On an annual basis for the duration of these Injunctive Terms, Walmart shall test its CSCP Employees on their knowledge regarding the CSCP Policies and Procedures required under these Injunctive Terms, including the Prescription Validation Process and their corresponding responsibility.

4. Walmart shall train all third-party compliance consultants performing CSCP-related compliance functions for Walmart in the same manner as Walmart's CSCP Employees.

5. It shall be a part of the CSCP Policies and Procedures and all trainings of all CSCP Employees required under these Injunctive Terms that pharmacists shall refuse to dispense Controlled Substances that they believe were prescribed or are being used for other than a legitimate medical purpose or that they believe were not prescribed by an individual Prescriber acting in the usual course of his or her professional practice.

6. All trainings required under these Injunctive Terms shall also make clear that i) Walmart's compensation and non-retaliation policies, including pursuant to these Injunctive Terms, prevent CSCP Employees from being compensated or penalized in any way related to revenue or profitability targets or expectations specific to sales of Controlled Substances; and ii) pharmacists will not be penalized in any way for exercising their professional judgment to refuse to fill prescriptions for Controlled Substances pursuant to their corresponding responsibility.

VIII. THE PRESCRIPTION VALIDATION PROCESS

1. As part of its CSCP, Walmart shall maintain a Prescription Validation Process in the CSCP Policies and Procedures, as further described and set forth in this section, that each pharmacist employed by Walmart in a Settling State must follow when dispensing a prescription for a Controlled Substance. The inclusion of an enumerated Red Flag in these Injunctive Terms shall not be considered, construed, or represented to be an admission, concession, or evidence of any fact or contention related to such Red Flag. Nothing in these Injunctive Terms shall require Walmart to create a record in those instances where the pharmacist rejects a prescription when presented without an effort to resolve any red flags, including but not limited to instances where the pharmacist identifies on the face of the prescription a Prescription Red Flag (defined in Section IX below) that causes the pharmacist to conclude without further inquiry that the prescription is invalid.

2. A Red Flag will be considered "resolved" if, after further investigation as described below, and given other facts and circumstances surrounding the prescription, a pharmacist determines, in his or her professional judgment, that the facts that triggered the Red Flag do not lead him or her to believe that the prescription was written or is being submitted for an illegitimate medical purpose or outside the usual course of a Prescriber's professional practice. All Red Flags described in Sections IX.3 and IX.5 below shall be based on internal Walmart dispensing data regarding prescriptions filled at Walmart pharmacies and shall not be based on Prescription Monitor Program ("PMP") or Prescription Drug Monitoring Program ("PDMP") data or dispensing data regarding prescriptions filled at pharmacies other than Walmart pharmacies. Nothing in this Agreement requires Walmart to use nor prohibits Walmart from using any data other than internal Walmart dispensing data to identify any Patient Red Flags or Prescriber Red Flags (described in Section IX.3 and IX.5 below).

3. Walmart's CSCP Policies and Procedures shall provide that if a pharmacist identifies any "Patient Red Flags" associated with a Controlled Substances prescription (described in Section IX(3) below), before filling the prescription the pharmacist must resolve them; and that the method of resolution falls within the judgment of the pharmacist and may include reviewing the Patient's profile and history with Walmart, calling the Prescriber or Prescribers if appropriate, speaking with the Patient if appropriate, calling on the pharmacist's pre-existing knowledge of the Patient or Prescriber, reviewing available Prescription Monitoring Program ("PMP" or "PDMP") data, and/or reviewing other data or information available to the pharmacist.

4. Walmart's CSCP Policies and Procedures shall provide that if forgery or fraud is suspected, or if the pharmacist identifies any other "Prescription Red Flags" associated with a Controlled Substances prescription (described in Section IX(4) below), the pharmacist must either reject the prescription if the pharmacist concludes without further inquiry that the prescription is invalid or resolve the Prescription Red Flags; and that the method of resolution falls within the judgment of the pharmacist and may include reviewing the Patient's profile and history with Walmart, calling the Prescriber or Prescribers if appropriate, speaking with the Patient if appropriate, calling on the pharmacist's pre-existing knowledge of the Patient or Prescriber, reviewing available PMP or PDMP data, and/or reviewing other data or information available to the pharmacist.

5. Walmart's CSCP Policies and Procedures shall require that if a pharmacist identifies any "Prescriber Red Flags" associated with a Controlled Substances prescription (described in Section IX(5) below), the pharmacist must resolve them; and that the method of resolution falls within the judgment of the pharmacist and may include reviewing any Walmart records regarding the Prescriber, calling the Prescriber if appropriate, speaking with the Patient if appropriate, calling on the pharmacist's pre-existing knowledge of the Patient or Prescriber, reviewing available PMP or PDMP data, and/or reviewing other data or information available to Walmart.

6. Walmart's CSCP Policies and Procedures shall provide that the resolution of all Red Flags identified by the pharmacist, as well as any Controlled Substance prescriptions that were rejected pursuant to the Prescription Validation Process, and the reasons why they were rejected, must be documented. Any such records shall be maintained for the duration of these Injunctive Terms. To the extent that a Red Flag is resolved based upon facts or circumstances that are already reflected or documented in Walmart's records, further documentation of those facts or circumstances is not required for resolution of substantially the same Red Flag on subsequent prescriptions. For example, if a patient lives 55 miles from a Walmart pharmacy but works near the pharmacy and that fact is reflected in pharmacy records, no documentation for the resolution of the Red Flag addressing patient distance from the pharmacy is required in connection with individual prescriptions dispensed for that patient.

7. Walmart's CSCP Policies and Procedures shall provide that, even if all Red Flags are resolved, a pharmacist shall reject a prescription if, in his or her professional judgment, he or she believes that it was written or is being submitted for other than a legitimate medical purpose and/or was written outside the usual course of an individual Prescriber's professional practice.

IX. RED FLAGS

1. Walmart shall provide annually to the Settling States, beginning with an initial report twelve months after the Injunctive Terms Implementation Date, and annually

thereafter, a report (the "Annual Red Flag Report") that sets forth: (a) the total number of prescriptions for Controlled Substances dispensed annually aggregated nationally and by state; (b) the specific metrics or algorithms (if any) used to identify each category of Red Flag listed in this section; and, (c) for each category of Red Flags (excluding the Prescription Red Flags in IX.4 except to the extent collected and maintained), the following information on both a nationwide basis and, separately, for each Settling State:

a. The number of times that Walmart pharmacists input a prescription into its systems and identified the Red Flag during the prior year;

b. The number of times when such Red Flag was not resolved and thus, the prescription was refused, during the prior year;

c. The percentage of instances where a Red Flag occurred, as in subsection a, that the Red Flag was not resolved, as in subsection b.

2. Within the three months following the provision of the Annual Red Flag Report, either Walmart or the States Injunctive Relief Committee may propose in writing a meet and confer to discuss potential changes to the scope of one or more categories of Red Flags. At such a meeting, Walmart or the States Injunctive Relief Committee may provide additional research, information or data available to them beyond that provided in the Annual Red Flag Report. For example, Walmart might propose reducing the threshold for triggering a particular category of Red Flag or consolidating certain Red Flags or subcategories of Red Flags into a single metric, or the States Injunctive Relief Committee might propose increasing the threshold for triggering a particular Red Flag or expanding that Red Flag to include multiple subcategories (*e.g.*, number of prescriptions, distance thresholds).

a. If Walmart and the States Injunctive Relief Committee agree on such changes to one or more Red Flags, they shall document those changes in writing and they shall become a part of these Injunctive Terms for all intents and purposes. Further, any modified Red Flags shall thereafter become subject to tracking by Walmart and part of the Annual Red Flag Report.

b. If Walmart and the States Injunctive Relief Committee cannot agree on the proposed changes during their meeting and confer, the Party seeking the change(s) to the Red Flag(s) may seek a 5-day mediation of the issue at its own expense. If the mediation fails to resolve the dispute between the parties, the party seeking the proposed change(s) may appeal to the National Arbitration Panel to have the National Arbitration Panel modify the Red Flags on the basis that the change(s) would be consistent both with avoiding unnecessary material costs of identifying and resolving Red Flags and materially reducing the diversion of Controlled Substances. In such a proceeding, the Party seeking the

proposed change(s) may provide evidence from Annual Red Flag Reports or from other research, data and information.

3. Walmart shall treat the following circumstances as "Patient Red Flags":

    a. A Patient seeks to fill a Schedule II Designated Controlled Substance prescription more than three days prior to the contemplated exhaustion date of more than two earlier prescriptions of the Schedule II Designated Controlled Substance (e.g., exhaustion of the days' supply assuming the prescription has been taken in accordance with the prescribers' directions on the face of the prescription);

    b. A Patient seeks to fill a Designated Controlled Substance prescription from a Prescriber after having filled Designated Controlled Substance prescriptions from three other Prescribers, from separate practices, in a given 6-month period;[1]

    c. A Patient seeks to fill a Designated Controlled Substance prescription after having filled Designated Controlled Substance prescriptions at two other Walmart pharmacies within 30 days;

    d. A Patient seeks to fill a Designated Controlled Substance prescription after having filled three other Designated Controlled Substance prescriptions within 30 days;

    e. The distance between a Patient's residence and the Walmart pharmacy receiving the Designated Controlled Substance prescription is farther than 50 miles (except if the prescription is presented to Walmart's mail-order pharmacy, in which case this Red Flag shall not be applicable);

    f. The Patient resides more than 100 miles from the Prescriber who issued the Designated Controlled Substances prescription;

    g. A Patient seeks to fill an acute-condition Designated Controlled Substance prescription for more than a seven-day supply or over 50 MME per day and has not filled an acute-condition Designated Controlled Substance prescription within the past 30 days; and

    h. A Patient seeks to fill a Designated Controlled Substance prescription after having two other prescriptions for Designated Controlled Substances subjected to documented refusals to fill by a Walmart pharmacist within the past 30 days.

4. Walmart shall treat the following circumstances as "Prescription Red Flags:"

[1] In Walmart's sole discretion, for administrative convenience Walmart may implement this Red Flag without regard to whether prescribers are at separate practices, thereby resulting in more instances in which the flag occurs.

a. A Controlled Substance prescription that appears altered, including but not limited to, a photocopied prescription or a prescription in which an altering agent, such as white out, was used;

b. A Controlled Substance prescription written with misspellings suggesting the prescription may not have been written by a Prescriber;

c. A Controlled Substance prescription using atypical abbreviations suggesting the prescription may not have been written by a Prescriber; and

d. A Controlled Substance prescription written with multiple colors of ink or in multiple different handwritings.

5. Walmart shall treat the following circumstances as "Prescriber Red Flags:"

a. A Prescriber provides a Patient with prescriptions for all three of a Schedule II Designated Controlled Substance, a benzodiazepine, and carisoprodol;

b. A Prescriber has no office within 50 miles of the retail pharmacy store where a Designated Controlled Substance prescription is submitted; and

c. A Patient seeks to fill a Designated Controlled Substance prescription written by a Prescriber after having filled at least seven Designated Controlled Substance prescriptions written by the same Prescriber within 90 days.

X. PRESCRIBER REVIEW

1. Walmart shall regularly review the prescribing patterns and practices of Prescribers of Designated Controlled Substances (the "Prescriber Review Process"). The Prescriber Review Process shall employ algorithms, or other means, to review data on Walmart's retail dispensing for potential Prescribers of concern.

2. Walmart shall automatically refer a Prescriber for further investigation as part of the Prescriber Review Process in the following circumstances:

a. Personnel implementing the Prescriber Review Process become aware that a Prescriber has had his or her medical license suspended or revoked for violations of laws or regulations related to Controlled Substance prescribing in any jurisdiction of the United States within the prior six months;

b. A Prescriber has been the subject of a blanket refusal to fill;

c. A Prescriber has been the subject of more than ten (10) documented refusals to fill within a six-month period;

d. Personnel implementing the Prescriber Review Process become aware that a Prescriber has been charged or indicted with a crime related to prescribing Controlled Substances by the Federal Government or in any jurisdiction of the United States; or

e. Walmart has received a Hotline complaint that has been investigated and substantiated concerning a Prescriber's illegitimate prescribing of Controlled Substances.

3. Based on the professional judgment of the employees operating the Prescriber Review Process, Walmart may also refer a Prescriber for further investigation as part of the Prescriber Review Process based on one of the following circumstances:

    a. A Prescriber was the subject of an inquiry by law enforcement;

    b. A Prescriber was flagged for review by a Walmart pharmacist (other than through a refusal to fill or blanket refusal to fill) or supervisory field personnel; or

    c. A Prescriber was identified by review or analysis of objective data metrics, alone or in combination, such as data pertaining to the Prescriber's Controlled Substance prescription practices or patients.

4. Once Walmart identifies a Prescriber for further investigation, Walmart shall review pertinent and available data and information pertaining to the Prescriber, which may include interviews or other information gathered in the discretion of the employees operating the Prescriber Review Process. When permitted by law, nothing contained in this Section prevents Walmart from taking immediate action to Block a Prescriber in lieu of referral for further investigation or prevents a Walmart Pharmacist from refusing to fill any particular prescription or refusing to fill prescriptions from a given Prescriber.

5. If after the Prescriber Review Process those making the decision have not resolved the circumstances that caused Walmart to further investigate the Prescriber, then the Prescriber shall be Blocked and Walmart pharmacies will no longer fill controlled substance prescriptions written by that prescriber. If Walmart does not Block the Prescriber due to requirements of state law, Walmart shall provide notice to the Pharmacist that, but for this prohibition, the Prescriber would have been Blocked. A Prescriber may have an opportunity at the discretion of Walmart to seek future reinstatement by providing information to Walmart that may resolve its concerns. Nothing in this Section shall limit the right or ability of individual Walmart pharmacists to either refuse to fill a given prescription or refuse to fill all prescriptions for Controlled Substances from a given prescriber independent of any decision by Walmart to Block or not Block a given prescriber. Walmart shall provide the names of doctors

it has Blocked to the Board of Medicine in each Settling State.

6. Walmart shall report to each Settling State the number and identity of Prescribers from such Settling State that were Blocked and the number of Prescribers from such Settling State who were referred for a decision regarding whether the Prescriber should be Blocked as part of Walmart's Prescriber Review Process. Such reporting shall occur on an annual basis. Walmart may, at its discretion, report on a more frequent basis.

XI. PROACTIVE DUE DILIGENCE AND SITE VISITS

1. During the term of these Injunctive Terms, Walmart shall conduct periodic proactive compliance reviews of its retail pharmacy stores in the Settling States to assist with the identification of potential compliance issues related to the dispensing of Designated Controlled Substances at its retail pharmacy stores in the Settling States. This may be satisfied by the use of algorithms, or other electronic means, to analyze the data associated with each pharmacy to identify particular pharmacies for review as required under this Section XI. Documentation of any resulting reviews shall be maintained by Walmart and made accessible to all Controlled Substance Compliance Department personnel upon request for the duration of these Injunctive Terms.

2. During the term of these Injunctive Terms, Walmart personnel or qualified third-party compliance consultants shall also conduct site visits based on analysis of data regarding dispensing of Designated Controlled Substances at Walmart pharmacies, including unannounced site visits to at least one in every 50 of its retail pharmacy stores in each Settling State each year (but not less than five each year) for the duration of these Injunctive Terms. These site visits shall at a minimum consist of a review of Controlled Substance dispensing documentation and recordkeeping; a review of fraud, theft and loss prevention equipment and processes; an audit of Controlled Substances inventory and recordkeeping; and a review of physical surroundings and other circumstances for any indications of potential non-compliance with these Injunctive Terms or the CSCP Policies and Procedures, or any violations of other applicable laws and regulations related to Controlled Substances.

3. During site visits, Walmart personnel or qualified third-party compliance consultants shall interview relevant pharmacy employees, if appropriate, about any potential areas or issues of concern, including potential violations of law, the CSCP Policies and Procedures, and these Injunctive Terms, as well as the retail pharmacy store's maintenance of effective controls against the potential diversion of Controlled Substances.

4. Walmart personnel or qualified third-party compliance consultants who conduct site visits shall complete a report reflecting the findings of any site visit pursuant to this section. This report shall document areas or issues of concern, including potential

violations of law, the CSCP standard operating procedure, and these Injunctive Terms, and the results of any follow-up data analysis performed, as well as any other results or findings.

5. Site visit reports and all other compliance reports related to the dispensing of Designated Controlled Substances shall be maintained by Walmart and made accessible to all Controlled Substance Compliance Department personnel upon request for the duration of these Injunctive Terms.

XII. FRAUD, THEFT AND LOSS PREVENTION

1. In addition to complying with all fraud, theft and loss procedures, policies and precautions required by state and federal law, Walmart shall maintain information regarding the inventory accounting and auditing of all Designated Controlled Substances at each retail pharmacy store for at least three years from the date of the accounting or audit.

2. In addition to any other reporting obligations under state and federal law, Walmart must provide to each Settling State on a quarterly basis any reports it has made to the Drug Enforcement Administration regarding the theft or significant loss of Controlled Substances in that Settling State pursuant to 21 CFR §1301.76(b).

XIII. REPORTING TO LAW ENFORCEMENT

1. To the extent not already in place, Walmart shall implement standard operating procedures directing its employees to report any confirmed fraudulent or forged prescriptions to Settling State law enforcement authorities, to the extent they want to accept it, within 5 business days of completing any review of such prescription, and provide a summary of such reports, to the extent permitted by law, to the Settling State on a biannual basis upon request.

2. Walmart shall document and for at least 2 years maintain records of any such reports that are made to law enforcement regarding confirmed fraudulent or forged prescriptions.

XIV. ENFORCEMENT OF INJUNCTIVE TERMS

1. Notice of Potential Violations and Opportunity to Cure.

    a. A "Potential Violation" occurs when the Settling State determines, after appropriate investigation and due diligence, that Walmart is not in substantial compliance with a material aspect of the Injunctive Terms. A Potential Violation may be for a single retail pharmacy. A violation of this Agreement

does not necessarily occur when a pharmacist, pharmacist technician, or other field personnel who supervise pharmacists and/or pharmacist technicians employed by Walmart violates Walmart's CSCP Policies and Procedures or the law.

b. Potential Violation Discovered by Settling State.

    a. In the event of a Potential Violation identified by a Settling State, the Settling State shall notify Walmart in writing (the "State's Notice").

    b. Within thirty (30) days of receipt of the State's Notice, Walmart shall provide a written response to the Settling State. The response shall include Walmart's position as to the act(s) of non-compliance, including, possibly, a statement setting forth why Walmart believes it is in substantial compliance with the relevant provision(s) or a statement explaining how the Potential Violation has been addressed.

    c. If the Settling State wishes to meet with Walmart, Walmart shall promptly make itself available for such a meeting.

c. If, after review of a written response and any meeting, the Settling State believes that a Potential Violation is ongoing or has not been substantially addressed, it will provide written notice to Walmart and work in conjunction with Walmart to devise, within thirty (30) days, a corrective action plan ("Corrective Action Plan") to remedy such Potential Violation, including a reasonable period for implementation of such plan.

d. Within 60 and 120 days after implementing the Corrective Action Plan, Walmart will provide a written compliance update to the Settling State and make itself available to meet with the Settling State if requested. If after reviewing the compliance update and any meeting, the Settling State believes a Potential Violation remains ongoing or has not been substantially addressed, the Settling State may commence a 30-day mediation period. If mediation fails to resolve the dispute between the parties, the Settling State may take whatever action it deems necessary, including but not limited to bringing an action to enforce these Injunctive Terms, filing a new action (administrative or civil action) for violation of the Injunctive Terms as allowed by state law, conducting further investigation, or attempting to negotiate an updated Corrective Action Plan with Walmart. But the Settling State may not seek to reinstate claims that have been released as part of the Settlement.

e. If Walmart fails or refuses to provide a written response, to devise or implement a Corrective Action Plan or to provide a compliance update as required by

subsections 1(b), 1(c) and/or 1(d), a Settling State may bring an action to enforce these Injunctive Terms, filing a new action (administrative or civil action) for violation of the Injunctive Terms as allowed by state law, conduct further investigation, or attempt to negotiate an updated Corrective Action Plan with Walmart. But the Settling State may not seek to reinstate claims that have been released as part of the Settlement.

f. If, after review of a written response and any meeting, pursuant to subsections 1b. or 1c., above, the Settling State concludes that a Potential Violation is not ongoing or has been substantially addressed, the State will provide written notice of this conclusion to Walmart within 30 days of reaching its conclusion.

2. Enforcement Action. Each Settling State agrees that prior to taking any court or administrative action, other than an action that the Settling State concludes is necessary to address an immediate threat to the health, safety, or welfare of the citizens of the Settling State, or that a public emergency requiring immediate action exists, it will follow the process outlined above. If the Settling State concludes that action is necessary to address an immediate threat to the health, safety, or welfare of the citizens of the Settling State or that a public emergency requiring immediate action exists, it will make best efforts to provide reasonable notice to Walmart prior to initiating any such action.

XV. COMPLIANCE CERTIFICATION

1. Walmart's Controlled Substance Compliance Director shall, after diligent inquiry, complete an annual compliance certification as set out in Section XV(4).

2. The certification shall be filed annually for the duration of these Injunctive Terms with a Settling State's appropriate licensing and/or regulatory agency and its Attorney General.

3. In addition to the responsibilities set forth in these Injunctive Terms, certain Walmart Pharmacy employees ("Certifying Employees") are expected to monitor and oversee activities within their areas of authority and beginning within 1 year of the Injunctive Terms Implementation Date shall annually certify that the applicable Walmart department is in compliance with applicable statutory requirements and the obligations of these Injunctive Terms. These Certifying Employees shall include, at a minimum, the following: Senior Vice President, Pharmacy; Vice President, Pharmacy Operations; Senior Vice President, Chief Financial Officer, Health & Wellness; and Chief Ethics and Compliance Officer, Health & Wellness. For each reporting period, each Certifying Employee shall sign a certification as set out in Section XV(4).

4. The certification shall state:

"I understand the compliance requirements and responsibilities as they relate to [insert name of department], an area under my supervision. My job responsibilities include attempting to ensure compliance with regard to the [insert name of department] with all applicable statutory requirements, obligations of the Injunctive Terms, and applicable policies, and I have taken steps to promote such compliance. To the best of my knowledge, the [insert name of department] is in compliance with the obligations of these Injunctive Terms. I understand that this certification is being provided to and relied upon by the State of [Settling State]."

5. If the Controlled Substance Compliance Director or Certifying Employee is unable to provide such a certification, the Controlled Substance Compliance Director or Certifying Employee shall provide a written explanation of the reasons why he or she is unable to provide the certification outlined above.

6. Within 120 days of the Injunctive Terms Implementation Date, Walmart shall develop and implement a written process for the Certifying Employees to follow for the purpose of completing the certification required by this section.

XVI. DATA SHARING

1. Walmart shall consent to the provision by its distributors of Walmart's unblinded "867 Data" (data sent from the distributor to the manufacturer concerning the sale of its products to Walmart) regarding Designated Controlled Substances to opioid manufacturers as soon as commercially reasonable and at no cost to the manufacturers, provided that, pursuant to a prior written agreement with Walmart, the opioid manufacturers agree (a) to ensure the confidentiality of the 867 Data; (b) to implement safeguards and procedures to limit access to and use of the 867 Data; (c) that the 867 Data shall be used solely for compliance purposes as part of their Suspicious Order Monitoring programs; and (d) that the 867 Data shall be shared only with specified personnel and shall not be shared with business or sales personnel.

2. To the extent that Walmart provides McKesson Corporation, Cardinal Health, Inc., or AmerisourceBergen Corporation (the "Settling Distributors") with Pharmacy Customer Data (as defined in the Distributor Injunctive Terms) for use in their Controlled Substance Monitoring Programs, Walmart agrees that the Settling Distributor(s) may share such Pharmacy Customer Data with the Monitor appointed pursuant to the Distributor Injunctive Terms, provided that the Monitor agrees, pursuant to a prior written agreement with Walmart, (a) to ensure the confidentiality of the Pharmacy Customer Data; (b) to implement safeguards and procedures to limit access to and use of the Pharmacy Customer Data; (c) that the Pharmacy Customer Data is used solely for the purpose of ensuring the Settling Distributors' compliance with the Distributor Injunctive Terms; and (d) that the Pharmacy Customer Data shall be shared only with specified personnel.

XVII. CLEARINGHOUSE

1. Solely for purposes of this Section XVII, the term "Pharmacy Clearinghouse Data" means aggregated data for a 90-day period that contains:

    a. A list of the total number of prescriptions and dosage units for each NDC for all Controlled Substances dispensed at each Walmart retail pharmacy;

    b. A list of the top five prescribers of each Designated Controlled Substance by dosage volume and the top ten prescribers of all Designated Controlled Substances combined by dosage volume dispensed at each Walmart retail pharmacy. For each prescriber, the data shall include the following information:

        i. Number of prescriptions and doses prescribed for each Designated Controlled Substance NDC;

        ii. Number of prescriptions for each unique dosage amount (number of pills per prescription) for each Designated Controlled Substance NDC;

        iii. Prescriber name, DEA registration number, and address; and

        iv. Medical practice/specialties, if available;

    c. Information on whether the method of payment was cash for Controlled Substances prescriptions dispensed at each Walmart retail pharmacy; and

    d. Information on top ten patient residential areas by five-digit ZIP code prefix for filled Designated Controlled Substances by dosage volume, including number of prescriptions and doses for each Designated Controlled Substance NDC dispensed at each Walmart retail pharmacy.

2. To the extent that a Settling Distributor distributes Controlled Substances to Walmart pharmacies, Walmart shall make Pharmacy Clearinghouse Data available to such Settling Distributor for provision to the Clearinghouse on a quarterly basis and Walmart will confer with such Settling Distributor(s) and the States Injunctive Relief Committee to determine: what additional information, if any, is needed from Walmart for a Settling Distributor to perform suspicious order monitoring, including in connection with the effective operation of the Clearinghouse to assist with suspicious order monitoring; if additional information is needed, how Walmart shall provide it to a Settling Distributor; and what information provided by Walmart to a Settling Distributor may be deposited by the Settling Distributor into the Clearinghouse. Due to patient privacy and legal restrictions, in connection with any meet and confer described above, Walmart will not agree to provide individual patient-level or prescription-level data, de-identified or otherwise, to the Settling Distributors and/or the Clearinghouse.

3. Walmart and Settling Distributors will also determine whether and in what amount Walmart will contribute financially to the Clearinghouse. Such contribution, if any, shall be in an amount proportionate to the contributions of other Chain Pharmacies based upon Controlled Substance market share, but in no event shall Walmart be

obligated to contribute more than a total of $7,000,000 for the life of the Clearinghouse. If Walmart contributes financially to the Clearinghouse and/or provides data directly to the Clearinghouse, it shall have the option, in its sole discretion, to have a seat on the Clearinghouse Advisory Panel with rights identical to those of the Settling Distributors. If Walmart becomes a member of the Clearinghouse Advisory, the number of state members shall remain equal to the number of non-state members

4. Any data provided by Walmart to a Settling Distributor and/or the Clearinghouse pursuant to these Injunctive Terms shall be treated in compliance with state and federal law, including but not limited to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") and all applicable state and federal privacy laws.

5. At Walmart's sole option, Walmart may obtain relevant information, analyses, and reports from the Clearinghouse, subject to the following conditions:

    a. Walmart shall be permitted to use information obtained from the Clearinghouse for anti-diversion purposes, including the uses expressly contemplated by the Injunctive Terms.

    b. Walmart shall ensure any data obtained from the Clearinghouse cannot be accessed by any of its employees or agents who are involved in negotiating pricing or other business terms with pharmaceutical distributors or manufacturers.

    c. No pharmacy shall receive from the Clearinghouse information specific to another pharmacy. Notwithstanding the prior sentence, Walmart may receive from the Clearinghouse blinded data.

    d. Walmart may use information it receives from the Clearinghouse only for the purposes of identifying, minimizing, or otherwise addressing the risk of Controlled Substances diversion. Walmart shall not attempt to obtain revenue from this information.

    e. Walmart shall not sell (or obtain license fees for) data obtained from Clearinghouse to any third-parties.

3. Liability Related to the Clearinghouse.

    a. Walmart is entitled to rely upon information or data received from the Clearinghouse, whether in oral, written, or other form. Walmart shall not have any liability (whether direct or indirect, in contract or tort or otherwise) to any party for or in connection with any action taken or not taken by the Clearinghouse. In addition, Walmart shall not have any liability (whether direct or indirect, in contract or tort or otherwise) to any party for or in connection with any action taken or not taken by Walmart based on incorrect,

inaccurate, incomplete or otherwise erroneous information or data provided by the Clearinghouse, unless the information or data was incorrect, inaccurate, incomplete or otherwise erroneous because Walmart itself provided incorrect, inaccurate, incomplete or otherwise erroneous data or information to the Clearinghouse.

b. Reports or analysis generated by the Clearinghouse may not be based on complete data due to a lack of participation by other pharmacies and distributors. As such, Walmart shall not be held responsible for actions or inactions related to reports and analysis prepared by the Clearinghouse which may be based on incomplete data due to a lack of participation by other pharmacies and distributors.

c. Walmart shall not require any distributor to indemnify or otherwise be responsible to it for any claims resulting from the provision of data, including Pharmacy Clearinghouse Data, to the Clearinghouse, including, but not limited to, claims related to any data breaches occurring with the data transmitted to or maintained by the Clearinghouse. Nothing in these Injunctive Terms shall require Walmart to indemnify, or otherwise be responsible to, any pharmacy, distributor, or Walmart customer for any claims arising out of or resulting from the provision of data, including Pharmacy Clearinghouse Data, to the Clearinghouse, including, but not limited to, claims related to any data breaches occurring with the data transmitted to or maintained by the Clearinghouse.

d. Walmart and the Settling States shall not be liable for any breaches of any databases maintained by the Clearinghouse. This does not excuse the Clearinghouse or its vendor(s) from compliance with all state and federal laws and regulations governing (1) the protection of personal information and protected health information, or (2) notifications relating to Data Security Events. Solely for purposes of this Section XVII, the term "Data Security Event" means any compromise, or threat that gives rise to a reasonable likelihood of compromise, by unauthorized access or inadvertent disclosure impacting the confidentiality, integrity, or availability of Pharmacy Clearinghouse Data.

EXHIBIT Q

[Intentionally Omitted]

EXHIBIT R

Agreement on Attorneys' Fees, Costs, and Expenses

This Agreement on Attorneys' Fees, Costs, and Expenses ("Fee Agreement") is entered between Walmart and the Plaintiffs' Executive Committee appointed in the multidistrict litigation in the Northern District of Ohio, *In re National Prescription Opiate Litigation*, No. 1:17-MD-2804 ("MDL PEC"), in connection with the Walmart Global Opioid Settlement Agreement ("Walmart Agreement"). This Fee Agreement becomes effective on the Effective Date of the Walmart Agreement or the date that the Consent Judgments anticipated under the Walmart Agreement become final in 25 Settling States (whichever is later).

I. Definitions

A. This Fee Agreement incorporates all defined terms in the Walmart Agreement, unless otherwise defined herein, and shall be interpreted in a manner consistent with the Walmart Agreement.

B. "*Applicant*." Any Attorney or MDL Participating Counsel who seeks an award of attorneys' fees from the Attorney Fee Fund pursuant to the procedures established by the MDL Court and the Fee Panel.

C. "*Attorney*." Any of the following retained through a legal contingency fee or hourly fee contract: a solo practitioner, multi-attorney law firm, or other legal representative of a Participating Subdivision or MDL Participating Counsel. This does not include Subdivision in-house attorneys.[1]

D. "*Attorney Fee Fund*." An account consisting of funds allocated to pay attorneys' fees approved pursuant to Section II.B of this Fee Agreement established by Order of and under the ongoing jurisdiction of the MDL Court, as provided below.

E. "*Common Benefit*." Work performed for the benefit of all Participating Subdivisions and Tribal Nations, including, but not limited to, pretrial matters, discovery, trial preparation, trial, settlement negotiations, and all other work that advances the interests of the Participating Subdivisions.

F. "*Common Benefit Fund*." The sub fund of the Attorney Fee Fund described in Section II.C.

G. "*Contingency Fee Fund*." The sub fund of the Attorney Fee Fund described in Section II.D.

[1] For the avoidance of doubt, Nassau County and Suffolk County of New York are eligible to receive payment under the Walmart Agreement and thus the legal services provided to Nassau County and Suffolk County in its litigation against Walmart, which was resolved through a separate settlement agreement, shall be treated as a Qualifying Representation for purposes of this Agreement.

H. "*Cost and Expense Fund Administrator*." The administrator appointed by the MDL Court on August 12, 2021 (MDL Docket No. 3828), to administer the Cost Fund and its sub funds as provided in the Fee Agreement.

I. "*Court Common Benefit Fund*." The Common Benefit Fund established by the MDL Court in its orders of July 22, 2021, MDL Docket No. 3794, and May 9, 2022, MDL Docket No. 4428.

J. "*Fee Entitlement*." Any right, entitlement, or expectation, including but not limited to a fee contract, contingent fee contract, agreement, referral arrangement, co-counsel arrangement, State Back-Stop Agreement, or any other arrangement by which counsel could receive compensation or other consideration. For the avoidance of doubt, the scope of Fee Entitlement under paragraph II.G.3.a does not include any Attorneys' fees associated with representation of a State.

K. "*Fee Panel*." The three-person panel appointed by the MDL Court on August 12, 2021 (MDL Docket No. 3828), to administer and make recommendations for the allocation and distribution of the Attorney Fee Fund and its sub funds as provided in the Fee Agreement.

L. "*Later Litigating State.*" A State that first files a lawsuit bringing a Released Claim against a Released Entity after November 14, 2022.

M. "*MDL Court*." United States District Court for the Northern District of Ohio Eastern Division, Case No. 1:17-md-2804, Judge Dan Aaron Polster.

N. "*MDL Expense Fund*." The cost fund described in Section II.F below.

O. "*MDL Participating Counsel."* MDL Participating Counsel includes an attorney or firm authorized by MDL 2804 Lead Counsel to perform work for the Common Benefit of Participating Subdivisions. By way of example, it would include insurance counsel and appellant counsel.

P. "*MDL PEC*." The Plaintiffs' Executive Committee appointed by the MDL Court.

Q. "*Non-Participating Litigating Subdivision*." A Litigating Subdivision that is not a Participating Subdivision.

R. "*Non-Participating State.*" A State that is not a Participating State.

S. "*Participating Litigating Subdivision*." A Litigating Subdivision that is also a Participating Subdivision.

T. "*Participation Agreement*." An agreement executed by an Attorney that acknowledges the obligation to pay an appropriate MDL Common Benefit Assessment.

U. "*Qualified Tribal Representation.*" Representation by an attorney of a Participating Tribal Government regarding Released Claims against Released Entities. Such counsel are eligible for Common Benefit Fee consideration. The Walmart Tribal Global Settlement provides for the contribution to the Common Benefit Fund as shall be determined by the MDL Court.

V. "*Qualifying Representation*." Legal services provided for representation of the MDL PEC or Participating Litigating Subdivision regarding Released Claims against Released Entities.

W. "*State Back-Stop Agreement*." Any agreement by a Settling State and private counsel for Participating Subdivisions in that State (or legislation enacted in that State) to provide, adjust, or guarantee attorneys' fees and costs, whether from the Attorney Fee Fund or any other source recognized in the agreement or legislation.[2]

X. *"Subdivision Cost and Expense Fund."* The fund created to pay approved Subdivision and Tribal Nations costs and expenses as set forth in Section II.E.

Y. *"Walmart."* (i) Walmart Inc. and (ii) all of its respective past and present direct or indirect parents, subsidiaries, divisions, affiliates, joint ventures, predecessors, successors, and assigns.

II. Fees and Costs

A. *Total Attorneys' Fees and Costs*

1. Total attorneys' fees and costs to be paid by Walmart to Attorneys under this Fee Agreement shall be up to but in no event more than $297,720,376.93, subject to the reductions and provisions set forth below. The total attorneys' fees and costs consists of up to $267,720,376.93 for the Attorney Fee Fund, as set forth in Section II, and $30,000,000 in total for the Subdivision Cost and Expense Fund and MDL Expense Fund, as set forth in Sections II.E and II.F respectively.

2. If an Eligible State does not join the Agreement by the State Participation Date and is accordingly not a Settling State, the total attorneys' fees and costs to be paid under this Fee Agreement by Walmart shall be reduced by twelve point four percent (12.4%) times the Remediation Payment amount that would have been allocated to that Non-Settling State as set forth in Section IV.B of the Walmart Agreement.

3. The total attorneys' fees and costs to be paid under this Fee Agreement by Walmart shall also be reduced by the amount of the Contingency Fee Fund for Attorneys representing Litigating Subdivisions in any Settling State that continue

[2] Nothing herein shall be understood to indicate approval for additional State Back-Stop Agreements or modifications of existing State Back-Stop Agreements.

to pursue Released Claims ("*Non-Participating Litigating Subdivisions*"), as set forth in Section II.D.4 and II.H.7 below.

4. If Walmart settles with any Non-Settling State after November 14, 2022, and such settlement allows for the Subdivision(s) in such Non-Settling State to join the settlement, Walmart agrees to withhold from the attorney fee portion of such settlement a Common Benefit Fund assessment, to be deposited in the Common Benefit Fund, of 7.5% times the portion of the Remediation Payment that would have been due to such State if it had participated in the Walmart Settlement and been awarded its full portion of the Remediation Payment (the "*Walmart State Settlement CBF Assessment*"). If Walmart settles with any Subdivision(s) in a Non-Settling State other than in connection with a statewide settlement that includes the relevant State after November 14, 2022, then Walmart agrees to withhold from the attorney fee portion of such settlement a Common Benefit Fund assessment, to be deposited in the Common Benefit Fund, of 7.5% times the portion of the Remediation Payment that would have been due to such Subdivision under this Agreement (the "*Walmart Subdivision CBF Assessment,*" and, along with the Walmart State Settlement CBF Assessment, each a "*Walmart CBF Assessment*"). If (a) Walmart settles with a Non-Settling State after November 14, 2022, (b) such settlement does not allow for the Subdivision(s) in such Non-Settling State to join the settlement, and (c) Walmart later prevails in asserting that Released Claims of Primary Subdivisions in such Non-Settling State were released as a result of such settlement, Walmart agrees to deposit the Walmart State Settlement CBF Assessment in the Common Benefit Fund. Any Walmart CBF Assessment is inclusive of any assessment related to such settlement that would be required by the Ongoing Common Benefit Order (Dkt. #4428) in *In re National Prescription Opiate Litigation*, Case No. 1:17-md-2804. To the extent that Walmart is required to pay any additional and/or separate assessment on such settlement as a result of the Ongoing Common Benefit Order, the Walmart CBF Assessment shall be reduced by the amount required to be paid pursuant to the Ongoing Common Benefit Order.

B. *Attorney Fee Fund and Sub Funds*

1. The Attorney Fee Fund shall consist of the Contingency Fee Fund and the Common Benefit Fee Fund.

2. There shall be a split of the Attorney Fee Fund into the Contingency Fee Fund and the Common Benefit Fund. The split shall be 40% to the Contingency Fee Fund and 60% to the Common Benefit Fund. The Cost Funds shall include the MDL Expense Fund, and the Subdivision Cost and Expense Fund. The State Counsel Fee Fund and the State Cost Fund shall be separate funds under the control of the Settling States.

3. The Contingency Fee Fund and the Common Benefit Fund shall be administered by a Fee Panel to be appointed by the MDL Court that will be governed by the provisions of this Fee Agreement and shall design the process

and procedures for the allocation of fees pursuant to this Fee Agreement and the MDL Court's Order. The Cost Funds shall be administered by the Cost and Expense Fund Administrator to be appointed by the MDL Court who will be governed by the provisions of this Agreement and shall design the process and procedures for the allocation of costs pursuant to this Agreement and the MDL Court's Order.

4. The fees to be paid under this Fee Agreement are available for Attorneys engaged in Qualifying Representations and Qualified Trial Representations only. Fees to be paid under this Fee Agreement are not available prior to the Effective Date of the Walmart Agreement. Fees to be paid under this Fee Agreement are not available for representation of States, Non-Participating Subdivisions or Non-Litigating Subdivisions and are not available for representation of private hospitals, third-party payors, NAS claimants, personal injury/wrongful death claimants, or any entity other than Participating Litigating Subdivisions. In addition, fees under this Fee Agreement are not available for representation of any individual or entity in matters other than those claims against Released Entities, but may include a reasonable share of representations that involve development of facts for pursuit of opioid-related claims against multiple defendants in the pharmacy, manufacturing, and distribution chain.

5. In no event shall Walmart be required to pay more into the Attorney Fee Fund than the maximum amount specified in paragraph II.A.1. The amounts allocated to the Contingency Fee Fund and the Common Benefit Fund set by the Fee Panel shall be subject to the reductions set forth in Section II.A.2 and the reductions and refunds set forth below.

6. Awards of fees from the Contingency Fee Fund shall be available to Attorneys with Qualifying Representations of Participating Litigating Subdivisions eligible to receive an allocation under the Walmart Agreement, as set forth in Exhibit G to the Walmart Agreement, and shall be made by applying the Mathematical Model attached as Exhibit "A" to this Fee Agreement. The collection of the data and calculations for the Mathematical Model has been a cooperative effort among private counsel for a large number of Litigating Subdivisions. The analysis has been spearheaded by Joseph Tann and Andrew Arnold. The Fee Panel is encouraged to continue working with those counsel in application of the Model. The Fee Panel shall oversee the application of the Model and resolve any questions or disputes concerning the eligibility of a Counsel to participate as required in Section II.G. The Panel is empowered to hear disputes concerning and ensure the accuracy of the mathematical calculation.

7. As to awards from the Contingency Fee Fund, there shall be no right of appeal.

8. Any appeal of an award of the Fee Panel from the Common Benefit Fund will be made to the MDL Court and be reviewed under an abuse of discretion standard.

C. *Common Benefit Fund* (60% of the Attorney Fee Fund.)

1. Walmart shall pay the entirety of the Common Benefit Fund payments into the Attorney Fee Fund within fifteen (15) calendar days of the Effective Date of the Walmart Agreement, subject to the reductions set forth in Section II.A.2 and the adjustments set forth below.

2. The Common Benefit Fund shall be available to compensate Attorneys engaged in Qualifying Representations of Participating Litigating Subdivisions and Qualified Tribal Representation of Tribal Participating Governments who:

   a. have performed work for the Common Benefit of all Participating Subdivisions and/or Tribal Nations consistent with the provisions to the guidelines established by Judge Polster set forth in MDL 2804 and the Order dated May 1, 2018, under docket number 358, which is included herein by reference; and

   b. satisfy the eligibility criteria set forth in Section II.G.

   For purposes of Common Benefit Fund distribution, notwithstanding paragraph II.A.5, Attorneys representing Tribal Nations litigating against Walmart have also reached a settlement for Released Claims with Walmart, and these settlements are the subject of agreements with Walmart. Attorneys are eligible for Common Benefit consideration provided such agreement with Walmart became effective under their terms. Such Attorneys must meet the eligibility criteria in Section II.G.

   For purposes of Common Benefit Fund distribution, notwithstanding paragraph II.A.5, MDL Participating Counsel not engaged in Qualifying Representations of Participating Litigating Subdivisions but who performed work for the Common Benefit pursuant to authorization from the MDL Co-Leads and meet the eligibility criteria in Section II.G shall be eligible.

3. The Common Benefit Fund shall be overseen by the Fee Panel, which shall determine the allocation of funds to eligible Attorneys consistent with this Fee Agreement and the May 1, 2018 Order.

4. In assessing the benefits that an Applicant has conferred to Participating Subdivisions (including non-Litigating Subdivisions) and/or Tribes for

purposes of any compensation decision, the Fee Panel shall give significant weight to the extent to which (i) the Applicant and his or her clients have contributed to increasing (or reducing) Subdivision Participation in the Walmart Agreement as of the Threshold Subdivision Participation Date, and (ii) the Applicant and his or her clients have contributed to increasing (or reducing) the amounts achieved under Incentive Payments A-D through participation in the Walmart Agreement, including the Walmart Tribal Agreement. The Fee Panel shall also consider additional fee recoveries the Applicant may potentially obtain, including, but not limited to, from attorney fee funds under other Settlement Agreements, State Back-Stop Agreements, representations of States or Tribal Nations, representations of other clients in opioids-related matters, or through the representation of Subdivision clients, whether they participated in the Walmart Agreement or not. It is the intent of this provision to recognize that the goal of the Walmart Agreement is to provide for maximum participation by the Subdivisions, maximum abatement funding for all Subdivisions nationally, and the maximum peace for Released Entities. Therefore, representing a Non-Participating Subdivision does not further the goal of the Walmart Agreement, and should not be considered Common Benefit because it does not increase funds available to Participating Subdivisions' abatement programs. Representing Later Litigating Subdivisions or Later Litigating States is antithetical to the Walmart Agreement and detracts from Common Benefit. The Fee Panel shall consider this concept of "common detriment" set forth in this paragraph in all of its decision making with respect to the allocation of the Attorney Fee Fund among Applicants, as well as, in its discretion, any refunds provided to Walmart as set forth in Section II.H. The Fee Panel shall consider the totality of the Applicant's Participating Litigating Subdivisions as compared to the Applicant's Non-Participating Litigating Subdivisions; the Parties recognize that, although the goal is for 100% participation, Applicants with a greater number of clients have a greater probability of having one or more Non-Participating Litigating Subdivision. As used in this paragraph II.C.4, "client" or "representing" a Subdivision shall include any Litigating Subdivision as to which the Applicant has a Fee Entitlement.

5. As set forth in Section II.H, the Fee Panel must consider the factors described in paragraph II.C.4 to determine how and whether to allocate funds among Applicants and to determine the amounts to refund to Walmart. Any reduction to an Applicant not refunded to Walmart shall be allocated to attorneys whose Litigating Subdivision clients participated in the settlement by the Threshold Subdivision Participation Date.

D. *Contingency Fee Fund*. (40% of the Attorney Fee Fund.)

1. Walmart shall pay the entirety of the Contingency Fee Fund payment into the Attorney Fee Fund within fifteen (15) calendar days of the Effective Date of the Walmart Agreement, subject to the reductions set forth in Section II.A.2 and the adjustments set forth below.

2. The Contingency Fee Fund shall be available to compensate Attorneys engaged in Qualifying Representations of Participating Litigating Subdivisions that meet the criteria set forth in Section II.G.

   a. The Contingency Fee Fund shall be available to Attorneys who represent Litigating Subdivisions that are Participating Subdivisions, whether their actions are filed in state or federal court, and meet the eligibility criteria of Section II.G.

   b. Participation in the Contingency Fee Fund by counsel that have a case that is not subject to the jurisdiction of the MDL Court shall not create, provide, or waive jurisdiction of the MDL Court over that Litigating Subdivision, that case or Attorneys, other than to oversee the fairness of the distribution process, and enforcement of this Fee Agreement.

3. The amount owed by Walmart to the Contingency Fee Fund shall be reduced to reflect the non-joinder of Litigating Subdivisions in Settling States by subtracting the amounts identified by the Fee Panel, pursuant to paragraph II.H.7, that would have been owed to counsel for Non-Participating Litigating Subdivisions in Settling States had such Litigating Subdivisions been Participating Subdivisions. The Fee Panel shall remit payment to Walmart from the Contingency Fee Fund for any amounts corresponding to such reductions.

4. In the event that after the date of the Walmart Agreement, Walmart, prior to the Effective Date of the Walmart Agreement, settles with any Litigating Subdivision that would have been eligible to participate in the Settlement Agreement, and, under such settlement agreement pays attorneys' fees, the Fee Panel shall treat those Litigating Subdivisions as Participating Litigating Subdivisions and, applying the same criteria applicable to all Attorneys for Participating Litigating Subdivisions, determine what amount they would have been paid from the Contingency Fee Fund if they had become Participating Subdivisions under the Walmart Agreement without such prior settlement. That sum, rather than being paid to the Attorney for the previously settling Litigating Subdivision, shall be returned to Walmart, except that such refund shall not be greater than the amount paid to the Attorneys under the Litigating Subdivision's prior settlement agreement.

E. *Subdivision Cost and Expense Fund*

1. Walmart shall pay $22,500,000 into the Subdivision Cost and Expense Fund.

2. The Subdivision Cost and Expense Fund shall be available to compensate Attorneys for costs and expenses arising out of representation of Participating Litigating Subdivisions. No funds in the Subdivision Cost and Expense Fund

may be used to compensate the costs incurred by Non-Participating Subdivisions or Non-Litigating Subdivisions or costs and expenses arising out of representation of any such Subdivision. In allocating the Subdivision Cost and Expense Fund, the Administrator shall not allocate any funds for costs incurred after November 14, 2022.

3. During the period between November 14, 2022 and the Effective Date, the MDL PEC, as well as Litigating Subdivisions eligible to claim costs from the Subdivision Cost and Expense Fund shall make best efforts to cease litigation activity against Walmart, including by jointly seeking stays or severance of claims against Walmart, where feasible, or postponements if a motion to stay or sever is not feasible or is denied, so long as such actions are not otherwise detrimental to the Litigating Subdivision.

4. In the event that Walmart, prior to the Effective Date of the Walmart Agreement, settles with any Litigating Subdivision and, under such settlement agreement pays costs to the Litigating Subdivision or its Attorney, the MDL Cost and Expense Fund Administrator shall treat those Litigating Subdivisions as Participating Litigating Subdivisions and, using the same criteria applicable to all applicants to the Subdivision Cost and Expense Fund, determine what amount in costs the Litigating Subdivision or its Attorney would have been paid from the Subdivision Cost and Expense Fund if they had settled under the Walmart Agreement. That sum, rather than being paid to the Attorney or the previously settling Litigating Subdivision, shall be credited and/or returned to Walmart, except that such sum shall not be greater than the amount paid under the previously settled Litigating Subdivision's settlement agreement.

5. The Cost Fund shall be administered by the Cost Fund and Expense Fund Administrator (MDL Docket No. 3828), who will be governed by the provisions of this Agreement and shall design the process and procedures for the allocation of costs pursuant to this Agreement and the MDL Court's Order.

6. The costs of the Cost and Expense Fund Administrator shall be paid from the Cost Fund and allocated by the Cost and Expense Fund Administrator between the MDL Direct Cost Fund and the Subdivision Cost and Expense Fund to fairly charge each fund the cost incurred in implementing and supervising the specific fund.

7. The Cost and Expense Fund Administrator shall set the process and procedures for submission of and criteria for applications for payment of Subdivisions' and Tribal Nations' costs and expenses. The Cost and Expense Fund Administrator shall receive and evaluate applications from Participating Litigating Subdivisions and litigating Tribal Nations, whether filed in Federal Court or State Court, to seek reimbursement for eligible costs under Section II.E.2 in pursuit of claims against Walmart. The process shall require a showing that the costs or expenses sought were reasonably incurred in furtherance of active litigation of a designated state or federal bellwether trial-set case, or Common Benefit. The Cost and Expense Fund Administrator shall require transparency from all applicants as to any other sources for compensating Attorneys for Subdivisions and Tribal Nations for costs incurred. If funds remain after the reimbursement of approved out-of-pocket costs, the Cost and Expense Fund Administrator may consider reasonable and appropriate payment for client time, costs, or expenses incurred by recognized trial bellwether plaintiffs. At the conclusion of the process, any funds not allocated by the Cost and Expense Fund Administrator shall be transferred to the Common Benefit Fund established in this Exhibit R.

8. In the event that States and Subdivisions enter into an additional global settlement with a party or parties other than Walmart that is (a) under the jurisdiction of the MDL Court in MDL No. 2804, (b) creates a separate cost fund, and (c) unless the parties agree to another date, such agreement has an effective date prior to June 30, 2023, the Cost and Expense Fund Administrator shall have the authority to aggregate the Cost Fund with the cost fund created under that global settlement agreement. The Cost and Expense Fund Administrator shall have the authority to address the appropriate procedures and required information to allow the costs to be funded from the appropriate cost fund or shared by two or more cost funds; *provided, however*, that the Subdivision Cost and Expense Fund shall remain subject to the requirements set forth in Section II.E.2. For the avoidance of doubt, the Subdivision Cost and Expense Fund is available only to compensate Attorneys for costs and expenses arising out of representation of Participating Litigating Subdivisions and no funds in the Subdivision Cost and Expense Fund may be used to compensate the costs incurred by Non-Participating Subdivisions or Non-Litigating Subdivisions or costs and expenses arising out of representation of any such Subdivision.

F. *MDL Expense Fund*

1. Walmart shall pay $7,500,000 into the MDL Expense Fund.

2. The MDL Expense Fund shall be released following the Effective Date of this Fee Agreement without any delay to reimburse the MDL Counsel for an agreed-to portion of the expenses incurred, as approved by the Cost and Expense Fund Administrator. The sum deposited into the MDL Expense Fund will be paid directly to the MDL Cost Account, set up by MDL Order and will be administered under the ongoing jurisdiction of the MDL Court, as provided

below. No funds may be used to compensate the costs incurred by Non-Participating Subdivisions or to compensate any Attorney for costs incurred in representing one or more Non-Participating Subdivisions.

3. In allocating the MDL Expense Fund, the Administrator shall not allocate any funds for costs incurred after November 14, 2022, unless the Administrator determines that there are sufficient funds to cover all subdivision costs incurred prior to November 14, 2022 and that special circumstances exist to justify costs incurred following the public announcement of the Walmart Agreement, including reasonable costs related to the implementation of the Walmart Agreement.

G. Eligibility

1. It is the intention of all parties participating in the Fee Panel process that there should be total transparency to the Fee Panel and to all fund participants. In connection with the process to be developed by the Fee Panel, any and all monies in attorney's fees received or awarded, including prior or future Contingency Fees, Common Benefit Fees, referral fees, expenses paid, promises for payment, or any other Fee Entitlement, to any Applicant in any opioid litigation shall be disclosed to the Fee Panel as a condition of participating in the Attorney Fee Fund and prior to an award from the Fee Panel. Any payment, expectation of payment or perceived entitlement to participate in a State Back-Stop Agreement or any other agreement reached with a Settling State or any Subdivision or any other source regarding payment of fees must be disclosed to the Fee Panel. Similarly, any right to payment from any other fund, for example a fund for payment to lawyers representing Settling States or Tribal Nations or Subdivisions shall be disclosed to the Fee Panel. Because it is anticipated that there will be multiple firms listed on contingent fee agreements with Litigating Subdivisions, the Fee Panel shall establish procedures, with input from Attorneys for Participating Litigating Subdivisions, for which party or parties should petition for fees from such groups and to whom the fee shall be paid and thereafter distributed to co-counsel in accordance with applicable agreements. For the avoidance of doubt, all Attorneys that are part of such groups must meet the eligibility criteria in paragraph II.G.3, must be subject to the criteria set forth in paragraph II.C.4, and must be disclosed to the Fee Panel.

2. An Applicant may apply for and recover attorneys' fees from the Common Benefit Fund, the Contingency Fee Fund, and any fund created by a past or future State Back-Stop Agreement, provided the Applicant satisfies the requirements relevant to each such fund and requirements for disclosure to the Fee Panel.

3. An Attorney may not receive any payment from the Attorney Fee Fund (which includes both the Contingency Fee Fund and the Common Benefit

Fund) unless the following eligibility criteria are met and annually certified by the Attorney:

a. The Attorney must expressly waive the enforcement against the Litigating Subdivision client of all Fee Entitlements (other than under State Back-Stop Agreements) arising out of or related to any or all Qualifying Representations of any Participating Litigating Subdivision prior to applying for attorneys' fees from the Attorney Fee Fund. All applications for attorneys' fees under this Fee Agreement shall include an affirmation by the Attorney of such waiver and notice to the client(s) of such waiver. Such waiver shall not preclude the Attorney from submitting such Fee Entitlements to the Fee Panel as a factor for consideration in allocating payments from the Attorney Fee Fund or in connection with a State Back-Stop Agreement. For the avoidance of doubt, no Attorney may recover fees under this Fee Agreement unless the Attorney expressly agrees not to enforce Fee Entitlements as to each and every Participating Litigating Subdivision represented by that Attorney, but such Attorneys may participate in and receive funds from a State Back-Stop Agreement.

b. The Attorney must represent that s/he has no present intent to represent or participate in the representation of any Later Litigating Subdivision or Later Litigating State with respect to Released Claims against Released Entities.

c. The Attorney must represent that s/he has not and will not engage in any advertising or solicitation related to Released Claims against Released Entities where such advertising or solicitation relates to a representation of a Subdivision eligible to be a Participating Subdivision after the Threshold Subdivision Participation Date.

d. The Attorney must represent s/he will not charge or accept any referral fees for any Released Claims brought against Released Entities by Later Litigating Subdivisions or Later Litigating States. This representation shall not prohibit Attorneys from receiving allocated shares of any future common benefit assessments arising out of settlements or judgments with Later Litigating Subdivisions or Later Litigating States that are the result of the MDL Court's Common Benefit Order.

e. The Attorney may not have and must represent that s/he does not have a Fee Entitlement related to a Later Litigating Subdivision or Later Litigating State, other than a potential Common Benefit Fee.

f. The Attorney must fully disclose the participation, or the anticipation of participation, in any agreement with a Settling State or Participating Subdivision concerning fees arising out of or related to the Walmart

Agreement, including any fees paid or anticipated to be paid or any State Back-Stop Agreement.

g. The Attorney must identify for the Fee Panel whether s/he utilized state litigation work product or MDL work product, including but not limited to ARCOS data, document repositories, experts developed in the MDL, trial transcripts, or deposition transcripts. The Attorney must identify whether s/he signed the MDL Participation Agreement.

h. Any Attorney who applies for fees from one or both Funds must represent that, having exercised his/her independent judgment, s/he believes the Walmart Agreement to be fair and will make or has made best efforts to recommend the Agreement to his or her Subdivision clients in Settling States. For avoidance of doubt, each Attorney is expected to exercise his or her independent judgment in the best interest of each client individually before determining whether to recommend joining the settlement. All applications for attorneys' fees or costs under this Section shall include an affirmation by the Attorney in compliance with this Subsection.

4. No Attorney receiving fees under this Fee Agreement may apply for or recover from the Attorney Fee Fund fees arising from representing a Non-Settling State or a Non-Participating Subdivision, provided, however, that this provision is not intended to prohibit Attorneys who do not represent or otherwise have a contractual agreement with such Non-Settling State or Non-Participating Subdivision from receiving allocated shares of any future common benefit assessments that arise out of settlements or judgments involving such Non-Settling State or Non-Participating Subdivision. All applications for attorneys' fees under this Section shall include an affirmation by the Attorney of compliance with this Section.

5. An Attorney who has filed an application under this section and received an award of attorneys' fees shall provide a certification of compliance with the Sections of this Fee Agreement annually during the years upon which they are still entitled to receive attorneys' fee payments under this Agreement. This certification will be done as directed by the Panel.

6. If, at any time, the Attorney is unable to make the representations set forth in this Section, such representations become untrue, or the Attorney falsely represents compliance with the eligibility criteria, the Attorney shall cease to be eligible to receive funds from the Attorney Fee Fund until further review by the Fee Panel of the Attorney's eligibility under and compliance with this Section II.

7. If an Attorney has a Fee Entitlement with a Later Litigating Subdivision or Later Litigating State or otherwise becomes unable to reaffirm compliance with the eligibility criteria set forth above, the Attorney shall notify Walmart

and the Fee Panel. For the avoidance of doubt, any Attorney who undertakes any new representation of, or has a Fee Entitlement with, a Later Litigating Subdivision or Later Litigating State shall be prohibited from receiving any future funds from the Attorney Fee Fund and be subject to additional obligations as set forth in Subsection 8 below. If an Attorney fails to notify Walmart and the Fee Panel of such Fee Entitlement with a Later Litigating Subdivision or Later Litigating State, the Attorney shall be required to refund amounts previously paid. The Fee Panel shall notify Walmart when it receives notification.

8. To the extent an Attorney who has received compensation from the Attorney Fee Fund based on Qualifying Representations of Participating Litigating Subdivisions under the Walmart Agreement represents a Later Litigating Subdivision or Later Litigating State, such Attorney shall be obligated to refund such amounts received as compensation from the Attorney Fee Fund to Walmart. Walmart or such Attorney may bring any dispute as to whether such Attorney shall be obligated to refund such amounts received from the Attorney Fee Fund to Walmart to the Fee Panel. Nothing herein shall require a multi-attorney law firm that has received compensation from the Attorney Fee Fund to refund such amounts if an attorney of the firm that is no longer affiliated with such law firm, after such departure, represents a Later Litigating Subdivision or Later Litigating State, provided that (a) neither the law firm nor any of its other attorneys have any contractual or financial arrangement regarding, stand to benefit directly or indirectly from, or directly or indirectly provide financial or other support of any kind to, the former attorney's representation of the Later Litigating Subdivision or Later Litigating State and (b) if the former attorney was a partner or owner of the multi-attorney law firm at the time that the law firm received compensation from the Attorney Fee Fund, the former attorney shall be obligated to refund such amounts as the former attorney earned as a result of the compensation that the law firm received from the Attorney Fee Fund.

9. In the event that an Attorney is deemed ineligible by the Fee Panel (whether based on its initial application or subsequent recertification), the Fee Panel shall provide notice to the Attorney and give the Attorney 30 days to provide additional information such that the Fee Panel could re-consider the Attorney's eligibility.

10. To the extent that an Attorney has a Fee Entitlement with a Participating Subdivision and is authorized to bring Released Claims against Released Entities, but such authorization is, in scope, less broad than the category of Released Claims set forth in the Walmart Agreement, such Attorney may participate fully in both the Contingency Fee Fund and the Common Benefit Fund, without any reduction imposed by the Fee Panel due to the scope of the authorization, so long as the Participating Subdivision fully releases all Released Claims against Released Entities.

11. Attorneys applying to the Attorney Fee Fund knowingly and expressly agree to be bound by the decisions of the Fee Panel, subject to the limited appeal rights set forth in this Fee Agreement, and waive the ability to assert the lack of enforceability of the allocation reached through the procedures outlined herein.

12. Applicants are under an ongoing obligation to inform the Fee Panel in writing of any additional fees earned, expected, or received related to any Opioid litigation throughout the period of the Fee Panel's operation.

H. Calculation of Amounts Due.

1. The Fee Panel shall be solely responsible for determining the amount of fees to be paid to each Applicant. None of the Released Entities shall have any responsibility, obligation, or liability of any kind whatsoever with respect to how attorneys' fees are calculated under this Section, except that the Fee Panel may receive information from Walmart as to (a) the identity of Participating, Non-Participating, Litigating, Later Litigating, and Non-Litigating Subdivisions; (b) the impact of non-participation by a Litigating Subdivision as is relevant to the Fee Panel's determination in paragraph II.C.4; and (c) such other information as Walmart may voluntarily elect to provide.

2. The Fee Panel shall establish procedures for making determinations under this Fee Agreement consistent with this Fee Agreement and orders of the MDL Court. Such procedures may include submission of documentary and/or other evidence, interviews with Applicants and/or other counsel (including counsel for Walmart) that the Fee Panel deems appropriate, and/or other means of creating a record upon which fee awards will be based.

3. In making determinations under this Fee Agreement, the Fee Panel must apply the eligibility criteria set forth in Section II.G of this Fee Agreement and the criteria set forth in Section II. The Fee Panel shall ensure that payments are only made for Qualifying Representations of Participating Litigating Subdivisions. In addition, the Fee Panel will give consideration in regard to Common Benefit Fund awards to the *Johnson* factors, as well as the following factors (which factors may be applied and given relative weight in the Fee Panel's discretion):

    a. The Applicant's contemporaneously recorded time and labor dedicated to Qualifying Representations along with the Applicant's financial commitment to such Qualifying Representations. Claimed "time" will not be automatically accepted by the Fee Panel but will be critically reviewed and given substantially more weight and consideration if such time was subject to the audit process described in any Pretrial Order(s) governing the collection of common benefit time;

b. The novelty, time, and complexity of the Qualifying Representations;

c. The skill requisite to perform legal services properly and undesirability of the case;

d. The preclusion of other employment by the Applicant due to time dedicated to Qualifying Representations;

e. The Common Benefit, if any, alleged to have been conferred by the Applicant and whether such Common Benefit work product by that Applicant was used by others in parallel litigations against Released Entities whether within or outside the MDL, provided that any Applicant claiming that s/he substantially benefited cases other than those in which s/he entered an appearance as counsel must substantiate such claims by proffering factual support, such as proper supporting affidavits or other documents as determined by the Fee Panel with input from Attorneys for Participating Litigating Subdivisions;

f. Any "common detriment," as set forth in paragraph II.C.4;

g. Any contingent fee agreement or other Fee Entitlement with Participating Subdivisions, enforcement of which, except for State Back-Stop Agreements, are waived in conjunction with the application, the nature and extent of any work for those Participating Subdivisions, whether such Participating Subdivisions actively litigated and, if so, the nature and procedural history of such case(s);

h. The experience, reputation, and ability of the Applicant;

i. Whether the Applicant's clients brought Released Claims against Released Entities;

j. The status of discovery in cases primarily handled by the Applicant;

k. The nature of any work by the Applicant on "bellwether" cases or cases that were similarly active in litigation;

l. Any pressure points successfully asserted by the Applicant in cases against Walmart or any risk for Walmart created by the Applicant in cases against Walmart;

m. Any risk for defendants created by Applicants in cases against Walmart;

n. Successful and unsuccessful motion practice in cases worked on by the Applicant;

o. The date of filing of any cases filed by the Applicant;

p. Obtaining consolidation of the litigation in the Applicant's jurisdiction;

q. The number and population of entities represented by the Applicant and the fees that would have been awarded under extinguished contingent fee arrangements;

r. Whether the Applicant's clients brought claims against Walmart prior to the announcement of this settlement on November 14, 2022;

s. Whether the Applicant has had a leadership role in the litigation, whether in state or federal court;

t. Whether the Applicant has had a leadership role in any negotiations aimed at resolving the litigation;

u. Whether the Applicant's cases have survived motions to dismiss;

v. The extent to which the Applicant contributed to the work product used for the common benefit of opioids litigants, including, without limitation, work on ARCOS data, Prescription Data Monitoring Programs, IQVIA data, depositions, document production and analysis experts, motions, briefs and pleadings, trial preparations, and trials;

w. The extent to which litigation occurred prior to and contributed to completion of settlement negotiations, as distinct from litigation that occurred after the announcement of the Walmart Agreement on November 14, 2022, such latter litigation both being of less value and, the case of litigation filed after the announcement of the Walmart Agreement on November 14, 2022, resulting in a common detriment to the settlement process, which in both cases should be viewed less favorably; and

x. Any other factors that the Fee Panel finds to be appropriate to consider after input from Applicants to the Attorney Fee Fund.

4. It is possible that the States and Subdivisions that are litigating Opioid cases will enter additional settlements in close proximity of the time for processing the Walmart Settlement. If there are additional settlements and these settlements create a Common Benefit Attorney Fee Fund to be administered by the Fee Panel, the Fee Panel may:

   a. Consolidate the Common Benefit approval process to include evaluation of all Common Benefit Applications for all settlements entered after November 14, 2022;

b. Determine the fair and equitable allocation of the Aggregate Common Benefit Fees that come after November 14, 2022, including consideration of beneficial or detrimental actions taken with respect to any Settling Defendant contributing to the Common Benefit Attorney Fee Fund;

c. Give consideration to the amount and timing of each settlement, including the amount and timing of Common Benefit Fees;

d. The Fee Panel shall abide by the applicable Attorney Fee Agreement in each of the Settlements in Allocating the Common Benefit Fees provided for in the Settlement; and

e. Be guided in their work by the Orders of the Court related to Fees and Costs.

5. The Fee Panel shall develop procedures for receiving a single application, which may be updated or amended based on new information (such as participation by additional Litigating Subdivisions) from each Applicant seeking compensation from each sub fund of the Attorney Fee Fund pursuant to processes and procedures developed by the Fee Panel, which shall not be inconsistent with this Fee Agreement. Any request for attorneys' fees not included on the single application or through the updating/amendment process designed by the Fee Panel shall be deemed waived. For purposes of transparency and to permit the Fee Panel to conduct its work, the application from each Applicant shall, at a minimum, require each Applicant to:

   a. Identify all Litigating Subdivisions for which s/he is seeking payment from the Attorney Fee Fund;

   b. Identify all Subdivisions in both Settling and Non-Settling States (and, where applicable, Tribal Nations) with respect to which s/he has a Fee Entitlement with respect to Relevant Claims against Released Entities, and identify all co-counsel in such cases;

   c. Identify which of those Subdivisions are Participating Subdivisions and which are not (with similar information for Tribal Nations, where applicable);

   d. Specify the specific fund or funds within the Attorney Fee Fund from which the Attorney is seeking compensation;

   e. Demonstrate his or her eligibility for compensation from the relevant sub funds within the Attorney Fee Fund pursuant to the criteria set forth for the relevant sub fund;

f. Identify any and all Fee Entitlements from representations of States, Tribal Nations, or other plaintiffs related to Released Claims against Released Entities or in opioids-related matters;

g. Notwithstanding "a-f" above, the Panel may consider a supplemental application if the Applicant shows good cause why circumstances exist that will lead to consideration for additional Common Benefit award. Examples would include, but are not limited to, an Applicant having Non-Participating Litigating Subdivision clients that subsequently become Participating Subdivisions, a Bar Date passes that increases participation or an Allocation Agreement is reached.

6. With respect to the Common Benefit Fund, the Fee Panel shall (subject to any applicable MDL Court Order):

   a. Review the applications of all Applicants seeking compensation from the Common Benefit Fund, including determining eligibility for each Applicant as set forth in Section II.G.

   b. Using criteria set forth in Sections II.C and II.G, allocate amounts from the Common Benefit Fund to eligible Applicants, including payment amounts for each Payment Year. In making such allocations, the Panel shall apply the principles set forth in paragraph II.C.5 to the amounts paid to Applicants with a Common Benefit Fee Entitlement.

7. With respect to the Contingency Fee Fund, the Fee Panel shall:

   a. Review the applications of all Attorneys seeking compensation from the Litigating Subdivision Fee Fund, including determining eligibility for each Attorney as set forth in Section II.G.

   b. Apply the Mathematical Model in Exhibit A.

   c. Use such allocations to determine refund amounts owed to Walmart from the Attorney Fee Fund, and inform Walmart and the MDL PEC of all such adjustments.

8. To the extent that there is a dispute about the calculations of the Fee Panel related to the amount that Walmart is required to pay (including application of any reductions or refunds under this Fee Agreement), such disputes shall be presented to the Fee Panel and any disputed funds be paid into/held in escrow. The Fee Panel shall resolve such disputes expeditiously, with either Party having the right to seek review from the MDL Court.

9. For purposes of determination of fee or cost awards, allocations, reductions, and possible reversions under this Fee Agreement, unless specified otherwise

a Subdivision will be considered a Non-Participating Subdivision if it is not a Participating Subdivision as of the deadline for the application for the fee at issue (or, if the determination does not involve a specific application, the date on which the record for such determination closes).

10. In the event that the Fee Panel, through the use of the Mathematical Model set forth in Exhibit A, allocates funds from the Contingency Fee Fund for an Attorney based on a Qualifying Representation of a Participating Litigating Subdivision and that Subdivision is in a Settling State in which the Consent Judgment has not been approved, such funds shall be placed into escrow until the Consent Judgment is approved, after which time they shall be released.

I. *Miscellaneous*.

1. The Fee Panel shall charge an hourly rate approved by the Court. The Pre-Effective Date costs associated with the Cost and Expense Fund Administrator shall be paid from funds in the Cost Fund. Post-Effective Date, the cost of the Fee Panel shall be charged against the applicable Fee Fund based on allocation by the Fee Panel and shall not be otherwise funded by Walmart.

2. The MDL PEC will seek, and the Attorneys General for Settling States and the Walmart will not oppose, a Common Benefit Fee Order requiring an assessment of 7.5% on the gross recovery (by judgment or settlement) of any Non-Participating Subdivision that is subject to the federal court jurisdiction, represented by a MDL PEC firm, represented by any Attorney receiving fees from the Common Benefit Fund, represented by any Attorney that signed a Participation Agreement or had been paid in a case otherwise under the jurisdiction of the MDL Court.

3. The MDL PEC shall provide to Walmart information the PEC has that identifies Attorneys who represent Litigating Subdivisions who are not Participating Subdivisions and who have an obligation to pay a common benefit assessment, either due to the MDL Court's orders or having signed a Participation Agreement.

4. The MDL PEC and Walmart agree that it is a conflict of interest for an Attorney that had represented a Participating Subdivision to represent a Later Litigating Subdivision or Later Litigating State. This Subsection shall be enforceable to the extent permitted by the equivalent to Rules 1.16 and 5.6 of the ABA Model Rules of Professional Conduct in the relevant jurisdictions. The MDL PEC represents that it will comply with this provision in the case of the Walmart Agreement until the Effective Date of the Walmart Agreement, as well as thereafter, if the Walmart Agreement proceeds.

5. Participating Subdivisions agree to instruct their counsel to treat information, work product and expert materials as confidential under Rule 1.6 of the ABA Model Rules of Professional Conduct. Accordingly, an Attorney shall not

share information or work product with, or experts or materials to, non-participants (other than the Attorney's own current clients or their lawyers, consultants, experts or other representatives or agents). However, nothing herein shall prevent MDL Leadership or PEC Counsel from fulfilling their obligations in any MDL and the MDL Court Order.

III. Miscellaneous

A. *Termination*. If the Walmart Agreement does not proceed past the date on which the Settlement Fund Administrator makes a determination as to whether the Subdivision Participation Thresholds have been satisfied and the time for the Parties to the Walmart Agreement to dispute such determination has passed, this Fee Agreement shall be null and void, Walmart shall have no obligation to make any payments under this Fee Agreement, and Walmart and the MDL PEC shall take such steps as are necessary to restore the *status quo ante*. All funds paid by Walmart into the Attorney Fee Fund and Cost Fund shall be promptly returned to Walmart (including interest that accrues during such time as the monies are in escrow).

B. *MDL Court Consideration*. This Fee Agreement shall be attached as an exhibit to the Walmart Agreement. This Fee Agreement shall also be submitted by Walmart and the MDL PEC to the MDL Court for approval pursuant to the motion and order that shall be attached, prior to the notice date under Section II.A.3 of the Walmart Agreement as to whether the State Participation Threshold has been satisfied, to this Fee Agreement, as Exhibit B.

1. In the event that the MDL Court, through an order, makes any change to the amounts potentially to be paid by Walmart under this Fee Agreement, makes any change to the Fee Panel's consideration of the factors set forth in paragraph II.C.4, or any other material change to the draft Order attached as part of Exhibit B or the terms of this Fee Agreement, Walmart and the MDL PEC shall meet and confer concerning such changes. The MDL Court shall have no authority to increase the payments made by Walmart related to fees and costs beyond the amounts described in this Fee Agreement.

2. If Walmart and the MDL PEC are unable to reach agreement and revisions to this Fee Agreement, this Fee Agreement shall be null and void, Walmart shall have no obligation to make any payments under this Fee Agreement, and Walmart and the MDL PEC shall take such steps as are necessary to restore the *status quo ante*. All funds paid by Walmart into the Attorney Fee Fund and Cost Fund shall be promptly returned to Walmart (including interest that accrues during such time as the monies are in escrow prior to the Effective Date of the Walmart Agreement).

C. *Amendment*. Once the MDL Court has entered an order implementing this Fee Agreement, this Fee Agreement can only be amended by (1) written agreement of Walmart and the MDL PEC and (2) approval by the MDL Court.

D. *Jurisdiction and Enforcement*. The MDL Court shall have exclusive and ongoing jurisdiction over the enforcement and implementation of this Fee Agreement as set forth herein. The MDL PEC shall be the Authorized Party to enforce this Fee Agreement, as to the payment obligations of Walmart as set forth in this Fee Agreement and as to Attorneys making application to the Funds under this Fee Agreement. Solely for purposes of assessing or allocating common benefit fees, the MDL Court will continue to have jurisdiction over the work product developed in the MDL Court by and under the direction of the MDL PEC with respect to claims against Walmart, including data and documents, depositions, expert reports, briefs and pleadings; and the MDL Court's protective orders, management orders, and other decisions regarding such discovery and other work product, including but not limited to, conditions on its use, will continue in full force and effect. Nothing in this paragraph authorizes the MDL Court to act contrary to this Agreement or to share any of the work product, or provides the MDL Court with jurisdiction over the Walmart Agreement.

Description of Mathematical Model for the Allocation of the Contingency Fee Funds

Walmart Settlement Agreement

This document describes the Mathematical Model for allocation of the Contingency Fee Fund described in Exhibit R (Agreement of Attorneys' Fees, Costs, and Expenses) to the Walmart Settlement Agreement.[3] Awards of fees from the Contingency Fee Fund shall be available to Attorneys with Qualifying Representations of Participating Litigating Subdivisions eligible to receive an allocation under the Walmart Settlement Agreement.[4] A Fee Panel shall oversee the application of the Model and resolve any questions or disputes concerning the eligibility of a counsel to participate. The Panel is empowered to hear disputes concerning and ensure the accuracy of the mathematical calculations.

In general terms, allocation of the Contingency Fee Fund shall be made by (1) determining the amount of the Settlement Fund that is attributable to each Participating Litigating Subdivision; (2) making certain adjustments to these amounts based on when the Subdivision filed suit and the terms of the applicable fee contract; and (3) dividing the Contingency Fee Fund proportionately among counsel for each Participating Litigating Subdivision based on the amounts calculated in subpart 2.

To collect a fee award from the Contingency Fee Fund, a Participating Litigating Subdivision must have named Walmart (or any Released Entity) in its lawsuit. The total maximum amount of the Contingency Fee Fund in the Walmart Settlement Agreement is $107,088,150.77.[5]

Allocation of the Contingency Fee Fund shall be made according to the following steps. These calculations are made only for purpose of determining the percentage share of the Contingency Fee Fund that Attorneys for each Participating Litigating Subdivision should receive, ***not*** for determining the dollar amount each Subdivision will receive.

(1) For each Settling State, attribute 50% of the settlement funds for that State to its Subdivisions according to the Subdivision Allocation Percentage in Exhibit G to the Walmart Settlement Agreement.

Illustrative example:

- Assume that State A is allocated 1.00000% of the $2,393,794,118.64 Remediation amount [see Exhibit M of the Walmart Settlement Agreement].
- 50% of the 1% share allocated to State A is $11,968,970.59.

[3] *See* Walmart Settlement Agreement, Exhibit R § II.D.2.
[4] Walmart Settlement Agreement, Exhibit R § II.D.2.
[5] Walmart Settlement Agreement, Exhibit R § II.A.1 & II.D.1.

- Assume that, per Exhibit G of the Agreement, the Subdivision Allocation Percentage for City B in State A is 1.00000000%.
- For purposes of determining its counsel's share of the Contingency Fee Fund, City B is attributed 1.00000000% of $11,968,970.59, or $119,689.71.

(2) Adjust the amounts in paragraph 1 as follows:

a. *Upward Adjustment for Early Filers.* Increase the amount calculated in paragraph 1 above by 10% for any Litigating Subdivision that named Walmart in a suit before December 5, 2017, the date the National Prescription Opiate Litigation MDL was formed. If the Litigating Subdivision did not name Walmart in a suit before December 2, 2022, then fees from the Contingency Fee Fund will not be awarded to Attorneys with otherwise Qualifying Representations of that Participating Litigating Subdivision.

Illustrative Example:

- Assume City C is attributed $1,000,000 under paragraph 1 above.
- If City C named Walmart before 12/5/2017, the attributed amount would be adjusted to $1,100,000.

b. *Determine Amount Due under Contingency Fee Contract*. Determine the amount that would be due to Attorneys with Qualifying Representations of each Participating Litigating Subdivision under the terms of the applicable fee contract if the Participating Litigating Subdivision were to receive the amount calculated in paragraph 2.a. This amount can be referred to as the Contingency Fee Assumption.

Illustrative Example:

- Continuing the example given in paragraph 2.a, if Attorneys have a 20% contingency fee contract with City C for the relevant litigation, the amount calculated in this step would be 20% of $1,100,000, or $220,000.

In the next step, the Contingency Fee Assumption is used to determine the percentage share of the Contingency Fee Fund due to Attorneys for each Participating Litigating Subdivision.

(3) Divide the Contingency Fee Fund proportionately among Attorneys for each Participating Litigating Subdivision in two ways:

a. *National Fee Pool Calculation.* Determine each Litigating Subdivision's

percentage share of all amounts due under contingency fee contracts nationwide by dividing the Contingency Fee Assumption calculated for each Subdivision in paragraph 2.b by the sum of all Contingency Fee Assumptions. Then multiply that percentage by the Contingency Fee Fund to figure each Subdivision's dollar share of the Contingency Fee Fund (but only if the Subdivision timely named Walmart in a lawsuit).

Illustrative example:

- $220,000 [from para. 2.b] ÷ $120,000,000 [total amount owed under contingency fee contracts nationwide] = 0.1833333%[6]
- 0.1833333% * $107,088,150.77 [Contingency Fee Fund] = $196,328.28

b. *Separate State Fee Pools Calculation.* Determine each Litigating Subdivision's percentage share of all amounts due under contingency fee contracts statewide by dividing the Contingency Fee Assumption calculated for each Subdivision in paragraph 2.b by the sum of all Contingency Fee Assumptions in the same State. Then multiply that percentage by the portion of the Contingency Fee Fund that corresponds to that State's Overall Allocation Percentage, shown in Exhibit F of the Walmart Settlement Agreement, to figure each Subdivision's dollar share of the Contingency Fee Fund.

Illustrative example:

- 1% * $107,088,150.77 = $1,070,881.51 [amount of the Contingency Fee Fund corresponding to State A]
- Assume a total of $1,600,000 is owed under contingency fee contracts for State A.
- $220,000 [from para. 2.b] ÷ $1,600,000 = 13.75%
- 13.75% * $1,070,881.51 = $147,246.21

The award of fees to Attorneys with Qualifying Representations of Participating Litigating Subdivisions will be the average of the final amounts calculated in paragraphs 3.a and 3.b above less any amounts the Fee Panel is authorized to, and does, withhold.[7]

Paragraph 3.a represents allocation based on a proportional share of a National Fee Pool, while paragraph 3.b represents allocation based on a proportional share of the Separate State Fee Pools. In other words, for the National Fee Pool described above in paragraph 3.a, the contingency fee contract rate is compared to all other contingency fee contract

[6] In this example, $120 million is the amount theoretically owed under all contingency fee contracts for litigation against Walmart as calculated in paragraph 2.b. This amount is illustrative only; the actual amount will not be known until all litigating subdivisions are identified and the terms of their contingency fee contracts are collected.

[7] The model also enforces a maximum fee award of 20% of the amount calculated in paragraph 2.b.The description in this document of the Mathematical Model is by necessity an abstraction; the precise contours of the calculations are defined in the model itself.

rates in the nation. For the Separate State Fee Pools described above in paragraph 3.b, the contingency fee contract terms are compared to the other contingency fee contract terms in that same State. The National Fee Pool and the Separate State Fee Pools are given equal weighting.

Using the first methodology, Attorneys for two Subdivisions in different States with the same amount calculated under paragraph 2.b would be assigned the same amount under paragraph 3.a. Using the second methodology, Attorneys for the same two Subdivisions would be assigned different amounts under paragraph 3.b because they are in different States. Specifically, the Subdivision in the State with a smaller proportion of Participating Litigating Subdivisions would be allocated more than the Subdivision in the State with a greater proportion of Participating Litigating Subdivisions.

By: _____

Name: Rachel Brand
Executive Vice President of Global Governance, Chief Legal Officer and Corporate Secretary

Date: _____

On behalf of Walmart Inc.

By: _____

Name: Paul T. Farrell, Jr.

Date: _____

By: _____

Name: Jayne Conroy

Date: _____

By: _____

Name: Joseph F. Rice

Date: _____

On behalf of Plaintiffs' Executive Committee

EXHIBIT S

Agreement on the State Outside Counsel Fee Fund for Chain Pharmacy Settlements

1. **Definitions**.

   a. "Chain Pharmacy" means any of CVS, Walgreens, and Walmart, and "Chain Pharmacies" means all of the foregoing.
   b. "Multistate Chain Pharmacy Settlement Agreement" means This Settlement Agreement along with any other settlement of opioids-related claims among 30 or more states and a Chain Pharmacy.
   c. "This Settlement Agreement" means the settlement agreement between the Settling States and the Chain Pharmacy to which this Agreement is attached as an Exhibit.
   d. "Settling Chain Pharmacy" means the Chain Pharmacy that is a party to This Settlement Agreement.
   e. "Settling States" has the meaning given such term in the relevant Multistate Chain Pharmacy Settlement Agreement.

2. **Creation of a State Outside Counsel Chain Pharmacies Fee Fund.** The Settling States have agreed to the creation of a state outside counsel fee fund to pay reasonable attorneys' fees of Settling States which have retained outside counsel in connection with litigation against one or more Chain Pharmacies (such fund, the "State Outside Counsel Chain Pharmacies Fee Fund").

3. **State Outside Counsel Chain Pharmacies Fee Fund Administration.** The State Outside Counsel Chain Pharmacies Fee Fund shall be administered separately from any other funds for the payment of attorneys fees or costs in connection with This Settlement Agreement, including any common benefit fund, contingency fee fund for subdivision counsel, state cost fund, or MDL expense fund. If necessary, a committee of Attorneys General shall be convened to oversee the State Outside Counsel Chain Pharmacies Fee Fund (the "Chain Pharmacies Fee Fund Committee"). The Chain Pharmacies Fee Fund Committee shall be appointed by the Settling State Members of the Enforcement Committee and shall be comprised solely of Attorneys General of Settling States that engaged outside counsel to pursue litigation against one or more Chain Pharmacies. The Settlement Fund Administrator (the "Fee Fund Administrator") shall administer the State Outside Counsel Chain Pharmacies Fee Fund according to this Exhibit and, if convened, the guidelines and directives of the Chain Pharmacies Fee Fund Committee.

4. **State Outside Counsel Chain Pharmacies Fee Eligibility.**

   a. To receive any amount from the State Outside Counsel Chain Pharmacies

Fee Fund, an outside counsel to a Settling State must have filed and maintained an action in the name of a Settling State or its Attorney General against a Chain Pharmacy in a state or federal court as of November 1, 2022. No Settling State (or its outside counsel) shall receive funds from both the State Outside Counsel Chain Pharmacies Fee Fund and any "Additional Remediation Amount" as may be provided for in This Settlement Agreement.

b. In addition to the eligibility criteria set forth in Paragraph 4.a, above, and for the avoidance of doubt, only Settling States under This Settlement Agreement are eligible to receive any funds paid into the State Outside Counsel Chain Pharmacies Fee Fund as a result of This Settlement Agreement.

5. **State Outside Counsel Chain Pharmacies Fee Fund Amount.** The Settling Chain Pharmacy shall pay funds into the State Outside Counsel Chain Pharmacies Fee Fund in an amount equal to, and on the schedule identified in Exhibit M (the "Contribution"). The Settling Chain Pharmacy's Contribution shall subject to a reduction as described in Paragraph 8, below.

6. State Outside Counsel Chain Pharmacies Fee Fund Availability and Calculation of Amount.

a. The State Outside Counsel Chain Pharmacies Fee Fund shall be available to compensate private outside counsel for Settling State Attorneys General for approved fees arising out of representation of the Settling State pursuant to the schedule attached to this agreement as Schedule I (the "Fee Schedule").

b. The Fee Schedule is intended to reflect the fee calculation in subparagraph 6.c, below (the "Fee Calculation"). Subject to adjustments required by Paragraph 8, below, in the event of any discrepancy between the Fee Schedule and the Fee Calculation, the Fee Schedule shall control. Each Settling State, by becoming a Participating State in This Settlement Agreement, agrees that the Fee Schedule reflects the Fee Calculation and waives any right to contest the accuracy of the Fee Schedule, absent manifest error, the exclusion of a Settling State, or the inclusion of a Non-Settling State. The version of the Fee Schedule reflecting any necessary adjustments shall be the "Final Fee Schedule."

c. Fees shall be aggregated across the Multistate Chain Pharmacy Settlement Agreements and be calculated by adding two components: (a) a fixed amount consisting of fifty percent (50%) of the amount of remediation funds allocated to a Settling State and its Subdivisions pursuant to the Multistate Chain Pharmacy Settlement Agreements multiplied by 4.5% (or, if lower, the applicable contingency fee percentage in the Settling State's

outside counsel contract); and (b) a proportional percentage of the remaining fee due under that Settling State's contract with its outside counsel assuming that fifty percent (50%) of the Settling State's recovery is allocable to a Settling State (rather than allocable to the Settling State's Participating Subdivisions) so that the fees of all eligible Settling States (minus the fixed amount that would have been allocated to any Non-Settling States had they become Settling States) exhausts the State Outside Counsel Chain Pharmacies Fee Fund. The proportional share percentage will be the same for each Settling State included in the State Outside Counsel Chain Pharmacies Fee Fund. Fees shall be split proportionally among each Multistate Chain Pharmacy Settlement Agreement, as set forth on the Fee Schedule.

d. All amounts paid will be less any costs or fees of the Fee Fund Administrator. The Fee Schedule reflects a holdback amount of $50,000 for such administrative expenses of the Fee Fund Administrator. The remainder of any unused administrative expenses shall be disbursed pro rata to States receiving monies from the State Outside Counsel Chain Pharmacies Fee Fund at the conclusion of such administration.

7. **Payment by the Fee Fund Administrator**.

a. The Fee Fund Administrator shall hold the Contribution in escrow until the earlier of (1) the last of the three Multistate Chain Pharmacy Settlement Agreements becomes effective or (2) when instructed by the Settling State Members of the Enforcement Committee.

b. Subject to eligibility pursuant to Paragraph 4, above, a Settling State's outside counsel may receive funds from the State Outside Counsel Chain Pharmacies Fee Fund in the following scenarios ("Payment Scenarios"):

    1. The Settling State's outside counsel agrees that the amount listed for such state on the Final Fee Schedule either satisfies in full or exceeds the amounts owed to all such Settling State's outside counsel and such counsel has provided written notice waiving all entitlement to additional fee in respect of any Multistate Chain Pharmacy Settlement Agreement.
    2. The Settling State and its outside counsel enter into a signed writing establishing the amount owed to the counsel, which includes an agreement on the payment of the amount listed for such state on the Final Fee Schedule and waives any right of the State or its outside counsel to additional amounts from the State Outside Counsel Chain Pharmacies Fee Fund.
    3. A final judgment is entered that is no longer appealable, which judgement adjudicates the amount owed to the Settling State's counsel in respect of This Settlement Agreement and directs the Chain Pharmacies Fee Fund Committee how to pay the amount

listed on the Final Fee Schedule for such State.

If no Payment Scenario is applicable with respect to a Settling State, then the Settling State's share shall be placed in an interest-bearing escrow account (less reasonable expenses of the Fee Fund Administrator) and held unless and until a Payment Scenario is applicable.

c. Upon the applicability of a Payment Scenario 1 with respect to a Settling State, the Fee Fund Administrator shall pay that Settling State's outside counsel the amount identified on the Final Fee Schedule for such state or such lesser amount that satisfies the Settling State's obligation to its outside counsel in full. Any remaining allocation to such State shall be paid to the Settling State.

d. Upon the applicability of a Payment Scenario 2 or 3 with respect to a Settling State, the Fee Fund Administrator shall release monies from the State Outside Counsel Chain Pharmacies Fee Fund in either the amount held by the Fee Fund Administrator, if the amount of the agreement or judgment is equal to or more than the amount held, or the amount indicated in the agreement or in the final judgment, if the amount in the agreement or judgment is less than the amount held.

e. Nothing herein, including the amounts listed in Paragraph 6 above or on any Fee Schedule, shall prevent a Settling State from arguing in any proceeding with its outside counsel that (i) its recovery was less than fifty percent (50%) of the recovery in the settlement agreement down to and including fifteen percent (15%) of the total recovery; (ii) any payment should be discounted by an appropriate discount rate commensurate to the risk of the settlement agreement and the timeline that the Settling State is receiving its payments; (iii) the settlement amount should be lower because the amount a Settling State receives was reduced because such Settling State's outside counsel failed to obtain joinder from a Settling State's Subdivision(s) that the outside counsel also represented; or (iv) any limitation placed by the Settling Chain Pharmacy bars payment of a higher fee to outside counsel.

f. In the event the amount due to the Settling State's outside counsel from an escrow account is less than the total amount of funds escrowed on the account of the Settling State, the balance shall be paid to the Settling State. In no event, other than a State becoming a Non-Settling State, shall funds revert to a Chain Pharmacy.

8. **Reduction of Amounts Owed**

a. **Non-Settling States; Reversion and Redistribution.** Amounts owed by the Settling Chain Pharmacy to the State Outside Counsel Chain Pharmacies Fee Fund shall be reduced by amounts allocated to the fixed amount for such State under This Settlement Agreement in the event that a listed State becomes a Non-Settling State. Specifically, the reduction in the

amount owed by the Settling Chain Pharmacy shall be calculated as 2.25% times the total Remediation Payments that would have been allocated to the Non-Settling State had it been a Settling State. The payments for the other Settling States reflected in the Fee Schedule shall be adjusted by the Fee Fund Administrator to reflect a recalculated proportional percentage under the Fee Calculation.

b. **Settling States; Redistribution**. If a Settling State under This Settlement Agreement (i) would otherwise be entitled to a payment from the State Outside Counsel Chain Pharmacies Fee Fund and (ii) is eligible to be a "Settling State" under either of the two other Multistate Chain Pharmacy Settlement Agreements but does not become such a "Settling State," then that Settling State's payment from the State Outside Counsel Chain Pharmacies Fee Fund shall be reduced to an amount equal to the Contribution times the Settling State's allocation percentage on Exhibit F, which shall be treated as an additional remediation payment in lieu of a fee payment. The payments for the other Settling States reflected in the Fee Schedule shall be adjusted by the Fee Fund Administrator to reflect a recalculated proportional percentage under the Fee Calculation.

c. If either or both of the other Chain Pharmacies fail to enter into a Multistate Chain Pharmacy Settlement Agreement, or if such Multistate Chain Pharmacy Settlement Agreements fail to take effect by December 15, 2023, then the Settling Chain Pharmacy and the Enforcement Committee shall renegotiate the terms of Paragraph 8.a in order to permit prompt payment to Settling States that terminated contested litigation with the Settling Chain Pharmacy, and permitting additional time if necessary to finalize payments to the other Settling States. In no event will such renegotiation result in additional reversion of monies in the State Outside Counsel Chain Pharmacies Fee Fund to the Settling Chain Pharmacy.

9. **Interpretation**.

a. This Agreement shall be an Exhibit to each Multistate Chain Pharmacy Settlement Agreement and shall include the Fee Schedule setting forth the presumptive payment calculations for each eligible Settling State. By joining This Settlement Agreement, each State agrees on the presumptive accuracy of the Fee Schedule, absent manifest error, the inclusion of a Non-Settling State, or the exclusion of a Settling State.

b. It is the intent of all parties that the State Outside Counsel Chain Pharmacies Fee Fund function in a similar manner, with similar calculations and mechanics, as the "State Outside Counsel Fee Fund" established in Exhibit S of that certain settlement agreement dated as of July 21, 2021 setting forth the terms of settlement between and among McKesson Corporation, Cardinal Health, Inc., and AmerisourceBergen Corporation, on the one hand, and certain settling states and certain participating subdivisions, on the other

hand.

Schedule I to Exhibit S

Fee Schedule

[This Fee Schedule is subject to adjustment pursuant to Paragraph 6.b of Exhibit S)]

State	Total Fee	Walgreens Share	Walmart Share	CVS Share
Alaska	$1,851,826.21	$691,943.15	$416,884.80	$742,998.26
Arkansas	$4,873,566.77	$1,821,030.03	$1,097,141.78	$1,955,394.96
Delaware	$3,726,440.37	$1,392,401.12	$838,899.65	$1,495,139.61
Kentucky	$7,773,195.40	$2,904,489.25	$1,749,908.82	$3,118,797.34
Michigan	$22,162,404.67	$8,281,081.68	$4,989,220.69	$8,892,102.29
Mississippi	$4,641,790.38	$1,734,425.75	$1,044,964.07	$1,862,400.56
Nevada	$9,363,802.33	$3,498,826.64	$2,107,987.70	$3,756,987.99
New Hampshire	$5,985,080.61	$2,236,352.15	$1,347,366.79	$2,401,361.67
New Mexico	$2,748,895.55	$2,748,895.55	$-	$-
Puerto Rico	$6,893,516.73	$2,575,793.38	$1,551,874.76	$2,765,848.60
South Dakota	$1,101,349.40	$411,524.13	$247,936.78	$441,888.49
Utah	$2,884,152.67	$1,204,171.82	$603,818.18	$1,076,162.67
West Virginia	$2,399,292.74	$2,399,292.74	$-	$-
	Admin Expense Holdback	$20,875.66	$10,467.86	$18,656.48
	Total	$31,921,103.05	$16,006,471.88	$28,527,738.91

Excluded States:

- Florida (Walgreens; Walmart; CVS)
- New Mexico (Walmart; CVS)
- West Virginia (Walmart; CVS)

EXHIBIT T

Agreement on the Joint State Cost Fund

1. **Definitions**.

   a. "Opioids Defendant" means Walmart, or such other defendant in opioids-related litigation that enters into a Multistate Settlement after November 1, 2022, and "Opioids Defendants" means all of the foregoing.

   b. "Multistate Settlement" means this Settlement Agreement along with any other settlement of opioids-related claims among 30 or more states and an Opioids Defendant.

   c. "Settlement Agreement" means the settlement agreement between the Settling States and the Opioids Defendant to which this Agreement is attached as an Exhibit.

   d. "Settling Opioids Defendant" means the Opioids Defendant that is a party to the Settlement Agreement.

   e. "Settling States" has the meaning given such term in the Settlement Agreement.

2. **Creation of a State Cost Fund.** The Settling Opioids Defendant and the Settling States agree to the creation of a fund to pay costs and expenses associated with litigation and investigations related to the opioids litigation (such fund, the "State Cost Fund"). The State Cost Fund shall be administered separately from any other funds for the payment of attorneys fees or costs in connection with the Settlement Agreement, including any common benefit fund, contingency fee fund for subdivision counsel, subdivision cost fund, or MDL expense fund. However, the State Cost Fund shall be administered jointly with similar "State Cost Funds" created in other Multistate Settlements after November 1, 2022; any state cost funds jointly administered in this manner shall be referred to as the "Joint State Cost Fund." To the extent permissible and feasible, the Joint State Cost Fund may also be jointly administered with any fund for reimbursement of states' litigation and investigation costs established by a bankruptcy plan, including the Mallinckrodt bankruptcy plan, any plans that may emerge from the bankruptcies of Purdue and Endo, and any similar bankruptcies of opioids defendants. To the extent feasible, the Joint State Cost Fund may also be jointly administered with the State Cost Funds established pursuant to the Distributors Multistate Settlement and the Janssen Multistate Settlement.

3. **State Cost Fund Amount.** The Settling Opioids Defendant shall pay into the State Cost Fund in the amount listed on, and on the schedule set forth in, Exhibit M (the "Settling Opioids Defendant's Contribution") for the purpose paying States' costs and

expenses associated with to the opioid litigation.

4. **Joint State Cost Fund Committee.** A committee of Attorneys General or their designated representatives (such committee, the "Joint State Cost Fund Committee") shall oversee the Joint State Cost Fund. The committee shall be appointed by the Settling State Members of the Enforcement Committee, who shall aim to (i) have equal representation between states that retained contingency fee outside counsel and states that did not retain contingency fee outside counsel with respect to opioids-related litigation, and (ii) maintain consistency of committee membership across state cost funds that compose the Joint State Cost Fund. The Settling State Members of the Enforcement Committee may by majority vote add to or change the composition of the Joint State Cost Fund Committee.

5. **Joint State Cost Fund Administrator.**

   a. The Joint State Cost Fund Committee may select an administrator (the "Joint State Cost Fund Administrator"), who shall administer the Joint State Cost Fund and direct payments to Settling States according to the guidelines and directives of the Joint State Cost Fund Committee. While the expenses of the Joint State Cost Fund Administrator shall be reimbursable pursuant to the principles and guidelines listed below, the Joint State Cost Fund Administrator shall first rely on any separate funds that may be set aside for such purpose in any Multistate Settlement.

   b. The Joint State Cost Fund Administrator shall be responsible, under the direction and supervision of the Joint State Cost Fund Committee, for receiving and reviewing applications for reimbursement from the Joint State Cost Fund. This may include the creation of an audit process to ensure the integrity of submissions, as well as reimbursement rules to incentivize accurate submissions.

6. **State Cost Fund Guidelines and Principles.**

   a. Monies in the State Cost Fund shall be released without any delay to reimburse Settling States for documented costs incurred or paid in connection with litigation and investigation related to the opioid litigation.

   b. In allocating the Joint State Cost Fund, the Joint State Cost Fund Committee shall seek to comply with the following principles:

      1. Each State Cost Fund should be used to reimburse costs incurred by States that are Settling States in the Multistate Settlement from which funds are paid. (However, the foregoing sentence does not preclude a Non-Settling State that joins a separate Multistate Settlement from participating in the Joint State Cost Fund with respect to contributions made by other Opioids Defendants.)

2. Funds in any State Cost Fund shall be primarily used to reimburse costs incurred prior to the date on which the relevant Multistate Settlement was first made available for participation to eligible States. Regardless of other factors considered in prioritizing payments, all costs incurred prior to January 1, 2023, shall be paid before any costs incurred after that date are paid.

3. The Joint State Cost Fund shall prioritize the reimbursement of the following over reimbursement of any State's litigation or investigation costs:

    - the reasonable costs of the Joint State Cost Fund Administrator;

    - repayment of National Association of Attorneys General grants made in connection with opioid litigation, without regard to when the grants were made;

    - repayment of state-attributable costs of any mediator in connection with negotiations of a Multistate Settlement;

4. The Joint State Cost Fund shall seek to prioritize costs in the following order:

    - litigation-related costs; then

    - investigation-related costs; then

    - settlement and negotiation related costs; then

    - cost shares.

5. Costs incurred by a State's outside counsel that the State is contractually obligated to reimburse shall be treated as costs incurred by a State.

6. As between similar categories of costs (e.g., defendant-specific litigation-related costs), the Joint State Cost Fund shall first reimburse costs incurred by a State's outside counsel that the State is contractually obligated to reimburse out of its recovery, and then reimburse costs directly incurred by States.

7. The Joint State Cost Fund shall be available to reimburse only those costs which have not yet been reimbursed to a State from any other source, including any other fund set aside in a Multistate

Settlement or bankruptcy plan for the reimbursement of costs or any individual state settlements.

8. The Joint State Cost Fund should not reimburse expenses that are expected to be reimbursed from another source, such as a bankruptcy debtor, unless such expected reimbursements do not come to fruition within a reasonable amount of time. This includes cost shares paid by states.

9. When coordinating among different state cost funds that each could be used to reimburse a given expense, the Joint State Cost Fund Committee may set guidelines to equitably distribute reimbursements across all state cost funds in a manner that prioritizes costs unlikely to be otherwise reimbursed to a similarly situated State.

10. The Joint State Cost Fund may deny reimbursement of costs, on either an individual basis or a categorical basis, that a supermajority (75%+) of the Joint State Cost Fund Committee determines to be unreasonable.

11. After all costs identified in the foregoing have been reimbursed, the remaining funds in the Joint State Cost Fund shall be distributed to states in proportion to their allocation of remediation payments in the Mallinckrodt bankruptcy plan. Such distribution shall be treated as a reimbursement for States' unenumerated costs of administering the Multistate Settlements and no subdivision shares shall be carved out of such disbursement, nor shall any attorney's fees be assessed against such distribution (unless individually agreed to by a State).

c. In applying the foregoing principles, the Joint State Cost Fund Committee shall have the discretion to vary their application in order to ensure equity among similarly situated states and to facilitate the ease and speed of administering the Joint State Cost Fund. The Joint State Cost Fund Committee may also apply percentages to approximate costs attributable to a particular Opioids Defendant (or categories of Opioids Defendants) in a manner that seeks to treat similarly situated states equitably.

d. The Joint State Cost Fund Committee shall establish guidelines for the submission and approval of expenses eligible for reimbursement from the Joint State Cost Fund, which guidelines may be coordinated and consolidated with any similar cost funds in other state opioid settlements for purposes of joint administration and efficiency.

e. Unless waived by the Joint State Cost Fund Committee, the Joint State Cost Fund Administrator shall, in accordance with such guidelines, receive from Settling States records sufficient to demonstrate the incurrence and payment of each expense.

f. Where the Joint State Cost Fund Committee determines by a supermajority vote (75%+) that outside counsel for a Settling State has failed to exercise reasonable diligence in reviewing submitted costs for allowability, and such failure has resulted in the reimbursement of unallowed costs to such outside counsel, the Committee shall have the discretion to reduce or recover payments made to such outside counsel in an amount calculated to incentivize the exercise of reasonable diligence.

7. **State Undertakings.** Each State submitting for reimbursement of costs from the Joint State Cost Fund agrees:

a. to only submit costs allowable under this Joint State Cost Fund Agreement;

b. to provide all back-up documentation that may be requested with respect to any submitted cost and to make itself available for any questions related to such costs;

c. to exercise reasonable diligence to ensure that all submitted costs are allowable under (i) this Joint State Cost Fund Agreement, (ii) the State's contract with its outside counsel, if relevant, (iii) state law, and (iv) the policies and procedures applicable to the State's retention of outside counsel, if relevant; and

d. to promptly return any excess payments made to the State or its outside counsel from the Joint State Cost Fund, including payments made for costs that were reimbursed from another source or are not allowable hereunder.

EXHIBIT U

IRS Form 1098-F

0303 ☐ VOID ☐ CORRECTED

FILER'S name, street address, city or town, state or province, country, ZIP or foreign postal code, and telephone no. [Appropriate Official] [Designated State] [Address]	1 Total amount required to be paid $ *	OMB No. 1545-2284 Form **1098-F** (Rev. January 2022) For calendar year 20 22	**Fines, Penalties, and Other Amounts**
	2 Amount to be paid for violation or potential violation $ *		
	3 Restitution/remediation amount $ *		
FILER'S TIN XX-XXXXXXX PAYER'S TIN 71-0415188	4 Compliance amount $ *	5 Date of order/agreement XX/XX/2022	**Copy A** **For Internal Revenue Service Center** **File with Form 1096.**
PAYER'S name Walmart Inc.	6 Court or entity U.S. District Court for the Northern District of Ohio and jurisdictions of other cases settled under the Settlement Agreement entered into by Walmart and the Settling States (as defined in such agreement), dated as of [ ].		For Privacy Act and Paperwork Reduction Act Notice, see the **current General Instructions for Certain Information Returns.**
Street address (including apt. no.) 702 S. W. 8th Street	7 Case number No. 1:17-md-2804, and other cases settled under the Settlement Agreement entered into by Walmart and the Settling States (as defined in such agreement), dated as of [ ].		
City or town, state or province, country, and ZIP or foreign postal code Bentonville, AR, USA 72716	8 Case name or names of parties to suit, order, or agreement National Prescription Opiate Litigation		
	9 Code A, B, I		

Form **1098-F** (Rev. 1-2022) Cat. No. 71382B www.irs.gov/Form1098F Department of the Treasury - Internal Revenue Service

Do Not Cut or Separate Forms on This Page — Do Not Cut or Separate Forms on This Page

*Amounts to be completed following confirmation of settlement participation.

EXHIBIT V

WALMART SETTLEMENT AGREEMENT SIGN-ON FORM

This form indicates whether a State has determined to become a Settling State under the Walmart Settlement Agreement. Each Settling State's Attorney General represents that he or she has or has obtained (or will obtain no later than the Threshold Subdivision Participation Date) the authority set forth in Section X.G. Attorneys General that determine to become a Settling State are committing to obtaining any necessary additional State releases prior to the Effective Date.

The State/Commonwealth/Territory of _____ has determined:

☐ **to become** or
☐ **not to become**

a Settling State under the Walmart Settlement Agreement

_____ _____
Signature Date

_____ _____
Printed Name Title

(1) Primary Contact for Your Office

Name:

Title:

Email:

Direct Phone Number:

(2) Secondary Contact for Your Office

Name:

Title:

Email:

Direct Phone Number:

(3) DEADLINE: THURSDAY, DECEMBER 15, 2022 AT 5:00 PM ET

Please email your completed form to the following:

For Walmart:

Brian K. Mahanna
Wilmer Cutler Pickering Hale and Dorr LLP
7 World Trade Center
250 Greenwich Street
New York, NY 10007
Brian.Mahanna@wilmerhale.com

For the Attorneys General:

Josh Stein, Attorney General
North Carolina Department of Justice
Attn: Daniel Mosteller, Deputy General Counsel
PO Box 629
Raleigh, NC 27602
Dmosteller@ncdoj.gov

EXHIBIT W

Non-Litigating Threshold Subdivisions Exhibit

1. Alexander City, City of, Alabama
2. Anniston, City of, Alabama
3. Autauga, County of, Alabama
4. Barbour, County of, Alabama
5. Blount, County of, Alabama
6. Bullock, County of, Alabama
7. Butler, County of, Alabama
8. Center Point, City of, Alabama
9. Chambers, County of, Alabama
10. Choctaw, County of, Alabama
11. Clarke, County of, Alabama
12. Clay, County of, Alabama
13. Cleburne, County of, Alabama
14. Colbert, County of, Alabama
15. Conecuh, County of, Alabama
16. Coosa, County of, Alabama
17. Covington, County of, Alabama
18. Crenshaw, County of, Alabama
19. Dale, County of, Alabama
20. DeKalb, County of, Alabama
21. Dothan, City of, Alabama
22. Escambia, County of, Alabama
23. Eufaula, City of, Alabama
24. Fairfield, City of, Alabama
25. Geneva, County of, Alabama
26. Hale, County of, Alabama
27. Henry, County of, Alabama
28. Hoover, City of, Alabama
29. Houston, County of, Alabama
30. Lee, County of, Alabama
31. Leeds, City of, Alabama
32. Limestone, County of, Alabama
33. Macon, County of, Alabama
34. Madison, City of, Alabama
35. Monroe, County of, Alabama
36. Montgomery, City of, Alabama
37. Montgomery, County of, Alabama
38. Muscle Shoals, City of, Alabama
39. Oxford, City of, Alabama
40. Pell City, City of, Alabama
41. Prattville, City of, Alabama
42. Russell, County of, Alabama
43. Shelby, County of, Alabama
44. St. Clair, County of, Alabama
45. Sumter, County of, Alabama
46. Talladega, City of, Alabama
47. Tuscaloosa, City of, Alabama
48. Washington, County of, Alabama
49. Wilcox, County of, Alabama
50. Anchorage, Municipality of, Alaska
51. Fairbanks, City of, Alaska
52. Fairbanks North Star, Borough of, Alaska
53. Juneau, City of/ Borough of, Alaska
54. Kenai Peninsula, Borough of, Alaska
55. Matanuska-Susitna, Borough of, Alaska
56. Apache, County of, Arizona
57. Apache Junction, City of, Arizona
58. Avondale, City of, Arizona
59. Buckeye, City of, Arizona
60. Bullhead City, City of, Arizona
61. Casa Grande, City of, Arizona
62. Chandler, City of, Arizona
63. Coconino, County of, Arizona
64. El Mirage, City of, Arizona
65. Flagstaff, City of, Arizona
66. Fountain Hills, Town of, Arizona
67. Gila, County of, Arizona
68. Gilbert, Town of, Arizona
69. Glendale, City of, Arizona
70. Goodyear, City of, Arizona
71. Graham, County of, Arizona
72. La Paz, County of, Arizona
73. Lake Havasu City, City of, Arizona
74. Marana, Town of, Arizona
75. Maricopa, City of, Arizona
76. Mesa, City of, Arizona
77. Oro Valley, Town of, Arizona

78. Peoria, City of, Arizona
79. Pima, County of, Arizona
80. Prescott Valley, Town of, Arizona
81. Queen Creek, Town of, Arizona
82. Sahuarita, Town of, Arizona
83. San Luis, City of, Arizona
84. Santa Cruz, County of, Arizona
85. Scottsdale, City of, Arizona
86. Sierra Vista, City of, Arizona
87. Surprise, City of, Arizona
88. Tempe, City of, Arizona
89. Tucson, City of, Arizona
90. Yavapai, County of, Arizona
91. Yuma, City of, Arizona
92. Arkadelphia, City of, Arkansas
93. Arkansas, County of, Arkansas
94. Ashley, County of, Arkansas
95. Batesville, City of, Arkansas
96. Baxter, County of, Arkansas
97. Bella Vista, City of, Arkansas
98. Benton, City of, Arkansas
99. Benton, County of, Arkansas
100. Bentonville, City of, Arkansas
101. Blytheville, City of, Arkansas
102. Boone, County of, Arkansas
103. Bradley, County of, Arkansas
104. Bryant, City of, Arkansas
105. Cabot, City of, Arkansas
106. Camden, City of, Arkansas
107. Carroll, County of, Arkansas
108. Centerton, City of, Arkansas
109. Chicot, County of, Arkansas
110. Clark, County of, Arkansas
111. Clay, County of, Arkansas
112. Cleburne, County of, Arkansas
113. Columbia, County of, Arkansas
114. Conway, City of, Arkansas
115. Conway, County of, Arkansas
116. Craighead, County of, Arkansas
117. Crawford, County of, Arkansas
118. Crittenden, County of, Arkansas
119. Cross, County of, Arkansas
120. Desha, County of, Arkansas
121. Drew, County of, Arkansas
122. El Dorado, City of, Arkansas
123. Faulkner, County of, Arkansas
124. Fayetteville, City of, Arkansas
125. Fort Smith, City of, Arkansas
126. Forrest, City of, Arkansas
127. Franklin, County of, Arkansas
128. Fulton, County of, Arkansas
129. Garland, County of, Arkansas
130. Grant, County of, Arkansas
131. Greene, County of, Arkansas
132. Harrison, City of, Arkansas
133. Hempstead, County of, Arkansas
134. Hot Spring, County of, Arkansas
135. Hot Springs, City of, Arkansas
136. Howard, County of, Arkansas
137. Independence, County of, Arkansas
138. Izard, County of, Arkansas
139. Jackson, County of, Arkansas
140. Jacksonville, City of, Arkansas
141. Johnson, County of, Arkansas
142. Jonesboro, City of, Arkansas
143. Lawrence, County of, Arkansas
144. Lincoln, County of, Arkansas
145. Little River, County of, Arkansas
146. Little Rock, City of, Arkansas
147. Logan, County of, Arkansas
148. Lonoke, County of, Arkansas
149. Madison, County of, Arkansas
150. Magnolia, City of, Arkansas
151. Malvern, City of, Arkansas
152. Marion, City of, Arkansas
153. Marion, County of, Arkansas
154. Maumelle, City of, Arkansas
155. Miller, County of, Arkansas
156. Mississippi, County of, Arkansas
157. Mountain Home, City of, Arkansas
158. North Little Rock, City of, Arkansas
159. Ouachita, County of, Arkansas
160. Paragould, City of, Arkansas
161. Perry, County of, Arkansas
162. Phillips, County of, Arkansas
163. Pike, County of, Arkansas
164. Pine Bluff, City of, Arkansas
165. Poinsett, County of, Arkansas

166. Polk, County of, Arkansas
167. Pope, County of, Arkansas
168. Randolph, County of, Arkansas
169. Rogers, City of, Arkansas
170. Russellville, City of, Arkansas
171. Saline, County of, Arkansas
172. Searcy, City of, Arkansas
173. Sebastian, County of, Arkansas
174. Sevier, County of, Arkansas
175. Sharp, County of, Arkansas
176. Sherwood, City of, Arkansas
177. Siloam Springs, City of, Arkansas
178. Springdale, City of, Arkansas
179. St. Francis, County of, Arkansas
180. Stone, County of, Arkansas
181. Texarkana, City of, Arkansas
182. Union, County of, Arkansas
183. Van Buren, City of, Arkansas
184. Van Buren, County of, Arkansas
185. Washington, County of, Arkansas
186. West Memphis, City of, Arkansas
187. White, County of, Arkansas
188. Yell, County of, Arkansas
189. Adelanto, City of, California
190. Alameda, City of, California
191. Alameda, County of, California
192. Alhambra, City of, California
193. Aliso Viejo, City of, California
194. Anaheim, City of, California
195. Antioch, City of, California
196. Apple Valley, Town of, California
197. Arcadia, City of, California
198. Atascadero, City of, California
199. Azusa, City of, California
200. Bakersfield, City of, California
201. Baldwin Park, City of, California
202. Banning, City of, California
203. Beaumont, City of, California
204. Bell, City of, California
205. Bell Gardens, City of, California
206. Bellflower, City of, California
207. Berkeley, City of, California
208. Beverly Hills, City of, California
209. Brea, City of, California
210. Brentwood, City of, California
211. Buena Park, City of, California
212. Burbank, City of, California
213. Burlingame, City of, California
214. Calexico, City of, California
215. Camarillo, City of, California
216. Campbell, City of, California
217. Carlsbad, City of, California
218. Carson, City of, California
219. Cathedral City, City of, California
220. Ceres, City of, California
221. Cerritos, City of, California
222. Chino, City of, California
223. Chino Hills, City of, California
224. Citrus Heights, City of, California
225. Claremont, City of, California
226. Clovis, City of, California
227. Coachella, City of, California
228. Colton, City of, California
229. Compton, City of, California
230. Concord, City of, California
231. Contra Costa, County of, California
232. Corona, City of, California
233. Costa Mesa, City of, California
234. Covina, City of, California
235. Culver City, City of, California
236. Cupertino, City of, California
237. Cypress, City of, California
238. Daly City, City of, California
239. Dana Point, City of, California
240. Danville, Town of, California
241. Davis, City of, California
242. Delano, City of, California
243. Diamond Bar, City of, California
244. Downey, City of, California
245. Dublin, City of, California
246. Eastvale, City of, California
247. El Cajon, City of, California
248. El Centro, City of, California
249. El Monte, City of, California

250. El Paso de Robles (Paso Robles), City of, California
251. Elk Grove, City of, California
252. Encinitas, City of, California
253. Escondido, City of, California
254. Eureka, City of, California
255. Fairfield, City of, California
256. Folsom, City of, California
257. Fontana, City of, California
258. Foster City, City of, California
259. Fountain Valley, City of, California
260. Fremont, City of, California
261. Fresno, City of, California
262. Fullerton, City of, California
263. Garden Grove, City of, California
264. Gardena, City of, California
265. Gilroy, City of, California
266. Glendale, City of, California
267. Glendora, City of, California
268. Glenn, County of, California
269. Goleta, City of, California
270. Hanford, City of, California
271. Hawthorne, City of, California
272. Hayward, City of, California
273. Hemet, City of, California
274. Hesperia, City of, California
275. Highland, City of, California
276. Hollister, City of, California
277. Huntington Park, City of, California
278. Indio, City of, California
279. Inglewood, City of, California
280. Irvine, City of, California
281. Jurupa Valley, City of, California
282. Kern, County of, California
283. Kings, County of, California
284. La Habra, City of, California
285. La Mesa, City of, California
286. La Mirada, City of, California
287. La Puente, City of, California
288. La Quinta, City of, California
289. La Verne, City of, California
290. Laguna Hills, City of, California
291. Laguna Niguel, City of, California
292. Lake, County of, California
293. Lake Elsinore, City of, California
294. Lake Forest, City of, California
295. Lakewood, City of, California
296. Lancaster, City of, California
297. Lawndale, City of, California
298. Lincoln, City of, California
299. Livermore, City of, California
300. Lodi, City of, California
301. Lompoc, City of, California
302. Long Beach, City of, California
303. Los Altos, City of, California
304. Los Angeles, City of, California
305. Los Angeles, County of, California
306. Los Banos, City of, California
307. Los Gatos, Town of, California
308. Lynwood, City of, California
309. Madera, City of, California
310. Manhattan Beach, City of, California
311. Manteca, City of, California
312. Marin, County of, California
313. Martinez, City of, California
314. Menifee, City of, California
315. Menlo Park, City of, California
316. Merced, City of, California
317. Milpitas, City of, California
318. Mission Viejo, City of, California
319. Modesto, City of, California
320. Monrovia, City of, California
321. Montclair, City of, California
322. Montebello, City of, California
323. Monterey Park, City of, California
324. Moorpark, City of, California
325. Moreno Valley, City of, California
326. Morgan Hill, City of, California
327. Mountain View, City of, California
328. Murrieta, City of, California
329. Napa, City of, California

330. Napa, County of, California
331. National City, City of, California
332. Newark, City of, California
333. Newport Beach, City of, California
334. Norwalk, City of, California
335. Novato, City of, California
336. Oakland, City of, California
337. Oakley, City of, California
338. Oceanside, City of, California
339. Ontario, City of, California
340. Orange, City of, California
341. Orange, County of, California
342. Oxnard, City of, California
343. Pacifica, City of, California
344. Palm Desert, City of, California
345. Palm Springs, City of, California
346. Palmdale, City of, California
347. Palo Alto, City of, California
348. Paramount, City of, California
349. Pasadena, City of, California
350. Perris, City of, California
351. Petaluma, City of, California
352. Pico Rivera, City of, California
353. Pittsburg, City of, California
354. Placentia, City of, California
355. Pleasant Hill, City of, California
356. Pleasanton, City of, California
357. Pomona, City of, California
358. Porterville, City of, California
359. Poway, City of, California
360. Rancho Cordova, City of, California
361. Rancho Cucamonga, City of, California
362. Rancho Palos Verdes, City of, California
363. Rancho Santa Margarita, City of, California
364. Redding, City of, California
365. Redlands, City of, California
366. Redondo Beach, City of, California
367. Redwood City, City of, California
368. Rialto, City of, California
369. Richmond, City of, California
370. Riverside, City of, California
371. Rocklin, City of, California
372. Rohnert Park, City of, California
373. Rosemead, City of, California
374. Roseville, City of, California
375. Sacramento, City of, California
376. Salinas, City of, California
377. San Benito, County of, California
378. San Bernardino, City of, California
379. San Bruno, City of, California
380. San Buenaventura (Ventura), City of, California
381. San Carlos, City of, California
382. San Clemente, City of, California
383. San Diego, City of, California
384. San Dimas, City of, California
385. San Francisco, City of/ County of, California
386. San Gabriel, City of, California
387. San Jacinto, City of, California
388. San Joaquin, County of, California
389. San Juan Capistrano, City of, California
390. San Leandro, City of, California
391. San Luis Obispo, City of, California
392. San Marcos, City of, California
393. San Mateo, City of, California
394. San Mateo, County of, California
395. San Pablo, City of, California
396. San Rafael, City of, California
397. San Ramon, City of, California
398. Santa Ana, City of, California
399. Santa Barbara, City of, California
400. Santa Clara, City of, California
401. Santa Clarita, City of, California
402. Santa Cruz, City of, California
403. Santa Cruz, County of, California
404. Santa Maria, City of, California
405. Santa Monica, City of, California
406. Santa Rosa, City of, California
407. Santee, City of, California
408. Saratoga, City of, California

409. Seaside, City of, California
410. Simi Valley, City of, California
411. Solano, County of, California
412. Sonoma, County of, California
413. South Gate, City of, California
414. South San Francisco, City of, California
415. Stanislaus, County of, California
416. Stanton, City of, California
417. Stockton, City of, California
418. Sunnyvale, City of, California
419. Temecula, City of, California
420. Temple City, City of, California
421. Thousand Oaks, City of, California
422. Torrance, City of, California
423. Tracy, City of, California
424. Tulare, City of, California
425. Turlock, City of, California
426. Tustin, City of, California
427. Union City, City of, California
428. Upland, City of, California
429. Vacaville, City of, California
430. Vallejo, City of, California
431. Ventura, County of, California
432. Victorville, City of, California
433. Visalia, City of, California
434. Vista, City of, California
435. Walnut Creek, City of, California
436. Watsonville, City of, California
437. West Covina, City of, California
438. West Hollywood, City of, California
439. West Sacramento, City of, California
440. Westminster, City of, California
441. Whittier, City of, California
442. Wildomar, City of, California
443. Woodland, City of, California
444. Yorba Linda, City of, California
445. Yuba City, City of, California
446. Yucaipa, City of, California
447. Arvada, City of, Colorado
448. Boulder, City of, Colorado
449. Castle Rock, Town of, Colorado
450. Centennial, City of, Colorado
451. Colorado Springs, City of, Colorado
452. Delta, County of, Colorado
453. Douglas, County of, Colorado
454. Eagle, County of, Colorado
455. El Paso, County of, Colorado
456. Englewood, City of, Colorado
457. Fort Collins, City of, Colorado
458. Fountain, City of, Colorado
459. Garfield, County of, Colorado
460. Grand Junction, City of, Colorado
461. La Plata, County of, Colorado
462. Lafayette, City of, Colorado
463. Littleton, City of, Colorado
464. Longmont, City of, Colorado
465. Loveland, City of, Colorado
466. Montrose, County of, Colorado
467. Parker, Town of, Colorado
468. Pueblo, City of, Colorado
469. Summit, County of, Colorado
470. Weld, County of, Colorado
471. Windsor, Town of, Colorado
472. Ansonia, City of, Connecticut
473. Danbury City of/ Town of, Connecticut
474. Derby, City of, Connecticut
475. Glastonbury, Town of, Connecticut
476. Greenwich, Town of, Connecticut
477. Groton, Town of, Connecticut
478. Hamden, Town of, Connecticut
479. Hartford, City of/ Town of, Connecticut
480. Manchester, Town of, Connecticut
481. Meriden, City of/ Town of, Connecticut
482. New Britain, Town of/ City of, Connecticut
483. New Haven, City of, Connecticut
484. New London, City of, Connecticut
485. Newington, Town of, Connecticut

486. Norwalk, City of/ Town of, Connecticut
487. Stamford, City of/ Town of, Connecticut
488. Trumbull, Town of, Connecticut
489. Wallingford, Town of, Connecticut
490. West Hartford, Town of, Connecticut
491. Dover, City of, Delaware
492. Kent, County of, Delaware
493. New Castle, County of, Delaware
494. Newark, City of, Delaware
495. Wilmington, City of, Delaware
496. Altamonte Springs, City of, Florida
497. Aventura, City of, Florida
498. Boca Raton, City of, Florida
499. Bonita Springs, City of, Florida
500. Boynton Beach, City of, Florida
501. Calhoun, County of, Florida
502. Cape Coral, City of, Florida
503. Charlotte, County of, Florida
504. Citrus, County of, Florida
505. Clermont, City of, Florida
506. Collier, County of, Florida
507. Columbia, County of, Florida
508. Cooper City, City of, Florida
509. Coral Gables, City of, Florida
510. Cutler Bay, Town of, Florida
511. Dania Beach, City of, Florida
512. Davie, Town of, Florida
513. DeLand, City of, Florida
514. Delray Beach, City of, Florida
515. DeSoto, County of, Florida
516. Doral, City of, Florida
517. Dunedin, City of, Florida
518. Duval-Jacksonville County, Consolidated Government of, Florida
519. Estero, Village of, Florida
520. Flagler, County of, Florida
521. Fort Myers, City of, Florida
522. Gadsden, County of, Florida
523. Gainesville, City of, Florida
524. Greenacres, City of, Florida
525. Gulf, County of, Florida
526. Hendry, County of, Florida
527. Hernando, County of, Florida
528. Hialeah, City of, Florida
529. Highlands, County of, Florida
530. Hillsborough, County of, Florida
531. Hollywood, City of, Florida
532. Holmes, County of, Florida
533. Indian River, County of, Florida
534. Jupiter, Town of, Florida
535. Kissimmee, City of, Florida
536. Lake Worth, City of, Florida
537. Lakeland, City of, Florida
538. Largo, City of, Florida
539. Lauderdale Lakes, City of, Florida
540. Margate, City of, Florida
541. Martin, County of, Florida
542. Melbourne, City of, Florida
543. Miami Beach, City of, Florida
544. Miami, City of, Florida
545. Miami Lakes, Town of, Florida
546. Nassau, County of, Florida
547. North Lauderdale, City of, Florida
548. North Miami Beach, City of, Florida
549. North Port, City of, Florida
550. Oakland Park, City of, Florida
551. Okeechobee, County of, Florida
552. Palm Beach Gardens, City of, Florida
553. Palm Coast, City of, Florida
554. Parkland, City of, Florida
555. Plant City, City of, Florida
556. Plantation, City of, Florida
557. Polk, County of, Florida
558. Port Orange, City of, Florida
559. Riviera Beach, City of, Florida
560. Royal Palm Beach, Village of, Florida
561. Sarasota, County of, Florida
562. St. Cloud, City of, Florida
563. Stuart, City of, Florida
564. Sumter, County of, Florida
565. Sunrise, City of, Florida

566. Tamarac, City of, Florida
567. Tampa, City of, Florida
568. Titusville, City of, Florida
569. Wakulla, County of, Florida
570. Washington, County of, Florida
571. Wellington, Village of, Florida
572. West Palm Beach, City of, Florida
573. Weston, City of, Florida
574. Winter Garden, City of, Florida
575. Winter Haven, City of, Florida
576. Winter Park, City of, Florida
577. Winter Springs, City of, Florida
578. Alpharetta, City of, Georgia
579. Augusta-Richmond County, Consolidated Government of, Georgia
580. Bacon, County of, Georgia
581. Barrow, County of, Georgia
582. Berrien, County of, Georgia
583. Brookhaven, City of, Georgia
584. Brooks, County of, Georgia
585. Brunswick, City of, Georgia
586. Bryan, County of, Georgia
587. Calhoun, City of, Georgia
588. Canton, City of, Georgia
589. Cartersville, City of, Georgia
590. Chamblee, City of, Georgia
591. Chatham, County of, Georgia
592. Chattooga, County of, Georgia
593. Colquitt, County of, Georgia
594. Coweta, County of, Georgia
595. Crawford, County of, Georgia
596. Dalton, City of, Georgia
597. Doraville, City of, Georgia
598. Douglas, County of, Georgia
599. Douglasville, City of, Georgia
600. Dunwoody, City of, Georgia
601. East Point, City of, Georgia
602. Fannin, County of, Georgia
603. Floyd, County of, Georgia
604. Gilmer, County of, Georgia
605. Gordon, County of, Georgia
606. Harris, County of, Georgia
607. Heard, County of, Georgia
608. Hinesville, City of, Georgia
609. Johns Creek, City of, Georgia
610. Kennesaw, City of, Georgia
611. LaGrange, City of, Georgia
612. Lawrenceville, City of, Georgia
613. Marietta, City of, Georgia
614. McDonough, City of, Georgia
615. Meriwether, County of, Georgia
616. Milton, City of, Georgia
617. Moultrie, City of, Georgia
618. Murray, County of, Georgia
619. Newnan, City of, Georgia
620. Paulding, County of, Georgia
621. Peach, County of, Georgia
622. Peachtree City, City of, Georgia
623. Peachtree Corners, City of, Georgia
624. Pickens, County of, Georgia
625. Pierce, County of, Georgia
626. Pooler, City of, Georgia
627. Richmond Hill, City of, Georgia
628. Roswell, City of, Georgia
629. Sandy Springs, City of, Georgia
630. Smyrna, City of, Georgia
631. Snellville, City of, Georgia
632. South Fulton, City of, Georgia
633. Statesboro, City of, Georgia
634. Stonecrest, City of, Georgia
635. Telfair, County of, Georgia
636. Thomas, County of, Georgia
637. Tucker, City of, Georgia
638. Valdosta, City of, Georgia
639. Villa Rica, City of, Georgia
640. Walker, County of, Georgia
641. Warner Robins, City of, Georgia
642. White, County of, Georgia
643. Whitfield, County of, Georgia
644. Winder, City of, Georgia
645. Woodstock, City of, Georgia
646. Hawai'i, County of, Hawaii
647. Honolulu, County of, Hawaii
648. Maui, County of, Hawaii
649. Bannock, County of, Idaho
650. Boise City, City of, Idaho
651. Bonner, County of, Idaho
652. Caldwell, City of, Idaho
653. Chubbuck, City of, Idaho

654. Coeur d'Alene, City of, Idaho
655. Idaho Falls, City of, Idaho
656. Kootenai, County of, Idaho
657. Lewiston, City of, Idaho
658. Madison, County of, Idaho
659. Meridian, City of, Idaho
660. Nampa, City of, Idaho
661. Nez Perce, County of, Idaho
662. Pocatello, City of, Idaho
663. Post Falls, City of, Idaho
664. Twin Falls, City of, Idaho
665. Twin Falls, County of, Idaho
666. Adams, County of, Illinois
667. Addison, Township of, Illinois
668. Addison, Village of, Illinois
669. Algonquin, Township of, Illinois
670. Algonquin, Village of, Illinois
671. Arlington Heights, Village of, Illinois
672. Aurora, City of, Illinois
673. Aurora, Township of, Illinois
674. Avon, Township of, Illinois
675. Bartlett, Village of, Illinois
676. Batavia, Township of, Illinois
677. Belleville, City of, Illinois
678. Bellwood, Village of, Illinois
679. Bensenville, Village of, Illinois
680. Berwyn, City of, Illinois
681. Berwyn, Township of, Illinois
682. Bloom, Township of, Illinois
683. Bloomingdale, Township of, Illinois
684. Bloomington, City of, Illinois
685. Bloomington City, Township of, Illinois
686. Bolingbrook, Village of, Illinois
687. Bond, County of, Illinois
688. Bourbonnais, Township of, Illinois
689. Bremen, Township of, Illinois
690. Bridgeview, Village of, Illinois
691. Bristol, Township of, Illinois
692. Buffalo Grove, Village of, Illinois
693. Burbank, City of, Illinois
694. Calumet City, City of, Illinois
695. Capital, Township of, Illinois
696. Carbondale, City of, Illinois
697. Carol Stream, Village of, Illinois
698. Carpentersville, Village of, Illinois
699. Caseyville, Township of, Illinois
700. Champaign City, Township of, Illinois
701. Chicago Heights, City of, Illinois
702. Chicago Ridge, Village of, Illinois
703. Cicero, Town of/ Township of, Illinois
704. Clinton, County of, Illinois
705. Collinsville, Township of, Illinois
706. Crystal Lake, City of, Illinois
707. Cunningham, Township of, Illinois
708. Danville, City of, Illinois
709. Decatur, City of, Illinois
710. Decatur, Township of, Illinois
711. DeKalb, City of, Illinois
712. DeKalb, Township of, Illinois
713. Des Plaines, City of, Illinois
714. Dolton, Village of, Illinois
715. Downers Grove, Township of, Illinois
716. Downers Grove, Village of, Illinois
717. Dundee, Township of, Illinois
718. DuPage, Township of, Illinois
719. Edwardsville, Township of, Illinois
720. Ela, Township of, Illinois
721. Elgin, City of, Illinois
722. Elgin, Township of, Illinois
723. Elk Grove, Township of, Illinois
724. Elk Grove Village, Village of, Illinois
725. Elmhurst, City of, Illinois
726. Evanston, City of, Illinois
727. Evergreen Park, Village of, Illinois
728. Forest Park, Village of, Illinois
729. Frankfort, Township of, Illinois

730. Franklin Park, Village of, Illinois
731. Fremont, Township of, Illinois
732. Fulton, County of, Illinois
733. Galesburg City, Township of, Illinois
734. Glendale Heights, Village of, Illinois
735. Glenview, Village of, Illinois
736. Grafton, Township of, Illinois
737. Granite City, City of, Illinois
738. Granite City, Township of, Illinois
739. Grundy, County of, Illinois
740. Gurnee, Village of, Illinois
741. Hanover Park, Village of, Illinois
742. Hanover, Township of, Illinois
743. Harlem, Township of, Illinois
744. Harvey, City of, Illinois
745. Hoffman Estates, Village of, Illinois
746. Homer, Township of, Illinois
747. Jackson, County of, Illinois
748. Joliet, City of, Illinois
749. Joliet, Township of, Illinois
750. Kankakee, City of, Illinois
751. Knox, County of, Illinois
752. La Grange Park, Village of, Illinois
753. Lake, County of, Illinois
754. Lake Villa, Township of, Illinois
755. LaSalle, County of, Illinois
756. Leyden, Township of, Illinois
757. Libertyville, Township of, Illinois
758. Lisle, Township of, Illinois
759. Lockport, Township of, Illinois
760. Lombard, Village of, Illinois
761. Lyons, Township of, Illinois
762. Lyons, Village of, Illinois
763. Madison, County of, Illinois
764. Maine, Township of, Illinois
765. Massac, County of, Illinois
766. Maywood, Village of, Illinois
767. McHenry, Township of, Illinois
768. McLean, County of, Illinois
769. Melrose Park, Village of, Illinois
770. Milton, Township of, Illinois
771. Moline, City of, Illinois
772. Monroe, County of, Illinois
773. Moraine, Township of, Illinois
774. Morgan, County of, Illinois
775. Mount Prospect, Village of, Illinois
776. Mundelein, Village of, Illinois
777. Naperville, City of, Illinois
778. Naperville, Township of, Illinois
779. New Lenox, Township of, Illinois
780. New Trier, Township of, Illinois
781. Niles, Township of, Illinois
782. Normal, Town of, Illinois
783. Normal, Township of, Illinois
784. Northbrook, Village of, Illinois
785. Northfield, Township of, Illinois
786. Northlake, City of, Illinois
787. Nunda, Township of, Illinois
788. Oak Lawn, Village of, Illinois
789. Oak Park, Township of, Illinois
790. Oak Park, Village of, Illinois
791. Ogle, County of, Illinois
792. Orland Park, Village of, Illinois
793. Orland, Township of, Illinois
794. Oswego, Township of, Illinois
795. Oswego, Village of, Illinois
796. Palatine, Township of, Illinois
797. Palatine, Village of, Illinois
798. Palos Heights, City of, Illinois
799. Palos Hills, City of, Illinois
800. Palos, Township of, Illinois
801. Park Ridge, City of, Illinois
802. Pekin, City of, Illinois
803. Peoria, City of/ Township of, Illinois
804. Peoria, County of, Illinois
805. Plainfield, Township of, Illinois
806. Plainfield, Village of, Illinois
807. Proviso, Township of, Illinois
808. Quincy, City of, Illinois
809. Quincy, Township of, Illinois
810. Randolph, County of, Illinois
811. Rich, Township of, Illinois
812. River Forest, Village of, Illinois

813. Rock Island, City of, Illinois
814. Rockford, Township of, Illinois
815. Romeoville, Village of, Illinois
816. Schaumburg, Township of, Illinois
817. Schaumburg, Village of, Illinois
818. Schiller Park, Village of, Illinois
819. Shields, Township of, Illinois
820. Skokie, Village of, Illinois
821. South Moline, Township of, Illinois
822. Springfield, City of, Illinois
823. St. Charles, City of, Illinois
824. St. Charles, Township of, Illinois
825. St. Clair, County of, Illinois
826. St. Clair, Township of, Illinois
827. Stickney, Township of, Illinois
828. Streamwood, Village of, Illinois
829. Streator, City of, Illinois
830. Summit, Village of, Illinois
831. Tazewell, County of, Illinois
832. Thornton, Township of, Illinois
833. Tinley Park, Village of, Illinois
834. Troy, Township of, Illinois
835. Urbana, City of, Illinois
836. Vermilion, County of, Illinois
837. Vernon, Township of, Illinois
838. Wabash, County of, Illinois
839. Warren, Township of, Illinois
840. Washington, County of, Illinois
841. Waukegan, City of, Illinois
842. Waukegan, Township of, Illinois
843. Wayne, Township of, Illinois
844. West Deerfield, Township of, Illinois
845. Wheatland, Township of, Illinois
846. Wheaton, City of, Illinois
847. Wheeling, Township of, Illinois
848. Wheeling, Village of, Illinois
849. Whiteside, County of, Illinois
850. Williamson, County of, Illinois
851. Winfield, Township of, Illinois
852. Wood River, Township of, Illinois
853. Woodford, County of, Illinois
854. Woodridge, Village of, Illinois
855. Worth, Township of, Illinois
856. York, Township of, Illinois
857. Aboite, Township of, Indiana
858. Adams, County of, Indiana
859. Adams, Township of, Indiana
860. Anderson, City of, Indiana
861. Anderson, Township of, Indiana
862. Bartholomew, County of, Indiana
863. Blackford, County of, Indiana
864. Bloomington, Township of, Indiana
865. Boone, County of, Indiana
866. Calumet, Township of, Indiana
867. Carmel, City of, Indiana
868. Cass, County of, Indiana
869. Center, Township of, Indiana
870. Center, Township of, Indiana
871. Center, Township of, Indiana
872. Center, Township of, Indiana
873. Center, Township of, Indiana
874. Center, Township of, Indiana
875. Clark, County of, Indiana
876. Clay, Township of, Indiana
877. Clay, Township of, Indiana
878. Clinton, County of, Indiana
879. Columbus, City of, Indiana
880. Columbus, Township of, Indiana
881. Concord, Township of, Indiana
882. Crown Point, City of, Indiana
883. Daviess, County of, Indiana
884. Dearborn, County of, Indiana
885. Decatur, Township of, Indiana
886. DeKalb, County of, Indiana
887. Delaware, Township of, Indiana
888. Dubois, County of, Indiana
889. Elkhart, City of, Indiana
890. Elkhart, County of, Indiana
891. Elkhart, Township of, Indiana
892. Fairfield, Township of, Indiana
893. Fall Creek, Township of, Indiana
894. Fayette, County of, Indiana
895. Floyd, County of, Indiana
896. Franklin, Township of, Indiana
897. Gibson, County of, Indiana
898. Goshen, City of, Indiana
899. Grant, County of, Indiana

900. Greene, County of, Indiana
901. Guilford, Township of, Indiana
902. Hamilton, County of, Indiana
903. Hancock, County of, Indiana
904. Harrison, Township of, Indiana
905. Hendricks, County of, Indiana
906. Henry, County of, Indiana
907. Hobart, Township of, Indiana
908. Huntington, County of, Indiana
909. Jasper, County of, Indiana
910. Jefferson, County of, Indiana
911. Jeffersonville, Township of, Indiana
912. Johnson, County of, Indiana
913. Knight, Township of, Indiana
914. Knox, County of, Indiana
915. Kokomo, City of, Indiana
916. Kosciusko, County of, Indiana
917. LaGrange, County of, Indiana
918. Lawrence, Township of, Indiana
919. Lincoln, Township of, Indiana
920. Merrillville, Town of, Indiana
921. Miami, County of, Indiana
922. Michigan City, City of, Indiana
923. Mishawaka, City of, Indiana
924. Montgomery, County of, Indiana
925. Noble, County of, Indiana
926. North, Township of, Indiana
927. Ohio, Township of, Indiana
928. Orange, County of, Indiana
929. Penn, Township of, Indiana
930. Perry, Township of, Indiana
931. Perry, Township of, Indiana
932. Perry, Township of, Indiana
933. Peru, City of, Indiana
934. Pike, Township of, Indiana
935. Pleasant, Township of, Indiana
936. Portage, City of, Indiana
937. Putnam, County of, Indiana
938. Ross, Township of, Indiana
939. Shelby, County of, Indiana
940. Shelbyville, City of, Indiana
941. St. John, Township of, Indiana
942. St. Joseph, Township of, Indiana
943. Starke, County of, Indiana
944. Steuben, County of, Indiana
945. Valparaiso, City of, Indiana
946. Wabash, County of, Indiana
947. Wabash, Township of, Indiana
948. Warren, Township of, Indiana
949. Warrick, County of, Indiana
950. Washington, Township of, Indiana
951. Washington, Township of, Indiana
952. Washington, Township of, Indiana
953. Washington, Township of, Indiana
954. Wayne, County of, Indiana
955. Wayne, Township of, Indiana
956. Wayne, Township of, Indiana
957. Wayne, Township of, Indiana
958. Wea, Township of, Indiana
959. White River, Township of, Indiana
960. Whitley, County of, Indiana
961. Ames, City of, Iowa
962. Ankeny, City of, Iowa
963. Bettendorf, City of, Iowa
964. Cedar Falls, City of, Iowa
965. Cedar Rapids, City of, Iowa
966. Council Bluffs, City of, Iowa
967. Davenport, City of, Iowa
968. Des Moines, City of, Iowa
969. Dubuque, City of, Iowa
970. Dubuque, County of, Iowa
971. Iowa City, City of, Iowa
972. Linn, County of, Iowa
973. Marion, City of, Iowa
974. Marshall, County of, Iowa
975. Sioux City, City of, Iowa
976. Story, County of, Iowa
977. Urbandale, City of, Iowa
978. Wapello, County of, Iowa
979. Warren, County of, Iowa
980. Waterloo, City of, Iowa
981. West Des Moines, City of, Iowa
982. Woodbury, County of, Iowa
983. Butler, County of, Kansas
984. Douglas, County of, Kansas
985. Geary, County of, Kansas

986. Hutchinson, City of, Kansas
987. Lawrence, City of, Kansas
988. Leavenworth, City of, Kansas
989. Leawood, City of, Kansas
990. Lenexa, City of, Kansas
991. Lyon, County of, Kansas
992. Manhattan, City of, Kansas
993. Miami, County of, Kansas
994. Olathe, City of, Kansas
995. Riley, County of, Kansas
996. Salina, City of, Kansas
997. Saline, County of, Kansas
998. Shawnee, City of, Kansas
999. Shawnee, County of, Kansas
1000. Topeka, City of, Kansas
1001. Allen, County of, Kentucky
1002. Barren, County of, Kentucky
1003. Bath, County of, Kentucky
1004. Bowling Green, City of, Kentucky
1005. Breathitt, County of, Kentucky
1006. Bullitt, County of, Kentucky
1007. Caldwell, County of, Kentucky
1008. Calloway, County of, Kentucky
1009. Campbellsville, City of, Kentucky
1010. Carter, County of, Kentucky
1011. Casey, County of, Kentucky
1012. Clay, County of, Kentucky
1013. Daviess, County of, Kentucky
1014. Elizabethtown, City of, Kentucky
1015. Fleming, County of, Kentucky
1016. Florence, City of, Kentucky
1017. Garrard, County of, Kentucky
1018. Georgetown, City of, Kentucky
1019. Graves, County of, Kentucky
1020. Greenup, County of, Kentucky
1021. Harrison, County of, Kentucky
1022. Hart, County of, Kentucky
1023. Henry, County of, Kentucky
1024. Hopkinsville, City of, Kentucky
1025. Larue, County of, Kentucky
1026. Laurel, County of, Kentucky
1027. Lewis, County of, Kentucky
1028. Logan, County of, Kentucky
1029. Martin, County of, Kentucky
1030. Mason, County of, Kentucky
1031. Mercer, County of, Kentucky
1032. Morgan, County of, Kentucky
1033. Mount Washington, City of, Kentucky
1034. Muhlenberg, County of, Kentucky
1035. Murray, City of, Kentucky
1036. Nelson, County of, Kentucky
1037. Nicholasville, City of, Kentucky
1038. Owen, County of, Kentucky
1039. Owensboro, City of, Kentucky
1040. Pendleton, County of, Kentucky
1041. Powell, County of, Kentucky
1042. Richmond, City of, Kentucky
1043. Russell, County of, Kentucky
1044. Shepherdsville, City of, Kentucky
1045. Spencer, County of, Kentucky
1046. Taylor, County of, Kentucky
1047. Todd, County of, Kentucky
1048. Webster, County of, Kentucky
1049. Winchester, City of, Kentucky
1050. Woodford, County of, Kentucky
1051. Acadia, Parish of, Louisiana
1052. Bienville, Parish of, Louisiana
1053. Covington, City of, Louisiana
1054. De Soto, Parish of, Louisiana
1055. Gretna, City of, Louisiana
1056. Iberville, Parish of, Louisiana
1057. Lafayette, City of, Louisiana
1058. Lincoln, Parish of, Louisiana
1059. Livingston, Parish of, Louisiana
1060. Morgan, City of, Louisiana
1061. Tangipahoa, Parish of, Louisiana
1062. Terrebonne, Parish of, Louisiana
1063. West Monroe, City of, Louisiana
1064. Franklin, County of, Maine
1065. Hancock, County of, Maine
1066. Oxford, County of, Maine
1067. Annapolis, City of, Maryland
1068. Anne Arundel, County of, Maryland
1069. Baltimore, City of, Maryland
1070. Baltimore, County of, Maryland
1071. Carroll, County of, Maryland

1072. College Park, City of, Maryland
1073. Gaithersburg, City of, Maryland
1074. Howard, County of, Maryland
1075. Montgomery, County of, Maryland
1076. Queen Anne's, County of, Maryland
1077. Salisbury, City of, Maryland
1078. Worcester, County of, Maryland
1079. Amherst, Town of, Massachusetts
1080. Andover, Town of, Massachusetts
1081. Arlington, Town of, Massachusetts
1082. Attleboro, City of, Massachusetts
1083. Barnstable, County of, Massachusetts
1084. Barnstable, Town of/ City of, Massachusetts
1085. Boston, City of, Massachusetts
1086. Braintree, Town of/ City of, Massachusetts
1087. Bristol, County of, Massachusetts
1088. Chelsea, City of, Massachusetts
1089. Dartmouth, Town of, Massachusetts
1090. Dracut, Town of, Massachusetts
1091. Fall River, City of, Massachusetts
1092. Franklin, Town of/ City of, Massachusetts
1093. Lawrence, City of, Massachusetts
1094. Lexington, Town of, Massachusetts
1095. Marlborough, City of, Massachusetts
1096. Nantucket, Town of/ County of, Massachusetts
1097. Needham, Town of, Massachusetts
1098. Newton, City of, Massachusetts
1099. Norfolk, County of, Massachusetts
1100. Plymouth, County of, Massachusetts
1101. Quincy, City of, Massachusetts
1102. Revere, City of, Massachusetts
1103. Shrewsbury, Town of, Massachusetts
1104. Somerville, City of, Massachusetts
1105. Taunton, City of, Massachusetts
1106. Waltham, City of, Massachusetts
1107. Westfield, City of, Massachusetts
1108. Weymouth, Town of/ City of, Massachusetts
1109. Winthrop, Town of/ City of, Massachusetts
1110. Allegan, County of, Michigan
1111. Ann Arbor, City of, Michigan
1112. Barry, County of, Michigan
1113. Battle Creek, City of, Michigan
1114. Bay City, City of, Michigan
1115. Bay, County of, Michigan
1116. Bedford, Township of, Michigan
1117. Bloomfield, Charter Township of, Michigan
1118. Brownstown, Charter Township of, Michigan
1119. Cheboygan, County of, Michigan
1120. Chesterfield, Township of, Michigan
1121. Clare, County of, Michigan
1122. Clinton, Charter Township of, Michigan
1123. Commerce, Charter Township of, Michigan
1124. Dearborn, City of, Michigan
1125. Dearborn Heights, City of, Michigan
1126. Delta, Charter Township of, Michigan
1127. Eastpointe, City of, Michigan
1128. Emmet, County of, Michigan
1129. Farmington Hills, City of, Michigan
1130. Flint, Charter Township of, Michigan
1131. Flint, City of, Michigan

1132. Georgetown, Charter Township of, Michigan
1133. Grand Blanc, Charter Township of, Michigan
1134. Harrison, Charter Township of, Michigan
1135. Holland, Charter Township of, Michigan
1136. Holland, City of, Michigan
1137. Huron, County of, Michigan
1138. Independence, Charter Township of, Michigan
1139. Jackson, County of, Michigan
1140. Kalamazoo, City of, Michigan
1141. Kentwood, City of, Michigan
1142. Lapeer, County of, Michigan
1143. Lincoln Park, City of, Michigan
1144. Macomb, Township of, Michigan
1145. Mecosta, County of, Michigan
1146. Meridian, Charter Township of, Michigan
1147. Midland, City of, Michigan
1148. Midland, County of, Michigan
1149. Muskegon, City of, Michigan
1150. Novi, City of, Michigan
1151. Oakland, County of, Michigan
1152. Orion, Charter Township of, Michigan
1153. Ottawa, County of, Michigan
1154. Plainfield, Charter Township of, Michigan
1155. Portage, City of, Michigan
1156. Redford, Charter Township of, Michigan
1157. Rochester Hills, City of, Michigan
1158. Roseville, City of, Michigan
1159. Royal Oak, City of, Michigan
1160. Saginaw, Charter Township of, Michigan
1161. Saginaw, City of, Michigan
1162. Shelby, Charter Township of, Michigan
1163. Southfield, City of, Michigan
1164. St. Clair Shores, City of, Michigan
1165. St. Joseph, County of, Michigan
1166. Sterling Heights, City of, Michigan
1167. Taylor, City of, Michigan
1168. Troy, City of, Michigan
1169. Van Buren, County of, Michigan
1170. Warren, City of, Michigan
1171. Waterford, Charter Township of, Michigan
1172. West Bloomfield, Charter Township of, Michigan
1173. White Lake, Charter Township of, Michigan
1174. Wyoming, City of, Michigan
1175. Ypsilanti, Charter Township of, Michigan
1176. Andover, City of, Minnesota
1177. Apple Valley, City of, Minnesota
1178. Becker, County of, Minnesota
1179. Beltrami, County of, Minnesota
1180. Benton, County of, Minnesota
1181. Blaine, City of, Minnesota
1182. Bloomington, City of, Minnesota
1183. Blue Earth, County of, Minnesota
1184. Brooklyn Center, City of, Minnesota
1185. Brooklyn Park, City of, Minnesota
1186. Burnsville, City of, Minnesota
1187. Carlton, County of, Minnesota
1188. Carver, County of, Minnesota
1189. Chisago, County of, Minnesota
1190. Clay, County of, Minnesota
1191. Coon Rapids, City of, Minnesota
1192. Cottage Grove, City of, Minnesota
1193. Crow Wing, County of, Minnesota
1194. Duluth, City of, Minnesota
1195. Eagan, City of, Minnesota
1196. Eden Prairie, City of, Minnesota
1197. Edina, City of, Minnesota
1198. Freeborn, County of, Minnesota
1199. Goodhue, County of, Minnesota
1200. Hennepin, County of, Minnesota

1201. Inver Grove Heights, City of, Minnesota
1202. Isanti, County of, Minnesota
1203. Kandiyohi, County of, Minnesota
1204. Lakeville, City of, Minnesota
1205. Mankato, City of, Minnesota
1206. Maple Grove, City of, Minnesota
1207. Maplewood, City of, Minnesota
1208. Minneapolis, City of, Minnesota
1209. Minnetonka, City of, Minnesota
1210. Moorhead, City of, Minnesota
1211. Nicollet, County of, Minnesota
1212. North St. Paul, City of, Minnesota
1213. Olmsted, County of, Minnesota
1214. Otter Tail, County of, Minnesota
1215. Pine, County of, Minnesota
1216. Plymouth, City of, Minnesota
1217. Polk, County of, Minnesota
1218. Ramsey, County of, Minnesota
1219. Rice, County of, Minnesota
1220. Richfield, City of, Minnesota
1221. Rochester, City of, Minnesota
1222. Roseau, County of, Minnesota
1223. Roseville, City of, Minnesota
1224. Savage, City of, Minnesota
1225. Scott, County of, Minnesota
1226. Shakopee, City of, Minnesota
1227. Sherburne, County of, Minnesota
1228. Sibley, County of, Minnesota
1229. St. Cloud, City of, Minnesota
1230. St. Louis Park, City of, Minnesota
1231. Stearns, County of, Minnesota
1232. Steele, County of, Minnesota
1233. Waseca, County of, Minnesota
1234. Woodbury, City of, Minnesota
1235. Wright, County of, Minnesota
1236. Alcorn, County of, Mississippi
1237. Attala, County of, Mississippi
1238. Biloxi, City of, Mississippi
1239. Chickasaw, County of, Mississippi
1240. Clarke, County of, Mississippi
1241. Cleveland, City of, Mississippi
1242. Columbus, City of, Mississippi
1243. Copiah, County of, Mississippi
1244. Gautier, City of, Mississippi
1245. George, County of, Mississippi
1246. Greene, County of, Mississippi
1247. Hancock, County of, Mississippi
1248. Holmes, County of, Mississippi
1249. Itawamba, County of, Mississippi
1250. Jackson, County of, Mississippi
1251. Jefferson Davis, County of, Mississippi
1252. Jones, County of, Mississippi
1253. Lamar, County of, Mississippi
1254. Lauderdale, County of, Mississippi
1255. Lawrence, County of, Mississippi
1256. Lee, County of, Mississippi
1257. Lowndes, County of, Mississippi
1258. Moss Point, City of, Mississippi
1259. Ocean Springs, City of, Mississippi
1260. Oktibbeha, County of, Mississippi
1261. Olive Branch, City of, Mississippi
1262. Panola, County of, Mississippi
1263. Perry, County of, Mississippi
1264. Pike, County of, Mississippi
1265. Pontotoc, County of, Mississippi
1266. Rankin, County of, Mississippi
1267. Southaven, City of, Mississippi
1268. Starkville, City of, Mississippi
1269. Tallahatchie, County of, Mississippi
1270. Tate, County of, Mississippi
1271. Tishomingo, County of, Mississippi
1272. Tupelo, City of, Mississippi
1273. Vicksburg, City of, Mississippi
1274. Walthall, County of, Mississippi
1275. Warren, County of, Mississippi
1276. Wayne, County of, Mississippi
1277. Yalobusha, County of, Mississippi
1278. Adair, County of, Missouri

1279. Andrew, County of, Missouri
1280. Ballwin, City of, Missouri
1281. Blue Springs, City of, Missouri
1282. Cape Girardeau, City of, Missouri
1283. Chesterfield, City of, Missouri
1284. Clay, County of, Missouri
1285. Columbia, City of, Missouri
1286. DeKalb, County of, Missouri
1287. Florissant, City of, Missouri
1288. Harrisonville, City of, Missouri
1289. Jefferson City, City of, Missouri
1290. Laclede, County of, Missouri
1291. Lee's Summit, City of, Missouri
1292. Liberty, City of, Missouri
1293. New Madrid, County of, Missouri
1294. Newton, County of, Missouri
1295. O'Fallon, City of, Missouri
1296. Platte, County of, Missouri
1297. Ralls, County of, Missouri
1298. St. Charles, City of, Missouri
1299. St. Louis, City of, Missouri
1300. St. Peters, City of, Missouri
1301. University City, City of, Missouri
1302. Wentzville, City of, Missouri
1303. Wildwood, City of, Missouri
1304. Billings, City of, Montana
1305. Bozeman, City of, Montana
1306. Butte-Silver Bow County, Consolidated Government of, Montana
1307. Flathead, County of, Montana
1308. Helena, City of, Montana
1309. Lewis and Clark, County of, Montana
1310. Ravalli, County of, Montana
1311. Yellowstone, County of, Montana
1312. Adams, County of, Nebraska
1313. Bellevue, City of, Nebraska
1314. Buffalo, County of, Nebraska
1315. Dodge, County of, Nebraska
1316. Grand Island, City of, Nebraska
1317. Hall, County of, Nebraska
1318. Kearney, City of, Nebraska
1319. Lancaster, County of, Nebraska
1320. Lincoln, City of, Nebraska
1321. Madison, County of, Nebraska
1322. Omaha, City of, Nebraska
1323. Platte, County of, Nebraska
1324. Scotts Bluff, County of, Nebraska
1325. Boulder City, City of, Nevada
1326. Elko, County of, Nevada
1327. Lyon, County of, Nevada
1328. Mesquite, City of, Nevada
1329. Reno, City of, Nevada
1330. Dover, City of, New Hampshire
1331. Merrimack, County of, New Hampshire
1332. Atlantic City, City of, New Jersey
1333. Atlantic, County of, New Jersey
1334. Belleville, Township of, New Jersey
1335. Bergen, County of, New Jersey
1336. Berkeley, Township of, New Jersey
1337. Bloomfield, Township of, New Jersey
1338. Brick, Township of, New Jersey
1339. Bridgewater, Township of, New Jersey
1340. Camden, City of, New Jersey
1341. Camden, County of, New Jersey
1342. Cape May, County of, New Jersey
1343. Cherry Hill, Township of, New Jersey
1344. Cumberland, County of, New JerseyMacon
1345. Deptford, Township of, New Jersey
1346. East Brunswick, Township of, New Jersey
1347. East Orange, City of, New Jersey
1348. Edison, Township of, New Jersey
1349. Egg Harbor, Township of, New Jersey
1350. Essex, County of, New Jersey

1351. Evesham, Township of, New Jersey
1352. Ewing, Township of, New Jersey
1353. Fair Lawn, Borough of, New Jersey
1354. Fort Lee, Borough of, New Jersey
1355. Franklin, Township of, New Jersey
1356. Freehold, Township of, New Jersey
1357. Galloway, Township of, New Jersey
1358. Garfield, City of, New Jersey
1359. Gloucester, County of, New Jersey
1360. Gloucester, Township of, New Jersey
1361. Hackensack, City of, New Jersey
1362. Hamilton, Township of, New Jersey
1363. Hillsborough, Township of, New Jersey
1364. Hoboken, City of, New Jersey
1365. Howell, Township of, New Jersey
1366. Irvington, Township of, New Jersey
1367. Jackson, Township of, New Jersey
1368. Jersey City, City of, New Jersey
1369. Kearny, Town of, New Jersey
1370. Lakewood, Township of, New Jersey
1371. Lawrence, Township of, New Jersey
1372. Linden, City of, New Jersey
1373. Livingston, Township of, New Jersey
1374. Long Branch, City of, New Jersey
1375. Manalapan, Township of, New Jersey
1376. Manchester, Township of, New Jersey
1377. Marlboro, Township of, New Jersey
1378. Mercer, County of, New Jersey
1379. Middlesex, County of, New Jersey
1380. Middletown, Township of, New Jersey
1381. Monmouth, County of, New Jersey
1382. Monroe, Township of, New Jersey
1383. Monroe, Township of, New Jersey
1384. Montclair, Township of, New Jersey
1385. Morris, County of, New Jersey
1386. Mount Laurel, Township of, New Jersey
1387. New Brunswick, City of, New Jersey
1388. Newark, City of, New Jersey
1389. North Bergen, Township of, New Jersey
1390. North Brunswick, Township of, New Jersey
1391. Old Bridge, Township of, New Jersey
1392. Orange, Township of/ City of, New Jersey
1393. Parsippany-Troy Hills, Township of, New Jersey
1394. Passaic, City of, New Jersey
1395. Passaic, County of, New Jersey
1396. Paterson, City of, New Jersey
1397. Pennsauken, Township of, New Jersey
1398. Perth Amboy, City of, New Jersey
1399. Piscataway, Township of, New Jersey
1400. Plainfield, City of, New Jersey
1401. Princeton, New Jersey
1402. Saddle Brook, Township of, New Jersey
1403. Salem, County of, New Jersey

1404. Sayreville, Borough of, New Jersey
1405. Somerset, County of, New Jersey
1406. South Brunswick, Township of, New Jersey
1407. Sussex, County of, New Jersey
1408. Teaneck, Township of, New Jersey
1409. Toms River, Township of, New Jersey
1410. Union City, City of, New Jersey
1411. Union, County of, New Jersey
1412. Union, Township of, New Jersey
1413. Warren, County of, New Jersey
1414. Washington, Township of, New Jersey
1415. Wayne, Township of, New Jersey
1416. West New York, Town of, New Jersey
1417. West Orange, Township of, New Jersey
1418. Willingboro, Township of, New Jersey
1419. Winslow, Township of, New Jersey
1420. Woodbridge, Township of, New Jersey
1421. Albany, County of, New York
1422. Amherst, Town of, New York
1423. Babylon, Town of, New York
1424. Bethlehem, Town of, New York
1425. Binghamton, City of, New York
1426. Brighton, Town of, New York
1427. Bronx, County of, New York
1428. Carmel, Town of, New York
1429. Cattaraugus, County of, New York
1430. Cayuga, County of, New York
1431. Chautauqua, County of, New York
1432. Cheektowaga, Town of, New York
1433. Chemung, County of, New York
1434. Chenango, County of, New York
1435. Cicero, Town of, New York
1436. Clarence, Town of, New York
1437. Clay, Town of, New York
1438. Clifton Park, Town of, New York
1439. Colonie, Town of, New York
1440. Cortlandt, Town of, New York
1441. Delaware, County of, New York
1442. Eastchester, Town of, New York
1443. Essex, County of, New York
1444. Freeport, Village of, New York
1445. Greece, Town of, New York
1446. Greenburgh, Town of, New York
1447. Guilderland, Town of, New York
1448. Hamburg, Town of, New York
1449. Henrietta, Town of, New York
1450. Irondequoit, Town of, New York
1451. Kings, County of, New York
1452. Lancaster, Town of, New York
1453. Livingston, County of, New York
1454. Madison, County of, New York
1455. Manlius, Town of, New York
1456. Mount Pleasant, Town of, New York
1457. Mount Vernon, City of, New York
1458. New Rochelle, City of, New York
1459. New York, County of, New York
1460. Newburgh, Town of, New York
1461. Niagara Falls, City of, New York
1462. North Tonawanda, City of, New York
1463. Orleans, County of, New York
1464. Ossining, Town of, New York
1465. Otsego, County of, New York
1466. Penfield, Town of, New York
1467. Perinton, Town of, New York
1468. Putnam, County of, New York
1469. Queens, County of, New York
1470. Richmond, County of, New York
1471. Rockland, County of, New York
1472. Rye, Town of, New York
1473. Salina, Town of, New York
1474. Spring Valley, Village of, New York

1475. Stony Point, Town of, New York
1476. Tioga, County of, New York
1477. Tonawanda, Town of, New York
1478. Union, Town of, New York
1479. Wappinger, Town of, New York
1480. Warren, County of, New York
1481. Warwick, Town of, New York
1482. Wayne, County of, New York
1483. Webster, Town of, New York
1484. West Seneca, Town of, New York
1485. White Plains, City of, New York
1486. Yates, County of, New York
1487. Yorktown, Town of, New York
1488. Alleghany, County of, North Carolina
1489. Apex, Town of, North Carolina
1490. Asheville, City of, North Carolina
1491. Bertie, County of, North Carolina
1492. Burlington, City of, North Carolina
1493. Cary, Town of, North Carolina
1494. Chapel Hill, Town of, North Carolina
1495. Charlotte, City of, North Carolina
1496. Chowan, County of, North Carolina
1497. Concord, City of, North Carolina
1498. Cornelius, Town of, North Carolina
1499. Currituck, County of, North Carolina
1500. Durham, City of, North Carolina
1501. Edgecombe, County of, North Carolina
1502. Fuquay-Varina, Town of, North Carolina
1503. Garner, Town of, North Carolina
1504. Gastonia, City of, North Carolina
1505. Goldsboro, City of, North Carolina
1506. Greenville, City of, North Carolina
1507. Harnett, County of, North Carolina
1508. Henderson, County of, North Carolina
1509. High Point, City of, North Carolina
1510. Hoke, County of, North Carolina
1511. Holly Springs, Town of, North Carolina
1512. Huntersville, Town of, North Carolina
1513. Indian Trail, Town of, North Carolina
1514. Jackson, County of, North Carolina
1515. Johnston, County of, North Carolina
1516. Kannapolis, City of, North Carolina
1517. Macon, County of, North Carolina
1518. Madison, County of, North Carolina
1519. Matthews, Town of, North Carolina
1520. Monroe, City of, North Carolina
1521. Mooresville, Town of, North Carolina
1522. Nash, County of, North Carolina
1523. Pender, County of, North Carolina
1524. Polk, County of, North Carolina
1525. Raleigh, City of, North Carolina
1526. Rocky Mount, City of, North Carolina
1527. Salisbury, City of, North Carolina
1528. Sanford, City of, North Carolina
1529. Stanly, County of, North Carolina
1530. Stokes, County of, North Carolina
1531. Transylvania, County of, North Carolina
1532. Union, County of, North Carolina

1533. Wake, County of, North Carolina
1534. Wake Forest, Town of, North Carolina
1535. Warren, County of, North Carolina
1536. Washington, County of, North Carolina
1537. Wilson, City of, North Carolina
1538. Wilson, County of, North Carolina
1539. Yadkin, County of, North Carolina
1540. Yancey, County of, North Carolina
1541. Cass, County of, North Dakota
1542. Fargo, City of, North Dakota
1543. Grand Forks, City of, North Dakota
1544. Minot, City of, North Dakota
1545. Morton, County of, North Dakota
1546. West Fargo, City of, North Dakota
1547. Anderson, Township of, Ohio
1548. Athens, Township of, Ohio
1549. Austintown, Township of, Ohio
1550. Bath, Township of, Ohio
1551. Beavercreek, City of, Ohio
1552. Beavercreek, Township of, Ohio
1553. Boardman, Township of, Ohio
1554. Bowling Green, City of, Ohio
1555. Brown, County of, Ohio
1556. Brunswick, City of, Ohio
1557. Carroll, County of, Ohio
1558. Clark, County of, Ohio
1559. Clear Creek, Township of, Ohio
1560. Cleveland Heights, City of, Ohio
1561. Colerain, Township of, Ohio
1562. Columbus, City of, Ohio
1563. Concord, Township of, Ohio
1564. Deerfield, Township of, Ohio
1565. Defiance, County of, Ohio
1566. Delaware, City of, Ohio
1567. Dublin, City of, Ohio
1568. Fairborn, City of, Ohio
1569. Fostoria, City of, Ohio
1570. Franklin, Township of, Ohio
1571. Gahanna, City of, Ohio
1572. Green, Township of, Ohio
1573. Greene, County of, Ohio
1574. Grove City, City of, Ohio
1575. Hardin, County of, Ohio
1576. Highland, County of, Ohio
1577. Hilliard, City of, Ohio
1578. Holmes, County of, Ohio
1579. Huber Heights, City of, Ohio
1580. Jackson, Township of, Ohio
1581. Jackson, Township of, Ohio
1582. Kettering, City of, Ohio
1583. Lakewood, City of, Ohio
1584. Lancaster, City of, Ohio
1585. Liberty, Township of, Ohio
1586. Liberty, Township of, Ohio
1587. Madison, County of, Ohio
1588. Mahoning, County of, Ohio
1589. Mansfield, City of, Ohio
1590. Marion, City of, Ohio
1591. Marion, Township of, Ohio
1592. Mason, City of, Ohio
1593. Medina, County of, Ohio
1594. Mentor, City of, Ohio
1595. Miami, County of, Ohio
1596. Mifflin, Township of, Ohio
1597. Monroe, County of, Ohio
1598. Morrow, County of, Ohio
1599. Newark, City of, Ohio
1600. Norwalk, City of, Ohio
1601. Norwich, Township of, Ohio
1602. Orange, Township of, Ohio
1603. Painesville, Township of, Ohio
1604. Perry, County of, Ohio
1605. Pickaway, County of, Ohio
1606. Plain, Township of, Ohio
1607. Preble, County of, Ohio
1608. Putnam, County of, Ohio
1609. Reynoldsburg, City of, Ohio
1610. Richland, County of, Ohio
1611. Sandusky, City of, Ohio
1612. Springfield, City of, Ohio
1613. Sylvania, Township of, Ohio
1614. Union, County of, Ohio
1615. Union, Township of, Ohio
1616. Upper Arlington, City of, Ohio

1617. Van Wert, City of, Ohio
1618. Vinton, County of, Ohio
1619. Violet, Township of, Ohio
1620. Warren, County of, Ohio
1621. Washington, Township of, Ohio
1622. Washington, Township of, Ohio
1623. West Chester, Township of, Ohio
1624. Westerville, City of, Ohio
1625. Westlake, City of, Ohio
1626. Wood, County of, Ohio
1627. Youngstown, City of, Ohio
1628. Bartlesville, City of, Oklahoma
1629. Bryan, County of, Oklahoma
1630. Canadian, County of, Oklahoma
1631. Carter, County of, Oklahoma
1632. Cherokee, County of, Oklahoma
1633. Garfield, County of, Oklahoma
1634. Moore, City of, Oklahoma
1635. Pontotoc, County of, Oklahoma
1636. Sequoyah, County of, Oklahoma
1637. Stillwater, City of, Oklahoma
1638. Wagoner, County of, Oklahoma
1639. Albany, City of, Oregon
1640. Beaverton, City of, Oregon
1641. Bend, City of, Oregon
1642. Benton, County of, Oregon
1643. Corvallis, City of, Oregon
1644. Curry, County of, Oregon
1645. Deschutes, County of, Oregon
1646. Douglas, County of, Oregon
1647. Eugene, City of, Oregon
1648. Grants Pass, City of, Oregon
1649. Gresham, City of, Oregon
1650. Hillsboro, City of, Oregon
1651. Keizer, City of, Oregon
1652. Klamath, County of, Oregon
1653. Lake Oswego, City of, Oregon
1654. Lincoln, County of, Oregon
1655. Linn, County of, Oregon
1656. Malheur, County of, Oregon
1657. Marion, County of, Oregon
1658. McMinnville, City of, Oregon
1659. Medford, City of, Oregon
1660. Oregon City, City of, Oregon
1661. Polk, County of, Oregon
1662. Redmond, City of, Oregon
1663. Salem, City of, Oregon
1664. Springfield, City of, Oregon
1665. Tigard, City of, Oregon
1666. Umatilla, County of, Oregon
1667. Abington, Township of, Pennsylvania
1668. Allentown, City of, Pennsylvania
1669. Altoona, City of, Pennsylvania
1670. Bethel Park, Municipality of, Pennsylvania
1671. Bethlehem, City of, Pennsylvania
1672. Blair, County of, Pennsylvania
1673. Butler, County of, Pennsylvania
1674. Centre, County of, Pennsylvania
1675. Cheltenham, Township of, Pennsylvania
1676. Chester, City of, Pennsylvania
1677. Cranberry, Township of, Pennsylvania
1678. Crawford, County of, Pennsylvania
1679. Cumberland, County of, Pennsylvania
1680. Erie, City of, Pennsylvania
1681. Falls, Township of, Pennsylvania
1682. Hampden, Township of, Pennsylvania
1683. Harrisburg, City of, Pennsylvania
1684. Haverford, Township of, Pennsylvania
1685. Hempfield, Township of, Pennsylvania
1686. Huntingdon, County of, Pennsylvania
1687. Jefferson, County of, Pennsylvania
1688. Lancaster, City of, Pennsylvania
1689. Lancaster, County of, Pennsylvania
1690. Lebanon, County of, Pennsylvania
1691. Lower Macungie, Township of, Pennsylvania
1692. Lower Merion, Township of, Pennsylvania

1693. Lower Paxton, Township of, Pennsylvania
1694. Lower Southampton, Township of, Pennsylvania
1695. Manheim, Township of, Pennsylvania
1696. McKean, County of, Pennsylvania
1697. Mifflin, County of, Pennsylvania
1698. Millcreek, Township of, Pennsylvania
1699. Montgomery, County of, Pennsylvania
1700. Mount Lebanon, Township of, Pennsylvania
1701. New Castle, City of, Pennsylvania
1702. Norristown, Borough of, Pennsylvania
1703. North Huntingdon, Township of, Pennsylvania
1704. Northampton, Township of, Pennsylvania
1705. Penn Hills, Township of, Pennsylvania
1706. Perry, County of, Pennsylvania
1707. Radnor, Township of, Pennsylvania
1708. Reading, City of, Pennsylvania
1709. Ridley, Township of, Pennsylvania
1710. Ross, Township of, Pennsylvania
1711. Scranton, City of, Pennsylvania
1712. Snyder, County of, Pennsylvania
1713. Somerset, County of, Pennsylvania
1714. State College, Borough of, Pennsylvania
1715. Susquehanna, County of, Pennsylvania
1716. Union, County of, Pennsylvania
1717. Upper Darby, Township of, Pennsylvania
1718. Upper Merion, Township of, Pennsylvania
1719. Venango, County of, Pennsylvania
1720. Warren, County of, Pennsylvania
1721. Wayne, County of, Pennsylvania
1722. York, City of, Pennsylvania
1723. York, County of, Pennsylvania
1724. Adjuntas, Municipality of, Puerto Rico
1725. Arecibo, Municipality of, Puerto Rico
1726. Arroyo, Municipality of, Puerto Rico
1727. Barceloneta, Municipality of, Puerto Rico
1728. Bayamón, Municipality of, Puerto Rico
1729. Caguas, Municipality of, Puerto Rico
1730. Carolina, Municipality of, Puerto Rico
1731. Catano, Municipality of, Puerto Rico
1732. Ceiba, Municipality of, Puerto Rico
1733. Cidra, Municipality of, Puerto Rico
1734. Coamo, Municipality of, Puerto Rico
1735. Corozal, Municipality of, Puerto Rico
1736. Guayama, Municipality of, Puerto Rico
1737. Guaynabo, Municipality of, Puerto Rico
1738. Gurabo, Municipality of, Puerto Rico
1739. Humacao, Municipality of, Puerto Rico
1740. Las Piedras, Municipality of, Puerto Rico
1741. Mayagüez, Municipality of, Puerto Rico
1742. San Germán, Municipality of, Puerto Rico
1743. San Lorenzo, Municipality of, Puerto Rico

1744. San Sebastián, Municipality of, Puerto Rico
1745. Toa Alta, Municipality of, Puerto Rico
1746. Toa Baja, Municipality of, Puerto Rico
1747. Trujillo Alto, Municipality of, Puerto Rico
1748. Vega Baja, Municipality of, Puerto Rico
1749. Villalba, Municipality of, Puerto Rico
1750. Yauco, Municipality of, Puerto Rico
1751. Barrington, Town of, Rhode Island
1752. Bristol, Town of, Rhode Island
1753. Providence, City of, Rhode Island
1754. Warren, Town of, Rhode Island
1755. Aiken, City of, South Carolina
1756. Columbia, City of, South Carolina
1757. Darlington, County of, South Carolina
1758. Florence, City of, South Carolina
1759. Goose Creek, City of, South Carolina
1760. Greenville, City of, South Carolina
1761. Greer, City of, South Carolina
1762. Hilton Head Island, Town of, South Carolina
1763. Mount Pleasant, Town of, South Carolina
1764. Rock Hill, City of, South Carolina
1765. Spartanburg, City of, South Carolina
1766. Sumter, City of, South Carolina
1767. Brookings, County of, South Dakota
1768. Brown, County of, South Dakota
1769. Lincoln, County of, South Dakota
1770. Minnehaha, County of, South Dakota
1771. Rapid City, City of, South Dakota
1772. Sioux Falls, City of, South Dakota
1773. Bartlett, City of, Tennessee
1774. Brentwood, City of, Tennessee
1775. Cannon, County of, Tennessee
1776. Carter, County of, Tennessee
1777. Chattanooga, City of, Tennessee
1778. Cheatham, County of, Tennessee
1779. Cleveland, City of, Tennessee
1780. Coffee, County of, Tennessee
1781. Collierville, Town of, Tennessee
1782. Crockett, County of, Tennessee
1783. Davidson, County of, Tennessee
1784. Decatur, County of, Tennessee
1785. Dickson, County of, Tennessee
1786. Dyer, County of, Tennessee
1787. Fayette, County of, Tennessee
1788. Franklin, City of, Tennessee
1789. Gallatin, City of, Tennessee
1790. Germantown, City of, Tennessee
1791. Gibson, County of, Tennessee
1792. Hamblen, County of, Tennessee
1793. Hendersonville, City of, Tennessee
1794. Henry, County of, Tennessee
1795. Jackson, City of, Tennessee
1796. Johnson City, City of, Tennessee
1797. Johnson, County of, Tennessee
1798. Kingsport, City of, Tennessee
1799. La Vergne, City of, Tennessee
1800. Lawrence, County of, Tennessee
1801. Lawrenceburg, City of, Tennessee
1802. Lebanon, City of, Tennessee
1803. Lincoln, County of, Tennessee
1804. Maryville, City of, Tennessee
1805. Maury, County of, Tennessee
1806. McMinnville, City of, Tennessee
1807. Memphis, City of, Tennessee
1808. Morgan, County of, Tennessee
1809. Morristown, City of, Tennessee
1810. Mount Juliet, City of, Tennessee

1811. Nashville-Davidson Metropolitan Government, Tennessee
1812. Obion, County of, Tennessee
1813. Overton, County of, Tennessee
1814. Robertson, County of, Tennessee
1815. Shelby, County of, Tennessee
1816. Smyrna, Town of, Tennessee
1817. Sullivan, County of, Tennessee
1818. Sumner, County of, Tennessee
1819. Tipton, County of, Tennessee
1820. Weakley, County of, Tennessee
1821. Wilson, County of, Tennessee
1822. Abilene, City of, Texas
1823. Allen, City of, Texas
1824. Amarillo, City of, Texas
1825. Anderson, County of, Texas
1826. Arlington, City of, Texas
1827. Atascosa, County of, Texas
1828. Austin, City of, Texas
1829. Austin, County of, Texas
1830. Bastrop, County of, Texas
1831. Baytown, City of, Texas
1832. Beaumont, City of, Texas
1833. Bedford, City of, Texas
1834. Bee, County of, Texas
1835. Bell, County of, Texas
1836. Blanco, County of, Texas
1837. Brazoria, County of, Texas
1838. Brown, County of, Texas
1839. Brownsville, City of, Texas
1840. Bryan, City of, Texas
1841. Burleson, City of, Texas
1842. Burnet, County of, Texas
1843. Caldwell, County of, Texas
1844. Calhoun, County of, Texas
1845. Cameron, County of, Texas
1846. Camp, County of, Texas
1847. Carrollton, City of, Texas
1848. Cass, County of, Texas
1849. Cedar Hill, City of, Texas
1850. Cedar Park, City of, Texas
1851. Chambers, County of, Texas
1852. Cibolo, City of, Texas
1853. Cleburne, City of, Texas
1854. College Station, City of, Texas
1855. Collin, County of, Texas
1856. Colorado, County of, Texas
1857. Comal, County of, Texas
1858. Conroe, City of, Texas
1859. Cooke, County of, Texas
1860. Coppell, City of, Texas
1861. Copperas Cove, City of, Texas
1862. Corpus Christi, City of, Texas
1863. Dallas, City of, Texas
1864. Deer Park, City of, Texas
1865. Del Rio, City of, Texas
1866. Denton, City of, Texas
1867. Denton, County of, Texas
1868. DeSoto, City of, Texas
1869. Duncanville, City of, Texas
1870. Ector, County of, Texas
1871. Edinburg, City of, Texas
1872. El Paso, City of, Texas
1873. El Paso, County of, Texas
1874. Erath, County of, Texas
1875. Euless, City of, Texas
1876. Falls, County of, Texas
1877. Fannin, County of, Texas
1878. Farmers Branch, City of, Texas
1879. Flower Mound, Town of, Texas
1880. Fort Bend, County of, Texas
1881. Fort Worth, City of, Texas
1882. Franklin, County of, Texas
1883. Friendswood, City of, Texas
1884. Frisco, City of, Texas
1885. Galveston, City of, Texas
1886. Galveston, County of, Texas
1887. Garland, City of, Texas
1888. Georgetown, City of, Texas
1889. Grand Prairie, City of, Texas
1890. Grapevine, City of, Texas
1891. Grayson, County of, Texas
1892. Gregg, County of, Texas
1893. Guadalupe, County of, Texas
1894. Hale, County of, Texas
1895. Haltom City, City of, Texas
1896. Hardin, County of, Texas
1897. Harker Heights, City of, Texas
1898. Harlingen, City of, Texas
1899. Harris, County of, Texas
1900. Harrison, County of, Texas
1901. Hays, County of, Texas

1902. Hidalgo, County of, Texas
1903. Hill, County of, Texas
1904. Hood, County of, Texas
1905. Hopkins, County of, Texas
1906. Houston, City of, Texas
1907. Houston, County of, Texas
1908. Howard, County of, Texas
1909. Hunt, County of, Texas
1910. Huntsville, City of, Texas
1911. Hurst, City of, Texas
1912. Irving, City of, Texas
1913. Jasper, County of, Texas
1914. Jefferson, County of, Texas
1915. Keller, City of, Texas
1916. Kerr, County of, Texas
1917. Killeen, City of, Texas
1918. Kyle, City of, Texas
1919. La Porte, City of, Texas
1920. Lancaster, City of, Texas
1921. League City, City of, Texas
1922. Leander, City of, Texas
1923. Leon, County of, Texas
1924. Leon Valley, City of, Texas
1925. Lewisville, City of, Texas
1926. Liberty, County of, Texas
1927. Limestone, County of, Texas
1928. Little Elm, City of, Texas
1929. Longview, City of, Texas
1930. Lubbock, City of, Texas
1931. Lubbock, County of, Texas
1932. Lufkin, City of, Texas
1933. Madison, County of, Texas
1934. Mansfield, City of, Texas
1935. Matagorda, County of, Texas
1936. McAllen, City of, Texas
1937. McKinney, City of, Texas
1938. Medina, County of, Texas
1939. Mesquite, City of, Texas
1940. Midland, City of, Texas
1941. Midland, County of, Texas
1942. Midlothian, City of, Texas
1943. Milam, County of, Texas
1944. Mission, City of, Texas
1945. Missouri City, City of, Texas
1946. Morris, County of, Texas
1947. Nacogdoches, City of, Texas
1948. Nacogdoches, County of, Texas
1949. Navarro, County of, Texas
1950. New Braunfels, City of, Texas
1951. Newton, County of, Texas
1952. North Richland Hills, City of, Texas
1953. Nueces, County of, Texas
1954. Odessa, City of, Texas
1955. Orange, County of, Texas
1956. Panola, County of, Texas
1957. Parker, County of, Texas
1958. Pasadena, City of, Texas
1959. Pearland, City of, Texas
1960. Pflugerville, City of, Texas
1961. Pharr, City of, Texas
1962. Plano, City of, Texas
1963. Port Arthur, City of, Texas
1964. Potter, County of, Texas
1965. Randall, County of, Texas
1966. Red River, County of, Texas
1967. Richardson, City of, Texas
1968. Robertson, County of, Texas
1969. Rockwall, City of, Texas
1970. Rosenberg, City of, Texas
1971. Round Rock, City of, Texas
1972. Rowlett, City of, Texas
1973. San Angelo, City of, Texas
1974. San Juan, City of, Texas
1975. San Marcos, City of, Texas
1976. San Patricio, County of, Texas
1977. Schertz, City of, Texas
1978. Shelby, County of, Texas
1979. Sherman, City of, Texas
1980. Socorro, City of, Texas
1981. Southlake, City of, Texas
1982. Starr, County of, Texas
1983. Sugar Land, City of, Texas
1984. Taylor, County of, Texas
1985. Temple, City of, Texas
1986. Texarkana, City of, Texas
1987. Texas City, City of, Texas
1988. The Colony, City of, Texas
1989. Tom Green, County of, Texas
1990. Travis, County of, Texas
1991. Trinity, County of, Texas
1992. Tyler, City of, Texas

1993. Uvalde, County of, Texas
1994. Val Verde, County of, Texas
1995. Van Zandt, County of, Texas
1996. Victoria, City of, Texas
1997. Victoria, County of, Texas
1998. Waco, City of, Texas
1999. Walker, County of, Texas
2000. Waller, County of, Texas
2001. Washington, County of, Texas
2002. Waxahachie, City of, Texas
2003. Weatherford, City of, Texas
2004. Weslaco, City of, Texas
2005. Wharton, County of, Texas
2006. Wichita Falls, City of, Texas
2007. Wilson, County of, Texas
2008. Wise, County of, Texas
2009. Wood, County of, Texas
2010. Wylie, City of, Texas
2011. American Fork, City of, Utah
2012. Bountiful, City of, Utah
2013. Box Elder, County of, Utah
2014. Carbon, County of, Utah
2015. Cedar City, City of, Utah
2016. Clearfield, City of, Utah
2017. Cottonwood Heights, City of, Utah
2018. Davis, County of, Utah
2019. Draper, City of, Utah
2020. Eagle Mountain, City of, Utah
2021. Herriman, City of, Utah
2022. Holladay, City of, Utah
2023. Iron, County of, Utah
2024. Kaysville, City of, Utah
2025. Kearns, Metro Township of, Utah
2026. Layton, City of, Utah
2027. Lehi, City of, Utah
2028. Logan, City of, Utah
2029. Midvale, City of, Utah
2030. Millard, County of, Utah
2031. Millcreek, City of, Utah
2032. Murray, City of, Utah
2033. Ogden, City of, Utah
2034. Orem, City of, Utah
2035. Pleasant Grove, City of, Utah
2036. Provo, City of, Utah
2037. Riverton, City of, Utah
2038. Roy, City of, Utah
2039. Salt Lake City, City of, Utah
2040. San Juan, County of, Utah
2041. Sandy, City of, Utah
2042. Sanpete, County of, Utah
2043. Saratoga Springs, City of, Utah
2044. South Jordan, City of, Utah
2045. Spanish Fork, City of, Utah
2046. Springville, City of, Utah
2047. St. George, City of, Utah
2048. Syracuse, City of, Utah
2049. Taylorsville, City of, Utah
2050. Tooele, City of, Utah
2051. West Jordan, City of, Utah
2052. West Valley City, City of, Utah
2053. Addison, County of, Vermont
2054. Bennington, County of, Vermont
2055. Brattleboro, Town of, Vermont
2056. Burlington, City of, Vermont
2057. Chittenden, County of, Vermont
2058. Franklin, County of, Vermont
2059. Rutland, County of, Vermont
2060. Washington, County of, Vermont
2061. Windham, County of, Vermont
2062. Windsor, County of, Vermont
2063. Albemarle, County of, Virginia
2064. Augusta, County of, Virginia
2065. Bedford, County of, Virginia
2066. Blacksburg, Town of, Virginia
2067. Buchanan, County of, Virginia
2068. Campbell, County of, Virginia
2069. Caroline, County of, Virginia
2070. Carroll, County of, Virginia
2071. Charlottesville, City of, Virginia
2072. Gloucester, County of, Virginia
2073. Grayson, County of, Virginia
2074. Hampton, City of, Virginia
2075. Hanover, County of, Virginia
2076. Harrisonburg, City of, Virginia
2077. James City, County of, Virginia
2078. Leesburg, Town of, Virginia
2079. Lynchburg, City of, Virginia
2080. Manassas, City of, Virginia
2081. Martinsville, City of, Virginia
2082. Newport News, City of, Virginia

2083. Orange, County of, Virginia
2084. Petersburg, City of, Virginia
2085. Portsmouth, City of, Virginia
2086. Rockingham, County of, Virginia
2087. Spotsylvania, County of, Virginia
2088. Suffolk, City of, Virginia
2089. York, County of, Virginia
2090. Auburn, City of, Washington
2091. Bellevue, City of, Washington
2092. Bellingham, City of, Washington
2093. Benton, County of, Washington
2094. Bothell, City of, Washington
2095. Bremerton, City of, Washington,
2096. Burien, City of, Washington
2097. Crowlitz, County of, Washington
2098. Des Moines, City of, Washington
2099. Douglas, County of, Washington
2100. Edmonds, City of, Washington
2101. Federal Way, City of, Washington
2102. Grant, County of, Washington
2103. Grays Harbor, County of, Washington
2104. Issaquah, City of, Washington
2105. Kennewick, City of, Washington
2106. King, County of, Washington
2107. Kittitas, County of, Washington
2108. Lacey, City of, Washington
2109. Lake Stevens, City of, Washington
2110. Lakewood, City of, Washington
2111. Lincoln, County of, Washington
2112. Longview, City of, Washington
2113. Lynnwood, City of, Washington
2114. Marysville, City of, Washington
2115. Mason, County of, Washington
2116. Mount Vernon, City of, Washington
2117. Okanogan, County of, Washington
2118. Olympia, City of, Washington
2119. Pasco, City of, Washington
2120. Pullman, City of, Washington
2121. Puyallup, City of, Washington
2122. Redmond, City of, Washington
2123. Renton, City of, Washington
2124. Richland, City of, Washington
2125. Sammamish, City of, Washington
2126. San Juan, County of, Washington
2127. Seattle, City of, Washington
2128. Sedro-Woolley, City of, Washington
2129. Shoreline, City of, Washington
2130. Spokane Valley, City of, Washington
2131. Stevens, County of, Washington
2132. University Place, City of, Washington
2133. Vancouver, City of, Washington
2134. Walla Walla, City of, Washington
2135. Whatcom, County of, Washington
2136. Wenatchee, City of, Washington
2137. Yakima, City of, Washington
2138. Yakima, County of, Washington
2139. Appleton, City of, Wisconsin
2140. Beloit, City of, Wisconsin
2141. Brookfield, City of, Wisconsin
2142. Cudahy, City of, Wisconsin
2143. Eau Claire, City of, Wisconsin
2144. Fitchburg, City of, Wisconsin
2145. Fond du Lac, City of, Wisconsin
2146. Franklin, City of, Wisconsin
2147. Green Bay, City of, Wisconsin
2148. Greenfield, City of, Wisconsin
2149. Janesville, City of, Wisconsin
2150. La Crosse, City of, Wisconsin
2151. Madison, City of, Wisconsin
2152. Manitowoc, City of, Wisconsin
2153. Marinette, City of, Wisconsin
2154. Menomonee Falls, Village of, Wisconsin
2155. Mount Pleasant, Village of, Wisconsin
2156. New Berlin, City of, Wisconsin
2157. Oak Creek, City of, Wisconsin
2158. Oshkosh, City of, Wisconsin
2159. Polk, County of, Wisconsin
2160. Racine, City of, Wisconsin

2161. Sheboygan, City of, Wisconsin
2162. South Milwaukee, City of, Wisconsin
2163. Sun Prairie, City of, Wisconsin
2164. Superior, City of, Wisconsin
2165. Waukesha, City of, Wisconsin
2166. Wausau, City of, Wisconsin
2167. Wauwatosa, City of, Wisconsin
2168. West Allis, City of, Wisconsin
2169. West Bend, City of, Wisconsin
2170. Albany, County of, Wyoming
2171. Campbell, County of, Wyoming
2172. Fremont, County of, Wyoming
2173. Gillette, City of, Wyoming
2174. Laramie, City of, Wyoming
2175. Laramie, County of, Wyoming
2176. Natrona, County of, Wyoming
2177. Sheridan, County of, Wyoming

EXHIBIT X

Governor's Release of Opioid-Related Claims Pursuant to the Walmart Settlement Agreement

I, [NAME], Governor of the [Commonwealth]/[State]/[Territory] of [Commonwealth]/[State]/[Territory], hereby authorize Attorney General [NAME] to settle and release, to the maximum extent of my power as Governor, all Released Claims of (1) all of [Commonwealth]/[State]/[Territory]'s past and present executive departments, agencies, divisions, boards, commissions and instrumentalities with regulatory authority to enforce state and federal controlled substances acts and (2) all of [Commonwealth]/[State]/[Territory]'s past and present executive departments, agencies, divisions, boards, commissions and instrumentalities that have the authority to bring Claims related to Alleged Harms and/or Covered Conduct seeking money (including abatement and/or remediation) or revocation or suspension of a pharmaceutical distribution or dispensing license. The foregoing authorization is given in connection with Section X.G of that certain settlement agreement dated as of November [●], 2022 setting forth the terms of settlement between and among Walmart Inc., on the one hand, and certain Settling States and certain Participating Subdivisions on the other hand. This release is intended to be a "release from a State's Governor" as contemplated in such section. Capitalized terms used herein and defined in such settlement agreement have the meanings given to them in such settlement agreement.

_____

Governor of the [Commonwealth]/[State]/[Territory] of [Commonwealth]/[State]/[Territory]

Date: _____

CVS SETTLEMENT AGREEMENT

TABLE OF CONTENTS

Page

I. Definitions....2

II. Participation by States and Condition to Preliminary Agreement....14

III. Injunctive Relief....15

IV. Settlement Payments....16

V. Allocation and Use of Settlement Payments....31

VI. Enforcement....38

VII. Participation by Subdivisions....43

VIII. Condition to Effectiveness of Agreement and Filing of Consent Judgment....46

IX. Additional Remediation....46

X. Plaintiffs' Attorneys' Fees and Costs....47

XI. Release....47

XII. Later Litigating Subdivisions; Non-Settling States....52

XIII. Miscellaneous....53

EXHIBIT A – Alleged Harms....A-1

EXHIBIT B – Enforcement Committee Organization Bylaws....B-1

EXHIBIT C – Litigation Subdivision List....C-1

EXHIBIT D – [Intentionally Omitted]....D-1

EXHIBIT E – List of Opioid Remediation Uses....E-1

EXHIBIT F – List of States and Allocation Percentages....F-1

EXHIBIT G – Subdivisions Eligible to Receive Direct Allocations from the Subdivision Fund and Subdivision Fund Allocation Percentages....G-1

EXHIBIT H – [Intentionally Omitted]....H-1

EXHIBIT I – Primary Subdivisions....I-1

EXHIBIT J – Illustrative List of Released Entities....J-1

EXHIBIT K – Subdivision Participation Form and Release K-1

EXHIBIT L – Settlement Fund Administrator L-1

EXHIBIT M – Maximum Payment Amounts M-1

EXHIBIT N – Additional Remediation Amount Allocation Percentages N-1

EXHIBIT O – Adoption of a State-Subdivision Agreement O-1

EXHIBIT P – Injunctive Relief P-1

EXHIBIT Q – [Intentionally Omitted] Q-1

EXHIBIT R – Agreement on Attorneys' Fees, Costs, and Expenses R-1

EXHIBIT S – Agreement on the State Outside Counsel Fee Fund S-1

EXHIBIT T – Agreement on the Joint State Cost Fund T-1

EXHIBIT U – IRS Form 1098-F U-1

EXHIBIT V – CVS Settlement Agreement Sign-on Form V-1

EXHIBIT W – Non-Litigating Threshold Subdivisions List W-1

EXHIBIT X – Governor's Release of Opioid-Related Claims X-1

CVS SETTLEMENT AGREEMENT

This Settlement Agreement, dated as of December 9, 2022 (the "*Agreement*"), sets forth the terms of settlement between and among the Settling States, CVS, and the Participating Subdivisions (as those terms are defined below). Upon satisfaction of the conditions set forth in Section II and Section VIII, this Agreement will be binding on all Settling States, Participating Subdivisions, and CVS. This Agreement will then be submitted for entry as part of Consent Judgments in the respective courts of each of the Settling States, pursuant to the terms set forth in Section VIII.

WHEREAS, certain States and Subdivisions have filed or could file Actions in various forums against CVS raising Claims or allegations concerning, related to, based upon, or in connection with the Alleged Harms and/or the Covered Conduct;

WHEREAS, CVS (i) denies each and all of the Claims and allegations of wrongdoing made by the States and Litigating Subdivisions in each of the Actions and maintains that it has meritorious defenses; (ii) denies all assertions of wrongdoing or liability against CVS arising out of any of the conduct, statements, acts or omissions alleged, or that could have been alleged, in the Actions already brought or that could be brought by any State or Subdivision related to the Covered Conduct and/or Alleged Harms and contends that the factual allegations made in the current Actions relating to CVS are false and materially inaccurate; (iii) denies that any State, Subdivision, or resident thereof was harmed by any conduct of CVS; (iv) denies liability, denies any wrongdoing, and denies it violated any federal or state statute, regulation, or common law; and (v) maintains that CVS would be able to successfully defend against the Claims and allegations at trial, that the facts do not support the allegations, that CVS engaged in no misconduct or unlawful activity, and that CVS caused no harm to any State, Subdivision, or resident thereof;

WHEREAS, the Parties have investigated the facts and analyzed the relevant legal issues regarding the Claims and defenses that have been or could have been asserted in the Actions;

WHEREAS, the Parties have determined that it is preferable to resolve any Claims the States and Subdivisions may have through a cooperative and mutually beneficial settlement that provides funding to remediate Alleged Harms;

WHEREAS, the Parties have each considered the costs, delays and uncertainty associated with the continued prosecution and defense of the Actions;

WHEREAS, the Parties believe the settlement set forth herein avoids the uncertainties of litigation and assures that the benefits reflected herein are obtained;

WHEREAS, the States have concluded that the terms of the settlement are fair, reasonable and adequate and in the best interests of the States and all Subdivisions and citizens and residents of the States;

WHEREAS, the Parties have agreed to the terms herein for the sole purpose of settlement, and nothing herein may be taken as or construed to be an admission or concession of any violation

of law, rule, or regulation, or of any other matter of fact or law, or of any liability or wrongdoing or lack thereof;

WHEREAS, no part of this Agreement, including its statements and commitments, shall constitute evidence of any liability, fault, or wrongdoing, or of any lack thereof; and

WHEREAS, unless the contrary is expressly stated, this Agreement is not intended for use by any Party or any third party for any purpose not expressly stated herein, including submission to any court for any purpose other than Court approvals associated with this Agreement.

NOW, THEREFORE, IT IS HEREBY AGREED by and between the Settling States, Participating Subdivisions, and CVS, by and through their respective counsel, as follows:

I. Definitions

For all sections of this Agreement except Exhibit E and Exhibit P, the following definitions apply:

A. "*Actions*" means any lawsuit by a Settling State or Participating Subdivision asserting any Released Claim against one or more Released Entities.

B. "*Additional Remediation Amount*" means the amount available to the Settling States totaling up to $28,527,739.

C. "*Advisory Committee*" has the meaning set forth in Section V.E.2.d.

D. "*Agreement*" has the definition set forth in the preamble, including all exhibits.

E. "*Alleged Harms*" means the alleged past, present, and future financial and societal harms and related expenditures arising out of the alleged misuse and abuse of Products, non-exclusive examples of which are described in the documents listed on Exhibit A, including those expenditures that have allegedly arisen as a result of the physical and bodily injuries sustained by individuals suffering from opioid-related addiction, abuse, death, and other related diseases and disorders, and that have allegedly been caused by CVS.

F. "*Allocation Statute*" means a state law that governs allocation, distribution, and/or use of some or all of the Settlement Fund amounts allocated to that State and/or its Subdivisions. In addition to modifying the allocation as set forth in Section V.D.2, an Allocation Statute may, without limitation, contain a Statutory Trust, further restrict expenditures of funds, form an advisory committee, establish oversight and reporting requirements, or address other default provisions and other matters related to the funds. An Allocation Statute is not required to address all three (3) types of funds comprising the Settlement Fund or all default provisions.

G. "*Annual Payment*" means the total amount payable to the Settlement Fund Administrator by CVS on the Payment Date each year, as calculated by the Settlement Fund Administrator pursuant to Section IV.C.3. For the avoidance of doubt, this term does not include the Additional Remediation Amount, amounts paid pursuant to Section X, amounts paid for the

cost of the Settlement Fund Administrator pursuant to Section V.C.4, or amounts paid for the cost of the Implementation Administrator pursuant to Section VIII.A.

H. "*Appropriate Official*" has the meaning set forth in Section XIII.F.3.

I. "*Base Payment*" has the meaning set forth in Section IV.G.

J. "*Bankruptcy Code*" means Title 11 of the United States Code, 11 U.S.C. §§ 101, *et seq.*

K. "*Bar*" means either: (1) a law barring Subdivisions in a State from maintaining Released Claims against Released Entities (either through a direct bar or through a grant of authority to release claims and the exercise of such authority in full); or (2) a ruling by the highest court of the State (or, in a State with a single intermediate court of appeals, the intermediate court of appeals when not subject to further review by the highest court of the State) setting forth the general principle that Subdivisions in the State may not maintain any Released Claims against Released Entities, whether on the ground of this Agreement (or the release in it) or otherwise. For the avoidance of doubt, a law or ruling that is conditioned or predicated upon payment by a Released Entity (apart from payments made by CVS under this Agreement) shall not constitute a Bar.

L. "*Case-Specific Resolution*" means either: (1) a law barring the Subdivision at issue from maintaining any Released Claims against any Released Entities (either through a direct bar or through a grant of authority to release claims and the exercise of such authority in full); or (2) a ruling by a court of competent jurisdiction over the Subdivision at issue that the Subdivision may not maintain any Released Claims at issue against any Released Entities, whether on the ground of this Agreement (or the release in it) or otherwise. For the avoidance of doubt, a law or ruling that is conditioned or predicated upon payment by a Released Entity (apart from payments made by CVS under this Agreement) shall not constitute a Case-Specific Resolution.

M. "*Claim*" means any past, present or future cause of action, claim for relief, cross-claim or counterclaim, theory of liability, demand, derivative claim, request, assessment, charge, covenant, damage, debt, lien, loss, penalty, judgment, right, obligation, dispute, suit, contract, controversy, agreement, *parens patriae* claim, promise, performance, warranty, omission, or grievance of any nature whatsoever, whether legal, equitable, statutory, regulatory or administrative, whether arising under federal, state or local common law, statute, regulation, guidance, ordinance or principles of equity, whether filed or unfiled, whether asserted or unasserted, whether known or unknown, whether accrued or unaccrued, whether foreseen, unforeseen or unforeseeable, whether discovered or undiscovered, whether suspected or unsuspected, whether fixed or contingent, and whether existing or hereafter arising, in all such cases, including but not limited to any request for declaratory, injunctive, or equitable relief, compensatory, punitive, or statutory damages, absolute liability, strict liability, restitution, abatement, subrogation, contribution, indemnity, apportionment, disgorgement, reimbursement, attorney fees, expert fees, consultant fees, fines, penalties, expenses, costs or any other legal, equitable, civil, administrative, or regulatory remedy whatsoever.

N. "*Claim-Over*" means a Claim asserted by a Non-Released Entity against a Released Entity on the basis of contribution, indemnity, or other claim-over on any theory relating to a Non-Party Covered Conduct Claim asserted by a Releasor.

O. "*Consent Judgment*" means a state-specific consent judgment in a form to be agreed by the Settling States and CVS prior to the Initial Subdivision Participation Date that, among other things, (1) approves this Agreement and (2) provides for the release set forth in Section XI.A, including the dismissal with prejudice of any Released Claims that the Settling State has brought against Released Entities.

P. "*Covered Conduct*" means any actual or alleged act, failure to act, negligence, statement, error, omission, breach of any duty, conduct, event, transaction, agreement, misstatement, misleading statement or other activity of any kind whatsoever from the beginning of time through the Effective Date (and any past, present or future consequence of any such act, failure to act, negligence, statement, error, omission, breach of duty, conduct, event, transaction, agreement, misstatement, misleading statement or other activity) in any line of business arising from or relating in any way to: (1) the distribution, dispensing, delivery, monitoring, reporting, supply, sale, prescribing, physical security, warehousing, coverage, purchases, reimbursement, discovery, development, manufacture, packaging, repackaging, marketing, promotion, advertising, labeling, recall, withdrawal, and/or any similar act or failure to act related to any Product; the use and/or abuse of any Product; orders, prescriptions, formularies, guidelines, payments and/or rebates for any Product; policies, practices and/or operating procedures, statements, contracts, commercial arrangements, insurance, claim and/or benefit administration, claim adjudication, plan design, data and/or sales thereof, and/or any similar act or failure to act relating to any Product; and/or any system, plan, policy and/or advocacy relating to any Product, including but not limited to unbranded promotion, marketing, programs, and/or campaigns related to any Product and/or class of Products; (2) the characteristics, properties, risks and/or benefits of any Product; (3) the reporting, disclosure, non-reporting and/or non-disclosure to federal, state and/or other regulators of orders and/or prescriptions, theft, diversion and/or any similar conduct related to any Product; (4) the purchasing, selling, acquiring, disposing of, importing, exporting, handling, processing, packaging, supplying, distributing, and/or converting any Product; and (5) controls against diversion, corresponding responsibility, and/or suspicious order monitoring related to any Product.

Q. "*CVS*" means CVS Health Corporation and CVS Pharmacy, Inc. and all of their past and present direct and indirect parents and subsidiaries. For the avoidance of doubt, this definition shall not in any way limit the definition of Released Entities.

R. "*Designated State*" means New York.

S. "*Effective Date*" means fifteen (15) calendar days after the Reference Date.

T. "*Eligible State*" means the states, commonwealths, and territories of the United States of America, but excluding Florida, New Mexico, and West Virginia. Eligible States are listed in Exhibit F-2. The use of non-capitalized "state" to describe something (*e.g.*, "state court") shall also be read to include parallel entities in commonwealths, territories, and the District of Columbia (*e.g.*, "territorial court").

U. "*Enforcement Committee*" means a committee consisting of certain representatives of the Settling States and of the Participating Subdivisions selected and operating pursuant to the organizational bylaws set forth at Exhibit B. Notice pursuant to Section XIII.Q shall be provided when there are changes in membership or contact information.

V. "*Final Order*" means an order or judgment of a court of competent jurisdiction with respect to the applicable subject matter (1) which has not been reversed or superseded by a modified or amended order, is not currently stayed, and as to which any right to appeal or seek *certiorari*, review, reargument, stay, or rehearing has expired, and as to which no appeal or petition for *certiorari*, review, reargument, stay, or rehearing is pending, or (2) as to which an appeal has been taken or petition for *certiorari*, review, reargument, stay, or rehearing has been filed and (a) such appeal or petition for *certiorari*, review, reargument, stay, or rehearing has been resolved by the highest court to which the order or judgment was appealed or from which *certiorari*, review, reargument, stay, or rehearing was sought, or (b) the time to appeal further or seek *certiorari*, review, reargument, stay, or rehearing has expired and no such further appeal or petition for *certiorari*, review, reargument, stay, or rehearing is pending.

W. "*Global Settlement Amount*" means the sum of (a) the Maximum Remediation Payment, (b) the Additional Remediation Amount, and (c) any attorneys' fees and costs set forth in Exhibit R, Exhibit S and Exhibit T.

X. "*Implementation Administrator*" means the vendor agreed to by CVS and the Enforcement Committee and retained by CVS to provide notice pursuant to Section VII.A and to manage the initial joinder period for Subdivisions, including the issuance and receipt of Subdivision Participation Agreements.

Y. "*Incentive C Eligible Subdivisions*" has the meaning set forth in Section IV.H.8.e.

Z. "*Incentive A*" and "*Incentive Payment A*" mean the incentive payment described in Section IV.H.6.

AA. "*Incentive B"* and "*Incentive Payment B*" mean the incentive payment described in Section IV.H.7.

BB. "*Incentive C"* and "*Incentive Payment C*" mean the incentive payment described in Section IV.H.8.

CC. "*Incentive Payment D*" means the incentive payment described in Section IV.H.9.

DD. "*Incentive Payment D Look-Back Dates*" has the meaning set forth in Section IV.H.9.d.

EE. "*Initial Participating Subdivision*" means a Subdivision that meets the requirements set forth in Section VII.D.

FF. "*Initial Subdivision Participation Date*" means ninety (90) calendar days after the Preliminary Agreement Date, unless it is extended by written agreement of CVS and the Enforcement Committee.

GG. "*Injunctive Relief Terms*" means the terms described in Section III and set forth in Exhibit P.

HH. "*Later Litigating Subdivision*" means a Subdivision (or Subdivision official asserting the right of or for the Subdivision to recover for Alleged Harms to the Subdivision and/or the people thereof) that: (1) first files a lawsuit bringing a Released Claim against a Released Entity after the Initial Subdivision Participation Date; or (2) adds a Released Claim against a Released Entity after the Initial Subdivision Participation Date to a lawsuit brought before the Initial Subdivision Participation Date that, prior to the Initial Subdivision Participation Date, did not include any Released Claims against a Released Entity; or (3) (a) was a Litigating Subdivision whose Released Claims against Released Entities were resolved by a legislative Bar or legislative Case-Specific Resolution as of the Initial Subdivision Participation Date, (b) such legislative Bar or legislative Case-Specific Resolution is subject to a Revocation Event after the Initial Subdivision Participation Date, and (c) the earlier of the date of completion of opening statements in a trial in an action brought by a Subdivision in that Settling State that includes a Released Claim against a Released Entity or one hundred eighty (180) days from the Revocation Event passes without a Bar or Case-Specific Resolution being implemented as to that Litigating Subdivision or the Litigating Subdivision's Released Claims being dismissed; or (4) (a) was a Litigating Subdivision whose Released Claims against Released Entities were resolved by a judicial Bar or judicial Case-Specific Resolution as of the Initial Subdivision Participation Date, (b) such judicial Bar or judicial Case-Specific Resolution is subject to a Revocation Event after the Initial Subdivision Participation Date, and (c) such Litigating Subdivision takes any action in its lawsuit asserting a Released Claim against a Released Entity other than seeking a stay or dismissal.

II. "*Later Participating Subdivision*" means a Participating Subdivision that is not an Initial Participating Subdivision, but meets the requirements set forth in Section VII.E.

JJ. "*Litigating Subdivisions*" means all Subdivisions that have brought any Released Claim against any Released Entities as of the Initial Subdivision Participation Date. Attached as Exhibit C is a list of the Litigating Subdivisions in each Eligible State. Exhibit C will be updated (including with any corrections) periodically, and a final version of Exhibit C will be attached hereto as of the Initial Subdivision Participation Date.

KK. "*Maximum Remediation Payment*" means $4,279,160,837, the total amount available to Eligible States for Annual Payments as set forth in Exhibit M-1.[1] The actual amount paid for Annual Payments is subject to reduction from the Maximum Remediation Payment for

[1] The total maximum amount of this settlement is up to $5,022,083,578, which includes (i) up to $4,279,160,837 in the Maximum Remediation Payment; (ii) up to $539,457,124 in Common Benefit and Subdivision Attorneys' Fees, Expenses and Costs; (iii) up to $85,583,217 in the State Outside Counsel Fee Fund, State Cost Fund and Additional Remediation Amount; (iv) a credit of $117,882,400 for CVS's settlements with the state of New Mexico, state of West Virginia, and Nassau County and Suffolk County of New York. In no event shall CVS's payment obligation under this Agreement exceed the sum of (i)-(iii) above ($4,904,201,178).

Non-Settling States, unachieved incentive payments, and as otherwise set forth in this Agreement. In no event shall CVS's total Annual Payments under this Agreement ever exceed the Maximum Remediation Payment.

LL. "*Maximum Annual Remediation Payments*" means the total amount available to Eligible States for Annual Payments in each Payment Year as set forth in the "Total Remediation" column of Exhibit M-1. In no event shall an Annual Payment in Payment Years 1-5 exceed the Maximum Annual Remediation Payment for that Payment Year set forth in Exhibit M-1. For Payment Years 6-10, the Annual Payment may exceed the Maximum Annual Remediation Payment for that Payment Year only to the extent needed for Incentive Payment D for a Settling State that has not earned some or all Incentive Payment C in prior Payment Years, having resulted in correspondingly lower Annual Payments in those prior Payment Years. In no event shall an Annual Payment in Payment Years 6-10 exceed the range set forth in Exhibit M-2 for that Payment Year. For the avoidance of doubt, in no event shall the Annual Payments in Payment Years 6-10 cause CVS's total Annual Payments to exceed the Maximum Remediation Payment.

MM. "*National Arbitration Panel*" means the panel comprised as described in Section VI.F.3.b.

NN. "*National Disputes*" has the meaning set forth in Section VI.F.3.a.

OO. "*Non-Litigating Subdivision*" means any Subdivision that is neither a Litigating Subdivision nor a Later Litigating Subdivision.

PP. "*Non-Litigating Threshold Subdivision*" means (a) all Primary Subdivisions with populations equal to or greater than 30,000 that have not brought a Released Claim against any Released Entity as of the Initial Subdivision Participation Date and (b) any other Primary Subdivisions with populations between 10,000 and 30,000 that have not brought a Released Claim against any Released Entity but have brought a claim related to Products, including any Claims related to the Covered Conduct and/or Alleged Harms, against McKesson, AmerisourceBergen, Cardinal Health, Janssen Pharmaceuticals, or any parents, subsidiaries, divisions, predecessors, successors, and assigns of McKesson, AmerisourceBergen, Cardinal Health, or Janssen Pharmaceuticals. Attached as Exhibit W is a list of the Non-Litigating Threshold Subdivisions in each Eligible State. Exhibit W will be updated (including with any corrections) periodically, and a final version of Exhibit W will be attached hereto as of the Initial Subdivision Participation Date.

QQ. "*Non-Participating Subdivision*" means any Subdivision that is not a Participating Subdivision.

RR. "*Non-Party Covered Conduct Claim*" means a Claim against any Non-Released Entity involving, arising out of, or related to Alleged Harms and/or Covered Conduct (or conduct that would be Covered Conduct if engaged in by a Released Entity).

SS. "*Non-Party Settlement*" means a settlement by any Releasor that settles any Non-Party Covered Conduct Claim and includes a release of any Non-Released Entity.

TT. "*Non-Released Entity*" means an entity that is not a Released Entity.

UU. "*Non-Settling State*" means any Eligible State that is not a Settling State.

VV. "*Opioid Remediation*" means care, treatment, and other programs and expenditures (including reimbursement for past such programs or expenditures[2] except where this Agreement restricts the use of funds solely to future Opioid Remediation) designed to remediate Alleged Harms, including to (1) address the misuse and abuse of opioid products, (2) treat or mitigate opioid use or related disorders, or (3) mitigate other alleged effects of, including on those injured as a result of, the opioid epidemic. Exhibit E provides a non-exhaustive list of expenditures that qualify as being paid for Opioid Remediation. Qualifying expenditures may include reasonable related administrative expenses.

WW. "*Opioid Tax*" means any tax, assessment, surcharge or any other fee (other than a fixed prospective excise tax or similar tax or fee that has no restriction on pass-through) imposed by a Settling State on a pharmacy's ordering or dispensing of opioid products. For the avoidance of doubt, an Opioid Tax shall not include a fee that a retail pharmacy pays to become registered or licensed to operate as a retail pharmacy or to dispense controlled substances in a Settling State, or to renew such a registration or license in a Settling State.

XX. "*Overall Allocation Percentage*" means a Settling State's percentage as set forth in Exhibit F-2. For the avoidance of doubt, the aggregate Overall Allocation Percentage of all Eligible States (including Settling States and Non-Settling States) shall equal one hundred percent (100%).

YY. "*Participating Subdivision*" means any Subdivision in a Settling State that joins the Agreement and meets the requirements for becoming a Participating Subdivision under Section VII.B or Section VII.C, as applicable.

ZZ. "*Participation Percentage of Incentive C Eligible Subdivision Population*" has the meaning set forth in Section IV.H.8.d.

AAA. "*Participation Percentage of Litigating Subdivision Population*" has the meaning set forth in Section IV.H.7.d.

BBB. "*Parties*" means CVS and the Settling States (each, a "*Party*").

CCC. "*Payment Year*" means the calendar year during which the applicable Annual Payment is due pursuant to Section IV.B. Payment Year 1 is 2023, Payment Year 2 is 2024 and so forth. References to payment "*for a Payment Year*" mean the Annual Payment due during that year. References to eligibility "*for a Payment Year*" mean eligibility for Annual Payment during that year.

DDD. "*Preliminary Agreement Date*" has the meaning set forth in Section II.C.

EEE. "*Primary Fire District*" means a fire district that covers a population of 25,000, or 0.20% of an Eligible State's population if an Eligible State's population is greater than 18 million.

[2] Reimbursement includes amounts paid to any governmental entities for past expenditures or programs.

If not easily calculable from state data sources and agreed to between the Eligible State and CVS, a fire district's population is calculated by dividing the population of the county or counties a fire district serves by the number of fire districts in the county or counties. "Primary Fire Districts" shall mean fire districts as identified in connection with the implementation of the July 21, 2021 Janssen Settlement Agreement.

FFF. "*Primary Subdivision*" means any General-Purpose Government (including, but not limited to, a municipality, county, county subdivision, city, town, township, parish, village, borough, gore, or any other entities that provide municipal-type government) with a population over 10,000. Attached as Exhibit I is an agreed list of the Primary Subdivisions in each Eligible State.

GGG. "*Prior Litigating Subdivision*" means a Subdivision (or Subdivision official) that brought any Released Claim against any Released Entity prior to the Initial Subdivision Participation Date and all such Released Claims were separately settled or finally adjudicated prior to the Initial Subdivision Participation Date; *provided, however*, that if the final adjudication was pursuant to a Bar, such Subdivision shall not be considered a Prior Litigating Subdivision. Notwithstanding the prior sentence, CVS and the Settling State of the relevant Subdivision may agree in writing that the Subdivision shall not be considered a Prior Litigating Subdivision.

HHH. "*Product*" means any chemical substance, whether licit or illicit, whether used for medicinal or non-medicinal purposes, and whether natural, synthetic, or semi-synthetic, or any finished pharmaceutical product made from or with such substance, that is (1) an opioid or opiate, as well as any product containing any such substance; (2) a benzodiazepine, a muscle relaxer, carisoprodol, zolpidem, or gabapentin; or (3) a combination or "cocktail" of any stimulant or other chemical substance prescribed, sold, bought, or dispensed to be used together that includes opioids or opiates. "Product" shall include, but is not limited to, any substance consisting of or containing buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, oxycodone, oxymorphone, tapentadol, tramadol, opium, heroin, carfentanil, diazepam, estazolam, quazepam, alprazolam, clonazepam, oxazepam, flurazepam, triozolam, temazepam, midazolam, carisoprodol, gabapentin, or any variant of these substances or any similar substance. Notwithstanding the foregoing, nothing in this section prohibits a Settling State from taking administrative or regulatory action related to a benzodiazepine (including, but not limited to, diazepam, estazolam, quazepam, alprazolam, clonazepam, oxazepam, flurazepam, triozolam, temazepam, and midazolam), a muscle relaxer, carisoprodol, zolpidem, or gabapentin that is wholly independent from the use of such drugs in combination with opioids, provided such action does not seek money (including abatement and/or remediation) for conduct prior to the Effective Date.

III. "*Reference Date*" means the date on which CVS is to provide notice to the Settling States and the Enforcement Committee of its determination whether to proceed with this Agreement as required by Section VIII.B. The Reference Date shall be no later than thirty (30) days after the Initial Subdivision Participation Date, unless it is extended by the written agreement of CVS and the Enforcement Committee.

JJJ. "*Released Claims*" means any and all Claims that directly or indirectly are based on, arise out of, or in any way relate to or concern Covered Conduct and/or Alleged Harms occurring prior to the Initial Subdivision Participation Date. Without limiting the foregoing, "Released Claims" include any Claims that have been asserted against the Released Entities by any Settling State or any of its Litigating Subdivisions or Litigating Special Districts in any federal, state or local action or proceeding (whether judicial, arbitral, or administrative) based on, arising out of or relating to, in whole or in part, the Covered Conduct and/or Alleged Harms, or any such Claims that could be or could have been asserted now or in the future in those actions or in any comparable action or proceeding brought by a State, any of its Subdivisions or Special Districts, or any Releasors (whether or not such State, Subdivision, Special District, or Releasor has brought such action or proceeding). Released Claims also include all Claims asserted in any proceeding to be dismissed pursuant to the Agreement, whether or not such claims relate to Covered Conduct and/or Alleged Harms. The Parties intend that "Released Claims" be interpreted broadly. This Agreement does not release Claims by private individuals. It is the intent of the Parties that the use and/or effect of this Agreement in connection with Claims by private individuals be treated in accordance with applicable law. Released Claims is also used herein to describe Claims brought by a Later Litigating Subdivision or other non-party Subdivision that would have been Released Claims if they had been brought by a Releasor against a Released Entity.

KKK. "*Released Entities*" means CVS and (1) all of CVS's past and present direct or indirect parents, subsidiaries, divisions, predecessors, successors, and assigns; (2) the past and present direct or indirect parents, subsidiaries, divisions, predecessors, successors, assigns, and joint ventures of any of the foregoing; (3) all of CVS's insurers (solely in their role as insurers with respect to the Released Claims); (4) all of CVS's, or of any entity described in subsection (1), past and present joint ventures; and (5) the respective past and present officers, directors, members, shareholders (solely in their capacity as shareholders of the foregoing entities), partners, trustees, and employees of any of the foregoing (for actions that occurred during and related to their work for, or employment with, CVS). Any person or entity described in subsections (3)-(5) shall be a Released Entity solely in the capacity described in such clause and shall not be a Released Entity with respect to its conduct in any other capacity. For the avoidance of doubt, any joint venture partner of a joint venture in subsection (2) or (4) is not a Released Entity unless such entity independently falls within subsections (1)-(5) above. An illustrative list of CVS's present joint ventures, subsidiaries, affiliates and predecessor entities is set forth in Exhibit J. With respect to joint ventures (including predecessor entities), only entities listed on Exhibit J are Released Entities. Current or former defendants in *In re: National Prescription Opiate Litigation*, No. 1:17-md-2804 (N.D. Ohio) ("*MDL*") (or in other pending litigation asserting a Claim for Covered Conduct, as identified in the *"National Opiate Litigation – Case and Defendant Extract"* provided to CVS by the Plaintiffs' Executive Committee on November 22, 2022) not identified in Exhibit J are not considered Released Entities, *provided, however*, that any CVS entities that fall within clauses (1)-(5) above against whom Released Claims are brought in the MDL on or after December 9, 2022 shall be considered Released Entities even if not listed on Exhibit J. For the avoidance of doubt, any entity acquired, or joint venture entered into, by CVS before the Initial Subdivision Participation Date is a Released Entity, but any entity acquired, or joint venture entered into, by CVS after the Initial Subdivision Participation Date is not a Released Entity.

LLL. "*Releasors*" means (1) each Settling State; (2) each Participating Subdivision; and (3) without limitation and to the maximum extent of the power of each Settling State's Attorney General and/or Participating Subdivision to release Claims, (a) the Settling State's and Participating Subdivision's departments, agencies, divisions, boards, commissions, Subdivisions, districts, instrumentalities of any kind and attorneys, including its Attorney General, and any person in their official capacity whether elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, (b) any public entities, public instrumentalities, public educational institutions, unincorporated districts, fire districts, irrigation districts, water districts, law enforcement districts, emergency services districts, school districts, hospital districts and other Special Districts in a Settling State, and (c) any person or entity acting in a *parens patriae*, sovereign, quasi-sovereign, private attorney general, qui tam, taxpayer, or other capacity seeking relief on behalf of or generally applicable to the general public with respect to a Settling State or Subdivision in a Settling State, whether or not any of them participate in the Agreement. The inclusion of a specific reference to a type of entity in this definition shall not be construed as meaning that the entity is not a Subdivision. Each Settling State's Attorney General represents that he or she has or has obtained (or will obtain no later than the Initial Subdivision Participation Date) the authority set forth in Section XI.G. In addition to being a Releasor as provided herein, a Participating Subdivision shall also provide the Subdivision Participation Agreement referenced in Section VII providing for a release to the fullest extent of the Participating Subdivision's authority.

MMM. "*Remediation Accounts Fund*" means the component of the Settlement Fund described in Section V.E.

NNN. "*Revocation Event*" means, with respect to a Bar, Settlement Class Resolution, or Case-Specific Resolution, a revocation, rescission, reversal, overruling, or interpretation that in any way limits the effect of such Bar, Settlement Class Resolution, or Case-Specific Resolution on Released Claims, or any other action or event that otherwise deprives the Bar, Settlement Class Resolution, or Case-Specific Resolution of force or effect in any material respect.

OOO. "*Settlement Class Resolution*" means a class action resolution in a court of competent jurisdiction in a Settling State (that is not successfully removed to federal court) with respect to a class of Subdivisions in that Settling State that (1) conforms with that Settling State's statutes, case law, and rules of procedure regarding class actions; (2) is approved and entered as an order of a court of competent jurisdiction in that Settling State and such order has become a Final Order; (3) is binding on all Non-Participating Subdivisions in that Settling State (other than opt outs as permitted under the next sentence); (4) provides that all such Non-Participating Subdivisions may not bring any Released Claims against any Released Entities, whether on the ground of this Agreement (or the releases herein) or otherwise; and (5) does not impose any costs or obligations on CVS other than those provided for in this Agreement, or contain any provision inconsistent with any provision of this Agreement. If applicable state law requires that opt-out rights be afforded to members of the class, a class action resolution otherwise meeting the foregoing requirements shall qualify as a Settlement Class Resolution unless Subdivisions collectively representing more than one percent (1%) of the total population of that Settling State opt out. In seeking certification of any Settlement Class, the applicable Settling State and Participating Subdivisions shall make clear that certification is sought solely for settlement

purposes and shall have no applicability beyond approval of the settlement for which certification is sought. Nothing in this Agreement constitutes an admission by any Party that class certification would be appropriate for litigation purposes in any case or for purposes unrelated to this Agreement.

PPP. "*Settlement Fund*" means the interest-bearing fund established pursuant to this Agreement into which the payment under Section IV is made. The Settlement Fund is comprised of the Remediation Accounts Fund, State Fund, and Subdivision Fund.

QQQ. "*Settlement Fund Administrator*" means the entity that determines the payments and reversions due under Section IV and Section IX, including annually determining the Payout Amount and calculating incentive payments, administers the Settlement Fund, and distributes amounts into three sub-funds (the Remediation Accounts Fund, State Fund, and Subdivision Fund) pursuant to this Agreement. The duties of the Settlement Fund Administrator shall be governed by this Agreement. Prior to the Initial Subdivision Participation Date, CVS and the Enforcement Committee shall agree to selection and removal processes for and the identity of the Settlement Fund Administrator, and a detailed description of the Settlement Fund Administrator's duties and responsibilities, including a detailed mechanism for paying the Settlement Fund Administrator's fees and costs, all of which shall be appended to the Agreement as Exhibit L.

RRR. "*Settling State*" means an Eligible State that has entered into this Agreement with CVS and delivers an executed State Participation Form and executed releases in accordance with Section II.A.

SSS. "*State Global Allocation Percentage*" means the allocation percentages for all States as set forth in Exhibit F-1, which represents allocations before adjusting for States that are not Eligible States due to prior settlements with CVS (Florida, New Mexico, and West Virginia).

TTT. "*State Fund*" means the component of the Settlement Fund described in Section V.C.

UUU. "*State Participation Form*" means the form attached as Exhibit V.

VVV. "*State Participation Date*" has the meaning set forth in Section II.A.

WWW. "*State-Subdivision Agreement*" means an agreement that a Settling State reaches with the Subdivisions in that Settling State regarding the allocation, distribution, and/or use of funds allocated to that Settling State and to its Subdivisions. A State-Subdivision Agreement shall be effective if approved pursuant to the provisions of Exhibit O or if adopted by statute. Preexisting agreements addressing funds other than those allocated pursuant to this Agreement shall qualify if the approval requirements of Exhibit O are met. A Settling State and its Subdivisions may revise a State-Subdivision Agreement if approved pursuant to the provisions of Exhibit O, or if such revision is adopted by statute.

XXX. "*Statewide Payment Amount"* means the amount from an Annual Payment to be paid to a Settling State, its separate types of funds (if applicable), and its Participating Subdivision listed on Exhibit G.

YYY. "*Statutory Trust*" means a trust fund established by state law to receive funds allocated to a Settling State's Remediation Accounts Fund and restrict any expenditures made using funds from such Settling State's Remediation Accounts Fund to Opioid Remediation, subject to reasonable administrative expenses. A Settling State may give a Statutory Trust authority to allocate one (1) or more of the three (3) types of funds comprising such State's Settlement Fund, but this is not required.

ZZZ. "*Subdivision*" means any (1) General-Purpose Government (including, but not limited to, a municipality, county, county subdivision, city, town, township, parish, village, borough, gore, or any other entities that provide municipal-type government), School District, or Special District within a Settling State, and (2) any other subdivision, subdivision official (acting in an official capacity on behalf of the subdivision) or sub-entity of or located within a Settling State (whether political, geographical or otherwise, whether functioning or non-functioning, regardless of population overlap, and including, but not limited to, nonfunctioning governmental units and public institutions) that has filed a lawsuit that includes a Released Claim against a Released Entity in a direct, *parens patriae*, or any other capacity. "General-Purpose Government," "School District," and "Special District" shall correspond to the "five basic types of local governments" recognized by the U.S. Census Bureau and match the 2017 list of Governmental Units.[3] The three (3) General-Purpose Governments are county, municipal, and township governments; the two (2) special purpose governments are School Districts and Special Districts.[4] The terms "Fire District," "Health District," "Hospital District," and "Library District" shall correspond to categories of Special Districts recognized by the U.S. Census Bureau.[5] References to a Settling State's Subdivisions or to a Subdivision "in," "of," or "within" such Settling State include Subdivisions located within the Settling State even if they are not formally or legally a sub-entity of such Settling State; *provided*, *however*, that a "health district" that includes any of the following words or phrases in its name shall not be considered a Subdivision: mosquito, pest, insect, spray, vector, animal, air quality, air pollution, clean air, coastal water, tuberculosis, and sanitary.

AAAA. "*Subdivision Allocation Percentage*" means the portion of a Settling State's Subdivision Fund set forth in Exhibit G that a Subdivision will receive pursuant to Section V.C or Section V.D if it becomes a Participating Subdivision. The aggregate Subdivision Allocation Percentage of all Subdivisions receiving a Subdivision Allocation Percentage in each State shall equal one hundred percent (100%). Immediately upon the effectiveness of any State-Subdivision

[3] https://www.census.gov/data/datasets/2017/econ/gus/public-use-files.html.

[4] *E.g.*, U.S. Census Bureau, "Technical Documentation: 2017 Public Use Files for State and Local Government Organization" at 7 (noting that "the Census Bureau recognizes five basic types of local governments," that three of those are "general purpose governments" (county governments, municipal governments, and township governments), and that the other two are "school district and special district governments"), https://www2.census.gov/programs-surveys/gus/datasets/2017/2017_gov_org_meth_tech_doc.pdf.

[5] A list of 2017 Government Units provided by the Census Bureau identifies 38,542 Special Districts and categorizes them by "FUNCTION_NAME." "Govt_Units_2017_Final" spreadsheet, "Special District" sheet, included in "Independent Governments - list of governments with reference information," https://www.census.gov/data/datasets/2017/econ/gus/public-use-files.html. As used herein, "fire district" corresponds to Special District function name "24 – Local Fire Protection," "Health District" corresponds to Special District function name "32 – Health," "Hospital District" corresponds to Special District function name "40 – Hospitals," and "Library District" corresponds to Special District function name "52 – Libraries." *See id.*

Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3) that addresses allocation from the Subdivision Fund, whether before or after the Initial Subdivision Participation Date, Exhibit G will automatically be amended to reflect the allocation from the Subdivision Fund pursuant to the State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3. The Subdivision Allocation Percentages contained in Exhibit G may not change once notice is distributed pursuant to Section VII.A, except upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3) that addresses allocation from the Subdivision Fund. For the avoidance of doubt, no Subdivision not listed on Exhibit G shall receive an allocation from the Subdivision Fund and no provision of this Agreement shall be interpreted to create such an entitlement.

BBBB. "*Subdivision Fund*" means the component of the Settlement Fund described in Section V.C.

CCCC. "*Subdivision Participation Agreement*" means the form of agreement attached as Exhibit K that Participating Subdivisions must execute and return to the Implementation Administrator or Settlement Fund Administrator.

DDDD. "*Threshold Motion*" means a motion to dismiss or equivalent dispositive motion made at the outset of litigation under applicable procedure. A Threshold Motion must include as potential grounds for dismissal any applicable Bar or the relevant release by a Settling State or Participating Subdivision provided under this Agreement and, where appropriate under applicable law, any applicable limitations defense.

EEEE. "*Total Remediation Amount*" means the aggregate amount paid or incurred by CVS hereunder other than amounts paid as attorneys' fees and costs or identified pursuant to Section V.B.2 as being used to pay attorneys' fees, investigation costs or litigation costs.

II. Participation by States and Condition to Preliminary Agreement

A. *Notice to States*. On December 9, 2022, this Agreement shall be distributed to all Eligible States by the Enforcement Committee. The Eligible States' Attorneys General shall then have until December 31, 2022 (the "*State Participation Date*"), to decide whether to become Settling States. Eligible States that determine to become Settling States shall sign a State Participation Form, in the form attached as Exhibit Y, and provide it to CVS and the Enforcement Committee on or before the State Participation Date. The State Participation Date may be extended by the written agreement of CVS and the Enforcement Committee.

B. *Condition to Preliminary Agreement—Settling States' Determination to Proceed*. Following the State Participation Date, the Settling States on the Enforcement Committee shall determine whether enough Eligible States have agreed to become Settling States to proceed with notice to Subdivisions as set forth in Section VII below. The Settling States shall have full, unfettered, and unilateral discretion to abandon the Agreement, without prejudice, should they

determine, based on any criteria or factors they deem relevant, that the Eligible State participation level is insufficient. Within seven (7) calendar days after the State Participation Date, the Settling States shall provide notice to CVS and the Enforcement Committee whether they intend to proceed with the Agreement. Should the Settling States give notice of insufficient Eligible State participation and elect not to proceed, then this Agreement shall have no further effect and all releases, payment obligations, and other commitments or obligations contained herein shall be void.

C. *Condition to Preliminary Agreement—CVS's Determination to Proceed*. If the Settling States elect to proceed, then CVS shall determine whether enough Eligible States have agreed to become Settling States to proceed with notice to Subdivisions as set forth in Section VII below. CVS shall have full, unfettered, and unilateral discretion to abandon the Agreement, without prejudice, should it determine, based on any criteria or factors it deems relevant, that the Eligible State participation level is insufficient. Within seven (7) calendar days after receiving notice of the Settling States' election to proceed pursuant to Section II.B, CVS shall provide notice to the Settling States and the Enforcement Committee whether it intends to proceed with the Agreement. Should CVS give notice of sufficient Eligible State participation and elect to proceed, the date of the notice shall be the Preliminary Agreement Date. Should CVS give notice of insufficient Eligible State participation and elect not to proceed, then this Agreement shall have no further effect and all releases, payment obligations, and other commitments or obligations contained herein shall be void.

D. *Later Joinder by States*. Should the Settling States and CVS elect to proceed with the Agreement, then an Eligible State may become a Settling State after the Preliminary Agreement Date only with the consent of CVS, in its sole discretion. If an Eligible State becomes a Settling State more than sixty (60) calendar days after the Preliminary Agreement Date, but on or before May 31, 2023, then the Subdivisions in that Eligible State that become Participating Subdivisions within ninety (90) calendar days of that Eligible State becoming a Settling State shall be considered Initial Participating Subdivisions. An Eligible State may not become a Settling State after May 31, 2023.

E. *Litigation Activity*. Following the State Participation Date, Eligible States that determine to become Settling States shall make reasonable efforts to cease all litigation activity against the Released Entities, including by jointly seeking stays or severance of Claims against Released Entities, where feasible, and otherwise to minimize such activity by means of agreed deadline extensions and agreed postponement of depositions, document productions, and motion practice if a motion to stay or sever is not feasible or is denied.

III. Injunctive Relief

A. *Injunctive Relief*. As part of the Consent Judgments, the Parties agree to the entry of the injunctive relief terms as set forth in Exhibit P.

IV. Settlement Payments

A. *Settlement Fund.* All payments under this Section IV shall be made into the Settlement Fund, except that, where specified, they shall be made into the Settlement Fund Escrow. The Settlement Fund shall be allocated and used only as specified in Section V.

B. *Annual Payments by CVS.*

1. CVS shall make ten (10) Annual Payments, each comprised of base payments and incentive payments as provided in this Section IV and Exhibit M-1; *provided that* the Annual Payment in Payment Year 1 shall consist solely of base payments. As a result, and as set forth in Exhibit M-1, base payments in Payment Years 2 through 10 are less than base payments in Payment Year 1 to ensure they do not exceed thirty-eight percent (38%) of each Settling State's allocable share of the Maximum Remediation Amount.

2. In no instance shall CVS's Annual Payment obligation exceed the Maximum Annual Remediation Payments, reduced for Non-Settling States, except as specified in the definition of "Maximum Annual Remediation Payments" for Payment Years 6-10. In no instance shall the sum of CVS's Annual Payment obligations exceed the Maximum Remediation Payment, reduced for Non-Settling States.

C. *Settlement Fund Payment Process*

1. To determine each Annual Payment for Payment Year 2 forward, the Settlement Fund Administrator shall use the data as of April 30 of the Payment Year for each Annual Payment, unless another provision of the Agreement specifies a different date. Prior to the Effective Date, the Parties will include an exhibit to the Agreement setting forth in detail the process for the Settlement Fund Administrator obtaining relevant data and for distributing funds to Settling States and Participating Subdivisions listed on Exhibit G consistent with the terms of this Agreement as quickly as practical.

2. The Settlement Fund Administrator shall determine the Annual Payment and the Statewide Payment Amount for each Settling State, consistent with the provisions in Exhibit L, by:

a. determining, for each Settling State, the amount of base payments and incentive payments to which the State is entitled by applying the criteria in this Section;

b. applying any reductions or offsets required by Section IV and Section XII; and

c. determining the total amount owed by CVS to all Settling States and Participating Subdivisions listed on Exhibit G.

3. As soon as possible, but no later than forty-five (45) days prior to the Payment Date, the Settlement Fund Administrator shall give notice to CVS, the Settling

States, and the Enforcement Committee of the amount of the Annual Payment, and the Statewide Payment Amount for each Settling State, following the determination described in Section IV.C.2, and the following timeline shall apply:

a. Within twenty-one (21) days of the notice provided by the Settlement Fund Administrator, CVS, any Settling State or the Enforcement Committee may dispute, in writing, the calculation of the Annual Payment, or the Statewide Payment Amount for a Settling State. Such disputing party must provide a written notice of dispute to the Settlement Fund Administrator, the Enforcement Committee, any affected Settling State, and CVS identifying the nature of the dispute, the amount of money that is disputed, and the Settling State(s) affected.

b. Within twenty-one (21) days of the sending of a written notice of dispute, any affected party may submit a response, in writing, to the Settlement Fund Administrator, the Enforcement Committee, any affected Settling State, and CVS identifying the basis for disagreement with the notice of dispute.

c. If no response is filed, the Settlement Fund Administrator shall adjust the amount calculated consistent with the written notice of dispute, and CVS shall pay the adjusted amount as the Annual Payment on the Payment Date. If a written response to the written notice of dispute is timely sent to the Settlement Fund Administrator, the Settlement Fund Administrator shall notify CVS of the preliminary amount to be paid, which shall be the greater of the amount originally calculated by the Settlement Fund Administrator or the amount that would be consistent with the notice of dispute, *provided, however,* that in no circumstances shall the preliminary amount to be paid be higher than the Maximum Annual Payment. For the avoidance of doubt, a transfer of payments from the Settlement Fund Escrow for other Payment Years does not count toward determining whether the amount to be paid is higher than the Maximum Annual Remediation Payments.

d. The Settlement Fund Administrator shall place any disputed amount of the preliminary amount paid by CVS into the Settlement Fund Escrow and shall disburse any undisputed amount to each Settling State and its Participating Subdivisions listed on Exhibit G.

e. At any time before the Payment Date for an Annual Payment, CVS and the Enforcement Committee may agree on the amount of the Annual Payment and the Statewide Payment Amount for each Settling State. If such agreement is reached, CVS and the Enforcement Committee shall inform the Settlement Fund Administrator, and the Settlement Fund Administrator shall treat those amounts as the determination described in Section IV.C.2.

4. If a Settling State informs the Settlement Fund Administrator that it and its Participating Subdivisions listed on Exhibit G have reached consensus on the amount of its Statewide Payment Amount, determined pursuant to Section IV.C.2 or Section IV.C.3, to be distributed to the Settling State, among its separate types of funds (if applicable), and among its Participating Subdivisions listed on Exhibit G, the Settlement Fund

Administrator shall disburse the Statewide Payment Amount pursuant to the consensus distribution amounts provided by the Settling State. For a Settling State that does not so notify the Settlement Fund Administrator, the Settlement Fund Administrator shall allocate the Settling State's Statewide Payment Amount, pursuant to Section V, among the separate types of funds for the Settling State (if applicable), and among its Participating Subdivisions listed on Exhibit G using the following procedures:

a. As soon as possible for each payment and following the determination described in Section IV.C.2 or Section IV.C.3, the Settlement Fund Administrator shall give notice to the relevant Settling States and their Participating Subdivisions listed on Exhibit G of the amount to be received by each Settling State, the amount to be received by the separate types of funds for each Settling State (if applicable), and the amount to be received by each Participating Subdivision listed on Exhibit G for each Settling State.

b. Within twenty-one (21) days of the notice provided by the Settlement Fund Administrator, any Settling State or Participating Subdivision listed on Exhibit G may dispute, in writing, the calculation of the amount to be received by the relevant Settling State and/or its Participating Subdivision listed on Exhibit G. A dispute will be deemed invalid and disregarded if it challenges the allocations adopted by a State-Subdivision Agreement approved pursuant to the provisions of Exhibit O or by statute. Such disputing party must provide a written notice of dispute to the Settlement Fund Administrator, any affected Settling State, and any affected Participating Subdivision identifying the nature of the dispute, the amount of money that is disputed, and the Settling State(s) affected.

c. Within twenty-one (21) days of the sending of a written notice of dispute, any affected Settling State or any affected Participating Subdivision may submit a response, in writing, to the Settlement Fund Administrator, any affected Settling State and any affected Participating Subdivision identifying the basis for disagreement with the notice of dispute.

d. If no response is filed, the Settlement Fund Administrator shall adjust the amount calculated consistent with the written notice of dispute.

e. The Settlement Fund Administrator shall place any disputed amount into the Settlement Fund Escrow and shall disburse any undisputed amount to the Settling State and its Participating Subdivisions eligible for payment.

5. Disputes described in this subsection (other than those for which no response is filed under Section IV.C.3.c or Section IV.C.4.d) shall be resolved in accordance with the terms of Section VI.

6. The Settlement Fund Administrator may combine the disbursements of Annual Payments with disbursement of funds under other comparable opioid settlements. In determining when disbursements for each Annual Payment will be made, the Settlement Fund Administrator may take into account the timeline for the availability of disbursements

under other comparable opioid settlements. No such disbursement determinations by the Settlement Fund Administrator shall impact in any respect the amount, composition, or determination of an Annual Payment under this Agreement or CVS's obligations under this Agreement.

7. For the avoidance of doubt, Subdivisions not listed on Exhibit G shall not receive and are not eligible to receive an allocation from the Subdivision Fund and no provision of this Agreement shall be interpreted to create such an entitlement.

D. *Payment Date and Procedure for Annual Payment in Payment Year 1.* The procedure described in Section IV.C.2 and Section IV.C.3 for determining the amount of the Annual Payment shall not apply to Payment Year 1. The procedure in lieu of Section IV.C.2 and Section IV.C.3 for determining the amount of the Annual Payment for Payment Year 1 is as set forth here. The Payment Date for Payment Year 1 is June 30, 2023 or the Effective Date, whichever is later. On or before such date, and *provided that* the conditions set forth in Section II.B, Section II.C, Section VIII.B, and Section VIII.C have been satisfied, CVS shall deposit into the Settlement Fund the Maximum Annual Remediation Payment for Payment Year 1 as specified in Exhibit M-1 (which, again, shall consist only of base payments). The excess amount paid in Payment Year 1—including without limitation any amounts allocable to Non-Settling States—shall be deducted from the Annual Payment for Payment Year 2, along with any other deductions or reductions to the Annual Payment for Payment Year 2.

E. *Payment Date for Payment Years 2 through 10.* The Payment Date for Payment Years 2 through 10 is June 30 of each Payment Year or thirty (30) calendar days from when the Settlement Fund Administrator gives notice to CVS of the amount of the Annual Payment for a Payment Year, whichever is later. The Annual Payments for those Payment Years shall be made pursuant to the process set forth in Section IV.C.

F. *Offsets to Annual Payments to the Settlement Fund for Non-Settling States.* An offset equal to the Maximum Remediation Payment of $4,279,160,837 times the Overall Allocation Percentage assigned to each Non-Settling State in Exhibit F-2 shall be deducted from the total amount to be paid by CVS to the Settlement Fund. Non-Settling States shall not be eligible for any payments or have any rights in connection with this Agreement. Accordingly, the Maximum Annual Remediation Payments specified in Exhibit M-1 are reduced by the aggregate Overall Allocation Percentage of Non-Settling States as set forth in Exhibit F-2.

G. *Base Payments.*

1. CVS shall make base payments into the Settlement Fund in an amount equal to thirty-eight percent (38%) of the Maximum Remediation Payment of $4,279,160,837 minus any offsets for Non-Settling States specified in Section IV.F. The maximum total for base payments is $1,626,081,118. The base payments shall be due in annual installments consistent with Exhibit M-1 over the ten (10) Payment Years, subject to potential offsets for Non-Settling States as provided in Section IV.F.

2. Each Settling State's total base payments for all Payment Years shall not exceed thirty-eight percent (38%) of each Settling State's Overall Allocation Percentage times the Maximum Remediation Payment.

3. The base payment for any Settling State in each Payment Year shall be the base payment for that Payment Year specified in Exhibit M-1 times the Settling State's Overall Allocation Percentage specified in Exhibit F-2.

H. *Incentive Payments.*

1. CVS shall make potential incentive payments into the Settlement Fund, totaling up to a maximum of sixty-two percent (62%) of the Maximum Remediation Payment of $4,279,160,837, minus any offsets for Non-Settling States specified in Section IV.F, with the actual incentive payment amount depending on whether and the extent to which the criteria set forth below are met in each Settling State. The potential maximum total for incentive payments is and cannot exceed $2,653,079,719.

2. A Settling State qualifies to receive incentive payments in addition to base payments if it meets the incentive eligibility requirements specified below. The maximum total Incentive Payment for any Settling State shall be no more than the maximum total for incentive payments listed in Section IV.H.1 times the Settling State's Overall Allocation Percentage specified in Exhibit F-2. Incentive payments are state-specific, with the actual amount depending on whether and the extent to which the criteria set forth below are met in such Settling State.

3. The incentive payments shall be available from four (4) categories, referred to as Incentive Payments A, B, C, and D. Incentive Payments A, B, and C will be due in annual installments over the nine (9) Payment Years beginning with Payment Year 2, and Incentive Payment D will be due in installments over five (5) years beginning with Payment Year 6, as shown on Exhibit M-1. The total amount of incentive payments in an Annual Payment shall be the sum of the incentive payments for which individual Settling States are eligible for that Payment Year under the criteria set forth below. The incentive payments shall be determined with respect to a specific Settling State based on its eligibility for that Payment Year under the criteria set forth below. For the avoidance of doubt, eligibility for Incentive Payments A, B, C, and D shall be determined on a Settling State-by-Settling State basis and for each Payment Year as set forth below. Except to the limited extent provided below for Incentives A (see Section IV.H.6.c) and D (see Section IV.H.9.j), a Settling State may not earn and shall not be paid in any later Payment Year an annual incentive payment for a prior Payment Year, or any portion thereof, that it failed to qualify for in that prior Payment Year.

4. A Settling State may either qualify for Incentive Payment A, or it can alternatively qualify for Incentive Payments B, C, and/or D. A Settling State will be eligible for its full allocable share of the maximum amount available for incentive payments by either (a) achieving Incentive Payment A within two (2) years of the Effective Date or (b) by fully earning Incentive Payment B in each Payment Year it is available and

earning Incentive Payments C and D in a manner that produces that maximum possible combined amount from those two incentives.

5. The following time periods apply to Incentive Payments B and C:

a. Period 1: Zero to two hundred ten (210) days after the Effective Date.

b. Period 2: Two hundred eleven (211) days to one year after the Effective Date.

c. Period 3: One year and one day after the Effective Date to April 30, 2027.

6. Incentive Payment A.

a. Incentive Payment A is mutually exclusive with Incentive Payments B, C, and D; if a Settling State receives Incentive Payment A in an Annual Payment, such Settling State is not eligible for Incentive Payments B, C, or D in that Annual Payment.

b. Incentive Payment A shall be up to a maximum of sixty-two percent (62%) of the Maximum Remediation Payment of $4,279,160,837, minus any offsets for Non-Settling States specified in Section IV.F, with the actual amount depending on whether and the extent to which the criteria set forth below are met in each Settling State. The potential maximum total for Incentive Payment A is $2,653,079,719.

c. The Incentive Payment A for any Settling State in each Payment Year shall be the Incentive Payment A for that Payment Year specified in Exhibit M-1 times the Settling State's Overall Allocation Percentage specified in Exhibit F-2, provided such Settling State achieves Incentive Payment A by two (2) years after the Effective Date. If a Settling State achieves Incentive Payment A after April 30, 2024 but before two (2) years after the Effective Date, it shall receive a catch-up payment as part of the next Annual Payment for the difference between what it would have earned had it qualified for Incentive Payment A for Payment Year 2 and what it was actually paid for Payment Year 2. The Settlement Fund Administrator shall decrease the catch-up payments payable pursuant to this Section IV.H.6.c to the extent they cannot be paid without exceeding an applicable payment limit shown in Exhibit M-1 for the next Payment Year.

d. A Settling State is eligible for Incentive Payment A if: (i) there is a Bar in that State in full force and effect; (ii) there is a Settlement Class Resolution in that State in full force and effect; (iii) there is a ruling from the State's highest court barring all Subdivisions from bringing or maintaining Released Claims; (iv) the Released Claims of all of the following entities are released through the execution of Subdivision Participation Agreements: (1) all Litigating Subdivisions,

(2) all Non-Litigating Primary Subdivisions, (3) all non-litigating School Districts with a K-12 student enrollment of at least 25,000 or 0.10% of a State's population, whichever is greater, (4) all non-litigating health districts and hospital districts that have at least one hundred twenty-five (125) hospital beds in one or more hospitals rendering services in that district, and (5) all Primary Fire Districts; or (v) a combination of the actions in clauses (i)-(iv) has achieved the same level of resolution of Claims by Subdivisions (*e.g.*, a Bar against future litigation combined with full joinder by Litigating Subdivisions). For the avoidance of doubt, subsection (iv) cannot be satisfied unless all Litigating Subdivisions are Participating Subdivisions or there is a Case-Specific Resolution against any such Subdivisions that are not Participating Subdivisions.

e. A Settling State that does not achieve Incentive Payment A as of two (2) years after the Effective Date shall not be eligible for, and shall not receive, Incentive Payment A for any Payment Year.

f. CVS shall acknowledge on or before the Initial Subdivision Participation Date the sufficiency of any existing Bars in Settling States, provided that such States shall have provided no less than 30 days' notice to CVS of such Bars. Any other Settling State that believes it qualifies for Incentive Payment A by two (2) years after the Effective Date shall provide prompt notice to CVS, the Enforcement Committee, and the Settlement Fund Administrator, including data sources or other information establishing such Settling State's entitlement to Incentive Payment A. CVS and the Enforcement Committee shall meet and confer in order to agree on data sources for purposes of this Section prior to the Preliminary Agreement Date.

g. If CVS made a payment under Incentive Payment A solely on the basis of a Bar or Settlement Class Resolution in a Settling State and that Bar or Settlement Class Resolution is subsequently subject to a Revocation Event, that Settling State shall not be eligible for Incentive Payment A thereafter, unless the State requalifies for Incentive Payment A through any method pursuant to Section IV.H.6.d, in which case the Settling State shall be eligible for Incentive Payment A less any litigation fees and costs incurred by CVS in the interim, except that, if the re-imposition occurs after the completion of opening statements in a trial involving a Released Claim, the Settling State shall not be eligible for Incentive Payment A (unless this exception is waived by CVS).

7. Incentive Payment B.

a. Incentive Payment B shall be available to Settling States that do not qualify for Incentive Payment A.

b. Incentive Payment B shall be up to a potential maximum of twenty-eight percent (28%) of the Maximum Remediation Payment of $4,279,160,837 minus any offsets for Non-Settling States specified in Section IV.F, with the actual amount depending on whether and the extent to which the criteria set forth below

are met in each Settling State. The potential maximum total for Incentive Payment B is $1,198,165,035.

c. The potential maximum Incentive Payment B for any Settling State in each Payment Year shall be the Incentive Payment B for that Payment Year specified in Exhibit M-1 times the Settling State's Overall Allocation Percentage specified in Exhibit F-2, provided such Settling State becomes eligible for Incentive Payment B by April 30 of the Payment Year or April 30, 2027, whichever is earlier. The Incentive Payment B for any Settling State that qualifies for Incentive Payment B is subject to reduction in accordance with Section IV.H.7.f, Section IV.H.7.g, and Section IV.H.7.h.

d. For Payment Years 2 through 5, the calculations specified by this Section IV.H.7 shall be based on a Settling State's Participation Percentage of Litigating Subdivision Population[6] as of April 30 of that Payment Year. For Payment Years 6 through 10, the calculations specified by this Section IV.H.7 shall be based on a Settling State's Participation Percentage of Litigating Subdivision Population as of April 30, 2027.

e. A Settling State qualifies for an Incentive Payment B if Litigating Subdivisions collectively representing at least eighty-five percent (85%) of the Settling State's Litigating Subdivision population are either Participating Subdivisions or have their Claims resolved through Case-Specific Resolutions.

f. Within Period 1: If Litigating Subdivisions collectively representing at least eighty-five percent (85%) of a Settling State's Litigating Subdivision population are Participating Subdivisions, or have their Claims resolved through Case-Specific Resolutions, during Period 1, then a sliding scale will determine the share of the Settling State's maximum Incentive Payment B for a Payment Year that it has earned. Under that sliding scale, if Litigating Subdivisions collectively representing eighty-five percent (85%) of a Settling State's Litigating Subdivision population become Participating Subdivisions, or achieve Case-Specific Resolution status, by the end of Period 1, a Settling State will receive twenty percent (20%) of its maximum Incentive Payment B for each Payment Year. If more Litigating

[6] The "Participation Percentage of Litigating Subdivision Population" shall be determined by the aggregate population of a Settling State's Litigating Subdivisions (including without limitation School Districts and Special Districts) that are Participating Subdivisions, or have their Claims resolved through Case-Specific Resolutions, divided by the aggregate population of that Settling State's Litigating Subdivisions (including without limitation School Districts and Special Districts). In calculating the Settling State's population that resides in Litigating Subdivisions, the population of the Settling State's Litigating Subdivisions shall be the sum of the population of all Litigating Subdivisions in the Settling State, notwithstanding that persons may be included within the population of more than one Litigating Subdivision. An individual Litigating Subdivision shall not be included more than once in the numerator, and shall not be included more than once in the denominator, of the calculation regardless if it (or any of its officials) is named as multiple plaintiffs in the same lawsuit; *provided*, *however*, that for the avoidance of doubt, no Litigating Subdivision will be excluded from the numerator or denominator under this sentence unless a Litigating Subdivision otherwise counted in the denominator has the authority to release the Claims (consistent with Section XI) of the Litigating Subdivision to be excluded.

Subdivisions become Participating Subdivisions, or achieve Case-Specific Resolution status, the Settling State shall receive an increased percentage of the maximum Incentive Payment B for each Payment Year as shown in the table below.

Participation Percentage of Litigating Subdivision Population	**Incentive Payment B Percentage**
Participation of less than 85%	Payment of 0% of Incentive B
Participation of 85% but less than 86%	Payment of 20% of Incentive B
Participation of 86% but less than 87%	Payment of 30% of Incentive B
Participation of 87% but less than 88%	Payment of 33% of Incentive B
Participation of 88% but less than 89%	Payment of 36% of Incentive B
Participation of 89% but less than 90%	Payment of 40% of Incentive B
Participation of 90% but less than 91%	Payment of 43% of Incentive B
Participation of 91% but less than 92%	Payment of 46% of Incentive B
Participation of 92% but less than 93%	Payment of 50% of Incentive B
Participation of 93% but less than 94%	Payment of 55% of Incentive B
Participation of 94% but less than 95%	Payment of 58% of Incentive B
Participation of 95% but less than 96%	Payment of 60% of Incentive B
Participation of 96% but less than 97%	Payment of 70% of Incentive B
Participation of 97% but less than 98%	Payment of 75% of Incentive B
Participation of 98% but less than 99%	Payment of 85% of Incentive B
Participation of 99% but less than 100%	Payment of 95% of Incentive B
Participation of 100%	Payment of 100% of Incentive B

g. Within Period 2: If a Settling State did not qualify for Incentive Payment B in Period 1, but Litigating Subdivisions collectively representing at least eighty-five percent (85%) of the Settling State's Litigating Subdivision population become Participating Subdivisions, or achieve Case-Specific Resolution status, by the end of Period 2, then the Settling State qualifies in each Payment Year for seventy-five percent (75%) of the Incentive Payment B it would have qualified for in Period 1. If a Settling State qualifies for Incentive Payment B in Period 1 and increases its Participation Percentage of Litigating Subdivision Population in Period 2, the additional Incentive Payment B for each Payment Year shall be eighty-seven and one-half percent (87.5%) of the difference between (i) the Incentive Payment B calculated pursuant to Section IV.H.7.f in Period 2 and (ii) the Incentive Payment B calculated pursuant to Section IV.H.7.f at the end of Period 1.

h. Within Period 3: If a Settling State did not qualify for an Incentive Payment B in Periods 1 or 2, but Litigating Subdivisions collectively representing at least eighty-five percent (85%) of the Settling State's Litigating Subdivision population become Participating Subdivisions, or achieve Case-Specific Resolution status, by the end of Period 3, then the Settling State qualifies for fifty percent (50%) of the Incentive Payment B it would have qualified for in Period 1. If a

Settling State qualifies for Incentive Payment B in Period 2 and increases its Participation Percentage of Litigating Subdivision Population in Period 3, the additional Incentive Payment B in each Payment Year shall be seventy-five percent (75%) of the difference between (i) the Incentive Payment B calculated pursuant to Section IV.H.7.f in Period 3 and (ii) the Incentive Payment B calculated pursuant to Section IV.H.7.f at the end of Period 2.

i. For the avoidance of doubt, an increase in a Settling State's Participation Percentage of Litigating Subdivision Population in Periods 2 and/or 3 from an earlier Period entitles the Settling State to receive the Incentive Payment B Percentage it had earned as of the end of the earlier Period plus the additional Incentive Payment B Percentage specified by the calculations in Section IV.H.7.g and Section IV.H.7.h.

j. If a Settling State has not qualified for Incentive Payment B by April 30, 2027, it shall no longer be eligible to qualify for and shall not receive any Incentive Payment B for any Payment Year.

k. If there are no Litigating Subdivisions in a Settling State, and that Settling State is otherwise eligible for Incentive Payment B, that Settling State will receive its maximum Incentive Payment B for that Annual Payment provided by Section IV.H.7.c.

8. Incentive Payment C.

a. Incentive Payment C shall be available to Settling States that do not qualify for Incentive Payment A.

b. Incentive Payment C shall be equal to up to a potential maximum of twenty-eight percent (28%) of the Maximum Remediation Payment of $4,279,160,837 minus any offsets for Non-Settling States specified in Section IV.F, with the actual amount depending on whether and the extent to which the criteria set forth below are met in each Settling State. The potential maximum total for Incentive Payment C is $1,198,165,035.

c. The potential maximum Incentive Payment C for any Settling State in each Payment Year shall be the Incentive Payment C for that Payment Year specified in Exhibit M-1 times the Settling State's Overall Allocation Percentage specified in Exhibit F-2, provided such Settling State becomes eligible for Incentive Payment B by April 30 of the Payment Year or April 30, 2027, whichever is earlier. The maximum Incentive Payment C for any Settling State that qualifies for Incentive Payment C is subject to reduction in accordance with Section IV.H.8.f, Section IV.H.8.g, and Section IV.H.8.h.

d. For Payment Years 2 through 5, the calculations specified by this Section IV.H.8 shall be based on the participation percentage of a Settling State's Non-Litigating Threshold population and its Litigating Subdivision population

("*Participation Percentage of Incentive C Eligible Subdivision Population*")[7] as of April 30 of that Payment Year. For Payment Years 6 through 10, the calculations specified by this Section IV.H.8 shall be based on a Settling State's Participation Percentage of Incentive C Eligible Subdivision Population as of April 30, 2027.

e. Incentive Payment C shall be available depending on the percentage of the aggregate population of a Settling State's Non-Litigating Threshold Subdivisions and Litigating Subdivisions (including without limitation School Districts and Special Districts) that are Participating Subdivisions or have their Claims resolved through Case-Specific Resolutions (the "*Incentive C Eligible Subdivisions*"). A Settling State qualifies for an Incentive Payment C if Incentive C Eligible Subdivisions collectively representing at least eighty-five percent (85%) of the Settling State's Incentive C Eligible Subdivision population are either Participating Subdivisions or have their Claims resolved through Case-Specific Resolutions.

f. Within Period 1: If Incentive C Eligible Subdivisions collectively representing at least eighty-five percent (85%) of a Settling State's Incentive C Eligible Subdivision population are Participating Subdivisions, or have their Claims resolved through Case-Specific Resolutions, during Period 1, then a sliding scale will determine the share of the Settling State's maximum Incentive Payment C for a Payment Year that it has earned. Under that sliding scale, if Incentive C Eligible Subdivisions collectively representing eighty-five percent (85%) of a Settling State's Incentive C Eligible population become Participating Subdivisions or achieve Case-Specific Resolution status by the end of Period 1, a Settling State will receive twenty percent (20%) of its maximum Incentive Payment C for each Payment Year. If more Incentive C Eligible Subdivisions become Participating Subdivisions, or achieve Case-Specific Resolution status, the Settling State shall receive an increased percentage of the maximum Incentive Payment C for each Payment Year as shown in the table below.

[7] The "Participation Percentage of Incentive C Eligible Subdivision Population" shall be determined by the aggregate population of a Settling State's Non-Litigating Threshold Subdivisions and Litigating Subdivisions (including without limitation School Districts and Special Districts) that are Participating Subdivisions, or have their Claims resolved through Case-Specific Resolutions, divided by the aggregate population of that Settling State's Non-Litigating Threshold Subdivisions and Litigating Subdivisions (including without limitation School Districts and Special Districts). In calculating the Settling State's population that resides in Non-Litigating Threshold Subdivisions and Litigating Subdivisions, the population of the Settling State's Non-Litigating Threshold Subdivisions and Litigating Subdivisions shall be the sum of the population of all Non-Litigating Threshold Subdivisions and Litigating Subdivisions in the Settling State, notwithstanding that persons may be included within the population of more than one Non-Litigating Threshold Subdivisions and Litigating Subdivision. An individual Non-Litigating Threshold Subdivisions or Litigating Subdivision shall not be included more than once in the numerator, and shall not be included more than once in the denominator, of the calculation regardless if it (or any of its officials) is named as multiple plaintiffs in the same lawsuit; *provided, however*, that for the avoidance of doubt, no Non-Litigating Threshold Subdivision or Litigating Subdivision will be excluded from the numerator or denominator under this sentence unless a Non-Litigating Threshold Subdivision or Litigating Subdivision otherwise counted in the denominator has the authority to release the Claims (consistent with Section XI) of the Non-Litigating Threshold Subdivision or Litigating Subdivision to be excluded.

Participation Percentage of Incentive C Eligible Subdivision Population	**Incentive Payment C Percentage**
Participation of less than 85%	Payment of 0% of Incentive C
Participation of 85% but less than 86%	Payment of 20% of Incentive C
Participation of 86% but less than 87%	Payment of 30% of Incentive C
Participation of 87% but less than 88%	Payment of 33% of Incentive C
Participation of 88% but less than 89%	Payment of 36% of Incentive C
Participation of 89% but less than 90%	Payment of 40% of Incentive C
Participation of 90% but less than 91%	Payment of 43% of Incentive C
Participation of 91% but less than 92%	Payment of 46% of Incentive C
Participation of 92% but less than 93%	Payment of 50% of Incentive C
Participation of 93% but less than 94%	Payment of 55% of Incentive C
Participation of 94% but less than 95%	Payment of 58% of Incentive C
Participation of 95% but less than 96%	Payment of 60% of Incentive C
Participation of 96% but less than 97%	Payment of 70% of Incentive C
Participation of 97% but less than 98%	Payment of 75% of Incentive C
Participation of 98% but less than 99%	Payment of 85% of Incentive C
Participation of 99% but less than 100%	Payment of 95% of Incentive C
Participation of 100%	Payment of 100% of Incentive C

g. Within Period 2: If a Settling State did not qualify for Incentive Payment C in Period 1, but Incentive C Eligible Subdivisions collectively representing at least eighty-five percent (85%) of the Settling State's Incentive C Eligible Subdivision population become Participating Subdivisions, or achieve Case-Specific Resolution status, by the end of Period 2, then the Settling State qualifies in each Payment Year for seventy-five percent (75%) of the Incentive Payment C it would have qualified for in Period 1. If a Settling State qualifies for Incentive Payment C in Period 1 and increases its Participation Percentage of Incentive C Eligible Subdivision Population in Period 2, the additional Incentive Payment C for each Payment Year shall be eighty-seven and one-half percent (87.5%) of the difference between (i) the Incentive Payment C calculated pursuant to Section IV.H.8.f in Period 2 and (ii) the Incentive Payment C calculated pursuant to Section IV.H.8.f at the end of Period 1.

h. Within Period 3: If a Settling State did not qualify for an Incentive Payment C in Periods 1 or 2, but Incentive C Eligible Subdivisions collectively representing at least eighty-five percent (85%) of the Settling State's Incentive C Eligible Subdivision population become Participating Subdivisions, or achieve Case-Specific Resolution status, by the end of Period 3, then the Settling State qualifies for fifty percent (50%) of the Incentive Payment C it would have qualified for in Period 1. If a Settling State qualifies for Incentive Payment C in Period 2 and increases its Participation Percentage of Incentive C Eligible Subdivision Population in Period 3, the additional Incentive Payment B in each Payment Year shall be seventy-five percent (75%) of the difference between (i) the Incentive

Payment B calculated pursuant to Section IV.H.8.f in Period 3 and (ii) the Incentive Payment B calculated pursuant to Section IV.H.8.f at the end of Period 2.

i. For the avoidance of doubt, an increase in a Settling State's Participation Percentage of Incentive C Eligible Subdivision Population in Periods 2 and/or 3 from an earlier Period entitles the Settling State to receive the Incentive Payment C Percentage it had earned as of the end of the earlier Period plus the additional Incentive Payment C Percentage specified by the calculations in Section IV.H.8.g and Section IV.H.8.h.

j. If a Settling State has not qualified for Incentive Payment C by April 30, 2027, it shall no longer be eligible to qualify for and shall not receive any Incentive Payment C for any Payment Year.

k. If there are no Incentive C Eligible Subdivisions in a Settling State, and that Settling State is otherwise eligible for Incentive Payment C, that Settling State will receive its maximum Incentive Payment C for that Annual Payment provided by Section IV.H.8.c.

9. Incentive Payment D.

a. Incentive Payment D shall be available to Settling States that do not qualify for Incentive Payment A.

b. Incentive Payment D shall be equal to up to a potential maximum of fifteen percent (15%) of the Maximum Remediation Payment of $4,279,160,837 minus any offsets for Non-Settling States specified in Section IV.F, with the actual amount depending on whether and the extent to which the criteria set forth below are met in each Settling State. The potential maximum total for Incentive Payment D is $641,874,126.[8]

c. Incentive Payment D shall be available to be earned starting at Payment Year 6 and the amount of Incentive Payment D in Payment Years 6-10 will depend on (i) the Settling State's eligibility as set out in Section IV.H.9.d and (ii) the Participation Percentage of the Incentive C Eligible Subdivision Population achieved by the Settling State as of April 30, 2027.

d. A Settling State is eligible for Incentive Payment D if no Later Litigating Subdivision (for purposes of Incentive Payment D, Later Litigating Subdivisions are limited to (i) a Primary Subdivision; (ii) a school district with a K-12 student enrollment of at least 25,000 or 0.10% of the State's population, whichever is greater; (iii) a health district or hospital district that has at least one

[8] The Incentive Payment C table specified in Section IV.H.8.f and Incentive Payment D table specified in Section IV.H.9.e operate so that the combined amount of Incentive Payment C and Incentive Payment D cannot exceed thirty-four percent (34%) of the Maximum Remediation Payment over the term of the Agreement. CVS will have no obligation to pay more than $1,454,914,684 for the combined amounts of Incentive Payment C and Incentive Payment D minus any offsets for Non-Settling States specified in Section IV.F and reductions for unachieved incentives.

hundred twenty-five (125) hospital beds in one or more hospitals rendering services in that district; and (iv) Primary Fire Districts) in that State has a lawsuit against a Released Entity that survived in whole or in part a Threshold Motion and is pending as of April 30 in Payment Years 6 to 10 ("*Incentive Payment D Look-Back Dates*").

e. The Incentive Payment D for any Settling State in Payment Years 6-10 shall be between six percent (6%) and fifteen percent (15%) of the Maximum Remediation Payment times the Settling State's Overall Allocation Percentage specified in Exhibit F-2. The applicable percentage shall be determined based on the Participation Percentage of the Incentive C Eligible Subdivision Population achieved by the Settling State as of April 30, 2027 as shown in the table below:

Participation Percentage of Incentive C Eligible Subdivision Population as of April 30, 2027	**Settling State's Applicable Incentive Payment D Percentage**
Participation of less than 96%	15% of Maximum Remediation Payment
Participation of 96% but less than 97%	14.4% of Maximum Remediation Payment
Participation of 97% but less than 98%	13% of Maximum Remediation Payment
Participation of 98% but less than 99%	10.2% of Maximum Remediation Payment
Participation of 99% but less than 100%	7.4% of Maximum Remediation Payment
Participation of 100%	6% of Maximum Remediation Payment

f. Incentive Payment D shall be available in equal installments in Payment Years 6-10, unless an adjustment to payment is required by Section IV.H.9.i or Section IV.H.9.j after the Annual Payment is made for Payment Year 6, in which case the adjustment shall be made in a way that equalizes, to the extent possible, its effect over the remaining Payment Years.[9]

g. Prior to determining the Annual Payment for each of Payment Years 6 through 10, the Settlement Fund Administrator shall determine a Settling State's eligibility for Incentive Payment D as of the Incentive Payment D Look-Back Date

[9] The top of the range for Incentive Payment D specified in Exhibit M-2 for Payment Years 6-10 represents five years of equal payments of Incentive Payment D at fifteen percent (15%) of the Maximum Remediation Payment for all Eligible States. The bottom of the range for Incentive Payment D specified in Exhibit M-2 for Payment Years 6-10 represents five years of equal payments of Incentive Payment D at six percent (6%) of the Maximum Remediation Payment for all Eligible States. Incentive Payment D cannot exceed the top of the range for Incentive Payment D specified in Exhibit M-2 for each of Payment Years 6-10. Any Incentive Payment D in excess of the bottom of the range for Incentive Payment D must correspond to reductions to Incentive Payment C in a prior or the same Payment Year, as provided by the Incentive Payment C table specified in Section IV.H.8.f.

in each such Payment Year. Prior to each Incentive Payment D Look-Back Date, CVS may provide the Settlement Fund Administrator and the Enforcement Committee with notice identifying any Settling State(s) it believes do not qualify for Incentive Payment D and information supporting its belief.

h. If, at any time during the term of this Agreement any Subdivision becomes a Later Litigating Subdivision (as that term is limited by Section IV.H.9.c), then CVS shall, within thirty (30) calendar days of CVS or any Released Entity being served, provide notice to the Settling State in which such Released Claims are being pursued and shall give the relevant Settling State a reasonable opportunity to extinguish the Released Claims without any payment or any other obligations being imposed upon any Released Entities (apart from the Global Settlement Amount payable by CVS under the Agreement or the Injunctive Relief Terms incurred by it). The relevant Settling State and CVS shall confer and use reasonable efforts to promptly resolve the lawsuit so that it is dismissed with prejudice. Nothing in this subsection creates an obligation for a Settling State to make a monetary payment or incur any other obligation to an entity filing a lawsuit.

i. If a Later Litigation Subdivision's lawsuit results in a money judgment being entered against a Released Entity or reasonable settlement being reached with a Released Entity, the amount is to be set off from the total Incentive Payment D for which the Settling State may become eligible. The total Incentive Payment D for which the Settling State may become eligible shall be reduced by the amount of the judgment or settlement.

j. Notwithstanding Section IV.H.9.d, a Settling State can become re-eligible for Incentive Payment D if the lawsuit that survived a Threshold Motion is dismissed pursuant to a later motion on grounds included in the Threshold Motion, in which case the Settling State shall be eligible for any missed payments of Incentive Payment D in the following Payment Year, less any litigation fees and costs incurred by CVS in the interim, except that if the dismissal motion occurs after the completion of opening statements in such action, the Settling State shall not be eligible for Incentive Payment D. The Settlement Fund Administrator shall decrease the missed payments payable pursuant to this Section IV.H.9.j to the extent it cannot be paid without exceeding the top end of an applicable payment range shown in Exhibit M-2 for the remaining Payment Years.

I. In no event shall any Settling State receive base payments and incentive payments totaling more than one hundred percent (100%) of its respective Overall Allocation Percentage specified in Exhibit F-2 times the Maximum Remediation Payment.

J. *Credit for Dispensing Services.* CVS and a Settling State may enter into an agreement for CVS to earn credits against Annual Payments for dispensing free-of-charge opioid alternatives, for free-of-charge product provided in connection with other opioid-related resolutions, and/or for other initiatives and services.

V. Allocation and Use of Settlement Payments

A. *Components of Settlement Fund*. The Settlement Fund shall be comprised of a Remediation Accounts Fund, a State Fund, and a Subdivision Fund for each Settling State. The payment made under Section IV into the Settlement Fund shall be initially allocated among those three (3) sub-funds and distributed and used as provided below or as provided for by a State-Subdivision Agreement (or other State-specific allocation of funds).

B. *Use of Settlement Payments*.

1. It is the intent of the Parties that the payments disbursed from the Settlement Fund to Settling States and Participating Subdivisions be for Opioid Remediation to address Alleged Harms, subject to exceptions that must be documented in accordance with Section V.B.2. In no event may less than 95.5% of CVS's maximum payment amounts pursuant to Section IV as set forth on Exhibit M-1 over the entirety of all Payment Years (but not in any single Payment Year) be spent on Opioid Remediation; *provided, however*, that the remaining 4.5% only may be spent outside of Opioid Remediation to the extent necessary to satisfy: (a) back-stop attorney fee agreements entered into by Settling States with respect to at least one opioid settlement on or before November 30, 2022, even if such an agreement did not as of that date apply to CVS's Annual Payments; or (b) contingency fee agreements entered into by Settling States covering CVS's Annual Payments. Any amounts not spent to satisfy such agreements must be spent on Opioid Remediation.

2. While disfavored by the Parties, a Settling State or a Participating Subdivision may, subject to the limitation in the second sentence of Section V.B.1, use monies from the Settlement Fund (that have not been restricted by this Agreement solely to future Opioid Remediation) for purposes that do not qualify as Opioid Remediation, provided that if, at any time, a Settling State or a Participating Subdivision listed on Exhibit G uses any monies from the Settlement Fund for a purpose that does not qualify as Opioid Remediation, such Settling State or Participating Subdivision listed on Exhibit G shall identify such amounts and report to the Settlement Fund Administrator and CVS how such funds were used, including if used to pay attorneys' fees, investigation costs, litigation costs, or costs related to the operation and enforcement of this Agreement, respectively. Such expenditures shall be reported to the Settlement Fund Administrator and CVS by January 31 of the year following the calendar year in which they are made. It is the intent of the Parties that the reporting under this Section V.B.2 shall be available to the public. For the avoidance of doubt, (a) any amounts not identified under this Section V.B.2 as used to pay attorneys' fees, investigation costs, or litigation costs shall be included in the Total Remediation Amount for purposes of Section V.F and (b) Participating Subdivisions not listed on Exhibit G may only use monies from the Settlement Fund for purposes that qualify as Opioid Remediation.

C. *Allocation of Settlement Fund*. The allocation of the Settlement Fund allows for different approaches to be taken in different Settling States, such as through a State-Subdivision Agreement. Given the uniqueness of Settling States and their Participating Subdivisions, Settling States and their Participating Subdivisions are encouraged to enter into State-Subdivision

Agreements in order to direct the allocation of their portion of the Settlement Fund. This Agreement has no effect on the ability of Settling States and their Participating Subdivisions to internally agree on the allocation of their portion of the Settlement Fund. As set out below, the Settlement Fund Administrator will make an initial allocation to three (3) state-level sub-funds. The Settlement Fund Administrator will then, for each Settling State and its Participating Subdivisions, apply the terms of this Agreement and any relevant State-Subdivision Agreement, Statutory Trust, Allocation Statute, or voluntary redistribution of funds as set out below before disbursing the funds.

1. Base Payments. The Settlement Fund Administrator will allocate base payments under Section IV.G among the Settling States pursuant to Section VI.G. Base payments for each Settling State will then be allocated fifteen percent (15%) to its State Fund, seventy percent (70%) to its Remediation Accounts Fund, and fifteen percent (15%) to its Subdivision Fund. Amounts may be reallocated and will be distributed as provided in Section V.D.

2. Incentive Payments. The Settlement Fund Administrator will treat incentive payments under Section IV.H on a Settling State-specific basis in proportion to each Settling State's respective Overall Allocation Percentage. Incentive payments for which a Settling State is eligible under Section IV.H will be allocated fifteen percent (15%) to its State Fund, seventy percent (70%) to its Remediation Accounts Fund, and fifteen percent (15%) to its Subdivision Fund. Amounts may be reallocated and will be distributed as provided in Section V.D.

3. Settlement Fund Administrator. Prior to the Initial Subdivision Participation Date, CVS and the Enforcement Committee will agree to a detailed mechanism consistent with the foregoing for the Settlement Fund Administrator to follow in allocating, apportioning, and distributing payments, which shall then be appended hereto as Exhibit L.

4. Settlement Fund Administrator Costs. Any reasonable costs and fees of the Settlement Fund Administrator accruing under this Agreement as described in Exhibit L shall be paid from the interest accrued in the Settlement Fund; *provided, however*, that if such accrued interest is insufficient to pay the entirety of any such costs and fees, CVS shall pay fifty percent (50%) of the additional amount directly to the Settlement Fund Administrator and fifty percent (50%) shall be paid out of the Settlement Fund.

D. *Settlement Fund Reallocation and Distribution.*

As set forth below, within a particular Settling State's account, amounts contained in the Settlement Fund sub-funds may be reallocated and distributed per a State-Subdivision Agreement or other means. If the apportionment of amounts is not addressed and controlled under Section V.D.1 and Section V.D.2, then the default provisions of Section V.D.4 apply. It is not necessary that a State-Subdivision Agreement or other means of allocating funds pursuant to Section V.D.1 and Section V.D.2 address all of the Settlement Fund sub-funds. For example, a Statutory Trust might only address disbursements from a Settling State's Remediation Accounts Fund.

1. Distribution by State-Subdivision Agreement. If a Settling State has a State-Subdivision Agreement, amounts apportioned to that Settling State's State Fund, Remediation Accounts Fund, and Subdivision Fund under Section V.C shall be reallocated and distributed as provided by that agreement. Any State-Subdivision Agreement entered into or amended after the Preliminary Agreement Date shall be applied only if it requires: (a) that all amounts be used for Opioid Remediation, except as allowed by Section V.B.2, and (b) that at least seventy percent (70%) of amounts be used solely for future Opioid Remediation.[10] For a State-Subdivision Agreement to be applied to the relevant portion of the Annual Payment, notice must be provided to CVS and the Settlement Fund Administrator at least ten (10) business days prior to the Settlement Fund Administrator's disbursements of such portion to a Settlement State and its Participating Subdivisions.

2. Distribution by Allocation Statute. If a Settling State has an Allocation Statute and/or a Statutory Trust that addresses allocation or distribution of amounts apportioned to such Settling State's State Fund, Remediation Accounts Fund, and/or Subdivision Fund and that, to the extent any or all such sub-funds are addressed, requires (1) all amounts to be used for Opioid Remediation, except as allowed by Section V.B.2, and (2) at least seventy percent (70%) of all amounts to be used solely for future Opioid Remediation,[11] then, to the extent allocation or distribution is addressed, the amounts apportioned to that Settling State's State Fund, Remediation Accounts Fund, and Subdivision Fund under Section V.C shall be allocated and distributed as addressed and provided by the applicable Allocation Statute or Statutory Trust. For the avoidance of doubt, an Allocation Statute or Statutory Trust need not address all three (3) sub-funds that comprise the Settlement Fund, and if the applicable Allocation Statute or Statutory Trust does not address distribution of all or some of these three (3) sub-funds, the applicable Allocation Statute or Statutory Trust does not replace the default provisions described in Section V.D.4 of any such unaddressed fund. For example, if an Allocation Statute or Statutory Trust that meets the requirements of this Section V.D.2 only addresses funds restricted to remediation and abatement, then the default provisions in this Agreement concerning allocation among the three (3) sub-funds comprising the Settlement Fund and the distribution of the State Fund and Subdivision Fund for that Settling State would still apply, while the distribution of the applicable Settling State's Remediation Accounts Fund would be governed by the qualifying Allocation Statute or Statutory Trust.

3. Voluntary Redistribution. A Settling State may choose to reallocate all or a portion of its State Fund to its Remediation Accounts Fund. A Participating Subdivision included on Exhibit G may choose to reallocate all or a portion of its allocation from the Subdivision Fund to the State's Remediation Accounts Fund or to another Participating Subdivision. The Settlement Fund Administrator is not required to honor a voluntary

[10] Future Opioid Remediation includes amounts paid to satisfy any future demand by another governmental entity to make a required reimbursement in connection with the past care and treatment of a person related to the Alleged Harms.

[11] Future Opioid Remediation includes amounts paid to satisfy any future demand by another governmental entity to make a required reimbursement in connection with the past care and treatment of a person related to the Alleged Harms.

redistribution for which notice is provided to it less than sixty (60) calendar days prior to the applicable Payment Date.

4. Distribution in the Absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust. If Section V.D.1 and Section V.D.2 do not apply, amounts apportioned to that Settling State's State Fund, Remediation Accounts Fund, and Subdivision Fund under Section V.C shall be distributed as follows:

a. Amounts apportioned to that Settling State's State Fund shall be distributed to that State.

b. Amounts apportioned to that Settling State's Remediation Accounts Fund shall be distributed consistent with Section V.E. Each Settling State shall submit to the Settlement Fund Administrator a designation of a lead state agency or other entity to serve as the single point of contact for that Settling State's funding requests from the Remediation Accounts Fund and other communications with the Settlement Fund Administrator. The designation of an individual entity is for administrative purposes only and such designation shall not limit funding to such entity or even require that such entity receive funds from this Agreement. The designated entity shall be the only entity authorized to request funds from the Settlement Fund Administrator to be disbursed from that Settling State's Remediation Accounts Fund. If a Settling State has established a Statutory Trust, then that Settling State's single point of contact may direct the Settlement Fund Administrator to release the State's Remediation Accounts Fund to the Statutory Trust.

c. Amounts apportioned to that Settling State's Subdivision Fund shall be distributed to Participating Subdivisions in that State included on Exhibit G per the Subdivision Allocation Percentage listed in Exhibit G. Section V.F shall govern amounts that would otherwise be distributed to Non-Participating Subdivisions listed in Exhibit G. For the avoidance of doubt and notwithstanding any other provision in this Agreement, no Non-Participating Subdivision will receive any amount from the Settlement Fund, regardless of whether such Subdivision is included on Exhibit G.

d. Special Districts shall not be allocated funds from the Subdivision Fund, except through a voluntary redistribution allowed by Section V.D.3 to Special Districts that are Participating Subdivisions. A Settling State may allocate funds from its State Fund or Remediation Accounts Fund for Special Districts that are Participating Subdivisions.

5. Restrictions on Distribution. No amounts may be distributed from the Subdivision Fund contrary to Section VII, *i.e.*, no amounts may be distributed directly to Non-Participating Subdivisions to the extent such a distribution would violate Section VII.G or Section VII.H. Amounts allocated to the Subdivision Fund that cannot be distributed by virtue of the preceding sentence shall be distributed into the sub-account in the Remediation Accounts Fund for the Settling State in which the Non-Participating

Subdivision is located, unless those payments are redirected elsewhere by a State-Subdivision Agreement described in Section V.D.1 or by an Allocation Statute or a Statutory Trust described in Section V.D.2.

E. *Provisions Regarding the Remediation Accounts Fund.*

1. State-Subdivision Agreement, Allocation Statute, and Statutory Trust Fund Provisions. A State-Subdivision Agreement, Allocation Statute, or Statutory Trust in a Settling State may govern the operation and use of amounts in that State's Remediation Accounts Fund so long as it complies with the requirements of Section V.D.1 or Section V.D.2, as applicable, and all direct payments to Participating Subdivisions in that State comply with Section VII.G through Section VII.I.

2. Absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust. In the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust that addresses distribution, the Remediation Accounts Fund will be used by a Settling State solely for future Opioid Remediation[12] and the following shall apply with respect to a Settling State:

a. *Regional Remediation.*

(i) At least fifty percent (50%) of distributions for remediation from a Settling State's Remediation Accounts Fund shall be annually allocated and tracked to the regional level. A Settling State may allow the Advisory Committee established pursuant to Section V.E.2.d to define its regions and assign regional allocations percentages. Otherwise, a Settling State shall (A) define its initial regions, which shall consist of one (1) or more General-Purpose Subdivision(s) and which shall be designated by the state agency with primary responsibility for substance abuse disorder services employing, to the maximum extent practical, existing regions established in that State for opioid abuse treatment or other public health purposes; (B) assign initial regional allocation percentages to the regions based on the Subdivision Allocation Percentages in Exhibit G and an assumption that all Subdivisions included on Exhibit G will become Participating Subdivisions.

(ii) This minimum regional expenditure percentage is calculated using the Settling State's initial Remediation Accounts Fund allocation and does not include any additional amounts a Settling State has directed to its Remediation Accounts Fund from its State Fund, or any other amounts directed to the fund. A Settling State may dedicate more than fifty percent (50%) of its Remediation Accounts Fund to the regional expenditure and may annually adjust the percentage of its Remediation Accounts Fund

[12] Future Opioid Remediation includes amounts paid to satisfy any future demand by another governmental entity to make a required reimbursement in connection with the past care and treatment of a person related to the Alleged Harms.

dedicated to regional expenditures as long as the percentage remains above the minimum amount.

(iii) A Settling State (A) has the authority to adjust the definition of the regions, and (B) may annually revise the percentages allocated to each region to reflect the number of General-Purpose Subdivisions in each region that are Non-Participating Subdivisions.

b. *Subdivision Block Grants.* Certain Participating Subdivisions shall be eligible to receive regional allocation funds in the form of block grants for future Opioid Remediation. A Participating Subdivision eligible for block grants is a county or parish (or in the case of Settling States that do not have counties or parishes that function as political subdivisions, a city) that (1) does not contain a Litigating Subdivision or a Later Litigating Subdivision for which it has the authority to end the litigation through a release, bar or other action, (2) either (i) has a population of 400,000 or more or (ii) in the case of California has a population of 750,000 or more, and (3) has funded or otherwise managed an established health care or treatment infrastructure (*e.g.*, health department or similar agency). Each Participating Subdivision eligible to receive block grants shall be assigned its own region.

c. *Small States.* Notwithstanding the provisions of Section V.E.2.a, Settling States with populations under four (4) million that do not have existing regions described in Section V.E.2.a shall not be required to establish regions. However, such a Settling State that contains one (1) or more Participating Subdivisions eligible for block grants under Section V.E.2.c shall be divided regionally so that each block-grant eligible Participating Subdivision is a region and the remainder of the Settling State is a region.

d. *Advisory Committee.* A Settling State shall designate an Opioid Settlement Remediation Advisory Committee (the "*Advisory Committee*") to provide input and recommendations regarding remediation spending from that Settling State's Remediation Accounts Fund. A Settling State may elect to use an existing advisory committee or similar entity (created outside of a State-Subdivision Agreement or Allocation Statute); *provided, however*, the Advisory Committee or similar entity shall meet the following requirements:

(i) Written guidelines that establish the formation and composition of the Advisory Committee, terms of service for members, contingency for removal or resignation of members, a schedule of meetings, and any other administrative details;

(ii) Composition that includes at least an equal number of local representatives as state representatives;

(iii) A process for receiving input from Participating Subdivisions and other communities regarding how the opioid crisis is

affecting their communities, their abatement needs, and proposals for abatement strategies and responses; and

(iv) A process by which Advisory Committee recommendations for expenditures for Opioid Remediation will be made to and considered by the appropriate state agencies.

3. Remediation Accounts Fund Reporting. The Settlement Fund Administrator shall track and assist in the report of remediation disbursements as agreed to between CVS and the Enforcement Committee.

F. *Nature of Payment*. CVS, the Settling States, and the Participating Subdivisions each acknowledge and agree that notwithstanding anything to the contrary in this Agreement, including, but not limited to, the scope of the Released Claims:

1. They have entered into this Agreement to avoid the delay, expense, inconvenience, and uncertainty of further litigation;

2. (a) The Settling States and Participating Subdivisions sought compensatory restitution and remediation (within the meaning of 26 U.S.C. § 162(f)(2)(A) and 26 C.F.R. § 1.162-21(e)(4)(i), (ii)) as damages for the Alleged Harms allegedly suffered by the Settling States and Participating Subdivisions; (b) the Total Remediation Amount is less than or equal to the amount, in the aggregate, of the Alleged Harms allegedly suffered by the Settling States and Participating Subdivisions; and (c) the portion of the Total Remediation Amount received by each Settling State or Participating Subdivision is less than or equal to the amount of the Alleged Harms allegedly suffered by such Settling State or Participating Subdivision;

3. The payment of the Total Remediation Amount by CVS constitutes, and is paid for, compensatory restitution and remediation (within the meaning of 26 U.S.C. § 162(f)(2)(A) and 26 C.F.R. § 1.162-21(e)(4)(i), (ii)) for alleged damage or harm (as compensation for alleged damage or harm arising out of alleged bodily injury) allegedly caused by CVS in order to restore, in whole or in part, the Settling States, Participating Subdivisions, and persons to the same position or condition that they would be in had the Settling States, Participating Subdivisions, and persons not suffered the Alleged Harms, and constitutes compensatory restitution and remediation for alleged damage or harm allegedly caused by the potential violation of a law and/or is an amount paid to come into compliance with the law; and

4. For the avoidance of doubt: (a) the entire Total Remediation Amount is properly characterized as described in Section V.F, (b) no portion of the Total Remediation Amount represents reimbursement to any Settling State or Participating Subdivision or other person or entity for the fees or costs of any investigation or litigation, including without limitation attorneys' fees, (c) no portion of the Global Settlement Amount constitutes the disgorgement of any allegedly ill-gotten gains, and (d) no portion of the Global Settlement Amount is paid for, is in place of, or is properly characterized as the payment of any fine, penalty, punitive damages, or other punitive assessments.

VI. Enforcement

A. *Enforceability.* This Agreement is enforceable only by the Settling States and CVS; *provided, however,* that Released Entities may enforce Section XI and Participating Subdivisions listed on Exhibit G have the enforcement rights described in Section VI.D. Except to the extent allowed by the Injunctive Relief Terms, Settling States and Participating Subdivisions shall not have enforcement rights with respect to either the terms of this Agreement that apply only to or in other States or any Consent Judgment entered into by another Settling State. Participating Subdivisions shall not have enforcement rights against CVS with respect to this Agreement or any Consent Judgment except that Participating Subdivisions shall have enforcement rights as set forth herein as to payments that would be allocated to the Subdivision Fund or Remediation Accounts Fund pursuant to Section V; *provided, however,* that each Settling State shall allow Participating Subdivisions in such Settling State to notify it of any perceived violations of this Agreement or the applicable Consent Judgment.

B. *Jurisdiction.* CVS consents to the jurisdiction of the court in each Settling State in which the Consent Judgment is filed, limited to and for the sole and exclusive purpose of resolution of disputes identified in Section VI.F.2 for resolution in that court.

C. *Specific Terms Dispute Resolution.*

1. Any dispute that is addressed by the provisions set forth in the Injunctive Relief Terms shall be resolved as provided therein.

2. In the event that CVS believes that the requirements established in Section V.B.1 are not being satisfied, CVS may request that CVS and the Enforcement Committee meet and confer regarding the use of funds to implement Section V.B.1. The completion of such meet-and-confer process is a precondition to further action regarding any such dispute. Further action concerning Section V.B.1 shall: (i) be limited to CVS obtaining a reduction of its Annual Payments by no more than five percent (5%) of the difference between the actual amount of Opioid Remediation and the 95.5% of CVS's maximum payment amounts pursuant to Section IV as set forth on Exhibit M-1 over the entirety of all Payment Years (but not in any single Payment Year); (ii) only reduce Annual Payments to those Settling States and their Participating Subdivisions that are out of compliance with the requirements established in Section V.B.1; and (iii) not reduce Annual Payments restricted to future Opioid Remediation.

D. *State-Subdivision Enforcement*.

1. A Subdivision shall not have enforcement rights against a Settling State in which it is located with respect to this Agreement or any Consent Judgment except that a Participating Subdivision listed on Exhibit G shall have enforcement rights (a) as provided for in a State-Subdivision Agreement, Allocation Statute, or Statutory Trust with respect to intrastate allocation; or (b) in the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust, to address allegations that (i) the Settling State's use of Remediation Accounts Fund monies were not used for uses similar to or in the nature of those uses contained in Exhibit E, or (ii) a Settling State failed to pay funds directly from

the Remediation Accounts Fund to a Participating Subdivision eligible to receive a block grant pursuant to Section V.E.2.b.

2. A Settling State shall have enforcement rights against a Participating Subdivision located in its territory (a) as provided for in a State-Subdivision Agreement, Allocation Statute, or Statutory Trust; or (b) in the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust, to address allegations that the Participating Subdivisions' uses of Remediation Accounts Fund monies were not used for purposes similar to or in the nature of those uses contained in Exhibit E.

3. As between Settling States and Participating Subdivisions, the above rights are contractual in nature and nothing herein is intended to limit, restrict, change or alter any other existing rights under law.

E. *Subdivision Payment Enforcement.* A Participating Subdivision listed on Exhibit G shall have the same right as a Settling State pursuant to Section VI.F.3.a(iv) to seek resolution regarding the failure by CVS to make its allocable share of an Annual Payment in a Payment Year.

F. *Other Terms Regarding Dispute Resolution.*

1. Except as provided by Section VI.C, the parties to a dispute shall promptly meet and confer in good faith to resolve any dispute. If the parties cannot resolve the dispute informally, and unless otherwise agreed in writing, they shall follow the remaining provisions of this Section VI.F to resolve the dispute.

2. Except to the extent provided by Section VI.C or Section VI.F.3, all disputes shall be resolved in either the court that entered the relevant Consent Judgment or, if no such Consent Judgment was entered, a state or territorial court with jurisdiction located wherever the seat of the relevant state government is located.

a. State court proceedings shall be governed by the rules and procedures of the relevant forum.

b. For the avoidance of doubt, disputes to be resolved in state court include, but are not limited to, the following:

(i) disputes concerning whether expenditures qualify as Opioid Remediation;

(ii) disputes between a Settling State and its Participating Subdivisions as provided by Section VI.D, except to the extent the State-Subdivision Agreement provides for other dispute resolution mechanisms. For the avoidance of doubt, disputes between a Settling State and any Participating Subdivision shall not be considered National Disputes;

(iii) whether this Agreement and relevant Consent Judgment are binding under state law;

(iv) the extent of the Attorney General's or other participating entity's authority under state law, including the extent of the authority to release claims;

(v) whether the definition of a Bar, a Case-Specific Resolution, Final Order, lead state agency as described in Section V.D.4.b, Later Litigating Subdivision, Litigating Subdivision, or Threshold Motion has been met; and

(vi) all other disputes not specifically identified in Section VI.C or Section VI.F.3.

c. Any Party may request that the National Arbitration Panel provide an interpretation of any provision of the Agreement that is relevant to the state court determination, and the National Arbitration Panel shall make reasonable best efforts to supply such interpretation within the earlier of thirty (30) calendar days or the time period required by the state court proceedings. Any Party may submit that interpretation to the state court to the extent permitted by, and for such weight provided by, the state court's rules and procedures. If requested by a Party, the National Arbitration Panel shall request that its interpretation be accepted in the form of an *amicus curiae* brief, and any attorneys' fees and costs for preparing any such filing shall be paid for by the requesting Party.

3. National Disputes involving a Settling State, a Participating Subdivision that has enforcement rights pursuant to Section VI.A, and/or CVS (together, "*Participating Parties*") shall be resolved by the National Arbitration Panel.

a. National Disputes are disputes that are not addressed by Section VI.C, and which are exceptions to Section VI.F.2's presumption of resolution in state courts because they involve issues of interpretation of terms contained in this Agreement applicable to all Settling States without reference to a particular State's law. Disputes between a Settling State and any Participating Subdivision shall not be considered National Disputes. National Disputes are limited to the following:

(i) The amount of withholding attributable to Non-Settling States;

(ii) issues involving the scope and definition of Product;

(iii) interpretation and application of the terms "Alleged Harms," "Covered Conduct," "Released Entities," and "Released Claims";

(iv) the failure by CVS to pay the Annual Payment, the Additional Remediation Amount in a Payment Year, or the amounts due pursuant to Exhibit S and Exhibit T, but for the avoidance of doubt, disputes between CVS and a Settling State over the amounts owed only to that

Settling State that do not affect any other Settling State shall not be considered National Disputes;

(v) the interpretation and application of any most-favored-nation provision in Section XIII.E;

(vi) questions regarding the performance and/or removal of the Settlement Fund Administrator;

(vii) disputes involving liability of successor entities;

(viii) disputes that require a determination of the sufficiency of participation in order to qualify for Incentive Payments A, B, C or D;

(ix) disputes requiring the interpretation of Agreement terms that are national in scope or impact, which shall mean disputes requiring the interpretation of Agreement terms that (i) concretely affect four (4) or more Settling States; and (ii) do not turn on unique definitions and interpretations under state law; and

(x) any dispute subject to resolution under Section VI.F.2 but for which all Participating Parties to the dispute agree to arbitration before the National Arbitration Panel under the provisions of this SectionVI.F.3.

b. The National Arbitration Panel shall be comprised of three (3) arbitrators. One (1) arbitrator shall be chosen by CVS, one (1) arbitrator shall be chosen by the Enforcement Committee with due input from Participating Subdivisions listed on Exhibit G, and the third arbitrator shall be agreed upon by the first two (2) arbitrators. The membership of the National Arbitration Panel is intended to remain constant throughout the term of this Agreement, but in the event that replacements are required, the retiring arbitrator shall be replaced by the party that selected him/her.

c. The National Arbitration Panel shall make reasonable best efforts to decide all matters within one hundred eighty (180) calendar days of filing, and in no event shall it take longer than one (1) year.

d. The National Arbitration Panel shall conduct all proceedings in a reasonably streamlined process consistent with an opportunity for the Participating Parties to be heard. Issues shall be resolved without the need for live witnesses where feasible, and with a presumption in favor of remote participation to minimize the burdens on the Participating Parties.

e. To the extent allowed under state law, a Settling State, a Participating Subdivision that has enforcement rights pursuant to Section VI.A, and (at any Participating Party's request) the National Arbitration Panel may certify to an appropriate state court any question of state law. The National Arbitration Panel

shall be bound by a final state court determination of such a certified question. The time period for the arbitration shall be tolled during the course of the certification process.

f. The arbitrators will give due deference to any authoritative interpretation of state law, including any declaratory judgment or similar relief obtained by a Settling State, a Participating Subdivision that has enforcement rights pursuant to Section VI.A, or CVS on a state law issue.

g. The decisions of the National Arbitration Panel shall be binding on Settling States, Participating Subdivisions, CVS, and the Settlement Fund Administrator. In any proceeding before the National Arbitration Panel involving a dispute between a Settling State and CVS whose resolution could prejudice the rights of a Participating Subdivision(s) in that Settling State, such Participating Subdivision(s) shall be allowed to file a statement of view in the proceeding.

h. Nothing herein shall be construed so as to limit or otherwise restrict a Settling State from seeking injunctive or other equitable relief in state court to protect the health, safety, or welfare of its citizens.

i. Each Participating Party shall bear its own costs in any arbitration or court proceeding arising under this Section VI. The costs for the arbitrators on the National Arbitration Panel shall be divided and paid equally by the disputing sides for each individual dispute, *e.g.*, a dispute between CVS and Settling States/Participating Subdivisions shall be split fifty percent (50%) by CVS and fifty percent (50%) by the Settling States/Participating Subdivisions that are parties to the dispute; a dispute between a Settling State and a Participating Subdivision shall be split fifty percent (50%) by the Settling State that is party to the dispute and fifty percent (50%) by any Participating Subdivisions that are parties to the dispute.

4. Prior to initiating an action to enforce pursuant to this Section VI.F, the complaining Participating Party must:

a. Provide written notice to the Enforcement Committee of its complaint, including the provision of the Consent Judgment and/or Agreement that the practice appears to violate, as well as the basis for its interpretation of the disputed provision. The Enforcement Committee shall establish a reasonable process and timeline for obtaining additional information from the involved parties; *provided*, *however*, that the date the Enforcement Committee establishes for obtaining additional information from the Participating Parties shall not be more than forty-five (45) calendar days following the notice. The Enforcement Committee may advise the Participating Parties of its views on the complaint and/or seek to resolve the complaint informally.

b. Wait to commence any enforcement action until thirty (30) calendar days after the date that the Enforcement Committee establishes for obtaining additional information from the Participating Parties.

5. If the Participating Parties to a dispute cannot agree on the proper forum for resolution of the dispute under the provisions of Section VI.F.2 or SectionVI.F.3, a committee comprising the Enforcement Committee and sufficient representatives of CVS, such that the members of the Enforcement Committee have a majority of one (1) member, will determine, within twenty-eight (28) calendar days of receiving notification of the dispute relating to the proper forum, the forum where the dispute will be initiated. The forum identified by such committee shall be the sole forum for resolving the issue of which forum will hear the substantive dispute, and the committee's identification of such forum in the first instance shall not be entitled to deference by the forum selected.

G. *No Effect.* Nothing in this Agreement shall be interpreted to limit the Settling States' Civil Investigative Demand ("*CID*") or investigative subpoena authority, to the extent such authority exists under applicable state law and the CID or investigative subpoena is issued pursuant to such authority, and CVS reserves all of its rights in connection with a CID or investigative subpoena issued pursuant to such authority.

VII. Participation by Subdivisions

A. *Notice.* Prior to the State Participation Date, the Parties shall agree on a vendor to serve as the Implementation Administrator and provide notice pursuant to this Section VII.A. No later than fifteen (15) calendar days after the Preliminary Agreement Date, the Implementation Administrator shall send individual written notice (which may be delivered via e-mail or other electronic means) of the opportunity to participate in this Agreement and the requirements of participation to all Subdivisions in the Settling States that are (1) Litigating Subdivisions or (2) Non-Litigating Subdivisions listed on Exhibit G. To the extent a Special District is entitled to an allocation for a direct payment through its inclusion in Exhibit G pursuant to a State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution, the Implementation Administrator, with the cooperation of the Settling States shall also send individual written notice (which may be delivered via e-mail or other electronic means) of the opportunity to participate in this Agreement and the requirements of participation to such Special Districts. Unless otherwise agreed by the Parties, the version of Exhibit G used for notice shall be the one in place as of the State Participation Date. Notice (which may be delivered via e-mail or other electronic means) shall also be provided simultaneously to counsel of record for Litigating Subdivisions and known counsel for Non-Litigating Subdivisions and Special Districts listed on Exhibit G. The Settling States also may provide general notice reasonably calculated to alert Non-Litigating Subdivisions in the Settling States to this Agreement, the opportunity to participate in it, and the requirements for participation. Such Notice may include publication and other standard forms of notification, as well as notice to national state and county organizations such as the National Association of Counties and the National League of Cities. All notice provided under this subsection will include that the deadline for becoming a Participating Subdivision is the Initial Subdivision Participation Date. Nothing contained herein shall preclude a Settling State from providing further notice to or otherwise contacting any of its Subdivisions about becoming a Participating Subdivision, including beginning any of the activities described in this paragraph prior to the Preliminary Agreement Date.

B. *Requirements for Becoming a Participating Subdivision—Non-Litigating Subdivisions.* A Non-Litigating Subdivision in a Settling State may become a Participating Subdivision by returning an executed Subdivision Participation Agreement to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) specifying (1) that the Subdivision agrees to the terms of this Agreement pertaining to Subdivisions, (2) that the Subdivision releases all Released Claims against all Released Entities, (3) that the Subdivision agrees to use monies it receives, if any, from the Settlement Fund pursuant to the applicable requirements of Section V; *provided, however*, that Non-Litigating Subdivisions may only use monies originating from the Settlement Fund for purposes that qualify as Opioid Remediation, and (4) that the Subdivision submits to the jurisdiction of the court where the applicable Consent Judgment is filed for purposes limited to that court's role under this Agreement. The required Subdivision Participation Agreement is attached as Exhibit K.

C. *Requirements for Becoming a Participating Subdivision—Litigating Subdivisions/Later Litigating Subdivisions.* A Litigating Subdivision or Later Litigating Subdivision in a Settling State may become a Participating Subdivision by returning an executed Subdivision Participation Agreement to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) and upon prompt dismissal with prejudice of its lawsuit following the Reference Date or the date on which the conditions for effectiveness in Section VIII.C have been met, whichever is later. Following its execution of a Subdivision Participation Agreement, a Litigating Subdivision shall take reasonable steps to immediately cease all litigation activity against the Released Entities, where feasible, or to minimize such activity by means of agreed deadline extensions and agreed postponement of depositions, document productions, and motion practice, unless the Litigating Subdivision reasonably concludes that it would be prejudiced by doing so. A Settling State may require each Litigating Subdivision in that State to specify on the Subdivision Participation Agreement whether its counsel has waived any contingency fee contract with that Participating Subdivision and whether, if eligible, it intends to seek fees pursuant to Exhibit R. The Settlement Fund Administrator shall provide quarterly reports of this information to the parties organized by Settling State. A Litigating Subdivision or Later Litigating Subdivision may not become a Participating Subdivision after the completion of opening statements in a trial of the lawsuit it brought that includes a Released Claim against a Released Entity. For avoidance of doubt, where a subdivision official other than a General-Purpose Government has filed a lawsuit that includes a Released Claim against a Released Entity in a direct, *parens patriae*, or any other capacity, that Subdivision may become a Participating Subdivision only if, in addition to the other requirements of this Section VII.C, the lawsuit filed by the subdivision official has also been dismissed with prejudice.

D. *Initial Participating Subdivisions.* A Subdivision qualifies as an Initial Participating Subdivision if it meets the applicable requirements for becoming a Participating Subdivision set forth in Section VII.B or Section VII.C by the Initial Subdivision Participation Date. All Subdivision Participation Agreements returned to the Implementation Administrator shall be held in escrow by the Implementation Administrator until the Reference Date. Subdivision Participation Agreements returned to the Implementation Administrator shall not be withdrawn

unless notice of the withdrawal is provided to the Implementation Administrator within eighteen (18) days after the Initial Subdivision Participation Date. If, for any reason, the Agreement does not become effective, all obligations created by such forms and releases in them shall be void *ab initio* and all Subdivision Participation Agreements shall be returned to Counsel for Litigating Subdivisions or to the Subdivisions not represented by counsel or destroyed to the extent that such destruction is not prohibited by then existing document preservation obligations.

E. *Later Participating Subdivisions.* A Subdivision in a Settling State that is not an Initial Participating Subdivision may become a Later Participating Subdivision by meeting the applicable requirements for becoming a Participating Subdivision set forth in Section VII.B or Section VII.C after the Initial Subdivision Participation Date and by agreeing to be subject to the terms of a State-Subdivision Agreement (if any) or any other structure adopted or applicable pursuant to Section V.D or Section V.E. The following provisions govern what a Later Participating Subdivision can receive (but do not apply to Initial Participating Subdivisions):

1. A Later Participating Subdivision shall not receive any share of any Annual Payment due before it became a Participating Subdivision.

2. A Subdivision that becomes a Later Participating Subdivision after November 30, 2023 shall receive seventy-five percent (75%) of the share of future base or incentive payments that it would have received had it become a Later Participating Subdivision prior to that date (unless the Later Participating Subdivision is subject to Section VII.E.3 or Section VII.E.4).

3. A Later Participating Subdivision that, after the Initial Subdivision Participation Date, maintains a lawsuit for a Released Claim(s) against a Released Entity and has judgment entered against it on every such Claim before it became a Participating Subdivision (other than a consensual dismissal with prejudice) is not eligible to become a Participation Subdivision.

4. A Subdivision that becomes a Later Participating Subdivision while a Bar or Case-Specific Resolution involving a different Subdivision exists in its State shall receive twenty-five percent (25%) of the share of future base or incentive payments that it would have received had it become a Later Participating Subdivision without such Bar or Case-Specific Resolution.

F. *No Increase in Payments.* Amounts to be received by Later Participating Subdivisions shall not increase the payments due from CVS.

G. *Ineligible Subdivisions*. Subdivisions in Non-Settling States and Prior Litigating Subdivisions are not eligible to be Participating Subdivisions.

H. *Non-Participating Subdivisions*. Non-Participating Subdivisions shall not directly receive any portion of any Annual Payment, including from the State Fund and direct distributions from the Remediation Accounts Fund; however, a Settling State may choose to fund future Opioid Remediation that indirectly benefits Non-Participating Subdivisions.

I. *Unpaid Allocations to Later Participating Subdivisions and Non-Participating Subdivisions*. Any base payments and incentive payments allocated pursuant to Section V.D to a Later Participating Subdivision or Non-Participating Subdivision that cannot be paid pursuant to this Section VII, including the amounts that remain unpaid after the reductions required by Section VII.E.2 through Section VII.E.4, will be allocated to the Remediation Accounts Fund for the Settling State in which the Non-Participating Subdivision is located, unless those payments are redirected elsewhere by a State-Subdivision Agreement or by a Statutory Trust.

VIII. Condition to Effectiveness of Agreement and Filing of Consent Judgment

A. *Distribution of Subdivision Participation Agreements*. No later than three (3) calendar days after the Initial Subdivision Participation Date, the Implementation Administrator shall report to the Settling States and CVS on which Subdivisions in the Settling States have and have not executed Subdivision Participation Agreements and shall provide notice under Section XIII.Q of any withdrawals of Subdivision Participation Agreements within one (1) business day of the withdrawal. The Settling States and CVS each shall have online access to the Subdivision Participation Agreements for the purpose of auditing the Implementation Administrator's reports but may not maintain copies. CVS shall pay up to and no more than $1.5 million of the Implementation Administrator's fees and costs, including advancing such fees and costs prior to the Effective Date. If this Agreement becomes effective, then CVS may deduct from its Annual Payment for Payment Year 2 any amount in excess of $1.5 million it paid for the Implementation Administrator's fees and costs.

B. *Determination to Proceed with Settlement—Settling States*. Following the Initial Subdivision Participation Date, the Settling States on the Enforcement Committee shall determine whether to proceed with the Agreement. No later than fifteen (15) calendar days prior to the Reference Date, the Settling States shall provide notice to CVS and the Enforcement Committee of their decision. If the Settling States elect not to proceed, this Agreement will have no further effect, and all releases (including those contained in Subdivision Participation Agreements) and other commitments or obligations contained herein or in Subdivision Settlement Participation Forms will be void.

C. *Determination to Proceed with Settlement—CVS.* If the Settling States elect to proceed, CVS shall then determine whether to proceed with the Agreement. This determination shall be in CVS's sole discretion and may be based on any criteria or factors it deems relevant. CVS shall provide notice to the Settling States and the Enforcement Committee of its decision no later than the Reference Date. If CVS elects to proceed with the Agreement, the Parties will proceed to file the Consent Judgments, and the obligations in the State Participation Forms and the Subdivision Participation Agreements will become effective as of the Reference Date. If CVS elects not to proceed, this Agreement will have no further effect, and all releases (including those contained in Subdivision Participation Agreements) and other commitments or obligations contained herein or in Subdivision Participation Agreements will be void.

IX. Additional Remediation

A. *Additional Remediation Amount.* Subject to and without exceeding the maximum payment amounts set forth in the "Additional Remediation Amount" column of Exhibit M-3 and

subject to the reduction specified in Section IX.B, CVS shall pay an Additional Remediation Amount to the Settling States listed in Exhibit N. Such funds shall be paid, on the schedule set forth in Exhibit M-3, on the Payment Date for each relevant Payment Year to such Settling States as allocated by the Settlement Fund Administrator pursuant to Exhibit N.

B. *Reduction of Additional Remediation Amount.* The amounts owed by CVS pursuant to this Section IX shall be reduced by the allocations set forth on Exhibit N for Non-Settling States.

C. For the avoidance of doubt, (1) a Settling State that retained outside counsel in connection with opioid investigations that receives an Additional Remediation Amount because the Settling State was not otherwise eligible to receive funds from the State Outside Counsel Fee Fund may choose to have the Additional Remediation Amount designated to pay the Settling State's outside counsel, and may instruct the Settlement Fund Administrator to pay those funds directly to the Settling State's outside counsel, and (2) Additional Remediation Amount funds, including funds designated by a Settling State to pay its outside counsel under this paragraph, shall not be subject to allocation as provided in Section V.C through Section V.E.

X. Plaintiffs' Attorneys' Fees and Costs

The Agreement on Attorneys' Fees, Expenses and Costs is set forth in Exhibit R and incorporated herein by reference. CVS shall pay subdivision attorneys' fees and costs into the Subdivision Attorney's Fee and Subdivision Cost and Expense Fund as set forth in Exhibit R and Exhibit M-3. The Agreement on the State Outside Counsel Fee Fund and Agreement on the Joint State Cost Fund are set forth in Exhibit S and Exhibit T, respectively, and are incorporated herein by reference. Attorneys' fees, expenses and costs shall not exceed the maximum annual and total amounts set forth in the relevant columns of Exhibits M-1 and M-3 and shall be subject to reduction as set forth in Exhibit R, Exhibit S, and Exhibit T.

XI. Release

A. *Scope.* As of the Effective Date, the Released Entities are hereby released and forever discharged from all of the Releasors' Released Claims. Each Settling State (for itself and its Releasors) and Participating Subdivision (for itself and its Releasors) hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim; or to cause, assist in bringing or permit to be brought, filed, or claimed; or to otherwise seek to establish liability for any Released Claim against any Released Entity in any forum whatsoever. The releases provided for in this Agreement are broad, shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to any Released Claim, and extend to the full extent of the power of each Settling State and its Attorney General to release claims. This Agreement shall be a complete bar to any Released Claim.

B. *Claim-Over and Non-Party Settlement*.

1. It is the intent of the Parties that:

a. Released Entities should not seek contribution or indemnification (other than pursuant to an insurance contract), from other parties for their payment obligations under this Agreement;

b. the payments made under this Agreement shall be the sole payments made by the Released Entities to the Releasors involving, arising out of, or related to Alleged Harms and/or Covered Conduct (or conduct that would be Covered Conduct if engaged in by a Released Entity);

c. Claims by Releasors against non-Parties shall not result in additional payments by Released Entities, whether through contribution, indemnification or any other means; and

d. the Agreement meets the requirements of the Uniform Contribution Among Joint Tortfeasors Act and any similar state law or doctrine that reduces or discharges a released party's liability to any other parties.

The provisions of this Section XI.B are to be implemented consistent with these principles. This Agreement and the releases and dismissals provided for herein are made in good faith.

2. No Released Entity shall seek to recover for amounts paid under this Agreement based on indemnification, contribution, or any other theory from a manufacturer, pharmacy, hospital, pharmacy benefit manager, health insurer, third-party vendor, trade association, distributor, or health care practitioner; *provided* that a Released Entity shall be relieved of this prohibition with respect to any entity that asserts a Claim-Over against it. For the avoidance of doubt, nothing herein shall prohibit a Released Entity from recovering amounts owed pursuant to insurance contracts.

3. If any Releasor enters into a Non-Party Settlement on or after the Effective Date, including in any bankruptcy case or through any plan of reorganization (whether individually or as a class of creditors), the Releasor will include (or in the case of a Non-Party Settlement made in connection with a bankruptcy case, will cause the debtor to include), unless prohibited from doing so under applicable law, in the Non-Party Settlement a prohibition on contribution or indemnity of any kind substantially equivalent to that required from CVS in Section XI.B.2, or a release from such Non-Released Entity in favor of the Released Entities (in a form equivalent to the releases contained in this Agreement) of any Claim-Over. The obligation to obtain the prohibition and/or release required by this subsection is a material term of this Agreement.

4. If any Releasor obtains a judgment with respect to a Non-Party Covered Conduct Claim against a Non-Released Entity that does not contain the prohibition described in Section XI.B.3, or any Releasor files a Non-Party Covered Conduct Claim against a Non-Released Entity in bankruptcy or a Releasor is prevented for any reason from obtaining a prohibition/release in a Non-Party Settlement as provided in Section XI.B.3, and such Non-Released Entity asserts a Claim-Over against a Released Entity, the Released Entity shall be relieved of the prohibition in Section XI.B.2 with respect to that Non-Released Entity and that Releasor and CVS shall take the following actions to ensure that

the Released Entities do not pay more with respect to Alleged Harms and/or Covered Conduct to Releasors or to Non-Released Entities than the amounts owed under this Agreement by CVS:

a. CVS shall notify that Releasor of the Claim-Over within sixty (60) calendar days of the assertion of the Claim-Over or sixty (60) calendar days of the Effective Date of this Agreement, whichever is later;

b. CVS and that Releasor shall meet and confer concerning the means to hold Released Entities harmless and ensure that they are not required to pay more with respect to Alleged Harms and/or Covered Conduct than the amounts owed by CVS under this Agreement;

c. That Releasor and CVS shall take steps sufficient and permissible under the law of the State of the Releasor to hold Released Entities harmless from the Claim-Over and ensure Released Entities are not required to pay more with respect to Alleged Harms and/or Covered Conduct than the amounts owed by CVS under this Agreement. Such steps may include, where permissible:

(i) Filing of motions to dismiss or such other appropriate motion by CVS or Released Entities, and supported by Releasors, in response to any claim filed in litigation or arbitration;

(ii) Reduction of that Releasors' Claim and any judgment it has obtained or may obtain against such Non-Released Entity by whatever amount is necessary to extinguish such Claim-Over under applicable law, up to the amount that Releasor has obtained, may obtain, or has authority to control from such Non-Released Entity;

(iii) Placement into escrow of funds paid by the Non-Released Entities such that those funds are available to satisfy the Claim-Over;

(iv) Return of monies paid by CVS to that Releasor under this Agreement to permit satisfaction of a judgment against or settlement with the Non-Released Entity to satisfy the Claim-Over;

(v) Payment of monies to CVS by that Releasor to ensure CVS is held harmless from such Claim-Over, up to the amount that Releasor has obtained, may obtain, or has authority to control from such Non-Released Entity;

(vi) Credit to CVS under this Agreement to reduce the overall amounts to be paid under the Agreement such that it is held harmless from the Claim-Over; and

(vii) Such other actions as that Releasor and CVS may devise to hold CVS harmless from the Claim-Over.

d. The actions of that Releasor and CVS taken pursuant to clause (c) above must, in combination, ensure CVS is not required to pay more with respect to Alleged Harms and/or Covered Conduct than the amounts owed by CVS under this Agreement.

e. In the event of any dispute over the sufficiency of the actions taken pursuant to clause (c) above, Releasor and CVS may seek review by the National Arbitration Panel, or, upon consent of the parties to the dispute, by the state court where the relevant Consent Judgment was filed. The National Arbitration Panel shall have authority to order a remedy, including one or more of the actions specified in clause (c), sufficient to hold Released Entities fully harmless. In the event that the Panel's actions do not result in Released Entities being held fully harmless, CVS shall have a claim for breach of this Agreement by Releasors, with the remedy being payment of sufficient funds to hold CVS harmless from the Claim-Over. For the avoidance of doubt, the prior sentence does not limit or eliminate any other remedy that CVS may have.

5. To the extent that the Claim-Over is based on a contractual indemnity, the obligations under Section XI.B.4 shall extend solely to a Non-Party Covered Conduct Claim against a pharmacy, distributor, clinic, hospital or other purchaser or dispenser of Products, a manufacturer that sold Products, a consultant, and/or a pharmacy benefit manager or other third-party payor. CVS shall notify the Settling States, to the extent permitted by applicable law, in the event that any of these types of Non-Released Entity asserts a Claim-Over arising out of contractual indemnity against it.

C. *Indemnification and Contribution Prohibited.* No Released Entity shall seek to recover for amounts paid under this Agreement based on indemnification, contribution, or any other theory, from a manufacturer, pharmacy, hospital, pharmacy benefit manager, health insurer, third-party vendor, trade association, distributor, or health care practitioner; *provided* that a Released Entity shall be relieved of this prohibition with respect to any entity that asserts a Claim-Over against it. For the avoidance of doubt, nothing herein shall prohibit a Released Entity from recovering amounts owed pursuant to insurance contracts. For the avoidance of doubt, nothing herein shall prohibit a Released Entity from recovering amounts owed pursuant to insurance contracts.

D. *General Release*. In connection with the releases provided for in this Agreement, each Settling State (for itself and its Releasors) and Participating Subdivision (for itself and its Releasors) expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any State or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent**. A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release and

> that if known by him or her, would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Settling State (for itself and its Releasors) and Participating Subdivision (for itself and its Releasors) hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date even if Releasors do not know or suspect such claims to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and even if knowledge of the existence of such claims would materially affect the Settling States' decision to enter into this Agreement or the Participating Subdivisions' decision to participate in this Agreement.

E. *Assigned Interest Waiver*. To the extent that any Settling State has any direct or indirect interest in any rights of a third-party that is a debtor under the Bankruptcy Code as a result of a claim arising out of Covered Conduct or Alleged Harms by way of assignment or otherwise, including as a result of being the beneficiary of a trust or other distribution entity, to assert claims against CVS (whether derivatively or otherwise), under any legal or equitable theory, including for indemnification, contribution, or subrogation, such Settling State waives the right to assert any such claim, or to receive a distribution or any benefit on account of such claim and such claim, distribution, or benefit shall be deemed assigned to CVS.

F. *Res Judicata*. Nothing in this Agreement shall be deemed to reduce the scope of the res judicata or claim preclusive effect that the settlement memorialized in this Agreement, and/or any Consent Judgment or other judgment entered on this Agreement, gives rise to under applicable law.

G. *Representation and Warranty*. The signatories hereto on behalf of their respective Settling States expressly represent and warrant that they have (or will obtain no later than the Initial Subdivision Participation Date) the authority to settle and release, to the maximum extent of the State's power, all Released Claims of (1) their respective Settling States, (2) all past and present executive departments, state agencies, divisions, boards, commissions and instrumentalities with the regulatory authority to enforce state and federal controlled substances acts, and (3) any of their respective Settling State's past and present executive departments, agencies, divisions, boards, commissions and instrumentalities that have the authority to bring Claims related to Alleged Harms and/or Covered Conduct seeking money (including abatement and/or remediation) or revocation of a pharmaceutical distribution or dispensing license. For the purposes of clause (3) above, executive departments, agencies, divisions, boards, commissions, and instrumentalities are those that are under the executive authority or direct control of the State's Governor. Also for the purposes of clause (3), a release from a State's Governor, to be materially similar to that in Exhibit X, is sufficient to demonstrate that the appropriate releases have been obtained.

H. *Effectiveness*. The releases set forth in this Agreement shall not be impacted in any way by any dispute that exists, has existed, or may later exist between or among the Releasors. Nor shall such releases be impacted in any way by any current or future law, regulation, ordinance, or court or agency order limiting, seizing, or controlling the distribution or use of the Settlement

Fund or any portion thereof, or by the enactment of future laws, or by any seizure of the Settlement Fund or any portion thereof.

I. *Cooperation*. Settling States will meet and confer with CVS and simultaneously make reasonable efforts to resolve any action filed by a Subdivision involving any Covered Conduct, Alleged Harms, or a Product that remains pending against CVS after the Initial Subdivision Participation Date. Releasors (i) will not encourage any person or entity to bring or maintain any Released Claim against any Released Entity and (ii) will reasonably cooperate with and not oppose any effort by a Released Entity to secure the prompt dismissal of any and all Released Claims.

J. *Non-Released Claims.* Notwithstanding the foregoing or anything in the definition of Released Claims, this Agreement does not waive, release or limit any criminal liability, Claims for liability under tax law, Claims under securities law by a State Releasor as investor, Claims against parties who are not Released Entities, Claims by private individuals, and any claims arising under this Agreement for enforcement of this Agreement. Nothing in this Agreement precludes the Released Entities from asserting, in an action arising from or relating to Claims by private individuals, any defense or argument based on this Agreement that is available under applicable law.

XII. Later Litigating Subdivisions; Non-Settling States

A. *Released Claims against Released Entities.* If a Later Litigating Subdivision in a Settling State maintains a lawsuit for a Released Claim against a Released Entity after the Initial Subdivision Participation Date, the Released Entity shall take ordinary and reasonable measures to defend the action, including filing a Threshold Motion with respect to the Released Claim. The Released Entity shall further notify the Settling State and Settlement Fund Administrator immediately upon notice of a Later Litigating Subdivision bringing a lawsuit for a Released Claim and shall not oppose a Settling State's submission in support of the Threshold Motion. CVS shall give the relevant Settling State a reasonable opportunity to extinguish the Released Claims without any payment or any other obligations being imposed upon any Released Entities (apart from the Global Settlement Amount payable by CVS under the Agreement or the Injunctive Relief Terms incurred by it). The relevant Settling State and CVS shall confer and use reasonable efforts to promptly resolve the lawsuit so that it is dismissed with prejudice. Nothing in this subsection creates an obligation for a Settling State to make a monetary payment or incur any other obligation to an entity filing a lawsuit.

B. *Non-Settling States.* Non-Settling States shall not be eligible for any payments or have any rights in connection with this Agreement.

C. *Settlement Class Resolution Opt Outs.* If a Settling State is eligible for Incentive Payment A on the basis of a Settlement Class Resolution, and a Primary Subdivision that opted out of the Settlement Class Resolution maintains a lawsuit asserting a Released Claim against a Released Entity, the following shall apply. The Released Entity shall take ordinary and reasonable measures to defend the action, including filing a Threshold Motion with respect to the Released Claim. The Settling State shall seek to obtain either dismissal of the lawsuit in cooperation with CVS, or a release of the Primary Subdivision's claims. If the lawsuit asserting a Released Claim

either survives a Threshold Motion or has an unresolved Threshold Motion fewer than sixty (60) calendar days prior to the scheduled start of a trial involving a Released Claim, and is resolved with finality on terms requiring payment by the Released Entity, CVS shall receive a dollar-for-dollar offset for the amount paid against its obligation to make remaining Incentive Payment A payments that would be apportioned to that Settling State and to its Subdivisions.

D. *Revoked Bar, Settlement Class Resolution, or Case-Specific Resolution.* If CVS made any Annual Payments that included any incentive payments earned as a result of the existence of a Bar, Settlement Class Resolution, or Case-Specific Resolution in a Settling State, and there is subsequently a Revocation Event with respect to that Bar, Settlement Class Resolution, or Case-Specific Resolution after the determination of the amount of such Annual Payment, that Settling State shall seek to obtain a release of the claims impacted by the Revocation Event, including but not limited to defending the legality of the Bar, obtaining a dismissal of the claims made against the Released Entity, and obtaining releases from impacted Subdivisions. If the Settling State is unable to defend the legality of the bar and/or obtain releases form all impacted Subdivisions, then CVS shall receive a dollar-for-dollar offset against the portion of remaining Annual Payments that would be allocated to that Settling State and its Participating Subdivisions. This offset will be calculated as the dollar amount difference between (1) the total amount of incentive payments paid by CVS by virtue of the Bar, Settlement Class Resolution, or Case-Specific Resolution subject to the Revocation Event and (2) the total amount of incentive payments that would have been due from CVS during that time had the Bar, Settlement Class Resolution, or Case-Specific Resolution subject to the Revocation Event not been in effect. The amount of incentive payments that would have been due, referenced in clause (2) above, will be calculated one hundred eighty (180) calendar days after the Revocation Event; for purposes of calculating the amount of incentive payments that would have been due, any relevant Subdivision shall be included as a Participating Subdivision if: (1) its Released Claims are extinguished by any subsequent Bar, Settlement Class Resolution, or Case-Specific Resolution in effect as of the date of such calculation, or (2) it becomes a Participating Subdivision (in addition to all other Participating Subdivisions) prior to the date of such calculation.

E. *Certain Taxes.* Amounts paid by CVS under an Opioid Tax in a Settling State in a Payment Year shall give rise to a dollar-for-dollar offset against CVS's obligation to pay its share of the Annual Payment in that Payment Year that would be allocated to the taxing Settling State or its Participating Subdivisions. If such amounts paid exceed CVS's allocable share of the Annual Payment allocable to the taxing Settling State or its Participating Subdivisions in that Payment Year, the excess shall carry forward as an offset against its allocable share of remaining Annual Payments that would be allocated to the taxing Settling State or its Participating Subdivisions. CVS represents that as of December 2, 2022, there is no Opioid Tax currently in effect in any Eligible State that would give rise to this offset provision.

XIII. Miscellaneous

A. *Population of General-Purpose Governments.* The population figures for General-Purpose Governments shall be the published U.S. Census Bureau's population estimates for July

1, 2019, released May 2020. These population figures shall remain unchanged during the term of this Agreement.[13]

B. *Population of Special Districts.* For any purpose in this Agreement in which the population of a Special District is used other than Section IV.H.6.d and Section IV.H.9.d: (a) School Districts' populations will be measured by the number of students enrolled who are eligible under the Individuals with Disabilities Education Act ("*IDEA*") or Section 504 of the Rehabilitation Act of 1973; (b) Health Districts' and Hospital Districts' populations will be measured at twenty-five percent (25%) of discharges; and (c) all other Special Districts' (including fire districts' and library districts') populations will be measured at ten percent (10%) of the population served. For the avoidance of doubt, this means that California healthcare districts will be measured at ten percent (10%) of their membership. CVS and the Enforcement Committee shall meet and confer in order to agree on data sources for purposes of this Section XIII.B prior to the Preliminary Agreement Date.

C. *Population Associated with Sheriffs.* For any purpose in this Agreement in which the population associated with a lawsuit by a sheriff is used, the population will be measured at twenty percent (20%) of the capacity of the jail(s) operated by the sheriff.

D. *No Admission.* The Parties intend the settlement as described herein to be a final and complete resolution of all disputes between CVS and all Releasors. CVS is entering into this Agreement solely for the purposes of settlement, to resolve all Actions and Released Claims and thereby avoid significant expense, inconvenience and uncertainty. CVS denies the allegations in the Actions and denies any civil or criminal liability in the Actions. Nothing contained herein may be taken as or deemed to be an admission or concession by CVS of: (i) any violation of any law, regulation, or ordinance; (ii) any fault, liability, or wrongdoing; (iii) the strength or weakness of any Claim or defense or allegation made in any Action, or in any other past, present or future proceeding relating to any Covered Conduct, Alleged Harms, or any Product; (iv) the legal viability of the claims and theories in any Action, including but not limited to the legal viability of the relief sought; or (v) any other matter of fact or law. Nothing in this Agreement shall be construed or used to prohibit any Released Entity from engaging in the conduct of its business relating to any Product in accordance with the Injunctive Relief Terms and applicable laws and regulations.

E. *Most-Favored-Nation Provision.*

1. If, after the Effective Date, CVS enters into any settlement agreement with any Non-Settling State that resolves Claims similar in scope to the Claims released by a Settling State under this Agreement on overall payment terms that are more favorable to such Non-Settling State than the overall payment terms of the Agreement (after due consideration of relevant differences in population or other appropriate factors), then the Settling States may elect to seek review, pursuant to Section XIII.E.3, of the overall payment terms of this Agreement and the Non-Settling State agreement so that such

[13] The estimates for counties and parishes were accessed at https://www.census.gov/data/datasets/time-series/demo/popest/2010s-countiestotal.html. The estimates for cities and towns can currently be found at https://www.census.gov/data/datasets/time-series/demo/popest/2010s-total-cities-and-towns.html.

Settling State(s) may obtain, with respect to CVS, overall payment terms at least as favorable as those obtained by such Non-Settling State. "*Overall payment terms*" refers to consideration of all payment terms of the two agreements, taken together, including, but not limited to the amounts of payments, the timing of payments, and conditions or contingencies on payments.

2. For any settlement with a Non-Settling State involving Released Claims that is entered into after the Effective Date, CVS shall provide the Enforcement Committee with a copy of the settlement agreement or relevant consent judgment within thirty (30) calendar days of the consummation of such settlement. The Enforcement Committee will promptly distribute such copy to all Settling States.

3. In the event that one or more Settling State(s) believes that the overall payment terms of an agreement by CVS with a Non-Settling State are more favorable to the Non-Settling State, based on the totality of the considerations set forth in Section XIII.E.1, the Settling State(s) and CVS shall engage in the following process:

a. The Settling State(s) shall provide notice, within sixty (60) calendar days of the date on which a settlement agreement or consent judgment is provided to the Enforcement Committee, to CVS of its (their) intent to seek revision of this Agreement to provide payment terms that are, on an overall basis, as favorable as those obtained by the Non-Settling State. To the extent allowed by law, such notice shall be confidential and not disclosed publicly and shall provide, in detail, the basis for the Settling State's (Settling States') belief that it (they) is (are) entitled to a revision of the Agreement.

b. CVS shall, within thirty (30) calendar days, provide a response to the Settling State(s), explaining its position, in detail, as to whether the Settling State(s) is (are) entitled to more favorable overall payment terms than those provided for in this Agreement.

c. In the event the Settling State(s) and CVS do not reach agreement as to the application of Section XIII.E.1, the Settling State(s) may petition the National Arbitration Panel to seek a ruling from the Panel as to the applicability of Section XIII.E.1, provided that the Settling State(s) may seek such review only if at least five (5) Settling States co-sign the petition. The Panel shall consider submissions and argument by the parties pursuant to the procedures set forth in Section VI.F.3.

d. The Settling State(s) and CVS shall be bound by the determination of the National Arbitration Panel.

4. This Section XIII.E does not apply to, and there is no ability of any Settling State to seek or obtain revision of this Agreement based on, any Non-Settling State agreement with CVS that is entered into with: (a) a Non-Settling State after a date ninety (90) calendar days prior to the scheduled start date of a trial between CVS and the Non-Settling State or any severed or bifurcated portion thereof, provided that, where, in order

to complete a settlement, a Non-Settling State and CVS jointly request an adjournment of the scheduled start date of a trial within ninety (90) calendar days of that date, this exception will apply as if the trial date had not been adjourned; (b) a Non-Settling State that previously litigated to judgment a case related to opioids against any manufacturer, distributor, or pharmacy; or (c) a Non-Settling State that has obtained any court order or judicial determination that grants judgment (in whole or in part) against CVS. For avoidance of doubt, the National Arbitration Panel shall have no power to review agreements described in this paragraph.

5. This Section XIII.E does not apply to, and there is no ability of any Settling State to seek or obtain revision of this Agreement based on, (a) any agreement between CVS and Non-Participating Subdivisions, and (b) any global tribal settlement or any agreement between CVS and any federally-recognized tribe.

6. This Section XIII.E will not apply to any agreement entered into more than eighteen (18) months after the Effective Date.

F. *Tax Cooperation and Reporting*.

1. Upon request by CVS, the Settling States and Participating Subdivisions agree to perform such further acts and to execute and deliver such further documents as may be reasonably necessary for CVS to establish the statements set forth in Section V.F to the satisfaction of their tax advisors, their independent financial auditors, the Internal Revenue Service, or any other governmental authority, including as contemplated by Treasury Regulations Section 1.162-21(b)(3)(ii) and any subsequently proposed or finalized relevant regulations or administrative guidance.

2. Without limiting the generality of Section XIII.F.1, each Settling State and Participating Subdivision shall cooperate in good faith with CVS with respect to any tax claim, dispute, investigation, audit, examination, contest, litigation, or other proceeding relating to this Agreement.

3. The Designated State, on behalf of all Settling States and Participating Subdivisions, shall designate one of its officers or employees to act as the "appropriate official" within the meaning of Treasury Regulations Section 1.6050X-1(f)(1)(ii)(B) (the "*Appropriate Official*"). The Designated State shall direct and ensure that the Appropriate Official timely (a) files (i) at the time this Agreement becomes binding on the Parties, an IRS Form 1098-F in the form attached as Exhibit U with respect to CVS and (ii) any legally required returns or amended returns with any applicable governmental authority, or any returns requested by CVS, and (b) provides to CVS a copy of (i) the IRS Form 1098-F filed with respect to CVS and (ii) any legally required written statement pursuant to any applicable law and any other document referred to in clause (a)(ii) above. Any such form, return, or statement shall be prepared and filed in a manner fully consistent with Section V.F.

4. Any return, amended return, or written statement filed or provided pursuant to Section XIII.F.3, and any similar document, shall be prepared and filed in a manner

consistent with reporting the Global Settlement Amount as the "Total amount to be paid" pursuant to this Agreement in Box 1 of IRS Form 1098-F and the Total Remediation Amount as "Restitution/remediation amount" in Box 3 of IRS Form 1098-F, as reflected in the attached Exhibit U. If the Designated State or Appropriate Official shall be required to file any return, amended return, or written statement contemplated by this Section XIII.F other than an IRS Form 1098-F in the form attached as Exhibit U, the Designated State shall direct and ensure that the Appropriate Official provides to CVS a draft of such return, amended return, or written statement no later than sixty (60) calendar days prior to the due date thereof, and shall accept any reasonable revisions from CVS on the return, amended return, or written statement.

5. For the avoidance of doubt, neither CVS nor the Settling States and Participating Subdivisions make any warranty or representation to any Settling State, Participating Subdivision, or Releasor as to the tax consequences of the payment of the Total Remediation Amount (or any portion thereof).

G. *No Third-Party Beneficiaries.* Except as expressly provided in this Agreement, no portion of this Agreement shall provide any rights to, or be enforceable by, any person or entity that is not a Settling State or Released Entity. No Settling State may assign or otherwise convey any right to enforce any provision of this Agreement.

H. *Calculation*. Any figure or percentage referred to in this Agreement shall be carried to seven decimal places.

I. *Construction*. None of the Parties and no Participating Subdivision shall be considered to be the drafter of this Agreement or of any of its provisions for the purpose of any statute, case law, or rule of interpretation or construction that would or might cause any provision to be construed against the drafter of this Agreement. The headings of the provisions of this Agreement are not binding and are for reference only and do not limit, expand, or otherwise affect the contents or meaning of this Agreement.

J. *Cooperation*. Each Party and each Participating Subdivision agrees to use reasonable efforts and to cooperate with the other Parties and Participating Subdivisions to cause this Agreement and Consent Judgments to become effective, to obtain all necessary approvals, consents and authorizations, if any, and to execute all documents and to take such other action as may be appropriate in connection herewith. Consistent with the foregoing, each Party and each Participating Subdivision agrees that it will not directly or indirectly assist or encourage any challenge to this Agreement or any Consent Judgment by any other person, and will support the integrity and enforcement of the terms of this Agreement and the Consent Judgments.

K. *Entire Agreement*. This Agreement, including its exhibits and any other attachments, embodies the entire agreement and understanding between and among the Parties and Participating Subdivisions relating to the subject matter hereof and supersedes (1) all prior agreements and understandings relating to such subject matter, whether written or oral and (2) all purportedly contemporaneous oral agreements and understandings relating to such subject matter.

L. *Execution*. This Agreement may be executed in counterparts and by different signatories on separate counterparts, each of which shall be deemed an original, but all of which shall together be one and the same Agreement. One or more counterparts of this Agreement may be delivered by facsimile or electronic transmission with the intent that it or they shall constitute an original counterpart hereof. One or more counterparts of this Agreement may be signed by electronic signature.

M. *Good Faith and Voluntary Entry*. Each Party warrants and represents that it negotiated the terms of this Agreement in good faith. Each of the Parties and Participating Subdivisions warrants and represents that it freely and voluntarily entered into this Agreement without any degree of duress or compulsion. The Parties and Participating Subdivisions state that no promise of any kind or nature whatsoever (other than the written terms of this Agreement) was made to them to induce them to enter into this Agreement.

N. *Legal Obligations.* Nothing in this Agreement shall relieve CVS of the obligation to comply with all state and federal laws, regulations or rules, nor does any provision herein permit any acts or practices prohibited by such laws, regulations, or rules. Except with respect to the Injunctive Relief Terms, in the event of a conflict between this Agreement and any requirement or requirements of federal, state, or local laws, such that CVS cannot comply with this Agreement without violating such a requirement or requirements, CVS shall document such conflicts and notify the Attorney(s) General of the relevant Settling State(s) that it intends to comply with the requirement or requirements to the extent necessary to eliminate the conflict. With respect to the Injunctive Relief Terms, in the event of such a conflict, the procedures set forth in the Injunctive Relief Terms will be followed.

O. *No Prevailing Party.* The Parties and Participating Subdivisions each agree that they are not the prevailing party in this action, for purposes of any claim for fees, costs, or expenses as prevailing parties arising under common law or under the terms of any statute, because the Parties and Participating Subdivisions have reached a good faith settlement. The Parties and Participating Subdivisions each further waive any right to challenge or contest the validity of this Agreement on any ground, including, without limitation, that any term is unconstitutional or is preempted by, or in conflict with, any current or future law. Nothing in the previous sentence shall modify, or be construed to conflict with, Section XIII.N.

P. *Non-Admissibility*. Neither this Agreement nor any act performed or document executed pursuant to or in furtherance of this Agreement: (i) is or may be deemed to be or may be used as an admission or evidence relating to any matter of fact or law alleged in the Actions, the strength or weakness of any claim or defense or allegation made in those cases, or any wrongdoing, fault, or liability of any Released Entities; or (ii) is or may be deemed to be or may be used as an admission or evidence relating to any liability, fault or omission of Released Entities in any civil, criminal or administrative proceeding in any court, administrative agency or other tribunal. Neither this Agreement nor any act performed or document executed pursuant to or in furtherance of this Agreement shall be admissible in any proceeding for any purpose, except to enforce the terms of this Agreement, and except that Released Entities may file or use this Agreement in any action (1) involving a determination regarding insurance coverage; (2) involving a determination of the taxable income or tax liability of any Released Entities; (3) to support a defense or counterclaim

based on principles of res judicata, collateral estoppel, release, good-faith settlement, judgment bar or reduction or on any other theory of claim preclusion or issue preclusion or similar defense or counterclaim; (4) to support a claim for contribution and/or indemnification; or (5) to support any other argument or defense by a Released Entities that the Remediation Payment provides a measure of compensation for Alleged Harms or otherwise satisfy the relief sought.

Q. *Notices.* All notices or other communications under this Agreement shall be in writing (including, but not limited to, electronic communications) and shall be given to the recipients indicated below:

For the Attorney(s) General:

Josh Stein, Attorney General
North Carolina Department of Justice
Attn: Daniel Mosteller, Deputy General Counsel
PO Box 629
Raleigh, NC 27602
Dmosteller@ncdoj.gov

Dave Yost, Attorney General
Ohio Attorney's General Office
Attn: Jonathan Blanton, First Assistant Attorney General
30 East Broad Street
Columbus, OH 43215
Jonathan.Blanton@OhioAGO.gov

Letitia James, Attorney General
New York State Office of the Attorney General
Attn: Jennifer Levy, First Deputy Attorney General
28 Liberty Street
New York, NY 10005
Jennifer.Levy@ag.ny.gov

For the Plaintiffs' Executive Committee:

Paul T. Farrell, Jr.
Farrell & Fuller, LLP
270 Munoz Rivera Ave., Suite 201
San Juan, Puerto Rico 00918
paul@farrellfuller.com

Jayne Conroy
Simmons Hanly Conroy LLC
112 Madison Avenue, 7th Floor
New York, NY 10016-7416
JConroy@simmonsfirm.com

Joseph F. Rice
Motley Rice LLC
28 Bridgeside Blvd.
Mount Pleasant, SC 29464
jrice@motleyrice.com

For CVS:

Elizabeth Ferguson
Senior Vice President and Deputy General Counsel
CVS Health Corporation
One CVS Drive
Woonsocket, RI 02895
betsy.ferguson@cvshealth.com

Notices to CVS's attorneys shall be delivered to:

Eric Delinsky
Zuckerman Spaeder LLP
1800 M Street, NW, Suite 1000
Washington, DC 20036-5807
edelinsky@zuckerman.com

Perry Rowthorn
Jepsen Rowthorn LLP
PO Box 370496
West Hartford, CT 06137
perry@jeprow.com

Any Party or the Plaintiffs' Executive Committee may change or add the contact information of the persons designated to receive notice on its behalf by notice given (effective upon the giving of such notice) as provided in this Section XIII.Q.

R. *No Waiver*. The waiver of any rights conferred hereunder shall be effective only if made by written instrument executed by the waiving Party or Parties. The waiver by any Party of any breach of this Agreement shall not be deemed to be or construed as a waiver of any other breach, whether prior, subsequent, or contemporaneous, nor shall such waiver be deemed to be or construed as a waiver by any other Party.

S. *Severability.* In the event any one or more immaterial provisions of this Agreement shall for any reason be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement.

T. *Preservation of Privilege.* Nothing contained in this Agreement or any Consent Judgment, and no act required to be performed pursuant to this Agreement or any Consent

Judgment, is intended to constitute, cause, or effect any waiver (in whole or in part) of any attorney-client privilege, work product protection, or common interest/joint defense privilege, and each Party and Participating Subdivision agrees that it shall not make or cause to be made in any forum any assertion to the contrary.

U. *Successors*.

1. This Agreement shall be binding upon, and inure to the benefit of, the Parties and their respective successors and assigns.

2. CVS shall not sell the majority of its voting stock or substantially all its assets without obtaining the acquiror's agreement that it will constitute a successor with respect to CVS's obligations under this Agreement.

3. CVS shall not in one (1) transaction, or a series of related transactions, sell, or transfer assets (other than sales or transfers of inventories, or sales or transfers to an entity owed directly or indirectly by CVS) having a fair market value equal to twenty-five percent (25%) or more of the consolidated assets of CVS where the sale or transfer transaction is announced after the Effective Date, is not for fair consideration, and would foreseeably and unreasonably jeopardize CVS's ability to make the payments under this Agreement that are due on or before the third Payment Date following the close of a sale or transfer transaction. The above restriction shall not apply if CVS obtains the acquiror's agreement that it will be either a guarantor of or successor to the percentage of CVS's remaining payment obligations under this Agreement equal to the percentage of CVS's consolidated assets being sold or transferred in such transaction. Percentages under this section shall be determined in accordance with the United States generally accepted accounting principles and as of the date of CVS's most recent publicly filed consolidated balance sheet prior to the date of entry into the sale or transfer agreement at issue. This Section XIII.U.3 shall be enforceable solely by the Enforcement Committee, and any objection under this Section XIII.U.3 not raised within twenty (20) calendar days from the date that CVS transmits notice of the transaction to the Enforcement Committee is waived. Any dispute under this Section XIII.U.3 shall be a National Dispute as described in Section VI.F.3 and must be raised exclusively with the National Arbitration Panel as described therein within twenty (20) calendar days of the announcement, and the sole remedy shall be an order enjoining the transaction.

V. *Waiver*. CVS, for good and valuable consideration the receipt of which is acknowledged, hereby (a) waives, foregoes and relinquishes all rights to utilize and/or seek relief under any of the following laws of the State of Texas for the restructuring of its debts or liabilities related to Released Claims, Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement: Tex. Bus. Orgs. Code § 10.003 (Contents of Plan of Merger: More Than One Successor) or any other statute of Subchapter A of Chapter 10 of Tex. Bus. Orgs. Code to the extent such statute relates to multi-successor mergers (and/or any other similar laws or statutes in any other state or territory); Tex. Bus. Orgs. Code §§ 11.01–11.414 (Winding Up and Termination of Domestic Entity); or Tex. Bus. & Com. Code §§ 23.01–23.33 (Assignments for the Benefit of Creditors) (collectively, the "*Texas*

Statutes"), and (b) agrees, warrants and represents that it will not file, request or petition for relief under the Texas Statutes related to its debts or liabilities related to Released Claims, Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement, in each case until such time as all of CVS's payment obligations incurred hereunder are satisfied in full. The foregoing waiver and relinquishment includes, without limitation, until such time as all of CVS's payment obligations incurred hereunder are satisfied in full, CVS's rights to execute a divisional merger or equivalent transaction or restructuring related to its debts or liabilities related to Released Claims, Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement that in each case has the intent or foreseeable effect of (i) separating material assets from material liabilities and (ii) assigning or allocating all or a substantial portion of those liabilities to any subsidiary or affiliate that files for relief under chapter 11 of the Bankruptcy Code, or pursuant to which such subsidiary or affiliate that files for relief under chapter 11 of the Bankruptcy Code would be assuming or retaining all or a substantial portion of those liabilities.

W. *Modification, Amendment, Alteration.* In the event the Plaintiffs' Executive Committee, the Executive Committee of the State Attorneys General, or CVS concludes prior to January 18, 2023 that technical corrections are required to this Agreement, the Plaintiffs' Executive Committee, the Executive Committee of the State Attorneys General, and CVS shall meet and confer and make such amendments as they agree are appropriate. Except as otherwise provided in this Agreement, after the Reference Date, any modification, amendment, or alteration of this Agreement by the Parties shall be binding only if evidenced in writing signed by CVS, along with the signatures of at least two-thirds of the Settling States along with a representation from each such Settling State that either: (1) the Advisory Committee or similar entity established or recognized by that Settling State (either pursuant to Section V.E.2.d, by a State-Subdivision Agreement, or by statute) voted in favor of the modification, amendment or alteration of this Agreement including at least one member appointed by the Participating Subdivisions listed on Exhibit G; or (2) in States without any Advisory Committee, that 50.1% (by population) of the Participating Subdivisions listed on Exhibit G expressed approval of the modification, amendment, or alteration of this Agreement in a writing.

X. *Termination.*

1. Unless otherwise agreed to by CVS and the Settling State in question, this Agreement or the Consent Judgment as to that Settling State and all of its terms (except Section XIII.P and any other non-admissibility provisions, which shall continue in full force and effect) shall be canceled and terminated with respect to the Settling State, and the Agreement and all orders issued by the courts in the Settling State pursuant to the Agreement shall become null and void and of no effect, only if one or more of the following conditions applies:

a. a Consent Judgment approving this Agreement without modification of any of the Agreement's terms has not been entered as to the Settling State by a court of competent jurisdiction on or before one hundred eighty (180) days after the Effective Date; or

b. this Agreement has been disapproved by a court of competent jurisdiction to which it was presented for approval and/or entry (or, in the event of an appeal from or review of a decision of such a court to approve this Agreement and the Consent Judgment, by the court hearing such appeal or conducting such review), and the time to appeal from such disapproval has expired, or, in the event of an appeal from such disapproval, the appeal has been dismissed or the disapproval has been affirmed by the court of last resort to which such appeal has been taken and such dismissal or disapproval has become no longer subject to further appeal (including, without limitation, review by the United States Supreme Court).

2. If this Agreement is terminated with respect to a Settling State for whatever reason pursuant to Section XIII.X.1, then:

a. an applicable statute of limitation or any similar time requirement (excluding any statute of repose) shall be tolled from the date the Settling State signed this Agreement until the later of the time permitted by applicable law or for one year from the date of such termination, with the effect that CVS and the Settling State in question shall be in the same position with respect to the statute of limitation as they were at the time the Settling State filed its action; and

b. CVS and the Settling State in question shall jointly move the relevant court of competent jurisdiction for an order reinstating the actions and claims dismissed pursuant to the terms of this Agreement governing dismissal, with the effect that CVS and the Settling State in question shall be in the same position with respect to those actions and claims as they were at the time the action or claim was stayed or dismissed.

3. Unless CVS and the Enforcement Committee agree otherwise, this Agreement, with the exception of the Injunctive Relief Terms that have their own provisions on duration, shall terminate as to all Parties after the Payment Date for Payment Year 10, *provided* that CVS has performed its payment obligations under the Agreement as of that date. Notwithstanding any other provision in this Section XIII.X.3 or in this Agreement, all releases under this Agreement will remain effective in perpetuity.

Y. *Governing Law.* Except (1) as otherwise provided in this Agreement or (2) as necessary, in the sole judgment of the National Arbitration Panel, to promote uniformity of interpretation for matters within the scope of the National Arbitration Panel's authority, this Agreement shall be governed by and interpreted in accordance with the respective laws of each Settling State, without regard to the conflict of law rules of such Settling State, that is seeking to enforce the Agreement against CVS or against which CVS is seeking enforcement. Notwithstanding any other provision in this subsection on governing law, any disputes relating to the Settlement Fund Escrow shall be governed by and interpreted in accordance with the law of the state where the escrow agent has its primary place of business.

EXHIBIT A

Alleged Harms

The following expert reports that were served in connection with the case captioned *In re: National Prescription Opiate Litigation*, No. 1:17-md-2804 (N.D. Ohio), provide non-exclusive examples of Alleged Harms:

1. Expert reports of G. Caleb Alexander, M.D., M.S., dated March 24, 2019, April 16, 2021, and August 22, 2022;

2. Expert reports of David Cutler dated March 25, 2019, April 16, 2021, April 21, 2021, May 10, 2021, and August 22, 2022;

3. Expert report of David Herzberg, Ph.D., dated April 16, 2021;

4. Expert reports of Katherine M. Keyes, Ph.D., dated March 25, 2019, April 16, 2021, June 2, 2021, and August 22, 2022;

5. Expert reports of Dr. Anna Lembke, M.D., dated March 25, 2019, April 16, 2021, and August 22, 2022;

6. Expert report of Nancy Young, Ph.D, M.S.W., dated March 25, 2019 and April 16, 2021;

7. Expert report of Harvey Rosen, dated April 16, 2021; and

8. Expert report of Professor Thomas McGuire dated March 25, 2019.

EXHIBIT B

Enforcement Committee Organization Bylaws

ARTICLE I

These bylaws constitute the code of rules adopted by the Settling States and Participating Subdivisions for the creation of an Enforcement Committee (the "Committee") to exist and operate during the term of the Agreement in connection with CVS and shall control the regulation and management of the Committee's affairs.

ARTICLE II
Purpose

The Committee is organized for the sole purpose of evaluating and taking such action as deemed reasonable, necessary, and appropriate by the members of the Committee on the matters delegated to the Committee under that certain Settlement Agreement between the Settling States and CVS dated December 9, 2022.

ARTICLE III
Members of the Committee

(1) Number of Members

The Committee will consist of sixteen (16) members (the "Members"). Upon majority resolution of the Committee, the number of Members may be increased or decreased from time to time, but in no event shall a decrease have the effect of decreasing the total number of Members to less than seven Members.

(2) Initial Members

The Committee initially will consist of ten (10) Settling State Members and six (6) Participating Subdivision Members; three (3) of the Participating Subdivisions shall be counties and three (3) shall be municipalities. The initial Settling State Members are representatives from: Connecticut, Delaware, Illinois, Indiana, Louisiana, New York, North Carolina, Ohio, Tennessee, and Texas. The initial Participating Subdivision Members are: [●]. Until fifteen (15) months from the Effective Date contained in the Settlement Agreement, the Participating Subdivisions may designate their outside counsel to serve as their representative. After fifteen (15) months from the Effective Date, an employee or official of the Participating Subdivision must be the designated as the representative of the Participating Subdivision.

(3) Term of Members

The term of office for Members of the Committee will be until the end of the term of the Settlement Agreement unless and until a Member withdraws or resigns from the Committee.

(4) Resignation

Any Member may resign at any time by delivering written notice to the Chairperson of the Committee. Such resignation shall take effect upon receipt or, if later, at the time specified in the notice.

(5) Removal

(a) Any Member may be removed without cause, at any time, by a majority of the entire Committee, at a Regular or Special Meeting called for that purpose. Any Member under consideration of removal must first be notified about the consideration by written notice at least five days prior to the meeting at which the vote takes place.

(b) In the event that any Member is not a Settling State or a Participating Subdivision or the Member subsequently becomes a Later Litigating Subdivision, the Member shall be removed immediately without notice or vote of the Committee.

(6) Vacancies

In the event of a vacancy, the Members of the same type (Settling State or Participating Subdivision) shall select another Settling State or Participating Subdivision to fill that Member's position.

(7) Compensation

Members shall not receive any salaries or other compensation for their services, but, by resolution of the Committee, may be reimbursed for any actual expenses incurred in the performance of their duties for the Committee, as long as a majority of disinterested Members approve the reimbursement. Any reimbursement shall be sought from the Settlement Fund Administrator.

ARTICLE IV
Conflicts of Interest and Code of Ethics

If a Member, agent, or employee of the Committee has a conflict of interest, he or she may not participate in a vote, discussion, or decision about the matter. Each Member shall follow any applicable state or local law with respect to conflicts, gifts, and ethics.

ARTICLE V
Committee Meetings

(1) Place of Meetings

Meetings of the Committee will be held at any place that the Chairperson may designate, including by telephonic or electronic means.

(2) Regular Meetings

Regular meetings of the Committee shall be held as deemed necessary by the Chairperson or any three members.

(3) Notice of Meetings

Written notice of the date, time, place and subject of each meeting must be provided to the Members at least 72 hours before the scheduled time of the meeting, except when there is an emergency or urgent public necessity.

(4) Quorum

A majority of the incumbent Members (not counting vacancies) shall constitute a quorum for the purposes of convening a meeting or conducting business.

(5) Voting and Proxy

When it is necessary to vote on any matter before the Committee, Members may vote by electronic means as provided in these Bylaws. Proxy voting is permitted. In order for a matter to pass, the matter must have a majority vote of Members present and must have at least one vote from a Settling State Member and a Participating Subdivision Member. In the event that there is a Quorum, but no Settling State or Participating Subdivision Member is present, then a matter may pass with a simple majority vote.

(6) Minutes

The Committee shall prepare and keep minutes. The minutes must state the subject of each deliberation and indicate each vote, order, decision, or other action taken.

ARTICLE VI
Officers

(1) Roster of Officers

The Committee shall have a Chairperson, a Vice Chairperson, and a Secretary. The Committee may have at its discretion, such other officers as may be appointed by the Members of the Committee. One person may hold two or more offices, except those serving as Chairperson.

(2) Election and Removal of Officers

All officers shall serve two-year terms. The election shall be conducted at the first meeting of the fiscal year. Officers shall remain in office until their successors have been selected. Officers may serve consecutive terms without limit. The election of officers shall be by majority vote of the Members of the Committee attending the meeting.

(3) Vacancies

If a vacancy occurs during the term of office for any elected officer, the Members of the Committee shall elect a new officer to fill the remainder of the term as soon as practical, by majority vote of Members present.

(4) Chairperson

The Chairperson will supervise and control the affairs of the Committee and shall exercise such supervisory powers as may be given him/her by the Members of the Committee. The Chairperson will perform all duties incident to such office and such other duties as may be provided in these bylaws or as may be prescribed from time to time by the Committee. The Chairperson shall preside at all meetings and shall exercise parliamentary control in accordance with Robert's Rules of Order.

(5) Vice Chairperson

The Vice Chairperson shall act in place of the Chairperson in the event of the Chairperson's absence, inability, or refusal to act, and shall exercise and discharge such other duties as may be required by the Committee. The Vice Chairperson shall serve as the parliamentarian and interpret any ambiguities of the bylaws.

(6) Secretary

The Secretary will keep and maintain all records related to the Committee and take minutes of all meetings.

(7) Records

All elected officers and committee chairpersons shall relinquish their records to the Chairperson immediately upon the completion of their term of office or completion of a project.

(8) Resignation

An officer may resign the office while not resigning membership from the Committee, by submitting a letter to the Chairperson. Vacancies occurring in any office shall be appointed for the remainder of the term.

ARTICLE VII
Duties

(1) Prior to the Effective Date

The Committee shall be responsible for any additional negotiations with CVS, including, but not limited to, negotiating extensions of any periods created by the Settlement Agreement, except that any additional negotiations related to the Injunctive Relief Terms (Exhibit [●]) shall be handled by the States Injunctive Relief Committee in accordance with the terms of Exhibit [●].

(2) After the Effective Date

The Committee shall establish procedures for the receipt of notices that a dispute exists concerning the Agreement and review of such disputes, pursuant to Section [●] of the Agreement. Members may engage with CVS, Settling States, and Participating Subdivisions attempting to resolve any dispute without further action by the Committee. The Committee may request additional information from CVS, Settling States, and Participating Subdivisions to the extent the Committee believes such information is necessary to understand, resolve, or provide advice related to a dispute. The Committee shall endeavor to provide advice relative to the dispute no later than 60 days after receipt of notice.

ARTICLE VIII
Rules of Procedure

The proceedings and business of the Committee shall be governed by Robert's Rules of Order unless otherwise waived by the Committee.

ARTICLE IX
Operations

(1) Records

The Committee will keep correct and complete records and will also keep minutes of the proceedings of the Committee meetings and Committees. The Committee will keep such records at its principal place of business at a place designated by the Chairperson**.**

All elected officers and committee chairpersons shall relinquish their records to the Chairperson, immediately upon the completion of their term of office.

(2) Inspection of Books and Records

The minutes of a meeting are public records and shall be available for public inspection and copying on request to the Committee's Chairperson or the Chairperson's designee.

(3) Amendments

The bylaws may be amended at any time by a vote of a majority of Members present and must have at least one vote from a Settling State Member and a Participating Subdivision Member. In the event that there is a Quorum, but no Settling State or Participating Subdivision Member is present, then a matter may pass with a simple majority vote.

EXHIBIT C

Litigating Subdivisions

1. Alabaster City, Alabama
2. Albertville City, Alabama
3. Allred, Hal (Sheriff, Lamar County), Alabama
4. Arab City, Alabama
5. Ashville City, Alabama
6. Athens City, Alabama
7. Atalla City, Alabama
8. Auburn City, Alabama
9. Baldwin County, Alabama
10. Bay Minette City, Alabama
11. Berry Town, Alabama
12. Bessemer City, Alabama
13. Bibb County, Alabama
14. Birmingham City, Alabama
15. Boaz City, Alabama
16. Brewton City, Alabama
17. Bullock County, Alabama
18. Butler Town, Alabama
19. Calera City, Alabama
20. Calhoun County, Alabama
21. Camp Hill Town, Alabama
22. Cedar Bluff Town, Alabama
23. Centre City, Alabama
24. Centreville City, Alabama
25. Cherokee County, Alabama
26. Cherokee Town, Alabama
27. Childersburg City, Alabama
28. Chilton County, Alabama
29. Clanton City, Alabama
30. Coffee County, Alabama
31. Colbert County, Alabama
32. Columbiana City, Alabama
33. Conecuh County, Alabama
34. Cullman City, Alabama
35. Cullman County, Alabama
36. Dadeville City, Alabama
37. Dallas County, Alabama
38. Daphne City, Alabama
39. Decatur City, Alabama
40. Demopolis City, Alabama
41. Dora City, Alabama
42. Double Springs Town, Alabama
43. Douglas Town, Alabama
44. East Brewton City, Alabama
45. Elmore County, Alabama
46. Enterprise City, Alabama
47. Fairhope City, Alabama
48. Fayette City, Alabama
49. Fayette County, Alabama
50. Florence City, Alabama
51. Foley City, Alabama
52. Fort Deposit Town, Alabama
53. Franklin County, Alabama
54. Fultondale City, Alabama
55. Gadsden City, Alabama
56. Gilbertown Town, Alabama
57. Grant Town, Alabama
58. Graysville City, Alabama
59. Gulf Shores City, Alabama
60. Guntersville City, Alabama
61. Haleyville City, Alabama
62. Hartselle City, Alabama
63. Helena City, Alabama
64. Homewood City, Alabama
65. Hoover City, Alabama
66. Hueytown City, Alabama
67. Huntsville City, Alabama
68. Irondale City, Alabama
69. Jackson County, Alabama
70. Jacksonville City, Alabama
71. Jasper City, Alabama
72. Jefferson County, Alabama
73. Lamar County, Alabama
74. Lauderdale County, Alabama
75. Lawrence County, Alabama
76. Leesburg City, Alabama
77. Leighton Town, Alabama
78. Lincoln City, Alabama
79. Loxley Town, Alabama
80. Madison County, Alabama
81. Marengo County, Alabama

82. Marion County, Alabama
83. Marshall County, Alabama
84. Millbrook City, Alabama
85. Mobile City, Alabama
86. Mobile County, Alabama
87. Moody City, Alabama
88. Morgan County, Alabama
89. Moulton City, Alabama
90. Mountain Brook City, Alabama
91. Munford Town, Alabama
92. Northport City, Alabama
93. Oakman Town, Alabama
94. Opelika City, Alabama
95. Opp City, Alabama
96. Orange Beach City, Alabama
97. Ozark City, Alabama
98. Pelham City, Alabama
99. Pettway, Mark (Sheriff Jefferson County), Alabama
100. Phenix City, Alabama
101. Pickens County, Alabama
102. Piedmont City, Alabama
103. Pike County, Alabama
104. Pleasant Grove City, Alabama
105. Prattville City, Alabama
106. Prichard City, Alabama
107. Ragland City, Alabama
108. Rainbow City, Alabama
109. Randolph County, Alabama
110. Red Bay City, Alabama
111. Roanoke City, Alabama
112. Russellville City, Alabama
113. Saraland City, Alabama
114. Semmes City, Alabama
115. Selma City, Alabama
116. Sheffield City, Alabama
117. Slocumb City, Alabama
118. Spanish Fort City, Alabama
119. Springville City, Alabama
120. Sumiton City, Alabama
121. Summerdale Town, Alabama
122. Sylacauga City, Alabama
123. Talladega City, Alabama
124. Talladega County, Alabama
125. Thomasville City, Alabama
126. Troy City, Alabama
127. Trussville City, Alabama
128. Tuscaloosa City, Alabama
129. Tuscaloosa County, Alabama
130. Tuscumbia City (AL)
131. Union Springs City, Alabama
132. Vernon City, Alabama
133. Vestavia Hills City, Alabama
134. Walker County, Alabama
135. West Blocton Town, Alabama
136. Wetumpkia City, Alabama
137. Wilcox County, Alabama
138. Winston County, Alabama
139. Yerby, Byron (Sheriff Fayette County), Alabama
140. Arizona Municipal Risk Retention Pool, Arizona
141. Cochise County, Arizona
142. Kingman City, Arizona
143. Maricopa County, Arizona
144. Mohave County, Arizona
145. Navajo County, Arizona
146. Phoenix City, Arizona
147. Yuma County, Arizona
148. Alameda County, California
149. Amador County, California
150. Anaheim City, California
151. Butte County, California
152. Calaveras County, California
153. Chico City, California
154. Chula Vista City, California
155. Clearlake City, California
156. Costa Mesa City, California
157. Del Norte County, California
158. Dublin City, California
159. El Dorado County, California
160. Encinitas City, California
161. Eureka City, California
162. Fresno County, California
163. Fullerton City, California
164. Humboldt County, California
165. Huntington Beach City, California
166. Imperial County, California
167. Inyo County, California
168. La Habra City, California
169. La Mesa City, California
170. Laguna Beach City, California

171. Lakeport City, California
172. Lassen County, California
173. Los Angeles City, California
174. Los Angeles County, California
175. Madera County, California
176. Marin County, California
177. Mariposa County, California
178. Mendocino County, California
179. Merced County, California
180. Modoc County, California
181. Mono County, California
182. Monterey County, California
183. Murrieta City, California
184. Napa County, California
185. Nevada County, California
186. Oxnard City, California
187. Placentia City, California
188. Placer County, California
189. Plumas County, California
190. Riverside County, California
191. Sacramento City, California
192. Sacramento County, California
193. San Bernardino County, California
194. San Clemente City, California
195. San Diego County, California
196. San Jose City, California
197. San Leandro Unified School District, California
198. San Luis Obispo County, California
199. Santa Ana City, California
200. Santa Clara County, California
201. Santa Cruz County, California
202. Shasta County, California
203. Sonoma County, California
204. Sutter County, California
205. Tehama County, California
206. Trinity County, California
207. Tulare County, California
208. Tuolumne County, California
209. Ventura County, California
210. Westminster City, California
211. Yolo County, California
212. Yuba County, California
213. Adams County, Colorado
214. Arapahoe County, Colorado
215. Aurora City, Colorado
216. Black Hawk City, Colorado
217. Boulder County, Colorado
218. Brighton City, Colorado
219. Broomfield City and County, Colorado
220. Commerce City, Colorado
221. Denver City and County, Colorado
222. Federal Heights City, Colorado
223. Fremont County, Colorado
224. Greeley City, Colorado
225. Hudson Town, Colorado
226. Jefferson County, Colorado
227. Larimer County, Colorado
228. Mesa County, Colorado
229. Northglenn City, Colorado
230. Pueblo County, Colorado
231. Sheridan City, Colorado
232. Teller County, Colorado
233. Thornton City, Colorado
234. Westminster City, Colorado
235. Beacon Falls Town, Connecticut
236. Berlin Town, Connecticut
237. Bethlehem Town, Connecticut
238. Bridgeport City, Connecticut
239. Bristol City, Connecticut
240. Coventry Town, Connecticut
241. East Hartford Town, Connecticut
242. Enfield Town, Connecticut
243. Fairfield Town, Connecticut
244. Middlebury Town, Connecticut
245. Middletown City, Connecticut
246. Milford City, Connecticut
247. Monroe Town, Connecticut
248. Naugatuck Town, Connecticut
249. New Milford Town, Connecticut
250. Newtown Town, Connecticut
251. North Haven Town, Connecticut
252. Norwich City, Connecticut
253. Oxford Town, Connecticut
254. Prospect Town, Connecticut
255. Roxbury Town, Connecticut
256. Seymour Town, Connecticut
257. Shelton City, Connecticut
258. Southbury Town, Connecticut
259. Southington Town, Connecticut
260. Stratford Town, Connecticut

261. Thomaston Town, Connecticut
262. Tolland Town, Connecticut
263. Torrington City, Connecticut
264. Waterbury City, Connecticut
265. West Haven City, Connecticut
266. Wethersfield Town, Connecticut
267. Windham Town, Connecticut
268. Wolcott Town, Connecticut
269. Woodbury Town, Connecticut
270. Dover City, Delaware
271. Kent County, Delaware
272. Seaford City, Delaware
273. Sussex County, Delaware
274. Albany City, Georgia
275. Appling County, Georgia
276. Arlington City, Georgia
277. Athens-Clarke County, Georgia
278. Atlanta City, Georgia
279. Augusta-Richmond County consolidated government, Georgia
280. Bainbridge City, Georgia
281. Banks County, Georgia
282. Bartow County, Georgia
283. Ben Hill County, Georgia
284. Berry, Scott (Sheriff Oconee County), Georgia
285. Blakely City, Georgia
286. Bohannon, Preston (Sheriff Jeff Davis County), Georgia
287. Brantley County, Georgia
288. Bulloch County, Georgia
289. Burke County, Georgia
290. Butts County, Georgia
291. Camden County, Georgia
292. Candler County, Georgia
293. Carroll County, Georgia
294. Carter, John (Sheriff Wayne County), Georgia
295. Cartersville City, Georgia
296. Catoosa County, Georgia
297. Charlton County, Georgia
298. Chattooga County, Georgia
299. Cherokee County, Georgia
300. Clay County, Georgia
301. Clayton County, Georgia
302. Clinch County, Georgia
303. Cobb County, Georgia
304. Columbia County, Georgia
305. Columbus City, Georgia
306. Cook County, Georgia
307. Crisp County, Georgia
308. Dade County, Georgia
309. Damascus City, Georgia
310. Davis, David (Sheriff Bibb County), Georgia
311. Dawson County, Georgia
312. Decatur County, Georgia
313. Deese, Terry (Sheriff Peach County), Georgia
314. Dekalb County, Georgia
315. Dooly County, Georgia
316. Dougherty County, Georgia
317. Early County, Georgia
318. Effingham County, Georgia
319. Elbert County, Georgia
320. Emanuel County, Georgia
321. Evans County, Georgia
322. Fayette County, Georgia
323. Fitzgerald City, Georgia
324. Flood County, Georgia
325. Forsyth County, Georgia
326. Fulton County, Georgia
327. Gainesville City, Georgia
328. Glascock County, Georgia
329. Glynn County, Georgia
330. Greene County, Georgia
331. Gwinnett County, Georgia
332. Habersham County, Georgia
333. Hall County, Georgia
334. Hancock County, Georgia
335. Hancock, H.W. (Sheriff Crisp County), Georgia
336. Henry County, Georgia
337. Houston County, Georgia
338. Irwin County, Georgia
339. Jackson County, Georgia
340. Jasper County, Georgia
341. Jeff Davis County, Georgia
342. Jefferson County, Georgia
343. Johnson County, Georgia
344. Jones County, Georgia

345. Jump, E. Neal (Sheriff Glynn County), Georgia
346. Langford, Gary (Sheriff Murray County), Georgia
347. Laurens County, Georgia
348. Lee County, Georgia
349. Liberty County, Georgia
350. Lincoln County, Georgia
351. Long County, Georgia
352. Lowndes County, Georgia
353. Lumpkin County, Georgia
354. Macon County, Georgia
355. Macon-Bibb County, Georgia
356. Madison County, Georgia
357. Massee, William (Sheriff Baldwin County), Georgia
358. McDuffie County, Georgia
359. McIntosh County, Georgia
360. Melton, Mark (Sheriff Appling County), Georgia
361. Milledgeville City, Georgia
362. Monroe County, Georgia
363. Montgomery County, Georgia
364. Newton County, Georgia
365. Oconee County, Georgia
366. Oglethorpe County, Georgia
367. Peach County, Georgia
368. Pike County, Georgia
369. Polk County, Georgia
370. Pulaski County, Georgia
371. Rabun County, Georgia
372. Randolph County, Georgia
373. Rockdale County, Georgia
374. Rome City, Georgia
375. Sandy Springs City, Georgia
376. Savannah City, Georgia
377. Scarbrough, Gene (Sheriff Tift County), Georgia
378. Screven County, Georgia
379. Seminole County, Georgia
380. Spalding County, Georgia
381. Springfield City, Georgia
382. Stephens County, Georgia
383. Sumter County, Georgia
384. Taliaferro County, Georgia
385. Talton, Cullen (Sheriff Houston County), Georgia
386. Tattnall County, Georgia
387. Tifton City, Georgia
388. Toombs County, Georgia
389. Towns County, Georgia
390. Troup County, Georgia
391. Twiggs County, Georgia
392. Union County, Georgia
393. Walton County, Georgia
394. Warren County, Georgia
395. Washington County, Georgia
396. Wayne County, Georgia
397. Whitfield County, Georgia
398. Wilkes County, Georgia
399. Woodbury City, Georgia
400. Wooten, Doyle (Sheriff Coffee County), Georgia
401. Worth County, Georgia
402. Kaua'i County, Hawai'i
403. Ada County, Idaho
404. Adams County, Idaho
405. Bannock County, Idaho
406. Bingham County, Idaho
407. Blaine County, Idaho
408. Boise City, Idaho
409. Boise County, Idaho
410. Bonneville County, Idaho
411. Camas County, Idaho
412. Canyon County, Idaho
413. Caribou County, Idaho
414. Cassia County, Idaho
415. Chubbuck City, Idaho
416. Elmore County, Idaho
417. Gooding County, Idaho
418. Latah County, Idaho
419. Minidoka County, Idaho
420. Owyhee County, Idaho
421. Payette County, Idaho
422. Pocatello City, Idaho
423. Preston City, Idaho
424. Twin Falls City, Idaho
425. Twin Falls County, Idaho
426. Bond County, Illinois
427. Boone County, Illinois
428. Bureau County, Illinois

429. Calhoun County, Illinois
430. Champaign County, Illinois
431. Chicago City, Illinois
432. Chicago Public School District 299, Illinois
433. Christian County, Illinois
434. Coles County, Illinois
435. Cook County, Illinois
436. Dekalb County, Illinois
437. Dupage County, Illinois
438. East Aurora Public Schools, District 131, Illinois
439. Franklin County, Illinois
440. Harrisburg City, Illinois
441. Henry County, Illinois
442. Herrin City, Illinois
443. Jasper County, Illinois
444. Jefferson County, Illinois
445. Johnson County, Illinois
446. Joliet Public Schools, District 204, Illinois
447. Kane County, Illinois
448. Kankakee County, Illinois
449. Kendall County, Illinois
450. Logan County, Illinois
451. Lawrence County, Illinois
452. Macon County, Illinois
453. Macoupin County, Illinois
454. Marion City, Illinois
455. Marion County, Illinois
456. McHenry County, Illinois
457. Piatt County, Illinois
458. Princeton City, Illinois
459. Putnam County, Illinois
460. Rock Island County, Illinois
461. Rockford City, Illinois
462. Saline County, Illinois
463. Sangamon County, Illinois
464. Schuyler County, Illinois
465. Shelby County, Illinois
466. Stephenson County, Illinois
467. Thornton High Schools, District 205, Illinois
468. Thornton Fractional High Schools, District 215, Illinois
469. Union County, Illinois
470. Wabash County, Illinois
471. West Frankfort City, Illinois
472. White County, Illinois
473. Will County, Illinois
474. Winnebago County, Illinois
475. Alexandria City, Indiana
476. Allen County, Indiana
477. Atlanta Town, Indiana
478. Beech Grove City, Indiana
479. Benton County, Indiana
480. Blackford County, Indiana
481. Bloomington City, Indiana
482. Brownstown Town, Indiana
483. Chandler Town, Indiana
484. Connersville City, Indiana
485. Danville Town, Indiana
486. Delaware County, Indiana
487. Evansville City, Indiana
488. Fishers City, Indiana
489. Fort Wayne City, Indiana
490. Franklin City, Indiana
491. Franklin County, Indiana
492. Gary City, Indiana
493. Greenwood City, Indiana
494. Hammond City, Indiana
495. Harrison County, Indiana
496. Hartford City, Indiana
497. Howard County, Indiana
498. Huntington City, Indiana
499. Indianapolis City, Indiana
500. Jackson County, Indiana
501. Jasper City, Indiana
502. Jay County, Indiana
503. Jeffersonville City, Indiana
504. Jennings County, Indiana
505. Lafayette City, Indiana
506. Lake County, Indiana
507. LaPorte County, Indiana
508. Lawrence City, Indiana
509. Lawrence County, Indiana
510. Logansport City, Indiana
511. Marion County, Indiana
512. Marshall County, Indiana
513. Martinsville City, Indiana
514. Monroe County, Indiana
515. Montpelier City, Indiana

516. Mooresville Town, Indiana
517. Morgan County, Indiana
518. Muncie City, Indiana
519. New Castle City, Indiana
520. Noblesville City, Indiana
521. Pendleton Town, Indiana
522. Peru City, Indiana
523. Plainfield Town, Indiana
524. Porter County, Indiana
525. Portland City, Indiana
526. Pulaski County, Indiana
527. Richmond City, Indiana
528. Ripley County, Indiana
529. Scott County, Indiana
530. Seymour City, Indiana
531. Sheridan Town, Indiana
532. South Bend City, Indiana
533. St. Joseph County, Indiana
534. Starke County, Indiana
535. Terre Haute City, Indiana
536. Tippecanoe County, Indiana
537. Upland Town, Indiana
538. Vanderburgh County, Indiana
539. Vigo County, Indiana
540. West Lafayette City, Indiana
541. Westfield City, Indiana
542. Zionsville Town, Indiana
543. Adair County, Iowa
544. Adams County, Iowa
545. Audubon County, Iowa
546. Allamakee County, Iowa
547. Appanoose County, Iowa
548. Benton County, Iowa
549. Black Hawk County, Iowa
550. Bremer County, Iowa
551. Buchanan County, Iowa
552. Buena Vista County, Iowa
553. Calhoun County, Iowa
554. Carroll County, Iowa
555. Cedar County, Iowa
556. Cerro Gordo County, Iowa
557. Cherokee County, Iowa
558. Chickasaw County, Iowa
559. Clay County, Iowa
560. Clayton County, Iowa
561. Clinton County, Iowa
562. Dallas County, Iowa
563. Delaware County, Iowa
564. Des Moines County, Iowa
565. Emmet County, Iowa
566. Fayette County, Iowa
567. Fremont County, Iowa
568. Hamilton County, Iowa
569. Hancock County, Iowa
570. Hardin County, Iowa
571. Harrison County, Iowa
572. Henry County, Iowa
573. Howard County, Iowa
574. Humboldt County, Iowa
575. Ida County, Iowa
576. Jasper County, Iowa
577. Johnson County, Iowa
578. Jones County, Iowa
579. Keokuk County, Iowa
580. Lee County, Iowa
581. Lyon County, Iowa
582. Madison County, Iowa
583. Mahaska County, Iowa
584. Marion County, Iowa
585. Mills County, Iowa
586. Mitchell County, Iowa
587. Monroe County, Iowa
588. Montgomery County, Iowa
589. Muscatine County, Iowa
590. O'Brien County, Iowa
591. Osceola County, Iowa
592. Plymouth County, Iowa
593. Pocahontas County, Iowa
594. Polk County, Iowa
595. Pottawattamie County, Iowa
596. Poweshiek County, Iowa
597. Sac County, Iowa
598. Scott County, Iowa
599. Shelby County, Iowa
600. Sioux County, Iowa
601. Tama County, Iowa
602. Taylor County, Iowa
603. Union County, Iowa
604. Webster County, Iowa
605. Winnebago County, Iowa
606. Winneshiek County, Iowa
607. Worth County, Iowa

608. Wright County, Iowa
609. Allen County, Kansas
610. Barber County, Kansas
611. Bourbon County, Kansas
612. Cowley County, Kansas
613. Dickinson County, Kansas
614. Elk County, Kansas
615. Elkhardt City, Kansas
616. Finney County, Kansas
617. Grant County, Kansas
618. Greenwood County, Kansas
619. Johnson County, Kansas
620. Kansas City, Kansas
621. Leavenworth County, Kansas
622. Manter City, Kansas
623. Meade County, Kansas
624. Morton County, Kansas
625. Overland Park City, Kansas
626. Reno County, Kansas
627. Sedgwick County, Kansas
628. Seward County, Kansas
629. Stanton County, Kansas
630. Ulysses City, Kansas
631. Wabaunsee County, Kansas
632. Wichita City, Kansas
633. Wyandotte County, Kansas
634. Adair County, Kentucky
635. Bellefont City, Kentucky
636. Benham City, Kentucky
637. Boone County, Kentucky
638. Bourbon County, Kentucky
639. Boyd County, Kentucky
640. Boyle County, Kentucky
641. Breckinridge County, Kentucky
642. Breathitt County Public Schools, Kentucky
643. Buckhorn City, Kentucky
644. Bullitt County Public Schools, Kentucky
645. Clark County, Kentucky
646. Covington City, Kentucky
647. Edmonson County Fiscal Court, Kentucky
648. Estill County, Kentucky
649. Estill County Public Schools, Kentucky
650. Fayette County Public Schools, Kentucky
651. Floyd County, Kentucky
652. Franklin County, Kentucky
653. Green County, Kentucky
654. Greenup City, Kentucky
655. Greenup County, Kentucky
656. Hardin County, Kentucky
657. Harlan City, Kentucky
658. Harlan County, Kentucky
659. Harrison County Public Schools, Kentucky
660. Hart County Public Schools, Kentucky
661. Henderson City, Kentucky
662. Henderson County, Kentucky
663. Henry County, Kentucky
664. Hopkins County, Kentucky
665. Hyden City, Kentucky
666. Jefferson County Public Schools, Kentucky
667. Jenkins City, Kentucky
668. Jessamine County, Kentucky
669. Johnson County Public Schools, Kentucky
670. Kenton County, Kentucky
671. Knott County, Kentucky
672. Larue County Public Schools, Kentucky
673. Lawrence County, Kentucky
674. Lawrence County Public Schools, Kentucky
675. Lee County, Kentucky
676. Lexington-Fayette Urban County, Kentucky
677. London City, Kentucky
678. Louisville-Jefferson County, Kentucky
679. Loyall City, Kentucky
680. Lynch City, Kentucky
681. Madison County, Kentucky
682. Manchester City, Kentucky
683. Marshall County, Kentucky
684. Martin County Public Schools, Kentucky
685. McCracken County, Kentucky

686. Meade County, Kentucky
687. Menifee County Public Schools, Kentucky
688. Montgomery County, Kentucky
689. Morehead City, Kentucky
690. Ohio County, Kentucky
691. Oldham County, Kentucky
692. Owsley County, Kentucky
693. Owsley County Public Schools, Kentucky
694. Paducah City, Kentucky
695. Pendleton County, Kentucky
696. Perry County, Kentucky
697. Pike County, Kentucky
698. Pineville City, Kentucky
699. Pippa Passes City, Kentucky
700. Pulaski County, Kentucky
701. Russell City, Kentucky
702. Scott County, Kentucky
703. Shelby County, Kentucky
704. South Shore City, Kentucky
705. Vanceburg City, Kentucky
706. Warren County, Kentucky
707. Whitesburg City, Kentucky
708. Woodford County, Kentucky
709. Wolfe County Public Schools, Kentucky
710. Worthington City, Kentucky
711. Acadia-St. Landry Hospital Service District d/b/a Acadia-St. Landry Hospital, Louisiana
712. Ackal, Louis (Sheriff Iberia Parish), Louisiana
713. Alexandria City, Louisiana
714. Anderson, Douglas (Sheriff Avoyelles Parish), Louisiana
715. Anslum, Scott (Sheriff St. Mary Parish), Louisiana
716. Ascension Parish, Louisiana
717. Ascension Parish School Board, Louisiana
718. Assumption Parish Police Jury, Louisiana
719. Avoyelles Parish Police Jury, Louisiana
720. Baldwin Town, Louisiana
721. Bastrop City, Louisiana
722. Baton Rouge City, Louisiana
723. Beauregard Parish Police Jury, Louisiana
724. Benton Fire District 4, Louisiana
725. Berwick Town, Louisiana
726. Bogalusa City, Louisiana
727. Bossier City, Louisiana
728. Bossier Parish, Louisiana
729. Caddo Fire District 1, Louisiana
730. Caddo Parish, Louisiana
731. Calcasieu Parish Policy Jury, Louisiana
732. Caldwell Parish, Louisiana
733. Cameron Parish, Louisiana
734. Catahoula Parish Police Jury, Louisiana
735. Champagne, Greg (Sheriff St. Charles Parish), Louisiana
736. Claiborne Parish, Louisiana
737. Concordia Parish, Louisiana
738. Craft, John (Sheriff Vernon Parish), Louisiana
739. Delhi Town, Louisiana
740. Desoto Fire District 8, Louisiana
741. Donaldsonville City, Louisiana
742. East Carroll Parish Police Jury, Louisiana
743. Edwards, Toney (Sheriff Catahoula Parish), Louisiana
744. Eunice City, Louisiana
745. Evangeline Parish Police Jury, Louisiana
746. Falcon, Leland (Sheriff Assumption Parish), Louisiana
747. Ferriday Town, Louisiana
748. Franklin City, Louisiana
749. Franklin Parish, Louisiana
750. Garber, Mark (Sheriff Lafayette Parish), Louisiana
751. Gautreaux, Sid (Sheriff East Baton Rouge Parish), Louisiana
752. Gilley, Gary (Sheriff Richland Parish), Louisiana
753. Gramercy Town, Louisiana
754. Grant Parish, Louisiana

755. Guidroz, Bobby (Sheriff St. Landry Parish), Louisiana
756. Gusman, Marlin (Sheriff Orleans Parish), Louisiana
757. Hospital Service District No. 1 of the Parish of Avoyelles, State of Louisiana d/b/a Bunkie General Hospital, Louisiana
758. Hospital Service District No. 1 of the Parish of Lasalle, State of Louisiana d/b/a Hardtner Medical Center, Louisiana
759. Hebert, Douglas (Sheriff Allen Parish), Louisiana
760. Hedrick, Kenneth (Sheriff Concordia Parish), Louisiana
761. Hilton, William (Sheriff Rapides Parish), Louisiana
762. Iberia Parish, Louisiana
763. Iberia Parish School Board, Louisiana
764. Jackson Parish Police Jury, Louisiana
765. Jefferson Davis Parish Police Jury, Louisiana
766. Jefferson Parish, Louisiana
767. Jefferson Parish Hospital Service District 1, Louisiana
768. Jefferson Parish Hospital Service District 2, Louisiana
769. Jones, Rickey (Sheriff Tensas Parish), Louisiana
770. Kenner City, Louisiana
771. Lafourche Parish, Louisiana
772. LaFourche Parish School Board, Louisiana
773. Lake Charles City, Louisiana
774. Lake Providence Town, Louisiana
775. LaSalle Parish, Louisiana
776. Lopinto, Joseph (Sheriff Jefferson Parish), Louisiana
777. Lutcher Town, Louisiana
778. Madisonville Town, Louisiana
779. Mancuso, Tony (Sheriff Calcasieu Parish), Louisiana
780. Mandeville City, Louisiana
781. McCain, Steven (Sheriff Grant Parish), Louisiana
782. Monroe City, Louisiana
783. Morehouse Parish Police Jury, Louisiana
784. Natchitoches Parish Council, Louisiana
785. New Iberia City, Louisiana
786. North Caddo Hospital Service District d/b/a North Caddo Medical Center, Louisiana
787. Opelousas City, Louisiana
788. Opelousas General Hospital Authority, A Louisiana Public Trust, d/b/a Opelousas General Health System, Louisiana
789. Ouachita Parish Police Jury, Louisiana
790. Patterson City, Louisiana
791. Pearl River Town, Louisiana
792. Philley, Jerry (Sheriff West Carroll Parish), Louisiana
793. Pineville City, Louisiana
794. Rapides Parish Police Jury, Louisiana
795. Red River Fire District, Louisiana
796. Red River Parish, Louisiana
797. Richardson, Ronald (Sheriff Sabine Parish), Louisiana
798. Richland Parish, Louisiana
799. Richwood Town, Louisiana
800. Russel, Jay (Sheriff Ouachita Parish), Louisiana
801. Sabine Parish Police Jury, Louisiana
802. Saint Martinville City, Louisiana
803. Seal, Randy (Sheriff Washington Parish), Louisiana
804. Shreveport City, Louisiana
805. Slidell City, Louisiana
806. Smith, Randy (Sheriff St. Tammany Parish), Louisiana
807. Soileau, Edrick (Sheriff, Evangeline Parish), Louisiana
808. St. Bernard Parish School Board, Louisiana
809. St. Charles Parish, Louisiana

810. St. James Parish, Louisiana
811. St. James Parish School Board, Louisiana
812. St. John the Baptist Parish, Louisiana
813. St. Landry Parish, Louisiana
814. St. Martin Parish, Louisiana
815. St. Mary Parish, Louisiana
816. St. Mary Parish School Board, Louisiana
817. St. Tammany Fire District 1, Louisiana
818. St. Tammany Fire District 12, Louisiana
819. St. Tammany Fire District 13, Louisiana
820. St. Tammany Fire District 2, Louisiana
821. St. Tammany Fire District 3, Louisiana
822. St. Tammany Fire District 4, Louisiana
823. St. Tammany Fire District 5, Louisiana
824. St. Tammany Parish, Louisiana
825. St. Tammany Parish Coroner, Louisiana
826. Tubbs, Michael (Sheriff Morehouse Parish), Louisiana
827. Union Parish, Louisiana
828. Vermilion Parish Police Jury, Louisiana
829. Vernon Parish Police Jury, Louisiana
830. Washington Parish, Louisiana
831. Webster Parish, Louisiana
832. West Ascension Parish Hospital Service District d/b/a Prevost Memorial Hospital, Louisiana
833. West Baton Rouge Fire District 1, Louisiana
834. West Baton Rouge Parish, Louisiana
835. West Carroll Parish Policy Jury, Louisiana
836. West Monroe City, Louisiana
837. Wiley, Jeffrey (Sheriff, Ascension Parish), Louisiana
838. Williams, Wydette (Sheriff East Carroll Parish), Louisiana
839. Winn Parish, Louisiana
840. Woods, Ivy (Sheriff Jefferson Davis Parish), Louisiana
841. Androscoggin County, Maine
842. Aroostook County, Maine
843. Auburn City, Maine
844. Augusta City, Maine
845. Bangor City, Maine
846. Bangor School Department, Maine
847. Biddeford City, Maine
848. Calais City, Maine
849. Cape Elizabeth School District, Maine
850. Cumberland County, Maine
851. Ellsworth School Department, Maine
852. Kennebec County, Maine
853. Knox County, Maine
854. Lewiston City, Maine
855. Lincoln County, Maine
856. Maine Regional School Unit 10, Maine
857. Maine Regional School Unit 13, Maine
858. Maine Regional School Unit 25, Maine
859. Maine Regional School Unit 26, Maine
860. Maine Regional School Unit 29, Maine
861. Maine Regional School Unit 34, Maine
862. Maine Regional School Unit 40, Maine
863. Maine Regional School Unit 50, Maine
864. Maine Regional School Unit 57, Maine
865. Maine Regional School Unit 60, Maine
866. Maine Regional School Unit 71, Maine
867. Maine Regional School Unit 9, Maine

868. Maine School Administrative District 11, Maine
869. Maine School Administrative District 15, Maine
870. Maine School Administrative District 28/Five Town Central School District, Maine
871. Maine School Administrative District 35, Maine
872. Maine School Administrative District 44, Maine
873. Maine School Administrative District 53, Maine
874. Maine School Administrative District 55, Maine
875. Maine School Administrative District 6, Maine
876. Maine School Administrative District 61, Maine
877. Maine School Administrative District 72, Maine
878. Penobscot County, Maine
879. Portland City, Maine
880. Portland School District, Maine
881. Rockland City, Maine
882. Saco City, Maine
883. Sagadahoc County, Maine
884. Sanford City, Maine
885. Scarborough School District, Maine
886. Somerset County, Maine
887. South Portland School Department, Maine
888. St. George Municipal School District, Maine
889. Waldo County, Maine
890. Washington County, Maine
891. Waterville City, Maine
892. Waterville School District, Maine
893. York County, Maine
894. Aberdeen City, Maryland
895. Allegany County, Maryland
896. Baltimore City, Maryland
897. Baltimore Public School District, Maryland
898. Bel Air City, Maryland
899. Berlin City, Maryland
900. Bowie City, Maryland
901. Calvert County, Maryland
902. Cambridge City, Maryland
903. Caroline County, Maryland
904. Carroll County, Maryland
905. Charles County, Maryland
906. Charlestown City, Maryland
907. Cottage City Town, Maryland
908. Cumberland City, Maryland
909. Dorchester County, Maryland
910. Forest Heights Town, Maryland
911. Frederick City, Maryland
912. Frederick County, Maryland
913. Frostburg City, Maryland
914. Garrett County, Maryland
915. Grantsville City, Maryland
916. Hagerstown City, Maryland
917. Harford County, Maryland
918. Havre de Grace City, Maryland
919. Howard County, Maryland
920. Laurel City, Maryland
921. Montgomery County, Maryland
922. Mountain Lake Park City, Maryland
923. North Brentwood Town, Maryland
924. North East City, Maryland
925. Oakland City, Maryland
926. Perryville City, Maryland
927. Prince George’s County, Maryland
928. Seat Pleasant City, Maryland
929. Somerset County, Maryland
930. St. Mary’s County, Maryland
931. Talbot County, Maryland
932. Upper Marlboro Town, Maryland
933. Vienna City, Maryland
934. Washington County, Maryland
935. Wicomico County, Maryland
936. Acushnet Town, Massachusetts
937. Agawam Town, Massachusetts
938. Amesbury City, Massachusetts
939. Aquinnah Town, Massachusetts
940. Athol Town, Massachusetts
941. Auburn Town, Massachusetts
942. Ayer Town, Massachusetts
943. Barnstable Town, Massachusetts
944. Belchertown Town, Massachusetts
945. Beverly City, Massachusetts

946. Billerica Town, Massachusetts
947. Braintree Town, Massachusetts
948. Brewster Town, Massachusetts
949. Bridgewater Town, Massachusetts
950. Brockton City, Massachusetts
951. Brookline Town, Massachusetts
952. Cambridge City, Massachusetts
953. Canton Town, Massachusetts
954. Carver Town, Massachusetts
955. Charlton Town, Massachusetts
956. Chelmsford Town, Massachusetts
957. Chelsea City, Massachusetts
958. Chicopee City, Massachusetts
959. Clarksburg Town, Massachusetts
960. Clinton Town, Massachusetts
961. Danvers Town, Massachusetts
962. Dedham Town, Massachusetts
963. Dennis Town, Massachusetts
964. Douglas Town, Massachusetts
965. Dudley Town, Massachusetts
966. East Bridgewater Town, Massachusetts
967. Eastham Town, Massachusetts
968. Easthampton City, Massachusetts
969. Easton Town, Massachusetts
970. Everett City, Massachusetts
971. Fairhaven Town, Massachusetts
972. Fall River City, Massachusetts
973. Falmouth Town, Massachusetts
974. Fitchburg City, Massachusetts
975. Framingham City, Massachusetts
976. Freetown Town, Massachusetts
977. Georgetown Town, Massachusetts
978. Gloucester City, Massachusetts
979. Grafton Town, Massachusetts
980. Greenfield City, Massachusetts
981. Hanson Town, Massachusetts
982. Haverhill City, Massachusetts
983. Holliston Town, Massachusetts
984. Holyoke City, Massachusetts
985. Hopedale Town, Massachusetts
986. Hull Town, Massachusetts
987. Kingston Town, Massachusetts
988. Lakeville Town, Massachusetts
989. Leicester Town, Massachusetts
990. Leominster City, Massachusetts
991. Leverett Town, Massachusetts
992. Longmeadow Town, Massachusetts
993. Lowell City, Massachusetts
994. Ludlow Town, Massachusetts
995. Lunenberg Town, Massachusetts
996. Lynn City, Massachusetts
997. Lynnfield Town, Massachusetts
998. Malden City, Massachusetts
999. Marblehead Town, Massachusetts
1000. Marshfield Town, Massachusetts
1001. Mashpee Town, Massachusetts
1002. Mattapoisett Town, Massachusetts
1003. Medford City, Massachusetts
1004. Melrose City, Massachusetts
1005. Methuen City, Massachusetts
1006. Middleborough Town, Massachusetts
1007. Milford Town, Massachusetts
1008. Millbury Town, Massachusetts
1009. Millis Town, Massachusetts
1010. Natick Town, Massachusetts
1011. New Bedford City, Massachusetts
1012. Newburyport City, Massachusetts
1013. North Adams City, Massachusetts
1014. North Andover Town, Massachusetts
1015. North Attleborough Town, Massachusetts
1016. North Reading Town, Massachusetts
1017. Northampton City, Massachusetts
1018. Northbridge Town, Massachusetts
1019. Norton Town, Massachusetts
1020. Norwell Town, Massachusetts
1021. Norwood Town, Massachusetts
1022. Orange Town, Massachusetts
1023. Oxford Town, Massachusetts
1024. Palmer Town, Massachusetts
1025. Peabody City, Massachusetts
1026. Pembroke Town, Massachusetts
1027. Pittsfield City, Massachusetts
1028. Plainville Town, Massachusetts
1029. Plymouth Town, Massachusetts
1030. Provincetown Town, Massachusetts
1031. Quincy City, Massachusetts
1032. Randolph Town, Massachusetts
1033. Rehoboth Town, Massachusetts
1034. Revere City, Massachusetts

1035. Rockland Town, Massachusetts
1036. Salem City, Massachusetts
1037. Salisbury Town, Massachusetts
1038. Sandwich Town, Massachusetts
1039. Scituate Town, Massachusetts
1040. Seekonk Town, Massachusetts
1041. Sheffield Town, Massachusetts
1042. Shirley Town, Massachusetts
1043. Somerset Town, Massachusetts
1044. Somerville City, Massachusetts
1045. South Hadley Town, Massachusetts
1046. Southbridge Town, Massachusetts
1047. Spencer Town, Massachusetts
1048. Springfield City, Massachusetts
1049. Stoneham Town, Massachusetts
1050. Stoughton Town, Massachusetts
1051. Sturbridge Town, Massachusetts
1052. Sudbury Town, Massachusetts
1053. Sutton Town, Massachusetts
1054. Swampscott Town, Massachusetts
1055. Templeton Town, Massachusetts
1056. Tewksbury Town, Massachusetts
1057. Truro Town, Massachusetts
1058. Tyngsborough Town, Massachusetts
1059. Upton Town, Massachusetts
1060. Wakefield Town, Massachusetts
1061. Walpole Town, Massachusetts
1062. Ware Town, Massachusetts
1063. Warren Town, Massachusetts
1064. Watertown Town, Massachusetts
1065. Wellfleet Town, Massachusetts
1066. West Boylston Town, Massachusetts
1067. West Bridgewater Town, Massachusetts
1068. West Springfield Town, Massachusetts
1069. Westborough Town, Massachusetts
1070. Westford Town, Massachusetts
1071. Weymouth Town, Massachusetts
1072. Williamsburg Town, Massachusetts
1073. Wilmington Town, Massachusetts
1074. Winchendon Town, Massachusetts
1075. Winthrop Town, Massachusetts
1076. Woburn City, Massachusetts
1077. Worcester City, Massachusetts
1078. Alcona County, Michigan
1079. Alger County, Michigan
1080. Alpena County, Michigan
1081. Antrim County, Michigan
1082. Arenac County, Michigan
1083. Baraga County, Michigan
1084. Benzie County, Michigan
1085. Berrien County, Michigan
1086. Branch County, Michigan
1087. Calhoun County, Michigan
1088. Canton Charter Township, Michigan
1089. Cass County, Michigan
1090. Charlevoix County, Michigan
1091. Chippewa County, Michigan
1092. Clinton Charter Township, Michigan
1093. Clinton County, New York
1094. Crawford County, Michigan
1095. Delta County, Michigan
1096. Detroit City, Michigan
1097. Dickinson County, Michigan
1098. East Lansing City, Michigan
1099. Eaton County, Michigan
1100. Escanaba City, Michigan
1101. Genesee County, Michigan
1102. Grand Rapids City, Michigan
1103. Grand Traverse County, Michigan
1104. Gratiot County, Michigan
1105. Hillsdale County, Michigan
1106. Houghton County, Michigan
1107. Huron Charter Township, Michigan
1108. Ingham County, Michigan
1109. Ionia County, Michigan
1110. Iosco County, Michigan
1111. Iron County, Michigan
1112. Iron Mountain City, Michigan
1113. Isabella County, Michigan
1114. Jackson City, Michigan
1115. Kalamazoo County, Michigan
1116. Kent County, Michigan
1117. Lake County, Michigan
1118. Lansing City, Michigan
1119. Leelanau County, Michigan
1120. Lenawee County, Michigan
1121. Livingston County, Michigan
1122. Livonia City, Michigan
1123. Luce County, Michigan
1124. Macomb County, Michigan

1125. Manistee County, Michigan
1126. Marquette County, Michigan
1127. Mason County, Michigan
1128. Monroe County, Michigan
1129. Montcalm County, Michigan
1130. Montmorency County, Michigan
1131. Muskegon County, Michigan
1132. Newaygo County, Michigan
1133. Northville Charter Township, Michigan
1134. Oakland County, Michigan
1135. Oceana County, Michigan
1136. Ogemaw County, Michigan
1137. Ontonagon County, Michigan
1138. Osceola County, Michigan
1139. Otsego County, Michigan
1140. Pittsfield Charter Township, Michigan
1141. Pontiac City, Michigan
1142. Presque Isle County, Michigan
1143. Romulus City, Michigan
1144. Roscommon County, Michigan
1145. Saginaw County, Michigan
1146. Sanilac County, Michigan
1147. Sault Ste. Marie City, Michigan
1148. Shiawassee County, Michigan
1149. St. Clair County, Michigan
1150. Traverse City, Michigan
1151. Tuscola County, Michigan
1152. Van Buren Charter Township, Michigan
1153. Washtenaw County, Michigan
1154. Wayne City, Michigan
1155. Wayne County, Michigan
1156. Westland City, Michigan
1157. Wexford County, Michigan
1158. Anoka County, Minnesota
1159. Big Stone County, Minnesota
1160. Coon Rapids City, Minnesota
1161. Duluth City, Minnesota
1162. Minnetonka Public School District No. 276, Minnesota
1163. North St. Paul City, Minnesota
1164. Pine County, Minnesota
1165. Proctor City, Minnesota
1166. Rochester City, Minnesota
1167. Saint Paul City, Minnesota
1168. Yellow Medicine County, Minnesota
1169. Adams County, Mississippi
1170. Amite County, Mississippi
1171. Arcola Town, Mississippi
1172. Bolivar County, Mississippi
1173. Centreville Town, Mississippi
1174. Clarksdale City, Mississippi
1175. Covington County, Mississippi
1176. DeSoto County, Mississippi
1177. Forrest County, Mississippi
1178. Greenwood City, Mississippi
1179. Grenada City, Mississippi
1180. Grenada County, Mississippi
1181. Gulfport City, Mississippi
1182. Harrison County, Mississippi
1183. Hattiesburg City, Mississippi
1184. Hinds County, Mississippi
1185. Holly Springs City, Mississippi
1186. Indianola City, Mississippi
1187. Issaquena County, Mississippi
1188. Jackson City, Mississippi
1189. Jonestown City, Mississippi
1190. Laurel City, Mississippi
1191. Leflore County, Mississippi
1192. Long Beach City, Mississippi
1193. Lumberton City, Mississippi
1194. Madison County, Mississippi
1195. Meridian City, Mississippi
1196. Mound Bayou City, Mississippi
1197. Pascagoula City, Mississippi
1198. Pearl River County, Mississippi
1199. Prentiss County, Mississippi
1200. Scott County, Mississippi
1201. Stone County, Mississippi
1202. Summit Town, Mississippi
1203. Tippah County, Mississippi
1204. Washington County, Mississippi
1205. Audrain County, Missouri
1206. Barton County, Missouri
1207. Boone County, Missouri
1208. Buchanan County, Missouri
1209. Callaway County, Missouri
1210. Camden County, Missouri
1211. Cass County, Missouri
1212. Chariton County, Missouri

1213. Cole County, Missouri
1214. Douglas County, Missouri
1215. Franklin County, Missouri
1216. Gasconade County, Missouri
1217. Harrisonville City, Missouri
1218. Howell County, Missouri
1219. Jackson County, Missouri
1220. Jefferson County, Missouri
1221. Johnson County, Missouri
1222. Kansas City, Missouri
1223. Knox County, Missouri
1224. Lewis County, Missouri
1225. Lincoln County, Missouri
1226. Maries County, Missouri
1227. Miller County, Missouri
1228. Moniteau County, Missouri
1229. Montgomery County, Missouri
1230. Morgan County, Missouri
1231. Osage County, Missouri
1232. Ozark County, Missouri
1233. Pemiscot County, Missouri
1234. Pettis County, Missouri
1235. Phelps County, Missouri
1236. Pulaski County, Missouri
1237. Randolph County, Missouri
1238. Reynolds County, Missouri
1239. Ripley County, Missouri
1240. Saint Joseph City, Missouri
1241. Schuyler County, Missouri
1242. Sedalia City, Missouri
1243. Shannon County, Missouri
1244. Shelby County, Missouri
1245. Springfield City, Missouri
1246. St. Charles County, Missouri
1247. St. Francois County, Missouri
1248. St. Louis County, Missouri
1249. Warren County, Missouri
1250. Webster County, Missouri
1251. Wright County, Missouri
1252. Anaconda-Deer Lodge County, Montana
1253. Cascade County, Montana
1254. Gallatin County, Montana
1255. Great Falls City, Montana
1256. Lake County, Montana
1257. Missoula City, Montana
1258. Douglas County, Nebraska
1259. Knox County, Nebraska
1260. Lincoln County, Nebraska
1261. Sarpy County, Nebraska
1262. Boulder City, Nevada
1263. Carson City, Nevada
1264. Churchill County, Nevada
1265. Clark County, Nevada
1266. Henderson City, Nevada
1267. Las Vegas City, Nevada
1268. Mesquite City, Nevada
1269. North Las Vegas City, Nevada
1270. Nye County, Nevada
1271. Sparks City, Nevada
1272. Washoe County, Nevada
1273. West Wendover City, Nevada
1274. Belknap County, New Hampshire
1275. Belmont City, New Hampshire
1276. Berlin City, New Hampshire
1277. Carroll County, New Hampshire
1278. Cheshire County, New Hampshire
1279. Claremont City, New Hampshire
1280. Concord City, New Hampshire
1281. Coos County, New Hampshire
1282. Derry Town, New Hampshire
1283. Franklin City, New Hampshire
1284. Grafton County, New Hampshire
1285. Goshen School District, New Hampshire
1286. Hillsborough County, New Hampshire
1287. Keene City, New Hampshire
1288. Kearsarge Regional School District-School Administrative Unit 65, New Hampshire
1289. Laconia City, New Hampshire
1290. Lebanon School District, New Hampshire
1291. Londonderry Town, New Hampshire
1292. Manchester City, New Hampshire
1293. Nashua City, New Hampshire
1294. Pittsfield School District, New Hampshire
1295. Rockingham County, New Hampshire
1296. Strafford County, New Hampshire

1297. Sullivan County, New Hampshire
1298. Tamworth School District, New Hampshire
1299. Atlantic County, New Jersey
1300. Barnegat Township, New Jersey
1301. Bayonne City, New Jersey
1302. Bergen County, New Jersey
1303. Burlington County, New Jersey
1304. Camden County, New Jersey
1305. Clifton City, New Jersey
1306. Clinton Town, New Jersey
1307. Elizabeth City, New Jersey
1308. Essex County, New Jersey
1309. Hudson County, New Jersey
1310. Hunterdon County, New Jersey
1311. Jersey City, New Jersey
1312. Ocean County, New Jersey
1313. Paramus Borough, New Jersey
1314. Passaic County, New Jersey
1315. Paterson City, New Jersey
1316. Ridgefield Borough, New Jersey
1317. Saddle Brook Township, New Jersey
1318. Sussex County, New Jersey
1319. Trenton City, New Jersey
1320. Vineland City, New Jersey
1321. Albany City, New York
1322. Albany County, New York
1323. Allegany County, New York
1324. Amityville Village, New York
1325. Amsterdam City, New York
1326. Auburn City, New York
1327. Babylon Town, New York
1328. Babylon Village, New York
1329. Bellmore Fire District, New York
1330. Bellport Village, New York
1331. Branch Village, New York
1332. Brookhaven Town, New York
1333. Broome County, New York
1334. Buffalo City, New York
1335. Centereach Fire District, New York
1336. Clarkstown Town, New York
1337. Clinton County, Michigan
1338. Columbia County, New York
1339. Cortland County, New York
1340. Dutchess County, New York
1341. East Hampton Village, New York
1342. East Rockaway Village, New York
1343. Erie County, New York
1344. Farmingdale Village, New York
1345. Floral Park Village, New York
1346. Franklin County, New York
1347. Friendship Fire & Hose Co., New York
1348. Fulton County, New York
1349. Garden City Village, New York
1350. Genesee County, New York
1351. Geneva City, New York
1352. Great Neck Village, New York
1353. Greene County, New York
1354. Greenport Village, New York
1355. Hamilton County, New York
1356. Hauppauge Fire District, New York
1357. Haverstraw Town, New York
1358. Hempstead Town, New York
1359. Hempstead Village, New York
1360. Herkimer County, New York
1361. Herkimer Village, New York
1362. Hicksville Water District, New York
1363. Huntington Town, New York
1364. Island Park Village, New York
1365. Islandia Village, New York
1366. Islip Terrance Fire District, New York
1367. Islip Town, New York
1368. Ithaca City, New York
1369. Jefferson County, New York
1370. Kingston City, New York
1371. Lackawanna City, New York
1372. Lake Grove Village, New York
1373. Lawrence Village, New York
1374. Levittown Fire District, New York
1375. Lewis County, New York
1376. Lindenhurst Village, New York
1377. Lloyd Harbor Village, New York
1378. Long Beach City, New York
1379. Lynbrook Village, New York
1380. Massapequa Park Village, New York
1381. Melville Fire District, New York
1382. Merrick Library, New York
1383. Mill Neck Village, New York
1384. Miller Place Fire District, New York
1385. Monroe County, New York

1386. Montgomery County, New York
1387. Mount Sinai Fire District, New York
1388. Nesconset Fire District, New York
1389. New Hyde Park Village, New York
1390. New York City, New York
1391. Niagara County, New York
1392. Nissequogue Village, New York
1393. North Hempstead Town, New York
1394. North Merrick Fire District, New York
1395. North Patchogue Fire District, New York
1396. Northport Village, New York
1397. Ogdensburg City, New York
1398. Old Westbury Village, New York
1399. Oneida County, New York
1400. Onondaga County, New York
1401. Ontario County, New York
1402. Orange County, New York
1403. Orangetown Town, New York
1404. Oswego County, New York
1405. Oyster Bay Town, New York
1406. Patchogue Village, New York
1407. Plattsburgh City, New York
1408. Poquott Village, New York
1409. Port Washington North Village, New York
1410. Port Washington Water District, New York
1411. Poughkeepsie City, New York
1412. Poughkeepsie Town, New York
1413. Ramapo Town, New York
1414. Rensselaer County, New York
1415. Ridge Fire District, New York
1416. Riverhead Town, New York
1417. Rochester City, New York
1418. Rochester Public School District, New York
1419. Rockland County, New York
1420. Rockville Centre Public Library, New York
1421. Rome City, New York
1422. Roslyn Water District, New York
1423. Saltaire Village, New York
1424. Saratoga County, New York
1425. Saratoga Springs City, New York
1426. Schenectady City, New York
1427. Schenectady County, New York
1428. Schoharie County, New York
1429. Schuyler County, New York
1430. Seneca County, New York
1431. Smithtown Fire District, New York
1432. Smithtown Town, New York
1433. South Farmingdale Fire District, New York
1434. Southampton Town, New York
1435. Southold Town, New York
1436. Southwestern Central School District, New York
1437. St. James Fire District, New York
1438. St. Lawrence County, New York
1439. Steuben County, New York
1440. Stewart Manor Village, New York
1441. Stony Brook Fire District, New York
1442. Stony Point Town, New York
1443. Suffern Village, New York
1444. Sullivan County, New York
1445. Syracuse City, New York
1446. Tompkins County, New York
1447. Troy City, New York
1448. Ulster County, New York
1449. Utica City, New York
1450. Valley Stream Village, New York
1451. Washington County, New York
1452. West Hampton Dunes, New York
1453. West Haverstraw Village, New York
1454. West Hempstead Public Library, New York
1455. Westbury Village, New York
1456. Westchester County, New York
1457. Wyoming County, New York
1458. Yonkers City, New York
1459. Alamance County, North Carolina
1460. Anson County, North Carolina
1461. Ashe County, North Carolina
1462. Beaufort County, North Carolina
1463. Bladen County, North Carolina
1464. Brunswick County, North Carolina
1465. Buncombe County, North Carolina
1466. Burke County, North Carolina
1467. Cabarrus County, North Carolina
1468. Caldwell County, North Carolina

1469. Camden County, North Carolina
1470. Canton City, North Carolina
1471. Carteret County, North Carolina
1472. Catawba County, North Carolina
1473. Chatham County, North Carolina
1474. Cleveland County, North Carolina
1475. Columbus County, North Carolina
1476. Craven County, North Carolina
1477. Cumberland County, North Carolina
1478. Dare County, North Carolina
1479. Davidson County, North Carolina
1480. Davie County, North Carolina
1481. Duplin County, North Carolina
1482. Durham County, North Carolina
1483. Fayetteville City, North Carolina
1484. Forsyth County, North Carolina
1485. Franklin County, North Carolina
1486. Gaston County, North Carolina
1487. Granville County, North Carolina
1488. Greensboro City, North Carolina
1489. Guilford County, North Carolina
1490. Halifax County, North Carolina
1491. Haywood County, North Carolina
1492. Henderson City, North Carolina
1493. Hickory City, North Carolina
1494. Iredell County, North Carolina
1495. Jacksonville City, North Carolina
1496. Lee County, North Carolina
1497. Lincoln County, North Carolina
1498. Madison County, North Carolina
1499. Martin County, North Carolina
1500. McDowell County, North Carolina
1501. Mecklenburg County, North Carolina
1502. Mitchell County, North Carolina
1503. Moore County, North Carolina
1504. New Hanover County, North Carolina
1505. Onslow County, North Carolina
1506. Orange County, North Carolina
1507. Pamlico County, North Carolina
1508. Pasquotank County, North Carolina
1509. Person County, North Carolina
1510. Pitt County, North Carolina
1511. Polk County, North Carolina
1512. Randolph County, North Carolina
1513. Richmond County, North Carolina
1514. Robeson County, North Carolina
1515. Rockingham County, North Carolina
1516. Rowan County, North Carolina
1517. Rutherford County, North Carolina
1518. Sampson County, North Carolina
1519. Scotland County, North Carolina
1520. Stokes County, North Carolina
1521. Surry County, North Carolina
1522. Vance County, North Carolina
1523. Watauga County, North Carolina
1524. Wayne County, North Carolina
1525. Wilkes County, North Carolina
1526. Wilmington City, North Carolina
1527. Winston-Salem City, North Carolina
1528. Yadkin County, North Carolina
1529. Yancey County, North Carolina
1530. Barnes County, North Dakota
1531. Benson County, North Dakota
1532. Bismarck City, North Dakota
1533. Burleigh County, North Dakota
1534. Devils Lake City, North Dakota
1535. Dickey County, North Dakota
1536. Dunn County, North Dakota
1537. Eddy County, North Dakota
1538. Foster County, North Dakota
1539. Grand Forks County, North Dakota
1540. Lamoure County, North Dakota
1541. Lisbon City, North Dakota
1542. McKenzie County, North Dakota
1543. McLean County, North Dakota
1544. Mercer County, North Dakota
1545. Mountrail County, North Dakota
1546. Pembina County, North Dakota
1547. Pierce County, North Dakota
1548. Ramsey County, North Dakota
1549. Ransom County, North Dakota
1550. Richland County, North Dakota
1551. Rolette County, North Dakota
1552. Sargent County, North Dakota
1553. Stark County, North Dakota
1554. Towner County, North Dakota
1555. Walsh County, North Dakota
1556. Ward County, North Dakota
1557. Wells County, North Dakota
1558. Williams County, North Dakota

1559. Akron City, Ohio
1560. Ashland City, Ohio
1561. Ashland County, Ohio
1562. Ashtabula County, Ohio
1563. Athens County, Ohio
1564. Auglaize County, Ohio
1565. Barberton City, Ohio
1566. Belmont County, Ohio
1567. Boardman Local Schools BOE, Ohio
1568. Boston Heights Village, Ohio
1569. Boston Township, Ohio
1570. Broadview Heights City, Ohio
1571. Brooklyn Heights Village, Ohio
1572. Brown County, Ohio
1573. Butler County, Ohio
1574. Champaign County, Ohio
1575. Cincinnati City, Ohio
1576. Clermont County, Ohio
1577. Cleveland City, Ohio
1578. Clinton County, Ohio
1579. Clinton Village, Ohio
1580. Copley Township, Ohio
1581. Coshocton County, Ohio
1582. Coventry Township, Ohio
1583. Crawford County, Ohio
1584. Cuyahoga County, Ohio
1585. Cuyahoga Falls City, Ohio
1586. Darke County, Ohio
1587. Dayton City, Ohio
1588. Delaware County, Ohio
1589. East Cleveland City, Ohio
1590. Elyria City, Ohio
1591. Erie County, Ohio
1592. Euclid City, Ohio
1593. Fairfield City, Ohio
1594. Fairfield County, Ohio
1595. Fairlawn City, Ohio
1596. Fayette County, Ohio
1597. Findlay City, Ohio
1598. Franklin County, Ohio
1599. Fulton County, Ohio
1600. Gallia County, Ohio
1601. Garfield Heights City, Ohio
1602. Geauga County, Ohio
1603. Green City, Ohio
1604. Guernsey County, Ohio
1605. Hamilton City, Ohio
1606. Hamilton County, Ohio
1607. Hocking County, Ohio
1608. Huron City, Ohio
1609. Huron County, Ohio
1610. Ironton City, Ohio
1611. Jackson County, Ohio
1612. Jefferson County, Ohio
1613. Knox County, Ohio
1614. Lake County, Ohio
1615. Lakemore Village, Ohio
1616. Lakewood City, Ohio
1617. Lawrence County, Ohio
1618. Lebanon City, Ohio
1619. Lexington Village, Ohio
1620. Liberty Local Schools, Ohio
1621. Licking County, Ohio
1622. Logan County, Ohio
1623. Lorain City, Ohio
1624. Lorain County, Ohio
1625. Lucas County, Ohio
1626. Lyndhurst City, Ohio
1627. Macedonia City, Ohio
1628. Marion County, Ohio
1629. Mayfield Heights City, Ohio
1630. Meigs County, Ohio
1631. Mercer County, Ohio
1632. Middletown City, Ohio
1633. Mogadore Village, Ohio
1634. Montgomery County, Ohio
1635. Munroe Falls City, Ohio
1636. Muskingum County, Ohio
1637. New Franklin City, Ohio
1638. Newburgh Heights Village, Ohio
1639. Noble County, Ohio
1640. North Olmsted City, Ohio
1641. North Ridgeville City, Ohio
1642. North Royalton City, Ohio
1643. Norton City, Ohio
1644. Olmsted Falls City, Ohio
1645. Painesville Township, Ohio
1646. Parma City, Ohio
1647. Parma Heights City, Ohio
1648. Peninsula Village, Ohio
1649. Perry County, Ohio
1650. Portage County, Ohio

1651. Portsmouth City, Ohio
1652. Richfield Village, Ohio
1653. Richland County Children's Services, Ohio
1654. Ross County, Ohio
1655. Sandusky County, Ohio
1656. Scioto County, Ohio
1657. Seneca County, Ohio
1658. Seven Hills City, Ohio
1659. Shelby County, Ohio
1660. Silver Lake Village, Ohio
1661. Springfield Township, Summit County, Ohio
1662. St. Mary's City, Ohio
1663. Stark County, Ohio
1664. Stow City, Ohio
1665. Strongsville City, Ohio
1666. Summit County, Ohio
1667. Tallmadge City, Ohio
1668. Toledo City, Ohio
1669. Trumbull County, Ohio
1670. Tuscarawas County, Ohio
1671. Valley Fire District, Ohio
1672. Van Wert City, Ohio
1673. Van Wert County, Ohio
1674. Warren City, Ohio
1675. Warrensville Heights, Ohio
1676. Washington County, Ohio
1677. Wayne County, Ohio
1678. Wickliffe City, Ohio
1679. Williams County, Ohio
1680. Altus City, Oklahoma
1681. Atoka County, Oklahoma
1682. Beckham County, Oklahoma
1683. Caddo County, Oklahoma
1684. Choctaw County, Oklahoma
1685. Cimarron County, Oklahoma
1686. Cleveland County, Oklahoma
1687. Coal County, Oklahoma
1688. Collinsville City, Oklahoma
1689. Comanche County, Oklahoma
1690. Craig County, Oklahoma
1691. Creek County, Oklahoma
1692. Custer County, Oklahoma
1693. Delaware County, Oklahoma
1694. Dewey County, Oklahoma
1695. El Reno City, Oklahoma
1696. Elk City, Oklahoma
1697. Enid City, Oklahoma
1698. Garvin County, Oklahoma
1699. Grady County, Oklahoma
1700. Greer County, Oklahoma
1701. Harper County, Oklahoma
1702. Haskell County, Oklahoma
1703. Hughes County, Oklahoma
1704. Jackson County, Oklahoma
1705. Jefferson County, Oklahoma
1706. Jenks City, Oklahoma
1707. Johnston County, Oklahoma
1708. Kay County, Oklahoma
1709. Kiowa County, Oklahoma
1710. Latimer County, Oklahoma
1711. LeFlore County, Oklahoma
1712. Lincoln County, Oklahoma
1713. Logan County, Oklahoma
1714. Love County, Oklahoma
1715. Major County, Oklahoma
1716. Mayes County, Oklahoma
1717. McClain County, Oklahoma
1718. McCurtain County, Oklahoma
1719. Midwest City, Oklahoma
1720. Noble County, Oklahoma
1721. Nowata County, Oklahoma
1722. Okfuskee County, Oklahoma
1723. Oklahoma County, Oklahoma
1724. Okmulgee County, Oklahoma
1725. Osage County, Oklahoma
1726. Ottawa County, Oklahoma
1727. Pawnee County, Oklahoma
1728. Payne County, Oklahoma
1729. Pittsburg County, Oklahoma
1730. Pottawatomie County, Oklahoma
1731. Rogers County, Oklahoma
1732. Seminole County, Oklahoma
1733. Shawnee City, Oklahoma
1734. Stephens County, Oklahoma
1735. Stillwater City, Oklahoma
1736. Texas County, Oklahoma
1737. Tillman County, Oklahoma
1738. Tulsa City, Oklahoma
1739. Tulsa County, Oklahoma
1740. Washington County, Oklahoma

1741. Woods County, Oklahoma
1742. Woodward County, Oklahoma
1743. Yukon City, Oklahoma
1744. Coos County, Oregon
1745. Portland City, Oregon
1746. Adams County, Pennsylvania
1747. Allegheny County, Pennsylvania
1748. Armstrong County, Pennsylvania
1749. Bedford County, Pennsylvania
1750. Bensalem Township, Pennsylvania
1751. Bradford County, Pennsylvania
1752. Bristol Township, Pennsylvania
1753. Bucks County, Pennsylvania
1754. Cambria County, Pennsylvania
1755. Carbon County, Pennsylvania
1756. Chardo, District Attorney of Dauphin County, Pennsylvania
1757. Clarion County, Pennsylvania
1758. Clearfield County, Pennsylvania
1759. Clinton County, Pennsylvania
1760. Coatesville City, Pennsylvania
1761. Columbia County, Pennsylvania
1762. Delaware County, Pennsylvania
1763. Edwardsville Borough, Pennsylvania
1764. Erie County, Pennsylvania
1765. Exeter Borough, Pennsylvania
1766. Fairview Township, Luzerne County, Pennsylvania
1767. Fayette County, Pennsylvania
1768. Forty Fort Borough, Pennsylvania
1769. Franklin County, Pennsylvania
1770. Greene County, Pennsylvania
1771. Hanover Township, Luzerne County, Pennsylvania
1772. Hazleton City, Pennsylvania
1773. Hirz, District Attorney of Erie County, Pennsylvania
1774. Houck, District Attorney of Northampton County, Pennsylvania
1775. Indiana County, Pennsylvania
1776. Kingston Borough, Pennsylvania
1777. Lackawanna County, Pennsylvania
1778. Lawrence County, Pennsylvania
1779. Lehigh County, Pennsylvania
1780. Lock Haven City, Pennsylvania
1781. Lower Makefield Township, Pennsylvania
1782. Luzerne County, Pennsylvania
1783. Lycoming County, Pennsylvania
1784. Mercer County, Pennsylvania
1785. Middletown Township, Bucks County, Pennsylvania
1786. Morrisville Borough, Pennsylvania
1787. Nanticoke City, Pennsylvania
1788. Newtown Township, Bucks County, Pennsylvania
1789. Norristown Municipality, Pennsylvania
1790. Northampton County, Pennsylvania
1791. Northumberland County, Pennsylvania
1792. Philadelphia City, Pennsylvania
1793. Pike County, Pennsylvania
1794. Pittsburgh City, Pennsylvania
1795. Plains Township, Pennsylvania
1796. Ryan, District Attorney of Chester County, Pennsylvania
1797. Schuylkill County, Pennsylvania
1798. Sugar Notch Borough, Pennsylvania
1799. Tioga County, Pennsylvania
1800. Warminster Township, Pennsylvania
1801. Warrington Township, Pennsylvania
1802. Washington County, Pennsylvania
1803. Weintraub, District Attorney of Bucks County, Pennsylvania
1804. West Norriton Township, Pennsylvania
1805. West Pittston, Pennsylvania
1806. Westmoreland County, Pennsylvania
1807. Wilkes-Barre City, Pennsylvania
1808. Wilkes-Barre Township, Pennsylvania
1809. Wright Township, Pennsylvania
1810. Wyoming Borough, Pennsylvania
1811. Wyoming County, Pennsylvania
1812. Zappala, District Attorney of Allegheny County, Pennsylvania
1813. Ziccarelli, District Attorney of Westmoreland County, Pennsylvania
1814. Aibonito Municipality, Puerto Rico
1815. Aguada Municipality, Puerto Rico

1816. Aguadilla Municipality, Puerto Rico
1817. Anasco Municipality, Puerto Rico
1818. Arecibo Municipality, Puerto Rico
1819. Barranquitas Municipality, Puerto Rico
1820. Cabo Rojo Municipality, Puerto Rico
1821. Camuy Municipality, Puerto Rico
1822. Canovanas Municipality, Puerto Rico
1823. Comerio Municipality, Puerto Rico
1824. Dorado Municipality, Puerto Rico
1825. Fajardo Municipality, Puerto Rico
1826. Guanica Municipality, Puerto Rico
1827. Guayanilla Municipality, Puerto Rico
1828. Hatillo Municipality, Puerto Rico
1829. Isabela Municipality, Puerto Rico
1830. Jayuya Municipality, Puerto Rico
1831. Juana Diaz Municipality, Puerto Rico
1832. Juncos Municipality, Puerto Rico
1833. Lares Municipality, Puerto Rico
1834. Las Marias Municipality, Puerto Rico
1835. Loiza Municipality, Puerto Rico
1836. Manati Municipality, Puerto Rico
1837. Maricao Municipality, Puerto Rico
1838. Moca Municipality, Puerto Rico
1839. Morovis Municipality, Puerto Rico
1840. Orocovis Municipality, Puerto Rico
1841. Penuelas Municipality, Puerto Rico
1842. Ponce Municipality, Puerto Rico
1843. Quebradillas Municipality, Puerto Rico
1844. Rincon Municipality, Puerto Rico
1845. Rio Grande Municipality, Puerto Rico
1846. Sabana Grande Municipality, Puerto Rico
1847. Salinas Municipality, Puerto Rico
1848. San German Municipality, Puerto Rico
1849. San Juan Municipality, Puerto Rico
1850. San Lorenzo Municipality, Puerto Rico
1851. Santa Isabel Municipality, Puerto Rico
1852. Toa Alta Municipality, Puerto Rico
1853. Trujillo Alto Municipality, Puerto Rico
1854. Vega Alta Municipality, Puerto Rico
1855. Vega Baja Municipality, Puerto Rico
1856. Yabucoa Municipality, Puerto Rico
1857. Barrington Town, Rhode Island
1858. Bristol Town, Rhode Island
1859. Burrillville Town, Rhode Island
1860. Central Falls City, Rhode Island
1861. Charlestown Town, Rhode Island
1862. Coventry Town, Rhode Island
1863. Cranston City, Rhode Island
1864. Cumberland Town, Rhode Island
1865. East Greenwich Town, Rhode Island
1866. East Providence City, Rhode Island
1867. Foster Town, Rhode Island
1868. Glocester Town, Rhode Island
1869. Hopkinton Town, Rhode Island
1870. Jamestown Town, Rhode Island
1871. Johnston Town, Rhode Island
1872. Middletown Town, Rhode Island
1873. Narragansett Town, Rhode Island
1874. Newport City, Rhode Island
1875. North Kingstown Town, Rhode Island
1876. North Providence Town, Rhode Island
1877. Pawtucket City, Rhode Island
1878. Portsmouth Town, Rhode Island
1879. Richmond Town, Rhode Island
1880. Scituate Town, Rhode Island
1881. Smithfield Town, Rhode Island
1882. South Kingstown Town, Rhode Island
1883. Warren Town, Rhode Island
1884. Warwick City, Rhode Island
1885. West Greenwich Town, Rhode Island
1886. West Warwick Town, Rhode Island
1887. Westerly Town, Rhode Island
1888. Woonsocket City, Rhode Island
1889. Abbeville County, South Carolina
1890. Aiken County, South Carolina

1891. Allendale County, South Carolina
1892. Anderson County, South Carolina
1893. Bamberg County, South Carolina
1894. Barnwell County, South Carolina
1895. Beaufort County, South Carolina
1896. Berkeley County, South Carolina
1897. Calhoun County, South Carolina
1898. Charleston City, South Carolina
1899. Charleston County, South Carolina
1900. Cherokee County, South Carolina
1901. Chester City, South Carolina
1902. Chester County, South Carolina
1903. Chesterfield County, South Carolina
1904. Clarendon County, South Carolina
1905. Colleton County, South Carolina
1906. Dillon County, South Carolina
1907. Dorchester County, South Carolina
1908. Edgefield County, South Carolina
1909. Fairfield County, South Carolina
1910. Florence County, South Carolina
1911. Georgetown City, South Carolina
1912. Georgetown County, South Carolina
1913. Greenville County, South Carolina
1914. Greenwood County, South Carolina
1915. Hampton County, South Carolina
1916. Horry County, South Carolina
1917. Jasper County, South Carolina
1918. Kershaw County, South Carolina
1919. Lancaster County, South Carolina
1920. Laurens County, South Carolina
1921. Lee County, South Carolina
1922. Lexington County, South Carolina
1923. Marion County, South Carolina
1924. Marlboro County, South Carolina
1925. McCormick County, South Carolina
1926. Mt. Pleasant Town, South Carolina
1927. Myrtle Beach City, South Carolina
1928. Newberry County, South Carolina
1929. North Charleston City, South Carolina
1930. Oconee County, South Carolina
1931. Orangeburg City, South Carolina
1932. Orangeburg County, South Carolina
1933. Pickens County, South Carolina
1934. Richland County, South Carolina
1935. Saluda County, South Carolina
1936. Spartanburg County, South Carolina
1937. Summerville Town, South Carolina
1938. Sumter County, South Carolina
1939. Union County, South Carolina
1940. Williamsburg County, South Carolina
1941. York County, South Carolina
1942. Anderson County, Tennessee
1943. Arlington Town, Tennessee
1944. Bledsoe County, Tennessee
1945. Blount County, Tennessee
1946. Bradley County, Tennessee
1947. Campbell County, Tennessee
1948. Claiborne County, Tennessee
1949. Clay County, Tennessee
1950. Cocke County, Tennessee
1951. Franklin County, Tennessee
1952. Gatlinburg City, Tennessee
1953. Grainger County, Tennessee
1954. Greene County, Tennessee
1955. Grundy County, Tennessee
1956. Hamblen County Board of Education, Tennessee
1957. Hamilton County, Tennessee
1958. Hancock County Board of Education, Tennessee
1959. Hawkins County, Tennessee
1960. Jefferson County, Tennessee
1961. Knox County, Tennessee
1962. Knoxville City, Tennessee
1963. Loudon County, Tennessee
1964. Madison County, Tennessee
1965. Marion County, Tennessee
1966. McMinn County, Tennessee
1967. Meigs County, Tennessee
1968. Memphis City, Tennessee
1969. Millington City, Tennessee
1970. Monroe County, Tennessee
1971. Polk County, Tennessee
1972. Rhea County, Tennessee
1973. Roane County, Tennessee
1974. Rutherford County, Tennessee
1975. Rutledge Town, Tennessee
1976. Sequatchie County, Tennessee
1977. Sevier County, Tennessee
1978. Shelby County, Tennessee

1979. Union County, Tennessee
1980. Washington County, Tennessee
1981. Williamson County, Tennessee
1982. Angelina County, Texas
1983. Bailey County, Texas
1984. Bexar County, Texas
1985. Bowie County, Texas
1986. Brazos County, Texas
1987. Camp County, Texas
1988. Cherokee County, Texas
1989. Clay County, Texas
1990. Coryell County, Texas
1991. Dallas County, Texas
1992. Dallas County Hospital District d/b/a Parkland Health Hospital System, Texas
1993. Duval County, Texas
1994. Eagle Pass City, Texas
1995. El Campo Memorial Hospital/West Wharton County Hospital District, Texas
1996. Ellis County, Texas
1997. Freestone County, Texas
1998. Guadalupe Valley Hospital a/k/a Guadalupe Regional Medical Center, Texas
1999. Harris County Hospital District d/b/a Harris Health System, Texas
2000. Henderson County, Texas
2001. Jim Hogg County, Texas
2002. Jim Wells County, Texas
2003. Johnson County, Texas
2004. Kaufman County, Texas
2005. Kleberg County, Texas
2006. Lamar County, Texas
2007. Laredo City, Texas
2008. Maverick County, Texas
2009. McLennan County, Texas
2010. Montgomery County, Texas
2011. Ochiltree County Hospital District, Texas
2012. Palo Pinto County Hospital District a/k/a Palo Pinto General Hospital, Texas
2013. Polk County, Texas
2014. Rockwall County, Texas
2015. Rusk County, Texas
2016. San Antonio City, Texas
2017. Smith County, Texas
2018. Stephens County, Texas
2019. Tarrant County, Texas
2020. Tarrant County Hospital District d/b/a JPS Health, Texas
2021. Titus County, Texas
2022. Walker County, Texas
2023. Webb County, Texas
2024. Wichita County, Texas
2025. Williamson County, Texas
2026. Zavala County, Texas
2027. Cache County, Utah
2028. Sevier County, Utah
2029. Summit County, Utah
2030. Tooele County, Utah
2031. Uintah County, Utah
2032. Utah County, Utah
2033. Wasatch County, Utah
2034. Washington County, Utah
2035. Weber County, Utah
2036. Bennington Town, Vermont
2037. St. Albans City, Vermont
2038. Accomack County, Virginia
2039. Alexandria City, Virginia
2040. Alleghany County, Virginia
2041. Amherst County, Virginia
2042. Arlington County, Virginia
2043. Botetourt County, Virginia
2044. Bristol City, Virginia
2045. Buchanan County, Virginia
2046. Buena Vista City, Virginia
2047. Carroll County, Virginia
2048. Charlotte County, Virginia
2049. Chesapeake City, Virginia
2050. Chesterfield County, Virginia
2051. Covington City, Virginia
2052. Culpeper County, Virginia
2053. Cumberland County, Virginia
2054. Danville City, Virginia
2055. Dickenson County, Virginia
2056. Dinwiddie County, Virginia
2057. Emporia City, Virginia
2058. Fairfax City, Virginia
2059. Fairfax County, Virginia

2060. Fauquier County, Virginia
2061. Floyd County, Virginia
2062. Franklin County, Virginia
2063. Frederick County, Virginia
2064. Fredericksburg City, Virginia
2065. Galax City, Virginia
2066. Giles County, Virginia
2067. Goochland County, Virginia
2068. Greensville County, Virginia
2069. Halifax County, Virginia
2070. Henrico County, Virginia
2071. Henry County, Virginia
2072. Hopewell City, Virginia
2073. Isle of Wight County, Virginia
2074. King & Queen County, Virginia
2075. Lee County, Virginia
2076. Lexington City, Virginia
2077. Loudoun County, Virginia
2078. Louisa County, Virginia
2079. Madison County, Virginia
2080. Martinsville City, Virginia
2081. Mecklenburg County, Virginia
2082. Montgomery County, Virginia
2083. Norfolk City, Virginia
2084. Northampton County, Virginia
2085. Northumberland County, Virginia
2086. Norton City, Virginia
2087. Page County, Virginia
2088. Patrick County, Virginia
2089. Pittsylvania County, Virginia
2090. Portsmouth City, Virginia
2091. Prince George County, Virginia
2092. Prince William County, Virginia
2093. Pulaski County, Virginia
2094. Radford City, Virginia
2095. Richmond City, Virginia
2096. Richmond County, Virginia
2097. Roanoke City, Virginia
2098. Roanoke County, Virginia
2099. Rockbridge County, Virginia
2100. Salem City, Virginia
2101. Scott County, Virginia
2102. Shenandoah County, Virginia
2103. Smyth County, Virginia
2104. Stafford County, Virginia
2105. Tazewell County, Virginia
2106. Virginia Beach City, Virginia
2107. Warren County, Virginia
2108. Washington County, Virginia
2109. Waynesboro City, Virginia
2110. Westmoreland County, Virginia
2111. Winchester City, Virginia
2112. Wise County, Virginia
2113. Wythe County, Virginia
2114. Bainbridge Island City, Washington
2115. Chelan County, Washington
2116. Franklin County, Washington
2117. Island County, Washington
2118. Jefferson County, Washington
2119. King County, Washington
2120. Kitsap County, Washington
2121. Lewis County, Washington
2122. Pierce County, Washington
2123. Spokane City, Washington
2124. Spokane County, Washington
2125. Tacoma City, Washington
2126. Thurston County, Washington
2127. Walla Walla County, Washington
2128. Whatcom County, Washington
2129. Adams County, Wisconsin
2130. Ashland County, Wisconsin
2131. Barron County, Wisconsin
2132. Bayfield County, Wisconsin
2133. Brown County, Wisconsin
2134. Buffalo County, Wisconsin
2135. Burnett County, Wisconsin
2136. Calumet County, Wisconsin
2137. Chippewa County, Wisconsin
2138. Clark County, Wisconsin
2139. Columbia County, Wisconsin
2140. Crawford County, Wisconsin
2141. Cudahy City, Wisconsin
2142. Dane County, Wisconsin
2143. Dodge County, Wisconsin
2144. Door County, Wisconsin
2145. Douglas County, Wisconsin
2146. Dunn County, Wisconsin
2147. Eau Claire County, Wisconsin
2148. Florence County, Wisconsin
2149. Fond du Lac County, Wisconsin
2150. Forest County, Wisconsin
2151. Franklin City, Wisconsin

2152. Grant County, Wisconsin
2153. Green County, Wisconsin
2154. Green Lake County, Wisconsin
2155. Greenfield City, Wisconsin
2156. Iowa County, Wisconsin
2157. Iron County, Wisconsin
2158. Jackson County, Wisconsin
2159. Jefferson County, Wisconsin
2160. Juneau County, Wisconsin
2161. Kenosha City, Wisconsin
2162. Kenosha County, Wisconsin
2163. Kewaunee County, Wisconsin
2164. La Crosse County, Wisconsin
2165. Lafayette County, Wisconsin
2166. Langlade County, Wisconsin
2167. Lincoln County, Wisconsin
2168. Manitowoc County, Wisconsin
2169. Marathon County, Wisconsin
2170. Marinette City, Wisconsin
2171. Marinette County, Wisconsin
2172. Marquette County, Wisconsin
2173. Menominee County, Wisconsin
2174. Milwaukee City, Wisconsin
2175. Milwaukee County, Wisconsin
2176. Monroe County, Wisconsin
2177. Oak Creek City, Wisconsin
2178. Oconto County, Wisconsin
2179. Oneida County, Wisconsin
2180. Outagamie County, Wisconsin
2181. Ozaukee County, Wisconsin
2182. Pepin County, Wisconsin
2183. Pierce County, Wisconsin
2184. Pleasant Prairie Village, Wisconsin
2185. Portage County, Wisconsin
2186. Price County, Wisconsin
2187. Racine County, Wisconsin
2188. Richland County, Wisconsin
2189. Rock County, Wisconsin
2190. Rusk County, Wisconsin
2191. Sauk County, Wisconsin
2192. Sawyer County, Wisconsin
2193. Shawano County, Wisconsin
2194. Sheboygan County, Wisconsin
2195. South Milwaukee City, Wisconsin
2196. St. Croix County, Wisconsin
2197. Superior City, Wisconsin
2198. Taylor County, Wisconsin
2199. Trempealeau County, Wisconsin
2200. Vernon County, Wisconsin
2201. Vilas County, Wisconsin
2202. Walworth County, Wisconsin
2203. Washburn County, Wisconsin
2204. Washington County, Wisconsin
2205. Waukesha County, Wisconsin
2206. Waupaca County, Wisconsin
2207. Waushara County, Wisconsin
2208. West Allis City, Wisconsin
2209. Winnebago County, Wisconsin
2210. Wood County, Wisconsin
2211. Sheridan City, Wyoming

EXHIBIT D

[Intentionally Omitted]

EXHIBIT E

List of Opioid Remediation Uses

Schedule A
Core Strategies

Settling States and Participating Subdivisions listed on Exhibit G may choose from among the abatement strategies listed in Schedule B. However, priority may be given to the following core abatement strategies ("*Core Strategies*").[1]

A. NALOXONE OR OTHER FDA-APPROVED DRUG TO REVERSE OPIOID OVERDOSES

1. Expand training for first responders, schools, community support groups and families; and

2. Increase distribution to individuals who are uninsured or whose insurance does not cover the needed service.

B. MEDICATION-ASSISTED TREATMENT ("*MAT*") DISTRIBUTION AND OTHER OPIOID-RELATED TREATMENT

1. Increase distribution of MAT to individuals who are uninsured or whose insurance does not cover the needed service;

2. Provide education to school-based and youth-focused programs that discourage or prevent misuse;

3. Provide MAT education and awareness training to healthcare providers, EMTs, law enforcement, and other first responders; and

4. Provide treatment and recovery support services such as residential and inpatient treatment, intensive outpatient treatment, outpatient therapy or counseling, and recovery housing that allow or integrate medication and with other support services.

[1] As used in this Schedule A, words like "expand," "fund," "provide" or the like shall not indicate a preference for new or existing programs.

C. PREGNANT & POSTPARTUM WOMEN

1. Expand Screening, Brief Intervention, and Referral to Treatment ("*SBIRT*") services to non-Medicaid eligible or uninsured pregnant women;

2. Expand comprehensive evidence-based treatment and recovery services, including MAT, for women with co-occurring Opioid Use Disorder ("*OUD*") and other Substance Use Disorder ("*SUD*")/Mental Health disorders for uninsured individuals for up to 12 months postpartum; and

3. Provide comprehensive wrap-around services to individuals with OUD, including housing, transportation, job placement/training, and childcare.

D. EXPANDING TREATMENT FOR NEONATAL ABSTINENCE SYNDROME ("*NAS*")

1. Expand comprehensive evidence-based and recovery support for NAS babies;

2. Expand services for better continuum of care with infant-need dyad; and

3. Expand long-term treatment and services for medical monitoring of NAS babies and their families.

E. EXPANSION OF WARM HAND-OFF PROGRAMS AND RECOVERY SERVICES

1. Expand services such as navigators and on-call teams to begin MAT in hospital emergency departments;

2. Expand warm hand-off services to transition to recovery services;

3. Broaden scope of recovery services to include co-occurring SUD or mental health conditions;

4. Provide comprehensive wrap-around services to individuals in recovery, including housing, transportation, job placement/training, and childcare; and

5. Hire additional social workers or other behavioral health workers to facilitate expansions above.

F. TREATMENT FOR INCARCERATED POPULATION

1. Provide evidence-based treatment and recovery support, including MAT for persons with OUD and co-occurring SUD/MH disorders within and transitioning out of the criminal justice system; and

2. Increase funding for jails to provide treatment to inmates with OUD.

G. PREVENTION PROGRAMS

1. Funding for media campaigns to prevent opioid use (similar to the FDA's "Real Cost" campaign to prevent youth from misusing tobacco);

2. Funding for evidence-based prevention programs in schools;

3. Funding for medical provider education and outreach regarding best prescribing practices for opioids consistent with the CDC guidelines, including providers at hospitals (academic detailing);

4. Funding for community drug disposal programs; and

5. Funding and training for first responders to participate in pre-arrest diversion programs, post-overdose response teams, or similar strategies that connect at-risk individuals to behavioral health services and supports.

H. EXPANDING SYRINGE SERVICE PROGRAMS

1. Provide comprehensive syringe services programs with more wrap-around services, including linkage to OUD treatment, access to sterile syringes and linkage to care and treatment of infectious diseases.

I. EVIDENCE-BASED DATA COLLECTION AND RESEARCH ANALYZING THE EFFECTIVENESS OF THE ABATEMENT STRATEGIES WITHIN THE STATE

Schedule B
Approved Uses

Support treatment of Opioid Use Disorder (OUD) and any co-occurring Substance Use Disorder or Mental Health (SUD/MH) conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

PART ONE: TREATMENT

A. TREAT OPIOID USE DISORDER (OUD)

Support treatment of Opioid Use Disorder ("*OUD*") and any co-occurring Substance Use Disorder or Mental Health ("*SUD/MH*") conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:[2]

1. Expand availability of treatment for OUD and any co-occurring SUD/MH conditions, including all forms of Medication-Assisted Treatment ("*MAT*") approved by the U.S. Food and Drug Administration.

2. Support and reimburse evidence-based services that adhere to the American Society of Addiction Medicine ("*ASAM*") continuum of care for OUD and any co-occurring SUD/MH conditions.

3. Expand telehealth to increase access to treatment for OUD and any co-occurring SUD/MH conditions, including MAT, as well as counseling, psychiatric support, and other treatment and recovery support services.

4. Improve oversight of Opioid Treatment Programs ("*OTPs*") to assure evidence-based or evidence-informed practices such as adequate methadone dosing and low threshold approaches to treatment.

5. Support mobile intervention, treatment, and recovery services, offered by qualified professionals and service providers, such as peer recovery coaches, for persons with OUD and any co-occurring SUD/MH conditions and for persons who have experienced an opioid overdose.

6. Provide treatment of trauma for individuals with OUD (*e.g.*, violence, sexual assault, human trafficking, or adverse childhood experiences) and family members (*e.g.*, surviving family members after an overdose or overdose fatality), and training of health care personnel to identify and address such trauma.

[2] As used in this Schedule B, words like "expand," "fund," "provide" or the like shall not indicate a preference for new or existing programs.

7. Support evidence-based withdrawal management services for people with OUD and any co-occurring mental health conditions.

8. Provide training on MAT for health care providers, first responders, students, or other supporting professionals, such as peer recovery coaches or recovery outreach specialists, including telementoring to assist community-based providers in rural or underserved areas.

9. Support workforce development for addiction professionals who work with persons with OUD and any co-occurring SUD/MH conditions.

10. Offer fellowships for addiction medicine specialists for direct patient care, instructors, and clinical research for treatments.

11. Offer scholarships and supports for behavioral health practitioners or workers involved in addressing OUD and any co-occurring SUD/MH or mental health conditions, including, but not limited to, training, scholarships, fellowships, loan repayment programs, or other incentives for providers to work in rural or underserved areas.

12. Provide funding and training for clinicians to obtain a waiver under the federal Drug Addiction Treatment Act of 2000 ("*DATA 2000*") to prescribe MAT for OUD, and provide technical assistance and professional support to clinicians who have obtained a DATA 2000 waiver.

13. Disseminate web-based training curricula, such as the American Academy of Addiction Psychiatry's Provider Clinical Support Service–Opioids web-based training curriculum and motivational interviewing.

14. Develop and disseminate new curricula, such as the American Academy of Addiction Psychiatry's Provider Clinical Support Service for Medication–Assisted Treatment.

B. SUPPORT PEOPLE IN TREATMENT AND RECOVERY

Support people in recovery from OUD and any co-occurring SUD/MH conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the programs or strategies that:

1. Provide comprehensive wrap-around services to individuals with OUD and any co-occurring SUD/MH conditions, including housing, transportation, education, job placement, job training, or childcare.

2. Provide the full continuum of care of treatment and recovery services for OUD and any co-occurring SUD/MH conditions, including supportive housing, peer support

services and counseling, community navigators, case management, and connections to community-based services.

3. Provide counseling, peer-support, recovery case management and residential treatment with access to medications for those who need it to persons with OUD and any co-occurring SUD/MH conditions.

4. Provide access to housing for people with OUD and any co-occurring SUD/MH conditions, including supportive housing, recovery housing, housing assistance programs, training for housing providers, or recovery housing programs that allow or integrate FDA-approved mediation with other support services.

5. Provide community support services, including social and legal services, to assist in deinstitutionalizing persons with OUD and any co-occurring SUD/MH conditions.

6. Support or expand peer-recovery centers, which may include support groups, social events, computer access, or other services for persons with OUD and any co-occurring SUD/MH conditions.

7. Provide or support transportation to treatment or recovery programs or services for persons with OUD and any co-occurring SUD/MH conditions.

8. Provide employment training or educational services for persons in treatment for or recovery from OUD and any co-occurring SUD/MH conditions.

9. Identify successful recovery programs such as physician, pilot, and college recovery programs, and provide support and technical assistance to increase the number and capacity of high-quality programs to help those in recovery.

10. Engage non-profits, faith-based communities, and community coalitions to support people in treatment and recovery and to support family members in their efforts to support the person with OUD in the family.

11. Provide training and development of procedures for government staff to appropriately interact and provide social and other services to individuals with or in recovery from OUD, including reducing stigma.

12. Support stigma reduction efforts regarding treatment and support for persons with OUD, including reducing the stigma on effective treatment.

13. Create or support culturally appropriate services and programs for persons with OUD and any co-occurring SUD/MH conditions, including new Americans.

14. Create and/or support recovery high schools.

15. Hire or train behavioral health workers to provide or expand any of the services or supports listed above.

C. CONNECT PEOPLE WHO NEED HELP TO THE HELP THEY NEED (CONNECTIONS TO CARE)

Provide connections to care for people who have—or are at risk of developing—OUD and any co-occurring SUD/MH conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Ensure that health care providers are screening for OUD and other risk factors and know how to appropriately counsel and treat (or refer if necessary) a patient for OUD treatment.

2. Fund SBIRT programs to reduce the transition from use to disorders, including SBIRT services to pregnant women who are uninsured or not eligible for Medicaid.

3. Provide training and long-term implementation of SBIRT in key systems (health, schools, colleges, criminal justice, and probation), with a focus on youth and young adults when transition from misuse to opioid disorder is common.

4. Purchase automated versions of SBIRT and support ongoing costs of the technology.

5. Expand services such as navigators and on-call teams to begin MAT in hospital emergency departments.

6. Provide training for emergency room personnel treating opioid overdose patients on post-discharge planning, including community referrals for MAT, recovery case management or support services.

7. Support hospital programs that transition persons with OUD and any co-occurring SUD/MH conditions, or persons who have experienced an opioid overdose, into clinically appropriate follow-up care through a bridge clinic or similar approach.

8. Support crisis stabilization centers that serve as an alternative to hospital emergency departments for persons with OUD and any co-occurring SUD/MH conditions or persons that have experienced an opioid overdose.

9. Support the work of Emergency Medical Systems, including peer support specialists, to connect individuals to treatment or other appropriate services following an opioid overdose or other opioid-related adverse event.

10. Provide funding for peer support specialists or recovery coaches in emergency departments, detox facilities, recovery centers, recovery housing, or similar settings; offer services, supports, or connections to care to persons with OUD and any co-

occurring SUD/MH conditions or to persons who have experienced an opioid overdose.

11. Expand warm hand-off services to transition to recovery services.

12. Create or support school-based contacts that parents can engage with to seek immediate treatment services for their child; and support prevention, intervention, treatment, and recovery programs focused on young people.

13. Develop and support best practices on addressing OUD in the workplace.

14. Support assistance programs for health care providers with OUD.

15. Engage non-profits and the faith community as a system to support outreach for treatment.

16. Support centralized call centers that provide information and connections to appropriate services and supports for persons with OUD and any co-occurring SUD/MH conditions.

D. ADDRESS THE NEEDS OF CRIMINAL JUSTICE-INVOLVED PERSONS

Address the needs of persons with OUD and any co-occurring SUD/MH conditions who are involved in, are at risk of becoming involved in, or are transitioning out of the criminal justice system through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Support pre-arrest or pre-arraignment diversion and deflection strategies for persons with OUD and any co-occurring SUD/MH conditions, including established strategies such as:

    1. Self-referral strategies such as the Angel Programs or the Police Assisted Addiction Recovery Initiative ("*PAARI*");

    2. Active outreach strategies such as the Drug Abuse Response Team ("*DART*") model;

    3. "Naloxone Plus" strategies, which work to ensure that individuals who have received naloxone to reverse the effects of an overdose are then linked to treatment programs or other appropriate services;

    4. Officer prevention strategies, such as the Law Enforcement Assisted Diversion ("*LEAD*") model;

5. Officer intervention strategies such as the Leon County, Florida Adult Civil Citation Network or the Chicago Westside Narcotics Diversion to Treatment Initiative; or

6. Co-responder and/or alternative responder models to address OUD-related 911 calls with greater SUD expertise.

2. Support pre-trial services that connect individuals with OUD and any co-occurring SUD/MH conditions to evidence-informed treatment, including MAT, and related services.

3. Support treatment and recovery courts that provide evidence-based options for persons with OUD and any co-occurring SUD/MH conditions.

4. Provide evidence-informed treatment, including MAT, recovery support, harm reduction, or other appropriate services to individuals with OUD and any co-occurring SUD/MH conditions who are incarcerated in jail or prison.

5. Provide evidence-informed treatment, including MAT, recovery support, harm reduction, or other appropriate services to individuals with OUD and any co-occurring SUD/MH conditions who are leaving jail or prison or have recently left jail or prison, are on probation or parole, are under community corrections supervision, or are in re-entry programs or facilities.

6. Support critical time interventions ("*CTI*"), particularly for individuals living with dual-diagnosis OUD/serious mental illness, and services for individuals who face immediate risks and service needs and risks upon release from correctional settings.

7. Provide training on best practices for addressing the needs of criminal justice-involved persons with OUD and any co-occurring SUD/MH conditions to law enforcement, correctional, or judicial personnel or to providers of treatment, recovery, harm reduction, case management, or other services offered in connection with any of the strategies described in this section.

E. ADDRESS THE NEEDS OF PREGNANT OR PARENTING WOMEN AND THEIR FAMILIES, INCLUDING BABIES WITH NEONATAL ABSTINENCE SYNDROME

Address the needs of pregnant or parenting women with OUD and any co-occurring SUD/MH conditions, and the needs of their families, including babies with neonatal abstinence syndrome ("*NAS*"), through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Support evidence-based or evidence-informed treatment, including MAT, recovery services and supports, and prevention services for pregnant women—or women who

could become pregnant—who have OUD and any co-occurring SUD/MH conditions, and other measures to educate and provide support to families affected by Neonatal Abstinence Syndrome.

2. Expand comprehensive evidence-based treatment and recovery services, including MAT, for uninsured women with OUD and any co-occurring SUD/MH conditions for up to 12 months postpartum.

3. Provide training for obstetricians or other healthcare personnel who work with pregnant women and their families regarding treatment of OUD and any co-occurring SUD/MH conditions.

4. Expand comprehensive evidence-based treatment and recovery support for NAS babies; expand services for better continuum of care with infant-need dyad; and expand long-term treatment and services for medical monitoring of NAS babies and their families.

5. Provide training to health care providers who work with pregnant or parenting women on best practices for compliance with federal requirements that children born with NAS get referred to appropriate services and receive a plan of safe care.

6. Provide child and family supports for parenting women with OUD and any co-occurring SUD/MH conditions.

7. Provide enhanced family support and child care services for parents with OUD and any co-occurring SUD/MH conditions.

8. Provide enhanced support for children and family members suffering trauma as a result of addiction in the family; and offer trauma-informed behavioral health treatment for adverse childhood events.

9. Offer home-based wrap-around services to persons with OUD and any co-occurring SUD/MH conditions, including, but not limited to, parent skills training.

10. Provide support for Children's Services—Fund additional positions and services, including supportive housing and other residential services, relating to children being removed from the home and/or placed in foster care due to custodial opioid use.

PART TWO: PREVENTION

F. PREVENT OVER-PRESCRIBING AND ENSURE APPROPRIATE PRESCRIBING AND DISPENSING OF OPIOIDS

Support efforts to prevent over-prescribing and ensure appropriate prescribing and dispensing of opioids through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Funding medical provider education and outreach regarding best prescribing practices for opioids consistent with the Guidelines for Prescribing Opioids for Chronic Pain from the U.S. Centers for Disease Control and Prevention, including providers at hospitals (academic detailing).

2. Training for health care providers regarding safe and responsible opioid prescribing, dosing, and tapering patients off opioids.

3. Continuing Medical Education (CME) on appropriate prescribing of opioids.

4. Providing Support for non-opioid pain treatment alternatives, including training providers to offer or refer to multi-modal, evidence-informed treatment of pain.

5. Supporting enhancements or improvements to Prescription Drug Monitoring Programs ("*PDMPs*"), including, but not limited to, improvements that:

    1. Increase the number of prescribers using PDMPs;

    2. Improve point-of-care decision-making by increasing the quantity, quality, or format of data available to prescribers using PDMPs, by improving the interface that prescribers use to access PDMP data, or both; or

    3. Enable states to use PDMP data in support of surveillance or intervention strategies, including MAT referrals and follow-up for individuals identified within PDMP data as likely to experience OUD in a manner that complies with all relevant privacy and security laws and rules.

6. Ensuring PDMPs incorporate available overdose/naloxone deployment data, including the United States Department of Transportation's Emergency Medical Technician overdose database in a manner that complies with all relevant privacy and security laws and rules.

7. Increasing electronic prescribing to prevent diversion or forgery.

8. Educating dispensers on appropriate opioid dispensing.

G. PREVENT MISUSE OF OPIOIDS

Support efforts to discourage or prevent misuse of opioids through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Funding media campaigns to prevent opioid misuse.

2. Corrective advertising or affirmative public education campaigns based on evidence.

3. Public education relating to drug disposal.

4. Drug take-back disposal or destruction programs.

5. Funding community anti-drug coalitions that engage in drug prevention efforts.

6. Supporting community coalitions in implementing evidence-informed prevention, such as reduced social access and physical access, stigma reduction—including staffing, educational campaigns, support for people in treatment or recovery, or training of coalitions in evidence-informed implementation, including the Strategic Prevention Framework developed by the U.S. Substance Abuse and Mental Health Services Administration ("*SAMHSA*").

7. Engaging non-profits and faith-based communities as systems to support prevention.

8. Funding evidence-based prevention programs in schools or evidence-informed school and community education programs and campaigns for students, families, school employees, school athletic programs, parent-teacher and student associations, and others.

9. School-based or youth-focused programs or strategies that have demonstrated effectiveness in preventing drug misuse and seem likely to be effective in preventing the uptake and use of opioids.

10. Create or support community-based education or intervention services for families, youth, and adolescents at risk for OUD and any co-occurring SUD/MH conditions.

11. Support evidence-informed programs or curricula to address mental health needs of young people who may be at risk of misusing opioids or other drugs, including emotional modulation and resilience skills.

12. Support greater access to mental health services and supports for young people, including services and supports provided by school nurses, behavioral health workers or other school staff, to address mental health needs in young people that (when not properly addressed) increase the risk of opioid or another drug misuse.

H. PREVENT OVERDOSE DEATHS AND OTHER HARMS (HARM REDUCTION)

Support efforts to prevent or reduce overdose deaths or other opioid-related harms through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Increased availability and distribution of naloxone and other drugs that treat overdoses for first responders, overdose patients, individuals with OUD and their friends and family members, schools, community navigators and outreach workers, persons being released from jail or prison, or other members of the general public.

2. Public health entities providing free naloxone to anyone in the community.

3. Training and education regarding naloxone and other drugs that treat overdoses for first responders, overdose patients, patients taking opioids, families, schools, community support groups, and other members of the general public.

4. Enabling school nurses and other school staff to respond to opioid overdoses, and provide them with naloxone, training, and support.

5. Expanding, improving, or developing data tracking software and applications for overdoses/naloxone revivals.

6. Public education relating to emergency responses to overdoses.

7. Public education relating to immunity and Good Samaritan laws.

8. Educating first responders regarding the existence and operation of immunity and Good Samaritan laws.

9. Syringe service programs and other evidence-informed programs to reduce harms associated with intravenous drug use, including supplies, staffing, space, peer support services, referrals to treatment, fentanyl checking, connections to care, and the full range of harm reduction and treatment services provided by these programs.

10. Expanding access to testing and treatment for infectious diseases such as HIV and Hepatitis C resulting from intravenous opioid use.

11. Supporting mobile units that offer or provide referrals to harm reduction services, treatment, recovery supports, health care, or other appropriate services to persons that use opioids or persons with OUD and any co-occurring SUD/MH conditions.

12. Providing training in harm reduction strategies to health care providers, students, peer recovery coaches, recovery outreach specialists, or other professionals that provide care to persons who use opioids or persons with OUD and any co-occurring SUD/MH conditions.

13. Supporting screening for fentanyl in routine clinical toxicology testing.

PART THREE: OTHER STRATEGIES

I. FIRST RESPONDERS

In addition to items in section C, D and H relating to first responders, support the following:

1. Education of law enforcement or other first responders regarding appropriate practices and precautions when dealing with fentanyl or other drugs.

2. Provision of wellness and support services for first responders and others who experience secondary trauma associated with opioid-related emergency events.

J. LEADERSHIP, PLANNING AND COORDINATION

Support efforts to provide leadership, planning, coordination, facilitations, training and technical assistance to abate the opioid epidemic through activities, programs, or strategies that may include, but are not limited to, the following:

1. Statewide, regional, local or community regional planning to identify root causes of addiction and overdose, goals for reducing harms related to the opioid epidemic, and areas and populations with the greatest needs for treatment intervention services, and to support training and technical assistance and other strategies to abate the opioid epidemic described in this opioid abatement strategy list.

2. A dashboard to (a) share reports, recommendations, or plans to spend opioid settlement funds; (b) to show how opioid settlement funds have been spent; (c) to report program or strategy outcomes; or (d) to track, share or visualize key opioid- or health-related indicators and supports as identified through collaborative statewide, regional, local or community processes.

3. Invest in infrastructure or staffing at government or not-for-profit agencies to support collaborative, cross-system coordination with the purpose of preventing overprescribing, opioid misuse, or opioid overdoses, treating those with OUD and any co-occurring SUD/MH conditions, supporting them in treatment or recovery, connecting them to care, or implementing other strategies to abate the opioid epidemic described in this opioid abatement strategy list.

4. Provide resources to staff government oversight and management of opioid abatement programs.

K. TRAINING

In addition to the training referred to throughout this document, support training to abate the opioid epidemic through activities, programs, or strategies that may include, but are not limited to, those that:

1. Provide funding for staff training or networking programs and services to improve the capability of government, community, and not-for-profit entities to abate the opioid crisis.

2. Support infrastructure and staffing for collaborative cross-system coordination to prevent opioid misuse, prevent overdoses, and treat those with OUD and any co-occurring SUD/MH conditions, or implement other strategies to abate the opioid epidemic described in this opioid abatement strategy list (*e.g.*, health care, primary care, pharmacies, PDMPs, etc.).

L. RESEARCH

Support opioid abatement research that may include, but is not limited to, the following:

1. Monitoring, surveillance, data collection and evaluation of programs and strategies described in this opioid abatement strategy list.

2. Research non-opioid treatment of chronic pain.

3. Research on improved service delivery for modalities such as SBIRT that demonstrate promising but mixed results in populations vulnerable to opioid use disorders.

4. Research on novel harm reduction and prevention efforts such as the provision of fentanyl test strips.

5. Research on innovative supply-side enforcement efforts such as improved detection of mail-based delivery of synthetic opioids.

6. Expanded research on swift/certain/fair models to reduce and deter opioid misuse within criminal justice populations that build upon promising approaches used to address other substances (*e.g.*, Hawaii HOPE and Dakota 24/7).

7. Epidemiological surveillance of OUD-related behaviors in critical populations, including individuals entering the criminal justice system, including, but not limited to approaches modeled on the Arrestee Drug Abuse Monitoring (“ADAM”) system.

8. Qualitative and quantitative research regarding public health risks and harm reduction opportunities within illicit drug markets, including surveys of market participants who sell or distribute illicit opioids.

Geospatial analysis of access barriers to MAT and their association with treatment engagement and treatment outcomes

EXHIBIT F

Exhibit F-1: List of States and State Global Allocation Percentage

Alabama	1.5958653635%
Alaska	0.2283101787%
American Samoa	0.0171221696%
Arizona	2.3755949882%
Arkansas	0.9322152924%
California	9.9213830698%
Colorado	1.6616291219%
Connecticut	1.2938102647%
Delaware	0.4420285052%
District of Columbia	0.1799774824%
Florida	7.0259134409%
Georgia	2.7882080114%
Guam	0.0480366565%
Hawaii	0.3246488040%
Idaho	0.4919080117%
Illinois	3.3263363702%
Indiana	2.2168933059%
Iowa	0.7419256132%
Kansas	0.7840793410%
Kentucky	1.9963344879%
Louisiana	1.4650905059%
Maine	0.5293231313%
Maryland	2.1106090494%
Massachusetts	2.3035761083%
Michigan	3.4020234989%
Minnesota	1.2972597706%
Mississippi	0.8624327860%
Missouri	2.0056475170%
Montana	0.3125481816%
N. Mariana Islands	0.0167059202%
Nebraska	0.4171546352%
Nevada	1.2017657135%
New Hampshire	0.5784834777%
New Jersey	2.7551354545%
New Mexico	0.7989379794%
New York	5.3903813405%

North Carolina	3.2502525994%
North Dakota	0.1700251989%
Ohio	4.3567051408%
Oklahoma	1.5322312508%
Oregon	1.3741405009%
Pennsylvania	4.5882419559%
Puerto Rico	0.7101195950%
Rhode Island	0.4465429178%
South Carolina	1.5393083548%
South Dakota	0.1982071487%
Tennessee	2.6881474977%
Texas	6.2932157196%
Utah	1.1466798699%
Vermont	0.2544890561%
Virgin Islands	0.0315673573%
Virginia	2.2801150757%
Washington	2.3189040182%
West Virginia	1.0567416533%
Wisconsin	1.7582560561%
Wyoming	0.1668134842%

Exhibit F-2: Adjusted Allocation Percentages (to be multiplied by $4,279,160,837)

Alabama	1.7662713506%
Alaska	0.2526890657%
American Samoa	0.0189504693%
Arizona	2.6292602523%
Arkansas	1.0317569396%
California	10.9807851434%
Colorado	1.8390573418%
Connecticut	1.4319629061%
Delaware	0.4892281659%
District of Columbia	0.1991954197%
Georgia	3.0859319606%
Guam	0.0531659951%
Hawaii	0.3593146982%
Idaho	0.5444337900%
Illinois	3.6815214914%
Indiana	2.4536124557%
Iowa	0.8211481901%
Kansas	0.8678030794%
Kentucky	2.2095024385%
Louisiana	1.6215323960%
Maine	0.5858440840%
Maryland	2.3359792007%
Massachusetts	2.5495512198%
Michigan	3.7652904672%
Minnesota	1.4357807492%
Mississippi	0.9545230798%
Missouri	2.2198099098%
Montana	0.3459219753%
N. Mariana Islands	0.0184897729%
Nebraska	0.4616982721%
Nevada	1.3300898675%
New Hampshire	0.6402537562%
New Jersey	3.0493279268%
New York	5.1179635833%
North Carolina	3.5973135202%
North Dakota	0.1881804346%
Ohio	4.8219127059%
Oklahoma	1.6958424079%

Oregon	1.5208707790%
Pennsylvania	5.0781729473%
Puerto Rico	0.7859459356%
Rhode Island	0.4942246260%
South Carolina	1.7036752028%
South Dakota	0.2193716438%
Tennessee	2.9751870176%
Texas	6.9652032577%
Utah	1.2691219754%
Vermont	0.2816633151%
Virgin Islands	0.0349381095%
Virginia	2.5235850256%
Washington	2.5665158389%
Wisconsin	1.9460020688%
Wyoming	0.1846257740%

EXHIBIT G

Subdivisions Eligible to Receive Direct Allocations from the Subdivision Fund and Default Subdivision Fund Allocation Percentages

The Subdivisions set forth on this Exhibit G are eligible to receive direct allocations from the Subdivision Fund, if such Subdivisions are otherwise eligible to receive such funds under this Agreement. By default, the Subdivisions set forth on this Exhibit G shall include all Subdivisions set forth on Exhibit G of the national opioid settlement agreement dated July 21, 2021 with Janssen Pharmaceuticals, Inc., et al., including all amendments up to the Preliminary Agreement Date of this Agreement. A State may elect to add any additional Subdivisions to this Exhibit G at any time prior to the Initial Subdivision Participation Date.

Immediately upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3) that addresses allocation from the Subdivision Fund, whether before or after the Initial Subdivision Participation Date, this Exhibit G will automatically be amended to reflect the allocation from the Subdivision Fund pursuant to the State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section V.D.3.

For the avoidance of doubt, inclusion on this Exhibit G shall not create any claim for any amount of the Settlement Fund, and no such amounts shall be allocated or distributed to any Subdivision included herein if such Subdivision does not otherwise meet all requirements to receive any such funds pursuant to the Agreement.

State ID	Qualifying Subdivision	Consolidated State Allocation
AL1	Abbeville City, Alabama	0.05373276788371%
AL2	Alabaster City, Alabama	0.50906155914420%
AL3	Albertville City, Alabama	0.30073173498551%
AL4	Alexander City, Alabama	0.31021586558805%
AL5	Anniston City, Alabama	0.80101152336447%
AL6	Arab City, Alabama	0.19249341507944%
AL7	Argo Town, Alabama	0.02394095067075%
AL8	Ashland Town, Alabama	0.03903714157458%
AL9	Ashville City, Alabama	0.01799180180480%
AL10	Athens City, Alabama	0.34982234331958%
AL11	Attalla City, Alabama	0.16452490218524%
AL12	Auburn City, Alabama	0.49379760320342%
AL13	Autauga County, Alabama	0.25196509791885%
AL14	Baldwin County, Alabama	1.47023732753838%
AL15	Barbour County, Alabama	0.07277031699064%
AL235	Bay Minette City, Alabama	0.12614031368064%
AL16	Berry Town, Alabama	0.02060389726110%
AL17	Bessemer City, Alabama	0.58643322270761%
AL18	Bibb County, Alabama	0.32904730429155%
AL19	Birmingham City, Alabama	4.18442675390468%
AL20	Blount County, Alabama	0.74378299576171%
AL21	Boaz City, Alabama	0.16593254403002%
AL22	Brent City, Alabama	0.06233303941215%
AL236	Brewton City, Alabama	0.22130588319049%
AL23	Bridgeport City, Alabama	0.00151300231408%
AL24	Brookwood Town, Alabama	0.00696629136887%
AL25	Brundidge City, Alabama	0.01089862331296%
AL26	Bullock County, Alabama	0.06418709145492%
AL27	Butler County, Alabama	0.05373624201937%
AL28	Butler Town, Alabama	0.08203304449913%
AL29	Calera City, Alabama	0.24319709382201%
AL30	Calhoun County, Alabama	0.73004532177506%
AL31	Camp Hill Town, Alabama	0.00607441256105%
AL32	Carbon Hill City, Alabama	0.09325758719295%
AL33	Cedar Bluff Town, Alabama	0.05726177540570%
AL34	Center Point City, Alabama	0.01073160505284%
AL35	Centre City, Alabama	0.14450358825257%
AL36	Centreville City, Alabama	0.02291656767950%
AL37	Chambers County, Alabama	0.42645541213545%
AL39	Cherokee County, Alabama	0.30474566041478%
AL40	Cherokee Town, Alabama	0.00837480986470%
AL41	Chickasaw City, Alabama	0.08065098787772%
AL237	Childersburg City, Alabama	0.09673766459870%
AL42	Chilton County, Alabama	0.65834253848868%
AL43	Choctaw County, Alabama	0.12575403525127%
AL44	Clanton City, Alabama	0.16879497206515%
AL45	Clarke County, Alabama	0.24012462668797%
AL46	Clay County, Alabama	0.16558350703617%
AL47	Cleburne County, Alabama	0.20515352257755%

State ID	Qualifying Subdivision	Consolidated State Allocation
AL48	Cleveland Town, Alabama	0.01274799988344%
AL49	Coffee County, Alabama	0.31178909707642%
AL50	Colbert County, Alabama	0.31838531182613%
AL238	Columbiana City, Alabama	0.05006719760858%
AL51	Conecuh County, Alabama	0.15445396734178%
AL52	Coosa County, Alabama	0.12178647492221%
AL53	Cordova City, Alabama	0.09563175305939%
AL54	Covington County, Alabama	0.45692575726444%
AL55	Crenshaw County, Alabama	0.14376470128801%
AL56	Cullman City, Alabama	0.53795721169973%
AL57	Cullman County, Alabama	0.89679454743357%
AL58	Dadeville City, Alabama	0.02418310117309%
AL59	Dale County, Alabama	0.24320907471975%
AL60	Daleville City, Alabama	0.07752611649176%
AL61	Dallas County, Alabama	0.20683597829357%
AL62	Daphne City, Alabama	0.32129647516618%
AL63	Dauphin Island Town, Alabama	0.04612275489251%
AL64	De Kalb County, Alabama	0.40059258260517%
AL65	Decatur City, Alabama	1.88368966680214%
AL66	Demopolis City, Alabama	0.14633737991542%
AL67	Dora City, Alabama	0.09240281994643%
AL68	Dothan City, Alabama	1.09030734534639%
AL69	Double Springs Town, Alabama	0.08025220905367%
AL70	Douglas Town, Alabama	0.00097275798472%
AL239	East Brewton City, Alabama	0.02656781932074%
AL71	Elmore County, Alabama	0.55644997087924%
AL72	Enterprise City, Alabama	0.33245406769430%
AL73	Escambia County, Alabama	0.65163401499834%
AL74	Etowah County, Alabama	1.02826912043695%
AL75	Eufaula City, Alabama	0.21259346526420%
AL76	Evergreen City, Alabama	0.04145059439568%
AL77	Fairfield City, Alabama	0.11699106378085%
AL78	Fairhope City, Alabama	0.22328055592462%
AL79	Faunsdale Town, Alabama	0.00027565805375%
AL80	Fayette City, Alabama	0.07882554063416%
AL81	Fayette County, Alabama	0.13876915395782%
AL82	Florence City, Alabama	0.89173419286246%
AL83	Foley City, Alabama	0.34393082614331%
AL84	Fort Deposit Town, Alabama	0.00516071488254%
AL85	Fort Payne City, Alabama	0.58210250156216%
AL86	Franklin County, Alabama	0.28807497174883%
AL87	Fultondale City, Alabama	0.09530547652440%
AL88	Gadsden City, Alabama	0.83652189774753%
AL90	Geneva City, Alabama	0.06639031036577%
AL91	Geneva County, Alabama	0.22068995465343%
AL92	Georgiana Town, Alabama	0.01833389052733%
AL93	Geraldine Town, Alabama	0.01101187364176%
AL94	Gilbertown, Alabama	0.00201561558522%
AL95	Grant Town, Alabama	0.01702349201247%

State ID	Qualifying Subdivision	Consolidated State Allocation
AL96	Graysville City, Alabama	0.03683772148497%
AL97	Greene County, Alabama	0.07053609060731%
AL98	Greensboro City, Alabama	0.02495617752877%
AL99	Greenville City, Alabama	0.17114173446901%
AL100	Guin City, Alabama	0.02535375501618%
AL101	Gulf Shores City, Alabama	0.48785192847313%
AL102	Guntersville City, Alabama	0.25418471345127%
AL103	Gurley Town, Alabama	0.00751669835675%
AL104	Hale County, Alabama	0.13189455379552%
AL105	Haleyville City, Alabama	0.14259976191105%
AL106	Hamilton City, Alabama	0.09032285168011%
AL107	Hammondville Town, Alabama	0.00490310934680%
AL108	Hartselle City, Alabama	0.06358502699195%
AL109	Headland City, Alabama	0.06278880055472%
AL110	Helena City, Alabama	0.13940462856652%
AL111	Henagar City, Alabama	0.03432173295908%
AL112	Henry County, Alabama	0.08134656178648%
AL113	Homewood City, Alabama	0.40003759755067%
AL114	Hoover City, Alabama	1.41830120728766%
AL115	Houston County, Alabama	0.55870611353893%
AL116	Hueytown City, Alabama	0.19444760015375%
AL117	Huntsville City, Alabama	3.18917672789720%
AL118	Irondale City, Alabama	0.17364096921920%
AL119	Jackson County, Alabama	0.15808077015917%
AL120	Jacksonville City, Alabama	0.25009708439633%
AL121	Jasper City, Alabama	1.40982301753567%
AL122	Jefferson County, Alabama	5.50780373047089%
AL123	Killen Town, Alabama	0.01833161772830%
AL124	Lamar County, Alabama	0.16280419850840%
AL125	Lanett City, Alabama	0.12800105424627%
AL126	Lauderdale County, Alabama	0.47859088932963%
AL127	Lawrence County, Alabama	0.45357831391636%
AL129	Leeds City, Alabama	0.14992359703585%
AL130	Leesburg Town, Alabama	0.01918722915732%
AL131	Leighton Town, Alabama	0.00564699646923%
AL132	Level Plains Town, Alabama	0.00350595484612%
AL133	Limestone County, Alabama	0.58188759217962%
AL134	Lincoln City, Alabama	0.18466222627409%
AL135	Linden City, Alabama	0.01718012033418%
AL136	Locust Fork Town, Alabama	0.00390814286871%
AL137	Louisville Town, Alabama	0.00463180207977%
AL138	Lowndes County, Alabama	0.06941452922326%
AL240	Loxley Town, Alabama	0.04113340905681%
AL139	Luverne City, Alabama	0.01532252921863%
AL140	Macon County, Alabama	0.13647706860490%
AL141	Madison City, Alabama	0.47088048355844%
AL142	Madison County, Alabama	1.31238390221929%
AL143	Marengo County, Alabama	0.04980089049941%
AL144	Marion City, Alabama	0.02355243191090%

State ID	Qualifying Subdivision	Consolidated State Allocation
AL145	Marion County, Alabama	0.22296850061784%
AL146	Marshall County, Alabama	0.74162828487587%
AL147	McKenzie Town, Alabama	0.00440552870209%
AL148	Midfield City, Alabama	0.00038923306812%
AL149	Millbrook City, Alabama	0.24754158163587%
AL150	Mobile City, Alabama	3.22757190115156%
AL151	Mobile County, Alabama	2.76021701591658%
AL152	Monroe County, Alabama	0.18825776187055%
AL153	Monroeville City, Alabama	0.10619523592115%
AL154	Montgomery City, Alabama	1.77726471583620%
AL155	Montgomery County, Alabama	0.98033322388421%
AL156	Moody City, Alabama	0.03620711715990%
AL157	Morgan County, Alabama	0.31373818458719%
AL158	Moulton City, Alabama	0.13546080275305%
AL159	Mountain Brook City, Alabama	0.35653362663731%
AL160	Munford Town, Alabama	0.02417891272917%
AL161	Muscle Shoals City, Alabama	0.26828019094231%
AL162	Nauvoo Town, Alabama	0.01870510354600%
AL163	New Hope City, Alabama	0.01307908176496%
AL164	Northport City, Alabama	0.42416628142128%
AL165	Oakman Town, Alabama	0.04189836827309%
AL166	Oneonta City, Alabama	0.27040610221760%
AL167	Opelika City, Alabama	0.53658372677752%
AL168	Opp City, Alabama	0.09265286030826%
AL169	Orange Beach City, Alabama	0.29416707967375%
AL170	Oxford City, Alabama	0.35237875519965%
AL171	Ozark City, Alabama	0.29499421617778%
AL172	Parrish Town, Alabama	0.11686245582433%
AL173	Pelham City, Alabama	0.68738196181712%
AL174	Pell City, Alabama	0.44443071991301%
AL175	Perry County, Alabama	0.05087894401632%
AL176	Phenix City, Alabama	0.62594382078864%
AL177	Pickens County, Alabama	0.28661898422184%
AL178	Piedmont City, Alabama	0.14348703018370%
AL179	Pike County, Alabama	0.02971580831969%
AL181	Pleasant Grove City, Alabama	0.05168400190121%
AL182	Powell Town, Alabama	0.00530497268382%
AL183	Prattville City, Alabama	0.60331346344410%
AL184	Priceville Town, Alabama	0.01217687795583%
AL185	Prichard City, Alabama	0.11003827933194%
AL186	Ragland Town, Alabama	0.01519801230036%
AL187	Rainbow City, Alabama	0.13460113275434%
AL188	Rainsville City, Alabama	0.18816655769234%
AL189	Randolph County, Alabama	0.17748105799125%
AL190	Red Bay City, Alabama	0.06274639661854%
AL241	Roanoke City, Alabama	0.10908084650639%
AL191	Robertsdale City, Alabama	0.08564458709446%
AL192	Rockford Town, Alabama	0.00588596505293%
AL193	Russell County, Alabama	0.17037596353878%

State ID	Qualifying Subdivision	Consolidated State Allocation
AL194	Russellville City, Alabama	0.31690084937415%
AL195	Saraland City, Alabama	0.24847953332688%
AL196	Satsuma City, Alabama	0.06260301546832%
AL197	Scottsboro City, Alabama	0.66355520306333%
AL198	Selma City, Alabama	0.26395099581907%
AL271	Semmes City, Alabama	0.04200467033057%
AL199	Sheffield City, Alabama	0.16093939937308%
AL200	Shelby County, Alabama	1.63752907032528%
AL201	Sipsey Town, Alabama	0.03758758282199%
AL202	Slocomb City, Alabama	0.04424009805052%
AL203	Spanish Fort City, Alabama	0.02939683721014%
AL204	Springville City, Alabama	0.05781214992503%
AL205	St Clair County, Alabama	1.03787114437202%
AL206	Sumiton City, Alabama	0.23258714845438%
AL242	Summerdale Town, Alabama	0.02450324115071%
AL207	Sumter County, Alabama	0.11813782076557%
AL208	Sweet Water Town, Alabama	0.00030000947192%
AL209	Sylacauga City, Alabama	0.23084021018303%
AL210	Talladega City, Alabama	0.22820288665750%
AL211	Talladega County, Alabama	0.51585677368324%
AL212	Tallapoosa County, Alabama	0.19470098477700%
AL213	Tarrant City, Alabama	0.09199699544540%
AL214	Thomasville City, Alabama	0.08852500271049%
AL215	Troy City, Alabama	0.32823721378024%
AL216	Trussville City, Alabama	0.24448154995938%
AL217	Tuscaloosa City, Alabama	1.95122494838196%
AL218	Tuscaloosa County, Alabama	1.01248511560961%
AL219	Tuscumbia City, Alabama	0.08432211027618%
AL220	Tuskegee City, Alabama	0.09179124219610%
AL221	Union Springs City, Alabama	0.04230906305776%
AL222	Uniontown, Alabama	0.01814515080219%
AL223	Vance Town, Alabama	0.00962932999198%
AL224	Vernon City, Alabama	0.03170902060019%
AL225	Vestavia Hills City, Alabama	0.30835957321481%
AL226	Walker County, Alabama	1.46359656592768%
AL227	Washington County, Alabama	0.16134379525758%
AL228	Weaver City, Alabama	0.04227639968885%
AL229	West Blocton Town, Alabama	0.04044773805810%
AL243	Wetumpka City, Alabama	0.16601095559654%
AL230	Wilcox County, Alabama	0.08791066513276%
AL231	Winfield City, Alabama	0.19023873350485%
AL233	Woodville Town, Alabama	0.00046128079736%
AL234	Yellow Bluff Town, Alabama	0.00293074188026%
AL243	Attentus Mouton, LLC d/b/a Lawrence Medical Center (Lawrence County Health Care Authority), Alabama	0.14143420563150%

State ID	Qualifying Subdivision	Consolidated State Allocation
AL244	Bibb County Healthcare Authority d/b/a Bibb Medical Center, Alabama	0.52488215603592%
AL245	Cullman Regional Medical Center, Inc. (Healthcare Authority of Cullman County), Alabama	0.43745923357493%
AL246	Dale County Healthcare Authority d/b/a Dale Medical Center, Alabama	0.29945201925755%
AL247	DCH Health Care Authority (Tuscaloosa) d/b/a DCH Regional Medical Center and Northport Medical Center, Alabama	2.03896534839883%
AL248	Decatur Morgan Hospital-Parkway (Health Care Authority of the City of Huntsville), Alabama	0.39470005890361%
AL249	Escambia County Health Care Authority d/b/a D.W. McMillan Memorial Hospital and Atmore Community Hospital, Alabama	0.15477293845133%
AL250	Geneva County Health Care Authority d/b/a Wiregrass Medical Center, Alabama	0.48787124726488%
AL251	Greene County Health System, Alabama	0.30954587690265%
AL252	Health Care Authority of Clarke County d/b/a Grove Hill Memorial Hospital, Alabama	0.10093886866801%
AL253	Health Care Authority of the City of Huntsville d/b/a Huntsville Hospital, Alabama	3.03261217443931%
AL254	Healthcare Authority for Baptist Health, an affiliate of UAB Health System d/b/a Baptist Medical Center East (Montgomery), Alabama	0.61909178627386%
AL255	Healthcare Authority for Baptist Health, an affiliate of UAB Health System d/b/a Baptist Medical Center South (Montgomery), Alabama	1.30211153244469%
AL256	Healthcare Authority for Baptist Health, an affiliate of UAB Health System d/b/a Prattville Baptist Hospital, Alabama	0.18505460879230%

State ID	Qualifying Subdivision	Consolidated State Allocation
AL257	HH Health System-Athens Limestone, LLC d/b/a Athens Limestone Hospital (Healthcare Authority of the City of Huntsville), Alabama	0.21708503564384%
AL258	HH Health System-Morgan, LLC d/b/a Decatur Morgan Hospital Decatur, Alabama	1.08542517821921%
AL259	HH Health Systems-Shoals LLC d/b/a Hellen Keller Hospital (Healthcare Authority of the City of Huntsville), Alabama	0.56573675758889%
AL260	HH Health Systems-Shoals, LLC d/b/a Red Bay Hospital (Healthcare Authority of the City of Huntsville), Alabama	0.08222918705539%
AL261	Jackson County Healthcare Authority, Alabama	0.31247087184822%
AL262	Jefferson County Board of Health, Alabama	3.08543617986526%
AL263	Lakeland Community Hospital HCA Winston County, Alabama	0.19514849890595%
AL264	Marshall County Health Care Authority, Alabama	0.29602506041199%
AL265	Marshall County Health Care Authority, Alabama	0.64138762006979%
AL266	Medical West Hospital Authority (UAB), Alabama	0.83442806540712%
AL267	Mobile County Board of Health, Alabama	1.93445993855628%
AL268	Monroe County Health Care Authority d/b/a Monroe County Hospital, Alabama	0.16486682856498%
AL269	Sylacauga Health Care Authority d/b/a Coosa Valley Medical Center, Alabama	0.47777735715122%
AL270	Tombigbee Health Care Authority d/b/a Brian W. Whitfield Memorial Hospital, Alabama	0.20524238901961%

State ID	Qualifying Subdivision	Consolidated State Allocation
AK1	Anchorage Municipality, Alaska	47.6578000000%
AK2	Fairbanks City, Alaska	5.1226000000%
AK3	Fairbanks North Star Borough, Alaska	10.9627000000%
AK4	Juneau City and Borough, Alaska	5.2324000000%
AK5	Kenai Peninsula Borough, Alaska	9.4922000000%
AK6	Ketchikan Gateway Borough, Alaska	2.2406000000%
AK7	Kodiak Island Borough, Alaska	2.1839000000%
AK8	Matanuska-Susitna Borough, Alaska	15.4726000000%
AK9	Wasilla City, Alaska	1.6351000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
AZ1	Apache County, Arizona	0.3907470000%
AZ2	Apache Junction City, Arizona	0.2201340000%
AZ3	Avondale City, Arizona	0.5677140000%
AZ4	Benson City, Arizona	0.0652960000%
AZ5	Bisbee City, Arizona	0.0643685000%
AZ6	Buckeye City, Arizona	0.2664780000%
AZ7	Bullhead City, Arizona	0.6416380000%
AZ8	Camp Verde Town, Arizona	0.0416227000%
AZ9	Carefree Town, Arizona	0.0231720000%
AZ10	Casa Grande City, Arizona	0.2125144000%
AZ11	Cave Creek Town, Arizona	0.0347580000%
AZ12	Chandler City, Arizona	1.6567980000%
AZ13	Chino Valley Town, Arizona	0.0291788000%
AZ14	Clarkdale Town, Arizona	0.0308952000%
AZ15	Clifton Town, Arizona	0.0102870000%
AZ16	Cochise County, Arizona	1.1773685000%
AZ17	Coconino County, Arizona	1.2011808000%
AZ18	Colorado City Town, Arizona	0.0298778000%
AZ19	Coolidge City, Arizona	0.0644448000%
AZ20	Cottonwood City, Arizona	0.2098299000%
AZ21	Dewey-Humboldt Town, Arizona	0.0660814000%
AZ22	Douglas City, Arizona	0.1565620000%
AZ23	Duncan Town, Arizona	0.0002520000%
AZ24	Eagar Town, Arizona	0.1425540000%
AZ25	El Mirage City, Arizona	0.2259270000%
AZ26	Eloy City, Arizona	1.3418328000%
AZ27	Flagstaff City, Arizona	0.3114360000%
AZ28	Florence Town, Arizona	0.0456484000%
AZ29	Fountain Hills Town, Arizona	0.0984810000%
AZ30	Fredonia Town, Arizona	0.0052328000%
AZ31	Gila Bend Town, Arizona	0.0173790000%
AZ32	Gila County, Arizona	0.7780446000%
AZ33	Gilbert Town, Arizona	0.9906030000%
AZ34	Glendale City, Arizona	1.5235590000%
AZ35	Globe City, Arizona	0.1168266000%
AZ36	Goodyear City, Arizona	0.4402680000%
AZ37	Graham County, Arizona	0.4476494000%
AZ38	Greenlee County, Arizona	0.0794610000%
AZ39	Guadalupe Town, Arizona	0.0000000000%
AZ40	Hayden Town, Arizona	0.0263802000%
AZ41	Holbrook City, Arizona	0.0575625000%
AZ42	Huachuca City Town, Arizona	0.0168805000%
AZ43	Jerome Town, Arizona	0.0012873000%
AZ44	Kearny Town, Arizona	0.0107408000%
AZ45	Kingman City, Arizona	0.4853918000%
AZ46	La Paz County, Arizona	0.2670171000%
AZ47	Lake Havasu City, Arizona	0.6793526000%
AZ48	Litchfield Park City, Arizona	0.0231720000%
AZ49	Mammoth Town, Arizona	0.0061376000%

State ID	Qualifying Subdivision	Consolidated State Allocation
AZ50	Marana Town, Arizona	0.3841282000%
AZ51	Maricopa City, Arizona	0.1047228000%
AZ52	Maricopa County, Arizona	29.8513290000%
AZ53	Mesa City, Arizona	3.5105580000%
AZ54	Miami Town, Arizona	0.0309482000%
AZ55	Mohave County, Arizona	3.0617398000%
AZ56	Navajo County, Arizona	1.0789515000%
AZ57	Nogales City, Arizona	0.0834350000%
AZ58	Oro Valley Town, Arizona	0.3207284000%
AZ59	Page City, Arizona	0.0575608000%
AZ60	Paradise Valley Town, Arizona	0.1969620000%
AZ61	Parker Town, Arizona	0.0156219000%
AZ62	Patagonia Town, Arizona	0.0024790000%
AZ63	Payson Town, Arizona	0.1846614000%
AZ64	Peoria City, Arizona	0.8747430000%
AZ65	Phoenix City, Arizona	12.3275040000%
AZ66	Pima County, Arizona	13.4612693000%
AZ67	Pima Town, Arizona	0.0159618000%
AZ68	Pinal County, Arizona	2.0334636000%
AZ69	Pinetop-Lakeside Town, Arizona	0.0729125000%
AZ70	Prescott City, Arizona	0.5917289000%
AZ71	Prescott Valley Town, Arizona	0.3471419000%
AZ72	Quartzsite Town, Arizona	0.0183911000%
AZ73	Queen Creek Town, Arizona	0.0637230000%
AZ74	Safford City, Arizona	0.1929077000%
AZ75	Sahuarita Town, Arizona	0.1510407000%
AZ76	San Luis City, Arizona	0.0963840000%
AZ77	Santa Cruz County, Arizona	0.2840860000%
AZ78	Scottsdale City, Arizona	2.3114070000%
AZ79	Sedona City, Arizona	0.0690392000%
AZ80	Show Low City, Arizona	0.1441365000%
AZ81	Sierra Vista City, Arizona	0.3084865000%
AZ82	Snowflake Town, Arizona	0.0451290000%
AZ83	Somerton City, Arizona	0.0449792000%
AZ84	South Tucson City, Arizona	0.0578057000%
AZ85	Springerville Town, Arizona	0.0740370000%
AZ86	St. Johns City, Arizona	0.0826620000%
AZ87	Star Valley Town, Arizona	0.0039970000%
AZ88	Superior Town, Arizona	0.0168784000%
AZ89	Surprise City, Arizona	0.5677140000%
AZ90	Taylor Town, Arizona	0.0411380000%
AZ91	Tempe City, Arizona	1.8943110000%
AZ92	Thatcher Town, Arizona	0.0624092000%
AZ93	Tolleson City, Arizona	0.1564110000%
AZ94	Tombstone City, Arizona	0.0215180000%
AZ95	Tucson City, Arizona	4.2720277000%
AZ96	Tusayan Town, Arizona	0.0113096000%
AZ97	Wellton Town, Arizona	0.0122488000%
AZ98	Wickenburg Town, Arizona	0.0579300000%

State ID	Qualifying Subdivision	Consolidated State Allocation
AZ99	Willcox City, Arizona	0.0443345000%
AZ100	Williams City, Arizona	0.0324096000%
AZ101	Winkelman Town, Arizona	0.0011420000%
AZ102	Winslow City, Arizona	0.0950165000%
AZ103	Yavapai County, Arizona	2.9740921000%
AZ104	Youngtown, Arizona	0.0289650000%
AZ105	Yuma City, Arizona	0.5285056000%
AZ106	Yuma County, Arizona	1.3258824000%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR1	Adona City, Arkansas	0.0020790506%
AR2	Alexander City, Arkansas	0.0103476018%
AR3	Alicia Town, Arkansas	0.0002309579%
AR4	Allport Town, Arkansas	0.0026587350%
AR5	Alma City, Arkansas	0.1875236673%
AR6	Almyra Town, Arkansas	0.0010881066%
AR7	Alpena Town, Arkansas	0.0141319347%
AR8	Altheimer City, Arkansas	0.0071081808%
AR9	Altus City, Arkansas	0.0161149675%
AR10	Amagon Town, Arkansas	0.0016587759%
AR11	Amity City, Arkansas	0.0105947297%
AR12	Anthonyville Town, Arkansas	0.0010978372%
AR13	Antoine Town, Arkansas	0.0010576270%
AR14	Arkadelphia City, Arkansas	0.2710593166%
AR15	Arkansas City, Arkansas	0.0026365550%
AR16	Arkansas County, Arkansas	0.2272004928%
AR17	Ash Flat City, Arkansas	0.0560964456%
AR18	Ashdown City, Arkansas	0.0210645360%
AR19	Ashley County, Arkansas	0.3024558569%
AR20	Atkins City, Arkansas	0.0507540769%
AR21	Aubrey Town, Arkansas	0.0021166850%
AR22	Augusta City, Arkansas	0.0134645321%
AR23	Austin City, Arkansas	0.0201747613%
AR24	Avoca Town, Arkansas	0.0030227727%
AR25	Bald Knob City, Arkansas	0.1048227005%
AR26	Banks Town, Arkansas	0.0006822846%
AR27	Barling City, Arkansas	0.1588678563%
AR28	Bassett Town, Arkansas	0.0011499243%
AR29	Batesville City, Arkansas	0.1318965785%
AR30	Bauxite Town, Arkansas	0.0049816222%
AR31	Baxter County, Arkansas	0.8690235470%
AR32	Bay City, Arkansas	0.0250493472%
AR33	Bearden City, Arkansas	0.0161101022%
AR34	Beaver Town, Arkansas	0.0051365958%
AR35	Beebe City, Arkansas	0.2412092213%
AR36	Beedeville Town, Arkansas	0.0018030172%
AR37	Bella Vista City, Arkansas	0.5136648745%
AR38	Bellefonte Town, Arkansas	0.0008435545%
AR39	Belleville City, Arkansas	0.0050880860%
AR40	Ben Lomond Town, Arkansas	0.0012499489%
AR41	Benton City, Arkansas	1.3762616667%
AR42	Benton County, Arkansas	1.9493524156%
AR43	Bentonville City, Arkansas	1.3212148347%
AR44	Bergman Town, Arkansas	0.0080191338%
AR45	Berryville City, Arkansas	0.1767673815%
AR47	Big Flat Town, Arkansas	0.0005552148%
AR48	Bigelow Town, Arkansas	0.0028351731%
AR49	Biggers Town, Arkansas	0.0002571446%
AR50	Birdsong Town, Arkansas	0.0001210597%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR51	Black Oak Town, Arkansas	0.0003079439%
AR52	Black Rock City, Arkansas	0.0020552966%
AR53	Black Springs Town, Arkansas	0.0007714338%
AR54	Blevins City, Arkansas	0.0042289340%
AR55	Blue Eye Town, Arkansas	0.0007084713%
AR56	Blue Mountain Town, Arkansas	0.0023457827%
AR57	Bluff City Town, Arkansas	0.0001956131%
AR58	Blytheville City, Arkansas	0.3444881956%
AR59	Bodcaw Town, Arkansas	0.0004892473%
AR60	Bonanza City, Arkansas	0.0271534397%
AR61	Bono City, Arkansas	0.0166311169%
AR62	Boone County, Arkansas	0.6844345049%
AR63	Booneville City, Arkansas	0.2395670446%
AR64	Bradford City, Arkansas	0.0196136795%
AR65	Bradley City, Arkansas	0.0127167093%
AR66	Bradley County, Arkansas	0.0903557767%
AR67	Branch City, Arkansas	0.0001595527%
AR68	Briarcliff City, Arkansas	0.0001841653%
AR69	Brinkley City, Arkansas	0.0788794288%
AR70	Brookland City, Arkansas	0.0336729211%
AR71	Bryant City, Arkansas	1.0536173112%
AR72	Buckner City, Arkansas	0.0065180504%
AR73	Bull Shoals City, Arkansas	0.0692543217%
AR74	Burdette Town, Arkansas	0.0001210597%
AR75	Cabot City, Arkansas	0.9626014299%
AR76	Caddo Valley Town, Arkansas	0.0447599031%
AR77	Caldwell Town, Arkansas	0.0042239256%
AR78	Cale Town, Arkansas	0.0007827384%
AR79	Calhoun County, Arkansas	0.1397959405%
AR80	Calico Rock City, Arkansas	0.0024459503%
AR81	Calion City, Arkansas	0.0029361993%
AR82	Camden City, Arkansas	0.4098542963%
AR83	Cammack Village City, Arkansas	0.0112054660%
AR84	Campbell Station City, Arkansas	0.0043090681%
AR85	Caraway City, Arkansas	0.0225855098%
AR86	Carlisle City, Arkansas	0.1468534652%
AR87	Carroll County, Arkansas	0.5928260605%
AR88	Carthage City, Arkansas	0.0016610654%
AR89	Casa Town, Arkansas	0.0015121018%
AR90	Cash Town, Arkansas	0.0012319187%
AR91	Caulksville Town, Arkansas	0.0006928738%
AR92	Cave City, Arkansas	0.0850463202%
AR93	Cave Springs City, Arkansas	0.0320796835%
AR94	Cedarville City, Arkansas	0.0178802072%
AR95	Centerton City, Arkansas	0.1131077079%
AR96	Central City Town, Arkansas	0.0174268772%
AR97	Charleston City, Arkansas	0.0410054775%
AR98	Cherokee Village City, Arkansas	0.2125413902%
AR99	Cherry Valley City, Arkansas	0.0081466329%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR100	Chester Town, Arkansas	0.0004361585%
AR101	Chicot County, Arkansas	0.2832352637%
AR102	Chidester City, Arkansas	0.0007419559%
AR103	Clarendon City, Arkansas	0.0270484068%
AR104	Clark County, Arkansas	0.3342708117%
AR105	Clarksville City, Arkansas	0.2458837581%
AR106	Clay County, Arkansas	0.0479674136%
AR107	Cleburne County, Arkansas	0.3503158049%
AR108	Cleveland County, Arkansas	0.1143679597%
AR109	Clinton City, Arkansas	0.0824034689%
AR110	Coal Hill City, Arkansas	0.1328713526%
AR111	Colt City, Arkansas	0.0085205444%
AR112	Columbia County, Arkansas	0.0671663991%
AR113	Concord Town, Arkansas	0.0150785188%
AR114	Conway City, Arkansas	2.0922743015%
AR115	Conway County, Arkansas	0.5138971203%
AR116	Corning City, Arkansas	0.0191809554%
AR117	Cotter City, Arkansas	0.0233925747%
AR118	Cotton Plant City, Arkansas	0.0024986099%
AR119	Cove Town, Arkansas	0.0001777260%
AR120	Coy Town, Arkansas	0.0078196572%
AR121	Craighead County, Arkansas	0.9265189050%
AR122	Crawford County, Arkansas	0.9565887967%
AR123	Crawfordsville Town, Arkansas	0.0037229444%
AR124	Crittenden County, Arkansas	0.4864689351%
AR125	Cross County, Arkansas	0.3114968436%
AR126	Crossett City, Arkansas	0.2482926464%
AR127	Cushman City, Arkansas	0.0031235127%
AR128	Daisy Town, Arkansas	0.0019036142%
AR129	Dallas County, Arkansas	0.1170103816%
AR130	Damascus Town, Arkansas	0.0328833141%
AR131	Danville City, Arkansas	0.0554598088%
AR132	Dardanelle City, Arkansas	0.1270318663%
AR133	Datto Town, Arkansas	0.0002041989%
AR134	De Queen City, Arkansas	0.1825177187%
AR135	De Valls Bluff City, Arkansas	0.0153369512%
AR136	Decatur City, Arkansas	0.0461206088%
AR137	Delaplaine Town, Arkansas	0.0012409338%
AR138	Delight City, Arkansas	0.0019036142%
AR139	Dell Town, Arkansas	0.0049627334%
AR140	Denning Town, Arkansas	0.0066893371%
AR141	Dermott City, Arkansas	0.0098811069%
AR142	Des Arc City, Arkansas	0.0461902968%
AR143	Desha County, Arkansas	0.1880442527%
AR144	Dewitt City, Arkansas	0.0561472449%
AR145	Diamond City, Arkansas	0.0067481498%
AR146	Diaz City, Arkansas	0.0144799456%
AR147	Dierks City, Arkansas	0.0109843817%
AR148	Donaldson Town, Arkansas	0.0097288521%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR149	Dover City, Arkansas	0.0357561215%
AR150	Drew County, Arkansas	0.4314342663%
AR151	Dumas City, Arkansas	0.0345209116%
AR152	Dyer City, Arkansas	0.0039248537%
AR153	Dyess Town, Arkansas	0.0004842389%
AR154	Earle City, Arkansas	0.0169920066%
AR155	East Camden Town, Arkansas	0.0077825952%
AR156	Edmondson Town, Arkansas	0.0080664988%
AR157	Egypt Town, Arkansas	0.0007186312%
AR158	El Dorado City, Arkansas	0.7549722601%
AR159	Elaine City, Arkansas	0.0061272536%
AR160	Elkins City, Arkansas	0.0584820092%
AR161	Elm Springs City, Arkansas	0.0169270407%
AR162	Emerson Town, Arkansas	0.0007712907%
AR163	Emmet City, Arkansas	0.0006732695%
AR164	England City, Arkansas	0.1277733929%
AR165	Enola Town, Arkansas	0.0166283981%
AR166	Etowah Town, Arkansas	0.0016945500%
AR167	Eudora City, Arkansas	0.0090127967%
AR168	Eureka Springs City, Arkansas	0.3891361972%
AR169	Evening Shade City, Arkansas	0.0112877465%
AR170	Everton Town, Arkansas	0.0023825585%
AR171	Fairfield Bay City, Arkansas	0.0994183710%
AR172	Fargo Town, Arkansas	0.0003540210%
AR173	Farmington City, Arkansas	0.0908450240%
AR174	Faulkner County, Arkansas	1.0072116540%
AR175	Fayetteville City, Arkansas	2.1103658624%
AR176	Felsenthal Town, Arkansas	0.0017181610%
AR177	Fifty-Six City, Arkansas	0.0004614866%
AR178	Fisher City, Arkansas	0.0019605666%
AR179	Flippin City, Arkansas	0.0956901320%
AR180	Fordyce City, Arkansas	0.0545063561%
AR181	Foreman City, Arkansas	0.0020583016%
AR182	Forrest City, Arkansas	0.2961090931%
AR183	Fort Smith City, Arkansas	3.8434930088%
AR184	Fouke City, Arkansas	0.0054372418%
AR185	Fountain Hill Town, Arkansas	0.0007150537%
AR186	Fountain Lake Town, Arkansas	0.0028270166%
AR187	Fourche Town, Arkansas	0.0009659021%
AR188	Franklin County, Arkansas	0.5981687154%
AR189	Franklin Town, Arkansas	0.0147063245%
AR190	Fredonia (Biscoe) Town, Arkansas	0.0078030580%
AR191	Friendship Town, Arkansas	0.0051302995%
AR192	Fulton County, Arkansas	0.4958178657%
AR193	Fulton Town, Arkansas	0.0066352466%
AR194	Garfield Town, Arkansas	0.0074476060%
AR195	Garland County, Arkansas	1.7334588443%
AR196	Garland Town, Arkansas	0.0002891982%
AR197	Garner Town, Arkansas	0.0077934705%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR198	Gassville City, Arkansas	0.0727563250%
AR199	Gateway Town, Arkansas	0.0062878080%
AR200	Gentry City, Arkansas	0.0904861377%
AR201	Georgetown, Arkansas	0.0040265954%
AR202	Gilbert Town, Arkansas	0.0024831554%
AR203	Gillett City, Arkansas	0.0114616089%
AR204	Gillham Town, Arkansas	0.0013801668%
AR205	Gilmore City, Arkansas	0.0000954454%
AR206	Glenwood City, Arkansas	0.0480021861%
AR207	Goshen Town, Arkansas	0.0031660124%
AR208	Gosnell City, Arkansas	0.0272347186%
AR209	Gould City, Arkansas	0.0171248002%
AR210	Grady City, Arkansas	0.0313103962%
AR211	Grannis City, Arkansas	0.0009242610%
AR212	Grant County, Arkansas	0.2664481715%
AR213	Gravette City, Arkansas	0.0803454535%
AR214	Green Forest City, Arkansas	0.1176088116%
AR215	Greenbrier City, Arkansas	0.0720066419%
AR216	Greene County, Arkansas	0.5298528213%
AR217	Greenland City, Arkansas	0.0237445924%
AR218	Greenway City, Arkansas	0.0004757962%
AR219	Greenwood City, Arkansas	0.2310067194%
AR220	Greers Ferry City, Arkansas	0.0499860774%
AR221	Griffithville Town, Arkansas	0.0045461792%
AR222	Grubbs City, Arkansas	0.0056885194%
AR223	Guion Town, Arkansas	0.0188333737%
AR224	Gum Springs Town, Arkansas	0.0030512489%
AR225	Gurdon City, Arkansas	0.0633258293%
AR226	Guy City, Arkansas	0.0155481618%
AR227	Hackett City, Arkansas	0.0171567108%
AR228	Hamburg City, Arkansas	0.0524650830%
AR229	Hampton City, Arkansas	0.0149258347%
AR230	Hardy City, Arkansas	0.0225704847%
AR231	Harrell Town, Arkansas	0.0015608978%
AR232	Harrisburg City, Arkansas	0.0610374284%
AR233	Harrison City, Arkansas	0.7509041666%
AR234	Hartford City, Arkansas	0.0079703379%
AR235	Hartman City, Arkansas	0.0041808536%
AR236	Haskell City, Arkansas	0.0719017520%
AR237	Hatfield Town, Arkansas	0.0003119506%
AR238	Havana City, Arkansas	0.0028832535%
AR239	Haynes Town, Arkansas	0.0021807923%
AR240	Hazen City, Arkansas	0.0648458015%
AR241	Heber Springs City, Arkansas	0.3767547633%
AR242	Hector Town, Arkansas	0.0046732490%
AR243	Helena-West Helena City, Arkansas	0.1739214762%
AR244	Hempstead County, Arkansas	0.2734659153%
AR245	Hermitage City, Arkansas	0.0121839606%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR246	Hickory Ridge City, Arkansas	0.0037770349%
AR247	Higden Town, Arkansas	0.0085654767%
AR248	Higginson Town, Arkansas	0.0151972889%
AR249	Highfill Town, Arkansas	0.0156011076%
AR250	Highland City, Arkansas	0.0298718460%
AR251	Hindsville Town, Arkansas	0.0033816590%
AR252	Holland City, Arkansas	0.0148864831%
AR253	Holly Grove City, Arkansas	0.0044608936%
AR254	Hope City, Arkansas	0.2248866206%
AR255	Horatio City, Arkansas	0.0029417800%
AR256	Horseshoe Bend City, Arkansas	0.1112109623%
AR257	Horseshoe Lake Town, Arkansas	0.0014319677%
AR258	Hot Spring County, Arkansas	0.4782149797%
AR259	Hot Springs City, Arkansas	3.5617977507%
AR260	Houston Town, Arkansas	0.0052922849%
AR261	Howard County, Arkansas	0.1730249760%
AR262	Hoxie City, Arkansas	0.0120318489%
AR263	Hughes City, Arkansas	0.0113608689%
AR264	Humnoke City, Arkansas	0.0148176536%
AR265	Humphrey City, Arkansas	0.0142685920%
AR266	Hunter Town, Arkansas	0.0001735762%
AR267	Huntington City, Arkansas	0.0062142563%
AR268	Huntsville City, Arkansas	0.0854508543%
AR269	Huttig City, Arkansas	0.0090756161%
AR270	Imboden Town, Arkansas	0.0007621325%
AR271	Independence County, Arkansas	1.0893020276%
AR272	Izard County, Arkansas	0.5513048629%
AR273	Jackson County, Arkansas	0.1817241049%
AR274	Jacksonport Town, Arkansas	0.0050680525%
AR275	Jacksonville City, Arkansas	2.6389305280%
AR276	Jasper City, Arkansas	0.0070526594%
AR277	Jefferson County, Arkansas	0.5992841535%
AR278	Jennette Town, Arkansas	0.0012409338%
AR279	Jericho Town, Arkansas	0.0009641849%
AR281	Johnson City, Arkansas	0.1307711237%
AR282	Johnson County, Arkansas	0.3131687844%
AR283	Joiner City, Arkansas	0.0294738943%
AR284	Jonesboro City, Arkansas	2.1740597362%
AR285	Judsonia City, Arkansas	0.0470208295%
AR286	Junction City, Arkansas	0.0041819983%
AR287	Keiser City, Arkansas	0.0065363668%
AR288	Kensett City, Arkansas	0.0362397881%
AR289	Kibler City, Arkansas	0.0431741065%
AR290	Kingsland City, Arkansas	0.0062036672%
AR291	Knobel City, Arkansas	0.0009218283%
AR292	Knoxville Town, Arkansas	0.0058832739%
AR293	Lafayette County, Arkansas	0.0910619584%
AR294	Lafe Town, Arkansas	0.0028363178%
AR295	Lagrange Town, Arkansas	0.0008239503%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR296	Lake City, Arkansas	0.0259733220%
AR297	Lake View City, Arkansas	0.0047133160%
AR298	Lake Village City, Arkansas	0.0224886334%
AR299	Lakeview City, Arkansas	0.0193402219%
AR300	Lamar City, Arkansas	0.1021685446%
AR301	Lavaca City, Arkansas	0.0302604964%
AR302	Lawrence County, Arkansas	0.4807663922%
AR303	Leachville City, Arkansas	0.0232401768%
AR304	Lead Hill Town, Arkansas	0.0069168607%
AR305	Lee County, Arkansas	0.0989039387%
AR306	Leola Town, Arkansas	0.0013687190%
AR307	Lepanto City, Arkansas	0.0682260295%
AR308	Leslie City, Arkansas	0.0254444370%
AR309	Lewisville City, Arkansas	0.0166148039%
AR310	Lincoln City, Arkansas	0.0464338472%
AR311	Lincoln County, Arkansas	0.1387881111%
AR312	Little Flock City, Arkansas	0.0530723850%
AR313	Little River County, Arkansas	0.3040825791%
AR314	Little Rock City, Arkansas	6.7135694892%
AR315	Lockesburg City, Arkansas	0.0062672021%
AR316	Logan County, Arkansas	0.5058103018%
AR317	London City, Arkansas	0.0142372538%
AR318	Lonoke City, Arkansas	0.2452247983%
AR319	Lonoke County, Arkansas	0.5819398431%
AR320	Louann Town, Arkansas	0.0002119261%
AR321	Luxora City, Arkansas	0.0119226662%
AR322	Lynn Town, Arkansas	0.0001385175%
AR323	Madison City, Arkansas	0.0058260353%
AR324	Madison County, Arkansas	0.3196927018%
AR325	Magazine City, Arkansas	0.0318730520%
AR326	Magness Town, Arkansas	0.0014179443%
AR327	Magnolia City, Arkansas	0.5824169272%
AR328	Malvern City, Arkansas	0.3835695961%
AR329	Mammoth Spring City, Arkansas	0.0072408314%
AR330	Manila City, Arkansas	0.0409124647%
AR331	Mansfield City, Arkansas	0.0007997669%
AR332	Marianna City, Arkansas	0.0846648246%
AR333	Marie Town, Arkansas	0.0009849339%
AR334	Marion City, Arkansas	0.1126915829%
AR335	Marion County, Arkansas	0.3952336867%
AR336	Marked Tree City, Arkansas	0.0992021520%
AR337	Marmaduke City, Arkansas	0.0391761304%
AR338	Marvell City, Arkansas	0.0610375715%
AR339	Maumelle City, Arkansas	0.2572012688%
AR340	Mayflower City, Arkansas	0.0608694329%
AR341	Maynard Town, Arkansas	0.0013140561%
AR342	McCaskill Town, Arkansas	0.0012894435%
AR343	McCrory City, Arkansas	0.0147483949%
AR344	McDougal Town, Arkansas	0.0001189133%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR345	McGehee City, Arkansas	0.0429993856%
AR346	McNab Town, Arkansas	0.0009151028%
AR347	Mcrae City, Arkansas	0.0307843730%
AR348	Melbourne City, Arkansas	0.0687295865%
AR349	Mena City, Arkansas	0.7716866592%
AR350	Menifee Town, Arkansas	0.0106144770%
AR351	Midland Town, Arkansas	0.0002701664%
AR352	Miller County, Arkansas	0.3769094507%
AR353	Mineral Springs City, Arkansas	0.0133569235%
AR354	Minturn Town, Arkansas	0.0002323889%
AR355	Mississippi County, Arkansas	0.4561503415%
AR356	Mitchellville City, Arkansas	0.0000190318%
AR357	Monette City, Arkansas	0.0230987974%
AR358	Monroe County, Arkansas	0.0751267203%
AR359	Montgomery County, Arkansas	0.2264091685%
AR360	Monticello City, Arkansas	0.0526747196%
AR361	Montrose City, Arkansas	0.0059883068%
AR362	Moorefield Town, Arkansas	0.0009616092%
AR363	Moro Town, Arkansas	0.0019858947%
AR364	Morrilton City, Arkansas	0.2597150469%
AR365	Morrison Bluff Town, Arkansas	0.0001732900%
AR366	Mount Ida City, Arkansas	0.0133550632%
AR367	Mount Pleasant Town, Arkansas	0.0122294653%
AR368	Mount Vernon Town, Arkansas	0.0071675659%
AR369	Mountain Home City, Arkansas	0.8447100025%
AR370	Mountain Pine City, Arkansas	0.0111311989%
AR371	Mountainburg City, Arkansas	0.0505877986%
AR372	Mulberry City, Arkansas	0.0839496278%
AR373	Murfreesboro City, Arkansas	0.0401878235%
AR374	Nashville City, Arkansas	0.1174004630%
AR375	Nevada County, Arkansas	0.1042972498%
AR376	Newark City, Arkansas	0.0743959259%
AR377	Newport City, Arkansas	0.2957024125%
AR378	Newton County, Arkansas	0.2538955941%
AR379	Norfork City, Arkansas	0.0071735760%
AR380	Norman Town, Arkansas	0.0054255078%
AR381	Norphlet City, Arkansas	0.0199309247%
AR382	North Little Rock City, Arkansas	1.6145764729%
AR383	Oak Grove Heights Town, Arkansas	0.0108133813%
AR384	Oak Grove Town, Arkansas	0.0031881924%
AR385	Oakhaven Town, Arkansas	0.0008458440%
AR386	Oden Town, Arkansas	0.0002086349%
AR387	Ogden City, Arkansas	0.0000829960%
AR388	Oil Trough Town, Arkansas	0.0018456600%
AR389	O'Kean Town, Arkansas	0.0001714297%
AR390	Okolona Town, Arkansas	0.0019046158%
AR391	Ola City, Arkansas	0.0262882776%
AR392	Omaha Town, Arkansas	0.0030405167%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR393	Oppelo City, Arkansas	0.0090335457%
AR394	Osceola City, Arkansas	0.2492878833%
AR395	Ouachita County, Arkansas	0.2913601460%
AR396	Oxford City, Arkansas	0.0264156336%
AR397	Ozan Town, Arkansas	0.0011369025%
AR398	Ozark City, Arkansas	0.1131238778%
AR399	Palestine City, Arkansas	0.0190803585%
AR400	Pangburn City, Arkansas	0.0157168727%
AR401	Paragould City, Arkansas	1.0056390223%
AR402	Paris City, Arkansas	0.1616167421%
AR403	Parkdale City, Arkansas	0.0007150537%
AR404	Parkin City, Arkansas	0.0145157198%
AR405	Patmos Town, Arkansas	0.0012638292%
AR406	Patterson City, Arkansas	0.0019780244%
AR407	Pea Ridge City, Arkansas	0.1099874863%
AR408	Peach Orchard City, Arkansas	0.0002743162%
AR409	Perla Town, Arkansas	0.0015089537%
AR410	Perry County, Arkansas	0.2411764522%
AR411	Perry Town, Arkansas	0.0054813155%
AR412	Perrytown, Arkansas	0.0014218079%
AR413	Perryville City, Arkansas	0.0413931262%
AR414	Phillips County, Arkansas	0.3245121955%
AR415	Piggott City, Arkansas	0.3895380125%
AR416	Pike County, Arkansas	0.3481536152%
AR417	Pindall Town, Arkansas	0.0030350790%
AR418	Pine Bluff City, Arkansas	0.9840818047%
AR419	Pineville Town, Arkansas	0.0022012551%
AR420	Plainview City, Arkansas	0.0125505741%
AR421	Pleasant Plains Town, Arkansas	0.0024498139%
AR422	Plumerville City, Arkansas	0.0292462276%
AR423	Pocahontas City, Arkansas	0.4671181241%
AR424	Poinsett County, Arkansas	0.4009911787%
AR425	Polk County, Arkansas	0.0691418478%
AR426	Pollard City, Arkansas	0.0004521853%
AR427	Pope County, Arkansas	0.8568421621%
AR428	Portia Town, Arkansas	0.0009455824%
AR429	Portland City, Arkansas	0.0081334680%
AR430	Pottsville City, Arkansas	0.0356473681%
AR431	Powhatan Town, Arkansas	0.0001556891%
AR432	Poyen Town, Arkansas	0.0022812461%
AR433	Prairie County, Arkansas	0.0903177130%
AR434	Prairie Grove City, Arkansas	0.0877670159%
AR435	Prattsville Town, Arkansas	0.0011406231%
AR436	Prescott City, Arkansas	0.0925564594%
AR437	Pulaski County, Arkansas	2.3536109191%
AR438	Pyatt Town, Arkansas	0.0061435666%
AR439	Quitman City, Arkansas	0.0720876345%
AR440	Randolph County, Arkansas	0.0533049170%
AR441	Ratcliff City, Arkansas	0.0038192484%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR442	Ravenden Springs Town, Arkansas	0.0001143342%
AR443	Ravenden Town, Arkansas	0.0021246984%
AR444	Rector City, Arkansas	0.0056501695%
AR445	Redfield City, Arkansas	0.0199888788%
AR446	Reed Town, Arkansas	0.0009294125%
AR447	Reyno City, Arkansas	0.0001714297%
AR448	Rison City, Arkansas	0.0266158258%
AR449	Rockport City, Arkansas	0.0466258829%
AR450	Roe Town, Arkansas	0.0006297682%
AR451	Rogers City, Arkansas	1.7409808606%
AR452	Rondo Town, Arkansas	0.0001282146%
AR453	Rose Bud Town, Arkansas	0.0201332633%
AR454	Rosston Town, Arkansas	0.0012719857%
AR455	Rudy Town, Arkansas	0.0043610122%
AR456	Russell Town, Arkansas	0.0072738867%
AR457	Russellville City, Arkansas	0.9171601007%
AR458	Salem City, Arkansas	0.0044962385%
AR459	Salesville City, Arkansas	0.0064404921%
AR460	Saline County, Arkansas	1.0800200662%
AR461	Scott County, Arkansas	0.3380405487%
AR462	Scranton City, Arkansas	0.0072753177%
AR463	Searcy City, Arkansas	0.9880873649%
AR464	Searcy County, Arkansas	0.2116252857%
AR465	Sebastian County, Arkansas	2.1934833834%
AR466	Sedgwick Town, Arkansas	0.0005311746%
AR467	Sevier County, Arkansas	0.2613059949%
AR468	Shannon Hills City, Arkansas	0.0498163648%
AR469	Sharp County, Arkansas	0.2811885530%
AR470	Sheridan City, Arkansas	0.2276671308%
AR471	Sherrill Town, Arkansas	0.0025761682%
AR472	Sherwood City, Arkansas	0.4241829888%
AR473	Shirley Town, Arkansas	0.0009145304%
AR474	Sidney Town, Arkansas	0.0035774152%
AR475	Siloam Springs City, Arkansas	0.7477783644%
AR476	Smackover City, Arkansas	0.0008007686%
AR477	Smithville Town, Arkansas	0.0001624146%
AR478	South Lead Hill Town, Arkansas	0.0018313504%
AR479	Sparkman City, Arkansas	0.0035065824%
AR480	Springdale City, Arkansas	2.0136786333%
AR481	Springtown, Arkansas	0.0002924895%
AR482	St Francis County, Arkansas	0.2044215163%
AR483	St. Charles Town, Arkansas	0.0024664131%
AR484	St. Francis City, Arkansas	0.0007137659%
AR485	St. Joe Town, Arkansas	0.0076757020%
AR486	St. Paul Town, Arkansas	0.0041619648%
AR487	Stamps City, Arkansas	0.0180207281%
AR488	Star City, Arkansas	0.0564865270%
AR489	Stephens City, Arkansas	0.0116586529%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR490	Stone County, Arkansas	0.2837768844%
AR491	Strawberry Town, Arkansas	0.0006928738%
AR492	Strong City, Arkansas	0.0029361993%
AR493	Stuttgart City, Arkansas	0.2203815101%
AR494	Subiaco Town, Arkansas	0.0109146937%
AR495	Success Town, Arkansas	0.0001784415%
AR496	Sulphur Rock Town, Arkansas	0.0032654646%
AR497	Sulphur Springs City, Arkansas	0.0120908047%
AR498	Summit City, Arkansas	0.0074467474%
AR499	Sunset Town, Arkansas	0.0016041130%
AR500	Swifton City, Arkansas	0.0178930859%
AR501	Taylor City, Arkansas	0.0014103602%
AR502	Texarkana City, Arkansas	0.7683955804%
AR503	Thornton City, Arkansas	0.0022437548%
AR504	Tillar City, Arkansas	0.0003265465%
AR505	Tinsman Town, Arkansas	0.0003150987%
AR506	Tollette Town, Arkansas	0.0032731918%
AR507	Tontitown City, Arkansas	0.0610355681%
AR508	Traskwood City, Arkansas	0.0177678764%
AR509	Trumann City, Arkansas	0.2319945153%
AR510	Tuckerman City, Arkansas	0.0405439909%
AR511	Tull Town, Arkansas	0.0030797252%
AR512	Tupelo Town, Arkansas	0.0005171511%
AR513	Turrell City, Arkansas	0.0090687475%
AR514	Twin Groves Town, Arkansas	0.0156102657%
AR515	Tyronza City, Arkansas	0.0382955139%
AR516	Ulm Town, Arkansas	0.0000897216%
AR517	Union County, Arkansas	0.4520045466%
AR518	Valley Springs Town, Arkansas	0.0032716177%
AR519	Van Buren City, Arkansas	1.7649031789%
AR520	Van Buren County, Arkansas	0.3641848711%
AR521	Vandervoort Town, Arkansas	0.0000659675%
AR522	Victoria Town, Arkansas	0.0005446257%
AR523	Vilonia City, Arkansas	0.1035441323%
AR524	Viola Town, Arkansas	0.0032700437%
AR525	Wabbaseka Town, Arkansas	0.0082530968%
AR526	Waldenburg Town, Arkansas	0.0023526513%
AR527	Waldo City, Arkansas	0.0028426141%
AR528	Waldron City, Arkansas	0.1501465474%
AR529	Walnut Ridge City, Arkansas	0.0315460763%
AR530	Ward City, Arkansas	0.1482609634%
AR531	Warren City, Arkansas	0.1331456688%
AR532	Washington City, Arkansas	0.0014218079%
AR533	Washington County, Arkansas	2.0141562897%
AR534	Watson City, Arkansas	0.0000569524%
AR535	Weiner City, Arkansas	0.0115016760%
AR536	Weldon Town, Arkansas	0.0015514534%
AR537	West Fork City, Arkansas	0.0278779379%
AR538	West Memphis City, Arkansas	0.6402086383%

State ID	Qualifying Subdivision	Consolidated State Allocation
AR539	West Point Town, Arkansas	0.0031173596%
AR540	Western Grove Town, Arkansas	0.0057204300%
AR541	Wheatley City, Arkansas	0.0050976735%
AR542	Whelen Springs Town, Arkansas	0.0002381128%
AR543	White County, Arkansas	0.9979591705%
AR544	White Hall City, Arkansas	0.0551959387%
AR545	Wickes Town, Arkansas	0.0001422380%
AR546	Widener Town, Arkansas	0.0014565804%
AR547	Wiederkehr Village City, Arkansas	0.0015955272%
AR548	Williford Town, Arkansas	0.0025041906%
AR549	Willisville Town, Arkansas	0.0003913692%
AR550	Wilmar City, Arkansas	0.0018078825%
AR551	Wilmot City, Arkansas	0.0171605744%
AR552	Wilson City, Arkansas	0.0038733390%
AR553	Wilton City, Arkansas	0.0002323889%
AR554	Winchester Town, Arkansas	0.0011094280%
AR555	Winslow City, Arkansas	0.0059329284%
AR556	Winthrop City, Arkansas	0.0004315794%
AR557	Woodruff County, Arkansas	0.2136270641%
AR558	Wooster Town, Arkansas	0.0052930004%
AR559	Wrightsville City, Arkansas	0.0089014675%
AR560	Wynne City, Arkansas	0.1541190523%
AR561	Yell County, Arkansas	0.5032932325%
AR562	Yellville City, Arkansas	0.0268081476%
AR563	Zinc Town, Arkansas	0.0018492375%
AR564	Keo Town, Arkansas	0.0137063654%
AR565	Letona Town, Arkansas	0.0096119422%
AR567	Lexa Town, Arkansas	0.0073056542%
AR568	Lonsdale Town, Arkansas	0.0009432928%
AR569	Lowell City, Arkansas	0.2449366017%
AR570	Marshall City, Arkansas	0.0391797079%
AR571	McNeil City, Arkansas	0.0006390694%
AR572	Mountain View City, Arkansas	0.1444262605%
AR573	Nimmons Town, Arkansas	0.0001405209%

State ID	Qualifying Subdivision	Consolidated State Allocation
CA1	Adelanto City, California	
CA2	Agoura Hills City, California	
CA3	Alameda City, California	
CA4	Alameda County, California	
CA5	Albany City, California	
CA6	Alhambra City, California	
CA7	Aliso Viejo City, California	
CA9	Amador County, California	
CA10	American Canyon City, California	
CA11	Anaheim City, California	
CA12	Anderson City, California	
CA13	Antioch City, California	
CA14	Apple Valley Town, California	
CA15	Arcadia City, California	
CA16	Arcata City, California	
CA17	Arroyo Grande City, California	
CA18	Artesia City, California	
CA19	Arvin City, California	
CA20	Atascadero City, California	
CA21	Atwater City, California	
CA22	Auburn City, California	
CA23	Avenal City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA24	Azusa City, California	
CA25	Bakersfield City, California	
CA26	Baldwin Park City, California	
CA27	Banning City, California	
CA28	Barstow City, California	
CA29	Beaumont City, California	
CA30	Bell City, California	
CA31	Bell Gardens City, California	
CA32	Bellflower City, California	
CA33	Belmont City, California	
CA34	Benicia City, California	
CA35	Berkeley City, California	
CA36	Beverly Hills City, California	
CA37	Blythe City, California	
CA38	Brawley City, California	
CA39	Brea City, California	
CA40	Brentwood City, California	
CA41	Buena Park City, California	
CA42	Burbank City, California	
CA43	Burlingame City, California	
CA44	Butte County, California	
CA45	Calabasas City, California	
CA46	Calaveras County, California	
CA47	Calexico City, California	
CA48	California City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA49	Camarillo City, California	
CA50	Campbell City, California	
CA51	Canyon Lake City, California	
CA52	Capitola City, California	
CA53	Carlsbad City, California	
CA54	Carpinteria City, California	
CA55	Carson City, California	
CA56	Cathedral City, California	
CA57	Ceres City, California	
CA58	Cerritos City, California	
CA59	Chico City, California	
CA60	Chino City, California	
CA61	Chino Hills City, California	
CA62	Chowchilla City, California	
CA63	Chula Vista City, California	
CA64	Citrus Heights City, California	
CA65	Claremont City, California	
CA66	Clayton City, California	
CA67	Clearlake City, California	
CA68	Clovis City, California	
CA69	Coachella City, California	
CA70	Coalinga City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA71	Colton City, California	
CA72	Colusa County, California	
CA73	Commerce City, California	
CA74	Compton City, California	
CA75	Concord City, California	
CA76	Contra Costa County, California	
CA77	Corcoran City, California	
CA78	Corona City, California	
CA79	Coronado City, California	
CA80	Costa Mesa City, California	
CA81	Covina City, California	
CA82	Cudahy City, California	
CA83	Culver City, California	
CA84	Cupertino City, California	
CA85	Cypress City, California	
CA86	Daly City, California	
CA87	Dana Point City, California	
CA88	Danville Town, California	
CA89	Davis City, California	
CA90	Del Norte County, California	
CA91	Delano City, California	
CA92	Desert Hot Springs City, California	
CA93	Diamond Bar City, California	
CA94	Dinuba City, California	
CA95	Dixon City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA96	Downey City, California	
CA97	Duarte City, California	
CA98	Dublin City, California	
CA99	East Palo Alto City, California	
CA100	Eastvale City, California	
CA101	El Cajon City, California	
CA102	El Centro City, California	
CA103	El Cerrito City, California	
CA104	El Dorado County, California	
CA105	El Monte City, California	
CA106	El Paso De Robles (Paso Robles) City, California	
CA107	El Segundo City, California	
CA108	Elk Grove City, California	
CA109	Emeryville City, California	
CA110	Encinitas City, California	
CA111	Escondido City, California	
CA112	Eureka City, California	
CA113	Exeter City, California	
CA114	Fairfield City, California	
CA115	Farmersville City, California	
CA116	Fillmore City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA117	Folsom City, California	
CA118	Fontana City, California	
CA119	Fortuna City, California	
CA120	Foster City, California	
CA121	Fountain Valley City, California	
CA122	Fremont City, California	
CA123	Fresno City, California	
CA124	Fresno County, California	
CA125	Fullerton City, California	
CA126	Galt City, California	
CA127	Garden Grove City, California	
CA128	Gardena City, California	
CA129	Gilroy City, California	
CA130	Glendale City, California	
CA131	Glendora City, California	
CA132	Glenn County, California	
CA133	Goleta City, California	
CA134	Grand Terrace City, California	
CA135	Grass Valley City, California	
CA136	Greenfield City, California	
CA137	Grover Beach City, California	
CA138	Half Moon Bay City, California	
CA139	Hanford City, California	
CA140	Hawaiian Gardens City, California	
CA141	Hawthorne City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA142	Hayward City, California	
CA143	Healdsburg City, California	
CA144	Hemet City, California	
CA145	Hercules City, California	
CA146	Hermosa Beach City, California	
CA147	Hesperia City, California	
CA148	Highland City, California	
CA149	Hillsborough Town, California	
CA150	Hollister City, California	
CA151	Humboldt County, California	
CA152	Huntington Beach City, California	
CA153	Huntington Park City, California	
CA154	Imperial Beach City, California	
CA155	Imperial City, California	
CA156	Imperial County, California	
CA157	Indio City, California	
CA158	Inglewood City, California	
CA159	Inyo County, California	
CA160	Irvine City, California	
CA161	Jurupa Valley City, California	
CA162	Kerman City, California	
CA163	Kern County, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA164	King City, California	
CA165	Kings County, California	
CA166	Kingsburg City, California	
CA167	La Cañada Flintridge City, California	
CA168	La Habra City, California	
CA169	La Mesa City, California	
CA170	La Mirada City, California	
CA171	La Palma City, California	
CA172	La Puente City, California	
CA173	La Quinta City, California	
CA174	La Verne City, California	
CA175	Lafayette City, California	
CA176	Laguna Beach City, California	
CA177	Laguna Hills City, California	
CA178	Laguna Niguel City, California	
CA179	Laguna Woods City, California	
CA180	Lake County, California	
CA181	Lake Elsinore City, California	
CA182	Lake Forest City, California	
CA183	Lakeport City, California	
CA184	Lakewood City, California	
CA185	Lancaster City, California	
CA186	Larkspur City, California	
CA187	Lassen County, California	
CA188	Lathrop City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA189	Lawndale City, California	
CA190	Lemon Grove City, California	
CA191	Lemoore City, California	
CA192	Lincoln City, California	
CA193	Lindsay City, California	
CA194	Livermore City, California	
CA195	Livingston City, California	
CA196	Lodi City, California	
CA197	Loma Linda City, California	
CA198	Lomita City, California	
CA199	Lompoc City, California	
CA200	Long Beach City, California	
CA201	Los Alamitos City, California	
CA202	Los Altos City, California	
CA203	Los Angeles City, California	
CA204	Los Angeles County, California	
CA205	Los Banos City, California	
CA206	Los Gatos Town, California	
CA207	Lynwood City, California	
CA208	Madera City, California	
CA209	Madera County, California	
CA210	Malibu City, California	Allocations in California
CA211	Manhattan Beach City, California	will be made in
CA212	Manteca City, California	accordance with the
CA213	Marin County, California	California State-
CA214	Marina City, California	Subdivision Agreement.
CA215	Mariposa County, California	
CA216	Martinez City, California	
CA217	Marysville City, California	
CA218	Maywood City, California	
CA219	McFarland City, California	
CA220	Mendocino County, California	
CA221	Mendota City, California	
CA222	Menifee City, California	
CA223	Menlo Park City, California	
CA224	Merced City, California	
CA225	Merced County, California	
CA226	Mill Valley City, California	
CA227	Millbrae City, California	
CA228	Milpitas City, California	
CA229	Mission Viejo City, California	
CA230	Modesto City, California	
CA231	Modoc County, California	
CA232	Mono County, California	
CA233	Monrovia City, California	
CA234	Montclair City, California	
CA235	Montebello City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA236	Monterey City, California	
CA237	Monterey County, California	
CA238	Monterey Park City, California	
CA239	Moorpark City, California	
CA240	Moraga Town, California	
CA241	Moreno Valley City, California	
CA242	Morgan Hill City, California	
CA243	Morro Bay City, California	
CA244	Mountain View City, California	
CA245	Murrieta City, California	
CA246	Napa City, California	
CA247	Napa County, California	
CA248	National City, California	
CA249	Nevada County, California	
CA250	Newark City, California	
CA251	Newman City, California	
CA252	Newport Beach City, California	
CA253	Norco City, California	
CA254	Norwalk City, California	
CA255	Novato City, California	
CA256	Oakdale City, California	
CA257	Oakland City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA258	Oakley City, California	
CA259	Oceanside City, California	
CA260	Ontario City, California	
CA261	Orange City, California	
CA262	Orange County, California	
CA263	Orange Cove City, California	
CA264	Orinda City, California	
CA265	Oroville City, California	
CA266	Oxnard City, California	
CA267	Pacific Grove City, California	
CA268	Pacifica City, California	
CA269	Palm Desert City, California	
CA270	Palm Springs City, California	
CA271	Palmdale City, California	
CA272	Palo Alto City, California	
CA273	Palos Verdes Estates City, California	
CA274	Paramount City, California	
CA275	Parlier City, California	
CA276	Pasadena City, California	
CA277	Patterson City, California	
CA278	Perris City, California	
CA279	Petaluma City, California	
CA280	Pico Rivera City, California	
CA281	Piedmont City, California	
CA282	Pinole City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA283	Pittsburg City, California	
CA284	Placentia City, California	
CA285	Placer County, California	
CA286	Placerville City, California	
CA287	Pleasant Hill City, California	
CA288	Pleasanton City, California	
CA289	Plumas County, California	
CA290	Pomona City, California	
CA291	Port Hueneme City, California	
CA292	Porterville City, California	
CA293	Poway City, California	
CA294	Rancho Cordova City, California	
CA295	Rancho Cucamonga City, California	
CA296	Rancho Mirage City, California	
CA297	Rancho Palos Verdes City, California	
CA298	Rancho Santa Margarita City, California	
CA299	Red Bluff City, California	
CA300	Redding City, California	
CA301	Redlands City, California	
CA302	Redondo Beach City, California	
CA303	Redwood City, California	Allocations in California
CA304	Reedley City, California	will be made in
CA305	Rialto City, California	accordance with the
CA306	Richmond City, California	California State-
CA307	Ridgecrest City, California	Subdivision Agreement.
CA308	Ripon City, California	
CA309	Riverbank City, California	
CA310	Riverside City, California	
CA311	Riverside County, California	
CA312	Rocklin City, California	
CA313	Rohnert Park City, California	
CA314	Rosemead City, California	
CA315	Roseville City, California	
CA316	Sacramento City, California	
CA317	Sacramento County, California	
CA318	Salinas City, California	
CA319	San Anselmo Town, California	
CA320	San Benito County, California	
CA321	San Bernardino City, California	
CA322	San Bernardino County, California	
CA323	San Bruno City, California	
CA324	San Buenaventura (Ventura) City, California	
CA325	San Carlos City, California	
CA326	San Clemente City, California	
CA327	San Diego City, California	
CA328	San Diego County, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA329	San Dimas City, California	
CA330	San Fernando City, California	
CA331	San Francisco City, California	
CA332	San Gabriel City, California	
CA333	San Jacinto City, California	
CA334	San Joaquin County, California	
CA335	San Jose City, California	
CA336	San Juan Capistrano City, California	
CA337	San Leandro City, California	
CA338	San Luis Obispo City, California	
CA339	San Luis Obispo County, California	
CA340	San Marcos City, California	
CA341	San Marino City, California	
CA342	San Mateo City, California	
CA343	San Mateo County, California	
CA344	San Pablo City, California	
CA345	San Rafael City, California	
CA346	San Ramon City, California	
CA347	Sanger City, California	
CA348	Santa Ana City, California	
CA349	Santa Barbara City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA350	Santa Barbara County, California	
CA351	Santa Clara City, California	
CA352	Santa Clara County, California	
CA353	Santa Clarita City, California	
CA354	Santa Cruz City, California	
CA355	Santa Cruz County, California	
CA356	Santa Fe Springs City, California	
CA357	Santa Maria City, California	
CA358	Santa Monica City, California	
CA359	Santa Paula City, California	
CA360	Santa Rosa City, California	
CA361	Santee City, California	
CA362	Saratoga City, California	
CA363	Scotts Valley City, California	
CA364	Seal Beach City, California	
CA365	Seaside City, California	
CA366	Selma City, California	
CA367	Shafter City, California	
CA368	Shasta County, California	
CA369	Shasta Lake City, California	
CA371	Sierra Madre City, California	
CA372	Signal Hill City, California	
CA373	Simi Valley City, California	
CA374	Siskiyou County, California	
CA375	Solana Beach City, California	
CA376	Solano County, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA377	Soledad City, California	
CA378	Sonoma City, California	
CA379	Sonoma County, California	
CA380	South El Monte City, California	
CA381	South Gate City, California	
CA382	South Lake Tahoe City, California	
CA383	South Pasadena City, California	
CA384	South San Francisco City, California	
CA385	Stanislaus County, California	
CA386	Stanton City, California	
CA387	Stockton City, California	
CA388	Suisun City, California	
CA389	Sunnyvale City, California	
CA390	Susanville City, California	
CA391	Sutter County, California	
CA392	Tehachapi City, California	
CA393	Tehama County, California	
CA394	Temecula City, California	
CA395	Temple City, California	
CA396	Thousand Oaks City, California	
CA397	Torrance City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA398	Tracy City, California	
CA399	Trinity County, California	
CA400	Truckee Town, California	
CA401	Tulare City, California	
CA402	Tulare County, California	
CA403	Tuolumne County, California	
CA404	Turlock City, California	
CA405	Tustin City, California	
CA406	Twentynine Palms City, California	
CA407	Ukiah City, California	
CA408	Union City, California	
CA409	Upland City, California	
CA410	Vacaville City, California	
CA411	Vallejo City, California	
CA412	Ventura County, California	
CA413	Victorville City, California	
CA414	Visalia City, California	
CA415	Vista City, California	
CA416	Walnut City, California	
CA417	Walnut Creek City, California	
CA418	Wasco City, California	
CA419	Watsonville City, California	
CA420	West Covina City, California	
CA421	West Hollywood City, California	
CA422	West Sacramento City, California	
CA423	Westminster City, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CA424	Whittier City, California	Allocations in California will be made in accordance with the California State-Subdivision Agreement.
CA425	Wildomar City, California	
CA426	Windsor Town, California	
CA427	Woodland City, California	
CA428	Yolo County, California	
CA429	Yorba Linda City, California	
CA430	Yuba City, California	
CA431	Yuba County, California	
CA432	Yucaipa City, California	
CA433	Yucca Valley Town, California	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO1	Adams County, Colorado	
CO2	Alamosa City, Colorado	
CO3	Alamosa County, Colorado	
CO4	Arapahoe County, Colorado	
CO5	Archuleta County, Colorado	
CO6	Arvada City, Colorado	
CO7	Aurora City, Colorado	
CO8	Baca County, Colorado	
CO9	Bent County, Colorado	
CO10	Black Hawk City, Colorado	
CO11	Boulder City, Colorado	
CO12	Boulder County, Colorado	
CO13	Brighton City, Colorado	
CO14	Broomfield City, Colorado	
CO15	Cañon City, Colorado	
CO16	Castle Pines City, Colorado	
CO17	Castle Rock Town, Colorado	
CO18	Centennial City, Colorado	
CO19	Chaffee County, Colorado	
CO20	Cheyenne County, Colorado	
CO21	Clear Creek County, Colorado	
CO22	Colorado Springs City, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO23	Commerce City, Colorado	
CO24	Conejos County, Colorado	
CO25	Costilla County, Colorado	
CO26	Crowley County, Colorado	
CO27	Custer County, Colorado	
CO28	Delta County, Colorado	
CO29	Denver City, Colorado	
CO30	Dolores County, Colorado	
CO31	Douglas County, Colorado	
CO32	Durango City, Colorado	
CO33	Eagle County, Colorado	
CO34	El Paso County, Colorado	
CO35	Elbert County, Colorado	
CO36	Englewood City, Colorado	
CO37	Erie Town, Colorado	
CO38	Evans City, Colorado	
CO39	Federal Heights City, Colorado	
CO40	Firestone Town, Colorado	
CO41	Fort Collins City, Colorado	
CO42	Fort Morgan City, Colorado	
CO43	Fountain City, Colorado	
CO44	Frederick Town, Colorado	
CO45	Fremont County, Colorado	
CO46	Fruita City, Colorado	
CO47	Garfield County, Colorado	
CO48	Gilpin County, Colorado	
CO49	Golden City, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO50	Grand County, Colorado	
CO51	Grand Junction City, Colorado	
CO52	Greeley City, Colorado	
CO53	Greenwood Village City, Colorado	
CO54	Gunnison County, Colorado	
CO55	Hinsdale County, Colorado	
CO56	Hudson Town, Colorado	
CO57	Huerfano County, Colorado	
CO58	Jackson County, Colorado	
CO59	Jefferson County, Colorado	
CO60	Johnstown, Colorado	
CO61	Kiowa County, Colorado	
CO62	Kit Carson County, Colorado	
CO63	La Plata County, Colorado	
CO64	Lafayette City, Colorado	
CO65	Lake County, Colorado	
CO66	Lakewood City, Colorado	
CO67	Larimer County, Colorado	
CO68	Las Animas County, Colorado	
CO69	Lincoln County, Colorado	
CO70	Littleton City, Colorado	
CO71	Logan County, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO72	Lone Tree City, Colorado	
CO73	Longmont City, Colorado	
CO74	Louisville City, Colorado	
CO75	Loveland City, Colorado	
CO76	Mesa County, Colorado	
CO77	Mineral County, Colorado	
CO78	Moffat County, Colorado	
CO79	Montezuma County, Colorado	
CO80	Montrose City, Colorado	
CO81	Montrose County, Colorado	
CO82	Morgan County, Colorado	
CO83	Northglenn City, Colorado	
CO84	Otero County, Colorado	
CO85	Ouray County, Colorado	
CO86	Park County, Colorado	
CO87	Parker Town, Colorado	
CO88	Phillips County, Colorado	
CO89	Pitkin County, Colorado	
CO90	Prowers County, Colorado	
CO91	Pueblo City, Colorado	
CO92	Pueblo County, Colorado	
CO93	Rio Blanco County, Colorado	
CO94	Rio Grande County, Colorado	
CO95	Routt County, Colorado	
CO96	Saguache County, Colorado	
CO97	San Juan County, Colorado	
CO98	San Miguel County, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO99	Sedgwick County, Colorado	
CO100	Sheridan City, Colorado	
CO101	Steamboat Springs City, Colorado	
CO102	Sterling City, Colorado	
CO103	Summit County, Colorado	
CO104	Superior Town, Colorado	
CO105	Teller County, Colorado	
CO106	Thornton City, Colorado	
CO107	Washington County, Colorado	
CO108	Weld County, Colorado	
CO109	Wellington Town, Colorado	
CO110	Westminster City, Colorado	
CO111	Wheat Ridge City, Colorado	
CO112	Windsor Town, Colorado	
CO113	Yuma County, Colorado	
CO114	Aguilar Town, Colorado	
CO115	Akron Town, Colorado	
CO116	Alma Town, Colorado	
CO117	Antonito Town, Colorado	
CO118	Arriba Town, Colorado	
CO119	Aspen City, Colorado	
CO120	Ault Town, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO121	Avon Town, Colorado	
CO122	Basalt Town, Colorado	
CO123	Bayfield Town, Colorado	
CO124	Bennett Town, Colorado	
CO125	Berthoud Town, Colorado	
CO126	Bethune Town, Colorado	
CO127	Blanca Town, Colorado	
CO128	Blue River Town, Colorado	
CO129	Boone Town, Colorado	
CO130	Bow Mar Town, Colorado	
CO131	Branson Town, Colorado	
CO132	Breckenridge Town, Colorado	
CO133	Brookside Town, Colorado	
CO134	Brush City, Colorado	
CO135	Buena Vista Town, Colorado	
CO136	Burlington City, Colorado	
CO137	Calhan Town, Colorado	
CO138	Campo Town, Colorado	
CO139	Carbondale Town, Colorado	
CO140	Cedaredge Town, Colorado	
CO141	Center Town, Colorado	
CO142	Central City, Colorado	
CO143	Cheraw Town, Colorado	
CO144	Cherry Hills Village City, Colorado	
CO145	Cheyenne Wells Town, Colorado	
CO146	City Of Creede Town, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO147	Coal Creek Town, Colorado	
CO148	Cokedale Town, Colorado	
CO149	Collbran Town, Colorado	
CO150	Columbine Valley Town, Colorado	
CO151	Cortez City, Colorado	
CO152	Craig City, Colorado	
CO153	Crawford Town, Colorado	
CO154	Crested Butte Town, Colorado	
CO155	Crestone Town, Colorado	
CO156	Cripple Creek City, Colorado	
CO157	Crook Town, Colorado	
CO158	Crowley Town, Colorado	
CO159	Dacono City, Colorado	
CO160	De Beque Town, Colorado	
CO161	Deer Trail Town, Colorado	
CO162	Del Norte Town, Colorado	
CO163	Delta City, Colorado	
CO164	Dillon Town, Colorado	
CO165	Dinosaur Town, Colorado	
CO166	Dolores Town, Colorado	
CO167	Dove Creek Town, Colorado	
CO168	Eads Town, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO169	Eagle Town, Colorado	
CO170	Eaton Town, Colorado	
CO171	Eckley Town, Colorado	
CO172	Edgewater City, Colorado	
CO173	Elizabeth Town, Colorado	
CO174	Empire Town, Colorado	
CO175	Estes Park Town, Colorado	
CO176	Fairplay Town, Colorado	
CO177	Flagler Town, Colorado	
CO178	Fleming Town, Colorado	
CO179	Florence City, Colorado	
CO180	Fort Lupton City, Colorado	
CO181	Fowler Town, Colorado	
CO182	Foxfield Town, Colorado	
CO183	Fraser Town, Colorado	
CO184	Frisco Town, Colorado	
CO185	Garden City Town, Colorado	
CO186	Genoa Town, Colorado	
CO187	Georgetown Town, Colorado	
CO188	Gilcrest Town, Colorado	
CO189	Glendale City, Colorado	
CO190	Glenwood Springs City, Colorado	
CO191	Granada Town, Colorado	
CO192	Granby Town, Colorado	
CO193	Grand Lake Town, Colorado	
CO194	Green Mountain Falls Town, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO195	Grover Town, Colorado	
CO196	Gunnison City, Colorado	
CO197	Gypsum Town, Colorado	
CO198	Hartman Town, Colorado	
CO199	Haswell Town, Colorado	
CO200	Haxtun Town, Colorado	
CO201	Hayden Town, Colorado	
CO202	Hillrose Town, Colorado	
CO203	Holly Town, Colorado	
CO204	Holyoke City, Colorado	
CO205	Hooper Town, Colorado	
CO206	Hot Sulphur Springs Town, Colorado	
CO207	Hotchkiss Town, Colorado	
CO208	Hugo Town, Colorado	
CO209	Idaho Springs City, Colorado	
CO210	Ignacio Town, Colorado	
CO211	Iliff Town, Colorado	
CO212	Jamestown Town, Colorado	
CO213	Julesburg Town, Colorado	
CO214	Keenesburg Town, Colorado	
CO215	Kersey Town, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO216	Kim Town, Colorado	
CO217	Kiowa Town, Colorado	
CO218	Kit Carson Town, Colorado	
CO219	Kremmling Town, Colorado	
CO220	La Jara Town, Colorado	
CO221	La Junta City, Colorado	
CO222	La Salle Town, Colorado	
CO223	La Veta Town, Colorado	
CO224	Lake City Town, Colorado	
CO225	Lakeside Town, Colorado	
CO226	Lamar City, Colorado	
CO227	Larkspur Town, Colorado	
CO228	Las Animas City, Colorado	
CO229	Leadville City, Colorado	
CO230	Limon Town, Colorado	
CO231	Lochbuie Town, Colorado	
CO232	Log Lane Village Town, Colorado	
CO233	Lyons Town, Colorado	
CO234	Manassa Town, Colorado	
CO235	Mancos Town, Colorado	
CO236	Manitou Springs City, Colorado	
CO237	Manzanola Town, Colorado	
CO238	Marble Town, Colorado	
CO239	Mead Town, Colorado	
CO240	Meeker Town, Colorado	
CO241	Merino Town, Colorado	
CO242	Milliken Town, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO243	Minturn Town, Colorado	
CO244	Moffat Town, Colorado	
CO245	Monte Vista City, Colorado	
CO246	Montezuma Town, Colorado	
CO247	Monument Town, Colorado	
CO248	Morrison Town, Colorado	
CO249	Mount Crested Butte Town, Colorado	
CO250	Mountain View Town, Colorado	
CO251	Mountain Village Town, Colorado	
CO252	Naturita Town, Colorado	
CO253	Nederland Town, Colorado	
CO254	New Castle Town, Colorado	
CO255	Norwood Town, Colorado	
CO256	Nucla Town, Colorado	
CO257	Nunn Town, Colorado	
CO258	Oak Creek Town, Colorado	
CO259	Olathe Town, Colorado	
CO260	Olney Springs Town, Colorado	
CO261	Ophir Town, Colorado	
CO262	Orchard City Town, Colorado	
CO263	Ordway Town, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO264	Otis Town, Colorado	
CO265	Ouray City, Colorado	
CO266	Ovid Town, Colorado	
CO267	Pagosa Springs Town, Colorado	
CO268	Palisade Town, Colorado	
CO269	Palmer Lake Town, Colorado	
CO270	Paoli Town, Colorado	
CO271	Paonia Town, Colorado	
CO272	Parachute Town, Colorado	
CO273	Peetz Town, Colorado	
CO274	Pierce Town, Colorado	
CO275	Pitkin Town, Colorado	
CO276	Platteville Town, Colorado	
CO277	Poncha Springs Town, Colorado	
CO278	Pritchett Town, Colorado	
CO279	Ramah Town, Colorado	
CO280	Rangely Town, Colorado	
CO281	Raymer (New Raymer) Town, Colorado	
CO282	Red Cliff Town, Colorado	
CO283	Rico Town, Colorado	
CO284	Ridgway Town, Colorado	
CO285	Rifle City, Colorado	
CO286	Rockvale Town, Colorado	
CO287	Rocky Ford City, Colorado	
CO288	Romeo Town, Colorado	
CO289	Rye Town, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CO290	Saguache Town, Colorado	
CO291	Salida City, Colorado	
CO292	San Luis Town, Colorado	
CO293	Sanford Town, Colorado	
CO294	Sawpit Town, Colorado	
CO295	Sedgwick Town, Colorado	
CO296	Seibert Town, Colorado	
CO297	Severance Town, Colorado	
CO298	Sheridan Lake Town, Colorado	
CO299	Silt Town, Colorado	
CO300	Silver Cliff Town, Colorado	
CO301	Silver Plume Town, Colorado	
CO302	Silverthorne Town, Colorado	
CO303	Silverton Town, Colorado	
CO304	Simla Town, Colorado	
CO305	Snowmass Village Town, Colorado	
CO306	South Fork Town, Colorado	
CO307	Springfield Town, Colorado	
CO308	Starkville Town, Colorado	Allocations in Colorado will be made in accordance with the Colorado Opioids Settlement Memorandum of Understanding.
CO309	Stratton Town, Colorado	
CO310	Sugar City Town, Colorado	
CO311	Swink Town, Colorado	
CO312	Telluride Town, Colorado	
CO313	Timnath Town, Colorado	
CO314	Trinidad City, Colorado	
CO315	Two Buttes Town, Colorado	
CO316	Vail Town, Colorado	
CO317	Victor City, Colorado	
CO318	Vilas Town, Colorado	
CO319	Vona Town, Colorado	
CO320	Walden Town, Colorado	
CO321	Walsenburg City, Colorado	
CO322	Walsh Town, Colorado	
CO323	Ward Town, Colorado	
CO324	Westcliffe Town, Colorado	
CO325	Wiggins Town, Colorado	
CO326	Wiley Town, Colorado	
CO327	Williamsburg Town, Colorado	
CO328	Winter Park Town, Colorado	
CO329	Woodland Park City, Colorado	
CO330	Wray City, Colorado	
CO331	Yampa Town, Colorado	
CO332	Yuma City, Colorado	

State ID	Qualifying Subdivision	Consolidated State Allocation
CT1	Andover Town, Connecticut	0.0513214640%
CT2	Ansonia City, Connecticut	0.5316052437%
CT3	Ashford Town, Connecticut	0.1096965130%
CT4	Avon Town, Connecticut	0.5494886534%
CT5	Barkhamsted Town, Connecticut	0.0620629520%
CT6	Beacon Falls Town, Connecticut	0.1953947308%
CT7	Berlin Town, Connecticut	0.5215629385%
CT8	Bethany Town, Connecticut	0.1039156068%
CT9	Bethel Town, Connecticut	0.3522422145%
CT10	Bethlehem Town, Connecticut	0.0078647202%
CT11	Bloomfield Town, Connecticut	0.4888368136%
CT12	Bolton Town, Connecticut	0.1520831395%
CT13	Bozrah Town, Connecticut	0.0582057867%
CT14	Branford Town, Connecticut	0.8903816954%
CT15	Bridgeport City, Connecticut	3.2580743095%
CT16	Bridgewater Town, Connecticut	0.0118125935%
CT17	Bristol City, Connecticut	1.3355768908%
CT18	Brookfield Town, Connecticut	0.3087903124%
CT19	Brooklyn Town, Connecticut	0.1880661562%
CT20	Burlington Town, Connecticut	0.2348761319%
CT21	Canaan Town, Connecticut	0.0343343640%
CT22	Canterbury Town, Connecticut	0.1354310071%
CT23	Canton Town, Connecticut	0.2669011966%
CT24	Chaplin Town, Connecticut	0.0523959290%
CT25	Cheshire Town, Connecticut	0.9783113499%
CT26	Chester Town, Connecticut	0.0772387574%
CT27	Clinton Town, Connecticut	0.5348726093%
CT28	Colchester Town, Connecticut	0.6134395770%
CT29	Colebrook Town, Connecticut	0.0296870114%
CT30	Columbia Town, Connecticut	0.1005666237%
CT31	Cornwall Town, Connecticut	0.0486027928%
CT32	Coventry Town, Connecticut	0.3460011479%
CT33	Cromwell Town, Connecticut	0.4750451453%
CT34	Danbury City, Connecticut	1.1556465907%
CT35	Darien Town, Connecticut	0.6429649345%
CT36	Deep River Town, Connecticut	0.0924563595%
CT37	Derby City, Connecticut	0.3503125449%
CT38	Durham Town, Connecticut	0.0079309232%
CT39	East Granby Town, Connecticut	0.1455975170%
CT40	East Haddam Town, Connecticut	0.3145696377%
CT41	East Hampton Town, Connecticut	0.4637546663%
CT42	East Hartford Town, Connecticut	1.2645454069%
CT43	East Haven Town, Connecticut	0.8590923735%
CT44	East Lyme Town, Connecticut	0.6375826296%
CT45	East Windsor Town, Connecticut	0.2419743793%
CT46	Eastford Town, Connecticut	0.0446651958%
CT47	Easton Town, Connecticut	0.1354961231%
CT48	Ellington Town, Connecticut	0.4010047839%
CT49	Enfield Town, Connecticut	0.9173431190%

State ID	Qualifying Subdivision	Consolidated State Allocation
CT50	Essex Town, Connecticut	0.1431870357%
CT51	Fairfield Town, Connecticut	1.4212308415%
CT52	Farmington Town, Connecticut	0.6572091547%
CT53	Franklin Town, Connecticut	0.0446032416%
CT54	Glastonbury Town, Connecticut	1.0420644550%
CT55	Goshen Town, Connecticut	0.0030464255%
CT56	Granby Town, Connecticut	0.2928405247%
CT57	Greenwich Town, Connecticut	1.5644702467%
CT58	Griswold Town, Connecticut	0.3865570141%
CT59	Groton Town, Connecticut	1.4033874500%
CT60	Guilford Town, Connecticut	0.8399392493%
CT61	Haddam Town, Connecticut	0.0151716553%
CT62	Hamden Town, Connecticut	1.7724359413%
CT63	Hampton Town, Connecticut	0.0429454985%
CT64	Hartford City, Connecticut	5.3268549899%
CT65	Hartland Town, Connecticut	0.0359782738%
CT66	Harwinton Town, Connecticut	0.0126363764%
CT67	Hebron Town, Connecticut	0.1593443254%
CT68	Kent Town, Connecticut	0.0835899976%
CT69	Killingly Town, Connecticut	0.6116898413%
CT70	Killingworth Town, Connecticut	0.2652963170%
CT71	Lebanon Town, Connecticut	0.2746607824%
CT72	Ledyard Town, Connecticut	0.5514380850%
CT73	Lisbon Town, Connecticut	0.1156355161%
CT74	Litchfield Town, Connecticut	0.3481982974%
CT75	Lyme Town, Connecticut	0.0023141411%
CT76	Madison Town, Connecticut	0.7594223560%
CT77	Manchester Town, Connecticut	1.3929765818%
CT78	Mansfield Town, Connecticut	0.3058754037%
CT79	Marlborough Town, Connecticut	0.0766010346%
CT80	Meriden City, Connecticut	1.8508778149%
CT81	Middlebury Town, Connecticut	0.0276033951%
CT82	Middlefield Town, Connecticut	0.0075627554%
CT83	Middletown City, Connecticut	1.5343128975%
CT84	Milford City, Connecticut	1.8215679630%
CT85	Monroe Town, Connecticut	0.4307375445%
CT86	Montville Town, Connecticut	0.5806185940%
CT87	Morris Town, Connecticut	0.0099785725%
CT88	Naugatuck Borough, Connecticut	1.0644527326%
CT89	New Britain City, Connecticut	1.5740557511%
CT90	New Canaan Town, Connecticut	0.6136187204%
CT91	New Fairfield Town, Connecticut	0.2962030448%
CT92	New Hartford Town, Connecticut	0.1323482193%
CT93	New Haven City, Connecticut	5.8061427601%
CT94	New London City, Connecticut	1.0536729060%
CT95	New Milford Town, Connecticut	1.0565475001%
CT96	Newington Town, Connecticut	0.7132456565%
CT97	Newtown, Connecticut	0.5964476353%
CT98	Norfolk Town, Connecticut	0.0442819100%

State ID	Qualifying Subdivision	Consolidated State Allocation
CT99	North Branford Town, Connecticut	0.4795791623%
CT100	North Canaan Town, Connecticut	0.0913148022%
CT101	North Haven Town, Connecticut	0.7922543069%
CT102	North Stonington Town, Connecticut	0.1803885830%
CT103	Norwalk City, Connecticut	1.5918210823%
CT104	Norwich City, Connecticut	1.1639182124%
CT105	Old Lyme Town, Connecticut	0.0247921386%
CT106	Old Saybrook Town, Connecticut	0.4181170767%
CT107	Orange Town, Connecticut	0.3683598812%
CT108	Oxford Town, Connecticut	0.3955127994%
CT109	Plainfield Town, Connecticut	0.5352043161%
CT110	Plainville Town, Connecticut	0.3937549612%
CT111	Plymouth Town, Connecticut	0.4213382978%
CT112	Pomfret Town, Connecticut	0.1174722050%
CT113	Portland Town, Connecticut	0.3205523149%
CT114	Preston Town, Connecticut	0.1319895374%
CT115	Prospect Town, Connecticut	0.3056173107%
CT116	Putnam Town, Connecticut	0.2953254103%
CT117	Redding Town, Connecticut	0.1726435223%
CT118	Ridgefield Town, Connecticut	0.6645173744%
CT119	Rocky Hill Town, Connecticut	0.3929175425%
CT120	Roxbury Town, Connecticut	0.0037924445%
CT121	Salem Town, Connecticut	0.1075219911%
CT122	Salisbury Town, Connecticut	0.1052257347%
CT123	Scotland Town, Connecticut	0.0395212218%
CT124	Seymour Town, Connecticut	0.5301171581%
CT125	Sharon Town, Connecticut	0.0761294123%
CT126	Shelton City, Connecticut	0.5601099879%
CT127	Sherman Town, Connecticut	0.0494382353%
CT128	Simsbury Town, Connecticut	0.6988446241%
CT129	Somers Town, Connecticut	0.2491740063%
CT130	South Windsor Town, Connecticut	0.7310935932%
CT131	Southbury Town, Connecticut	0.0581965974%
CT132	Southington Town, Connecticut	0.9683065927%
CT133	Sprague Town, Connecticut	0.0874709763%
CT134	Stafford Town, Connecticut	0.3388202949%
CT135	Stamford City, Connecticut	2.9070395589%
CT136	Sterling Town, Connecticut	0.0949826467%
CT137	Stonington Town, Connecticut	0.5576891315%
CT138	Stratford Town, Connecticut	0.9155695700%
CT139	Suffield Town, Connecticut	0.3402792315%
CT140	Thomaston Town, Connecticut	0.2664061562%
CT141	Thompson Town, Connecticut	0.2673479187%
CT142	Tolland Town, Connecticut	0.4342020371%
CT143	Torrington City, Connecticut	1.3652460176%
CT144	Trumbull Town, Connecticut	0.7617744403%
CT145	Union Town, Connecticut	0.0153941764%

State ID	Qualifying Subdivision	Consolidated State Allocation
CT146	Vernon Town, Connecticut	0.7027162157%
CT147	Voluntown, Connecticut	0.0733181557%
CT148	Wallingford Town, Connecticut	1.5350353996%
CT149	Warren Town, Connecticut	0.0489758024%
CT150	Washington Town, Connecticut	0.1553517897%
CT151	Waterbury City, Connecticut	4.6192219654%
CT152	Waterford Town, Connecticut	0.7608802056%
CT153	Watertown, Connecticut	0.6868118808%
CT154	West Hartford Town, Connecticut	1.6216697477%
CT155	West Haven City, Connecticut	1.4026972589%
CT156	Westbrook Town, Connecticut	0.2586999280%
CT157	Weston Town, Connecticut	0.3664201329%
CT158	Westport Town, Connecticut	0.8921084083%
CT159	Wethersfield Town, Connecticut	0.6208707168%
CT160	Willington Town, Connecticut	0.0975268185%
CT161	Wilton Town, Connecticut	0.6378099925%
CT162	Winchester Town, Connecticut	0.3760305376%
CT163	Windham Town, Connecticut	1.0108949901%
CT164	Windsor Locks Town, Connecticut	0.3174167624%
CT165	Windsor Town, Connecticut	0.7548324123%
CT166	Wolcott Town, Connecticut	0.5443693820%
CT167	Woodbridge Town, Connecticut	0.2435300513%
CT168	Woodbury Town, Connecticut	0.3411988605%
CT169	Woodmont Borough, Connecticut	0.0173159412%
CT170	Woodstock Town, Connecticut	0.1817110623%

State ID	Qualifying Subdivision	Consolidated State Allocation
DE1	Dover City, Delaware	25.00000000% ($1.00)
DE2	Kent County, Delaware	25.00000000% ($1.00)
DE3	Middletown, Delaware	0.0000000000%
DE4	Milford City, Delaware	0.0000000000%
DE5	New Castle County, Delaware	0.0000000000%
DE6	Newark City, Delaware	0.0000000000%
DE7	Seaford City, Delaware	25.00000000% ($1.00)
DE8	Smyrna Town, Delaware	0.0000000000%
DE9	Sussex County, Delaware	25.00000000% ($1.00)
DE10	Wilmington City, Delaware	0.0000000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA1	Acworth City, Georgia	0.1010066057%
GA2	Adel City, Georgia	0.0545649432%
GA3	Albany City, Georgia	0.3157843012%
GA4	Alma City, Georgia	0.0720108615%
GA5	Alpharetta City, Georgia	0.2110377863%
GA6	Americus City, Georgia	0.0651732444%
GA7	Appling County, Georgia	0.1891925647%
GA8	Arlington City, Georgia	0.0057755147%
GA9	Athens-Clarke County Unified Government, Georgia	1.3856330305%
GA10	Atkinson County, Georgia	0.0986720780%
GA11	Atlanta City, Georgia	2.9922320659%
GA12	Augusta-Richmond County Consolidated Government, Georgia	2.7761021713%
GA13	Bacon County, Georgia	0.1326313298%
GA14	Bainbridge City, Georgia	0.0569861790%
GA15	Baker County, Georgia	0.0138992540%
GA16	Baldwin County, Georgia	0.2940093402%
GA17	Banks County, Georgia	0.2108287241%
GA18	Barrow County, Georgia	0.7562315570%
GA19	Bartow County, Georgia	1.0945235112%
GA20	Ben Hill County, Georgia	0.0834031458%
GA21	Berrien County, Georgia	0.1225733642%
GA22	Blackshear City, Georgia	0.0349161927%
GA23	Blakely City, Georgia	0.0158441397%
GA24	Bleckley County, Georgia	0.1430561858%
GA25	Brantley County, Georgia	0.2875410777%
GA26	Braselton Town, Georgia	0.0371467624%
GA27	Brookhaven City, Georgia	0.0913450445%
GA28	Brooks County, Georgia	0.1455943886%
GA29	Brunswick City, Georgia	0.1020085339%
GA30	Bryan County, Georgia	0.2289883650%
GA31	Buford City, Georgia	0.0023586547%
GA32	Bulloch County, Georgia	0.4088475182%
GA33	Burke County, Georgia	0.1875413288%
GA34	Butts County, Georgia	0.3178860983%
GA35	Calhoun City, Georgia	0.1780085402%
GA36	Calhoun County, Georgia	0.0360783561%
GA37	Camden County, Georgia	0.3387009665%
GA38	Candler County, Georgia	0.0990882539%
GA39	Canton City, Georgia	0.1378274535%
GA40	Carroll County, Georgia	1.4108548814%
GA41	Carrollton City, Georgia	0.4395018339%
GA42	Cartersville City, Georgia	0.2991406477%
GA43	Catoosa County, Georgia	1.0548339612%
GA44	Chamblee City, Georgia	0.0537051979%
GA45	Charlton County, Georgia	0.1046313818%
GA46	Chatham County, Georgia	1.4544033708%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA47	Chattooga County, Georgia	0.3317513109%
GA48	Cherokee County, Georgia	2.1190683851%
GA49	Clarkston City, Georgia	0.0175253481%
GA50	Clay County, Georgia	0.0274637104%
GA51	Clayton County, Georgia	1.6728881377%
GA52	Clinch County, Georgia	0.0617206810%
GA53	Cobb County, Georgia	5.8580801967%
GA54	Coffee County, Georgia	0.4164755944%
GA55	College Park City, Georgia	0.1805996391%
GA56	Colquitt County, Georgia	0.2578612394%
GA57	Columbia County, Georgia	1.2905730633%
GA58	Columbus City, Georgia	1.8227140298%
GA59	Conyers City, Georgia	0.1202231912%
GA60	Cook County, Georgia	0.0973405674%
GA61	Cordele City, Georgia	0.0583989534%
GA62	Covington City, Georgia	0.1969084378%
GA63	Coweta County, Georgia	0.9767276305%
GA64	Crawford County, Georgia	0.1282569558%
GA65	Crisp County, Georgia	0.1296658905%
GA66	Cusseta-Chattahoochee County Unified Government, Georgia	0.0695538650%
GA67	Dade County, Georgia	0.1799465490%
GA68	Dallas City, Georgia	0.0916776643%
GA69	Dalton City, Georgia	0.3628092518%
GA70	Damascus City, Georgia	0.0005040301%
GA71	Dawson City, Georgia	0.0138696254%
GA72	Dawson County, Georgia	0.3192782415%
GA73	Decatur City, Georgia	0.1040340531%
GA74	Decatur County, Georgia	0.1633371087%
GA75	Dekalb County, Georgia	4.0579602979%
GA76	Demorest City, Georgia	0.0233539880%
GA77	Dodge County, Georgia	0.3228398634%
GA78	Dooly County, Georgia	0.0758970226%
GA79	Doraville City, Georgia	0.0619484258%
GA80	Dougherty County, Georgia	0.4519146718%
GA81	Douglas City, Georgia	0.2364366638%
GA82	Douglas County, Georgia	1.2411219485%
GA83	Douglasville City, Georgia	0.2313289102%
GA84	Dublin City, Georgia	0.1598683843%
GA85	Duluth City, Georgia	0.1174400509%
GA86	Dunwoody City, Georgia	0.0823645400%
GA87	Early County, Georgia	0.0433467628%
GA88	East Point City, Georgia	0.2308433908%
GA89	Echols County, Georgia	0.0262187359%
GA90	Effingham County, Georgia	0.4370293068%
GA91	Elbert County, Georgia	0.2655117233%
GA92	Emanuel County, Georgia	0.2278497555%
GA93	Evans County, Georgia	0.1156959749%
GA94	Fairburn City, Georgia	0.0542552469%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA95	Fannin County, Georgia	0.5651805280%
GA96	Fayette County, Georgia	0.6527012475%
GA97	Fayetteville City, Georgia	0.1201203794%
GA98	Fitzgerald City, Georgia	0.0569093853%
GA99	Floyd County, Georgia	0.9887350092%
GA100	Forest Park City, Georgia	0.1455200592%
GA101	Forsyth County, Georgia	1.7110664570%
GA102	Franklin County, Georgia	0.5550296650%
GA103	Fulton County, Georgia	3.2792330120%
GA104	Gainesville City, Georgia	0.3640437388%
GA105	Georgetown-Quitman County Unified Government, Georgia	0.0176595651%
GA106	Gilmer County, Georgia	0.4239021158%
GA107	Glascock County, Georgia	0.0283662653%
GA108	Glynn County, Georgia	0.7968809706%
GA109	Gordon County, Georgia	0.4175279543%
GA110	Grady County, Georgia	0.1716497947%
GA111	Greene County, Georgia	0.1737385827%
GA112	Griffin City, Georgia	0.2287480123%
GA113	Grovetown City, Georgia	0.0632622854%
GA114	Gwinnett County, Georgia	4.8912732775%
GA115	Habersham County, Georgia	0.4635124652%
GA116	Hall County, Georgia	1.5772937095%
GA117	Hancock County, Georgia	0.0536800967%
GA118	Haralson County, Georgia	1.0934912667%
GA119	Harris County, Georgia	0.2037540782%
GA120	Hart County, Georgia	0.2935398099%
GA121	Heard County, Georgia	0.1232058232%
GA122	Henry County, Georgia	1.9715208583%
GA123	Hinesville City, Georgia	0.2572364025%
GA124	Holly Springs City, Georgia	0.0823108417%
GA125	Houston County, Georgia	0.8378076437%
GA126	Irwin County, Georgia	0.0610553841%
GA127	Jackson County, Georgia	0.9201220386%
GA128	Jasper County, Georgia	0.1152245534%
GA129	Jeff Davis County, Georgia	0.3659791686%
GA130	Jefferson City, Georgia	0.0881783943%
GA131	Jefferson County, Georgia	0.1517559349%
GA132	Jenkins County, Georgia	0.0808740550%
GA133	Johns Creek City, Georgia	0.1877697040%
GA134	Johnson County, Georgia	0.0876584323%
GA135	Jones County, Georgia	0.2773521617%
GA136	Kennesaw City, Georgia	0.1446191663%
GA137	Kingsland City, Georgia	0.1313198199%
GA138	Lagrange City, Georgia	0.2069622772%
GA139	Lakeland City, Georgia	0.0155232109%
GA140	Lamar County, Georgia	0.2083015245%
GA141	Lanier County, Georgia	0.0574613256%
GA142	Laurens County, Georgia	0.5249834521%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA143	Lawrenceville City, Georgia	0.1647173317%
GA144	Lee County, Georgia	0.2162850866%
GA145	Liberty County, Georgia	0.2931642086%
GA146	Lilburn City, Georgia	0.0538355752%
GA147	Lincoln County, Georgia	0.1000487479%
GA148	Loganville City, Georgia	0.1468681321%
GA149	Long County, Georgia	0.1216766548%
GA150	Lowndes County, Georgia	0.6253829866%
GA151	Lumpkin County, Georgia	0.3139555802%
GA152	Macon County, Georgia	0.1110857755%
GA153	Macon-Bibb County Unified Government, Georgia	2.0265214623%
GA154	Madison County, Georgia	0.5114434091%
GA155	Marietta City, Georgia	0.7354006996%
GA156	Marion County, Georgia	0.0615218771%
GA157	McDonough City, Georgia	0.0803644086%
GA158	McDuffie County, Georgia	0.2216409869%
GA159	McIntosh County, Georgia	0.1678759014%
GA160	Meriwether County, Georgia	0.2015834534%
GA161	Milledgeville City, Georgia	0.1343842887%
GA162	Miller County, Georgia	0.0562389307%
GA163	Milton City, Georgia	0.0765630644%
GA164	Mitchell County, Georgia	0.1842864232%
GA165	Monroe City, Georgia	0.1616058698%
GA166	Monroe County, Georgia	0.2463868890%
GA167	Montgomery County, Georgia	0.0685440855%
GA168	Morgan County, Georgia	0.1807932852%
GA169	Moultrie City, Georgia	0.1150272968%
GA170	Murray County, Georgia	0.5636808736%
GA171	Nashville City, Georgia	0.0288042758%
GA172	Newnan City, Georgia	0.2037973462%
GA173	Newton County, Georgia	0.6206699754%
GA174	Norcross City, Georgia	0.0762036242%
GA175	Oconee County, Georgia	0.2721000475%
GA176	Oglethorpe County, Georgia	0.1461658711%
GA177	Paulding County, Georgia	1.7495211188%
GA178	Peach County, Georgia	0.2319656673%
GA179	Peachtree City, Georgia	0.2219833492%
GA180	Peachtree Corners City, Georgia	0.2099400952%
GA181	Perry City, Georgia	0.0954580908%
GA182	Pickens County, Georgia	0.3905362384%
GA183	Pierce County, Georgia	0.2012068205%
GA184	Pike County, Georgia	0.1072270653%
GA185	Polk County, Georgia	0.7130941429%
GA186	Pooler City, Georgia	0.0516303360%
GA187	Powder Springs City, Georgia	0.0633430906%
GA188	Pulaski County, Georgia	0.1671565625%
GA189	Putnam County, Georgia	0.2061208707%
GA190	Rabun County, Georgia	0.3170130000%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA191	Randolph County, Georgia	0.0382245100%
GA192	Richmond Hill City, Georgia	0.0716382402%
GA193	Riverdale City, Georgia	0.0684460876%
GA194	Rockdale County, Georgia	0.7947696030%
GA195	Rome City, Georgia	0.3719383578%
GA196	Roswell City, Georgia	0.2174642134%
GA197	Sandy Springs City, Georgia	0.2590143480%
GA198	Savannah City, Georgia	1.1246685243%
GA199	Schley County, Georgia	0.0238356678%
GA200	Screven County, Georgia	0.1132053955%
GA201	Seminole County, Georgia	0.0804817769%
GA202	Smyrna City, Georgia	0.2661908888%
GA203	Snellville City, Georgia	0.0758688840%
GA204	Spalding County, Georgia	0.5900646014%
GA205	Springfield City, Georgia	0.0124802329%
GA206	St. Marys City, Georgia	0.0962803562%
GA207	Statesboro City, Georgia	0.1844690660%
GA208	Stephens County, Georgia	0.7520555284%
GA209	Stewart County, Georgia	0.0419742764%
GA210	Stockbridge City, Georgia	0.0302698888%
GA211	Sugar Hill City, Georgia	0.0106058369%
GA212	Sumter County, Georgia	0.1314426325%
GA213	Suwanee City, Georgia	0.0700562332%
GA214	Talbot County, Georgia	0.0410357316%
GA215	Taliaferro County, Georgia	0.0068637499%
GA216	Tattnall County, Georgia	0.2930768128%
GA217	Taylor County, Georgia	0.0819435502%
GA218	Telfair County, Georgia	0.1855378735%
GA219	Terrell County, Georgia	0.0334710962%
GA220	Thomas County, Georgia	0.2077911904%
GA221	Thomasville City, Georgia	0.1281973547%
GA222	Tift County, Georgia	0.2088288220%
GA223	Tifton City, Georgia	0.1416502311%
GA224	Toombs County, Georgia	0.2423104056%
GA225	Towns County, Georgia	0.2454408368%
GA226	Treutlen County, Georgia	0.0571447522%
GA227	Troup County, Georgia	0.4334095739%
GA228	Tucker City, Georgia	0.0615225648%
GA229	Turner County, Georgia	0.0490657711%
GA230	Twiggs County, Georgia	0.0640416265%
GA231	Union City, Georgia	0.1531538090%
GA232	Union County, Georgia	0.2949759089%
GA233	Upson County, Georgia	0.3355566667%
GA234	Valdosta City, Georgia	0.2598246932%
GA235	Vidalia City, Georgia	0.1252530050%
GA236	Villa Rica City, Georgia	0.1397113628%
GA237	Walker County, Georgia	0.8453605309%
GA238	Walton County, Georgia	0.8194381956%
GA239	Ware County, Georgia	0.5170078559%

State ID	Qualifying Subdivision	Consolidated State Allocation
GA240	Warner Robins City, Georgia	0.3969845574%
GA241	Warren County, Georgia	0.0447828045%
GA242	Warwick City, Georgia	0.0103298381%
GA243	Washington County, Georgia	0.1959988913%
GA244	Waycross City, Georgia	0.1358274367%
GA245	Wayne County, Georgia	0.6609347902%
GA246	Webster County Unified Government, Georgia	0.0143656323%
GA247	Wheeler County, Georgia	0.0675300652%
GA248	White County, Georgia	0.3873386988%
GA249	Whitfield County, Georgia	0.7644288806%
GA250	Wilcox County, Georgia	0.0828696590%
GA251	Wilkes County, Georgia	0.0976306068%
GA252	Wilkinson County, Georgia	0.0847297279%
GA253	Winder City, Georgia	0.2007720766%
GA254	Woodbury City, Georgia	0.0085236394%
GA255	Woodstock City, Georgia	0.1942956763%
GA256	Worth County, Georgia	0.1491832321%
GA257	Rincon town, Georgia	0.0275488139%
GA258	South Fulton City, Georgia	0.2561412300%
GA259	Stonecrest City, Georgia	0.0904388800%
GA260	Ashburn City, Georgia	0.0207294209%
GA261	Chatsworth City, Georgia	0.1226056863%
GA262	Dawsonville City, Georgia	0.0022440946%
GA263	Helen City, Georgia	0.0478552392%
GA264	Jackson City, Georgia	0.0568159148%
GA265	Ringgold City, Georgia	0.0585728853%

State ID	Qualifying Subdivision	Consolidated State Allocation
HI1	Hawaii County, Hawaii	18.2671692501%
HI2	Kalawao, Hawaii	0.0034501514%
HI3	Kauai County, Hawaii	5.7006273580%
HI4	Maui County, Hawaii	13.9979969296%
HI5	City and County of Honolulu, Hawaii	62.0307563109%

State ID	Qualifying Subdivision	Consolidated State Allocation
ID1	Ada County, Idaho	13.2776278333%
ID2	Adams County, Idaho	0.1446831902%
ID3	Ammon City, Idaho	0.0812916024%
ID4	Bannock County, Idaho	3.0595589832%
ID5	Bear Lake County, Idaho	0.6082712041%
ID6	Benewah County, Idaho	0.6526829809%
ID7	Bingham County, Idaho	1.6421270812%
ID8	Blackfoot City, Idaho	0.6283857401%
ID9	Blaine County, Idaho	0.9137717551%
ID10	Boise City, Idaho	12.7586409110%
ID11	Boise County, Idaho	0.3309644652%
ID12	Bonner County, Idaho	2.5987361786%
ID13	Bonneville County, Idaho	3.7761253875%
ID14	Boundary County, Idaho	0.8788284447%
ID15	Burley City, Idaho	0.4485975363%
ID16	Butte County, Idaho	0.1839745518%
ID17	Caldwell City, Idaho	1.1958553249%
ID18	Camas County, Idaho	0.0422073443%
ID19	Canyon County, Idaho	5.0120113688%
ID20	Caribou County, Idaho	0.4396183832%
ID21	Cassia County, Idaho	0.7270235866%
ID22	Chubbuck City, Idaho	0.4841935447%
ID23	Clark County, Idaho	0.0420924425%
ID24	Clearwater County, Idaho	0.4890418390%
ID25	Coeur D'Alene City, Idaho	2.7593778237%
ID26	Custer County, Idaho	0.2133243878%
ID27	Eagle City, Idaho	0.1711876661%
ID28	Elmore County, Idaho	0.8899512165%
ID29	Franklin County, Idaho	0.5753624958%
ID30	Fremont County, Idaho	0.5716071696%
ID31	Garden City, Idaho	0.5582782838%
ID32	Gem County, Idaho	1.3784025725%
ID33	Gooding County, Idaho	0.6966472013%
ID34	Hayden City, Idaho	0.0047132146%
ID35	Idaho County, Idaho	0.8474305547%
ID36	Idaho Falls City, Idaho	3.8875027578%
ID37	Jefferson County, Idaho	0.9842670749%
ID38	Jerome City, Idaho	0.4169017424%
ID39	Jerome County, Idaho	0.6223444291%
ID40	Kootenai County, Idaho	5.6394798565%
ID41	Kuna City, Idaho	0.1849461724%
ID42	Latah County, Idaho	1.2943861166%
ID43	Lemhi County, Idaho	0.4880814284%
ID44	Lewis County, Idaho	0.2882543555%
ID45	Lewiston City, Idaho	2.0176549375%
ID46	Lincoln County, Idaho	0.1930184422%
ID47	Madison County, Idaho	1.2748404845%
ID48	Meridian City, Idaho	2.4045650754%
ID49	Minidoka County, Idaho	0.9140620922%

State ID	Qualifying Subdivision	Consolidated State Allocation
ID50	Moscow City, Idaho	0.6590552650%
ID51	Mountain Home City, Idaho	0.5706694591%
ID52	Nampa City, Idaho	3.3274647954%
ID53	Nez Perce County, Idaho	1.2765833482%
ID54	Oneida County, Idaho	0.2371656647%
ID55	Owyhee County, Idaho	0.5554298409%
ID56	Payette County, Idaho	1.2750728102%
ID57	Pocatello City, Idaho	2.9494898116%
ID58	Post Falls City, Idaho	0.6781328826%
ID59	Power County, Idaho	0.3505171035%
ID60	Preston City, Idaho	0.1496220047%
ID61	Rexburg City, Idaho	0.1336231941%
ID62	Shoshone County, Idaho	1.2841091340%
ID63	Star City, Idaho	0.0001322772%
ID64	Teton County, Idaho	0.4258195211%
ID65	Twin Falls City, Idaho	1.8245765222%
ID66	Twin Falls County, Idaho	3.3104301873%
ID67	Valley County, Idaho	0.8074710814%
ID68	Washington County, Idaho	0.4917358652%

State ID	Qualifying Subdivision	Consolidated State Allocation
IL1	Adams County, Illinois	
IL3	Addison Village, Illinois	
IL4	Alexander County, Illinois	
IL6	Algonquin Village, Illinois	
IL10	Anna City, Illinois	
IL13	Arlington Heights Village, Illinois	
IL14	Aurora City, Illinois	
IL19	Bartlett Village, Illinois	
IL22	Bedford Park Village, Illinois	
IL23	Belleville City, Illinois	
IL24	Bellwood Village, Illinois	
IL27	Bensenville Village, Illinois	
IL28	Benton City, Illinois	
IL30	Berkeley Village, Illinois	
IL31	Berwyn City, Illinois	
IL37	Bloomington City, Illinois	
IL39	Bolingbrook Village, Illinois	
IL40	Bond County, Illinois	
IL41	Boone County, Illinois	
IL46	Bridgeview Village, Illinois	
IL47	Broadview Village, Illinois	
IL49	Brown County, Illinois	Allocations in Illinois
IL51	Buffalo Grove Village, Illinois	will be made in
IL52	Burbank City, Illinois	accordance with the
IL53	Bureau County, Illinois	Illinois Opioid Allocation
IL56	Calhoun County, Illinois	Agreement.
IL57	Calumet City, Illinois	
IL63	Carbondale City, Illinois	
IL65	Carol Stream Village, Illinois	
IL66	Carpentersville Village, Illinois	
IL67	Carroll County, Illinois	
IL70	Cass County, Illinois	
IL75	Champaign City, Illinois	
IL76	Champaign County, Illinois	
IL84	Chicago City, Illinois	
IL85	Chicago Heights City, Illinois	
IL86	Chicago Ridge Village, Illinois	
IL87	Christian County, Illinois	
IL88	Clark County, Illinois	
IL89	Clay County, Illinois	
IL90	Clinton County, Illinois	
IL91	Coles County, Illinois	
IL96	Cook County, Illinois	
IL99	Countryside City, Illinois	
IL100	Crawford County, Illinois	
IL104	Crystal Lake City, Illinois	
IL106	Cumberland County, Illinois	

State ID	Qualifying Subdivision	Consolidated State Allocation
IL107	Danville City, Illinois	
IL110	De Witt County, Illinois	
IL111	Decatur City, Illinois	
IL114	Dekalb City, Illinois	
IL115	Dekalb County, Illinois	
IL117	Des Plaines City, Illinois	
IL120	Dolton Village, Illinois	
IL122	Douglas County, Illinois	
IL125	Downers Grove Village, Illinois	
IL127	Dupage County, Illinois	
IL131	Edgar County, Illinois	
IL132	Edwards County, Illinois	
IL136	Effingham County, Illinois	
IL138	Elgin City, Illinois	
IL141	Elk Grove Village, Illinois	
IL142	Elmhurst City, Illinois	
IL144	Evanston City, Illinois	
IL145	Evergreen Park Village, Illinois	
IL147	Fayette County, Illinois	
IL150	Ford County, Illinois	
IL151	Forest Park Village, Illinois	
IL155	Franklin County, Illinois	Allocations in Illinois will be made in accordance with the Illinois Opioid Allocation Agreement.
IL156	Franklin Park Village, Illinois	
IL160	Fulton County, Illinois	
IL162	Galesburg City, Illinois	
IL163	Gallatin County, Illinois	
IL168	Glendale Heights Village, Illinois	
IL169	Glenview Village, Illinois	
IL174	Granite City, Illinois	
IL177	Greene County, Illinois	
IL180	Grundy County, Illinois	
IL181	Gurnee Village, Illinois	
IL182	Hamilton County, Illinois	
IL183	Hancock County, Illinois	
IL184	Hanover Park Village, Illinois	
IL186	Hardin County, Illinois	
IL188	Harrisburg City, Illinois	
IL190	Harvey City, Illinois	
IL191	Harwood Heights Village, Illinois	
IL193	Henderson County, Illinois	
IL194	Henry County, Illinois	
IL195	Herrin City, Illinois	
IL199	Hillside Village, Illinois	
IL201	Hodgkins Village, Illinois	
IL202	Hoffman Estates Village, Illinois	
IL206	Iroquois County, Illinois	
IL207	Jackson County, Illinois	

State ID	Qualifying Subdivision	Consolidated State Allocation
IL210	Jasper County, Illinois	
IL211	Jefferson County, Illinois	
IL212	Jersey County, Illinois	
IL213	Jo Daviess County, Illinois	
IL214	Johnson County, Illinois	
IL215	Joliet City, Illinois	
IL218	Kane County, Illinois	
IL219	Kankakee City, Illinois	
IL220	Kankakee County, Illinois	
IL222	Kendall County, Illinois	
IL224	Knox County, Illinois	
IL225	La Grange Park Village, Illinois	
IL227	Lake County, Illinois	
IL233	Lasalle County, Illinois	
IL234	Lawrence County, Illinois	
IL235	Lee County, Illinois	
IL247	Livingston County, Illinois	
IL250	Logan County, Illinois	
IL251	Lombard Village, Illinois	
IL254	Lyons Township, Illinois	
IL255	Lyons Village, Illinois	
IL259	Macon County, Illinois	Allocations in Illinois will be made in accordance with the Illinois Opioid Allocation Agreement.
IL260	Macoupin County, Illinois	
IL261	Madison County, Illinois	
IL266	Marion City, Illinois	
IL267	Marion County, Illinois	
IL269	Marshall County, Illinois	
IL270	Mason County, Illinois	
IL271	Massac County, Illinois	
IL275	Maywood Village, Illinois	
IL276	McCook Village, Illinois	
IL277	McDonough County, Illinois	
IL279	McHenry County, Illinois	
IL281	McLean County, Illinois	
IL283	Melrose Park Village, Illinois	
IL284	Menard County, Illinois	
IL285	Mercer County, Illinois	
IL286	Merrionette Park Village, Illinois	
IL287	Metropolis City, Illinois	
IL292	Moline City, Illinois	
IL295	Monroe County, Illinois	
IL296	Montgomery County, Illinois	
IL299	Morgan County, Illinois	
IL304	Moultrie County, Illinois	
IL305	Mount Prospect Village, Illinois	
IL307	Mundelein Village, Illinois	
IL309	Naperville City, Illinois	

State ID	Qualifying Subdivision	Consolidated State Allocation
IL317	Normal Town, Illinois	
IL322	North Riverside Village, Illinois	
IL323	Northbrook Village, Illinois	
IL325	Northlake City, Illinois	
IL329	Oak Lawn Village, Illinois	
IL331	Oak Park Village, Illinois	
IL333	Ogle County, Illinois	
IL334	Orland Park Village, Illinois	
IL337	Oswego Village, Illinois	
IL341	Palatine Village, Illinois	
IL342	Palos Heights City, Illinois	
IL343	Palos Hills City, Illinois	
IL346	Park Ridge City, Illinois	
IL347	Pekin City, Illinois	
IL350	Peoria City, Illinois	
IL351	Peoria County, Illinois	
IL352	Perry County, Illinois	
IL354	Piatt County, Illinois	
IL355	Pike County, Illinois	
IL356	Plainfield Village, Illinois	
IL360	Pope County, Illinois	
IL361	Posen Village, Illinois	Allocations in Illinois will be made in accordance with the Illinois Opioid Allocation Agreement.
IL362	Princeton City, Illinois	
IL365	Pulaski County, Illinois	
IL366	Putnam County, Illinois	
IL367	Quincy City, Illinois	
IL369	Randolph County, Illinois	
IL373	Richland County, Illinois	
IL376	River Forest Village, Illinois	
IL377	River Grove Village, Illinois	
IL380	Riverside Village, Illinois	
IL381	Rock Island City, Illinois	
IL382	Rock Island County, Illinois	
IL384	Rockford City, Illinois	
IL388	Romeoville Village, Illinois	
IL395	Saline County, Illinois	
IL396	Sangamon County, Illinois	
IL399	Schaumburg Village, Illinois	
IL400	Schiller Park Village, Illinois	
IL401	Schuyler County, Illinois	
IL402	Scott County, Illinois	
IL403	Sesser City, Illinois	
IL404	Shelby County, Illinois	
IL408	Skokie Village, Illinois	
IL413	Springfield City, Illinois	
IL414	St Clair County, Illinois	
IL415	St. Charles City, Illinois	

State ID	Qualifying Subdivision	Consolidated State Allocation
IL416	Stark County, Illinois	
IL417	Stephenson County, Illinois	
IL421	Stone Park Village, Illinois	
IL422	Streamwood Village, Illinois	
IL423	Streator City, Illinois	
IL425	Summit Village, Illinois	
IL431	Tazewell County, Illinois	
IL433	Tinley Park Village, Illinois	
IL436	Union County, Illinois	
IL437	Urbana City, Illinois	
IL438	Vermilion County, Illinois	
IL441	Wabash County, Illinois	Allocations in Illinois will be made in accordance with the Illinois Opioid Allocation Agreement.
IL442	Warren County, Illinois	
IL446	Washington County, Illinois	
IL451	Waukegan City, Illinois	
IL453	Wayne County, Illinois	
IL456	West Frankfort City, Illinois	
IL461	Wheaton City, Illinois	
IL463	Wheeling Village, Illinois	
IL464	White County, Illinois	
IL465	Whiteside County, Illinois	
IL466	Will County, Illinois	
IL467	Williamson County, Illinois	
IL470	Winnebago County, Illinois	
IL475	Woodford County, Illinois	
IL476	Woodridge Village, Illinois	
IL485	Cicero Town, Illinois	

State ID	Qualifying Subdivision	Consolidated State Allocation
IN1	Adams County, Indiana	0.3093066943%
IN2	Advance Town, Indiana	0.0005697863%
IN3	Akron Town, Indiana	0.0003285254%
IN4	Alamo Town, Indiana	0.0005749195%
IN5	Albany Town, Indiana	0.0256968486%
IN6	Albion Town, Indiana	0.0216621457%
IN7	Alexandria City, Indiana	0.1062420448%
IN8	Alfordsville Town, Indiana	0.0001539963%
IN9	Allen County, Indiana	1.5529191846%
IN10	Alton Town, Indiana	0.0000307993%
IN11	Altona Town, Indiana	0.0012473700%
IN12	Ambia Town, Indiana	0.0006519177%
IN13	Amboy Town, Indiana	0.0004825217%
IN14	Amo Town, Indiana	0.0005749195%
IN15	Anderson City, Indiana	1.3828918739%
IN16	Andrews Town, Indiana	0.0060520544%
IN17	Angola City, Indiana	0.0947539211%
IN18	Arcadia Town, Indiana	0.0063138481%
IN19	Argos Town, Indiana	0.0167907295%
IN20	Ashley Town, Indiana	0.0062368500%
IN21	Atlanta Town, Indiana	0.0011652386%
IN22	Attica City, Indiana	0.0207587007%
IN23	Auburn City, Indiana	0.1472615249%
IN24	Aurora City, Indiana	0.0094399730%
IN25	Austin City, Indiana	0.0232277747%
IN26	Avilla Town, Indiana	0.0199579200%
IN27	Avon Town, Indiana	0.0164108720%
IN28	Bainbridge Town, Indiana	0.0014783644%
IN29	Bargersville Town, Indiana	0.0121041089%
IN30	Bartholomew County, Indiana	1.1839235258%
IN31	Batesville City, Indiana	0.1547046792%
IN32	Battle Ground Town, Indiana	0.0136286722%
IN33	Bedford City, Indiana	0.3269803359%
IN34	Beech Grove City, Indiana	0.0544736232%
IN35	Benton County, Indiana	0.0744315432%
IN36	Berne City, Indiana	0.0028078658%
IN37	Bethany Town, Indiana	0.0002720601%
IN38	Beverly Shores Town, Indiana	0.0154458285%
IN39	Bicknell City, Indiana	0.0013295014%
IN40	Birdseye Town, Indiana	0.0029464625%
IN41	Blackford County, Indiana	0.2715365360%
IN42	Bloomfield Town, Indiana	0.0042862302%
IN43	Bloomingdale Town, Indiana	0.0026025374%
IN44	Bloomington City, Indiana	0.8390231543%
IN45	Blountsville Town, Indiana	0.0002566605%
IN46	Bluffton City, Indiana	0.1002977878%
IN47	Boone County, Indiana	0.6762798684%
IN48	Boonville City, Indiana	0.1007854427%
IN49	Borden Town, Indiana	0.0017504246%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN50	Boston Town, Indiana	0.0005697863%
IN51	Boswell Town, Indiana	0.0021097493%
IN52	Bourbon Town, Indiana	0.0173040505%
IN53	Brazil City, Indiana	0.0626816258%
IN54	Bremen Town, Indiana	0.0529387935%
IN55	Bristol Town, Indiana	0.0158462189%
IN56	Brook Town, Indiana	0.0037369768%
IN57	Brooklyn Town, Indiana	0.0065705086%
IN58	Brooksburg Town, Indiana	0.0009547770%
IN59	Brookston Town, Indiana	0.0116677860%
IN60	Brookville Town, Indiana	0.0538935705%
IN61	Brown County, Indiana	0.1879165471%
IN62	Brownsburg Town, Indiana	0.1125918254%
IN63	Brownstown, Indiana	0.0033622525%
IN64	Bruceville Town, Indiana	0.0002412609%
IN65	Bryant Town, Indiana	0.0003747243%
IN66	Bunker Hill Town, Indiana	0.0010985069%
IN67	Burket Town, Indiana	0.0011139065%
IN68	Burlington Town, Indiana	0.0063805799%
IN69	Burnettsville Town, Indiana	0.0004619889%
IN70	Burns Harbor Town, Indiana	0.0397977762%
IN71	Butler City, Indiana	0.0239156248%
IN72	Cadiz Town, Indiana	0.0002823265%
IN73	Cambridge City Town, Indiana	0.0241517525%
IN74	Camden Town, Indiana	0.0064216456%
IN75	Campbellsburg Town, Indiana	0.0081874698%
IN76	Cannelburg Town, Indiana	0.0002258612%
IN77	Cannelton City, Indiana	0.0018325559%
IN78	Carbon Town, Indiana	0.0026846688%
IN79	Carlisle Town, Indiana	0.0017658242%
IN80	Carmel City, Indiana	0.3676250917%
IN81	Carroll County, Indiana	0.1629794136%
IN82	Carthage Town, Indiana	0.0013141017%
IN83	Cass County, Indiana	0.3389612478%
IN84	Cayuga Town, Indiana	0.0078486779%
IN85	Cedar Grove Town, Indiana	0.0004055236%
IN86	Cedar Lake Town, Indiana	0.0511678360%
IN87	Center Point Town, Indiana	0.0016374940%
IN88	Centerville Town, Indiana	0.0350752231%
IN89	Chalmers Town, Indiana	0.0006827169%
IN90	Chandler Town, Indiana	0.0347518309%
IN91	Charlestown City, Indiana	0.0146039821%
IN92	Chesterfield Town, Indiana	0.0379036217%
IN93	Chesterton Town, Indiana	0.2160003384%
IN94	Chrisney Town, Indiana	0.0032339222%
IN95	Churubusco Town, Indiana	0.0000564653%
IN96	Cicero Town, Indiana	0.0173297165%
IN97	Clark County, Indiana	1.9376070659%
IN98	Clarks Hill Town, Indiana	0.0040603690%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN99	Clarksville Town, Indiana	0.1071762890%
IN100	Clay City Town, Indiana	0.0057697279%
IN101	Clay County, Indiana	0.2954521608%
IN102	Claypool Town, Indiana	0.0024690740%
IN103	Clayton Town, Indiana	0.0006981165%
IN104	Clear Lake Town, Indiana	0.0019762858%
IN105	Clifford Town, Indiana	0.0002309944%
IN106	Clinton City, Indiana	0.0336584572%
IN107	Clinton County, Indiana	0.2744214000%
IN108	Cloverdale Town, Indiana	0.0050202793%
IN109	Coatesville Town, Indiana	0.0007494486%
IN110	Colfax Town, Indiana	0.0046147557%
IN111	Columbia City, Indiana	0.0886402681%
IN112	Columbus City, Indiana	0.0764283618%
IN113	Connersville City, Indiana	0.4636161164%
IN114	Converse Town, Indiana	0.0045736900%
IN115	Corunna Town, Indiana	0.0016374940%
IN116	Corydon Town, Indiana	0.0069811654%
IN117	Country Club Heights Town, Indiana	0.0012217040%
IN118	Covington City, Indiana	0.0257122483%
IN119	Crandall Town, Indiana	0.0000153996%
IN120	Crane Town, Indiana	0.0015656290%
IN121	Crawford County, Indiana	0.1338946464%
IN122	Crawfordsville City, Indiana	0.2738413473%
IN123	Cromwell Town, Indiana	0.0034546502%
IN124	Crothersville Town, Indiana	0.0018222895%
IN125	Crown Point City, Indiana	0.1246189362%
IN126	Culver Town, Indiana	0.0289821030%
IN127	Cynthiana Town, Indiana	0.0032749879%
IN128	Dale Town, Indiana	0.0059750563%
IN129	Daleville Town, Indiana	0.0199784528%
IN130	Dana Town, Indiana	0.0050510785%
IN131	Danville Town, Indiana	0.0039474384%
IN132	Darlington Town, Indiana	0.0074790868%
IN133	Darmstadt Town, Indiana	0.0109491367%
IN134	Daviess County, Indiana	0.3758998260%
IN135	Dayton Town, Indiana	0.0114727241%
IN136	DeKalb County, Indiana	0.2773473296%
IN137	De Motte Town, Indiana	0.0070940960%
IN138	Dearborn County, Indiana	0.9577234994%
IN139	Decatur City, Indiana	0.0090909147%
IN140	Decatur County, Indiana	0.3533239690%
IN141	Decker Town, Indiana	0.0001231970%
IN142	Delaware County, Indiana	1.2035734533%
IN143	Delphi City, Indiana	0.0177249737%
IN144	Denver Town, Indiana	0.0006005856%
IN145	Dillsboro Town, Indiana	0.0060007223%
IN146	Dublin Town, Indiana	0.0051588759%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN147	Dubois County, Indiana	0.2728968366%
IN148	Dugger Town, Indiana	0.0023407437%
IN149	Dune Acres Town, Indiana	0.0046917538%
IN150	Dunkirk City, Indiana	0.0079872746%
IN151	Dunreith Town, Indiana	0.0003387919%
IN152	Dupont Town, Indiana	0.0039782377%
IN153	Dyer Town, Indiana	0.0533186510%
IN154	Earl Park Town, Indiana	0.0009188446%
IN155	East Chicago City, Indiana	0.4621018195%
IN156	East Germantown, Indiana	0.0015861619%
IN157	Eaton Town, Indiana	0.0166418664%
IN158	Economy Town, Indiana	0.0007648483%
IN159	Edgewood Town, Indiana	0.0243673473%
IN160	Edinburgh Town, Indiana	0.0198963215%
IN161	Edwardsport Town, Indiana	0.0001488631%
IN162	Elberfeld Town, Indiana	0.0031569241%
IN163	Elizabeth Town, Indiana	0.0000153996%
IN164	Elizabethtown, Indiana	0.0005133210%
IN165	Elkhart City, Indiana	0.5425802839%
IN166	Elkhart County, Indiana	1.1662652839%
IN167	Ellettsville Town, Indiana	0.0677789032%
IN168	Elnora Town, Indiana	0.0013551674%
IN169	Elwood City, Indiana	0.2112777853%
IN170	English Town, Indiana	0.0003747243%
IN171	Etna Green Town, Indiana	0.0033725189%
IN172	Evansville City, Indiana	1.9321196646%
IN173	Fairland Town, Indiana	0.0005133210%
IN174	Fairmount Town, Indiana	0.0104409489%
IN175	Fairview Park Town, Indiana	0.0093373088%
IN176	Farmersburg Town, Indiana	0.0039731044%
IN177	Farmland Town, Indiana	0.0182074954%
IN178	Fayette County, Indiana	0.2945127834%
IN179	Ferdinand Town, Indiana	0.0189415444%
IN180	Fillmore Town, Indiana	0.0010420416%
IN181	Fishers City, Indiana	0.1521842732%
IN182	Flora Town, Indiana	0.0175966435%
IN183	Floyd County, Indiana	1.5760956272%
IN184	Fort Branch Town, Indiana	0.0073250905%
IN185	Fort Wayne City, Indiana	2.7340040454%
IN186	Fortville Town, Indiana	0.0152712994%
IN187	Fountain City Town, Indiana	0.0045993560%
IN188	Fountain County, Indiana	0.1640779205%
IN189	Fowler Town, Indiana	0.0093886409%
IN190	Fowlerton Town, Indiana	0.0022688788%
IN191	Francesville Town, Indiana	0.0011498390%
IN192	Francisco Town, Indiana	0.0027668001%
IN193	Frankfort City, Indiana	0.1520302769%
IN194	Franklin City, Indiana	0.1074072834%
IN195	Franklin County, Indiana	0.2948618417%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN196	Frankton Town, Indiana	0.0115548554%
IN197	Fremont Town, Indiana	0.0201427156%
IN198	French Lick Town, Indiana	0.0211642243%
IN199	Fulton County, Indiana	0.2359941908%
IN200	Fulton Town, Indiana	0.0002925930%
IN201	Galveston Town, Indiana	0.0012730360%
IN202	Garrett City, Indiana	0.0387249353%
IN203	Gary City, Indiana	0.7295266544%
IN204	Gas City, Indiana	0.0544736232%
IN205	Gaston Town, Indiana	0.0083209332%
IN206	Geneva Town, Indiana	0.0008367132%
IN207	Gentryville Town, Indiana	0.0017966235%
IN208	Georgetown, Indiana	0.0044864254%
IN209	Gibson County, Indiana	0.2588523744%
IN210	Glenwood Town, Indiana	0.0027103348%
IN211	Goodland Town, Indiana	0.0046352885%
IN212	Goshen City, Indiana	0.2386377939%
IN213	Gosport Town, Indiana	0.0097736316%
IN214	Grabill Town, Indiana	0.0057543283%
IN215	Grandview Town, Indiana	0.0048406169%
IN216	Grant County, Indiana	0.7449878825%
IN217	Greencastle City, Indiana	0.0286279115%
IN218	Greendale City, Indiana	0.0136543383%
IN219	Greene County, Indiana	0.4315540875%
IN220	Greenfield City, Indiana	0.0612289274%
IN221	Greens Fork Town, Indiana	0.0017504246%
IN222	Greensboro Town, Indiana	0.0002720601%
IN223	Greensburg City, Indiana	0.0195369968%
IN224	Greentown, Indiana	0.0017452914%
IN225	Greenville Town, Indiana	0.0009291110%
IN226	Greenwood City, Indiana	0.1803758618%
IN227	Griffin Town, Indiana	0.0010112423%
IN228	Griffith Town, Indiana	0.0696165923%
IN229	Hagerstown, Indiana	0.0234433695%
IN230	Hamilton County, Indiana	2.0269762499%
IN231	Hamilton Town, Indiana	0.0034341174%
IN232	Hamlet Town, Indiana	0.0188234806%
IN233	Hammond City, Indiana	1.0770244302%
IN234	Hancock County, Indiana	0.8954422640%
IN235	Hanover Town, Indiana	0.0079667417%
IN236	Hardinsburg Town, Indiana	0.0034649167%
IN237	Harmony Town, Indiana	0.0043529620%
IN238	Harrison County, Indiana	0.5610033742%
IN239	Hartford City, Indiana	0.1033058488%
IN240	Hartsville Town, Indiana	0.0003849907%
IN241	Haubstadt Town, Indiana	0.0066783060%
IN242	Hazleton Town, Indiana	0.0014937641%
IN243	Hebron Town, Indiana	0.0722037301%
IN244	Hendricks County, Indiana	1.5700846384%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN245	Henry County, Indiana	1.1653207733%
IN246	Highland Town, Indiana	0.0864997196%
IN247	Hillsboro Town, Indiana	0.0040501026%
IN248	Hobart City, Indiana	0.1594631648%
IN249	Holland Town, Indiana	0.0044453598%
IN250	Holton Town, Indiana	0.0060058556%
IN251	Hope Town, Indiana	0.0036805115%
IN252	Howard County, Indiana	1.8693507742%
IN253	Hudson Town, Indiana	0.0029669953%
IN254	Huntertown, Indiana	0.0415225347%
IN255	Huntingburg City, Indiana	0.0455829037%
IN256	Huntington City, Indiana	0.2487142849%
IN257	Huntington County, Indiana	0.2617013059%
IN258	Hymera Town, Indiana	0.0020173515%
IN259	Indian Village Town, Indiana	0.0006005856%
IN260	Indianapolis City, Indiana	15.8348539612%
IN261	Ingalls Town, Indiana	0.0015194301%
IN262	Jackson County, Indiana	0.7183516565%
IN263	Jamestown, Indiana	0.0010471748%
IN264	Jasonville City, Indiana	0.0039628380%
IN265	Jasper City, Indiana	0.0892100544%
IN266	Jasper County, Indiana	0.4269598647%
IN267	Jay County, Indiana	0.3117552354%
IN268	Jefferson County, Indiana	0.3577898616%
IN269	Jeffersonville City, Indiana	0.1772754031%
IN270	Jennings County, Indiana	0.4175198917%
IN271	Johnson County, Indiana	1.7413644524%
IN272	Jonesboro City, Indiana	0.0065499758%
IN273	Jonesville Town, Indiana	0.0001847956%
IN274	Kempton Town, Indiana	0.0027462673%
IN275	Kendallville City, Indiana	0.0955393022%
IN276	Kennard Town, Indiana	0.0009034449%
IN277	Kentland Town, Indiana	0.0053796040%
IN278	Kewanna Town, Indiana	0.0005389870%
IN279	Kingman Town, Indiana	0.0037934421%
IN280	Kingsbury Town, Indiana	0.0012935689%
IN281	Kingsford Heights Town, Indiana	0.0045942228%
IN282	Kirklin Town, Indiana	0.0053282719%
IN283	Knightstown, Indiana	0.0036856447%
IN284	Knightsville Town, Indiana	0.0053026058%
IN285	Knox City, Indiana	0.0998614649%
IN286	Knox County, Indiana	0.5298755895%
IN287	Kokomo City, Indiana	0.2824600066%
IN288	Kosciusko County, Indiana	0.4936351277%
IN289	Kouts Town, Indiana	0.0383502110%
IN290	La Crosse Town, Indiana	0.0028283986%
IN291	La Fontaine Town, Indiana	0.0017555578%
IN292	La Paz Town, Indiana	0.0034187178%
IN293	La Porte City, Indiana	0.1637904607%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN294	La Porte County, Indiana	0.7761413333%
IN295	Laconia Town, Indiana	0.0000051332%
IN296	Ladoga Town, Indiana	0.0108156732%
IN297	Lafayette City, Indiana	1.0122433215%
IN298	Lagrange County, Indiana	0.2088446438%
IN299	Lagrange Town, Indiana	0.0232996396%
IN300	Lagro Town, Indiana	0.0008264468%
IN301	Lake County, Indiana	1.8344141478%
IN302	Lake Station City, Indiana	0.0738514905%
IN303	Lakeville Town, Indiana	0.0035470480%
IN304	Lanesville Town, Indiana	0.0000513321%
IN305	Lapel Town, Indiana	0.0216570125%
IN306	Larwill Town, Indiana	0.0024998732%
IN307	Laurel Town, Indiana	0.0013295014%
IN308	Lawrence City, Indiana	0.1413634668%
IN309	Lawrence County, Indiana	0.4144758982%
IN310	Lawrenceburg City, Indiana	0.0397721101%
IN311	Leavenworth Town, Indiana	0.0001385967%
IN312	Lebanon City, Indiana	0.0221087349%
IN313	Leesburg Town, Indiana	0.0032236558%
IN314	Leo-Cedarville Town, Indiana	0.0196037285%
IN315	Lewisville Town, Indiana	0.0006981165%
IN316	Liberty Town, Indiana	0.0173399830%
IN317	Ligonier City, Indiana	0.0407012211%
IN318	Linden Town, Indiana	0.0066885725%
IN319	Linton City, Indiana	0.0214516841%
IN320	Little York Town, Indiana	0.0026795356%
IN321	Livonia Town, Indiana	0.0017966235%
IN322	Lizton Town, Indiana	0.0006827169%
IN323	Logansport City, Indiana	0.0184076906%
IN324	Long Beach Town, Indiana	0.0039115059%
IN325	Loogootee City, Indiana	0.0178533039%
IN326	Losantville Town, Indiana	0.0065191765%
IN327	Lowell Town, Indiana	0.0413531388%
IN328	Lynn Town, Indiana	0.0149633068%
IN329	Lynnville Town, Indiana	0.0045377575%
IN330	Lyons Town, Indiana	0.0016426272%
IN331	Mackey Town, Indiana	0.0006159852%
IN332	Macy Town, Indiana	0.0002617937%
IN333	Madison City, Indiana	0.1309584504%
IN334	Madison County, Indiana	1.3792626945%
IN335	Marengo Town, Indiana	0.0004825217%
IN336	Marion City, Indiana	0.7936558454%
IN337	Markle Town, Indiana	0.0068887677%
IN338	Markleville Town, Indiana	0.0080540063%
IN339	Marshall County, Indiana	0.2679792216%
IN340	Marshall Town, Indiana	0.0025409389%
IN341	Martin County, Indiana	0.0865151193%
IN342	Martinsville City, Indiana	0.0794004904%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN343	Matthews Town, Indiana	0.0050818778%
IN344	Mauckport Town, Indiana	0.0000051332%
IN345	McCordsville Town, Indiana	0.0170833225%
IN346	Mecca Town, Indiana	0.0025460721%
IN347	Medaryville Town, Indiana	0.0008110472%
IN348	Medora Town, Indiana	0.0008007807%
IN349	Mellott Town, Indiana	0.0014732312%
IN350	Mentone Town, Indiana	0.0056311312%
IN351	Merom Town, Indiana	0.0005903191%
IN352	Merrillville Town, Indiana	0.1076947432%
IN353	Miami County, Indiana	0.2157180118%
IN354	Michiana Shores Town, Indiana	0.0016066947%
IN355	Michigan City, Indiana	0.5192652447%
IN356	Michigantown, Indiana	0.0030593931%
IN357	Middlebury Town, Indiana	0.0186335519%
IN358	Middletown, Indiana	0.0039063727%
IN359	Milan Town, Indiana	0.0291463657%
IN360	Milford Town, Indiana	0.0156562901%
IN361	Millersburg Town, Indiana	0.0043940277%
IN362	Millhousen Town, Indiana	0.0001693959%
IN363	Milltown, Indiana	0.0004773885%
IN364	Milton Town, Indiana	0.0000564653%
IN365	Mishawaka City, Indiana	0.5537912143%
IN366	Mitchell City, Indiana	0.0424721785%
IN367	Modoc Town, Indiana	0.0044453598%
IN368	Monon Town, Indiana	0.0132898804%
IN369	Monroe City Town, Indiana	0.0002669269%
IN370	Monroe County, Indiana	1.1604288242%
IN371	Monroe Town, Indiana	0.0007597151%
IN372	Monroeville Town, Indiana	0.0067501710%
IN373	Monrovia Town, Indiana	0.0058929249%
IN374	Monterey Town, Indiana	0.0002874598%
IN375	Montezuma Town, Indiana	0.0078948768%
IN376	Montgomery County, Indiana	0.3881322652%
IN377	Montgomery Town, Indiana	0.0003028594%
IN378	Monticello City, Indiana	0.0859504662%
IN379	Montpelier City, Indiana	0.0238026942%
IN380	Mooreland Town, Indiana	0.0007083830%
IN381	Moores Hill Town, Indiana	0.0009804431%
IN382	Mooresville Town, Indiana	0.0679534323%
IN383	Morgan County, Indiana	1.1892004656%
IN384	Morgantown, Indiana	0.0033263200%
IN385	Morocco Town, Indiana	0.0043324291%
IN386	Morristown, Indiana	0.0014218991%
IN387	Mount Auburn Town, Indiana	0.0004568557%
IN388	Mount Ayr Town, Indiana	0.0004619889%
IN389	Mount Carmel Town, Indiana	0.0002207280%
IN390	Mount Etna Town, Indiana	0.0009496438%
IN391	Mount Summit Town, Indiana	0.0006724505%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN392	Mount Vernon City, Indiana	0.0528001968%
IN393	Mulberry Town, Indiana	0.0102048212%
IN394	Muncie City, Indiana	1.1426730513%
IN395	Munster Town, Indiana	0.1401776953%
IN396	Napoleon Town, Indiana	0.0029207964%
IN397	Nappanee City, Indiana	0.0750937273%
IN398	Nashville Town, Indiana	0.0122940377%
IN399	New Albany City, Indiana	0.1005493151%
IN400	New Amsterdam Town, Indiana	0.0000000000%
IN401	New Carlisle Town, Indiana	0.0260048412%
IN402	New Castle City, Indiana	0.0525435363%
IN403	New Chicago Town, Indiana	0.0302397394%
IN404	New Harmony Town, Indiana	0.0046404217%
IN405	New Haven City, Indiana	0.1210256893%
IN406	New Market Town, Indiana	0.0055849323%
IN407	New Middletown, Indiana	0.0000102664%
IN408	New Palestine Town, Indiana	0.0039269056%
IN409	New Pekin Town, Indiana	0.0237000300%
IN410	New Point Town, Indiana	0.0004311896%
IN411	New Richmond Town, Indiana	0.0029464625%
IN412	New Ross Town, Indiana	0.0030542599%
IN413	New Whiteland Town, Indiana	0.0149735732%
IN414	Newberry Town, Indiana	0.0004311896%
IN415	Newburgh Town, Indiana	0.0335968586%
IN416	Newport Town, Indiana	0.0042554310%
IN417	Newton County, Indiana	0.1317386983%
IN418	Newtown, Indiana	0.0019352201%
IN419	Noble County, Indiana	0.3308610426%
IN420	Noblesville City, Indiana	0.1813255057%
IN421	North Judson Town, Indiana	0.0550690756%
IN422	North Liberty Town, Indiana	0.0258405785%
IN423	North Manchester Town, Indiana	0.0190904075%
IN424	North Salem Town, Indiana	0.0007289158%
IN425	North Vernon City, Indiana	0.1513680928%
IN426	North Webster Town, Indiana	0.0116061875%
IN427	Oakland City, Indiana	0.0117550506%
IN428	Oaktown, Indiana	0.0003028594%
IN429	Odon Town, Indiana	0.0001129306%
IN430	Ogden Dunes Town, Indiana	0.0007545819%
IN431	Ohio County, Indiana	0.0605102780%
IN432	Oldenburg Town, Indiana	0.0017555578%
IN433	Onward Town, Indiana	0.0000205328%
IN434	Oolitic Town, Indiana	0.0059288574%
IN435	Orange County, Indiana	0.1597198253%
IN436	Orestes Town, Indiana	0.0064113791%
IN437	Orland Town, Indiana	0.0025255393%
IN438	Orleans Town, Indiana	0.0250859967%
IN439	Osceola Town, Indiana	0.0333607310%
IN440	Osgood Town, Indiana	0.0249576664%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN441	Ossian Town, Indiana	0.0269134194%
IN442	Otterbein Town, Indiana	0.0047636188%
IN443	Owen County, Indiana	0.2265234186%
IN444	Owensville Town, Indiana	0.0056362644%
IN445	Oxford Town, Indiana	0.0039166391%
IN446	Palmyra Town, Indiana	0.0000821314%
IN447	Paoli Town, Indiana	0.0428417696%
IN448	Paragon Town, Indiana	0.0022226799%
IN449	Parke County, Indiana	0.1418203225%
IN450	Parker City Town, Indiana	0.0194291994%
IN451	Patoka Town, Indiana	0.0042605642%
IN452	Patriot Town, Indiana	0.0022740120%
IN453	Pendleton Town, Indiana	0.0746163388%
IN454	Pennville Town, Indiana	0.0010009759%
IN455	Perry County, Indiana	0.2167651867%
IN456	Perrysville Town, Indiana	0.0037934421%
IN457	Peru City, Indiana	0.1826036749%
IN458	Petersburg City, Indiana	0.0103588175%
IN459	Pierceton Town, Indiana	0.0102869526%
IN460	Pike County, Indiana	0.1238284218%
IN461	Pine Village Town, Indiana	0.0008880453%
IN462	Pittsboro Town, Indiana	0.0022842784%
IN463	Plainfield Town, Indiana	0.1021046776%
IN464	Plainville Town, Indiana	0.0007186494%
IN465	Plymouth City, Indiana	0.1356142717%
IN466	Poneto Town, Indiana	0.0011087733%
IN467	Portage City, Indiana	0.4894412953%
IN468	Porter County, Indiana	1.1076491603%
IN469	Porter Town, Indiana	0.1634722017%
IN470	Portland City, Indiana	0.0123299701%
IN471	Posey County, Indiana	0.1942714610%
IN472	Poseyville Town, Indiana	0.0044658926%
IN473	Pottawattamie Park Town, Indiana	0.0012319704%
IN474	Princes Lakes Town, Indiana	0.0039063727%
IN475	Princeton City, Indiana	0.0453005772%
IN476	Pulaski County, Indiana	0.1885530652%
IN477	Putnam County, Indiana	0.4476056348%
IN478	Randolph County, Indiana	0.1948463805%
IN479	Redkey Town, Indiana	0.0011601054%
IN480	Remington Town, Indiana	0.0024228751%
IN481	Rensselaer City, Indiana	0.0101278231%
IN482	Reynolds Town, Indiana	0.0007083830%
IN483	Richland Town, Indiana	0.0026898020%
IN484	Richmond City, Indiana	0.6900830697%
IN485	Ridgeville Town, Indiana	0.0178943696%
IN486	Riley Town, Indiana	0.0014629648%
IN487	Ripley County, Indiana	0.2963915383%
IN488	Rising Sun City, Indiana	0.0356090769%
IN489	River Forest Town, Indiana	0.0003439251%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN490	Roachdale Town, Indiana	0.0017760906%
IN491	Roann Town, Indiana	0.0009599102%
IN492	Roanoke Town, Indiana	0.0123402365%
IN493	Rochester City, Indiana	0.0090652486%
IN494	Rockport City, Indiana	0.0104768814%
IN495	Rockville Town, Indiana	0.0245162104%
IN496	Rome City Town, Indiana	0.0125096325%
IN497	Rosedale Town, Indiana	0.0056105984%
IN498	Roseland Town, Indiana	0.0028283986%
IN499	Rossville Town, Indiana	0.0134079442%
IN500	Royal Center Town, Indiana	0.0001796623%
IN501	Rush County, Indiana	0.2195011875%
IN502	Rushville City, Indiana	0.0154047628%
IN503	Russellville Town, Indiana	0.0006929833%
IN504	Russiaville Town, Indiana	0.0008059140%
IN505	Salamonia Town, Indiana	0.0002258612%
IN506	Salem City, Indiana	0.0949284502%
IN507	Saltillo Town, Indiana	0.0012833025%
IN508	Sandborn Town, Indiana	0.0002053284%
IN509	Santa Claus Town, Indiana	0.0075252857%
IN510	Saratoga Town, Indiana	0.0045018251%
IN511	Schererville Town, Indiana	0.1304861951%
IN512	Schneider Town, Indiana	0.0009342442%
IN513	Scott County, Indiana	1.2220735416%
IN514	Scottsburg City, Indiana	0.0625019635%
IN515	Seelyville Town, Indiana	0.0082952672%
IN516	Sellersburg Town, Indiana	0.0135722069%
IN517	Selma Town, Indiana	0.0080899388%
IN518	Seymour City, Indiana	0.0450541831%
IN519	Shadeland Town, Indiana	0.0129356889%
IN520	Shamrock Lakes Town, Indiana	0.0030901923%
IN521	Sharpsville Town, Indiana	0.0050818778%
IN522	Shelburn Town, Indiana	0.0044402265%
IN523	Shelby County, Indiana	0.0450541831%
IN524	Shelbyville City, Indiana	0.5457372080%
IN525	Sheridan Town, Indiana	0.0121657074%
IN526	Shipshewana Town, Indiana	0.0047174199%
IN527	Shirley Town, Indiana	0.0011806383%
IN528	Shoals Town, Indiana	0.0066988389%
IN529	Sidney Town, Indiana	0.0004773885%
IN530	Silver Lake Town, Indiana	0.0053128722%
IN531	Somerville Town, Indiana	0.0016939593%
IN532	South Bend City, Indiana	1.3582319336%
IN533	South Whitley Town, Indiana	0.0000564653%
IN534	Southport City, Indiana	0.0003490583%
IN535	Speedway Town, Indiana	0.0716390770%
IN536	Spencer County, Indiana	0.1563113739%
IN537	Spencer Town, Indiana	0.0335301269%
IN538	Spiceland Town, Indiana	0.0016836928%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN539	Spring Grove Town, Indiana	0.0014167659%
IN540	Spring Lake Town, Indiana	0.0003079926%
IN541	Springport Town, Indiana	0.0002771933%
IN542	Spurgeon Town, Indiana	0.0006827169%
IN543	St. Joseph County, Indiana	1.3360462005%
IN544	St. Joe Town, Indiana	0.0029823949%
IN545	St. John Town, Indiana	0.0653868274%
IN546	St. Leon Town, Indiana	0.0011190398%
IN547	St. Paul Town, Indiana	0.0016220943%
IN548	Starke County, Indiana	0.5754687596%
IN549	State Line City Town, Indiana	0.0005800527%
IN550	Staunton Town, Indiana	0.0035419148%
IN551	Steuben County, Indiana	0.2289052280%
IN552	Stilesville Town, Indiana	0.0004517225%
IN553	Stinesville Town, Indiana	0.0014321656%
IN554	Straughn Town, Indiana	0.0004260564%
IN555	Sullivan City, Indiana	0.0150608378%
IN556	Sullivan County, Indiana	0.4997077150%
IN557	Sulphur Springs Town, Indiana	0.0007494486%
IN558	Summitville Town, Indiana	0.0154098960%
IN559	Sunman Town, Indiana	0.0161336786%
IN560	Swayzee Town, Indiana	0.0084954623%
IN561	Sweetser Town, Indiana	0.0043786280%
IN562	Switz City Town, Indiana	0.0006570509%
IN563	Switzerland County, Indiana	0.1390381227%
IN564	Syracuse Town, Indiana	0.0288332399%
IN565	Tell City, Indiana	0.0071351617%
IN566	Tennyson Town, Indiana	0.0014372988%
IN567	Terre Haute City, Indiana	1.0172687340%
IN568	Thorntown, Indiana	0.0019968186%
IN569	Tippecanoe County, Indiana	0.9836513425%
IN570	Tipton City, Indiana	0.0756840464%
IN571	Tipton County, Indiana	0.1461219523%
IN572	Topeka Town, Indiana	0.0102510201%
IN573	Town of Pines Town, Indiana	0.0177506398%
IN574	Trafalgar Town, Indiana	0.0034751831%
IN575	Trail Creek Town, Indiana	0.0070068315%
IN576	Troy Town, Indiana	0.0003695911%
IN577	Ulen Town, Indiana	0.0001385967%
IN578	Union City, Indiana	0.0467276095%
IN579	Union County, Indiana	0.0788666365%
IN580	Uniondale Town, Indiana	0.0020532840%
IN581	Universal Town, Indiana	0.0029823949%
IN582	Upland Town, Indiana	0.0132693475%
IN583	Utica Town, Indiana	0.0015553626%
IN584	Valparaiso City, Indiana	0.4508549566%
IN585	Van Buren Town, Indiana	0.0074585540%
IN586	Vanderburgh County, Indiana	1.8730004864%
IN587	Veedersburg Town, Indiana	0.0174477804%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN588	Vera Cruz Town, Indiana	0.0005287206%
IN589	Vermillion County, Indiana	0.1479237090%
IN590	Vernon Town, Indiana	0.0044556262%
IN591	Versailles Town, Indiana	0.0325753499%
IN592	Vevay Town, Indiana	0.0222627312%
IN593	Vigo County, Indiana	0.7949340146%
IN594	Vincennes City, Indiana	0.0141984585%
IN595	Wabash City, Indiana	0.0616549838%
IN596	Wabash County, Indiana	0.5254353629%
IN597	Wakarusa Town, Indiana	0.0133566121%
IN598	Walkerton Town, Indiana	0.0293414277%
IN599	Wallace Town, Indiana	0.0007443154%
IN600	Walton Town, Indiana	0.0010215088%
IN601	Wanatah Town, Indiana	0.0034289842%
IN602	Warren County, Indiana	0.0576818794%
IN603	Warren Town, Indiana	0.0076587491%
IN604	Warrick County, Indiana	0.3991430003%
IN605	Warsaw City, Indiana	0.2580772597%
IN606	Washington City, Indiana	0.0149581736%
IN607	Washington County, Indiana	0.3404396122%
IN608	Waterloo Town, Indiana	0.0127970922%
IN609	Waveland Town, Indiana	0.0037215772%
IN610	Wayne County, Indiana	0.7657876490%
IN611	Waynetown, Indiana	0.0084133310%
IN612	Wells County, Indiana	0.2019866754%
IN613	West Baden Springs Town, Indiana	0.0054822681%
IN614	West College Corner Town, Indiana	0.0065345762%
IN615	West Harrison Town, Indiana	0.0004773885%
IN616	West Lafayette City, Indiana	0.2612290506%
IN617	West Lebanon Town, Indiana	0.0029772617%
IN618	West Terre Haute Town, Indiana	0.0180175667%
IN619	Westfield City, Indiana	0.1106874046%
IN620	Westport Town, Indiana	0.0022021470%
IN621	Westville Town, Indiana	0.0405164256%
IN622	Wheatfield Town, Indiana	0.0014064995%
IN623	Wheatland Town, Indiana	0.0002361277%
IN624	White County, Indiana	0.2045738132%
IN625	Whiteland Town, Indiana	0.0126892948%
IN626	Whitestown, Indiana	0.0075560849%
IN627	Whitewater Town, Indiana	0.0002977262%
IN628	Whiting City, Indiana	0.0746933369%
IN629	Whitley County, Indiana	0.3073920070%
IN630	Wilkinson Town, Indiana	0.0006365180%
IN631	Williamsport Town, Indiana	0.0094553726%
IN632	Winamac Town, Indiana	0.0021559481%
IN633	Winchester City, Indiana	0.0715004804%
IN634	Windfall City Town, Indiana	0.0058877917%

State ID	Qualifying Subdivision	Consolidated State Allocation
IN635	Winfield Town, Indiana	0.0246548070%
IN636	Wingate Town, Indiana	0.0023253441%
IN637	Winona Lake Town, Indiana	0.0964016815%
IN638	Winslow Town, Indiana	0.0028489315%
IN639	Wolcott Town, Indiana	0.0013397678%
IN640	Wolcottville Town, Indiana	0.0086494586%
IN641	Woodburn City, Indiana	0.0082131358%
IN642	Woodlawn Heights Town, Indiana	0.0012217040%
IN643	Worthington Town, Indiana	0.0026128038%
IN644	Yeoman Town, Indiana	0.0014578316%
IN645	Yorktown, Indiana	0.0901956307%
IN646	Zanesville Town, Indiana	0.0025922710%
IN647	Zionsville Town, Indiana	0.0375853627%
IN648	Cumberland Town, Indiana	0.0148247101%

State ID	Qualifying Subdivision	Consolidated State Allocation
IA1	Adair County, Iowa	0.2556895492%
IA2	Adams County, Iowa	0.1116738610%
IA3	Allamakee County, Iowa	0.4458620571%
IA7	Appanoose County, Iowa	0.5319573473%
IA8	Audubon County, Iowa	0.1208090649%
IA9	Benton County, Iowa	0.5190077951%
IA11	Black Hawk County, Iowa	3.3423948145%
IA13	Boone County, Iowa	0.8229376316%
IA14	Bremer County, Iowa	0.7313291658%
IA15	Buchanan County, Iowa	0.3770114677%
IA16	Buena Vista County, Iowa	0.3269761930%
IA18	Butler County, Iowa	0.2707546223%
IA19	Calhoun County, Iowa	0.1889544807%
IA20	Carroll County, Iowa	0.6033080977%
IA21	Cass County, Iowa	0.3356626501%
IA22	Cedar County, Iowa	0.3655363695%
IA25	Cerro Gordo County, Iowa	1.6302973365%
IA26	Cherokee County, Iowa	0.2378358349%
IA27	Chickasaw County, Iowa	0.2431246372%
IA28	Clarke County, Iowa	0.3046029568%
IA29	Clay County, Iowa	0.2957241797%
IA30	Clayton County, Iowa	0.4574012621%
IA32	Clinton County, Iowa	1.4586196098%
IA36	Crawford County, Iowa	0.3305341145%
IA37	Dallas County, Iowa	1.4775951912%
IA39	Davis County, Iowa	0.1538560657%
IA40	Decatur County, Iowa	0.2531573348%
IA41	Delaware County, Iowa	0.3021348491%
IA43	Des Moines County, Iowa	1.5679856298%
IA44	Dickinson County, Iowa	0.3322329419%
IA46	Dubuque County, Iowa	2.7454332795%
IA47	Emmet County, Iowa	0.1753318082%
IA49	Fayette County, Iowa	0.5284635324%
IA50	Floyd County, Iowa	0.3285468070%
IA53	Franklin County, Iowa	0.2107187034%
IA54	Fremont County, Iowa	0.2047888342%
IA55	Greene County, Iowa	0.3578435662%
IA57	Grundy County, Iowa	0.3230977380%
IA58	Guthrie County, Iowa	0.2308482053%
IA59	Hamilton County, Iowa	0.3501828163%
IA60	Hancock County, Iowa	0.1901084012%
IA61	Hardin County, Iowa	0.4491314985%
IA62	Harrison County, Iowa	0.6178282639%
IA63	Henry County, Iowa	0.4451248302%
IA64	Howard County, Iowa	0.1714212999%
IA65	Humboldt County, Iowa	0.1929611491%
IA66	Ida County, Iowa	0.1680556985%
IA69	Iowa County, Iowa	0.2658504602%
IA70	Jackson County, Iowa	0.5490417812%

State ID	Qualifying Subdivision	Consolidated State Allocation
IA71	Jasper County, Iowa	1.6780568235%
IA72	Jefferson County, Iowa	0.5728253647%
IA73	Johnson County, Iowa	3.8223936863%
IA75	Jones County, Iowa	0.3884865660%
IA77	Keokuk County, Iowa	0.1980255779%
IA78	Kossuth County, Iowa	0.3482275621%
IA80	Lee County, Iowa	1.4586837165%
IA81	Linn County, Iowa	7.3285811041%
IA82	Louisa County, Iowa	0.3358870235%
IA83	Lucas County, Iowa	0.3300533143%
IA84	Lyon County, Iowa	0.1619335092%
IA85	Madison County, Iowa	0.4031349456%
IA86	Mahaska County, Iowa	0.7161999860%
IA88	Marion County, Iowa	1.1788259436%
IA89	Marshall County, Iowa	1.0363488161%
IA92	Mills County, Iowa	0.4947113580%
IA93	Mitchell County, Iowa	0.1894673343%
IA94	Monona County, Iowa	0.4457658971%
IA95	Monroe County, Iowa	0.2157510788%
IA96	Montgomery County, Iowa	0.5308995868%
IA98	Muscatine County, Iowa	1.0607414131%
IA102	O Brien County, Iowa	0.2348228203%
IA103	Osceola County, Iowa	0.1453939821%
IA106	Page County, Iowa	0.5824093155%
IA107	Palo Alto County, Iowa	0.1666132978%
IA110	Plymouth County, Iowa	0.4452850969%
IA111	Pocahontas County, Iowa	0.1165780231%
IA112	Polk County, Iowa	22.8108926250%
IA113	Pottawattamie County, Iowa	3.6145597841%
IA114	Poweshiek County, Iowa	0.4747100695%
IA115	Ringgold County, Iowa	0.1195910378%
IA116	Sac County, Iowa	0.2200782807%
IA117	Scott County, Iowa	8.8614042123%
IA118	Shelby County, Iowa	0.2859158555%
IA120	Sioux County, Iowa	0.4096738283%
IA123	Story County, Iowa	2.1665177789%
IA124	Tama County, Iowa	0.3449901740%
IA125	Taylor County, Iowa	0.1784409829%
IA126	Union County, Iowa	0.4629785445%
IA128	Van Buren County, Iowa	0.1525418785%
IA129	Wapello County, Iowa	1.0026607483%
IA130	Warren County, Iowa	1.3316563022%
IA131	Washington County, Iowa	0.5543626368%
IA135	Wayne County, Iowa	0.2440541843%
IA136	Webster County, Iowa	1.5957758817%
IA138	Winnebago County, Iowa	0.2340535400%
IA139	Winneshiek County, Iowa	0.3674595703%
IA140	Woodbury County, Iowa	2.5662230163%
IA141	Worth County, Iowa	0.2345663935%

State ID	Qualifying Subdivision	Consolidated State Allocation
IA142	Wright County, Iowa	0.2810437467%

State ID	Qualifying Subdivision	Consolidated State Allocation
KS1	Allen County, Kansas	0.2469590982%
KS2	Anderson County, Kansas	0.1033070846%
KS3	Andover City, Kansas	0.2965259109%
KS4	Arkansas City, Kansas	0.2517607353%
KS5	Atchison City, Kansas	0.2261465530%
KS6	Atchison County, Kansas	0.2081347289%
KS7	Barber County, Kansas	0.0868011735%
KS8	Barton County, Kansas	0.3334574382%
KS9	Bourbon County, Kansas	0.2875114592%
KS10	Brown County, Kansas	0.1232303153%
KS11	Butler County, Kansas	0.8706438812%
KS12	Chase County, Kansas	0.0336082678%
KS14	Cherokee County, Kansas	0.3919995171%
KS17	Clay County, Kansas	0.1042947986%
KS19	Coffey County, Kansas	0.1060232980%
KS20	Comanche County, Kansas	0.0219636398%
KS21	Cowley County, Kansas	0.6897088195%
KS22	Crawford County, Kansas	0.7714110714%
KS24	Derby City, Kansas	0.5453586914%
KS25	Dickinson County, Kansas	0.3638160245%
KS26	Dodge City, Kansas	0.5788024418%
KS28	Douglas County, Kansas	1.5924288685%
KS29	Edwards County, Kansas	0.0357396506%
KS30	El Dorado City, Kansas	0.2788280508%
KS31	Elk County, Kansas	0.0499335801%
KS32	Elkhart City, Kansas	0.0460427074%
KS33	Ellis County, Kansas	0.3726150991%
KS34	Ellsworth County, Kansas	0.0784192915%
KS35	Emporia City, Kansas	0.5314129512%
KS37	Finney County, Kansas	0.7153826866%
KS38	Ford County, Kansas	0.6591551252%
KS39	Franklin County, Kansas	0.3340422689%
KS40	Garden City, Kansas	0.5639674708%
KS41	Gardner City, Kansas	0.4851729540%
KS42	Geary County, Kansas	0.4187127502%
KS43	Gove County, Kansas	0.0340631361%
KS44	Graham County, Kansas	0.0310480092%
KS45	Grant County, Kansas	0.1409572980%
KS47	Great Bend City, Kansas	0.3231811438%
KS48	Greeley County Unified Government, Kansas	0.0155434990%
KS49	Greenwood County, Kansas	0.1168768440%
KS50	Hamilton County, Kansas	0.0315158737%
KS51	Harper County, Kansas	0.0693479184%
KS52	Harvey County, Kansas	0.6829965673%
KS53	Haskell County, Kansas	0.0509842361%
KS54	Hays City, Kansas	0.4517508922%
KS55	Haysville City, Kansas	0.2470109420%
KS57	Hutchinson City, Kansas	0.8720750695%

State ID	Qualifying Subdivision	Consolidated State Allocation
KS58	Jackson County, Kansas	0.1711734320%
KS59	Jefferson County, Kansas	0.2473443746%
KS61	Johnson County, Kansas	12.0944030669%
KS62	Junction City, Kansas	0.4741551685%
KS63	Kansas City, Kansas	4.4060498188%
KS64	Kearny County, Kansas	0.0486709060%
KS65	Kingman County, Kansas	0.0906357539%
KS66	Kiowa County, Kansas	0.0319187570%
KS67	Labette County, Kansas	0.2545442897%
KS69	Lansing City, Kansas	0.2592649750%
KS70	Lawrence City, Kansas	2.1351947685%
KS71	Leavenworth City, Kansas	0.7793565010%
KS72	Leavenworth County, Kansas	1.6381480759%
KS73	Leawood City, Kansas	0.7519204801%
KS74	Lenexa City, Kansas	1.2179424409%
KS75	Liberal City, Kansas	0.4082002757%
KS78	Logan County, Kansas	0.0355057183%
KS79	Lyon County, Kansas	0.4294606379%
KS80	Manhattan City, Kansas	1.1916559134%
KS81	Manter City, Kansas	0.0039724166%
KS83	Marshall County, Kansas	0.1254396755%
KS84	McPherson City, Kansas	0.2822331538%
KS85	McPherson County, Kansas	0.3697169383%
KS86	Meade County, Kansas	0.0802482625%
KS87	Merriam City, Kansas	0.2413502294%
KS88	Miami County, Kansas	0.4462127868%
KS90	Montgomery County, Kansas	0.6274462063%
KS92	Morton County, Kansas	0.0505510276%
KS94	Neosho County, Kansas	0.3172684471%
KS95	Ness County, Kansas	0.0359735829%
KS96	Newton City, Kansas	0.4065302570%
KS98	Olathe City, Kansas	3.0725090086%
KS99	Osage County, Kansas	0.2049506509%
KS101	Ottawa City, Kansas	0.2675066256%
KS103	Overland Park City, Kansas	5.2622788811%
KS104	Pawnee County, Kansas	0.0827340421%
KS105	Phillips County, Kansas	0.0673335017%
KS106	Pittsburg City, Kansas	0.4330770471%
KS107	Pottawatomie County, Kansas	0.3212929608%
KS108	Prairie Village City, Kansas	0.4839800835%
KS109	Pratt County, Kansas	0.1817885063%
KS110	Rawlins County, Kansas	0.0326335501%
KS111	Reno County, Kansas	1.2307721233%
KS112	Republic County, Kansas	0.0589509291%
KS113	Rice County, Kansas	0.1216707669%
KS114	Riley County, Kansas	0.9513505103%
KS117	Russell County, Kansas	0.0884263937%
KS118	Salina City, Kansas	1.0036161498%
KS119	Saline County, Kansas	0.7008350540%

State ID	Qualifying Subdivision	Consolidated State Allocation
KS120	Scott County, Kansas	0.0622519732%
KS121	Sedgwick County, Kansas	10.3553321948%
KS122	Seward County, Kansas	0.4190277852%
KS123	Shawnee City, Kansas	1.4379077560%
KS124	Shawnee County, Kansas	3.5054886950%
KS125	Sheridan County, Kansas	0.0327505162%
KS126	Sherman County, Kansas	0.0750792587%
KS127	Smith County, Kansas	0.0460586624%
KS130	Stanton County, Kansas	0.0392178776%
KS131	Stevens County, Kansas	0.0700237227%
KS132	Sumner County, Kansas	0.2934290296%
KS133	Thomas County, Kansas	0.1000970142%
KS134	Topeka City, Kansas	2.7014829146%
KS135	Trego County, Kansas	0.0358436205%
KS136	Ulysses City, Kansas	0.1478592097%
KS137	Wabaunsee County, Kansas	0.1375513777%
KS138	Wallace County, Kansas	0.0199622194%
KS139	Washington County, Kansas	0.0705305759%
KS140	Wichita City, Kansas	10.4437497448%
KS141	Wichita County, Kansas	0.0269541947%
KS142	Wilson County, Kansas	0.1086745303%
KS143	Winfield City, Kansas	0.2560767576%
KS145	Abilene City, Kansas	0.1327990164%
KS146	Anthony City, Kansas	0.0440711418%
KS147	Augusta City, Kansas	0.2017035526%
KS148	Baxter Springs City, Kansas	0.0844335409%
KS149	Bel Aire City, Kansas	0.1836803642%
KS150	Belleville City, Kansas	0.0399286280%
KS151	Beloit City, Kansas	0.0772980066%
KS152	Bentley City, Kansas	0.0111696053%
KS153	Benton City, Kansas	0.0187605992%
KS154	Bonner Springs City, Kansas	0.1727710215%
KS155	Burlingame City, Kansas	0.0191726818%
KS156	Burrton City, Kansas	0.0185220252%
KS157	Caney City, Kansas	0.0422493033%
KS158	Chanute City, Kansas	0.1950017894%
KS159	Cheney City, Kansas	0.0471292279%
KS160	Coffeyville City, Kansas	0.1988623520%
KS161	Colby City, Kansas	0.1152746647%
KS162	Concordia City, Kansas	0.1064040461%
KS163	Edwardsville City, Kansas	0.0976201818%
KS164	Ellsworth City, Kansas	0.0636559061%
KS165	Enterprise City, Kansas	0.0167652523%
KS166	Eudora City, Kansas	0.1386549260%
KS167	Fairway City, Kansas	0.0859517397%
KS168	Fall River City, Kansas	0.0030797747%
KS169	Fort Scott City, Kansas	0.1658740613%
KS170	Galena City, Kansas	0.0612484766%
KS171	Garden Plain City, Kansas	0.0197799613%

State ID	Qualifying Subdivision	Consolidated State Allocation
KS172	Garnett City, Kansas	0.0706613091%
KS173	Goddard City, Kansas	0.1076186052%
KS174	Halstead City, Kansas	0.0439843876%
KS175	Harper City, Kansas	0.0280433004%
KS176	Herington City, Kansas	0.0485823611%
KS177	Hiawatha City, Kansas	0.0670393205%
KS178	Highland City, Kansas	0.0213849143%
KS179	Hillsboro City, Kansas	0.0599037863%
KS180	Hoisington City, Kansas	0.0531803345%
KS181	Hugoton City, Kansas	0.0797705018%
KS182	Humboldt City, Kansas	0.0385622491%
KS183	Independence City, Kansas	0.1827043793%
KS184	Iola City, Kansas	0.1141685485%
KS185	Johnson City City, Kansas	0.0286505799%
KS186	Kechi City, Kansas	0.0457411605%
KS187	Kingman City, Kansas	0.0599688519%
KS188	Leoti City, Kansas	0.0307977467%
KS189	Lincoln Center City, Kansas	0.0257876908%
KS190	Longton City, Kansas	0.0066366975%
KS191	Maize City, Kansas	0.1142336141%
KS192	Marysville City, Kansas	0.0705094892%
KS193	Meade City, Kansas	0.0329449136%
KS194	Medicine Lodge City, Kansas	0.0391261515%
KS195	Mission City, Kansas	0.2141310941%
KS196	Mission Hills City, Kansas	0.0766256614%
KS197	Moundridge City, Kansas	0.0403623991%
KS198	Mount Hope City, Kansas	0.0174809746%
KS199	Neodesha City, Kansas	0.0479533930%
KS200	North Newton City, Kansas	0.0382152322%
KS201	Norton City, Kansas	0.0587542929%
KS202	Oakley City, Kansas	0.0440277647%
KS203	Osawatomie City, Kansas	0.0915907637%
KS204	Park City City, Kansas	0.1722721848%
KS205	Parsons City, Kansas	0.2052387869%
KS206	Phillipsburg City, Kansas	0.0524863008%
KS207	Pleasanton City, Kansas	0.0251153456%
KS208	Pratt City, Kansas	0.1401731248%
KS209	Rantoul City, Kansas	0.0040557596%
KS210	Roeland Park City, Kansas	0.1442722615%
KS211	Russell City, Kansas	0.0950609324%
KS212	Sabetha City, Kansas	0.0553491899%
KS213	Satanta City, Kansas	0.0243128691%
KS214	Scott City, Kansas	0.0810284379%
KS215	Sedgwick City, Kansas	0.0359379341%
KS216	Spring Hill City, Kansas	0.1707106089%
KS217	Sterling City, Kansas	0.0471942936%
KS218	Sublette City, Kansas	0.0287156456%
KS219	Syracuse City, Kansas	0.0353740316%
KS220	Tonganoxie City, Kansas	0.1234078725%

State ID	Qualifying Subdivision	Consolidated State Allocation
KS221	Tribune City, Kansas	0.0157025131%
KS222	Valley Falls City, Kansas	0.0249852143%
KS223	Wakeeney City, Kansas	0.0376947069%
KS224	Wamego City, Kansas	0.1023265980%
KS225	Washington City, Kansas	0.0230983101%
KS226	Weir City, Kansas	0.0137505433%
KS227	Wellington City, Kansas	0.1637485830%
KS228	Westwood City, Kansas	0.0356126057%
KS229	Wilson City, Kansas	0.0154639390%
KS230	Wyandotte County, Kansas	3.2916925050%

State ID	Qualifying Subdivision	Consolidated State Allocation
KY1	Adair County, Kentucky	0.2072149972%
KY2	Allen County, Kentucky	0.3652932746%
KY3	Anderson County, Kentucky	0.3621159370%
KY4	Ashland City, Kentucky	0.9834499202%
KY5	Ballard County, Kentucky	0.1275818571%
KY6	Bardstown City, Kentucky	0.2352870373%
KY7	Barren County, Kentucky	0.3122030586%
KY8	Bath County, Kentucky	0.1600781328%
KY9	Bell County, Kentucky	0.6418579913%
KY12	Berea City, Kentucky	0.1673960319%
KY13	Boone County, Kentucky	2.0430819725%
KY14	Bourbon County, Kentucky	0.2554835051%
KY15	Bowling Green City, Kentucky	0.6707865957%
KY16	Boyd County, Kentucky	0.8927787584%
KY17	Boyle County, Kentucky	0.3790292999%
KY18	Bracken County, Kentucky	0.1275577166%
KY19	Breathitt County, Kentucky	0.5390554414%
KY20	Breckinridge County, Kentucky	0.3244963382%
KY22	Bullitt County, Kentucky	1.0630204077%
KY23	Butler County, Kentucky	0.1624898322%
KY24	Caldwell County, Kentucky	0.1441008473%
KY25	Calloway County, Kentucky	0.0270405279%
KY26	Campbell County, Kentucky	1.0519698931%
KY27	Campbellsville City, Kentucky	0.2769609681%
KY28	Carlisle County, Kentucky	0.0604084438%
KY29	Carroll County, Kentucky	0.2541479356%
KY30	Carter County, Kentucky	0.6015849596%
KY31	Casey County, Kentucky	0.2668572392%
KY32	Christian County, Kentucky	0.4386166388%
KY33	Clark County, Kentucky	0.6110238861%
KY34	Clay County, Kentucky	0.7834161044%
KY35	Clinton County, Kentucky	0.3920484376%
KY36	Columbia City, Kentucky	0.0941274300%
KY37	Covington City, Kentucky	1.7146827203%
KY38	Crittenden County, Kentucky	0.2010231527%
KY39	Cumberland County, Kentucky	0.1857249004%
KY40	Danville City, Kentucky	0.2799464970%
KY41	Daviess County, Kentucky	1.1263935276%
KY42	Edmonson County, Kentucky	0.1884368528%
KY44	Elliott County, Kentucky	0.1458221479%
KY45	Erlanger City, Kentucky	0.3397777298%
KY46	Estill County, Kentucky	0.4049309515%
KY47	Fleming County, Kentucky	0.1823914480%
KY48	Florence City, Kentucky	0.7389020512%
KY49	Floyd County, Kentucky	1.9179322449%
KY50	Fort Thomas City, Kentucky	0.3651296923%
KY51	Frankfort City, Kentucky	0.4254271088%
KY52	Franklin County, Kentucky	0.4438483122%
KY53	Fulton County, Kentucky	0.1040009320%

State ID	Qualifying Subdivision	Consolidated State Allocation
KY54	Gallatin County, Kentucky	0.2347861459%
KY55	Garrard County, Kentucky	0.3127117464%
KY56	Georgetown City, Kentucky	0.2129888920%
KY57	Glasgow City, Kentucky	0.4100978120%
KY58	Grant County, Kentucky	0.5343736918%
KY59	Graves County, Kentucky	0.2447866907%
KY60	Grayson City, Kentucky	0.1405700912%
KY61	Grayson County, Kentucky	0.4371371187%
KY62	Green County, Kentucky	0.1363993307%
KY64	Greenup County, Kentucky	0.6872346204%
KY65	Hancock County, Kentucky	0.1001482246%
KY66	Hardin County, Kentucky	1.6677965130%
KY68	Harlan County, Kentucky	0.9236857078%
KY69	Harrison County, Kentucky	0.2078604027%
KY70	Hart County, Kentucky	0.2333469695%
KY71	Henderson City, Kentucky	0.5644511762%
KY72	Henderson County, Kentucky	0.3796057595%
KY73	Henry County, Kentucky	0.2263086115%
KY74	Hickman County, Kentucky	0.0533625713%
KY76	Hopkins County, Kentucky	0.5493362318%
KY77	Hopkinsville City, Kentucky	0.5662686160%
KY79	Independence City, Kentucky	0.1255237640%
KY81	Jackson County, Kentucky	0.1930879337%
KY83	Jefferson County, Kentucky	14.4939132925%
KY84	Jeffersontown City, Kentucky	0.1981991396%
KY85	Jenkins City, Kentucky	0.0688654541%
KY86	Jessamine County, Kentucky	0.6407795601%
KY87	Johnson County, Kentucky	0.6400798620%
KY88	Kenton County, Kentucky	2.5731398261%
KY89	Knott County, Kentucky	0.4910894879%
KY90	Knox County, Kentucky	0.8060755114%
KY91	Larue County, Kentucky	0.1917133825%
KY92	Laurel County, Kentucky	0.9215642107%
KY93	Lawrence County, Kentucky	0.4474957316%
KY94	Lawrenceburg City, Kentucky	0.0804801232%
KY95	Lee County, Kentucky	0.2235931366%
KY96	Leslie County, Kentucky	0.5525464926%
KY97	Letcher County, Kentucky	0.6327552468%
KY98	Lewis County, Kentucky	0.2492484050%
KY99	Lexington-Fayette Urban County, Kentucky	6.2597070666%
KY100	Lincoln County, Kentucky	0.4109182594%
KY101	Livingston County, Kentucky	0.2056037847%
KY102	Logan County, Kentucky	0.3022584972%
KY103	London City, Kentucky	0.1961505806%
KY106	Lyndon City, Kentucky	0.0748780766%
KY107	Lyon County, Kentucky	0.1367346673%
KY108	Madison County, Kentucky	1.1073052673%
KY109	Madisonville City, Kentucky	0.3927355489%

State ID	Qualifying Subdivision	Consolidated State Allocation
KY110	Magoffin County, Kentucky	0.3084779576%
KY111	Manchester City, Kentucky	0.1800397241%
KY112	Marion County, Kentucky	0.2018769929%
KY113	Marshall County, Kentucky	0.6110803392%
KY114	Martin County, Kentucky	0.4692913886%
KY115	Mason County, Kentucky	0.1741746215%
KY116	McCracken County, Kentucky	0.3377504933%
KY117	McCreary County, Kentucky	0.3011869230%
KY118	McLean County, Kentucky	0.1433881867%
KY119	Meade County, Kentucky	0.3762152436%
KY120	Menifee County, Kentucky	0.1152561711%
KY121	Mercer County, Kentucky	0.2841928256%
KY122	Metcalfe County, Kentucky	0.1167070889%
KY123	Monroe County, Kentucky	0.2890192303%
KY124	Montgomery County, Kentucky	0.5746052526%
KY125	Morehead City, Kentucky	0.1176937487%
KY126	Morgan County, Kentucky	0.0505889526%
KY127	Morganfield City, Kentucky	0.1082087956%
KY129	Muhlenberg County, Kentucky	0.5338036196%
KY130	Murray City, Kentucky	0.5765962314%
KY131	Nelson County, Kentucky	0.4816564321%
KY132	Newport City, Kentucky	0.7312996326%
KY133	Nicholas County, Kentucky	0.1324383199%
KY134	Nicholasville City, Kentucky	0.3723153354%
KY135	Ohio County, Kentucky	0.4467150643%
KY136	Oldham County, Kentucky	0.7333447161%
KY137	Owen County, Kentucky	0.2198857418%
KY138	Owensboro City, Kentucky	0.5118319344%
KY139	Owsley County, Kentucky	0.1294761331%
KY140	Paducah City, Kentucky	1.1041080161%
KY141	Paintsville City, Kentucky	0.3642660363%
KY142	Pendleton County, Kentucky	0.3094900729%
KY143	Perry County, Kentucky	1.4848386091%
KY144	Pike County, Kentucky	1.9294441527%
KY145	Pineville City, Kentucky	0.0736606264%
KY147	Powell County, Kentucky	0.5788951657%
KY148	Prestonsburg City, Kentucky	0.4197933602%
KY149	Pulaski County, Kentucky	0.8723902940%
KY151	Richmond City, Kentucky	0.5069051167%
KY152	Robertson County, Kentucky	0.0346199801%
KY153	Rockcastle County, Kentucky	0.4380501830%
KY154	Rowan County, Kentucky	0.4245058255%
KY155	Russell City, Kentucky	0.1455248537%
KY156	Russell County, Kentucky	0.5599110288%
KY158	Scott County, Kentucky	0.6332443967%
KY159	Shelby County, Kentucky	0.5093783884%
KY160	Shelbyville City, Kentucky	0.1168374662%
KY161	Shepherdsville City, Kentucky	0.1717991328%
KY162	Shively City, Kentucky	0.1040826057%

State ID	Qualifying Subdivision	Consolidated State Allocation
KY163	Simpson County, Kentucky	0.2049906448%
KY164	Somerset City, Kentucky	0.3108498299%
KY166	Spencer County, Kentucky	0.2447695951%
KY167	St. Matthews City, Kentucky	0.1131834246%
KY168	Taylor County, Kentucky	0.1908446071%
KY169	Todd County, Kentucky	0.1788746408%
KY170	Trigg County, Kentucky	0.2047738501%
KY171	Trimble County, Kentucky	0.1174427629%
KY172	Union County, Kentucky	0.2531192882%
KY175	Warren County, Kentucky	0.9893070387%
KY176	Washington County, Kentucky	0.1549834119%
KY177	Wayne County, Kentucky	0.3477965951%
KY178	Webster County, Kentucky	0.2371207742%
KY179	West Liberty City, Kentucky	0.1691975502%
KY181	Whitley County, Kentucky	1.5794132485%
KY182	Winchester City, Kentucky	0.4646999075%
KY183	Wolfe County, Kentucky	0.2600699609%
KY184	Woodford County, Kentucky	0.2675359435%
KY186	Albany City, Kentucky	0.1264298304%
KY187	Alexandria City, Kentucky	0.1080131826%
KY192	Barbourville City, Kentucky	0.0730470168%
KY193	Beattyville City, Kentucky	0.1448233239%
KY195	Bellevue City, Kentucky	0.0965704087%
KY205	Carrollton City, Kentucky	0.0887635005%
KY206	Catlettsburg City, Kentucky	0.1263485793%
KY207	Cave City City, Kentucky	0.0700133478%
KY208	Central City City, Kentucky	0.0844674819%
KY211	Cold Spring City, Kentucky	0.0750717640%
KY212	Corbin City, Kentucky	0.2036058550%
KY215	Crittenden City, Kentucky	0.1485297325%
KY216	Cynthiana City, Kentucky	0.2429917006%
KY218	Dayton City, Kentucky	0.1369669607%
KY220	Dry Ridge City, Kentucky	0.1124383105%
KY222	Edgewood City, Kentucky	0.0997328111%
KY228	Flatwoods City, Kentucky	0.0815134672%
KY230	Flemingsburg City, Kentucky	0.0974474500%
KY231	Fort Mitchell City, Kentucky	0.1045834032%
KY232	Fort Wright City, Kentucky	0.0888485558%
KY233	Franklin City, Kentucky	0.1059281781%
KY238	Harrodsburg City, Kentucky	0.1433328138%
KY240	Hazard City, Kentucky	0.2853655644%
KY242	Highland Heights City, Kentucky	0.1099203272%
KY247	Irvine City, Kentucky	0.0767877105%
KY252	La Grange City, Kentucky	0.0727992716%
KY255	Lebanon City, Kentucky	0.1122041854%
KY256	Leitchfield City, Kentucky	0.1135380642%
KY258	Louisa City, Kentucky	0.0866211036%
KY259	Ludlow City, Kentucky	0.0669617849%
KY261	Martin City, Kentucky	0.2943288201%

State ID	Qualifying Subdivision	Consolidated State Allocation
KY262	Mayfield City, Kentucky	0.2929381596%
KY263	Maysville City, Kentucky	0.1796298526%
KY264	Middlesborough City, Kentucky	0.9627869870%
KY267	Morgantown City, Kentucky	0.1066840944%
KY268	Mount Sterling City, Kentucky	0.1357736978%
KY269	Mount Vernon City, Kentucky	0.1195254191%
KY275	Owingsville City, Kentucky	0.1120741368%
KY276	Paris City, Kentucky	0.1357848757%
KY278	Pikeville City, Kentucky	0.9232553122%
KY280	Princeton City, Kentucky	0.1044295429%
KY283	Russellville City, Kentucky	0.1019054071%
KY286	Southgate City, Kentucky	0.0952700635%
KY288	Stanford City, Kentucky	0.0735805495%
KY291	Taylor Mill City, Kentucky	0.1020398235%
KY294	Union City, Kentucky	0.1260059161%
KY295	Versailles City, Kentucky	0.1700135829%
KY297	Walton City, Kentucky	0.0725720505%
KY301	Wilder City, Kentucky	0.1271712342%
KY302	Williamsburg City, Kentucky	0.2511273232%
KY303	Williamstown City, Kentucky	0.1029710636%

State ID	Qualifying Subdivision	Consolidated State Allocation
LA2	Acadia Parish, Louisiana	
LA3	Alexandria City, Louisiana	
LA4	Allen Parish, Louisiana	
LA5	Ascension Parish, Louisiana	
LA6	Assumption Parish, Louisiana	
LA7	Avoyelles Parish, Louisiana	
LA9	Baldwin Town, Louisiana	
LA10	Bastrop City, Louisiana	
LA12	Beauregard Parish, Louisiana	
LA13	Berwick Town, Louisiana	
LA14	Bienville Parish, Louisiana	
LA15	Bogalusa City, Louisiana	
LA16	Bossier City, Louisiana	
LA17	Bossier Parish, Louisiana	
LA19	Caddo Parish, Louisiana	
LA20	Calcasieu Parish, Louisiana	
LA21	Caldwell Parish, Louisiana	
LA22	Cameron Parish, Louisiana	
LA23	Catahoula Parish, Louisiana	
LA25	Claiborne Parish, Louisiana	
LA26	Concordia Parish, Louisiana	
LA27	Covington City, Louisiana	Allocations in Louisiana
LA29	De Soto Parish, Louisiana	will be made in
LA30	Delhi Town, Louisiana	accordance with the
LA32	Donaldsonville City, Louisiana	Louisiana State-Local
LA33	East Carroll Parish, Louisiana	Government Opioid
LA34	East Feliciana Parish, Louisiana	Litigation Memorandum
LA35	Eunice City, Louisiana	of Understanding.
LA36	Evangeline Parish, Louisiana	
LA37	Ferriday Town, Louisiana	
LA38	Franklin City, Louisiana	
LA39	Franklin Parish, Louisiana	
LA41	Gramercy Town, Louisiana	
LA42	Grant Parish, Louisiana	
LA43	Gretna City, Louisiana	
LA46	Iberia Parish, Louisiana	
LA47	Iberville Parish, Louisiana	
LA48	Jackson Parish, Louisiana	
LA49	Jean Lafitte Town, Louisiana	
LA50	Jefferson Davis Parish, Louisiana	
LA51	Jefferson Parish, Louisiana	
LA52	Kenner City, Louisiana	
LA54	Lafourche Parish, Louisiana	
LA55	Lake Charles City, Louisiana	
LA56	Lake Providence Town, Louisiana	
LA57	Lasalle Parish, Louisiana	
LA58	Lincoln Parish, Louisiana	
LA59	Livingston Parish, Louisiana	
LA60	Lutcher Town, Louisiana	

State ID	Qualifying Subdivision	Consolidated State Allocation
LA61	Madison Parish, Louisiana	
LA62	Madisonville Town, Louisiana	
LA63	Mandeville City, Louisiana	
LA65	Monroe City, Louisiana	
LA66	Morehouse Parish, Louisiana	
LA67	Morgan City, Louisiana	
LA68	Natchitoches City, Louisiana	
LA69	Natchitoches Parish, Louisiana	
LA70	New Iberia City, Louisiana	
LA72	New Roads City, Louisiana	
LA73	Opelousas City, Louisiana	
LA74	Ouachita Parish, Louisiana	
LA75	Patterson City, Louisiana	
LA76	Pearl River Town, Louisiana	
LA77	Pineville City, Louisiana	
LA78	Plaquemines Parish, Louisiana	
LA79	Pointe Coupee Parish, Louisiana	
LA80	Rapides Parish, Louisiana	
LA81	Red River Parish, Louisiana	
LA82	Richland Parish, Louisiana	
LA83	Richwood Town, Louisiana	
LA85	Sabine Parish, Louisiana	Allocations in Louisiana will be made in accordance with the Louisiana State-Local Government Opioid Litigation Memorandum of Understanding.
LA86	Shreveport City, Louisiana	
LA87	Slidell City, Louisiana	
LA88	St Bernard Parish, Louisiana	
LA89	St Charles Parish, Louisiana	
LA90	St Helena Parish, Louisiana	
LA91	St James Parish, Louisiana	
LA92	St John The Baptist Parish, Louisiana	
LA93	St Landry Parish, Louisiana	
LA94	St Martin Parish, Louisiana	
LA95	St Mary Parish, Louisiana	
LA96	St Tammany Parish, Louisiana	
LA97	St. Martinville City, Louisiana	
LA99	Tangipahoa Parish, Louisiana	
LA100	Tensas Parish, Louisiana	
LA102	Union Parish, Louisiana	
LA103	Vermilion Parish, Louisiana	
LA104	Vernon Parish, Louisiana	
LA105	Washington Parish, Louisiana	
LA106	Webster Parish, Louisiana	
LA107	West Baton Rouge Parish, Louisiana	
LA108	West Carroll Parish, Louisiana	
LA109	West Feliciana Parish, Louisiana	
LA110	West Monroe City, Louisiana	
LA111	Westwego City, Louisiana	
LA112	Winn Parish, Louisiana	

State ID	Qualifying Subdivision	Consolidated State Allocation
LA115	East Baton Rouge Parish, Louisiana	
LA116	Lafayette Parish, Louisiana	
LA117	Orleans Parish, Louisiana	
LA118	Terrebonne Parish, Louisiana	
LA119	Sheriff of Acadia Parish, Louisiana	
LA120	Sheriff of Allen Parish, Louisiana	
LA121	Sheriff of Ascension Parish, Louisiana	
LA122	Sheriff of Assumption Parish, Louisiana	
LA123	Sheriff of Avoyelles Parish, Louisiana	
LA124	Sheriff of Beauregard Parish, Louisiana	
LA125	Sheriff of Bienville Parish, Louisiana	
LA126	Sheriff of Bossier Parish, Louisiana	
LA127	Sheriff of Caddo Parish, Louisiana	
LA128	Sheriff of Calcasieu Parish, Louisiana	Allocations in Louisiana will be made in accordance with the Louisiana State-Local Government Opioid Litigation Memorandum of Understanding.
LA129	Sheriff of Caldwell Parish, Louisiana	
LA130	Sheriff of Cameron Parish, Louisiana	
LA131	Sheriff of Catahoula Parish, Louisiana	
LA132	Sheriff of Claiborne Parish, Louisiana	
LA133	Sheriff of Concordia Parish, Louisiana	
LA134	Sheriff of De Soto Parish, Louisiana	
LA135	Sheriff of East Baton Rouge Parish, Louisiana	
LA136	Sheriff of East Carroll Parish, Louisiana	
LA137	Sheriff of East Feliciana Parish, Louisiana	
LA138	Sheriff of Evangeline Parish, Louisiana	
LA139	Sheriff of Franklin Parish, Louisiana	
LA140	Sheriff of Grant Parish, Louisiana	
LA141	Sheriff of Iberia Parish, Louisiana	
LA142	Sheriff of Iberville Parish, Louisiana	

State ID	Qualifying Subdivision	Consolidated State Allocation
LA143	Sheriff of Jackson Parish, Louisiana	
LA144	Sheriff of Jefferson Davis Parish, Louisiana	
LA145	Sheriff of Jefferson Parish, Louisiana	
LA146	Sheriff of Lafayette Parish, Louisiana	
LA147	Sheriff of Lafourche Parish, Louisiana	
LA148	Sheriff of Lasalle Parish, Louisiana	
LA149	Sheriff of Lincoln Parish, Louisiana	
LA150	Sheriff of Livingston Parish, Louisiana	
LA151	Sheriff of Madison Parish, Louisiana	
LA152	Sheriff of Morehouse Parish, Louisiana	
LA153	Sheriff of Natchitoches Parish, Louisiana	Allocations in Louisiana will be made in accordance with the Louisiana State-Local Government Opioid Litigation Memorandum of Understanding.
LA154	Sheriff of Orleans Parish, Louisiana	
LA155	Sheriff of Ouachita Parish, Louisiana	
LA156	Sheriff of Plaquemines Parish, Louisiana	
LA157	Sheriff of Pointe Coupee Parish, Louisiana	
LA158	Sheriff of Rapides Parish, Louisiana	
LA159	Sheriff of Red River Parish, Louisiana	
LA160	Sheriff of Richland Parish, Louisiana	
LA161	Sheriff of Sabine Parish, Louisiana	
LA162	Sheriff of St Bernard Parish, Louisiana	
LA163	Sheriff of St Charles Parish, Louisiana	
LA164	Sheriff of St Helena Parish, Louisiana	
LA165	Sheriff of St James Parish, Louisiana	
LA166	Sheriff of St John The Baptist Parish, Louisiana	
LA167	Sheriff of St Landry Parish, Louisiana	

State ID	Qualifying Subdivision	Consolidated State Allocation
LA168	Sheriff of St Martin Parish, Louisiana	
LA169	Sheriff of St Mary Parish, Louisiana	
LA170	Sheriff of St Tammany Parish, Louisiana	
LA171	Sheriff of Tangipahoa Parish, Louisiana	
LA172	Sheriff of Tensas Parish, Louisiana	
LA173	Sheriff of Terrebonne Parish, Louisiana	Allocations in Louisiana will be made in accordance with the Louisiana State-Local Government Opioid Litigation Memorandum of Understanding.
LA174	Sheriff of Union Parish, Louisiana	
LA175	Sheriff of Vermilion Parish, Louisiana	
LA176	Sheriff of Vernon Parish, Louisiana	
LA177	Sheriff of Washington Parish, Louisiana	
LA178	Sheriff of Webster Parish, Louisiana	
LA179	Sheriff of West Baton Rouge Parish, Louisiana	
LA180	Sheriff of West Carroll Parish, Louisiana	
LA181	Sheriff of West Feliciana Parish, Louisiana	
LA182	Sheriff of Winn Parish, Louisiana	

State ID	Qualifying Subdivision	Consolidated State Allocation
ME1	Androscoggin County, Maine	1.6799535986%
ME2	Aroostook County, Maine	4.0537116218%
ME3	Auburn City, Maine	2.6283332826%
ME4	Augusta City, Maine	3.6779545807%
ME5	Bangor City, Maine	5.2042873123%
ME6	Biddeford City, Maine	2.7393997300%
ME7	Brunswick Town, Maine	1.6113929261%
ME8	Calais City, Maine	0.8369049504%
ME9	Cumberland County, Maine	3.5025701951%
ME10	Falmouth Town, Maine	1.2353278939%
ME11	Franklin County, Maine	1.9717572454%
ME12	Gorham Town, Maine	1.4582940317%
ME13	Hancock County, Maine	3.8494340111%
ME14	Kennebec County, Maine	4.9959268385%
ME15	Kennebunk Town, Maine	0.2185679049%
ME16	Knox County, Maine	2.1010369789%
ME17	Lewiston City, Maine	4.3451006968%
ME18	Lincoln County, Maine	2.1621727981%
ME19	Orono Town, Maine	0.2094180830%
ME20	Oxford County, Maine	3.8454418782%
ME21	Penobscot County, Maine	6.7801027597%
ME22	Piscataquis County, Maine	1.2760851978%
ME23	Portland City, Maine	7.2016026249%
ME24	Rockland City, Maine	0.6184398003%
ME25	Saco City, Maine	0.4366518238%
ME26	Sagadahoc County, Maine	1.9708146889%
ME27	Sanford City, Maine	2.6908215844%
ME28	Scarborough Town, Maine	1.8363769930%
ME29	Somerset County, Maine	3.6977198467%
ME30	South Portland City, Maine	2.2275994495%
ME31	Standish Town, Maine	0.0664145731%
ME32	Waldo County, Maine	2.4723925078%
ME33	Washington County, Maine	2.6998574469%
ME34	Waterville City, Maine	2.8132809688%
ME35	Wells Town, Maine	0.2541311729%
ME36	Westbrook City, Maine	1.5416150467%
ME37	Windham Town, Maine	0.1935482073%
ME38	York County, Maine	6.7950503019%
ME39	York Town, Maine	2.1005084476%

State ID	Qualifying Subdivision	Consolidated State Allocation
MD1	Aberdeen City, Maryland	0.0372796529%
MD2	Allegany County, Maryland	1.6120411494%
MD3	Annapolis City, Maryland	0.2413230958%
MD4	Anne Arundel County, Maryland	9.5850095156%
MD5	Baltimore City, Maryland	20.9970334354%
MD6	Baltimore County, Maryland	17.7565394434%
MD7	Bel Air Town, Maryland	0.0322364280%
MD8	Berlin Town, Maryland	0.0109236186%
MD9	Bowie City, Maryland	0.0263270946%
MD10	Calvert County, Maryland	1.6948343688%
MD11	Cambridge City, Maryland	0.0196746185%
MD12	Caroline County, Maryland	0.5865017850%
MD13	Carroll County, Maryland	2.9605563001%
MD14	Cecil County, Maryland	3.7958577634%
MD15	Charles County, Maryland	1.9663409179%
MD16	Charlestown, Maryland	0.0013846587%
MD17	College Park City, Maryland	0.0050334845%
MD18	Cottage City Town, Maryland	0.0015972023%
MD19	Cumberland City, Maryland	0.1627132426%
MD20	Dorchester County, Maryland	0.3951913125%
MD21	Easton Town, Maryland	0.0630108370%
MD22	Elkton Town, Maryland	0.0884110160%
MD23	Forest Heights Town, Maryland	0.0014812182%
MD24	Frederick City, Maryland	0.1530889274%
MD25	Frederick County, Maryland	3.4957333212%
MD26	Frostburg City, Maryland	0.0194678741%
MD27	Gaithersburg City, Maryland	0.0243966914%
MD28	Garrett County, Maryland	0.3513434690%
MD29	Grantsville Town, Maryland	0.0002207076%
MD30	Greenbelt City, Maryland	0.0369938028%
MD31	Hagerstown City, Maryland	0.1829328174%
MD32	Harford County, Maryland	5.1958110720%
MD33	Havre De Grace City, Maryland	0.0458009931%
MD34	Howard County, Maryland	3.2487213744%
MD35	Hyattsville City, Maryland	0.0127377562%
MD36	Kent County, Maryland	0.4683852152%
MD37	Laurel City, Maryland	0.0300516480%
MD38	Montgomery County, Maryland	8.5574378958%
MD39	Mountain Lake Park Town, Maryland	0.0001004445%
MD40	New Carrollton City, Maryland	0.0062727689%
MD41	North Brentwood Town, Maryland	0.0000662686%
MD42	North East Town, Maryland	0.0183814522%
MD43	Oakland Town, Maryland	0.0011777453%
MD44	Perryville Town, Maryland	0.0184160785%
MD45	Prince Georges County, Maryland	7.1382650655%
MD46	Queen Annes County, Maryland	0.7381792535%
MD47	Rockville City, Maryland	0.0611045878%
MD48	Salisbury City, Maryland	0.1347806691%

State ID	Qualifying Subdivision	Consolidated State Allocation
MD49	Seat Pleasant City, Maryland	0.0040128808%
MD50	Somerset County, Maryland	0.3875128839%
MD51	St Marys County, Maryland	1.3684562511%
MD52	Takoma Park City, Maryland	0.0195596479%
MD53	Talbot County, Maryland	0.4896824850%
MD54	Upper Marlboro Town, Maryland	0.0009443695%
MD55	Vienna Town, Maryland	0.0001582676%
MD56	Washington County, Maryland	3.0474490505%
MD57	Westminster City, Maryland	0.0440087573%
MD58	Wicomico County, Maryland	1.6694422411%
MD59	Worcester County, Maryland	0.9876031064%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA1	Abington Town, Massachusetts	0.2400899791%
MA2	Acton Town, Massachusetts	0.1586479343%
MA3	Acushnet Town, Massachusetts	0.1547305792%
MA4	Adams Town, Massachusetts	0.0189731986%
MA5	Agawam Town City, Massachusetts	0.4341901730%
MA6	Alford Town, Massachusetts	0.0007449491%
MA7	Amesbury Town City, Massachusetts	0.2580959424%
MA8	Amherst Town, Massachusetts	0.3675897982%
MA9	Andover Town, Massachusetts	0.7102727131%
MA10	Aquinnah Town, Massachusetts	0.0049293930%
MA11	Arlington Town, Massachusetts	0.3350233330%
MA12	Ashburnham Town, Massachusetts	0.0140160133%
MA13	Ashby Town, Massachusetts	0.0069876989%
MA14	Ashfield Town, Massachusetts	0.0027296132%
MA15	Ashland Town, Massachusetts	0.1613930923%
MA16	Athol Town, Massachusetts	0.0359559233%
MA17	Attleboro City, Massachusetts	0.9357205930%
MA18	Auburn Town, Massachusetts	0.3036683195%
MA19	Avon Town, Massachusetts	0.0739889948%
MA20	Ayer Town, Massachusetts	0.0179210686%
MA21	Barnstable County, Massachusetts	0.0639482242%
MA22	Barnstable Town City, Massachusetts	0.8578313582%
MA23	Barre Town, Massachusetts	0.0096522017%
MA24	Becket Town, Massachusetts	0.0067279376%
MA25	Bedford Town, Massachusetts	0.1982937972%
MA26	Belchertown, Massachusetts	0.3492785905%
MA27	Bellingham Town, Massachusetts	0.1961076781%
MA28	Belmont Town, Massachusetts	0.2420315678%
MA29	Berkley Town, Massachusetts	0.1212759115%
MA30	Berlin Town, Massachusetts	0.0397753511%
MA31	Bernardston Town, Massachusetts	0.0040751589%
MA32	Beverly City, Massachusetts	0.4801566147%
MA33	Billerica Town, Massachusetts	0.3870913124%
MA34	Blackstone Town, Massachusetts	0.0221473318%
MA35	Blandford Town, Massachusetts	0.0009007116%
MA36	Bolton Town, Massachusetts	0.0110088433%
MA37	Boston City, Massachusetts	10.5767780349%
MA38	Bourne Town, Massachusetts	0.3783946742%
MA39	Boxborough Town, Massachusetts	0.0399298051%
MA40	Boxford Town, Massachusetts	0.0912309051%
MA41	Boylston Town, Massachusetts	0.0562367737%
MA42	Braintree Town City, Massachusetts	0.4457226214%
MA43	Brewster Town, Massachusetts	0.1284470083%
MA44	Bridgewater Town, Massachusetts	0.0570448443%
MA45	Brimfield Town, Massachusetts	0.0355644757%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA46	Bristol County, Massachusetts	0.1015083030%
MA47	Brockton City, Massachusetts	2.1170344615%
MA48	Brookfield Town, Massachusetts	0.0372953453%
MA49	Brookline Town, Massachusetts	0.8244968622%
MA50	Buckland Town, Massachusetts	0.0031396937%
MA51	Burlington Town, Massachusetts	0.3034752912%
MA52	Cambridge City, Massachusetts	4.3053779748%
MA53	Canton Town, Massachusetts	0.2909840866%
MA54	Carlisle Town, Massachusetts	0.0526144568%
MA55	Carver Town, Massachusetts	0.2179547901%
MA56	Charlemont Town, Massachusetts	0.0066765925%
MA57	Charlton Town, Massachusetts	0.0305379405%
MA58	Chatham Town, Massachusetts	0.1685335181%
MA59	Chelmsford Town, Massachusetts	0.3162632088%
MA60	Chelsea City, Massachusetts	0.5236031155%
MA61	Cheshire Town, Massachusetts	0.0015830626%
MA62	Chester Town, Massachusetts	0.0096828727%
MA63	Chesterfield Town, Massachusetts	0.0168042468%
MA64	Chicopee City, Massachusetts	0.8816952708%
MA65	Chilmark Town, Massachusetts	0.0062328576%
MA66	Clarksburg Town, Massachusetts	0.0303920178%
MA67	Clinton Town, Massachusetts	0.2371744557%
MA68	Cohasset Town, Massachusetts	0.1430861241%
MA69	Colrain Town, Massachusetts	0.0016018525%
MA70	Concord Town, Massachusetts	0.1749597704%
MA71	Conway Town, Massachusetts	0.0354590115%
MA72	Cummington Town, Massachusetts	0.0009757143%
MA73	Dalton Town, Massachusetts	0.0123034626%
MA74	Danvers Town, Massachusetts	0.4037368656%
MA75	Dartmouth Town, Massachusetts	0.5505881937%
MA76	Dedham Town, Massachusetts	0.3188835370%
MA77	Deerfield Town, Massachusetts	0.0872700035%
MA78	Dennis Town, Massachusetts	0.0970183530%
MA79	Dighton Town, Massachusetts	0.0228752705%
MA80	Douglas Town, Massachusetts	0.1659192613%
MA81	Dover Town, Massachusetts	0.0683428114%
MA82	Dracut Town, Massachusetts	0.2045887296%
MA83	Dudley Town, Massachusetts	0.0179390734%
MA84	Dukes County, Massachusetts	0.0054256244%
MA85	Dunstable Town, Massachusetts	0.0041607864%
MA86	Duxbury Town, Massachusetts	0.3742011756%
MA87	East Bridgewater Town, Massachusetts	0.2308047825%
MA88	East Brookfield Town, Massachusetts	0.0052365739%
MA89	East Longmeadow Town, Massachusetts	0.2715713403%
MA90	Eastham Town, Massachusetts	0.0786916528%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA91	Easthampton Town City, Massachusetts	0.2670463228%
MA92	Easton Town, Massachusetts	0.5676857515%
MA93	Edgartown, Massachusetts	0.0809809332%
MA94	Egremont Town, Massachusetts	0.0050750540%
MA95	Erving Town, Massachusetts	0.0513752128%
MA96	Essex Town, Massachusetts	0.0113333487%
MA97	Everett City, Massachusetts	0.4368228534%
MA98	Fairhaven Town, Massachusetts	0.3265362625%
MA99	Fall River City, Massachusetts	2.1055901006%
MA100	Falmouth Town, Massachusetts	0.6632841320%
MA101	Fitchburg City, Massachusetts	0.6913634212%
MA102	Florida Town, Massachusetts	0.0170875086%
MA103	Foxborough Town, Massachusetts	0.2588100112%
MA104	Framingham Town, Massachusetts	0.6902310022%
MA105	Franklin Town City, Massachusetts	0.4506715894%
MA106	Freetown, Massachusetts	0.0347111837%
MA107	Gardner City, Massachusetts	0.3080580392%
MA108	Georgetown, Massachusetts	0.1361143365%
MA109	Gill Town, Massachusetts	0.0032293514%
MA110	Gloucester City, Massachusetts	0.4219402015%
MA111	Goshen Town, Massachusetts	0.0020598761%
MA112	Gosnold Town, Massachusetts	0.0011645031%
MA113	Grafton Town, Massachusetts	0.2787903277%
MA114	Granby Town, Massachusetts	0.1421420753%
MA115	Granville Town, Massachusetts	0.0205788719%
MA116	Great Barrington Town, Massachusetts	0.0238735954%
MA117	Greenfield Town City, Massachusetts	0.4522917084%
MA118	Groton Town, Massachusetts	0.0112861907%
MA119	Groveland Town, Massachusetts	0.0109548289%
MA120	Hadley Town, Massachusetts	0.1036658447%
MA121	Halifax Town, Massachusetts	0.0744074497%
MA122	Hamilton Town, Massachusetts	0.0148754814%
MA123	Hampden Town, Massachusetts	0.0086441416%
MA124	Hancock Town, Massachusetts	0.0080083205%
MA125	Hanover Town, Massachusetts	0.2979987927%
MA126	Hanson Town, Massachusetts	0.0306151413%
MA127	Hardwick Town, Massachusetts	0.0046489576%
MA128	Harvard Town, Massachusetts	0.1646144358%
MA129	Harwich Town, Massachusetts	0.2864309104%
MA130	Hatfield Town, Massachusetts	0.0627393895%
MA131	Haverhill City, Massachusetts	0.8142937865%
MA132	Hawley Town, Massachusetts	0.0002691301%
MA133	Heath Town, Massachusetts	0.0011790011%
MA134	Hingham Town, Massachusetts	0.4828724626%
MA135	Hinsdale Town, Massachusetts	0.0037015067%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA136	Holbrook Town, Massachusetts	0.1222501079%
MA137	Holden Town, Massachusetts	0.0343745879%
MA138	Holland Town, Massachusetts	0.0238040885%
MA139	Holliston Town, Massachusetts	0.1672190621%
MA140	Holyoke City, Massachusetts	0.9664659552%
MA141	Hopedale Town, Massachusetts	0.1372305825%
MA142	Hopkinton Town, Massachusetts	0.2027514537%
MA143	Hubbardston Town, Massachusetts	0.0076647112%
MA144	Hudson Town, Massachusetts	0.1994512345%
MA145	Hull Town, Massachusetts	0.1954841045%
MA146	Huntington Town, Massachusetts	0.0026561285%
MA147	Ipswich Town, Massachusetts	0.2079635850%
MA148	Kingston Town, Massachusetts	0.1369378473%
MA149	Lakeville Town, Massachusetts	0.0202228058%
MA150	Lancaster Town, Massachusetts	0.0116656002%
MA151	Lanesborough Town, Massachusetts	0.0575248505%
MA152	Lawrence City, Massachusetts	1.4758837913%
MA153	Lee Town, Massachusetts	0.1519018348%
MA154	Leicester Town, Massachusetts	0.1926291380%
MA155	Lenox Town, Massachusetts	0.1609461124%
MA156	Leominster City, Massachusetts	0.7902530708%
MA157	Leverett Town, Massachusetts	0.0395342227%
MA158	Lexington Town, Massachusetts	0.5090924410%
MA159	Leyden Town, Massachusetts	0.0007689206%
MA160	Lincoln Town, Massachusetts	0.1099619285%
MA161	Littleton Town, Massachusetts	0.1043597104%
MA162	Longmeadow Town, Massachusetts	0.2992108201%
MA163	Lowell City, Massachusetts	1.0242474790%
MA164	Ludlow Town, Massachusetts	0.3042665608%
MA165	Lunenburg Town, Massachusetts	0.1916440550%
MA166	Lynn City, Massachusetts	1.5917595154%
MA167	Lynnfield Town, Massachusetts	0.2333154069%
MA168	Malden City, Massachusetts	0.4659742140%
MA169	Manchester-By-The-Sea Town, Massachusetts	0.0201100664%
MA170	Mansfield Town, Massachusetts	0.6816694002%
MA171	Marblehead Town, Massachusetts	0.3485912672%
MA172	Marion Town, Massachusetts	0.0698025620%
MA173	Marlborough City, Massachusetts	0.3668295136%
MA174	Marshfield Town, Massachusetts	0.4930551259%
MA175	Mashpee Town, Massachusetts	0.3459150927%
MA176	Mattapoisett Town, Massachusetts	0.0843720139%
MA177	Maynard Town, Massachusetts	0.1014940666%
MA178	Medfield Town, Massachusetts	0.2083772770%
MA179	Medford City, Massachusetts	0.3972200658%
MA180	Medway Town, Massachusetts	0.1940731867%
MA181	Melrose City, Massachusetts	0.2296395466%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA182	Mendon Town, Massachusetts	0.0164096065%
MA183	Merrimac Town, Massachusetts	0.0100336001%
MA184	Methuen Town City, Massachusetts	0.7149217230%
MA185	Middleborough Town, Massachusetts	0.3933419654%
MA186	Middlefield Town, Massachusetts	0.0003252381%
MA187	Middleton Town, Massachusetts	0.0917093411%
MA188	Milford Town, Massachusetts	0.5323916620%
MA189	Millbury Town, Massachusetts	0.2332340712%
MA190	Millis Town, Massachusetts	0.0999797258%
MA191	Millville Town, Massachusetts	0.0062130209%
MA192	Milton Town, Massachusetts	0.3520463069%
MA193	Monroe Town, Massachusetts	0.0001025332%
MA194	Monson Town, Massachusetts	0.1266258006%
MA195	Montague Town, Massachusetts	0.0291412591%
MA196	Monterey Town, Massachusetts	0.0042137017%
MA197	Montgomery Town, Massachusetts	0.0002324400%
MA198	Mt Washington Town, Massachusetts	0.0001746048%
MA199	Nahant Town, Massachusetts	0.0355497159%
MA200	Nantucket Town, Massachusetts	0.1102324194%
MA201	Natick Town, Massachusetts	0.3421702489%
MA202	Needham Town, Massachusetts	0.4914063771%
MA203	New Ashford Town, Massachusetts	0.0002677169%
MA204	New Bedford City, Massachusetts	2.3617391681%
MA205	New Braintree Town, Massachusetts	0.0013480056%
MA206	New Marlborough Town, Massachusetts	0.0032940955%
MA207	New Salem Town, Massachusetts	0.0024476600%
MA208	Newbury Town, Massachusetts	0.0135400372%
MA209	Newburyport City, Massachusetts	0.2905748435%
MA210	Newton City, Massachusetts	1.0088865481%
MA211	Norfolk County, Massachusetts	0.0563017795%
MA212	Norfolk Town, Massachusetts	0.0892988423%
MA213	North Adams City, Massachusetts	0.3428675166%
MA214	North Andover Town, Massachusetts	0.4494773051%
MA215	North Attleborough Town, Massachusetts	0.6369959028%
MA216	North Brookfield Town, Massachusetts	0.0698725924%
MA217	North Reading Town, Massachusetts	0.1664230820%
MA218	Northampton City, Massachusetts	0.5405649568%
MA219	Northborough Town, Massachusetts	0.2422641125%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA220	Northbridge Town, Massachusetts	0.2823159735%
MA221	Northfield Town, Massachusetts	0.0153010544%
MA222	Norton Town, Massachusetts	0.4563834066%
MA223	Norwell Town, Massachusetts	0.2753854817%
MA224	Norwood Town, Massachusetts	0.3412282413%
MA225	Oak Bluffs Town, Massachusetts	0.0769116887%
MA226	Oakham Town, Massachusetts	0.0026269230%
MA227	Orange Town, Massachusetts	0.1376712816%
MA228	Orleans Town, Massachusetts	0.0935051641%
MA229	Otis Town, Massachusetts	0.0035269019%
MA230	Oxford Town, Massachusetts	0.2336229019%
MA231	Palmer Town City, Massachusetts	0.1621757259%
MA232	Paxton Town, Massachusetts	0.0115100470%
MA233	Peabody City, Massachusetts	0.7162928627%
MA234	Pelham Town, Massachusetts	0.0235476246%
MA235	Pembroke Town, Massachusetts	0.3388218249%
MA236	Pepperell Town, Massachusetts	0.0102363113%
MA237	Peru Town, Massachusetts	0.0011523603%
MA238	Petersham Town, Massachusetts	0.0159775433%
MA239	Phillipston Town, Massachusetts	0.0039835646%
MA240	Pittsfield City, Massachusetts	1.1541979937%
MA241	Plainfield Town, Massachusetts	0.0004986914%
MA242	Plainville Town, Massachusetts	0.0738004154%
MA243	Plymouth County, Massachusetts	0.0008974666%
MA244	Plymouth Town, Massachusetts	1.0727134492%
MA245	Plympton Town, Massachusetts	0.0311939123%
MA246	Princeton Town, Massachusetts	0.0094015998%
MA247	Provincetown, Massachusetts	0.0895015011%
MA248	Quincy City, Massachusetts	1.0277365393%
MA249	Randolph Town, Massachusetts	0.3517891103%
MA250	Raynham Town, Massachusetts	0.0739771661%
MA251	Reading Town, Massachusetts	0.2463903024%
MA252	Rehoboth Town, Massachusetts	0.0342848256%
MA253	Revere City, Massachusetts	0.5754964378%
MA254	Richmond Town, Massachusetts	0.0346755405%
MA255	Rochester Town, Massachusetts	0.0656757963%
MA256	Rockland Town, Massachusetts	0.3048431858%
MA257	Rockport Town, Massachusetts	0.1188536886%
MA258	Rowe Town, Massachusetts	0.0242459391%
MA259	Rowley Town, Massachusetts	0.0134543050%
MA260	Royalston Town, Massachusetts	0.0020739031%
MA261	Russell Town, Massachusetts	0.0012348998%
MA262	Rutland Town, Massachusetts	0.0122272562%
MA263	Salem City, Massachusetts	0.6254547137%
MA264	Salisbury Town, Massachusetts	0.0319290215%
MA265	Sandisfield Town, Massachusetts	0.0020719142%
MA266	Sandwich Town, Massachusetts	0.4944903815%
MA267	Saugus Town, Massachusetts	0.3330802265%
MA268	Savoy Town, Massachusetts	0.0103246605%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA269	Scituate Town, Massachusetts	0.3938536371%
MA270	Seekonk Town, Massachusetts	0.3325159013%
MA271	Sharon Town, Massachusetts	0.3157804286%
MA272	Sheffield Town, Massachusetts	0.0066580643%
MA273	Shelburne Town, Massachusetts	0.0145706034%
MA274	Sherborn Town, Massachusetts	0.0361347676%
MA275	Shirley Town, Massachusetts	0.0049654026%
MA276	Shrewsbury Town, Massachusetts	0.6471205738%
MA277	Shutesbury Town, Massachusetts	0.0358178516%
MA278	Somerset Town, Massachusetts	0.2943717652%
MA279	Somerville City, Massachusetts	0.5538327759%
MA280	South Hadley Town, Massachusetts	0.3289508962%
MA281	Southampton Town, Massachusetts	0.0773861993%
MA282	Southborough Town, Massachusetts	0.2173688486%
MA283	Southbridge Town City, Massachusetts	0.2906114812%
MA284	Southwick Town, Massachusetts	0.0165255910%
MA285	Spencer Town, Massachusetts	0.0203153945%
MA286	Springfield City, Massachusetts	3.4410224370%
MA287	Sterling Town, Massachusetts	0.0196759620%
MA288	Stockbridge Town, Massachusetts	0.0092305018%
MA289	Stoneham Town, Massachusetts	0.1669780908%
MA290	Stoughton Town, Massachusetts	0.3118943726%
MA291	Stow Town, Massachusetts	0.0087733680%
MA292	Sturbridge Town, Massachusetts	0.1235688557%
MA293	Sudbury Town, Massachusetts	0.1950193814%
MA294	Sunderland Town, Massachusetts	0.0394445127%
MA295	Sutton Town, Massachusetts	0.1720631416%
MA296	Swampscott Town, Massachusetts	0.2802270489%
MA297	Swansea Town, Massachusetts	0.3127370397%
MA298	Taunton City, Massachusetts	1.3156698571%
MA299	Templeton Town, Massachusetts	0.0167725290%
MA300	Tewksbury Town, Massachusetts	0.2526508477%
MA301	Tisbury Town, Massachusetts	0.0665566713%
MA302	Tolland Town, Massachusetts	0.0005593530%
MA303	Topsfield Town, Massachusetts	0.0713350646%
MA304	Townsend Town, Massachusetts	0.0093843801%
MA305	Truro Town, Massachusetts	0.0604250384%
MA306	Tyngsborough Town, Massachusetts	0.1162396935%
MA307	Tyringham Town, Massachusetts	0.0012803829%
MA308	Upton Town, Massachusetts	0.0211017442%
MA309	Uxbridge Town, Massachusetts	0.2255606716%
MA310	Wakefield Town, Massachusetts	0.2116065761%
MA311	Wales Town, Massachusetts	0.0147604390%
MA312	Walpole Town, Massachusetts	0.3194149930%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA313	Waltham City, Massachusetts	0.5322671985%
MA314	Ware Town, Massachusetts	0.2035588439%
MA315	Wareham Town, Massachusetts	0.3595394490%
MA316	Warren Town, Massachusetts	0.0179304373%
MA317	Warwick Town, Massachusetts	0.0065997057%
MA318	Washington Town, Massachusetts	0.0004074112%
MA319	Watertown Town City, Massachusetts	0.2540965713%
MA320	Wayland Town, Massachusetts	0.2147389946%
MA321	Webster Town, Massachusetts	0.2405963644%
MA322	Wellesley Town, Massachusetts	0.4811483972%
MA323	Wellfleet Town, Massachusetts	0.0667808417%
MA324	Wendell Town, Massachusetts	0.0010508215%
MA325	Wenham Town, Massachusetts	0.0112119209%
MA326	West Boylston Town, Massachusetts	0.1222726663%
MA327	West Bridgewater Town, Massachusetts	0.1467598909%
MA328	West Brookfield Town, Massachusetts	0.0059191866%
MA329	West Newbury Town, Massachusetts	0.0086981560%
MA330	West Springfield Town City, Massachusetts	0.4627594653%
MA331	West Stockbridge Town, Massachusetts	0.0028401544%
MA332	West Tisbury Town, Massachusetts	0.0099183484%
MA333	Westborough Town, Massachusetts	0.5070384269%
MA334	Westfield City, Massachusetts	0.6538385669%
MA335	Westford Town, Massachusetts	0.2939962811%
MA336	Westhampton Town, Massachusetts	0.0199373981%
MA337	Westminster Town, Massachusetts	0.0226744436%
MA338	Weston Town, Massachusetts	0.2254658323%
MA339	Westport Town, Massachusetts	0.2811335179%
MA340	Westwood Town, Massachusetts	0.2903783084%
MA341	Weymouth Town City, Massachusetts	0.5656639786%
MA342	Whately Town, Massachusetts	0.0314223222%
MA343	Whitman Town, Massachusetts	0.0448742719%
MA344	Wilbraham Town, Massachusetts	0.0313150261%
MA345	Williamsburg Town, Massachusetts	0.0343998679%
MA346	Williamstown, Massachusetts	0.0783021941%
MA347	Wilmington Town, Massachusetts	0.2467559990%
MA348	Winchendon Town, Massachusetts	0.1830720373%
MA349	Winchester Town, Massachusetts	0.2570095300%

State ID	Qualifying Subdivision	Consolidated State Allocation
MA350	Windsor Town, Massachusetts	0.0005238144%
MA351	Winthrop Town City, Massachusetts	0.1505890537%
MA352	Woburn City, Massachusetts	0.3503541163%
MA353	Worcester City, Massachusetts	3.7929503518%
MA354	Worthington Town, Massachusetts	0.0015069609%
MA355	Wrentham Town, Massachusetts	0.0961794021%
MA356	Yarmouth Town, Massachusetts	0.1308391883%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI1	Ada Township, Michigan	0.0042278554%
MI2	Adrian City, Michigan	0.0328126789%
MI3	Alcona County, Michigan	0.0934629817%
MI4	Alger County, Michigan	0.0879525875%
MI5	Algoma Township, Michigan	0.0016941585%
MI6	Allegan County, Michigan	0.4460242903%
MI7	Allen Park City, Michigan	0.0620457416%
MI8	Allendale Charter Township, Michigan	0.0044901249%
MI9	Alpena County, Michigan	0.3552566921%
MI10	Alpine Charter Township, Michigan	0.0014679355%
MI11	Ann Arbor City, Michigan	0.2674253148%
MI12	Antrim County, Michigan	0.2666725680%
MI13	Antwerp Township, Michigan	0.0007581775%
MI14	Arenac County, Michigan	0.1805504304%
MI15	Auburn Hills City, Michigan	0.0679438259%
MI16	Bangor Charter Township, Michigan	0.0063071908%
MI17	Baraga County, Michigan	0.0830045795%
MI18	Barry County, Michigan	0.2499588316%
MI19	Bath Charter Township, Michigan	0.0310575579%
MI20	Battle Creek City, Michigan	0.1976545014%
MI21	Bay City, Michigan	0.0662640083%
MI22	Bay County, Michigan	1.1889740912%
MI23	Bedford Township, Michigan	0.0238194433%
MI24	Benton Charter Township, Michigan	0.0523760917%
MI25	Benzie County, Michigan	0.1559708495%
MI26	Berkley City, Michigan	0.0207220905%
MI27	Berrien County, Michigan	1.4353008205%
MI28	Beverly Hills Village, Michigan	0.0265585450%
MI29	Big Rapids City, Michigan	0.0141485793%
MI30	Birmingham City, Michigan	0.0595211261%
MI278	Blackman Charter Township, Michigan	0.0000000000%
MI31	Bloomfield Charter Township, Michigan	0.1382971973%
MI32	Branch County, Michigan	0.3823019725%
MI33	Brandon Charter Township, Michigan	0.0172309269%
MI34	Brighton Township, Michigan	0.0005844508%
MI35	Brownstown Charter Township, Michigan	0.0597655290%
MI36	Burton City, Michigan	0.0191573337%
MI37	Byron Township, Michigan	0.0082898139%
MI38	Cadillac City, Michigan	0.0572782844%
MI39	Caledonia Charter Township, Kent County, Michigan	0.0026644035%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI40	Calhoun County, Michigan	1.7844560932%
MI41	Cannon Township, Michigan	0.0031972842%
MI42	Canton Charter Township, Michigan	0.2635380816%
MI43	Cascade Charter Township, Michigan	0.0117082940%
MI44	Cass County, Michigan	0.4127454052%
MI45	Charlevoix County, Michigan	0.2142857345%
MI46	Cheboygan County, Michigan	0.3054122146%
MI47	Chesterfield Charter Township, Michigan	0.1219762582%
MI48	Chippewa County, Michigan	0.2775926422%
MI49	Clare County, Michigan	0.2705014687%
MI50	Clawson City, Michigan	0.0134773906%
MI51	Clinton Charter Township, Michigan	0.6524315825%
MI52	Clinton County, Michigan	0.5402667258%
MI53	Coldwater City, Michigan	0.0074666730%
MI54	Commerce Charter Township, Michigan	0.0192121087%
MI55	Comstock Charter Township, Michigan	0.0081656838%
MI56	Cooper Charter Township, Michigan	0.0009266020%
MI57	Crawford County, Michigan	0.2886252314%
MI58	Davison Township, Michigan	0.0085451532%
MI59	Dearborn City, Michigan	0.2895118016%
MI60	Dearborn Heights City, Michigan	0.1017944247%
MI61	Delhi Charter Township, Michigan	0.0190090980%
MI62	Delta Charter Township, Michigan	0.0391807240%
MI63	Delta County, Michigan	0.2697501609%
MI64	Detroit City, Michigan	7.3863527308%
MI65	Dewitt Charter Township, Michigan	0.0355251274%
MI66	Dickinson County, Michigan	0.2772928270%
MI67	East Bay Township, Michigan	0.0014150822%
MI68	East Grand Rapids City, Michigan	0.0200332982%
MI69	East Lansing City, Michigan	0.1928772515%
MI70	Eastpointe City, Michigan	0.1620457585%
MI71	Eaton County, Michigan	1.0040379149%
MI72	Egelston Township, Michigan	0.0057198661%
MI73	Emmet County, Michigan	0.1751859110%
MI74	Emmett Charter Township, Michigan	0.0078634499%
MI75	Escanaba City, Michigan	0.0187485817%
MI76	Farmington City, Michigan	0.0212789632%
MI77	Farmington Hills City, Michigan	0.1595279696%
MI78	Fenton Charter Township, Michigan	0.0017899625%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI79	Fenton City, Michigan	0.0463367531%
MI80	Ferndale City, Michigan	0.0860957347%
MI81	Flat Rock City, Michigan	0.0165965372%
MI82	Flint Charter Township, Michigan	0.0247094958%
MI83	Flint City, Michigan	2.8492826162%
MI84	Flushing Charter Township, Michigan	0.0036163716%
MI85	Fort Gratiot Charter Township, Michigan	0.0091219411%
MI86	Fraser City, Michigan	0.0773787868%
MI87	Frenchtown Charter Township, Michigan	0.0472286300%
MI88	Fruitport Charter Township, Michigan	0.0124893804%
MI89	Gaines Township, Kent County, Michigan	0.0086869609%
MI90	Garden City, Michigan	0.0348032319%
MI91	Garfield Charter Township, Michigan	0.0003928875%
MI92	Genesee Charter Township, Michigan	0.0125078610%
MI93	Genesee County, Michigan	2.1444091585%
MI94	Genoa Township, Michigan	0.0000730563%
MI95	Georgetown Charter Township, Michigan	0.0069588066%
MI96	Gladwin County, Michigan	0.2077497604%
MI97	Gogebic County, Michigan	0.0721438406%
MI98	Grand Blanc Charter Township, Michigan	0.0202728576%
MI99	Grand Haven Charter Township, Michigan	0.0108943696%
MI100	Grand Haven City, Michigan	0.0335954698%
MI101	Grand Rapids Charter Township, Michigan	0.0036296214%
MI102	Grand Rapids City, Michigan	1.3440305744%
MI103	Grand Traverse County, Michigan	0.9563577517%
MI104	Grandville City, Michigan	0.0268602038%
MI105	Gratiot County, Michigan	0.3525171058%
MI106	Green Oak Township, Michigan	0.0310802595%
MI107	Grosse Ile Township, Michigan	0.0206969233%
MI108	Grosse Pointe Park City, Michigan	0.0273525288%
MI109	Grosse Pointe Woods City, Michigan	0.0194917954%
MI110	Hamburg Township, Michigan	0.0327814289%
MI111	Hamtramck City, Michigan	0.1045696825%
MI112	Harper Woods City, Michigan	0.0291877050%
MI113	Harrison Charter Township, Michigan	0.1197690060%
MI114	Hartland Township, Michigan	0.0002817888%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI115	Hazel Park City, Michigan	0.0425097355%
MI116	Highland Charter Township, Michigan	0.0169953269%
MI117	Highland Park City, Michigan	0.0226020911%
MI118	Hillsdale County, Michigan	0.4179676993%
MI119	Holland Charter Township, Michigan	0.0168424444%
MI120	Holland City, Michigan	0.0955964916%
MI121	Holly Township, Michigan	0.0023667091%
MI122	Houghton County, Michigan	0.2492719347%
MI123	Huron Charter Township, Michigan	0.0404726791%
MI124	Huron County, Michigan	0.1691383539%
MI125	Independence Charter Township, Michigan	0.0476500991%
MI126	Ingham County, Michigan	2.3910799665%
MI127	Inkster City, Michigan	0.0963789326%
MI128	Ionia City, Michigan	0.0259372614%
MI129	Ionia County, Michigan	0.5298085345%
MI130	Iosco County, Michigan	0.3597971837%
MI131	Iron County, Michigan	0.1234778574%
MI132	Iron Mountain City, Michigan	0.0102890396%
MI133	Isabella County, Michigan	0.6406627159%
MI134	Jackson City, Michigan	0.1975960490%
MI135	Jackson County, Michigan	0.6266962818%
MI136	Kalamazoo Charter Township, Michigan	0.0300335110%
MI137	Kalamazoo City, Michigan	0.2186435127%
MI138	Kalamazoo County, Michigan	2.1433241424%
MI139	Kalkaska County, Michigan	0.0950485976%
MI140	Kent County, Michigan	3.0032910409%
MI141	Kentwood City, Michigan	0.0821691991%
MI142	Keweenaw County, Michigan	0.0039070602%
MI143	Lake County, Michigan	0.0815750583%
MI144	Lansing City, Michigan	0.6157258774%
MI145	Lapeer County, Michigan	0.4570551035%
MI146	Leelanau County, Michigan	0.1385869050%
MI147	Lenawee County, Michigan	0.8823790089%
MI148	Lenox Township, Michigan	0.0064611477%
MI149	Leoni Township, Michigan	0.0052492697%
MI150	Lincoln Charter Township, Michigan	0.0103038346%
MI151	Lincoln Park City, Michigan	0.0917234908%
MI152	Livingston County, Michigan	1.4441655813%
MI153	Livonia City, Michigan	0.4479739512%
MI154	Luce County, Michigan	0.0715137120%
MI155	Lyon Charter Township, Michigan	0.0034804545%
MI156	Mackinac County, Michigan	0.0525087280%
MI157	Macomb County, Michigan	8.9600697690%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI158	Macomb Township, Michigan	0.0624612667%
MI159	Madison Heights City, Michigan	0.0833167256%
MI160	Manistee County, Michigan	0.3495467119%
MI161	Marion Township, Livingston County, Michigan	0.0001148028%
MI162	Marquette City, Michigan	0.0180973752%
MI163	Marquette County, Michigan	0.6035272233%
MI164	Mason County, Michigan	0.2785769407%
MI165	Mecosta County, Michigan	0.1917457546%
MI166	Melvindale City, Michigan	0.0300027854%
MI167	Menominee County, Michigan	0.0912256468%
MI168	Meridian Charter Township, Michigan	0.0408752583%
MI169	Midland City, Michigan	0.1745254871%
MI170	Midland County, Michigan	0.3108652798%
MI171	Milford Charter Township, Michigan	0.0037106999%
MI172	Missaukee County, Michigan	0.0578937210%
MI173	Monitor Charter Township, Michigan	0.0025502597%
MI174	Monroe Charter Township, Michigan	0.0069121111%
MI175	Monroe City, Michigan	0.1213473624%
MI176	Monroe County, Michigan	1.7767045087%
MI177	Montcalm County, Michigan	0.6957831869%
MI178	Montmorency County, Michigan	0.0985847841%
MI179	Mount Clemens City, Michigan	0.0290390165%
MI180	Mount Morris Charter Township, Michigan	0.0143743799%
MI181	Mount Pleasant City, Michigan	0.0206549613%
MI182	Mundy Charter Township, Michigan	0.0087055516%
MI183	Muskegon Charter Township, Michigan	0.0208333463%
MI184	Muskegon City, Michigan	0.1009248080%
MI185	Muskegon County, Michigan	1.9100367830%
MI186	Muskegon Heights City, Michigan	0.0288916451%
MI187	New Baltimore City, Michigan	0.0277364435%
MI188	Newaygo County, Michigan	0.5231811022%
MI189	Niles City, Michigan	0.0336753397%
MI190	Niles Township, Michigan	0.0124323128%
MI191	Northville Charter Township, Michigan	0.0937410207%
MI192	Norton Shores City, Michigan	0.0405173975%
MI193	Novi City, Michigan	0.0846232347%
MI194	Oak Park City, Michigan	0.0599120079%
MI195	Oakland Charter Township, Michigan	0.0158387451%
MI196	Oakland County, Michigan	6.0626269110%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI197	Oceana County, Michigan	0.2437641356%
MI198	Oceola Township, Michigan	0.0002087325%
MI199	Ogemaw County, Michigan	0.6231250992%
MI200	Ontonagon County, Michigan	0.0564870701%
MI201	Orion Charter Township, Michigan	0.0279774995%
MI202	Osceola County, Michigan	0.2155121164%
MI203	Oscoda County, Michigan	0.0566748663%
MI204	Oshtemo Charter Township, Michigan	0.0071811704%
MI205	Otsego County, Michigan	0.3179204956%
MI206	Ottawa County, Michigan	0.8561297014%
MI207	Owosso City, Michigan	0.0346613348%
MI208	Oxford Charter Township, Michigan	0.0127384634%
MI209	Park Township, Ottawa County, Michigan	0.0040071188%
MI210	Pittsfield Charter Township, Michigan	0.0274648128%
MI211	Plainfield Charter Township, Michigan	0.0085009554%
MI212	Plymouth Charter Township, Michigan	0.0357383127%
MI213	Pontiac City, Michigan	0.3248498872%
MI214	Port Huron Charter Township, Michigan	0.0083327500%
MI215	Port Huron City, Michigan	0.1504374166%
MI216	Portage City, Michigan	0.0567022991%
MI217	Presque Isle County, Michigan	0.1629846266%
MI218	Redford Charter Township, Michigan	0.1223763279%
MI219	Riverview City, Michigan	0.0278625766%
MI220	Rochester City, Michigan	0.0230459632%
MI221	Rochester Hills City, Michigan	0.0390185719%
MI222	Romulus City, Michigan	0.1043054243%
MI223	Roscommon County, Michigan	0.4301835283%
MI224	Roseville City, Michigan	0.2467127304%
MI225	Royal Oak City, Michigan	0.1498737243%
MI226	Saginaw Charter Township, Michigan	0.0399524841%
MI227	Saginaw City, Michigan	0.2486892685%
MI228	Saginaw County, Michigan	1.8697499899%
MI229	Sanilac County, Michigan	0.3884583961%
MI230	Sault Ste. Marie City, Michigan	0.1102861372%
MI231	Schoolcraft County, Michigan	0.0455825815%
MI232	Scio Charter Township, Michigan	0.0029747576%
MI233	Shelby Charter Township, Michigan	0.2924370238%
MI234	Shiawassee County, Michigan	0.8126038392%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI235	South Lyon City, Michigan	0.0149498906%
MI236	Southfield City, Michigan	0.2271237501%
MI237	Southfield Township, Michigan	0.0000642545%
MI238	Southgate City, Michigan	0.0512897499%
MI239	Spring Lake Township, Michigan	0.0060017466%
MI240	Springfield Charter Township, Michigan	0.0025808909%
MI241	St Clair County, Michigan	2.2355263751%
MI242	St Joseph County, Michigan	0.2462634133%
MI243	St. Clair Shores City, Michigan	0.1962330188%
MI244	Sterling Heights City, Michigan	1.0160154348%
MI245	Sturgis City, Michigan	0.0345993898%
MI246	Summit Township, Jackson County, Michigan	0.0084993840%
MI247	Superior Charter Township, Michigan	0.0069991428%
MI248	Taylor City, Michigan	0.2173451175%
MI249	Texas Charter Township, Michigan	0.0030056684%
MI250	Thomas Township, Michigan	0.0073384407%
MI251	Traverse City, Michigan	0.0694748526%
MI252	Trenton City, Michigan	0.0278175688%
MI253	Troy City, Michigan	0.1362571155%
MI254	Tuscola County, Michigan	0.4964108264%
MI255	Tyrone Township, Livingston County, Michigan	0.0055627194%
MI256	Union Charter Township, Michigan	0.0000295731%
MI257	Van Buren Charter Township, Michigan	0.0769291242%
MI258	Van Buren County, Michigan	0.4404295489%
MI259	Vienna Charter Township, Genesee County, Michigan	0.0049907472%
MI260	Walker City, Michigan	0.0333201255%
MI261	Warren City, Michigan	1.2684334598%
MI262	Washington Township, Macomb County, Michigan	0.0466960473%
MI263	Washtenaw County, Michigan	2.6615283392%
MI264	Waterford Charter Township, Michigan	0.1262119884%
MI265	Wayne City, Michigan	0.0938477408%
MI266	Wayne County, Michigan	11.4087490300%
MI267	West Bloomfield Charter Township, Michigan	0.1514104788%
MI268	Westland City, Michigan	0.3653115305%
MI269	Wexford County, Michigan	0.3345380363%
MI270	White Lake Charter Township, Michigan	0.0337978902%
MI271	Wixom City, Michigan	0.0213271541%

State ID	Qualifying Subdivision	Consolidated State Allocation
MI272	Woodhaven City, Michigan	0.0330180645%
MI273	Wyandotte City, Michigan	0.0563902282%
MI274	Wyoming City, Michigan	0.1474722212%
MI275	Ypsilanti Charter Township, Michigan	0.0334144094%
MI276	Ypsilanti City, Michigan	0.0518771364%
MI277	Zeeland Charter Township, Michigan	0.0035509487%

State ID	Qualifying Subdivision	Consolidated State Allocation
MN1	Aitkin County, Minnesota	0.5760578506%
MN4	Andover City, Minnesota	0.1364919451%
MN6	Anoka County, Minnesota	5.0386504681%
MN7	Apple Valley City, Minnesota	0.2990817345%
MN10	Becker County, Minnesota	0.6619330684%
MN11	Beltrami County, Minnesota	0.7640787093%
MN13	Benton County, Minnesota	0.6440948102%
MN15	Big Stone County, Minnesota	0.1194868775%
MN16	Blaine City, Minnesota	0.4249516913%
MN17	Bloomington City, Minnesota	0.4900195550%
MN18	Blue Earth County, Minnesota	0.6635420705%
MN20	Brooklyn Center City, Minnesota	0.1413853902%
MN21	Brooklyn Park City, Minnesota	0.2804136235%
MN22	Brown County, Minnesota	0.3325325416%
MN24	Burnsville City, Minnesota	0.5135361297%
MN25	Carlton County, Minnesota	0.9839591749%
MN26	Carver County, Minnesota	1.1452829660%
MN27	Cass County, Minnesota	0.8895681513%
MN31	Chippewa County, Minnesota	0.2092611794%
MN32	Chisago County, Minnesota	0.9950193750%
MN33	Clay County, Minnesota	0.9428475282%
MN34	Clearwater County, Minnesota	0.1858592043%
MN37	Cook County, Minnesota	0.1074594960%
MN38	Coon Rapids City, Minnesota	0.5772642445%
MN39	Cottage Grove City, Minnesota	0.2810994719%
MN40	Cottonwood County, Minnesota	0.1739065270%
MN41	Crow Wing County, Minnesota	1.1394859175%
MN43	Dakota County, Minnesota	4.4207140603%
MN44	Dodge County, Minnesota	0.2213963258%
MN45	Douglas County, Minnesota	0.6021779472%
MN46	Duluth City, Minnesota	1.1502115380%
MN47	Eagan City, Minnesota	0.3657951576%
MN49	Eden Prairie City, Minnesota	0.2552171573%
MN50	Edina City, Minnesota	0.1973054822%
MN54	Faribault County, Minnesota	0.2169409335%
MN57	Fillmore County, Minnesota	0.2329591105%
MN59	Freeborn County, Minnesota	0.3507169824%
MN62	Goodhue County, Minnesota	0.5616542387%
MN64	Grant County, Minnesota	0.0764556498%
MN67	Hennepin County, Minnesota	19.0624622262%
MN70	Houston County, Minnesota	0.3099019273%
MN71	Hubbard County, Minnesota	0.4582368775%
MN74	Inver Grove Heights City, Minnesota	0.2193400520%
MN75	Isanti County, Minnesota	0.7712992708%
MN76	Itasca County, Minnesota	1.1406408131%
MN77	Jackson County, Minnesota	0.1408950444%
MN78	Kanabec County, Minnesota	0.3078966750%
MN79	Kandiyohi County, Minnesota	0.1581167542%

State ID	Qualifying Subdivision	Consolidated State Allocation
MN80	Kittson County, Minnesota	0.0812834506%
MN81	Koochiching County, Minnesota	0.2612581866%
MN82	Lac Qui Parle County, Minnesota	0.0985665133%
MN83	Lake County, Minnesota	0.1827750321%
MN84	Lake of the Woods County, Minnesota	0.1123105028%
MN85	Lakeville City, Minnesota	0.2822249627%
MN86	Le Sueur County, Minnesota	0.3225703347%
MN87	Lincoln County, Minnesota	0.1091919984%
MN90	Lyon County, Minnesota	0.2935118186%
MN91	Mahnomen County, Minnesota	0.1416417688%
MN92	Mankato City, Minnesota	0.3698584321%
MN93	Maple Grove City, Minnesota	0.1814019047%
MN94	Maplewood City, Minnesota	0.1875101678%
MN96	Marshall County, Minnesota	0.1296352091%
MN97	Martin County, Minnesota	0.2543064014%
MN98	McLeod County, Minnesota	0.1247104518%
MN99	Meeker County, Minnesota	0.3744031515%
MN101	Mille Lacs County, Minnesota	0.9301506696%
MN102	Minneapolis City, Minnesota	4.8777618689%
MN103	Minnetonka City, Minnesota	0.1967231071%
MN105	Moorhead City, Minnesota	0.4337377038%
MN106	Morrison County, Minnesota	0.7178981419%
MN108	Mower County, Minnesota	0.5801769149%
MN109	Murray County, Minnesota	0.1348775389%
MN113	Nicollet County, Minnesota	0.1572381053%
MN114	Nobles County, Minnesota	0.1562005112%
MN115	Norman County, Minnesota	0.1087596675%
MN118	North St. Paul City, Minnesota	0.0575844069%
MN121	Olmsted County, Minnesota	1.9236715095%
MN123	Otter Tail County, Minnesota	0.8336175419%
MN125	Pennington County, Minnesota	0.3082576395%
MN126	Pine County, Minnesota	0.5671222707%
MN127	Pipestone County, Minnesota	0.1535154503%
MN128	Plymouth City, Minnesota	0.1762541473%
MN129	Polk County, Minnesota	0.8654291474%
MN130	Pope County, Minnesota	0.1870129873%
MN132	Proctor City, Minnesota	0.0214374128%
MN134	Ramsey County, Minnesota	7.1081424150%
MN135	Red Lake County, Minnesota	0.0532649128%
MN137	Redwood County, Minnesota	0.2809842367%
MN138	Renville County, Minnesota	0.2706888807%
MN139	Rice County, Minnesota	0.2674764398%
MN140	Richfield City, Minnesota	0.2534018444%
MN142	Rochester City, Minnesota	0.7363082849%
MN143	Rock County, Minnesota	0.2043437336%
MN145	Roseau County, Minnesota	0.2517872793%
MN147	Roseville City, Minnesota	0.1721905549%
MN150	Savage City, Minnesota	0.1883576635%

State ID	Qualifying Subdivision	Consolidated State Allocation
MN151	Scott County, Minnesota	1.3274301646%
MN152	Shakopee City, Minnesota	0.2879873611%
MN153	Sherburne County, Minnesota	1.2543449472%
MN155	Sibley County, Minnesota	0.2393480708%
MN157	St Louis County, Minnesota	4.7407767170%
MN158	St. Cloud City, Minnesota	0.7330089009%
MN159	St. Louis Park City, Minnesota	0.1476314588%
MN161	St. Paul City, Minnesota	3.7475206798%
MN163	Stearns County, Minnesota	2.4158085321%
MN164	Steele County, Minnesota	0.3969975263%
MN165	Stevens County, Minnesota	0.1439474275%
MN167	Swift County, Minnesota	0.1344167568%
MN168	Todd County, Minnesota	0.4180909817%
MN169	Traverse County, Minnesota	0.0903964134%
MN172	Wabasha County, Minnesota	0.3103038997%
MN174	Wadena County, Minnesota	0.2644094337%
MN175	Waseca County, Minnesota	0.2857912156%
MN176	Washington County, Minnesota	3.0852862513%
MN177	Watonwan County, Minnesota	0.1475626356%
MN181	Wilkin County, Minnesota	0.0937962507%
MN184	Winona County, Minnesota	0.7755267356%
MN185	Woodbury City, Minnesota	0.4677270172%
MN187	Wright County, Minnesota	1.6985269385%
MN188	Yellow Medicine County, Minnesota	0.1742264836%

State ID	Qualifying Subdivision	Consolidated State Allocation
MS1	Adams County, Mississippi	0.8956930256%
MS2	Alcorn County, Mississippi	0.0576362452%
MS3	Amite County, Mississippi	0.2746164929%
MS4	Amory City, Mississippi	0.2116793450%
MS5	Arcola Town, Mississippi	0.0010556367%
MS6	Attala County, Mississippi	0.4297756502%
MS7	Bay St. Louis City, Mississippi	0.0311287683%
MS8	Benton County, Mississippi	0.1960984974%
MS9	Biloxi City, Mississippi	0.6645430129%
MS10	Bolivar County, Mississippi	0.5038616841%
MS11	Brandon City, Mississippi	0.5570720591%
MS12	Brookhaven City, Mississippi	0.4683584117%
MS13	Byram City, Mississippi	0.0546025247%
MS14	Caledonia Town, Mississippi	0.0029950314%
MS15	Calhoun County, Mississippi	0.4153642017%
MS16	Canton City, Mississippi	0.3608383968%
MS17	Carroll County, Mississippi	0.2031873312%
MS18	Charleston City, Mississippi	0.0470339459%
MS19	Chickasaw County, Mississippi	0.5109289507%
MS21	Claiborne County, Mississippi	0.1646839236%
MS22	Clarke County, Mississippi	0.5114179153%
MS23	Clarksdale City, Mississippi	0.2773833408%
MS24	Clay County, Mississippi	0.1860006383%
MS25	Cleveland City, Mississippi	0.1374693414%
MS26	Clinton City, Mississippi	0.3236377422%
MS27	Coahoma County, Mississippi	0.4236538797%
MS28	Columbia City, Mississippi	0.1695070569%
MS29	Columbus City, Mississippi	0.7040334045%
MS30	Copiah County, Mississippi	0.7218083365%
MS31	Corinth City, Mississippi	1.5766265587%
MS32	Covington County, Mississippi	0.6154970684%
MS33	Desoto County, Mississippi	2.2451071357%
MS34	Diamondhead City, Mississippi	0.0001700675%
MS35	D'Iberville City, Mississippi	0.0448052883%
MS36	Forrest County, Mississippi	3.0519047573%
MS37	Franklin County, Mississippi	0.2573415560%
MS38	Gautier City, Mississippi	0.1317718341%
MS39	George County, Mississippi	1.0370803395%
MS40	Greene County, Mississippi	0.2945486312%
MS41	Greenville City, Mississippi	0.0840582768%
MS42	Greenwood City, Mississippi	0.5924200813%
MS43	Grenada City, Mississippi	0.0559331010%
MS44	Grenada County, Mississippi	0.5257141196%
MS45	Gulfport City, Mississippi	8.3397025495%
MS46	Hancock County, Mississippi	2.4053819819%
MS47	Harrison County, Mississippi	1.2833704733%
MS48	Hattiesburg City, Mississippi	0.3234604308%
MS49	Hernando City, Mississippi	0.4422243258%
MS50	Hinds County, Mississippi	2.0886225058%

State ID	Qualifying Subdivision	Consolidated State Allocation
MS51	Holly Springs City, Mississippi	0.1628357363%
MS52	Holmes County, Mississippi	0.3324473362%
MS53	Horn Lake City, Mississippi	0.6520350689%
MS54	Humphreys County, Mississippi	0.1373820850%
MS55	Indianola City, Mississippi	0.0232047435%
MS56	Issaquena County, Mississippi	0.0175702913%
MS57	Itawamba County, Mississippi	1.0517575083%
MS58	Iuka City, Mississippi	0.2854580062%
MS59	Jackson City, Mississippi	2.6937777267%
MS60	Jackson County, Mississippi	7.6559251195%
MS61	Jasper County, Mississippi	0.3922495132%
MS62	Jefferson County, Mississippi	0.0985248779%
MS63	Jefferson Davis County, Mississippi	0.3514408929%
MS64	Jones County, Mississippi	2.2234728410%
MS65	Jonestown, Mississippi	0.0093341195%
MS66	Kemper County, Mississippi	0.2223493091%
MS67	Kosciusko City, Mississippi	0.0408594923%
MS68	Lafayette County, Mississippi	0.7049370835%
MS69	Lamar County, Mississippi	1.3105353358%
MS70	Lauderdale County, Mississippi	1.4707252306%
MS71	Laurel City, Mississippi	0.1485722943%
MS72	Lawrence County, Mississippi	0.3428558606%
MS73	Leake County, Mississippi	0.5798006796%
MS74	Leakesville Town, Mississippi	0.0098357610%
MS75	Lee County, Mississippi	1.4759031513%
MS76	Leflore County, Mississippi	0.1018315625%
MS77	Lincoln County, Mississippi	0.5740717271%
MS78	Long Beach City, Mississippi	0.1390600402%
MS79	Lowndes County, Mississippi	0.9390202250%
MS80	Lumberton City, Mississippi	0.0397836057%
MS81	Madison City, Mississippi	0.5726048335%
MS82	Madison County, Mississippi	1.0788558585%
MS83	Marion County, Mississippi	1.6274197695%
MS84	Marshall County, Mississippi	0.6280998419%
MS85	McComb City, Mississippi	1.1131798538%
MS86	McLain Town, Mississippi	0.0044584678%
MS87	Meridian City, Mississippi	1.1164172272%
MS88	Monroe County, Mississippi	0.8130759595%
MS90	Morton City, Mississippi	0.0606772097%
MS91	Moss Point City, Mississippi	0.0032841297%
MS92	Mound Bayou City, Mississippi	0.0140956794%
MS93	Natchez City, Mississippi	0.1092519702%
MS94	Neshoba County, Mississippi	1.0186206925%
MS95	Nettleton City, Mississippi	0.0307845175%
MS96	New Albany City, Mississippi	0.2729319523%
MS97	Newton County, Mississippi	0.5457847155%
MS98	Noxubee County, Mississippi	0.1848315685%
MS99	Ocean Springs City, Mississippi	0.1196690556%

State ID	Qualifying Subdivision	Consolidated State Allocation
MS100	Oktibbeha County, Mississippi	0.7876142411%
MS101	Olive Branch City, Mississippi	1.0910656493%
MS102	Oxford City, Mississippi	0.6004720270%
MS103	Panola County, Mississippi	1.1256622795%
MS104	Pascagoula City, Mississippi	0.2495759096%
MS105	Pearl City, Mississippi	1.1956946818%
MS106	Pearl River County, Mississippi	3.0542096408%
MS107	Perry County, Mississippi	0.3691053552%
MS108	Petal City, Mississippi	0.0271880761%
MS109	Philadelphia City, Mississippi	0.1154094664%
MS110	Picayune City, Mississippi	0.5891117503%
MS111	Pike County, Mississippi	0.1094837756%
MS112	Pontotoc County, Mississippi	1.1485245831%
MS113	Prentiss County, Mississippi	0.7977710394%
MS114	Quitman City, Mississippi	0.0879535299%
MS115	Quitman County, Mississippi	0.2137706975%
MS116	Rankin County, Mississippi	3.4671179892%
MS117	Ridgeland City, Mississippi	0.7137364699%
MS118	Scott County, Mississippi	0.6318707959%
MS119	Shannon Town, Mississippi	0.0293681665%
MS121	Shubuta Town, Mississippi	0.0061495937%
MS122	Simpson County, Mississippi	0.9197186369%
MS123	Smith County, Mississippi	0.3871907879%
MS124	Southaven City, Mississippi	1.5563837550%
MS125	Starkville City, Mississippi	0.1006690780%
MS126	Stone County, Mississippi	0.5647624674%
MS127	Summit Town, Mississippi	0.0051138779%
MS128	Sunflower County, Mississippi	0.4655797100%
MS129	Tallahatchie County, Mississippi	0.2608094178%
MS130	Tate County, Mississippi	1.1559202957%
MS131	Tippah County, Mississippi	0.6673123304%
MS132	Tishomingo County, Mississippi	1.3186009463%
MS133	Tunica County, Mississippi	0.1788884264%
MS134	Tupelo City, Mississippi	1.4776375761%
MS135	Union County, Mississippi	0.4956551465%
MS136	Verona City, Mississippi	0.0613981442%
MS137	Vicksburg City, Mississippi	0.7338152977%
MS138	Walthall County, Mississippi	0.4949654924%
MS139	Warren County, Mississippi	0.5605232929%
MS140	Washington County, Mississippi	0.9202227479%
MS141	Wayne County, Mississippi	0.9416871398%
MS142	Waynesboro City, Mississippi	0.0134634829%
MS143	Webb Town, Mississippi	0.0120400527%
MS145	West Point City, Mississippi	0.2116459242%
MS146	Wiggins City, Mississippi	0.1726599728%
MS148	Winston County, Mississippi	0.5339853585%
MS149	Yalobusha County, Mississippi	0.2986570860%
MS150	Yazoo City, Mississippi	0.2540246640%
MS151	Yazoo County, Mississippi	0.4224067732%

State ID	Qualifying Subdivision	Consolidated State Allocation
MO1	Adair County, Missouri	
MO2	Andrew County, Missouri	
MO3	Arnold City, Missouri	
MO4	Atchison County, Missouri	
MO5	Audrain County, Missouri	
MO6	Ballwin City, Missouri	
MO7	Barry County, Missouri	
MO8	Barton County, Missouri	
MO9	Bates County, Missouri	
MO10	Bellefontaine Neighbors City, Missouri	
MO11	Belton City, Missouri	
MO12	Benton County, Missouri	
MO13	Blue Springs City, Missouri	
MO14	Bolivar City, Missouri	
MO15	Bollinger County, Missouri	
MO16	Boone County, Missouri	
MO17	Branson City, Missouri	Allocations in Missouri
MO18	Bridgeton City, Missouri	will be made in
MO19	Buchanan County, Missouri	accordance with the
MO20	Butler County, Missouri	Memorandum of
MO21	Caldwell County, Missouri	Understanding Between
MO22	Callaway County, Missouri	the State of Missouri and
MO23	Camden County, Missouri	its Political Subdivisions
MO24	Cape Girardeau City, Missouri	on Proceeds Relating to
MO25	Cape Girardeau County, Missouri	the Settlement of Opioid
MO26	Carroll County, Missouri	Litigation and with the
MO27	Carter County, Missouri	ancillary Memorandum
MO28	Carthage City, Missouri	of Understanding
MO29	Cass County, Missouri	Between the Litigating
MO30	Cedar County, Missouri	Subdivisions of the State
MO31	Chariton County, Missouri	of Missouri.
MO32	Chesterfield City, Missouri	
MO33	Christian County, Missouri	
MO34	Clark County, Missouri	
MO35	Clay County, Missouri	
MO36	Clayton City, Missouri	
MO37	Clinton County, Missouri	
MO38	Cole County, Missouri	
MO39	Columbia City, Missouri	
MO40	Cooper County, Missouri	
MO41	Crawford County, Missouri	
MO42	Crestwood City, Missouri	
MO43	Creve Coeur City, Missouri	
MO44	Dade County, Missouri	
MO45	Dallas County, Missouri	
MO46	Dardenne Prairie City, Missouri	
MO47	Daviess County, Missouri	
MO48	De Kalb County, Missouri	

State ID	Qualifying Subdivision	Consolidated State Allocation
MO49	Dent County, Missouri	
MO50	Douglas County, Missouri	
MO51	Dunklin County, Missouri	
MO52	Eureka City, Missouri	
MO53	Excelsior Springs City, Missouri	
MO54	Farmington City, Missouri	
MO55	Ferguson City, Missouri	
MO56	Festus City, Missouri	
MO57	Florissant City, Missouri	
MO58	Franklin County, Missouri	
MO59	Fulton City, Missouri	
MO60	Gasconade County, Missouri	
MO61	Gentry County, Missouri	
MO62	Gladstone City, Missouri	
MO63	Grain Valley City, Missouri	
MO64	Grandview City, Missouri	
MO65	Greene County, Missouri	
MO66	Grundy County, Missouri	Allocations in Missouri
MO67	Hannibal City, Missouri	will be made in
MO68	Harrison County, Missouri	accordance with the
MO69	Harrisonville City, Missouri	Memorandum of
MO70	Hazelwood City, Missouri	Understanding Between
MO71	Henry County, Missouri	the State of Missouri and
MO72	Hickory County, Missouri	its Political Subdivisions
MO73	Holt County, Missouri	on Proceeds Relating to
MO74	Howard County, Missouri	the Settlement of Opioid
MO75	Howell County, Missouri	Litigation and with the
MO76	Independence City, Missouri	ancillary Memorandum
MO77	Iron County, Missouri	of Understanding
MO78	Jackson City, Missouri	Between the Litigating
MO79	Jackson County, Missouri	Subdivisions of the State
MO80	Jasper County, Missouri	of Missouri.
MO81	Jefferson City, Missouri	
MO82	Jefferson County, Missouri	
MO83	Jennings City, Missouri	
MO84	Johnson County, Missouri	
MO85	Joplin City, Missouri	
MO86	Kansas City, Missouri	
MO87	Kearney City, Missouri	
MO88	Kennett City, Missouri	
MO89	Kirksville City, Missouri	
MO90	Kirkwood City, Missouri	
MO91	Knox County, Missouri	
MO92	Laclede County, Missouri	
MO93	Lafayette County, Missouri	
MO94	Lake St. Louis City, Missouri	
MO95	Lawrence County, Missouri	
MO96	Lebanon City, Missouri	
MO97	Lee's Summit City, Missouri	

State ID	Qualifying Subdivision	Consolidated State Allocation
MO98	Lewis County, Missouri	
MO99	Liberty City, Missouri	
MO100	Lincoln County, Missouri	
MO101	Linn County, Missouri	
MO102	Livingston County, Missouri	
MO103	Macon County, Missouri	
MO104	Madison County, Missouri	
MO105	Manchester City, Missouri	
MO106	Maries County, Missouri	
MO107	Marion County, Missouri	
MO108	Marshall City, Missouri	
MO109	Maryland Heights City, Missouri	
MO110	Maryville City, Missouri	
MO111	McDonald County, Missouri	
MO112	Mercer County, Missouri	
MO113	Mexico City, Missouri	
MO114	Miller County, Missouri	
MO115	Mississippi County, Missouri	Allocations in Missouri
MO116	Moberly City, Missouri	will be made in
MO117	Moniteau County, Missouri	accordance with the
MO118	Monroe County, Missouri	Memorandum of
MO119	Montgomery County, Missouri	Understanding Between
MO120	Morgan County, Missouri	the State of Missouri and
MO121	Neosho City, Missouri	its Political Subdivisions
MO122	New Madrid County, Missouri	on Proceeds Relating to
MO123	Newton County, Missouri	the Settlement of Opioid
MO124	Nixa City, Missouri	Litigation and with the
MO125	Nodaway County, Missouri	ancillary Memorandum
MO126	O'Fallon City, Missouri	of Understanding
MO127	Oregon County, Missouri	Between the Litigating
MO128	Osage County, Missouri	Subdivisions of the State
MO129	Overland City, Missouri	of Missouri.
MO130	Ozark City, Missouri	
MO131	Ozark County, Missouri	
MO132	Pemiscot County, Missouri	
MO133	Perry County, Missouri	
MO134	Pettis County, Missouri	
MO135	Phelps County, Missouri	
MO136	Pike County, Missouri	
MO137	Platte County, Missouri	
MO138	Polk County, Missouri	
MO139	Poplar Bluff City, Missouri	
MO140	Pulaski County, Missouri	
MO141	Putnam County, Missouri	
MO142	Ralls County, Missouri	
MO143	Randolph County, Missouri	
MO144	Ray County, Missouri	
MO145	Raymore City, Missouri	
MO146	Raytown City, Missouri	

State ID	Qualifying Subdivision	Consolidated State Allocation
MO147	Republic City, Missouri	
MO148	Reynolds County, Missouri	
MO149	Ripley County, Missouri	
MO150	Rolla City, Missouri	
MO151	Saline County, Missouri	
MO152	Schuyler County, Missouri	
MO153	Scotland County, Missouri	
MO154	Scott County, Missouri	
MO155	Sedalia City, Missouri	
MO156	Shannon County, Missouri	
MO157	Shelby County, Missouri	
MO158	Sikeston City, Missouri	
MO159	Smithville City, Missouri	
MO160	Springfield City, Missouri	
MO161	St Charles County, Missouri	
MO162	St Clair County, Missouri	
MO163	St Francois County, Missouri	
MO164	St Louis County, Missouri	Allocations in Missouri
MO165	St. Ann City, Missouri	will be made in
MO166	St. Charles City, Missouri	accordance with the
MO167	St. Joseph City, Missouri	Memorandum of
MO168	St. Louis City, Missouri	Understanding Between
MO169	St. Peters City, Missouri	the State of Missouri and
MO170	Ste Genevieve County, Missouri	its Political Subdivisions
MO171	Stoddard County, Missouri	on Proceeds Relating to
MO172	Stone County, Missouri	the Settlement of Opioid
MO173	Sullivan County, Missouri	Litigation and with the
MO174	Taney County, Missouri	ancillary Memorandum
MO175	Texas County, Missouri	of Understanding
MO176	Town and Country City, Missouri	Between the Litigating
MO177	Troy City, Missouri	Subdivisions of the State
MO178	Union City, Missouri	of Missouri.
MO179	University City, Missouri	
MO180	Vernon County, Missouri	
MO181	Warren County, Missouri	
MO182	Warrensburg City, Missouri	
MO183	Washington City, Missouri	
MO184	Washington County, Missouri	
MO185	Wayne County, Missouri	
MO186	Webb City, Missouri	
MO187	Webster County, Missouri	
MO188	Webster Groves City, Missouri	
MO189	Wentzville City, Missouri	
MO190	West Plains City, Missouri	
MO191	Wildwood City, Missouri	
MO192	Worth County, Missouri	
MO193	Wright County, Missouri	
MO194	Northeast Ambulance and Fire Protection District, Missouri	

State ID	Qualifying Subdivision	Consolidated State Allocation
MO195	Kinloch Fire Protection District, Missouri	Allocations in Missouri will be made in accordance with the Memorandum of Understanding Between the State of Missouri and its Political Subdivisions on Proceeds Relating to the Settlement of Opioid Litigation and with the ancillary Memorandum of Understanding Between the Litigating Subdivisions of the State of Missouri.
MO196	Citizens Memorial Hospital District D/B/A Citizens Memorial Hospital, Missouri	

State ID	Qualifying Subdivision	Consolidated State Allocation
MT1	Anaconda-Deer Lodge County, Montana	1.4480190514%
MT2	Beaverhead County, Montana	0.6841480225%
MT3	Big Horn County, Montana	0.8504903609%
MT4	Billings City, Montana	9.1331142413%
MT5	Blaine County, Montana	0.3691094337%
MT6	Bozeman City, Montana	2.0161886507%
MT7	Broadwater County, Montana	0.4143251264%
MT8	Butte-Silver Bow, Montana	5.6101260434%
MT9	Carbon County, Montana	0.7105360522%
MT10	Carter County, Montana	0.0374679104%
MT11	Cascade County, Montana	3.8993050480%
MT12	Chouteau County, Montana	0.4053063424%
MT13	Custer County, Montana	1.5139056450%
MT14	Daniels County, Montana	0.1787602908%
MT15	Dawson County, Montana	0.7800682133%
MT16	Fallon County, Montana	0.1543582011%
MT17	Fergus County, Montana	0.8667027669%
MT18	Flathead County, Montana	8.0141785369%
MT19	Gallatin County, Montana	4.0205572717%
MT20	Garfield County, Montana	0.0398838599%
MT21	Glacier County, Montana	1.5230709367%
MT22	Golden Valley County, Montana	0.0264303648%
MT23	Granite County, Montana	0.1831398237%
MT24	Great Falls City, Montana	4.3577779784%
MT25	Helena City, Montana	1.7360655042%
MT26	Hill County, Montana	1.8438532922%
MT27	Jefferson County, Montana	0.7770843087%
MT28	Judith Basin County, Montana	0.0614804228%
MT29	Kalispell City, Montana	2.4735432710%
MT30	Lake County, Montana	3.6175099064%
MT31	Lewis and Clark County, Montana	4.9326712334%
MT32	Liberty County, Montana	0.1210395973%
MT33	Lincoln County, Montana	2.1915597624%
MT34	Madison County, Montana	0.5498047673%
MT35	McCone County, Montana	0.0823035394%
MT36	Meagher County, Montana	0.0912086373%
MT37	Mineral County, Montana	0.7546909914%
MT38	Missoula City, Montana	4.4312558575%
MT39	Missoula County, Montana	8.0272833629%
MT40	Musselshell County, Montana	0.3895510594%
MT41	Park County, Montana	2.0831835653%
MT42	Petroleum County, Montana	0.0144742922%
MT43	Phillips County, Montana	0.2085622347%
MT44	Pondera County, Montana	0.4003873948%
MT45	Powder River County, Montana	0.1504386452%
MT46	Powell County, Montana	0.8872723490%
MT47	Prairie County, Montana	0.0572069653%
MT48	Ravalli County, Montana	3.6906819270%

State ID	Qualifying Subdivision	Consolidated State Allocation
MT49	Richland County, Montana	0.7541525281%
MT50	Roosevelt County, Montana	0.8182976782%
MT51	Rosebud County, Montana	0.5641981949%
MT52	Sanders County, Montana	1.0679134558%
MT53	Sheridan County, Montana	0.2700355225%
MT54	Stillwater County, Montana	0.5055604014%
MT55	Sweet Grass County, Montana	0.2836540766%
MT56	Teton County, Montana	0.5735903832%
MT57	Toole County, Montana	0.3258040487%
MT58	Treasure County, Montana	0.0226554138%
MT59	Valley County, Montana	0.5598291268%
MT60	Wheatland County, Montana	0.0720998508%
MT61	Wibaux County, Montana	0.0630373047%
MT62	Yellowstone County, Montana	7.3090889550%

State ID	Qualifying Subdivision	Consolidated State Allocation
NE1	Adams County, Nebraska	0.7130410264%
NE2	Antelope County, Nebraska	0.2406339800%
NE3	Arthur County, Nebraska	0.0110831278%
NE4	Banner County, Nebraska	0.0183674606%
NE5	Beatrice City, Nebraska	0.9248205382%
NE6	Bellevue City, Nebraska	2.4787880023%
NE7	Blaine County, Nebraska	0.0123640997%
NE8	Boone County, Nebraska	0.2533407507%
NE9	Box Butte County, Nebraska	0.7492533620%
NE10	Boyd County, Nebraska	0.0902847433%
NE11	Brown County, Nebraska	0.1375135354%
NE12	Buffalo County, Nebraska	0.9630320332%
NE13	Burt County, Nebraska	0.3365661770%
NE14	Butler County, Nebraska	0.2899805672%
NE15	Cass County, Nebraska	1.2356339344%
NE16	Cedar County, Nebraska	0.3502588009%
NE17	Chase County, Nebraska	0.1707898814%
NE18	Cherry County, Nebraska	0.3082161558%
NE19	Cheyenne County, Nebraska	0.7408263023%
NE20	Clay County, Nebraska	0.1772971991%
NE21	Colfax County, Nebraska	0.2670475913%
NE22	Columbus City, Nebraska	0.7291294061%
NE23	Cuming County, Nebraska	0.4019883978%
NE24	Custer County, Nebraska	0.4848137961%
NE25	Dakota County, Nebraska	0.3940917673%
NE26	Dawes County, Nebraska	0.6577293164%
NE27	Dawson County, Nebraska	0.7540316373%
NE28	Deuel County, Nebraska	0.1500055852%
NE29	Dixon County, Nebraska	0.2144571499%
NE30	Dodge County, Nebraska	1.8317996330%
NE31	Douglas County, Nebraska	14.9119111455%
NE32	Dundy County, Nebraska	0.1513630330%
NE33	Fillmore County, Nebraska	0.3541443667%
NE34	Franklin County, Nebraska	0.1630162987%
NE35	Fremont City, Nebraska	0.1476946393%
NE36	Frontier County, Nebraska	0.0732649260%
NE37	Furnas County, Nebraska	0.2315426581%
NE38	Gage County, Nebraska	0.5390651380%
NE39	Garden County, Nebraska	0.1132118364%
NE40	Garfield County, Nebraska	0.1104479177%
NE41	Gosper County, Nebraska	0.0528581072%
NE42	Grand Island City, Nebraska	1.5052861196%
NE43	Grant County, Nebraska	0.0167075406%
NE44	Greeley County, Nebraska	0.1006996872%
NE45	Hall County, Nebraska	1.3023214397%
NE46	Hamilton County, Nebraska	0.3285553228%
NE47	Harlan County, Nebraska	0.1831157431%
NE48	Hastings City, Nebraska	0.7738158635%
NE49	Hayes County, Nebraska	0.0464208924%

State ID	Qualifying Subdivision	Consolidated State Allocation
NE50	Hitchcock County, Nebraska	0.1428727336%
NE51	Holt County, Nebraska	0.4319086269%
NE52	Hooker County, Nebraska	0.0195391111%
NE53	Howard County, Nebraska	0.3117590505%
NE54	Jefferson County, Nebraska	0.4621587809%
NE55	Johnson County, Nebraska	0.3674281385%
NE56	Kearney City, Nebraska	1.3128662946%
NE57	Kearney County, Nebraska	0.3284087439%
NE58	Keith County, Nebraska	0.5586120928%
NE59	Keya Paha County, Nebraska	0.0207700795%
NE60	Kimball County, Nebraska	0.2074517582%
NE61	Knox County, Nebraska	0.4262180329%
NE62	La Vista City, Nebraska	0.6948539706%
NE63	Lancaster County, Nebraska	7.9530599340%
NE64	Lexington City, Nebraska	0.2672235840%
NE65	Lincoln City, Nebraska	8.9584993437%
NE66	Lincoln County, Nebraska	0.7588461895%
NE67	Logan County, Nebraska	0.0192253637%
NE68	Loup County, Nebraska	0.0163070224%
NE69	Madison County, Nebraska	1.0198085515%
NE70	McPherson County, Nebraska	0.0133651501%
NE71	Merrick County, Nebraska	0.5571149293%
NE72	Morrill County, Nebraska	0.2640807173%
NE73	Nance County, Nebraska	0.1820220392%
NE74	Nemaha County, Nebraska	0.5862140225%
NE75	Norfolk City, Nebraska	0.6855964607%
NE76	North Platte City, Nebraska	1.2668714124%
NE77	Nuckolls County, Nebraska	0.2606241030%
NE78	Omaha City, Nebraska	16.7836032733%
NE79	Otoe County, Nebraska	0.8114537890%
NE80	Papillion City, Nebraska	1.1943452635%
NE81	Pawnee County, Nebraska	0.2449303588%
NE82	Perkins County, Nebraska	0.0938742100%
NE83	Phelps County, Nebraska	0.4453164270%
NE84	Pierce County, Nebraska	0.2791606931%
NE85	Platte County, Nebraska	0.5054632790%
NE86	Polk County, Nebraska	0.2126035890%
NE87	Red Willow County, Nebraska	0.6782282985%
NE88	Richardson County, Nebraska	0.6780640713%
NE89	Rock County, Nebraska	0.0420632348%
NE90	Saline County, Nebraska	0.6431415318%
NE91	Sarpy County, Nebraska	4.1205096407%
NE92	Saunders County, Nebraska	0.9147340487%
NE93	Scotts Bluff County, Nebraska	1.8428925654%
NE94	Scottsbluff City, Nebraska	0.5159537183%
NE95	Seward County, Nebraska	0.7637450614%
NE96	Sheridan County, Nebraska	0.1814092513%
NE97	Sherman County, Nebraska	0.1198260243%
NE98	Sioux County, Nebraska	0.0355730752%

State ID	Qualifying Subdivision	Consolidated State Allocation
NE99	South Sioux City, Nebraska	0.4431368628%
NE100	Stanton County, Nebraska	0.2162062918%
NE101	Thayer County, Nebraska	0.2059575361%
NE102	Thomas County, Nebraska	0.0173570958%
NE103	Thurston County, Nebraska	0.2564159657%
NE104	Valley County, Nebraska	0.3103957199%
NE105	Washington County, Nebraska	0.7878555706%
NE106	Wayne County, Nebraska	0.3510034608%
NE107	Webster County, Nebraska	0.1652355715%
NE108	Wheeler County, Nebraska	0.0210156849%
NE109	York County, Nebraska	0.8321939645%
NE110	Region 1 Behavioral Health Authority, Nebraska	0.0000000000%
NE111	Region II Human Services, Nebraska	0.0000000000%
NE112	Region 3 Behavioral Health Services, Nebraska	0.0000000000%
NE113	Region 4 Behavioral Health System, Nebraska	0.0000000000%
NE114	Region V Systems, Nebraska	0.0000000000%
NE115	Region 6 Behavioral Healthcare, Nebraska	0.0000000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
NV1	Boulder City, Nevada	0.1478660452%
NV2	Carson City, Nevada	1.8146007537%
NV3	Churchill County, Nevada	0.7013051988%
NV4	Clark County, Nevada	66.9248026834%
NV5	Douglas County, Nevada	1.6601462472%
NV7	Elko County, Nevada	1.0825745225%
NV8	Ely City, Nevada	0.0066172807%
NV9	Esmeralda County, Nevada	0.0497291448%
NV10	Eureka County, Nevada	0.1033573623%
NV11	Fernley City, Nevada	0.0144506991%
NV12	Henderson City, Nevada	2.3020643974%
NV13	Humboldt County, Nevada	1.0192724731%
NV14	Lander County, Nevada	0.3627438791%
NV15	Las Vegas City, Nevada	4.7206970773%
NV16	Lincoln County, Nevada	0.2373284219%
NV17	Lyon County, Nevada	1.5721396872%
NV18	Mesquite City, Nevada	0.1465069544%
NV19	Mineral County, Nevada	0.5992930253%
NV20	North Las Vegas City, Nevada	2.4258866892%
NV21	Nye County, Nevada	1.6016841576%
NV22	Pershing County, Nevada	0.3624498791%
NV23	Reno City, Nevada	1.3562863383%
NV24	Sparks City, Nevada	0.4253229218%
NV25	Storey County, Nevada	0.1263908620%
NV26	Washoe County, Nevada	9.1139488828%
NV27	West Wendover City, Nevada	0.0564015794%
NV28	White Pine County, Nevada	1.0458576594%
NV29	Central Lyon Fire Protection District, Nevada	0.0150922618%
NV30	North Lyon Fire Protection District, Nevada	0.0051829150%

State ID	Qualifying Subdivision	Consolidated State Allocation
NH3	Belknap County, New Hampshire	2.868905%
NH4	Belmont Town, New Hampshire	0.530951%
NH5	Berlin City, New Hampshire	0.684196%
NH6	Carroll County, New Hampshire	3.637455%
NH7	Cheshire County, New Hampshire	3.877305%
NH8	Claremont City, New Hampshire	0.940017%
NH9	Concord City, New Hampshire	3.191730%
NH11	Coos County, New Hampshire	1.585665%
NH12	Derry Town, New Hampshire	2.491200%
NH13	Dover City, New Hampshire	2.376792%
NH16	Franklin City, New Hampshire	0.634542%
NH18	Grafton County, New Hampshire	6.614598%
NH21	Hillsborough County, New Hampshire	15.676694%
NH24	Keene City, New Hampshire	1.673068%
NH25	Laconia City, New Hampshire	1.224729%
NH27	Londonderry Town, New Hampshire	1.874806%
NH28	Manchester City, New Hampshire	8.396484%
NH29	Merrimack County, New Hampshire	7.339228%
NH32	Nashua City, New Hampshire	6.629407%
NH36	Rochester City, New Hampshire	2.358716%
NH37	Rockingham County, New Hampshire	18.441209%
NH40	Strafford County, New Hampshire	4.766215%
NH41	Sullivan County, New Hampshire	2.186088%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ1	Aberdeen Township, New Jersey	0.0797396894%
NJ2	Asbury Park City, New Jersey	0.3916349671%
NJ3	Atlantic City, New Jersey	1.2847690915%
NJ4	Atlantic County, New Jersey	2.8915764045%
NJ5	Barnegat Township, New Jersey	0.1626638814%
NJ6	Bayonne City, New Jersey	0.8502340058%
NJ7	Beachwood Borough, New Jersey	0.0492329228%
NJ8	Belleville Township, New Jersey	0.0872090223%
NJ9	Bellmawr Borough, New Jersey	0.0640989992%
NJ10	Bergen County, New Jersey	4.9446361090%
NJ11	Bergenfield Borough, New Jersey	0.0618076073%
NJ12	Berkeley Heights Township, New Jersey	0.0272673062%
NJ13	Berkeley Township, New Jersey	0.2619731788%
NJ14	Bernards Township, New Jersey	0.0910577073%
NJ15	Bloomfield Township, New Jersey	0.1173874959%
NJ16	Bordentown Township, New Jersey	0.0545891482%
NJ17	Bound Brook Borough, New Jersey	0.0527105023%
NJ18	Branchburg Township, New Jersey	0.0561024563%
NJ19	Brick Township, New Jersey	0.5908193174%
NJ20	Bridgeton City, New Jersey	0.2079614154%
NJ21	Bridgewater Township, New Jersey	0.1828057629%
NJ22	Burlington County, New Jersey	4.4940916659%
NJ23	Burlington Township, New Jersey	0.1157900630%
NJ24	Camden City, New Jersey	1.6603828843%
NJ25	Camden County, New Jersey	6.8741218172%
NJ26	Cape May County, New Jersey	1.2842777540%
NJ27	Carteret Borough, New Jersey	0.1794847100%
NJ28	Cedar Grove Township, New Jersey	0.0187911021%
NJ29	Chatham Township, New Jersey	0.0498541051%
NJ30	Cherry Hill Township, New Jersey	0.3440044947%
NJ31	Cinnaminson Township, New Jersey	0.0701648926%
NJ32	Clark Township, New Jersey	0.0429898704%
NJ33	Cliffside Park Borough, New Jersey	0.1142449150%
NJ34	Clifton City, New Jersey	0.3535258812%
NJ35	Clinton Town, New Jersey	0.0294193343%
NJ36	Clinton Township, New Jersey	0.0799778554%
NJ37	Collingswood Borough, New Jersey	0.1128930571%
NJ38	Cranford Township, New Jersey	0.0684441330%
NJ39	Cumberland County, New Jersey	0.9862828059%
NJ40	Delran Township, New Jersey	0.0837486054%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ41	Denville Township, New Jersey	0.0795654377%
NJ42	Deptford Township, New Jersey	0.2200095463%
NJ43	Dover Town, New Jersey	0.1186530251%
NJ44	Dumont Borough, New Jersey	0.0403826120%
NJ45	East Brunswick Township, New Jersey	0.0972927881%
NJ46	East Greenwich Township, New Jersey	0.0212104162%
NJ47	East Hanover Township, New Jersey	0.0890156417%
NJ48	East Orange City, New Jersey	1.2844844553%
NJ49	East Windsor Township, New Jersey	0.0422463462%
NJ50	Eatontown Borough, New Jersey	0.0974794194%
NJ51	Edgewater Borough, New Jersey	0.0546948904%
NJ52	Edison Township, New Jersey	2.4018132631%
NJ53	Egg Harbor Township, New Jersey	0.1572891336%
NJ54	Elizabeth City, New Jersey	0.7646308101%
NJ55	Elmwood Park Borough, New Jersey	0.0462435391%
NJ56	Englewood City, New Jersey	0.6429812736%
NJ57	Essex County, New Jersey	1.4898498664%
NJ58	Evesham Township, New Jersey	0.1745115947%
NJ59	Ewing Township, New Jersey	0.0839796907%
NJ60	Fair Lawn Borough, New Jersey	0.0699332916%
NJ61	Fairview Borough, New Jersey	0.0347025484%
NJ62	Florence Township, New Jersey	0.0676007282%
NJ63	Florham Park Borough, New Jersey	0.0674975182%
NJ64	Fort Lee Borough, New Jersey	0.1848366682%
NJ65	Franklin Lakes Borough, New Jersey	0.0273076336%
NJ66	Franklin Township, Gloucester County, New Jersey	0.0870963870%
NJ67	Franklin Township, Somerset County, New Jersey	0.3236022203%
NJ68	Freehold Borough, New Jersey	0.0816675723%
NJ69	Freehold Township, New Jersey	0.1512818556%
NJ70	Galloway Township, New Jersey	0.0846515634%
NJ71	Garfield City, New Jersey	0.0989196224%
NJ72	Glassboro Borough, New Jersey	0.1948186777%
NJ73	Glen Rock Borough, New Jersey	0.0253178060%
NJ74	Gloucester City, New Jersey	0.1325275640%
NJ75	Gloucester County, New Jersey	4.7022029491%
NJ76	Gloucester Township, New Jersey	0.3259502581%
NJ77	Guttenberg Town, New Jersey	0.0382186733%
NJ78	Hackensack City, New Jersey	0.2554139785%
NJ79	Haddon Township, New Jersey	0.0831057121%
NJ80	Haddonfield Borough, New Jersey	0.0710479214%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ81	Hamilton Township, Atlantic County, New Jersey	0.0939608561%
NJ82	Hamilton Township, Mercer County, New Jersey	0.1394262176%
NJ83	Hammonton Town, New Jersey	0.0463451547%
NJ84	Hanover Township, New Jersey	0.0711651990%
NJ85	Harrison Town, New Jersey	0.2059190684%
NJ86	Harrison Township, New Jersey	0.0478487561%
NJ87	Hasbrouck Heights Borough, New Jersey	0.0360845581%
NJ88	Hawthorne Borough, New Jersey	0.0380122534%
NJ89	Hazlet Township, New Jersey	0.0810519234%
NJ90	Highland Park Borough, New Jersey	0.0606246554%
NJ91	Hillsborough Township, New Jersey	0.1405113053%
NJ92	Hillsdale Borough, New Jersey	0.0247027667%
NJ93	Hillside Township, New Jersey	0.1085603967%
NJ94	Hoboken City, New Jersey	0.1803633309%
NJ95	Holmdel Township, New Jersey	0.1058875828%
NJ96	Hopatcong Borough, New Jersey	0.0677558479%
NJ97	Hopewell Township, Mercer County, New Jersey	0.0275878151%
NJ98	Howell Township, New Jersey	0.2067529072%
NJ99	Hudson County, New Jersey	0.9363280231%
NJ100	Hunterdon County, New Jersey	0.8037645396%
NJ101	Irvington Township, New Jersey	0.9244040630%
NJ102	Jackson Township, New Jersey	0.2670097394%
NJ103	Jefferson Township, New Jersey	0.0866198206%
NJ104	Jersey City, New Jersey	0.9916102863%
NJ105	Kearny Town, New Jersey	0.1071857960%
NJ106	Lacey Township, New Jersey	0.1502291236%
NJ107	Lakewood Township, New Jersey	0.7730028665%
NJ108	Lawrence Township, Mercer County, New Jersey	0.0644503163%
NJ109	Lincoln Park Borough, New Jersey	0.0595261565%
NJ110	Linden City, New Jersey	0.2495261821%
NJ111	Lindenwold Borough, New Jersey	0.1004455914%
NJ112	Little Egg Harbor Township, New Jersey	0.1465902816%
NJ113	Little Falls Township, New Jersey	0.0348320180%
NJ114	Little Ferry Borough, New Jersey	0.0258966914%
NJ115	Livingston Township, New Jersey	0.0484285793%
NJ116	Lodi Borough, New Jersey	0.1078340351%
NJ117	Long Branch City, New Jersey	0.5243184480%
NJ118	Lower Township, New Jersey	0.0710329159%
NJ119	Lumberton Township, New Jersey	0.0461973502%
NJ120	Lyndhurst Township, New Jersey	0.0645354727%
NJ121	Madison Borough, New Jersey	0.1424930674%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ122	Mahwah Township, New Jersey	0.0610985020%
NJ123	Manalapan Township, New Jersey	0.1318410608%
NJ124	Manchester Township, New Jersey	0.2136801182%
NJ125	Mantua Township, New Jersey	0.0853984170%
NJ126	Manville Borough, New Jersey	0.0574532358%
NJ127	Maple Shade Township, New Jersey	0.1058088976%
NJ128	Maplewood Township, New Jersey	0.0589307182%
NJ129	Marlboro Township, New Jersey	0.1588151495%
NJ130	Medford Township, New Jersey	0.1130775783%
NJ131	Mercer County, New Jersey	1.1117204895%
NJ132	Metuchen Borough, New Jersey	0.0339468322%
NJ133	Middle Township, New Jersey	0.0695160908%
NJ134	Middlesex Borough, New Jersey	0.0317606196%
NJ135	Middlesex County, New Jersey	2.2387299770%
NJ136	Middletown Township, New Jersey	0.3292948041%
NJ137	Millburn Township, New Jersey	0.0627532842%
NJ138	Millstone Township, New Jersey	0.0066098909%
NJ139	Millville City, New Jersey	0.2397981412%
NJ140	Monmouth County, New Jersey	4.4617935668%
NJ141	Monroe Township, Gloucester County, New Jersey	0.2271632002%
NJ142	Monroe Township, Middlesex County, New Jersey	0.1024216796%
NJ143	Montclair Township, New Jersey	0.5843666564%
NJ144	Montgomery Township, New Jersey	0.0805666350%
NJ145	Montville Township, New Jersey	0.0902727303%
NJ146	Moorestown Township, New Jersey	0.1000871936%
NJ147	Morris County, New Jersey	2.3575766204%
NJ148	Morris Township, New Jersey	0.1125747053%
NJ149	Morristown, New Jersey	0.2369807115%
NJ150	Mount Laurel Township, New Jersey	0.1725831491%
NJ151	Mount Olive Township, New Jersey	0.1068809023%
NJ152	Neptune Township, New Jersey	0.2450351195%
NJ153	New Brunswick City, New Jersey	1.8327331194%
NJ154	New Milford Borough, New Jersey	0.0368443070%
NJ155	New Providence Borough, New Jersey	0.0258412178%
NJ156	Newark City, New Jersey	1.7760400546%
NJ157	North Arlington Borough, New Jersey	0.0408890956%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ158	North Bergen Township, New Jersey	0.1110635074%
NJ159	North Brunswick Township, New Jersey	0.1217197343%
NJ160	North Plainfield Borough, New Jersey	0.1454941742%
NJ161	Nutley Township, New Jersey	0.0574061090%
NJ162	Oakland Borough, New Jersey	0.0335231134%
NJ163	Ocean City, New Jersey	0.1910428164%
NJ164	Ocean County, New Jersey	4.9497293624%
NJ165	Ocean Township, Monmouth County, New Jersey	0.1387263032%
NJ166	Old Bridge Township, New Jersey	0.1263966779%
NJ167	Orange City Township, New Jersey	0.5609302630%
NJ168	Palisades Park Borough, New Jersey	0.0366345109%
NJ169	Paramus Borough, New Jersey	0.1129786355%
NJ170	Parsippany-Troy Hills Township, New Jersey	0.2342890939%
NJ171	Passaic City, New Jersey	0.4984612868%
NJ172	Passaic County, New Jersey	2.1805505203%
NJ173	Paterson City, New Jersey	0.9805526614%
NJ174	Pemberton Township, New Jersey	0.1182059071%
NJ175	Pennsauken Township, New Jersey	0.3221185950%
NJ176	Pennsville Township, New Jersey	0.0340920576%
NJ177	Pequannock Township, New Jersey	0.0769477223%
NJ178	Perth Amboy City, New Jersey	0.3436749356%
NJ179	Phillipsburg Town, New Jersey	0.1544595119%
NJ180	Pine Hill Borough, New Jersey	0.0482528270%
NJ181	Piscataway Township, New Jersey	0.1067019613%
NJ182	Plainfield City, New Jersey	0.3012229667%
NJ183	Plainsboro Township, New Jersey	0.0503298743%
NJ184	Pleasantville City, New Jersey	0.1421175070%
NJ185	Point Pleasant Borough, New Jersey	0.1109970141%
NJ186	Pompton Lakes Borough, New Jersey	0.0290573727%
NJ187	Princeton, New Jersey	0.0503970240%
NJ188	Rahway City, New Jersey	0.1444485698%
NJ189	Ramsey Borough, New Jersey	0.0402523452%
NJ190	Randolph Township, New Jersey	0.0853331898%
NJ191	Raritan Township, New Jersey	0.1071670391%
NJ192	Readington Township, New Jersey	0.0850076166%
NJ193	Red Bank Borough, New Jersey	0.1420636747%
NJ194	Ridgefield Borough, New Jersey	0.0201153405%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ195	Ridgefield Park Village, New Jersey	0.0392827532%
NJ196	Ridgewood Village, New Jersey	0.0849185213%
NJ197	Ringwood Borough, New Jersey	0.0309822545%
NJ198	River Edge Borough, New Jersey	0.0266057498%
NJ199	Robbinsville Township, New Jersey	0.0338593312%
NJ200	Rockaway Township, New Jersey	0.1290497970%
NJ201	Roselle Borough, New Jersey	0.0912325687%
NJ202	Roselle Park Borough, New Jersey	0.0316673040%
NJ203	Roxbury Township, New Jersey	0.1057717120%
NJ204	Rutherford Borough, New Jersey	0.0459830524%
NJ205	Saddle Brook Township, New Jersey	0.0390656888%
NJ206	Salem County, New Jersey	0.9344056735%
NJ207	Sayreville Borough, New Jersey	0.1477057086%
NJ208	Scotch Plains Township, New Jersey	0.0484433504%
NJ209	Secaucus Town, New Jersey	0.0516659295%
NJ210	Somers Point City, New Jersey	0.0439926621%
NJ211	Somerset County, New Jersey	1.4647125488%
NJ212	Somerville Borough, New Jersey	0.0756287358%
NJ213	South Brunswick Township, New Jersey	0.1037777110%
NJ214	South Orange Village Township, New Jersey	0.0488891085%
NJ215	South Plainfield Borough, New Jersey	0.0899775902%
NJ216	South River Borough, New Jersey	0.0421568288%
NJ217	Southampton Township, New Jersey	0.0127996268%
NJ218	Sparta Township, New Jersey	0.1069549921%
NJ219	Springfield Township, Union County, New Jersey	0.0573437423%
NJ220	Stafford Township, New Jersey	0.2155115906%
NJ221	Summit City, New Jersey	0.5428090174%
NJ222	Sussex County, New Jersey	1.2735318221%
NJ223	Teaneck Township, New Jersey	0.1723477966%
NJ224	Tenafly Borough, New Jersey	0.0450713724%
NJ225	Tinton Falls Borough, New Jersey	0.0881640307%
NJ226	Toms River Township, New Jersey	0.5620940829%
NJ227	Totowa Borough, New Jersey	0.0342545863%
NJ228	Trenton City, New Jersey	1.9352906929%
NJ229	Union City, New Jersey	0.9841875644%
NJ230	Union County, New Jersey	1.7400474523%
NJ231	Union Township, Union County, New Jersey	0.2247240506%
NJ232	Upper Township, New Jersey	0.0173930552%

State ID	Qualifying Subdivision	Consolidated State Allocation
NJ233	Vernon Township, New Jersey	0.0783616187%
NJ234	Verona Township, New Jersey	0.0234318917%
NJ235	Vineland City, New Jersey	0.5000169856%
NJ236	Voorhees Township, New Jersey	0.1406021825%
NJ237	Waldwick Borough, New Jersey	0.0421770394%
NJ238	Wall Township, New Jersey	0.1650847899%
NJ239	Wallington Borough, New Jersey	0.0235956865%
NJ240	Wanaque Borough, New Jersey	0.0311245257%
NJ241	Wantage Township, New Jersey	0.0091403397%
NJ242	Warren County, New Jersey	1.0382472049%
NJ243	Warren Township, New Jersey	0.0736326246%
NJ244	Washington Township, Gloucester County, New Jersey	0.2470375143%
NJ245	Washington Township, Morris County, New Jersey	0.0524274135%
NJ246	Waterford Township, New Jersey	0.0648566849%
NJ247	Wayne Township, New Jersey	0.1724444886%
NJ248	Weehawken Township, New Jersey	0.0282451513%
NJ249	West Caldwell Township, New Jersey	0.0246748189%
NJ250	West Deptford Township, New Jersey	0.1402059895%
NJ251	West Milford Township, New Jersey	0.0644752630%
NJ252	West New York Town, New Jersey	0.6157331463%
NJ253	West Orange Township, New Jersey	0.1051193933%
NJ254	West Windsor Township, New Jersey	0.0458605228%
NJ255	Westfield Town, New Jersey	0.0887745684%
NJ256	Westwood Borough, New Jersey	0.0348328152%
NJ257	Willingboro Township, New Jersey	0.2091808026%
NJ258	Winslow Township, New Jersey	0.1817978600%
NJ259	Woodbridge Township, New Jersey	0.3688029685%
NJ260	Woodland Park Borough, New Jersey	0.0292498655%
NJ261	Woolwich Township, New Jersey	0.0599291958%
NJ262	Wyckoff Township, New Jersey	0.0296665036%

State ID	Qualifying Subdivision	Consolidated State Allocation
NY1	Albany City, New York	
NY2	Albany County, New York	
NY3	Allegany County, New York	
NY4	Broome County, New York	
NY5	Buffalo City, New York	
NY6	Cattaraugus County, New York	
NY7	Cayuga County, New York	
NY8	Chautauqua County, New York	
NY9	Chemung County, New York	
NY10	Chenango County, New York	
NY11	Clinton County, New York	
NY12	Columbia County, New York	
NY13	Cortland County, New York	
NY14	Delaware County, New York	
NY15	Dutchess County, New York	
NY16	Erie County, New York	
NY17	Essex County, New York	
NY18	Franklin County, New York	
NY19	Fulton County, New York	
NY20	Genesee County, New York	
NY21	Greene County, New York	
NY22	Hamilton County, New York	Allocations in New York will be made in accordance with the New York Agreement.
NY23	Herkimer County, New York	
NY24	Jefferson County, New York	
NY25	Lewis County, New York	
NY26	Livingston County, New York	
NY27	Madison County, New York	
NY28	Monroe County, New York	
NY29	Montgomery County, New York	
NY30	Nassau County, New York	
NY31	New York City, New York	
NY32	Niagara County, New York	
NY33	Oneida County, New York	
NY34	Onondaga County, New York	
NY35	Ontario County, New York	
NY36	Orange County, New York	
NY37	Orleans County, New York	
NY38	Oswego County, New York	
NY39	Otsego County, New York	
NY40	Putnam County, New York	
NY41	Rensselaer County, New York	
NY42	Rochester City, New York	
NY43	Rockland County, New York	
NY44	Saratoga County, New York	
NY45	Schenectady County, New York	
NY46	Schoharie County, New York	
NY47	Schuyler County, New York	

State ID	Qualifying Subdivision	Consolidated State Allocation
NY48	Seneca County, New York	
NY49	St Lawrence County, New York	
NY50	Steuben County, New York	
NY51	Suffolk County, New York	
NY52	Sullivan County, New York	
NY53	Syracuse City, New York	
NY54	Tioga County, New York	
NY55	Tompkins County, New York	
NY56	Ulster County, New York	
NY57	Warren County, New York	
NY58	Washington County, New York	
NY59	Wayne County, New York	
NY60	Westchester County, New York	
NY61	Wyoming County, New York	
NY62	Yates County, New York	
NY63	Yonkers City, New York	Allocations in New York will be made in accordance with the New York Agreement.
NY64	Geneva City, New York	
NY65	Herkimer Village, New York	
NY66	Lackawanna City, New York	
NY67	Rome City, New York	
NY68	Utica City, New York	
NY69	Plattsburgh City, New York	
NY70	Saratoga Springs City, New York	
NY71	Schenectady City, New York	
NY72	Troy City, New York	
NY73	Amherst Town, New York	
NY74	Amsterdam City, New York	
NY75	Auburn City, New York	
NY76	Cheektowaga Town, New York	
NY77	Ithaca City, New York	
NY78	Lancaster Town, New York	
NY79	Mount Vernon City, New York	
NY80	Ogdensburg City, New York	
NY81	Poughkeepsie City, New York	
NY82	Tonawanda Town, New York	

State ID	Qualifying Subdivision	Consolidated State Allocation
NC1	Alamance County, North Carolina	1.3780289676%
NC2	Alexander County, North Carolina	0.5100078796%
NC3	Alleghany County, North Carolina	0.1490905989%
NC4	Anson County, North Carolina	0.1821929604%
NC5	Ashe County, North Carolina	0.3386391883%
NC6	Asheville City, North Carolina	0.2358147243%
NC7	Avery County, North Carolina	0.2659967669%
NC8	Beaufort County, North Carolina	0.4778884349%
NC9	Bertie County, North Carolina	0.1394685751%
NC10	Bladen County, North Carolina	0.4292178095%
NC11	Brunswick County, North Carolina	2.1132385076%
NC12	Buncombe County, North Carolina	2.5115878573%
NC13	Burke County, North Carolina	2.0901968270%
NC14	Cabarrus County, North Carolina	1.6695734466%
NC15	Caldwell County, North Carolina	1.2763011462%
NC16	Camden County, North Carolina	0.0730364004%
NC17	Canton Town, North Carolina	0.0114538232%
NC18	Carteret County, North Carolina	1.1284655939%
NC19	Cary Town, North Carolina	0.1441516454%
NC20	Caswell County, North Carolina	0.1729202375%
NC21	Catawba County, North Carolina	2.0726952227%
NC22	Charlotte City, North Carolina	1.2474838144%
NC23	Chatham County, North Carolina	0.4498143831%
NC24	Cherokee County, North Carolina	0.7827591529%
NC25	Chowan County, North Carolina	0.1137055961%
NC26	Clay County, North Carolina	0.2244299489%
NC27	Cleveland County, North Carolina	1.1199280277%
NC28	Columbus County, North Carolina	1.2209369390%
NC29	Concord City, North Carolina	0.2274558703%
NC30	Craven County, North Carolina	1.3368601902%
NC31	Cumberland County, North Carolina	2.6372996596%
NC32	Currituck County, North Carolina	0.1867785513%
NC33	Dare County, North Carolina	0.5331267313%
NC34	Davidson County, North Carolina	1.9402695304%
NC35	Davie County, North Carolina	0.5131475269%
NC36	Duplin County, North Carolina	0.3827851474%
NC37	Durham City, North Carolina	0.3804050267%
NC38	Durham County, North Carolina	1.7979943624%
NC39	Edgecombe County, North Carolina	0.4171019390%
NC40	Fayetteville City, North Carolina	0.3097690552%
NC41	Forsyth County, North Carolina	3.0684508095%
NC42	Franklin County, North Carolina	0.5005036433%
NC43	Gaston County, North Carolina	3.0981738869%
NC44	Gastonia City, North Carolina	0.2577638238%
NC45	Gates County, North Carolina	0.0795675166%
NC46	Graham County, North Carolina	0.1834845617%
NC47	Granville County, North Carolina	0.5901034093%

State ID	Qualifying Subdivision	Consolidated State Allocation
NC48	Greene County, North Carolina	0.1232748186%
NC49	Greensboro City, North Carolina	0.5273916964%
NC50	Greenville City, North Carolina	0.1626564747%
NC51	Guilford County, North Carolina	3.3750152311%
NC52	Halifax County, North Carolina	0.4531611740%
NC53	Harnett County, North Carolina	0.9889807722%
NC54	Haywood County, North Carolina	0.8033151101%
NC55	Henderson City, North Carolina	0.0322534788%
NC56	Henderson County, North Carolina	1.3815950870%
NC57	Hertford County, North Carolina	0.2068430501%
NC58	Hickory City, North Carolina	0.0948758357%
NC59	High Point City, North Carolina	0.2064287629%
NC60	Hoke County, North Carolina	0.3324858046%
NC61	Hyde County, North Carolina	0.0272373541%
NC62	Iredell County, North Carolina	2.1159313745%
NC63	Jackson County, North Carolina	0.5077577313%
NC64	Jacksonville City, North Carolina	0.0950098698%
NC65	Johnston County, North Carolina	1.2508874682%
NC66	Jones County, North Carolina	0.0879669870%
NC67	Lee County, North Carolina	0.6531156836%
NC68	Lenoir County, North Carolina	0.6042825926%
NC69	Lincoln County, North Carolina	0.9268336271%
NC70	Macon County, North Carolina	0.2377764961%
NC71	Madison County, North Carolina	0.2328822206%
NC72	Martin County, North Carolina	0.5875445765%
NC73	McDowell County, North Carolina	0.4667676661%
NC74	Mecklenburg County, North Carolina	5.0383012599%
NC75	Mitchell County, North Carolina	0.3093141516%
NC76	Montgomery County, North Carolina	0.2260505430%
NC77	Moore County, North Carolina	0.9717391128%
NC78	Nash County, North Carolina	0.8456536396%
NC79	New Hanover County, North Carolina	2.8972648920%
NC80	Northampton County, North Carolina	0.1209962389%
NC81	Onslow County, North Carolina	1.6440013647%
NC82	Orange County, North Carolina	1.0558394190%
NC83	Pamlico County, North Carolina	0.1199361510%
NC84	Pasquotank County, North Carolina	0.3748162108%
NC85	Pender County, North Carolina	0.5857493319%
NC86	Perquimans County, North Carolina	0.1118331803%
NC87	Person County, North Carolina	0.4030242967%
NC88	Pitt County, North Carolina	1.3690080664%
NC89	Polk County, North Carolina	0.2661429860%
NC90	Raleigh City, North Carolina	0.5667246127%

State ID	Qualifying Subdivision	Consolidated State Allocation
NC91	Randolph County, North Carolina	1.5254339862%
NC92	Richmond County, North Carolina	0.7491328400%
NC93	Robeson County, North Carolina	1.3597353436%
NC94	Rockingham County, North Carolina	1.3653688375%
NC95	Rowan County, North Carolina	2.3352192879%
NC96	Rutherford County, North Carolina	0.9289416180%
NC97	Sampson County, North Carolina	0.6195137405%
NC98	Scotland County, North Carolina	0.4491482742%
NC99	Stanly County, North Carolina	0.7249742086%
NC100	Stokes County, North Carolina	0.6239531124%
NC101	Surry County, North Carolina	1.4108267061%
NC102	Swain County, North Carolina	0.2811629286%
NC103	Transylvania County, North Carolina	0.4975955095%
NC104	Tyrrell County, North Carolina	0.0414409072%
NC105	Union County, North Carolina	1.4667026799%
NC106	Vance County, North Carolina	0.5362582553%
NC107	Wake County, North Carolina	4.9024556672%
NC108	Warren County, North Carolina	0.1063905835%
NC109	Washington County, North Carolina	0.0747707205%
NC110	Watauga County, North Carolina	0.4696757999%
NC111	Wayne County, North Carolina	0.9706993331%
NC112	Wilkes County, North Carolina	1.9971771606%
NC113	Wilmington City, North Carolina	0.1194974940%
NC114	Wilson County, North Carolina	0.6464708415%
NC115	Winston-Salem City, North Carolina	0.4944599238%
NC116	Yadkin County, North Carolina	0.5621471451%
NC117	Yancey County, North Carolina	0.3821149769%

State ID	Qualifying Subdivision	Consolidated State Allocation
ND1	Adams County, North Dakota	0.3266859369%
ND2	Barnes County, North Dakota	1.1596409120%
ND3	Benson County, North Dakota	0.8243618844%
ND4	Billings County, North Dakota	0.0531198558%
ND5	Bismarck City, North Dakota	7.8720018475%
ND6	Bottineau County, North Dakota	0.6564106964%
ND7	Bowman County, North Dakota	0.3537618912%
ND8	Burke County, North Dakota	0.1340272238%
ND9	Burleigh County, North Dakota	5.9258321732%
ND10	Cass County, North Dakota	9.2593207065%
ND11	Cavalier County, North Dakota	0.4775832577%
ND12	Devils Lake City, North Dakota	0.3622623619%
ND13	Dickey County, North Dakota	0.6064663883%
ND14	Dickinson City, North Dakota	1.0573324109%
ND15	Divide County, North Dakota	0.1925705034%
ND16	Dunn County, North Dakota	0.5017615248%
ND17	Eddy County, North Dakota	0.2227970127%
ND18	Emmons County, North Dakota	0.7218887252%
ND19	Fargo City, North Dakota	12.8639966005%
ND20	Foster County, North Dakota	0.3938546507%
ND21	Golden Valley County, North Dakota	0.2278631874%
ND22	Grand Forks City, North Dakota	7.1999971538%
ND23	Grand Forks County, North Dakota	5.4639296523%
ND24	Grant County, North Dakota	0.2093626818%
ND25	Griggs County, North Dakota	0.2073426807%
ND26	Hettinger County, North Dakota	0.2096684753%
ND27	Jamestown City, North Dakota	0.7024664288%
ND28	Kidder County, North Dakota	0.3074782839%
ND29	La Moure County, North Dakota	0.3036088203%
ND30	Lisbon City, North Dakota	0.1372424658%
ND31	Logan County, North Dakota	0.1641331799%
ND32	Mandan City, North Dakota	1.1262932510%
ND33	McHenry County, North Dakota	0.3973374621%
ND34	McIntosh County, North Dakota	0.2870077627%
ND35	McKenzie County, North Dakota	1.2312553926%
ND36	McLean County, North Dakota	1.1384661837%
ND37	Mercer County, North Dakota	1.1241071216%
ND38	Minot City, North Dakota	2.8909627339%
ND39	Morton County, North Dakota	2.6703636118%
ND40	Mountrail County, North Dakota	1.1142893867%
ND41	Nelson County, North Dakota	0.4740975060%
ND42	Oliver County, North Dakota	0.2228234756%
ND43	Pembina County, North Dakota	1.2530005434%
ND44	Pierce County, North Dakota	0.7284574044%
ND45	Ramsey County, North Dakota	1.2734343106%
ND46	Ransom County, North Dakota	0.6183673413%
ND47	Renville County, North Dakota	0.2860845016%

State ID	Qualifying Subdivision	Consolidated State Allocation
ND48	Richland County, North Dakota	2.4309493698%
ND49	Rolette County, North Dakota	1.8198034592%
ND50	Sargent County, North Dakota	0.5773674924%
ND51	Sheridan County, North Dakota	0.0895886685%
ND52	Sioux County, North Dakota	0.6666209643%
ND53	Slope County, North Dakota	0.0470907257%
ND54	Stark County, North Dakota	3.3526741338%
ND55	Steele County, North Dakota	0.2434939387%
ND56	Stutsman County, North Dakota	1.9758860377%
ND57	Towner County, North Dakota	0.1807489391%
ND58	Traill County, North Dakota	1.0587643476%
ND59	Walsh County, North Dakota	2.0521094729%
ND60	Ward County, North Dakota	3.4849842097%
ND61	Wells County, North Dakota	0.4346604383%
ND62	West Fargo City, North Dakota	1.8417059171%
ND63	Williams County, North Dakota	2.3067369406%
ND64	Williston City, North Dakota	1.5016973817%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1	Aberdeen Village, Ohio	0.0087437716%
OH2	Ada Village, Ohio	0.0077636351%
OH3	Adams County, Ohio	0.3473544585%
OH4	Adams Township, Champaign County, Ohio	0.0001374611%
OH5	Adams Township, Clinton County, Ohio	0.0003122525%
OH6	Adams Township, Darke County, Ohio	0.0016731027%
OH7	Adams Township, Monroe County, Ohio	0.0000311703%
OH8	Adams Township, Muskingum County, Ohio	0.0001003092%
OH9	Adams Township, Seneca County, Ohio	0.0003810303%
OH10	Adams Township, Washington County, Ohio	0.0001169753%
OH11	Adamsville Village, Ohio	0.0000910884%
OH12	Addyston Village, Ohio	0.0025217854%
OH13	Adelphi Village, Ohio	0.0020068066%
OH14	Adena Village, Ohio	0.0003568983%
OH15	Aid Township, Ohio	0.0003303244%
OH16	Akron City, Ohio	0.8812077621%
OH17	Albany Village, Ohio	0.0019488925%
OH18	Alexander Township, Ohio	0.0001250626%
OH19	Alexandria Village, Ohio	0.0005560173%
OH20	Alger Village, Ohio	0.0005166462%
OH21	Allen County, Ohio	0.4092999560%
OH22	Allen Township, Darke County, Ohio	0.0006643202%
OH23	Allen Township, Hancock County, Ohio	0.0005903230%
OH24	Allen Township, Ottawa County, Ohio	0.0005976710%
OH25	Allen Township, Union County, Ohio	0.0028518922%
OH26	Alliance City, Ohio	0.0889490116%
OH27	Amanda Township, Fairfield County, Ohio	0.0018577114%
OH28	Amanda Township, Hancock County, Ohio	0.0001616361%
OH29	Amanda Village, Ohio	0.0005782400%
OH30	Amberley Village, Ohio	0.0192140009%
OH31	Amboy Township, Ohio	0.0017244001%
OH32	Amelia Village, Ohio	0.0138770427%
OH33	American Township, Ohio	0.0193901533%
OH34	Ames Township, Ohio	0.0004272973%
OH35	Amesville Village, Ohio	0.0000937970%
OH36	Amherst City, Ohio	0.0344767089%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH37	Amherst Township, Ohio	0.0134400730%
OH38	Amsterdam Village, Ohio	0.0003984552%
OH39	Anderson Township, Ohio	0.0760877775%
OH40	Andover Township, Ohio	0.0010566751%
OH41	Andover Village, Ohio	0.0040505880%
OH42	Anna Village, Ohio	0.0028751504%
OH43	Ansonia Village, Ohio	0.0014885693%
OH44	Antioch Village, Ohio	0.0000311703%
OH45	Antwerp Village, Ohio	0.0009282725%
OH46	Apple Creek Village, Ohio	0.0004832518%
OH47	Aquilla Village, Ohio	0.0000095709%
OH48	Arcadia Village, Ohio	0.0000210830%
OH49	Arcanum Village, Ohio	0.0034200188%
OH50	Archbold Village, Ohio	0.0168893369%
OH51	Arlington Heights Village, Ohio	0.0024048815%
OH52	Arlington Village, Ohio	0.0017280808%
OH53	Ashland City, Ohio	0.0677959091%
OH54	Ashland County, Ohio	0.2064379332%
OH55	Ashley Village, Ohio	0.0012125812%
OH56	Ashtabula City, Ohio	0.0931048204%
OH57	Ashtabula County, Ohio	0.7429130666%
OH58	Ashtabula Township, Ohio	0.0174821031%
OH59	Ashville Village, Ohio	0.0024582550%
OH60	Athalia Village, Ohio	0.0000173855%
OH61	Athens City, Ohio	0.0700871751%
OH62	Athens County, Ohio	0.4584170235%
OH63	Athens Township, Athens County, Ohio	0.0025846274%
OH64	Athens Township, Harrison County, Ohio	0.0003148983%
OH65	Attica Village, Ohio	0.0007921419%
OH66	Atwater Township, Ohio	0.0004753019%
OH67	Auburn Township, Crawford County, Ohio	0.0007613308%
OH68	Auburn Township, Geauga County, Ohio	0.0067953249%
OH69	Auburn Township, Tuscarawas County, Ohio	0.0000098536%
OH70	Auglaize County, Ohio	0.1648586210%
OH71	Auglaize Township, Allen County, Ohio	0.0010226874%
OH72	Auglaize Township, Paulding County, Ohio	0.0000730923%
OH73	Augusta Township, Ohio	0.0004684152%
OH74	Aurelius Township, Ohio	0.0000083554%
OH75	Aurora City, Ohio	0.0294524674%
OH76	Austinburg Township, Ohio	0.0004813742%
OH77	Austintown Township, Ohio	0.0890063352%
OH78	Avon City, Ohio	0.0729757005%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH79	Avon Lake City, Ohio	0.0663140992%
OH80	Bailey Lakes Village, Ohio	0.0000813388%
OH81	Bainbridge Township, Ohio	0.0406379571%
OH82	Bainbridge Village, Ohio	0.0022724133%
OH83	Bairdstown Village, Ohio	0.0000612234%
OH84	Ballville Township, Ohio	0.0021521086%
OH85	Baltic Village, Ohio	0.0009410120%
OH86	Baltimore Village, Ohio	0.0031532207%
OH87	Barberton City, Ohio	0.1164193916%
OH88	Barlow Township, Ohio	0.0003258598%
OH89	Barnesville Village, Ohio	0.0106861443%
OH90	Barnhill Village, Ohio	0.0006601909%
OH91	Bartlow Township, Ohio	0.0001082864%
OH92	Batavia Township, Ohio	0.0000517157%
OH93	Batavia Village, Ohio	0.0047750818%
OH94	Batesville Village, Ohio	0.0000517432%
OH95	Bath Township, Allen County, Ohio	0.0088564730%
OH96	Bath Township, Greene County, Ohio	0.0001754181%
OH97	Bath Township, Summit County, Ohio	0.0489522386%
OH98	Baughman Township, Ohio	0.0001353105%
OH99	Bay Township, Ohio	0.0000549583%
OH100	Bay View Village, Ohio	0.0012986334%
OH101	Bay Village City, Ohio	0.0295102794%
OH102	Bazetta Township, Ohio	0.0331455317%
OH103	Beach City Village, Ohio	0.0006531299%
OH104	Beachwood City, Ohio	0.0573216138%
OH105	Beallsville Village, Ohio	0.0001580913%
OH106	Bearfield Township, Ohio	0.0005486478%
OH107	Beaver Township, Mahoning County, Ohio	0.0148139167%
OH108	Beaver Township, Pike County, Ohio	0.0003380168%
OH109	Beaver Village, Ohio	0.0001859093%
OH110	Beavercreek City, Ohio	0.0843658046%
OH111	Beavercreek Township, Ohio	0.1348759090%
OH112	Beaverdam Village, Ohio	0.0000749971%
OH113	Bedford City, Ohio	0.0429793572%
OH114	Bedford Heights City, Ohio	0.0386687782%
OH115	Bedford Township, Ohio	0.0000306151%
OH116	Bellaire Village, Ohio	0.0010264323%
OH117	Bellbrook City, Ohio	0.0237949542%
OH118	Belle Center Village, Ohio	0.0005231767%
OH119	Belle Valley Village, Ohio	0.0001073626%
OH120	Bellefontaine City, Ohio	0.0729400123%
OH121	Bellevue City, Ohio	0.0299834456%
OH122	Bellville Village, Ohio	0.0011239941%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH123	Belmont County, Ohio	0.4904799617%
OH124	Belmont Village, Ohio	0.0011248573%
OH125	Belmore Village, Ohio	0.0002483511%
OH126	Beloit Village, Ohio	0.0037587550%
OH127	Belpre City, Ohio	0.0099429019%
OH128	Belpre Township, Ohio	0.0009358025%
OH129	Bennington Township, Licking County, Ohio	0.0005560173%
OH130	Bennington Township, Morrow County, Ohio	0.0001476031%
OH131	Bentleyville Village, Ohio	0.0019992236%
OH132	Benton Ridge Village, Ohio	0.0000914068%
OH133	Benton Township, Hocking County, Ohio	0.0001089904%
OH134	Benton Township, Ottawa County, Ohio	0.0007968947%
OH135	Benton Township, Paulding County, Ohio	0.0002485139%
OH136	Benton Township, Pike County, Ohio	0.0003718185%
OH137	Berea City, Ohio	0.0293403849%
OH138	Bergholz Village, Ohio	0.0002390731%
OH139	Berkey Village, Ohio	0.0003639406%
OH140	Berkshire Township, Ohio	0.0000742397%
OH141	Berlin Heights Village, Ohio	0.0009142379%
OH142	Berlin Township, Delaware County, Ohio	0.0000164977%
OH143	Berlin Township, Erie County, Ohio	0.0001350579%
OH144	Berlin Township, Holmes County, Ohio	0.0000814306%
OH145	Berlin Township, Mahoning County, Ohio	0.0014985886%
OH146	Bern Township, Ohio	0.0001354845%
OH147	Berne Township, Ohio	0.0001629571%
OH148	Bethel Township, Clark County, Ohio	0.0138134025%
OH149	Bethel Township, Monroe County, Ohio	0.0000498724%
OH150	Bethel Village, Ohio	0.0057576798%
OH151	Bethesda Village, Ohio	0.0006889751%
OH152	Bethlehem Township, Coshocton County, Ohio	0.0000765378%
OH153	Bethlehem Township, Stark County, Ohio	0.0015140738%
OH154	Bettsville Village, Ohio	0.0009525757%
OH155	Beverly Village, Ohio	0.0019551589%
OH156	Bexley City, Ohio	0.0458668476%
OH157	Big Island Township, Ohio	0.0005578783%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH158	Black Creek Township, Ohio	0.0001534027%
OH159	Blakeslee Village, Ohio	0.0000628635%
OH160	Blanchard Township, Hancock County, Ohio	0.0001475808%
OH161	Blanchard Township, Putnam County, Ohio	0.0006457128%
OH162	Blanchester Village, Ohio	0.0114641267%
OH163	Blendon Township, Ohio	0.0282639366%
OH164	Bloom Township, Fairfield County, Ohio	0.0118551321%
OH165	Bloom Township, Morgan County, Ohio	0.0001713719%
OH166	Bloom Township, Scioto County, Ohio	0.0000852977%
OH167	Bloom Township, Seneca County, Ohio	0.0009926842%
OH168	Bloomdale Village, Ohio	0.0005693772%
OH169	Bloomfield Township, Jackson County, Ohio	0.0013260530%
OH170	Bloomfield Township, Logan County, Ohio	0.0000099754%
OH171	Bloomingburg Village, Ohio	0.0002078369%
OH172	Bloomingdale Village, Ohio	0.0002231349%
OH173	Bloominggrove Township, Ohio	0.0001784118%
OH174	Bloomville Village, Ohio	0.0004411930%
OH175	Blue Ash City, Ohio	0.0851895858%
OH176	Blue Creek Township, Ohio	0.0000767469%
OH177	Blue Rock Township, Ohio	0.0001103402%
OH178	Bluffton Village, Ohio	0.0052836661%
OH179	Boardman Township, Ohio	0.1408673271%
OH180	Bokescreek Township, Ohio	0.0013367015%
OH181	Bolivar Village, Ohio	0.0004434118%
OH182	Boston Heights Village, Ohio	0.0077201699%
OH183	Boston Township, Ohio	0.0003662503%
OH184	Botkins Village, Ohio	0.0019522626%
OH185	Bowerston Village, Ohio	0.0000572542%
OH186	Bowersville Village, Ohio	0.0000916319%
OH187	Bowling Green City, Ohio	0.0752741164%
OH188	Bowling Green Township, Ohio	0.0000370678%
OH189	Braceville Township, Ohio	0.0037680877%
OH190	Bradford Village, Ohio	0.0028661348%
OH191	Bradner Village, Ohio	0.0009183503%
OH192	Brady Lake Village, Ohio	0.0002559318%
OH193	Brady Township, Ohio	0.0005029083%
OH194	Bratenahl Village, Ohio	0.0051323943%
OH195	Bratton Township, Ohio	0.0000790580%
OH196	Brecksville City, Ohio	0.0241013127%
OH197	Bremen Village, Ohio	0.0006844200%
OH198	Brewster Village, Ohio	0.0058880648%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH199	Brice Village, Ohio	0.0005574892%
OH200	Bridgeport Village, Ohio	0.0050477971%
OH201	Bridgewater Township, Ohio	0.0004164709%
OH202	Brighton Township, Ohio	0.0000194784%
OH203	Brimfield Township, Ohio	0.0111960000%
OH204	Bristol Township, Morgan County, Ohio	0.0001285289%
OH205	Bristol Township, Trumbull County, Ohio	0.0252513027%
OH206	Broadview Heights City, Ohio	0.0226789401%
OH207	Bronson Township, Ohio	0.0009334281%
OH208	Brook Park City, Ohio	0.0389572037%
OH209	Brookfield Township, Noble County, Ohio	0.0000517432%
OH210	Brookfield Township, Trumbull County, Ohio	0.0346459468%
OH211	Brooklyn City, Ohio	0.0212407634%
OH212	Brooklyn Heights Village, Ohio	0.0100909430%
OH213	Brookside Village, Ohio	0.0001124857%
OH214	Brookville City, Ohio	0.0216648650%
OH215	Broughton Village, Ohio	0.0000073092%
OH216	Brown County, Ohio	0.4653422837%
OH217	Brown Township, Carroll County, Ohio	0.0009477238%
OH218	Brown Township, Darke County, Ohio	0.0007873425%
OH219	Brown Township, Delaware County, Ohio	0.0000082489%
OH220	Brown Township, Franklin County, Ohio	0.0003894787%
OH221	Brown Township, Knox County, Ohio	0.0039027192%
OH222	Brown Township, Miami County, Ohio	0.0006132702%
OH223	Brown Township, Paulding County, Ohio	0.0001315662%
OH224	Brown Township, Vinton County, Ohio	0.0000390135%
OH225	Brunswick City, Ohio	0.1197413086%
OH226	Brunswick Hills Township, Ohio	0.0200631640%
OH227	Brush Creek Township, Jefferson County, Ohio	0.0001275057%
OH228	Brush Creek Township, Scioto County, Ohio	0.0011088700%
OH229	Brushcreek Township, Ohio	0.0059850824%
OH230	Bryan City, Ohio	0.0285400457%
OH231	Buchtel Village, Ohio	0.0001849243%
OH232	Buckeye Lake Village, Ohio	0.0040562680%
OH233	Buckland Village, Ohio	0.0001068314%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH234	Bucks Township, Ohio	0.0002857543%
OH235	Bucyrus City, Ohio	0.0467130847%
OH236	Bucyrus Township, Ohio	0.0002175231%
OH237	Buffalo Township, Ohio	0.0000689910%
OH238	Burbank Village, Ohio	0.0001559017%
OH239	Burgoon Village, Ohio	0.0001532454%
OH240	Burkettsville Village, Ohio	0.0000203512%
OH241	Burlington Township, Ohio	0.0012973736%
OH242	Burton Township, Ohio	0.0022682986%
OH243	Burton Village, Ohio	0.0036177927%
OH244	Butler County, Ohio	2.6887406714%
OH245	Butler Township, Columbiana County, Ohio	0.0017704304%
OH246	Butler Township, Darke County, Ohio	0.0006643202%
OH247	Butler Township, Mercer County, Ohio	0.0021025197%
OH248	Butler Township, Montgomery County, Ohio	0.0308007959%
OH249	Butler Township, Richland County, Ohio	0.0003925059%
OH250	Butler Village, Ohio	0.0004817118%
OH251	Butlerville Village, Ohio	0.0001866800%
OH252	Byesville Village, Ohio	0.0018493145%
OH253	Byrd Township, Ohio	0.0018293707%
OH254	Cadiz Township, Ohio	0.0013359320%
OH255	Cadiz Village, Ohio	0.0042081859%
OH256	Caesarscreek Township, Ohio	0.0004643421%
OH257	Cairo Village, Ohio	0.0000409075%
OH258	Caldwell Village, Ohio	0.0017937650%
OH259	Caledonia Village, Ohio	0.0007098142%
OH260	Cambridge City, Ohio	0.0668200845%
OH261	Cambridge Township, Ohio	0.0000951853%
OH262	Camden Township, Ohio	0.0003116539%
OH263	Camden Village, Ohio	0.0031099397%
OH264	Camp Creek Township, Ohio	0.0001943597%
OH265	Campbell City, Ohio	0.0206854359%
OH266	Canaan Township, Morrow County, Ohio	0.0000885618%
OH267	Canaan Township, Wayne County, Ohio	0.0002435589%
OH268	Canal Fulton City, Ohio	0.0143391696%
OH269	Canal Winchester City, Ohio	0.0017001990%
OH270	Canfield City, Ohio	0.0340253310%
OH271	Canfield Township, Ohio	0.0024198521%
OH272	Canton City, Ohio	0.4906093929%
OH273	Canton Township, Ohio	0.0238293446%
OH274	Cardington Village, Ohio	0.0026450469%
OH275	Carey Village, Ohio	0.0048237347%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH276	Carlisle Township, Ohio	0.0046455904%
OH277	Carlisle Village, Ohio	0.0081658806%
OH278	Carroll County, Ohio	0.1274960868%
OH279	Carroll Township, Ohio	0.0031394902%
OH280	Carroll Village, Ohio	0.0008718207%
OH281	Carrollton Village, Ohio	0.0061329714%
OH282	Carryall Township, Ohio	0.0000511646%
OH283	Carthage Township, Ohio	0.0002397033%
OH284	Cass Township, Muskingum County, Ohio	0.0002006185%
OH285	Cass Township, Richland County, Ohio	0.0007850118%
OH286	Casstown Village, Ohio	0.0005337723%
OH287	Castalia Village, Ohio	0.0011427974%
OH288	Castine Village, Ohio	0.0005289957%
OH289	Catawba Island Township, Ohio	0.0060247984%
OH290	Catawba Village, Ohio	0.0002313575%
OH291	Cecil Village, Ohio	0.0000109638%
OH292	Cedarville Township, Ohio	0.0036837809%
OH293	Cedarville Village, Ohio	0.0036321873%
OH294	Celina City, Ohio	0.0165674940%
OH295	Center Township, Carroll County, Ohio	0.0001634007%
OH296	Center Township, Columbiana County, Ohio	0.0003327877%
OH297	Center Township, Guernsey County, Ohio	0.0001903706%
OH298	Center Township, Mercer County, Ohio	0.0004241134%
OH299	Center Township, Monroe County, Ohio	0.0005361288%
OH300	Center Township, Morgan County, Ohio	0.0000535537%
OH301	Center Township, Noble County, Ohio	0.0001724774%
OH302	Center Township, Williams County, Ohio	0.0005107662%
OH303	Center Township, Wood County, Ohio	0.0002510158%
OH304	Centerburg Village, Ohio	0.0041342364%
OH305	Centerville City, Ohio	0.0591550598%
OH306	Centerville Village, Ohio	0.0005060807%
OH307	Cessna Township, Ohio	0.0001110677%
OH308	Chagrin Falls Township, Ohio	0.0000039510%
OH309	Chagrin Falls Village, Ohio	0.0125168784%
OH310	Champaign County, Ohio	0.2269483026%
OH311	Champion Township, Ohio	0.0283714840%
OH312	Chardon City, Ohio	0.0479405386%
OH313	Chardon Township, Ohio	0.0039336317%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH314	Charlestown Township, Ohio	0.0000121872%
OH315	Chatfield Township, Ohio	0.0008265878%
OH316	Chatfield Village, Ohio	0.0000870092%
OH317	Chatham Township, Ohio	0.0003778818%
OH318	Chauncey Village, Ohio	0.0000833751%
OH319	Cherry Fork Village, Ohio	0.0004264208%
OH320	Cherry Valley Township, Ohio	0.0004696334%
OH321	Chesapeake Village, Ohio	0.0021905725%
OH322	Cheshire Township, Ohio	0.0010496489%
OH323	Cheshire Village, Ohio	0.0001686936%
OH324	Chester Township, Clinton County, Ohio	0.0019181224%
OH325	Chester Township, Geauga County, Ohio	0.0252766944%
OH326	Chester Township, Morrow County, Ohio	0.0005136587%
OH327	Chester Township, Wayne County, Ohio	0.0004213956%
OH328	Chesterhill Village, Ohio	0.0000958805%
OH329	Chesterville Village, Ohio	0.0000531371%
OH330	Cheviot City, Ohio	0.0177109500%
OH331	Chickasaw Village, Ohio	0.0003251707%
OH332	Chillicothe City, Ohio	0.3116747707%
OH333	Chilo Village, Ohio	0.0001537865%
OH334	Chippewa Lake Village, Ohio	0.0005077787%
OH335	Chippewa Township, Ohio	0.0025863636%
OH336	Christiansburg Village, Ohio	0.0002537744%
OH337	Cincinnati City, Ohio	1.9225774768%
OH338	Circleville City, Ohio	0.3452050773%
OH339	Circleville Township, Ohio	0.0006412839%
OH340	Claibourne Township, Ohio	0.0000211028%
OH341	Claridon Township, Ohio	0.0025745668%
OH342	Clarington Village, Ohio	0.0000498724%
OH343	Clark County, Ohio	1.2151983585%
OH344	Clark Township, Brown County, Ohio	0.0053640868%
OH345	Clark Township, Clinton County, Ohio	0.0010928837%
OH346	Clarksburg Village, Ohio	0.0000295119%
OH347	Clarksfield Township, Ohio	0.0007412517%
OH348	Clarksville Village, Ohio	0.0004237712%
OH349	Clay Center Village, Ohio	0.0000618280%
OH350	Clay Township, Auglaize County, Ohio	0.0004451307%
OH351	Clay Township, Highland County, Ohio	0.0003613635%
OH352	Clay Township, Montgomery County, Ohio	0.0058148642%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH353	Clay Township, Muskingum County, Ohio	0.0004012369%
OH354	Clay Township, Ottawa County, Ohio	0.0026311263%
OH355	Clay Township, Scioto County, Ohio	0.0064826249%
OH356	Clay Township, Tuscarawas County, Ohio	0.0000492680%
OH357	Clayton City, Ohio	0.0375148659%
OH358	Clayton Township, Ohio	0.0004303120%
OH359	Clear Creek Township, Ohio	0.0874295648%
OH360	Clearcreek Township, Ohio	0.0010918129%
OH361	Clermont County, Ohio	1.9148422650%
OH362	Cleveland City, Ohio	1.8006406770%
OH363	Cleveland Heights City, Ohio	0.0861404621%
OH364	Cleves Village, Ohio	0.0031981583%
OH365	Clifton Village, Ohio	0.0002996729%
OH366	Clinton County, Ohio	0.4003299792%
OH367	Clinton Township, Franklin County, Ohio	0.0107832149%
OH368	Clinton Township, Fulton County, Ohio	0.0006481787%
OH369	Clinton Township, Seneca County, Ohio	0.0007420064%
OH370	Clinton Township, Shelby County, Ohio	0.0005501831%
OH371	Clinton Township, Vinton County, Ohio	0.0002860993%
OH372	Clinton Township, Wayne County, Ohio	0.0001933007%
OH373	Clinton Village, Ohio	0.0011373034%
OH374	Cloverdale Village, Ohio	0.0001986809%
OH375	Clyde City, Ohio	0.0219912947%
OH376	Coal Grove Village, Ohio	0.0050070228%
OH377	Coal Township, Jackson County, Ohio	0.0004972699%
OH378	Coal Township, Perry County, Ohio	0.0003550074%
OH379	Coalton Village, Ohio	0.0024310971%
OH380	Coitsville Township, Ohio	0.0048028536%
OH381	Coldwater Village, Ohio	0.0054593322%
OH382	Colerain Township, Belmont County, Ohio	0.0006046108%
OH383	Colerain Township, Hamilton County, Ohio	0.1398087860%
OH384	College Corner Village, Ohio	0.0022611881%
OH385	College Township, Ohio	0.0028608916%
OH386	Columbia Township, Hamilton County, Ohio	0.0091268592%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH387	Columbia Township, Lorain County, Ohio	0.0044508068%
OH388	Columbia Township, Meigs County, Ohio	0.0000676625%
OH389	Columbiana City, Ohio	0.0212455929%
OH390	Columbiana County, Ohio	0.6832396894%
OH391	Columbus City, Ohio	4.0358741733%
OH392	Columbus Grove Village, Ohio	0.0013907661%
OH393	Commercial Point Village, Ohio	0.0008841945%
OH394	Concord Township, Delaware County, Ohio	0.0132064120%
OH395	Concord Township, Fayette County, Ohio	0.0003201811%
OH396	Concord Township, Highland County, Ohio	0.0000677557%
OH397	Concord Township, Lake County, Ohio	0.0329119594%
OH398	Concord Township, Miami County, Ohio	0.0048266640%
OH399	Concord Township, Ross County, Ohio	0.0034233759%
OH400	Conesville Village, Ohio	0.0001949904%
OH401	Congress Township, Morrow County, Ohio	0.0000354247%
OH402	Congress Township, Wayne County, Ohio	0.0000386601%
OH403	Congress Village, Ohio	0.0001394121%
OH404	Conneaut City, Ohio	0.0500864015%
OH405	Continental Village, Ohio	0.0013742094%
OH406	Convoy Village, Ohio	0.0015735393%
OH407	Coolville Village, Ohio	0.0002918128%
OH408	Copley Township, Ohio	0.0644889601%
OH409	Corning Village, Ohio	0.0010865378%
OH410	Cortland City, Ohio	0.0349699000%
OH411	Corwin Village, Ohio	0.0004993129%
OH412	Coshocton City, Ohio	0.0177337984%
OH413	Coshocton County, Ohio	0.1889793769%
OH414	Coventry Township, Ohio	0.0112670146%
OH415	Covington Village, Ohio	0.0077226624%
OH416	Craig Beach Village, Ohio	0.0004176394%
OH417	Cranberry Township, Ohio	0.0001631423%
OH418	Crane Township, Paulding County, Ohio	0.0001169477%
OH419	Crane Township, Wyandot County, Ohio	0.0005667045%
OH420	Crawford County, Ohio	0.2595376809%
OH421	Crawford Township, Coshocton County, Ohio	0.0002372670%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH422	Crawford Township, Wyandot County, Ohio	0.0001079437%
OH423	Crestline Village, Ohio	0.0166501207%
OH424	Creston Village, Ohio	0.0007596505%
OH425	Cridersville Village, Ohio	0.0045581388%
OH426	Crooksville Village, Ohio	0.0043353934%
OH427	Crosby Township, Ohio	0.0044757516%
OH428	Cross Creek Township, Ohio	0.0061202713%
OH429	Crown City Village, Ohio	0.0005435682%
OH430	Cumberland Village, Ohio	0.0007050617%
OH431	Custar Village, Ohio	0.0000244893%
OH432	Cuyahoga Falls City, Ohio	0.1811685822%
OH433	Cuyahoga Heights Village, Ohio	0.0193798260%
OH434	Cygnet Village, Ohio	0.0002510158%
OH435	Cynthian Township, Ohio	0.0000266218%
OH436	Dallas Township, Ohio	0.0001522662%
OH437	Dalton Village, Ohio	0.0011945985%
OH438	Damascus Township, Ohio	0.0007850761%
OH439	Danbury Township, Ohio	0.0038539475%
OH440	Danville Village, Ohio	0.0021828768%
OH441	Darby Township, Madison County, Ohio	0.0011346056%
OH442	Darby Township, Union County, Ohio	0.0004220559%
OH443	Darbyville Village, Ohio	0.0000242911%
OH444	Darke County, Ohio	0.2651621760%
OH445	Dayton City, Ohio	1.3353086202%
OH446	De Graff Village, Ohio	0.0013067754%
OH447	Decatur Township, Lawrence County, Ohio	0.0001043130%
OH448	Decatur Township, Washington County, Ohio	0.0001169753%
OH449	Deer Park City, Ohio	0.0107468140%
OH450	Deercreek Township, Ohio	0.0004275226%
OH451	Deerfield Township, Portage County, Ohio	0.0008693556%
OH452	Deerfield Township, Ross County, Ohio	0.0015346168%
OH453	Deerfield Township, Warren County, Ohio	0.1151454582%
OH454	Deersville Village, Ohio	0.0000209231%
OH455	Defiance City, Ohio	0.0658767007%
OH456	Defiance County, Ohio	0.1709704524%
OH457	Defiance Township, Ohio	0.0007172505%
OH458	Delaware City, Ohio	0.1151374756%
OH459	Delaware County, Ohio	0.4816174702%
OH460	Delaware Township, Defiance County, Ohio	0.0015007088%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH461	Delaware Township, Delaware County, Ohio	0.0075064553%
OH462	Delaware Township, Hancock County, Ohio	0.0001335254%
OH463	Delhi Township, Ohio	0.0630446356%
OH464	Dellroy Village, Ohio	0.0002505477%
OH465	Delphos City, Ohio	0.0171051813%
OH466	Delta Village, Ohio	0.0085241620%
OH467	Dennison Village, Ohio	0.0062570335%
OH468	Deshler Village, Ohio	0.0009475056%
OH469	Dexter City Village, Ohio	0.0000689910%
OH470	Dillonvale Village, Ohio	0.0012431801%
OH471	Dinsmore Township, Ohio	0.0004170743%
OH472	Dodson Township, Ohio	0.0105924667%
OH473	Donnelsville Village, Ohio	0.0002721853%
OH474	Dorset Township, Ohio	0.0001174083%
OH475	Dover City, Ohio	0.0416708574%
OH476	Dover Township, Athens County, Ohio	0.0005002505%
OH477	Dover Township, Tuscarawas County, Ohio	0.0000886824%
OH478	Dover Township, Union County, Ohio	0.0005124965%
OH479	Doylestown Village, Ohio	0.0020721837%
OH480	Dresden Village, Ohio	0.0028086586%
OH481	Dublin City, Ohio	0.0949912950%
OH482	Dublin Township, Ohio	0.0004331371%
OH483	Duchouquet Township, Ohio	0.0010861190%
OH484	Dunham Township, Ohio	0.0004344797%
OH485	Dunkirk Village, Ohio	0.0005233559%
OH486	Dupont Village, Ohio	0.0006622696%
OH487	Eagle Township, Brown County, Ohio	0.0090538344%
OH488	Eagle Township, Vinton County, Ohio	0.0002210767%
OH489	East Canton Village, Ohio	0.0024838727%
OH490	East Cleveland City, Ohio	0.0558083674%
OH491	East Liverpool City, Ohio	0.0368861843%
OH492	East Palestine Village, Ohio	0.0165861370%
OH493	East Sparta Village, Ohio	0.0004354199%
OH494	East Union Township, Ohio	0.0003556733%
OH495	Eastlake City, Ohio	0.0700788770%
OH496	Eaton City, Ohio	0.0615604375%
OH497	Eaton Township, Ohio	0.0004480024%
OH498	Eden Township, Licking County, Ohio	0.0004448138%
OH499	Eden Township, Seneca County, Ohio	0.0001102982%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH500	Eden Township, Wyandot County, Ohio	0.0000944507%
OH501	Edgerton Village, Ohio	0.0042354308%
OH502	Edinburg Township, Ohio	0.0011740363%
OH503	Edison Village, Ohio	0.0001948360%
OH504	Edon Village, Ohio	0.0013908558%
OH505	Eldorado Village, Ohio	0.0003273621%
OH506	Elgin Village, Ohio	0.0000619504%
OH507	Elida Village, Ohio	0.0011181382%
OH508	Elizabeth Township, Lawrence County, Ohio	0.0009562023%
OH509	Elizabeth Township, Miami County, Ohio	0.0000454274%
OH510	Elk Township, Noble County, Ohio	0.0000344955%
OH511	Elk Township, Vinton County, Ohio	0.0002600903%
OH512	Elkrun Township, Ohio	0.0004259682%
OH513	Ellsworth Township, Ohio	0.0001965362%
OH514	Elmore Village, Ohio	0.0016556174%
OH515	Elmwood Place Village, Ohio	0.0045008025%
OH516	Elyria City, Ohio	0.2638149975%
OH517	Elyria Township, Ohio	0.0007693955%
OH518	Empire Village, Ohio	0.0010041070%
OH519	Englewood City, Ohio	0.0628005329%
OH520	Enon Village, Ohio	0.0038378123%
OH521	Erie County, Ohio	0.4532438208%
OH522	Erie Township, Ohio	0.0006045408%
OH523	Euclid City, Ohio	0.0936790366%
OH524	Evendale Village, Ohio	0.0340357530%
OH525	Fairborn City, Ohio	0.1544298717%
OH526	Fairfax Village, Ohio	0.0079411190%
OH527	Fairfield City, Ohio	0.2893759753%
OH528	Fairfield County, Ohio	0.6244843622%
OH529	Fairfield Township, Butler County, Ohio	0.0801075425%
OH530	Fairfield Township, Columbiana County, Ohio	0.0024759402%
OH531	Fairfield Township, Huron County, Ohio	0.0006726173%
OH532	Fairfield Township, Tuscarawas County, Ohio	0.0004138510%
OH533	Fairfield Township, Washington County, Ohio	0.0000501323%
OH534	Fairlawn City, Ohio	0.0675346202%
OH535	Fairport Harbor Village, Ohio	0.0091069372%
OH536	Fairview Park City, Ohio	0.0218966352%
OH537	Fairview Village, Ohio	0.0000924858%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH538	Falls Township, Hocking County, Ohio	0.0002873384%
OH539	Falls Township, Muskingum County, Ohio	0.0022068032%
OH540	Farmer Township, Ohio	0.0002869002%
OH541	Farmersville Village, Ohio	0.0013667928%
OH542	Farmington Township, Ohio	0.0015345154%
OH543	Fayette County, Ohio	0.2554820842%
OH544	Fayette Township, Ohio	0.0013386832%
OH545	Fayette Village, Ohio	0.0012352086%
OH546	Fayetteville Village, Ohio	0.0029455968%
OH547	Fearing Township, Ohio	0.0004177690%
OH548	Felicity Village, Ohio	0.0030684641%
OH549	Findlay City, Ohio	0.1162163280%
OH550	Fitchville Township, Ohio	0.0003431721%
OH551	Flatrock Township, Ohio	0.0001691974%
OH552	Fletcher Village, Ohio	0.0012151836%
OH553	Florence Township, Erie County, Ohio	0.0013194115%
OH554	Florence Township, Williams County, Ohio	0.0002671700%
OH555	Florida Village, Ohio	0.0015566164%
OH556	Flushing Township, Ohio	0.0005905501%
OH557	Flushing Village, Ohio	0.0004640036%
OH558	Forest Park City, Ohio	0.0861415180%
OH559	Forest Village, Ohio	0.0023324226%
OH560	Fort Jennings Village, Ohio	0.0004221969%
OH561	Fort Loramie Village, Ohio	0.0012778446%
OH562	Fort Recovery Village, Ohio	0.0009926059%
OH563	Fostoria City, Ohio	0.0512205361%
OH564	Fowler Township, Ohio	0.0047569976%
OH565	Frankfort Village, Ohio	0.0079678326%
OH566	Franklin City, Ohio	0.0535002847%
OH567	Franklin County, Ohio	5.7883029997%
OH568	Franklin Township, Adams County, Ohio	0.0010014012%
OH569	Franklin Township, Brown County, Ohio	0.0023874837%
OH570	Franklin Township, Clermont County, Ohio	0.0034132353%
OH571	Franklin Township, Columbiana County, Ohio	0.0006123293%
OH572	Franklin Township, Coshocton County, Ohio	0.0002449208%
OH573	Franklin Township, Darke County, Ohio	0.0004797868%
OH574	Franklin Township, Franklin County, Ohio	0.0440874644%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH575	Franklin Township, Fulton County, Ohio	0.0000733787%
OH576	Franklin Township, Jackson County, Ohio	0.0003038871%
OH577	Franklin Township, Mercer County, Ohio	0.0012091744%
OH578	Franklin Township, Portage County, Ohio	0.0001990581%
OH579	Franklin Township, Richland County, Ohio	0.0008563765%
OH580	Franklin Township, Shelby County, Ohio	0.0011802315%
OH581	Franklin Township, Tuscarawas County, Ohio	0.0031235899%
OH582	Franklin Township, Warren County, Ohio	0.0035372089%
OH583	Frazeysburg Village, Ohio	0.0003209896%
OH584	Fredericksburg Village, Ohio	0.0001198464%
OH585	Fredericktown Village, Ohio	0.0055729507%
OH586	Freedom Township, Portage County, Ohio	0.0004265530%
OH587	Freedom Township, Wood County, Ohio	0.0012305895%
OH588	Freeport Township, Ohio	0.0002576440%
OH589	Freeport Village, Ohio	0.0001049661%
OH590	Fremont City, Ohio	0.0724844646%
OH591	Fulton County, Ohio	0.1830065436%
OH592	Fulton Village, Ohio	0.0001234266%
OH593	Fultonham Village, Ohio	0.0000100309%
OH594	Gahanna City, Ohio	0.0724048588%
OH595	Galena Village, Ohio	0.0001402305%
OH596	Galion City, Ohio	0.0440049221%
OH597	Gallia County, Ohio	0.3272280412%
OH598	Gallipolis Village, Ohio	0.0421733929%
OH599	Gambier Village, Ohio	0.0019348227%
OH600	Gann Village, Ohio	0.0000330739%
OH601	Garfield Heights City, Ohio	0.0512449222%
OH602	Garrettsville Village, Ohio	0.0040959299%
OH603	Gasper Township, Ohio	0.0060234621%
OH604	Gates Mills Village, Ohio	0.0065784730%
OH605	Geauga County, Ohio	0.4034987358%
OH606	Geneva City, Ohio	0.0306905423%
OH607	Geneva Township, Ohio	0.0015497902%
OH608	Geneva-On-The-Lake Village, Ohio	0.0052011898%
OH609	Genoa Township, Ohio	0.0490971668%
OH610	Genoa Village, Ohio	0.0023769444%
OH611	Georgetown Village, Ohio	0.0263243336%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH612	German Township, Auglaize County, Ohio	0.0003115915%
OH613	German Township, Clark County, Ohio	0.0120986353%
OH614	German Township, Fulton County, Ohio	0.0012718979%
OH615	German Township, Harrison County, Ohio	0.0002671864%
OH616	German Township, Montgomery County, Ohio	0.0069298793%
OH617	Germantown City, Ohio	0.0166173231%
OH618	Gettysburg Village, Ohio	0.0016993673%
OH619	Gibson Township, Ohio	0.0000992606%
OH620	Gibsonburg Village, Ohio	0.0033999699%
OH621	Gilboa Village, Ohio	0.0001572890%
OH622	Gilead Township, Ohio	0.0002952061%
OH623	Girard City, Ohio	0.0699056997%
OH624	Glandorf Village, Ohio	0.0007698884%
OH625	Glendale Village, Ohio	0.0089682038%
OH626	Glenford Village, Ohio	0.0004004647%
OH627	Glenmont Village, Ohio	0.0000756142%
OH628	Glenwillow Village, Ohio	0.0043105790%
OH629	Gloria Glens Park Village, Ohio	0.0002361762%
OH630	Glouster Village, Ohio	0.0025846274%
OH631	Gnadenhutten Village, Ohio	0.0020889623%
OH632	Golf Manor Village, Ohio	0.0149804075%
OH633	Good Hope Township, Ohio	0.0000544952%
OH634	Gordon Village, Ohio	0.0000369067%
OH635	Gorham Township, Ohio	0.0003913532%
OH636	Goshen Township, Auglaize County, Ohio	0.0000178052%
OH637	Goshen Township, Belmont County, Ohio	0.0007592787%
OH638	Goshen Township, Champaign County, Ohio	0.0009305060%
OH639	Goshen Township, Clermont County, Ohio	0.0551461609%
OH640	Goshen Township, Hardin County, Ohio	0.0002665626%
OH641	Goshen Township, Mahoning County, Ohio	0.0098390939%
OH642	Goshen Township, Tuscarawas County, Ohio	0.0000492680%
OH643	Grafton Township, Ohio	0.0022594905%
OH644	Grafton Village, Ohio	0.0066908189%
OH645	Grand Prairie Township, Ohio	0.0006880499%
OH646	Grand Rapids Township, Ohio	0.0003306061%
OH647	Grand Rapids Village, Ohio	0.0005020315%
OH648	Grand River Village, Ohio	0.0044444886%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH649	Grand Township, Ohio	0.0000371919%
OH650	Grandview Heights City, Ohio	0.0363742583%
OH651	Grandview Township, Ohio	0.0005932320%
OH652	Granger Township, Ohio	0.0028459226%
OH653	Granville Township, Licking County, Ohio	0.0126030583%
OH654	Granville Township, Mercer County, Ohio	0.0015971931%
OH655	Granville Village, Ohio	0.0103882561%
OH656	Gratiot Village, Ohio	0.0002067581%
OH657	Gratis Village, Ohio	0.0064162966%
OH658	Graysville Village, Ohio	0.0000309746%
OH659	Green Camp Township, Ohio	0.0011901403%
OH660	Green Camp Village, Ohio	0.0002045554%
OH661	Green City, Ohio	0.0847580205%
OH662	Green Creek Township, Ohio	0.0006872280%
OH663	Green Springs Village, Ohio	0.0016423298%
OH664	Green Township, Adams County, Ohio	0.0000263527%
OH665	Green Township, Brown County, Ohio	0.0034727036%
OH666	Green Township, Clark County, Ohio	0.0007485095%
OH667	Green Township, Clinton County, Ohio	0.0001561262%
OH668	Green Township, Fayette County, Ohio	0.0001235787%
OH669	Green Township, Gallia County, Ohio	0.0009184428%
OH670	Green Township, Hamilton County, Ohio	0.0953852812%
OH671	Green Township, Harrison County, Ohio	0.0005725423%
OH672	Green Township, Hocking County, Ohio	0.0033142996%
OH673	Green Township, Mahoning County, Ohio	0.0033902496%
OH674	Green Township, Monroe County, Ohio	0.0000062341%
OH675	Green Township, Ross County, Ohio	0.0105357346%
OH676	Green Township, Scioto County, Ohio	0.0218077775%
OH677	Green Township, Shelby County, Ohio	0.0000621174%
OH678	Greene County, Ohio	0.9063855073%
OH679	Greene Township, Ohio	0.0000341003%
OH680	Greenfield Township, Fairfield County, Ohio	0.0084982150%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH681	Greenfield Township, Huron County, Ohio	0.0011256045%
OH682	Greenfield Village, Ohio	0.0148836578%
OH683	Greenhills Village, Ohio	0.0082250286%
OH684	Greensburg Township, Ohio	0.0001324539%
OH685	Greenville City, Ohio	0.0550893674%
OH686	Greenville Township, Ohio	0.0140737464%
OH687	Greenwich Village, Ohio	0.0017844949%
OH688	Groton Township, Ohio	0.0005921768%
OH689	Grove City, Ohio	0.0733060057%
OH690	Groveport City, Ohio	0.0125549613%
OH691	Grover Hill Village, Ohio	0.0001863854%
OH692	Guernsey County, Ohio	0.2910222727%
OH693	Guilford Township, Ohio	0.0060579183%
OH694	Gustavus Township, Ohio	0.0000511505%
OH695	Guyan Township, Ohio	0.0003561309%
OH696	Hambden Township, Ohio	0.0039432026%
OH697	Hamden Village, Ohio	0.0009493296%
OH698	Hamer Township, Ohio	0.0000451704%
OH699	Hamersville Village, Ohio	0.0007131445%
OH700	Hamilton City, Ohio	0.6764224012%
OH701	Hamilton County, Ohio	5.8561869769%
OH702	Hamilton Township, Franklin County, Ohio	0.0255910434%
OH703	Hamilton Township, Jackson County, Ohio	0.0005248960%
OH704	Hamilton Township, Lawrence County, Ohio	0.0009909733%
OH705	Hamilton Township, Warren County, Ohio	0.0450761424%
OH706	Hamler Village, Ohio	0.0004060738%
OH707	Hancock County, Ohio	0.2855617267%
OH708	Hanging Rock Village, Ohio	0.0019993320%
OH709	Hanover Township, Butler County, Ohio	0.0098235954%
OH710	Hanover Township, Columbiana County, Ohio	0.0013178391%
OH711	Hanover Township, Licking County, Ohio	0.0043184009%
OH712	Hanover Village, Ohio	0.0008062251%
OH713	Hanoverton Village, Ohio	0.0010440744%
OH714	Harbor View Village, Ohio	0.0001526700%
OH715	Hardin County, Ohio	0.2235793641%
OH716	Harding Township, Ohio	0.0000272955%
OH717	Hardy Township, Ohio	0.0013901375%
OH718	Harlan Township, Ohio	0.0030485156%
OH719	Harlem Township, Ohio	0.0049245646%
OH720	Harmony Township, Clark County, Ohio	0.0018916876%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH721	Harmony Township, Morrow County, Ohio	0.0001180824%
OH722	Harpersfield Township, Ohio	0.0005048559%
OH723	Harpster Village, Ohio	0.0000822938%
OH724	Harris Township, Ohio	0.0004190567%
OH725	Harrisburg Village, Ohio	0.0002978367%
OH726	Harrison City, Ohio	0.0560804997%
OH727	Harrison County, Ohio	0.0770641930%
OH728	Harrison Township, Champaign County, Ohio	0.0001374611%
OH729	Harrison Township, Gallia County, Ohio	0.0002811560%
OH730	Harrison Township, Hamilton County, Ohio	0.0022712769%
OH731	Harrison Township, Henry County, Ohio	0.0000203037%
OH732	Harrison Township, Knox County, Ohio	0.0000165369%
OH733	Harrison Township, Licking County, Ohio	0.0003058095%
OH734	Harrison Township, Vinton County, Ohio	0.0000199508%
OH735	Harrison Township, Montgomery County, Ohio	0.0328749640%
OH736	Harrison Township, Muskingum County, Ohio	0.0004112679%
OH737	Harrison Township, Paulding County, Ohio	0.0000657831%
OH738	Harrison Township, Perry County, Ohio	0.0020762554%
OH739	Harrison Township, Pickaway County, Ohio	0.0068306454%
OH740	Harrison Township, Preble County, Ohio	0.0015877060%
OH741	Harrison Township, Scioto County, Ohio	0.0071650064%
OH742	Harrison Township, Van Wert County, Ohio	0.0001858511%
OH743	Harrison Township, Vinton County, Ohio	0.0005201806%
OH744	Harrisville Township, Ohio	0.0067192115%
OH745	Harrisville Village, Ohio	0.0000619645%
OH746	Harrod Village, Ohio	0.0000673593%
OH747	Harrison Township, Vinton County, Ohio	0.0007413564%
OH748	Hartford Township, Trumbull County, Ohio	0.0014833648%
OH749	Hartford Village, Ohio	0.0002502078%
OH750	Hartland Township, Ohio	0.0000960882%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH751	Hartsgrove Township, Ohio	0.0005870417%
OH752	Hartville Village, Ohio	0.0099058031%
OH753	Harveysburg Village, Ohio	0.0012100978%
OH754	Haskins Village, Ohio	0.0008938610%
OH755	Haviland Village, Ohio	0.0000511646%
OH756	Hayesville Village, Ohio	0.0000894727%
OH757	Heath City, Ohio	0.0429986695%
OH758	Hebron Village, Ohio	0.0150402674%
OH759	Helena Village, Ohio	0.0000542548%
OH760	Hemlock Village, Ohio	0.0003549573%
OH761	Henrietta Township, Ohio	0.0004674808%
OH762	Henry County, Ohio	0.1089766836%
OH763	Hicksville Township, Ohio	0.0002096578%
OH764	Hicksville Village, Ohio	0.0077242363%
OH765	Higginsport Village, Ohio	0.0015866304%
OH766	Highland County, Ohio	0.3882850462%
OH767	Highland Heights City, Ohio	0.0224853394%
OH768	Highland Hills Village, Ohio	0.0015764629%
OH769	Highland Township, Defiance County, Ohio	0.0027365866%
OH770	Highland Township, Muskingum County, Ohio	0.0001705257%
OH771	Highland Village, Ohio	0.0000677557%
OH772	Hilliard City, Ohio	0.0500136505%
OH773	Hills and Dales Village, Ohio	0.0006069453%
OH774	Hillsboro City, Ohio	0.0707143136%
OH775	Hinckley Township, Ohio	0.0165323306%
OH776	Hiram Township, Ohio	0.0008287315%
OH777	Hiram Village, Ohio	0.0032539898%
OH778	Hocking County, Ohio	0.2559590488%
OH779	Holgate Village, Ohio	0.0002774838%
OH780	Holiday City Village, Ohio	0.0000613051%
OH781	Holland Village, Ohio	0.0097536077%
OH782	Hollansburg Village, Ohio	0.0003567645%
OH783	Holloway Village, Ohio	0.0002671536%
OH784	Holmes County, Ohio	0.1337033098%
OH785	Holmes Township, Ohio	0.0003480370%
OH786	Holmesville Village, Ohio	0.0000436236%
OH787	Homer Township, Medina County, Ohio	0.0010864103%
OH788	Homer Township, Morgan County, Ohio	0.0001820827%
OH789	Hopedale Village, Ohio	0.0002767288%
OH790	Hopewell Township, Licking County, Ohio	0.0002502078%
OH791	Hopewell Township, Muskingum County, Ohio	0.0007422883%
OH792	Hopewell Township, Perry County, Ohio	0.0012909360%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH793	Hopewell Township, Seneca County, Ohio	0.0001303525%
OH794	Howard Township, Ohio	0.0000496108%
OH795	Howland Township, Ohio	0.0502639031%
OH796	Hoytville Village, Ohio	0.0002378935%
OH797	Hubbard City, Ohio	0.0289341396%
OH798	Hubbard Township, Ohio	0.0153110532%
OH799	Huber Heights City, Ohio	0.1252489167%
OH800	Hudson City, Ohio	0.0660214283%
OH801	Hunting Valley Village, Ohio	0.0076690112%
OH802	Huntington Township, Brown County, Ohio	0.0072244638%
OH803	Huntington Township, Ross County, Ohio	0.0066106570%
OH804	Huntsburg Township, Ohio	0.0006508198%
OH805	Huntsville Village, Ohio	0.0008479077%
OH806	Huron City, Ohio	0.0302737409%
OH807	Huron County, Ohio	0.3638859630%
OH808	Huron Township, Ohio	0.0007791800%
OH809	Independence City, Ohio	0.0311578609%
OH810	Independence Township, Ohio	0.0000751984%
OH811	Irondale Village, Ohio	0.0001593821%
OH812	Ironton City, Ohio	0.0888572696%
OH813	Island Creek Township, Ohio	0.0026616805%
OH814	Israel Township, Ohio	0.0004746750%
OH815	Ithaca Village, Ohio	0.0003813690%
OH816	Jackson Center Village, Ohio	0.0015263144%
OH817	Jackson City, Ohio	0.0556665988%
OH818	Jackson County, Ohio	0.4838159524%
OH819	Jackson Township, Allen County, Ohio	0.0004227108%
OH820	Jackson Township, Ashland County, Ohio	0.0000162678%
OH821	Jackson Township, Auglaize County, Ohio	0.0003115915%
OH822	Jackson Township, Brown County, Ohio	0.0004961005%
OH823	Jackson Township, Clermont County, Ohio	0.0014652778%
OH824	Jackson Township, Coshocton County, Ohio	0.0005510719%
OH825	Jackson Township, Crawford County, Ohio	0.0000108762%
OH826	Jackson Township, Franklin County, Ohio	0.0661350150%
OH827	Jackson Township, Guernsey County, Ohio	0.0010334405%
OH828	Jackson Township, Hardin County, Ohio	0.0015327348%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH829	Jackson Township, Highland County, Ohio	0.0000451704%
OH830	Jackson Township, Jackson County, Ohio	0.0001105044%
OH831	Jackson Township, Mahoning County, Ohio	0.0058960862%
OH832	Jackson Township, Monroe County, Ohio	0.0000561065%
OH833	Jackson Township, Montgomery County, Ohio	0.0086323757%
OH834	Jackson Township, Muskingum County, Ohio	0.0011435253%
OH835	Jackson Township, Noble County, Ohio	0.0001207342%
OH836	Jackson Township, Monroe County, Ohio	0.0001534939%
OH837	Jackson Township, Pickaway County, Ohio	0.0001894702%
OH838	Jackson Township, Pike County, Ohio	0.0004309715%
OH839	Jackson Township, Richland County, Ohio	0.0004638706%
OH840	Jackson Township, Sandusky County, Ohio	0.0004340387%
OH841	Jackson Township, Seneca County, Ohio	0.0004311659%
OH842	Jackson Township, Shelby County, Ohio	0.0013665838%
OH843	Jackson Township, Stark County, Ohio	0.1371869620%
OH844	Jackson Township, Union County, Ohio	0.0001416902%
OH845	Jackson Township, Vinton County, Ohio	0.0000910316%
OH846	Jackson Township, Wood County, Ohio	0.0001346914%
OH847	Jackson Township, Wyandot County, Ohio	0.0001214367%
OH848	Jacksonburg Village, Ohio	0.0002870780%
OH849	Jacksonville Village, Ohio	0.0008441727%
OH850	Jamestown Village, Ohio	0.0034877253%
OH851	Jefferson County, Ohio	0.6622324840%
OH852	Jefferson Township, Adams County, Ohio	0.0007642272%
OH853	Jefferson Township, Brown County, Ohio	0.0006821382%
OH854	Jefferson Township, Clinton County, Ohio	0.0014720474%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH855	Jefferson Township, Coshocton County, Ohio	0.0000612302%
OH856	Jefferson Township, Crawford County, Ohio	0.0004567985%
OH857	Jefferson Township, Fayette County, Ohio	0.0005898074%
OH858	Jefferson Township, Franklin County, Ohio	0.0261561693%
OH859	Jefferson Township, Greene County, Ohio	0.0000619123%
OH860	Jefferson Township, Guernsey County, Ohio	0.0000679895%
OH861	Jefferson Township, Jackson County, Ohio	0.0000828783%
OH862	Jefferson Township, Knox County, Ohio	0.0006284039%
OH863	Jefferson Township, Logan County, Ohio	0.0002493846%
OH864	Jefferson Township, Madison County, Ohio	0.0262668976%
OH865	Jefferson Township, Montgomery County, Ohio	0.0133322246%
OH866	Jefferson Township, Muskingum County, Ohio	0.0005015462%
OH867	Jefferson Township, Noble County, Ohio	0.0000172477%
OH868	Jefferson Township, Preble County, Ohio	0.0008020371%
OH869	Jefferson Township, Richland County, Ohio	0.0017662765%
OH870	Jefferson Township, Ross County, Ohio	0.0009148677%
OH871	Jefferson Township, Scioto County, Ohio	0.0036109358%
OH872	Jefferson Township, Tuscarawas County, Ohio	0.0008079949%
OH873	Jefferson Township, Williams County, Ohio	0.0002200224%
OH874	Jefferson Village, Ohio	0.0039566613%
OH875	Jeffersonville Village, Ohio	0.0000112344%
OH876	Jenera Village, Ohio	0.0001194701%
OH877	Jennings Township, Ohio	0.0002731862%
OH878	Jerome Township, Ohio	0.0044044550%
OH879	Jeromesville Village, Ohio	0.0003085668%
OH880	Jerry City Village, Ohio	0.0003417298%
OH881	Jersey Township, Ohio	0.0017699883%
OH882	Jerusalem Township, Ohio	0.0021563480%
OH883	Jerusalem Village, Ohio	0.0000311703%
OH884	Jewett Village, Ohio	0.0001813051%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH885	Johnson Township, Ohio	0.0002326265%
OH886	Johnston Township, Ohio	0.0002216522%
OH887	Johnstown Village, Ohio	0.0092206199%
OH888	Junction City Village, Ohio	0.0017212480%
OH889	Kalida Village, Ohio	0.0022682733%
OH890	Kelleys Island Village, Ohio	0.0028777715%
OH891	Kent City, Ohio	0.0513285414%
OH892	Kenton City, Ohio	0.0306658035%
OH893	Kettering City, Ohio	0.3384195127%
OH894	Kettlersville Village, Ohio	0.0000266218%
OH895	Killbuck Township, Ohio	0.0002093931%
OH896	Killbuck Village, Ohio	0.0010702314%
OH897	Kingston Township, Ohio	0.0000164977%
OH898	Kingston Village, Ohio	0.0076824625%
OH899	Kingsville Township, Ohio	0.0011036385%
OH900	Kinsman Township, Ohio	0.0020801208%
OH901	Kipton Village, Ohio	0.0000973918%
OH902	Kirby Village, Ohio	0.0000472254%
OH903	Kirkersville Village, Ohio	0.0005560173%
OH904	Kirkwood Township, Ohio	0.0000140607%
OH905	Kirtland City, Ohio	0.0223930205%
OH906	Kirtland Hills Village, Ohio	0.0096850050%
OH907	Knox County, Ohio	0.3115395206%
OH908	Knox Township, Columbiana County, Ohio	0.0005191487%
OH909	Knox Township, Guernsey County, Ohio	0.0002039685%
OH910	Knox Township, Jefferson County, Ohio	0.0010041070%
OH911	Knox Township, Vinton County, Ohio	0.0001170406%
OH912	La Grange Township, Ohio	0.0042170664%
OH913	La Rue Village, Ohio	0.0006694539%
OH914	Lafayette Township, Ohio	0.0073805047%
OH915	Lafayette Village, Ohio	0.0000886329%
OH916	Lagrange Village, Ohio	0.0054247251%
OH917	Lake County, Ohio	1.2794251773%
OH918	Lake Township, Stark County, Ohio	0.0367336076%
OH919	Lake Township, Wood County, Ohio	0.0141058613%
OH920	Lakeline Village, Ohio	0.0000947652%
OH921	Lakemore Village, Ohio	0.0083562888%
OH922	Lakeview Village, Ohio	0.0008279569%
OH923	Lakewood City, Ohio	0.1008106545%
OH924	Lancaster City, Ohio	0.1565040398%
OH925	Latty Township, Ohio	0.0000877108%
OH926	Latty Village, Ohio	0.0000219277%
OH927	Laura Village, Ohio	0.0001135686%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH928	Laurel Township, Ohio	0.0001089904%
OH929	Laurelville Village, Ohio	0.0007183460%
OH930	Lawrence County, Ohio	0.5322395718%
OH931	Lawrence Township, Lawrence County, Ohio	0.0093186258%
OH932	Lawrence Township, Stark County, Ohio	0.0140521883%
OH933	Lawrence Township, Tuscarawas County, Ohio	0.0052322595%
OH934	Lawrence Township, Washington County, Ohio	0.0000334215%
OH935	Lebanon City, Ohio	0.0873597515%
OH936	Lebanon Township, Ohio	0.0004736376%
OH937	Lee Township, Athens County, Ohio	0.0005836255%
OH938	Lee Township, Carroll County, Ohio	0.0000980404%
OH939	Lee Township, Monroe County, Ohio	0.0000872768%
OH940	Leesburg Township, Ohio	0.0001989692%
OH941	Leesburg Village, Ohio	0.0054882077%
OH942	Leesville Village, Ohio	0.0000217868%
OH943	Leetonia Village, Ohio	0.0074544436%
OH944	Leipsic Village, Ohio	0.0030629968%
OH945	Lemon Township, Ohio	0.0041524079%
OH946	Lenox Township, Ohio	0.0002582984%
OH947	Leroy Township, Ohio	0.0053731877%
OH948	Letart Township, Ohio	0.0005413001%
OH949	Lewis Township, Ohio	0.0039998104%
OH950	Lewisburg Village, Ohio	0.0132254277%
OH951	Lewisville Village, Ohio	0.0001745536%
OH952	Lexington Township, Ohio	0.0014349065%
OH953	Lexington Village, Ohio	0.0093220146%
OH954	Liberty Center Village, Ohio	0.0002842517%
OH955	Liberty Township, Adams County, Ohio	0.0005534059%
OH956	Liberty Township, Butler County, Ohio	0.1149425287%
OH957	Liberty Township, Clinton County, Ohio	0.0016058699%
OH958	Liberty Township, Crawford County, Ohio	0.0001413900%
OH959	Liberty Township, Darke County, Ohio	0.0010825959%
OH960	Liberty Township, Delaware County, Ohio	0.0646792482%
OH961	Liberty Township, Guernsey County, Ohio	0.0001631748%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH962	Liberty Township, Hancock County, Ohio	0.0013703927%
OH963	Liberty Township, Hardin County, Ohio	0.0010773571%
OH964	Liberty Township, Henry County, Ohio	0.0006632539%
OH965	Liberty Township, Highland County, Ohio	0.0016487208%
OH966	Liberty Township, Jackson County, Ohio	0.0018785750%
OH967	Liberty Township, Knox County, Ohio	0.0003803498%
OH968	Liberty Township, Licking County, Ohio	0.0000926695%
OH969	Liberty Township, Logan County, Ohio	0.0003591138%
OH970	Liberty Township, Mercer County, Ohio	0.0002526633%
OH971	Liberty Township, Putnam County, Ohio	0.0002235160%
OH972	Liberty Township, Seneca County, Ohio	0.0003409218%
OH973	Liberty Township, Trumbull County, Ohio	0.0688997396%
OH974	Liberty Township, Union County, Ohio	0.0017726349%
OH975	Liberty Township, Wood County, Ohio	0.0002142817%
OH976	Lick Township, Ohio	0.0000552522%
OH977	Licking County, Ohio	0.7119059883%
OH978	Licking Township, Licking County, Ohio	0.0031507646%
OH979	Licking Township, Muskingum County, Ohio	0.0012839582%
OH980	Lima City, Ohio	0.1727455397%
OH981	Limaville Village, Ohio	0.0003869608%
OH982	Lincoln Heights Village, Ohio	0.0083419326%
OH983	Lincoln Township, Ohio	0.0001771237%
OH984	Lindsey Village, Ohio	0.0006510581%
OH985	Linndale Village, Ohio	0.0028091858%
OH986	Lisbon Village, Ohio	0.0009584285%
OH987	Litchfield Township, Ohio	0.0019838797%
OH988	Lithopolis Village, Ohio	0.0014069809%
OH989	Liverpool Township, Columbiana County, Ohio	0.0053112911%
OH990	Liverpool Township, Medina County, Ohio	0.0054202427%
OH991	Lockbourne Village, Ohio	0.0000076368%
OH992	Lockington Village, Ohio	0.0000443696%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH993	Lockland Village, Ohio	0.0146296956%
OH994	Lodi Township, Ohio	0.0003856097%
OH995	Lodi Village, Ohio	0.0068845348%
OH996	Logan City, Ohio	0.0081742815%
OH997	Logan County, Ohio	0.2671308245%
OH998	Logan Township, Ohio	0.0001602471%
OH999	London City, Ohio	0.0432082694%
OH1000	Londonderry Township, Ohio	0.0001223811%
OH1001	Lorain City, Ohio	0.2833225817%
OH1002	Lorain County, Ohio	1.3357776870%
OH1003	Lordstown Village, Ohio	0.0208012082%
OH1004	Lore City Village, Ohio	0.0001903706%
OH1005	Lostcreek Township, Ohio	0.0008063368%
OH1006	Loudon Township, Carroll County, Ohio	0.0003703748%
OH1007	Loudon Township, Seneca County, Ohio	0.0000802169%
OH1008	Loudonville Village, Ohio	0.0063961356%
OH1009	Louisville City, Ohio	0.0170110645%
OH1010	Loveland City, Ohio	0.0476149868%
OH1011	Lowell Village, Ohio	0.0000835538%
OH1012	Lowellville Village, Ohio	0.0039921417%
OH1013	Lower Salem Village, Ohio	0.0000220891%
OH1014	Lucas County, Ohio	3.1972089435%
OH1015	Lucas Village, Ohio	0.0007671706%
OH1016	Luckey Village, Ohio	0.0005693772%
OH1017	Ludlow Falls Village, Ohio	0.0002558525%
OH1018	Ludlow Township, Ohio	0.0000501323%
OH1019	Lykens Township, Ohio	0.0000217523%
OH1020	Lynchburg Village, Ohio	0.0028908592%
OH1021	Lyndhurst City, Ohio	0.0338761729%
OH1022	Lynn Township, Ohio	0.0000111068%
OH1023	Lyons Village, Ohio	0.0001442518%
OH1024	Macedonia City, Ohio	0.0527014847%
OH1025	Macksburg Village, Ohio	0.0000477742%
OH1026	Mad River Township, Champaign County, Ohio	0.0003806616%
OH1027	Mad River Township, Clark County, Ohio	0.0132962505%
OH1028	Madeira City, Ohio	0.0133187012%
OH1029	Madison County, Ohio	0.2562654482%
OH1030	Madison Township, Butler County, Ohio	0.0065436778%
OH1031	Madison Township, Clark County, Ohio	0.0028035083%
OH1032	Madison Township, Columbiana County, Ohio	0.0001863611%
OH1033	Madison Township, Fayette County, Ohio	0.0003651188%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1034	Madison Township, Franklin County, Ohio	0.0648596631%
OH1035	Madison Township, Guernsey County, Ohio	0.0001087832%
OH1036	Madison Township, Hancock County, Ohio	0.0001546084%
OH1037	Madison Township, Highland County, Ohio	0.0000451704%
OH1038	Madison Township, Lake County, Ohio	0.0185550292%
OH1039	Madison Township, Licking County, Ohio	0.0016124501%
OH1040	Madison Township, Muskingum County, Ohio	0.0000200618%
OH1041	Madison Township, Pickaway County, Ohio	0.0005781272%
OH1042	Madison Township, Richland County, Ohio	0.0162443911%
OH1043	Madison Township, Sandusky County, Ohio	0.0010398844%
OH1044	Madison Township, Scioto County, Ohio	0.0090415557%
OH1045	Madison Township, Williams County, Ohio	0.0001650168%
OH1046	Madison Village, Ohio	0.0069557668%
OH1047	Magnetic Springs Village, Ohio	0.0003286007%
OH1048	Magnolia Village, Ohio	0.0039121470%
OH1049	Mahoning County, Ohio	1.6000258367%
OH1050	Maineville Village, Ohio	0.0020362222%
OH1051	Malaga Township, Ohio	0.0000561065%
OH1052	Malinta Village, Ohio	0.0000609111%
OH1053	Malta Village, Ohio	0.0001392397%
OH1054	Malvern Village, Ohio	0.0005882424%
OH1055	Manchester Township, Ohio	0.0013966912%
OH1056	Manchester Village, Ohio	0.0025562084%
OH1057	Mansfield City, Ohio	0.2140405926%
OH1058	Mantua Township, Ohio	0.0000649985%
OH1059	Mantua Village, Ohio	0.0015884020%
OH1060	Maple Heights City, Ohio	0.0395380059%
OH1061	Marble Cliff Village, Ohio	0.0004658471%
OH1062	Marblehead Village, Ohio	0.0019235388%
OH1063	Marengo Village, Ohio	0.0002597814%
OH1064	Margaretta Township, Ohio	0.0078229674%
OH1065	Mariemont Village, Ohio	0.0153812210%
OH1066	Marietta City, Ohio	0.0852917164%
OH1067	Marietta Township, Ohio	0.0002088845%
OH1068	Marion City, Ohio	0.2496505326%
OH1069	Marion County, Ohio	0.3374233828%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1070	Marion Township, Allen County, Ohio	0.0001840837%
OH1071	Marion Township, Clinton County, Ohio	0.0020965523%
OH1072	Marion Township, Fayette County, Ohio	0.0007695582%
OH1073	Marion Township, Hardin County, Ohio	0.0006108726%
OH1074	Marion Township, Henry County, Ohio	0.0000947506%
OH1075	Marion Township, Hocking County, Ohio	0.0001634856%
OH1076	Marion Township, Marion County, Ohio	0.0526451142%
OH1077	Marion Township, Mercer County, Ohio	0.0015069562%
OH1078	Marion Township, Pike County, Ohio	0.0001943597%
OH1079	Mark Township, Ohio	0.0001324155%
OH1080	Marlboro Township, Delaware County, Ohio	0.0001979724%
OH1081	Marlboro Township, Stark County, Ohio	0.0048193068%
OH1082	Marseilles Township, Ohio	0.0000067465%
OH1083	Marseilles Village, Ohio	0.0000067465%
OH1084	Marshall Township, Ohio	0.0006323861%
OH1085	Marshallville Village, Ohio	0.0004600557%
OH1086	Martins Ferry City, Ohio	0.0347299689%
OH1087	Martinsburg Village, Ohio	0.0000165369%
OH1088	Martinsville Village, Ohio	0.0006022012%
OH1089	Mary Ann Township, Ohio	0.0009452294%
OH1090	Marysville City, Ohio	0.0386422342%
OH1091	Mason City, Ohio	0.1510527828%
OH1092	Mason Township, Ohio	0.0000347710%
OH1093	Massie Township, Ohio	0.0001279911%
OH1094	Massillon City, Ohio	0.1194930798%
OH1095	Matamoras Village, Ohio	0.0003175044%
OH1096	Maumee City, Ohio	0.0830057490%
OH1097	Mayfield Heights City, Ohio	0.0460098010%
OH1098	Mayfield Village, Ohio	0.0222206201%
OH1099	McArthur Village, Ohio	0.0034201873%
OH1100	McClure Village, Ohio	0.0000744469%
OH1101	McComb Village, Ohio	0.0019536880%
OH1102	McConnelsville Village, Ohio	0.0038344466%
OH1103	McDonald Township, Ohio	0.0004331642%
OH1104	McDonald Village, Ohio	0.0085762358%
OH1105	McGuffey Village, Ohio	0.0000111068%
OH1106	McKean Township, Ohio	0.0016773188%
OH1107	McLean Township, Ohio	0.0000088739%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1108	Mead Township, Ohio	0.0016310431%
OH1109	Mecca Township, Ohio	0.0015686157%
OH1110	Mechanicsburg Village, Ohio	0.0059742716%
OH1111	Medina City, Ohio	0.0850942672%
OH1112	Medina County, Ohio	0.7825696764%
OH1113	Medina Township, Ohio	0.0180792844%
OH1114	Meigs County, Ohio	0.1986571471%
OH1115	Meigs Township, Ohio	0.0019764498%
OH1116	Meigsville Township, Ohio	0.0000749752%
OH1117	Melrose Village, Ohio	0.0001123652%
OH1118	Mendon Village, Ohio	0.0000902369%
OH1119	Mentor City, Ohio	0.2495262895%
OH1120	Mentor-On-The-Lake City, Ohio	0.0195974466%
OH1121	Mercer County, Ohio	0.1655486085%
OH1122	Mesopotamia Township, Ohio	0.0029496795%
OH1123	Metamora Village, Ohio	0.0001589872%
OH1124	Meyers Lake Village, Ohio	0.0015027860%
OH1125	Miami County, Ohio	0.5778482109%
OH1126	Miami Township, Clermont County, Ohio	0.2187745945%
OH1127	Miami Township, Greene County, Ohio	0.0056649739%
OH1128	Miami Township, Hamilton County, Ohio	0.0222368033%
OH1129	Miami Township, Logan County, Ohio	0.0002394092%
OH1130	Miami Township, Montgomery County, Ohio	0.1354683508%
OH1131	Miamisburg City, Ohio	0.1660413479%
OH1132	Middle Point Village, Ohio	0.0010159860%
OH1133	Middleburg Heights City, Ohio	0.0377244809%
OH1134	Middlebury Township, Ohio	0.0002811281%
OH1135	Middlefield Village, Ohio	0.0110639374%
OH1136	Middleport Village, Ohio	0.0066985891%
OH1137	Middleton Township, Columbiana County, Ohio	0.0013311506%
OH1138	Middleton Township, Wood County, Ohio	0.0032264709%
OH1139	Middletown City, Ohio	0.5826547123%
OH1140	Midland Village, Ohio	0.0000223037%
OH1141	Midvale Village, Ohio	0.0004926798%
OH1142	Midway Village, Ohio	0.0006778443%
OH1143	Mifflin Township, Ashland County, Ohio	0.0003416231%
OH1144	Mifflin Township, Franklin County, Ohio	0.0915733216%
OH1145	Mifflin Township, Pike County, Ohio	0.0001267563%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1146	Mifflin Township, Richland County, Ohio	0.0080552911%
OH1147	Mifflin Township, Wyandot County, Ohio	0.0001214367%
OH1148	Mifflin Village, Ohio	0.0001545438%
OH1149	Milan Township, Ohio	0.0020258680%
OH1150	Milan Village, Ohio	0.0040820332%
OH1151	Milford Center Village, Ohio	0.0000633084%
OH1152	Milford City, Ohio	0.0751522099%
OH1153	Milford Township, Butler County, Ohio	0.0015672512%
OH1154	Milford Township, Defiance County, Ohio	0.0002979348%
OH1155	Mill Creek Township, Coshocton County, Ohio	0.0000229613%
OH1156	Mill Creek Township, Williams County, Ohio	0.0000628635%
OH1157	Mill Township, Ohio	0.0121593375%
OH1158	Millbury Village, Ohio	0.0009905091%
OH1159	Millcreek Township, Ohio	0.0000180881%
OH1160	Milledgeville Village, Ohio	0.0000257235%
OH1161	Miller City Village, Ohio	0.0000248351%
OH1162	Miller Township, Ohio	0.0008599212%
OH1163	Millersburg Village, Ohio	0.0018263731%
OH1164	Millersport Village, Ohio	0.0058664571%
OH1165	Millville Village, Ohio	0.0076100550%
OH1166	Millwood Township, Ohio	0.0000543916%
OH1167	Milton Center Village, Ohio	0.0000061223%
OH1168	Milton Township, Ashland County, Ohio	0.0000162678%
OH1169	Milton Township, Mahoning County, Ohio	0.0048642711%
OH1170	Miltonsburg Village, Ohio	0.0000172975%
OH1171	Mineral City Village, Ohio	0.0026506173%
OH1172	Minerva Park Village, Ohio	0.0030776456%
OH1173	Minerva Village, Ohio	0.0118214870%
OH1174	Mingo Junction Village, Ohio	0.0074909571%
OH1175	Minster Village, Ohio	0.0056442578%
OH1176	Mississinawa Township, Ohio	0.0003444623%
OH1177	Mogadore Village, Ohio	0.0107618198%
OH1178	Monclova Township, Ohio	0.0108181339%
OH1179	Monday Creek Township, Ohio	0.0000430312%
OH1180	Monroe City, Ohio	0.1198391105%
OH1181	Monroe County, Ohio	0.0768222745%
OH1182	Monroe Township, Adams County, Ohio	0.0016865705%
OH1183	Monroe Township, Allen County, Ohio	0.0002727166%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1184	Monroe Township, Carroll County, Ohio	0.0010130841%
OH1185	Monroe Township, Clermont County, Ohio	0.0034821896%
OH1186	Monroe Township, Darke County, Ohio	0.0006151113%
OH1187	Monroe Township, Guernsey County, Ohio	0.0001903706%
OH1188	Monroe Township, Harrison County, Ohio	0.0003530677%
OH1189	Monroe Township, Knox County, Ohio	0.0021828768%
OH1190	Monroe Township, Licking County, Ohio	0.0160503654%
OH1191	Monroe Township, Logan County, Ohio	0.0001895323%
OH1192	Monroe Township, Muskingum County, Ohio	0.0001203711%
OH1193	Monroe Township, Perry County, Ohio	0.0000753046%
OH1194	Monroe Township, Pickaway County, Ohio	0.0003740823%
OH1195	Monroe Township, Preble County, Ohio	0.0020296448%
OH1196	Monroe Township, Putnam County, Ohio	0.0007698884%
OH1197	Monroe Township, Richland County, Ohio	0.0011596765%
OH1198	Monroeville Village, Ohio	0.0057515643%
OH1199	Monterey Township, Ohio	0.0001158972%
OH1200	Montezuma Village, Ohio	0.0003248528%
OH1201	Montgomery City, Ohio	0.0491831661%
OH1202	Montgomery County, Ohio	5.1644746001%
OH1203	Montgomery Township, Marion County, Ohio	0.0007252418%
OH1204	Montgomery Township, Wood County, Ohio	0.0011448768%
OH1205	Montpelier Village, Ohio	0.0054141221%
OH1206	Montville Township, Geauga County, Ohio	0.0005742528%
OH1207	Montville Township, Medina County, Ohio	0.0202875314%
OH1208	Moorefield Township, Ohio	0.0090773788%
OH1209	Moraine City, Ohio	0.0890573422%
OH1210	Moreland Hills Village, Ohio	0.0034611065%
OH1211	Morgan County, Ohio	0.0873568346%
OH1212	Morgan Township, Ashtabula County, Ohio	0.0013032327%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1213	Morgan Township, Butler County, Ohio	0.0060266465%
OH1214	Morgan Township, Gallia County, Ohio	0.0004498495%
OH1215	Morgan Township, Knox County, Ohio	0.0013394926%
OH1216	Morgan Township, Scioto County, Ohio	0.0014216283%
OH1217	Morral Village, Ohio	0.0008926053%
OH1218	Morris Township, Ohio	0.0000330739%
OH1219	Morristown Village, Ohio	0.0004780643%
OH1220	Morrow County, Ohio	0.2192732037%
OH1221	Morrow Village, Ohio	0.0015475289%
OH1222	Moscow Village, Ohio	0.0010343137%
OH1223	Moulton Township, Ohio	0.0002403706%
OH1224	Mount Blanchard Village, Ohio	0.0000632489%
OH1225	Mount Cory Village, Ohio	0.0001194701%
OH1226	Mount Eaton Village, Ohio	0.0003286112%
OH1227	Mount Gilead Village, Ohio	0.0047705309%
OH1228	Mount Healthy City, Ohio	0.0150472097%
OH1229	Mount Orab Village, Ohio	0.0858253892%
OH1230	Mount Pleasant Township, Ohio	0.0009562924%
OH1231	Mount Pleasant Village, Ohio	0.0001593821%
OH1232	Mount Sterling Village, Ohio	0.0092167280%
OH1233	Mount Vernon City, Ohio	0.0916146794%
OH1234	Mount Victory Village, Ohio	0.0003726928%
OH1235	Mowrystown Village, Ohio	0.0099826658%
OH1236	Munroe Falls City, Ohio	0.0144765234%
OH1237	Munson Township, Ohio	0.0126431327%
OH1238	Murray City Village, Ohio	0.0003666041%
OH1239	Muskingum County, Ohio	0.5186890264%
OH1240	Muskingum Township, Ohio	0.0034591272%
OH1241	Mutual Village, Ohio	0.0000512624%
OH1242	Napoleon City, Ohio	0.0200262083%
OH1243	Napoleon Township, Ohio	0.0008595230%
OH1244	Nashville Village, Ohio	0.0001163295%
OH1245	Navarre Village, Ohio	0.0045125337%
OH1246	Nellie Village, Ohio	0.0000766034%
OH1247	Nelsonville City, Ohio	0.0153618582%
OH1248	Nevada Village, Ohio	0.0000539719%
OH1249	Neville Village, Ohio	0.0000172386%
OH1250	New Albany City, Ohio	0.0355984449%
OH1251	New Alexandria Village, Ohio	0.0001593821%
OH1252	New Athens Village, Ohio	0.0001049661%
OH1253	New Bavaria Village, Ohio	0.0001925555%
OH1254	New Bloomington Village, Ohio	0.0006286558%
OH1255	New Boston Village, Ohio	0.0217793450%
OH1256	New Bremen Village, Ohio	0.0076829566%
OH1257	New Carlisle City, Ohio	0.0121258538%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1258	New Concord Village, Ohio	0.0073426360%
OH1259	New Franklin City, Ohio	0.0293867642%
OH1260	New Haven Township, Ohio	0.0016334992%
OH1261	New Holland Village, Ohio	0.0001903085%
OH1262	New Jasper Township, Ohio	0.0016406755%
OH1263	New Knoxville Village, Ohio	0.0011840478%
OH1264	New Lebanon Village, Ohio	0.0058388430%
OH1265	New Lexington Village, Ohio	0.0129954223%
OH1266	New London Township, Ohio	0.0002882646%
OH1267	New London Village, Ohio	0.0030473682%
OH1268	New Madison Village, Ohio	0.0016608005%
OH1269	New Market Township, Ohio	0.0002484374%
OH1270	New Miami Village, Ohio	0.0024074272%
OH1271	New Middletown Village, Ohio	0.0007615778%
OH1272	New Paris Village, Ohio	0.0016204423%
OH1273	New Philadelphia City, Ohio	0.0774788253%
OH1274	New Richmond Village, Ohio	0.0330808011%
OH1275	New Riegel Village, Ohio	0.0002406507%
OH1276	New Russia Township, Ohio	0.0008375698%
OH1277	New Straitsville Village, Ohio	0.0021300444%
OH1278	New Vienna Village, Ohio	0.0009144537%
OH1279	New Washington Village, Ohio	0.0012290055%
OH1280	New Waterford Village, Ohio	0.0048586998%
OH1281	New Weston Village, Ohio	0.0000861156%
OH1282	Newark City, Ohio	0.1777772576%
OH1283	Newark Township, Ohio	0.0018255901%
OH1284	Newberry Township, Ohio	0.0019874499%
OH1285	Newburgh Heights Village, Ohio	0.0042789708%
OH1286	Newbury Township, Ohio	0.0027755552%
OH1287	Newcomerstown Village, Ohio	0.0076759513%
OH1288	Newton Falls Village, Ohio	0.0365044154%
OH1289	Newton Township, Licking County, Ohio	0.0011027676%
OH1290	Newton Township, Muskingum County, Ohio	0.0020262466%
OH1291	Newton Township, Pike County, Ohio	0.0002281614%
OH1292	Newton Township, Trumbull County, Ohio	0.0026939270%
OH1293	Newtonsville Village, Ohio	0.0005516340%
OH1294	Newtown Village, Ohio	0.0057282940%
OH1295	Ney Village, Ohio	0.0000662077%
OH1296	Nile Township, Ohio	0.0052315920%
OH1297	Niles City, Ohio	0.1643806952%
OH1298	Nimishillen Township, Ohio	0.0122610291%
OH1299	Noble County, Ohio	0.0987433126%
OH1300	Noble Township, Auglaize County, Ohio	0.0000089026%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1301	Noble Township, Defiance County, Ohio	0.0003420733%
OH1302	Noble Township, Noble County, Ohio	0.0008278915%
OH1303	North Baltimore Village, Ohio	0.0034529973%
OH1304	North Bend Village, Ohio	0.0025608089%
OH1305	North Bloomfield Township, Ohio	0.0004132886%
OH1306	North Canton City, Ohio	0.0524878920%
OH1307	North College Hill City, Ohio	0.0194144077%
OH1308	North Fairfield Village, Ohio	0.0000686344%
OH1309	North Hampton Village, Ohio	0.0018236413%
OH1310	North Kingsville Village, Ohio	0.0058586766%
OH1311	North Lewisburg Village, Ohio	0.0040569220%
OH1312	North Olmsted City, Ohio	0.0399884238%
OH1313	North Perry Village, Ohio	0.0021416939%
OH1314	North Randall Village, Ohio	0.0010272691%
OH1315	North Ridgeville City, Ohio	0.1099748579%
OH1316	North Robinson Village, Ohio	0.0000652569%
OH1317	North Royalton City, Ohio	0.0490362937%
OH1318	North Star Village, Ohio	0.0006041028%
OH1319	North Township, Ohio	0.0006202542%
OH1320	Northfield Center Township, Ohio	0.0055419447%
OH1321	Northfield Village, Ohio	0.0204907382%
OH1322	Northwest Township, Ohio	0.0003378915%
OH1323	Northwood City, Ohio	0.0154037964%
OH1324	Norton City, Ohio	0.0374368018%
OH1325	Norwalk City, Ohio	0.0671930963%
OH1326	Norwalk Township, Ohio	0.0009746088%
OH1327	Norwich Township, Franklin County, Ohio	0.0881825657%
OH1328	Norwich Township, Huron County, Ohio	0.0005490754%
OH1329	Norwich Village, Ohio	0.0000776491%
OH1330	Norwood City, Ohio	0.1133550899%
OH1331	Nottingham Township, Ohio	0.0002290169%
OH1332	Oak Harbor Village, Ohio	0.0043210926%
OH1333	Oak Hill Village, Ohio	0.0009945397%
OH1334	Oakwood City, Ohio	0.0665292396%
OH1335	Oakwood Village, Cuyahoga County, Ohio	0.0160412015%
OH1336	Oakwood Village, Paulding County, Ohio	0.0006103209%
OH1337	Oberlin City, Ohio	0.0523286319%
OH1338	Obetz Village, Ohio	0.0012677151%
OH1339	Octa Village, Ohio	0.0000132032%
OH1340	Ohio City Village, Ohio	0.0013381279%
OH1341	Ohio Township, Clermont County, Ohio	0.0024995915%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1342	Ohio Township, Monroe County, Ohio	0.0002805325%
OH1343	Old Washington Village, Ohio	0.0016589439%
OH1344	Olive Township, Meigs County, Ohio	0.0005413001%
OH1345	Olive Township, Noble County, Ohio	0.0002069729%
OH1346	Olmsted Falls City, Ohio	0.0116318466%
OH1347	Olmsted Township, Ohio	0.0148163807%
OH1348	Ontario City, Ohio	0.0192773910%
OH1349	Orange Township, Ashland County, Ohio	0.0004880329%
OH1350	Orange Township, Carroll County, Ohio	0.0003703748%
OH1351	Orange Township, Delaware County, Ohio	0.0531556020%
OH1352	Orange Township, Meigs County, Ohio	0.0003383126%
OH1353	Orange Township, Shelby County, Ohio	0.0011891054%
OH1354	Orange Village, Ohio	0.0100237754%
OH1355	Orangeville Village, Ohio	0.0005285553%
OH1356	Oregon City, Ohio	0.0936692081%
OH1357	Orrville City, Ohio	0.0089614214%
OH1358	Orwell Township, Ohio	0.0004813742%
OH1359	Orwell Village, Ohio	0.0054712290%
OH1360	Osgood Village, Ohio	0.0000984178%
OH1361	Osnaburg Township, Ohio	0.0017515756%
OH1362	Ostrander Village, Ohio	0.0001237328%
OH1363	Ottawa County, Ohio	0.2393019717%
OH1364	Ottawa Hills Village, Ohio	0.0134021121%
OH1365	Ottawa Village, Ohio	0.0047352274%
OH1366	Ottoville Village, Ohio	0.0010927448%
OH1367	Otway Village, Ohio	0.0001137303%
OH1368	Owensville Village, Ohio	0.0008791667%
OH1369	Oxford City, Ohio	0.0794612533%
OH1370	Oxford Township, Butler County, Ohio	0.1101599888%
OH1371	Oxford Township, Coshocton County, Ohio	0.0002143057%
OH1372	Oxford Township, Guernsey County, Ohio	0.0001223811%
OH1373	Oxford Township, Tuscarawas County, Ohio	0.0000788288%
OH1374	Painesville City, Ohio	0.0828627046%
OH1375	Painesville Township, Ohio	0.0334236916%
OH1376	Paint Township, Fayette County, Ohio	0.0000280861%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1377	Paint Township, Highland County, Ohio	0.0002710226%
OH1378	Paint Township, Holmes County, Ohio	0.0004187862%
OH1379	Paint Township, Madison County, Ohio	0.0000155425%
OH1380	Paint Township, Ross County, Ohio	0.0003836542%
OH1381	Paint Township, Wayne County, Ohio	0.0001894347%
OH1382	Palestine Village, Ohio	0.0005121741%
OH1383	Palmer Township, Ohio	0.0000584877%
OH1384	Palmyra Township, Ohio	0.0008124819%
OH1385	Pandora Village, Ohio	0.0009188990%
OH1386	Paris Township, Portage County, Ohio	0.0001503091%
OH1387	Paris Township, Stark County, Ohio	0.0010390703%
OH1388	Parkman Township, Ohio	0.0008613792%
OH1389	Parma City, Ohio	0.1543116176%
OH1390	Parma Heights City, Ohio	0.0326118418%
OH1391	Parral Village, Ohio	0.0000098536%
OH1392	Pataskala City, Ohio	0.0174033408%
OH1393	Patterson Village, Ohio	0.0000841761%
OH1394	Paulding County, Ohio	0.0839721160%
OH1395	Paulding Township, Ohio	0.0001534939%
OH1396	Paulding Village, Ohio	0.0016847781%
OH1397	Paxton Township, Ohio	0.0010329152%
OH1398	Payne Village, Ohio	0.0005664655%
OH1399	Pease Township, Ohio	0.0005202465%
OH1400	Pebble Township, Ohio	0.0003464673%
OH1401	Pee Pee Township, Ohio	0.0015041749%
OH1402	Peebles Village, Ohio	0.0067989872%
OH1403	Pemberville Village, Ohio	0.0012856905%
OH1404	Peninsula Village, Ohio	0.0050407601%
OH1405	Penn Township, Ohio	0.0001392397%
OH1406	Pepper Pike City, Ohio	0.0193758750%
OH1407	Perkins Township, Ohio	0.0512077107%
OH1408	Perry County, Ohio	0.2380485965%
OH1409	Perry Township, Allen County, Ohio	0.0045543679%
OH1410	Perry Township, Brown County, Ohio	0.0143559087%
OH1411	Perry Township, Columbiana County, Ohio	0.0048853229%
OH1412	Perry Township, Fayette County, Ohio	0.0003538844%
OH1413	Perry Township, Franklin County, Ohio	0.0091642053%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1414	Perry Township, Lake County, Ohio	0.0025586608%
OH1415	Perry Township, Lawrence County, Ohio	0.0009214313%
OH1416	Perry Township, Licking County, Ohio	0.0016309840%
OH1417	Perry Township, Logan County, Ohio	0.0026933538%
OH1418	Perry Township, Monroe County, Ohio	0.0000872768%
OH1419	Perry Township, Muskingum County, Ohio	0.0027986277%
OH1420	Perry Township, Pickaway County, Ohio	0.0000291493%
OH1421	Perry Township, Pike County, Ohio	0.0001267563%
OH1422	Perry Township, Putnam County, Ohio	0.0000082784%
OH1423	Perry Township, Richland County, Ohio	0.0004103471%
OH1424	Perry Township, Stark County, Ohio	0.0537347763%
OH1425	Perry Township, Wood County, Ohio	0.0001040797%
OH1426	Perry Village, Ohio	0.0054300469%
OH1427	Perrysburg City, Ohio	0.0576846462%
OH1428	Perrysburg Township, Ohio	0.0342177338%
OH1429	Perrysville Village, Ohio	0.0008459238%
OH1430	Peru Township, Huron County, Ohio	0.0000274538%
OH1431	Peru Township, Morrow County, Ohio	0.0000708495%
OH1432	Phillipsburg Village, Ohio	0.0041962937%
OH1433	Philo Village, Ohio	0.0010532470%
OH1434	Pickaway County, Ohio	0.0934088328%
OH1435	Pickaway Township, Ohio	0.0005441197%
OH1436	Pickerington City, Ohio	0.0350194279%
OH1437	Pierce Township, Ohio	0.0721778605%
OH1438	Pierpont Township, Ohio	0.0011858243%
OH1439	Pike County, Ohio	0.3072066041%
OH1440	Pike Township, Brown County, Ohio	0.0024184900%
OH1441	Pike Township, Clark County, Ohio	0.0026810249%
OH1442	Pike Township, Perry County, Ohio	0.0022268646%
OH1443	Pike Township, Stark County, Ohio	0.0021276201%
OH1444	Piketon Village, Ohio	0.0023999196%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1445	Pioneer Village, Ohio	0.0028760068%
OH1446	Piqua City, Ohio	0.0869480927%
OH1447	Pitsburg Village, Ohio	0.0005659024%
OH1448	Pitt Township, Ohio	0.0002833522%
OH1449	Plain City Village, Ohio	0.0102501421%
OH1450	Plain Township, Franklin County, Ohio	0.0388485937%
OH1451	Plain Township, Stark County, Ohio	0.0464019090%
OH1452	Plain Township, Wayne County, Ohio	0.0002976831%
OH1453	Plain Township, Wood County, Ohio	0.0002693828%
OH1454	Plainfield Village, Ohio	0.0000153076%
OH1455	Pleasant City Village, Ohio	0.0008654831%
OH1456	Pleasant Hill Village, Ohio	0.0002839214%
OH1457	Pleasant Plain Village, Ohio	0.0000116356%
OH1458	Pleasant Township, Brown County, Ohio	0.0012092450%
OH1459	Pleasant Township, Clark County, Ohio	0.0032390047%
OH1460	Pleasant Township, Fairfield County, Ohio	0.0068849393%
OH1461	Pleasant Township, Franklin County, Ohio	0.0137844922%
OH1462	Pleasant Township, Hancock County, Ohio	0.0002811062%
OH1463	Pleasant Township, Henry County, Ohio	0.0002233406%
OH1464	Pleasant Township, Knox County, Ohio	0.0045641970%
OH1465	Pleasant Township, Marion County, Ohio	0.0096326984%
OH1466	Pleasant Township, Perry County, Ohio	0.0001828826%
OH1467	Pleasant Township, Seneca County, Ohio	0.0003208676%
OH1468	Pleasant Township, Van Wert County, Ohio	0.0002849717%
OH1469	Pleasantville Village, Ohio	0.0000570350%
OH1470	Plymouth Township, Ohio	0.0017493844%
OH1471	Plymouth Village, Ohio	0.0065060016%
OH1472	Poland Township, Ohio	0.0148262002%
OH1473	Poland Village, Ohio	0.0061663235%
OH1474	Polk Township, Ohio	0.0010767393%
OH1475	Polk Village, Ohio	0.0000406694%
OH1476	Pomeroy Village, Ohio	0.0093881741%
OH1477	Port Clinton City, Ohio	0.0145364578%
OH1478	Port Jefferson Village, Ohio	0.0003105872%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1479	Port Washington Village, Ohio	0.0003251687%
OH1480	Port William Village, Ohio	0.0010928837%
OH1481	Portage County, Ohio	0.9187057360%
OH1482	Portage Township, Hancock County, Ohio	0.0001686637%
OH1483	Portage Township, Ottawa County, Ohio	0.0000480885%
OH1484	Portage Township, Wood County, Ohio	0.0001408137%
OH1485	Portage Village, Ohio	0.0016040519%
OH1486	Porter Township, Delaware County, Ohio	0.0036954857%
OH1487	Porter Township, Scioto County, Ohio	0.0395496982%
OH1488	Portsmouth City, Ohio	0.2233662325%
OH1489	Potsdam Village, Ohio	0.0000227137%
OH1490	Powell City, Ohio	0.0184361841%
OH1491	Powhatan Point Village, Ohio	0.0016591645%
OH1492	Prairie Township, Franklin County, Ohio	0.0344574120%
OH1493	Prairie Township, Holmes County, Ohio	0.0003867956%
OH1494	Preble County, Ohio	0.3067055248%
OH1495	Proctorville Village, Ohio	0.0018254771%
OH1496	Prospect Village, Ohio	0.0011157566%
OH1497	Providence Township, Ohio	0.0026476678%
OH1498	Pulaski Township, Ohio	0.0002907439%
OH1499	Pultney Township, Ohio	0.0018560145%
OH1500	Pusheta Township, Ohio	0.0002670784%
OH1501	Put In Bay Township, Ohio	0.0034623699%
OH1502	Put-In-Bay Village, Ohio	0.0040050827%
OH1503	Putnam County, Ohio	0.1372967601%
OH1504	Quaker City Village, Ohio	0.0004351328%
OH1505	Quincy Village, Ohio	0.0003391631%
OH1506	Raccoon Township, Ohio	0.0003561309%
OH1507	Racine Village, Ohio	0.0010826003%
OH1508	Radnor Township, Ohio	0.0001814747%
OH1509	Randolph Township, Ohio	0.0013730943%
OH1510	Range Township, Ohio	0.0007149570%
OH1511	Rarden Township, Ohio	0.0020471447%
OH1512	Rarden Village, Ohio	0.0005117862%
OH1513	Ravenna City, Ohio	0.0218557620%
OH1514	Ravenna Township, Ohio	0.0059636168%
OH1515	Rawson Village, Ohio	0.0001405531%
OH1516	Rayland Village, Ohio	0.0003984552%
OH1517	Reading City, Ohio	0.0457344992%
OH1518	Reading Township, Ohio	0.0019364040%
OH1519	Recovery Township, Ohio	0.0000812132%
OH1520	Reily Township, Ohio	0.0012764211%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1521	Reminderville Village, Ohio	0.0151415568%
OH1522	Rendville Village, Ohio	0.0001828826%
OH1523	Republic Village, Ohio	0.0011130095%
OH1524	Reynoldsburg City, Ohio	0.0697130845%
OH1525	Rice Township, Ohio	0.0003978688%
OH1526	Richfield Township, Henry County, Ohio	0.0023349246%
OH1527	Richfield Township, Lucas County, Ohio	0.0047039321%
OH1528	Richfield Township, Summit County, Ohio	0.0095996121%
OH1529	Richfield Village, Ohio	0.0399887454%
OH1530	Richland County, Ohio	0.7455113947%
OH1531	Richland Township, Allen County, Ohio	0.0002999883%
OH1532	Richland Township, Belmont County, Ohio	0.0026715361%
OH1533	Richland Township, Clinton County, Ohio	0.0005798975%
OH1534	Richland Township, Darke County, Ohio	0.0002952534%
OH1535	Richland Township, Fairfield County, Ohio	0.0003503579%
OH1536	Richland Township, Holmes County, Ohio	0.0001483201%
OH1537	Richland Township, Wyandot County, Ohio	0.0001079437%
OH1538	Richmond Heights City, Ohio	0.0218650269%
OH1539	Richmond Township, Ashtabula County, Ohio	0.0003170025%
OH1540	Richmond Township, Huron County, Ohio	0.0015099572%
OH1541	Richmond Village, Ohio	0.0007609773%
OH1542	Richwood Village, Ohio	0.0014048433%
OH1543	Ridgefield Township, Ohio	0.0003431721%
OH1544	Ridgeville Township, Ohio	0.0002165727%
OH1545	Ridgeway Village, Ohio	0.0003864298%
OH1546	Riley Township, Ohio	0.0007202182%
OH1547	Rio Grande Village, Ohio	0.0014432672%
OH1548	Ripley Township, Holmes County, Ohio	0.0000348988%
OH1549	Ripley Township, Huron County, Ohio	0.0000137269%
OH1550	Ripley Village, Ohio	0.0111932679%
OH1551	Risingsun Village, Ohio	0.0004530528%
OH1552	Rittman City, Ohio	0.0059649971%
OH1553	Riverlea Village, Ohio	0.0001680104%
OH1554	Riverside City, Ohio	0.0817797700%
OH1555	Roaming Shores Village, Ohio	0.0034987688%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1556	Rochester Township, Ohio	0.0013537465%
OH1557	Rochester Village, Ohio	0.0000194784%
OH1558	Rock Creek Village, Ohio	0.0002113350%
OH1559	Rockford Village, Ohio	0.0018408327%
OH1560	Rocky Ridge Village, Ohio	0.0002129632%
OH1561	Rocky River City, Ohio	0.0503638414%
OH1562	Rogers Village, Ohio	0.0005457718%
OH1563	Rome Township, Ashtabula County, Ohio	0.0014206410%
OH1564	Rome Township, Athens County, Ohio	0.0002813909%
OH1565	Rome Township, Lawrence County, Ohio	0.0010605153%
OH1566	Rome Village, Ohio	0.0002586036%
OH1567	Rootstown Township, Ohio	0.0026527533%
OH1568	Rose Township, Ohio	0.0004793086%
OH1569	Roseville Village, Ohio	0.0016522526%
OH1570	Ross County, Ohio	1.0109583321%
OH1571	Ross Township, Butler County, Ohio	0.0261747113%
OH1572	Ross Township, Greene County, Ohio	0.0002579678%
OH1573	Ross Township, Jefferson County, Ohio	0.0004940844%
OH1574	Rossburg Village, Ohio	0.0000984178%
OH1575	Rossford City, Ohio	0.0126977241%
OH1576	Roswell Village, Ohio	0.0002759007%
OH1577	Roundhead Township, Ohio	0.0002332423%
OH1578	Royalton Township, Ohio	0.0009661532%
OH1579	Rumley Township, Ohio	0.0006297965%
OH1580	Rush Creek Township, Ohio	0.0026562014%
OH1581	Rush Township, Scioto County, Ohio	0.0047482384%
OH1582	Rush Township, Tuscarawas County, Ohio	0.0000689752%
OH1583	Rushcreek Township, Ohio	0.0004189662%
OH1584	Rushsylvania Village, Ohio	0.0000099754%
OH1585	Rushville Village, Ohio	0.0000244436%
OH1586	Russell Township, Ohio	0.0185770784%
OH1587	Russells Point Village, Ohio	0.0022943385%
OH1588	Russellville Village, Ohio	0.0057671685%
OH1589	Russia Village, Ohio	0.0003460829%
OH1590	Rutland Village, Ohio	0.0004567220%
OH1591	Sabina Village, Ohio	0.0072933257%
OH1592	Sagamore Hills Township, Ohio	0.0226207726%
OH1593	Salem City, Ohio	0.0383095249%
OH1594	Salem Township, Auglaize County, Ohio	0.0001157340%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1595	Salem Township, Champaign County, Ohio	0.0003806616%
OH1596	Salem Township, Columbiana County, Ohio	0.0009051824%
OH1597	Salem Township, Muskingum County, Ohio	0.0003912060%
OH1598	Salem Township, Ottawa County, Ohio	0.0007213271%
OH1599	Salem Township, Shelby County, Ohio	0.0010648705%
OH1600	Salem Township, Tuscarawas County, Ohio	0.0026407637%
OH1601	Salem Township, Warren County, Ohio	0.0074583911%
OH1602	Salem Township, Washington County, Ohio	0.0005013228%
OH1603	Salesville Village, Ohio	0.0000679895%
OH1604	Salineville Village, Ohio	0.0034609917%
OH1605	Salisbury Township, Ohio	0.0003552282%
OH1606	Salt Creek Township, Hocking County, Ohio	0.0001833021%
OH1607	Salt Creek Township, Holmes County, Ohio	0.0000465318%
OH1608	Salt Creek Township, Wayne County, Ohio	0.0001391765%
OH1609	Salt Lick Township, Ohio	0.0000430312%
OH1610	Salt Rock Township, Ohio	0.0007066458%
OH1611	Saltcreek Township, Ohio	0.0003935151%
OH1612	Sandusky City, Ohio	0.1261336610%
OH1613	Sandusky County, Ohio	0.3072903644%
OH1614	Sandusky Township, Crawford County, Ohio	0.0000108762%
OH1615	Sandusky Township, Sandusky County, Ohio	0.0015100930%
OH1616	Sandy Township, Stark County, Ohio	0.0049479536%
OH1617	Sandy Township, Tuscarawas County, Ohio	0.0006897517%
OH1618	Sarahsville Village, Ohio	0.0000689910%
OH1619	Sardinia Village, Ohio	0.0044028921%
OH1620	Savannah Village, Ohio	0.0002294615%
OH1621	Saybrook Township, Ohio	0.0161906113%
OH1622	Scio Village, Ohio	0.0001526779%
OH1623	Scioto County, Ohio	0.9401796346%
OH1624	Scioto Township, Delaware County, Ohio	0.0019714756%
OH1625	Scioto Township, Pickaway County, Ohio	0.0062913839%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1626	Scioto Township, Pike County, Ohio	0.0002619631%
OH1627	Scioto Township, Ross County, Ohio	0.0146969071%
OH1628	Scipio Township, Meigs County, Ohio	0.0004736376%
OH1629	Scipio Township, Seneca County, Ohio	0.0005615183%
OH1630	Scott Township, Marion County, Ohio	0.0001301716%
OH1631	Scott Township, Sandusky County, Ohio	0.0009313747%
OH1632	Scott Village, Ohio	0.0006416289%
OH1633	Seal Township, Ohio	0.0013351665%
OH1634	Seaman Village, Ohio	0.0025035030%
OH1635	Sebring Village, Ohio	0.0078737318%
OH1636	Seneca County, Ohio	0.2801274556%
OH1637	Seneca Township, Monroe County, Ohio	0.0000124681%
OH1638	Seneca Township, Noble County, Ohio	0.0000172477%
OH1639	Senecaville Village, Ohio	0.0007886782%
OH1640	Seven Hills City, Ohio	0.0208535620%
OH1641	Seven Mile Village, Ohio	0.0013087356%
OH1642	Seville Village, Ohio	0.0055383307%
OH1643	Shadyside Village, Ohio	0.0078177582%
OH1644	Shaker Heights City, Ohio	0.1048407101%
OH1645	Shalersville Township, Ohio	0.0000934354%
OH1646	Sharon Township, Franklin County, Ohio	0.0053763338%
OH1647	Sharon Township, Medina County, Ohio	0.0058099333%
OH1648	Sharon Township, Richland County, Ohio	0.0000802853%
OH1649	Sharonville City, Ohio	0.1284229161%
OH1650	Shawnee Hills Village, Ohio	0.0030520752%
OH1651	Shawnee Township, Ohio	0.0289829613%
OH1652	Shawnee Village, Ohio	0.0005916790%
OH1653	Sheffield Lake City, Ohio	0.0113266702%
OH1654	Sheffield Township, Ashtabula County, Ohio	0.0012562693%
OH1655	Sheffield Township, Lorain County, Ohio	0.0039054125%
OH1656	Sheffield Village, Ohio	0.0383431647%
OH1657	Shelby City, Ohio	0.0301426674%
OH1658	Shelby County, Ohio	0.2601922372%
OH1659	Sherrodsville Village, Ohio	0.0010675510%
OH1660	Sherwood Village, Ohio	0.0012358778%
OH1661	Shiloh Village, Ohio	0.0001516500%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1662	Shreve Village, Ohio	0.0012061965%
OH1663	Sidney City, Ohio	0.0768126600%
OH1664	Silver Lake Village, Ohio	0.0087129009%
OH1665	Silverton Village, Ohio	0.0117488480%
OH1666	Sinking Spring Village, Ohio	0.0018697801%
OH1667	Smith Township, Belmont County, Ohio	0.0011670394%
OH1668	Smith Township, Mahoning County, Ohio	0.0056258490%
OH1669	Smithfield Township, Ohio	0.0003028259%
OH1670	Smithfield Village, Ohio	0.0021516579%
OH1671	Smithville Village, Ohio	0.0012448566%
OH1672	Solon City, Ohio	0.0575665779%
OH1673	Somerford Township, Ohio	0.0018806477%
OH1674	Somers Township, Ohio	0.0009493500%
OH1675	Somerset Village, Ohio	0.0013447250%
OH1676	Somerville Village, Ohio	0.0001615723%
OH1677	South Amherst Village, Ohio	0.0020257501%
OH1678	South Bloomfield Township, Ohio	0.0004782339%
OH1679	South Bloomfield Village, Ohio	0.0012874261%
OH1680	South Charleston Village, Ohio	0.0026810249%
OH1681	South Euclid City, Ohio	0.0416202012%
OH1682	South Lebanon Village, Ohio	0.0058643200%
OH1683	South Point Village, Ohio	0.0061370801%
OH1684	South Russell Village, Ohio	0.0067283287%
OH1685	South Salem Village, Ohio	0.0005572426%
OH1686	South Solon Village, Ohio	0.0007460421%
OH1687	South Vienna Village, Ohio	0.0009118207%
OH1688	South Webster Village, Ohio	0.0024736332%
OH1689	South Zanesville Village, Ohio	0.0015547932%
OH1690	Southington Township, Ohio	0.0014492645%
OH1691	Sparta Village, Ohio	0.0000770825%
OH1692	Spencer Township, Allen County, Ohio	0.0001636300%
OH1693	Spencer Township, Guernsey County, Ohio	0.0001631748%
OH1694	Spencer Township, Lucas County, Ohio	0.0024565990%
OH1695	Spencer Township, Medina County, Ohio	0.0000708528%
OH1696	Spencer Village, Ohio	0.0016178066%
OH1697	Spencerville Village, Ohio	0.0025294469%
OH1698	Sprigg Township, Ohio	0.0001054107%
OH1699	Spring Valley Township, Ohio	0.0070786377%
OH1700	Spring Valley Village, Ohio	0.0001444620%
OH1701	Springboro City, Ohio	0.0299889938%
OH1702	Springdale City, Ohio	0.0692154947%
OH1703	Springfield City, Ohio	0.4735887613%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1704	Springfield Township, Clark County, Ohio	0.0105063514%
OH1705	Springfield Township, Gallia County, Ohio	0.0009746740%
OH1706	Springfield Township, Hamilton County, Ohio	0.1053972703%
OH1707	Springfield Township, Jefferson County, Ohio	0.0002231349%
OH1708	Springfield Township, Lucas County, Ohio	0.0432543386%
OH1709	Springfield Township, Mahoning County, Ohio	0.0039675747%
OH1710	Springfield Township, Richland County, Ohio	0.0177162881%
OH1711	Springfield Township, Ross County, Ohio	0.0053121351%
OH1712	Springfield Township, Summit County, Ohio	0.0469667767%
OH1713	Springfield Township, Williams County, Ohio	0.0004950504%
OH1714	St Albans Township, Ohio	0.0043369348%
OH1715	St Clair Township, Butler County, Ohio	0.0005493458%
OH1716	St Clair Township, Columbiana County, Ohio	0.0167991211%
OH1717	St Marys Township, Ohio	0.0002136628%
OH1718	St. Bernard Village, Ohio	0.0379854367%
OH1719	St. Clairsville City, Ohio	0.0187569954%
OH1720	St. Henry Village, Ohio	0.0014076956%
OH1721	St. Louisville Village, Ohio	0.0003799451%
OH1722	St. Marys City, Ohio	0.0281144576%
OH1723	St. Paris Village, Ohio	0.0038066155%
OH1724	Stafford Village, Ohio	0.0000249362%
OH1725	Stark County, Ohio	1.5315796664%
OH1726	Starr Township, Ohio	0.0001436692%
OH1727	Staunton Township, Ohio	0.0003747763%
OH1728	Sterling Township, Ohio	0.0043408795%
OH1729	Steubenville City, Ohio	0.1367338744%
OH1730	Steubenville Township, Ohio	0.0000318764%
OH1731	Stock Township, Harrison County, Ohio	0.0003339830%
OH1732	Stock Township, Noble County, Ohio	0.0000344955%
OH1733	Stockport Village, Ohio	0.0002249256%
OH1734	Stokes Township, Logan County, Ohio	0.0047782092%
OH1735	Stokes Township, Madison County, Ohio	0.0007615846%
OH1736	Stone Creek Village, Ohio	0.0001379503%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1737	Stonelick Township, Ohio	0.0184280231%
OH1738	Stoutsville Village, Ohio	0.0000733307%
OH1739	Stow City, Ohio	0.1475892163%
OH1740	Strasburg Village, Ohio	0.0032911011%
OH1741	Stratton Village, Ohio	0.0014981914%
OH1742	Streetsboro City, Ohio	0.0206045399%
OH1743	Strongsville City, Ohio	0.0739396664%
OH1744	Struthers City, Ohio	0.0252671862%
OH1745	Stryker Village, Ohio	0.0016737417%
OH1746	Suffield Township, Ohio	0.0026771277%
OH1747	Sugar Bush Knolls Village, Ohio	0.0000982645%
OH1748	Sugar Creek Township, Allen County, Ohio	0.0002727166%
OH1749	Sugar Creek Township, Putnam County, Ohio	0.0001655674%
OH1750	Sugar Creek Township, Wayne County, Ohio	0.0003634054%
OH1751	Sugar Grove Village, Ohio	0.0001955486%
OH1752	Sugarcreek Township, Ohio	0.0470017417%
OH1753	Sugarcreek Village, Ohio	0.0027688605%
OH1754	Sullivan Township, Ohio	0.0017162492%
OH1755	Summerfield Village, Ohio	0.0001212800%
OH1756	Summit Township, Ohio	0.0000062341%
OH1757	Summitville Village, Ohio	0.0004792142%
OH1758	Sunbury Village, Ohio	0.0082323543%
OH1759	Sunfish Township, Ohio	0.0000676034%
OH1760	Swan Creek Township, Ohio	0.0048429959%
OH1761	Swanton Township, Ohio	0.0015012549%
OH1762	Swanton Village, Ohio	0.0072434936%
OH1763	Switzerland Township, Ohio	0.0001807876%
OH1764	Sycamore Township, Hamilton County, Ohio	0.0584269292%
OH1765	Sycamore Township, Wyandot County, Ohio	0.0002766058%
OH1766	Sycamore Village, Ohio	0.0012008738%
OH1767	Sylvania City, Ohio	0.0526622027%
OH1768	Sylvania Township, Ohio	0.1247952267%
OH1769	Symmes Township, Hamilton County, Ohio	0.0305202839%
OH1770	Symmes Township, Lawrence County, Ohio	0.0000521565%
OH1771	Syracuse Village, Ohio	0.0005413001%
OH1772	Tallmadge City, Ohio	0.0580737905%
OH1773	Tarlton Village, Ohio	0.0002242634%
OH1774	Tate Township, Ohio	0.0267197716%
OH1775	Taylor Creek Township, Ohio	0.0001110677%
OH1776	Terrace Park Village, Ohio	0.0056698421%
OH1777	Texas Township, Ohio	0.0002936562%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1778	The Village of Indian Hill City, Ohio	0.0264202950%
OH1779	Thompson Township, Delaware County, Ohio	0.0002474656%
OH1780	Thompson Township, Geauga County, Ohio	0.0022491568%
OH1781	Thorn Township, Ohio	0.0007422882%
OH1782	Thornville Village, Ohio	0.0006131946%
OH1783	Thurston Village, Ohio	0.0013688400%
OH1784	Tiffin City, Ohio	0.0703803061%
OH1785	Tiffin Township, Ohio	0.0005075927%
OH1786	Tiltonsville Village, Ohio	0.0016575735%
OH1787	Timberlake Village, Ohio	0.0023312243%
OH1788	Tipp City, Ohio	0.0376479790%
OH1789	Tiro Village, Ohio	0.0000326285%
OH1790	Toledo City, Ohio	1.0197706186%
OH1791	Tontogany Village, Ohio	0.0001897924%
OH1792	Toronto City, Ohio	0.0279077997%
OH1793	Townsend Township, Huron County, Ohio	0.0006177098%
OH1794	Townsend Township, Sandusky County, Ohio	0.0000271274%
OH1795	Tremont City Village, Ohio	0.0006396354%
OH1796	Trenton City, Ohio	0.0416371797%
OH1797	Trenton Township, Ohio	0.0000577420%
OH1798	Trimble Township, Ohio	0.0023032365%
OH1799	Trimble Village, Ohio	0.0004320101%
OH1800	Trotwood City, Ohio	0.0811683100%
OH1801	Troy City, Ohio	0.0899917302%
OH1802	Troy Township, Ashland County, Ohio	0.0002358826%
OH1803	Troy Township, Athens County, Ohio	0.0008754383%
OH1804	Troy Township, Geauga County, Ohio	0.0026032794%
OH1805	Troy Township, Richland County, Ohio	0.0034790294%
OH1806	Troy Township, Wood County, Ohio	0.0027734180%
OH1807	Trumbull County, Ohio	2.0203599712%
OH1808	Trumbull Township, Ohio	0.0006457459%
OH1809	Truro Township, Ohio	0.0493339720%
OH1810	Tully Township, Ohio	0.0007929647%
OH1811	Turtle Creek Township, Ohio	0.0003372090%
OH1812	Turtlecreek Township, Ohio	0.0071325956%
OH1813	Tuscarawas County, Ohio	0.3721703206%
OH1814	Tuscarawas Township, Ohio	0.0020979323%
OH1815	Tuscarawas Village, Ohio	0.0003842902%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1816	Twin Township, Darke County, Ohio	0.0003813690%
OH1817	Twin Township, Ross County, Ohio	0.0052531114%
OH1818	Twinsburg City, Ohio	0.0833508485%
OH1819	Tymochtee Township, Ohio	0.0003170847%
OH1820	Uhrichsville City, Ohio	0.0101787647%
OH1821	Union City Village, Ohio	0.0076150778%
OH1822	Union City, Ohio	0.0198982889%
OH1823	Union County, Ohio	0.3002174205%
OH1824	Union Township, Auglaize County, Ohio	0.0001691497%
OH1825	Union Township, Carroll County, Ohio	0.0000762536%
OH1826	Union Township, Champaign County, Ohio	0.0000211479%
OH1827	Union Township, Clermont County, Ohio	0.3185341547%
OH1828	Union Township, Clinton County, Ohio	0.0085869431%
OH1829	Union Township, Fayette County, Ohio	0.0014043033%
OH1830	Union Township, Highland County, Ohio	0.0112248527%
OH1831	Union Township, Lawrence County, Ohio	0.0011822137%
OH1832	Union Township, Licking County, Ohio	0.0076823054%
OH1833	Union Township, Logan County, Ohio	0.0001197046%
OH1834	Union Township, Mercer County, Ohio	0.0004692319%
OH1835	Union Township, Miami County, Ohio	0.0038499743%
OH1836	Union Township, Muskingum County, Ohio	0.0003209896%
OH1837	Union Township, Pike County, Ohio	0.0001098555%
OH1838	Union Township, Ross County, Ohio	0.0119227921%
OH1839	Union Township, Tuscarawas County, Ohio	0.0002167791%
OH1840	Union Township, Union County, Ohio	0.0002502189%
OH1841	Union Township, Van Wert County, Ohio	0.0002973617%
OH1842	Union Township, Warren County, Ohio	0.0079936267%
OH1843	Unionville Center Village, Ohio	0.0001475046%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1844	Uniopolis Village, Ohio	0.0002492732%
OH1845	Unity Township, Ohio	0.0000798690%
OH1846	University Heights City, Ohio	0.0306916388%
OH1847	Upper Arlington City, Ohio	0.1198448950%
OH1848	Upper Sandusky City, Ohio	0.0108550896%
OH1849	Upper Township, Ohio	0.0007475763%
OH1850	Urbana City, Ohio	0.0575116162%
OH1851	Urbancrest Village, Ohio	0.0003436577%
OH1852	Utica Village, Ohio	0.0044986588%
OH1853	Valley Hi Village, Ohio	0.0001316045%
OH1854	Valley Township, Guernsey County, Ohio	0.0005439160%
OH1855	Valley Township, Scioto County, Ohio	0.0018196842%
OH1856	Valley View Village, Ohio	0.0158831601%
OH1857	Valleyview Village, Ohio	0.0016037359%
OH1858	Van Buren Township, Darke County, Ohio	0.0003444623%
OH1859	Van Buren Township, Putnam County, Ohio	0.0002317943%
OH1860	Van Buren Township, Shelby County, Ohio	0.0003904525%
OH1861	Van Buren Village, Ohio	0.0001188906%
OH1862	Van Wert City, Ohio	0.0528808311%
OH1863	Van Wert County, Ohio	0.1122540604%
OH1864	Vandalia City, Ohio	0.0967305650%
OH1865	Vanlue Village, Ohio	0.0001114793%
OH1866	Venedocia Village, Ohio	0.0000371702%
OH1867	Venice Township, Ohio	0.0000100271%
OH1868	Vermilion City, Ohio	0.0432196320%
OH1869	Vermilion Township, Ohio	0.0012778552%
OH1870	Vermillion Township, Ohio	0.0004880329%
OH1871	Vernon Township, Crawford County, Ohio	0.0000108762%
OH1872	Vernon Township, Scioto County, Ohio	0.0038952614%
OH1873	Vernon Township, Trumbull County, Ohio	0.0006308563%
OH1874	Verona Village, Ohio	0.0012373333%
OH1875	Versailles Village, Ohio	0.0100017096%
OH1876	Vienna Township, Ohio	0.0042113922%
OH1877	Vinton County, Ohio	0.1090168446%
OH1878	Vinton Township, Ohio	0.0001170406%
OH1879	Vinton Village, Ohio	0.0005060807%
OH1880	Violet Township, Ohio	0.0621844457%
OH1881	Virginia Township, Ohio	0.0000841915%
OH1882	Wabash Township, Ohio	0.0000492089%
OH1883	Wadsworth City, Ohio	0.0760959559%
OH1884	Waite Hill Village, Ohio	0.0053068521%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1885	Wakeman Village, Ohio	0.0018119487%
OH1886	Walbridge Village, Ohio	0.0029019871%
OH1887	Waldo Township, Ohio	0.0000743838%
OH1888	Waldo Village, Ohio	0.0004160980%
OH1889	Walnut Township, Fairfield County, Ohio	0.0087100593%
OH1890	Walnut Township, Gallia County, Ohio	0.0001499498%
OH1891	Walton Hills Village, Ohio	0.0099526568%
OH1892	Wapakoneta City, Ohio	0.0275268850%
OH1893	Ward Township, Ohio	0.0001486233%
OH1894	Warren City, Ohio	0.3520178232%
OH1895	Warren County, Ohio	1.0504230532%
OH1896	Warren Township, Belmont County, Ohio	0.0000984250%
OH1897	Warren Township, Jefferson County, Ohio	0.0004303316%
OH1898	Warren Township, Trumbull County, Ohio	0.0001534515%
OH1899	Warren Township, Tuscarawas County, Ohio	0.0002069255%
OH1900	Warren Township, Washington County, Ohio	0.0008773149%
OH1901	Warrensville Heights City, Ohio	0.0361164097%
OH1902	Warsaw Village, Ohio	0.0003911414%
OH1903	Warwick Township, Ohio	0.0008474093%
OH1904	Washington County, Ohio	0.3325608246%
OH1905	Washington Court House City, Ohio	0.0376016242%
OH1906	Washington Township, Auglaize County, Ohio	0.0023680955%
OH1907	Washington Township, Belmont County, Ohio	0.0000843643%
OH1908	Washington Township, Brown County, Ohio	0.0011782387%
OH1909	Washington Township, Carroll County, Ohio	0.0002178675%
OH1910	Washington Township, Clermont County, Ohio	0.0305984481%
OH1911	Washington Township, Clinton County, Ohio	0.0029440948%
OH1912	Washington Township, Columbiana County, Ohio	0.0006256408%
OH1913	Washington Township, Coshocton County, Ohio	0.0000841915%
OH1914	Washington Township, Darke County, Ohio	0.0003198579%
OH1915	Washington Township, Defiance County, Ohio	0.0003531079%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1916	Washington Township, Franklin County, Ohio	0.1225330619%
OH1917	Washington Township, Guernsey County, Ohio	0.0000951853%
OH1918	Washington Township, Hancock County, Ohio	0.0008925122%
OH1919	Washington Township, Harrison County, Ohio	0.0003339830%
OH1920	Washington Township, Henry County, Ohio	0.0002571801%
OH1921	Washington Township, Highland County, Ohio	0.0004065339%
OH1922	Washington Township, Hocking County, Ohio	0.0002427514%
OH1923	Washington Township, Holmes County, Ohio	0.0000261741%
OH1924	Washington Township, Jackson County, Ohio	0.0003315132%
OH1925	Washington Township, Lawrence County, Ohio	0.0000695420%
OH1926	Washington Township, Licking County, Ohio	0.0008154920%
OH1927	Washington Township, Logan County, Ohio	0.0017756185%
OH1928	Washington Township, Lucas County, Ohio	0.0071150384%
OH1929	Washington Township, Mercer County, Ohio	0.0001173080%
OH1930	Washington Township, Miami County, Ohio	0.0009766897%
OH1931	Washington Township, Monroe County, Ohio	0.0000062341%
OH1932	Washington Township, Montgomery County, Ohio	0.1316317394%
OH1933	Washington Township, Morrow County, Ohio	0.0002420690%
OH1934	Washington Township, Muskingum County, Ohio	0.0014845767%
OH1935	Washington Township, Paulding County, Ohio	0.0000402008%
OH1936	Washington Township, Pickaway County, Ohio	0.0003983733%
OH1937	Washington Township, Preble County, Ohio	0.0006874604%
OH1938	Washington Township, Richland County, Ohio	0.0012132000%
OH1939	Washington Township, Sandusky County, Ohio	0.0006510581%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1940	Washington Township, Scioto County, Ohio	0.0113445935%
OH1941	Washington Township, Shelby County, Ohio	0.0000798653%
OH1942	Washington Township, Stark County, Ohio	0.0006531299%
OH1943	Washington Township, Wood County, Ohio	0.0002265264%
OH1944	Washingtonville Village, Ohio	0.0014015930%
OH1945	Waterford Township, Ohio	0.0050048725%
OH1946	Waterloo Township, Ohio	0.0006670006%
OH1947	Watertown Township, Ohio	0.0001503968%
OH1948	Waterville City, Ohio	0.0124831621%
OH1949	Waterville Township, Ohio	0.0015558460%
OH1950	Wauseon City, Ohio	0.0277126990%
OH1951	Waverly Village, Ohio	0.0077490360%
OH1952	Wayne County, Ohio	0.2257675097%
OH1953	Wayne Lakes Village, Ohio	0.0075166600%
OH1954	Wayne Township, Adams County, Ohio	0.0012649279%
OH1955	Wayne Township, Ashtabula County, Ohio	0.0005165967%
OH1956	Wayne Township, Auglaize County, Ohio	0.0004273255%
OH1957	Wayne Township, Belmont County, Ohio	0.0000562429%
OH1958	Wayne Township, Butler County, Ohio	0.0007432325%
OH1959	Wayne Township, Champaign County, Ohio	0.0014909244%
OH1960	Wayne Township, Clermont County, Ohio	0.0020513889%
OH1961	Wayne Township, Clinton County, Ohio	0.0002007337%
OH1962	Wayne Township, Columbiana County, Ohio	0.0005990178%
OH1963	Wayne Township, Darke County, Ohio	0.0000369067%
OH1964	Wayne Township, Fayette County, Ohio	0.0001404303%
OH1965	Wayne Township, Jefferson County, Ohio	0.0021038433%
OH1966	Wayne Township, Monroe County, Ohio	0.0000062341%
OH1967	Wayne Township, Muskingum County, Ohio	0.0001404329%
OH1968	Wayne Township, Noble County, Ohio	0.0000862387%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH1969	Wayne Township, Pickaway County, Ohio	0.0000437239%
OH1970	Wayne Township, Tuscarawas County, Ohio	0.0003941438%
OH1971	Wayne Township, Warren County, Ohio	0.0038164622%
OH1972	Wayne Village, Ohio	0.0008081483%
OH1973	Waynesburg Village, Ohio	0.0012073007%
OH1974	Waynesfield Village, Ohio	0.0007567223%
OH1975	Waynesville Village, Ohio	0.0046309511%
OH1976	Weathersfield Township, Ohio	0.0249955502%
OH1977	Weller Township, Ohio	0.0004460294%
OH1978	Wellington Village, Ohio	0.0164981765%
OH1979	Wells Township, Ohio	0.0100888848%
OH1980	Wellston City, Ohio	0.0406103723%
OH1981	Wellsville Village, Ohio	0.0125660620%
OH1982	Wesley Township, Ohio	0.0001253307%
OH1983	West Alexandria Village, Ohio	0.0099845432%
OH1984	West Carrollton City, Ohio	0.0603546931%
OH1985	West Chester Township, Ohio	0.3737167118%
OH1986	West Elkton Village, Ohio	0.0026843690%
OH1987	West Farmington Village, Ohio	0.0001875519%
OH1988	West Jefferson Village, Ohio	0.0159155640%
OH1989	West Lafayette Village, Ohio	0.0026252451%
OH1990	West Leipsic Village, Ohio	0.0002152376%
OH1991	West Liberty Village, Ohio	0.0035013600%
OH1992	West Manchester Village, Ohio	0.0025206880%
OH1993	West Mansfield Village, Ohio	0.0000798031%
OH1994	West Millgrove Village, Ohio	0.0001102020%
OH1995	West Milton Village, Ohio	0.0098350376%
OH1996	West Rushville Village, Ohio	0.0001070525%
OH1997	West Salem Village, Ohio	0.0004987159%
OH1998	West Township, Ohio	0.0005857063%
OH1999	West Union Village, Ohio	0.0111998820%
OH2000	West Unity Village, Ohio	0.0014694352%
OH2001	Westerville City, Ohio	0.2122517954%
OH2002	Westfield Center Village, Ohio	0.0015469538%
OH2003	Westfield Township, Ohio	0.0022200558%
OH2004	Westlake City, Ohio	0.0470647273%
OH2005	Westland Township, Ohio	0.0000407937%
OH2006	Weston Township, Ohio	0.0001040797%
OH2007	Weston Village, Ohio	0.0009305950%
OH2008	Wharton Village, Ohio	0.0000269859%
OH2009	Wheeling Township, Belmont County, Ohio	0.0005343072%
OH2010	Wheeling Township, Guernsey County, Ohio	0.0000407937%
OH2011	Whetstone Township, Ohio	0.0003262846%
OH2012	White Eyes Township, Ohio	0.0001913444%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH2013	Whitehall City, Ohio	0.0708163966%
OH2014	Whitehouse Village, Ohio	0.0191159792%
OH2015	Whitewater Township, Ohio	0.0072647461%
OH2016	Wickliffe City, Ohio	0.0543194216%
OH2017	Wilkesville Township, Ohio	0.0005461896%
OH2018	Wilkesville Village, Ohio	0.0001034151%
OH2019	Willard City, Ohio	0.0338504955%
OH2020	Williams County, Ohio	0.1507467614%
OH2021	Williamsburg Township, Ohio	0.0138253270%
OH2022	Williamsburg Village, Ohio	0.0064127452%
OH2023	Williamsfield Township, Ohio	0.0004696334%
OH2024	Williamsport Village, Ohio	0.0004226644%
OH2025	Willoughby City, Ohio	0.1356374532%
OH2026	Willoughby Hills City, Ohio	0.0528410843%
OH2027	Willowick City, Ohio	0.0540256495%
OH2028	Wills Township, Ohio	0.0001087832%
OH2029	Willshire Village, Ohio	0.0006690639%
OH2030	Wilmington City, Ohio	0.1278227818%
OH2031	Wilmot Village, Ohio	0.0024343932%
OH2032	Wilson Township, Ohio	0.0006914162%
OH2033	Wilson Village, Ohio	0.0001415832%
OH2034	Winchester Village, Ohio	0.0033994936%
OH2035	Windham Township, Ohio	0.0001218723%
OH2036	Windham Village, Ohio	0.0030305573%
OH2037	Windsor Township, Ashtabula County, Ohio	0.0006340051%
OH2038	Windsor Township, Lawrence County, Ohio	0.0007128053%
OH2039	Windsor Township, Morgan County, Ohio	0.0004926943%
OH2040	Wintersville Village, Ohio	0.0169582518%
OH2041	Wood County, Ohio	0.6017827347%
OH2042	Woodlawn Village, Ohio	0.0240822158%
OH2043	Woodmere Village, Ohio	0.0007072352%
OH2044	Woodsfield Village, Ohio	0.0011221301%
OH2045	Woodstock Village, Ohio	0.0001517571%
OH2046	Woodville Township, Ohio	0.0019622167%
OH2047	Woodville Village, Ohio	0.0034270973%
OH2048	Wooster City, Ohio	0.4046402646%
OH2049	Wooster Township, Ohio	0.0017358405%
OH2050	Worthington City, Ohio	0.0819890902%
OH2051	Worthington Township, Ohio	0.0017573559%
OH2052	Wren Village, Ohio	0.0008301349%
OH2053	Wyandot County, Ohio	0.0959147354%
OH2054	Wyoming City, Ohio	0.0220280462%
OH2055	Xenia City, Ohio	0.1268376308%
OH2056	Xenia Township, Ohio	0.0075532986%
OH2057	Yankee Lake Village, Ohio	0.0000341003%
OH2058	Yellow Creek Township, Ohio	0.0010782320%

State ID	Qualifying Subdivision	Consolidated State Allocation
OH2059	Yellow Springs Village, Ohio	0.0142295064%
OH2060	York Township, Athens County, Ohio	0.0005523599%
OH2061	York Township, Fulton County, Ohio	0.0061882726%
OH2062	York Township, Medina County, Ohio	0.0023145263%
OH2063	York Township, Sandusky County, Ohio	0.0006239306%
OH2064	York Township, Tuscarawas County, Ohio	0.0007784341%
OH2065	York Township, Van Wert County, Ohio	0.0001115107%
OH2066	Yorkshire Village, Ohio	0.0007627380%
OH2067	Yorkville Village, Ohio	0.0011795516%
OH2068	Youngstown City, Ohio	0.5751891038%
OH2069	Zaleski Village, Ohio	0.0000780271%
OH2070	Zane Township, Ohio	0.0012568985%
OH2071	Zanesfield Village, Ohio	0.0001257699%
OH2072	Zanesville City, Ohio	0.1371227251%
OH2073	Zoar Village, Ohio	0.0002364863%

State ID	Qualifying Subdivision	Consolidated State Allocation
OK1	Ada City, Oklahoma	0.8751127538%
OK2	Adair County, Oklahoma	0.4266209709%
OK3	Alfalfa County, Oklahoma	0.0752358760%
OK4	Altus City, Oklahoma	0.0622184471%
OK5	Anadarko City, Oklahoma	0.2177062552%
OK6	Ardmore City, Oklahoma	0.8834203994%
OK7	Atoka County, Oklahoma	0.3570166411%
OK8	Bartlesville City, Oklahoma	0.7616370548%
OK9	Beaver County, Oklahoma	0.0784743727%
OK10	Beckham County, Oklahoma	0.2846460130%
OK11	Bethany City, Oklahoma	0.2482441625%
OK12	Bixby City, Oklahoma	0.2557077913%
OK13	Blaine County, Oklahoma	0.1909298641%
OK14	Broken Arrow City, Oklahoma	1.9405732012%
OK15	Bryan County, Oklahoma	0.5253079080%
OK16	Burns Flat Town, Oklahoma	0.0297825750%
OK17	Caddo County, Oklahoma	0.4845736458%
OK18	Canadian County, Oklahoma	0.5808839408%
OK19	Carter County, Oklahoma	1.0204659663%
OK20	Cherokee County, Oklahoma	0.0547155245%
OK21	Chickasha City, Oklahoma	0.1510124411%
OK22	Choctaw City, Oklahoma	0.0613538158%
OK23	Choctaw County, Oklahoma	0.4004199348%
OK24	Cimarron County, Oklahoma	0.0722904419%
OK25	Claremore City, Oklahoma	0.7190775254%
OK26	Cleveland County, Oklahoma	0.2725422694%
OK27	Coal County, Oklahoma	0.1610866236%
OK28	Comanche County, Oklahoma	2.0790341012%
OK29	Cotton County, Oklahoma	0.1077265239%
OK30	Coweta City, Oklahoma	0.3910652406%
OK31	Craig County, Oklahoma	0.2892248732%
OK32	Creek County, Oklahoma	1.2474865281%
OK33	Custer County, Oklahoma	0.4049880250%
OK34	Del City, Oklahoma	0.2643825434%
OK35	Delaware County, Oklahoma	0.8410533842%
OK36	Dewey County, Oklahoma	0.0676712782%
OK37	Duncan City, Oklahoma	0.8937861298%
OK38	Durant City, Oklahoma	0.7336303563%
OK39	Edmond City, Oklahoma	1.4615935748%
OK40	El Reno City, Oklahoma	0.2053992273%
OK41	Elk City, Oklahoma	0.3587477547%
OK42	Ellis County, Oklahoma	0.0583375351%
OK43	Enid City, Oklahoma	0.7392412881%
OK44	Garfield County, Oklahoma	0.2542221165%
OK45	Garvin County, Oklahoma	0.8411004189%
OK46	Glenpool City, Oklahoma	0.1608895657%
OK47	Grady County, Oklahoma	1.0545977812%
OK48	Grant County, Oklahoma	0.0405478903%
OK49	Greer County, Oklahoma	0.1583252054%

State ID	Qualifying Subdivision	Consolidated State Allocation
OK50	Guthrie City, Oklahoma	0.1856265512%
OK51	Guymon City, Oklahoma	0.0547591936%
OK52	Harmon County, Oklahoma	0.0673861249%
OK53	Harper County, Oklahoma	0.0522026584%
OK54	Haskell County, Oklahoma	0.2531508354%
OK55	Hughes County, Oklahoma	0.2061436213%
OK56	Jackson County, Oklahoma	0.4801048418%
OK57	Jefferson County, Oklahoma	0.3090924602%
OK58	Jenks City, Oklahoma	0.1806228639%
OK59	Johnston County, Oklahoma	0.4472082986%
OK60	Kay County, Oklahoma	0.5067583031%
OK61	Kingfisher County, Oklahoma	0.2717757463%
OK62	Kiowa County, Oklahoma	0.2298382701%
OK63	Latimer County, Oklahoma	0.3148762172%
OK64	Lawton City, Oklahoma	0.3312681144%
OK65	Le Flore County, Oklahoma	1.4166392289%
OK66	Lincoln County, Oklahoma	0.6999457500%
OK67	Logan County, Oklahoma	0.5399784520%
OK68	Love County, Oklahoma	0.2288662752%
OK69	Major County, Oklahoma	0.0852741304%
OK70	Marshall County, Oklahoma	0.2609426135%
OK71	Mayes County, Oklahoma	1.2431623622%
OK72	McAlester City, Oklahoma	1.2318612380%
OK73	McClain County, Oklahoma	0.6643227071%
OK74	McCurtain County, Oklahoma	0.8951427325%
OK75	McIntosh County, Oklahoma	0.6473819592%
OK76	Miami City, Oklahoma	0.3080134381%
OK77	Midwest City, Oklahoma	1.3662006673%
OK78	Moore City, Oklahoma	0.2533704430%
OK79	Murray County, Oklahoma	0.5297956437%
OK80	Muskogee City, Oklahoma	2.5039385148%
OK81	Muskogee County, Oklahoma	0.1783839604%
OK82	Mustang City, Oklahoma	0.1655020823%
OK83	Newcastle City, Oklahoma	0.2606099206%
OK84	Noble County, Oklahoma	0.1688783176%
OK85	Norman City, Oklahoma	4.4189589851%
OK86	Nowata County, Oklahoma	0.1569775216%
OK87	Okfuskee County, Oklahoma	0.2609296558%
OK88	Oklahoma City, Oklahoma	14.3489114350%
OK89	Oklahoma County, Oklahoma	3.3422940072%
OK90	Okmulgee City, Oklahoma	0.5086746948%
OK91	Okmulgee County, Oklahoma	0.4742639531%
OK92	Osage County, Oklahoma	0.5896618496%
OK93	Ottawa County, Oklahoma	0.3159777890%
OK94	Owasso City, Oklahoma	0.7456266521%
OK95	Pawnee County, Oklahoma	0.6201145221%
OK96	Payne County, Oklahoma	0.6719554590%
OK97	Pittsburg County, Oklahoma	0.1253496540%
OK98	Ponca City, Oklahoma	0.4343605817%

State ID	Qualifying Subdivision	Consolidated State Allocation
OK99	Pontotoc County, Oklahoma	0.3451006157%
OK100	Pottawatomie County, Oklahoma	0.8536612997%
OK101	Pushmataha County, Oklahoma	0.3982344607%
OK102	Roger Mills County, Oklahoma	0.0439550052%
OK103	Rogers County, Oklahoma	1.2081401690%
OK104	Sand Springs City, Oklahoma	0.3849881687%
OK105	Sapulpa City, Oklahoma	1.1421081226%
OK106	Seminole City, Oklahoma	0.2214634802%
OK107	Seminole County, Oklahoma	0.4144393970%
OK108	Sequoyah County, Oklahoma	1.5345087624%
OK109	Shawnee City, Oklahoma	1.3614784311%
OK110	Stephens County, Oklahoma	0.8246887486%
OK111	Stillwater City, Oklahoma	0.8442351700%
OK112	Tahlequah City, Oklahoma	1.5329176592%
OK113	Texas County, Oklahoma	0.3711376613%
OK114	Tillman County, Oklahoma	0.1988848754%
OK115	Tulsa City, Oklahoma	11.8499277217%
OK116	Tulsa County, Oklahoma	5.3498014970%
OK117	Wagoner County, Oklahoma	0.8686244855%
OK118	Warr Acres City, Oklahoma	0.1616160377%
OK119	Washington County, Oklahoma	0.3936750370%
OK120	Washita County, Oklahoma	0.1931168527%
OK121	Weatherford City, Oklahoma	0.1872773945%
OK122	Woods County, Oklahoma	0.1975804400%
OK123	Woodward City, Oklahoma	0.2327716722%
OK124	Woodward County, Oklahoma	0.1781706634%
OK125	Yukon City, Oklahoma	0.3103071173%

State ID	Qualifying Subdivision	Consolidated State Allocation
OR1	Albany City, Oregon	1.1574421234%
OR2	Ashland City, Oregon	0.5725593238%
OR3	Astoria City, Oregon	0.1859283065%
OR4	Baker County, Oregon	0.4771636205%
OR5	Beaverton City, Oregon	0.9709676029%
OR6	Bend City, Oregon	0.9443519043%
OR7	Benton County, Oregon	1.0219885306%
OR8	Canby City, Oregon	0.1716812437%
OR9	Central Point City, Oregon	0.1718730043%
OR10	Clackamas County, Oregon	7.7713142577%
OR11	Clatsop County, Oregon	1.1423692099%
OR12	Columbia County, Oregon	1.0096699413%
OR13	Coos Bay City, Oregon	0.2538945929%
OR14	Coos County, Oregon	1.5633002470%
OR15	Cornelius City, Oregon	0.0949750265%
OR16	Corvallis City, Oregon	0.6633711425%
OR17	Cottage Grove City, Oregon	0.0910229575%
OR18	Crook County, Oregon	0.3513229911%
OR19	Curry County, Oregon	0.7612961295%
OR20	Dallas City, Oregon	0.1606964683%
OR21	Deschutes County, Oregon	2.2569753600%
OR22	Douglas County, Oregon	2.5689481047%
OR23	Eugene City, Oregon	2.7611039932%
OR24	Forest Grove City, Oregon	0.2522169415%
OR26	Gladstone City, Oregon	0.1181360032%
OR28	Grants Pass City, Oregon	0.8232581895%
OR29	Gresham City, Oregon	0.9831942718%
OR30	Happy Valley City, Oregon	0.0103506009%
OR32	Hermiston City, Oregon	0.1316304314%
OR33	Hillsboro City, Oregon	1.5083519364%
OR34	Hood River County, Oregon	0.3553687498%
OR35	Independence City, Oregon	0.0808970601%
OR36	Jackson County, Oregon	4.0769510640%
OR37	Jefferson County, Oregon	0.3674692915%
OR38	Josephine County, Oregon	1.6536523798%
OR39	Keizer City, Oregon	0.1916558451%
OR40	Klamath County, Oregon	1.2169628601%
OR41	Klamath Falls City, Oregon	0.3209275214%
OR42	La Grande City, Oregon	0.2715648669%
OR44	Lake Oswego City, Oregon	0.6934160342%
OR45	Lane County, Oregon	6.3326808234%
OR46	Lebanon City, Oregon	0.3269345282%
OR47	Lincoln County, Oregon	1.5190343268%
OR48	Linn County, Oregon	1.8185376689%
OR49	Malheur County, Oregon	0.5014027023%
OR50	Marion County, Oregon	4.1636475308%
OR51	McMinnville City, Oregon	0.4803592635%
OR52	Medford City, Oregon	1.5540758598%
OR53	Milwaukie City, Oregon	0.2113647118%

State ID	Qualifying Subdivision	Consolidated State Allocation
OR54	Monmouth City, Oregon	0.0706960930%
OR55	Morrow County, Oregon	0.1351544937%
OR56	Multnomah County, Oregon	13.9643815662%
OR57	Newberg City, Oregon	0.4093257361%
OR58	Newport City, Oregon	0.1908392623%
OR59	Ontario City, Oregon	0.1869780182%
OR60	Oregon City, Oregon	0.2765040475%
OR61	Pendleton City, Oregon	0.3521049458%
OR62	Polk County, Oregon	0.7074299681%
OR63	Portland City, Oregon	8.2736702858%
OR64	Prineville City, Oregon	0.0924861843%
OR65	Redmond City, Oregon	0.1550311086%
OR66	Roseburg City, Oregon	0.6370799877%
OR67	Salem City, Oregon	3.0438221421%
OR68	Sandy City, Oregon	0.0775015682%
OR70	Sherwood City, Oregon	0.1404204928%
OR71	Silverton City, Oregon	0.0775630731%
OR72	Springfield City, Oregon	1.1667234659%
OR73	St. Helens City, Oregon	0.1964453077%
OR74	The Dalles City, Oregon	0.1723418738%
OR75	Tigard City, Oregon	0.5049875956%
OR76	Tillamook County, Oregon	0.9001228870%
OR77	Troutdale City, Oregon	0.0899929610%
OR78	Tualatin City, Oregon	0.1551565618%
OR79	Umatilla County, Oregon	0.9738633884%
OR80	Union County, Oregon	0.4153841374%
OR82	Wasco County, Oregon	0.4116278731%
OR83	Washington County, Oregon	7.2167622210%
OR84	West Linn City, Oregon	0.1600504983%
OR86	Wilsonville City, Oregon	0.1383351396%
OR87	Woodburn City, Oregon	0.2069349266%
OR88	Yamhill County, Oregon	1.4120246444%

State ID	Qualifying Subdivision	Consolidated State Allocation
PA2	Adams County, Pennsylvania	
PA4	Aliquippa City, Pennsylvania	
PA5	Allegheny County, Pennsylvania	
PA6	Allentown City, Pennsylvania	
PA10	Armstrong County, Pennsylvania	
PA13	Beaver County, Pennsylvania	
PA14	Bedford County, Pennsylvania	
PA15	Bensalem Township, Pennsylvania	
PA16	Berks County, Pennsylvania	
PA20	Blair County, Pennsylvania	
PA22	Bradford County, Pennsylvania	
PA23	Bristol Township, Pennsylvania	
PA25	Bucks County, Pennsylvania	
PA27	Butler County, Pennsylvania	
PA30	Cambria County, Pennsylvania	
PA31	Cameron County, Pennsylvania	
PA32	Carbon County, Pennsylvania	
PA36	Centre County, Pennsylvania	
PA40	Chester County, Pennsylvania	
PA42	Clarion County, Pennsylvania	
PA43	Clearfield County, Pennsylvania	
PA44	Clinton County, Pennsylvania	
PA46	Coatesville City, Pennsylvania	Allocations in Pennsylvania will be made in accordance with the Pennsylvania Trust and Allocation Order.
PA49	Columbia County, Pennsylvania	
PA53	Crawford County, Pennsylvania	
PA54	Cumberland County, Pennsylvania	
PA57	Dauphin County, Pennsylvania	
PA58	Delaware County, Pennsylvania	
PA76	Edwardsville Borough, Pennsylvania	
PA79	Elk County, Pennsylvania	
PA84	Erie County, Pennsylvania	
PA85	Exeter Borough, Pennsylvania	
PA90	Fayette County, Pennsylvania	
PA92	Forest County, Pennsylvania	
PA94	Forty Fort Borough, Pennsylvania	
PA96	Franklin County, Pennsylvania	
PA98	Fulton County, Pennsylvania	
PA99	Greene County, Pennsylvania	
PA107	Hanover Township, Luzerne County, Pennsylvania	
PA114	Hazleton City, Pennsylvania	
PA120	Huntingdon County, Pennsylvania	
PA122	Indiana County, Pennsylvania	
PA123	Jefferson County, Pennsylvania	
PA126	Juniata County, Pennsylvania	
PA127	Kingston Borough, Pennsylvania	
PA128	Lackawanna County, Pennsylvania	
PA130	Lancaster County, Pennsylvania	

State ID	Qualifying Subdivision	Consolidated State Allocation
PA134	Lawrence County, Pennsylvania	
PA136	Lebanon County, Pennsylvania	
PA137	Lehigh County, Pennsylvania	
PA141	Lock Haven City, Pennsylvania	
PA147	Lower Makefield Township, Pennsylvania	
PA155	Lower Southampton Township, Pennsylvania	
PA157	Luzerne County, Pennsylvania	
PA158	Lycoming County, Pennsylvania	
PA348	Mahoning Township, Lawrence County, Pennsylvania	
PA164	McKean County, Pennsylvania	
PA167	Mercer County, Pennsylvania	
PA169	Middletown Township, Bucks County, Pennsylvania	
PA171	Mifflin County, Pennsylvania	
PA174	Monroe County, Pennsylvania	
PA176	Montgomery County, Pennsylvania	
PA178	Montour County, Pennsylvania	
PA180	Morrisville Borough, Pennsylvania	Allocations in Pennsylvania will be made in accordance with the Pennsylvania Trust and Allocation Order.
PA187	Nanticoke City, Pennsylvania	
PA190	New Castle City, Pennsylvania	
PA195	Newtown Township, Bucks County, Pennsylvania	
PA197	Norristown Borough, Pennsylvania	
PA205	Northampton County, Pennsylvania	
PA207	Northumberland County, Pennsylvania	
PA213	Perry County, Pennsylvania	
PA215	Philadelphia City, Pennsylvania	
PA217	Pike County, Pennsylvania	
PA219	Pittsburgh City, Pennsylvania	
PA220	Plains Township, Pennsylvania	
PA225	Potter County, Pennsylvania	
PA241	Schuylkill County, Pennsylvania	
PA248	Snyder County, Pennsylvania	
PA249	Somerset County, Pennsylvania	
PA265	Sugar Notch Borough, Pennsylvania	
PA266	Sullivan County, Pennsylvania	
PA267	Susquehanna County, Pennsylvania	
PA270	Tioga County, Pennsylvania	
PA273	Union County, Pennsylvania	

State ID	Qualifying Subdivision	Consolidated State Allocation
PA349	Union Township, Lawrence County, Pennsylvania	
PA290	Venango County, Pennsylvania	
PA350	Wampum Borough, Pennsylvania	
PA291	Warminster Township, Pennsylvania	
PA292	Warren County, Pennsylvania	
PA293	Warrington Township, Bucks County, Pennsylvania	
PA297	Washington County, Pennsylvania	
PA299	Wayne County, Pennsylvania	
PA310	West Norriton Township, Pennsylvania	
PA311	West Pittston Borough, Pennsylvania	
PA313	Westmoreland County, Pennsylvania	
PA320	Wilkes Barre Township, Pennsylvania	
PA321	Wilkes-Barre City, Pennsylvania	
PA327	Wright Township, Pennsylvania	
PA328	Wyoming Borough, Pennsylvania	Allocations in Pennsylvania will be made in accordance with the Pennsylvania Trust and Allocation Order.
PA329	Wyoming County, Pennsylvania	
PA333	York County, Pennsylvania	
PA335	Fairview Township, Luzerne County, Pennsylvania	
PA336	District Attorney of Allegheny County, Pennsylvania	
PA337	District Attorney of Berks County, Pennsylvania	
PA338	District Attorney of Bucks County, Pennsylvania	
PA339	District Attorney of Chester County, Pennsylvania	
PA340	District Attorney of Clearfield County, Pennsylvania	
PA341	District Attorney of Dauphin County, Pennsylvania	
PA342	District Attorney of Delaware County, Pennsylvania	
PA343	District Attorney of Erie County, Pennsylvania	
PA344	District Attorney of Lehigh County, Pennsylvania	
PA345	District Attorney of Northampton County, Pennsylvania	
PA346	District Attorney of Philadelphia County, Pennsylvania	

State ID	Qualifying Subdivision	Consolidated State Allocation
PA347	District Attorney of Westmoreland County, Pennsylvania	Allocations in Pennsylvania will be made in accordance with the Pennsylvania Trust and Allocation Order.
PA351	Southeastern Pennsylvania Transportation Authority, Pennsylvania	

State ID	Qualifying Subdivision	Consolidated State Allocation
PR1	Adjuntas, Puerto Rico	0.4468461493%
PR2	Aguada, Puerto Rico	0.9238661758%
PR3	Aguadilla, Puerto Rico	1.6156167759%
PR4	Aguas Buenas, Puerto Rico	0.7490858028%
PR5	Aibonito, Puerto Rico	0.7959428477%
PR6	Anasco, Puerto Rico	0.5050154853%
PR7	Arecibo, Puerto Rico	1.3074850692%
PR8	Arroyo, Puerto Rico	2.0592191012%
PR9	Barceloneta, Puerto Rico	0.5768569406%
PR10	Barranquitas, Puerto Rico	0.7167107056%
PR11	Bayamon, Puerto Rico	5.7282390971%
PR12	Cabo Rojo, Puerto Rico	1.1570847420%
PR13	Caguas, Puerto Rico	4.7119895861%
PR14	Camuy, Puerto Rico	0.7759381807%
PR15	Canovanas, Puerto Rico	1.0721780377%
PR16	Carolina, Puerto Rico	4.3228006165%
PR17	Catano, Puerto Rico	0.7612066695%
PR18	Cayey, Puerto Rico	1.3596493469%
PR19	Ceiba, Puerto Rico	0.2896687707%
PR20	Ciales, Puerto Rico	0.4533215195%
PR21	Cidra, Puerto Rico	1.1671492158%
PR22	Coamo, Puerto Rico	0.9970822347%
PR23	Comerio, Puerto Rico	0.5268640655%
PR24	Corozal, Puerto Rico	0.8595048594%
PR25	Culebra, Puerto Rico	0.0380175870%
PR26	Dorado, Puerto Rico	0.8970759382%
PR27	Fajardo, Puerto Rico	1.1102770585%
PR28	Florida, Puerto Rico	0.2695408253%
PR29	Guanica, Puerto Rico	0.4269617539%
PR30	Guayama, Puerto Rico	1.3293151076%
PR31	Guayanilla, Puerto Rico	0.4886780984%
PR32	Guaynabo, Puerto Rico	2.3185934725%
PR33	Gurabo, Puerto Rico	0.9866291335%
PR34	Hatillo, Puerto Rico	1.0577790273%
PR35	Hormigueros, Puerto Rico	0.3963005262%
PR36	Humacao, Puerto Rico	1.8829438530%
PR37	Isabela, Puerto Rico	1.0062900243%
PR38	Jayuya, Puerto Rico	0.3757431113%
PR39	Juana Diaz, Puerto Rico	1.7179648597%
PR40	Juncos, Puerto Rico	0.9543672919%
PR41	Lajas, Puerto Rico	0.5633742491%
PR42	Lares, Puerto Rico	0.6852103333%
PR43	Las Marias, Puerto Rico	0.2285582941%
PR44	Las Piedras, Puerto Rico	0.8440153869%
PR45	Loiza, Puerto Rico	0.7971240145%
PR46	Luquillo, Puerto Rico	0.5035020683%
PR47	Manati, Puerto Rico	1.3858134207%
PR48	Maricao, Puerto Rico	0.1311593846%
PR49	Maunabo, Puerto Rico	0.2983734242%

State ID	Qualifying Subdivision	Consolidated State Allocation
PR50	Mayaguez, Puerto Rico	2.7384221211%
PR51	Moca, Puerto Rico	0.9400143856%
PR52	Morovis, Puerto Rico	0.7678286207%
PR53	Naguabo, Puerto Rico	0.6776685553%
PR54	Naranjito, Puerto Rico	0.6713715879%
PR55	Orocovis, Puerto Rico	0.5209419444%
PR56	Patillas, Puerto Rico	0.4307397840%
PR57	Penuelas, Puerto Rico	0.5782731381%
PR58	Ponce, Puerto Rico	5.1762853836%
PR59	Quebradillas, Puerto Rico	0.6086201563%
PR60	Rincon, Puerto Rico	0.3607312171%
PR61	Rio Grande, Puerto Rico	1.2995118170%
PR62	Sabana Grande, Puerto Rico	0.5625075422%
PR63	Salinas, Puerto Rico	0.8069301551%
PR64	San German, Puerto Rico	0.9914753253%
PR65	San Juan, Puerto Rico	13.8003700360%
PR66	San Lorenzo, Puerto Rico	1.0322446251%
PR67	San Sebastian, Puerto Rico	0.9222442638%
PR68	Santa Isabel, Puerto Rico	0.5210354055%
PR69	Toa Alta, Puerto Rico	1.7552873773%
PR70	Toa Baja, Puerto Rico	2.1783919223%
PR71	Trujillo Alto, Puerto Rico	1.9136501824%
PR72	Utuado, Puerto Rico	0.7718304061%
PR73	Vega Alta, Puerto Rico	0.9338331796%
PR74	Vega Baja, Puerto Rico	1.6886509241%
PR75	Vieques, Puerto Rico	0.1979351524%
PR76	Villalba, Puerto Rico	0.5576736281%
PR77	Yabucoa, Puerto Rico	0.8842993409%
PR78	Yauco, Puerto Rico	1.1383015829%

State ID	Qualifying Subdivision	Consolidated State Allocation
RI1	Barrington Town, Rhode Island	2.3000539202%
RI2	Bristol Town, Rhode Island	1.0821868960%
RI3	Burrillville Town, Rhode Island	1.3272036109%
RI4	Central Falls City, Rhode Island	0.9147584689%
RI5	Charlestown, Rhode Island	0.5887860100%
RI6	Coventry Town, Rhode Island	3.5886939036%
RI7	Cranston City, Rhode Island	7.8869595262%
RI8	Cumberland Town, Rhode Island	2.4742003754%
RI9	East Greenwich Town, Rhode Island	1.7467671439%
RI10	East Providence City, Rhode Island	4.3247728580%
RI11	Exeter Town, Rhode Island	0.0071810640%
RI12	Foster Town, Rhode Island	0.2489021533%
RI13	Glocester Town, Rhode Island	0.8508469130%
RI14	Hopkinton Town, Rhode Island	0.7098006614%
RI15	Jamestown, Rhode Island	0.4220295287%
RI16	Johnston Town, Rhode Island	3.0898685140%
RI17	Lincoln Town, Rhode Island	2.1171973520%
RI18	Little Compton Town, Rhode Island	0.2663017745%
RI19	Middletown, Rhode Island	1.2877439601%
RI20	Narragansett Town, Rhode Island	1.2760123800%
RI21	New Shoreham Town, Rhode Island	0.2118269375%
RI22	Newport City, Rhode Island	2.3339316695%
RI23	North Kingstown, Rhode Island	2.6500524514%
RI24	North Providence Town, Rhode Island	2.5306229398%
RI25	North Smithfield Town, Rhode Island	1.1299013506%
RI26	Pawtucket City, Rhode Island	5.9652217345%
RI27	Portsmouth Town, Rhode Island	1.2807429020%
RI28	Providence City, Rhode Island	21.4858080262%
RI29	Richmond Town, Rhode Island	0.0818789542%
RI30	Scituate Town, Rhode Island	1.0248588645%
RI31	Smithfield Town, Rhode Island	1.7724673574%
RI32	South Kingstown, Rhode Island	2.3282747894%
RI33	Tiverton Town, Rhode Island	0.9907730639%
RI34	Warren Town, Rhode Island	0.1394116029%
RI35	Warwick City, Rhode Island	9.9418184427%
RI36	West Greenwich Town, Rhode Island	0.7104734659%
RI37	West Warwick Town, Rhode Island	3.0239943495%
RI38	Westerly Town, Rhode Island	2.0135754535%
RI39	Woonsocket City, Rhode Island	3.8740986306%

State ID	Qualifying Subdivision	Consolidated State Allocation
SC1	Abbeville County, South Carolina	0.3350059823%
SC2	Aiken City, South Carolina	0.7838026892%
SC3	Aiken County, South Carolina	2.5661670597%
SC4	Allendale County, South Carolina	0.1220441823%
SC5	Anderson City, South Carolina	1.1735303052%
SC6	Anderson County, South Carolina	3.3392231904%
SC7	Bamberg County, South Carolina	0.2705913372%
SC8	Barnwell County, South Carolina	0.4653224769%
SC9	Beaufort City, South Carolina	0.0769982478%
SC10	Beaufort County, South Carolina	2.3364418352%
SC11	Berkeley County, South Carolina	2.0961440294%
SC12	Bluffton Town, South Carolina	0.0481968917%
SC13	Calhoun County, South Carolina	0.1833260393%
SC14	Cayce City, South Carolina	0.2572136960%
SC15	Charleston City, South Carolina	2.3004340552%
SC16	Charleston County, South Carolina	3.8016438488%
SC17	Cherokee County, South Carolina	0.9440700745%
SC18	Chester City, South Carolina	0.1299573133%
SC19	Chester County, South Carolina	0.3947965211%
SC20	Chesterfield County, South Carolina	0.9443488664%
SC21	Clarendon County, South Carolina	0.5705383575%
SC22	Clemson City, South Carolina	0.3311616877%
SC23	Colleton County, South Carolina	0.8589365535%
SC24	Columbia City, South Carolina	2.3918060702%
SC25	Conway City, South Carolina	0.2894739402%
SC26	Darlington County, South Carolina	1.6906462867%
SC27	Dillon County, South Carolina	0.6608411417%
SC28	Dorchester County, South Carolina	1.6015765975%
SC29	Easley City, South Carolina	0.8565835771%
SC30	Edgefield County, South Carolina	0.3586097074%
SC31	Fairfield County, South Carolina	0.3536421891%
SC32	Florence City, South Carolina	1.0065336904%
SC33	Florence County, South Carolina	2.2059006272%
SC34	Forest Acres City, South Carolina	0.0995929056%
SC35	Fort Mill Town, South Carolina	0.1714974802%
SC36	Fountain Inn City, South Carolina	0.1975697094%
SC37	Gaffney City, South Carolina	0.2044353782%
SC38	Georgetown City, South Carolina	0.2626233562%
SC39	Georgetown County, South Carolina	1.1895098900%
SC40	Goose Creek City, South Carolina	0.5473575768%
SC41	Greenville City, South Carolina	2.2705648395%
SC42	Greenville County, South Carolina	7.1502328364%
SC43	Greenwood City, South Carolina	0.0308220618%
SC44	Greenwood County, South Carolina	1.3388944490%
SC45	Greer City, South Carolina	0.5590564672%

State ID	Qualifying Subdivision	Consolidated State Allocation
SC46	Hampton County, South Carolina	0.3450376919%
SC47	Hanahan City, South Carolina	0.2279684840%
SC48	Hilton Head Island Town, South Carolina	0.2323878458%
SC49	Horry County, South Carolina	5.2166718879%
SC50	Irmo Town, South Carolina	0.0942740906%
SC51	James Island Town, South Carolina	0.0461551887%
SC52	Jasper County, South Carolina	0.4278548317%
SC53	Kershaw County, South Carolina	1.0780892823%
SC54	Lancaster County, South Carolina	1.4809282603%
SC55	Laurens County, South Carolina	1.3598442946%
SC56	Lee County, South Carolina	0.2176621820%
SC57	Lexington County, South Carolina	4.4881391605%
SC58	Lexington Town, South Carolina	0.2342104062%
SC59	Marion County, South Carolina	0.6973242307%
SC60	Marlboro County, South Carolina	0.4878238042%
SC61	Mauldin City, South Carolina	0.4253253929%
SC62	McCormick County, South Carolina	0.1281623493%
SC63	Moncks Corner Town, South Carolina	0.1965426445%
SC64	Mount Pleasant Town, South Carolina	0.5750801889%
SC65	Myrtle Beach City, South Carolina	1.9068234068%
SC66	Newberry City, South Carolina	0.0344864657%
SC67	Newberry County, South Carolina	0.5656551710%
SC68	North Augusta City, South Carolina	0.5139678525%
SC69	North Charleston City, South Carolina	1.7751090959%
SC70	North Myrtle Beach City, South Carolina	0.6366313248%
SC71	Oconee County, South Carolina	2.8099515214%
SC72	Orangeburg City, South Carolina	0.0468940344%
SC73	Orangeburg County, South Carolina	1.4543982912%
SC74	Pickens County, South Carolina	2.8143347165%
SC75	Port Royal Town, South Carolina	0.0206098617%
SC76	Richland County, South Carolina	3.8816723839%
SC77	Rock Hill City, South Carolina	1.3120073555%
SC78	Saluda County, South Carolina	0.2604801809%
SC79	Simpsonville City, South Carolina	0.3497064495%
SC80	Spartanburg City, South Carolina	1.1890308958%
SC81	Spartanburg County, South Carolina	6.4084293395%
SC82	Summerville Town, South Carolina	0.6446011912%
SC83	Sumter City, South Carolina	0.5390642671%

State ID	Qualifying Subdivision	Consolidated State Allocation
SC84	Sumter County, South Carolina	0.9480995733%
SC85	Tega Cay City, South Carolina	0.0433365022%
SC86	Union County, South Carolina	0.6499524020%
SC87	West Columbia City, South Carolina	0.3943858322%
SC88	Williamsburg County, South Carolina	0.4931357629%
SC89	York County, South Carolina	2.5800878865%

State ID	Qualifying Subdivision	Consolidated State Allocation
SD1	Aberdeen City, South Dakota	1.7806789284%
SD2	Aurora County, South Dakota	0.1283252150%
SD3	Beadle County, South Dakota	0.8743032704%
SD4	Bennett County, South Dakota	0.1895703332%
SD5	Bon Homme County, South Dakota	0.6047162426%
SD6	Box Elder City, South Dakota	0.2251076107%
SD7	Brandon City, South Dakota	0.4012895918%
SD8	Brookings City, South Dakota	2.4259611863%
SD9	Brookings County, South Dakota	0.2802421588%
SD10	Brown County, South Dakota	1.7764564315%
SD11	Brule County, South Dakota	0.8045710091%
SD12	Buffalo County, South Dakota	0.1823519926%
SD13	Butte County, South Dakota	0.8926544344%
SD14	Campbell County, South Dakota	0.0682419048%
SD15	Charles Mix County, South Dakota	0.8084433424%
SD16	Clark County, South Dakota	0.2550260601%
SD17	Clay County, South Dakota	0.4415194932%
SD18	Codington County, South Dakota	0.8721266365%
SD19	Corson County, South Dakota	0.3429322421%
SD20	Custer County, South Dakota	1.0868471426%
SD21	Davison County, South Dakota	0.6815458005%
SD22	Day County, South Dakota	0.3921680475%
SD23	Deuel County, South Dakota	0.4035008098%
SD24	Dewey County, South Dakota	0.3699996685%
SD25	Douglas County, South Dakota	0.2891518759%
SD26	Edmunds County, South Dakota	0.2529348056%
SD27	Fall River County, South Dakota	2.1968904590%
SD28	Faulk County, South Dakota	0.2772473959%
SD29	Grant County, South Dakota	0.6923230564%
SD30	Gregory County, South Dakota	0.5555128599%
SD31	Haakon County, South Dakota	0.1774497029%
SD32	Hamlin County, South Dakota	0.3340117176%
SD33	Hand County, South Dakota	0.2401311401%
SD34	Hanson County, South Dakota	0.1484271966%
SD35	Harding County, South Dakota	0.0620805393%
SD36	Hughes County, South Dakota	0.8137066032%
SD37	Huron City, South Dakota	0.8308959590%
SD38	Hutchinson County, South Dakota	0.5659237410%
SD39	Hyde County, South Dakota	0.0640529112%
SD40	Jackson County, South Dakota	0.1437421380%
SD41	Jerauld County, South Dakota	0.3258250234%
SD42	Jones County, South Dakota	0.0451732597%
SD43	Kingsbury County, South Dakota	0.3721763025%
SD44	Lake County, South Dakota	0.8273932428%
SD45	Lawrence County, South Dakota	2.3838237581%
SD46	Lincoln County, South Dakota	1.2611723923%
SD47	Lyman County, South Dakota	0.3239942300%

State ID	Qualifying Subdivision	Consolidated State Allocation
SD48	Marshall County, South Dakota	0.5625107271%
SD49	McCook County, South Dakota	0.3047773840%
SD50	McPherson County, South Dakota	0.1613184030%
SD51	Meade County, South Dakota	3.2698326502%
SD52	Mellette County, South Dakota	0.1848247525%
SD53	Miner County, South Dakota	0.1616739703%
SD54	Minnehaha County, South Dakota	12.2243522517%
SD55	Mitchell City, South Dakota	1.5031732329%
SD56	Moody County, South Dakota	0.4743937985%
SD57	Oglala Lakota County, South Dakota	1.3919692864%
SD58	Pennington County, South Dakota	8.0611767283%
SD59	Perkins County, South Dakota	0.3755374403%
SD60	Pierre City, South Dakota	0.6216678331%
SD61	Potter County, South Dakota	0.1893444561%
SD62	Rapid City, South Dakota	6.9492723574%
SD63	Roberts County, South Dakota	0.9943780269%
SD64	Sanborn County, South Dakota	0.1141857404%
SD65	Sioux Falls City, South Dakota	21.6732660428%
SD66	Spearfish City, South Dakota	0.8208633410%
SD67	Spink County, South Dakota	0.7324773052%
SD68	Stanley County, South Dakota	0.1733882380%
SD69	Sully County, South Dakota	0.0632218131%
SD70	Todd County, South Dakota	1.0677859248%
SD71	Tripp County, South Dakota	0.6252580903%
SD72	Turner County, South Dakota	0.6536969906%
SD73	Union County, South Dakota	1.4531041680%
SD74	Vermillion City, South Dakota	0.5912781760%
SD75	Walworth County, South Dakota	0.5615110318%
SD76	Watertown City, South Dakota	1.6132964277%
SD77	Yankton City, South Dakota	1.2219897393%
SD78	Yankton County, South Dakota	1.4233435084%
SD79	Ziebach County, South Dakota	0.3085103004%

State ID	Qualifying Subdivision	Consolidated State Allocation
TN3	Anderson County, Tennessee	1.2063249026%
TN5	Arlington Town, Tennessee	0.0036566309%
TN8	Bartlett City, Tennessee	0.0730561566%
TN10	Bedford County, Tennessee	0.5762663555%
TN12	Benton County, Tennessee	0.5216608068%
TN13	Bledsoe County, Tennessee	0.1398580820%
TN14	Blount County, Tennessee	1.9196465581%
TN15	Bradley County, Tennessee	1.0430217552%
TN16	Brentwood City, Tennessee	0.0478208600%
TN17	Bristol City, Tennessee	0.5426871150%
TN19	Campbell County, Tennessee	1.5974370559%
TN20	Cannon County, Tennessee	0.3205453949%
TN21	Carroll County, Tennessee	0.4438060785%
TN22	Carter County, Tennessee	0.8435596891%
TN27	Chattanooga City, Tennessee	0.4981237028%
TN28	Cheatham County, Tennessee	0.8209998781%
TN29	Chester County, Tennessee	0.1751399118%
TN30	Claiborne County, Tennessee	1.1929412357%
TN31	Clarksville City, Tennessee	0.2296815192%
TN32	Clay County, Tennessee	0.3261509170%
TN33	Cleveland City, Tennessee	0.5531282252%
TN36	Cocke County, Tennessee	0.8746257470%
TN37	Coffee County, Tennessee	0.8953551698%
TN39	Collierville Town, Tennessee	0.0617375387%
TN41	Columbia City, Tennessee	0.0390894158%
TN42	Cookeville City, Tennessee	0.8404101920%
TN45	Crockett County, Tennessee	0.1232062476%
TN47	Cumberland County, Tennessee	0.8784847959%
TN48	Dandridge Town, Tennessee	0.0109089663%
TN49	De Kalb County, Tennessee	0.4478425886%
TN50	Decatur County, Tennessee	0.3607195939%
TN51	Decatur Town, Tennessee	0.0050599481%
TN53	Dickson County, Tennessee	0.8341347308%
TN56	Dyer County, Tennessee	0.4019088559%
TN64	Fayette County, Tennessee	0.3157083831%
TN66	Fentress County, Tennessee	0.5526714656%
TN67	Franklin City, Tennessee	0.1089989646%
TN68	Franklin County, Tennessee	0.6323371108%
TN69	Gallatin City, Tennessee	0.0760079674%
TN70	Gatlinburg City, Tennessee	0.0507819668%
TN71	Germantown City, Tennessee	0.0687501047%
TN72	Gibson County, Tennessee	0.4940695219%
TN73	Giles County, Tennessee	0.4604367666%
TN75	Grainger County, Tennessee	0.4671260668%
TN76	Greene County, Tennessee	1.2127967101%
TN78	Grundy County, Tennessee	0.3896858892%
TN79	Hamblen County, Tennessee	2.2614488604%
TN80	Hamilton County, Tennessee	4.2055530346%
TN81	Hancock County, Tennessee	0.2089065376%

State ID	Qualifying Subdivision	Consolidated State Allocation
TN82	Hardeman County, Tennessee	0.2150658408%
TN83	Hardin County, Tennessee	0.5683946644%
TN84	Hartsville/Trousdale County, Tennessee	0.1139641522%
TN85	Hawkins County, Tennessee	1.0968095083%
TN86	Haywood County, Tennessee	0.1104263592%
TN87	Henderson County, Tennessee	0.2498867656%
TN88	Hendersonville City, Tennessee	0.1137407554%
TN89	Henry County, Tennessee	0.6661685991%
TN90	Hickman County, Tennessee	0.2804089244%
TN91	Houston County, Tennessee	0.1198735525%
TN92	Humphreys County, Tennessee	0.2441608982%
TN93	Jackson City, Tennessee	0.0431370644%
TN94	Jackson County, Tennessee	0.2780985367%
TN95	Jefferson County, Tennessee	0.8912247367%
TN96	Johnson City, Tennessee	1.0682855260%
TN97	Johnson County, Tennessee	0.2282065978%
TN98	Kingsport City, Tennessee	0.9871149359%
TN99	Knox County, Tennessee	9.1809198144%
TN100	Knoxville City, Tennessee	1.5417816888%
TN101	La Vergne City, Tennessee	0.0518950147%
TN102	Lake County, Tennessee	0.0671464632%
TN104	Lauderdale County, Tennessee	0.2733775153%
TN105	Lawrence County, Tennessee	0.6992850503%
TN107	Lebanon City, Tennessee	0.1110258247%
TN108	Lewis County, Tennessee	0.1528225920%
TN110	Lexington City, Tennessee	0.0796867496%
TN112	Lincoln County, Tennessee	0.4060784411%
TN115	Loudon County, Tennessee	0.8992484296%
TN116	Lynchburg, Moore County Metropolitan Government, Tennessee	0.0579106070%
TN118	Macon County, Tennessee	0.3091017000%
TN119	Madison County, Tennessee	0.8907256845%
TN121	Marion County, Tennessee	0.3637161259%
TN122	Marshall County, Tennessee	0.5422227344%
TN124	Maryville City, Tennessee	0.3223901040%
TN125	Maury County, Tennessee	1.0772540178%
TN126	McMinn County, Tennessee	0.9297273747%
TN128	McNairy County, Tennessee	0.4269884656%
TN129	Meigs County, Tennessee	0.2016450737%
TN130	Memphis City, Tennessee	4.9079216307%
TN131	Millington City, Tennessee	0.0212200583%
TN133	Monroe County, Tennessee	0.7506735593%
TN135	Montgomery County, Tennessee	1.6758545682%
TN136	Morgan County, Tennessee	0.5132562715%
TN138	Morristown City, Tennessee	0.3919462797%
TN139	Mount Juliet City, Tennessee	0.0577622481%
TN141	Murfreesboro City, Tennessee	0.7283549414%

State ID	Qualifying Subdivision	Consolidated State Allocation
TN142	Nashville-Davidson Metropolitan Government, Tennessee	8.9810236006%
TN145	Oak Ridge City, Tennessee	0.9598050011%
TN146	Obion County, Tennessee	0.3198033491%
TN147	Overton County, Tennessee	0.5461670803%
TN149	Perry County, Tennessee	0.0857864664%
TN151	Pickett County, Tennessee	0.1471132648%
TN152	Pigeon Forge City, Tennessee	0.0877322588%
TN154	Polk County, Tennessee	0.3220131560%
TN157	Putnam County, Tennessee	0.3930896023%
TN159	Rhea County, Tennessee	0.5404420504%
TN160	Ripley City, Tennessee	0.0190759934%
TN161	Roane County, Tennessee	1.6361535854%
TN162	Robertson County, Tennessee	0.9333043197%
TN163	Rutherford County, Tennessee	2.5756978154%
TN164	Scott County, Tennessee	0.5189341096%
TN165	Sequatchie County, Tennessee	0.2433974548%
TN166	Sevier County, Tennessee	1.4412782095%
TN168	Shelby County, Tennessee	3.5255489082%
TN170	Smith County, Tennessee	0.5711842980%
TN172	Smyrna Town, Tennessee	0.1314691656%
TN176	Spring Hill City, Tennessee	0.0244598773%
TN179	Stewart County, Tennessee	0.1459273147%
TN180	Sullivan County, Tennessee	1.4573397906%
TN181	Sumner County, Tennessee	1.7449087187%
TN182	Tipton County, Tennessee	0.6312749815%
TN184	Unicoi County, Tennessee	0.3464527663%
TN186	Union County, Tennessee	0.5606745148%
TN187	Van Buren County, Tennessee	0.0479172535%
TN189	Warren County, Tennessee	0.5719112694%
TN191	Washington County, Tennessee	1.1061046159%
TN192	Wayne County, Tennessee	0.2328717594%
TN194	Weakley County, Tennessee	0.3874777573%
TN195	White County, Tennessee	0.4162394991%
TN197	Williamson County, Tennessee	1.6843304984%
TN198	Wilson County, Tennessee	1.4019072760%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1	Abbott City, Texas	0.0004586670%
TX2	Abernathy City, Texas	0.0000733330%
TX3	Abilene City, Texas	0.3758786670%
TX4	Ackerly City, Texas	0.0000140000%
TX5	Addison Town, Texas	0.0387293330%
TX6	Adrian City, Texas	0.0001206670%
TX7	Agua Dulce City, Texas	0.0000286670%
TX8	Alamo City, Texas	0.0147473330%
TX9	Alamo Heights City, Texas	0.0187986670%
TX10	Alba Town, Texas	0.0021306670%
TX11	Albany City, Texas	0.0001200000%
TX12	Aledo City, Texas	0.0002206670%
TX13	Alice City, Texas	0.0475273330%
TX14	Allen City, Texas	0.2100540000%
TX15	Alma Town, Texas	0.0007380000%
TX16	Alpine City, Texas	0.0197906670%
TX17	Alto Town, Texas	0.0025113330%
TX18	Alton City, Texas	0.0076933330%
TX19	Alvarado City, Texas	0.0193526670%
TX20	Alvin City, Texas	0.0759746670%
TX21	Alvord Town, Texas	0.0002386670%
TX22	Amarillo City, Texas	0.6584406670%
TX23	Ames City, Texas	0.0037140000%
TX24	Amherst City, Texas	0.0000146670%
TX25	Anahuac City, Texas	0.0003613330%
TX26	Anderson City, Texas	0.0000126670%
TX27	Anderson County, Texas	0.1791753330%
TX28	Andrews City, Texas	0.0126553330%
TX29	Andrews County, Texas	0.0250706670%
TX30	Angelina County, Texas	0.1533040000%
TX31	Angleton City, Texas	0.0418606670%
TX32	Angus City, Texas	0.0002206670%
TX33	Anna City, Texas	0.0060500000%
TX34	Annetta North Town, Texas	0.0000226670%
TX35	Annetta South Town, Texas	0.0004013330%
TX36	Annetta Town, Texas	0.0039706670%
TX37	Annona Town, Texas	0.0004920000%
TX38	Anson City, Texas	0.0034226670%
TX39	Anthony Town, Texas	0.0030093330%
TX40	Anton City, Texas	0.0002960000%
TX41	Appleby City, Texas	0.0010340000%
TX42	Aquilla City, Texas	0.0001386670%
TX43	Aransas County, Texas	0.1776746670%
TX44	Aransas Pass City, Texas	0.0385420000%
TX45	Archer City, Texas	0.0070360000%
TX46	Archer County, Texas	0.0303560000%
TX47	Arcola City, Texas	0.0048600000%
TX48	Argyle City, Texas	0.0076040000%
TX49	Arlington City, Texas	0.4905353330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX50	Armstrong County, Texas	0.0006493330%
TX51	Arp City, Texas	0.0013393330%
TX52	Asherton City, Texas	0.0000746670%
TX53	Aspermont Town, Texas	0.0000060000%
TX54	Atascosa County, Texas	0.1179353330%
TX55	Athens City, Texas	0.0706280000%
TX56	Atlanta City, Texas	0.0206633330%
TX57	Aubrey City, Texas	0.0100940000%
TX58	Aurora City, Texas	0.0012326670%
TX59	Austin City, Texas	3.2518106670%
TX60	Austin County, Texas	0.0506866670%
TX61	Austwell City, Texas	0.0000726670%
TX62	Avery Town, Texas	0.0000920000%
TX63	Avinger Town, Texas	0.0007433330%
TX64	Azle City, Texas	0.0214753330%
TX65	Bailey City, Texas	0.0006333330%
TX66	Bailey County, Texas	0.0102513330%
TX67	Bailey's Prairie Village, Texas	0.0037360000%
TX68	Baird City, Texas	0.0018680000%
TX69	Balch Springs City, Texas	0.0182386670%
TX70	Balcones Heights City, Texas	0.0158740000%
TX71	Ballinger City, Texas	0.0061146670%
TX72	Balmorhea City, Texas	0.0000420000%
TX73	Bandera City, Texas	0.0019286670%
TX74	Bandera County, Texas	0.0578766670%
TX75	Bangs City, Texas	0.0020333330%
TX76	Bardwell City, Texas	0.0002413330%
TX77	Barry City, Texas	0.0001333330%
TX78	Barstow City, Texas	0.0000406670%
TX79	Bartlett City, Texas	0.0022493330%
TX80	Bartonville Town, Texas	0.0059246670%
TX81	Bastrop City, Texas	0.0308800000%
TX82	Bastrop County, Texas	0.2293066670%
TX83	Bay City, Texas	0.0386080000%
TX84	Baylor County, Texas	0.0198880000%
TX85	Bayou Vista City, Texas	0.0041600000%
TX86	Bayside Town, Texas	0.0001613330%
TX87	Baytown City, Texas	0.1440440000%
TX88	Bayview Town, Texas	0.0000273330%
TX89	Beach City, Texas	0.0083366670%
TX90	Bear Creek Village, Texas	0.0006040000%
TX91	Beasley City, Texas	0.0000866670%
TX92	Beaumont City, Texas	0.4553400000%
TX93	Beckville City, Texas	0.0008313330%
TX94	Bedford City, Texas	0.0628760000%
TX95	Bedias City, Texas	0.0023166670%
TX96	Bee Cave City, Texas	0.0085753330%
TX97	Bee County, Texas	0.0652293330%
TX98	Beeville City, Texas	0.0160180000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX99	Bell County, Texas	0.4338320000%
TX100	Bellaire City, Texas	0.0275093330%
TX101	Bellevue City, Texas	0.0000373330%
TX102	Bellmead City, Texas	0.0096580000%
TX103	Bells Town, Texas	0.0012606670%
TX104	Bellville City, Texas	0.0049920000%
TX105	Belton City, Texas	0.0484533330%
TX106	Benavides City, Texas	0.0001013330%
TX107	Benbrook City, Texas	0.0292793330%
TX108	Benjamin City, Texas	0.0006340000%
TX109	Berryville Town, Texas	0.0095860000%
TX110	Bertram City, Texas	0.0001213330%
TX111	Beverly Hills City, Texas	0.0028906670%
TX112	Bevil Oaks City, Texas	0.0003660000%
TX113	Bexar County, Texas	4.6714346670%
TX114	Big Lake City, Texas	0.0003646670%
TX115	Big Sandy Town, Texas	0.0030526670%
TX116	Big Spring City, Texas	0.1266186670%
TX117	Big Wells City, Texas	0.0001573330%
TX118	Bishop City, Texas	0.0054753330%
TX119	Bishop Hills Town, Texas	0.0002153330%
TX120	Blackwell City, Texas	0.0000206670%
TX121	Blanco City, Texas	0.0041273330%
TX122	Blanco County, Texas	0.0328153330%
TX123	Blanket Town, Texas	0.0000980000%
TX124	Bloomburg Town, Texas	0.0006733330%
TX125	Blooming Grove Town, Texas	0.0002346670%
TX126	Blossom City, Texas	0.0001320000%
TX127	Blue Mound City, Texas	0.0019253330%
TX128	Blue Ridge City, Texas	0.0008966670%
TX129	Blum Town, Texas	0.0010813330%
TX130	Boerne City, Texas	0.0303840000%
TX131	Bogata City, Texas	0.0024326670%
TX132	Bonham City, Texas	0.0672726670%
TX133	Bonney Village, Texas	0.0016733330%
TX134	Booker Town, Texas	0.0006906670%
TX135	Borden County, Texas	0.0006666670%
TX136	Borger City, Texas	0.0464533330%
TX137	Bosque County, Texas	0.0473820000%
TX138	Bovina City, Texas	0.0001153330%
TX139	Bowie City, Texas	0.0557466670%
TX140	Bowie County, Texas	0.1554600000%
TX141	Boyd Town, Texas	0.0046353330%
TX142	Brackettville City, Texas	0.0000053330%
TX143	Brady City, Texas	0.0183200000%
TX144	Brazoria City, Texas	0.0076913330%
TX145	Brazoria County, Texas	0.6807266670%
TX146	Brazos Bend City, Texas	0.0003080000%
TX147	Brazos Country City, Texas	0.0006013330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX148	Brazos County, Texas	0.2280580000%
TX149	Breckenridge City, Texas	0.0159840000%
TX150	Bremond City, Texas	0.0037026670%
TX151	Brenham City, Texas	0.0365000000%
TX152	Brewster County, Texas	0.0400580000%
TX153	Briarcliff Village, Texas	0.0003813330%
TX154	Briaroaks City, Texas	0.0000380000%
TX155	Bridge City, Texas	0.0538373330%
TX156	Bridgeport City, Texas	0.0222006670%
TX157	Briscoe County, Texas	0.0006513330%
TX158	Broaddus Town, Texas	0.0000206670%
TX159	Bronte Town, Texas	0.0000660000%
TX160	Brooks County, Texas	0.0138066670%
TX161	Brookshire City, Texas	0.0042706670%
TX162	Brookside Village City, Texas	0.0007400000%
TX163	Brown County, Texas	0.1289446670%
TX164	Browndell City, Texas	0.0001013330%
TX165	Brownfield City, Texas	0.0096346670%
TX166	Brownsboro City, Texas	0.0021173330%
TX167	Brownsville City, Texas	0.2833713330%
TX168	Brownwood City, Texas	0.1110480000%
TX169	Bruceville-Eddy City, Texas	0.0011280000%
TX170	Bryan City, Texas	0.1645980000%
TX171	Bryson City, Texas	0.0008186670%
TX172	Buckholts Town, Texas	0.0007420000%
TX173	Buda City, Texas	0.0071893330%
TX174	Buffalo City, Texas	0.0079106670%
TX175	Buffalo Gap Town, Texas	0.0000586670%
TX176	Buffalo Springs Village, Texas	0.0001253330%
TX177	Bullard Town, Texas	0.0049913330%
TX178	Bulverde City, Texas	0.0096240000%
TX179	Bunker Hill Village City, Texas	0.0003146670%
TX180	Burkburnett City, Texas	0.0252293330%
TX181	Burke City, Texas	0.0007426670%
TX182	Burleson City, Texas	0.1011860000%
TX183	Burleson County, Texas	0.0468293330%
TX184	Burnet City, Texas	0.0222300000%
TX185	Burnet County, Texas	0.1265526670%
TX186	Burton City, Texas	0.0006246670%
TX187	Byers City, Texas	0.0000513330%
TX188	Bynum Town, Texas	0.0002533330%
TX189	Cactus City, Texas	0.0031860000%
TX190	Caddo Mills City, Texas	0.0000286670%
TX191	Caldwell City, Texas	0.0121633330%
TX192	Caldwell County, Texas	0.0576086670%
TX193	Calhoun County, Texas	0.0852840000%
TX194	Callahan County, Texas	0.0085960000%
TX195	Callisburg City, Texas	0.0000673330%
TX196	Calvert City, Texas	0.0005146670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX197	Cameron City, Texas	0.0073940000%
TX198	Cameron County, Texas	0.3580173330%
TX199	Camp County, Texas	0.0192340000%
TX200	Camp Wood City, Texas	0.0002813330%
TX201	Campbell City, Texas	0.0007440000%
TX202	Canadian City, Texas	0.0007266670%
TX203	Caney City Town, Texas	0.0013366670%
TX204	Canton City, Texas	0.0378226670%
TX205	Canyon City, Texas	0.0175006670%
TX206	Carbon Town, Texas	0.0004133330%
TX207	Carl's Corner Town, Texas	0.0000320000%
TX208	Carmine City, Texas	0.0002566670%
TX209	Carrizo Springs City, Texas	0.0011140000%
TX210	Carrollton City, Texas	0.2068366670%
TX211	Carson County, Texas	0.0196620000%
TX212	Carthage City, Texas	0.0126180000%
TX213	Cashion Community City, Texas	0.0002146670%
TX214	Cass County, Texas	0.0621033330%
TX215	Castle Hills City, Texas	0.0085200000%
TX216	Castro County, Texas	0.0029466670%
TX217	Castroville City, Texas	0.0030166670%
TX218	Cedar Hill City, Texas	0.0467513330%
TX219	Cedar Park City, Texas	0.1237113330%
TX220	Celeste City, Texas	0.0008533330%
TX221	Celina City, Texas	0.0121886670%
TX222	Center City, Texas	0.0392253330%
TX223	Centerville City, Texas	0.0002566670%
TX224	Chambers County, Texas	0.1021253330%
TX225	Chandler City, Texas	0.0115760000%
TX226	Channing City, Texas	0.0000013330%
TX227	Charlotte City, Texas	0.0028380000%
TX228	Cherokee County, Texas	0.1044080000%
TX229	Chester Town, Texas	0.0007826670%
TX230	Chico City, Texas	0.0019520000%
TX231	Childress City, Texas	0.0252773330%
TX232	Childress County, Texas	0.0337213330%
TX233	Chillicothe City, Texas	0.0001146670%
TX234	China City, Texas	0.0003480000%
TX235	China Grove Town, Texas	0.0003986670%
TX236	Chireno City, Texas	0.0010453330%
TX237	Christine Town, Texas	0.0002360000%
TX238	Cibolo City, Texas	0.0091266670%
TX239	Cisco City, Texas	0.0048120000%
TX240	Clarendon City, Texas	0.0000760000%
TX241	Clarksville City, Texas	0.0139273330%
TX242	Clarksville City, Texas	0.0000360000%
TX243	Claude City, Texas	0.0000173330%
TX244	Clay County, Texas	0.0480333330%
TX245	Clear Lake Shores City, Texas	0.0044546670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX246	Cleburne City, Texas	0.1521226670%
TX247	Cleveland City, Texas	0.0645980000%
TX248	Clifton City, Texas	0.0066260000%
TX249	Clint Town, Texas	0.0002500000%
TX250	Clute City, Texas	0.0342333330%
TX251	Clyde City, Texas	0.0115246670%
TX252	Coahoma Town, Texas	0.0015273330%
TX253	Cochran County, Texas	0.0022593330%
TX254	Cockrell Hill City, Texas	0.0003413330%
TX255	Coffee City Town, Texas	0.0007246670%
TX256	Coke County, Texas	0.0036813330%
TX257	Coldspring City, Texas	0.0002980000%
TX258	Coleman City, Texas	0.0036280000%
TX259	Coleman County, Texas	0.0027760000%
TX260	College Station City, Texas	0.1720980000%
TX261	Colleyville City, Texas	0.0306993330%
TX262	Collin County, Texas	0.8444806670%
TX263	Collingsworth County, Texas	0.0128226670%
TX264	Collinsville Town, Texas	0.0012206670%
TX265	Colmesneil City, Texas	0.0014740000%
TX266	Colorado City, Texas	0.0056033330%
TX267	Colorado County, Texas	0.0327226670%
TX268	Columbus City, Texas	0.0045780000%
TX269	Comal County, Texas	0.2640946670%
TX270	Comanche City, Texas	0.0110020000%
TX271	Comanche County, Texas	0.0339760000%
TX272	Combes Town, Texas	0.0011400000%
TX273	Combine City, Texas	0.0012613330%
TX274	Commerce City, Texas	0.0225793330%
TX275	Como Town, Texas	0.0002766670%
TX276	Concho County, Texas	0.0025726670%
TX277	Conroe City, Texas	0.3111140000%
TX278	Converse City, Texas	0.0184620000%
TX279	Cooke County, Texas	0.1336340000%
TX280	Cool City, Texas	0.0004873330%
TX281	Coolidge Town, Texas	0.0001620000%
TX282	Cooper City, Texas	0.0002413330%
TX283	Coppell City, Texas	0.0577286670%
TX284	Copper Canyon Town, Texas	0.0003260000%
TX285	Copperas Cove City, Texas	0.0889946670%
TX286	Corinth City, Texas	0.0501986670%
TX287	Corpus Christi City, Texas	1.2084713330%
TX288	Corral City Town, Texas	0.0000953330%
TX289	Corrigan Town, Texas	0.0142120000%
TX290	Corsicana City, Texas	0.0582066670%
TX291	Coryell County, Texas	0.0824393330%
TX292	Cottle County, Texas	0.0005833330%
TX293	Cottonwood City, Texas	0.0001926670%
TX294	Cottonwood Shores City, Texas	0.0008020000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX295	Cotulla City, Texas	0.0008340000%
TX296	Coupland City, Texas	0.0001773330%
TX297	Cove City, Texas	0.0002580000%
TX298	Covington City, Texas	0.0003460000%
TX299	Coyote Flats City, Texas	0.0009813330%
TX300	Crandall City, Texas	0.0080626670%
TX301	Crane City, Texas	0.0070660000%
TX302	Crane County, Texas	0.0174306670%
TX303	Cranfills Gap City, Texas	0.0000853330%
TX304	Crawford Town, Texas	0.0002553330%
TX305	Creedmoor City, Texas	0.0000106670%
TX306	Cresson City, Texas	0.0007240000%
TX307	Crockett City, Texas	0.0156020000%
TX308	Crockett County, Texas	0.0121400000%
TX309	Crosby County, Texas	0.0122586670%
TX310	Crosbyton City, Texas	0.0009986670%
TX311	Cross Plains Town, Texas	0.0032513330%
TX312	Cross Roads Town, Texas	0.0001626670%
TX313	Cross Timber Town, Texas	0.0003613330%
TX314	Crowell City, Texas	0.0042233330%
TX315	Crowley City, Texas	0.0148966670%
TX316	Crystal City, Texas	0.0129413330%
TX317	Cuero City, Texas	0.0164593330%
TX318	Culberson County, Texas	0.0005260000%
TX319	Cumby City, Texas	0.0035466670%
TX320	Cuney Town, Texas	0.0004040000%
TX321	Cushing City, Texas	0.0007466670%
TX322	Cut and Shoot City, Texas	0.0014273330%
TX323	Daingerfield City, Texas	0.0083173330%
TX324	Daisetta City, Texas	0.0035800000%
TX325	Dalhart City, Texas	0.0077393330%
TX326	Dallam County, Texas	0.0144573330%
TX327	Dallas City, Texas	1.9999346670%
TX328	Dallas County, Texas	5.6921940000%
TX329	Dalworthington Gardens City, Texas	0.0040400000%
TX330	Danbury City, Texas	0.0028206670%
TX331	Darrouzett Town, Texas	0.0000673330%
TX332	Dawson County, Texas	0.0312740000%
TX333	Dawson Town, Texas	0.0004000000%
TX334	Dayton City, Texas	0.0314146670%
TX335	Dayton Lakes City, Texas	0.0000253330%
TX336	De Kalb City, Texas	0.0006900000%
TX337	De Leon City, Texas	0.0054786670%
TX338	De Witt County, Texas	0.0459300000%
TX339	Deaf Smith County, Texas	0.0230213330%
TX340	Dean City, Texas	0.0000940000%
TX341	Decatur City, Texas	0.0377793330%
TX342	Decordova City, Texas	0.0091853330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX343	Deer Park City, Texas	0.0329253330%
TX344	Del Rio City, Texas	0.0393706670%
TX345	Dell City, Texas	0.0000100000%
TX346	Delta County, Texas	0.0203893330%
TX347	Denison City, Texas	0.1402840000%
TX348	Denton City, Texas	0.3055560000%
TX349	Denton County, Texas	0.7548653330%
TX350	Denver City Town, Texas	0.0014026670%
TX351	Deport City, Texas	0.0000280000%
TX352	Desoto City, Texas	0.0482666670%
TX353	Detroit Town, Texas	0.0006433330%
TX354	Devers City, Texas	0.0001273330%
TX355	Devine City, Texas	0.0029026670%
TX356	Diboll City, Texas	0.0170220000%
TX357	Dickens City, Texas	0.0000473330%
TX358	Dickens County, Texas	0.0012486670%
TX359	Dickinson City, Texas	0.0557886670%
TX360	Dilley City, Texas	0.0017553330%
TX361	Dimmit County, Texas	0.0221960000%
TX362	Dimmitt City, Texas	0.0006746670%
TX363	Dish Town, Texas	0.0000126670%
TX364	Dodd City Town, Texas	0.0008073330%
TX365	Dodson Town, Texas	0.0002980000%
TX366	Domino Town, Texas	0.0001306670%
TX367	Donley County, Texas	0.0149133330%
TX368	Donna City, Texas	0.0091986670%
TX369	Dorchester City, Texas	0.0001540000%
TX370	Double Oak Town, Texas	0.0031766670%
TX371	Douglassville Town, Texas	0.0003826670%
TX372	Dripping Springs City, Texas	0.0005406670%
TX373	Driscoll City, Texas	0.0000260000%
TX374	Dublin City, Texas	0.0096520000%
TX375	Dumas City, Texas	0.0174860000%
TX376	Duncanville City, Texas	0.0388853330%
TX377	Duval County, Texas	0.0327393330%
TX378	Eagle Lake City, Texas	0.0032546670%
TX379	Eagle Pass City, Texas	0.0373366670%
TX380	Early City, Texas	0.0098920000%
TX381	Earth City, Texas	0.0001613330%
TX382	East Bernard City, Texas	0.0037026670%
TX383	East Mountain City, Texas	0.0016626670%
TX384	East Tawakoni City, Texas	0.0018153330%
TX385	Eastland City, Texas	0.0105973330%
TX386	Eastland County, Texas	0.0348500000%
TX387	Easton City, Texas	0.0002193330%
TX388	Ector City, Texas	0.0007386670%
TX389	Ector County, Texas	0.3200000000%
TX390	Edcouch City, Texas	0.0027340000%
TX391	Eden City, Texas	0.0003313330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX392	Edgecliff Village Town, Texas	0.0014880000%
TX393	Edgewood Town, Texas	0.0087693330%
TX394	Edinburg City, Texas	0.0805893330%
TX395	Edmonson Town, Texas	0.0000906670%
TX396	Edna City, Texas	0.0121293330%
TX397	Edom City, Texas	0.0014326670%
TX398	Edwards County, Texas	0.0006500000%
TX399	El Campo City, Texas	0.0211333330%
TX400	El Cenizo City, Texas	0.0004140000%
TX401	El Lago City, Texas	0.0037360000%
TX402	El Paso City, Texas	0.8162473330%
TX403	El Paso County, Texas	1.7280806670%
TX404	Eldorado City, Texas	0.0000333330%
TX405	Electra City, Texas	0.0104773330%
TX406	Elgin City, Texas	0.0175226670%
TX407	Elkhart Town, Texas	0.0002006670%
TX408	Ellis County, Texas	0.2102480000%
TX409	Elmendorf City, Texas	0.0004973330%
TX410	Elsa City, Texas	0.0051466670%
TX411	Emhouse Town, Texas	0.0000553330%
TX412	Emory City, Texas	0.0025853330%
TX413	Enchanted Oaks Town, Texas	0.0008660000%
TX414	Encinal City, Texas	0.0010100000%
TX415	Ennis City, Texas	0.0545593330%
TX416	Erath County, Texas	0.0684106670%
TX417	Escobares City, Texas	0.0000266670%
TX418	Estelline Town, Texas	0.0006060000%
TX419	Euless City, Texas	0.0618826670%
TX420	Eureka City, Texas	0.0002226670%
TX421	Eustace City, Texas	0.0013926670%
TX422	Evant Town, Texas	0.0013786670%
TX423	Everman City, Texas	0.0051280000%
TX424	Fair Oaks Ranch City, Texas	0.0053846670%
TX425	Fairchilds Village, Texas	0.0000540000%
TX426	Fairfield City, Texas	0.0008300000%
TX427	Fairview Town, Texas	0.0214966670%
TX428	Falfurrias City, Texas	0.0014806670%
TX429	Falls City, Texas	0.0000273330%
TX430	Falls County, Texas	0.0230146670%
TX431	Fannin County, Texas	0.0877686670%
TX432	Farmers Branch City, Texas	0.0630213330%
TX433	Farmersville City, Texas	0.0070213330%
TX434	Farwell City, Texas	0.0002286670%
TX435	Fate City, Texas	0.0023153330%
TX436	Fayette County, Texas	0.0616266670%
TX437	Fayetteville City, Texas	0.0002606670%
TX438	Ferris City, Texas	0.0092486670%
TX439	Fisher County, Texas	0.0036786670%
TX440	Flatonia Town, Texas	0.0037740000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX441	Florence City, Texas	0.0026326670%
TX442	Floresville City, Texas	0.0144660000%
TX443	Flower Mound Town, Texas	0.1435040000%
TX444	Floyd County, Texas	0.0060326670%
TX445	Floydada City, Texas	0.0042380000%
TX446	Foard County, Texas	0.0038426670%
TX447	Follett City, Texas	0.0001413330%
TX448	Forest Hill City, Texas	0.0174213330%
TX449	Forney City, Texas	0.0534080000%
TX450	Forsan City, Texas	0.0003840000%
TX451	Fort Bend County, Texas	1.0044793330%
TX452	Fort Stockton City, Texas	0.0029406670%
TX453	Fort Worth City, Texas	1.4138600000%
TX454	Franklin City, Texas	0.0026206670%
TX455	Franklin County, Texas	0.0171886670%
TX456	Frankston Town, Texas	0.0001826670%
TX457	Fredericksburg City, Texas	0.0376573330%
TX458	Freeport City, Texas	0.0486486670%
TX459	Freer City, Texas	0.0021806670%
TX460	Freestone County, Texas	0.0336633330%
TX461	Friendswood City, Texas	0.0935533330%
TX462	Frio County, Texas	0.0133026670%
TX463	Friona City, Texas	0.0018986670%
TX464	Frisco City, Texas	0.2702060000%
TX465	Fritch City, Texas	0.0030320000%
TX466	Frost City, Texas	0.0002140000%
TX467	Fruitvale City, Texas	0.0015626670%
TX468	Fulshear City, Texas	0.0035146670%
TX469	Fulton Town, Texas	0.0010680000%
TX470	Gaines County, Texas	0.0362313330%
TX471	Gainesville City, Texas	0.1026533330%
TX472	Galena Park City, Texas	0.0087286670%
TX473	Gallatin City, Texas	0.0008353330%
TX474	Galveston City, Texas	0.3254580000%
TX475	Galveston County, Texas	0.7493953330%
TX476	Ganado City, Texas	0.0036733330%
TX477	Garden Ridge City, Texas	0.0075673330%
TX478	Garland City, Texas	0.2801626670%
TX479	Garrett Town, Texas	0.0016733330%
TX480	Garrison City, Texas	0.0023700000%
TX481	Gary City Town, Texas	0.0003000000%
TX482	Garza County, Texas	0.0059626670%
TX483	Gatesville City, Texas	0.0179960000%
TX484	George West City, Texas	0.0041380000%
TX485	Georgetown City, Texas	0.1505973330%
TX486	Gholson City, Texas	0.0010033330%
TX487	Giddings City, Texas	0.0084493330%
TX488	Gillespie County, Texas	0.0421273330%
TX489	Gilmer City, Texas	0.0226340000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX490	Gladewater City, Texas	0.0164253330%
TX491	Glasscock County, Texas	0.0006666670%
TX492	Glen Rose City, Texas	0.0003600000%
TX493	Glenn Heights City, Texas	0.0110620000%
TX494	Godley City, Texas	0.0020766670%
TX495	Goldsmith City, Texas	0.0004513330%
TX496	Goldthwaite City, Texas	0.0008166670%
TX497	Goliad City, Texas	0.0023753330%
TX498	Goliad County, Texas	0.0231066670%
TX499	Golinda City, Texas	0.0000666670%
TX500	Gonzales City, Texas	0.0099213330%
TX501	Gonzales County, Texas	0.0221533330%
TX502	Goodlow City, Texas	0.0001473330%
TX503	Goodrich City, Texas	0.0064286670%
TX504	Gordon City, Texas	0.0002433330%
TX505	Goree City, Texas	0.0004993330%
TX506	Gorman City, Texas	0.0020713330%
TX507	Graford City, Texas	0.0000153330%
TX508	Graham City, Texas	0.1569520000%
TX509	Granbury City, Texas	0.0478233330%
TX510	Grand Prairie City, Texas	0.2969593330%
TX511	Grand Saline City, Texas	0.0242753330%
TX512	Grandfalls Town, Texas	0.0000433330%
TX513	Grandview City, Texas	0.0044000000%
TX514	Granger City, Texas	0.0018273330%
TX515	Granite Shoals City, Texas	0.0078893330%
TX516	Granjeno City, Texas	0.0000286670%
TX517	Grapeland City, Texas	0.0048580000%
TX518	Grapevine City, Texas	0.0861300000%
TX519	Gray County, Texas	0.0439226670%
TX520	Grays Prairie Village, Texas	0.0000113330%
TX521	Grayson County, Texas	0.3593886670%
TX522	Greenville City, Texas	0.1354080000%
TX523	Gregg County, Texas	0.1624960000%
TX524	Gregory City, Texas	0.0031313330%
TX525	Grey Forest City, Texas	0.0003160000%
TX526	Grimes County, Texas	0.0632520000%
TX527	Groesbeck City, Texas	0.0038300000%
TX528	Groom Town, Texas	0.0006433330%
TX529	Groves City, Texas	0.0271680000%
TX530	Groveton City, Texas	0.0058846670%
TX531	Gruver City, Texas	0.0007773330%
TX532	Guadalupe County, Texas	0.0978826670%
TX533	Gun Barrel City, Texas	0.0242013330%
TX534	Gunter City, Texas	0.0030726670%
TX535	Gustine Town, Texas	0.0000226670%
TX536	Hackberry Town, Texas	0.0000626670%
TX537	Hale Center City, Texas	0.0040280000%
TX538	Hale County, Texas	0.0527666670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX539	Hall County, Texas	0.0059553330%
TX540	Hallettsville City, Texas	0.0045966670%
TX541	Hallsburg City, Texas	0.0001813330%
TX542	Hallsville City, Texas	0.0068260000%
TX543	Haltom City, Texas	0.0478666670%
TX544	Hamilton City, Texas	0.0023873330%
TX545	Hamilton County, Texas	0.0442380000%
TX546	Hamlin City, Texas	0.0031040000%
TX547	Hansford County, Texas	0.0109440000%
TX548	Happy Town, Texas	0.0002180000%
TX549	Hardeman County, Texas	0.0101460000%
TX550	Hardin City, Texas	0.0000666670%
TX551	Hardin County, Texas	0.2532000000%
TX552	Harker Heights City, Texas	0.0757873330%
TX553	Harlingen City, Texas	0.1102860000%
TX554	Harris County, Texas	9.9774680000%
TX555	Harrison County, Texas	0.1239400000%
TX556	Hart City, Texas	0.0000573330%
TX557	Hartley County, Texas	0.0005240000%
TX558	Haskell City, Texas	0.0072193330%
TX559	Haskell County, Texas	0.0146740000%
TX560	Haslet City, Texas	0.0012720000%
TX561	Hawk Cove City, Texas	0.0004493330%
TX562	Hawkins City, Texas	0.0052880000%
TX563	Hawley City, Texas	0.0006206670%
TX564	Hays City, Texas	0.0003373330%
TX565	Hays County, Texas	0.3529926670%
TX566	Hearne City, Texas	0.0112160000%
TX567	Heath City, Texas	0.0191673330%
TX568	Hebron Town, Texas	0.0004580000%
TX569	Hedley City, Texas	0.0000466670%
TX570	Hedwig Village City, Texas	0.0087113330%
TX571	Helotes City, Texas	0.0105266670%
TX572	Hemphill City, Texas	0.0053566670%
TX573	Hemphill County, Texas	0.0095960000%
TX574	Hempstead City, Texas	0.0141600000%
TX575	Henderson City, Texas	0.0399773330%
TX576	Henderson County, Texas	0.2186433330%
TX577	Henrietta City, Texas	0.0018133330%
TX578	Hereford City, Texas	0.0136153330%
TX579	Hewitt City, Texas	0.0131840000%
TX580	Hickory Creek Town, Texas	0.0110066670%
TX581	Hico City, Texas	0.0036893330%
TX582	Hidalgo City, Texas	0.0177473330%
TX583	Hidalgo County, Texas	0.8354020000%
TX584	Hideaway City, Texas	0.0006146670%
TX585	Higgins City, Texas	0.0000286670%
TX586	Highland Haven City, Texas	0.0002133330%
TX587	Highland Park Town, Texas	0.0289220000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX588	Highland Village City, Texas	0.0335433330%
TX589	Hill Country Village City, Texas	0.0043233330%
TX590	Hill County, Texas	0.0849846670%
TX591	Hillcrest Village, Texas	0.0035633330%
TX592	Hillsboro City, Texas	0.0310726670%
TX593	Hilshire Village City, Texas	0.0005726670%
TX594	Hitchcock City, Texas	0.0191973330%
TX595	Hockley County, Texas	0.0309380000%
TX596	Holiday Lakes Town, Texas	0.0011966670%
TX597	Holland Town, Texas	0.0000513330%
TX598	Holliday City, Texas	0.0039400000%
TX599	Hollywood Park Town, Texas	0.0062826670%
TX600	Hondo City, Texas	0.0768586670%
TX601	Honey Grove City, Texas	0.0047973330%
TX602	Hood County, Texas	0.1947366670%
TX603	Hooks City, Texas	0.0018013330%
TX604	Hopkins County, Texas	0.0996786670%
TX605	Horizon City, Texas	0.0050133330%
TX606	Horseshoe Bay City, Texas	0.0321153330%
TX607	Houston City, Texas	4.6811953330%
TX608	Houston County, Texas	0.0524320000%
TX609	Howard County, Texas	0.0595533330%
TX610	Howardwick City, Texas	0.0000560000%
TX611	Howe Town, Texas	0.0061180000%
TX612	Hubbard City, Texas	0.0024233330%
TX613	Hudson City, Texas	0.0045600000%
TX614	Hudson Oaks City, Texas	0.0104246670%
TX615	Hudspeth County, Texas	0.0006566670%
TX616	Hughes Springs City, Texas	0.0029613330%
TX617	Humble City, Texas	0.0493013330%
TX618	Hunt County, Texas	0.2065673330%
TX619	Hunters Creek Village City, Texas	0.0098053330%
TX620	Huntington City, Texas	0.0058613330%
TX621	Huntsville City, Texas	0.0535820000%
TX622	Hurst City, Texas	0.0661246670%
TX623	Hutchins City, Texas	0.0063673330%
TX624	Hutchinson County, Texas	0.0497533330%
TX625	Hutto City, Texas	0.0255640000%
TX626	Huxley City, Texas	0.0004920000%
TX627	Idalou City, Texas	0.0013326670%
TX628	Impact Town, Texas	0.0000053330%
TX629	Indian Lake Town, Texas	0.0003153330%
TX630	Industry City, Texas	0.0004026670%
TX631	Ingleside City, Texas	0.0269913330%
TX632	Ingleside on the Bay City, Texas	0.0000946670%
TX633	Ingram City, Texas	0.0034953330%
TX634	Iola City, Texas	0.0021093330%
TX635	Iowa Colony Village, Texas	0.0027266670%
TX636	Iowa Park City, Texas	0.0156580000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX637	Iraan City, Texas	0.0000373330%
TX638	Iredell City, Texas	0.0001440000%
TX639	Irion County, Texas	0.0060700000%
TX640	Irving City, Texas	0.2852120000%
TX641	Italy Town, Texas	0.0035660000%
TX642	Itasca City, Texas	0.0057960000%
TX643	Ivanhoe City, Texas	0.0000173330%
TX644	Jacinto City, Texas	0.0094273330%
TX645	Jack County, Texas	0.0098660000%
TX646	Jacksboro City, Texas	0.0155026670%
TX647	Jackson County, Texas	0.0253226670%
TX648	Jacksonville City, Texas	0.0534526670%
TX649	Jamaica Beach City, Texas	0.0032753330%
TX650	Jarrell City, Texas	0.0016153330%
TX651	Jasper City, Texas	0.0522813330%
TX652	Jasper County, Texas	0.1659033330%
TX653	Jayton City, Texas	0.0000420000%
TX654	Jeff Davis County, Texas	0.0056666670%
TX655	Jefferson City, Texas	0.0074626670%
TX656	Jefferson County, Texas	0.5044093330%
TX657	Jersey Village City, Texas	0.0242313330%
TX658	Jewett City, Texas	0.0062253330%
TX659	Jim Hogg County, Texas	0.0084786670%
TX660	Jim Wells County, Texas	0.1110260000%
TX661	Joaquin City, Texas	0.0005400000%
TX662	Johnson City, Texas	0.0023873330%
TX663	Johnson County, Texas	0.2724613330%
TX664	Jolly City, Texas	0.0000173330%
TX665	Jones County, Texas	0.0146673330%
TX666	Jones Creek Village, Texas	0.0033853330%
TX667	Jonestown City, Texas	0.0042793330%
TX668	Josephine City, Texas	0.0005873330%
TX669	Joshua City, Texas	0.0137460000%
TX670	Jourdanton City, Texas	0.0064000000%
TX671	Junction City, Texas	0.0032166670%
TX672	Justin City, Texas	0.0057166670%
TX673	Karnes City, Texas	0.0077546670%
TX674	Karnes County, Texas	0.0234993330%
TX675	Katy City, Texas	0.0349780000%
TX676	Kaufman City, Texas	0.0184046670%
TX677	Kaufman County, Texas	0.2353646670%
TX678	Keene City, Texas	0.0255306670%
TX679	Keller City, Texas	0.0527926670%
TX680	Kemah City, Texas	0.0188833330%
TX681	Kemp City, Texas	0.0042793330%
TX682	Kempner City, Texas	0.0002200000%
TX683	Kendall County, Texas	0.0670953330%
TX684	Kendleton City, Texas	0.0000086670%
TX685	Kenedy City, Texas	0.0004506670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX686	Kenedy County, Texas	0.0006666670%
TX687	Kenefick Town, Texas	0.0002773330%
TX688	Kennard City, Texas	0.0000880000%
TX689	Kennedale City, Texas	0.0140160000%
TX690	Kent County, Texas	0.0006260000%
TX691	Kerens City, Texas	0.0012826670%
TX692	Kermit City, Texas	0.0037680000%
TX693	Kerr County, Texas	0.1456346670%
TX694	Kerrville City, Texas	0.1269046670%
TX695	Kilgore City, Texas	0.0703886670%
TX696	Killeen City, Texas	0.3571000000%
TX697	Kimble County, Texas	0.0136533330%
TX698	King County, Texas	0.0006666670%
TX699	Kingsville City, Texas	0.0133886670%
TX700	Kinney County, Texas	0.0014280000%
TX701	Kirby City, Texas	0.0058346670%
TX702	Kirbyville City, Texas	0.0071266670%
TX703	Kirvin Town, Texas	0.0000013330%
TX704	Kleberg County, Texas	0.0827393330%
TX705	Knollwood City, Texas	0.0007733330%
TX706	Knox City Town, Texas	0.0013080000%
TX707	Knox County, Texas	0.0078200000%
TX708	Kosse Town, Texas	0.0016453330%
TX709	Kountze City, Texas	0.0131440000%
TX710	Kress City, Texas	0.0001240000%
TX711	Krugerville City, Texas	0.0010053330%
TX712	Krum City, Texas	0.0064406670%
TX713	Kurten Town, Texas	0.0004573330%
TX714	Kyle City, Texas	0.0345566670%
TX715	La Feria City, Texas	0.0069206670%
TX716	La Grange City, Texas	0.0064153330%
TX717	La Grulla City, Texas	0.0011386670%
TX718	La Joya City, Texas	0.0056380000%
TX719	La Marque City, Texas	0.0659533330%
TX720	La Porte City, Texas	0.0610213330%
TX721	La Salle County, Texas	0.0099833330%
TX722	La Vernia City, Texas	0.0021446670%
TX723	La Villa City, Texas	0.0003813330%
TX724	La Ward City, Texas	0.0002140000%
TX725	Lacoste City, Texas	0.0001060000%
TX726	Lacy-Lakeview City, Texas	0.0077326670%
TX727	Ladonia Town, Texas	0.0013406670%
TX728	Lago Vista City, Texas	0.0091786670%
TX729	Laguna Vista Town, Texas	0.0024593330%
TX730	Lake Bridgeport City, Texas	0.0001546670%
TX731	Lake City Town, Texas	0.0019453330%
TX732	Lake Dallas City, Texas	0.0168760000%
TX733	Lake Jackson City, Texas	0.0505206670%
TX734	Lake Tanglewood Village, Texas	0.0004086670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX735	Lake Worth City, Texas	0.0133673330%
TX736	Lakeport City, Texas	0.0003086670%
TX737	Lakeside City Town, Texas	0.0001480000%
TX738	Lakeside Town, San Patricio County, Texas	0.0029826670%
TX739	Lakeside Town, Tarrant County, Texas	0.0029826670%
TX740	Lakeview Town, Texas	0.0002846670%
TX741	Lakeway City, Texas	0.0211046670%
TX742	Lakewood Village City, Texas	0.0003713330%
TX743	Lamar County, Texas	0.0943986670%
TX744	Lamb County, Texas	0.0337873330%
TX745	Lamesa City, Texas	0.0197706670%
TX746	Lampasas City, Texas	0.0188073330%
TX747	Lampasas County, Texas	0.0285453330%
TX748	Lancaster City, Texas	0.0604353330%
TX749	Laredo City, Texas	0.5087826670%
TX750	Latexo City, Texas	0.0000826670%
TX751	Lavaca County, Texas	0.0306486670%
TX752	Lavon City, Texas	0.0049566670%
TX753	Lawn Town, Texas	0.0000386670%
TX754	League City, Texas	0.2016120000%
TX755	Leakey City, Texas	0.0001706670%
TX756	Leander City, Texas	0.0590940000%
TX757	Leary City, Texas	0.0005313330%
TX758	Lee County, Texas	0.0203046670%
TX759	Lefors Town, Texas	0.0001060000%
TX760	Leon County, Texas	0.0449286670%
TX761	Leon Valley City, Texas	0.0155053330%
TX762	Leona City, Texas	0.0005886670%
TX763	Leonard City, Texas	0.0056700000%
TX764	Leroy City, Texas	0.0001173330%
TX765	Levelland City, Texas	0.0312320000%
TX766	Lewisville City, Texas	0.2547293330%
TX767	Lexington Town, Texas	0.0015453330%
TX768	Liberty City, Texas	0.0482286670%
TX769	Liberty County, Texas	0.3541413330%
TX770	Liberty Hill City, Texas	0.0018533330%
TX771	Limestone County, Texas	0.0904560000%
TX772	Lincoln Park Town, Texas	0.0004513330%
TX773	Lindale City, Texas	0.0161346670%
TX774	Linden City, Texas	0.0024406670%
TX775	Lindsay City, Texas	0.0008186670%
TX776	Lipan City, Texas	0.0000293330%
TX777	Lipscomb County, Texas	0.0067546670%
TX778	Little Elm City, Texas	0.0462173330%
TX779	Little River-Academy City, Texas	0.0005320000%
TX780	Littlefield City, Texas	0.0051186670%
TX781	Live Oak City, Texas	0.0218266670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX782	Live Oak County, Texas	0.0264773330%
TX783	Liverpool City, Texas	0.0009566670%
TX784	Livingston Town, Texas	0.0487766670%
TX785	Llano City, Texas	0.0154140000%
TX786	Llano County, Texas	0.0770980000%
TX787	Lockhart City, Texas	0.0327000000%
TX788	Lockney Town, Texas	0.0022006670%
TX789	Log Cabin City, Texas	0.0013066670%
TX790	Lometa City, Texas	0.0007840000%
TX791	Lone Oak City, Texas	0.0011366670%
TX792	Lone Star City, Texas	0.0055220000%
TX793	Longview City, Texas	0.3215026670%
TX794	Loraine Town, Texas	0.0001253330%
TX795	Lorena City, Texas	0.0022600000%
TX796	Lorenzo City, Texas	0.0075720000%
TX797	Los Fresnos City, Texas	0.0074566670%
TX798	Los Indios Town, Texas	0.0001060000%
TX799	Lott City, Texas	0.0010106670%
TX800	Lovelady City, Texas	0.0001660000%
TX801	Loving County, Texas	0.0006666670%
TX802	Lowry Crossing City, Texas	0.0005220000%
TX803	Lubbock City, Texas	0.2132446670%
TX804	Lubbock County, Texas	0.9198126670%
TX805	Lucas City, Texas	0.0035106670%
TX806	Lueders City, Texas	0.0003386670%
TX807	Lufkin City, Texas	0.1877280000%
TX808	Luling City, Texas	0.0196140000%
TX809	Lumberton City, Texas	0.0244060000%
TX810	Lyford City, Texas	0.0020473330%
TX811	Lynn County, Texas	0.0041833330%
TX812	Lytle City, Texas	0.0048153330%
TX813	Mabank Town, Texas	0.0129620000%
TX814	Madison County, Texas	0.0329946670%
TX815	Madisonville City, Texas	0.0076386670%
TX816	Magnolia City, Texas	0.0173540000%
TX817	Malakoff City, Texas	0.0084093330%
TX818	Malone Town, Texas	0.0002926670%
TX819	Manor City, Texas	0.0083326670%
TX820	Mansfield City, Texas	0.1005253330%
TX821	Manvel City, Texas	0.0082033330%
TX822	Marble Falls City, Texas	0.0246926670%
TX823	Marfa City, Texas	0.0000433330%
TX824	Marietta Town, Texas	0.0002253330%
TX825	Marion City, Texas	0.0001833330%
TX826	Marion County, Texas	0.0364853330%
TX827	Marlin City, Texas	0.0144226670%
TX828	Marquez City, Texas	0.0008813330%
TX829	Marshall City, Texas	0.0722473330%
TX830	Mart City, Texas	0.0006186670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX831	Martin County, Texas	0.0072413330%
TX832	Martindale City, Texas	0.0016246670%
TX833	Mason City, Texas	0.0005180000%
TX834	Mason County, Texas	0.0020893330%
TX835	Matador Town, Texas	0.0008020000%
TX836	Matagorda County, Texas	0.0901593330%
TX837	Mathis City, Texas	0.0104800000%
TX838	Maud City, Texas	0.0002820000%
TX839	Maverick County, Texas	0.0772793330%
TX840	Maypearl City, Texas	0.0006573330%
TX841	McAllen City, Texas	0.2429493330%
TX842	McCamey City, Texas	0.0003613330%
TX843	McCulloch County, Texas	0.0133473330%
TX844	McGregor City, Texas	0.0061033330%
TX845	McKinney City, Texas	0.3002553330%
TX846	McLean Town, Texas	0.0000093330%
TX847	McLendon-Chisholm City, Texas	0.0002740000%
TX848	McLennan County, Texas	0.3530940000%
TX849	McMullen County, Texas	0.0006666670%
TX850	Meadow Town, Texas	0.0007473330%
TX851	Meadowlakes City, Texas	0.0006033330%
TX852	Meadows Place City, Texas	0.0120986670%
TX853	Medina County, Texas	0.0322366670%
TX854	Megargel Town, Texas	0.0004073330%
TX855	Melissa City, Texas	0.0102540000%
TX856	Melvin Town, Texas	0.0002300000%
TX857	Memphis City, Texas	0.0048020000%
TX858	Menard City, Texas	0.0006606670%
TX859	Menard County, Texas	0.0098113330%
TX860	Mercedes City, Texas	0.0142940000%
TX861	Meridian City, Texas	0.0023640000%
TX862	Merkel Town, Texas	0.0067446670%
TX863	Mertens Town, Texas	0.0001593330%
TX864	Mertzon City, Texas	0.0000193330%
TX865	Mesquite City, Texas	0.2071393330%
TX866	Mexia City, Texas	0.0140640000%
TX867	Miami City, Texas	0.0003033330%
TX868	Midland City, Texas	0.3478993330%
TX869	Midland County, Texas	0.1866180000%
TX870	Midlothian City, Texas	0.0638660000%
TX871	Midway City, Texas	0.0000520000%
TX872	Milam County, Texas	0.0649240000%
TX873	Milano City, Texas	0.0006026670%
TX874	Mildred Town, Texas	0.0001906670%
TX875	Miles City, Texas	0.0000620000%
TX876	Milford Town, Texas	0.0041180000%
TX877	Miller's Cove Town, Texas	0.0000646670%
TX878	Millican Town, Texas	0.0002780000%
TX879	Mills County, Texas	0.0132873330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX880	Millsap Town, Texas	0.0000226670%
TX881	Mineola City, Texas	0.0324793330%
TX882	Mineral Wells City, Texas	0.0613740000%
TX883	Mingus City, Texas	0.0001260000%
TX884	Mission City, Texas	0.0831786670%
TX885	Missouri City, Texas	0.1397553330%
TX886	Mitchell County, Texas	0.0139000000%
TX887	Mobeetie City, Texas	0.0000346670%
TX888	Mobile City, Texas	0.0013560000%
TX889	Monahans City, Texas	0.0038993330%
TX890	Mont Belvieu City, Texas	0.0131126670%
TX891	Montague County, Texas	0.0631973330%
TX892	Montgomery City, Texas	0.0012560000%
TX893	Montgomery County, Texas	1.8006073330%
TX894	Moody City, Texas	0.0005520000%
TX895	Moore County, Texas	0.0270846670%
TX896	Moore Station City, Texas	0.0005146670%
TX897	Moran City, Texas	0.0000333330%
TX898	Morgan City, Texas	0.0004033330%
TX899	Morgan's Point City, Texas	0.0020700000%
TX900	Morgan's Point Resort City, Texas	0.0053493330%
TX901	Morris County, Texas	0.0355520000%
TX902	Morton City, Texas	0.0001113330%
TX903	Motley County, Texas	0.0022293330%
TX904	Moulton Town, Texas	0.0006660000%
TX905	Mount Calm City, Texas	0.0004033330%
TX906	Mount Enterprise City, Texas	0.0012213330%
TX907	Mount Pleasant City, Texas	0.0437893330%
TX908	Mount Vernon Town, Texas	0.0040326670%
TX909	Mountain City, Texas	0.0010320000%
TX910	Muenster City, Texas	0.0031040000%
TX911	Muleshoe City, Texas	0.0032733330%
TX912	Mullin Town, Texas	0.0002560000%
TX913	Munday City, Texas	0.0013646670%
TX914	Murchison City, Texas	0.0015346670%
TX915	Murphy City, Texas	0.0345953330%
TX916	Mustang Ridge City, Texas	0.0016413330%
TX917	Mustang Town, Texas	0.0000046670%
TX918	Nacogdoches City, Texas	0.1373280000%
TX919	Nacogdoches County, Texas	0.1323886670%
TX920	Naples City, Texas	0.0028160000%
TX921	Nash City, Texas	0.0053326670%
TX922	Nassau Bay City, Texas	0.0074980000%
TX923	Natalia City, Texas	0.0004166670%
TX924	Navarro County, Texas	0.0690086670%
TX925	Navarro Town, Texas	0.0002226670%
TX926	Navasota City, Texas	0.0251173330%
TX927	Nazareth City, Texas	0.0000826670%
TX928	Nederland City, Texas	0.0297233330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX929	Needville City, Texas	0.0068940000%
TX930	Nevada City, Texas	0.0001580000%
TX931	New Berlin City, Texas	0.0000026670%
TX932	New Boston City, Texas	0.0046353330%
TX933	New Braunfels City, Texas	0.2048753330%
TX934	New Chapel Hill City, Texas	0.0001920000%
TX935	New Deal Town, Texas	0.0002253330%
TX936	New Fairview City, Texas	0.0015560000%
TX937	New Home City, Texas	0.0000060000%
TX938	New Hope Town, Texas	0.0006826670%
TX939	New London City, Texas	0.0027526670%
TX940	New Summerfield City, Texas	0.0002946670%
TX941	New Waverly City, Texas	0.0017080000%
TX942	Newark City, Texas	0.0003466670%
TX943	Newcastle City, Texas	0.0006093330%
TX944	Newton City, Texas	0.0040680000%
TX945	Newton County, Texas	0.1053373330%
TX946	Neylandville Town, Texas	0.0001086670%
TX947	Niederwald City, Texas	0.0000106670%
TX948	Nixon City, Texas	0.0015220000%
TX949	Nocona City, Texas	0.0110240000%
TX950	Nolan County, Texas	0.0335080000%
TX951	Nolanville City, Texas	0.0028313330%
TX952	Nome City, Texas	0.0002606670%
TX953	Noonday City, Texas	0.0001506670%
TX954	Nordheim City, Texas	0.0004646670%
TX955	Normangee Town, Texas	0.0041280000%
TX956	North Cleveland City, Texas	0.0000700000%
TX957	North Richland Hills City, Texas	0.0976126670%
TX958	Northlake Town, Texas	0.0059366670%
TX959	Novice City, Texas	0.0000506670%
TX960	Nueces County, Texas	0.9119546670%
TX961	Oak Grove Town, Texas	0.0018460000%
TX962	Oak Leaf City, Texas	0.0004080000%
TX963	Oak Point City, Texas	0.0060073330%
TX964	Oak Ridge North City, Texas	0.0223413330%
TX965	Oak Ridge Town, Cooke County, Texas	0.0002386670%
TX966	Oak Ridge Town, Kaufman County, Texas	0.0002386670%
TX967	Oak Valley Town, Texas	0.0000046670%
TX968	Oakwood Town, Texas	0.0000986670%
TX969	O'Brien City, Texas	0.0000506670%
TX970	Ochiltree County, Texas	0.0103173330%
TX971	Odem City, Texas	0.0049466670%
TX972	Odessa City, Texas	0.3727753330%
TX973	O'Donnell City, Texas	0.0000180000%
TX974	Oglesby City, Texas	0.0000193330%
TX975	Old River-Winfree City, Texas	0.0144353330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX976	Oldham County, Texas	0.0068786670%
TX977	Olmos Park City, Texas	0.0065340000%
TX978	Olney City, Texas	0.0040586670%
TX979	Olton City, Texas	0.0007980000%
TX980	Omaha City, Texas	0.0027900000%
TX981	Onalaska City, Texas	0.0211026670%
TX982	Opdyke West Town, Texas	0.0003193330%
TX983	Orange City, Texas	0.2075593330%
TX984	Orange County, Texas	0.4598786670%
TX985	Orange Grove City, Texas	0.0011180000%
TX986	Orchard City, Texas	0.0005780000%
TX987	Ore City, Texas	0.0045373330%
TX988	Overton City, Texas	0.0052666670%
TX989	Ovilla City, Texas	0.0089273330%
TX990	Oyster Creek City, Texas	0.0064220000%
TX991	Paducah Town, Texas	0.0000833330%
TX992	Paint Rock Town, Texas	0.0000940000%
TX993	Palacios City, Texas	0.0093573330%
TX994	Palestine City, Texas	0.1186726670%
TX995	Palisades Village, Texas	0.0001600000%
TX996	Palm Valley City, Texas	0.0012786670%
TX997	Palmer Town, Texas	0.0084440000%
TX998	Palmhurst City, Texas	0.0031066670%
TX999	Palmview City, Texas	0.0050513330%
TX1000	Palo Pinto County, Texas	0.0830806670%
TX1001	Pampa City, Texas	0.0448180000%
TX1002	Panhandle Town, Texas	0.0063573330%
TX1003	Panola County, Texas	0.0537993330%
TX1004	Panorama Village City, Texas	0.0008613330%
TX1005	Pantego Town, Texas	0.0085986670%
TX1006	Paradise City, Texas	0.0000346670%
TX1007	Paris City, Texas	0.1341200000%
TX1008	Parker City, Texas	0.0068713330%
TX1009	Parker County, Texas	0.3175026670%
TX1010	Parmer County, Texas	0.0105773330%
TX1011	Pasadena City, Texas	0.2376906670%
TX1012	Pattison City, Texas	0.0007653330%
TX1013	Patton Village City, Texas	0.0061786670%
TX1014	Payne Springs Town, Texas	0.0011800000%
TX1015	Pearland City, Texas	0.2225013330%
TX1016	Pearsall City, Texas	0.0077133330%
TX1017	Pecan Gap City, Texas	0.0004793330%
TX1018	Pecan Hill City, Texas	0.0001526670%
TX1019	Pecos City, Texas	0.0050813330%
TX1020	Pecos County, Texas	0.0313313330%
TX1021	Pelican Bay City, Texas	0.0007993330%
TX1022	Penelope Town, Texas	0.0002766670%
TX1023	Penitas City, Texas	0.0002080000%
TX1024	Perryton City, Texas	0.0155760000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1025	Petersburg City, Texas	0.0011273330%
TX1026	Petrolia City, Texas	0.0000113330%
TX1027	Petronila City, Texas	0.0000033330%
TX1028	Pflugerville City, Texas	0.0576053330%
TX1029	Pharr City, Texas	0.0964806670%
TX1030	Pilot Point City, Texas	0.0077420000%
TX1031	Pine Forest City, Texas	0.0025960000%
TX1032	Pine Island Town, Texas	0.0020940000%
TX1033	Pinehurst City, Texas	0.0217806670%
TX1034	Pineland City, Texas	0.0027586670%
TX1035	Piney Point Village City, Texas	0.0104920000%
TX1036	Pittsburg City, Texas	0.0136840000%
TX1037	Plains Town, Texas	0.0000860000%
TX1038	Plainview City, Texas	0.0401986670%
TX1039	Plano City, Texas	0.7677386670%
TX1040	Pleak Village, Texas	0.0001800000%
TX1041	Pleasant Valley Town, Texas	0.0002053330%
TX1042	Pleasanton City, Texas	0.0193406670%
TX1043	Plum Grove City, Texas	0.0001720000%
TX1044	Point Blank City, Texas	0.0002366670%
TX1045	Point City, Texas	0.0010126670%
TX1046	Point Comfort City, Texas	0.0002980000%
TX1047	Point Venture Village, Texas	0.0003920000%
TX1048	Polk County, Texas	0.2472206670%
TX1049	Ponder Town, Texas	0.0008546670%
TX1050	Port Aransas City, Texas	0.0206813330%
TX1051	Port Arthur City, Texas	0.2452966670%
TX1052	Port Isabel City, Texas	0.0065346670%
TX1053	Port Lavaca City, Texas	0.0078346670%
TX1054	Port Neches City, Texas	0.0258993330%
TX1055	Portland City, Texas	0.0510113330%
TX1056	Post City, Texas	0.0015546670%
TX1057	Post Oak Bend City Town, Texas	0.0006893330%
TX1058	Poteet City, Texas	0.0045113330%
TX1059	Poth Town, Texas	0.0026493330%
TX1060	Potter County, Texas	0.2478006670%
TX1061	Pottsboro Town, Texas	0.0082013330%
TX1062	Powell Town, Texas	0.0000733330%
TX1063	Poynor Town, Texas	0.0007866670%
TX1064	Prairie View City, Texas	0.0050666670%
TX1065	Premont City, Texas	0.0022140000%
TX1066	Presidio City, Texas	0.0000986670%
TX1067	Presidio County, Texas	0.0005246670%
TX1068	Primera Town, Texas	0.0019720000%
TX1069	Princeton City, Texas	0.0128300000%
TX1070	Progreso City, Texas	0.0053813330%
TX1071	Progreso Lakes City, Texas	0.0000260000%
TX1072	Prosper Town, Texas	0.0151800000%
TX1073	Providence Village Town, Texas	0.0003386670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1074	Putnam Town, Texas	0.0000093330%
TX1075	Pyote Town, Texas	0.0000146670%
TX1076	Quanah City, Texas	0.0001380000%
TX1077	Queen City, Texas	0.0032246670%
TX1078	Quinlan City, Texas	0.0048693330%
TX1079	Quintana Town, Texas	0.0003280000%
TX1080	Quitaque City, Texas	0.0000053330%
TX1081	Quitman City, Texas	0.0104126670%
TX1082	Rains County, Texas	0.0354600000%
TX1083	Ralls City, Texas	0.0026446670%
TX1084	Rancho Viejo Town, Texas	0.0025573330%
TX1085	Randall County, Texas	0.1854173330%
TX1086	Ranger City, Texas	0.0081240000%
TX1087	Rankin City, Texas	0.0010753330%
TX1088	Ransom Canyon Town, Texas	0.0006200000%
TX1089	Ravenna City, Texas	0.0004566670%
TX1090	Raymondville City, Texas	0.0049773330%
TX1091	Reagan County, Texas	0.0168100000%
TX1092	Real County, Texas	0.0033820000%
TX1093	Red Lick City, Texas	0.0000153330%
TX1094	Red Oak City, Texas	0.0178953330%
TX1095	Red River County, Texas	0.0195373330%
TX1096	Redwater City, Texas	0.0007053330%
TX1097	Reeves County, Texas	0.0689000000%
TX1098	Refugio County, Texas	0.0308106670%
TX1099	Refugio Town, Texas	0.0058926670%
TX1100	Reklaw City, Texas	0.0007573330%
TX1101	Reno City, Lamar County, Texas	0.0074426670%
TX1102	Reno City, Parker County, Texas	0.0025273330%
TX1103	Retreat Town, Texas	0.0000346670%
TX1104	Rhome City, Texas	0.0081900000%
TX1105	Rice City, Texas	0.0013146670%
TX1106	Richardson City, Texas	0.1735433330%
TX1107	Richland Hills City, Texas	0.0162920000%
TX1108	Richland Springs Town, Texas	0.0014893330%
TX1109	Richland Town, Texas	0.0001400000%
TX1110	Richmond City, Texas	0.0517373330%
TX1111	Richwood City, Texas	0.0080746670%
TX1112	Riesel City, Texas	0.0007453330%
TX1113	Rio Bravo City, Texas	0.0056986670%
TX1114	Rio Grande City, Texas	0.0172980000%
TX1115	Rio Hondo City, Texas	0.0023666670%
TX1116	Rio Vista City, Texas	0.0029460000%
TX1117	Rising Star Town, Texas	0.0012886670%
TX1118	River Oaks City, Texas	0.0079446670%
TX1119	Riverside City, Texas	0.0005720000%
TX1120	Roanoke City, Texas	0.0001833330%
TX1121	Roaring Springs Town, Texas	0.0003073330%
TX1122	Robert Lee City, Texas	0.0000566670%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1123	Roberts County, Texas	0.0003646670%
TX1124	Robertson County, Texas	0.0297613330%
TX1125	Robinson City, Texas	0.0120013330%
TX1126	Robstown City, Texas	0.0267693330%
TX1127	Roby City, Texas	0.0002853330%
TX1128	Rochester Town, Texas	0.0004493330%
TX1129	Rockdale City, Texas	0.0139820000%
TX1130	Rockport City, Texas	0.0361686670%
TX1131	Rocksprings Town, Texas	0.0000166670%
TX1132	Rockwall City, Texas	0.0762053330%
TX1133	Rockwall County, Texas	0.1125466670%
TX1134	Rocky Mound Town, Texas	0.0001866670%
TX1135	Rogers Town, Texas	0.0025453330%
TX1136	Rollingwood City, Texas	0.0031693330%
TX1137	Roma City, Texas	0.0110860000%
TX1138	Roman Forest Town, Texas	0.0057400000%
TX1139	Ropesville City, Texas	0.0014146670%
TX1140	Roscoe City, Texas	0.0005186670%
TX1141	Rose City, Texas	0.0026746670%
TX1142	Rose Hill Acres City, Texas	0.0015406670%
TX1143	Rosebud City, Texas	0.0009926670%
TX1144	Rosenberg City, Texas	0.0843953330%
TX1145	Ross City, Texas	0.0000980000%
TX1146	Rosser Village, Texas	0.0003660000%
TX1147	Rotan City, Texas	0.0009953330%
TX1148	Round Mountain Town, Texas	0.0003026670%
TX1149	Round Rock City, Texas	0.3173280000%
TX1150	Round Top Town, Texas	0.0000933330%
TX1151	Rowlett City, Texas	0.0666420000%
TX1152	Roxton City, Texas	0.0000313330%
TX1153	Royse City, Texas	0.0156626670%
TX1154	Rule Town, Texas	0.0005333330%
TX1155	Runaway Bay City, Texas	0.0046206670%
TX1156	Runge Town, Texas	0.0001700000%
TX1157	Runnels County, Texas	0.0225540000%
TX1158	Rusk City, Texas	0.0119940000%
TX1159	Rusk County, Texas	0.1009266670%
TX1160	Sabinal City, Texas	0.0012073330%
TX1161	Sabine County, Texas	0.0309860000%
TX1162	Sachse City, Texas	0.0156000000%
TX1163	Sadler City, Texas	0.0006166670%
TX1164	Saginaw City, Texas	0.0213153330%
TX1165	Salado Village, Texas	0.0021400000%
TX1166	San Angelo City, Texas	0.3576726670%
TX1167	San Antonio City, Texas	2.9102773330%
TX1168	San Augustine City, Texas	0.0167880000%
TX1169	San Augustine County, Texas	0.0252360000%
TX1170	San Benito City, Texas	0.0266766670%
TX1171	San Diego City, Texas	0.0078473330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1172	San Elizario City, Texas	0.0052206670%
TX1173	San Felipe Town, Texas	0.0009986670%
TX1174	San Jacinto County, Texas	0.1315986670%
TX1175	San Juan City, Texas	0.0192300000%
TX1176	San Leanna Village, Texas	0.0000240000%
TX1177	San Marcos City, Texas	0.2171253330%
TX1178	San Patricio City, Texas	0.0028086670%
TX1179	San Patricio County, Texas	0.1812773330%
TX1180	San Perlita City, Texas	0.0014793330%
TX1181	San Saba City, Texas	0.0067046670%
TX1182	San Saba County, Texas	0.0117080000%
TX1183	Sanctuary Town, Texas	0.0000113330%
TX1184	Sandy Oaks City, Texas	0.0065753330%
TX1185	Sandy Point City, Texas	0.0010913330%
TX1186	Sanford Town, Texas	0.0002053330%
TX1187	Sanger City, Texas	0.0148246670%
TX1188	Sansom Park City, Texas	0.0001486670%
TX1189	Santa Anna Town, Texas	0.0002193330%
TX1190	Santa Clara City, Texas	0.0000580000%
TX1191	Santa Fe City, Texas	0.0221813330%
TX1192	Santa Rosa Town, Texas	0.0014253330%
TX1193	Savoy City, Texas	0.0015660000%
TX1194	Schertz City, Texas	0.0400733330%
TX1195	Schleicher County, Texas	0.0037966670%
TX1196	Schulenburg City, Texas	0.0017066670%
TX1197	Scotland City, Texas	0.0000986670%
TX1198	Scottsville City, Texas	0.0004720000%
TX1199	Scurry County, Texas	0.0487440000%
TX1200	Scurry Town, Texas	0.0007400000%
TX1201	Seabrook City, Texas	0.0201800000%
TX1202	Seadrift City, Texas	0.0006606670%
TX1203	Seagoville City, Texas	0.0114040000%
TX1204	Seagraves City, Texas	0.0050206670%
TX1205	Sealy City, Texas	0.0137580000%
TX1206	Seguin City, Texas	0.2510253330%
TX1207	Selma City, Texas	0.0149526670%
TX1208	Seminole City, Texas	0.0107280000%
TX1209	Seven Oaks City, Texas	0.0026113330%
TX1210	Seven Points City, Texas	0.0049680000%
TX1211	Seymour City, Texas	0.0094786670%
TX1212	Shackelford County, Texas	0.0008586670%
TX1213	Shady Shores Town, Texas	0.0003960000%
TX1214	Shallowater City, Texas	0.0012713330%
TX1215	Shamrock City, Texas	0.0028853330%
TX1216	Shavano Park City, Texas	0.0021186670%
TX1217	Shelby County, Texas	0.0732833330%
TX1218	Shenandoah City, Texas	0.0314146670%
TX1219	Shepherd City, Texas	0.0000980000%
TX1220	Sherman City, Texas	0.2203900000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1221	Sherman County, Texas	0.0052866670%
TX1222	Shiner City, Texas	0.0026946670%
TX1223	Shoreacres City, Texas	0.0006386670%
TX1224	Silsbee City, Texas	0.0442946670%
TX1225	Silverton City, Texas	0.0000093330%
TX1226	Simonton City, Texas	0.0012706670%
TX1227	Sinton City, Texas	0.0157720000%
TX1228	Skellytown, Texas	0.0002666670%
TX1229	Slaton City, Texas	0.0001026670%
TX1230	Smiley City, Texas	0.0004366670%
TX1231	Smith County, Texas	0.5059740000%
TX1232	Smithville City, Texas	0.0113393330%
TX1233	Smyer Town, Texas	0.0002000000%
TX1234	Snook City, Texas	0.0009480000%
TX1235	Snyder City, Texas	0.0060120000%
TX1236	Socorro City, Texas	0.0074166670%
TX1237	Somerset City, Texas	0.0010180000%
TX1238	Somervell County, Texas	0.0380506670%
TX1239	Somerville City, Texas	0.0025373330%
TX1240	Sonora City, Texas	0.0048913330%
TX1241	Sour Lake City, Texas	0.0119040000%
TX1242	South Houston City, Texas	0.0170800000%
TX1243	South Mountain Town, Texas	0.0001026670%
TX1244	South Padre Island Town, Texas	0.0204193330%
TX1245	Southlake City, Texas	0.0472306670%
TX1246	Southmayd City, Texas	0.0047306670%
TX1247	Southside Place City, Texas	0.0005900000%
TX1248	Spearman City, Texas	0.0093333330%
TX1249	Splendora City, Texas	0.0051706670%
TX1250	Spofford City, Texas	0.0000046670%
TX1251	Spring Valley Village City, Texas	0.0109360000%
TX1252	Springlake Town, Texas	0.0000020000%
TX1253	Springtown City, Texas	0.0094960000%
TX1254	Spur City, Texas	0.0002846670%
TX1255	St. Hedwig Town, Texas	0.0000740000%
TX1256	St. Jo City, Texas	0.0049066670%
TX1257	St. Paul Town, Texas	0.0000140000%
TX1258	Stafford City, Texas	0.0500966670%
TX1259	Stagecoach Town, Texas	0.0020240000%
TX1260	Stamford City, Texas	0.0002653330%
TX1261	Stanton City, Texas	0.0025586670%
TX1262	Staples City, Texas	0.0000126670%
TX1263	Star Harbor City, Texas	0.0001006670%
TX1264	Starr County, Texas	0.0665973330%
TX1265	Stephens County, Texas	0.0234960000%
TX1266	Stephenville City, Texas	0.0556480000%
TX1267	Sterling City, Texas	0.0000413330%
TX1268	Sterling County, Texas	0.0006260000%
TX1269	Stinnett City, Texas	0.0027313330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1270	Stockdale City, Texas	0.0004940000%
TX1271	Stonewall County, Texas	0.0012146670%
TX1272	Stratford City, Texas	0.0055853330%
TX1273	Strawn City, Texas	0.0006580000%
TX1274	Streetman Town, Texas	0.0000033330%
TX1275	Sudan City, Texas	0.0000213330%
TX1276	Sugar Land City, Texas	0.2143740000%
TX1277	Sullivan City, Texas	0.0040806670%
TX1278	Sulphur Springs City, Texas	0.0830686670%
TX1279	Sun Valley City, Texas	0.0000026670%
TX1280	Sundown City, Texas	0.0017280000%
TX1281	Sunnyvale Town, Texas	0.0021653330%
TX1282	Sunray City, Texas	0.0017140000%
TX1283	Sunrise Beach Village City, Texas	0.0013886670%
TX1284	Sunset Valley City, Texas	0.0062833330%
TX1285	Surfside Beach City, Texas	0.0043533330%
TX1286	Sutton County, Texas	0.0043606670%
TX1287	Sweeny City, Texas	0.0030020000%
TX1288	Sweetwater City, Texas	0.0454986670%
TX1289	Swisher County, Texas	0.0048340000%
TX1290	Taft City, Texas	0.0039073330%
TX1291	Tahoka City, Texas	0.0002866670%
TX1292	Talco City, Texas	0.0002480000%
TX1293	Talty Town, Texas	0.0060826670%
TX1294	Tarrant County, Texas	4.1141060000%
TX1295	Tatum City, Texas	0.0006480000%
TX1296	Taylor City, Texas	0.0386300000%
TX1297	Taylor County, Texas	0.2340520000%
TX1298	Taylor Lake Village City, Texas	0.0002746670%
TX1299	Taylor Landing City, Texas	0.0001020000%
TX1300	Teague City, Texas	0.0011426670%
TX1301	Tehuacana Town, Texas	0.0000080000%
TX1302	Temple City, Texas	0.1871646670%
TX1303	Tenaha Town, Texas	0.0031453330%
TX1304	Terrell City, Texas	0.0991373330%
TX1305	Terrell County, Texas	0.0038246670%
TX1306	Terrell Hills City, Texas	0.0065720000%
TX1307	Terry County, Texas	0.0169486670%
TX1308	Texarkana City, Texas	0.1280626670%
TX1309	Texas City, Texas	0.1991346670%
TX1310	Texhoma City, Texas	0.0001040000%
TX1311	Texline Town, Texas	0.0005766670%
TX1312	The Colony City, Texas	0.0761980000%
TX1313	The Hills Village, Texas	0.0006693330%
TX1314	Thompsons Town, Texas	0.0012646670%
TX1315	Thorndale City, Texas	0.0010633330%
TX1316	Thornton Town, Texas	0.0001800000%
TX1317	Thorntonville Town, Texas	0.0000580000%
TX1318	Thrall City, Texas	0.0005500000%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1319	Three Rivers City, Texas	0.0031126670%
TX1320	Throckmorton County, Texas	0.0037966670%
TX1321	Throckmorton Town, Texas	0.0000193330%
TX1322	Tiki Island Village, Texas	0.0014520000%
TX1323	Timbercreek Canyon Village, Texas	0.0002460000%
TX1324	Timpson City, Texas	0.0084280000%
TX1325	Tioga Town, Texas	0.0015933330%
TX1326	Tira Town, Texas	0.0001233330%
TX1327	Titus County, Texas	0.0470740000%
TX1328	Toco City, Texas	0.0000026670%
TX1329	Todd Mission City, Texas	0.0011200000%
TX1330	Tolar City, Texas	0.0015793330%
TX1331	Tom Bean City, Texas	0.0015286670%
TX1332	Tom Green County, Texas	0.1882846670%
TX1333	Tomball City, Texas	0.0230800000%
TX1334	Tool City, Texas	0.0098580000%
TX1335	Toyah Town, Texas	0.0000266670%
TX1336	Travis County, Texas	3.1356486670%
TX1337	Trent Town, Texas	0.0000420000%
TX1338	Trenton City, Texas	0.0020593330%
TX1339	Trinidad City, Texas	0.0039060000%
TX1340	Trinity City, Texas	0.0157680000%
TX1341	Trinity County, Texas	0.0705106670%
TX1342	Trophy Club Town, Texas	0.0195800000%
TX1343	Troup City, Texas	0.0052786670%
TX1344	Troy City, Texas	0.0035466670%
TX1345	Tulia City, Texas	0.0059406670%
TX1346	Turkey City, Texas	0.0004913330%
TX1347	Tuscola City, Texas	0.0000920000%
TX1348	Tye City, Texas	0.0011773330%
TX1349	Tyler City, Texas	0.4825526670%
TX1350	Tyler County, Texas	0.0878286670%
TX1351	Uhland City, Texas	0.0010300000%
TX1352	Uncertain City, Texas	0.0001233330%
TX1353	Union Grove City, Texas	0.0006626670%
TX1354	Union Valley City, Texas	0.0004440000%
TX1355	Universal City, Texas	0.0189520000%
TX1356	University Park City, Texas	0.0338886670%
TX1357	Upshur County, Texas	0.0855333330%
TX1358	Upton County, Texas	0.0056660000%
TX1359	Uvalde City, Texas	0.0122926670%
TX1360	Uvalde County, Texas	0.0241626670%
TX1361	Val Verde County, Texas	0.0785433330%
TX1362	Valentine Town, Texas	0.0001380000%
TX1363	Valley Mills City, Texas	0.0014853330%
TX1364	Valley View City, Texas	0.0012160000%
TX1365	Van Alstyne City, Texas	0.0291660000%
TX1366	Van City, Texas	0.0041373330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1367	Van Horn Town, Texas	0.0001406670%
TX1368	Van Zandt County, Texas	0.1658313330%
TX1369	Vega City, Texas	0.0006493330%
TX1370	Venus Town, Texas	0.0065280000%
TX1371	Vernon City, Texas	0.0542246670%
TX1372	Victoria City, Texas	0.0563986670%
TX1373	Victoria County, Texas	0.3472573330%
TX1374	Vidor City, Texas	0.0637466670%
TX1375	Vinton Village, Texas	0.0004146670%
TX1376	Volente Village, Texas	0.0002220000%
TX1377	Von Ormy City, Texas	0.0003420000%
TX1378	Waco City, Texas	0.3413380000%
TX1379	Waelder City, Texas	0.0022846670%
TX1380	Wake Village City, Texas	0.0001160000%
TX1381	Walker County, Texas	0.1230826670%
TX1382	Waller City, Texas	0.0075300000%
TX1383	Waller County, Texas	0.0841373330%
TX1384	Wallis City, Texas	0.0017986670%
TX1385	Walnut Springs City, Texas	0.0001220000%
TX1386	Ward County, Texas	0.0452800000%
TX1387	Warren City, Texas	0.0000440000%
TX1388	Washington County, Texas	0.0558180000%
TX1389	Waskom City, Texas	0.0035640000%
TX1390	Watauga City, Texas	0.0221440000%
TX1391	Waxahachie City, Texas	0.1013960000%
TX1392	Weatherford City, Texas	0.1385813330%
TX1393	Webb County, Texas	0.3368693330%
TX1394	Webberville Village, Texas	0.0008533330%
TX1395	Webster City, Texas	0.0354680000%
TX1396	Weimar City, Texas	0.0038866670%
TX1397	Weinert City, Texas	0.0001560000%
TX1398	Weir City, Texas	0.0002953330%
TX1399	Wellington City, Texas	0.0060740000%
TX1400	Wellman City, Texas	0.0002553330%
TX1401	Wells Town, Texas	0.0009046670%
TX1402	Weslaco City, Texas	0.0492993330%
TX1403	West City, Texas	0.0023480000%
TX1404	West Columbia City, Texas	0.0119720000%
TX1405	West Lake Hills City, Texas	0.0113706670%
TX1406	West Orange City, Texas	0.0283013330%
TX1407	West Tawakoni City, Texas	0.0046633330%
TX1408	West University Place City, Texas	0.0231146670%
TX1409	Westbrook City, Texas	0.0000286670%
TX1410	Westlake Town, Texas	0.0276933330%
TX1411	Weston City, Texas	0.0001773330%
TX1412	Weston Lakes City, Texas	0.0001260000%
TX1413	Westover Hills Town, Texas	0.0030060000%
TX1414	Westworth Village City, Texas	0.0052280000%
TX1415	Wharton City, Texas	0.0211333330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1416	Wharton County, Texas	0.0485913330%
TX1417	Wheeler City, Texas	0.0002980000%
TX1418	Wheeler County, Texas	0.0175153330%
TX1419	White Deer Town, Texas	0.0008486670%
TX1420	White Oak City, Texas	0.0102033330%
TX1421	White Settlement City, Texas	0.0155360000%
TX1422	Whiteface Town, Texas	0.0001033330%
TX1423	Whitehouse City, Texas	0.0193446670%
TX1424	Whitesboro City, Texas	0.0126213330%
TX1425	Whitewright Town, Texas	0.0047320000%
TX1426	Whitney Town, Texas	0.0000486670%
TX1427	Wichita County, Texas	0.3682473330%
TX1428	Wichita Falls City, Texas	0.5550493330%
TX1429	Wickett Town, Texas	0.0000580000%
TX1430	Wilbarger County, Texas	0.0367493330%
TX1431	Willacy County, Texas	0.0163873330%
TX1432	Williamson County, Texas	0.7973246670%
TX1433	Willis City, Texas	0.0162560000%
TX1434	Willow Park City, Texas	0.0178246670%
TX1435	Wills Point City, Texas	0.0291766670%
TX1436	Wilmer City, Texas	0.0002840000%
TX1437	Wilson City, Texas	0.0000080000%
TX1438	Wilson County, Texas	0.0806893330%
TX1439	Wimberley City, Texas	0.0004826670%
TX1440	Windcrest City, Texas	0.0086053330%
TX1441	Windom Town, Texas	0.0007246670%
TX1442	Windthorst Town, Texas	0.0022566670%
TX1443	Winfield City, Texas	0.0001933330%
TX1444	Wink City, Texas	0.0000800000%
TX1445	Winkler County, Texas	0.0407753330%
TX1446	Winnsboro City, Texas	0.0191940000%
TX1447	Winona Town, Texas	0.0002126670%
TX1448	Winters City, Texas	0.0041526670%
TX1449	Wise County, Texas	0.1927160000%
TX1450	Wixon Valley City, Texas	0.0002940000%
TX1451	Wolfe City, Texas	0.0036440000%
TX1452	Wolfforth City, Texas	0.0026813330%
TX1453	Wood County, Texas	0.1780320000%
TX1454	Woodbranch City, Texas	0.0064113330%
TX1455	Woodcreek City, Texas	0.0002386670%
TX1456	Woodloch Town, Texas	0.0006746670%
TX1457	Woodsboro Town, Texas	0.0007533330%
TX1458	Woodson Town, Texas	0.0000813330%
TX1459	Woodville Town, Texas	0.0135600000%
TX1460	Woodway City, Texas	0.0171420000%
TX1461	Wortham Town, Texas	0.0002506670%
TX1462	Wylie City, Texas	0.0764720000%
TX1463	Yantis Town, Texas	0.0013813330%
TX1464	Yoakum City, Texas	0.0134733330%

State ID	Qualifying Subdivision	Consolidated State Allocation
TX1465	Yoakum County, Texas	0.0232826670%
TX1466	Yorktown City, Texas	0.0036313330%
TX1467	Young County, Texas	0.0294133330%
TX1468	Zapata County, Texas	0.0376533330%
TX1469	Zavala County, Texas	0.0254313330%
TX1470	Zavalla City, Texas	0.0007253330%

State ID	Qualifying Subdivision	Consolidated State Allocation
UT3	Beaver County, Utah	0.2280000000%
UT6	Box Elder County, Utah	1.4640000000%
UT8	Cache County, Utah	2.6490000000%
UT9	Carbon County, Utah	2.7180000000%
UT16	Daggett County, Utah	0.0280000000%
UT17	Davis County, Utah	8.6950000000%
UT19	Duchesne County, Utah	0.6410000000%
UT21	Emery County, Utah	0.9380000000%
UT23	Garfield County, Utah	0.1470000000%
UT24	Grand County, Utah	0.3040000000%
UT31	Iron County, Utah	1.6220000000%
UT32	Juab County, Utah	0.3520000000%
UT33	Kane County, Utah	0.4390000000%
UT41	Millard County, Utah	0.3550000000%
UT42	Morgan County, Utah	0.2160000000%
UT50	Piute County, Utah	0.0220000000%
UT54	Rich County, Utah	0.0610000000%
UT58	Salt Lake County, Utah	42.2710000000%
UT59	San Juan County, Utah	0.2490000000%
UT61	Sanpete County, Utah	1.0130000000%
UT64	Sevier County, Utah	0.6610000000%
UT72	Summit County, Utah	0.9440000000%
UT76	Tooele County, Utah	2.2330000000%
UT77	Uintah County, Utah	0.8660000000%
UT78	Utah County, Utah	15.4260000000%
UT81	Wasatch County, Utah	0.6010000000%
UT83	Washington County, Utah	4.8650000000%
UT84	Wayne County, Utah	0.1090000000%
UT85	Weber County, Utah	9.8830000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT1	Addison County, Vermont	0.7355948910%
VT2	Albany Town, Vermont	0.0345075405%
VT3	Albany Village, Vermont	0.0160668267%
VT4	Alburgh Town, Vermont	0.0606145322%
VT5	Alburgh Village, Vermont	0.0525580527%
VT6	Andover Town, Vermont	0.0012398034%
VT7	Arlington Town, Vermont	0.0885559202%
VT8	Athens Town, Vermont	0.0006484140%
VT9	Bakersfield Town, Vermont	0.0549127180%
VT10	Baltimore Town, Vermont	0.0024796068%
VT11	Barnard Town, Vermont	0.0830636232%
VT12	Barnet Town, Vermont	0.0471074029%
VT13	Barre City, Vermont	2.1256028600%
VT14	Barre Town, Vermont	1.3320832015%
VT15	Barton Town, Vermont	0.3252065150%
VT16	Barton Village, Vermont	0.0324162133%
VT17	Bellows Falls Village, Vermont	0.9422159742%
VT18	Belvidere Town, Vermont	0.0049931720%
VT19	Bennington County, Vermont	0.9901518348%
VT20	Bennington Town, Vermont	2.4851413569%
VT21	Benson Town, Vermont	0.0225970986%
VT22	Berlin Town, Vermont	0.5526473249%
VT23	Bethel Town, Vermont	0.0892626402%
VT24	Bloomfield Town, Vermont	0.0119245379%
VT25	Bolton Town, Vermont	0.1874031696%
VT26	Bradford Town, Vermont	0.7724442824%
VT27	Braintree Town, Vermont	0.0619908100%
VT28	Brandon Town, Vermont	0.5039156835%
VT29	Brattleboro Town, Vermont	2.8616648398%
VT30	Bridgewater Town, Vermont	0.2045592293%
VT31	Bridport Town, Vermont	0.0525426753%
VT32	Brighton Town, Vermont	0.1371312246%
VT33	Bristol Town, Vermont	0.4536168281%
VT34	Brookfield Town, Vermont	0.0181094589%
VT35	Brookline Town, Vermont	0.0142663887%
VT36	Brownington Town, Vermont	0.0209132726%
VT37	Brunswick Town, Vermont	0.0071549790%
VT38	Burke Town, Vermont	0.0035553845%
VT39	Burlington City, Vermont	10.6984139884%
VT40	Cabot Town, Vermont	0.0223388863%
VT41	Calais Town, Vermont	0.0461347819%
VT42	Caledonia County, Vermont	0.8505961058%
VT43	Cambridge Town, Vermont	0.0682410850%
VT44	Cambridge Village, Vermont	0.0012481328%
VT45	Canaan Town, Vermont	0.1359388349%
VT46	Castleton Town, Vermont	0.4255786906%
VT47	Cavendish Town, Vermont	0.0216955982%
VT48	Charleston Town, Vermont	0.0460098405%
VT49	Charlotte Town, Vermont	0.2587947007%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT50	Chelsea Town, Vermont	0.0097511978%
VT51	Chester Town, Vermont	0.3719262791%
VT52	Chittenden County, Vermont	0.6721150355%
VT53	Chittenden Town, Vermont	0.0203372606%
VT54	Clarendon Town, Vermont	0.0632716198%
VT55	Colchester Town, Vermont	2.5489633597%
VT56	Concord Town, Vermont	0.0166940968%
VT57	Corinth Town, Vermont	0.0626872784%
VT58	Cornwall Town, Vermont	0.0577966224%
VT59	Coventry Town, Vermont	0.0376445314%
VT60	Craftsbury Town, Vermont	0.0501924950%
VT61	Danby Town, Vermont	0.0082858591%
VT62	Danville Town, Vermont	0.0302198071%
VT63	Derby Center Village, Vermont	0.0488117321%
VT64	Derby Line Village, Vermont	0.0549242511%
VT65	Derby Town, Vermont	0.5855806035%
VT66	Dorset Town, Vermont	0.0697288490%
VT67	Dover Town, Vermont	0.6426262960%
VT68	Dummerston Town, Vermont	0.0577133282%
VT69	East Haven Town, Vermont	0.0107321482%
VT70	East Montpelier Town, Vermont	0.1121807421%
VT71	Eden Town, Vermont	0.0299596726%
VT72	Elmore Town, Vermont	0.0195568572%
VT73	Enosburg Falls Village, Vermont	0.0515847910%
VT74	Enosburgh Town, Vermont	0.0873609676%
VT75	Essex County, Vermont	0.3791972294%
VT76	Essex Junction Village, Vermont	0.1451319610%
VT77	Essex Town, Vermont	1.8402135758%
VT78	Fair Haven Town, Vermont	0.3879168595%
VT79	Fairfax Town, Vermont	0.1256334098%
VT80	Fairfield Town, Vermont	0.0981770508%
VT81	Fairlee Town, Vermont	0.0592042959%
VT82	Fayston Town, Vermont	0.0053417265%
VT83	Ferrisburgh Town, Vermont	0.1296046250%
VT84	Fletcher Town, Vermont	0.0216321664%
VT85	Franklin County, Vermont	1.4110871894%
VT86	Franklin Town, Vermont	0.0432643327%
VT87	Georgia Town, Vermont	0.2512668196%
VT88	Goshen Town, Vermont	0.0148872515%
VT89	Grafton Town, Vermont	0.0220479971%
VT90	Grand Isle County, Vermont	0.4312958821%
VT91	Grand Isle Town, Vermont	0.1561992085%
VT92	Granville Town, Vermont	0.0131355086%
VT93	Greensboro Town, Vermont	0.2645567430%
VT94	Groton Town, Vermont	0.0719938128%
VT95	Guildhall Town, Vermont	0.0155017070%
VT96	Guilford Town, Vermont	0.0032420698%
VT97	Halifax Town, Vermont	0.0155632167%
VT98	Hancock Town, Vermont	0.0534179060%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT99	Hardwick Town, Vermont	0.7839350493%
VT100	Hartford Town, Vermont	3.2053851113%
VT101	Hartland Town, Vermont	0.0483504099%
VT102	Highgate Town, Vermont	0.2362905072%
VT103	Hinesburg Town, Vermont	0.2869757200%
VT104	Holland Town, Vermont	0.0010456636%
VT105	Hubbardton Town, Vermont	0.0632716198%
VT106	Huntington Town, Vermont	0.0422712086%
VT107	Hyde Park Town, Vermont	0.0374497510%
VT108	Hyde Park Village, Vermont	0.0025481644%
VT109	Ira Town, Vermont	0.0067788733%
VT110	Irasburg Town, Vermont	0.0909740173%
VT111	Isle La Motte Town, Vermont	0.0520666164%
VT112	Jacksonville Village, Vermont	0.0061977355%
VT113	Jamaica Town, Vermont	0.0259384809%
VT114	Jay Town, Vermont	0.0031369909%
VT115	Jeffersonville Village, Vermont	0.0039462269%
VT116	Jericho Town, Vermont	0.0422712086%
VT117	Johnson Town, Vermont	0.2812873611%
VT118	Johnson Village, Vermont	0.1616364031%
VT119	Killington Town, Vermont	0.2124125988%
VT120	Kirby Town, Vermont	0.0008886859%
VT121	Lamoille County, Vermont	1.1151624597%
VT122	Landgrove Town, Vermont	0.0125511672%
VT123	Leicester Town, Vermont	0.0481639588%
VT124	Lincoln Town, Vermont	0.0718080025%
VT125	Londonderry Town, Vermont	0.0382589870%
VT126	Lowell Town, Vermont	0.0481011678%
VT127	Ludlow Town, Vermont	0.7209171567%
VT128	Ludlow Village, Vermont	0.2940730337%
VT129	Lunenburg Town, Vermont	0.0965880521%
VT130	Lyndon Town, Vermont	0.4559618826%
VT131	Lyndonville Village, Vermont	0.0079994549%
VT132	Maidstone Town, Vermont	0.0214642963%
VT133	Manchester Town, Vermont	0.6972897719%
VT134	Manchester Village, Vermont	0.0076701221%
VT135	Marlboro Town, Vermont	0.0129695608%
VT136	Marshfield Town, Vermont	0.0174828296%
VT137	Marshfield Village, Vermont	0.0171445266%
VT138	Mendon Town, Vermont	0.0971672678%
VT139	Middlebury Town, Vermont	1.3520936922%
VT140	Middlesex Town, Vermont	0.0165114901%
VT141	Middletown Springs Town, Vermont	0.0587525845%
VT142	Milton Town, Vermont	0.9332579943%
VT143	Monkton Town, Vermont	0.0210170701%
VT144	Montgomery Town, Vermont	0.0432643327%
VT145	Montpelier City, Vermont	2.1358012840%
VT146	Moretown, Vermont	0.0140831413%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT147	Morgan Town, Vermont	0.0271878951%
VT148	Morristown, Vermont	0.5887893556%
VT149	Morrisville Village, Vermont	0.2266450291%
VT150	Mount Holly Town, Vermont	0.0918947396%
VT151	Mount Tabor Town, Vermont	0.0241034437%
VT152	New Haven Town, Vermont	0.1313563678%
VT153	Newbury Town, Vermont	0.0536325490%
VT154	Newbury Village, Vermont	0.0020894051%
VT155	Newfane Town, Vermont	0.0603069840%
VT156	Newfane Village, Vermont	0.0032420698%
VT157	Newport City, Vermont	1.2443589426%
VT158	Newport Town, Vermont	0.5761696308%
VT159	North Bennington Village, Vermont	0.1073823506%
VT160	North Hero Town, Vermont	0.0916986776%
VT161	North Troy Village, Vermont	0.0345075405%
VT162	Northfield Town, Vermont	0.5366215046%
VT163	Norton Town, Vermont	0.0131169276%
VT164	Norwich Town, Vermont	0.4866039276%
VT165	Old Bennington Village, Vermont	0.0014256137%
VT166	Orange County, Vermont	0.5836866196%
VT167	Orange Town, Vermont	0.0271641883%
VT168	Orleans County, Vermont	0.4475510820%
VT169	Orleans Village, Vermont	0.1150249216%
VT170	Orwell Town, Vermont	0.0350284502%
VT171	Panton Town, Vermont	0.0402823974%
VT172	Pawlet Town, Vermont	0.0497138732%
VT173	Peacham Town, Vermont	0.0373299353%
VT174	Perkinsville Village, Vermont	0.0463135443%
VT175	Peru Town, Vermont	0.0034861862%
VT176	Pittsfield Town, Vermont	0.0090387113%
VT177	Pittsford Town, Vermont	0.2538406130%
VT178	Plainfield Town, Vermont	0.0684736682%
VT179	Plymouth Town, Vermont	0.0681866233%
VT180	Pomfret Town, Vermont	0.0750052216%
VT181	Poultney Town, Vermont	0.1634522185%
VT182	Poultney Village, Vermont	0.3218151562%
VT183	Pownal Town, Vermont	0.1568905511%
VT184	Proctor Town, Vermont	0.1581796903%
VT185	Putney Town, Vermont	0.1348803568%
VT186	Randolph Town, Vermont	1.0482675385%
VT187	Reading Town, Vermont	0.0006195813%
VT188	Readsboro Town, Vermont	0.0495075597%
VT189	Richford Town, Vermont	0.3377954850%
VT190	Richmond Town, Vermont	0.3085809759%
VT191	Ripton Town, Vermont	0.0402823974%
VT192	Rochester Town, Vermont	0.1090982129%
VT193	Rockingham Town, Vermont	0.4824558723%
VT194	Roxbury Town, Vermont	0.0082557450%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT195	Royalton Town, Vermont	0.1989804344%
VT196	Rutland City, Vermont	6.2978142029%
VT197	Rutland County, Vermont	1.5426293676%
VT198	Rutland Town, Vermont	0.3201255637%
VT199	Ryegate Town, Vermont	0.0515514733%
VT200	Salisbury Town, Vermont	0.0271468887%
VT201	Sandgate Town, Vermont	0.0257994435%
VT202	Saxtons River Village, Vermont	0.0156375408%
VT203	Searsburg Town, Vermont	0.0118540581%
VT204	Shaftsbury Town, Vermont	0.0697288490%
VT205	Sharon Town, Vermont	0.1462910330%
VT206	Sheffield Town, Vermont	0.0302198071%
VT207	Shelburne Town, Vermont	0.7838991687%
VT208	Sheldon Town, Vermont	0.1372817951%
VT209	Shoreham Town, Vermont	0.0359043216%
VT210	Shrewsbury Town, Vermont	0.0323893028%
VT211	South Burlington City, Vermont	4.2811506559%
VT212	South Hero Town, Vermont	0.0559519744%
VT213	Springfield Town, Vermont	2.0400160607%
VT214	St Albans Town, Vermont	0.7155280165%
VT215	St George Town, Vermont	0.0117419312%
VT216	St Johnsbury Town, Vermont	1.7171904807%
VT217	St. Albans City, Vermont	3.9012902759%
VT218	Stamford Town, Vermont	0.0495075597%
VT219	Stannard Town, Vermont	0.0017773719%
VT220	Starksboro Town, Vermont	0.0070056900%
VT221	Stockbridge Town, Vermont	0.0737654182%
VT222	Stowe Town, Vermont	0.9395659345%
VT223	Strafford Town, Vermont	0.0821896740%
VT224	Stratton Town, Vermont	0.1614672516%
VT225	Sudbury Town, Vermont	0.0135583873%
VT226	Sunderland Town, Vermont	0.0341673154%
VT227	Sutton Town, Vermont	0.0364412494%
VT228	Swanton Town, Vermont	0.1297936389%
VT229	Swanton Village, Vermont	0.5715903674%
VT230	Thetford Town, Vermont	0.2618926073%
VT231	Tinmouth Town, Vermont	0.0120520422%
VT232	Topsham Town, Vermont	0.0592042959%
VT233	Townshend Town, Vermont	0.0596585701%
VT234	Troy Town, Vermont	0.0365988678%
VT235	Underhill Town, Vermont	0.0897092257%
VT236	Vergennes City, Vermont	1.4746932678%
VT237	Vernon Town, Vermont	0.3196917927%
VT238	Vershire Town, Vermont	0.0006964684%
VT239	Victory Town, Vermont	0.0095397585%
VT240	Waitsfield Town, Vermont	0.0485631307%
VT241	Walden Town, Vermont	0.0071107690%
VT242	Wallingford Town, Vermont	0.0165710775%
VT243	Waltham Town, Vermont	0.0201411987%

State ID	Qualifying Subdivision	Consolidated State Allocation
VT244	Warren Town, Vermont	0.0480774609%
VT245	Washington County, Vermont	0.9081281087%
VT246	Washington Town, Vermont	0.0529360806%
VT247	Waterbury Town, Vermont	0.4584350821%
VT248	Waterford Town, Vermont	0.0577729156%
VT249	Waterville Town, Vermont	0.0004158307%
VT250	Weathersfield Town, Vermont	0.1692264346%
VT251	Wells River Village, Vermont	0.1107474397%
VT252	Wells Town, Vermont	0.0444407043%
VT253	West Burke Village, Vermont	0.0017773719%
VT254	West Fairlee Town, Vermont	0.0090547294%
VT255	West Haven Town, Vermont	0.0090387113%
VT256	West Rutland Town, Vermont	0.1212713522%
VT257	West Windsor Town, Vermont	0.0210760168%
VT258	Westfield Town, Vermont	0.0250965679%
VT259	Westford Town, Vermont	0.0657557117%
VT260	Westminster Town, Vermont	0.0752217867%
VT261	Westminster Village, Vermont	0.0079763888%
VT262	Westmore Town, Vermont	0.0365988678%
VT263	Weston Town, Vermont	0.0291344185%
VT264	Weybridge Town, Vermont	0.0245199151%
VT265	Wheelock Town, Vermont	0.0222203522%
VT266	Whiting Town, Vermont	0.0026269736%
VT267	Whitingham Town, Vermont	0.0901365894%
VT268	Williston Town, Vermont	1.4048183334%
VT269	Wilmington Town, Vermont	0.4344700351%
VT270	Windham County, Vermont	0.7048785219%
VT271	Windham Town, Vermont	0.0155632167%
VT272	Windsor County, Vermont	0.7909631647%
VT273	Windsor Town, Vermont	1.5118803214%
VT274	Winhall Town, Vermont	0.3772340472%
VT275	Winooski City, Vermont	1.3620774732%
VT276	Wolcott Town, Vermont	0.0337047118%
VT277	Woodbury Town, Vermont	0.0267099141%
VT278	Woodford Town, Vermont	0.0383512514%
VT279	Woodstock Town, Vermont	0.5151181240%
VT280	Woodstock Village, Vermont	0.3241960913%
VT281	Worcester Town, Vermont	0.0233102258%

State ID	Qualifying Subdivision	Consolidated State Allocation
VA1	Accomack County, Virginia	0.3480034800%
VA2	Albemarle County, Virginia	0.8630086301%
VA3	Alexandria City, Virginia	1.1620116201%
VA4	Alleghany County, Virginia	0.2130021300%
VA5	Amelia County, Virginia	0.1000010000%
VA6	Amherst County, Virginia	0.2990029900%
VA7	Appomattox County, Virginia	0.1330013300%
VA8	Arlington County, Virginia	1.3780137801%
VA9	Augusta County, Virginia	0.8350083501%
VA10	Bath County, Virginia	0.0370003700%
VA11	Bedford County, Virginia	0.7770077701%
VA12	Bland County, Virginia	0.1470014700%
VA13	Botetourt County, Virginia	0.3620036200%
VA14	Bristol City, Virginia	0.4340043400%
VA15	Brunswick County, Virginia	0.1070010700%
VA16	Buchanan County, Virginia	0.9290092901%
VA17	Buckingham County, Virginia	0.1270012700%
VA18	Buena Vista City, Virginia	0.0780007800%
VA19	Campbell County, Virginia	0.4560045600%
VA20	Caroline County, Virginia	0.3180031800%
VA21	Carroll County, Virginia	0.4400044000%
VA22	Charles City County, Virginia	0.0730007300%
VA23	Charlotte County, Virginia	0.1380013800%
VA24	Charlottesville City, Virginia	0.4630046300%
VA25	Chesapeake City, Virginia	2.9120291203%
VA26	Chesterfield County, Virginia	4.0880408804%
VA27	Clarke County, Virginia	0.1250012500%
VA28	Colonial Heights City, Virginia	0.2830028300%
VA29	Covington City, Virginia	0.1000010000%
VA30	Craig County, Virginia	0.0700007000%
VA31	Culpeper County, Virginia	0.7900079001%
VA32	Cumberland County, Virginia	0.1000010000%
VA33	Danville City, Virginia	0.6370063701%
VA34	Dickenson County, Virginia	0.9480094801%
VA35	Dinwiddie County, Virginia	0.1960019600%
VA36	Emporia City, Virginia	0.0500005000%
VA37	Essex County, Virginia	0.1010010100%
VA38	Fairfax City, Virginia	0.2690026900%
VA39	Fairfax County, Virginia	8.6720867209%
VA40	Falls Church City, Virginia	0.1020010200%
VA41	Fauquier County, Virginia	1.2100121001%
VA42	Floyd County, Virginia	0.1820018200%
VA43	Fluvanna County, Virginia	0.1940019400%
VA44	Franklin City, Virginia	0.0790007900%
VA45	Franklin County, Virginia	0.9540095401%
VA46	Frederick County, Virginia	1.2770127701%
VA47	Fredericksburg City, Virginia	0.5240052401%
VA48	Galax City, Virginia	0.1390013900%
VA49	Giles County, Virginia	0.4090040900%

State ID	Qualifying Subdivision	Consolidated State Allocation
VA50	Gloucester County, Virginia	0.4240042400%
VA51	Goochland County, Virginia	0.2250022500%
VA52	Grayson County, Virginia	0.2240022400%
VA53	Greene County, Virginia	0.1780017800%
VA54	Greensville County, Virginia	0.1240012400%
VA55	Halifax County, Virginia	0.3530035300%
VA56	Hampton City, Virginia	1.5380153802%
VA57	Hanover County, Virginia	1.0790107901%
VA58	Harrisonburg City, Virginia	0.5230052301%
VA59	Henrico County, Virginia	4.4730447304%
VA60	Henry County, Virginia	1.2200122001%
VA61	Highland County, Virginia	0.0230002300%
VA62	Hopewell City, Virginia	0.3440034400%
VA63	Isle of Wight County, Virginia	0.3560035600%
VA64	James City County, Virginia	0.6120061201%
VA65	King and Queen County, Virginia	0.0720007200%
VA66	King George County, Virginia	0.3060030600%
VA67	King William County, Virginia	0.1780017800%
VA68	Lancaster County, Virginia	0.1350013500%
VA69	Lee County, Virginia	0.5560055601%
VA70	Lexington City, Virginia	0.0930009300%
VA71	Loudoun County, Virginia	2.5670256703%
VA72	Louisa County, Virginia	0.4490044900%
VA73	Lunenburg County, Virginia	0.0880008800%
VA74	Lynchburg City, Virginia	0.8160081601%
VA75	Madison County, Virginia	0.1630016300%
VA76	Manassas City, Virginia	0.4520045200%
VA77	Manassas Park City, Virginia	0.0950009500%
VA78	Martinsville City, Virginia	0.4940049400%
VA79	Mathews County, Virginia	0.0880008800%
VA80	Mecklenburg County, Virginia	0.3440034400%
VA81	Middlesex County, Virginia	0.1080010800%
VA82	Montgomery County, Virginia	1.2050120501%
VA83	Nelson County, Virginia	0.1470014700%
VA84	New Kent County, Virginia	0.1560015600%
VA85	Newport News City, Virginia	2.0470204702%
VA86	Norfolk City, Virginia	3.3880338803%
VA87	Northampton County, Virginia	0.1220012200%
VA88	Northumberland County, Virginia	0.1290012900%
VA89	Norton City, Virginia	0.1100011000%
VA90	Nottoway County, Virginia	0.1330013300%
VA91	Orange County, Virginia	0.6380063801%
VA92	Page County, Virginia	0.4100041000%
VA93	Patrick County, Virginia	0.3290032900%
VA94	Petersburg City, Virginia	0.3950039500%
VA95	Pittsylvania County, Virginia	0.7500075001%
VA96	Poquoson City, Virginia	0.1860018600%
VA97	Portsmouth City, Virginia	1.9370193702%
VA98	Powhatan County, Virginia	0.2620026200%

State ID	Qualifying Subdivision	Consolidated State Allocation
VA99	Prince Edward County, Virginia	0.1900019000%
VA100	Prince George County, Virginia	0.3510035100%
VA101	Prince William County, Virginia	3.5560355604%
VA102	Pulaski County, Virginia	1.0610106101%
VA103	Radford City, Virginia	0.2470024700%
VA104	Rappahannock County, Virginia	0.0910009100%
VA105	Richmond City, Virginia	4.2250422504%
VA106	Richmond County, Virginia	0.0840008400%
VA107	Roanoke City, Virginia	1.8590185902%
VA108	Roanoke County, Virginia	1.4980149801%
VA109	Rockbridge County, Virginia	0.2350023500%
VA110	Rockingham County, Virginia	0.6140061401%
VA111	Russell County, Virginia	1.0640106401%
VA112	Salem City, Virginia	0.7860078601%
VA113	Scott County, Virginia	0.4210042100%
VA114	Shenandoah County, Virginia	0.6600066001%
VA115	Smyth County, Virginia	0.5920059201%
VA116	Southampton County, Virginia	0.1370013700%
VA117	Spotsylvania County, Virginia	1.4170141701%
VA118	Stafford County, Virginia	1.4430144301%
VA119	Staunton City, Virginia	0.4400044000%
VA120	Suffolk City, Virginia	0.7100071001%
VA121	Surry County, Virginia	0.0580005800%
VA122	Sussex County, Virginia	0.0810008100%
VA123	Tazewell County, Virginia	1.6060160602%
VA124	Virginia Beach City, Virginia	4.8590485905%
VA125	Warren County, Virginia	0.7660076601%
VA126	Washington County, Virginia	0.9960099601%
VA127	Waynesboro City, Virginia	0.3630036300%
VA128	Westmoreland County, Virginia	0.2230022300%
VA129	Williamsburg City, Virginia	0.0860008600%
VA130	Winchester City, Virginia	0.6490064901%
VA131	Wise County, Virginia	1.7560175602%
VA132	Wythe County, Virginia	0.6420064201%
VA133	York County, Virginia	0.5610056101%

State ID	Qualifying Subdivision	Consolidated State Allocation
WA1	Aberdeen City, Washington	0.2491525333%
WA2	Adams County, Washington	0.1638732475%
WA3	Anacortes City, Washington	0.1774962906%
WA4	Arlington City, Washington	0.2620524080%
WA5	Asotin County, Washington	0.4694498386%
WA6	Auburn City, Washington	0.3251297029%
WA7	Bainbridge Island City, Washington	0.1364686014%
WA8	Battle Ground City, Washington	0.1384729857%
WA9	Bellevue City, Washington	1.1300592573%
WA10	Bellingham City, Washington	0.8978614577%
WA11	Benton County, Washington	1.4848831892%
WA12	Bonney Lake City, Washington	0.1190773864%
WA13	Bothell City, Washington	0.4476161304%
WA14	Bremerton City, Washington	0.6193374389%
WA15	Burien City, Washington	0.0270962921%
WA16	Burlington City, Washington	0.1146861661%
WA17	Camas City, Washington	0.2691592724%
WA18	Centralia City, Washington	0.1909990353%
WA19	Chelan County, Washington	0.7434914485%
WA20	Cheney City, Washington	0.1238454349%
WA21	Clallam County, Washington	1.3076983401%
WA22	Clark County, Washington	4.5149775326%
WA23	Columbia County, Washington	0.0561699537%
WA24	Covington City, Washington	0.0118134406%
WA25	Cowlitz County, Washington	1.7226945990%
WA26	Des Moines City, Washington	0.1179764526%
WA27	Douglas County, Washington	0.3932175175%
WA28	East Wenatchee City, Washington	0.0799810865%
WA29	Edgewood City, Washington	0.0048016791%
WA30	Edmonds City, Washington	0.3058936009%
WA31	Ellensburg City, Washington	0.0955824915%
WA32	Enumclaw City, Washington	0.0537768326%
WA33	Everett City, Washington	1.9258363241%
WA34	Federal Way City, Washington	0.3061452240%
WA35	Ferndale City, Washington	0.0646101891%
WA36	Ferry County, Washington	0.1153487994%
WA37	Fife City, Washington	0.1955185481%
WA38	Franklin County, Washington	0.3361237144%
WA39	Garfield County, Washington	0.0321982209%
WA40	Gig Harbor City, Washington	0.0859963345%
WA41	Grandview City, Washington	0.0530606109%
WA42	Grant County, Washington	0.9932572167%
WA43	Grays Harbor County, Washington	0.9992429138%
WA44	Island County, Washington	0.6820422610%
WA45	Issaquah City, Washington	0.1876240107%
WA46	Jefferson County, Washington	0.4417137380%
WA47	Kelso City, Washington	0.1331145270%
WA48	Kenmore City, Washington	0.0204441024%

State ID	Qualifying Subdivision	Consolidated State Allocation
WA49	Kennewick City, Washington	0.5415650564%
WA50	Kent City, Washington	0.5377397676%
WA51	King County, Washington	13.9743722662%
WA52	Kirkland City, Washington	0.5453525246%
WA53	Kitsap County, Washington	2.6294133668%
WA54	Kittitas County, Washington	0.3855704683%
WA55	Klickitat County, Washington	0.2211673457%
WA56	Lacey City, Washington	0.2348627221%
WA57	Lake Forest Park City, Washington	0.0525439124%
WA58	Lake Stevens City, Washington	0.1385202891%
WA59	Lakewood City, Washington	0.5253640894%
WA60	Lewis County, Washington	1.0777377479%
WA61	Liberty Lake City, Washington	0.0389636519%
WA62	Lincoln County, Washington	0.1712669645%
WA63	Longview City, Washington	0.6162736905%
WA64	Lynden City, Washington	0.0827115612%
WA65	Lynnwood City, Washington	0.7704629214%
WA66	Maple Valley City, Washington	0.0093761587%
WA67	Marysville City, Washington	0.3945067827%
WA68	Mason County, Washington	0.8089918012%
WA69	Mercer Island City, Washington	0.1751797481%
WA70	Mill Creek City, Washington	0.1227939546%
WA71	Monroe City, Washington	0.1771621898%
WA72	Moses Lake City, Washington	0.2078293909%
WA73	Mount Vernon City, Washington	0.2801063665%
WA74	Mountlake Terrace City, Washington	0.2108935805%
WA75	Mukilteo City, Washington	0.2561790702%
WA76	Newcastle City, Washington	0.0033117880%
WA77	Oak Harbor City, Washington	0.2511550431%
WA78	Okanogan County, Washington	0.6145043345%
WA79	Olympia City, Washington	0.6039423385%
WA80	Pacific County, Washington	0.4895416466%
WA81	Pasco City, Washington	0.4278056066%
WA82	Pend Oreille County, Washington	0.2566374940%
WA83	Pierce County, Washington	7.2310164020%
WA84	Port Angeles City, Washington	0.4598370527%
WA85	Port Orchard City, Washington	0.1009497162%
WA86	Poulsbo City, Washington	0.0773748246%
WA87	Pullman City, Washington	0.2214837491%
WA88	Puyallup City, Washington	0.3845704814%
WA89	Redmond City, Washington	0.4839486007%
WA90	Renton City, Washington	0.7652626920%
WA91	Richland City, Washington	0.4756779517%
WA92	Sammamish City, Washington	0.0224369090%
WA93	San Juan County, Washington	0.2101495171%
WA94	Seatac City, Washington	0.1481551278%
WA95	Seattle City, Washington	6.6032403816%

State ID	Qualifying Subdivision	Consolidated State Allocation
WA96	Sedro-Woolley City, Washington	0.0661146351%
WA97	Shelton City, Washington	0.1239179888%
WA98	Shoreline City, Washington	0.0435834501%
WA99	Skagit County, Washington	1.0526023961%
WA100	Skamania County, Washington	0.1631931925%
WA101	Snohomish City, Washington	0.0861097964%
WA102	Snohomish County, Washington	6.9054415622%
WA103	Snoqualmie City, Washington	0.0649164481%
WA104	Spokane City, Washington	3.0872078287%
WA105	Spokane County, Washington	5.5623859292%
WA106	Spokane Valley City, Washington	0.0684217500%
WA107	Stevens County, Washington	0.7479240179%
WA108	Sumner City, Washington	0.1083157569%
WA109	Sunnyside City, Washington	0.1213478384%
WA110	Tacoma City, Washington	3.2816374617%
WA111	Thurston County, Washington	2.3258492094%
WA112	Tukwila City, Washington	0.3032205739%
WA113	Tumwater City, Washington	0.2065982350%
WA114	University Place City, Washington	0.0353733363%
WA115	Vancouver City, Washington	1.7306605325%
WA116	Wahkiakum County, Washington	0.0596582197%
WA117	Walla Walla City, Washington	0.3140768654%
WA118	Walla Walla County, Washington	0.5543870294%
WA119	Washougal City, Washington	0.1279328220%
WA120	Wenatchee City, Washington	0.2968333494%
WA121	West Richland City, Washington	0.0459360490%
WA122	Whatcom County, Washington	1.3452637306%
WA123	Whitman County, Washington	0.2626805837%
WA124	Woodinville City, Washington	0.0185516364%
WA125	Yakima City, Washington	0.6060410539%
WA126	Yakima County, Washington	1.9388392959%

State ID	Qualifying Subdivision	Consolidated State Allocation
WI1	Adams County, Wisconsin	0.3270000000%
WI4	Ashland County, Wisconsin	0.2250000000%
WI7	Barron County, Wisconsin	0.4780000000%
WI8	Bayfield County, Wisconsin	0.1240000000%
WI13	Brown County, Wisconsin	2.9000000000%
WI15	Buffalo County, Wisconsin	0.1260000000%
WI17	Burnett County, Wisconsin	0.2240000000%
WI19	Calumet County, Wisconsin	0.3860000000%
WI21	Chippewa County, Wisconsin	0.6960000000%
WI23	Clark County, Wisconsin	0.2610000000%
WI24	Columbia County, Wisconsin	1.0760000000%
WI25	Crawford County, Wisconsin	0.1950000000%
WI26	Cudahy City, Wisconsin	0.0870000000%
WI27	Dane County, Wisconsin	8.2480000000%
WI30	Dodge County, Wisconsin	1.3020000000%
WI31	Door County, Wisconsin	0.2820000000%
WI32	Douglas County, Wisconsin	0.5540000000%
WI33	Dunn County, Wisconsin	0.4420000000%
WI35	Eau Claire County, Wisconsin	1.1770000000%
WI38	Florence County, Wisconsin	0.0530000000%
WI40	Fond Du Lac County, Wisconsin	1.1960000000%
WI41	Forest County, Wisconsin	0.1270000000%
WI43	Franklin City, Wisconsin	0.1550000000%
WI48	Grant County, Wisconsin	0.4980000000%
WI50	Green County, Wisconsin	0.4660000000%
WI51	Green Lake County, Wisconsin	0.2800000000%
WI53	Greenfield City, Wisconsin	0.1630000000%
WI61	Iowa County, Wisconsin	0.2790000000%
WI62	Iron County, Wisconsin	0.0610000000%
WI63	Jackson County, Wisconsin	0.2360000000%
WI65	Jefferson County, Wisconsin	1.0510000000%
WI66	Juneau County, Wisconsin	0.4380000000%
WI68	Kenosha City, Wisconsin	0.4840000000%
WI69	Kenosha County, Wisconsin	3.7120000000%
WI70	Kewaunee County, Wisconsin	0.1560000000%
WI72	La Crosse County, Wisconsin	1.6490000000%
WI73	Lafayette County, Wisconsin	0.1340000000%
WI74	Langlade County, Wisconsin	0.3120000000%
WI75	Lincoln County, Wisconsin	0.3500000000%
WI80	Manitowoc County, Wisconsin	1.4030000000%
WI81	Marathon County, Wisconsin	1.2590000000%
WI82	Marinette City, Wisconsin	0.0320000000%
WI83	Marinette County, Wisconsin	0.5030000000%
WI84	Marquette County, Wisconsin	0.2460000000%
WI87	Menominee County, Wisconsin	0.0800000000%
WI92	Milwaukee City, Wisconsin	7.8150000000%
WI93	Milwaukee County, Wisconsin	25.2210000000%
WI95	Monroe County, Wisconsin	0.6550000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
WI96	Mount Pleasant Village, Wisconsin	0.1170000000%
WI100	Oak Creek City, Wisconsin	0.1660000000%
WI102	Oconto County, Wisconsin	0.3360000000%
WI104	Oneida County, Wisconsin	0.5260000000%
WI107	Outagamie County, Wisconsin	1.8360000000%
WI108	Ozaukee County, Wisconsin	1.0360000000%
WI109	Pepin County, Wisconsin	0.0550000000%
WI111	Pierce County, Wisconsin	0.3870000000%
WI113	Pleasant Prairie Village, Wisconsin	0.0590000000%
WI118	Portage County, Wisconsin	0.7290000000%
WI119	Price County, Wisconsin	0.1490000000%
WI121	Racine County, Wisconsin	3.2080000000%
WI123	Richland County, Wisconsin	0.2180000000%
WI125	Rock County, Wisconsin	2.9470000000%
WI126	Rusk County, Wisconsin	0.1590000000%
WI128	Sauk County, Wisconsin	1.2260000000%
WI129	Sawyer County, Wisconsin	0.2580000000%
WI130	Shawano County, Wisconsin	0.4180000000%
WI132	Sheboygan County, Wisconsin	1.4100000000%
WI134	South Milwaukee City, Wisconsin	0.0960000000%
WI135	St Croix County, Wisconsin	0.8290000000%
WI138	Sturtevant Village, Wisconsin	0.0180000000%
WI141	Superior City, Wisconsin	0.0890000000%
WI143	Taylor County, Wisconsin	0.1590000000%
WI145	Trempealeau County, Wisconsin	0.3200000000%
WI147	Union Grove Village, Wisconsin	0.0070000000%
WI148	Vernon County, Wisconsin	0.3220000000%
WI150	Vilas County, Wisconsin	0.4680000000%
WI151	Walworth County, Wisconsin	1.5730000000%
WI152	Washburn County, Wisconsin	0.1850000000%
WI153	Washington County, Wisconsin	1.9910000000%
WI156	Waukesha County, Wisconsin	6.0350000000%
WI158	Waupaca County, Wisconsin	0.6060000000%
WI161	Waushara County, Wisconsin	0.2310000000%
WI162	Wauwatosa City, Wisconsin	0.3090000000%
WI163	West Allis City, Wisconsin	0.3780000000%
WI168	Winnebago County, Wisconsin	2.1760000000%
WI170	Wood County, Wisconsin	0.8420000000%
WI171	Yorkville Town, Wisconsin	0.0020000000%

State ID	Qualifying Subdivision	Consolidated State Allocation
WY1	Albany County, Wyoming	1.6329876137%
WY2	Big Horn County, Wyoming	3.0324432485%
WY3	Campbell County, Wyoming	4.4393335213%
WY4	Carbon County, Wyoming	3.6968556043%
WY5	Casper City, Wyoming	7.3503611059%
WY6	Cheyenne City, Wyoming	1.2286265328%
WY7	Converse County, Wyoming	1.8962432493%
WY8	Crook County, Wyoming	0.5448669885%
WY9	Evanston City, Wyoming	1.9702405199%
WY10	Fremont County, Wyoming	6.7374838437%
WY11	Gillette City, Wyoming	1.7410635670%
WY12	Goshen County, Wyoming	1.6361202905%
WY13	Green River City, Wyoming	0.6122218672%
WY14	Hot Springs County, Wyoming	0.8557309329%
WY15	Jackson Town, Wyoming	0.5598544963%
WY16	Johnson County, Wyoming	0.9322427236%
WY17	Laramie City, Wyoming	3.4181078811%
WY18	Laramie County, Wyoming	15.5855269922%
WY19	Lincoln County, Wyoming	3.1228011914%
WY20	Natrona County, Wyoming	7.9000169472%
WY21	Niobrara County, Wyoming	0.1540280861%
WY22	Park County, Wyoming	5.7964268009%
WY23	Platte County, Wyoming	1.7507027157%
WY24	Riverton City, Wyoming	1.2744483314%
WY25	Rock Springs City, Wyoming	1.5261479738%
WY26	Sheridan City, Wyoming	0.3405187102%
WY27	Sheridan County, Wyoming	3.9149494912%
WY28	Sublette County, Wyoming	0.7136740477%
WY29	Sweetwater County, Wyoming	7.6391306020%
WY30	Teton County, Wyoming	1.3290900349%
WY31	Uinta County, Wyoming	4.3911508108%
WY32	Washakie County, Wyoming	1.5007597928%
WY33	Weston County, Wyoming	0.7758434851%

EXHIBIT H

[Intentionally Omitted]

EXHIBIT I

Primary Subdivisions

1. Alabaster, City of, Alabama
2. Albertville, City of, Alabama
3. Alexander City, City of, Alabama
4. Anniston, City of, Alabama
5. Athens, City of, Alabama
6. Auburn, City of, Alabama
7. Autauga, County of, Alabama
8. Baldwin, County of, Alabama
9. Barbour, County of, Alabama
10. Bessemer, City of, Alabama
11. Bibb, County of, Alabama
12. Birmingham, City of, Alabama
13. Blount, County of, Alabama
14. Bullock, County of, Alabama
15. Butler, County of, Alabama
16. Calera, City of, Alabama
17. Calhoun, County of, Alabama
18. Center Point, City of, Alabama
19. Chambers, County of, Alabama
20. Chelsea, City of, Alabama
21. Cherokee, County of, Alabama
22. Chilton, County of, Alabama
23. Choctaw, County of, Alabama
24. Clarke, County of, Alabama
25. Clay, County of, Alabama
26. Cleburne, County of, Alabama
27. Coffee, County of, Alabama
28. Colbert, County of, Alabama
29. Conecuh, County of, Alabama
30. Coosa, County of, Alabama
31. Covington, County of, Alabama
32. Crenshaw, County of, Alabama
33. Cullman, City of, Alabama
34. Cullman, County of, Alabama
35. Dale, County of, Alabama
36. Dallas, County of, Alabama
37. Daphne, City of, Alabama
38. Decatur, City of, Alabama
39. DeKalb, County of, Alabama
40. Dothan, City of, Alabama
41. Elmore, County of, Alabama
42. Enterprise, City of, Alabama
43. Escambia, County of, Alabama
44. Etowah, County of, Alabama
45. Eufaula, City of, Alabama
46. Fairfield, City of, Alabama
47. Fairhope, City of, Alabama
48. Fayette, County of, Alabama
49. Florence, City of, Alabama
50. Foley, City of, Alabama
51. Fort Payne, City of, Alabama
52. Franklin, County of, Alabama
53. Gadsden, City of, Alabama
54. Gardendale, City of, Alabama
55. Geneva, County of, Alabama
56. Gulf Shores, City of, Alabama
57. Hale, County of, Alabama
58. Hartselle, City of, Alabama
59. Helena, City of, Alabama
60. Henry, County of, Alabama
61. Homewood, City of, Alabama
62. Hoover, City of, Alabama
63. Houston, County of, Alabama
64. Hueytown, City of, Alabama
65. Huntsville, City of, Alabama
66. Irondale, City of, Alabama
67. Jackson, County of, Alabama
68. Jacksonville, City of, Alabama
69. Jasper, City of, Alabama
70. Jefferson, County of, Alabama
71. Lamar, County of, Alabama
72. Lauderdale, County of, Alabama
73. Lawrence, County of, Alabama
74. Lee, County of, Alabama
75. Leeds, City of, Alabama
76. Limestone, County of, Alabama
77. Macon, County of, Alabama
78. Madison, City of, Alabama
79. Madison, County of, Alabama
80. Marengo, County of, Alabama
81. Marion, County of, Alabama
82. Marshall, County of, Alabama
83. Millbrook, City of, Alabama
84. Mobile, City of, Alabama
85. Mobile, County of, Alabama
86. Monroe, County of, Alabama

87. Montgomery, City of, Alabama
88. Montgomery, County of, Alabama
89. Moody, City of, Alabama
90. Morgan, County of, Alabama
91. Mountain Brook, City of, Alabama
92. Muscle Shoals, City of, Alabama
93. Northport, City of, Alabama
94. Opelika, City of, Alabama
95. Oxford, City of, Alabama
96. Ozark, City of, Alabama
97. Pelham, City of, Alabama
98. Pell City, City of, Alabama
99. Phenix City, City of, Alabama
100. Pickens, County of, Alabama
101. Pike, County of, Alabama
102. Pike Road, Town of, Alabama
103. Prattville, City of, Alabama
104. Prichard, City of, Alabama
105. Randolph, County of, Alabama
106. Russell, County of, Alabama
107. Saraland, City of, Alabama
108. Scottsboro, City of, Alabama
109. Selma, City of, Alabama
110. Shelby, County of, Alabama
111. St. Clair, County of, Alabama
112. Sumter, County of, Alabama
113. Sylacauga, City of, Alabama
114. Talladega, City of, Alabama
115. Talladega, County of, Alabama
116. Tallapoosa, County of, Alabama
117. Troy, City of, Alabama
118. Trussville, City of, Alabama
119. Tuscaloosa, City of, Alabama
120. Tuscaloosa, County of, Alabama
121. Vestavia Hills, City of, Alabama
122. Walker, County of, Alabama
123. Washington, County of, Alabama
124. Wilcox, County of, Alabama
125. Winston, County of, Alabama
126. Anchorage, Municipality of, Alaska
127. Fairbanks, City of, Alaska
128. Fairbanks North Star, Borough of, Alaska
129. Juneau, City of/ Borough of, Alaska
130. Kenai Peninsula, Borough of, Alaska
131. Ketchikan Gateway, Borough of, Alaska
132. Kodiak Island, Borough of, Alaska
133. Matanuska-Susitna, Borough of, Alaska
134. Wasilla, City of, Alaska
135. Apache, County of, Arizona
136. Apache Junction, City of, Arizona
137. Avondale, City of, Arizona
138. Buckeye, City of, Arizona
139. Bullhead City, City of, Arizona
140. Camp Verde, Town of, Arizona
141. Casa Grande, City of, Arizona
142. Chandler, City of, Arizona
143. Chino Valley, Town of, Arizona
144. Cochise, County of, Arizona
145. Coconino, County of, Arizona
146. Coolidge, City of, Arizona
147. Cottonwood, City of, Arizona
148. Douglas, City of, Arizona
149. El Mirage, City of, Arizona
150. Eloy, City of, Arizona
151. Flagstaff, City of, Arizona
152. Florence, Town of, Arizona
153. Fountain Hills, Town of, Arizona
154. Gila, County of, Arizona
155. Gilbert, Town of, Arizona
156. Glendale, City of, Arizona
157. Goodyear, City of, Arizona
158. Graham, County of, Arizona
159. Kingman, City of, Arizona
160. La Paz, County of, Arizona
161. Lake Havasu City, City of, Arizona
162. Marana, Town of, Arizona
163. Maricopa, City of, Arizona
164. Maricopa, County of, Arizona
165. Mesa, City of, Arizona
166. Mohave, County of, Arizona
167. Navajo, County of, Arizona
168. Nogales, City of, Arizona
169. Oro Valley, Town of, Arizona
170. Paradise Valley, Town of, Arizona
171. Payson, Town of, Arizona
172. Peoria, City of, Arizona
173. Phoenix, City of, Arizona
174. Pima, County of, Arizona

175. Pinal, County of, Arizona
176. Prescott, City of, Arizona
177. Prescott Valley, Town of, Arizona
178. Queen Creek, Town of, Arizona
179. Sahuarita, Town of, Arizona
180. San Luis, City of, Arizona
181. Santa Cruz, County of, Arizona
182. Scottsdale, City of, Arizona
183. Sedona, City of, Arizona
184. Show Low, City of, Arizona
185. Sierra Vista, City of, Arizona
186. Somerton, City of, Arizona
187. Surprise, City of, Arizona
188. Tempe, City of, Arizona
189. Tucson, City of, Arizona
190. Yavapai, County of, Arizona
191. Yuma, City of, Arizona
192. Yuma, County of, Arizona
193. Arkadelphia, City of, Arkansas
194. Arkansas, County of, Arkansas
195. Ashley, County of, Arkansas
196. Batesville, City of, Arkansas
197. Baxter, County of, Arkansas
198. Bella Vista, City of, Arkansas
199. Benton, City of, Arkansas
200. Benton, County of, Arkansas
201. Bentonville, City of, Arkansas
202. Blytheville, City of, Arkansas
203. Boone, County of, Arkansas
204. Bradley, County of, Arkansas
205. Bryant, City of, Arkansas
206. Cabot, City of, Arkansas
207. Camden, City of, Arkansas
208. Carroll, County of, Arkansas
209. Centerton, City of, Arkansas
210. Chicot, County of, Arkansas
211. Clark, County of, Arkansas
212. Clay, County of, Arkansas
213. Cleburne, County of, Arkansas
214. Columbia, County of, Arkansas
215. Conway, City of, Arkansas
216. Conway, County of, Arkansas
217. Craighead, County of, Arkansas
218. Crawford, County of, Arkansas
219. Crittenden, County of, Arkansas
220. Cross, County of, Arkansas
221. Desha, County of, Arkansas
222. Drew, County of, Arkansas
223. El Dorado, City of, Arkansas
224. Faulkner, County of, Arkansas
225. Fayetteville, City of, Arkansas
226. Forrest City, City of, Arkansas
227. Fort Smith, City of, Arkansas
228. Franklin, County of, Arkansas
229. Fulton, County of, Arkansas
230. Garland, County of, Arkansas
231. Grant, County of, Arkansas
232. Greene, County of, Arkansas
233. Harrison, City of, Arkansas
234. Helena-West Helena, City of, Arkansas
235. Hempstead, County of, Arkansas
236. Hot Spring, County of, Arkansas
237. Hot Springs, City of, Arkansas
238. Howard, County of, Arkansas
239. Independence, County of, Arkansas
240. Izard, County of, Arkansas
241. Jackson, County of, Arkansas
242. Jacksonville, City of, Arkansas
243. Jefferson, County of, Arkansas
244. Johnson, County of, Arkansas
245. Jonesboro, City of, Arkansas
246. Lawrence, County of, Arkansas
247. Lincoln, County of, Arkansas
248. Little River, County of, Arkansas
249. Little Rock, City of, Arkansas
250. Logan, County of, Arkansas
251. Lonoke, County of, Arkansas
252. Madison, County of, Arkansas
253. Magnolia, City of, Arkansas
254. Malvern, City of, Arkansas
255. Marion, City of, Arkansas
256. Marion, County of, Arkansas
257. Maumelle, City of, Arkansas
258. Miller, County of, Arkansas
259. Mississippi, County of, Arkansas
260. Mountain Home, City of, Arkansas
261. North Little Rock, City of, Arkansas
262. Ouachita, County of, Arkansas
263. Paragould, City of, Arkansas
264. Perry, County of, Arkansas
265. Phillips, County of, Arkansas

266. Pike, County of, Arkansas
267. Pine Bluff, City of, Arkansas
268. Poinsett, County of, Arkansas
269. Polk, County of, Arkansas
270. Pope, County of, Arkansas
271. Pulaski, County of, Arkansas
272. Randolph, County of, Arkansas
273. Rogers, City of, Arkansas
274. Russellville, City of, Arkansas
275. Saline, County of, Arkansas
276. Scott, County of, Arkansas
277. Searcy, City of, Arkansas
278. Sebastian, County of, Arkansas
279. Sevier, County of, Arkansas
280. Sharp, County of, Arkansas
281. Sherwood, City of, Arkansas
282. Siloam Springs, City of, Arkansas
283. Springdale, City of, Arkansas
284. St. Francis, County of, Arkansas
285. Stone, County of, Arkansas
286. Texarkana, City of, Arkansas
287. Union, County of, Arkansas
288. Van Buren, City of, Arkansas
289. Van Buren, County of, Arkansas
290. Washington, County of, Arkansas
291. West Memphis, City of, Arkansas
292. White, County of, Arkansas
293. Yell, County of, Arkansas
294. Adelanto, City of, California
295. Agoura Hills, City of, California
296. Alameda, City of, California
297. Alameda, County of, California
298. Albany, City of, California
299. Alhambra, City of, California
300. Aliso Viejo, City of, California
301. Amador, County of, California
302. American Canyon, City of, California
303. Anaheim, City of, California
304. Anderson, City of, California
305. Antioch, City of, California
306. Apple Valley, Town of, California
307. Arcadia, City of, California
308. Arcata, City of, California
309. Arroyo Grande, City of, California
310. Artesia, City of, California
311. Arvin, City of, California
312. Atascadero, City of, California
313. Atwater, City of, California
314. Auburn, City of, California
315. Avenal, City of, California
316. Azusa, City of, California
317. Bakersfield, City of, California
318. Baldwin Park, City of, California
319. Banning, City of, California
320. Barstow, City of, California
321. Beaumont, City of, California
322. Bell, City of, California
323. Bell Gardens, City of, California
324. Bellflower, City of, California
325. Belmont, City of, California
326. Benicia, City of, California
327. Berkeley, City of, California
328. Beverly Hills, City of, California
329. Blythe, City of, California
330. Brawley, City of, California
331. Brea, City of, California
332. Brentwood, City of, California
333. Buena Park, City of, California
334. Burbank, City of, California
335. Burlingame, City of, California
336. Butte, County of, California
337. Calabasas, City of, California
338. Calaveras, County of, California
339. Calexico, City of, California
340. California City, City of, California
341. Camarillo, City of, California
342. Campbell, City of, California
343. Canyon Lake, City of, California
344. Capitola, City of, California
345. Carlsbad, City of, California
346. Carpinteria, City of, California
347. Carson, City of, California
348. Cathedral City, City of, California
349. Ceres, City of, California
350. Cerritos, City of, California
351. Chico, City of, California
352. Chino, City of, California
353. Chino Hills, City of, California
354. Chowchilla, City of, California
355. Chula Vista, City of, California
356. Citrus Heights, City of, California

357. Claremont, City of, California
358. Clayton, City of, California
359. Clearlake, City of, California
360. Clovis, City of, California
361. Coachella, City of, California
362. Coalinga, City of, California
363. Colton, City of, California
364. Colusa, County of, California
365. Commerce, City of, California
366. Compton, City of, California
367. Concord, City of, California
368. Contra Costa, County of, California
369. Corcoran, City of, California
370. Corona, City of, California
371. Coronado, City of, California
372. Costa Mesa, City of, California
373. Covina, City of, California
374. Cudahy, City of, California
375. Culver City, City of, California
376. Cupertino, City of, California
377. Cypress, City of, California
378. Daly City, City of, California
379. Dana Point, City of, California
380. Danville, Town of, California
381. Davis, City of, California
382. Del Norte, County of, California
383. Delano, City of, California
384. Desert Hot Springs, City of, California
385. Diamond Bar, City of, California
386. Dinuba, City of, California
387. Dixon, City of, California
388. Downey, City of, California
389. Duarte, City of, California
390. Dublin, City of, California
391. East Palo Alto, City of, California
392. Eastvale, City of, California
393. El Cajon, City of, California
394. El Centro, City of, California
395. El Cerrito, City of, California
396. El Dorado, County of, California
397. El Monte, City of, California
398. El Paso de Robles (Paso Robles), City of, California
399. El Segundo, City of, California
400. Elk Grove, City of, California
401. Emeryville, City of, California
402. Encinitas, City of, California
403. Escondido, City of, California
404. Eureka, City of, California
405. Exeter, City of, California
406. Fairfield, City of, California
407. Farmersville, City of, California
408. Fillmore, City of, California
409. Folsom, City of, California
410. Fontana, City of, California
411. Fortuna, City of, California
412. Foster City, City of, California
413. Fountain Valley, City of, California
414. Fremont, City of, California
415. Fresno, City of, California
416. Fresno, County of, California
417. Fullerton, City of, California
418. Galt, City of, California
419. Garden Grove, City of, California
420. Gardena, City of, California
421. Gilroy, City of, California
422. Glendale, City of, California
423. Glendora, City of, California
424. Glenn, County of, California
425. Goleta, City of, California
426. Grand Terrace, City of, California
427. Grass Valley, City of, California
428. Greenfield, City of, California
429. Grover Beach, City of, California
430. Half Moon Bay, City of, California
431. Hanford, City of, California
432. Hawaiian Gardens, City of, California
433. Hawthorne, City of, California
434. Hayward, City of, California
435. Healdsburg, City of, California
436. Hemet, City of, California
437. Hercules, City of, California
438. Hermosa Beach, City of, California
439. Hesperia, City of, California
440. Highland, City of, California
441. Hillsborough, Town of, California
442. Hollister, City of, California
443. Humboldt, County of, California
444. Huntington Beach, City of, California

445. Huntington Park, City of, California
446. Imperial Beach, City of, California
447. Imperial, City of, California
448. Imperial, County of, California
449. Indio, City of, California
450. Inglewood, City of, California
451. Inyo, County of, California
452. Irvine, City of, California
453. Jurupa Valley, City of, California
454. Kerman, City of, California
455. Kern, County of, California
456. King City, City of, California
457. Kings, County of, California
458. Kingsburg, City of, California
459. La Cañada Flintridge, City of, California
460. La Habra, City of, California
461. La Mesa, City of, California
462. La Mirada, City of, California
463. La Palma, City of, California
464. La Puente, City of, California
465. La Quinta, City of, California
466. La Verne, City of, California
467. Lafayette, City of, California
468. Laguna Beach, City of, California
469. Laguna Hills, City of, California
470. Laguna Niguel, City of, California
471. Laguna Woods, City of, California
472. Lake, County of, California
473. Lake Elsinore, City of, California
474. Lake Forest, City of, California
475. Lakewood, City of, California
476. Lancaster, City of, California
477. Larkspur, City of, California
478. Lassen, County of, California
479. Lathrop, City of, California
480. Lawndale, City of, California
481. Lemon Grove, City of, California
482. Lemoore, City of, California
483. Lincoln, City of, California
484. Lindsay, City of, California
485. Livermore, City of, California
486. Livingston, City of, California
487. Lodi, City of, California
488. Loma Linda, City of, California
489. Lomita, City of, California
490. Lompoc, City of, California
491. Long Beach, City of, California
492. Los Alamitos, City of, California
493. Los Altos, City of, California
494. Los Angeles, City of, California
495. Los Angeles, County of, California
496. Los Banos, City of, California
497. Los Gatos, Town of, California
498. Lynwood, City of, California
499. Madera, City of, California
500. Madera, County of, California
501. Malibu, City of, California
502. Manhattan Beach, City of, California
503. Manteca, City of, California
504. Marin, County of, California
505. Marina, City of, California
506. Mariposa, County of, California
507. Martinez, City of, California
508. Marysville, City of, California
509. Maywood, City of, California
510. McFarland, City of, California
511. Mendocino, County of, California
512. Mendota, City of, California
513. Menifee, City of, California
514. Menlo Park, City of, California
515. Merced, City of, California
516. Merced, County of, California
517. Mill Valley, City of, California
518. Millbrae, City of, California
519. Milpitas, City of, California
520. Mission Viejo, City of, California
521. Modesto, City of, California
522. Mono, County of, California
523. Monrovia, City of, California
524. Montclair, City of, California
525. Montebello, City of, California
526. Monterey, City of, California
527. Monterey, County of, California
528. Monterey Park, City of, California
529. Moorpark, City of, California
530. Moraga, Town of, California
531. Moreno Valley, City of, California
532. Morgan Hill, City of, California
533. Morro Bay, City of, California
534. Mountain View, City of, California
535. Murrieta, City of, California

536. Napa, City of, California
537. Napa, County of, California
538. National City, City of, California
539. Nevada, County of, California
540. Newark, City of, California
541. Newman, City of, California
542. Newport Beach, City of, California
543. Norco, City of, California
544. Norwalk, City of, California
545. Novato, City of, California
546. Oakdale, City of, California
547. Oakland, City of, California
548. Oakley, City of, California
549. Oceanside, City of, California
550. Ontario, City of, California
551. Orange, City of, California
552. Orange, County of, California
553. Orange Cove, City of, California
554. Orinda, City of, California
555. Oroville, City of, California
556. Oxnard, City of, California
557. Pacific Grove, City of, California
558. Pacifica, City of, California
559. Palm Desert, City of, California
560. Palm Springs, City of, California
561. Palmdale, City of, California
562. Palo Alto, City of, California
563. Palos Verdes Estates, City of, California
564. Paramount, City of, California
565. Parlier, City of, California
566. Pasadena, City of, California
567. Patterson, City of, California
568. Perris, City of, California
569. Petaluma, City of, California
570. Pico Rivera, City of, California
571. Piedmont, City of, California
572. Pinole, City of, California
573. Pittsburg, City of, California
574. Placentia, City of, California
575. Placer, County of, California
576. Placerville, City of, California
577. Pleasant Hill, City of, California
578. Pleasanton, City of, California
579. Plumas, County of, California
580. Pomona, City of, California
581. Port Hueneme, City of, California
582. Porterville, City of, California
583. Poway, City of, California
584. Rancho Cordova, City of, California
585. Rancho Cucamonga, City of, California
586. Rancho Mirage, City of, California
587. Rancho Palos Verdes, City of, California
588. Rancho Santa Margarita, City of, California
589. Red Bluff, City of, California
590. Redding, City of, California
591. Redlands, City of, California
592. Redondo Beach, City of, California
593. Redwood City, City of, California
594. Reedley, City of, California
595. Rialto, City of, California
596. Richmond, City of, California
597. Ridgecrest, City of, California
598. Ripon, City of, California
599. Riverbank, City of, California
600. Riverside, City of, California
601. Riverside, County of, California
602. Rocklin, City of, California
603. Rohnert Park, City of, California
604. Rosemead, City of, California
605. Roseville, City of, California
606. Sacramento, City of, California
607. Sacramento, County of, California
608. Salinas, City of, California
609. San Anselmo, Town of, California
610. San Benito, County of, California
611. San Bernardino, City of, California
612. San Bernardino, County of, California
613. San Bruno, City of, California
614. San Buenaventura (Ventura), City of, California
615. San Carlos, City of, California
616. San Clemente, City of, California
617. San Diego, City of, California
618. San Diego, County of, California
619. San Dimas, City of, California
620. San Fernando, City of, California

621. San Francisco, City of/ County of, California
622. San Gabriel, City of, California
623. San Jacinto, City of, California
624. San Joaquin, County of, California
625. San Jose, City of, California
626. San Juan Capistrano, City of, California
627. San Leandro, City of, California
628. San Luis Obispo, City of, California
629. San Luis Obispo, County of, California
630. San Marcos, City of, California
631. San Marino, City of, California
632. San Mateo, City of, California
633. San Mateo, County of, California
634. San Pablo, City of, California
635. San Rafael, City of, California
636. San Ramon, City of, California
637. Sanger, City of, California
638. Santa Ana, City of, California
639. Santa Barbara, City of, California
640. Santa Barbara, County of, California
641. Santa Clara, City of, California
642. Santa Clara, County of, California
643. Santa Clarita, City of, California
644. Santa Cruz, City of, California
645. Santa Cruz, County of, California
646. Santa Fe Springs, City of, California
647. Santa Maria, City of, California
648. Santa Monica, City of, California
649. Santa Paula, City of, California
650. Santa Rosa, City of, California
651. Santee, City of, California
652. Saratoga, City of, California
653. Scotts Valley, City of, California
654. Seal Beach, City of, California
655. Seaside, City of, California
656. Selma, City of, California
657. Shafter, City of, California
658. Shasta, County of, California
659. Shasta Lake, City of, California
660. Sierra Madre, City of, California
661. Signal Hill, City of, California
662. Simi Valley, City of, California
663. Siskiyou, County of, California
664. Solana Beach, City of, California
665. Solano, County of, California
666. Soledad, City of, California
667. Sonoma, City of, California
668. Sonoma, County of, California
669. South El Monte, City of, California
670. South Gate, City of, California
671. South Lake Tahoe, City of, California
672. South Pasadena, City of, California
673. South San Francisco, City of, California
674. Stanislaus, County of, California
675. Stanton, City of, California
676. Stockton, City of, California
677. Suisun City, City of, California
678. Sunnyvale, City of, California
679. Susanville, City of, California
680. Sutter, County of, California
681. Tehachapi, City of, California
682. Tehama, County of, California
683. Temecula, City of, California
684. Temple City, City of, California
685. Thousand Oaks, City of, California
686. Torrance, City of, California
687. Tracy, City of, California
688. Trinity, County of, California
689. Truckee, Town of, California
690. Tulare, City of, California
691. Tulare, County of, California
692. Tuolumne, County of, California
693. Turlock, City of, California
694. Tustin, City of, California
695. Twentynine Palms, City of, California
696. Ukiah, City of, California
697. Union City, City of, California
698. Upland, City of, California
699. Vacaville, City of, California
700. Vallejo, City of, California
701. Ventura, County of, California
702. Victorville, City of, California
703. Visalia, City of, California
704. Vista, City of, California
705. Walnut, City of, California
706. Walnut Creek, City of, California

707. Wasco, City of, California
708. Watsonville, City of, California
709. West Covina, City of, California
710. West Hollywood, City of, California
711. West Sacramento, City of, California
712. Westminster, City of, California
713. Whittier, City of, California
714. Wildomar, City of, California
715. Windsor, Town of, California
716. Woodland, City of, California
717. Yolo, County of, California
718. Yorba Linda, City of, California
719. Yuba City, City of, California
720. Yuba, County of, California
721. Yucaipa, City of, California
722. Yucca Valley, Town of, California
723. Adams, County of, Colorado
724. Alamosa, County of, Colorado
725. Arapahoe, County of, Colorado
726. Archuleta, County of, Colorado
727. Arvada, City of, Colorado
728. Aurora, City of, Colorado
729. Boulder, City of, Colorado
730. Boulder, County of, Colorado
731. Brighton, City of, Colorado
732. Broomfield, City of/ County of, Colorado
733. Cañon City, City of, Colorado
734. Castle Pines, City of, Colorado
735. Castle Rock, Town of, Colorado
736. Centennial, City of, Colorado
737. Chaffee, County of, Colorado
738. Colorado Springs, City of, Colorado
739. Commerce City, City of, Colorado
740. Delta, County of, Colorado
741. Denver, City of/ County of, Colorado
742. Douglas, County of, Colorado
743. Durango, City of, Colorado
744. Eagle, County of, Colorado
745. El Paso, County of, Colorado
746. Elbert, County of, Colorado
747. Englewood, City of, Colorado
748. Erie, Town of, Colorado
749. Evans, City of, Colorado
750. Federal Heights, City of, Colorado
751. Firestone, Town of, Colorado
752. Fort Collins, City of, Colorado
753. Fort Morgan, City of, Colorado
754. Fountain, City of, Colorado
755. Frederick, Town of, Colorado
756. Fremont, County of, Colorado
757. Fruita, City of, Colorado
758. Garfield, County of, Colorado
759. Golden, City of, Colorado
760. Grand, County of, Colorado
761. Grand Junction, City of, Colorado
762. Greeley, City of, Colorado
763. Greenwood, Village of/ City of, Colorado
764. Gunnison, County of, Colorado
765. Jefferson, County of, Colorado
766. Johnstown, Town of, Colorado
767. La Plata, County of, Colorado
768. Lafayette, City of, Colorado
769. Lakewood, City of, Colorado
770. Larimer, County of, Colorado
771. Las Animas, County of, Colorado
772. Littleton, City of, Colorado
773. Logan, County of, Colorado
774. Lone Tree, City of, Colorado
775. Longmont, City of, Colorado
776. Louisville, City of, Colorado
777. Loveland, City of, Colorado
778. Mesa, County of, Colorado
779. Moffat, County of, Colorado
780. Montezuma, County of, Colorado
781. Montrose, City of, Colorado
782. Montrose, County of, Colorado
783. Morgan, County of, Colorado
784. Northglenn, City of, Colorado
785. Otero, County of, Colorado
786. Park, County of, Colorado
787. Parker, Town of, Colorado
788. Pitkin, County of, Colorado
789. Prowers, County of, Colorado
790. Pueblo, City of, Colorado
791. Pueblo, County of, Colorado
792. Rio Grande, County of, Colorado
793. Routt, County of, Colorado
794. Steamboat Springs, City of, Colorado

795. Sterling, City of, Colorado
796. Summit, County of, Colorado
797. Superior, Town of, Colorado
798. Teller, County of, Colorado
799. Thornton, City of, Colorado
800. Weld, County of, Colorado
801. Wellington, Town of, Colorado
802. Westminster, City of, Colorado
803. Wheat Ridge, City of, Colorado
804. Windsor, Town of, Colorado
805. Yuma, County of, Colorado
806. Ansonia, Town of/ City of, Connecticut
807. Avon, Town of, Connecticut
808. Berlin, Town of, Connecticut
809. Bethel, Town of, Connecticut
810. Bloomfield, Town of, Connecticut
811. Branford, Town of, Connecticut
812. Bridgeport, Town of/ City of, Connecticut
813. Bristol, City of/ Town of, Connecticut
814. Brookfield, Town of, Connecticut
815. Canton, Town of, Connecticut
816. Cheshire, Town of, Connecticut
817. Clinton, Town of, Connecticut
818. Colchester, Town of, Connecticut
819. Coventry, Town of, Connecticut
820. Cromwell, Town of, Connecticut
821. Danbury, City of/ Town of, Connecticut
822. Darien, Town of, Connecticut
823. Derby, City of/ Town of, Connecticut
824. East Hampton, Town of, Connecticut
825. East Hartford, Town of, Connecticut
826. East Haven, Town of, Connecticut
827. East Lyme, Town of, Connecticut
828. East Windsor, Town of, Connecticut
829. Ellington, Town of, Connecticut
830. Enfield, Town of, Connecticut
831. Fairfield, Town of, Connecticut
832. Farmington, Town of, Connecticut
833. Glastonbury, Town of, Connecticut
834. Granby, Town of, Connecticut
835. Greenwich, Town of, Connecticut
836. Griswold, Town of, Connecticut
837. Groton, Town of, Connecticut
838. Guilford, Town of, Connecticut
839. Hamden, Town of, Connecticut
840. Hartford, City of/ Town of, Connecticut
841. Killingly, Town of, Connecticut
842. Ledyard, Town of, Connecticut
843. Madison, Town of, Connecticut
844. Manchester, Town of, Connecticut
845. Mansfield, Town of, Connecticut
846. Meriden, City of/ Town of, Connecticut
847. Middletown, City of/ Town of, Connecticut
848. Milford, City of, Connecticut
849. Milford, Town of, Connecticut
850. Monroe, Town of, Connecticut
851. Montville, Town of, Connecticut
852. Naugatuck, Borough of/ Town of, Connecticut
853. New Britain, Town of/ City of, Connecticut
854. New Canaan, Town of, Connecticut
855. New Fairfield, Town of, Connecticut
856. New Haven, Town of/ City of, Connecticut
857. New London, City of/ Town of, Connecticut
858. New Milford, Town of, Connecticut
859. Newington, Town of, Connecticut
860. Newtown, Town of, Connecticut
861. North Branford, Town of, Connecticut
862. North Haven, Town of, Connecticut
863. Norwalk, City of/ Town of, Connecticut
864. Norwich, City of/ Town of, Connecticut
865. Old Saybrook, Town of, Connecticut
866. Orange, Town of, Connecticut
867. Oxford, Town of, Connecticut
868. Plainfield, Town of, Connecticut
869. Plainville, Town of, Connecticut
870. Plymouth, Town of, Connecticut
871. Ridgefield, Town of, Connecticut

872. Rocky Hill, Town of, Connecticut
873. Seymour, Town of, Connecticut
874. Shelton, City of/ Town of, Connecticut
875. Simsbury, Town of, Connecticut
876. Somers, Town of, Connecticut
877. South Windsor, Town of, Connecticut
878. Southbury, Town of, Connecticut
879. Southington, Town of, Connecticut
880. Stafford, Town of, Connecticut
881. Stamford, City of/ Town of, Connecticut
882. Stonington, Town of, Connecticut
883. Stratford, Town of, Connecticut
884. Suffield, Town of, Connecticut
885. Tolland, Town of, Connecticut
886. Torrington, City of/ Town of, Connecticut
887. Trumbull, Town of, Connecticut
888. Vernon, Town of, Connecticut
889. Wallingford, Town of, Connecticut
890. Waterbury, City of/ Town of, Connecticut
891. Waterford, Town of, Connecticut
892. Watertown, Town of, Connecticut
893. West Hartford, Town of, Connecticut
894. West Haven, City of/ Town of, Connecticut
895. Weston, Town of, Connecticut
896. Westport, Town of, Connecticut
897. Wethersfield, Town of, Connecticut
898. Wilton, Town of, Connecticut
899. Winchester, Town of, Connecticut
900. Windham, Town of, Connecticut
901. Windsor Locks, Town of, Connecticut
902. Windsor, Town of, Connecticut
903. Wolcott, Town of, Connecticut
904. Dover, City of, Delaware
905. Kent, County of, Delaware
906. Middletown, Town of, Delaware
907. Milford, City of, Delaware
908. New Castle, County of, Delaware
909. Newark, City of, Delaware
910. Smyrna, Town of, Delaware
911. Sussex, County of, Delaware
912. Wilmington, City of, Delaware
913. Acworth, City of, Georgia
914. Albany, City of, Georgia
915. Alpharetta, City of, Georgia
916. Americus, City of, Georgia
917. Appling, County of, Georgia
918. Athens-Clarke County, Unified Government of, Georgia
919. Atlanta, City of, Georgia
920. Augusta-Richmond County, Consolidated Government of, Georgia
921. Bacon, County of, Georgia
922. Bainbridge, City of, Georgia
923. Baldwin, County of, Georgia
924. Banks, County of, Georgia
925. Barrow, County of, Georgia
926. Bartow, County of, Georgia
927. Ben Hill, County of, Georgia
928. Berrien, County of, Georgia
929. Bleckley, County of, Georgia
930. Brantley, County of, Georgia
931. Braselton, Town of, Georgia
932. Brookhaven, City of, Georgia
933. Brooks, County of, Georgia
934. Brunswick, City of, Georgia
935. Bryan, County of, Georgia
936. Buford, City of, Georgia
937. Bulloch, County of, Georgia
938. Burke, County of, Georgia
939. Butts, County of, Georgia
940. Calhoun, City of, Georgia
941. Camden, County of, Georgia
942. Candler, County of, Georgia
943. Canton, City of, Georgia
944. Carroll, County of, Georgia
945. Carrollton, City of, Georgia
946. Cartersville, City of, Georgia
947. Catoosa, County of, Georgia
948. Chamblee, City of, Georgia
949. Charlton, County of, Georgia
950. Chatham, County of, Georgia
951. Chattooga, County of, Georgia
952. Cherokee, County of, Georgia
953. Clarkston, City of, Georgia

954. Clayton, County of, Georgia
955. Cobb, County of, Georgia
956. Coffee, County of, Georgia
957. College Park, City of, Georgia
958. Colquitt, County of, Georgia
959. Columbia, County of, Georgia
960. Columbus, City of, Georgia
961. Columbus, City of/ Muscogee, County of, Georgia
962. Conyers, City of, Georgia
963. Cook, County of, Georgia
964. Cordele, City of, Georgia
965. Covington, City of, Georgia
966. Coweta, County of, Georgia
967. Crawford, County of, Georgia
968. Crisp, County of, Georgia
969. Cusseta-Chattahoochee County, Unified Government of, Georgia
970. Dade, County of, Georgia
971. Dallas, City of, Georgia
972. Dalton, City of, Georgia
973. Dawson, County of, Georgia
974. Decatur, City of, Georgia
975. Decatur, County of, Georgia
976. DeKalb, County of, Georgia
977. Dodge, County of, Georgia
978. Dooly, County of, Georgia
979. Doraville, City of, Georgia
980. Dougherty, County of, Georgia
981. Douglas, City of, Georgia
982. Douglas, County of, Georgia
983. Douglasville, City of, Georgia
984. Dublin, City of, Georgia
985. Duluth, City of, Georgia
986. Dunwoody, City of, Georgia
987. Early, County of, Georgia
988. East Point, City of, Georgia
989. Effingham, County of, Georgia
990. Elbert, County of, Georgia
991. Emanuel, County of, Georgia
992. Evans, County of, Georgia
993. Fairburn, City of, Georgia
994. Fannin, County of, Georgia
995. Fayette, County of, Georgia
996. Fayetteville, City of, Georgia
997. Floyd, County of, Georgia
998. Forest Park, City of, Georgia
999. Forsyth, County of, Georgia
1000. Franklin, County of, Georgia
1001. Fulton, County of, Georgia
1002. Gainesville, City of, Georgia
1003. Gilmer, County of, Georgia
1004. Glynn, County of, Georgia
1005. Gordon, County of, Georgia
1006. Grady, County of, Georgia
1007. Greene, County of, Georgia
1008. Griffin, City of, Georgia
1009. Grovetown, City of, Georgia
1010. Gwinnett, County of, Georgia
1011. Habersham, County of, Georgia
1012. Hall, County of, Georgia
1013. Haralson, County of, Georgia
1014. Harris, County of, Georgia
1015. Hart, County of, Georgia
1016. Heard, County of, Georgia
1017. Henry, County of, Georgia
1018. Hinesville, City of, Georgia
1019. Holly Springs, City of, Georgia
1020. Houston, County of, Georgia
1021. Jackson, County of, Georgia
1022. Jasper, County of, Georgia
1023. Jeff Davis, County of, Georgia
1024. Jefferson, City of, Georgia
1025. Jefferson, County of, Georgia
1026. Johns Creek, City of, Georgia
1027. Jones, County of, Georgia
1028. Kennesaw, City of, Georgia
1029. Kingsland, City of, Georgia
1030. LaGrange, City of, Georgia
1031. Lamar, County of, Georgia
1032. Lanier, County of, Georgia
1033. Laurens, County of, Georgia
1034. Lawrenceville, City of, Georgia
1035. Lee, County of, Georgia
1036. Liberty, County of, Georgia
1037. Lilburn, City of, Georgia
1038. Loganville, City of, Georgia
1039. Long, County of, Georgia
1040. Lowndes, County of, Georgia
1041. Lumpkin, County of, Georgia
1042. Macon, County of, Georgia
1043. Macon-Bibb, County of, Georgia

1044. Madison, County of, Georgia
1045. Marietta, City of, Georgia
1046. McDonough, City of, Georgia
1047. McDuffie, County of, Georgia
1048. McIntosh, County of, Georgia
1049. Meriwether, County of, Georgia
1050. Milledgeville, City of, Georgia
1051. Milton, City of, Georgia
1052. Mitchell, County of, Georgia
1053. Monroe, City of, Georgia
1054. Monroe, County of, Georgia
1055. Morgan, County of, Georgia
1056. Moultrie, City of, Georgia
1057. Murray, County of, Georgia
1058. Newnan, City of, Georgia
1059. Newton, County of, Georgia
1060. Norcross, City of, Georgia
1061. Oconee, County of, Georgia
1062. Oglethorpe, County of, Georgia
1063. Paulding, County of, Georgia
1064. Peach, County of, Georgia
1065. Peachtree City, City of, Georgia
1066. Peachtree Corners, City of, Georgia
1067. Perry, City of, Georgia
1068. Pickens, County of, Georgia
1069. Pierce, County of, Georgia
1070. Pike, County of, Georgia
1071. Polk, County of, Georgia
1072. Pooler, City of, Georgia
1073. Powder Springs, City of, Georgia
1074. Pulaski, County of, Georgia
1075. Putnam, County of, Georgia
1076. Rabun, County of, Georgia
1077. Richmond Hill, City of, Georgia
1078. Rincon, City of, Georgia
1079. Riverdale, City of, Georgia
1080. Rockdale, County of, Georgia
1081. Rome, City of, Georgia
1082. Roswell, City of, Georgia
1083. Sandy Springs, City of, Georgia
1084. Savannah, City of, Georgia
1085. Screven, County of, Georgia
1086. Smyrna, City of, Georgia
1087. Snellville, City of, Georgia
1088. South Fulton, City of, Georgia
1089. Spalding, County of, Georgia
1090. St. Marys, City of, Georgia
1091. Statesboro, City of, Georgia
1092. Stephens, County of, Georgia
1093. Stockbridge, City of, Georgia
1094. Stonecrest, City of, Georgia
1095. Sugar Hill, City of, Georgia
1096. Sumter, County of, Georgia
1097. Suwanee, City of, Georgia
1098. Tattnall, County of, Georgia
1099. Telfair, County of, Georgia
1100. Thomas, County of, Georgia
1101. Thomasville, City of, Georgia
1102. Tift, County of, Georgia
1103. Tifton, City of, Georgia
1104. Toombs, County of, Georgia
1105. Towns, County of, Georgia
1106. Troup, County of, Georgia
1107. Tucker, City of, Georgia
1108. Union City, City of, Georgia
1109. Union, County of, Georgia
1110. Upson, County of, Georgia
1111. Valdosta, City of, Georgia
1112. Vidalia, City of, Georgia
1113. Villa Rica, City of, Georgia
1114. Walker, County of, Georgia
1115. Walton, County of, Georgia
1116. Ware, County of, Georgia
1117. Warner Robins, City of, Georgia
1118. Washington, County of, Georgia
1119. Waycross, City of, Georgia
1120. Wayne, County of, Georgia
1121. White, County of, Georgia
1122. Whitfield, County of, Georgia
1123. Winder, City of, Georgia
1124. Woodstock, City of, Georgia
1125. Worth, County of, Georgia
1126. Hawaii, County of, Hawaii
1127. Honolulu, County of/ City of, Hawaii
1128. Kauai, County of, Hawaii
1129. Maui, County of, Hawaii
1130. Ada, County of, Idaho
1131. Ammon, City of, Idaho
1132. Bannock, County of, Idaho
1133. Bingham, County of, Idaho
1134. Blackfoot, City of, Idaho

1135. Blaine, County of, Idaho
1136. Boise City, City of, Idaho
1137. Bonner, County of, Idaho
1138. Bonneville, County of, Idaho
1139. Boundary, County of, Idaho
1140. Burley, City of, Idaho
1141. Caldwell, City of, Idaho
1142. Canyon, County of, Idaho
1143. Cassia, County of, Idaho
1144. Chubbuck, City of, Idaho
1145. Coeur d'Alene, City of, Idaho
1146. Eagle, City of, Idaho
1147. Elmore, County of, Idaho
1148. Franklin, County of, Idaho
1149. Fremont, County of, Idaho
1150. Garden City, City of, Idaho
1151. Gem, County of, Idaho
1152. Gooding, County of, Idaho
1153. Hayden, City of, Idaho
1154. Idaho, County of, Idaho
1155. Idaho Falls, City of, Idaho
1156. Jefferson, County of, Idaho
1157. Jerome, City of, Idaho
1158. Jerome, County of, Idaho
1159. Kootenai, County of, Idaho
1160. Kuna, City of, Idaho
1161. Latah, County of, Idaho
1162. Lewiston, City of, Idaho
1163. Madison, County of, Idaho
1164. Meridian, City of, Idaho
1165. Minidoka, County of, Idaho
1166. Moscow, City of, Idaho
1167. Mountain Home, City of, Idaho
1168. Nampa, City of, Idaho
1169. Nez Perce, County of, Idaho
1170. Owyhee, County of, Idaho
1171. Payette, County of, Idaho
1172. Pocatello, City of, Idaho
1173. Post Falls, City of, Idaho
1174. Rexburg, City of, Idaho
1175. Shoshone, County of, Idaho
1176. Star, City of, Idaho
1177. Teton, County of, Idaho
1178. Twin Falls, City of, Idaho
1179. Twin Falls, County of, Idaho
1180. Valley, County of, Idaho
1181. Washington, County of, Idaho
1182. Adams, County of, Illinois
1183. Addison Township, Illinois
1184. Addison, Village of, Illinois
1185. Algonquin Township, Illinois
1186. Algonquin, Village of, Illinois
1187. Alsip, Village of, Illinois
1188. Alton, City of, Illinois
1189. Alton Township, Illinois
1190. Antioch Township, Illinois
1191. Antioch, Village of, Illinois
1192. Arlington Heights, Village of, Illinois
1193. Aurora, City of, Illinois
1194. Aurora Township, Illinois
1195. Aux Sable Township, Illinois
1196. Avon Township, Illinois
1197. Barrington Township, Illinois
1198. Barrington, Village of, Illinois
1199. Bartlett, Village of, Illinois
1200. Batavia, City of, Illinois
1201. Batavia Township, Illinois
1202. Beach Park, Village of, Illinois
1203. Belleville, City of, Illinois
1204. Bellwood, Village of, Illinois
1205. Belvidere, City of, Illinois
1206. Belvidere Township, Illinois
1207. Bensenville, Village of, Illinois
1208. Benton Township, Illinois
1209. Berwyn, City of, Illinois
1210. Berwyn Township, Illinois
1211. Blackberry Township, Illinois
1212. Bloom Township, Illinois
1213. Bloomingdale Township, Illinois
1214. Bloomingdale, Village of, Illinois
1215. Bloomington, City of, Illinois
1216. Bloomington City Township, Illinois
1217. Blue Island, City of, Illinois
1218. Bolingbrook, Village of, Illinois
1219. Bond, County of, Illinois
1220. Boone, County of, Illinois
1221. Bourbonnais Township, Illinois
1222. Bourbonnais, Village of, Illinois
1223. Bradley, Village of, Illinois
1224. Bremen Township, Illinois
1225. Bridgeview, Village of, Illinois

1226. Bristol Township, Illinois
1227. Brookfield, Village of, Illinois
1228. Bruce Township, Illinois
1229. Buffalo Grove, Village of, Illinois
1230. Burbank, City of, Illinois
1231. Bureau, County of, Illinois
1232. Burr Ridge, Village of, Illinois
1233. Cahokia, Village of, Illinois
1234. Calumet City, City of, Illinois
1235. Calumet Township, Illinois
1236. Campton Hills, Village of, Illinois
1237. Campton Township, Illinois
1238. Canton, City of, Illinois
1239. Canton Township, Illinois
1240. Capital Township, Illinois
1241. Carbondale, City of, Illinois
1242. Carbondale Township, Illinois
1243. Carol Stream, Village of, Illinois
1244. Carpentersville, Village of, Illinois
1245. Carroll, County of, Illinois
1246. Cary, Village of, Illinois
1247. Caseyville Township, Illinois
1248. Cass, County of, Illinois
1249. Centralia, City of, Illinois
1250. Centralia Township, Illinois
1251. Centreville Township, Illinois
1252. Champaign, City of, Illinois
1253. Champaign City Township, Illinois
1254. Champaign, County of, Illinois
1255. Champaign Township, Illinois
1256. Channahon Township, Illinois
1257. Channahon, Village of, Illinois
1258. Charleston, City of, Illinois
1259. Charleston Township, Illinois
1260. Chatham, Village of, Illinois
1261. Cherry Valley Township, Illinois
1262. Chicago, City of, Illinois
1263. Chicago Heights, City of, Illinois
1264. Chicago Ridge, Village of, Illinois
1265. Christian, County of, Illinois
1266. Cicero, Town of/ Township of, Illinois
1267. Clark, County of, Illinois
1268. Clay, County of, Illinois
1269. Clinton, County of, Illinois
1270. Coles, County of, Illinois
1271. Collinsville, City of, Illinois
1272. Collinsville Township, Illinois
1273. Coloma Township, Illinois
1274. Columbia, City of, Illinois
1275. Cook, County of, Illinois
1276. Cortland Township, Illinois
1277. Country Club Hills, City of, Illinois
1278. Crawford, County of, Illinois
1279. Crest Hill, City of, Illinois
1280. Crestwood, Village of, Illinois
1281. Crete Township, Illinois
1282. Crystal Lake, City of, Illinois
1283. Cuba Township, Illinois
1284. Cumberland, County of, Illinois
1285. Cunningham Township, Illinois
1286. Danville, City of, Illinois
1287. Danville Township, Illinois
1288. Darien, City of, Illinois
1289. De Witt, County of, Illinois
1290. Decatur, City of, Illinois
1291. Decatur Township, Illinois
1292. Deerfield, Village of, Illinois
1293. DeKalb, City of, Illinois
1294. DeKalb, County of, Illinois
1295. DeKalb Township, Illinois
1296. Des Plaines, City of, Illinois
1297. Dixon, City of, Illinois
1298. Dixon Township, Illinois
1299. Dolton, Village of, Illinois
1300. Dorr Township, Illinois
1301. Douglas, County of, Illinois
1302. Douglas Township, Illinois
1303. Downers Grove Township, Illinois
1304. Downers Grove, Village of, Illinois
1305. Du Page Township, Illinois
1306. Dundee Township, Illinois
1307. DuPage, County of, Illinois
1308. East Moline, City of, Illinois
1309. East Peoria, City of, Illinois
1310. East St. Louis, City of, Illinois
1311. East St. Louis Township, Illinois
1312. Edgar, County of, Illinois
1313. Edwardsville, City of, Illinois
1314. Edwardsville Township, Illinois
1315. Effingham, City of, Illinois
1316. Effingham, County of, Illinois

1317. Ela Township, Illinois
1318. Elgin, City of, Illinois
1319. Elgin Township, Illinois
1320. Elk Grove Township, Illinois
1321. Elk Grove Village, Village of, Illinois
1322. Elmhurst, City of, Illinois
1323. Elmwood Park, Village of, Illinois
1324. Evanston, City of, Illinois
1325. Evergreen Park, Village of, Illinois
1326. Fairview Heights, City of, Illinois
1327. Fayette, County of, Illinois
1328. Flagg Township, Illinois
1329. Fondulac Township, Illinois
1330. Ford, County of, Illinois
1331. Forest Park, Village of, Illinois
1332. Fox Lake, Village of, Illinois
1333. Frankfort Township, Illinois
1334. Frankfort, Village of, Illinois
1335. Franklin, County of, Illinois
1336. Franklin Park, Village of, Illinois
1337. Freeport, City of, Illinois
1338. Freeport Township, Illinois
1339. Fremont Township, Illinois
1340. Fulton, County of, Illinois
1341. Galesburg, City of, Illinois
1342. Galesburg City Township, Illinois
1343. Geneva, City of, Illinois
1344. Geneva Township, Illinois
1345. Glen Carbon, Village of, Illinois
1346. Glen Ellyn, Village of, Illinois
1347. Glendale Heights, Village of, Illinois
1348. Glenview, Village of, Illinois
1349. Godfrey Township, Illinois
1350. Godfrey, Village of, Illinois
1351. Grafton Township, Illinois
1352. Granite City, City of, Illinois
1353. Granite City Township, Illinois
1354. Grant Township, Illinois
1355. Grayslake, Village of, Illinois
1356. Greene, County of, Illinois
1357. Greenwood Township, Illinois
1358. Groveland Township, Illinois
1359. Grundy, County of, Illinois
1360. Gurnee, Village of, Illinois
1361. Hampton Township, Illinois
1362. Hancock, County of, Illinois
1363. Hanover Park, Village of, Illinois
1364. Hanover Township, Illinois
1365. Harlem Township, Illinois
1366. Harrisburg Township, Illinois
1367. Harvey, City of, Illinois
1368. Hazel Crest, Village of, Illinois
1369. Henry, County of, Illinois
1370. Herrin, City of, Illinois
1371. Hickory Hills, City of, Illinois
1372. Hickory Point Township, Illinois
1373. Highland Park, City of, Illinois
1374. Hinsdale, Village of, Illinois
1375. Hoffman Estates, Village of, Illinois
1376. Homer Glen, Village of, Illinois
1377. Homer Township, Illinois
1378. Homewood, Village of, Illinois
1379. Huntley, Village of, Illinois
1380. Iroquois, County of, Illinois
1381. Jackson, County of, Illinois
1382. Jacksonville, City of, Illinois
1383. Jarvis Township, Illinois
1384. Jefferson, County of, Illinois
1385. Jersey, County of, Illinois
1386. Jo Daviess, County of, Illinois
1387. Johnson, County of, Illinois
1388. Joliet, City of, Illinois
1389. Joliet Township, Illinois
1390. Justice, Village of, Illinois
1391. Kane, County of, Illinois
1392. Kankakee, City of, Illinois
1393. Kankakee, County of, Illinois
1394. Kankakee Township, Illinois
1395. Kendall, County of, Illinois
1396. Kewanee, City of, Illinois
1397. Knox, County of, Illinois
1398. La Grange Park, Village of, Illinois
1399. La Grange, Village of, Illinois
1400. Lake, County of, Illinois
1401. Lake Forest, City of, Illinois
1402. Lake in the Hills, Village of, Illinois
1403. Lake Villa Township, Illinois
1404. Lake Zurich, Village of, Illinois
1405. Lansing, Village of, Illinois
1406. LaSalle, County of, Illinois
1407. LaSalle Township, Illinois

1408. Lawrence, County of, Illinois
1409. Lee, County of, Illinois
1410. Lemont Township, Illinois
1411. Lemont, Village of, Illinois
1412. Leyden Township, Illinois
1413. Libertyville Township, Illinois
1414. Libertyville, Village of, Illinois
1415. Limestone Township, Illinois
1416. Lincoln, City of, Illinois
1417. Lincolnwood, Village of, Illinois
1418. Lindenhurst, Village of, Illinois
1419. Lisle Township, Illinois
1420. Lisle, Village of, Illinois
1421. Little Rock Township, Illinois
1422. Livingston, County of, Illinois
1423. Lockport, City of, Illinois
1424. Lockport Township, Illinois
1425. Logan, County of, Illinois
1426. Lombard, Village of, Illinois
1427. Long Creek Township, Illinois
1428. Loves Park, City of, Illinois
1429. Lyons Township, Illinois
1430. Lyons, Village of, Illinois
1431. Machesney Park, Village of, Illinois
1432. Macomb, City of, Illinois
1433. Macomb City Township, Illinois
1434. Macon, County of, Illinois
1435. Macoupin, County of, Illinois
1436. Madison, County of, Illinois
1437. Mahomet Township, Illinois
1438. Maine Township, Illinois
1439. Manhattan Township, Illinois
1440. Manteno Township, Illinois
1441. Marion, City of, Illinois
1442. Marion, County of, Illinois
1443. Markham, City of, Illinois
1444. Marshall, County of, Illinois
1445. Mason, County of, Illinois
1446. Massac, County of, Illinois
1447. Matteson, Village of, Illinois
1448. Mattoon, City of, Illinois
1449. Mattoon, Township of, Illinois
1450. Maywood, Village of, Illinois
1451. McDonough, County of, Illinois
1452. McHenry, City of, Illinois
1453. McHenry, County of, Illinois
1454. McHenry, Township of, Illinois
1455. McLean, County of, Illinois
1456. Medina, Township of, Illinois
1457. Melrose Park, Village of, Illinois
1458. Menard, County of, Illinois
1459. Mercer, County of, Illinois
1460. Midlothian, Village of, Illinois
1461. Milton Township, Illinois
1462. Minooka, Village of, Illinois
1463. Mokena, Village of, Illinois
1464. Moline, City of, Illinois
1465. Moline, Township of, Illinois
1466. Monee, Township of, Illinois
1467. Monroe, County of, Illinois
1468. Montgomery, County of, Illinois
1469. Montgomery, Village of, Illinois
1470. Moraine, Township of, Illinois
1471. Morgan, County of, Illinois
1472. Morris, City of, Illinois
1473. Morton Grove, Village of, Illinois
1474. Morton, Township of, Illinois
1475. Morton, Village of, Illinois
1476. Moultrie, County of, Illinois
1477. Mount Prospect, Village of, Illinois
1478. Mount Vernon, City of, Illinois
1479. Mount Vernon, Township of, Illinois
1480. Mundelein, Village of, Illinois
1481. Nameoki, Township of, Illinois
1482. Naperville, City of, Illinois
1483. Naperville, Township of, Illinois
1484. New Lenox, Township of, Illinois
1485. New Lenox, Village of, Illinois
1486. New Trier, Township of, Illinois
1487. Newell, Township of, Illinois
1488. Niles, Township of, Illinois
1489. Niles, Village of, Illinois
1490. Normal, Town of, Illinois
1491. Normal, Township of, Illinois
1492. Norridge, Village of, Illinois
1493. North Aurora, Village of, Illinois
1494. North Chicago, City of, Illinois
1495. Northbrook, Village of, Illinois
1496. Northfield, Township of, Illinois
1497. Northlake, City of, Illinois
1498. Norwood Park, Township of, Illinois
1499. Nunda, Township of, Illinois

1500. Oak Forest, City of, Illinois
1501. Oak Lawn, Village of, Illinois
1502. Oak Park, Township of, Illinois
1503. Oak Park, Village of, Illinois
1504. O'Fallon, City of, Illinois
1505. O'Fallon, Township of, Illinois
1506. Ogle, County of, Illinois
1507. Orland Park, Village of, Illinois
1508. Orland, Township of, Illinois
1509. Oswego, Township of, Illinois
1510. Oswego, Village of, Illinois
1511. Ottawa, City of, Illinois
1512. Ottawa, Township of, Illinois
1513. Palatine, Township of, Illinois
1514. Palatine, Village of, Illinois
1515. Palos Heights, City of, Illinois
1516. Palos Hills, City of, Illinois
1517. Palos, Township of, Illinois
1518. Park Forest, Village of, Illinois
1519. Park Ridge, City of, Illinois
1520. Pekin, City of, Illinois
1521. Pekin, Township of, Illinois
1522. Peoria, City of, Illinois
1523. Peoria City Township, Illinois
1524. Peoria, County of, Illinois
1525. Perry, County of, Illinois
1526. Peru, Township of, Illinois
1527. Piatt, County of, Illinois
1528. Pike, County of, Illinois
1529. Plainfield, Township of, Illinois
1530. Plainfield, Village of, Illinois
1531. Plano, City of, Illinois
1532. Pontiac, City of, Illinois
1533. Pontiac, Township of, Illinois
1534. Prospect Heights, City of, Illinois
1535. Proviso, Township of, Illinois
1536. Quincy, City of, Illinois
1537. Quincy, Township of, Illinois
1538. Randolph, County of, Illinois
1539. Rantoul, Township of,Illinois
1540. Rantoul, Village of, Illinois
1541. Rich, Township of, Illinois
1542. Richland, County of, Illinois
1543. Richton Park, Village of, Illinois
1544. River Forest, Township of, Illinois
1545. River Forest, Village of, Illinois
1546. Riverdale, Village of, Illinois
1547. Riverside, Township of, Illinois
1548. Rock Island, City of, Illinois
1549. Rock Island, County of, Illinois
1550. Rock Island, Township of, Illinois
1551. Rockford, City of, Illinois
1552. Rockford, Township of, Illinois
1553. Rockton, Township of, Illinois
1554. Rolling Meadows, City of, Illinois
1555. Romeoville, Village of, Illinois
1556. Roscoe, Township of, Illinois
1557. Roscoe, Village of, Illinois
1558. Roselle, Village of, Illinois
1559. Round Lake Beach, Village of, Illinois
1560. Round Lake, Village of, Illinois
1561. Rutland, Township of, Illinois
1562. Saline, County of, Illinois
1563. Sangamon, County of, Illinois
1564. Sauk Village, Village of, Illinois
1565. Schaumburg, Township of, Illinois
1566. Schaumburg, Village of, Illinois
1567. Schiller Park, Village of, Illinois
1568. Shelby, County of, Illinois
1569. Shields, Township of, Illinois
1570. Shiloh Valley, Township of, Illinois
1571. Shiloh, Village of, Illinois
1572. Shorewood, Village of, Illinois
1573. Skokie, Village of, Illinois
1574. South Elgin, Village of, Illinois
1575. South Holland, Village of, Illinois
1576. South Moline, Township of, Illinois
1577. South Rock Island, Township of, Illinois
1578. Springfield, City of, Illinois
1579. St. Charles, City of, Illinois
1580. St. Charles, Township of, Illinois
1581. St. Clair, County of, Illinois
1582. St. Clair, Township of, Illinois
1583. Stephenson, County of, Illinois
1584. Sterling, City of, Illinois
1585. Sterling, Township of, Illinois
1586. Stickney, Township of, Illinois
1587. Streamwood, Village of, Illinois
1588. Streator, City of, Illinois
1589. Sugar Grove, Township of, Illinois

1590. Summit, Village of, Illinois
1591. Swansea, Village of, Illinois
1592. Sycamore, City of, Illinois
1593. Sycamore, Township of, Illinois
1594. Taylorville, City of, Illinois
1595. Taylorville, Township of, Illinois
1596. Tazewell, County of, Illinois
1597. Thornton, Township of, Illinois
1598. Tinley Park, Village of, Illinois
1599. Troy, City of, Illinois
1600. Troy, Township of, Illinois
1601. Union, County of, Illinois
1602. Urbana, City of, Illinois
1603. Vermilion, County of, Illinois
1604. Vernon Hills, Village of, Illinois
1605. Vernon, Township of, Illinois
1606. Villa Park, Village of, Illinois
1607. Wabash, County of, Illinois
1608. Warren, County of, Illinois
1609. Warren, Township of, Illinois
1610. Warrenville, City of, Illinois
1611. Washington, City of, Illinois
1612. Washington, County of, Illinois
1613. Washington, Township of, Illinois
1614. Waterloo, City of, Illinois
1615. Wauconda, Township of, Illinois
1616. Wauconda, Village of, Illinois
1617. Waukegan, City of, Illinois
1618. Waukegan, Township of, Illinois
1619. Wayne, County of, Illinois
1620. Wayne, Township of, Illinois
1621. West Chicago, City of, Illinois
1622. West Deerfield, Township of, Illinois
1623. Westchester, Village of, Illinois
1624. Western Springs, Village of, Illinois
1625. Westmont, Village of, Illinois
1626. Wheatland, Township of, Illinois
1627. Wheaton, City of, Illinois
1628. Wheeling, Township of, Illinois
1629. Wheeling, Village of, Illinois
1630. White, County of, Illinois
1631. Whiteside, County of, Illinois
1632. Will, County of, Illinois
1633. Williamson, County of, Illinois
1634. Wilmette, Village of, Illinois
1635. Winfield, Township of, Illinois
1636. Winnebago, County of, Illinois
1637. Winnetka, Village of, Illinois
1638. Wood Dale, City of, Illinois
1639. Wood River, City of, Illinois
1640. Wood River, Township of, Illinois
1641. Woodford, County of, Illinois
1642. Woodridge, Village of, Illinois
1643. Woodside, Township of, Illinois
1644. Woodstock, City of, Illinois
1645. Worth, Township of, Illinois
1646. Worth, Village of, Illinois
1647. York, Township of, Illinois
1648. Yorkville, City of, Illinois
1649. Zion, City of, Illinois
1650. Zion, Township of, Illinois
1651. Aboite, Township of, Indiana
1652. Adams, County of, Indiana
1653. Adams, Township of, Indiana
1654. Addison, Township of, Indiana
1655. Allen, County of, Indiana
1656. Anderson, City of, Indiana
1657. Anderson, Township of, Indiana
1658. Auburn, City of, Indiana
1659. Avon, Town of, Indiana
1660. Bainbridge, Township of, Indiana
1661. Bartholomew, County of, Indiana
1662. Baugo, Township of, Indiana
1663. Bedford, City of, Indiana
1664. Beech Grove, City of, Indiana
1665. Blackford, County of, Indiana
1666. Bloomington, City of, Indiana
1667. Bloomington, Township of, Indiana
1668. Bluffton, City of, Indiana
1669. Boon, Township of, Indiana
1670. Boone, County of, Indiana
1671. Brown, County of, Indiana
1672. Brown, Township of, Indiana
1673. Brownsburg, Town of, Indiana
1674. Calumet, Township of, Indiana
1675. Carmel, City of, Indiana
1676. Carroll, County of, Indiana
1677. Cass, County of, Indiana
1678. Cedar Creek, Township of, Indiana
1679. Cedar Lake, Town of, Indiana
1680. Center, Township of, Indiana
1681. Centre, Township of, Indiana

1682. Charlestown, Township of, Indiana
1683. Chesterton, Town of, Indiana
1684. Clark, County of, Indiana
1685. Clarksville, Town of, Indiana
1686. Clay, County of, Indiana
1687. Clay, Township of, Indiana
1688. Cleveland, Township of, Indiana
1689. Clinton, County of, Indiana
1690. Columbia, Township of, Indiana
1691. Columbus, City of, Indiana
1692. Columbus, Township of, Indiana
1693. Concord, Township of, Indiana
1694. Connersville, City of, Indiana
1695. Connersville, Township of, Indiana
1696. Coolspring, Township of, Indiana
1697. Crawford, County of, Indiana
1698. Crawfordsville, City of, Indiana
1699. Crown Point, City of, Indiana
1700. Danville, Town of, Indiana
1701. Daviess, County of, Indiana
1702. Dearborn, County of, Indiana
1703. Decatur, County of, Indiana
1704. Decatur, Township of, Indiana
1705. DeKalb, County of, Indiana
1706. Delaware, County of, Indiana
1707. Delaware, Township of, Indiana
1708. Dubois, County of, Indiana
1709. Dyer, Town of, Indiana
1710. East Chicago, City of, Indiana
1711. Eel, Township of, Indiana
1712. Elkhart, City of, Indiana
1713. Elkhart, County of, Indiana
1714. Elkhart, Township of, Indiana
1715. Evansville, City of, Indiana
1716. Fairfield, Township of, Indiana
1717. Fall Creek, Township of, Indiana
1718. Fayette, County of, Indiana
1719. Fishers, City of, Indiana
1720. Floyd, County of, Indiana
1721. Fort Wayne, City of, Indiana
1722. Fountain, County of, Indiana
1723. Frankfort, City of, Indiana
1724. Franklin, City of, Indiana
1725. Franklin, County of, Indiana
1726. Franklin, Township of, Indiana
1727. Fulton, County of, Indiana
1728. Gary, City of, Indiana
1729. Georgetown, Township of, Indiana
1730. Gibson, County of, Indiana
1731. Goshen, City of, Indiana
1732. Grant, County of, Indiana
1733. Greencastle, City of, Indiana
1734. Greencastle, Township of, Indiana
1735. Greene, County of, Indiana
1736. Greenfield, City of, Indiana
1737. Greensburg, City of, Indiana
1738. Greenwood, City of, Indiana
1739. Griffith, Town of, Indiana
1740. Guilford, Township of, Indiana
1741. Hamilton, County of, Indiana
1742. Hammond, City of, Indiana
1743. Hancock, County of, Indiana
1744. Hanover, Township of, Indiana
1745. Harris, Township of, Indiana
1746. Harrison, County of, Indiana
1747. Harrison, Township of, Indiana
1748. Hendricks, County of, Indiana
1749. Henry, County of, Indiana
1750. Henry, Township of, Indiana
1751. Highland, Town of, Indiana
1752. Hobart, City of, Indiana
1753. Hobart, Township of, Indiana
1754. Honey Creek, Township of, Indiana
1755. Howard, County of, Indiana
1756. Huntington, City of, Indiana
1757. Huntington, County of, Indiana
1758. Huntington, Township of, Indiana
1759. Jackson, County of, Indiana
1760. Jackson, Township of, Indiana
1761. Jasper, City of, Indiana
1762. Jasper, County of, Indiana
1763. Jay, County of, Indiana
1764. Jefferson, County of, Indiana
1765. Jefferson, Township of, Indiana
1766. Jeffersonville, City of, Indiana
1767. Jeffersonville, Township of, Indiana
1768. Jennings, County of, Indiana
1769. Johnson, County of, Indiana
1770. Keener, Township of, Indiana
1771. Knight, Township of, Indiana
1772. Knox, County of, Indiana
1773. Kokomo, City of, Indiana

1774. Kosciusko, County of, Indiana
1775. La Porte, City of, Indiana
1776. Lafayette, City of, Indiana
1777. LaGrange, County of, Indiana
1778. Lake, County of, Indiana
1779. Lake Station, City of, Indiana
1780. LaPorte, County of, Indiana
1781. Lawrence, City of, Indiana
1782. Lawrence, County of, Indiana
1783. Lawrence, Township of, Indiana
1784. Lawrenceburg, Township of, Indiana
1785. Lebanon, City of, Indiana
1786. Lincoln, Township of, Indiana
1787. Logansport, City of, Indiana
1788. Lost Creek, Township of, Indiana
1789. Madison, City of, Indiana
1790. Madison, County of, Indiana
1791. Madison, Township of, Indiana
1792. Marion, City of, Indiana
1793. Marion, County of/ Indianapolis, City of, Indiana
1794. Marshall, County of, Indiana
1795. Martin, County of, Indiana
1796. Martinsville, City of, Indiana
1797. Merrillville, Town of, Indiana
1798. Miami, County of, Indiana
1799. Michigan City, City of, Indiana
1800. Michigan, Township of, Indiana
1801. Mill, Township of, Indiana
1802. Mishawaka, City of, Indiana
1803. Monroe, County of, Indiana
1804. Montgomery, County of, Indiana
1805. Morgan, County of, Indiana
1806. Muncie, City of, Indiana
1807. Munster, Town of, Indiana
1808. New Albany, City of, Indiana
1809. New Albany, Township of, Indiana
1810. New Castle, City of, Indiana
1811. New Haven, City of, Indiana
1812. Newton, County of, Indiana
1813. Noble, County of, Indiana
1814. Noble, Township of, Indiana
1815. Noblesville, City of, Indiana
1816. Noblesville, Township of, Indiana
1817. North, Township of, Indiana
1818. Ohio, Township of, Indiana
1819. Orange, County of, Indiana
1820. Osolo, Township of, Indiana
1821. Owen, County of, Indiana
1822. Parke, County of, Indiana
1823. Patoka, Township of, Indiana
1824. Penn, Township of, Indiana
1825. Perry, County of, Indiana
1826. Perry, Township of, Indiana
1827. Peru, City of, Indiana
1828. Peru, Township of, Indiana
1829. Pigeon, Township of, Indiana
1830. Pike, County of, Indiana
1831. Pike, Township of, Indiana
1832. Pipe Creek, Township of, Indiana
1833. Plainfield, Town of, Indiana
1834. Pleasant, Township of, Indiana
1835. Portage, City of, Indiana
1836. Portage, Township of, Indiana
1837. Porter, County of, Indiana
1838. Posey, County of, Indiana
1839. Pulaski, County of, Indiana
1840. Putnam, County of, Indiana
1841. Randolph, County of, Indiana
1842. Richland, Township of, Indiana
1843. Richmond, City of, Indiana
1844. Ripley, County of, Indiana
1845. Ross, Township of, Indiana
1846. Rush, County of, Indiana
1847. Schererville, Town of, Indiana
1848. Scott, County of, Indiana
1849. Seymour, City of, Indiana
1850. Shawswick, Township of, Indiana
1851. Shelby, County of, Indiana
1852. Shelbyville, City of, Indiana
1853. Silver Creek, Township of, Indiana
1854. South Bend, City of, Indiana
1855. Speedway, Town of, Indiana
1856. Spencer, County of, Indiana
1857. St. John, Town of, Indiana
1858. St. John, Township of, Indiana
1859. St. Joseph, County of, Indiana
1860. St. Joseph, Township of, Indiana
1861. Starke, County of, Indiana
1862. Steuben, County of, Indiana
1863. Sugar Creek, Township of, Indiana
1864. Sullivan, County of, Indiana

1865. Switzerland, County of, Indiana
1866. Terre Haute, City of, Indiana
1867. Tippecanoe, County of, Indiana
1868. Tipton, County of, Indiana
1869. Troy, Township of, Indiana
1870. Union, Township of, Indiana
1871. Valparaiso, City of, Indiana
1872. Van Buren, Township of, Indiana
1873. Vanderburgh, County of, Indiana
1874. Vermillion, County of, Indiana
1875. Vernon, Township of, Indiana
1876. Vigo, County of, Indiana
1877. Vincennes, City of, Indiana
1878. Vincennes, Township of, Indiana
1879. Wabash, County of, Indiana
1880. Wabash, Township of, Indiana
1881. Warren, Township of, Indiana
1882. Warrick, County of, Indiana
1883. Warsaw, City of, Indiana
1884. Washington, City of, Indiana
1885. Washington, County of, Indiana
1886. Washington, Township of, Indiana
1887. Wayne, County of, Indiana
1888. Wayne, Township of, Indiana
1889. Wea, Township of, Indiana
1890. Wells, County of, Indiana
1891. West Lafayette, City of, Indiana
1892. Westchester, Township of, Indiana
1893. Westfield, City of, Indiana
1894. White, County of, Indiana
1895. White River, Township of, Indiana
1896. Whitley, County of, Indiana
1897. Winfield, Township of, Indiana
1898. Yorktown, Town of, Indiana
1899. Zionsville, Town of, Indiana
1900. Allamakee, County of, Iowa
1901. Altoona, City of, Iowa
1902. Ames, City of, Iowa
1903. Ankeny, City of, Iowa
1904. Appanoose, County of, Iowa
1905. Benton, County of, Iowa
1906. Bettendorf, City of, Iowa
1907. Black Hawk, County of, Iowa
1908. Boone, City of, Iowa
1909. Boone, County of, Iowa
1910. Bremer, County of, Iowa
1911. Buchanan, County of, Iowa
1912. Buena Vista, County of, Iowa
1913. Burlington, City of, Iowa
1914. Butler, County of, Iowa
1915. Carroll, County of, Iowa
1916. Cass, County of, Iowa
1917. Cedar, County of, Iowa
1918. Cedar Falls, City of, Iowa
1919. Cedar Rapids, City of, Iowa
1920. Cerro Gordo, County of, Iowa
1921. Cherokee, County of, Iowa
1922. Chickasaw, County of, Iowa
1923. Clay, County of, Iowa
1924. Clayton, County of, Iowa
1925. Clinton, City of, Iowa
1926. Clinton, County of, Iowa
1927. Clive, City of, Iowa
1928. Coralville, City of, Iowa
1929. Council Bluffs, City of, Iowa
1930. Crawford, County of, Iowa
1931. Dallas, County of, Iowa
1932. Davenport, City of, Iowa
1933. Delaware, County of, Iowa
1934. Des Moines, City of, Iowa
1935. Des Moines, County of, Iowa
1936. Dickinson, County of, Iowa
1937. Dubuque, City of, Iowa
1938. Dubuque, County of, Iowa
1939. Fairfield, City of, Iowa
1940. Fayette, County of, Iowa
1941. Floyd, County of, Iowa
1942. Fort Dodge, City of, Iowa
1943. Fort Madison, City of, Iowa
1944. Franklin, County of, Iowa
1945. Grimes, City of, Iowa
1946. Grundy, County of, Iowa
1947. Guthrie, County of, Iowa
1948. Hamilton, County of, Iowa
1949. Hancock, County of, Iowa
1950. Hardin, County of, Iowa
1951. Harrison, County of, Iowa
1952. Henry, County of, Iowa
1953. Indianola, City of, Iowa
1954. Iowa City, City of, Iowa
1955. Iowa, County of, Iowa
1956. Jackson, County of, Iowa

1957. Jasper, County of, Iowa
1958. Jefferson, County of, Iowa
1959. Johnson, County of, Iowa
1960. Johnston, City of, Iowa
1961. Jones, County of, Iowa
1962. Keokuk, City of, Iowa
1963. Keokuk, County of, Iowa
1964. Kossuth, County of, Iowa
1965. Le Mars, City of, Iowa
1966. Lee, County of, Iowa
1967. Linn, County of, Iowa
1968. Louisa, County of, Iowa
1969. Lyon, County of, Iowa
1970. Madison, County of, Iowa
1971. Mahaska, County of, Iowa
1972. Marion, City of, Iowa
1973. Marion, County of, Iowa
1974. Marshall, County of, Iowa
1975. Marshalltown, City of, Iowa
1976. Mason City, City of, Iowa
1977. Mills, County of, Iowa
1978. Mitchell, County of, Iowa
1979. Muscatine, City of, Iowa
1980. Muscatine, County of, Iowa
1981. Newton, City of, Iowa
1982. North Liberty, City of, Iowa
1983. Norwalk, City of, Iowa
1984. O'Brien, County of, Iowa
1985. Oskaloosa, City of, Iowa
1986. Ottumwa, City of, Iowa
1987. Page, County of, Iowa
1988. Pella, City of, Iowa
1989. Pleasant Hill, City of, Iowa
1990. Plymouth, County of, Iowa
1991. Polk, County of, Iowa
1992. Pottawattamie, County of, Iowa
1993. Poweshiek, County of, Iowa
1994. Scott, County of, Iowa
1995. Shelby, County of, Iowa
1996. Sioux City, City of, Iowa
1997. Sioux, County of, Iowa
1998. Spencer, City of, Iowa
1999. Storm Lake, City of, Iowa
2000. Story, County of, Iowa
2001. Tama, County of, Iowa
2002. Union, County of, Iowa
2003. Urbandale, City of, Iowa
2004. Wapello, County of, Iowa
2005. Warren, County of, Iowa
2006. Washington, County of, Iowa
2007. Waterloo, City of, Iowa
2008. Waukee, City of, Iowa
2009. Waverly, City of, Iowa
2010. Webster, County of, Iowa
2011. West Des Moines, City of, Iowa
2012. Winnebago, County of, Iowa
2013. Winneshiek, County of, Iowa
2014. Woodbury, County of, Iowa
2015. Wright, County of, Iowa
2016. Allen, County of, Kansas
2017. Andover, City of, Kansas
2018. Arkansas City, City of, Kansas
2019. Atchison, City of, Kansas
2020. Atchison, County of, Kansas
2021. Barton, County of, Kansas
2022. Bourbon, County of, Kansas
2023. Bruno, Township of, Kansas
2024. Butler, County of, Kansas
2025. Cherokee, County of, Kansas
2026. Cowley, County of, Kansas
2027. Crawford, County of, Kansas
2028. Derby, City of, Kansas
2029. Dickinson, County of, Kansas
2030. Dodge City, City of, Kansas
2031. Douglas, County of, Kansas
2032. El Dorado, City of, Kansas
2033. Ellis, County of, Kansas
2034. Emporia, City of, Kansas
2035. Fairmount, Township of, Kansas
2036. Finney, County of, Kansas
2037. Ford, County of, Kansas
2038. Franklin, County of, Kansas
2039. Garden City, City of, Kansas
2040. Gardner, City of, Kansas
2041. Geary, County of, Kansas
2042. Great Bend, City of, Kansas
2043. Harvey, County of, Kansas
2044. Hays, City of, Kansas
2045. Haysville, City of, Kansas
2046. Haysville, City of, Kansas
2047. Hutchinson, City of, Kansas
2048. Jackson, County of, Kansas

2049. Jefferson, County of, Kansas
2050. Johnson, County of, Kansas
2051. Junction City, City of, Kansas
2052. Kansas City, City of, Kansas
2053. Kansas City, City of, Kansas
2054. Labette, County of, Kansas
2055. Lansing, City of, Kansas
2056. Lawrence, City of, Kansas
2057. Lawrence, City of, Kansas
2058. Leavenworth, City of, Kansas
2059. Leavenworth, County of, Kansas
2060. Leawood, City of, Kansas
2061. Lenexa, City of, Kansas
2062. Liberal, City of, Kansas
2063. Lyon, County of, Kansas
2064. Madison, Township of, Kansas
2065. Manhattan, City of, Kansas
2066. Marion, County of, Kansas
2067. McPherson, City of, Kansas
2068. McPherson, County of, Kansas
2069. Merriam, City of, Kansas
2070. Miami, County of, Kansas
2071. Montgomery, County of, Kansas
2072. Nemaha, County of, Kansas
2073. Neosho, County of, Kansas
2074. Newton, City of, Kansas
2075. Olathe, City of, Kansas
2076. Osage, County of, Kansas
2077. Ottawa, City of, Kansas
2078. Overland Park, City of, Kansas
2079. Pittsburg, City of, Kansas
2080. Pottawatomie, County of, Kansas
2081. Prairie, Village of, City of, Kansas
2082. Reno, County of, Kansas
2083. Riley, County of, Kansas
2084. Riverside, Township of, Kansas
2085. Rockford, Township of, Kansas
2086. Salina, City of, Kansas
2087. Saline, County of, Kansas
2088. Sedgwick, County of, Kansas
2089. Seward, County of, Kansas
2090. Shawnee, City of, Kansas
2091. Shawnee, County of, Kansas
2092. Soldier, Township of, Kansas
2093. Sumner, County of, Kansas
2094. Topeka, City of, Kansas
2095. Wichita, City of, Kansas
2096. Winfield, City of, Kansas
2097. Wyandotte, County of, Kansas
2098. Adair, County of, Kentucky
2099. Allen, County of, Kentucky
2100. Anderson, County of, Kentucky
2101. Ashland, City of, Kentucky
2102. Bardstown, City of, Kentucky
2103. Barren, County of, Kentucky
2104. Bath, County of, Kentucky
2105. Bell, County of, Kentucky
2106. Berea, City of, Kentucky
2107. Boone, County of, Kentucky
2108. Bourbon, County of, Kentucky
2109. Bowling Green, City of, Kentucky
2110. Boyd, County of, Kentucky
2111. Boyle, County of, Kentucky
2112. Breathitt, County of, Kentucky
2113. Breckinridge, County of, Kentucky
2114. Bullitt, County of, Kentucky
2115. Butler, County of, Kentucky
2116. Caldwell, County of, Kentucky
2117. Calloway, County of, Kentucky
2118. Campbell, County of, Kentucky
2119. Campbellsville, City of, Kentucky
2120. Carroll, County of, Kentucky
2121. Carter, County of, Kentucky
2122. Casey, County of, Kentucky
2123. Christian, County of, Kentucky
2124. Clark, County of, Kentucky
2125. Clay, County of, Kentucky
2126. Clinton, County of, Kentucky
2127. Covington, City of, Kentucky
2128. Danville, City of, Kentucky
2129. Daviess, County of, Kentucky
2130. Edmonson, County of, Kentucky
2131. Elizabethtown, City of, Kentucky
2132. Erlanger, City of, Kentucky
2133. Estill, County of, Kentucky
2134. Fleming, County of, Kentucky
2135. Florence, City of, Kentucky
2136. Floyd, County of, Kentucky
2137. Fort Thomas, City of, Kentucky
2138. Frankfort, City of, Kentucky
2139. Franklin, County of, Kentucky
2140. Garrard, County of, Kentucky

2141. Georgetown, City of, Kentucky
2142. Glasgow, City of, Kentucky
2143. Grant, County of, Kentucky
2144. Graves, County of, Kentucky
2145. Grayson, County of, Kentucky
2146. Green, County of, Kentucky
2147. Greenup, County of, Kentucky
2148. Hardin, County of, Kentucky
2149. Harlan, County of, Kentucky
2150. Harrison, County of, Kentucky
2151. Hart, County of, Kentucky
2152. Henderson, City of, Kentucky
2153. Henderson, County of, Kentucky
2154. Henry, County of, Kentucky
2155. Hopkins, County of, Kentucky
2156. Hopkinsville, City of, Kentucky
2157. Independence, City of, Kentucky
2158. Jackson, County of, Kentucky
2159. Jeffersontown, City of, Kentucky
2160. Jessamine, County of, Kentucky
2161. Johnson, County of, Kentucky
2162. Kenton, County of, Kentucky
2163. Knott, County of, Kentucky
2164. Knox, County of, Kentucky
2165. Larue, County of, Kentucky
2166. Laurel, County of, Kentucky
2167. Lawrence, County of, Kentucky
2168. Lawrenceburg, City of, Kentucky
2169. Letcher, County of, Kentucky
2170. Lewis, County of, Kentucky
2171. Lexington-Fayette, Urban County of, Kentucky
2172. Lincoln, County of, Kentucky
2173. Logan, County of, Kentucky
2174. Louisville/Jefferson, County Metro of, Kentucky
2175. Lyndon, City of, Kentucky
2176. Madison, County of, Kentucky
2177. Madisonville, City of, Kentucky
2178. Magoffin, County of, Kentucky
2179. Marion, County of, Kentucky
2180. Marshall, County of, Kentucky
2181. Martin, County of, Kentucky
2182. Mason, County of, Kentucky
2183. McCracken, County of, Kentucky
2184. McCreary, County of, Kentucky
2185. Meade, County of, Kentucky
2186. Mercer, County of, Kentucky
2187. Metcalfe, County of, Kentucky
2188. Monroe, County of, Kentucky
2189. Montgomery, County of, Kentucky
2190. Morgan, County of, Kentucky
2191. Mount Washington, City of, Kentucky
2192. Muhlenberg, County of, Kentucky
2193. Murray, City of, Kentucky
2194. Nelson, County of, Kentucky
2195. Newport, City of, Kentucky
2196. Nicholasville, City of, Kentucky
2197. Ohio, County of, Kentucky
2198. Oldham, County of, Kentucky
2199. Owen, County of, Kentucky
2200. Owensboro, City of, Kentucky
2201. Paducah, City of, Kentucky
2202. Pendleton, County of, Kentucky
2203. Perry, County of, Kentucky
2204. Pike, County of, Kentucky
2205. Powell, County of, Kentucky
2206. Pulaski, County of, Kentucky
2207. Radcliff, City of, Kentucky
2208. Richmond, City of, Kentucky
2209. Rockcastle, County of, Kentucky
2210. Rowan, County of, Kentucky
2211. Russell, County of, Kentucky
2212. Scott, County of, Kentucky
2213. Shelby, County of, Kentucky
2214. Shelbyville, City of, Kentucky
2215. Shepherdsville, City of, Kentucky
2216. Shively, City of, Kentucky
2217. Simpson, County of, Kentucky
2218. Somerset, City of, Kentucky
2219. Spencer, County of, Kentucky
2220. St. Matthews, City of, Kentucky
2221. Taylor, County of, Kentucky
2222. Todd, County of, Kentucky
2223. Trigg, County of, Kentucky
2224. Union, County of, Kentucky
2225. Warren, County of, Kentucky
2226. Washington, County of, Kentucky
2227. Wayne, County of, Kentucky
2228. Webster, County of, Kentucky
2229. Whitley, County of, Kentucky

2230. Winchester, City of, Kentucky
2231. Woodford, County of, Kentucky
2232. Morgan, County of, Kentucky
Louisiana
2233. Abbeville, City of, Louisiana
2234. Acadia, Parish of, Louisiana
2235. Alexandria, City of, Louisiana
2236. Allen, Parish of, Louisiana
2237. Ascension, Parish of, Louisiana
2238. Assumption, Parish of, Louisiana
2239. Avoyelles, Parish of, Louisiana
2240. Baker, City of, Louisiana
2241. Bastrop, City of, Louisiana
2242. Baton Rouge, City of, Louisiana
2243. Beauregard, Parish of, Louisiana
2244. Bienville, Parish of, Louisiana
2245. Bogalusa, City of, Louisiana
2246. Bossier City, City of, Louisiana
2247. Bossier, Parish of, Louisiana
2248. Broussard, City of, Louisiana
2249. Caddo, Parish of, Louisiana
2250. Calcasieu, Parish of, Louisiana
2251. Central, City of, Louisiana
2252. Claiborne, Parish of, Louisiana
2253. Concordia, Parish of, Louisiana
2254. Covington, City of, Louisiana
2255. Crowley, City of, Louisiana
2256. De Soto, Parish of, Louisiana
2257. DeRidder, City of, Louisiana
2258. East Baton Rouge, Parish of,
Louisiana
2259. East Feliciana, Parish of, Louisiana
2260. Evangeline, Parish of, Louisiana
2261. Franklin, Parish of, Louisiana
2262. Gonzales, City of, Louisiana
2263. Grant, Parish of, Louisiana
2264. Gretna, City of, Louisiana
2265. Hammond, City of, Louisiana
2266. Iberia, Parish of, Louisiana
2267. Iberville, Parish of, Louisiana
2268. Jackson, Parish of, Louisiana
2269. Jefferson Davis, Parish of, Louisiana
2270. Jefferson, Parish of, Louisiana
2271. Kenner, City of, Louisiana
2272. Lafayette, City of, Louisiana
2273. Lafayette, Parish of, Louisiana
2274. Lafourche, Parish of, Louisiana
2275. Lake Charles, City of, Louisiana
2276. LaSalle, Parish of, Louisiana
2277. Lincoln, Parish of, Louisiana
2278. Livingston, Parish of, Louisiana
2279. Madison, Parish of, Louisiana
2280. Mandeville, City of, Louisiana
2281. Minden, City of, Louisiana
2282. Monroe, City of, Louisiana
2283. Morehouse, Parish of, Louisiana
2284. Morgan City, City of, Louisiana
2285. Natchitoches, City of, Louisiana
2286. Natchitoches, Parish of, Louisiana
2287. New Iberia, City of, Louisiana
2288. New Orleans, City of, Louisiana
2289. Orleans, Parish of, Louisiana
2290. Opelousas, City of, Louisiana
2291. Ouachita, Parish of, Louisiana
2292. Pineville, City of, Louisiana
2293. Plaquemines, Parish of, Louisiana
2294. Pointe Coupee, Parish of, Louisiana
2295. Rapides, Parish of, Louisiana
2296. Richland, Parish of, Louisiana
2297. Ruston, City of, Louisiana
2298. Sabine, Parish of, Louisiana
2299. Shreveport, City of, Louisiana
2300. Slidell, City of, Louisiana
2301. St. Bernard, Parish of, Louisiana
2302. St. Charles, Parish of, Louisiana
2303. St. Helena, Parish of, Louisiana
2304. St. James, Parish of, Louisiana
2305. St. John the Baptist, Parish of,
Louisiana
2306. St. Landry, Parish of, Louisiana
2307. St. Martin, Parish of, Louisiana
2308. St. Mary, Parish of, Louisiana
2309. St. Tammany, Parish of, Louisiana
2310. Sulphur, City of, Louisiana
2311. Tangipahoa, Parish of, Louisiana
2312. Terrebonne, Parish of/ Houma, City
of, Louisiana
2313. Thibodaux, City of, Louisiana
2314. Union, Parish of, Louisiana
2315. Vermilion, Parish of, Louisiana
2316. Vernon, Parish of, Louisiana
2317. Washington, Parish of, Louisiana

2318. Webster, Parish of, Louisiana
2319. West Baton Rouge, Parish of, Louisiana
2320. West Carroll, Parish of, Louisiana
2321. West Feliciana, Parish of, Louisiana
2322. West Monroe, City of, Louisiana
2323. Winn, Parish of, Louisiana
2324. Youngsville, City of, Louisiana
2325. Zachary, City of, Louisiana
2326. Androscoggin, County of, Maine
2327. Aroostook, County of, Maine
2328. Auburn, City of, Maine
2329. Augusta, City of, Maine
2330. Bangor, City of, Maine
2331. Biddeford, City of, Maine
2332. Brunswick, Town of, Maine
2333. Cumberland, County of, Maine
2334. Falmouth, Town of, Maine
2335. Franklin, County of, Maine
2336. Gorham, Town of, Maine
2337. Hancock, County of, Maine
2338. Kennebec, County of, Maine
2339. Kennebunk, Town of, Maine
2340. Knox, County of, Maine
2341. Lewiston, City of, Maine
2342. Lincoln, County of, Maine
2343. Orono, Town of, Maine
2344. Oxford, County of, Maine
2345. Penobscot, County of, Maine
2346. Piscataquis, County of, Maine
2347. Portland, City of, Maine
2348. Saco, City of, Maine
2349. Sagadahoc, County of, Maine
2350. Sanford, City of, Maine
2351. Scarborough, Town of, Maine
2352. Somerset, County of, Maine
2353. South Portland, City of, Maine
2354. Standish, Town of, Maine
2355. Waldo, County of, Maine
2356. Washington, County of, Maine
2357. Waterville, City of, Maine
2358. Wells, Town of, Maine
2359. Westbrook, City of, Maine
2360. Windham, Town of, Maine
2361. York, County of, Maine
2362. York, Town of, Maine
2363. Aberdeen, City of, Maryland
2364. Allegany, County of, Maryland
2365. Annapolis, City of, Maryland
2366. Anne Arundel, County of, Maryland
2367. Baltimore, City of, Maryland
2368. Baltimore, County of, Maryland
2369. Bel Air, Town of, Maryland
2370. Bowie, City of, Maryland
2371. Calvert, County of, Maryland
2372. Cambridge, City of, Maryland
2373. Caroline, County of, Maryland
2374. Carroll, County of, Maryland
2375. Cecil, County of, Maryland
2376. Charles, County of, Maryland
2377. College Park, City of, Maryland
2378. Cumberland, City of, Maryland
2379. Dorchester, County of, Maryland
2380. Easton, Town of, Maryland
2381. Elkton, Town of, Maryland
2382. Frederick, City of, Maryland
2383. Frederick, County of, Maryland
2384. Gaithersburg, City of, Maryland
2385. Garrett, County of, Maryland
2386. Greenbelt, City of, Maryland
2387. Hagerstown, City of, Maryland
2388. Harford, County of, Maryland
2389. Havre de Grace, City of, Maryland
2390. Howard, County of, Maryland
2391. Hyattsville, City of, Maryland
2392. Kent, County of, Maryland
2393. Laurel, City of, Maryland
2394. Montgomery, County of, Maryland
2395. New Carrollton, City of, Maryland
2396. Prince George's, County of, Maryland
2397. Queen Anne's, County of, Maryland
2398. Rockville, City of, Maryland
2399. Salisbury, City of, Maryland
2400. Somerset, County of, Maryland
2401. St. Mary's, County of, Maryland
2402. Takoma Park, City of, Maryland
2403. Talbot, County of, Maryland
2404. Washington, County of, Maryland
2405. Westminster, City of, Maryland
2406. Wicomico, County of, Maryland
2407. Worcester, County of, Maryland

2408. Abington, Town of, Massachusetts
2409. Acton, Town of, Massachusetts
2410. Acushnet, Town of, Massachusetts
2411. Agawam, Town of/ City of, Massachusetts
2412. Amesbury, Town of/ City of, Massachusetts
2413. Amherst, Town of, Massachusetts
2414. Andover, Town of, Massachusetts
2415. Arlington, Town of, Massachusetts
2416. Ashland, Town of, Massachusetts
2417. Athol, Town of, Massachusetts
2418. Attleboro, City of, Massachusetts
2419. Auburn, Town of, Massachusetts
2420. Barnstable, County of, Massachusetts
2421. Barnstable, Town of/ City of, Massachusetts
2422. Bedford, Town of, Massachusetts
2423. Belchertown, Town of, Massachusetts
2424. Bellingham, Town of, Massachusetts
2425. Belmont, Town of, Massachusetts
2426. Beverly, City of, Massachusetts
2427. Billerica, Town of, Massachusetts
2428. Boston, City of, Massachusetts
2429. Bourne, Town of, Massachusetts
2430. Braintree, Town of/ City of, Massachusetts
2431. Bridgewater, Town of/ City of, Massachusetts
2432. Bristol, County of, Massachusetts
2433. Brockton, City of, Massachusetts
2434. Brookline, Town of, Massachusetts
2435. Burlington, Town of, Massachusetts
2436. Cambridge, City of, Massachusetts
2437. Canton, Town of, Massachusetts
2438. Carver, Town of, Massachusetts
2439. Charlton, Town of, Massachusetts
2440. Chelmsford, Town of, Massachusetts
2441. Chelsea, City of, Massachusetts
2442. Chicopee, City of, Massachusetts
2443. Clinton, Town of, Massachusetts
2444. Concord, Town of, Massachusetts
2445. Danvers, Town of, Massachusetts
2446. Dartmouth, Town of, Massachusetts
2447. Dedham, Town of, Massachusetts
2448. Dennis, Town of, Massachusetts
2449. Dracut, Town of, Massachusetts
2450. Dudley, Town of, Massachusetts
2451. Dukes, County of, Massachusetts
2452. Duxbury, Town of, Massachusetts
2453. East Bridgewater, Town of, Massachusetts
2454. East Longmeadow, Town of, Massachusetts
2455. Easthampton, Town of, City of, Massachusetts
2456. Easton, Town of, Massachusetts
2457. Everett, City of, Massachusetts
2458. Fairhaven, Town of, Massachusetts
2459. Fall River, City of, Massachusetts
2460. Falmouth, Town of, Massachusetts
2461. Fitchburg, City of, Massachusetts
2462. Foxborough, Town of, Massachusetts
2463. Framingham, City of, Massachusetts
2464. Franklin, Town of, City of, Massachusetts
2465. Gardner, City of, Massachusetts
2466. Gloucester, City of, Massachusetts
2467. Grafton, Town of, Massachusetts
2468. Greenfield, Town of, City of, Massachusetts
2469. Groton, Town of, Massachusetts
2470. Hanover, Town of, Massachusetts
2471. Hanson, Town of, Massachusetts
2472. Harwich, Town of, Massachusetts
2473. Haverhill, City of, Massachusetts
2474. Hingham, Town of, Massachusetts
2475. Holbrook, Town of, Massachusetts
2476. Holden, Town of, Massachusetts
2477. Holliston, Town of, Massachusetts
2478. Holyoke, City of, Massachusetts
2479. Hopkinton, Town of, Massachusetts
2480. Hudson, Town of, Massachusetts
2481. Hull, Town of, Massachusetts
2482. Ipswich, Town of, Massachusetts
2483. Kingston, Town of, Massachusetts
2484. Lakeville, Town of, Massachusetts
2485. Lawrence, City of, Massachusetts
2486. Leicester, Town of, Massachusetts

2487. Leominster, City of, Massachusetts
2488. Lexington, Town of, Massachusetts
2489. Littleton, Town of, Massachusetts
2490. Longmeadow, Town of, Massachusetts
2491. Lowell, City of, Massachusetts
2492. Ludlow, Town of, Massachusetts
2493. Lunenburg, Town of, Massachusetts
2494. Lynn, City of, Massachusetts
2495. Lynnfield, Town of, Massachusetts
2496. Malden, City of, Massachusetts
2497. Mansfield, Town of, Massachusetts
2498. Marblehead, Town of, Massachusetts
2499. Marlborough, City of, Massachusetts
2500. Marshfield, Town of, Massachusetts
2501. Mashpee, Town of, Massachusetts
2502. Maynard, Town of, Massachusetts
2503. Medfield, Town of, Massachusetts
2504. Medford, City of, Massachusetts
2505. Medway, Town of, Massachusetts
2506. Melrose, City of, Massachusetts
2507. Methuen, Town of, City of, Massachusetts
2508. Middleborough, Town of, Massachusetts
2509. Middleton, Town of, Massachusetts
2510. Milford, Town of, Massachusetts
2511. Millbury, Town of, Massachusetts
2512. Milton, Town of, Massachusetts
2513. Nantucket, Town of/ County of, Massachusetts
2514. Natick, Town of, Massachusetts
2515. Needham, Town of, Massachusetts
2516. New Bedford, City of, Massachusetts
2517. Newburyport, City of, Massachusetts
2518. Newton, City of, Massachusetts
2519. Norfolk, County of, Massachusetts
2520. Norfolk, Town of, Massachusetts
2521. North Adams, City of, Massachusetts
2522. North Andover, Town of, Massachusetts
2523. North Attleborough, Town of, Massachusetts
2524. North Reading, Town of, Massachusetts
2525. Northampton, City of, Massachusetts
2526. Northborough, Town of, Massachusetts
2527. Northbridge, Town of, Massachusetts
2528. Norton, Town of, Massachusetts
2529. Norwell, Town of, Massachusetts
2530. Norwood, Town of, Massachusetts
2531. Oxford, Town of, Massachusetts
2532. Palmer, Town of/ City of, Massachusetts
2533. Peabody, City of, Massachusetts
2534. Pembroke, Town of, Massachusetts
2535. Pepperell, Town of, Massachusetts
2536. Pittsfield, City of, Massachusetts
2537. Plymouth, County of, Massachusetts
2538. Plymouth, Town of, Massachusetts
2539. Quincy, City of, Massachusetts
2540. Randolph, Town of/ City of, Massachusetts
2541. Raynham, Town of, Massachusetts
2542. Reading, Town of, Massachusetts
2543. Rehoboth, Town of, Massachusetts
2544. Revere, City of, Massachusetts
2545. Rockland, Town of, Massachusetts
2546. Salem, City of, Massachusetts
2547. Sandwich, Town of, Massachusetts
2548. Saugus, Town of, Massachusetts
2549. Scituate, Town of, Massachusetts
2550. Seekonk, Town of, Massachusetts
2551. Sharon, Town of, Massachusetts
2552. Shrewsbury, Town of, Massachusetts
2553. Somerset, Town of, Massachusetts
2554. Somerville, City of, Massachusetts
2555. South Hadley, Town of, Massachusetts
2556. Southborough, Town of, Massachusetts
2557. Southbridge, Town of/ City of, Massachusetts
2558. Spencer, Town of, Massachusetts
2559. Springfield, City of, Massachusetts
2560. Stoneham, Town of, Massachusetts
2561. Stoughton, Town of, Massachusetts
2562. Sudbury, Town of, Massachusetts
2563. Swampscott, Town of, Massachusetts

2564. Swansea, Town of, Massachusetts
2565. Taunton, City of, Massachusetts
2566. Tewksbury, Town of, Massachusetts
2567. Tyngsborough, Town of, Massachusetts
2568. Uxbridge, Town of, Massachusetts
2569. Wakefield, Town of, Massachusetts
2570. Walpole, Town of, Massachusetts
2571. Waltham, City of, Massachusetts
2572. Wareham, Town of, Massachusetts
2573. Watertown, Town of/ City of, Massachusetts
2574. Wayland, Town of, Massachusetts
2575. Webster, Town of, Massachusetts
2576. Wellesley, Town of, Massachusetts
2577. West Springfield, Town of/ City of, Massachusetts
2578. Westborough, Town of, Massachusetts
2579. Westfield, City of, Massachusetts
2580. Westford, Town of, Massachusetts
2581. Weston, Town of, Massachusetts
2582. Westport, Town of, Massachusetts
2583. Westwood, Town of, Massachusetts
2584. Weymouth, Town of/ City of, Massachusetts
2585. Whitman, Town of, Massachusetts
2586. Wilbraham, Town of, Massachusetts
2587. Wilmington, Town of, Massachusetts
2588. Winchendon, Town of, Massachusetts
2589. Winchester, Town of, Massachusetts
2590. Winthrop, Town of/ City of, Massachusetts
2591. Woburn, City of, Massachusetts
2592. Worcester, City of, Massachusetts
2593. Wrentham, Town of, Massachusetts
2594. Yarmouth, Town of, Massachusetts
2595. Ada, Township of, Michigan
2596. Adrian, City of, Michigan
2597. Alcona, County of, Michigan
2598. Algoma, Township of, Michigan
2599. Allegan, County of, Michigan
2600. Allen Park, City of, Michigan
2601. Allendale, Charter Township of, Michigan
2602. Alpena, County of, Michigan
2603. Alpine, Township of, Michigan
2604. Ann Arbor, City of, Michigan
2605. Antrim, County of, Michigan
2606. Antwerp, Township of, Michigan
2607. Arenac, County of, Michigan
2608. Auburn Hills, City of, Michigan
2609. Bangor, Charter Township of, Michigan
2610. Barry, County of, Michigan
2611. Bath, Charter Township of, Michigan
2612. Battle Creek, City of, Michigan
2613. Bay City, City of, Michigan
2614. Bay, County of, Michigan
2615. Bedford, Township of, Michigan
2616. Benton, Charter Township of, Michigan
2617. Benzie, County of, Michigan
2618. Berkley, City of, Michigan
2619. Berrien, County of, Michigan
2620. Beverly Hills, Village of, Michigan
2621. Big Rapids, City of, Michigan
2622. Birmingham, City of, Michigan
2623. Blackman, Charter Township of, Michigan
2624. Bloomfield, Charter Township of, Michigan
2625. Branch, County of, Michigan
2626. Brandon, Charter Township of, Michigan
2627. Brighton, Township of, Michigan
2628. Brownstown, Charter Township of, Michigan
2629. Burton, City of, Michigan
2630. Byron, Township of, Michigan
2631. Cadillac, City of, Michigan
2632. Caledonia, Township of, Michigan
2633. Calhoun, County of, Michigan
2634. Cannon, Township of, Michigan
2635. Canton, Charter Township of, Michigan
2636. Cascade, Charter Township of, Michigan

2637. Cass, County of, Michigan
2638. Charlevoix, County of, Michigan
2639. Cheboygan, County of, Michigan
2640. Chesterfield, Township of, Michigan
2641. Chippewa, County of, Michigan
2642. Clare, County of, Michigan
2643. Clawson, City of, Michigan
2644. Clinton, Charter Township of, Michigan
2645. Clinton, County of, Michigan
2646. Coldwater, City of, Michigan
2647. Commerce, Charter Township of, Michigan
2648. Comstock, Charter Township of, Michigan
2649. Cooper, Charter Township of, Michigan
2650. Crawford, County of, Michigan
2651. Davison, Township of, Michigan
2652. Dearborn, City of, Michigan
2653. Dearborn Heights, City of, Michigan
2654. Delhi, Charter Township of, Michigan
2655. Delta, Charter Township of, Michigan
2656. Delta, County of, Michigan
2657. Detroit, City of, Michigan
2658. DeWitt, Charter Township of, Michigan
2659. Dickinson, County of, Michigan
2660. East Bay, Township of, Michigan
2661. East Grand Rapids, City of, Michigan
2662. East Lansing, City of, Michigan
2663. Eastpointe, City of, Michigan
2664. Eaton, County of, Michigan
2665. Egelston, Township of, Michigan
2666. Emmet, County of, Michigan
2667. Emmett, Charter Township of, Michigan
2668. Escanaba, City of, Michigan
2669. Farmington, City of, Michigan
2670. Farmington Hills, City of, Michigan
2671. Fenton, Charter Township of, Michigan
2672. Fenton, City of, Michigan
2673. Ferndale, City of, Michigan
2674. Flat Rock, City of, Michigan
2675. Flint, Charter Township of, Michigan
2676. Flint, City of, Michigan
2677. Flushing, Charter Township of, Michigan
2678. Fort Gratiot, Charter Township of, Michigan
2679. Fraser, City of, Michigan
2680. Frenchtown, Township of, Michigan
2681. Fruitport, Charter Township of, Michigan
2682. Gaines, Charter Township of, Michigan
2683. Garden City, City of, Michigan
2684. Garfield, Charter Township of, Michigan
2685. Genesee, Charter Township of, Michigan
2686. Genesee, County of, Michigan
2687. Genoa, Township of, Michigan
2688. Georgetown, Charter Township of, Michigan
2689. Gladwin, County of, Michigan
2690. Gogebic, County of, Michigan
2691. Grand Blanc, Charter Township of, Michigan
2692. Grand Haven, Charter Township of, Michigan
2693. Grand Haven, City of, Michigan
2694. Grand Rapids, Charter Township of, Michigan
2695. Grand Rapids, City of, Michigan
2696. Grand Traverse, County of, Michigan
2697. Grandville, City of, Michigan
2698. Gratiot, County of, Michigan
2699. Green Oak, Township of, Michigan
2700. Grosse Ile, Township of, Michigan
2701. Grosse Pointe Park, City of, Michigan
2702. Grosse Pointe Woods, City of, Michigan
2703. Hamburg, Township of, Michigan
2704. Hamtramck, City of, Michigan

2705. Harper Woods, City of, Michigan
2706. Harrison, Charter Township of, Michigan
2707. Hartland, Township of, Michigan
2708. Hazel Park, City of, Michigan
2709. Highland, Charter Township of, Michigan
2710. Highland Park, City of, Michigan
2711. Hillsdale, County of, Michigan
2712. Holland, Charter Township of, Michigan
2713. Holland, City of, Michigan
2714. Holly, Township of, Michigan
2715. Houghton, County of, Michigan
2716. Huron, Charter Township of, Michigan
2717. Huron, County of, Michigan
2718. Independence, Charter Township of, Michigan
2719. Ingham, County of, Michigan
2720. Inkster, City of, Michigan
2721. Ionia, City of, Michigan
2722. Ionia, County of, Michigan
2723. Iosco, County of, Michigan
2724. Iron, County of, Michigan
2725. Isabella, County of, Michigan
2726. Jackson, City of, Michigan
2727. Jackson, County of, Michigan
2728. Kalamazoo, Charter Township of, Michigan
2729. Kalamazoo, City of, Michigan
2730. Kalamazoo, County of, Michigan
2731. Kalkaska, County of, Michigan
2732. Kent, County of, Michigan
2733. Kentwood, City of, Michigan
2734. Lake, County of, Michigan
2735. Lansing, City of, Michigan
2736. Lapeer, County of, Michigan
2737. Leelanau, County of, Michigan
2738. Lenawee, County of, Michigan
2739. Lenox, Township of, Michigan
2740. Leoni, Township of, Michigan
2741. Lincoln, Charter Township of, Michigan
2742. Lincoln Park, City of, Michigan
2743. Livingston, County of, Michigan
2744. Livonia, City of, Michigan
2745. Lyon, Charter Township of, Michigan
2746. Mackinac, County of, Michigan
2747. Macomb, County of, Michigan
2748. Macomb, Township of, Michigan
2749. Madison Heights, City of, Michigan
2750. Manistee, County of, Michigan
2751. Marion, Township of, Michigan
2752. Marquette, City of, Michigan
2753. Marquette, County of, Michigan
2754. Mason, County of, Michigan
2755. Mecosta, County of, Michigan
2756. Melvindale, City of, Michigan
2757. Menominee, County of, Michigan
2758. Meridian, Charter Township of, Michigan
2759. Midland, City of, Michigan
2760. Midland, County of, Michigan
2761. Milford, Charter Township of, Michigan
2762. Missaukee, County of, Michigan
2763. Monitor, Charter Township of, Michigan
2764. Monroe, Charter Township of, Michigan
2765. Monroe, City of, Michigan
2766. Monroe, County of, Michigan
2767. Montcalm, County of, Michigan
2768. Mount Clemens, City of, Michigan
2769. Mount Morris, Township of, Michigan
2770. Mount Pleasant, City of, Michigan
2771. Mundy, Township of, Michigan
2772. Muskegon, Charter Township of, Michigan
2773. Muskegon, City of, Michigan
2774. Muskegon, County of, Michigan
2775. Muskegon Heights, City of, Michigan
2776. New Baltimore, City of, Michigan
2777. Newaygo, County of, Michigan
2778. Niles, City of, Michigan
2779. Niles, Township of, Michigan
2780. Northville, Township of, Michigan
2781. Norton Shores, City of, Michigan

2782. Novi, City of, Michigan
2783. Oak Park, City of, Michigan
2784. Oakland, Charter Township of, Michigan
2785. Oakland, County of, Michigan
2786. Oceana, County of, Michigan
2787. Oceola, Township of, Michigan
2788. Ogemaw, County of, Michigan
2789. Orion, Charter Township of, Michigan
2790. Osceola, County of, Michigan
2791. Oshtemo, Charter Township of, Michigan
2792. Otsego, County of, Michigan
2793. Ottawa, County of, Michigan
2794. Owosso, City of, Michigan
2795. Oxford, Charter Township of, Michigan
2796. Park, Township of, Michigan
2797. Pittsfield, Charter Township of, Michigan
2798. Plainfield, Charter Township of, Michigan
2799. Plymouth, Charter Township of, Michigan
2800. Pontiac, City of, Michigan
2801. Port Huron, Charter Township of, Michigan
2802. Port Huron, City of, Michigan
2803. Portage, City of, Michigan
2804. Presque Isle, County of, Michigan
2805. Redford, Charter Township of, Michigan
2806. Riverview, City of, Michigan
2807. Rochester, City of, Michigan
2808. Rochester Hills, City of, Michigan
2809. Romulus, City of, Michigan
2810. Roscommon, County of, Michigan
2811. Roseville, City of, Michigan
2812. Royal Oak, City of, Michigan
2813. Saginaw, Charter Township of, Michigan
2814. Saginaw, City of, Michigan
2815. Saginaw, County of, Michigan
2816. Sanilac, County of, Michigan
2817. Sault Ste. Marie, City of, Michigan
2818. Scio, Township of, Michigan
2819. Shelby, Charter Township of, Michigan
2820. Shiawassee, County of, Michigan
2821. South Lyon, City of, Michigan
2822. Southfield, City of, Michigan
2823. Southfield, Township of, Michigan
2824. Southgate, City of, Michigan
2825. Spring Lake, Township of, Michigan
2826. Springfield, Charter Township of, Michigan
2827. St. Clair, County of, Michigan
2828. St. Clair Shores, City of, Michigan
2829. St. Joseph, County of, Michigan
2830. Sterling Heights, City of, Michigan
2831. Sturgis, City of, Michigan
2832. Summit, Township of, Michigan
2833. Superior, Charter Township of, Michigan
2834. Taylor, City of, Michigan
2835. Texas, Charter Township of, Michigan
2836. Thomas, Township of, Michigan
2837. Traverse City, City of, Michigan
2838. Trenton, City of, Michigan
2839. Troy, City of, Michigan
2840. Tuscola, County of, Michigan
2841. Tyrone, Township of, Michigan
2842. Union, Charter Township of, Michigan
2843. Van Buren, Charter Township of, Michigan
2844. Van Buren, County of, Michigan
2845. Vienna, Charter Township of, Michigan
2846. Walker, City of, Michigan
2847. Warren, City of, Michigan
2848. Washington, Township of, Michigan
2849. Washtenaw, County of, Michigan
2850. Waterford, Charter Township of, Michigan
2851. Wayne, City of, Michigan
2852. Wayne, County of, Michigan
2853. West Bloomfield, Charter Township of, Michigan
2854. Westland, City of, Michigan

2855. Wexford, County of, Michigan
2856. White Lake, Charter Township of, Michigan
2857. Wixom, City of, Michigan
2858. Woodhaven, City of, Michigan
2859. Wyandotte, City of, Michigan
2860. Wyoming, City of, Michigan
2861. Ypsilanti, Charter Township of, Michigan
2862. Ypsilanti, City of, Michigan
2863. Zeeland, Charter Township of, Michigan
2864. Aitkin, County of, Minnesota
2865. Albert Lea, City of, Minnesota
2866. Alexandria, City of, Minnesota
2867. Andover, City of, Minnesota
2868. Anoka, City of, Minnesota
2869. Anoka, County of, Minnesota
2870. Apple Valley, City of, Minnesota
2871. Arden Hills, City of, Minnesota
2872. Austin, City of, Minnesota
2873. Becker, County of, Minnesota
2874. Beltrami, County of, Minnesota
2875. Bemidji, City of, Minnesota
2876. Benton, County of, Minnesota
2877. Big Lake, City of, Minnesota
2878. Blaine, City of, Minnesota
2879. Bloomington, City of, Minnesota
2880. Blue Earth, County of, Minnesota
2881. Brainerd, City of, Minnesota
2882. Brooklyn Center, City of, Minnesota
2883. Brooklyn Park, City of, Minnesota
2884. Brown, County of, Minnesota
2885. Buffalo, City of, Minnesota
2886. Burnsville, City of, Minnesota
2887. Carlton, County of, Minnesota
2888. Carver, County of, Minnesota
2889. Cass, County of, Minnesota
2890. Champlin, City of, Minnesota
2891. Chanhassen, City of, Minnesota
2892. Chaska, City of, Minnesota
2893. Chippewa, County of, Minnesota
2894. Chisago, County of, Minnesota
2895. Clay, County of, Minnesota
2896. Cloquet, City of, Minnesota
2897. Columbia Heights, City of, Minnesota
2898. Coon Rapids, City of, Minnesota
2899. Cottage Grove, City of, Minnesota
2900. Cottonwood, County of, Minnesota
2901. Crow Wing, County of, Minnesota
2902. Crystal, City of, Minnesota
2903. Dakota, County of, Minnesota
2904. Dodge, County of, Minnesota
2905. Douglas, County of, Minnesota
2906. Duluth, City of, Minnesota
2907. Eagan, City of, Minnesota
2908. East Bethel, City of, Minnesota
2909. Eden Prairie, City of, Minnesota
2910. Edina, City of, Minnesota
2911. Elk River, City of, Minnesota
2912. Fairmont, City of, Minnesota
2913. Faribault, City of, Minnesota
2914. Faribault, County of, Minnesota
2915. Farmington, City of, Minnesota
2916. Fergus Falls, City of, Minnesota
2917. Fillmore, County of, Minnesota
2918. Forest Lake, City of, Minnesota
2919. Freeborn, County of, Minnesota
2920. Fridley, City of, Minnesota
2921. Golden Valley, City of, Minnesota
2922. Goodhue, County of, Minnesota
2923. Grand Rapids, City of, Minnesota
2924. Ham Lake, City of, Minnesota
2925. Hastings, City of, Minnesota
2926. Hennepin, County of, Minnesota
2927. Hibbing, City of, Minnesota
2928. Hopkins, City of, Minnesota
2929. Houston, County of, Minnesota
2930. Hubbard, County of, Minnesota
2931. Hugo, City of, Minnesota
2932. Hutchinson, City of, Minnesota
2933. Inver Grove Heights, City of, Minnesota
2934. Isanti, County of, Minnesota
2935. Itasca, County of, Minnesota
2936. Kanabec, County of, Minnesota
2937. Kandiyohi, County of, Minnesota
2938. Koochiching, County of, Minnesota
2939. Lake, County of, Minnesota
2940. Lakeville, City of, Minnesota

2941. Le Sueur, County of, Minnesota
2942. Lino Lakes, City of, Minnesota
2943. Little Canada, City of, Minnesota
2944. Lyon, County of, Minnesota
2945. Mankato, City of, Minnesota
2946. Maple Grove, City of, Minnesota
2947. Maplewood, City of, Minnesota
2948. Marshall, City of, Minnesota
2949. Martin, County of, Minnesota
2950. McLeod, County of, Minnesota
2951. Meeker, County of, Minnesota
2952. Mendota Heights, City of, Minnesota
2953. Mille Lacs, County of, Minnesota
2954. Minneapolis, City of, Minnesota
2955. Minnetonka, City of, Minnesota
2956. Monticello, City of, Minnesota
2957. Moorhead, City of, Minnesota
2958. Morrison, County of, Minnesota
2959. Mounds View, City of, Minnesota
2960. Mower, County of, Minnesota
2961. New Brighton, City of, Minnesota
2962. New Hope, City of, Minnesota
2963. New Ulm, City of, Minnesota
2964. Nicollet, County of, Minnesota
2965. Nobles, County of, Minnesota
2966. North Branch, City of, Minnesota
2967. North Mankato, City of, Minnesota
2968. North St. Paul, City of, Minnesota
2969. Northfield, City of, Minnesota
2970. Oakdale, City of, Minnesota
2971. Olmsted, County of, Minnesota
2972. Otsego, City of, Minnesota
2973. Otter Tail, County of, Minnesota
2974. Owatonna, City of, Minnesota
2975. Pennington, County of, Minnesota
2976. Pine, County of, Minnesota
2977. Plymouth, City of, Minnesota
2978. Polk, County of, Minnesota
2979. Pope, County of, Minnesota
2980. Prior Lake, City of, Minnesota
2981. Ramsey, City of, Minnesota
2982. Ramsey, County of, Minnesota
2983. Red Wing, City of, Minnesota
2984. Redwood, County of, Minnesota
2985. Renville, County of, Minnesota
2986. Rice, County of, Minnesota
2987. Richfield, City of, Minnesota
2988. Robbinsdale, City of, Minnesota
2989. Rochester, City of, Minnesota
2990. Rogers, City of, Minnesota
2991. Roseau, County of, Minnesota
2992. Rosemount, City of, Minnesota
2993. Roseville, City of, Minnesota
2994. Sartell, City of, Minnesota
2995. Sauk Rapids, City of, Minnesota
2996. Savage, City of, Minnesota
2997. Scott, County of, Minnesota
2998. Shakopee, City of, Minnesota
2999. Sherburne, County of, Minnesota
3000. Shoreview, City of, Minnesota
3001. Sibley, County of, Minnesota
3002. South St. Paul, City of, Minnesota
3003. St. Cloud, City of, Minnesota
3004. St. Louis, County of, Minnesota
3005. St. Louis Park, City of, Minnesota
3006. St. Michael, City of, Minnesota
3007. St. Paul, City of, Minnesota
3008. St. Peter, City of, Minnesota
3009. Stearns, County of, Minnesota
3010. Steele, County of, Minnesota
3011. Stillwater, City of, Minnesota
3012. Todd, County of, Minnesota
3013. Vadnais Heights, City of, Minnesota
3014. Victoria, City of, Minnesota
3015. Wabasha, County of, Minnesota
3016. Waconia, City of, Minnesota
3017. Wadena, County of, Minnesota
3018. Waseca, County of, Minnesota
3019. Washington, County of, Minnesota
3020. Watonwan, County of, Minnesota
3021. West St. Paul, City of, Minnesota
3022. White Bear Lake, City of, Minnesota
3023. White Bear, Township of, Minnesota
3024. Willmar, City of, Minnesota
3025. Winona, City of, Minnesota
3026. Winona, County of, Minnesota
3027. Woodbury, City of, Minnesota
3028. Worthington, City of, Minnesota
3029. Wright, County of, Minnesota
3030. Adams, County of, Mississippi
3031. Alcorn, County of, Mississippi
3032. Amite, County of, Mississippi

3033. Attala, County of, Mississippi
3034. Bay St. Louis, City of, Mississippi
3035. Biloxi, City of, Mississippi
3036. Bolivar, County of, Mississippi
3037. Brandon, City of, Mississippi
3038. Brookhaven, City of, Mississippi
3039. Byram, City of, Mississippi
3040. Calhoun, County of, Mississippi
3041. Canton, City of, Mississippi
3042. Chickasaw, County of, Mississippi
3043. Clarke, County of, Mississippi
3044. Clarksdale, City of, Mississippi
3045. Clay, County of, Mississippi
3046. Cleveland, City of, Mississippi
3047. Clinton, City of, Mississippi
3048. Coahoma, County of, Mississippi
3049. Columbus, City of, Mississippi
3050. Copiah, County of, Mississippi
3051. Corinth, City of, Mississippi
3052. Covington, County of, Mississippi
3053. DeSoto, County of, Mississippi
3054. D'Iberville, City of, Mississippi
3055. Forrest, County of, Mississippi
3056. Gautier, City of, Mississippi
3057. George, County of, Mississippi
3058. Greene, County of, Mississippi
3059. Greenville, City of, Mississippi
3060. Greenwood, City of, Mississippi
3061. Grenada, City of, Mississippi
3062. Grenada, County of, Mississippi
3063. Gulfport, City of, Mississippi
3064. Hancock, County of, Mississippi
3065. Harrison, County of, Mississippi
3066. Hattiesburg, City of, Mississippi
3067. Hernando, City of, Mississippi
3068. Hinds, County of, Mississippi
3069. Holmes, County of, Mississippi
3070. Horn Lake, City of, Mississippi
3071. Itawamba, County of, Mississippi
3072. Jackson, City of, Mississippi
3073. Jackson, County of, Mississippi
3074. Jasper, County of, Mississippi
3075. Jefferson Davis, County of, Mississippi
3076. Jones, County of, Mississippi
3077. Lafayette, County of, Mississippi
3078. Lamar, County of, Mississippi
3079. Lauderdale, County of, Mississippi
3080. Laurel, City of, Mississippi
3081. Lawrence, County of, Mississippi
3082. Leake, County of, Mississippi
3083. Lee, County of, Mississippi
3084. Leflore, County of, Mississippi
3085. Lincoln, County of, Mississippi
3086. Long Beach, City of, Mississippi
3087. Lowndes, County of, Mississippi
3088. Madison, City of, Mississippi
3089. Madison, County of, Mississippi
3090. Marion, County of, Mississippi
3091. Marshall, County of, Mississippi
3092. McComb, City of, Mississippi
3093. Meridian, City of, Mississippi
3094. Monroe, County of, Mississippi
3095. Moss Point, City of, Mississippi
3096. Natchez, City of, Mississippi
3097. Neshoba, County of, Mississippi
3098. Newton, County of, Mississippi
3099. Noxubee, County of, Mississippi
3100. Ocean Springs, City of, Mississippi
3101. Oktibbeha, County of, Mississippi
3102. Olive Branch, City of, Mississippi
3103. Oxford, City of, Mississippi
3104. Panola, County of, Mississippi
3105. Pascagoula, City of, Mississippi
3106. Pearl, City of, Mississippi
3107. Pearl River, County of, Mississippi
3108. Perry, County of, Mississippi
3109. Petal, City of, Mississippi
3110. Picayune, City of, Mississippi
3111. Pike, County of, Mississippi
3112. Pontotoc, County of, Mississippi
3113. Prentiss, County of, Mississippi
3114. Rankin, County of, Mississippi
3115. Ridgeland, City of, Mississippi
3116. Scott, County of, Mississippi
3117. Simpson, County of, Mississippi
3118. Smith, County of, Mississippi
3119. Southaven, City of, Mississippi
3120. Starkville, City of, Mississippi
3121. Stone, County of, Mississippi
3122. Sunflower, County of, Mississippi
3123. Tallahatchie, County of, Mississippi

3124. Tate, County of, Mississippi
3125. Tippah, County of, Mississippi
3126. Tishomingo, County of, Mississippi
3127. Tupelo, City of, Mississippi
3128. Union, County of, Mississippi
3129. Vicksburg, City of, Mississippi
3130. Walthall, County of, Mississippi
3131. Warren, County of, Mississippi
3132. Washington, County of, Mississippi
3133. Wayne, County of, Mississippi
3134. West Point, City of, Mississippi
3135. Winston, County of, Mississippi
3136. Yalobusha, County of, Mississippi
3137. Yazoo City, City of, Mississippi
3138. Yazoo, County of, Mississippi
3139. Adair, County of, Missouri
3140. Andrew, County of, Missouri
3141. Arnold, City of, Missouri
3142. Audrain, County of, Missouri
3143. Ballwin, City of, Missouri
3144. Barry, County of, Missouri
3145. Barton, County of, Missouri
3146. Bates, County of, Missouri
3147. Bellefontaine Neighbors, City of, Missouri
3148. Belton, City of, Missouri
3149. Benton, County of, Missouri
3150. Blue Springs, City of, Missouri
3151. Bolivar, City of, Missouri
3152. Bollinger, County of, Missouri
3153. Boone, County of, Missouri
3154. Branson, City of, Missouri
3155. Bridgeton, City of, Missouri
3156. Buchanan, County of, Missouri
3157. Butler, County of, Missouri
3158. Callaway, County of, Missouri
3159. Camden, County of, Missouri
3160. Cape Girardeau, City of, Missouri
3161. Cape Girardeau, County of, Missouri
3162. Carthage, City of, Missouri
3163. Cass, County of, Missouri
3164. Cedar, County of, Missouri
3165. Chesterfield, City of, Missouri
3166. Christian, County of, Missouri
3167. Clay, County of, Missouri
3168. Clayton, City of, Missouri
3169. Clinton, County of, Missouri
3170. Cole, County of, Missouri
3171. Columbia, City of, Missouri
3172. Cooper, County of, Missouri
3173. Crawford, County of, Missouri
3174. Crestwood, City of, Missouri
3175. Creve Coeur, City of, Missouri
3176. Dallas, County of, Missouri
3177. Dardenne Prairie, City of, Missouri
3178. DeKalb, County of, Missouri
3179. Dent, County of, Missouri
3180. Douglas, County of, Missouri
3181. Dunklin, County of, Missouri
3182. Eureka, City of, Missouri
3183. Excelsior Springs, City of, Missouri
3184. Farmington, City of, Missouri
3185. Ferguson, City of, Missouri
3186. Festus, City of, Missouri
3187. Florissant, City of, Missouri
3188. Franklin, County of, Missouri
3189. Fulton, City of, Missouri
3190. Gasconade, County of, Missouri
3191. Gladstone, City of, Missouri
3192. Grain Valley, City of, Missouri
3193. Grandview, City of, Missouri
3194. Greene, County of, Missouri
3195. Hannibal, City of, Missouri
3196. Harrisonville, City of, Missouri
3197. Hazelwood, City of, Missouri
3198. Henry, County of, Missouri
3199. Howard, County of, Missouri
3200. Howell, County of, Missouri
3201. Independence, City of, Missouri
3202. Independence, Township of, Missouri
3203. Iron, County of, Missouri
3204. Jackson, City of, Missouri
3205. Jackson, County of, Missouri
3206. Jasper, County of, Missouri
3207. Jefferson City, City of, Missouri
3208. Jefferson, County of, Missouri
3209. Jennings, City of, Missouri
3210. Johnson, County of, Missouri
3211. Joplin, City of, Missouri
3212. Kansas City, City of, Missouri
3213. Kearney, City of, Missouri

3214. Kennett, City of, Missouri
3215. Kirksville, City of, Missouri
3216. Kirkwood, City of, Missouri
3217. Laclede, County of, Missouri
3218. Lafayette, County of, Missouri
3219. Lake St. Louis, City of, Missouri
3220. Lawrence, County of, Missouri
3221. Lebanon, City of, Missouri
3222. Lee's Summit, City of, Missouri
3223. Liberty, City of, Missouri
3224. Liberty, Township of, Missouri
3225. Lincoln, County of, Missouri
3226. Linn, County of, Missouri
3227. Livingston, County of, Missouri
3228. Macon, County of, Missouri
3229. Madison, County of, Missouri
3230. Manchester, City of, Missouri
3231. Marion, County of, Missouri
3232. Marshall, City of, Missouri
3233. Maryland Heights, City of, Missouri
3234. Maryville, City of, Missouri
3235. McDonald, County of, Missouri
3236. Mexico, City of, Missouri
3237. Miller, County of, Missouri
3238. Mississippi, County of, Missouri
3239. Moberly, City of, Missouri
3240. Moniteau, County of, Missouri
3241. Montgomery, County of, Missouri
3242. Morgan, County of, Missouri
3243. Neosho, City of, Missouri
3244. New Madrid, County of, Missouri
3245. Newton, County of, Missouri
3246. Nixa, City of, Missouri
3247. Nodaway, County of, Missouri
3248. O'Fallon, City of, Missouri
3249. Oregon, County of, Missouri
3250. Osage, County of, Missouri
3251. Overland, City of, Missouri
3252. Ozark, City of, Missouri
3253. Pemiscot, County of, Missouri
3254. Perry, County of, Missouri
3255. Pettis, County of, Missouri
3256. Phelps, County of, Missouri
3257. Pike, County of, Missouri
3258. Platte, County of, Missouri
3259. Polk, County of, Missouri
3260. Polk, Township of, Missouri
3261. Poplar Bluff, City of, Missouri
3262. Pulaski, County of, Missouri
3263. Ralls, County of, Missouri
3264. Randolph, County of, Missouri
3265. Ray, County of, Missouri
3266. Raymore, City of, Missouri
3267. Raytown, City of, Missouri
3268. Republic, City of, Missouri
3269. Ripley, County of, Missouri
3270. Rolla, City of, Missouri
3271. Saline, County of, Missouri
3272. Scott, County of, Missouri
3273. Sedalia, City of, Missouri
3274. Sikeston, City of, Missouri
3275. Smithville, City of, Missouri
3276. Springfield, City of, Missouri
3277. St. Ann, City of, Missouri
3278. St. Charles, City of, Missouri
3279. St. Charles, County of, Missouri
3280. St. Francois, County of, Missouri
3281. St. Joseph, City of, Missouri
3282. St. Louis, City of, Missouri
3283. St. Louis, County of, Missouri
3284. St. Peters, City of, Missouri
3285. Ste. Genevieve, County of, Missouri
3286. Stoddard, County of, Missouri
3287. Stone, County of, Missouri
3288. Taney, County of, Missouri
3289. Texas, County of, Missouri
3290. Town and Country, City of, Missouri
3291. Troy, City of, Missouri
3292. Union, City of, Missouri
3293. University City, City of, Missouri
3294. Vernon, County of, Missouri
3295. Warren, County of, Missouri
3296. Warrensburg, City of, Missouri
3297. Washington, City of, Missouri
3298. Washington, County of, Missouri
3299. Wayne, County of, Missouri
3300. Webb City, City of, Missouri
3301. Webster, County of, Missouri
3302. Webster Groves, City of, Missouri
3303. Wentzville, City of, Missouri
3304. West Plains, City of, Missouri
3305. Wildwood, City of, Missouri

3306. Wright, County of, Missouri
3307. Big Horn, County of, Montana
3308. Billings, City of, Montana
3309. Bozeman, City of, Montana
3310. Butte-Silver Bow, Montana
3311. Carbon, County of, Montana
3312. Cascade, County of, Montana
3313. Custer, County of, Montana
3314. Fergus, County of, Montana
3315. Flathead, County of, Montana
3316. Gallatin, County of, Montana
3317. Glacier, County of, Montana
3318. Great Falls, City of, Montana
3319. Helena, City of, Montana
3320. Hill, County of, Montana
3321. Jefferson, County of, Montana
3322. Kalispell, City of, Montana
3323. Lake, County of, Montana
3324. Lewis and Clark, County of, Montana
3325. Lincoln, County of, Montana
3326. Missoula, City of, Montana
3327. Missoula, County of, Montana
3328. Park, County of, Montana
3329. Ravalli, County of, Montana
3330. Richland, County of, Montana
3331. Roosevelt, County of, Montana
3332. Sanders, County of, Montana
3333. Yellowstone, County of, Montana
3334. Adams, County of, Nebraska
3335. Beatrice, City of, Nebraska
3336. Bellevue, City of, Nebraska
3337. Box Butte, County of, Nebraska
3338. Buffalo, County of, Nebraska
3339. Cass, County of, Nebraska
3340. Colfax, County of, Nebraska
3341. Columbus, City of, Nebraska
3342. Custer, County of, Nebraska
3343. Dakota, County of, Nebraska
3344. Dawson, County of, Nebraska
3345. Dodge, County of, Nebraska
3346. Douglas, County of, Nebraska
3347. Fremont, City of, Nebraska
3348. Gage, County of, Nebraska
3349. Grand Island, City of, Nebraska
3350. Hall, County of, Nebraska
3351. Hastings, City of, Nebraska
3352. Holt, County of, Nebraska
3353. Kearney, City of, Nebraska
3354. La Vista, City of, Nebraska
3355. Lancaster, County of, Nebraska
3356. Lexington, City of, Nebraska
3357. Lincoln, City of, Nebraska
3358. Lincoln, County of, Nebraska
3359. Madison, County of, Nebraska
3360. Norfolk, City of, Nebraska
3361. North Platte, City of, Nebraska
3362. Omaha, City of, Nebraska
3363. Otoe, County of, Nebraska
3364. Papillion, City of, Nebraska
3365. Platte, County of, Nebraska
3366. Red Willow, County of, Nebraska
3367. Saline, County of, Nebraska
3368. Sarpy, County of, Nebraska
3369. Saunders, County of, Nebraska
3370. Scotts Bluff, County of, Nebraska
3371. Scottsbluff, City of, Nebraska
3372. Seward, County of, Nebraska
3373. South Sioux City, City of, Nebraska
3374. Washington, County of, Nebraska
3375. York, County of, Nebraska
3376. Boulder City, City of, Nevada
3377. Carson, City of, Nevada
3378. Churchill, County of, Nevada
3379. Clark, County of, Nevada
3380. Douglas, County of, Nevada
3381. Elko, City of, Nevada
3382. Elko, County of, Nevada
3383. Fernley, City of, Nevada
3384. Henderson, City of, Nevada
3385. Humboldt, County of, Nevada
3386. Las Vegas, City of, Nevada
3387. Lyon, County of, Nevada
3388. Mesquite, City of, Nevada
3389. North Las Vegas, City of, Nevada
3390. Nye, County of, Nevada
3391. Reno, City of, Nevada
3392. Sparks, City of, Nevada
3393. Washoe, County of, Nevada
3394. Amherst, Town of, New Hampshire
3395. Bedford, Town of, New Hampshire
3396. Belknap, County of, New Hampshire

3397. Berlin, City of, New Hampshire
3398. Carroll, County of, New Hampshire
3399. Cheshire, County of, New Hampshire
3400. Claremont, City of, New Hampshire
3401. Concord, City of, New Hampshire
3402. Conway, Town of, New Hampshire
3403. Coos, County of, New Hampshire
3404. Derry, Town of, New Hampshire
3405. Dover, City of, New Hampshire
3406. Durham, Town of, New Hampshire
3407. Exeter, Town of, New Hampshire
3408. Goffstown, Town of, New Hampshire
3409. Grafton, County of, New Hampshire
3410. Hampton, Town of, New Hampshire
3411. Hanover, Town of, New Hampshire
3412. Hillsborough, County of, New Hampshire
3413. Hooksett, Town of, New Hampshire
3414. Hudson, Town of, New Hampshire
3415. Keene, City of, New Hampshire
3416. Laconia, City of, New Hampshire
3417. Lebanon, City of, New Hampshire
3418. Londonderry, Town of, New Hampshire
3419. Manchester, City of, New Hampshire
3420. Merrimack, County of, New Hampshire
3421. Merrimack, Town of, New Hampshire
3422. Milford, Town of, New Hampshire
3423. Nashua, City of, New Hampshire
3424. Pelham, Town of, New Hampshire
3425. Portsmouth, City of, New Hampshire
3426. Raymond, Town of, New Hampshire
3427. Rochester, City of, New Hampshire
3428. Rockingham, County of, New Hampshire
3429. Salem, Town of, New Hampshire
3430. Somersworth, City of, New Hampshire
3431. Strafford, County of, New Hampshire
3432. Sullivan, County of, New Hampshire
3433. Windham, Town of, New Hampshire
3434. Aberdeen, Township of, New Jersey
3435. Asbury Park, City of, New Jersey
3436. Atlantic City, City of, New Jersey
3437. Atlantic, County of, New Jersey
3438. Barnegat, Township of, New Jersey
3439. Bayonne, City of, New Jersey
3440. Beachwood, Borough of, New Jersey
3441. Belleville, Township of, New Jersey
3442. Bellmawr, Borough of, New Jersey
3443. Bergen, County of, New Jersey
3444. Bergenfield, Borough of, New Jersey
3445. Berkeley Heights, Township of, New Jersey
3446. Berkeley, Township of, New Jersey
3447. Bernards, Township of, New Jersey
3448. Bloomfield, Township of, New Jersey
3449. Bordentown, Township of, New Jersey
3450. Bound Brook, Borough of, New Jersey
3451. Branchburg, Township of, New Jersey
3452. Brick, Township of, New Jersey
3453. Bridgeton, City of, New Jersey
3454. Bridgewater, Township of, New Jersey
3455. Burlington, County of, New Jersey
3456. Burlington, Township of, New Jersey
3457. Camden, City of, New Jersey
3458. Camden, County of, New Jersey
3459. Cape May, County of, New Jersey
3460. Carteret, Borough of, New Jersey
3461. Cedar Grove, Township of, New Jersey
3462. Chatham, Township of, New Jersey
3463. Cherry Hill, Township of, New Jersey
3464. Cinnaminson, Township of, New Jersey
3465. City of Orange, Township of, New Jersey
3466. Clark, Township of, New Jersey
3467. Cliffside Park, Borough of, New Jersey

3468. Clifton, City of, New Jersey
3469. Clinton, Township of, New Jersey
3470. Collingswood, Borough of, New Jersey
3471. Cranford, Township of, New Jersey
3472. Cumberland, County of, New Jersey
3473. Delran, Township of, New Jersey
3474. Denville, Township of, New Jersey
3475. Deptford, Township of, New Jersey
3476. Dover, Town of, New Jersey
3477. Dumont, Borough of, New Jersey
3478. East Brunswick, Township of, New Jersey
3479. East Greenwich, Township of, New Jersey
3480. East Hanover, Township of, New Jersey
3481. East Orange, City of, New Jersey
3482. East Windsor, Township of, New Jersey
3483. Eatontown, Borough of, New Jersey
3484. Edgewater, Borough of, New Jersey
3485. Edison, Township of, New Jersey
3486. Egg Harbor, Township of, New Jersey
3487. Elizabeth, City of, New Jersey
3488. Elmwood Park, Borough of, New Jersey
3489. Englewood, City of, New Jersey
3490. Essex, County of, New Jersey
3491. Evesham, Township of, New Jersey
3492. Ewing, Township of, New Jersey
3493. Fair Lawn, Borough of, New Jersey
3494. Fairview, Borough of, New Jersey
3495. Florence, Township of, New Jersey
3496. Florham Park, Borough of, New Jersey
3497. Fort Lee, Borough of, New Jersey
3498. Franklin Lakes, Borough of, New Jersey
3499. Franklin, Township of, New Jersey
3500. Freehold, Borough of, New Jersey
3501. Freehold, Township of, New Jersey
3502. Galloway, Township of, New Jersey
3503. Garfield, City of, New Jersey
3504. Glassboro, Borough of, New Jersey
3505. Glen Rock, Borough of, New Jersey
3506. Gloucester City, City of, New Jersey
3507. Gloucester, County of, New Jersey
3508. Gloucester, Township of, New Jersey
3509. Guttenberg, Town of, New Jersey
3510. Hackensack, City of, New Jersey
3511. Haddon, Township of, New Jersey
3512. Haddonfield, Borough of, New Jersey
3513. Hamilton, Township of, New Jersey
3514. Hammonton, Town of, New Jersey
3515. Hanover, Township of, New Jersey
3516. Harrison, Town of, New Jersey
3517. Harrison, Township of, New Jersey
3518. Hasbrouck Heights, Borough of, New Jersey
3519. Hawthorne, Borough of, New Jersey
3520. Hazlet, Township of, New Jersey
3521. Highland Park, Borough of, New Jersey
3522. Hillsborough, Township of, New Jersey
3523. Hillsdale, Borough of, New Jersey
3524. Hillside, Township of, New Jersey
3525. Hoboken, City of, New Jersey
3526. Holmdel, Township of, New Jersey
3527. Hopatcong, Borough of, New Jersey
3528. Hopewell, Township of, New Jersey
3529. Howell, Township of, New Jersey
3530. Hudson, County of, New Jersey
3531. Hunterdon, County of, New Jersey
3532. Irvington, Township of, New Jersey
3533. Jackson, Township of, New Jersey
3534. Jefferson, Township of, New Jersey
3535. Jersey City, City of, New Jersey
3536. Kearny, Town of, New Jersey
3537. Lacey, Township of, New Jersey
3538. Lakewood, Township of, New Jersey
3539. Lawrence, Township of, New Jersey
3540. Lincoln Park, Borough of, New Jersey
3541. Linden, City of, New Jersey
3542. Lindenwold, Borough of, New Jersey

3543. Little Egg Harbor, Township of, New Jersey
3544. Little Falls, Township of, New Jersey
3545. Little Ferry, Borough of, New Jersey
3546. Livingston, Township of, New Jersey
3547. Lodi, Borough of, New Jersey
3548. Long Branch, City of, New Jersey
3549. Lower, Township of, New Jersey
3550. Lumberton, Township of, New Jersey
3551. Lyndhurst, Township of, New Jersey
3552. Madison, Borough of, New Jersey
3553. Mahwah, Township of, New Jersey
3554. Manalapan, Township of, New Jersey
3555. Manchester, Township of, New Jersey
3556. Mantua, Township of, New Jersey
3557. Manville, Borough of, New Jersey
3558. Maple Shade, Township of, New Jersey
3559. Maplewood, Township of, New Jersey
3560. Marlboro, Township of, New Jersey
3561. Medford, Township of, New Jersey
3562. Mercer, County of, New Jersey
3563. Metuchen, Borough of, New Jersey
3564. Middle, Township of, New Jersey
3565. Middlesex, Borough of, New Jersey
3566. Middlesex, County of, New Jersey
3567. Middletown, Township of, New Jersey
3568. Millburn, Township of, New Jersey
3569. Millstone, Township of, New Jersey
3570. Millville, City of, New Jersey
3571. Monmouth, County of, New Jersey
3572. Monroe, Township of, New Jersey
3573. Montclair, Township of, New Jersey
3574. Montgomery, Township of, New Jersey
3575. Montville, Township of, New Jersey
3576. Moorestown, Township of, New Jersey
3577. Morris, County of, New Jersey
3578. Morris, Township of, New Jersey
3579. Morristown, Town of, New Jersey
3580. Mount Laurel, Township of, New Jersey
3581. Mount Olive, Township of, New Jersey
3582. Neptune, Township of, New Jersey
3583. New Brunswick, City of, New Jersey
3584. New Milford, Borough of, New Jersey
3585. New Providence, Borough of, New Jersey
3586. Newark, City of, New Jersey
3587. North Arlington, Borough of, New Jersey
3588. North Bergen, Township of, New Jersey
3589. North Brunswick, Township of, New Jersey
3590. North Plainfield, Borough of, New Jersey
3591. Nutley, Township of, New Jersey
3592. Oakland, Borough of, New Jersey
3593. Ocean City, City of, New Jersey
3594. Ocean, County of, New Jersey
3595. Ocean, Township of, New Jersey
3596. Old Bridge, Township of, New Jersey
3597. Palisades Park, Borough of, New Jersey
3598. Paramus, Borough of, New Jersey
3599. Parsippany-Troy Hills, Township of, New Jersey
3600. Passaic, City of, New Jersey
3601. Passaic, County of, New Jersey
3602. Paterson, City of, New Jersey
3603. Pemberton, Township of, New Jersey
3604. Pennsauken, Township of, New Jersey
3605. Pennsville, Township of, New Jersey
3606. Pequannock, Township of, New Jersey
3607. Perth Amboy, City of, New Jersey
3608. Phillipsburg, Town of, New Jersey
3609. Pine Hill, Borough of, New Jersey

3610. Piscataway, Township of, New Jersey
3611. Plainfield, City of, New Jersey
3612. Plainsboro, Township of, New Jersey
3613. Pleasantville, City of, New Jersey
3614. Point Pleasant, Borough of, New Jersey
3615. Pompton Lakes, Borough of, New Jersey
3616. Princeton, New Jersey
3617. Rahway, City of, New Jersey
3618. Ramsey, Borough of, New Jersey
3619. Randolph, Township of, New Jersey
3620. Raritan, Township of, New Jersey
3621. Readington, Township of, New Jersey
3622. Red Bank, Borough of, New Jersey
3623. Ridgefield, Borough of, New Jersey
3624. Ridgefield Park, Village of, New Jersey
3625. Ridgewood, Village of, New Jersey
3626. Ringwood, Borough of, New Jersey
3627. River Edge, Borough of, New Jersey
3628. Robbinsville, Township of, New Jersey
3629. Rockaway, Township of, New Jersey
3630. Roselle, Borough of, New Jersey
3631. Roselle Park, Borough of, New Jersey
3632. Roxbury, Township of, New Jersey
3633. Rutherford, Borough of, New Jersey
3634. Saddle Brook, Township of, New Jersey
3635. Salem, County of, New Jersey
3636. Sayreville, Borough of, New Jersey
3637. Scotch Plains, Township of, New Jersey
3638. Secaucus, Town of, New Jersey
3639. Somers Point, City of, New Jersey
3640. Somerset, County of, New Jersey
3641. Somerville, Borough of, New Jersey
3642. South Brunswick, Township of, New Jersey
3643. South Orange Village, Township of, New Jersey
3644. South Plainfield, Borough of, New Jersey
3645. South River, Borough of, New Jersey
3646. Southampton, Township of, New Jersey
3647. Sparta, Township of, New Jersey
3648. Springfield, Township of, New Jersey
3649. Stafford, Township of, New Jersey
3650. Summit, City of, New Jersey
3651. Sussex, County of, New Jersey
3652. Teaneck, Township of, New Jersey
3653. Tenafly, Borough of, New Jersey
3654. Tinton Falls, Borough of, New Jersey
3655. Toms River, Township of, New Jersey
3656. Totowa, Borough of, New Jersey
3657. Trenton, City of, New Jersey
3658. Union City, City of, New Jersey
3659. Union, County of, New Jersey
3660. Union, Township of, New Jersey
3661. Upper, Township of, New Jersey
3662. Vernon, Township of, New Jersey
3663. Verona, Township of, New Jersey
3664. Vineland, City of, New Jersey
3665. Voorhees, Township of, New Jersey
3666. Waldwick, Borough of, New Jersey
3667. Wall, Township of, New Jersey
3668. Wallington, Borough of, New Jersey
3669. Wanaque, Borough of, New Jersey
3670. Wantage, Township of, New Jersey
3671. Warren, County of, New Jersey
3672. Warren, Township of, New Jersey
3673. Washington, Township of, New Jersey
3674. Waterford, Township of, New Jersey
3675. Wayne, Township of, New Jersey
3676. Weehawken, Township of, New Jersey
3677. West Caldwell, Township of, New Jersey
3678. West Deptford, Township of, New Jersey

3679. West Milford, Township of, New Jersey
3680. West New York, Town of, New Jersey
3681. West Orange, Township of, New Jersey
3682. West Windsor, Township of, New Jersey
3683. Westfield, Town of, New Jersey
3684. Westwood, Borough of, New Jersey
3685. Willingboro, Township of, New Jersey
3686. Winslow, Township of, New Jersey
3687. Woodbridge, Township of, New Jersey
3688. Woodland Park, Borough of, New Jersey
3689. Woolwich, Township of, New Jersey
3690. Wyckoff, Township of, New Jersey
3691. Albany, City of, New York
3692. Albany, County of, New York
3693. Allegany, County of, New York
3694. Amherst, Town of, New York
3695. Amsterdam, City of, New York
3696. Arcadia, Town of, New York
3697. Auburn, City of, New York
3698. Aurora, Town of, New York
3699. Babylon, Town of, New York
3700. Babylon, Village of, New York
3701. Ballston, Town of, New York
3702. Batavia, City of, New York
3703. Bath, Town of, New York
3704. Beacon, City of, New York
3705. Bedford, Town of, New York
3706. Beekman, Town of, New York
3707. Bethlehem, Town of, New York
3708. Binghamton, City of, New York
3709. Blooming Grove, Town of, New York
3710. Brighton, Town of, New York
3711. Bronx, County of, New York
3712. Brookhaven, Town of, New York
3713. Broome, County of, New York
3714. Brunswick, Town of, New York
3715. Buffalo, City of, New York
3716. Camillus, Town of, New York
3717. Canandaigua, City of, New York
3718. Canandaigua, Town of, New York
3719. Canton, Town of, New York
3720. Carmel, Town of, New York
3721. Catskill, Town of, New York
3722. Cattaraugus, County of, New York
3723. Cayuga, County of, New York
3724. Chautauqua, County of, New York
3725. Cheektowaga, Town of, New York
3726. Chemung, County of, New York
3727. Chenango, County of, New York
3728. Chenango, Town of, New York
3729. Chester, Town of, New York
3730. Chili, Town of, New York
3731. Cicero, Town of, New York
3732. Clarence, Town of, New York
3733. Clarkstown, Town of, New York
3734. Clay, Town of, New York
3735. Clifton Park, Town of, New York
3736. Clinton, County of, New York
3737. Cohoes, City of, New York
3738. Colonie, Town of, New York
3739. Columbia, County of, New York
3740. Corning, City of, New York
3741. Cornwall, Town of, New York
3742. Cortland, City of, New York
3743. Cortland, County of, New York
3744. Cortlandt, Town of, New York
3745. De Witt, Town of, New York
3746. Delaware, County of, New York
3747. Depew, Village of, New York
3748. Dobbs Ferry, Village of, New York
3749. Dryden, Town of, New York
3750. Dunkirk, City of, New York
3751. Dutchess, County of, New York
3752. East Fishkill, Town of, New York
3753. East Greenbush, Town of, New York
3754. East Hampton, Town of, New York
3755. Eastchester, Town of, New York
3756. Elma, Town of, New York
3757. Elmira, City of, New York
3758. Endicott, Village of, New York
3759. Erie, County of, New York
3760. Essex, County of, New York
3761. Evans, Town of, New York
3762. Fallsburg, Town of, New York

3763. Farmington, Town of, New York
3764. Fishkill, Town of, New York
3765. Floral Park, Village of, New York
3766. Franklin, County of, New York
3767. Fredonia, Village of, New York
3768. Freeport, Village of, New York
3769. Fulton, City of, New York
3770. Fulton, County of, New York
3771. Garden City, Village of, New York
3772. Gates, Town of, New York
3773. Geddes, Town of, New York
3774. Genesee, County of, New York
3775. Geneseo, Town of, New York
3776. Geneva, City of, New York
3777. German Flatts, Town of, New York
3778. Glen Cove, City of, New York
3779. Glens Falls, City of, New York
3780. Glenville, Town of, New York
3781. Gloversville, City of, New York
3782. Goshen, Town of, New York
3783. Grand Island, Town of, New York
3784. Great Neck, Village of, New York
3785. Greece, Town of, New York
3786. Greenburgh, Town of, New York
3787. Greene, County of, New York
3788. Guilderland, Town of, New York
3789. Halfmoon, Town of, New York
3790. Hamburg, Town of, New York
3791. Harrison, Town of, New York
3792. Harrison, Village of, New York
3793. Haverstraw, Town of, New York
3794. Haverstraw, Village of, New York
3795. Hempstead, Town of, New York
3796. Hempstead, Village of, New York
3797. Henrietta, Town of, New York
3798. Herkimer, County of, New York
3799. Highlands, Town of, New York
3800. Horseheads, Town of, New York
3801. Huntington, Town of, New York
3802. Hyde Park, Town of, New York
3803. Irondequoit, Town of, New York
3804. Islip, Town of, New York
3805. Ithaca, City of, New York
3806. Ithaca, Town of, New York
3807. Jamestown, City of, New York
3808. Jefferson, County of, New York
3809. Johnson City, Village of, New York
3810. Kenmore, Village of, New York
3811. Kent, Town of, New York
3812. Kings, County of, New York
3813. Kingsbury, Town of, New York
3814. Kingston, City of, New York
3815. Kirkland, Town of, New York
3816. Kiryas Joel, Village of, New York
3817. La Grange, Town of, New York
3818. Lackawanna, City of, New York
3819. Lake Grove, Village of, New York
3820. Lancaster, Town of, New York
3821. Lancaster, Village of, New York
3822. Lansing, Town of, New York
3823. Le Ray, Town of, New York
3824. Lewis, County of, New York
3825. Lewisboro, Town of, New York
3826. Lewiston, Town of, New York
3827. Lindenhurst, Village of, New York
3828. Livingston, County of, New York
3829. Lloyd, Town of, New York
3830. Lockport, City of, New York
3831. Lockport, Town of, New York
3832. Long Beach, City of, New York
3833. Lynbrook, Village of, New York
3834. Lysander, Town of, New York
3835. Madison, County of, New York
3836. Malone, Town of, New York
3837. Malta, Town of, New York
3838. Mamakating, Town of, New York
3839. Mamaroneck, Town of, New York
3840. Mamaroneck, Village of, New York
3841. Manlius, Town of, New York
3842. Massapequa Park, Village of, New York
3843. Massena, Town of, New York
3844. Massena, Village of, New York
3845. Middletown, City of, New York
3846. Milton, Town of, New York
3847. Mineola, Village of, New York
3848. Monroe, County of, New York
3849. Monroe, Town of, New York
3850. Montgomery, County of, New York
3851. Montgomery, Town of, New York
3852. Moreau, Town of, New York

3853. Mount Kisco, Village of/ Town of, New York
3854. Mount Pleasant, Town of, New York
3855. Mount Vernon, City of, New York
3856. Nassau, County of, New York
3857. New Castle, Town of, New York
3858. New Hartford, Town of, New York
3859. New Paltz, Town of, New York
3860. New Rochelle, City of, New York
3861. New Windsor, Town of, New York
3862. New York, City of, New York
3863. New York, County of, New York
3864. Newburgh, City of, New York
3865. Newburgh, Town of, New York
3866. Niagara, County of, New York
3867. Niagara Falls, City of, New York
3868. Niskayuna, Town of, New York
3869. North Castle, Town of, New York
3870. North Greenbush, Town of, New York
3871. North Hempstead, Town of, New York
3872. North Tonawanda, City of, New York
3873. Ogden, Town of, New York
3874. Ogdensburg, City of, New York
3875. Olean, City of, New York
3876. Oneida, City of, New York
3877. Oneida, County of, New York
3878. Oneonta, City of, New York
3879. Onondaga, County of, New York
3880. Onondaga, Town of, New York
3881. Ontario, County of, New York
3882. Ontario, Town of, New York
3883. Orange, County of, New York
3884. Orangetown, Town of, New York
3885. Orchard Park, Town of, New York
3886. Orleans, County of, New York
3887. Ossining, Town of, New York
3888. Ossining, Village of, New York
3889. Oswego, City of, New York
3890. Oswego, County of, New York
3891. Otsego, County of, New York
3892. Owego, Town of, New York
3893. Oyster Bay, Town of, New York
3894. Palm Tree, Town of, New York
3895. Parma, Town of, New York
3896. Patchogue, Village of, New York
3897. Patterson, Town of, New York
3898. Peekskill, City of, New York
3899. Pelham, Town of, New York
3900. Penfield, Town of, New York
3901. Perinton, Town of, New York
3902. Pittsford, Town of, New York
3903. Plattekill, Town of, New York
3904. Plattsburgh, City of, New York
3905. Plattsburgh, Town of, New York
3906. Pomfret, Town of, New York
3907. Port Chester, Village of, New York
3908. Potsdam, Town of, New York
3909. Poughkeepsie, City of, New York
3910. Poughkeepsie, Town of, New York
3911. Putnam, County of, New York
3912. Putnam Valley, Town of, New York
3913. Queens, County of, New York
3914. Queensbury, Town of, New York
3915. Ramapo, Town of, New York
3916. Red Hook, Town of, New York
3917. Rensselaer, County of, New York
3918. Richmond, County of, New York
3919. Riverhead, Town of, New York
3920. Rochester, City of, New York
3921. Rockland, County of, New York
3922. Rockville Centre, Village of, New York
3923. Rome, City of, New York
3924. Rotterdam, Town of, New York
3925. Rye, City of, New York
3926. Rye, Town of, New York
3927. Salina, Town of, New York
3928. Saratoga, County of, New York
3929. Saratoga Springs, City of, New York
3930. Saugerties, Town of, New York
3931. Scarsdale, Village of/ Scarsdale, Town of, New York
3932. Schenectady, City of, New York
3933. Schenectady, County of, New York
3934. Schodack, Town of, New York
3935. Schoharie, County of, New York
3936. Schuyler, County of, New York
3937. Seneca, County of, New York
3938. Shawangunk, Town of, New York

3939. Sleepy Hollow, Village of, New York
3940. Smithtown, Town of, New York
3941. Somers, Town of, New York
3942. Southampton, Town of, New York
3943. Southeast, Town of, New York
3944. Southold, Town of, New York
3945. Spring Valley, Village of, New York
3946. St. Lawrence, County of, New York
3947. Steuben, County of, New York
3948. Stony Point, Town of, New York
3949. Suffern, Village of, New York
3950. Suffolk, County of, New York
3951. Sullivan, County of, New York
3952. Sullivan, Town of, New York
3953. Sweden, Town of, New York
3954. Syracuse, City of, New York
3955. Tarrytown, Village of, New York
3956. Thompson, Town of, New York
3957. Tioga, County of, New York
3958. Tompkins, County of, New York
3959. Tonawanda, City of, New York
3960. Tonawanda, Town of, New York
3961. Troy, City of, New York
3962. Ulster, County of, New York
3963. Ulster, Town of, New York
3964. Union, Town of, New York
3965. Utica, City of, New York
3966. Valley Stream, Village of, New York
3967. Van Buren, Town of, New York
3968. Vestal, Town of, New York
3969. Victor, Town of, New York
3970. Wallkill, Town of, New York
3971. Wappinger, Town of, New York
3972. Warren, County of, New York
3973. Warwick, Town of, New York
3974. Washington, County of, New York
3975. Watertown, City of, New York
3976. Wawarsing, Town of, New York
3977. Wayne, County of, New York
3978. Webster, Town of, New York
3979. West Haverstraw, Village of, New York
3980. West Seneca, Town of, New York
3981. Westbury, Village of, New York
3982. Westchester, County of, New York
3983. Wheatfield, Town of, New York
3984. White Plains, City of, New York
3985. Whitestown, Town of, New York
3986. Wilton, Town of, New York
3987. Woodbury, Town of, New York
3988. Woodbury, Village of, New York
3989. Wyoming, County of, New York
3990. Yates, County of, New York
3991. Yonkers, City of, New York
3992. Yorktown, Town of, New York
3993. Alamance, County of, North Carolina
3994. Albemarle, City of, North Carolina
3995. Alexander, County of, North Carolina
3996. Alleghany, County of, North Carolina
3997. Anson, County of, North Carolina
3998. Apex, Town of, North Carolina
3999. Archdale, City of, North Carolina
4000. Ashe, County of, North Carolina
4001. Asheboro, City of, North Carolina
4002. Asheville, City of, North Carolina
4003. Avery, County of, North Carolina
4004. Beaufort, County of, North Carolina
4005. Belmont, City of, North Carolina
4006. Bertie, County of, North Carolina
4007. Bladen, County of, North Carolina
4008. Boone, Town of, North Carolina
4009. Brunswick, County of, North Carolina
4010. Buncombe, County of, North Carolina
4011. Burke, County of, North Carolina
4012. Burlington, City of, North Carolina
4013. Cabarrus, County of, North Carolina
4014. Caldwell, County of, North Carolina
4015. Camden, County of, North Carolina
4016. Carrboro, Town of, North Carolina
4017. Carteret, County of, North Carolina
4018. Cary, Town of, North Carolina
4019. Caswell, County of, North Carolina
4020. Catawba, County of, North Carolina
4021. Chapel Hill, Town of, North Carolina
4022. Charlotte, City of, North Carolina

4023. Chatham, County of, North Carolina
4024. Cherokee, County of, North Carolina
4025. Chowan, County of, North Carolina
4026. Clay, County of, North Carolina
4027. Clayton, Town of, North Carolina
4028. Clemmons, Village of, North Carolina
4029. Cleveland, County of, North Carolina
4030. Columbus, County of, North Carolina
4031. Concord, City of, North Carolina
4032. Cornelius, Town of, North Carolina
4033. Craven, County of, North Carolina
4034. Cumberland, County of, North Carolina
4035. Currituck, County of, North Carolina
4036. Dare, County of, North Carolina
4037. Davidson, County of, North Carolina
4038. Davidson, Town of, North Carolina
4039. Davie, County of, North Carolina
4040. Duplin, County of, North Carolina
4041. Durham, City of, North Carolina
4042. Durham, County of, North Carolina
4043. Eden, City of, North Carolina
4044. Edgecombe, County of, North Carolina
4045. Elizabeth City, City of, North Carolina
4046. Elon, Town of, North Carolina
4047. Fayetteville, City of, North Carolina
4048. Forsyth, County of, North Carolina
4049. Franklin, County of, North Carolina
4050. Fuquay-Varina, Town of, North Carolina
4051. Garner, Town of, North Carolina
4052. Gaston, County of, North Carolina
4053. Gastonia, City of, North Carolina
4054. Gates, County of, North Carolina
4055. Goldsboro, City of, North Carolina
4056. Graham, City of, North Carolina
4057. Granville, County of, North Carolina
4058. Greene, County of, North Carolina
4059. Greensboro, City of, North Carolina
4060. Greenville, City of, North Carolina
4061. Guilford, County of, North Carolina
4062. Halifax, County of, North Carolina
4063. Harnett, County of, North Carolina
4064. Harrisburg, Town of, North Carolina
4065. Havelock, City of, North Carolina
4066. Haywood, County of, North Carolina
4067. Henderson, City of, North Carolina
4068. Henderson, County of, North Carolina
4069. Hendersonville, City of, North Carolina
4070. Hertford, County of, North Carolina
4071. Hickory, City of, North Carolina
4072. High Point, City of, North Carolina
4073. Hoke, County of, North Carolina
4074. Holly Springs, Town of, North Carolina
4075. Hope Mills, Town of, North Carolina
4076. Huntersville, Town of, North Carolina
4077. Indian Trail, Town of, North Carolina
4078. Iredell, County of, North Carolina
4079. Jackson, County of, North Carolina
4080. Jacksonville, City of, North Carolina
4081. Johnston, County of, North Carolina
4082. Kannapolis, City of, North Carolina
4083. Kernersville, Town of, North Carolina
4084. Kings Mountain, City of, North Carolina
4085. Kinston, City of, North Carolina
4086. Knightdale, Town of, North Carolina
4087. Laurinburg, City of, North Carolina
4088. Lee, County of, North Carolina
4089. Leland, Town of, North Carolina
4090. Lenoir, City of, North Carolina
4091. Lenoir, County of, North Carolina
4092. Lewisville, Town of, North Carolina
4093. Lexington, City of, North Carolina
4094. Lincoln, County of, North Carolina
4095. Lincolnton, City of, North Carolina
4096. Lumberton, City of, North Carolina
4097. Macon, County of, North Carolina
4098. Madison, County of, North Carolina
4099. Martin, County of, North Carolina
4100. Matthews, Town of, North Carolina

4101. McDowell, County of, North Carolina
4102. Mebane, City of, North Carolina
4103. Mecklenburg, County of, North Carolina
4104. Mint Hill, Town of, North Carolina
4105. Mitchell, County of, North Carolina
4106. Monroe, City of, North Carolina
4107. Montgomery, County of, North Carolina
4108. Moore, County of, North Carolina
4109. Mooresville, Town of, North Carolina
4110. Morganton, City of, North Carolina
4111. Morrisville, Town of, North Carolina
4112. Mount Airy, City of, North Carolina
4113. Mount Holly, City of, North Carolina
4114. Nash, County of, North Carolina
4115. New Bern, City of, North Carolina
4116. New Hanover, County of, North Carolina
4117. Newton, City of, North Carolina
4118. Northampton, County of, North Carolina
4119. Onslow, County of, North Carolina
4120. Orange, County of, North Carolina
4121. Pamlico, County of, North Carolina
4122. Pasquotank, County of, North Carolina
4123. Pender, County of, North Carolina
4124. Perquimans, County of, North Carolina
4125. Person, County of, North Carolina
4126. Pinehurst, Village of, North Carolina
4127. Pitt, County of, North Carolina
4128. Polk, County of, North Carolina
4129. Raleigh, City of, North Carolina
4130. Randolph, County of, North Carolina
4131. Reidsville, City of, North Carolina
4132. Richmond, County of, North Carolina
4133. Roanoke Rapids, City of, North Carolina
4134. Robeson, County of, North Carolina
4135. Rockingham, County of, North Carolina
4136. Rocky Mount, City of, North Carolina
4137. Rowan, County of, North Carolina
4138. Rutherford, County of, North Carolina
4139. Salisbury, City of, North Carolina
4140. Sampson, County of, North Carolina
4141. Sanford, City of, North Carolina
4142. Scotland, County of, North Carolina
4143. Shelby, City of, North Carolina
4144. Smithfield, Town of, North Carolina
4145. Southern Pines, Town of, North Carolina
4146. Spring Lake, Town of, North Carolina
4147. Stallings, Town of, North Carolina
4148. Stanly, County of, North Carolina
4149. Statesville, City of, North Carolina
4150. Stokes, County of, North Carolina
4151. Summerfield, Town of, North Carolina
4152. Surry, County of, North Carolina
4153. Swain, County of, North Carolina
4154. Tarboro, Town of, North Carolina
4155. Thomasville, City of, North Carolina
4156. Transylvania, County of, North Carolina
4157. Union, County of, North Carolina
4158. Vance, County of, North Carolina
4159. Wake, County of, North Carolina
4160. Wake Forest, Town of, North Carolina
4161. Warren, County of, North Carolina
4162. Washington, County of, North Carolina
4163. Watauga, County of, North Carolina
4164. Waxhaw, Town of, North Carolina
4165. Wayne, County of, North Carolina
4166. Waynesville, Town of, North Carolina
4167. Weddington, Town of, North Carolina
4168. Wilkes, County of, North Carolina
4169. Wilmington, City of, North Carolina

4170. Wilson, City of, North Carolina
4171. Wilson, County of, North Carolina
4172. Winston-Salem, City of, North Carolina
4173. Yadkin, County of, North Carolina
4174. Yancey, County of, North Carolina
4175. Barnes, County of, North Dakota
4176. Bismarck, City of, North Dakota
4177. Burleigh, County of, North Dakota
4178. Cass, County of, North Dakota
4179. Dickinson, City of, North Dakota
4180. Fargo, City of, North Dakota
4181. Grand Forks, City of, North Dakota
4182. Grand Forks, County of, North Dakota
4183. Jamestown, City of, North Dakota
4184. Mandan, City of, North Dakota
4185. McKenzie, County of, North Dakota
4186. Minot, City of, North Dakota
4187. Morton, County of, North Dakota
4188. Mountrail, County of, North Dakota
4189. Ramsey, County of, North Dakota
4190. Richland, County of, North Dakota
4191. Rolette, County of, North Dakota
4192. Stark, County of, North Dakota
4193. Stutsman, County of, North Dakota
4194. Walsh, County of, North Dakota
4195. Ward, County of, North Dakota
4196. West Fargo, City of, North Dakota
4197. Williams, County of, North Dakota
4198. Williston, City of, North Dakota
4199. Adams, County of, Ohio
4200. Akron, City of, Ohio
4201. Allen, County of, Ohio
4202. Alliance, City of, Ohio
4203. American, Township of, Ohio
4204. Amherst, City of, Ohio
4205. Anderson, Township of, Ohio
4206. Ashland, City of, Ohio
4207. Ashland, County of, Ohio
4208. Ashtabula, City of, Ohio
4209. Ashtabula, County of, Ohio
4210. Ashtabula, Township of, Ohio
4211. Athens, City of, Ohio
4212. Athens, County of, Ohio
4213. Athens, Township of, Ohio
4214. Auglaize, County of, Ohio
4215. Aurora, City of, Ohio
4216. Austintown, Township of, Ohio
4217. Avon, City of, Ohio
4218. Avon Lake, City of, Ohio
4219. Bainbridge, Township of, Ohio
4220. Barberton, City of, Ohio
4221. Batavia, Township of, Ohio
4222. Bath, Township of, Ohio
4223. Bay, Village of, City of, Ohio
4224. Beachwood, City of, Ohio
4225. Beavercreek, City of, Ohio
4226. Beavercreek, Township of, Ohio
4227. Bedford, City of, Ohio
4228. Bedford Heights, City of, Ohio
4229. Bellefontaine, City of, Ohio
4230. Belmont, County of, Ohio
4231. Berea, City of, Ohio
4232. Bethel, Township of, Ohio
4233. Bexley, City of, Ohio
4234. Blue Ash, City of, Ohio
4235. Boardman, Township of, Ohio
4236. Bowling Green, City of, Ohio
4237. Brecksville, City of, Ohio
4238. Brimfield, Township of, Ohio
4239. Broadview Heights, City of, Ohio
4240. Brook Park, City of, Ohio
4241. Brooklyn, City of, Ohio
4242. Brown, County of, Ohio
4243. Brunswick, City of, Ohio
4244. Brunswick Hills, Township of, Ohio
4245. Bucyrus, City of, Ohio
4246. Butler, County of, Ohio
4247. Cambridge, City of, Ohio
4248. Cambridge, Township of, Ohio
4249. Canfield, Township of, Ohio
4250. Canton, City of, Ohio
4251. Canton, Township of, Ohio
4252. Carroll, County of, Ohio
4253. Celina, City of, Ohio
4254. Centerville, City of, Ohio
4255. Champaign, County of, Ohio
4256. Chester, Township of, Ohio
4257. Chillicothe, City of, Ohio
4258. Chippewa, Township of, Ohio
4259. Cincinnati, City of, Ohio

4260. Circleville, City of, Ohio
4261. Clark, County of, Ohio
4262. Clayton, City of, Ohio
4263. Clear Creek, Township of, Ohio
4264. Clermont, County of, Ohio
4265. Cleveland, City of, Ohio
4266. Cleveland Heights, City of, Ohio
4267. Clinton, County of, Ohio
4268. Clinton, Township of, Ohio
4269. Colerain, Township of, Ohio
4270. Columbiana, County of, Ohio
4271. Columbus, City of, Ohio
4272. Concord, Township of, Ohio
4273. Conneaut, City of, Ohio
4274. Copley, Township of, Ohio
4275. Coshocton, City of, Ohio
4276. Coshocton, County of, Ohio
4277. Coventry, Township of, Ohio
4278. Crawford, County of, Ohio
4279. Cuyahoga, County of, Ohio
4280. Cuyahoga Falls, City of, Ohio
4281. Darke, County of, Ohio
4282. Dayton, City of, Ohio
4283. Deerfield, Township of, Ohio
4284. Defiance, City of, Ohio
4285. Defiance, County of, Ohio
4286. Defiance, Township of, Ohio
4287. Delaware, City of, Ohio
4288. Delaware City, Township of, Ohio
4289. Delaware, County of, Ohio
4290. Delhi, Township of, Ohio
4291. Dover, City of, Ohio
4292. Dublin, City of, Ohio
4293. Duchouquet, Township of, Ohio
4294. East Cleveland, City of, Ohio
4295. East Liverpool, City of, Ohio
4296. Eastlake, City of, Ohio
4297. Elyria, City of, Ohio
4298. Englewood, City of, Ohio
4299. Erie, County of, Ohio
4300. Etna, Township of, Ohio
4301. Euclid, City of, Ohio
4302. Fairborn, City of, Ohio
4303. Fairfield, City of, Ohio
4304. Fairfield, County of, Ohio
4305. Fairfield, Township of, Ohio
4306. Fairview Park, City of, Ohio
4307. Falls, Township of, Ohio
4308. Fayette, County of, Ohio
4309. Findlay, City of, Ohio
4310. Forest Park, City of, Ohio
4311. Fostoria, City of, Ohio
4312. Franklin, City of, Ohio
4313. Franklin, County of, Ohio
4314. Franklin, Township of, Ohio
4315. Fremont, City of, Ohio
4316. Fulton, County of, Ohio
4317. Gahanna, City of, Ohio
4318. Gallia, County of, Ohio
4319. Garfield Heights, City of, Ohio
4320. Geauga, County of, Ohio
4321. Geneva, Township of, Ohio
4322. Genoa, Township of, Ohio
4323. Goshen, Township of, Ohio
4324. Granville, Township of, Ohio
4325. Green, City of, Ohio
4326. Green, Township of, Ohio
4327. Greene, County of, Ohio
4328. Greenville, City of, Ohio
4329. Greenville, Township of, Ohio
4330. Grove City, City of, Ohio
4331. Guernsey, County of, Ohio
4332. Hamilton, City of, Ohio
4333. Hamilton, County of, Ohio
4334. Hamilton, Township of, Ohio
4335. Hancock, County of, Ohio
4336. Hardin, County of, Ohio
4337. Harrison, City of, Ohio
4338. Harrison, County of, Ohio
4339. Harrison, Township of, Ohio
4340. Heath, City of, Ohio
4341. Henry, County of, Ohio
4342. Highland, County of, Ohio
4343. Hilliard, City of, Ohio
4344. Hocking, County of, Ohio
4345. Holmes, County of, Ohio
4346. Howland, Township of, Ohio
4347. Hubbard, Township of, Ohio
4348. Huber Heights, City of, Ohio
4349. Hudson, City of, Ohio
4350. Huron, County of, Ohio
4351. Huron, Township of, Ohio

4352. Ironton, City of, Ohio
4353. Jackson, County of, Ohio
4354. Jackson, Township of, Ohio
4355. Jefferson, County of, Ohio
4356. Jefferson, Township of, Ohio
4357. Kent, City of, Ohio
4358. Kettering, City of, Ohio
4359. Knox, County of, Ohio
4360. Lake, County of, Ohio
4361. Lake, Township of, Ohio
4362. Lakewood, City of, Ohio
4363. Lancaster, City of, Ohio
4364. Lancaster City, Township of, Ohio
4365. Lawrence, County of, Ohio
4366. Lawrence, Township of, Ohio
4367. Lebanon, City of, Ohio
4368. Lemon, Township of, Ohio
4369. Liberty, Township of, Ohio
4370. Licking, County of, Ohio
4371. Lima, City of, Ohio
4372. Logan, County of, Ohio
4373. London, City of, Ohio
4374. Lorain, City of, Ohio
4375. Lorain, County of, Ohio
4376. Loveland, City of, Ohio
4377. Lucas, County of, Ohio
4378. Lyndhurst, City of, Ohio
4379. Macedonia, City of, Ohio
4380. Mad River, Township of, Ohio
4381. Madison, County of, Ohio
4382. Madison, Township of, Ohio
4383. Mahoning, County of, Ohio
4384. Mansfield, City of, Ohio
4385. Maple Heights, City of, Ohio
4386. Marietta, City of, Ohio
4387. Marion, City of, Ohio
4388. Marion, County of, Ohio
4389. Marion, Township of, Ohio
4390. Marysville, City of, Ohio
4391. Mason, City of, Ohio
4392. Massillon, City of, Ohio
4393. Maumee, City of, Ohio
4394. Mayfield Heights, City of, Ohio
4395. Medina, City of, Ohio
4396. Medina City, Township of, Ohio
4397. Medina, County of, Ohio
4398. Meigs, County of, Ohio
4399. Mentor, City of, Ohio
4400. Mercer, County of, Ohio
4401. Miami, County of, Ohio
4402. Miami, Township of, Ohio
4403. Miamisburg, City of, Ohio
4404. Middleburg Heights, City of, Ohio
4405. Middletown, City of, Ohio
4406. Mifflin, Township of, Ohio
4407. Monclova, Township of, Ohio
4408. Monroe, City of, Ohio
4409. Monroe, County of, Ohio
4410. Monroe, Township of, Ohio
4411. Montgomery, City of, Ohio
4412. Montgomery, County of, Ohio
4413. Montville, Township of, Ohio
4414. Moorefield, Township of, Ohio
4415. Morgan, County of, Ohio
4416. Morrow, County of, Ohio
4417. Mount Vernon, City of, Ohio
4418. Muskingum, County of, Ohio
4419. New Albany, City of, Ohio
4420. New Franklin, City of, Ohio
4421. New Philadelphia, City of, Ohio
4422. Newark, City of, Ohio
4423. Niles, City of, Ohio
4424. Noble, County of, Ohio
4425. North Canton, City of, Ohio
4426. North Olmsted, City of, Ohio
4427. North Ridgeville, City of, Ohio
4428. North Royalton, City of, Ohio
4429. Norton, City of, Ohio
4430. Norwalk, City of, Ohio
4431. Norwich, Township of, Ohio
4432. Norwood, City of, Ohio
4433. Olmsted, Township of, Ohio
4434. Orange, Township of, Ohio
4435. Oregon, City of, Ohio
4436. Ottawa, County of, Ohio
4437. Oxford, City of, Ohio
4438. Oxford, Township of, Ohio
4439. Painesville, City of, Ohio
4440. Painesville, Township of, Ohio
4441. Paris, Township of, Ohio
4442. Parma, City of, Ohio
4443. Parma Heights, City of, Ohio

4444. Pataskala, City of, Ohio
4445. Paulding, County of, Ohio
4446. Pease, Township of, Ohio
4447. Perkins, Township of, Ohio
4448. Perry, County of, Ohio
4449. Perry, Township of, Ohio
4450. Perrysburg, City of, Ohio
4451. Perrysburg, Township of, Ohio
4452. Pickaway, County of, Ohio
4453. Pickerington, City of, Ohio
4454. Pierce, Township of, Ohio
4455. Pike, County of, Ohio
4456. Piqua, City of, Ohio
4457. Plain, Township of, Ohio
4458. Pleasant, Township of, Ohio
4459. Poland, Township of, Ohio
4460. Portage, County of, Ohio
4461. Portsmouth, City of, Ohio
4462. Powell, City of, Ohio
4463. Prairie, Township of, Ohio
4464. Preble, County of, Ohio
4465. Putnam, County of, Ohio
4466. Ravenna, City of, Ohio
4467. Reading, City of, Ohio
4468. Reynoldsburg, City of, Ohio
4469. Richland, County of, Ohio
4470. Richland, Township of, Ohio
4471. Richmond Heights, City of, Ohio
4472. Riverside, City of, Ohio
4473. Rocky River, City of, Ohio
4474. Ross, County of, Ohio
4475. Sagamore Hills, Township of, Ohio
4476. Salem, City of, Ohio
4477. Sandusky, City of, Ohio
4478. Sandusky, County of, Ohio
4479. Scioto, County of, Ohio
4480. Scioto, Township of, Ohio
4481. Seneca, County of, Ohio
4482. Seven Hills, City of, Ohio
4483. Shaker Heights, City of, Ohio
4484. Sharon, Township of, Ohio
4485. Sharonville, City of, Ohio
4486. Shawnee, Township of, Ohio
4487. Shelby, County of, Ohio
4488. Sidney, City of, Ohio
4489. Solon, City of, Ohio
4490. South Euclid, City of, Ohio
4491. Springboro, City of, Ohio
4492. Springdale, City of, Ohio
4493. Springfield, City of, Ohio
4494. Springfield, Township of, Ohio
4495. St. Marys, Township of, Ohio
4496. Stark, County of, Ohio
4497. Steubenville, City of, Ohio
4498. Stow, City of, Ohio
4499. Streetsboro, City of, Ohio
4500. Strongsville, City of, Ohio
4501. Struthers, City of, Ohio
4502. Summit, County of, Ohio
4503. Sycamore, Township of, Ohio
4504. Sylvania, City of, Ohio
4505. Sylvania, Township of, Ohio
4506. Symmes, Township of, Ohio
4507. Tallmadge, City of, Ohio
4508. Tiffin, City of, Ohio
4509. Tipp City, City of, Ohio
4510. Toledo, City of, Ohio
4511. Trenton, City of, Ohio
4512. Trotwood, City of, Ohio
4513. Troy, City of, Ohio
4514. Trumbull, County of, Ohio
4515. Truro, Township of, Ohio
4516. Turtlecreek, Township of, Ohio
4517. Tuscarawas, County of, Ohio
4518. Twinsburg, City of, Ohio
4519. Union, County of, Ohio
4520. Union, Township of, Ohio
4521. University Heights, City of, Ohio
4522. Upper Arlington, City of, Ohio
4523. Upper, Township of, Ohio
4524. Urbana, City of, Ohio
4525. Urbana, Township of, Ohio
4526. Van Wert, City of, Ohio
4527. Van Wert, County of, Ohio
4528. Vandalia, City of, Ohio
4529. Vermilion, City of, Ohio
4530. Vinton, County of, Ohio
4531. Violet, Township of, Ohio
4532. Wadsworth, City of, Ohio
4533. Warren, City of, Ohio
4534. Warren, County of, Ohio
4535. Warrensville Heights, City of, Ohio

4536. Washington, County of, Ohio
4537. Washington Court House, City of, Ohio
4538. Washington, Township of, Ohio
4539. Wayne, County of, Ohio
4540. Weathersfield, Township of, Ohio
4541. West Carrollton, City of, Ohio
4542. West Chester, Township of, Ohio
4543. Westerville, City of, Ohio
4544. Westlake, City of, Ohio
4545. Whitehall, City of, Ohio
4546. Wickliffe, City of, Ohio
4547. Williams, County of, Ohio
4548. Willoughby, City of, Ohio
4549. Willowick, City of, Ohio
4550. Wilmington, City of, Ohio
4551. Wood, County of, Ohio
4552. Wooster, City of, Ohio
4553. Worthington, City of, Ohio
4554. Wyandot, County of, Ohio
4555. Xenia, City of, Ohio
4556. Youngstown, City of, Ohio
4557. Zanesville, City of, Ohio
4558. Ada, City of, Oklahoma
4559. Adair, County of, Oklahoma
4560. Altus, City of, Oklahoma
4561. Ardmore, City of, Oklahoma
4562. Atoka, County of, Oklahoma
4563. Bartlesville, City of, Oklahoma
4564. Beckham, County of, Oklahoma
4565. Bethany, City of, Oklahoma
4566. Bixby, City of, Oklahoma
4567. Broken Arrow, City of, Oklahoma
4568. Bryan, County of, Oklahoma
4569. Caddo, County of, Oklahoma
4570. Canadian, County of, Oklahoma
4571. Carter, County of, Oklahoma
4572. Cherokee, County of, Oklahoma
4573. Chickasha, City of, Oklahoma
4574. Choctaw, City of, Oklahoma
4575. Choctaw, County of, Oklahoma
4576. Claremore, City of, Oklahoma
4577. Cleveland, County of, Oklahoma
4578. Comanche, County of, Oklahoma
4579. Coweta, City of, Oklahoma
4580. Craig, County of, Oklahoma
4581. Creek, County of, Oklahoma
4582. Custer, County of, Oklahoma
4583. Del City, City of, Oklahoma
4584. Delaware, County of, Oklahoma
4585. Duncan, City of, Oklahoma
4586. Durant, City of, Oklahoma
4587. Edmond, City of, Oklahoma
4588. El Reno, City of, Oklahoma
4589. Elk City, City of, Oklahoma
4590. Enid, City of, Oklahoma
4591. Garfield, County of, Oklahoma
4592. Garvin, County of, Oklahoma
4593. Glenpool, City of, Oklahoma
4594. Grady, County of, Oklahoma
4595. Guthrie, City of, Oklahoma
4596. Guymon, City of, Oklahoma
4597. Haskell, County of, Oklahoma
4598. Hughes, County of, Oklahoma
4599. Jackson, County of, Oklahoma
4600. Jenks, City of, Oklahoma
4601. Johnston, County of, Oklahoma
4602. Kay, County of, Oklahoma
4603. Kingfisher, County of, Oklahoma
4604. Latimer, County of, Oklahoma
4605. Lawton, City of, Oklahoma
4606. Le Flore, County of, Oklahoma
4607. Lincoln, County of, Oklahoma
4608. Logan, County of, Oklahoma
4609. Love, County of, Oklahoma
4610. Marshall, County of, Oklahoma
4611. Mayes, County of, Oklahoma
4612. McAlester, City of, Oklahoma
4613. McClain, County of, Oklahoma
4614. McCurtain, County of, Oklahoma
4615. McIntosh, County of, Oklahoma
4616. Miami, City of, Oklahoma
4617. Midwest City, City of, Oklahoma
4618. Moore, City of, Oklahoma
4619. Murray, County of, Oklahoma
4620. Muskogee, City of, Oklahoma
4621. Muskogee, County of, Oklahoma
4622. Mustang, City of, Oklahoma
4623. Newcastle, City of, Oklahoma
4624. Noble, County of, Oklahoma
4625. Norman, City of, Oklahoma
4626. Nowata, County of, Oklahoma

4627. Okfuskee, County of, Oklahoma
4628. Oklahoma City, City of, Oklahoma
4629. Oklahoma, County of, Oklahoma
4630. Okmulgee, City of, Oklahoma
4631. Okmulgee, County of, Oklahoma
4632. Osage, County of, Oklahoma
4633. Ottawa, County of, Oklahoma
4634. Owasso, City of, Oklahoma
4635. Pawnee, County of, Oklahoma
4636. Payne, County of, Oklahoma
4637. Pittsburg, County of, Oklahoma
4638. Ponca City, City of, Oklahoma
4639. Pontotoc, County of, Oklahoma
4640. Pottawatomie, County of, Oklahoma
4641. Pushmataha, County of, Oklahoma
4642. Rogers, County of, Oklahoma
4643. Sand Springs, City of, Oklahoma
4644. Sapulpa, City of, Oklahoma
4645. Seminole, County of, Oklahoma
4646. Sequoyah, County of, Oklahoma
4647. Shawnee, City of, Oklahoma
4648. Stephens, County of, Oklahoma
4649. Stillwater, City of, Oklahoma
4650. Tahlequah, City of, Oklahoma
4651. Texas, County of, Oklahoma
4652. Tulsa, City of, Oklahoma
4653. Tulsa, County of, Oklahoma
4654. Wagoner, County of, Oklahoma
4655. Warr Acres, City of, Oklahoma
4656. Washington, County of, Oklahoma
4657. Washita, County of, Oklahoma
4658. Weatherford, City of, Oklahoma
4659. Woodward, City of, Oklahoma
4660. Woodward, County of, Oklahoma
4661. Yukon, City of, Oklahoma
4662. Albany, City of, Oregon
4663. Ashland, City of, Oregon
4664. Astoria, City of, Oregon
4665. Baker, County of, Oregon
4666. Beaverton, City of, Oregon
4667. Bend, City of, Oregon
4668. Benton, County of, Oregon
4669. Canby, City of, Oregon
4670. Central Point, City of, Oregon
4671. Clackamas, County of, Oregon
4672. Clatsop, County of, Oregon
4673. Columbia, County of, Oregon
4674. Coos Bay, City of, Oregon
4675. Coos, County of, Oregon
4676. Cornelius, City of, Oregon
4677. Corvallis, City of, Oregon
4678. Cottage Grove, City of, Oregon
4679. Crook, County of, Oregon
4680. Curry, County of, Oregon
4681. Dallas, City of, Oregon
4682. Deschutes, County of, Oregon
4683. Douglas, County of, Oregon
4684. Eugene, City of, Oregon
4685. Forest Grove, City of, Oregon
4686. Gladstone, City of, Oregon
4687. Grants Pass, City of, Oregon
4688. Gresham, City of, Oregon
4689. Happy Valley, City of, Oregon
4690. Hermiston, City of, Oregon
4691. Hillsboro, City of, Oregon
4692. Hood River, County of, Oregon
4693. Independence, City of, Oregon
4694. Jackson, County of, Oregon
4695. Jefferson, County of, Oregon
4696. Josephine, County of, Oregon
4697. Keizer, City of, Oregon
4698. Klamath, County of, Oregon
4699. Klamath Falls, City of, Oregon
4700. La Grande, City of, Oregon
4701. Lake Oswego, City of, Oregon
4702. Lane, County of, Oregon
4703. Lebanon, City of, Oregon
4704. Lincoln, County of, Oregon
4705. Linn, County of, Oregon
4706. Malheur, County of, Oregon
4707. Marion, County of, Oregon
4708. McMinnville, City of, Oregon
4709. Medford, City of, Oregon
4710. Milwaukie, City of, Oregon
4711. Monmouth, City of, Oregon
4712. Morrow, County of, Oregon
4713. Multnomah, County of, Oregon
4714. Newberg, City of, Oregon
4715. Newport, City of, Oregon
4716. Ontario, City of, Oregon
4717. Oregon City, City of, Oregon
4718. Pendleton, City of, Oregon

4719. Polk, County of, Oregon
4720. Portland, City of, Oregon
4721. Prineville, City of, Oregon
4722. Redmond, City of, Oregon
4723. Roseburg, City of, Oregon
4724. Salem, City of, Oregon
4725. Sandy, City of, Oregon
4726. Sherwood, City of, Oregon
4727. Silverton, City of, Oregon
4728. Springfield, City of, Oregon
4729. St. Helens, City of, Oregon
4730. The Dalles, City of, Oregon
4731. Tigard, City of, Oregon
4732. Tillamook, County of, Oregon
4733. Troutdale, City of, Oregon
4734. Tualatin, City of, Oregon
4735. Umatilla, County of, Oregon
4736. Union, County of, Oregon
4737. Wasco, County of, Oregon
4738. Washington, County of, Oregon
4739. West Linn, City of, Oregon
4740. Wilsonville, City of, Oregon
4741. Woodburn, City of, Oregon
4742. Yamhill, County of, Oregon
4743. Abington, Township of, Pennsylvania
4744. Adams, County of, Pennsylvania
4745. Adams, Township of, Pennsylvania
4746. Allegheny, County of, Pennsylvania
4747. Allentown, City of, Pennsylvania
4748. Altoona, City of, Pennsylvania
4749. Amity, Township of, Pennsylvania
4750. Antrim, Township of, Pennsylvania
4751. Armstrong, County of, Pennsylvania
4752. Aston, Township of, Pennsylvania
4753. Baldwin, Borough of, Pennsylvania
4754. Beaver, County of, Pennsylvania
4755. Bedford, County of, Pennsylvania
4756. Bensalem, Township of, Pennsylvania
4757. Berks, County of, Pennsylvania
4758. Bethel Park, Municipality of, Pennsylvania
4759. Bethlehem, City of, Pennsylvania
4760. Bethlehem, Township of, Pennsylvania
4761. Blair, County of, Pennsylvania
4762. Bloomsburg, Town of, Pennsylvania
4763. Bradford, County of, Pennsylvania
4764. Bristol, Township of, Pennsylvania
4765. Buckingham, Township of, Pennsylvania
4766. Bucks, County of, Pennsylvania
4767. Butler, City of, Pennsylvania
4768. Butler, County of, Pennsylvania
4769. Butler, Township of, Pennsylvania
4770. Caln, Township of, Pennsylvania
4771. Cambria, County of, Pennsylvania
4772. Carbon, County of, Pennsylvania
4773. Carlisle, Borough of, Pennsylvania
4774. Cecil, Township of, Pennsylvania
4775. Center, Township of, Pennsylvania
4776. Centre, County of, Pennsylvania
4777. Chambersburg, Borough of, Pennsylvania
4778. Cheltenham, Township of, Pennsylvania
4779. Chester, City of, Pennsylvania
4780. Chester, County of, Pennsylvania
4781. Chestnuthill, Township of, Pennsylvania
4782. Clarion, County of, Pennsylvania
4783. Clearfield, County of, Pennsylvania
4784. Clinton, County of, Pennsylvania
4785. Coal, Township of, Pennsylvania
4786. Coatesville, City of, Pennsylvania
4787. College, Township of, Pennsylvania
4788. Columbia, Borough of, Pennsylvania
4789. Columbia, County of, Pennsylvania
4790. Concord, Township of, Pennsylvania
4791. Coolbaugh, Township of, Pennsylvania
4792. Cranberry, Township of, Pennsylvania
4793. Crawford, County of, Pennsylvania
4794. Cumberland, County of, Pennsylvania
4795. Cumru, Township of, Pennsylvania
4796. Darby, Borough of, Pennsylvania
4797. Dauphin, County of, Pennsylvania
4798. Delaware, County of, Pennsylvania
4799. Derry, Township of, Pennsylvania

4800. Dingman, Township of, Pennsylvania
4801. Douglass, Township of, Pennsylvania
4802. Dover, Township of, Pennsylvania
4803. Doylestown, Township of, Pennsylvania
4804. Dunmore, Borough of, Pennsylvania
4805. East Cocalico, Township of, Pennsylvania
4806. East Goshen, Township of, Pennsylvania
4807. East Hempfield, Township of, Pennsylvania
4808. East Lampeter, Township of, Pennsylvania
4809. East Norriton, Township of, Pennsylvania
4810. East Pennsboro, Township of, Pennsylvania
4811. East Stroudsburg, Borough of, Pennsylvania
4812. East Whiteland, Township of, Pennsylvania
4813. Easton, City of, Pennsylvania
4814. Easttown, Township of, Pennsylvania
4815. Elizabeth, Township of, Pennsylvania
4816. Elizabethtown, Borough of, Pennsylvania
4817. Elk, County of, Pennsylvania
4818. Emmaus, Borough of, Pennsylvania
4819. Ephrata, Borough of, Pennsylvania
4820. Ephrata, Township of, Pennsylvania
4821. Erie, City of, Pennsylvania
4822. Erie, County of, Pennsylvania
4823. Exeter, Township of, Pennsylvania
4824. Fairview, Township of, Pennsylvania
4825. Falls, Township of, Pennsylvania
4826. Fayette, County of, Pennsylvania
4827. Ferguson, Township of, Pennsylvania
4828. Forks, Township of, Pennsylvania
4829. Franconia, Township of, Pennsylvania
4830. Franklin, County of, Pennsylvania
4831. Franklin Park, Borough of, Pennsylvania
4832. Fulton, County of, Pennsylvania
4833. Greene, County of, Pennsylvania
4834. Greene, Township of, Pennsylvania
4835. Greensburg, City of, Pennsylvania
4836. Guilford, Township of, Pennsylvania
4837. Hamilton, Township of, Pennsylvania
4838. Hampden, Township of, Pennsylvania
4839. Hampton, Township of, Pennsylvania
4840. Hanover, Borough of, Pennsylvania
4841. Hanover, Township of, Pennsylvania
4842. Harborcreek, Township of, Pennsylvania
4843. Harrisburg, City of, Pennsylvania
4844. Harrison, Township of, Pennsylvania
4845. Hatfield, Township of, Pennsylvania
4846. Haverford, Township of, Pennsylvania
4847. Hazleton, City of, Pennsylvania
4848. Hempfield, Township of, Pennsylvania
4849. Hermitage, City of, Pennsylvania
4850. Hilltown, Township of, Pennsylvania
4851. Hopewell, Township of, Pennsylvania
4852. Horsham, Township of, Pennsylvania
4853. Huntingdon, County of, Pennsylvania
4854. Indiana, Borough of, Pennsylvania
4855. Indiana, County of, Pennsylvania
4856. Jefferson, County of, Pennsylvania
4857. Jefferson Hills, Borough of, Pennsylvania
4858. Johnstown, City of, Pennsylvania
4859. Juniata, County of, Pennsylvania
4860. Kingston, Borough of, Pennsylvania
4861. Lackawanna, County of, Pennsylvania
4862. Lancaster, City of, Pennsylvania
4863. Lancaster, County of, Pennsylvania

4864. Lancaster, Township of, Pennsylvania
4865. Lansdale, Borough of, Pennsylvania
4866. Lansdowne, Borough of, Pennsylvania
4867. Lawrence, County of, Pennsylvania
4868. Lebanon, City of, Pennsylvania
4869. Lebanon, County of, Pennsylvania
4870. Lehigh, County of, Pennsylvania
4871. Lehigh, Township of, Pennsylvania
4872. Lehman, Township of, Pennsylvania
4873. Limerick, Township of, Pennsylvania
4874. Logan, Township of, Pennsylvania
4875. Lower Allen, Township of, Pennsylvania
4876. Lower Burrell, City of, Pennsylvania
4877. Lower Gwynedd, Township of, Pennsylvania
4878. Lower Macungie, Township of, Pennsylvania
4879. Lower Makefield, Township of, Pennsylvania
4880. Lower Merion, Township of, Pennsylvania
4881. Lower Moreland, Township of, Pennsylvania
4882. Lower Paxton, Township of, Pennsylvania
4883. Lower Pottsgrove, Township of, Pennsylvania
4884. Lower Providence, Township of, Pennsylvania
4885. Lower Salford, Township of, Pennsylvania
4886. Lower Saucon, Township of, Pennsylvania
4887. Lower Southampton, Township of, Pennsylvania
4888. Loyalsock, Township of, Pennsylvania
4889. Luzerne, County of, Pennsylvania
4890. Lycoming, County of, Pennsylvania
4891. Manchester, Township of, Pennsylvania
4892. Manheim, Township of, Pennsylvania
4893. Manor, Township of, Pennsylvania
4894. Marple, Township of, Pennsylvania
4895. McCandless, Township of, Pennsylvania
4896. McKean, County of, Pennsylvania
4897. McKeesport, City of, Pennsylvania
4898. Meadville, City of, Pennsylvania
4899. Mercer, County of, Pennsylvania
4900. Middle Smithfield, Township of, Pennsylvania
4901. Middletown, Township of, Pennsylvania
4902. Mifflin, County of, Pennsylvania
4903. Milford, Township of, Pennsylvania
4904. Millcreek, Township of, Pennsylvania
4905. Monroe, County of, Pennsylvania
4906. Monroeville, Municipality of, Pennsylvania
4907. Montgomery, County of, Pennsylvania
4908. Montgomery, Township of, Pennsylvania
4909. Montour, County of, Pennsylvania
4910. Moon, Township of, Pennsylvania
4911. Mount Joy, Township of, Pennsylvania
4912. Mount Lebanon, Township of, Pennsylvania
4913. Mount Pleasant, Township of, Pennsylvania
4914. Muhlenberg, Township of, Pennsylvania
4915. Munhall, Borough of, Pennsylvania
4916. Murrysville, Municipality of, Pennsylvania
4917. Nanticoke, City of, Pennsylvania
4918. Nether Providence, Township of, Pennsylvania
4919. New Britain, Township of, Pennsylvania
4920. New Castle, City of, Pennsylvania
4921. New Garden, Township of, Pennsylvania

4922. New Hanover, Township of, Pennsylvania
4923. New Kensington, City of, Pennsylvania
4924. Newberry, Township of, Pennsylvania
4925. Newtown, Township of, Pennsylvania
4926. Norristown, Borough of, Pennsylvania
4927. North Fayette, Township of, Pennsylvania
4928. North Huntingdon, Township of, Pennsylvania
4929. North Lebanon, Township of, Pennsylvania
4930. North Middleton, Township of, Pennsylvania
4931. North Strabane, Township of, Pennsylvania
4932. North Union, Township of, Pennsylvania
4933. North Whitehall, Township of, Pennsylvania
4934. Northampton, County of, Pennsylvania
4935. Northampton, Township of, Pennsylvania
4936. Northumberland, County of, Pennsylvania
4937. Palmer, Township of, Pennsylvania
4938. Patton, Township of, Pennsylvania
4939. Penn Hills, Township of, Pennsylvania
4940. Penn, Township of, Pennsylvania
4941. Perry, County of, Pennsylvania
4942. Peters, Township of, Pennsylvania
4943. Philadelphia, City of/ County of, Pennsylvania
4944. Phoenixville, Borough of, Pennsylvania
4945. Pike, County of, Pennsylvania
4946. Pine, Township of, Pennsylvania
4947. Pittsburgh, City of, Pennsylvania
4948. Plum, Borough of, Pennsylvania
4949. Plumstead, Township of, Pennsylvania
4950. Plymouth, Township of, Pennsylvania
4951. Pocono, Township of, Pennsylvania
4952. Potter, County of, Pennsylvania
4953. Pottstown, Borough of, Pennsylvania
4954. Pottsville, City of, Pennsylvania
4955. Radnor, Township of, Pennsylvania
4956. Rapho, Township of, Pennsylvania
4957. Reading, City of, Pennsylvania
4958. Richland, Township of, Pennsylvania
4959. Ridley, Township of, Pennsylvania
4960. Robinson, Township of, Pennsylvania
4961. Ross, Township of, Pennsylvania
4962. Rostraver, Township of, Pennsylvania
4963. Salisbury, Township of, Pennsylvania
4964. Sandy, Township of, Pennsylvania
4965. Schuylkill, County of, Pennsylvania
4966. Scott, Township of, Pennsylvania
4967. Scranton, City of, Pennsylvania
4968. Shaler, Township of, Pennsylvania
4969. Sharon, City of, Pennsylvania
4970. Silver Spring, Township of, Pennsylvania
4971. Skippack, Township of, Pennsylvania
4972. Snyder, County of, Pennsylvania
4973. Somerset, County of, Pennsylvania
4974. Somerset, Township of, Pennsylvania
4975. South Fayette, Township of, Pennsylvania
4976. South Lebanon, Township of, Pennsylvania
4977. South Middleton, Township of, Pennsylvania
4978. South Park, Township of, Pennsylvania
4979. South Union, Township of, Pennsylvania

4980. South Whitehall, Township of, Pennsylvania
4981. Spring Garden, Township of, Pennsylvania
4982. Spring, Township of, Pennsylvania
4983. Springettsbury, Township of, Pennsylvania
4984. Springfield, Township of, Pennsylvania
4985. St. Marys, City of, Pennsylvania
4986. State College, Borough of, Pennsylvania
4987. Stroud, Township of, Pennsylvania
4988. Susquehanna, County of, Pennsylvania
4989. Susquehanna, Township of, Pennsylvania
4990. Swatara, Township of, Pennsylvania
4991. Tioga, County of, Pennsylvania
4992. Towamencin, Township of, Pennsylvania
4993. Tredyffrin, Township of, Pennsylvania
4994. Union, County of, Pennsylvania
4995. Unity, Township of, Pennsylvania
4996. Upper Allen, Township of, Pennsylvania
4997. Upper Chichester, Township of, Pennsylvania
4998. Upper Darby, Township of, Pennsylvania
4999. Upper Dublin, Township of, Pennsylvania
5000. Upper Gwynedd, Township of, Pennsylvania
5001. Upper Macungie, Township of, Pennsylvania
5002. Upper Merion, Township of, Pennsylvania
5003. Upper Moreland, Township of, Pennsylvania
5004. Upper Providence, Township of, Pennsylvania
5005. Upper Saucon, Township of, Pennsylvania
5006. Upper Southampton, Township of, Pennsylvania
5007. Upper St. Clair, Township of, Pennsylvania
5008. Upper Uwchlan, Township of, Pennsylvania
5009. Uwchlan, Township of, Pennsylvania
5010. Venango, County of, Pennsylvania
5011. Warminster, Township of, Pennsylvania
5012. Warren, County of, Pennsylvania
5013. Warrington, Township of, Pennsylvania
5014. Warwick, Township of, Pennsylvania
5015. Washington, City of, Pennsylvania
5016. Washington, County of, Pennsylvania
5017. Washington, Township of, Pennsylvania
5018. Wayne, County of, Pennsylvania
5019. Waynesboro, Borough of, Pennsylvania
5020. West Bradford, Township of, Pennsylvania
5021. West Chester, Borough of, Pennsylvania
5022. West Deer, Township of, Pennsylvania
5023. West Goshen, Township of, Pennsylvania
5024. West Hanover, Township of, Pennsylvania
5025. West Hempfield, Township of, Pennsylvania
5026. West Lampeter, Township of, Pennsylvania
5027. West Manchester, Township of, Pennsylvania
5028. West Mifflin, Borough of, Pennsylvania
5029. West Norriton, Township of, Pennsylvania
5030. West Whiteland, Township of, Pennsylvania

5031. Westmoreland, County of, Pennsylvania
5032. Westtown, Township of, Pennsylvania
5033. White, Township of, Pennsylvania
5034. Whitehall, Borough of, Pennsylvania
5035. Whitehall, Township of, Pennsylvania
5036. Whitemarsh, Township of, Pennsylvania
5037. Whitpain, Township of, Pennsylvania
5038. Wilkes-Barre, City of, Pennsylvania
5039. Wilkinsburg, Borough of, Pennsylvania
5040. Williamsport, City of, Pennsylvania
5041. Willistown, Township of, Pennsylvania
5042. Windsor, Township of, Pennsylvania
5043. Worcester, Township of, Pennsylvania
5044. Wyoming, County of, Pennsylvania
5045. Wyomissing, Borough of, Pennsylvania
5046. Yeadon, Borough of, Pennsylvania
5047. York, City of, Pennsylvania
5048. York, County of, Pennsylvania
5049. York, Township of, Pennsylvania
5050. Adjuntas, Municipality of, Puerto Rico
5051. Aguada, Municipality of, Puerto Rico
5052. Aguadilla, Municipality of, Puerto Rico
5053. Aguas Buenas, Municipality of, Puerto Rico
5054. Aibonito, Municipality of, Puerto Rico
5055. Añasco, Municipality of, Puerto Rico
5056. Arecibo, Municipality of, Puerto Rico
5057. Arroyo, Municipality of, Puerto Rico
5058. Barceloneta, Municipality of, Puerto Rico
5059. Barranquitas, Municipality of, Puerto Rico
5060. Bayamón, Municipality of, Puerto Rico
5061. Cabo Rojo, Municipality of, Puerto Rico
5062. Caguas, Municipality of, Puerto Rico
5063. Camuy, Municipality of, Puerto Rico
5064. Canóvanas, Municipality of, Puerto Rico
5065. Carolina, Municipality of, Puerto Rico
5066. Cataño, Municipality of, Puerto Rico
5067. Cayey, Municipality of, Puerto Rico
5068. Ceiba, Municipality of, Puerto Rico
5069. Ciales, Municipality of, Puerto Rico
5070. Cidra, Municipality of, Puerto Rico
5071. Coamo, Municipality of, Puerto Rico
5072. Comerío, Municipality of, Puerto Rico
5073. Corozal, Municipality of, Puerto Rico
5074. Dorado, Municipality of, Puerto Rico
5075. Fajardo, Municipality of, Puerto Rico
5076. Florida, Municipality of, Puerto Rico
5077. Guánica, Municipality of, Puerto Rico
5078. Guayama, Municipality of, Puerto Rico
5079. Guayanilla, Municipality of, Puerto Rico
5080. Guaynabo, Municipality of, Puerto Rico
5081. Gurabo, Municipality of, Puerto Rico
5082. Hatillo, Municipality of, Puerto Rico
5083. Hormigueros, Municipality of, Puerto Rico
5084. Humacao, Municipality of, Puerto Rico
5085. Isabela, Municipality of, Puerto Rico
5086. Jayuya, Municipality of, Puerto Rico
5087. Juana Díaz, Municipality of, Puerto Rico
5088. Juncos, Municipality of, Puerto Rico
5089. Lajas, Municipality of, Puerto Rico
5090. Lares, Municipality of, Puerto Rico

5091. Las Piedras, Municipality of, Puerto Rico
5092. Loíza, Municipality of, Puerto Rico
5093. Luquillo, Municipality of, Puerto Rico
5094. Manatí, Municipality of, Puerto Rico
5095. Maunabo, Municipality of, Puerto Rico
5096. Mayagüez, Municipality of, Puerto Rico
5097. Moca, Municipality of, Puerto Rico
5098. Morovis, Municipality of, Puerto Rico
5099. Naguabo, Municipality of, Puerto Rico
5100. Naranjito, Municipality of, Puerto Rico
5101. Orocovis, Municipality of, Puerto Rico
5102. Patillas, Municipality of, Puerto Rico
5103. Peñuelas, Municipality of, Puerto Rico
5104. Ponce, Municipality of, Puerto Rico
5105. Quebradillas, Municipality of, Puerto Rico
5106. Rincón, Municipality of, Puerto Rico
5107. Río Grande, Municipality of, Puerto Rico
5108. Sabana Grande, Municipality of, Puerto Rico
5109. Salinas, Municipality of, Puerto Rico
5110. San Germán, Municipality of, Puerto Rico
5111. San Juan, Municipality of, Puerto Rico
5112. San Lorenzo, Municipality of, Puerto Rico
5113. San Sebastián, Municipality of, Puerto Rico
5114. Santa Isabel, Municipality of, Puerto Rico
5115. Toa Alta, Municipality of, Puerto Rico
5116. Toa Baja, Municipality of, Puerto Rico
5117. Trujillo Alto, Municipality of, Puerto Rico
5118. Utuado, Municipality of, Puerto Rico
5119. Vega Alta, Municipality of, Puerto Rico
5120. Vega Baja, Municipality of, Puerto Rico
5121. Villalba, Municipality of, Puerto Rico
5122. Yabucoa, Municipality of, Puerto Rico
5123. Yauco, Municipality of, Puerto Rico
5124. Barrington, Town of, Rhode Island
5125. Bristol, Town of, Rhode Island
5126. Burrillville, Town of, Rhode Island
5127. Central Falls, City of, Rhode Island
5128. Coventry, Town of, Rhode Island
5129. Cranston, City of, Rhode Island
5130. Cumberland, Town of, Rhode Island
5131. East Greenwich, Town of, Rhode Island
5132. East Providence, City of, Rhode Island
5133. Glocester, Town of, Rhode Island
5134. Johnston, Town of, Rhode Island
5135. Lincoln, Town of, Rhode Island
5136. Middletown, Town of, Rhode Island
5137. Narragansett, Town of, Rhode Island
5138. Newport, City of, Rhode Island
5139. North Kingstown, Town of, Rhode Island
5140. North Providence, Town of, Rhode Island
5141. North Smithfield, Town of, Rhode Island
5142. Pawtucket, City of, Rhode Island
5143. Portsmouth, Town of, Rhode Island
5144. Providence, City of, Rhode Island
5145. Scituate, Town of, Rhode Island
5146. Smithfield, Town of, Rhode Island
5147. South Kingstown, Town of, Rhode Island
5148. Tiverton, Town of, Rhode Island
5149. Warren, Town of, Rhode Island
5150. Warwick, City of, Rhode Island

5151. West Warwick, Town of, Rhode Island
5152. Westerly, Town of, Rhode Island
5153. Woonsocket, City of, Rhode Island
5154. Abbeville, County of, South Carolina
5155. Aiken, City of, South Carolina
5156. Aiken, County of, South Carolina
5157. Anderson, City of, South Carolina
5158. Anderson, County of, South Carolina
5159. Bamberg, County of, South Carolina
5160. Barnwell, County of, South Carolina
5161. Beaufort, City of, South Carolina
5162. Beaufort, County of, South Carolina
5163. Berkeley, County of, South Carolina
5164. Bluffton, Town of, South Carolina
5165. Calhoun, County of, South Carolina
5166. Cayce, City of, South Carolina
5167. Charleston, City of, South Carolina
5168. Charleston, County of, South Carolina
5169. Cherokee, County of, South Carolina
5170. Chester, County of, South Carolina
5171. Chesterfield, County of, South Carolina
5172. Clarendon, County of, South Carolina
5173. Clemson, City of, South Carolina
5174. Colleton, County of, South Carolina
5175. Columbia, City of, South Carolina
5176. Conway, City of, South Carolina
5177. Darlington, County of, South Carolina
5178. Dillon, County of, South Carolina
5179. Dorchester, County of, South Carolina
5180. Easley, City of, South Carolina
5181. Edgefield, County of, South Carolina
5182. Fairfield, County of, South Carolina
5183. Florence, City of, South Carolina
5184. Florence, County of, South Carolina
5185. Forest Acres, City of, South Carolina
5186. Fort Mill, Town of, South Carolina
5187. Fountain Inn, City of, South Carolina
5188. Gaffney, City of, South Carolina
5189. Georgetown, County of, South Carolina
5190. Goose Creek, City of, South Carolina
5191. Greenville, City of, South Carolina
5192. Greenville, County of, South Carolina
5193. Greenwood, City of, South Carolina
5194. Greenwood, County of, South Carolina
5195. Greer, City of, South Carolina
5196. Hampton, County of, South Carolina
5197. Hanahan, City of, South Carolina
5198. Hilton Head Island, Town of, South Carolina
5199. Horry, County of, South Carolina
5200. Irmo, Town of, South Carolina
5201. James Island, Town of, South Carolina
5202. Jasper, County of, South Carolina
5203. Kershaw, County of, South Carolina
5204. Lancaster, County of, South Carolina
5205. Laurens, County of, South Carolina
5206. Lee, County of, South Carolina
5207. Lexington, County of, South Carolina
5208. Lexington, Town of, South Carolina
5209. Marion, County of, South Carolina
5210. Marlboro, County of, South Carolina
5211. Mauldin, City of, South Carolina
5212. Moncks Corner, Town of, South Carolina
5213. Mount Pleasant, Town of, South Carolina
5214. Myrtle Beach, City of, South Carolina
5215. Newberry, City of, South Carolina
5216. Newberry, County of, South Carolina
5217. North Augusta, City of, South Carolina
5218. North Charleston, City of, South Carolina
5219. North Myrtle Beach, City of, South Carolina
5220. Oconee, County of, South Carolina
5221. Orangeburg, City of, South Carolina

5222. Orangeburg, County of, South Carolina
5223. Pickens, County of, South Carolina
5224. Port Royal, Town of, South Carolina
5225. Richland, County of, South Carolina
5226. Rock Hill, City of, South Carolina
5227. Saluda, County of, South Carolina
5228. Simpsonville, City of, South Carolina
5229. Spartanburg, City of, South Carolina
5230. Spartanburg, County of, South Carolina
5231. Summerville, Town of, South Carolina
5232. Sumter, City of, South Carolina
5233. Sumter, County of, South Carolina
5234. Tega Cay, City of, South Carolina
5235. Union, County of, South Carolina
5236. West Columbia, City of, South Carolina
5237. Williamsburg, County of, South Carolina
5238. York, County of, South Carolina
5239. Aberdeen, City of, South Dakota
5240. Beadle, County of, South Dakota
5241. Box Elder, City of, South Dakota
5242. Brandon, City of, South Dakota
5243. Brookings, City of, South Dakota
5244. Brookings, County of, South Dakota
5245. Brown, County of, South Dakota
5246. Butte, County of, South Dakota
5247. Clay, County of, South Dakota
5248. Codington, County of, South Dakota
5249. Davison, County of, South Dakota
5250. Hughes, County of, South Dakota
5251. Huron, City of, South Dakota
5252. Lake, County of, South Dakota
5253. Lawrence, County of, South Dakota
5254. Lincoln, County of, South Dakota
5255. Meade, County of, South Dakota
5256. Minnehaha, County of, South Dakota
5257. Mitchell, City of, South Dakota
5258. Oglala Lakota, County of, South Dakota
5259. Pennington, County of, South Dakota
5260. Pierre, City of, South Dakota
5261. Rapid City, City of, South Dakota
5262. Roberts, County of, South Dakota
5263. Sioux Falls, City of, South Dakota
5264. Spearfish, City of, South Dakota
5265. Todd, County of, South Dakota
5266. Union, County of, South Dakota
5267. Vermillion, City of, South Dakota
5268. Watertown, City of, South Dakota
5269. Yankton, City of, South Dakota
5270. Yankton, County of, South Dakota
5271. Anderson, County of, Tennessee
5272. Arlington, Town of, Tennessee
5273. Athens, City of, Tennessee
5274. Bartlett, City of, Tennessee
5275. Bedford, County of, Tennessee
5276. Benton, County of, Tennessee
5277. Bledsoe, County of, Tennessee
5278. Blount, County of, Tennessee
5279. Bradley, County of, Tennessee
5280. Brentwood, City of, Tennessee
5281. Bristol, City of, Tennessee
5282. Campbell, County of, Tennessee
5283. Cannon, County of, Tennessee
5284. Carroll, County of, Tennessee
5285. Carter, County of, Tennessee
5286. Chattanooga, City of, Tennessee
5287. Cheatham, County of, Tennessee
5288. Chester, County of, Tennessee
5289. Claiborne, County of, Tennessee
5290. Clarksville, City of, Tennessee
5291. Cleveland, City of, Tennessee
5292. Clinton, City of, Tennessee
5293. Cocke, County of, Tennessee
5294. Coffee, County of, Tennessee
5295. Collegedale, City of, Tennessee
5296. Collierville, Town of, Tennessee
5297. Columbia, City of, Tennessee
5298. Cookeville, City of, Tennessee
5299. Crockett, County of, Tennessee
5300. Crossville, City of, Tennessee
5301. Cumberland, County of, Tennessee
5302. Decatur, County of, Tennessee
5303. DeKalb, County of, Tennessee
5304. Dickson, City of, Tennessee
5305. Dickson, County of, Tennessee

5306. Dyer, County of, Tennessee
5307. Dyersburg, City of, Tennessee
5308. East Ridge, City of, Tennessee
5309. Elizabethton, City of, Tennessee
5310. Farragut, Town of, Tennessee
5311. Fayette, County of, Tennessee
5312. Fentress, County of, Tennessee
5313. Franklin, City of, Tennessee
5314. Franklin, County of, Tennessee
5315. Gallatin, City of, Tennessee
5316. Germantown, City of, Tennessee
5317. Gibson, County of, Tennessee
5318. Giles, County of, Tennessee
5319. Goodlettsville, City of, Tennessee
5320. Grainger, County of, Tennessee
5321. Greene, County of, Tennessee
5322. Greeneville, Town of, Tennessee
5323. Grundy, County of, Tennessee
5324. Hamblen, County of, Tennessee
5325. Hamilton, County of, Tennessee
5326. Hardeman, County of, Tennessee
5327. Hardin, County of, Tennessee
5328. Hartsville/Trousdale, County of, Tennessee
5329. Hawkins, County of, Tennessee
5330. Haywood, County of, Tennessee
5331. Henderson, County of, Tennessee
5332. Hendersonville, City of, Tennessee
5333. Henry, County of, Tennessee
5334. Hickman, County of, Tennessee
5335. Humphreys, County of, Tennessee
5336. Jackson, City of, Tennessee
5337. Jackson, County of, Tennessee
5338. Jefferson, County of, Tennessee
5339. Johnson City, City of, Tennessee
5340. Johnson, County of, Tennessee
5341. Kingsport, City of, Tennessee
5342. Knox, County of, Tennessee
5343. Knoxville, City of, Tennessee
5344. La Vergne, City of, Tennessee
5345. Lakeland, City of, Tennessee
5346. Lauderdale, County of, Tennessee
5347. Lawrence, County of, Tennessee
5348. Lawrenceburg, City of, Tennessee
5349. Lebanon, City of, Tennessee
5350. Lewis, County of, Tennessee
5351. Lewisburg, City of, Tennessee
5352. Lincoln, County of, Tennessee
5353. Loudon, County of, Tennessee
5354. Macon, County of, Tennessee
5355. Madison, County of, Tennessee
5356. Manchester, City of, Tennessee
5357. Marion, County of, Tennessee
5358. Marshall, County of, Tennessee
5359. Martin, City of, Tennessee
5360. Maryville, City of, Tennessee
5361. Maury, County of, Tennessee
5362. McMinn, County of, Tennessee
5363. McMinnville, City of, Tennessee
5364. McNairy, County of, Tennessee
5365. Meigs, County of, Tennessee
5366. Memphis, City of, Tennessee
5367. Millington, City of, Tennessee
5368. Monroe, County of, Tennessee
5369. Montgomery, County of, Tennessee
5370. Morgan, County of, Tennessee
5371. Morristown, City of, Tennessee
5372. Mount Juliet, City of, Tennessee
5373. Murfreesboro, City of, Tennessee
5374. Nashville-Davidson, Metropolitan Government, Tennessee
5375. Nolensville, Town of, Tennessee
5376. Oak Ridge, City of, Tennessee
5377. Obion, County of, Tennessee
5378. Overton, County of, Tennessee
5379. Paris, City of, Tennessee
5380. Polk, County of, Tennessee
5381. Portland, City of, Tennessee
5382. Putnam, County of, Tennessee
5383. Red Bank, City of, Tennessee
5384. Rhea, County of, Tennessee
5385. Roane, County of, Tennessee
5386. Robertson, County of, Tennessee
5387. Rutherford, County of, Tennessee
5388. Scott, County of, Tennessee
5389. Sequatchie, County of, Tennessee
5390. Sevier, County of, Tennessee
5391. Sevierville, City of, Tennessee
5392. Shelby, County of, Tennessee
5393. Shelbyville, City of, Tennessee
5394. Smith, County of, Tennessee
5395. Smyrna, Town of, Tennessee

5396. Soddy-Daisy, City of, Tennessee
5397. Spring Hill, City of, Tennessee
5398. Springfield, City of, Tennessee
5399. Stewart, County of, Tennessee
5400. Sullivan, County of, Tennessee
5401. Sumner, County of, Tennessee
5402. Tipton, County of, Tennessee
5403. Tullahoma, City of, Tennessee
5404. Unicoi, County of, Tennessee
5405. Union City, City of, Tennessee
5406. Union, County of, Tennessee
5407. Warren, County of, Tennessee
5408. Washington, County of, Tennessee
5409. Wayne, County of, Tennessee
5410. Weakley, County of, Tennessee
5411. White, County of, Tennessee
5412. White House, City of, Tennessee
5413. Williamson, County of, Tennessee
5414. Wilson, County of, Tennessee
5415. Abilene, City of, Texas
5416. Addison, Town of, Texas
5417. Alamo, City of, Texas
5418. Alice, City of, Texas
5419. Allen, City of, Texas
5420. Alton, City of, Texas
5421. Alvin, City of, Texas
5422. Amarillo, City of, Texas
5423. Anderson, County of, Texas
5424. Andrews, City of, Texas
5425. Andrews, County of, Texas
5426. Angelina, County of, Texas
5427. Angleton, City of, Texas
5428. Anna, City of, Texas
5429. Aransas, County of, Texas
5430. Arlington, City of, Texas
5431. Atascosa, County of, Texas
5432. Athens, City of, Texas
5433. Austin, City of, Texas
5434. Austin, County of, Texas
5435. Azle, City of, Texas
5436. Balch Springs, City of, Texas
5437. Bandera, County of, Texas
5438. Bastrop, County of, Texas
5439. Bay City, City of, Texas
5440. Baytown, City of, Texas
5441. Beaumont, City of, Texas
5442. Bedford, City of, Texas
5443. Bee, County of, Texas
5444. Beeville, City of, Texas
5445. Bell, County of, Texas
5446. Bellaire, City of, Texas
5447. Bellmead, City of, Texas
5448. Belton, City of, Texas
5449. Benbrook, City of, Texas
5450. Bexar, County of, Texas
5451. Big Spring, City of, Texas
5452. Blanco, County of, Texas
5453. Boerne, City of, Texas
5454. Bonham, City of, Texas
5455. Borger, City of, Texas
5456. Bosque, County of, Texas
5457. Bowie, County of, Texas
5458. Brazoria, County of, Texas
5459. Brazos, County of, Texas
5460. Brenham, City of, Texas
5461. Brown, County of, Texas
5462. Brownsville, City of, Texas
5463. Brownwood, City of, Texas
5464. Bryan, City of, Texas
5465. Buda, City of, Texas
5466. Burkburnett, City of, Texas
5467. Burleson, City of, Texas
5468. Burleson, County of, Texas
5469. Burnet, County of, Texas
5470. Caldwell, County of, Texas
5471. Calhoun, County of, Texas
5472. Callahan, County of, Texas
5473. Cameron, County of, Texas
5474. Camp, County of, Texas
5475. Canyon, City of, Texas
5476. Carrollton, City of, Texas
5477. Cass, County of, Texas
5478. Cedar Hill, City of, Texas
5479. Cedar Park, City of, Texas
5480. Celina, City of, Texas
5481. Chambers, County of, Texas
5482. Cherokee, County of, Texas
5483. Cibolo, City of, Texas
5484. Clay, County of, Texas
5485. Cleburne, City of, Texas
5486. Clute, City of, Texas
5487. College Station, City of, Texas

5488. Colleyville, City of, Texas
5489. Collin, County of, Texas
5490. Colorado, County of, Texas
5491. Comal, County of, Texas
5492. Comanche, County of, Texas
5493. Conroe, City of, Texas
5494. Converse, City of, Texas
5495. Cooke, County of, Texas
5496. Coppell, City of, Texas
5497. Copperas Cove, City of, Texas
5498. Corinth, City of, Texas
5499. Corpus Christi, City of, Texas
5500. Corsicana, City of, Texas
5501. Coryell, County of, Texas
5502. Crowley, City of, Texas
5503. Dallas, City of, Texas
5504. Dallas, County of, Texas
5505. Dawson, County of, Texas
5506. Deaf Smith, County of, Texas
5507. Deer Park, City of, Texas
5508. Del Rio, City of, Texas
5509. Denison, City of, Texas
5510. Denton, City of, Texas
5511. Denton, County of, Texas
5512. DeSoto, City of, Texas
5513. DeWitt, County of, Texas
5514. Dickinson, City of, Texas
5515. Dimmit, County of, Texas
5516. Donna, City of, Texas
5517. Dumas, City of, Texas
5518. Duncanville, City of, Texas
5519. Duval, County of, Texas
5520. Eagle Pass, City of, Texas
5521. Eastland, County of, Texas
5522. Ector, County of, Texas
5523. Edinburg, City of, Texas
5524. El Campo, City of, Texas
5525. El Paso, City of, Texas
5526. El Paso, County of, Texas
5527. Elgin, City of, Texas
5528. Ellis, County of, Texas
5529. Ennis, City of, Texas
5530. Erath, County of, Texas
5531. Euless, City of, Texas
5532. Fair Oaks Ranch, City of, Texas
5533. Falls, County of, Texas
5534. Fannin, County of, Texas
5535. Farmers Branch, City of, Texas
5536. Fate, City of, Texas
5537. Fayette, County of, Texas
5538. Flower Mound, Town of, Texas
5539. Forest Hill, City of, Texas
5540. Forney, City of, Texas
5541. Fort Bend, County of, Texas
5542. Fort Worth, City of, Texas
5543. Franklin, County of, Texas
5544. Fredericksburg, City of, Texas
5545. Freeport, City of, Texas
5546. Freestone, County of, Texas
5547. Friendswood, City of, Texas
5548. Frio, County of, Texas
5549. Frisco, City of, Texas
5550. Fulshear, City of, Texas
5551. Gaines, County of, Texas
5552. Gainesville, City of, Texas
5553. Galena Park, City of, Texas
5554. Galveston, City of, Texas
5555. Galveston, County of, Texas
5556. Garland, City of, Texas
5557. Gatesville, City of, Texas
5558. Georgetown, City of, Texas
5559. Gillespie, County of, Texas
5560. Glenn Heights, City of, Texas
5561. Gonzales, County of, Texas
5562. Granbury, City of, Texas
5563. Grand Prairie, City of, Texas
5564. Grapevine, City of, Texas
5565. Gray, County of, Texas
5566. Grayson, County of, Texas
5567. Greenville, City of, Texas
5568. Gregg, County of, Texas
5569. Grimes, County of, Texas
5570. Groves, City of, Texas
5571. Guadalupe, County of, Texas
5572. Hale, County of, Texas
5573. Haltom City, City of, Texas
5574. Hardin, County of, Texas
5575. Harker Heights, City of, Texas
5576. Harlingen, City of, Texas
5577. Harris, County of, Texas
5578. Harrison, County of, Texas
5579. Hays, County of, Texas

5580. Henderson, City of, Texas
5581. Henderson, County of, Texas
5582. Hereford, City of, Texas
5583. Hewitt, City of, Texas
5584. Hidalgo, City of, Texas
5585. Hidalgo, County of, Texas
5586. Highland, Village of, City of, Texas
5587. Hill, County of, Texas
5588. Hockley, County of, Texas
5589. Hood, County of, Texas
5590. Hopkins, County of, Texas
5591. Horizon City, City of, Texas
5592. Houston, City of, Texas
5593. Houston, County of, Texas
5594. Howard, County of, Texas
5595. Humble, City of, Texas
5596. Hunt, County of, Texas
5597. Huntsville, City of, Texas
5598. Hurst, City of, Texas
5599. Hutchinson, County of, Texas
5600. Hutto, City of, Texas
5601. Ingleside, City of, Texas
5602. Irving, City of, Texas
5603. Jacinto City, City of, Texas
5604. Jackson, County of, Texas
5605. Jacksonville, City of, Texas
5606. Jasper, County of, Texas
5607. Jefferson, County of, Texas
5608. Jim Wells, County of, Texas
5609. Johnson, County of, Texas
5610. Jones, County of, Texas
5611. Karnes, County of, Texas
5612. Katy, City of, Texas
5613. Kaufman, County of, Texas
5614. Keller, City of, Texas
5615. Kendall, County of, Texas
5616. Kerr, County of, Texas
5617. Kerrville, City of, Texas
5618. Kilgore, City of, Texas
5619. Killeen, City of, Texas
5620. Kingsville, City of, Texas
5621. Kleberg, County of, Texas
5622. Kyle, City of, Texas
5623. La Marque, City of, Texas
5624. La Porte, City of, Texas
5625. Lake Jackson, City of, Texas
5626. Lakeway, City of, Texas
5627. Lamar, County of, Texas
5628. Lamb, County of, Texas
5629. Lampasas, County of, Texas
5630. Lancaster, City of, Texas
5631. Laredo, City of, Texas
5632. Lavaca, County of, Texas
5633. League City, City of, Texas
5634. Leander, City of, Texas
5635. Lee, County of, Texas
5636. Leon, County of, Texas
5637. Leon Valley, City of, Texas
5638. Levelland, City of, Texas
5639. Lewisville, City of, Texas
5640. Liberty, County of, Texas
5641. Limestone, County of, Texas
5642. Little Elm, City of, Texas
5643. Live Oak, City of, Texas
5644. Live Oak, County of, Texas
5645. Llano, County of, Texas
5646. Lockhart, City of, Texas
5647. Longview, City of, Texas
5648. Lubbock, City of, Texas
5649. Lubbock, County of, Texas
5650. Lufkin, City of, Texas
5651. Lumberton, City of, Texas
5652. Madison, County of, Texas
5653. Manor, City of, Texas
5654. Mansfield, City of, Texas
5655. Manvel, City of, Texas
5656. Marshall, City of, Texas
5657. Matagorda, County of, Texas
5658. Maverick, County of, Texas
5659. McAllen, City of, Texas
5660. McKinney, City of, Texas
5661. McLennan, County of, Texas
5662. Medina, County of, Texas
5663. Melissa, City of, Texas
5664. Mercedes, City of, Texas
5665. Mesquite, City of, Texas
5666. Midland, City of, Texas
5667. Midland, County of, Texas
5668. Midlothian, City of, Texas
5669. Milam, County of, Texas
5670. Mineral Wells, City of, Texas
5671. Mission, City of, Texas

5672. Missouri City, City of, Texas
5673. Montague, County of, Texas
5674. Montgomery, County of, Texas
5675. Moore, County of, Texas
5676. Morris, County of, Texas
5677. Mount Pleasant, City of, Texas
5678. Murphy, City of, Texas
5679. Nacogdoches, City of, Texas
5680. Nacogdoches, County of, Texas
5681. Navarro, County of, Texas
5682. Nederland, City of, Texas
5683. New Braunfels, City of, Texas
5684. Newton, County of, Texas
5685. Nolan, County of, Texas
5686. North Richland Hills, City of, Texas
5687. Nueces, County of, Texas
5688. Odessa, City of, Texas
5689. Orange, City of, Texas
5690. Orange, County of, Texas
5691. Palestine, City of, Texas
5692. Palo Pinto, County of, Texas
5693. Pampa, City of, Texas
5694. Panola, County of, Texas
5695. Paris, City of, Texas
5696. Parker, County of, Texas
5697. Pasadena, City of, Texas
5698. Pearland, City of, Texas
5699. Pearsall, City of, Texas
5700. Pecos, City of, Texas
5701. Pecos, County of, Texas
5702. Pflugerville, City of, Texas
5703. Pharr, City of, Texas
5704. Plainview, City of, Texas
5705. Plano, City of, Texas
5706. Pleasanton, City of, Texas
5707. Polk, County of, Texas
5708. Port Arthur, City of, Texas
5709. Port Lavaca, City of, Texas
5710. Port Neches, City of, Texas
5711. Portland, City of, Texas
5712. Potter, County of, Texas
5713. Princeton, City of, Texas
5714. Prosper, Town of, Texas
5715. Rains, County of, Texas
5716. Randall, County of, Texas
5717. Raymondville, City of, Texas
5718. Red Oak, City of, Texas
5719. Red River, County of, Texas
5720. Reeves, County of, Texas
5721. Richardson, City of, Texas
5722. Richmond, City of, Texas
5723. Rio Grande City, City of, Texas
5724. Robertson, County of, Texas
5725. Robinson, City of, Texas
5726. Robstown, City of, Texas
5727. Rockport, City of, Texas
5728. Rockwall, City of, Texas
5729. Rockwall, County of, Texas
5730. Roma, City of, Texas
5731. Rosenberg, City of, Texas
5732. Round Rock, City of, Texas
5733. Rowlett, City of, Texas
5734. Royse City, City of, Texas
5735. Runnels, County of, Texas
5736. Rusk, County of, Texas
5737. Sabine, County of, Texas
5738. Sachse, City of, Texas
5739. Saginaw, City of, Texas
5740. San Angelo, City of, Texas
5741. San Antonio, City of, Texas
5742. San Benito, City of, Texas
5743. San Jacinto, County of, Texas
5744. San Juan, City of, Texas
5745. San Marcos, City of, Texas
5746. San Patricio, County of, Texas
5747. Santa Fe, City of, Texas
5748. Schertz, City of, Texas
5749. Scurry, County of, Texas
5750. Seabrook, City of, Texas
5751. Seagoville, City of, Texas
5752. Seguin, City of, Texas
5753. Selma, City of, Texas
5754. Shelby, County of, Texas
5755. Sherman, City of, Texas
5756. Smith, County of, Texas
5757. Snyder, City of, Texas
5758. Socorro, City of, Texas
5759. South Houston, City of, Texas
5760. Southlake, City of, Texas
5761. Stafford, City of, Texas
5762. Starr, County of, Texas
5763. Stephenville, City of, Texas

5764. Sugar Land, City of, Texas
5765. Sulphur Springs, City of, Texas
5766. Sweetwater, City of, Texas
5767. Tarrant, County of, Texas
5768. Taylor, City of, Texas
5769. Taylor, County of, Texas
5770. Temple, City of, Texas
5771. Terrell, City of, Texas
5772. Terry, County of, Texas
5773. Texarkana, City of, Texas
5774. Texas City, City of, Texas
5775. The Colony, City of, Texas
5776. Titus, County of, Texas
5777. Tom Green, County of, Texas
5778. Tomball, City of, Texas
5779. Travis, County of, Texas
5780. Trinity, County of, Texas
5781. Trophy Club, Town of, Texas
5782. Tyler, City of, Texas
5783. Tyler, County of, Texas
5784. Universal City, City of, Texas
5785. University Park, City of, Texas
5786. Upshur, County of, Texas
5787. Uvalde, City of, Texas
5788. Uvalde, County of, Texas
5789. Val Verde, County of, Texas
5790. Van Zandt, County of, Texas
5791. Vernon, City of, Texas
5792. Victoria, City of, Texas
5793. Victoria, County of, Texas
5794. Vidor, City of, Texas
5795. Waco, City of, Texas
5796. Walker, County of, Texas
5797. Waller, County of, Texas
5798. Ward, County of, Texas
5799. Washington, County of, Texas
5800. Watauga, City of, Texas
5801. Waxahachie, City of, Texas
5802. Weatherford, City of, Texas
5803. Webb, County of, Texas
5804. Webster, City of, Texas
5805. Weslaco, City of, Texas
5806. West University Place, City of, Texas
5807. Wharton, County of, Texas
5808. White Settlement, City of, Texas
5809. Wichita, County of, Texas
5810. Wichita Falls, City of, Texas
5811. Wilbarger, County of, Texas
5812. Willacy, County of, Texas
5813. Williamson, County of, Texas
5814. Wilson, County of, Texas
5815. Wise, County of, Texas
5816. Wood, County of, Texas
5817. Wylie, City of, Texas
5818. Young, County of, Texas
5819. Zapata, County of, Texas
5820. Zavala, County of, Texas
5821. Alpine, City of, Utah
5822. American Fork, City of, Utah
5823. Bluffdale, City of, Utah
5824. Bountiful, City of, Utah
5825. Box Elder, County of, Utah
5826. Brigham City, City of, Utah
5827. Cache, County of, Utah
5828. Carbon, County of, Utah
5829. Cedar City, City of, Utah
5830. Cedar Hills, City of, Utah
5831. Centerville, City of, Utah
5832. Clearfield, City of, Utah
5833. Clinton, City of, Utah
5834. Cottonwood Heights, City of, Utah
5835. Davis, County of, Utah
5836. Draper, City of, Utah
5837. Duchesne, County of, Utah
5838. Eagle Mountain, City of, Utah
5839. Emery, County of, Utah
5840. Farmington, City of, Utah
5841. Grantsville, City of, Utah
5842. Heber, City of, Utah
5843. Herriman, City of, Utah
5844. Highland, City of, Utah
5845. Holladay, City of, Utah
5846. Hurricane, City of, Utah
5847. Iron, County of, Utah
5848. Juab, County of, Utah
5849. Kaysville, City of, Utah
5850. Kearns metro, Township of, Utah
5851. Layton, City of, Utah
5852. Lehi, City of, Utah
5853. Lindon, City of, Utah
5854. Logan, City of, Utah

5855. Magna metro, Township of, Utah
5856. Mapleton, City of, Utah
5857. Midvale, City of, Utah
5858. Millard, County of, Utah
5859. Millcreek, City of, Utah
5860. Morgan, County of, Utah
5861. Murray, City of, Utah
5862. North Logan, City of, Utah
5863. North Ogden, City of, Utah
5864. North Salt Lake, City of, Utah
5865. Ogden, City of, Utah
5866. Orem, City of, Utah
5867. Payson, City of, Utah
5868. Pleasant Grove, City of, Utah
5869. Pleasant View, City of, Utah
5870. Provo, City of, Utah
5871. Riverton, City of, Utah
5872. Roy, City of, Utah
5873. Salt Lake City, City of, Utah
5874. Salt Lake, County of, Utah
5875. San Juan, County of, Utah
5876. Sandy, City of, Utah
5877. Sanpete, County of, Utah
5878. Santaquin, City of, Utah
5879. Saratoga Springs, City of, Utah
5880. Sevier, County of, Utah
5881. Smithfield, City of, Utah
5882. South Jordan, City of, Utah
5883. South Ogden, City of, Utah
5884. South Salt Lake, City of, Utah
5885. Spanish Fork, City of, Utah
5886. Springville, City of, Utah
5887. St. George, City of, Utah
5888. Summit, County of, Utah
5889. Syracuse, City of, Utah
5890. Taylorsville, City of, Utah
5891. Tooele, City of, Utah
5892. Tooele, County of, Utah
5893. Uintah, County of, Utah
5894. Utah, County of, Utah
5895. Vernal, City of, Utah
5896. Vineyard, Town of, Utah
5897. Wasatch, County of, Utah
5898. Washington, City of, Utah
5899. Washington, County of, Utah
5900. Weber, County of, Utah
5901. West Haven, City of, Utah
5902. West Jordan, City of, Utah
5903. West Point, City of, Utah
5904. West Valley City, City of, Utah
5905. Woods Cross, City of, Utah
5906. Addison, County of, Vermont
5907. Bennington, County of, Vermont
5908. Bennington, Town of, Vermont
5909. Brattleboro, Town of, Vermont
5910. Burlington, City of, Vermont
5911. Caledonia, County of, Vermont
5912. Chittenden, County of, Vermont
5913. Colchester, Town of, Vermont
5914. Essex Junction, Village of, Vermont
5915. Essex, Town of, Vermont
5916. Franklin, County of, Vermont
5917. Lamoille, County of, Vermont
5918. Milton, Town of, Vermont
5919. Orange, County of, Vermont
5920. Orleans, County of, Vermont
5921. Rutland, City of, Vermont
5922. Rutland, County of, Vermont
5923. South Burlington, City of, Vermont
5924. Washington, County of, Vermont
5925. Williston, Town of, Vermont
5926. Windham, County of, Vermont
5927. Windsor, County of, Vermont
5928. Accomack, County of, Virginia
5929. Albemarle, County of, Virginia
5930. Alexandria, City of, Virginia
5931. Alleghany, County of, Virginia
5932. Amelia, County of, Virginia
5933. Amherst, County of, Virginia
5934. Appomattox, County of, Virginia
5935. Arlington, County of, Virginia
5936. Augusta, County of, Virginia
5937. Bedford, County of, Virginia
5938. Blacksburg, Town of, Virginia
5939. Botetourt, County of, Virginia
5940. Bristol, City of, Virginia
5941. Brunswick, County of, Virginia
5942. Buchanan, County of, Virginia
5943. Buckingham, County of, Virginia
5944. Campbell, County of, Virginia
5945. Caroline, County of, Virginia
5946. Carroll, County of, Virginia

5947. Charlotte, County of, Virginia
5948. Charlottesville, City of, Virginia
5949. Chesapeake, City of, Virginia
5950. Chesterfield, County of, Virginia
5951. Christiansburg, Town of, Virginia
5952. Clarke, County of, Virginia
5953. Colonial Heights, City of, Virginia
5954. Culpeper, County of, Virginia
5955. Culpeper, Town of, Virginia
5956. Danville, City of, Virginia
5957. Dickenson, County of, Virginia
5958. Dinwiddie, County of, Virginia
5959. Essex, County of, Virginia
5960. Fairfax, City of, Virginia
5961. Fairfax, County of, Virginia
5962. Falls Church, City of, Virginia
5963. Fauquier, County of, Virginia
5964. Floyd, County of, Virginia
5965. Fluvanna, County of, Virginia
5966. Franklin, County of, Virginia
5967. Frederick, County of, Virginia
5968. Fredericksburg, City of, Virginia
5969. Front Royal, Town of, Virginia
5970. Giles, County of, Virginia
5971. Gloucester, County of, Virginia
5972. Goochland, County of, Virginia
5973. Grayson, County of, Virginia
5974. Greene, County of, Virginia
5975. Greensville, County of, Virginia
5976. Halifax, County of, Virginia
5977. Hampton, City of, Virginia
5978. Hanover, County of, Virginia
5979. Harrisonburg, City of, Virginia
5980. Henrico, County of, Virginia
5981. Henry, County of, Virginia
5982. Herndon, Town of, Virginia
5983. Hopewell, City of, Virginia
5984. Isle of Wight, County of, Virginia
5985. James City, County of, Virginia
5986. King George, County of, Virginia
5987. King William, County of, Virginia
5988. Lancaster, County of, Virginia
5989. Lee, County of, Virginia
5990. Leesburg, Town of, Virginia
5991. Loudoun, County of, Virginia
5992. Louisa, County of, Virginia
5993. Lunenburg, County of, Virginia
5994. Lynchburg, City of, Virginia
5995. Madison, County of, Virginia
5996. Manassas, City of, Virginia
5997. Manassas Park, City of, Virginia
5998. Martinsville, City of, Virginia
5999. Mecklenburg, County of, Virginia
6000. Middlesex, County of, Virginia
6001. Montgomery, County of, Virginia
6002. Nelson, County of, Virginia
6003. New Kent, County of, Virginia
6004. Newport News, City of, Virginia
6005. Norfolk, City of, Virginia
6006. Northampton, County of, Virginia
6007. Northumberland, County of, Virginia
6008. Nottoway, County of, Virginia
6009. Orange, County of, Virginia
6010. Page, County of, Virginia
6011. Patrick, County of, Virginia
6012. Petersburg, City of, Virginia
6013. Pittsylvania, County of, Virginia
6014. Poquoson, City of, Virginia
6015. Portsmouth, City of, Virginia
6016. Powhatan, County of, Virginia
6017. Prince Edward, County of, Virginia
6018. Prince George, County of, Virginia
6019. Prince William, County of, Virginia
6020. Pulaski, County of, Virginia
6021. Purcellville, Town of, Virginia
6022. Radford, City of, Virginia
6023. Richmond, City of, Virginia
6024. Roanoke, City of, Virginia
6025. Roanoke, County of, Virginia
6026. Rockbridge, County of, Virginia
6027. Rockingham, County of, Virginia
6028. Russell, County of, Virginia
6029. Salem, City of, Virginia
6030. Scott, County of, Virginia
6031. Shenandoah, County of, Virginia
6032. Smyth, County of, Virginia
6033. Southampton, County of, Virginia
6034. Spotsylvania, County of, Virginia
6035. Stafford, County of, Virginia
6036. Staunton, City of, Virginia
6037. Suffolk, City of, Virginia
6038. Sussex, County of, Virginia

6039. Tazewell, County of, Virginia
6040. Vienna, Town of, Virginia
6041. Virginia Beach, City of, Virginia
6042. Warren, County of, Virginia
6043. Warrenton, Town of, Virginia
6044. Washington, County of, Virginia
6045. Waynesboro, City of, Virginia
6046. Westmoreland, County of, Virginia
6047. Williamsburg, City of, Virginia
6048. Winchester, City of, Virginia
6049. Wise, County of, Virginia
6050. Wythe, County of, Virginia
6051. York, County of, Virginia
6052. Aberdeen, City of, Washington
6053. Adams, County of, Washington
6054. Anacortes, City of, Washington
6055. Arlington, City of, Washington
6056. Asotin, County of, Washington
6057. Auburn, City of, Washington
6058. Bainbridge Island, City of, Washington
6059. Battle Ground, City of, Washington
6060. Bellevue, City of, Washington
6061. Bellingham, City of, Washington
6062. Benton, County of, Washington
6063. Bonney Lake, City of, Washington
6064. Bothell, City of, Washington
6065. Bremerton, City of, Washington
6066. Burien, City of, Washington
6067. Camas, City of, Washington
6068. Centralia, City of, Washington
6069. Chelan, County of, Washington
6070. Cheney, City of, Washington
6071. Clallam, County of, Washington
6072. Clark, County of, Washington
6073. Covington, City of, Washington
6074. Cowlitz, County of, Washington
6075. Des Moines, City of, Washington
6076. Douglas, County of, Washington
6077. East Wenatchee, City of, Washington
6078. Edgewood, City of, Washington
6079. Edmonds, City of, Washington
6080. Ellensburg, City of, Washington
6081. Enumclaw, City of, Washington
6082. Everett, City of, Washington
6083. Federal Way, City of, Washington
6084. Ferndale, City of, Washington
6085. Fife, City of, Washington
6086. Franklin, County of, Washington
6087. Gig Harbor, City of, Washington
6088. Grandview, City of, Washington
6089. Grant, County of, Washington
6090. Grays Harbor, County of, Washington
6091. Island, County of, Washington
6092. Issaquah, City of, Washington
6093. Jefferson, County of, Washington
6094. Kelso, City of, Washington
6095. Kenmore, City of, Washington
6096. Kennewick, City of, Washington
6097. Kent, City of, Washington
6098. King, County of, Washington
6099. Kirkland, City of, Washington
6100. Kitsap, County of, Washington
6101. Kittitas, County of, Washington
6102. Klickitat, County of, Washington
6103. Lacey, City of, Washington
6104. Lake Forest Park, City of, Washington
6105. Lake Stevens, City of, Washington
6106. Lakewood, City of, Washington
6107. Lewis, County of, Washington
6108. Liberty Lake, City of, Washington
6109. Lincoln, County of, Washington
6110. Longview, City of, Washington
6111. Lynden, City of, Washington
6112. Lynnwood, City of, Washington
6113. Maple Valley, City of, Washington
6114. Marysville, City of, Washington
6115. Mason, County of, Washington
6116. Mercer Island, City of, Washington
6117. Mill Creek, City of, Washington
6118. Monroe, City of, Washington
6119. Moses Lake, City of, Washington
6120. Mount Vernon, City of, Washington
6121. Mountlake Terrace, City of, Washington
6122. Mukilteo, City of, Washington
6123. Newcastle, City of, Washington
6124. Oak Harbor, City of, Washington
6125. Okanogan, County of, Washington

6126. Olympia, City of, Washington
6127. Pacific, County of, Washington
6128. Pasco, City of, Washington
6129. Pend Oreille, County of, Washington
6130. Pierce, County of, Washington
6131. Port Angeles, City of, Washington
6132. Port Orchard, City of, Washington
6133. Poulsbo, City of, Washington
6134. Pullman, City of, Washington
6135. Puyallup, City of, Washington
6136. Redmond, City of, Washington
6137. Renton, City of, Washington
6138. Richland, City of, Washington
6139. Sammamish, City of, Washington
6140. San Juan, County of, Washington
6141. SeaTac, City of, Washington
6142. Seattle, City of, Washington
6143. Sedro-Woolley, City of, Washington
6144. Shelton, City of, Washington
6145. Shoreline, City of, Washington
6146. Skagit, County of, Washington
6147. Skamania, County of, Washington
6148. Snohomish, City of, Washington
6149. Snohomish, County of, Washington
6150. Snoqualmie, City of, Washington
6151. Spokane, City of, Washington
6152. Spokane, County of, Washington
6153. Spokane Valley, City of, Washington
6154. Stevens, County of, Washington
6155. Sumner, City of, Washington
6156. Sunnyside, City of, Washington
6157. Tacoma, City of, Washington
6158. Thurston, County of, Washington
6159. Tukwila, City of, Washington
6160. Tumwater, City of, Washington
6161. University Place, City of, Washington
6162. Vancouver, City of, Washington
6163. Walla Walla, City of, Washington
6164. Walla Walla, County of, Washington
6165. Washougal, City of, Washington
6166. Wenatchee, City of, Washington
6167. West Richland, City of, Washington
6168. Whatcom, County of, Washington
6169. Whitman, County of, Washington
6170. Woodinville, City of, Washington
6171. Yakima, City of, Washington
6172. Yakima, County of, Washington
6173. Adams, County of, Wisconsin
6174. Allouez, Village of, Wisconsin
6175. Appleton, City of, Wisconsin
6176. Ashland, County of, Wisconsin
6177. Ashwaubenon, Village of, Wisconsin
6178. Baraboo, City of, Wisconsin
6179. Barron, County of, Wisconsin
6180. Bayfield, County of, Wisconsin
6181. Beaver Dam, City of, Wisconsin
6182. Bellevue, Village of, Wisconsin
6183. Beloit, City of, Wisconsin
6184. Brookfield, City of, Wisconsin
6185. Brown, County of, Wisconsin
6186. Brown Deer, Village of, Wisconsin
6187. Buffalo, County of, Wisconsin
6188. Burlington, City of, Wisconsin
6189. Burnett, County of, Wisconsin
6190. Caledonia, Village of, Wisconsin
6191. Calumet, County of, Wisconsin
6192. Cedarburg, City of, Wisconsin
6193. Chippewa, County of, Wisconsin
6194. Chippewa Falls, City of, Wisconsin
6195. Clark, County of, Wisconsin
6196. Columbia, County of, Wisconsin
6197. Crawford, County of, Wisconsin
6198. Cudahy, City of, Wisconsin
6199. Dane, County of, Wisconsin
6200. De Pere, City of, Wisconsin
6201. DeForest, Village of, Wisconsin
6202. Dodge, County of, Wisconsin
6203. Door, County of, Wisconsin
6204. Douglas, County of, Wisconsin
6205. Dunn, County of, Wisconsin
6206. Eau Claire, City of, Wisconsin
6207. Eau Claire, County of, Wisconsin
6208. Elkhorn, City of, Wisconsin
6209. Fitchburg, City of, Wisconsin
6210. Fond du Lac, City of, Wisconsin
6211. Fond du Lac, County of, Wisconsin
6212. Fort Atkinson, City of, Wisconsin
6213. Fox Crossing, Village of, Wisconsin
6214. Franklin, City of, Wisconsin
6215. Germantown, Village of, Wisconsin
6216. Glendale, City of, Wisconsin

6217. Grafton, Village of, Wisconsin
6218. Grand Chute, Town of, Wisconsin
6219. Grant, County of, Wisconsin
6220. Green Bay, City of, Wisconsin
6221. Green, County of, Wisconsin
6222. Green Lake, County of, Wisconsin
6223. Greendale, Village of, Wisconsin
6224. Greenfield, City of, Wisconsin
6225. Greenville, Town of, Wisconsin
6226. Harrison, Village of, Wisconsin
6227. Hartford, City of, Wisconsin
6228. Hobart, Village of, Wisconsin
6229. Holmen, Village of, Wisconsin
6230. Howard, Village of, Wisconsin
6231. Hudson, City of, Wisconsin
6232. Iowa, County of, Wisconsin
6233. Jackson, County of, Wisconsin
6234. Janesville, City of, Wisconsin
6235. Jefferson, County of, Wisconsin
6236. Juneau, County of, Wisconsin
6237. Kaukauna, City of, Wisconsin
6238. Kenosha, City of, Wisconsin
6239. Kenosha, County of, Wisconsin
6240. Kewaunee, County of, Wisconsin
6241. La Crosse, City of, Wisconsin
6242. La Crosse, County of, Wisconsin
6243. Lafayette, County of, Wisconsin
6244. Langlade, County of, Wisconsin
6245. Lincoln, County of, Wisconsin
6246. Lisbon, Town of, Wisconsin
6247. Little Chute, Village of, Wisconsin
6248. Madison, City of, Wisconsin
6249. Manitowoc, City of, Wisconsin
6250. Manitowoc, County of, Wisconsin
6251. Marathon, County of, Wisconsin
6252. Marinette, City of, Wisconsin
6253. Marinette, County of, Wisconsin
6254. Marquette, County of, Wisconsin
6255. Marshfield, City of, Wisconsin
6256. Menasha, City of, Wisconsin
6257. Menomonee Falls, Village of, Wisconsin
6258. Menomonie, City of, Wisconsin
6259. Mequon, City of, Wisconsin
6260. Middleton, City of, Wisconsin
6261. Milwaukee, City of, Wisconsin
6262. Milwaukee, County of, Wisconsin
6263. Monroe, City of, Wisconsin
6264. Monroe, County of, Wisconsin
6265. Mount Pleasant, Village of, Wisconsin
6266. Muskego, City of, Wisconsin
6267. Neenah, City of, Wisconsin
6268. New Berlin, City of, Wisconsin
6269. Oak Creek, City of, Wisconsin
6270. Oconomowoc, City of, Wisconsin
6271. Oconto, County of, Wisconsin
6272. Onalaska, City of, Wisconsin
6273. Oneida, County of, Wisconsin
6274. Oregon, Village of, Wisconsin
6275. Oshkosh, City of, Wisconsin
6276. Outagamie, County of, Wisconsin
6277. Ozaukee, County of, Wisconsin
6278. Pewaukee, City of, Wisconsin
6279. Pierce, County of, Wisconsin
6280. Platteville, City of, Wisconsin
6281. Pleasant Prairie, Village of, Wisconsin
6282. Plover, Village of, Wisconsin
6283. Polk, County of, Wisconsin
6284. Port Washington, City of, Wisconsin
6285. Portage, City of, Wisconsin
6286. Portage, County of, Wisconsin
6287. Price, County of, Wisconsin
6288. Racine, City of, Wisconsin
6289. Racine, County of, Wisconsin
6290. Richfield, Village of, Wisconsin
6291. Richland, County of, Wisconsin
6292. River Falls, City of, Wisconsin
6293. Rock, County of, Wisconsin
6294. Rusk, County of, Wisconsin
6295. Salem Lakes, Village of, Wisconsin
6296. Sauk, County of, Wisconsin
6297. Sawyer, County of, Wisconsin
6298. Shawano, County of, Wisconsin
6299. Sheboygan, City of, Wisconsin
6300. Sheboygan, County of, Wisconsin
6301. Shorewood, Village of, Wisconsin
6302. South Milwaukee, City of, Wisconsin
6303. St. Croix, County of, Wisconsin
6304. Stevens Point, City of, Wisconsin

6305. Stoughton, City of, Wisconsin
6306. Suamico, Village of, Wisconsin
6307. Sun Prairie, City of, Wisconsin
6308. Superior, City of, Wisconsin
6309. Sussex, Village of, Wisconsin
6310. Taylor, County of, Wisconsin
6311. Trempealeau, County of, Wisconsin
6312. Two Rivers, City of, Wisconsin
6313. Vernon, County of, Wisconsin
6314. Verona, City of, Wisconsin
6315. Vilas, County of, Wisconsin
6316. Walworth, County of, Wisconsin
6317. Washburn, County of, Wisconsin
6318. Washington, County of, Wisconsin
6319. Watertown, City of, Wisconsin
6320. Waukesha, City of, Wisconsin
6321. Waukesha, County of, Wisconsin
6322. Waunakee, Village of, Wisconsin
6323. Waupaca, County of, Wisconsin
6324. Waupun, City of, Wisconsin
6325. Wausau, City of, Wisconsin
6326. Waushara, County of, Wisconsin
6327. Wauwatosa, City of, Wisconsin
6328. West Allis, City of, Wisconsin
6329. West Bend, City of, Wisconsin
6330. Weston, Village of, Wisconsin
6331. Whitefish Bay, Village of, Wisconsin
6332. Whitewater, City of, Wisconsin
6333. Winnebago, County of, Wisconsin
6334. Wisconsin Rapids, City of, Wisconsin
6335. Wood, County of, Wisconsin
6336. Albany, County of, Wyoming
6337. Big Horn, County of, Wyoming
6338. Campbell, County of, Wyoming
6339. Carbon, County of, Wyoming
6340. Casper, City of, Wyoming
6341. Cheyenne, City of, Wyoming
6342. Converse, County of, Wyoming
6343. Evanston, City of, Wyoming
6344. Fremont, County of, Wyoming
6345. Gillette, City of, Wyoming
6346. Goshen, County of, Wyoming
6347. Green River, City of, Wyoming
6348. Jackson, Town of, Wyoming
6349. Laramie, City of, Wyoming
6350. Laramie, County of, Wyoming
6351. Lincoln, County of, Wyoming
6352. Natrona, County of, Wyoming
6353. Park, County of, Wyoming
6354. Riverton, City of, Wyoming
6355. Rock Springs, City of, Wyoming
6356. Sheridan, City of, Wyoming
6357. Sheridan, County of, Wyoming
6358. Sweetwater, County of, Wyoming
6359. Teton, County of, Wyoming
6360. Uinta, County of, Wyoming

EXHIBIT J

Illustrative List of Released Entities

1. CVS Health Corporation
2. CVS Caremark Corporation
3. CVS/Caremark Corporation
4. CVS Corporation
5. CVS Pharmacy, Inc.
6. CVS, Inc.
7. CVS Distribution, Inc.
8. Mark Steven Service Merchandisers, Inc.
9. Mark Steven, Inc.
10. @Credentials Inc.
11. 103rd Avenue CVS, L.L.C.
12. 10th Ave Minneapolis CVS, L.L.C.
13. 115th Chicago CVS, L.L.C.
14. 131st Street CVS, L.L.C.
15. 1500 Lexington CVS, L.L.C.
16. 167th North Miami CVS, L.L.C.
17. 175 West Road Ellington, Inc.
18. 186th Miami CVS, L.L.C.
19. 18th and L Street CVS, Inc.
20. 25th Street CVS, Inc.
21. 26th Kostner CVS, L.L.C.
22. 27th Avenue CVS, Inc.
23. 295 Westport Ave. CVS, Inc.
24. 34th Street CVS, Inc.
25. 37th Minneapolis CVS, L.L.C.
26. 38th Street CVS, Inc.
27. 39th Independence CVS, Inc.
28. 419 West Main Street Pharmacy, Inc.
29. 41st Street CVS, Inc.
30. 42nd Minneapolis CVS, L.L.C.
31. 49th Hialeah CVS, L.L.C.
32. 4th Street NEC CVS, L.L.C.
33. 50th Street CVS, L.L.C.
34. 54th Western Chicago CVS, L.L.C.
35. 587 Boylston CVS, Inc.
36. 59th Ashland CVS, L.L.C.
37. 5th Street Perkasie CVS, Inc.
38. 6th NEC CVS, L.L.C.
39. 7 Mile CVS, Inc.
40. 711 Maple Road, Inc.
41. 74th Miami CVS, L.L.C.
42. 76th Stony Chicago CVS, L.L.C.
43. 79th Street CVS, L.L.C.
44. 7th Phoenix CVS, L.L.C.
45. 85th Ave CVS, L.L.C.
46. 87th Avenue CVS, L.L.C.
47. 8th Street CVS, L.L.C.
48. 976 MIAMI RE, L.L.C.
49. Aberdeen CVS, Inc.
50. Abington CVS, Inc.
51. Abrams Arlington CVS, L.P.
52. Absecon CVS, Inc.
53. Accendo Holding Company
54. Accendo Holding Company
55. Accendo Insurance Company
56. Accordant Common, L.L.C.
57. Accordant Health Services, Inc.
58. Accordant Health Services, L.L.C.
59. Accordant Integrated Services, Inc.
60. Accuscript MO, Inc.
61. Acme Hospital and Life Insurance Company
62. ACS ACQCO CORP.
63. ACS Primary Care Physicians-Midwest, S.C.
64. ACS Primary Care Physicians-New England, P.C.
65. ACS Primary Care Physicians-Northeast, P.C.
66. ACS Primary Care Physicians-Southeast, P.C.
67. ACS Primary Care Physicians-Southwest, P.A.
68. Active Health Management, Inc.

69. Acton Plaza CVS, Inc.
70. Acton Woods CVS, Inc.
71. Acushnet CVS, Inc.
72. Acute Care Medical Management, Inc.
73. Acute Care Physician's Network, Inc.
74. Acute Care Specialists, Inc.
75. Acute General Medical PLLC
76. Adams Drug Co. of Edgewood, Inc.
77. Addison Chicago CVS, L.L.C.
78. ADI Realty, Inc.
79. Admar, Inc.
80. Adminco, Inc.
81. Administrative Enterprises, Inc.
82. Admiral Douglas CVS, Inc.
83. ADS Health Management, Inc.
84. Advance Funding Corporation
85. Advance Paradigm, Inc.
86. Advanced Care Scripts, Inc.
87. Advanced Healthcare Distributors, L.L.C.
88. AdvancePCS
89. AdvancePCS Health Systems, LLC
90. AdvancePCS Health, LLC
91. AdvancePCS Health, LP
92. AdvancePCS Holding, L.L.C.
93. AdvancePCS Mail Services of Birmingham, Inc.
94. AdvancePCS Research, LLC
95. AdvancePCS SpecialtyRx, LLC
96. AdvancePCS, L.P.
97. AdvancePriority Specialty Rx, L.L.C.
98. AdvanceRx.com, L.L.C.
99. AdvanceRx.com, L.P.
100. Advantus Inc.
101. Advent Financial Services, Inc.
102. Advent Investments, Inc.
103. ADVP Consolidation, L.L.C.
104. ADVP Management, L.P.
105. ADVP Operations, L.P.
106. AE Eleven, Incorporation
107. AE Fifteen, Incorporated
108. AE Fourteen, Incorporated
109. AE Housing Corp.
110. Aelan Inc.
111. AET Health Care Plan of California, Inc.
112. AET Health Care Plan of Georgia, Inc.
113. AET Health Care Plan, Inc.
114. Aetna (Beijing) Enterprise Management Services Co., Ltd
115. Aetna (Shanghai) Enterprise Services Co., Ltd.
116. Aetna ACO Holdings Inc.
117. Aetna Affordable Housing, Inc.
118. Aetna Asset Advisors, LLC
119. Aetna Behavioral Health of Delaware, LLC
120. Aetna Behavioral Health, LLC
121. Aetna Better Health Inc.
122. Aetna Better Health Inc. (CT)
123. Aetna Better Health Inc. (GA)
124. Aetna Better Health Inc. (IL)
125. Aetna Better Health Inc. (NJ)
126. Aetna Better Health Inc. (NY)
127. Aetna Better Health Inc. (OH)
128. Aetna Better Health Inc. (PA)
129. Aetna Better Health LLC
130. Aetna Better Health of California Inc.
131. Aetna Better Health of Florida Inc.
132. Aetna Better Health of Illinois Inc.
133. Aetna Better Health of Indiana Inc.
134. Aetna Better Health of Iowa Inc.
135. Aetna Better Health of Kansas Inc.
136. Aetna Better Health of Kentucky Insurance Company
137. Aetna Better Health of Michigan Inc.
138. Aetna Better Health of Missouri LLC
139. Aetna Better Health of Nevada Inc.

140. Aetna Better Health of North Carolina Inc.
141. Aetna Better Health of Oklahoma Inc.
142. Aetna Better Health of Tennessee Inc.
143. Aetna Better Health of Texas Inc.
144. Aetna Better Health of Washington, Inc.
145. Aetna Better Health Premier Plan MMAI Inc.
146. Aetna Better Health, Inc. (LA)
147. Aetna Business Resources, Inc.
148. Aetna Capital Management, LLC
149. Aetna Card Solutions, LLC
150. Aetna Casualty Company
151. Aetna Corporate Services LLC
152. Aetna Criterion Communications, Inc.
153. Aetna Dental Care for Groups, Inc.
154. Aetna Dental Care of California, Inc.
155. Aetna Dental Care of Kentucky, Inc.
156. Aetna Dental Care of New Jersey, Inc.
157. Aetna Dental Care of Texas, Inc.
158. Aetna Dental Inc.
159. Aetna Dental Inc. (NJ)
160. Aetna Dental Inc. (TX)
161. Aetna Dental Maintenance Organization, Inc.
162. Aetna Dental of California Inc.
163. Aetna Familly Plans of Georgia Inc.
164. Aetna Family Plans of Ohio Inc.
165. Aetna Family Plans of Pennsylvania Inc.
166. Aetna Financial Holdings, LLC
167. Aetna Florida Inc.
168. Aetna Foundation, Inc.
169. Aetna Global Benefits (Asia Pacific) Limited
170. Aetna Global Benefits (Bahamas) Limited
171. Aetna Global Benefits (Bermuda) Limited
172. Aetna Global Benefits (Europe) Limited
173. Aetna Global Benefits (Middle East) LLC
174. Aetna Global Benefits (Middle East) LLC - Abu Dhabi Branch
175. Aetna Global Benefits (Singapore) PTE. LTD.
176. Aetna Global Benefits (UK) Limited
177. Aetna Global Benefits Administrators Inc.
178. Aetna Global Benefits Limited
179. Aetna Global Holdings Limited
180. Aetna Government Health Plans, Inc.
181. Aetna Government Health Plans, LLC
182. Aetna Health Administrators, LLC
183. Aetna Health and Life Insurance Company
184. Aetna Health Finance, Inc.
185. Aetna Health Holdings, LLC
186. Aetna Health Inc.
187. Aetna Health Inc. (CT)
188. Aetna Health Inc. (DE)
189. Aetna Health Inc. (FL)
190. Aetna Health Inc. (GA)
191. Aetna Health Inc. (IA)
192. Aetna Health Inc. (LA)
193. Aetna Health Inc. (ME)
194. Aetna Health Inc. (NJ)
195. Aetna Health Inc. (NY)
196. Aetna Health Inc. (PA)
197. Aetna Health Inc. (TX)
198. Aetna Health Information Solutions, Inc.
199. Aetna Health Insurance (Thailand) Public Company Limited

200. Aetna Health Insurance Company
201. Aetna Health Insurance Company of Connecticut
202. Aetna Health Insurance Company of Europe DAC
203. Aetna Health Insurance Company of New York
204. Aetna Health Management, Inc.
205. Aetna Health Management, LLC
206. Aetna Health of the Carolinas Inc.
207. Aetna Health of California Inc.
208. Aetna Health of Illinois Inc.
209. Aetna Health of Iowa Inc.
210. Aetna Health of Michigan Inc.
211. Aetna Health of North Texas Inc.
212. Aetna Health of Ohio Inc.
213. Aetna Health of Pennsylvania Inc.
214. Aetna Health of Utah Inc.
215. Aetna Health of Washington Inc.
216. Aetna Health Plans of Arizona, Inc.
217. Aetna Health Plans of California, Inc.
218. Aetna Health Plans of Central and Eastern Pennsylvania, Inc.
219. Aetna Health Plans of Florida, Inc.
220. Aetna Health Plans of Illinois, Inc.
221. Aetna Health Plans of Louisiana, Inc.
222. Aetna Health Plans of New Jersey, Inc.
223. Aetna Health Plans of New York, Inc.
224. Aetna Health Plans of North Texas, Inc.
225. Aetna Health Plans of Northern Ohio, Inc.
226. Aetna Health Plans of Ohio, Inc.
227. Aetna Health Plans of Phoenix, Inc.
228. Aetna Health Plans of Southern California
229. Aetna Health Plans of Southern New England, Inc.
230. Aetna Health Plans of Tennessee, Inc.
231. Aetna Health Plans of Texas, Inc.
232. Aetna Health Plans of the Carolinas, Inc.
233. Aetna Health Plans of the Mid-Atlantic, Inc.
234. Aetna Health Services (Middle East) FZ-LLC
235. Aetna Health Services (UK) Limited
236. Aetna Health Services of Phoenix, Inc.
237. Aetna HealthAssurance Pennsylvania, Inc.
238. Aetna Healthcare Programs, Inc.
239. Aetna Holdco (UK) Limited
240. Aetna Holdings (Thailand) Limited
241. Aetna Home Delivery, LLC
242. Aetna Inc.
243. Aetna Insurance (Singapore) PTE. LTD.
244. Aetna Insurance Company Limited
245. Aetna Insurance Company of Connecticut
246. Aetna Integrated Informatics, Inc.
247. Aetna InteliHealth Inc.
248. Aetna International Ex Pat LLC
249. Aetna International Inc.
250. Aetna International LLC
251. Aetna Ireland Inc.
252. Aetna Ireland, LLC
253. Aetna Korea Ltd.
254. Aetna Life & Casualty (Bermuda) Ltd.
255. Aetna Life Assignment Company
256. Aetna Life Insurance Company
257. Aetna Life Insurance Company of Illinois
258. Aetna Life Insurance Company Shanghai Representative Office
259. Aetna Medicaid Administrators LLC

260. Aetna Mortgage Investments I, Inc.
261. Aetna Multi-Strategy 1099 Fund
262. Aetna Multi-Strategy 1099 Fund, LLC
263. Aetna Network Services LLC
264. Aetna Partners Diversified Fund (Cayman), Limited
265. Aetna Partners Diversified Fund, LLC
266. Aetna Pharmacy Management Services LLC
267. Aetna Provider Solutions, LLC
268. Aetna Real Estate Properties, Inc.
269. Aetna Resources LLC
270. Aetna Risk Assurance Company of Connecticut Inc.
271. Aetna Risk Indemnity Company, Ltd.
272. Aetna Rx Home Delivery, LLC
273. Aetna Specialty Pharmacy, LLC
274. Aetna Student Health Agency Inc.
275. Aetna U.S. Healthcare Dental Plan Inc.
276. Aetna U.S. Healthcare Dental Plan of California Inc
277. Aetna U.S. Healthcare Holdings, Inc.
278. Aetna U.S. Healthcare Inc.
279. Aetna U.S. Healthcare Inc. (DE)
280. Aetna U.S. Healthcare of Alabama, Inc.
281. Aetna U.S. Healthcare of California Inc.
282. Aetna U.S. Healthcare of Colorado, Inc.
283. Aetna U.S. Healthcare of Georgia, Inc.
284. Aetna U.S. Healthcare of Illinois Inc.
285. Aetna U.S. Healthcare of North Texas Inc.
286. Aetna U.S. Healthcare of the Carolinas Inc.
287. Aetna U.S. Healthcare, Inc. (Michigan)
288. Aetna Ventures, LLC
289. Aetna Workers' Comp Access, LLC
290. Aetna/AREA Corporation
291. AFC Receivables Holding Corporation
292. AHP Holdings, Inc.
293. Airport Boulevard CVS, L.P.
294. Akron Cuyahoga CVS, Inc.
295. Alabama CVS Pharmacy, L.L.C.
296. Alabama Road CVS, Inc.
297. Alajasper Realty Services, Inc.
298. Alajasper Realty Services, L.L.C.
299. Alaska CVS Pharmacy, L.L.C.
300. Albany CVS, Inc.
301. Albany New Scotland CVS, L.L.C.
302. Albemarle CVS, Inc.
303. Alexander Baytown CVS, L.P.
304. Alexander Durham CVS, Inc.
305. Alexandria Duke CVS, Inc.
306. Algonquin CVS, L.L.C.
307. Alicia Mission Viejo CVS, L.L.C.
308. Aliso Creek CVS, L.L.C.
309. Allen CVS, Inc.
310. Allen Main TX CVS, L.L.C.
311. Allen Texas CVS, L.P.
312. Allentown CVS, Inc.
313. Allentown Village CVS, Inc.
314. Alliance Family Centers, Inc.
315. Allina Health and Aetna Health Plan Inc.
316. Allina Health and Aetna Insurance Company
317. Allina Health and Aetna Insurance Holding Company LLC
318. Allston Commonwealth CVS, Inc.
319. Allston Retailer, Inc.
320. Allviant Corporation
321. Almadea Burbank CVS, Inc.
322. Almond Ave CVS, L.L.C.
323. Almshouse CVS, Inc.
324. Aloma Winter Park CVS, L.L.C.

325. Alpharetta CVS, Inc
326. Alta Health Strategies, Inc.
327. Alta Mere Fort Worth CVS, L.P.
328. Alta Mesa McCart CVS, L.P.
329. Altamonte Springs CVS, L.L.C.
330. Altius Health Plans Inc.
331. AMC - New York, Inc.
332. AMC - Tennessee, Inc.
333. AMC-New York, LLC
334. AMC-Tennessee, LLC
335. American Continental Insurance Company
336. American Drug Stores Delaware, L.L.C.
337. American Drug Stores, Inc. d/b/a Osco Drug, Inc. (for assets / pharmacies acquired by CVS)
338. American Health Holding, Inc.
339. American Service Life Insurance Company
340. Ames Plaza CVS, Inc.
341. Amesbury CVS, Inc.
342. Amherst Academia CVS, Inc.
343. Amherst CVS Store, Inc.
344. Amsterdam Mall CVS Store, Inc.
345. Anac Holding Corporation
346. Anaheim Hills CVS, Inc.
347. Ancillary Care Management, Inc.
348. Anderson CVS, Inc.
349. Anderson House CVS, Inc.
350. Andover CVS, Inc.
351. Angelini Ave. CVS, Inc.
352. Angell Street CVS, Inc.
353. Anita Street CVS, L.L.C.
354. Ann Mary Street CVS, Inc.
355. Annapolis CVS, Inc.
356. Annapolis Riva CVS, Inc.
357. Anoka MN CVS, L.L.C.
358. Anthem AZ CVS, L.L.C.
359. Antoine Houston CVS, L.P.
360. API Properties 808 LLC
361. Apollo Beach CVS, L.L.C.
362. Apopka CVS, Inc.
363. APP Hedge Funds, LLC
364. Apple Valley MN CVS, L.L.C.
365. Apria Finance Holdings Inc.
366. APS Acquisition LLC
367. APS Enterprises Holding Company, Inc.
368. APS-Summit Care Pharmacy, L.L.C.
369. Aquia Harbor CVS, Inc.
370. Aquidneck Drug CVS, Inc.
371. Aramingo Avenue CVS, Inc.
372. Arbor Drugs - Civic, Inc.
373. Arbor Drugs - Civic, Inc.
374. Arbor Drugs of Ann Arbor, Inc.
375. Arbor Drugs of East Detroit, Inc.
376. Arbor Drugs of Inkster, Inc.
377. Arbor Drugs of Livonia, Inc.
378. Arbor Drugs of Merriman, Inc.
379. Arbor Drugs of Milford, Inc.
380. Arbor Drugs of Northville, Inc.
381. Arbor Drugs of Redford, Inc.
382. Arbor Drugs of Saline, Inc.
383. Arbor Drugs of Walled Lake, Inc.
384. Arbor Drugs of Westland, Inc.
385. Arbor Drugs, Inc.
386. Arbor Drugs, Inc.
387. ARC RetailCare, PLLC
388. Archer Oak CVS, L.L.C.
389. ARCP CV Bowling Green OH, LLC
390. ARCP CV Claremore OK, LLC
391. ARCP CV Duncan OK, LLC
392. ARCP CV Durant OK, LLC
393. ARCP CV Enid OK, LLC
394. ARCP CV Enterprise AL, LLC
395. ARCP CV Erwin NC, LLC
396. ARCP CV Green OH, LLC
397. ARCP CV Greeneville TN, LLC
398. ARCP CV Ironton OH, LLC
399. ARCP CV Knoxville (Kingston) TN, LLC
400. ARCP CV Lawrence MA, LLC
401. ARCP CV Lewes DE, LLC

402. ARCP CV Liberty SC, LLC
403. ARCP CV Macon GA, LLC
404. ARCP CV Manchester GA, LLC
405. ARCP CV Morgantown WV, LLC
406. ARCP CV Muskogee OK, LLC
407. ARCP CV Norfolk NE, LLC
408. ARCP CV Oklahoma City (Pennsylvania) OK, LLC
409. ARCP CV Portsmouth (High) VA, LLC
410. ARCP CV Sanford NC, LLC
411. ARCP CV Toledo OH, LLC
412. Ardmore CVS, Inc.
413. Argonne Avenue CVS, Inc.
414. Arizona Acquisition Corporation
415. Arizona CVS Stores, L.L.C.
416. Arkansas CVS Pharmacy, L.L.C.
417. Arleta CVS, Inc.
418. Arlington 10th Street CVS, Inc.
419. Arlington CVS, Inc.
420. Arlington Pentagon CVS, Inc.
421. Arlington Peoples, Inc.
422. Arlington South Eads CVS, Inc.
423. Arlington-Walter Reed CVS, Inc.
424. Armcal Chicago CVS, L.L.C.
425. Armitage CVS, L.L.C.
426. Army Trail Bartlett CVS, L.L.C.
427. Arrow Glendora CVS, L.P.
428. Arsenal CVS, Inc.
429. ARV LLC
430. Asbury Evanston CVS, L.L.C.
431. ASCO Healthcare of New England Limited Partnership
432. ASCO Healthcare of New England, LLC
433. ASCO HealthCare, LLC
434. Ashburn Parkway CVS, Inc.
435. Ashford Dunwoody CVS, Inc.
436. Ashland Chicago CVS, L.L.C.
437. Ashland CVS, Inc.
438. ASI Wings, LLC
439. Assembly Square CVS, Inc.
440. Assurance Company of Connecticut
441. Aston Township CVS, Inc.
442. Astoria NY CVS, L.L.C.
443. Atlanta Bell Isle CVS, Inc.
444. Atlanta Brookwood Village CVS, Inc.
445. Atlanta Peachtree CVS, Inc.
446. Atlanta ProCare Pharmacy, Inc.
447. Atlanta Ridge CVS, Inc.
448. Atlantic Blvd CVS, Inc.
449. Atlantic City CVS, Inc.
450. Atlantic Jacksonville CVS, L.L.C.
451. Atlantic Jog Delray CVS, L.L.C.
452. Atlantic Medical Group, LLC
453. Atlee CVS, Inc.
454. Attleboro CVS, Inc.
455. Attleboro Pleasant CVS, Inc.
456. Atwood Avenue CVS, Inc.
457. Auburn AL CVS, Inc.
458. Auburn Clinton Stores,Inc.
459. Auburn CVS, Inc.
460. Auburn Glen CVS, Inc.
461. Auburn Mall (Me.) CVS, Inc.
462. Auburn PharmaCare Pharmacy, Inc.
463. Augusta Belair CVS, Inc.
464. Augusta Dr CVS, L.L.C.
465. AUSHC Holdings, Inc.
466. Austell Road CVS, Inc.
467. Austin Drug Co., Inc.
468. Austin Drugs of East Meadow, Inc.
469. Austin Drugs of Hicksville, Inc.
470. Austin Drugs of Lawrence, Inc.
471. Austin Drugs of Syosset, Inc.
472. Avenue 18 CVS, Inc.
473. Avenue of Americas CVS, L.L.C.
474. Avenue P Brooklyn CVS, Inc.
475. Aversboro Road CVS, Inc.
476. Avery Ranch CVS, L.L.C.
477. AV-Med of Louisiana, Inc.
478. Avon CVS, Inc.
479. Avon OH CVS, Inc.
480. Azalea Mall, L.L.C.
481. Azusa Avenue CVS, Inc.
482. Azusa CVS, L.P.

483. B.H. Krueger, Inc.
484. Back Bay CVS, Inc.
485. Badger Acquisition LLC
486. Badger Acquisition of Kentucky LLC
487. Badger Acquisition of Minnesota LLC
488. Badger Acquisition of Ohio LLC
489. Bailey Avenue CVS Store, Inc.
490. Baker Avenue CVS, Inc.
491. Ball Square CVS, Inc.
492. Ballantyne Commons CVS, Inc.
493. Ballston Spa CVS, L.L.C.
494. Baltimore Avenue CVS, Inc.
495. Baltimore Belair CVS, Inc.
496. Baltimore CVS, Inc.
497. Bangor Route 512 CVS, Inc.
498. Bangor, Penna., CVS, Inc.
499. Banner Health and Aetna Health Insurance Company
500. Banner Health and Aetna Health Insurance Holding Company LLC
501. Banner Health and Aetna Health Plan Inc.
502. Barberton CVS, Inc.
503. Barker Houston CVS, L.P.
504. Barkley CVS, Inc.
505. Barnstable Retailer, Inc.
506. Barrington CVS, Inc.
507. Bartlett CVS, L.L.C.
508. Baseline 35th CVS, L.L.C.
509. Baseline Phoenix CVS, L.L.C.
510. Bass Fort Worth CVS, L.P.
511. Baton Rouge Perkins CVS, Inc.
512. Battleground Avenue CVS, L.L.C.
513. Baumel Eisner Neuromedical Institute, L.L.C.
514. Bay City Clinton Stores, Inc.
515. Bay Village CVS, Inc.
516. Bayamon Oeste Chess King, Inc.
517. Bayonne CVS, Inc.
518. Bayou La Batre CVS, Inc.
519. Beach Anaheim CVS, L.P.
520. Beach Buena Park CVS, L.P.
521. Beach Lincoln CVS, L.L.C.
522. Beacon Retailer, Inc.
523. Bear Merger Subsidiary, LLC
524. Bearss Avenue CVS, Inc.
525. Beaumont TX CVS, L.L.C.
526. Beauty Holdings, L.L.C.
527. Bedford Great Road CVS, Inc.
528. Bedford Retailer, Inc.
529. Bedford TX CVS, L.P.
530. Beechnut CVS, L.P.
531. Beechnut Gessner CVS, L.P.
532. Beechnut Houston CVS, L.P.
533. Bel Air CVS, Inc.
534. Bel Air Maryland CVS, Inc.
535. Belchertown CVS, Inc.
536. Bell Plaza CVS, Inc.
537. Bell Square CVS, Inc.
538. Bellaire Cook CVS, L.P.
539. Bellaire Ft. Worth CVS, L.P.
540. Belleville CVS, Inc.
541. Bellevue CVS, Inc.
542. Bellingham CVS, Inc.
543. Bellport CVS, Inc.
544. Belmont Ave. CVS, Inc.
545. Belmont Chicago CVS, L.L.C.
546. Belpre CVS, Inc.
547. Beltsville CVS, Inc.
548. Beltway 8 CVS, L.P.
549. Benchmark Physicians, Inc.
550. Benignus Houston CVS, L.P.
551. Bennington CVS, Inc.
552. Bensalem CVS, Inc.
553. Bentana Technologies, Inc.
554. Bergen Mall (N.J.) CVS, Inc.
555. Bergen Ridgefield CVS, Inc.
556. Berkeley PharmaCare Pharmacy, L.L.C.
557. Berlin CVS, Inc.
558. Bernville PA CVS, Inc.
559. Berwick Market CVS, Inc.
560. Berwyn PA CVS, Inc.
561. Beryl Street CVS, Inc.

562. Best Care LTC Acquisition Company LLC
563. Bethany Glendale CVS, L.L.C.
564. Bethel Church Road CVS, Inc.
565. Bethel Clinic Family Health Plan Corporation
566. Bethel CVS, Inc.
567. Bethel Drive CVS, Inc.
568. Bethel OH CVS, L.L.C.
569. Bethesda CVS, Inc.
570. Bethesda Peoples, Inc.
571. Bethlehem Broad St. CVS, Inc.
572. Bethlehem Plaza CVS, Inc.
573. Bethlehem West Fourth CVS, Inc.
574. Beverly Cove CVS, Inc.
575. Beverly CVS, Inc.
576. Big B Drugs, Inc.
577. Big B Express, Inc.
578. Big B, Inc.
579. Billerica CVS, Inc.
580. Binghamton Clinton Stores, Inc.
581. Birmingham AL CVS, Inc.
582. Bissonnet Houston CVS, L.P.
583. Black Rock Turnpike CVS, Inc.
584. Blackstone CVS, Inc.
585. Blackstone Insurance Group, Inc.
586. Blaine MN CVS, L.L.C.
587. Blakeslee CVS, Inc.
588. Blalock & Hammerly CVS, L.P.
589. Bloomfield Avenue CVS, Inc.
590. Bloomfield CVS, Inc.
591. Bloomingdale Brandon CVS, L.L.C.
592. Bloomington CVS, L.L.C.
593. Bloomsburg CVS, Inc.
594. BLS Properties, L.L.C.
595. Blue Hill Avenue CVS, Inc.
596. Blue Ridge CVS, L.L.C.
597. Blue Ridge Road CVS, Inc.
598. Bluegrass Pharmacy of Lexington, LLC
599. Boca Raton CVS, Inc.
600. Bolingbrook IL CVS, L.L.C.
601. Bonita Beach CVS, L.L.C.
602. Borden Pharmacy, Inc.
603. Bordentown CVS, Inc.
604. Borough of Hatboro CVS, Inc.
605. Boston Chelmsford CVS, Inc.
606. Boston Hanover CVS, Inc.
607. Boston Jamaica Plain CVS, Inc.
608. Boston Saratoga CVS, Inc.
609. Boston Washington CVS, Inc.
610. Boston, Ma., CVS, Inc.
611. Boston-Milk St. CVS, Inc.
612. Bourbonaise CVS, L.L.C.
613. Bourne MA CVS, Inc.
614. Bowling Green CVS, L.L.C.
615. Bowman Street CVS, Inc.
616. Boyertown CVS, Inc.
617. Boynton Beach CVS, Inc.
618. BPC Equity, Inc.
619. BPC Equity, LLC
620. BPNY Acquisition Corp
621. Bradenton CVS, L.L.C.
622. Bradenton SR 70 CVS, L.L.C.
623. Bradley NEC CVS, L.L.C.
624. Braintree CVS, Inc.
625. Braintree Washington CVS, Inc.
626. Brandon CVS, Inc.
627. Branford CVS, Inc.
628. Branhaven CVS, Inc.
629. Braselton CVS, Inc.
630. Brea Mall CVS, Inc.
631. Bremner Boulevard CVS, Inc.
632. Brewster CVS, L.L.C.
633. Briarwood CVS, Inc.
634. Brick New Jersey CVS, Inc.
635. Bridge Campus CVS, L.L.C.
636. Bridge Street CVS, L.L.C.
637. Bridgeport Avenue CVS, Inc.
638. Bridgeport Boston Ave. CVS, Inc.
639. Bridgeport-Merritt CVS, Inc.
640. Bridgeview CVS, L.L.C.
641. Bridgewater Commons CVS, Inc.
642. Bridgewater Main Street CVS, Inc.
643. Bridgewater Store Corporation

644. Brighton Market St. CVS, Inc.
645. Bristol Bay CVS, Inc.
646. Bristol CVS, Inc.
647. Bristol Farmington CVS, Inc.
648. Bristol North Main CVS, Inc.
649. Bristol Plaza CVS, Inc.
650. Brittain Road CVS, Inc.
651. Brittany Square CVS, Inc.
652. Broadheadsville CVS, Inc.
653. Broadspire National Services, Inc.
654. Broadway Fairlawn CVS, L.L.C.
655. Broadway Hewlett CVS, L.L.C.
656. Broadway Houston CVS, L.P.
657. Broadway Lawrence CVS, L.L.C.
658. Broadway Maricopa CVS, L.L.C.
659. Broadway Minneapolis CVS, L.L.C.
660. Broadway New York CVS, Inc.
661. Broadway Palm Beach CVS, L.L.C.
662. Brockton Belmont CVS, Inc.
663. Brockton Carey Hill CVS, Inc.
664. Brockton Crescent CVS, Inc.
665. Brockton CVS, Inc.
666. Brockton Hayward CVS, Inc.
667. Brockton Oak CVS, Inc.
668. Brockton Pleasant CVS, Inc.
669. Brockton West Plaza CVS, Inc.
670. Bronx Bainbridge CVS, L.L.C.
671. Bronx River CVS, Inc.
672. Brookfield CVS, Inc.
673. Brookfield IL CVS, L.L.C.
674. Brookhaven Hilltop CVS, Inc.
675. Brookline CVS, Inc.
676. Brookline Village CVS, Inc.
677. Brooklyn 9th Street CVS, Inc.
678. Brooklyn Bass CVS, L.L.C.
679. Brooklyn Commons CVS, Inc.
680. Brooklyn NY CVS, L.L.C.
681. Brooklyn Park MN CVS, L.L.C.
682. Brooklyn Pennsylvania CVS, Inc.
683. Brooklyn Rockaway CVS, Inc.
684. Brooks Drug of Ipswich, Inc.
685. Brooks Drug, Inc.
686. Broomall CVS, Inc.
687. Brown Recker CVS, L.L.C.
688. Brown Street CVS, Inc.
689. Browns Covington CVS, Inc.
690. Browns Mills CVS, L.L.C.
691. Brownstown Twp CVS, L.L.C.
692. Bruin Acquisition Co., Inc.
693. Brunswick (Me.) CVS, Inc.
694. Brunswick CVS, Inc.
695. Brunswick Square CVS, Inc.
696. Bryans Road CVS, Inc.
697. Bryans Road Peoples, Inc.
698. bswift LLC
699. bswift Resources LLC
700. Buckeye AZ CVS, L.L.C.
701. Buckland Hills CVS, Inc.
702. Bud's Price King, Inc.
703. Buffalo Grove CVS, L.L.C.
704. Buford Highway CVS, Inc.
705. Bunker Hill CVS, Inc.
706. Bunker Lake CVS, L.L.C.
707. Bupa Health Insurance (Thailand) Public Company Limited
708. Burlington Cambridge CVS, Inc.
709. Burlington Center (N.J.) CVS, Inc.
710. Burlington CVS, Inc.
711. Burnsville CVS, L.L.C.
712. Burnsville MN CVS, L.L.C.
713. Busch CVS, Inc.
714. Bush River CVS, Inc.
715. Busse CVS, L.L.C.
716. Bustleton Nursery CVS, Inc.
717. Bustleton Philadelphia CVS, Inc.
718. Butler Road CVS, Inc.
719. Byron Center CVS, L.L.C.
720. C Street CVS, Inc.
721. C Street Peoples, Inc.
722. Cactus 83rd CVS, L.L.C.
723. Cactus Las Vegas CVS, L.L.C.
724. Cactus Peoria CVS, L.L.C.
725. California CVS Pharmacy, L.L.C.
726. Cambria Heights CVS, L.L.C.
727. Cambridge Alewife CVS, Inc.

728. Cambridge Burlington CVS, Inc.
729. Cambridge CVS, Inc.
730. Cambridge Galleria CVS, Inc.
731. Cambridge Life Insurance Company
732. Cambridge Street CVS, Inc.
733. Camden NJ CVS, Inc.
734. Camillus Plaza CVS Store, Inc.
735. Camino Real CVS, Inc.
736. Camp Hill CVS, Inc.
737. Campbell Richardson CVS, L.P.
738. Campo's Medical Pharmacy, Inc.
739. Campo's Medical Pharmacy, LLC
740. Canal CVS, Inc.
741. Canal Place, LLC
742. Canal Salem CVS, Inc.
743. Canal Winchester CVS, Inc.
744. Canoga Park CVS, Inc.
745. Canopy Acquisition, LLC
746. Canton CVS, Inc.
747. Canton GA CVS, Inc.
748. Canton Highway CVS, Inc.
749. Cantonment FL CVS, L.L.C.
750. Cape Coral CVS, L.L.C.
751. Cape May CVS, Inc.
752. Capital Market CVS, Inc.
753. Capitol Heights CVS, L.L.C.
754. Capitol Home Infusion, Inc.
755. Care Pharmaceutical Services, LP
756. Care4, L.P.
757. CareCenter Pharmacy, L.L.C.
758. CareFlorida Health Plan, Inc.
759. Carefree Insurance Services, Inc.
760. Carelink Health Plans, Inc.
761. Caremark Advantage, Inc.
762. Caremark Advantage, L.L.C.
763. Caremark Arizona Mail Pharmacy Holding, LLC
764. Caremark Arizona Mail Pharmacy, LLC
765. Caremark Arizona Specialty Pharmacy Holding, L.L.C.
766. Caremark Arizona Specialty Pharmacy, L.L.C.
767. Caremark Atlanta Pharmacy, LLC
768. Caremark Aviation, L.L.C.
769. Caremark Baltimore Pharmacy, LLC
770. Caremark California Specialty Pharmacy Holding, L.L.C.
771. Caremark California Specialty Pharmacy, L.L.C.
772. Caremark CareCenter Pharmacy, L.L.C.
773. Caremark Chicago Pharmacy, LLC
774. Caremark Connecticut CareCenter Pharmacy Holding, LLC
775. Caremark Connecticut CareCenter Pharmacy, LLC
776. Caremark Dallas Pharmacy, LLC
777. Caremark Detroit Pharmacy, LLC
778. Caremark Florida Mail Pharmacy Holding, LLC
779. Caremark Florida Mail Pharmacy, LLC
780. Caremark Florida Speciality Pharmacy Holding, LLC
781. Caremark Florida Specialty Pharmacy, LLC
782. Caremark Fort Lauderdale Pharmacy, LLC
783. Caremark Georgia CareCenter Pharmacy Holding, LLC
784. Caremark Georgia CareCenter Pharmacy, LLC
785. Caremark Georgia Specialty Pharmacy Holding, LLC
786. Caremark Georgia Specialty Pharmacy, LLC
787. Caremark Global, Inc.
788. Caremark Hawaii Mail Pharmacy Holding, L.L.C.
789. Caremark Hawaii Mail Pharmacy, LLC

790. Caremark Hawaii Specialty Pharmacy Holding, LLC
791. Caremark Hawaii Specialty Pharmacy, LLC
792. Caremark Homecare, Inc.
793. Caremark Honolulu Pharmacy, LLC
794. Caremark Illinois CareCenter Pharmacy Holding I, LLC
795. Caremark Illinois CareCenter Pharmacy Holding II, LLC
796. Caremark Illinois CareCenter Pharmacy Holding, LLC
797. Caremark Illinois CareCenter Pharmacy I, LLC
798. Caremark Illinois CareCenter Pharmacy II, LLC
799. Caremark Illinois CareCenter Pharmacy, LLC
800. Caremark Illinois Mail Pharmacy Holding, LLC
801. Caremark Illinois Mail Pharmacy, LLC
802. Caremark Illinois Specialty Pharmacy Holding, LLC
803. Caremark Illinois Specialty Pharmacy, LLC
804. Caremark Indemnity, Ltd.
805. Caremark International, Inc.
806. Caremark International, L.L.C.
807. Caremark Iowa CareCenter Pharmacy Holding I, LLC
808. Caremark Iowa CareCenter Pharmacy Holding, LLC
809. Caremark Iowa CareCenter Pharmacy I, LLC
810. Caremark Iowa CareCenter Pharmacy, LLC
811. Caremark IPA, L.L.C.
812. Caremark Irving Resource Center Holding, LLC
813. Caremark Irving Resource Center, LLC
814. Caremark Kansas Specialty Pharmacy Holding, LLC
815. Caremark Kansas Specialty Pharmacy, LLC
816. Caremark Limited, LLC
817. Caremark Logistics Holding, LLC
818. Caremark Logistics, LLC
819. Caremark Louisiana Specialty Pharmacy Holding, LLC
820. Caremark Louisiana Specialty Pharmacy, LLC
821. Caremark Mail Pharmacy, LLC
822. Caremark Management Limited, LLC
823. Caremark Management, L.L.C.
824. Caremark Management, LP
825. Caremark Maryland CareCenter Pharmacy Holding, LLC
826. Caremark Maryland CareCenter Pharmacy, LLC
827. Caremark Maryland Specialty Pharmacy Holding, LLC
828. Caremark Maryland Specialty Pharmacy, LLC
829. Caremark Massachusetts Specialty Pharmacy Holding, LLC
830. Caremark Massachusetts Specialty Pharmacy, LLC
831. Caremark MergerSub, L.L.C.
832. Caremark Michigan Specialty Pharmacy Holding, LLC
833. Caremark Michigan Specialty Pharmacy, LLC
834. Caremark Minnesota Specialty Pharmacy Holding, LLC
835. Caremark Minnesota Specialty Pharmacy, LLC
836. Caremark Miramar Pharmacy, LLC
837. Caremark New Jersey CareCenter Pharmacy Holding, LLC
838. Caremark New Jersey CareCenter Pharmacy, LLC

839. Caremark New Jersey Specialty Pharmacy Holding, LLC
840. Caremark New Jersey Specialty Pharmacy, LLC
841. Caremark North Carolina CareCenter Pharmacy Holding, LLC
842. Caremark North Carolina CareCenter Pharmacy, LLC
843. Caremark North Carolina Specialty Pharmacy Holding LLC
844. Caremark North Carolina Specialty Pharmacy, LLC
845. Caremark Ohio CareCenter Pharmacy Holding, LLC
846. Caremark Ohio CareCenter Pharmacy, LLC
847. Caremark Ohio Specialty Pharmacy Holding, L.L.C.
848. Caremark Ohio Specialty Pharmacy, L.L.C.
849. Caremark Onsite Pharmacy, Inc.
850. Caremark Pennsylvania Specialty Pharmacy Holding, LLC
851. Caremark Pennsylvania Specialty Pharmacy, LLC
852. Caremark Pharmacy, L.L.C.
853. Caremark PhC, L.L.C.
854. Caremark Phoenix Pharmacy, LLC
855. Caremark Pittsburgh Pharmacy, LLC
856. Caremark Procurement Corporation
857. Caremark Procurement, L.L.C.
858. Caremark Puerto Rico Holding LLC
859. Caremark Puerto Rico L.L.C.
860. Caremark Puerto Rico Specialty Pharmacy Holding LLC
861. Caremark Puerto Rico Specialty Pharmacy L.L.C.
862. Caremark Puerto Rico, Inc.
863. Caremark Raleigh Pharmacy, LLC
864. Caremark Receivable, LLC
865. Caremark Redlands Pharmacy, L.L.C.
866. Caremark Repack, LLC
867. Caremark Resource Center General, LLC
868. Caremark Rx, Inc.
869. Caremark Rx, L.L.C.
870. Caremark San Antonio Pharmacy, LLC
871. Caremark San Antonio Resource Center Holding, LLC
872. Caremark San Antonio Resource Center, LLC
873. Caremark Specialty Pharmacy, LLC
874. Caremark Tampa Pharmacy, LLC
875. Caremark Tennessee CareCenter Pharmacy Holding, LLC
876. Caremark Tennessee CareCenter Pharmacy, LLC
877. Caremark Tennessee Specialty Pharmacy Holding, LLC
878. Caremark Tennessee Specialty Pharmacy, LLC
879. Caremark Texas Mail Pharmacy Holding, LLC
880. Caremark Texas Mail Pharmacy, LLC
881. Caremark Texas Specialty Pharmacy, LLC
882. Caremark Ulysses Holding Corp.
883. Caremark Washington Specialty Pharmacy Holding, LLC
884. Caremark Washington Specialty Pharmacy, LLC
885. Caremark, L.L.C.
886. Caremark, LP
887. CaremarkPCS
888. CaremarkPCS Alabama Mail Pharmacy Holding, LLC
889. CaremarkPCS Alabama Mail Pharmacy, LLC
890. CaremarkPCS Caribbean, Inc.
891. CaremarkPCS Health Systems, LLC

892. CaremarkPCS Health, LLC
893. CaremarkPCS Health, LP
894. CaremarkPCS Mail Pharmacy, LLC
895. CaremarkPCS Pennsylvania Mail Pharmacy Holding, LLC
896. CaremarkPCS Pennsylvania Mail Pharmacy, LLC
897. CaremarkPCS Texas Mail Pharmacy Holding, LLC
898. CaremarkPCS Texas Mail Pharmacy, LLC
899. CaremarkPCS, L.L.C.
900. Carney CVS, Inc.
901. Carol Stream IL CVS, L.L.C.
902. Carrabile, LLC
903. Carroll Denton CVS, L.P.
904. Carroll Street CVS, Inc.
905. Carrollton CVS, L.P.
906. Carson CA CVS, L.L.C.
907. Carver CVS, Inc.
908. Cary Tryon CVS, Inc.
909. Cascades CVS, Inc.
910. Cashmere St. Lucie CVS, L.L.C.
911. Cass Darien CVS, L.L.C.
912. Castor Avenue CVS, Inc.
913. Castro Street ProCare Pharmacy, Inc.
914. Catalpa Chicago CVS, L.L.C.
915. Cathedral City CVS, L.L.C.
916. Caton Farm Joliet CVS, L.L.C.
917. CC Advertising & Marketing, LLC
918. CCI Foreign Holdings, Sarl
919. CCI Foreign, Sarl
920. CCRx Holdings, LLC
921. CCRx of North Carolina Holdings, LLC
922. CCRx of North Carolina, LLC
923. Cedar Garwood CVS, L.L.C.
924. Cedar Park CVS, Inc.
925. Cedar Park Peoples, Inc.
926. Center City CVS, Inc.
927. Center Moriches CVS, Inc.
928. Center Pasadena CVS, L.P.
929. Center Plaza CVS, Inc.
930. Center Square CVS, Inc.
931. Centerville Falmouth St. CVS, Inc.
932. Central Ave SEC CVS, L.L.C.
933. Central City Mall CVS, Inc.
934. Central Rx Services, LLC
935. Central Square CVS, Inc.
936. Central St. Petersburg CVS, L.L.C.
937. Central Street CVS, Inc.
938. Centreville Road CVS, Inc.
939. CH Saluda SC 2008, LLC
940. Chandler AZ CVS, L.L.C.
941. Chandler Dobson CVS, L.L.C.
942. Chandler Gilbert CVS, L.L.C.
943. Chandler Heights CVS, L.L.C.
944. Chandler Kyrene CVS, L.L.C.
945. Chandler North CVS, L.L.C.
946. Chandler Street CVS, Inc.
947. Chandler Warner CVS, L.L.C.
948. Chanhassen CVS, L.L.C.
949. Chapman Avenue CVS, Inc.
950. Chappaqua CVS, L.L.C.
951. Charles Street Baltimore CVS, Inc.
952. Charles Street CVS, Inc.
953. Charleston Area Health Plan, Inc.
954. Charlie Acquisition Corporation
955. Charlott Street CVS, Inc.
956. Charlotte NC CVS, Inc.
957. Charlotte PUD, LLC
958. Charlton MA CVS, Inc.
959. Charlton PharmaCare Pharmacy, Inc.
960. Chatham CVS, Inc.
961. Chatham Main St. CVS, Inc.
962. Chatsworth CVS, L.L.C.
963. CHC Casualty Risk Retention Group, Inc.
964. CHCCares, Inc.
965. Cheektowaga-Como CVS, Inc.
966. Chelsea AL CVS, Inc.
967. Cheltenham CVS, Inc.
968. Cherry Hill C.K. Jeanery, Inc.
969. Cherry Tree Lane CVS, Inc.

970. Cheshire CVS, Inc.
971. Chester MD CVS, L.L.C.
972. Chester NY CVS, L.L.C.
973. Chesterfield CVS, Inc.
974. Chestnut Hill CVS, Inc.
975. Chestnut Montvale CVS, L.L.C.
976. Chestnut St. CVS, Inc.
977. Chestnut Street CVS, Inc.
978. Chicago CVS Store, L.L.C.
979. Chicago Heights IL CVS, L.L.C.
980. Chicago North Central CVS, L.L.C.
981. Chicago Pulaski CVS, L.L.C.
982. Chicago Ridge IL CVS, L.L.C.
983. Chicago West Irving Park CVS, L.L.C.
984. Chichester CVS, Inc.
985. Chick Springs CVS, Inc.
986. Chickering Benefit Planning Insurance Agency, Inc.
987. Chickering Claims Administrators, Inc.
988. Chicopee CVS, Inc.
989. Chicopee Exchange Street CVS, Inc.
990. Chicopee Memorial CVS, Inc.
991. Children's Hospital of Michigan Outpatient Pharmacy, Inc.
992. Chili CVS, Inc.
993. Chimney Rock CVS, L.P.
994. China Town CVS, Inc.
995. Chino Ave SEC CVS, L.L.C.
996. Chino Hills CVS, INc.
997. Choice Source Therapeutic of Houston, Texas, L.L.C.
998. Choice Source Therapeutic South, L.L.C.
999. Choice Source, L.L.C.
1000. CHP Acquisition Corp.
1001. CHP Acquisition, LLC
1002. Christiana CVS, Inc.
1003. Chula Vista CVS, Inc.
1004. Church Avenue CVS, Inc.
1005. Cicero Addison CVS, L.L.C.
1006. Cincinnati CVS, L.L.C.
1007. Cin-Dayton CVS, Inc.
1008. CIP Acquisition, LLC
1009. Circle Plaza CVS, Inc.
1010. Circle Tallahassee RE, L.L.C.
1011. Circulation, LLC
1012. City Line Avenue CVS, Inc.
1013. Claims Administration Corp.
1014. ClaimsPro Management Services, Inc.
1015. Clairmont Road CVS, Inc.
1016. Clairton Boulevard CVS, Inc.
1017. Claremont River CVS, Inc.
1018. Clarendon Blvd. CVS, Inc.
1019. Clarendon Boulevard CVS, Inc.
1020. Clark Chicago CVS, L.L.C.
1021. Clark CVS, Inc.
1022. Clarkston CVS, Inc.
1023. Clarksville MD CVS, L.L.C.
1024. Clayton CVS, Inc.
1025. Clearwater CVS, Inc.
1026. Clearwater Sunset CVS, Inc.
1027. Clementon Square CVS, Inc.
1028. Clermont CVS, L.L.C.
1029. Cleveland Lorain CVS, Inc.
1030. Cleveland Primary Care Associates, P.A., Inc.
1031. Cliffside Park CVS, L.L.C.
1032. Clifton CVS, Inc.
1033. Clint Moore Boca Raton CVS, L.L.C.
1034. Clinton Center CVS, Inc.
1035. Clinton Discount Stores, Inc.
1036. Clinton Post CVS, Inc.
1037. Cloppers Mill CVS, Inc.
1038. Cloppers Mill Peoples, inc.
1039. Clover CVS, L.L.C.
1040. Clyde Daytona CVS, L.L.C.
1041. CMBS Holdings, Inc.
1042. CMBS Holdings, Inc. II
1043. CMBS Holdings, L.L.C.
1044. Cochran CVS, L.L.C.
1045. Coconut Creek CVS, Inc.

1046. Cofinity, Inc.
1047. Cohasset CVS, Inc.
1048. Cohoes CVS, L.L.C.
1049. Coit Dallas CVS, L.P.
1050. Coit McDermott CVS, L.P.
1051. Colchester CT CVS, Inc.
1052. College Anaheim CVS, L.L.C.
1053. College Point CVS, Inc.
1054. College Street CVS, Inc.
1055. Collegeville CVS, Inc.
1056. Collings CVS, Inc.
1057. Colonial Place CVS, Inc.
1058. Colonie CVS, Inc.
1059. Columbia CVS, Inc.
1060. Columbus CVS, L.L.C.
1061. Columbus High Street CVS, Inc.
1062. Columbus New York CVS, Inc.
1063. Columbus Polaris CVS, Inc.
1064. Commack CVS, Inc.
1065. Commerce Palms Tampa CVS, L.L.C.
1066. Commercial CVS, Inc.
1067. Committed Provider Services, LLC
1068. COMMUNITY HEALTH CARE SOLUTIONS LLC
1069. Compass Health Services, LLC
1070. Compo Center CVS, Inc.
1071. Compscript, LLC
1072. Computer Development, Inc.
1073. Concord Crisco CVS, Inc.
1074. Concord Road CVS, Inc.
1075. Conewango CVS, Inc.
1076. Confident Care Health Plan, Inc.
1077. Congress Austin CVS TX, L.L.C.
1078. Connecticut Avenue CVS, Inc.
1079. Connecticut CVS Pharmacy, L.L.C.
1080. Conservco, Inc.
1081. Conshohocken CVS, Inc.
1082. Constitution Blvd. CVS, Inc.
1083. Consumer Health Interactive, L.L.C.
1084. Consumer Value Store of Bangor, Inc.
1085. Consumer Value Stores of Lowell, Inc.
1086. Consumer Value stores of Merrimack, Inc.
1087. Consumer Value Stores of Revere, Inc.
1088. Consumer Value Stores of Rhode Island, Inc.
1089. Consumer Value Stores of White City, Inc.
1090. Consumer Value Stores of Worcester, Inc.
1091. Continental Life Insurance Company of Brentwood, Tennessee
1092. Continuing Care Rx, LLC
1093. Conyers CVS, Inc.
1094. Coolidge Corner CVS, Inc.
1095. Coon Rapids MN CVS, L.L.C.
1096. Cooper City CVS, L.L.C.
1097. Coopersburg CVS, Inc.
1098. Copiaque CVS, Inc.
1099. Copley CVS, Inc.
1100. Coral Ridge CVS, L.L.C.
1101. Coram Alternate Site Services, Inc.
1102. Coram Clinical Trials, Inc.
1103. Coram Healthcare Corporation of Alabama
1104. Coram Healthcare Corporation of Florida
1105. Coram Healthcare Corporation of Greater D.C.
1106. Coram Healthcare Corporation of Greater New York
1107. Coram Healthcare Corporation of Indiana
1108. Coram Healthcare Corporation of Massachusetts
1109. Coram Healthcare Corporation of Mississippi
1110. Coram Healthcare Corporation of Nevada
1111. Coram Healthcare Corporation of North Texas

1112. Coram Healthcare Corporation of Northern California
1113. Coram Healthcare Corporation of Rhode Island
1114. Coram Healthcare Corporation of Southern California
1115. Coram Healthcare Corporation of Southern Florida
1116. Coram Healthcare Corporation of Utah
1117. Coram Healthcare/Carolina Home Therapeutics, LLC
1118. Coram LLC
1119. Coram Service Corporation
1120. Coram Specialty Infusion Services, Inc.
1121. CoramRx, LLC
1122. Corbin Avenue CVS, Inc.
1123. Corey Enterprises, Inc.
1124. Cornelius CVS, Inc.
1125. Corning Park Plaza CVS, Inc.
1126. Corona CVS, Inc.
1127. Corporate Benefit Strategies, Inc.
1128. Corporate Health Administrators, Inc.
1129. Corporate Health Insurance Company
1130. Cortez Bradenton CVS, L.L.C.
1131. Cottage Grove CVS, Inc.
1132. Cotuit CVS, Inc.
1133. County Line CVS, Inc.
1134. County Road CVS, L.L.C.
1135. Court Street CVS, L.L.C.
1136. Courtland Street CVS, Inc.
1137. Courtyards of Costa Mesa CVS, Inc.
1138. Coventry Consumer Advantage, Inc.
1139. Coventry CT CVS, Inc.
1140. Coventry Financial Management Services, Inc.
1141. Coventry Health and Life Insurance Company
1142. Coventry Health Care National Accounts, Inc.
1143. Coventry Health Care National Network, Inc.
1144. Coventry Health Care of Delaware, Inc.
1145. Coventry Health Care of Florida, Inc.
1146. Coventry Health Care of Georgia, Inc.
1147. Coventry Health Care of Illinois, Inc.
1148. Coventry Health Care of Iowa, Inc.
1149. Coventry Health Care of Kansas, Inc.
1150. Coventry Health Care of Louisiana, Inc.
1151. Coventry Health Care of Missouri, Inc.
1152. Coventry Health Care of Nebraska, Inc.
1153. Coventry Health Care of Pennsylvania, Inc.
1154. Coventry Health Care of Texas, Inc.
1155. Coventry Health Care of the Carolinas, Inc.
1156. Coventry Health Care of Virginia, Inc.
1157. Coventry Health Care of West Virginia, Inc.
1158. Coventry Health Care Workers Compensation, Inc.
1159. Coventry Health Care, Inc.
1160. Coventry Health of Michigan, Inc.
1161. Coventry Health Plan of Florida, Inc.
1162. Coventry Healthcare Management Corporation
1163. Coventry Independent Medical Exams of Texas, PA
1164. Coventry Lake CVS, Inc.
1165. Coventry Management Services, Inc.

1166. Coventry Merger Holdings, Inc.
1167. Coventry Merger Sub
1168. Coventry Prescription Management Services, Inc.
1169. Coventry Rehabilitation Services, Inc.
1170. Coventry Specialty Services, LLC
1171. Coventry Square CVS, Inc.
1172. Coventry Summit Health Plan, Inc.
1173. Coventry Transplant Network, Inc.
1174. CoventryCares of Michigan, Inc.
1175. Coviello Plaza CVS, Inc.
1176. Covina (Cal.) CVS, Inc.
1177. Covington CVS, Inc.
1178. Cox CVS, Inc.
1179. CP Acquisition Corp.
1180. CP Acquisition, LLC
1181. CP Red Springs NC 2008, LLC
1182. CP Services LLC
1183. CR 545 Davenport CVS, L.L.C.
1184. Crabapple CVS, Inc.
1185. Craig Road CVS, L.L.C.
1186. Cranberry CVS, Inc.
1187. Cranberry PA CVS, Inc.
1188. Cranberry Township CVS, Inc.
1189. Cranston Retailer, Inc.
1190. Cranston RI CVS, Inc.
1191. Cranston-Elmwood CVS, Inc.
1192. Cranston-Reservoir CVS, Inc.
1193. Cresco CVS, Inc.
1194. Cressona Mall CVS, Inc.
1195. Crest CVS, Inc.
1196. Crestwood KY CVS, Inc.
1197. Crismon Mesa CVS, L.L.C.
1198. Criterion Communications, Inc.
1199. Crofton MD CVS, L.L.C.
1200. Cromwell CT CVS, Inc.
1201. Cropsey Avenue CVS, L.L.C.
1202. Cross Keys Place CVS, Inc.
1203. Crossgates CVS Store, Inc.
1204. Crossroads Plaza CVS, Inc.
1205. Croton-On-Hudson CVS, L.L.C.
1206. Crowley TX CVS, L.P.
1207. Croydon CVS, Inc.
1208. Crystal Drive CVS, L.L.C.
1209. Crystal Lake CVS, L.L.C.
1210. Crystal Plaza CVS, Inc.,
1211. Crystal Waterford CVS, Inc.
1212. CSR, Inc.
1213. Cucamonga Foothill CVS, L.L.C.
1214. Culver City CVS, Inc.
1215. Cumberland Bear Hill CVS, Inc.
1216. Cumberland Church CVS, Inc.
1217. Cumberland Retailer, Inc.
1218. Cumming GA CVS, Inc.
1219. Cumru CVS, Inc.
1220. Curaflex Health Services
1221. Cuyahoga Oakwood CVS, Inc.
1222. CVS 1001 MA, L.L.C.
1223. CVS 10012 OK, L.L.C.
1224. CVS 10013 VA, L.L.C.
1225. CVS 10015 MA, L.L.C.
1226. CVS 10018 VA, L.L.C.
1227. CVS 10019 AR, L.L.C.
1228. CVS 10021 VA, L.L.C.
1229. CVS 10024 VA, L.L.C.
1230. CVS 10049 KY, L.L.C.
1231. CVS 10065 OK, L.L.C.
1232. CVS 10072 TN, L.L.C.
1233. CVS 10076 AL, L.L.C.
1234. CVS 10078 FL, L.L.C.
1235. CVS 10088 VA, L.L.C.
1236. CVS 10099 DE, L.L.C.
1237. CVS 10101 OK, L.L.C.
1238. CVS 10102 OK, L.L.C.
1239. CVS 10117 VA, L.L.C.
1240. CVS 10122 FL, L.L.C.
1241. CVS 10124 WV, L.L.C.
1242. CVS 10125 MA, L.L.C.
1243. CVS 10131 FL, L.L.C.
1244. CVS 10143 WI, L.L.C.
1245. CVS 10154 GA, L.L.C.
1246. CVS 10156 NC, L.L.C.
1247. CVS 10163 WI, L.L.C.
1248. CVS 10170 VA, L.L.C.
1249. CVS 10172 WI, L.L.C.

1250. CVS 10175 OK, L.L.C
1251. CVS 10196 MA, L.L.C.
1252. CVS 10201 MN, L.L.C.
1253. CVS 10202 VA, L.L.C.
1254. CVS 10205 KY, L.L.C.
1255. CVS 10206 AL, L.L.C.
1256. CVS 10208 AL, L.L.C.
1257. CVS 10209 OH, L.L.C.
1258. CVS 10213 OK, L.L.C.
1259. CVS 10214 OK, L.L.C.
1260. CVS 10238 DE, L.L.C.
1261. CVS 10242 NE, L.L.C.
1262. CVS 10243 NE, L.L.C.
1263. CVS 10246 OH, L.L.C.
1264. CVS 10248 OH, L.L.C.
1265. CVS 10251 VA, L.L.C.
1266. CVS 10252 MN, L.L.C.
1267. CVS 10255 AR, L.L.C.
1268. CVS 10272 OK, L.L.C.
1269. CVS 10273 OK, L.L.C.
1270. CVS 10274 OK, L.L.C.
1271. CVS 10275 OK, L.L.C.
1272. CVS 10279 KY, L.L.C.
1273. CVS 10286 VA, L.L.C.
1274. CVS 10293 NE, L.L.C.
1275. CVS 10320 VA, L.L.C.
1276. CVS 10326 OK, L.L.C.
1277. CVS 10346 FL, L.L.C.
1278. CVS 10357 GA, L.L.C.
1279. CVS 10358 GA, L.L.C.
1280. CVS 10372 OH, L.L.C.
1281. CVS 10374 OH, L.L.C.
1282. CVS 10376 DE, L.L.C.
1283. CVS 10396 MN, L.L.C.
1284. CVS 1040 FL, L.L.C.
1285. CVS 10408 AR, L.L.C.
1286. CVS 10409 AR, L.L.C.
1287. CVS 1041 MA, L.L.C.
1288. CVS 10410 NE, L.L.C.
1289. CVS 10411 WI, L.L.C.
1290. CVS 10416 AL, L.L.C.
1291. CVS 10419 WI, L.L.C.
1292. CVS 10422 VA, L.L.C.
1293. CVS 10430 AR, L.L.C.
1294. CVS 10431 AR, L.L.C.
1295. CVS 10432 AR, L.L.C.
1296. CVS 10437 OK, L.L.C.
1297. CVS 10441 NE, L.L.C.
1298. CVS 10453 VA, L.L.C.
1299. CVS 10454 VA, L.L.C.
1300. CVS 10457 OH, L.L.C.
1301. CVS 10501 MA, L.L.C.
1302. CVS 10504 FL, L.L.C.
1303. CVS 10515 TN, L.L.C.
1304. CVS 10518 AR, L.L.C.
1305. CVS 10519 AR, L.L.C.
1306. CVS 10520 OK, L.L.C.
1307. CVS 10533 WI, L.L.C.
1308. CVS 10534 AR, L.L.C.
1309. CVS 10539 AR, L.L.C.
1310. CVS 10549 WI, L.L.C.
1311. CVS 1055 FL, L.L.C.
1312. CVS 10560 OK, L.L.C.
1313. CVS 10561 OK, L.L.C.
1314. CVS 10563 VA, L.L.C.
1315. CVS 10566 WV, L.L.C.
1316. CVS 10586 VA, L.L.C.
1317. CVS 10589 GA, L.L.C.
1318. CVS 1063 CA, L.L.C.
1319. CVS 10644 FL, L.L.C.
1320. CVS 10645 TN, L.L.C.
1321. CVS 10666 AR, L.L.C.
1322. CVS 10678 AR, L.L.C.
1323. CVS 10683 KY, L.L.C.
1324. CVS 10684 VA, L.L.C.
1325. CVS 10746 VA, L.L.C.
1326. CVS 10756 MN, L.L.C.
1327. CVS 10768 VA, L.L.C.
1328. CVS 10769 VA, L.L.C.
1329. CVS 10770 VA, L.L.C.
1330. CVS 10771 MN, L.L.C.
1331. CVS 10772 WI, L.L.C.
1332. CVS 10779 AR, L.L.C.
1333. CVS 1078 IN, L.L.C.
1334. CVS 10781 CO, L.L.C.
1335. CVS 10782 CO, L.L.C.

1336. CVS 10783 CO, L.L.C.
1337. CVS 10784 CO, L.L.C.
1338. CVS 10785 CO, L.L.C.
1339. CVS 10787 SC, L.L.C.
1340. CVS 10788 KY, L.L.C.
1341. CVS 1079 GA, L.L.C.
1342. CVS 10811 AL, L.L.C.
1343. CVS 10812 KY, L.L.C.
1344. CVS 10816 AR, L.L.C.
1345. CVS 10830 CO, L.L.C.
1346. CVS 10831 CO, L.L.C.
1347. CVS 10836 MA, L.L.C.
1348. CVS 10893 OH, L.L.C.
1349. CVS 10898 AL, L.L.C.
1350. CVS 10937 VA, L.L.C.
1351. CVS 10949 TN, L.L.C.
1352. CVS 10958 CO, L.L.C.
1353. CVS 10967 VA, L.L.C.
1354. CVS 10968 VA, L.L.C.
1355. CVS 10975 AR, L.L.C.
1356. CVS 10976 OK, L.L.C.
1357. CVS 1099 LA, L.L.C.
1358. CVS 10990 VA, L.L.C.
1359. CVS 10992 VA, L.L.C.
1360. CVS 10th Street, L.L.C.
1361. CVS 11000 CO, L.L.C.
1362. CVS 11001 CO, L.L.C.
1363. CVS 11002 CO, L.L.C.
1364. CVS 11016 AL, L.L.C.
1365. CVS 11017 GA, L.L.C.
1366. CVS 11019 KY, L.L.C.
1367. CVS 11024 CO, L.L.C.
1368. CVS 11056 VA, L.L.C.
1369. CVS 11070 MN, L.L.C.
1370. CVS 11083 VA, L.L.C.
1371. CVS 11086 OH, L.L.C.
1372. CVS 11089 KY, L.L.C.
1373. CVS 11092 OK, L.L.C.
1374. CVS 11093 AR, L.L.C.
1375. CVS 11104 CO, L.L.C.
1376. CVS 11105 CO, L.L.C.
1377. CVS 11115 VA, L.L.C.
1378. CVS 11138 CO, L.L.C.
1379. CVS 1114 FL, L.L.C.
1380. CVS 11155 OH, L.L.C.
1381. CVS 11158 AR, L.L.C.
1382. CVS 11179 VA, L.L.C.
1383. CVS 1118 NY, L.L.C.
1384. CVS 11233 VA, L.L.C.
1385. CVS 1126 FL, L.L.C.
1386. CVS 11288 MA, L.L.C.
1387. CVS 113 FL, L.L.C.
1388. CVS 1131 MA, L.L.C.
1389. CVS 11337 CO, L.L.C.
1390. CVS 1140 SC, L.L.C.
1391. CVS 11450 SC LLC
1392. CVS 115 W., L.L.C.
1393. CVS 1150 MI, L.L.C.
1394. CVS 1161 IL, L.L.C.
1395. CVS 1172 IL, L.L.C.
1396. CVS 1189 MA, L.L.C.
1397. CVS 1194 SC, L.L.C.
1398. CVS 12 VA, L.L.C.
1399. CVS 1200 SC, L.L.C.
1400. CVS 1218 NC, L.L.C.
1401. CVS 1223 OH, L.L.C.
1402. CVS 1246 NC, L.L.C.
1403. CVS 1316 FL, L.L.C.
1404. CVS 1359 GA, L.L.C.
1405. CVS 1383 VA, L.L.C.
1406. CVS 1420 GA, L.L.C.
1407. CVS 1423 VA, L.L.C.
1408. CVS 1427, L.L.C.
1409. CVS 1428 WV, L.L.C.
1410. CVS 1429 WV, L.L.C.
1411. CVS 1435 MD, L.L.C.
1412. CVS 1452 MD, L.L.C.
1413. CVS 1461 MD, L.L.C.
1414. CVS 1464 OH, L.L.C.
1415. CVS 1481 MD, L.L.C.
1416. CVS 1488 MD, L.L.C.
1417. CVS 1501 MD, L.L.C.
1418. CVS 1507 NV, L.L.C.
1419. CVS 1515 MD, L.L.C.
1420. CVS 1525 VA, L.L.C.
1421. CVS 1534 VA, L.L.C.

1422. CVS 1538 VA, L.L.C.
1423. CVS 1547 VA, L.L.C.
1424. CVS 1550 VA, L.L.C.
1425. CVS 1553 VA, L.L.C.
1426. CVS 1556 VA, L.L.C.
1427. CVS 1557 VA, L.L.C.
1428. CVS 1561 VA, L.L.C.
1429. CVS 1589 MI, L.L.C.
1430. CVS 161 SC, L.L.C.
1431. CVS 1619 IL, L.L.C.
1432. CVS 1643 NC, L.L.C.
1433. CVS 1674 NC, L.L.C.
1434. CVS 1741 TN, L.L.C.
1435. CVS 1742 NC, L.L.C.
1436. CVS 1743 AZ, L.L.C.
1437. CVS 1748 MI, L.L.C.
1438. CVS 1752 NC, L.L.C.
1439. CVS 1756 OH, L.L.C.
1440. CVS 1758 MI, L.L.C.
1441. CVS 1769 FL, L.L.C.
1442. CVS 1777 AL, L.L.C.
1443. CVS 1782 NJ, L.L.C.
1444. CVS 1786 MA, L.L.C.
1445. CVS 1798 VA, L.L.C.
1446. CVS 180 SC, L.L.C.
1447. CVS 1803 MA, L.L.C.
1448. CVS 1815 FL, L.L.C.
1449. CVS 1836 VA, L.L.C.
1450. CVS 1844 MA, L.L.C.
1451. CVS 1867 MA, L.L.C.
1452. CVS 1874 MA, L.L.C.
1453. CVS 1933 LA, L.L.C.
1454. CVS 1944 NC, L.L.C.
1455. CVS 1978 VA, L.L.C.
1456. CVS 1979 VA, L.L.C.
1457. CVS 1991 VA, L.L.C.
1458. CVS 20 MA, L.L.C.
1459. CVS 2003 VA, L.L.C.
1460. CVS 2004 VA, L.L.C.
1461. CVS 2019 VA, L.L.C.
1462. CVS 2033 MD, L.L.C.
1463. CVS 2048 RI, L.L.C.
1464. CVS 205 SC, L.L.C.
1465. CVS 2065 RI, L.L.C.
1466. CVS 2105 GA, L.L.C.
1467. CVS 211 MI, L.L.C.
1468. CVS 2148 WV, L.L.C.
1469. CVS 2212 GA, L.L.C.
1470. CVS 2214 WI, L.L.C.
1471. CVS 2276 MN, L.L.C.
1472. CVS 2315 VA, L.L.C.
1473. CVS 232 NY, L.L.C.
1474. CVS 2386 TN, L.L.C.
1475. CVS 244 MD, L.L.C.
1476. CVS 2446 SC, L.L.C.
1477. CVS 2489 OK, L.L.C.
1478. CVS 249 First Avenue, L.L.C.
1479. CVS 2497 SC, L.L.C.
1480. CVS 2512 OK, L.L.C.
1481. CVS 2522 Baltimore, L.L.C.
1482. CVS 2538 NC, L.L.C.
1483. CVS 2544 GA, L.L.C.
1484. CVS 2544 Peachtree, L.L.C.
1485. CVS 2545 CT, L.L.C.
1486. CVS 2548 NC, L.L.C.
1487. CVS 2555 SC, L.L.C.
1488. CVS 2593 GA, L.L.C.
1489. CVS 264 NJ, L.L.C.
1490. CVS 266 LA, L.L.C.
1491. CVS 26th Street, L.L.C.
1492. CVS 2721 NY, L.L.C.
1493. CVS 2723 NJ, L.L.C.
1494. CVS 2731 Clearwater, L.L.C.
1495. CVS 2732 Hollywood, L.L.C.
1496. CVS 2747 FL, L.L.C.
1497. CVS 2758 Margate, L.L.C.
1498. CVS 2759 St. Petersburg, L.L.C.
1499. CVS 2760 Tampa, L.L.C.
1500. CVS 2767 Pinellas Park, L.L.C.
1501. CVS 2776 VA, L.L.C.
1502. CVS 2786 IL, L.L.C.
1503. CVS 2788 Buffalo Grove, L.L.C.
1504. CVS 2790 Evergreen, L.L.C.
1505. CVS 2797 Niles, L.L.C.
1506. CVS 2798 Chicago, L.L.C.
1507. CVS 2799 Mt. Prospect, L.L.C.

1508. CVS 2803 Tampa, L.L.C.
1509. CVS 2805 Lauderhill, L.L.C.
1510. CVS 2806 Orlando, L.L.C.
1511. CVS 2809 IL, L.L.C.
1512. CVS 2825 Brandon, L.L.C.
1513. CVS 2827 Hillside, L.L.C.
1514. CVS 2829 FL, L.L.C.
1515. CVS 2842 Palm Harbor, L.L.C.
1516. CVS 2844 Chicago, L.L.C.
1517. CVS 2846 Chicago, L.L.C.
1518. CVS 2863 Rolling Meadows, L.L.C.
1519. CVS 2868 Tinton Falls, L.L.C.
1520. CVS 2873 St. Petersburg, L.L.C.
1521. CVS 2874 Clearwater, L.L.C.
1522. CVS 2875 Tampa, L.L.C.
1523. CVS 2881 Randolph, L.L.C.
1524. CVS 2893 Miami, L.L.C.
1525. CVS 2895 Miami, L.L.C.
1526. CVS 2898 Tampa, L.L.C.
1527. CVS 28th and Eastern, Inc.
1528. CVS 2901 Waukegan, L.L.C.
1529. CVS 2903 Downers Grove, L.L.C.
1530. CVS 2904 FL, L.L.C.
1531. CVS 2935 IL, L.L.C.
1532. CVS 2936 Joliet, L.L.C.
1533. CVS 2942 Chicago, L.L.C.
1534. CVS 2948 Henderson, L.L.C.
1535. CVS 2949 East Hanover, L.L.C.
1536. CVS 2964 Maineville, L.L.C.
1537. CVS 2966 FL, L.L.C.
1538. CVS 2972 Philadelphia, L.L.C.
1539. CVS 2974 MD, L.L.C.
1540. CVS 2976 General, Inc.
1541. CVS 2977 General, Inc.
1542. CVS 2979 General, Inc.
1543. CVS 2986 Lincoln Drive, L.L.C.
1544. CVS 2987 Lincoln Park, L.L.C.
1545. CVS 2987 NJ, L.L.C.
1546. CVS 2988 General, Inc.
1547. CVS 2989 Las Vegas, L.L.C.
1548. CVS 2990 Las Vegas, L.L.C.
1549. CVS 2991 General, Inc.
1550. CVS 3005 General, Inc.
1551. CVS 3006 General, Inc.
1552. CVS 3007 General, Inc.
1553. CVS 301 MA, L.L.C.
1554. CVS 3010 Setauket, L.L.C.
1555. CVS 3038 DE, L.L.C.
1556. CVS 304 FL, L.L.C.
1557. CVS 3042 DE, L.L.C.
1558. CVS 3048 VA, L.L.C.
1559. CVS 3052 VA, L.L.C.
1560. CVS 3082 GA, L.L.C.
1561. CVS 3086 GA, L.L.C.
1562. CVS 3088 OH, L.L.C.
1563. CVS 3114 FL, L.L.C.
1564. CVS 3121 FL, L.L.C.
1565. CVS 3126 FL, L.L.C.
1566. CVS 3134 General, Inc.
1567. CVS 3136 North Arlington, L.L.C.
1568. CVS 3140 Torresdale, L.L.C.
1569. CVS 3143 Chandler, L.L.C.
1570. CVS 316 MA, L.L.C.
1571. CVS 3163 IL, L.L.C.
1572. CVS 3163 Oak Park, L.L.C.
1573. CVS 317 NC, L.L.C.
1574. CVS 3172 Las Vegas, L.L.C.
1575. CVS 3173 General, Inc.
1576. CVS 3176 General, Inc.
1577. CVS 3177 General, Inc.
1578. CVS 3178 General, Inc.
1579. CVS 3180 General, Inc.
1580. CVS 3181 General, Inc.
1581. CVS 3186 WV, L.L.C.
1582. CVS 3190 General, Inc.
1583. CVS 31st Street Astoria, L.L.C.
1584. CVS 320 Fifth Avenue, L.L.C.
1585. CVS 320 NJ, L.L.C.
1586. CVS 3200 General, Inc.
1587. CVS 3205 MN, L.L.C.
1588. CVS 3207 General, Inc.
1589. CVS 3210 Las Vegas, L.L.C.
1590. CVS 3226 FL, L.L.C.
1591. CVS 3227 FL, L.L.C.
1592. CVS 3231 DE, L.L.C.

1593. CVS 3231 FL, L.L.C.
1594. CVS 3232 NC, L.L.C.
1595. CVS 3245 FL, L.L.C.
1596. CVS 3249 FL, L.L.C.
1597. CVS 3250 FL, L.L.C.
1598. CVS 3257 FL, L.L.C.
1599. CVS 326 RI, L.L.C.
1600. CVS 3264 Phoenix, L.L.C.
1601. CVS 3268 Gilbert, L.L.C.
1602. CVS 3269 FL, L.L.C.
1603. CVS 3271 FL, L.L.C.
1604. CVS 3274 FL, L.L.C.
1605. CVS 3285 FL, L.L.C.
1606. CVS 3292 General, Inc.
1607. CVS 3295 General, Inc.
1608. CVS 3301 OH, L.L.C.
1609. CVS 3318 FL, L.L.C.
1610. CVS 3320 OH, L.L.C.
1611. CVS 3321 OH, L.L.C.
1612. CVS 3336 VA, L.L.C.
1613. CVS 3338 OH, L.L.C.
1614. CVS 3340 OH, L.L.C.
1615. CVS 3343 OH, L.L.C.
1616. CVS 3346 OH, L.L.C.
1617. CVS 3348 GA, L.L.C.
1618. CVS 3350 MN, L.L.C.
1619. CVS 3353 OH, L.L.C.
1620. CVS 3356 OH, L.L.C.
1621. CVS 3380 SC, L.L.C.
1622. CVS 3381 OH, L.L.C.
1623. CVS 3395 FL, L.L.C.
1624. CVS 3396 VA, L.L.C.
1625. CVS 3397 VA, L.L.C.
1626. CVS 3407 OH, L.L.C.
1627. CVS 3416 OH, L.L.C.
1628. CVS 3418 FL, L.L.C.
1629. CVS 3432 OH, L.L.C.
1630. CVS 3435 NC, L.L.C.
1631. CVS 3436 Mesa, L.L.C.
1632. CVS 3452 OH, L.L.C.
1633. CVS 3457 OH, L.L.C.
1634. CVS 3460 VA, L.L.C.
1635. CVS 3468 OH, L.L.C.
1636. CVS 3471 OH, L.L.C.
1637. CVS 3472 OH, L.L.C.
1638. CVS 3474 OH, L.L.C.
1639. CVS 3475 WV, L.L.C.
1640. CVS 3492 Orlando, L.L.C.
1641. CVS 3502 VA, L.L.C.
1642. CVS 3503 VA, L.L.C.
1643. CVS 3515 VA, L.L.C.
1644. CVS 3519 FL, L.L.C.
1645. CVS 352 MD, L.L.C.
1646. CVS 3521 VA, L.L.C.
1647. CVS 3527 NC, L.L.C.
1648. CVS 3537 SC, L.L.C.
1649. CVS 3543 SC, L.L.C.
1650. CVS 3558 NV, L.L.C.
1651. CVS 3560 SC, L.L.C.
1652. CVS 3563 NC, L.L.C.
1653. CVS 3569 NC, L.L.C.
1654. CVS 3574 NC, L.L.C.
1655. CVS 3591 FL, L.L.C.
1656. CVS 3593 NC, L.L.C.
1657. CVS 3597 SC, L.L.C.
1658. CVS 3617 Forks Township, L.L.C.
1659. CVS 3625 AZ, L.L.C.
1660. CVS 3625 Phoenix, L.L.C.
1661. CVS 3643 NC, L.L.C.
1662. CVS 3652 FL, L.L.C.
1663. CVS 3661 FL, L.L.C.
1664. CVS 3663 FL, L.L.C.
1665. CVS 3667 FL, L.L.C.
1666. CVS 3671 FL, L.L.C.
1667. CVS 3693 General, Inc.
1668. CVS 3699 General, Inc.
1669. CVS 3701 General, Inc.
1670. CVS 3702 General, Inc.
1671. CVS 3707 General, Inc.
1672. CVS 3708 General, Inc.
1673. CVS 3711 NC, L.L.C.
1674. CVS 3718 General, Inc.
1675. CVS 3722 FL, L.L.C.
1676. CVS 3724 General, Inc.
1677. CVS 3728 TN, L.L.C.
1678. CVS 373 MA, L.L.C.

1679. CVS 3743 TN, L.L.C.
1680. CVS 3745 Peoria, L.L.C.
1681. CVS 3749 AZ, L.L.C.
1682. CVS 3749 Goodyear, L.L.C.
1683. CVS 3753 FL, L.L.C.
1684. CVS 3755 St. Petersburg, L.L.C.
1685. CVS 3760 GA, L.L.C.
1686. CVS 3762 TN, L.L.C.
1687. CVS 3766 Dacula, L.L.C.
1688. CVS 3767 GA, L.L.C.
1689. CVS 3769, L.L.C.
1690. CVS 3771 GA, L.L.C.
1691. CVS 3778 GA, L.L.C.
1692. CVS 3791 TN, L.L.C.
1693. CVS 3805 SC, L.L.C.
1694. CVS 3818 FL, L.L.C.
1695. CVS 3821 SC, L.L.C.
1696. CVS 3831 NC, L.L.C.
1697. CVS 3833 NC, L.L.C.
1698. CVS 3850 SC, L.L.C.
1699. CVS 386 TN, L.L.C.
1700. CVS 3861 SC, L.L.C.
1701. CVS 3863 SC, L.L.C.
1702. CVS 3869 SC, L.L.C.
1703. CVS 3874 GA, L.L.C.
1704. CVS 3892 SC, L.L.C.
1705. CVS 3893 VA, L.L.C.
1706. CVS 3895 NC, L.L.C.
1707. CVS 3897 General, Inc.
1708. CVS 3900 General, Inc.
1709. CVS 3919 FL, L.L.C.
1710. CVS 3921 FL, L.L.C.
1711. CVS 3922 VA, L.L.C.
1712. CVS 3923 FL, L.L.C.
1713. CVS 3949 VA, L.L.C.
1714. CVS 3965 AZ, L.L.C.
1715. CVS 3965 Chandler, L.L.C.
1716. CVS 3967 AZ, L.L.C.
1717. CVS 397 RI, L.L.C.
1718. CVS 3973 NC, L.L.C.
1719. CVS 3980 OH, L.L.C.
1720. CVS 3987 NC, L.L.C.
1721. CVS 3988 NC, L.L.C.
1722. CVS 4005 FL, L.L.C.
1723. CVS 4009 FL, L.L.C.
1724. CVS 4015 FL, L.L.C.
1725. CVS 4016 MA, L.L.C.
1726. CVS 4025 FL, L.L.C.
1727. CVS 4073 MA, L.L.C.
1728. CVS 4083 Largo, L.L.C.
1729. CVS 4099 FL, L.L.C.
1730. CVS 410 FL, L.L.C.
1731. CVS 4110 TN, L.L.C.
1732. CVS 4135 NC, L.L.C.
1733. CVS 4139 FL, L.L.C.
1734. CVS 4143 MA, L.L.C.
1735. CVS 4146 FL, L.L.C.
1736. CVS 4153 SC, L.L.C.
1737. CVS 4155 FL, L.L.C.
1738. CVS 4164 GA, L.L.C.
1739. CVS 4175 VA, L.L.C.
1740. CVS 4176 NC, L.L.C.
1741. CVS 4178 GA, L.L.C.
1742. CVS 4194 VA, L.L.C.
1743. CVS 4203 GA, L.L.C.
1744. CVS 4206 GA, L.L.C.
1745. CVS 421 FL, L.L.C.
1746. CVS 4220 MD, L.L.C.
1747. CVS 4225 MD, L.L.C.
1748. CVS 4226 FL, L.L.C.
1749. CVS 4237 VA, L.L.C.
1750. CVS 4240 TN, L.L.C.
1751. CVS 4244 WV, L.L.C.
1752. CVS 4251 GA, L.L.C.
1753. CVS 4255 GA, L.L.C.
1754. CVS 4262 IL, L.L.C.
1755. CVS 4269 Geneva, L.L.C.
1756. CVS 427 NC, L.L.C.
1757. CVS 4272 General, Inc.
1758. CVS 4278 General, Inc.
1759. CVS 4284 NC, L.L.C.
1760. CVS 4285 VA, L.L.C.
1761. CVS 4290 NC, L.L.C.
1762. CVS 4292 VA, L.L.C.
1763. CVS 4293 NC, L.L.C.
1764. CVS 4297 NC, L.L.C.

1765. CVS 4298 NC, L.L.C.
1766. CVS 4300 OH, L.L.C.
1767. CVS 4307 General, Inc.
1768. CVS 433 MA, L.L.C.
1769. CVS 4331 OH, L.L.C.
1770. CVS 4335 VA, L.L.C.
1771. CVS 4337 GA, L.L.C.
1772. CVS 4363 VA, L.L.C.
1773. CVS 4365 TN, L.L.C.
1774. CVS 4366 OH, L.L.C.
1775. CVS 4371 MD, L.L.C.
1776. CVS 4374 NC, L.L.C.
1777. CVS 4379 NC, L.L.C.
1778. CVS 4380 WI, L.L.C.
1779. CVS 4383 General, Inc.
1780. CVS 4397 General, Inc.
1781. CVS 4404 GA, L.L.C.
1782. CVS 4415 FL, L.L.C.
1783. CVS 4419 WV, L.L.C.
1784. CVS 4421 TN, L.L.C.
1785. CVS 4424 GA, L.L.C.
1786. CVS 4427 General, Inc.
1787. CVS 4428 TN, L.L.C.
1788. CVS 4444 NC, L.L.C.
1789. CVS 4456 General, Inc.
1790. CVS 4458 FL, L.L.C.
1791. CVS 447 MA, L.L.C.
1792. CVS 4474 General, Inc.
1793. CVS 4480 FL, L.L.C.
1794. CVS 4485 FL, L.L.C.
1795. CVS 449 MA, L.L.C.
1796. CVS 4506 GA, L.L.C.
1797. CVS 4514 GA, L.L.C.
1798. CVS 4519 MS, L.L.C.
1799. CVS 452 MD, L.L.C.
1800. CVS 4523 SC, L.L.C.
1801. CVS 4532 GA, L.L.C.
1802. CVS 4533 TN, L.L.C.
1803. CVS 4534 GA, L.L.C.
1804. CVS 4536 MS, L.L.C.
1805. CVS 4540 GA, L.L.C.
1806. CVS 4544 RI, L.L.C.
1807. CVS 4545 GA, L.L.C.
1808. CVS 4551 OH, L.L.C.
1809. CVS 4556 GA, L.L.C.
1810. CVS 4564 GA, L.L.C.
1811. CVS 4565 GA, L.L.C.
1812. CVS 4567 GA, L.L.C.
1813. CVS 4569 GA, L.L.C.
1814. CVS 4571 GA, L.L.C.
1815. CVS 4572 OH, L.L.C.
1816. CVS 4573 MN, L.L.C.
1817. CVS 4576 GA, L.L.C.
1818. CVS 4578 MN, L.L.C.
1819. CVS 4579 GA, L.L.C.
1820. CVS 4582 GA, L.L.C.
1821. CVS 4583 GA, L.L.C.
1822. CVS 4589 GA, L.L.C.
1823. CVS 4593 GA, L.L.C.
1824. CVS 4600 GA, L.L.C.
1825. CVS 4603 GA, L.L.C.
1826. CVS 4605 OH, L.L.C.
1827. CVS 4620 NC, L.L.C.
1828. CVS 4628 SC, L.L.C.
1829. CVS 4629 FL, L.L.C.
1830. CVS 4631 MI, L.L.C.
1831. CVS 4639 FL, L.L.C.
1832. CVS 4668 GA, L.L.C.
1833. CVS 4669 GA, L.L.C.
1834. CVS 467 AL, L.L.C.
1835. CVS 4672 GA, L.L.C.
1836. CVS 4678 GA, L.L.C.
1837. CVS 4695 GA, L.L.C.
1838. CVS 47 MS, L.L.C.
1839. CVS 4706 General, Inc.
1840. CVS 4721 GA, L.L.C.
1841. CVS 4738 FL, L.L.C.
1842. CVS 4765 GA, L.L.C.
1843. CVS 4767 AL, L.L.C.
1844. CVS 4769 FL, L.L.C.
1845. CVS 4769 SC, L.L.C.
1846. CVS 4772 East Vincent, L.L.C.
1847. CVS 4773 Gilbertsville, L.L.C.
1848. CVS 4777 General, Inc.
1849. CVS 4778 IL, L.L.C.
1850. CVS 4784 NV, L.L.C

1851. CVS 4785 FL, L.L.C.
1852. CVS 4794 General, Inc.
1853. CVS 4795 AZ, L.L.C.
1854. CVS 4797 FL, L.L.C.
1855. CVS 4803 OH, L.L.C.
1856. CVS 4807 OH, L.L.C.
1857. CVS 4811 OH, L.L.C.
1858. CVS 4822 AL, L.L.C.
1859. CVS 4823 AL, L.L.C.
1860. CVS 4826 AL, L.L.C.
1861. CVS 4832 AL, L.L.C.
1862. CVS 4833 AL, L.L.C.
1863. CVS 4834 AL, L.L.C.
1864. CVS 4838 AL, L.L.C.
1865. CVS 4840 AL, L.L.C.
1866. CVS 4842 AL, L.L.C.
1867. CVS 4843 AL, L.L.C.
1868. CVS 4846 NC, L.L.C.
1869. CVS 4847 AL, L.L.C.
1870. CVS 4853 AL, L.L.C.
1871. CVS 4854 AL, L.L.C.
1872. CVS 4855 AL, L.L.C.
1873. CVS 4858 AL, L.L.C.
1874. CVS 4861 AL, L.L.C.
1875. CVS 4863 AL, L.L.C.
1876. CVS 4866 AL, L.L.C.
1877. CVS 4882 AL, L.L.C.
1878. CVS 4888 AL, L.L.C.
1879. CVS 4889 AL, L.L.C.
1880. CVS 4893 AL, L.L.C.
1881. CVS 4896 OK, L.L.C.
1882. CVS 4900 AL, L.L.C.
1883. CVS 4902 AL, L.L.C.
1884. CVS 4905 AL, L.L.C.
1885. CVS 4921 DE, L.L.C.
1886. CVS 4925 AL, L.L.C.
1887. CVS 4931 AL, L.L.C.
1888. CVS 4936 AL, L.L.C.
1889. CVS 4938 AL, L.L.C.
1890. CVS 4941 AL, L.L.C.
1891. CVS 4944 AL, L.L.C.
1892. CVS 4946 AL, L.L.C.
1893. CVS 4947 AL, L.L.C.
1894. CVS 4948 AL, L.L.C.
1895. CVS 4960 AL, L.L.C.
1896. CVS 4976 AL, L.L.C.
1897. CVS 4977 IL, L.L.C.
1898. CVS 4978 IL, L.L.C.
1899. CVS 4981 IL, L.L.C.
1900. CVS 4981 MA, L.L.C.
1901. CVS 4982 IN, L.L.C.
1902. CVS 4983 General, Inc.
1903. CVS 4985 General, Inc.
1904. CVS 4987 FL, L.L.C.
1905. CVS 4989 FL, L.L.C.
1906. CVS 4990 TN, L.L.C.
1907. CVS 4992 TN, L.L.C.
1908. CVS 4993 FL, L.L.C.
1909. CVS 4993 MS, L.L.C.
1910. CVS 4994 Miami, L.L.C.
1911. CVS 4995 IL, L.L.C.
1912. CVS 4996 WI, L.L.C.
1913. CVS 4997 FL, L.L.C.
1914. CVS 4998 Melbourne, L.L.C.
1915. CVS 4999 Suntree, L.L.C.
1916. CVS 5004 FL, L.L.C.
1917. CVS 5006 FL, L.L.C.
1918. CVS 5012 CA, L.L.C.
1919. CVS 5018 TN, L.L.C.
1920. CVS 5021 VA, L.L.C.
1921. CVS 5029 AZ, L.L.C.
1922. CVS 5041 FL, L.L.C.
1923. CVS 5044 SC, L.L.C.
1924. CVS 506 NJ, L.L.C.
1925. CVS 5060 OH, L.L.C.
1926. CVS 5089 NY, L.L.C.
1927. CVS 5111 FL, L.L.C.
1928. CVS 5112 FL, L.L.C.
1929. CVS 5113 NV, L.L.C.
1930. CVS 5116 FL, L.L.C.
1931. CVS 5122 FL, L.L.C.
1932. CVS 5127 FL, L.L.C.
1933. CVS 5128 NJ, L.L.C.
1934. CVS 5131 AZ, L.L.C.
1935. CVS 5144 NV, L.L.C.
1936. CVS 5146 FL, L.L.C.

1937. CVS 516 VA, L.L.C.
1938. CVS 5165 FL, L.L.C.
1939. CVS 5168 MS, L.L.C.
1940. CVS 5172 FL, L.L.C.
1941. CVS 5177 FL, L.L.C.
1942. CVS 5180 FL, L.L.C.
1943. CVS 5182 FL, L.L.C.
1944. CVS 5206 IN, L.L.C.
1945. CVS 5213 IL, L.L.C.
1946. CVS 5225 General, Inc.
1947. CVS 5255 General, Inc.
1948. CVS 5258 General, Inc.
1949. CVS 5259 General, Inc.
1950. CVS 5260 General, Inc.
1951. CVS 5267 General, Inc.
1952. CVS 5269 General, Inc.
1953. CVS 5271 KS, L.L.C.
1954. CVS 5273 General, Inc.
1955. CVS 5278 LA, L.L.C.
1956. CVS 5282 LA, L.L.C.
1957. CVS 5286 NV, L.L.C.
1958. CVS 5294 LA, L.L.C.
1959. CVS 530 NY, L.L.C.
1960. CVS 5306 LA, L.L.C.
1961. CVS 5320 General, Inc.
1962. CVS 5323 LA, L.L.C.
1963. CVS 5325 LA, L.L.C.
1964. CVS 5328 General, Inc.
1965. CVS 5339 General, Inc.
1966. CVS 5346 General, Inc.
1967. CVS 5347 General, Inc.
1968. CVS 5352 GA, L.L.C.
1969. CVS 5353 GA, L.L.C.
1970. CVS 5354 LA, L.L.C.
1971. CVS 5355 GA, L.L.C.
1972. CVS 5356 GA, L.L.C.
1973. CVS 5374 LA, L.L.C.
1974. CVS 5375 FL, L.L.C.
1975. CVS 5379 NC, L.L.C.
1976. CVS 5382 IL, L.L.C.
1977. CVS 5384 NC, L.L.C.
1978. CVS 5388 General, Inc.
1979. CVS 5396 LA, L.L.C.
1980. CVS 540 Amsterdam Avenue, L.L.C.
1981. CVS 5413 AL, L.L.C.
1982. CVS 5418 GA, L.L.C.
1983. CVS 5419 SC, L.L.C.
1984. CVS 5420 NC, L.L.C.
1985. CVS 5425 OH, L.L.C.
1986. CVS 5426 OH, L.L.C.
1987. CVS 5432 LA, L.L.C.
1988. CVS 5439 FL, L.L.C.
1989. CVS 5444 GA, L.L.C.
1990. CVS 5444 General, Inc.
1991. CVS 5448 FL, L.L.C.
1992. CVS 5457 OH, L.L.C.
1993. CVS 5458 OH, L.L.C.
1994. CVS 5460 MD, L.L.C.
1995. CVS 5461 NJ, L.L.C.
1996. CVS 5466 FL, L.L.C.
1997. CVS 5466 IL, L.L.C.
1998. CVS 5467 IL, L.L.C.
1999. CVS 5467 VA, L.L.C.
2000. CVS 5468 FL, L.L.C.
2001. CVS 5469 LA, L.L.C.
2002. CVS 5472 MN, L.L.C.
2003. CVS 5476 SC, L.L.C.
2004. CVS 5477 AZ, L.L.C.
2005. CVS 5488 FL, L.L.C.
2006. CVS 5492 MN, L.L.C.
2007. CVS 5501 VA, L.L.C.
2008. CVS 5507 VA, L.L.C.
2009. CVS 5523 GA, L.L.C.
2010. CVS 5535 WI, L.L.C.
2011. CVS 5536 SC, L.L.C.
2012. CVS 5537 NC, L.L.C.
2013. CVS 5542 SC, L.L.C.
2014. CVS 5544 LA, L.L.C.
2015. CVS 5545 NC, L.L.C.
2016. CVS 5548 SC, L.L.C.
2017. CVS 5552 SC, L.L.C.
2018. CVS 5554 LA, L.L.C.
2019. CVS 5555 SC, L.L.C.
2020. CVS 5565 NC, L.L.C.
2021. CVS 5568 NC, L.L.C.

2022. CVS 5575 SC, L.L.C.
2023. CVS 5577 NC, L.L.C.
2024. CVS 5582 VA, L.L.C.
2025. CVS 5585 NC, L.L.C.
2026. CVS 5586 NC, L.L.C.
2027. CVS 5589 FL, L.L.C.
2028. CVS 5592 NC, L.L.C.
2029. CVS 5594 NC, L.L.C.
2030. CVS 5595 NC, L.L.C.
2031. CVS 5598 SC, L.L.C.
2032. CVS 5599 LA, L.L.C.
2033. CVS 56 FL, L.L.C.
2034. CVS 5604 MS, L.L.C.
2035. CVS 5606 GA, L.L.C.
2036. CVS 5608 GA, L.L.C.
2037. CVS 5612 LA, L.L.C.
2038. CVS 5613 GA, L.L.C.
2039. CVS 5616 MN, L.L.C.
2040. CVS 5617 LA, L.L.C.
2041. CVS 5618 GA, L.L.C.
2042. CVS 5622 GA, L.L.C.
2043. CVS 5625 MO, L.L.C.
2044. CVS 5626 GA, L.L.C.
2045. CVS 5631 GA, L.L.C.
2046. CVS 5657 General, Inc.
2047. CVS 5660 FL, L.L.C.
2048. CVS 5662 General, Inc.
2049. CVS 5666 OH, L.L.C.
2050. CVS 5667 General, Inc.
2051. CVS 5668 TN, L.L.C.
2052. CVS 5669 General, Inc.
2053. CVS 5670 General, Inc.
2054. CVS 5674 FL, L.L.C.
2055. CVS 5676 General, Inc.
2056. CVS 5677 IL, L.L.C.
2057. CVS 5680 GA, L.L.C.
2058. CVS 5683 GA, L.L.C.
2059. CVS 5684 GA, L.L.C.
2060. CVS 5685 General, Inc.
2061. CVS 5689 General, Inc.
2062. CVS 5690 General, Inc.
2063. CVS 5694 TN, L.L.C.
2064. CVS 5695 General, Inc.
2065. CVS 5696 General, Inc.
2066. CVS 5702 General, Inc.
2067. CVS 5704 GA, L.L.C.
2068. CVS 5718 General, Inc.
2069. CVS 5729 VA, L.L.C.
2070. CVS 5736 VA, L.L.C.
2071. CVS 5740 MS, L.L.C.
2072. CVS 5750 VA, L.L.C.
2073. CVS 5758 IL, L.L.C.
2074. CVS 5767 NJ, L.L.C.
2075. CVS 5769 IL, L.L.C.
2076. CVS 5774 IL, L.L.C.
2077. CVS 5777 MS, L.L.C.
2078. CVS 5779 AZ, L.L.C.
2079. CVS 5781 IN, L.L.C.
2080. CVS 5782 FL, L.L.C.
2081. CVS 5783 IL, L.L.C.
2082. CVS 5784 FL, L.L.C.
2083. CVS 5785 FL, L.L.C.
2084. CVS 5786 FL, L.L.C.
2085. CVS 5790 VA, L.L.C.
2086. CVS 5791 AZ, L.L.C.
2087. CVS 5792 NV, L.L.C.
2088. CVS 5793 AZ, L.L.C.
2089. CVS 5794 AZ, L.L.C.
2090. CVS 5797 IL, L.L.C.
2091. CVS 5799 General, Inc.
2092. CVS 5800 General, Inc.
2093. CVS 5801 MS, L.L.C.
2094. CVS 5802 VA, L.L.C.
2095. CVS 5804 General, Inc.
2096. CVS 5805 General, Inc.
2097. CVS 5807 General, Inc.
2098. CVS 5811 NV, L.L.C.
2099. CVS 5812 AZ, L.L.C.
2100. CVS 5814 AZ, L.L.C.
2101. CVS 5815 FL, L.L.C.
2102. CVS 5816 FL, L.L.C.
2103. CVS 582 MA, L.L.C.
2104. CVS 5821 FL, L.L.C.
2105. CVS 5822 IL, L.L.C.
2106. CVS 5828 CA, L.L.C.
2107. CVS 5829 IL, L.L.C.

2108. CVS 5831 NJ, L.L.C.
2109. CVS 5832 FL, L.L.C.
2110. CVS 5833 General, Inc.
2111. CVS 5835 MS, L.L.C.
2112. CVS 5838 General, Inc.
2113. CVS 5839 General, Inc.
2114. CVS 5840 General, Inc.
2115. CVS 5843 General, Inc.
2116. CVS 5844 General, Inc.
2117. CVS 5849 AZ, L.L.C.
2118. CVS 585 AL, L.L.C.
2119. CVS 5850 MS, L.L.C.
2120. CVS 5851 IL, L.L.C.
2121. CVS 5852 FL, L.L.C.
2122. CVS 5853 FL, L.L.C.
2123. CVS 5854 FL, L.L.C.
2124. CVS 5856 FL, L.L.C.
2125. CVS 5856 MA, L.L.C.
2126. CVS 5857 FL, L.L.C.
2127. CVS 5859 FL, L.L.C.
2128. CVS 5864 FL, L.L.C.
2129. CVS 5867 NJ, L.L.C.
2130. CVS 5869 General, Inc.
2131. CVS 5870 MS, L.L.C.
2132. CVS 5872 NJ, L.L.C.
2133. CVS 5875 MD, L.L.C.
2134. CVS 5877 General, Inc.
2135. CVS 5878 MS, L.L.C.
2136. CVS 5880 General, Inc.
2137. CVS 5881 General, Inc.
2138. CVS 5882 General, Inc.
2139. CVS 5883 MS, L.L.C.
2140. CVS 5884 General, Inc.
2141. CVS 5886 NC, L.L.C.
2142. CVS 5887 General, Inc.
2143. CVS 5889 CA, L.L.C.
2144. CVS 5890 AZ, L.L.C.
2145. CVS 5891 AZ, L.L.C.
2146. CVS 5892 AZ, L.L.C.
2147. CVS 5893 AZ, L.L.C.
2148. CVS 5894 General, Inc.
2149. CVS 5895 General, Inc.
2150. CVS 5896 General, Inc.
2151. CVS 5897 FL, L.L.C.
2152. CVS 5899 FL, L.L.C.
2153. CVS 590 RI, L.L.C.
2154. CVS 5901 FL, L.L.C.
2155. CVS 5906 General, Inc.
2156. CVS 5907 General, Inc.
2157. CVS 5909 MD, L.L.C.
2158. CVS 5910 General, Inc.
2159. CVS 5912 FL, L.L.C.
2160. CVS 5914 IL, L.L.C.
2161. CVS 5915 IL, L.L.C.
2162. CVS 5917 FL, L.L.C.
2163. CVS 5919 FL, L.L.C.
2164. CVS 5928 VA, L.L.C.
2165. CVS 5929 FL, L.L.C.
2166. CVS 5930 FL, L.L.C.
2167. CVS 5931 AZ, L.L.C.
2168. CVS 5934 AZ, L.L.C.
2169. CVS 5940 NV, L.L.C.
2170. CVS 5942 NV, L.L.C.
2171. CVS 5961 WV, L.L.C.
2172. CVS 5962 General, Inc.
2173. CVS 5963 General, Inc.
2174. CVS 5964 General, Inc.
2175. CVS 5965 General, Inc.
2176. CVS 5966 General, Inc.
2177. CVS 5968 General, Inc.
2178. CVS 5969 General, Inc.
2179. CVS 5970 General, Inc.
2180. CVS 5971 General, Inc.
2181. CVS 5972 General, Inc.
2182. CVS 5975 FL, L.L.C.
2183. CVS 5976 General, Inc.
2184. CVS 5977 General, Inc.
2185. CVS 5979 IL, L.L.C.
2186. CVS 5981 General, Inc.
2187. CVS 5982 General, Inc.
2188. CVS 5986 VA, L.L.C.
2189. CVS 6000 General, Inc.
2190. CVS 6001 General, Inc.
2191. CVS 6002 General, Inc.
2192. CVS 6004 OK, L.L.C.
2193. CVS 6005 General, Inc.

2194. CVS 6007 FL, L.L.C.
2195. CVS 6009 OK, L.L.C.
2196. CVS 6012 GA, L.L.C.
2197. CVS 6013 AL, L.L.C.
2198. CVS 6017 AL, L.L.C.
2199. CVS 6019 FL, L.L.C.
2200. CVS 6022 OK, L.L.C.
2201. CVS 6024 OK, L.L.C.
2202. CVS 6044 TN, L.L.C.
2203. CVS 6073 NJ, L.L.C.
2204. CVS 6075 NJ, L.L.C.
2205. CVS 6089 OH, L.L.C.
2206. CVS 6098 Wilmington OH, L.L.C.
2207. CVS 6098, L.L.C.
2208. CVS 6105 OH, L.L.C.
2209. CVS 6116 KY, L.L.C.
2210. CVS 612 MA, L.L.C.
2211. CVS 6135 NJ, L.L.C.
2212. CVS 6137 OH, L.L.C.
2213. CVS 6139 OH, L.L.C.
2214. CVS 6142 OK, L.L.C.
2215. CVS 6146 VA, L.L.C.
2216. CVS 6153 OH, L.L.C.
2217. CVS 6155 OH, L.L.C.
2218. CVS 6164 OH, L.L.C.
2219. CVS 6171 OH, L.L.C.
2220. CVS 620 ME, L.L.C.
2221. CVS 6201 MN, L.L.C.
2222. CVS 6222 OK, L.L.C.
2223. CVS 6224 OK, L.L.C..
2224. CVS 6230 OK, L.L.C.
2225. CVS 6233 OK, L.L.C.
2226. CVS 6237 OH, L.L.C.
2227. CVS 6244 KY, L.L.C.
2228. CVS 6267 TN, L.L.C.
2229. CVS 6268 OH, L.L.C.
2230. CVS 6271 OH, L.L.C.
2231. CVS 6283 VA, L.L.C.
2232. CVS 6296 VA, L.L.C.
2233. CVS 6304 TN, L.L.C.
2234. CVS 6305 WV, L.L.C.
2235. CVS 6306 WV, L.L.C.
2236. CVS 6307 WV, L.L.C.
2237. CVS 6312 WV, L.L.C.
2238. CVS 632 MA, L.L.C.
2239. CVS 6322 VA, L.L.C.
2240. CVS 6329 VA, L.L.C.
2241. CVS 6335 KY, L.L.C.
2242. CVS 6337 KY, L.L.C.
2243. CVS 6339 KY, L.L.C.
2244. CVS 6342 KY, L.L.C.
2245. CVS 6346 KY, L.L.C.
2246. CVS 6348 KY, L.L.C.
2247. CVS 6349 OH, L.L.C.
2248. CVS 6350 WV, L.L.C.
2249. CVS 6363 TN, L.L.C.
2250. CVS 6384 KY, L.L.C.
2251. CVS 6386 IL, L.L.C.
2252. CVS 6388 IL, L.L.C.
2253. CVS 6395 TN, L.L.C.
2254. CVS 6400 TN, L.L.C.
2255. CVS 6403 VA, L.L.C.
2256. CVS 6413 TN, L.L.C.
2257. CVS 6415 TN, L.L.C.
2258. CVS 6423, L.L.C.
2259. CVS 6429 TN, L.L.C.
2260. CVS 6433, L.L.C.
2261. CVS 646 FL, L.L.C.
2262. CVS 6487 IN, L.L.C.
2263. CVS 6495 IN, L.L.C.
2264. CVS 6497 IL, L.L.C.
2265. CVS 6507 MN, L.L.C.
2266. CVS 6517 IN, L.L.C.
2267. CVS 652 FL, L.L.C.
2268. CVS 6525 IN, L.L.C.
2269. CVS 657 MA, L.L.C.
2270. CVS 6572 IN. II, L.L.C.
2271. CVS 6572 IN., L.L.C.
2272. CVS 6585 IN, L.L.C.
2273. CVS 6608 New Palestine, L.L.C.
2274. CVS 6610 IN, L.L.C.
2275. CVS 6628 TN, L.L.C.
2276. CVS 6633 NC, L.L.C.
2277. CVS 6652 IN, L.L.C.
2278. CVS 6670 IN, L.L.C.
2279. CVS 6677 IN, L.L.C.

2280. CVS 6686 MN, L.L.C.
2281. CVS 6687 IN, L.L.C.
2282. CVS 6691 MN, L.L.C.
2283. CVS 6701 IL, L.L.C.
2284. CVS 6702 IL, L.L.C.
2285. CVS 6717 NV, L.L.C.
2286. CVS 6722 IN, L.L.C.
2287. CVS 6726 General, Inc.
2288. CVS 6732 FL, L.L.C.
2289. CVS 6733 General, Inc.
2290. CVS 6734 General, Inc.
2291. CVS 6737 General, Inc.
2292. CVS 6744 General, Inc.
2293. CVS 6746 General, Inc.
2294. CVS 6747 General, Inc.
2295. CVS 6753 FL, L.L.C.
2296. CVS 6760 NJ, L.L.C.
2297. CVS 6766 VA, L.L.C.
2298. CVS 6769 NC, L.L.C.
2299. CVS 6780 IN, L.L.C.
2300. CVS 6789 IL, L.L.C.
2301. CVS 6796 MA, L.L.C.
2302. CVS 6801 FL, L.L.C.
2303. CVS 6810 MN, L.L.C.
2304. CVS 6812 OH, L.L.C.
2305. CVS 6816 General, Inc.
2306. CVS 6824 General, Inc.
2307. CVS 6834 General, Inc.
2308. CVS 684 IN, L.L.C.
2309. CVS 6843 FL, L.L.C.
2310. CVS 6852 VA, L.L.C.
2311. CVS 6853 FL, L.L.C.
2312. CVS 6855 FL, L.L.C.
2313. CVS 6858 MD, L.L.C.
2314. CVS 6860 FL, L.L.C.
2315. CVS 6861 GA, L.L.C.
2316. CVS 6867 NV, L.L.C.
2317. CVS 6869 DE, L.L.C.
2318. CVS 6872 NJ, L.L.C.
2319. CVS 6874 IN, L.L.C.
2320. CVS 6880 IN, L.L.C.
2321. CVS 6920 General, Inc.
2322. CVS 693 MA, L.L.C.
2323. CVS 6940 KY, L.L.C.
2324. CVS 6941 KY, L.L.C.
2325. CVS 6972 FL, L.L.C.
2326. CVS 6988 NC, L.L.C.
2327. CVS 6996 OH, L.L.C.
2328. CVS 7008 NC, L.L.C.
2329. CVS 7036, L.L.C.
2330. CVS 7044 General, Inc.
2331. CVS 7047, L.L.C.
2332. CVS 7053 NC, L.L.C.
2333. CVS 7057 NC, L.L.C.
2334. CVS 706 MA, L.L.C.
2335. CVS 7062 NC, L.L.C.
2336. CVS 7063 AL, L.L.C.
2337. CVS 7065 MS, L.L.C.
2338. CVS 7068 GA, L.L.C.
2339. CVS 7070 IL, L.L.C.
2340. CVS 7070 MS, L.L.C.
2341. CVS 7077 AL, L.L.C.
2342. CVS 7082 VA, L.L.C.
2343. CVS 709 FL, L.L.C.
2344. CVS 7092 General, Inc.
2345. CVS 7094 General, Inc.
2346. CVS 7097 OH, L.L.C.
2347. CVS 7098 WV, L.L.C.
2348. CVS 7105 NJ, L.L.C.
2349. CVS 7109 MA, L.L.C.
2350. CVS 7118 General, Inc.
2351. CVS 7119 General, Inc.
2352. CVS 7120 General, Inc.
2353. CVS 7121 OH, L.L.C.
2354. CVS 7124 WV, L.L.C.
2355. CVS 7125 IL, L.L.C.
2356. CVS 7127 FL, L.L.C.
2357. CVS 7129 FL, L.L.C.
2358. CVS 7130 FL, L.L.C.
2359. CVS 7133 FL, L.L.C.
2360. CVS 7134 IL, L.L.C.
2361. CVS 7142 IL, L.L.C.
2362. CVS 7144 TN, L.L.C.
2363. CVS 7147 General, Inc.
2364. CVS 7148 General, Inc.
2365. CVS 7148 NC, L.L.C.

2366. CVS 7149 General, Inc.
2367. CVS 7151 General, Inc.
2368. CVS 7153 General, Inc.
2369. CVS 7154 General, Inc.
2370. CVS 7155 AL, L.L.C.
2371. CVS 7156 General, Inc.
2372. CVS 7157 NC, L.L.C.
2373. CVS 7161 General, Inc.
2374. CVS 7162 General, Inc.
2375. CVS 7163 NC, L.L.C.
2376. CVS 7164 General, Inc.
2377. CVS 7166 IL, L.L.C.
2378. CVS 7167 IL, L.L.C.
2379. CVS 7170 IL, L.L.C.
2380. CVS 7173 FL, L.L.C.
2381. CVS 7174 FL, L.L.C.
2382. CVS 7178 FL, L.L.C.
2383. CVS 7179 AL, L.L.C.
2384. CVS 7180 AL, L.L.C.
2385. CVS 7190 NJ, L.L.C.
2386. CVS 7196 General, Inc.
2387. CVS 7198 General, Inc.
2388. CVS 7200, L.L.C.
2389. CVS 7214 GA, L.L.C.
2390. CVS 7215 AL, L.L.C.
2391. CVS 7217 AL, L.L.C.
2392. CVS 7222 General, Inc.
2393. CVS 7223 GA, L.L.C.
2394. CVS 7225 FL, L.L.C.
2395. CVS 7242 MD, L.L.C.
2396. CVS 7251 NV, L.L.C.
2397. CVS 7252 NV, L.L.C.
2398. CVS 7256 General, Inc.
2399. CVS 7261 WI, L.L.C.
2400. CVS 727 FL, L.L.C.
2401. CVS 7318 SC, L.L.C.
2402. CVS 7324 NC, L.L.C.
2403. CVS 7325 NC, L.L.C.
2404. CVS 7328 NC, L.L.C.
2405. CVS 7331 NC, L.L.C.
2406. CVS 7332, L.L.C.
2407. CVS 7344 NC, L.L.C.
2408. CVS 7350 NC, L.L.C.
2409. CVS 7351 SC, L.L.C.
2410. CVS 7354 NC, L.L.C.
2411. CVS 7381 NC, L.L.C.
2412. CVS 7382 NC, L.L.C.
2413. CVS 7388 SC, L.L.C.
2414. CVS 7397 SC, L.L.C.
2415. CVS 74 VA, L.L.C
2416. CVS 7420 NC, L.L.C.
2417. CVS 7500 NC, L.L.C.
2418. CVS 75004 NC, L.L.C.
2419. CVS 75005 NJ, L.L.C.
2420. CVS 75006 GA, L.L.C.
2421. CVS 7501 GA, L.L.C.
2422. CVS 75012 SC, L.L.C.
2423. CVS 75014 MI, L.L.C.
2424. CVS 75015 MI, L.L.C.
2425. CVS 75020 GA, L.L.C.
2426. CVS 75021 GA, L.L.C.
2427. CVS 75023 GA, L.L.C.
2428. CVS 75024 AL, L.L.C.
2429. CVS 75029 LA, L.L.C.
2430. CVS 7503 VA, L.L.C.
2431. CVS 75030 LA, L.L.C.
2432. CVS 75031 GA, L.L.C.
2433. CVS 7504 GA, L.L.C.
2434. CVS 75087 GA, L.L.C.
2435. CVS 7510 VA, L.L.C.
2436. CVS 75121 SC, L.L.C.
2437. CVS 75122 NC, L.L.C.
2438. CVS 75124 MI, L.L.C.
2439. CVS 75127 NC, L.L.C.
2440. CVS 75128 FL, L.L.C.
2441. CVS 75129 FL, L.L.C.
2442. CVS 75135 VA, L.L.C.
2443. CVS 75136 VA, L.L.C.
2444. CVS 75137 MD, L.L.C.
2445. CVS 75139 NJ, L.L.C.
2446. CVS 75144 RI, L.L.C.
2447. CVS 75147 VA, L.L.C.
2448. CVS 75148 VA, L.L.C.
2449. CVS 75149 WV, L.L.C.
2450. CVS 75151 OH, L.L.C.
2451. CVS 75156 NV, L.L.C.

2452. CVS 75157 MI, L.L.C.
2453. CVS 75159 NC, L.L.C.
2454. CVS 75160 SC, L.L.C.
2455. CVS 75161 AZ, L.L.C.
2456. CVS 75162 AZ, L.L.C.
2457. CVS 75163 GA, L.L.C.
2458. CVS 75164 FL, L.L.C.
2459. CVS 75165 GA, L.L.C.
2460. CVS 75177 FL, L.L.C.
2461. CVS 7518 VA, L.L.C.
2462. CVS 75180 FL, L.L.C.
2463. CVS 75181 AL, L.L.C.
2464. CVS 75182 GA, L.L.C.
2465. CVS 75183 GA, L.L.C.
2466. CVS 75184 FL, L.L.C.
2467. CVS 7519 MN, L.L.C.
2468. CVS 75191 NJ, L.L.C.
2469. CVS 75195 FL, L.L.C.
2470. CVS 75196 FL, L.L.C.
2471. CVS 75197 NC, L.L.C.
2472. CVS 75198 FL, L.L.C.
2473. CVS 75199 MI, L.L.C.
2474. CVS 75207 NJ, L.L.C.
2475. CVS 75208 TN, L.L.C.
2476. CVS 75215 SC, L.L.C.
2477. CVS 75216 NV, L.L.C.
2478. CVS 75219 MI, L.L.C.
2479. CVS 75229 AL, L.L.C.
2480. CVS 75230 OK, L.L.C.
2481. CVS 75232 OK, L.L.C.
2482. CVS 75235 RI, L.L.C.
2483. CVS 75236 NC, L.L.C.
2484. CVS 75239 NJ, L.L.C.
2485. CVS 7524 NC, L.L.C.
2486. CVS 75241 FL, L.L.C.
2487. CVS 75249 FL, L.L.C.
2488. CVS 75254 GA, L.L.C.
2489. CVS 75255 GA, L.L.C.
2490. CVS 75257 NJ, L.L.C.
2491. CVS 75260 VA, L.L.C.
2492. CVS 75262 TN, L.L.C.
2493. CVS 75269 MI, L.L.C.
2494. CVS 75275 TN, L.L.C.
2495. CVS 75280 NC, L.L.C.
2496. CVS 75282 GA, L.L.C.
2497. CVS 75283 GA, L.L.C.
2498. CVS 75284 GA, L.L.C.
2499. CVS 75286 GA, L.L.C.
2500. CVS 75293 FL, L.L.C.
2501. CVS 75294 FL, L.L.C.
2502. CVS 75296 FL, L.L.C.
2503. CVS 75297 VA, L.L.C.
2504. CVS 753 NY, L.L.C.
2505. CVS 75306 SC, L.L.C.
2506. CVS 75307 KS, L.L.C.
2507. CVS 75308 VA, L.L.C.
2508. CVS 75311 VA, L.L.C.
2509. CVS 75312 VA, L.L.C.
2510. CVS 75315 VA, L.L.C.
2511. CVS 75322 FL, L.L.C.
2512. CVS 75324 FL, L.L.C.
2513. CVS 75325 FL, L.L.C.
2514. CVS 75329 NJ, L.L.C.
2515. CVS 75330 MA, L.L.C.
2516. CVS 75334 FL, L.L.C.
2517. CVS 75335 FL, L.L.C.
2518. CVS 75348 NJ, L.L.C.
2519. CVS 75349 SC, L.L.C.
2520. CVS 75351 GA, L.L.C.
2521. CVS 75358 SC, L.L.C.
2522. CVS 75359 NC, L.L.C.
2523. CVS 75362 FL, L.L.C.
2524. CVS 75363 GA, L.L.C.
2525. CVS 75364 FL, L.L.C.
2526. CVS 75365 GA, L.L.C.
2527. CVS 75370 GA, L.L.C.
2528. CVS 75374 NJ, L.L.C.
2529. CVS 75377 NC, L.L.C.
2530. CVS 75378 NC, L.L.C.
2531. CVS 75379 GA, L.L.C.
2532. CVS 75380 GA, L.L.C.
2533. CVS 75381 FL, L.L.C.
2534. CVS 75389 RI, L.L.C.
2535. CVS 75390 NC, L.L.C.
2536. CVS 75391 NC, L.L.C.
2537. CVS 75393 DE, L.L.C.

2538. CVS 75395 FL, L.L.C.
2539. CVS 75405 DE, L.L.C.
2540. CVS 75408 FL, L.L.C.
2541. CVS 75412 MN, L.L.C.
2542. CVS 75414 TN, L.L.C.
2543. CVS 75415 NJ, L.L.C.
2544. CVS 75416 KY, L.L.C.
2545. CVS 75433 GA, L.L.C.
2546. CVS 75441 GA, L.L.C.
2547. CVS 75444 NV, L.L.C.
2548. CVS 75445 SC, L.L.C.
2549. CVS 75448 MA, L.L.C.
2550. CVS 75451 MI, L.L.C.
2551. CVS 75452 MI, L.L.C.
2552. CVS 75453 MI, L.L.C.
2553. CVS 75458 FL, L.L.C.
2554. CVS 7546 NC L.L.C.
2555. CVS 75461 AL, L.L.C.
2556. CVS 75462 FL, L.L.C.
2557. CVS 75466 NC, L.L.C.
2558. CVS 75467 MA, L.L.C.
2559. CVS 75468 TN, L.L.C.
2560. CVS 75479 FL, L.L.C.
2561. CVS 7548 NC, L.L.C.
2562. CVS 75480 FL, L.L.C.
2563. CVS 75482 FL, L.L.C.
2564. CVS 75485 NC, L.L.C.
2565. CVS 75486 KS, L.L.C.
2566. CVS 7549 MI, L.L.C.
2567. CVS 75491 WV, L.L.C.
2568. CVS 75494 MN, L.L.C.
2569. CVS 75498 DE, L.L.C.
2570. CVS 75499 DE, L.L.C.
2571. CVS 75502 VA, L.L.C.
2572. CVS 75503 GA, L.L.C.
2573. CVS 75507 NC, L.L.C.
2574. CVS 75508 MA, L.L.C.
2575. CVS 75514 NV, L.L.C.
2576. CVS 75530 FL, L.L.C.
2577. CVS 75531 FL, L.L.C.
2578. CVS 75535 FL, L.L.C.
2579. CVS 75536 GA, L.L.C.
2580. CVS 75545 NV, L.L.C.
2581. CVS 75549 VA, L.L.C.
2582. CVS 7555 NC, L.L.C.
2583. CVS 75550 VA, L.L.C.
2584. CVS 75552 VA, L.L.C.
2585. CVS 75555 VA, L.L.C.
2586. CVS 75558 FL, L.L.C.
2587. CVS 75560 NJ, L.L.C.
2588. CVS 75561 NJ, L.L.C.
2589. CVS 75562 VA, L.L.C.
2590. CVS 75563 MD, L.L.C.
2591. CVS 75565 VA, L.L.C.
2592. CVS 75566 RI, L.L.C.
2593. CVS 75567 WI, L.L.C.
2594. CVS 75568 VA, L.L.C.
2595. CVS 75569 GA, L.L.C.
2596. CVS 7557 VA, L.L.C.
2597. CVS 75570 SC, L.L.C.
2598. CVS 75571 NC, L.L.C.
2599. CVS 75572 NC, L.L.C.
2600. CVS 7558 VA, L.L.C.
2601. CVS 75580 FL, L.L.C.
2602. CVS 75581 DE, L.L.C.
2603. CVS 75583 MA, L.L.C.
2604. CVS 75584 MA, L.L.C.
2605. CVS 75586 RI, L.L.C.
2606. CVS 75589 KY, L.L.C.
2607. CVS 7559 Glen Raven, L.L.C.
2608. CVS 75590 MN, L.L.C.
2609. CVS 75591 NC, L.L.C.
2610. CVS 7561 VA, L.L.C.
2611. CVS 75613 FL, L.L.C.
2612. CVS 75615 FL, L.L.C.
2613. CVS 75616 FL, L.L.C.
2614. CVS 75618 MI, L.L.C.
2615. CVS 75619 NJ, L.L.C.
2616. CVS 75620 FL, L.L.C.
2617. CVS 75622 FL, L.L.C.
2618. CVS 75623 FL, L.L.C.
2619. CVS 75626 GA, L.L.C.
2620. CVS 75636 NV, L.L.C.
2621. CVS 75642 VA, L.L.C.
2622. CVS 7565 VA, L.L.C.
2623. CVS 75651 SC, L.L.C.

2624. CVS 75659 OK, L.L.C.
2625. CVS 7566 NC, L.L.C.
2626. CVS 75660 OK, L.L.C.
2627. CVS 75667 VA, L.L.C.
2628. CVS 75668 VA, L.L.C.
2629. CVS 75669 MA, L.L.C.
2630. CVS 75674 FL, L.L.C.
2631. CVS 75676 KY, L.L.C.
2632. CVS 75677 MN, L.L.C.
2633. CVS 75679 SC, L.L.C.
2634. CVS 7568 SC, L.L.C.
2635. CVS 75691 VA, L.L.C.
2636. CVS 75692 VA, L.L.C.
2637. CVS 75705 FL, L.L.C.
2638. CVS 75707 FL, L.L.C.
2639. CVS 75711 VA, L.L.C.
2640. CVS 75712 RI, L.L.C.
2641. CVS 75718 OH, L.L.C.
2642. CVS 75719 MN, L.L.C.
2643. CVS 7572 NC, L.L.C.
2644. CVS 75721 FL, L.L.C.
2645. CVS 7573 NC, L.L.C.
2646. CVS 75730 OK, L.L.C.
2647. CVS 75733 NV, L.L.C.
2648. CVS 75738 RI, L.L.C.
2649. CVS 75740 NJ, L.L.C.
2650. CVS 75743 NJ, L.L.C.
2651. CVS 75747 MN, L.L.C.
2652. CVS 75750 NC, L.L.C.
2653. CVS 75762 VA, L.L.C.
2654. CVS 75766 FL, L.L.C.
2655. CVS 75767 TN, L.L.C.
2656. CVS 75768 TN, L.L.C.
2657. CVS 7577 VA, L.L.C.
2658. CVS 75770 NC, L.L.C.
2659. CVS 75771 NC, L.L.C.
2660. CVS 75773 MA, L.L.C.
2661. CVS 75774 MA, L.L.C.
2662. CVS 75781 OK, L.L.C.
2663. CVS 75782 OK, L.L.C.
2664. CVS 75795 DE, L.L.C.
2665. CVS 75796 DE, L.L.C.
2666. CVS 75799 NJ, L.L.C.
2667. CVS 7581 VA, L.L.C.
2668. CVS 75816 FL, L.L.C.
2669. CVS 75821 MN, L.L.C.
2670. CVS 75849 NC, L.L.C.
2671. CVS 75851 TN, L.L.C.
2672. CVS 75852 TN, L.L.C.
2673. CVS 75866 MA, L.L.C.
2674. CVS 75867 RI, L.L.C.
2675. CVS 75870 FL, L.L.C.
2676. CVS 75883 FL, L.L.C.
2677. CVS 75884 VA, L.L.C.
2678. CVS 7589 VA, L.L.C.
2679. CVS 75896 MA, L.L.C.
2680. CVS 75905 NJ, L.L.C.
2681. CVS 75907 DE, L.L.C.
2682. CVS 75915 OK, L.L.C.
2683. CVS 7592 VA, L.L.C.
2684. CVS 75921 OK, L.L.C.
2685. CVS 75924 FL, L.L.C.
2686. CVS 75930 VA, L.L.C.
2687. CVS 75931 VA, L.L.C.
2688. CVS 75935 NV, L.L.C.
2689. CVS 75945 WI, L.L.C.
2690. CVS 75946 VA, L.L.C.
2691. CVS 75947 GA, L.L.C.
2692. CVS 75948 NC, L.L.C.
2693. CVS 75952 WI, L.L.C.
2694. CVS 75955 OK, L.L.C.
2695. CVS 75958 MN, L.L.C.
2696. CVS 75959 MN, L.L.C.
2697. CVS 75961 SC, L.L.C.
2698. CVS 7597 NC, L.L.C.
2699. CVS 75975 FL, L.L.C.
2700. CVS 75977 MN, L.L.C.
2701. CVS 75978 FL, L.L.C.
2702. CVS 75979 OH, L.L.C.
2703. CVS 75980 OH, L.L.C.
2704. CVS 75981 OH, L.L.C.
2705. CVS 75988 MN, L.L.C.
2706. CVS 75989 VA, L.L.C.
2707. CVS 75990 VA, L.L.C.
2708. CVS 75995 DE, L.L.C.
2709. CVS 7604 WV, L.L.C.

2710. CVS 7648 KY, L.L.C.
2711. CVS 7666 GA, L.L.C.
2712. CVS 7671 AL, L.L.C.
2713. CVS 770 FL, L.L.C.
2714. CVS 7701, L.L.C.
2715. CVS 7706 GA, L.L.C.
2716. CVS 7712 GA, L.L.C.
2717. CVS 7714 TN, L.L.C.
2718. CVS 7736 GA, L.L.C.
2719. CVS 7738 TN, L.L.C.
2720. CVS 7755 GA, L.L.C.
2721. CVS 7758 GA, L.L.C.
2722. CVS 7763 TN, L.L.C.
2723. CVS 7771 TN, L.L.C.
2724. CVS 7782 GA, L.L.C.
2725. CVS 7843 VA, L.L.C.
2726. CVS 7856 NJ, L.L.C.
2727. CVS 7882 NC, L.L.C.
2728. CVS 7885 GA, L.L.C.
2729. CVS 7888 GA, L.L.C.
2730. CVS 7927 GA, L.L.C.
2731. CVS 7936 MA, L.L.C.
2732. CVS 7973 FL, L.L.C.
2733. CVS 7974 GA, L.L.C.
2734. CVS 7980 FL, L.L.C.
2735. CVS 7997 OH, L.L.C.
2736. CVS 8002 MI, L.L.C.
2737. CVS 8003 MI, L.L.C.
2738. CVS 8009 MI, L.L.C.
2739. CVS 8013 MI, L.L.C.
2740. CVS 8034 MI, L.L.C.
2741. CVS 8038 MI, L.L.C.
2742. CVS 8039, L.L.C.
2743. CVS 8044 MI, L.L.C.
2744. CVS 8049 MI, L.L.C.
2745. CVS 8059 MI, L.L.C.
2746. CVS 8067 MI, L.L.C.
2747. CVS 8071 MI, L.L.C.
2748. CVS 8073 MI, L.L.C.
2749. CVS 8078 MI, L.L.C.
2750. CVS 8086 MI, L.L.C.
2751. CVS 8088 MI, L.L.C.
2752. CVS 8091 MI, L.L.C.
2753. CVS 810 MA, L.L.C.
2754. CVS 8103 MI, L.L.C.
2755. CVS 8112 MI, L.L.C.
2756. CVS 8121 MI, L.L.C.
2757. CVS 8123 MI, L.L.C.
2758. CVS 8129 MI, L.L.C.
2759. CVS 8131 MI, L.L.C.
2760. CVS 8133 MI, L.L.C.
2761. CVS 8141 MI, L.L.C.
2762. CVS 8165 MI, L.L.C.
2763. CVS 8190 MI, L.L.C.
2764. CVS 8191 MI, L.L.C.
2765. CVS 8207 MI, L.L.C.
2766. CVS 824 NJ, L.L.C.
2767. CVS 8246 MI, L.L.C.
2768. CVS 8271 MI, L.L.C.
2769. CVS 8271 Warren, L.L.C.
2770. CVS 8272 MI, L.L.C.
2771. CVS 8281 MD, L.L.C.
2772. CVS 8283 MI, L.L.C.
2773. CVS 8299 MI, L.L.C.
2774. CVS 8301 MI, L.L.C.
2775. CVS 8302 MI, L.L.C.
2776. CVS 8303 TN, L.L.C.
2777. CVS 8304 MI, L.L.C.
2778. CVS 8306 MI, L.L.C.
2779. CVS 8308 MI, L.L.C.
2780. CVS 8320 RI, L.L.C.
2781. CVS 8395 GA, L.L.C.
2782. CVS 8399 MI, L.L.C.
2783. CVS 8415 FL, L.L.C.
2784. CVS 8415 NE, L.L.C.
2785. CVS 8417 NC, L.L.C.
2786. CVS 8418 GA, L.L.C.
2787. CVS 8422 GA, L.L.C.
2788. CVS 8423 OH, L.L.C.
2789. CVS 8432 GA, L.L.C.
2790. CVS 8441 MA, L.L.C.
2791. CVS 8446 FL, L.L.C.
2792. CVS 8549 MI, L.L.C.
2793. CVS 8615 NE, L.L.C.
2794. CVS 862 NJ, L.L.C.
2795. CVS 863 NH, L.L.C.

2796. CVS 866 FL, L.L.C.
2797. CVS 8774 WI, L.L.C.
2798. CVS 8776 WI, L.L.C.
2799. CVS 8813 NV, L.L.C.
2800. CVS 8902 FL, L.L.C.
2801. CVS 8905 KY, L.L.C.
2802. CVS 8907 GA, L.L.C.
2803. CVS 8909 NC, L.L.C.
2804. CVS 8932 OH, L.L.C.
2805. CVS 8934 GA, L.L.C.
2806. CVS 8935 NC, L.L.C.
2807. CVS 8954 MS, L.L.C.
2808. CVS 8955 MS, L.L.C.
2809. CVS 8956 MS, L.L.C.
2810. CVS 8975 SC, L.L.C.
2811. CVS 8986 OK, L.L.C.
2812. CVS 8992 MS, L.L.C.
2813. CVS 8993 MS, L.L.C.
2814. CVS 8994 MS, L.L.C.
2815. CVS 8th Avenue, L.L.C.
2816. CVS 920 MA, L.L.C.
2817. CVS 921 IL, L.L.C.
2818. CVS 927 MI, L.L.C.
2819. CVS 932 FL, L.L.C.
2820. CVS 962 GA, L.L.C.
2821. CVS 9674 CA, LLC
2822. CVS 976 FL, L.L.C.
2823. CVS 9898 OH, L.L.C.
2824. CVS Accountable Care Organization Inc.
2825. CVS Adelphi, L.L.C.
2826. CVS Ahearn Pharmacy, L.L.C.
2827. CVS Ahearn Plaza Pharmacy, L.L.C.
2828. CVS AL Distribution, Inc.
2829. CVS AL Distribution, L.L.C.
2830. CVS Albany Central Avenue, L.L.C.
2831. CVS Albany, L.L.C.
2832. CVS Albertson, L.L.C.
2833. CVS Alhambra, L.P.
2834. CVS Allerton Avenue, L.L.C.
2835. CVS Alpharetta GA, Inc.
2836. CVS Amherst Road, L.L.C.
2837. CVS Amityville, L.L.C.
2838. CVS Amsterdam Avenue, L.L.C.
2839. CVS Anaheim CA, L.L.C.
2840. CVS AOC Corporation
2841. CVS AOC Services, L.L.C.
2842. CVS Arcadia, L.P.
2843. CVS Arclight, Inc.
2844. CVS Ardsley, L.L.C.
2845. CVS Arlington Heights, L.L.C.
2846. CVS Arnot Mall, L.L.C.
2847. CVS Atlanta GA, Inc.
2848. CVS Atlantic Avenue, L.L.C.
2849. CVS Atlantic Highlands, L.L.C.
2850. CVS Auburn Mall ME, L.L.C.
2851. CVS Auburndale, L.L.C.
2852. CVS Aurora, L.L.C.
2853. CVS Austin Drugs of Great Neck, L.L.C.
2854. CVS Austin Drugs of Merrick, L.L.C.
2855. CVS Austin Drugs of Plainview, L.L.C.
2856. CVS Avon Store, L.L.C.
2857. CVS Baldwin Merrick Road, L.L.C.
2858. CVS Baltimore Fayette, Inc.
2859. CVS Bath Congress, L.L.C.
2860. CVS Bay City 8207 MI, L.L.C.
2861. CVS Bay Shore, L.L.C.
2862. CVS Bayberry Bensalem, Inc.
2863. CVS Bayport, L.L.C.
2864. CVS Bayside Queens, L.L.C.
2865. CVS BDI, Inc.
2866. CVS Beauty Participações Ltda
2867. CVS Bell Boulevard, L.L.C.
2868. CVS Bellerose, L.L.C.
2869. CVS Bellmore Avenue, L.L.C.
2870. CVS Bensenville, L.L.C.
2871. CVS Benson NC, Inc.
2872. CVS Bergenfield, L.L.C.
2873. CVS Bergenline, L.L.C.
2874. CVS Bethesda Lawrenceville, Inc.
2875. CVS Bethesda, L.L.C.

2876. CVS Bethpage Broadway, L.L.C.
2877. CVS Big Apple, L.L.C.
2878. CVS Binghamton, L.L.C.
2879. CVS Black Horse, L.L.C.
2880. CVS Blasdell Drug, L.L.C.
2881. CVS Bleecker Street, L.L.C.
2882. CVS Bloomfield NJ, L.L.C.
2883. CVS Bohemia, L.L.C.
2884. CVS Bridgewater, L.L.C.
2885. CVS Brighton Lac DeVille, L.L.C.
2886. CVS Broadway Chicago, L.L.C.
2887. CVS Broadway Massapequa, L.L.C.
2888. CVS Bronx White Plains, L.L.C.
2889. CVS Bronx, L.L.C.
2890. CVS Bronxville Retailer, L.L.C.
2891. CVS Brooklyn 86th Street, L.L.C.
2892. CVS Brooklyn Eighteenth Avenue, L.L.C.
2893. CVS Brooklyn Kings Highway, L.L.C.
2894. CVS Brooklyn Store, L.L.C.
2895. CVS Brownsville, L.L.C.
2896. CVS Budd Lake, L.L.C.
2897. CVS Buena Park, L.P.
2898. CVS Buffalo Downtown, L.L.C.
2899. CVS Buffalo Spectrum Store, L.L.C.
2900. CVS Burnt Hills, L.L.C.
2901. CVS Cabot Holdings Inc.
2902. CVS Caldwell Cleveland, L.L.C.
2903. CVS Canfield OH, Inc.
2904. CVS Cape Elizabeth, L.L.C.
2905. CVS Card, Inc.
2906. CVS Care Concierge, LLC
2907. CVS Caremark Advanced Technology Pharmacy, L.L.C.
2908. CVS Caremark Charitable Trust, Inc.
2909. CVS Caremark Charity Classic, Inc.
2910. CVS Caremark Employee Relief Fund
2911. CVS Caremark Indemnity Ltd.
2912. CVS Caremark NI IT Operations Center Ltd.
2913. CVS Caremark Part D Services, L.L.C.
2914. CVS Caremark TN SUTA, LLC
2915. CVS Carmel Road Charlotte, Inc.
2916. CVS Carson, L.P.
2917. CVS Cedar Creek Commons, L.L.C.
2918. CVS Cedar Grove, L.L.C.
2919. CVS Cedar Lane, Inc.
2920. CVS Center, Inc.
2921. CVS Central Charlotte, Inc.
2922. CVS Central Islip, L.L.C.
2923. CVS Champlain Centre, L.L.C.
2924. CVS Charitable Trust, Inc
2925. CVS Charity Classic, Inc.
2926. CVS Charlotte, Inc.
2927. CVS Chatham Main Street, L.L.C.
2928. CVS Chenango Centre, L.L.C.
2929. CVS Cherry Hill, L.L.C.
2930. CVS Christopher Street, L.L.C.
2931. CVS Clairidge, L.L.C.
2932. CVS Clifton Crescent, L.L.C.
2933. CVS Closter Dock, L.L.C.
2934. CVS Clyde Park, Inc.
2935. CVS Cold Spring Road, L.L.C.
2936. CVS Columbia Turnpike, L.L.C.
2937. CVS Columbus OH, Inc.
2938. CVS Columbus Place, L.L.C.
2939. CVS Commerce Street, L.L.C.
2940. CVS Community Care, Inc.
2941. CVS Community Pharmacy Center For Excellence, Inc.
2942. CVS Corporation Foundation Program
2943. CVS Cortland, L.L.C.
2944. CVS Court St., L.L.C.
2945. CVS Cross County Store, L.L.C.
2946. CVS Crystal Derry, L.L.C.
2947. CVS Crystal Run, L.L.C.
2948. CVS Cuthbert Boulevard, L.L.C.
2949. CVS Danbury Padanaram, Inc.

2950. CVS Data, Inc.
2951. CVS Deer Park, L.L.C.
2952. CVS Dekalb Norristown, Inc.
2953. CVS Delmar Drug, L.L.C.
2954. CVS Detroit 8275, L.L.C.
2955. CVS Detroit Grand River, Inc.
2956. CVS Dix Hills, L.L.C.
2957. CVS Doubletree, L.L.C.
2958. CVS Douglaston, L.L.C.
2959. CVS Downey, L.P.
2960. CVS Dunkirk Marketplace, L.L.C.
2961. CVS Dunkirk Store, L.L.C.
2962. CVS Durham 7042, L.L.C.
2963. CVS Durham, Inc.
2964. CVS Eagle Rock, L.L.C.
2965. CVS East 149th Street, L.L.C.
2966. CVS East 21st Street, L.L.C.
2967. CVS East 23rd Street, L.L.C.
2968. CVS East 86th, L.L.C.
2969. CVS East Aurora, L.L.C.
2970. CVS East Main Street, L.L.C.
2971. CVS East Rockaway, L.L.C.
2972. CVS East Windsor 3161, L.L.C.
2973. CVS Eastchester Plaza, L.L.C.
2974. CVS Edwardsville IL, L.L.C.
2975. CVS EGL 103rd Jacksonville FL, L.L.C.
2976. CVS EGL 1076 TX, L.L.C.
2977. CVS EGL 107th Miami FL, L.L.C.
2978. CVS EGL 107th Southwest FL, L.L.C.
2979. CVS EGL 109th Summerfield FL, L.L.C.
2980. CVS EGL 111th Kansas City MO, Inc.
2981. CVS EGL 112th Miami FL, L.L.C.
2982. CVS EGL 115th Avondale AZ, L.L.C.
2983. CVS EGL 119th Northwest FL, L.L.C.
2984. CVS EGL 119th Oklahoma, Inc.
2985. CVS EGL 11th Huntsville TX, L.P.
2986. CVS EGL 11th Lake Wales FL, L.L.C.
2987. CVS EGL 122nd MacArthur OK, Inc.
2988. CVS EGL 128 FL, L.L.C.
2989. CVS EGL 128th Miami FL, L.L.C.
2990. CVS EGL 12th Phoenix AZ, L.L.C.
2991. CVS EGL 1313 TX, L.L.C.
2992. CVS EGL 1326 LA, L.L.C.
2993. CVS EGL 1331 TX, L.L.C.
2994. CVS EGL 1336 AL, L.L.C.
2995. CVS EGL 136th Fort Lauderdale FL, L.L.C.
2996. CVS EGL 136th Miami FL, L.L.C.
2997. CVS EGL 13th Gainesville FL, L.L.C.
2998. CVS EGL 13th Northwest FL, L.L.C.
2999. CVS EGL 13th Saint Cloud FL, L.L.C.
3000. CVS EGL 1460 FL, L.L.C.
3001. CVS EGL 1462 TX, L.L.C.
3002. CVS EGL 14th Bradenton FL, L.L.C.
3003. CVS EGL 14th Leesburg FL, L.L.C.
3004. CVS EGL 150 TX, L.L.C.
3005. CVS EGL 1512 LA, L.L.C.
3006. CVS EGL 152nd Miami FL, L.L.C.
3007. CVS EGL 152nd Southwest FL, L.L.C.
3008. CVS EGL 1580 TX, L.L.C.
3009. CVS EGL 15th Immokalee FL, L.L.C.
3010. CVS EGL 15th Oklahoma City OK, Inc.
3011. CVS EGL 15th Panama City FL, L.L.C.
3012. CVS EGL 1620 TX, L.L.C.
3013. CVS EGL 1634 TX, L.L.C.
3014. CVS EGL 1635 FL, L.L.C.
3015. CVS EGL 163rd North Miami FL, L.L.C.

3016. CVS EGL 1644 FL, L.L.C.
3017. CVS EGL 1647 LA, L.L.C.
3018. CVS EGL 164th May OK, Inc.
3019. CVS EGL 1651 TX, L.L.C.
3020. CVS EGL 1652 LA, L.L.C.
3021. CVS EGL 1655 FL, L.L.C.
3022. CVS EGL 1660 FL, L.L.C.
3023. CVS EGL 16th Baseline AZ, L.L.C.
3024. CVS EGL 16th Northwest FL, L.L.C.
3025. CVS EGL 1722 FL, L.L.C.
3026. CVS EGL 1723 FL, L.L.C.
3027. CVS EGL 1724 FL, L.L.C.
3028. CVS EGL 1725 FL, L.L.C.
3029. CVS EGL 1726 FL, L.L.C.
3030. CVS EGL 1728 OK, L.L.C.
3031. CVS EGL 1729 FL, L.L.C.
3032. CVS EGL 173 TX, L.L.C.
3033. CVS EGL 1730 FL, L.L.C.
3034. CVS EGL 1732 AL, L.L.C.
3035. CVS EGL 1734 LA, L.L.C.
3036. CVS EGL 1736 FL, L.L.C.
3037. CVS EGL 1738 FL, L.L.C.
3038. CVS EGL 1739 FL, L.L.C.
3039. CVS EGL 1749 FL, L.L.C.
3040. CVS EGL 1765 TX, L.L.C.
3041. CVS EGL 1766 TX, L.L.C.
3042. CVS EGL 1779 FL, L.L.C.
3043. CVS EGL 1783 TX, L.L.C.
3044. CVS EGL 1793 TX, L.L.C.
3045. CVS EGL 1794 LA, L.L.C.
3046. CVS EGL 17th Southeast FL, L.L.C.
3047. CVS EGL 1827 TX, L.L.C.
3048. CVS EGL 183rd Opa Locka FL, L.L.C.
3049. CVS EGL 185th Northeast FL, L.L.C.
3050. CVS EGL 186th Hialeah FL, L.L.C.
3051. CVS EGL 18th Monroe LA, Inc.
3052. CVS EGL 19 Pinellas FL, L.L.C.
3053. CVS EGL 192 MO, L.L.C.
3054. CVS EGL 19th Happy Valley AZ, L.L.C.
3055. CVS EGL 19th Memphis TX, L.P.
3056. CVS EGL 19th North FL, L.L.C.
3057. CVS EGL 1st Humbel TX, L.P.
3058. CVS EGL 1st Kaplan LA, Inc.
3059. CVS EGL 1st Lake City FL, L.L.C.
3060. CVS EGL 1st Sanford FL, L.L.C.
3061. CVS EGL 1st Wadsworth CO CVS, L.L.C.
3062. CVS EGL 200 Ocala FL, L.L.C.
3063. CVS EGL 20th Vero Beach FL, L.L.C.
3064. CVS EGL 21st Covington LA, Inc.
3065. CVS EGL 222 LA, L.L.C.
3066. CVS EGL 22nd Southwest FL, L.L.C.
3067. CVS EGL 2366 FL, L.L.C.
3068. CVS EGL 23rd Independence MO, Inc.
3069. CVS EGL 23rd Northwest OK, Inc.
3070. CVS EGL 23rd Oklahoma, Inc.
3071. CVS EGL 23rd Panama City FL, L.L.C.
3072. CVS EGL 248th Miami FL, L.L.C.
3073. CVS EGL 24th Indian AZ, L.L.C.
3074. CVS EGL 25th Gulfport MS, Inc.
3075. CVS EGL 267 FL, L.L.C.
3076. CVS EGL 26th Fort Lauderdale FL, L.L.C.
3077. CVS EGL 27th Miami FL, L.L.C.
3078. CVS EGL 284 FL, L.L.C.
3079. CVS EGL 29th Hialeah FL, L.L.C.
3080. CVS EGL 2nd Delray Beach FL, L.L.C.
3081. CVS EGL 301 Dade City FL, L.L.C.
3082. CVS EGL 312 Augustine FL, L.L.C.
3083. CVS EGL 3278 FL, L.L.C.
3084. CVS EGL 328 FL, L.L.C.
3085. CVS EGL 34 OK, L.L.C.
3086. CVS EGL 34th Lubbock TX, L.P.

3087. CVS EGL 34th Ocala FL, L.L.C.
3088. CVS EGL 34th St Petersburg FL, L.L.C.
3089. CVS EGL 35 N Austin TX, L.P.
3090. CVS EGL 358 FL, L.L.C.
3091. CVS EGL 35th Evans CO CVS, L.L.C.
3092. CVS EGL 3624 FL, L.L.C.
3093. CVS EGL 3637 FL, L.L.C.
3094. CVS EGL 3669 TX, L.L.C.
3095. CVS EGL 37th St Petersburg FL, L.L.C.
3096. CVS EGL 384 TX, L.L.C.
3097. CVS EGL 3rd Jacksonville Beach FL, L.L.C.
3098. CVS EGL 3rd New Smyrna Beach FL, L.L.C.
3099. CVS EGL 3rd Saint Pete FL, L.L.C.
3100. CVS EGL 403 FL, L.L.C.
3101. CVS EGL 405 FL, L.L.C.
3102. CVS EGL 408 FL, L.L.C.
3103. CVS EGL 40th Miami FL, L.L.C.
3104. CVS EGL 40th Northwest FL, L.L.C.
3105. CVS EGL 40th Street FL, L.L.C.
3106. CVS EGL 41 Sarasota FL, L.L.C.
3107. CVS EGL 41st Miami FL, L.L.C.
3108. CVS EGL 42nd Miami FL, L.L.C.
3109. CVS EGL 430 FL, L.L.C.
3110. CVS EGL 439 AL, L.L.C.
3111. CVS EGL 43rd Northwest FL, L.L.C.
3112. CVS EGL 441 Lake Worth FL, L.L.C.
3113. CVS EGL 441 Ocala FL, L.L.C.
3114. CVS EGL 46 Loop TX, L.P.
3115. CVS EGL 475 AL, L.L.C.
3116. CVS EGL 486 FL, L.L.C.
3117. CVS EGL 49th Hialeah FL, L.L.C.
3118. CVS EGL 49th Pinellas Park FL, L.L.C.
3119. CVS EGL 49th Saint Petersburg FL, L.L.C.
3120. CVS EGL 4th Chickasha OK, Inc.
3121. CVS EGL 4th Oklahoma City OK, Inc.
3122. CVS EGL 4th Pueblo CO CVS, L.L.C.
3123. CVS EGL 4th Saint Petersburg FL, L.L.C.
3124. CVS EGL 504 FL, L.L.C.
3125. CVS EGL 50th Lubbock TX, L.P.
3126. CVS EGL 537 FL, L.L.C.
3127. CVS EGL 53rd Bradenton FL, L.L.C.
3128. CVS EGL 54 New Port Richey FL, L.L.C.
3129. CVS EGL 546 MS, L.L.C.
3130. CVS EGL 54th Saint Petersburg FL, L.L.C.
3131. CVS EGL 5624 MO, L.L.C.
3132. CVS EGL 568 LA, L.L.C.
3133. CVS EGL 571 FL, L.L.C.
3134. CVS EGL 59th Glendale AZ, L.L.C.
3135. CVS EGL 5th Boca Raton FL, L.L.C.
3136. CVS EGL 5th Miami Beach FL, L.L.C.
3137. CVS EGL 60th Hialeah FL, L.L.C.
3138. CVS EGL 61st Galveston TX, L.P.
3139. CVS EGL 63rd Kansas City MO, Inc.
3140. CVS EGL 64 Bradenton FL, L.L.C.
3141. CVS EGL 66th Northwest FL, L.L.C.
3142. CVS EGL 66th Saint Petersburg FL, L.L.C.
3143. CVS EGL 66th Street North FL, L.L.C.
3144. CVS EGL 67th Hialeah FL, L.L.C.
3145. CVS EGL 68th Thomas AZ, L.L.C.
3146. CVS EGL 68th West Hialeah FL, L.L.C.
3147. CVS EGL 6th Panama City FL, L.L.C.

3148. CVS EGL 6th South FL, L.L.C.
3149. CVS EGL 6th Winter Haven FL, L.L.C.
3150. CVS EGL 756 TX, L.L.C.
3151. CVS EGL 75th Bethany AZ, L.L.C.
3152. CVS EGL 75th Gainesville FL, L.L.C.
3153. CVS EGL 75th Houston TX, L.P.
3154. CVS EGL 7894 FL, L.L.C.
3155. CVS EGL 78th Seminole FL, L.L.C.
3156. CVS EGL 7927 FL, L.L.C.
3157. CVS EGL 7958 FL, L.L.C.
3158. CVS EGL 7th Miami FL, L.L.C.
3159. CVS EGL 82nd Lubbock TX, L.P.
3160. CVS EGL 8383 FL, L.L.C.
3161. CVS EGL 83rd Glendale AZ, L.L.C.
3162. CVS EGL 88th Miami FL, L.L.C.
3163. CVS EGL 88th Street FL, L.L.C.
3164. CVS EGL 8th Ave Hialeah FL, L.L.C.
3165. CVS EGL 8th Miami FL, L.L.C.
3166. CVS EGL 8th Palmetto FL, L.L.C.
3167. CVS EGL 8th Southwest FL, L.L.C.
3168. CVS EGL 8th Street FL, L.L.C.
3169. CVS EGL 90 West FL, L.L.C.
3170. CVS EGL 908 FL, L.L.C.
3171. CVS EGL 951 Naples FL, L.L.C.
3172. CVS EGL 97th Miami FL, L.L.C.
3173. CVS EGL 98th Lubbock TX, L.P.
3174. CVS EGL 99th Phoenix AZ, L.L.C.
3175. CVS EGL 9th Naples FL, L.L.C.
3176. CVS EGL 9th North FL, L.L.C.
3177. CVS EGL 9th Pensacola FL, L.L.C.
3178. CVS EGL 9th Saint Petersburg FL, L.L.C.
3179. CVS EGL Abshier Belleview FL, L.L.C.
3180. CVS EGL Academy Seagull NM, L.L.C.
3181. CVS EGL Admiral New Iberia LA, Inc.
3182. CVS EGL Airline Baton Rouge LA, Inc.
3183. CVS EGL Airline Corpus Christi TX, L.P.
3184. CVS EGL Airline Destrehan LA, Inc.
3185. CVS EGL Airline Drive TX, L.P.
3186. CVS EGL Airline Gonzales LA, Inc.
3187. CVS EGL Airline La Place LA, Inc.
3188. CVS EGL Airline Metairie LA, Inc.
3189. CVS EGL Airport Austin TX, L.P.
3190. CVS EGL Airport Naples FL, L.L.C.
3191. CVS EGL Alabama Properties, Inc.
3192. CVS EGL Alafaya Orlando FL, L.L.C.
3193. CVS EGL Alameda Denver CO CVS, L.L.C.
3194. CVS EGL Alameda Parkway CO CVS, L.L.C.
3195. CVS EGL Aldine Mail TX, L.P.
3196. CVS EGL Aldine Westfield Spring TX, L.P.
3197. CVS EGL Alexander Plant City FL, L.L.C.
3198. CVS EGL Alma Chandler AZ, L.L.C.
3199. CVS EGL Aloma Winter FL, L.L.C.
3200. CVS EGL Alpha Dallas TX, L.P.
3201. CVS EGL Altamonte Springs FL, L.L.C.
3202. CVS EGL Alton Miami Beach FL, L.L.C.
3203. CVS EGL Andrews Fort Lauderdale FL, L.L.C.
3204. CVS EGL Angleton TX, L.P.
3205. CVS EGL Antoine Houston TX, L.P.

3206. CVS EGL Apalachee Tallahassee FL, L.L.C.
3207. CVS EGL Apalachicola FL, L.L.C.
3208. CVS EGL Apollo Beach FL, L.L.C.
3209. CVS EGL Apopka Vineland FL, L.L.C.
3210. CVS EGL Archer Gainesville FL, L.L.C.
3211. CVS EGL Arlington Jacksonville FL, L.L.C.
3212. CVS EGL Armenia Tampa FL, L.L.C.
3213. CVS EGL Atlantic Beach FL, L.L.C.
3214. CVS EGL Atlantic Boulevard FL, L.L.C.
3215. CVS EGL Atlantic Cocoa Beach FL, L.L.C.
3216. CVS EGL Atlantic Daytona FL, L.L.C.
3217. CVS EGL Atlantic FL, L.L.C.
3218. CVS EGL Atlantic Jacksonville FL, L.L.C.
3219. CVS EGL Atlantic Neptune Beach FL, L.L.C.
3220. CVS EGL Augustine Road FL, L.L.C.
3221. CVS EGL Austin Harry TX, L.P.
3222. CVS EGL Avenida Lady Lake FL, L.L.C.
3223. CVS EGL Aventura FL, L.L.C.
3224. CVS EGL Avenue A TX, L.P.
3225. CVS EGL Avenue J Galveston TX, L.P.
3226. CVS EGL Avondale Dysart AZ, L.L.C.
3227. CVS EGL Ayers Corpus Christi TX, L.P.
3228. CVS EGL Ayers TX, L.P.
3229. CVS EGL Azalea AL, Inc.
3230. CVS EGL Bandera Road TX, L.P.
3231. CVS EGL Bandera San Antonio TX, L.P.
3232. CVS EGL Barataria Marrero LA, Inc.
3233. CVS EGL Barker Cypress TX, L.P.
3234. CVS EGL Barksdale LA, Inc.
3235. CVS EGL Barrow Abilene TX, L.P.
3236. CVS EGL Barry Road MO, Inc.
3237. CVS EGL Bartow FL, L.L.C.
3238. CVS EGL Bartram Park FL, L.L.C.
3239. CVS EGL Baseline Gilbert AZ, L.L.C.
3240. CVS EGL Baseline Tempe AZ, L.L.C.
3241. CVS EGL Baton Rouge LA, Inc.
3242. CVS EGL Bay Area TX, L.P.
3243. CVS EGL Bay City TX, L.P.
3244. CVS EGL Bay Clearwater FL, L.L.C.
3245. CVS EGL Bay Largo FL, L.L.C.
3246. CVS EGL Bay Meadows FL, L.L.C.
3247. CVS EGL Bay St. Louis MS, Inc.
3248. CVS EGL Bayport Seabrook TX, L.P.
3249. CVS EGL Bayshore Dunedin FL, L.L.C.
3250. CVS EGL Beach Boulevard FL, L.L.C.
3251. CVS EGL Beaumont TX, L.P.
3252. CVS EGL Bee Caves TX, L.P.
3253. CVS EGL Bee Ridge Sarasota FL, L.L.C.
3254. CVS EGL Belcher Clearwater FL, L.L.C.
3255. CVS EGL Belcher Largo FL, L.L.C.
3256. CVS EGL Bell Amarillo TX, L.P.
3257. CVS EGL Bell Glendale AZ, L.L.C.
3258. CVS EGL Bell Houston TX, L.P.
3259. CVS EGL Bell Surprise AZ, L.L.C.
3260. CVS EGL Bellaire Blvd TX, L.P.
3261. CVS EGL Belle Glade FL, L.L.C.

3262. CVS EGL Belle Palm Coast FL, L.L.C.
3263. CVS EGL Belleview Littleton CO CVS, L.L.C.
3264. CVS EGL Belleview Plaquemine LA, Inc.
3265. CVS EGL Belt Saint Joseph MO, Inc.
3266. CVS EGL Beltline Garland TX, L.P.
3267. CVS EGL Belville Daytona FL, L.L.C.
3268. CVS EGL Beneva Road FL, L.L.C.
3269. CVS EGL Biscayne Boulevard, L.L.C.
3270. CVS EGL Biscayne FL, L.L.C.
3271. CVS EGL Biscayne Miami FL, L.L.C.
3272. CVS EGL Bissonnet Houston TX, L.P.
3273. CVS EGL Bissonnet Kirkwood TX, L.P.
3274. CVS EGL Blanco Road TX, L.P.
3275. CVS EGL Blanding Jacksonville FL, L.L.C.
3276. CVS EGL Blanding Middleburg FL, L.L.C.
3277. CVS EGL Blanding Orange Park FL, L.L.C.
3278. CVS EGL Blichton Ocala FL, L.L.C.
3279. CVS EGL Bloomingdale Valrico FL, L.L.C.
3280. CVS EGL Blossom Orlando FL, L.L.C.
3281. CVS EGL Bogalusa LA, Inc.
3282. CVS EGL Boggy Creek FL, L.L.C.
3283. CVS EGL Bolton Alexandria LA, Inc.
3284. CVS EGL Bonham Paris TX, L.P.
3285. CVS EGL Bossier City LA, Inc.
3286. CVS EGL Boulevard Rayne LA, Inc.
3287. CVS EGL Boyette Riverview, L.L.C.
3288. CVS EGL Bradenton FL, L.L.C.
3289. CVS EGL Brair Forest TX, L.P.
3290. CVS EGL Brandon FL, L.L.C.
3291. CVS EGL Brenham TX, L.P.
3292. CVS EGL Brevard Arcadia FL, L.L.C.
3293. CVS EGL Briar Drive KS, Inc.
3294. CVS EGL Briarcliff Austin TX, L.P.
3295. CVS EGL Bridge Hobe Sound FL, L.L.C.
3296. CVS EGL Britt Jensen FL, L.L.C.
3297. CVS EGL Broadmoor MS, Inc.
3298. CVS EGL Broadway Garland TX, L.P.
3299. CVS EGL Broadway Gladewater TX, L.P.
3300. CVS EGL Broadway Tampa, L.L.C.
3301. CVS EGL Broadway Tempe AZ, L.L.C.
3302. CVS EGL Broadway Tucson AZ, L.L.C.
3303. CVS EGL Broadway Tyler TX, L.P.
3304. CVS EGL Brookside MO, Inc.
3305. CVS EGL Brooksville FL, L.L.C.
3306. CVS EGL Broomfield CO CVS, L.L.C.
3307. CVS EGL Broward Lauderdale FL, L.L.C.
3308. CVS EGL Brown Arlington TX, L.P.
3309. CVS EGL Brunswick FL, L.L.C.
3310. CVS EGL Bryan Dairy Seminole FL, L.L.C.
3311. CVS EGL Bryan TX, L.P.
3312. CVS EGL Bryant Irvin Fort Worth TX, L.P.
3313. CVS EGL Buckingham Richardson TX, L.P.

3314. CVS EGL Buckner Dallas TX, L.P.
3315. CVS EGL Buffalo Gap Abilene TX, L.P.
3316. CVS EGL Bullard Parkway FL, L.L.C.
3317. CVS EGL Burleigh Tavares FL, L.L.C.
3318. CVS EGL Burnett Austin TX, L.P.
3319. CVS EGL Camelback Phoenix AZ, L.L.C.
3320. CVS EGL Cameron Lafayette LA, Inc.
3321. CVS EGL Cameron Scott LA, Inc.
3322. CVS EGL Camino Boca Raton FL, L.L.C.
3323. CVS EGL Camino Real TX, L.P.
3324. CVS EGL Camp Bowie Fort Worth TX, L.P.
3325. CVS EGL Camp Bowie TX, L.P.
3326. CVS EGL Camp Clarke TX, L.P.
3327. CVS EGL Camp Lowell AZ, L.L.C.
3328. CVS EGL Camp TX, L.P.
3329. CVS EGL Campbell Dallas TX, L.P.
3330. CVS EGL Canal New Orleans LA, Inc.
3331. CVS EGL Canal Thibodaux LA, Inc.
3332. CVS EGL Candelaria NM, L.L.C.
3333. CVS EGL Canoe St. Cloud FL, L.L.C.
3334. CVS EGL Cape Coral Pkwy FL, L.L.C.
3335. CVS EGL Capital Circle FL, L.L.C.
3336. CVS EGL Capital Tallahassee FL, L.L.C.
3337. CVS EGL Carefree Cave Creek AZ, L.L.C.
3338. CVS EGL Caroline Milton FL, L.L.C.
3339. CVS EGL Carrier Grand Prairie TX, L.P.
3340. CVS EGL Carrollton New Orleans LA, Inc.
3341. CVS EGL Carrollwood Tampa FL, L.L.C.
3342. CVS EGL Cartwright Mesquite TX, L.P.
3343. CVS EGL Cartwright Missouri City TX, L.P.
3344. CVS EGL Cedar Breaks TX, L.P.
3345. CVS EGL Cedar Park TX, L.P.
3346. CVS EGL Cedar Ridge TX, L.P.
3347. CVS EGL Centennial CO CVS, L.L.C.
3348. CVS EGL Central Avenue NM, L.L.C.
3349. CVS EGL Central Bedford TX, L.P.
3350. CVS EGL Central Florida, L.L.C.
3351. CVS EGL Central McKinney TX, L.P.
3352. CVS EGL Central Parkway FL, L.L.C.
3353. CVS EGL Central Petersburg FL, L.L.C.
3354. CVS EGL Centre Hereford TX, L.P.
3355. CVS EGL Cerrillos NM, L.L.C.
3356. CVS EGL Chalmette LA, Inc.
3357. CVS EGL Chambers Denver CO CVS, L.L.C.
3358. CVS EGL Champion Forest TX, L.P.
3359. CVS EGL Chandler Phoenix AZ, L.L.C.
3360. CVS EGL Charity Abbeville LA, Inc.
3361. CVS EGL Chateau Kenner LA, Inc.
3362. CVS EGL Cheney Titusville FL, L.L.C.
3363. CVS EGL Chipley FL, L.L.C.
3364. CVS EGL Choctaw OK, Inc.
3365. CVS EGL Church Livingston TX, L.P.
3366. CVS EGL Cinco Ranch TX, L.P.

3367. CVS EGL Clark Road, L.L.C.
3368. CVS EGL Clark Sarasota FL, L.L.C.
3369. CVS EGL Classen Oklahoma City OK, Inc.
3370. CVS EGL Clearlake Cocoa FL, L.L.C.
3371. CVS EGL Clearwater FL, L.L.C.
3372. CVS EGL Clearwater Largo FL, L.L.C.
3373. CVS EGL Cleburne TX, L.P.
3374. CVS EGL Clermont FL, L.L.C.
3375. CVS EGL Cleveland Avenue, L.L.C.
3376. CVS EGL Cleveland Fort Myers FL, L.L.C.
3377. CVS EGL Clint Moore Boca Raton FL, L.L.C.
3378. CVS EGL Clubview Levelland TX, L.P.
3379. CVS EGL Clute TX, L.P.
3380. CVS EGL Coalton Broomfield CO CVS, L.L.C.
3381. CVS EGL Cockrell Hill TX, L.P.
3382. CVS EGL Coit Plano TX, L.P.
3383. CVS EGL Coit Richardson TX, L.P.
3384. CVS EGL Colfax Denver CO CVS, L.L.C.
3385. CVS EGL Colfax Lakewood CO CVS, L.L.C.
3386. CVS EGL College Beaumont TX, L.P.
3387. CVS EGL College Collins CO CVS, L.L.C.
3388. CVS EGL College Hills San Angelo TX, L.P.
3389. CVS EGL College Park Conroe TX, L.P.
3390. CVS EGL Colleyville TX, L.P.
3391. CVS EGL Collins Avenue FL, L.L.C.
3392. CVS EGL Collins North Miami FL, L.L.C.
3393. CVS EGL Colonial Golden FL, L.L.C.
3394. CVS EGL Colonial Myers FL, L.L.C.
3395. CVS EGL Colonial Orlando FL, L.L.C.
3396. CVS EGL Colonial Winter Garden FL, L.L.C.
3397. CVS EGL Colorado Springs CO CVS, L.L.C.
3398. CVS EGL Commerce Ardmore OK, Inc.
3399. CVS EGL Commercial 18th FL, L.L.C.
3400. CVS EGL Commercial Lauderdale FL, L.L.C.
3401. CVS EGL Congress Austin TX, L.P.
3402. CVS EGL Congress Boynton Beach FL, L.L.C.
3403. CVS EGL Congress Lake Worth FL, L.L.C.
3404. CVS EGL Congress Street TX, L.P.
3405. CVS EGL Coors Boulevard NM, L.L.C.
3406. CVS EGL Coral Miami FL, L.L.C.
3407. CVS EGL Corpus Christi TX, L.P.
3408. CVS EGL Cortez Boulevard FL, L.L.C.
3409. CVS EGL Cortez Bradenton FL, L.L.C.
3410. CVS EGL Cortez FL, L.L.C.
3411. CVS EGL Cottage Mobile AL, Inc.
3412. CVS EGL Countryway Tampa FL, L.L.C.
3413. CVS EGL County Dunedin FL, L.L.C.
3414. CVS EGL County Line Ridgeland MS, Inc.
3415. CVS EGL County Orange Park FL, L.L.C.

3416. CVS EGL Courtenay Merritt FL, L.L.C.
3417. CVS EGL Covington LA, Inc.
3418. CVS EGL Crandon Key Biscayne FL, L.L.C.
3419. CVS EGL Crawfordville FL, L.L.C.
3420. CVS EGL Cresswell Opelousas LA, Inc.
3421. CVS EGL Crockett Palestine TX, L.P.
3422. CVS EGL Cross Timbers TX, L.P.
3423. CVS EGL Crowley TX, L.P.
3424. CVS EGL Crown Bonita Springs FL, L.L.C.
3425. CVS EGL Culebra San Antonio TX, L.P.
3426. CVS EGL Cullen Pearland TX, L.P.
3427. CVS EGL Curry Ford Orlando FL, L.L.C.
3428. CVS EGL Curry Ford Road FL, L.L.C.
3429. CVS EGL Custer Frisco TX, L.P.
3430. CVS EGL Cypress Gardens FL, L.L.C.
3431. CVS EGL Cypress North TX, L.P.
3432. CVS EGL Cypress Poinciana FL, L.L.C.
3433. CVS EGL Cypress West Monroe LA, Inc.
3434. CVS EGL Cypress Winter Haven FL, L.L.C.
3435. CVS EGL Dale Mabry Tampa FL, L.L.C.
3436. CVS EGL Dania Beach FL, L.L.C.
3437. CVS EGL Daniels Fort Myers, L.L.C.
3438. CVS EGL Daphne AL, Inc.
3439. CVS EGL Davenport FL, L.L.C.
3440. CVS EGL Davie Lauderdale FL, L.L.C.
3441. CVS EGL Davis N Richland Hills TX, L.P.
3442. CVS EGL Davis Pensacola FL, L.L.C.
3443. CVS EGL Daytona FL, L.L.C.
3444. CVS EGL De Land FL, L.L.C.
3445. CVS EGL De Zavala San Antonio TX, L.P.
3446. CVS EGL Decatur FL, L.L.C.
3447. CVS EGL Decker Baytown TX, L.P.
3448. CVS EGL Deerfield Beach FL, L.L.C.
3449. CVS EGL Denham Springs LA, Inc.
3450. CVS EGL Denton Fort Worth TX, L.P.
3451. CVS EGL Desoto TX, L.P.
3452. CVS EGL Dickinson TX, L.P.
3453. CVS EGL Dixie Highway FL, L.L.C.
3454. CVS EGL Dixie Homestead FL, L.L.C.
3455. CVS EGL Dixie Lake Worth FL, L.L.C.
3456. CVS EGL Dixie Miami FL, L.L.C.
3457. CVS EGL Dixie South FL, L.L.C.
3458. CVS EGL Dixie West FL, L.L.C.
3459. CVS EGL Dixie West Palm FL, L.L.C.
3460. CVS EGL Dorado Craig TX, L.P.
3461. CVS EGL Dowlen TX, L.P.
3462. CVS EGL Downing Denver CO CVS, L.L.C.
3463. CVS EGL Drake Fort Collins CO CVS, L.L.C.
3464. CVS EGL Dry Creek Aurora CO CVS, L.L.C.
3465. CVS EGL Duck Creek TX, L.P.
3466. CVS EGL Dulles Road TX, L.P.
3467. CVS EGL Dunlap Phoenix AZ, L.L.C.
3468. CVS EGL Dunn Jacksonville FL, L.L.C.
3469. CVS EGL Dunnellon FL, L.L.C.

3470. CVS EGL Duval Key West FL, L.L.C.
3471. CVS EGL Dysart Goodyear AZ, L.L.C.
3472. CVS EGL E 20th Houston TX, L.P.
3473. CVS EGL E Amarillo TX, L.P.
3474. CVS EGL E Arapaho Richardson TX, L.P.
3475. CVS EGL E Arkansas Arlington TX, L.P.
3476. CVS EGL E Belt Line Cedar Hill TX, L.P.
3477. CVS EGL E Broadway Sweetwater TX, L.P.
3478. CVS EGL E Commerce Brownwood TX, L.P.
3479. CVS EGL E End North Marshall TX, L.P.
3480. CVS EGL E Irving TX, L.P.
3481. CVS EGL E Lancaster Fort Worth TX, L.P.
3482. CVS EGL E Loop 304 Crockett TX, L.P.
3483. CVS EGL E Lufkin TX, L.P.
3484. CVS EGL E Main Allen TX, L.P.
3485. CVS EGL E Main Grand Prairie TX, L.P.
3486. CVS EGL E Main Whitehouse TX, L.P.
3487. CVS EGL E Mockingbird Dallas TX, L.P.
3488. CVS EGL E Northwest Dallas TX, L.P.
3489. CVS EGL E Pipeline Bedford TX, L.P.
3490. CVS EGL E Riverside Austin TX, L.P.
3491. CVS EGL E Southlake TX, L.P.
3492. CVS EGL E Tidwell Houston TX, L.P.
3493. CVS EGL E Tyler Athens TX, L.P.
3494. CVS EGL E US Hwy 287 Midlothian TX, L.P.
3495. CVS EGL Eagle Nest Hialeah FL, L.L.C.
3496. CVS EGL East Atlantic FL, L.L.C.
3497. CVS EGL East Camelback AZ, L.L.C.
3498. CVS EGL East Colonial Drive FL, L.L.C.
3499. CVS EGL East Danforth OK, Inc.
3500. CVS EGL East Fowler FL, L.L.C.
3501. CVS EGL East Hinson FL, L.L.C.
3502. CVS EGL East Jester Houston TX, L.P.
3503. CVS EGL East Lake FL, L.L.C.
3504. CVS EGL East Oak FL, L.L.C.
3505. CVS EGL East Palatka FL, L.L.C.
3506. CVS EGL East Park Arlington TX, L.P.
3507. CVS EGL East Pass Gulfport MS, Inc.
3508. CVS EGL Eastex Beaumont TX, L.P.
3509. CVS EGL Edgewater Orlando FL, L.L.C.
3510. CVS EGL Edmond OK, Inc.
3511. CVS EGL Ehrlich Tampa FL, L.L.C.
3512. CVS EGL Eiland Zephyrhills FL, L.L.C.
3513. CVS EGL Eisenhower Loveland CO, L.L.C.
3514. CVS EGL El Salido TX, L.P.
3515. CVS EGL Elam Balch Springs TX, L.P.
3516. CVS EGL Eldridge Houston TX, L.P.
3517. CVS EGL Eldridge Road TX, L.P.
3518. CVS EGL Elkcam Deltona FL, L.L.C.
3519. CVS EGL Elliot Arizona AZ, L.L.C.
3520. CVS EGL Ellison Drive NM, L.L.C.

3521. CVS EGL Emerson Palm Bay FL, L.L.C.
3522. CVS EGL Erie Ellenton FL, L.L.C.
3523. CVS EGL Estero Fort Myers FL, L.L.C.
3524. CVS EGL Everhart TX, L.P.
3525. CVS EGL Fairfield Pensacola FL, L.L.C.
3526. CVS EGL Fay Cocoa FL, L.L.C.
3527. CVS EGL Federal Boynton FL, L.L.C.
3528. CVS EGL Federal Broward FL, L.L.C.
3529. CVS EGL Federal Deerfield FL, L.L.C.
3530. CVS EGL Federal Delray Beach FL, L.L.C.
3531. CVS EGL Federal Denver CO CVS, L.L.C.
3532. CVS EGL Federal Fort Pierce FL, L.L.C.
3533. CVS EGL Federal Hollywood FL, L.L.C.
3534. CVS EGL Federal Pompano FL, L.L.C.
3535. CVS EGL Federal Stuart FL, L.L.C.
3536. CVS EGL Ferguson Dallas TX, L.P.
3537. CVS EGL Ferguson Road TX, L.P.
3538. CVS EGL Ferris Waxahachie TX, L.P.
3539. CVS EGL Fielder Arlington TX, L.P.
3540. CVS EGL First Bradenton FL, L.L.C.
3541. CVS EGL FL Wright AZ, L.L.C.
3542. CVS EGL Flagler Miami FL, L.L.C.
3543. CVS EGL Flamingo Hollywood FL, L.L.C.
3544. CVS EGL Flamingo South FL, L.L.C.
3545. CVS EGL Florabranch FL, L.L.C.
3546. CVS EGL Florence Casa AZ, L.L.C.
3547. CVS EGL Florida Baton Rouge LA, Inc.
3548. CVS EGL Florida Lakeland FL, L.L.C.
3549. CVS EGL Florida Tampa FL, L.L.C.
3550. CVS EGL Florida, L.L.C.
3551. CVS EGL Flowood MS, Inc.
3552. CVS EGL Fm 1821 Mineral Wells TX, L.P.
3553. CVS EGL FM 1960 E Humble TX, L.P.
3554. CVS EGL FM 1960 Road TX, L.P.
3555. CVS EGL FM 2100 Crosby TX, L.P.
3556. CVS EGL Fm 3009 Schertz TX, L.P.
3557. CVS EGL FM 407 Lewisville TX, L.P.
3558. CVS EGL FM 528 TX, L.P.
3559. CVS EGL FM 529 Houston TX, L.P.
3560. CVS EGL FM Round TX, L.P.
3561. CVS EGL FM West TX, L.P.
3562. CVS EGL Foley AL, Inc.
3563. CVS EGL Fondren Houston TX, L.P.
3564. CVS EGL Ford Orlando FL, L.L.C.
3565. CVS EGL Forest Dallas TX, L.P.
3566. CVS EGL Forest Hill Blvd FL, L.L.C.
3567. CVS EGL Forest Hill Fort Worth TX, L.P.
3568. CVS EGL Forest Hill Palm FL, L.L.C.
3569. CVS EGL Forest Lane TX, L.P.
3570. CVS EGL Forest MS, Inc.
3571. CVS EGL Forest Spring TX, L.P.
3572. CVS EGL Forney TX, L.P.
3573. CVS EGL Fort Walton Beach FL, L.L.C.

3574. CVS EGL Fountain Hills AZ, L.L.C.
3575. CVS EGL Fountain Murray CO CVS, L.L.C.
3576. CVS EGL Fowler Tampa FL, L.L.C.
3577. CVS EGL Frankford Dallas TX, L.P.
3578. CVS EGL Freeport TX, L.P.
3579. CVS EGL Friendswood TX, L.P.
3580. CVS EGL Fruitville Sarasota FL, L.L.C.
3581. CVS EGL Fry Katy TX, L.P.
3582. CVS EGL Fry Little York TX, L.P.
3583. CVS EGL Fuqua Houston TX, L.P.
3584. CVS EGL Fuqua Street TX, L.P.
3585. CVS EGL Gainesville FL, L.L.C.
3586. CVS EGL Garden Titusville FL, L.L.C.
3587. CVS EGL Garland Dallas TX, L.P.
3588. CVS EGL Garland TX, L.P.
3589. CVS EGL Garth Baytown TX, L.P.
3590. CVS EGL Gattis School Round Rock TX, L.P.
3591. CVS EGL Gause Boulevard LA, Inc.
3592. CVS EGL Gause Slidell LA, Inc.
3593. CVS EGL Gears Houston TX, L.P.
3594. CVS EGL General Meyer LA, Inc.
3595. CVS EGL Georgetown TX, L.P.
3596. CVS EGL Georgia Amarillo TX, L.P.
3597. CVS EGL Georgia Bogalusa LA, Inc.
3598. CVS EGL Gessner Houston TX, L.P.
3599. CVS EGL Gibsonton Riverview FL, L.L.C.
3600. CVS EGL Glages Boca Raton FL, L.L.C.
3601. CVS EGL Glenbrook Clermont FL, L.L.C.
3602. CVS EGL Gloria Clewiston FL, L.L.C.
3603. CVS EGL Golden Naples FL, L.L.C.
3604. CVS EGL Golf Links AZ, L.L.C.
3605. CVS EGL Government Baton Rouge LA, Inc.
3606. CVS EGL Granada Ormond Beach FL, L.L.C.
3607. CVS EGL Granbury TX, L.P.
3608. CVS EGL Grand Caillou Houma LA, Inc.
3609. CVS EGL Grand Prairie TX, L.P.
3610. CVS EGL Grandview MO, Inc.
3611. CVS EGL Grapevine N Richland Hills TX, L.P.
3612. CVS EGL Greeley CO CVS, L.L.C.
3613. CVS EGL Green Cove Springs FL, L.L.C.
3614. CVS EGL Green Oaks TX, L.P.
3615. CVS EGL Greenville Ste 140 Dallas TX, L.P.
3616. CVS EGL Greenwell Baton Rouge LA, Inc.
3617. CVS EGL Greenwell Springs LA, Inc.
3618. CVS EGL Greenwood MS, Inc.
3619. CVS EGL Griffin Cooper FL, L.L.C.
3620. CVS EGL Grogans Mill Spring TX, L.P.
3621. CVS EGL Guadalupe Austin TX, L.P.
3622. CVS EGL Guadalupe Street TX, L.P.
3623. CVS EGL Gulf Beach Pensacola FL, L.L.C.
3624. CVS EGL Gulf Boulevard FL, L.L.C.
3625. CVS EGL Gulf Breeze Pkwy FL, L.L.C.
3626. CVS EGL Gulf Indian Rocks FL, L.L.C.

3627. CVS EGL Gulfbreeze Parkway FL, L.L.C.
3628. CVS EGL Gulfport Boulevard FL, L.L.C.
3629. CVS EGL Gulfshores AL, Inc.
3630. CVS EGL Gunn Highway FL, L.L.C.
3631. CVS EGL Gunn Tampa FL, L.L.C.
3632. CVS EGL Haily Pueblo CO CVS, L.L.C.
3633. CVS EGL Hall Johnson Grapevine TX, L.P.
3634. CVS EGL Hammerly Houston TX, L.P.
3635. CVS EGL Hammock Miami FL, L.L.C.
3636. CVS EGL Hammond LA, Inc.
3637. CVS EGL Hampden Aurora CO CVS, L.L.C.
3638. CVS EGL Hancock Bridge FL, L.L.C.
3639. CVS EGL Hancock Clermont FL, L.L.C.
3640. CVS EGL Happy Valley AZ, L.L.C.
3641. CVS EGL Harding Miami FL, L.L.C.
3642. CVS EGL Hardy Hattiesburg MS, Inc.
3643. CVS EGL Harris Red Oak TX, L.P.
3644. CVS EGL Harvey LA, Inc.
3645. CVS EGL Hawthorne FL, L.L.C.
3646. CVS EGL Hebron Carrolton TX, L.P.
3647. CVS EGL Hedgecoxe Plano TX, L.P.
3648. CVS EGL Henderson Boulevard FL, L.L.C.
3649. CVS EGL Henderson Tampa FL, L.L.C.
3650. CVS EGL Hialeah Drive FL, L.L.C.
3651. CVS EGL Hiawassee Orlando FL, L.L.C.
3652. CVS EGL Hickory Creek TX, L.P.
3653. CVS EGL High Springs FL, L.L.C.
3654. CVS EGL Highland Madison MS, Inc.
3655. CVS EGL Highland Road LA, Inc.
3656. CVS EGL Highway 77 TX, L.P.
3657. CVS EGL Hillsboro Coconut FL, L.L.C.
3658. CVS EGL Hillsborough Charlotte FL, L.L.C.
3659. CVS EGL Hillsborough FL, L.L.C.
3660. CVS EGL Hillsborough Tampa FL, L.L.C.
3661. CVS EGL Himes Tampa FL, L.L.C.
3662. CVS EGL Hollywood Blvd FL, L.L.C.
3663. CVS EGL Hollywood FL, L.L.C.
3664. CVS EGL Hollywood Shreveport LA, Inc.
3665. CVS EGL Holzwarth TX, L.P.
3666. CVS EGL Horizon Rockwall TX, L.P.
3667. CVS EGL Houston 6 South TX, L.P.
3668. CVS EGL Houston North, L.P.
3669. CVS EGL Houston Street TX, L.P.
3670. CVS EGL Houston TX, L.P.
3671. CVS EGL Howard Tampa FL, L.L.C.
3672. CVS EGL Hudson FL, L.L.C.
3673. CVS EGL Huebner Road TX, L.P.
3674. CVS EGL Huebner San Antonio TX, L.P.
3675. CVS EGL Hunters Creek Orlando FL, L.L.C.
3676. CVS EGL Hwy 1 Donaldsonville LA, Inc.
3677. CVS EGL Hwy 1 Fort Pierce FL, L.L.C.
3678. CVS EGL Hwy 1 Lucie FL, L.L.C.
3679. CVS EGL Hwy 1 Palm Beach FL, L.L.C.

3680. CVS EGL Hwy 1 Raceland LA, Inc.
3681. CVS EGL Hwy 1 Rockledge FL, L.L.C.
3682. CVS EGL Hwy 1 Vero Beach FL, L.L.C.
3683. CVS EGL Hwy 152 Mustang OK, Inc.
3684. CVS EGL Hwy 17 Casselberry FL, L.L.C.
3685. CVS EGL Hwy 171 Lake Charles LA, Inc.
3686. CVS EGL Hwy 181 Floresville TX, L.P.
3687. CVS EGL Hwy 19 Clearwater FL, L.L.C.
3688. CVS EGL Hwy 19 Crystal River FL, L.L.C.
3689. CVS EGL Hwy 19 Eustis FL, L.L.C.
3690. CVS EGL Hwy 19 Meridian MS, Inc.
3691. CVS EGL Hwy 19 North FL, L.L.C.
3692. CVS EGL Hwy 19 Port Richey FL, L.L.C.
3693. CVS EGL Hwy 190 Mandeville LA, Inc.
3694. CVS EGL Hwy 20 Interlachen FL, L.L.C.
3695. CVS EGL Hwy 20 Niceville FL, L.L.C.
3696. CVS EGL Hwy 24 Independence MO, Inc.
3697. CVS EGL Hwy 27 Haines City FL, L.L.C.
3698. CVS EGL Hwy 27 Sebring FL, L.L.C.
3699. CVS EGL Hwy 271 Gilmer TX, L.P.
3700. CVS EGL Hwy 28 Pineville LA, Inc.
3701. CVS EGL Hwy 281 San Antonio TX, L.P.
3702. CVS EGL Hwy 377 Fort Worth TX, L.P.
3703. CVS EGL Hwy 40 Silver Springs FL, L.L.C.
3704. CVS EGL Hwy 441 Alachua FL, L.L.C.
3705. CVS EGL Hwy 441 Mount Dora FL, L.L.C.
3706. CVS EGL Hwy 49 Gulfport MS, Inc.
3707. CVS EGL Hwy 524 Cocoa FL, L.L.C.
3708. CVS EGL Hwy 59 N Bowie TX, L.P.
3709. CVS EGL Hwy 6 North TX, L.P.
3710. CVS EGL Hwy 6 Sugar Land TX, L.P.
3711. CVS EGL Hwy 7 Lauderdale FL, L.L.C.
3712. CVS EGL Hwy 70 Bradenton FL, L.L.C.
3713. CVS EGL Hwy 84 Slaton TX, L.P.
3714. CVS EGL Hwy 90 Milton FL, L.L.C.
3715. CVS EGL Hwy 90 Morgan City LA, Inc.
3716. CVS EGL Hwy 92 Lakeland FL, L.L.C.
3717. CVS EGL Hwy 98 Destin FL, L.L.C.
3718. CVS EGL Hwy 98 Lakeland FL, L.L.C.
3719. CVS EGL Hwy 98 Panama FL, L.L.C.
3720. CVS EGL Hwy A1A Palm FL, L.L.C.
3721. CVS EGL Hwy Lake Placid FL, L.L.C.
3722. CVS EGL Hymeadow Austin TX, L.P.

3723. CVS EGL Imperial Bonita FL, L.L.C.
3724. CVS EGL Ina Tucson AZ, L.L.C.
3725. CVS EGL Independence Plano TX, L.P.
3726. CVS EGL Independence Shawnee OK, Inc.
3727. CVS EGL Independence TX, L.P.
3728. CVS EGL Indian Scottsdale AZ, L.L.C.
3729. CVS EGL Indian Trace FL, L.L.C.
3730. CVS EGL Indiana Arvada CO CVS, L.L.C.
3731. CVS EGL Indiantown Jupiter FL, L.L.C.
3732. CVS EGL International Drive FL, L.L.C.
3733. CVS EGL International Mary FL, L.L.C.
3734. CVS EGL International Orlando FL, L.L.C.
3735. CVS EGL Irlo Kissimmee FL, L.L.C.
3736. CVS EGL Irving TX, L.P.
3737. CVS EGL Irvington Houston TX, L.P.
3738. CVS EGL Irvington Tucson AZ, L.L.C.
3739. CVS EGL Ives Dairy Miami FL, L.L.C.
3740. CVS EGL Jacksboro Fort Worth TX, L.P.
3741. CVS EGL Jacksboro Wichita Falls TX, L.P.
3742. CVS EGL Jackson Alexandria LA, Inc.
3743. CVS EGL Jackson MS, Inc.
3744. CVS EGL Jacksonville FL, L.L.C.
3745. CVS EGL Jasper FL, L.L.C.
3746. CVS EGL Jefferson Baton Rouge LA, Inc.
3747. CVS EGL Jensen Beach FL, L.L.C.
3748. CVS EGL Jester Austin TX, L.P.
3749. CVS EGL Jog Boynton Beach FL, L.L.C.
3750. CVS EGL Jog Greenacres FL, L.L.C.
3751. CVS EGL Jog Lake Worth FL, L.L.C.
3752. CVS EGL John Young Orlando FL, L.L.C.
3753. CVS EGL Johnson Mission KS, Inc.
3754. CVS EGL Johnston Lafayette LA, Inc.
3755. CVS EGL Jones Houston TX, L.P.
3756. CVS EGL Jones Maltsberger San Antonio TX, L.P.
3757. CVS EGL Jones Road TX, L.P.
3758. CVS EGL Juan Tabo NM, L.L.C.
3759. CVS EGL Juno Beach FL, L.L.C.
3760. CVS EGL Jupiter Plano TX, L.P.
3761. CVS EGL Kaliste Lafayette LA, Inc.
3762. CVS EGL Kansas City KS, Inc.
3763. CVS EGL Kathleen Road FL, L.L.C.
3764. CVS EGL Katy TX, L.P.
3765. CVS EGL Kaufman TX, L.P.
3766. CVS EGL Kenner LA, Inc.
3767. CVS EGL Keystone Heights FL, L.L.C.
3768. CVS EGL King Seguin TX, L.P.
3769. CVS EGL Kings Pierce FL, L.L.C.
3770. CVS EGL Kingsland TX, L.P.
3771. CVS EGL Kingwood Humble TX, L.P.
3772. CVS EGL Kingwood TX, L.P.
3773. CVS EGL Kipling Coal Mine CO CVS, L.L.C.
3774. CVS EGL Kipling Littleton CO CVS, L.L.C.
3775. CVS EGL Kirby Houston TX, L.P.
3776. CVS EGL Kirkman FL, L.L.C.
3777. CVS EGL Kissimmee FL, L.L.C.
3778. CVS EGL Kosciusko MS, Inc.

3779. CVS EGL Kuykendahl TX, L.P.
3780. CVS EGL La Canada Oro AZ, L.L.C.
3781. CVS EGL Lafayette LA, Inc.
3782. CVS EGL Lake Austin TX, L.P.
3783. CVS EGL Lake Butler FL, L.L.C.
3784. CVS EGL Lake North Palm FL, L.L.C.
3785. CVS EGL Lake Pickett FL, L.L.C.
3786. CVS EGL Lake Taylor TX, L.P.
3787. CVS EGL Lake Underhill FL, L.L.C.
3788. CVS EGL Lake Weir Ocala FL, L.L.C.
3789. CVS EGL Lake Worth FL, L.L.C.
3790. CVS EGL Lake Worth Fort Worth TX, L.P.
3791. CVS EGL Lake Worth Road FL, L.L.C.
3792. CVS EGL Lakeland FL, L.L.C.
3793. CVS EGL Lakeland Highlands FL, L.L.C.
3794. CVS EGL Lakewood CO CVS, L.L.C.
3795. CVS EGL Lamar Paris TX, L.P.
3796. CVS EGL Land O Lakes FL, L.L.C.
3797. CVS EGL Lantana FL, L.L.C.
3798. CVS EGL Lantana Lake Worth FL, L.L.C.
3799. CVS EGL Lauderdale FL, L.L.C.
3800. CVS EGL Laurel MS, Inc.
3801. CVS EGL Lavon Garland TX, L.P.
3802. CVS EGL Lawton OK, Inc.
3803. CVS EGL Leavenworth KS, Inc.
3804. CVS EGL Lebanon Frisco TX, L.P.
3805. CVS EGL Lecanto Beverly FL, L.L.C.
3806. CVS EGL Lee Lawton OK, Inc.
3807. CVS EGL Lee Lehigh Acres FL, L.L.C.
3808. CVS EGL Lee Orlando FL, L.L.C.
3809. CVS EGL Lees Summit MO, Inc.
3810. CVS EGL Leesburg FL, L.L.C.
3811. CVS EGL Lemmon Dallas TX, L.P.
3812. CVS EGL Lenexa KS, Inc.
3813. CVS EGL Leopard TX, L.P.
3814. CVS EGL Lewis New Iberia LA, Inc.
3815. CVS EGL Lexington Missouri City TX, L.P.
3816. CVS EGL Lexington Sugar Land TX, L.P.
3817. CVS EGL Liberty MO, Inc.
3818. CVS EGL Lindsay Gilbert AZ, L.L.C.
3819. CVS EGL Linebaugh Tampa FL, L.L.C.
3820. CVS EGL Little Elm TX, L.P.
3821. CVS EGL Little Hudson FL, L.L.C.
3822. CVS EGL Lomans Ford TX, L.P.
3823. CVS EGL Long Beach MS, Inc.
3824. CVS EGL Long Point Houston TX, L.P.
3825. CVS EGL Longboat Key FL, L.L.C.
3826. CVS EGL Longmont CO CVS, L.L.C.
3827. CVS EGL Longwood FL, L.L.C.
3828. CVS EGL Loop Alvin TX, L.P.
3829. CVS EGL Losoya San Antonio TX, L.P.
3830. CVS EGL Louetta Houston TX, L.P.
3831. CVS EGL Louetta Spring TX, L.P.
3832. CVS EGL Louisiana Properties, Inc.
3833. CVS EGL Lovers Lane TX, L.P.
3834. CVS EGL Lowell Boulevard CO CVS, L.L.C.
3835. CVS EGL Lubbock Lamesa TX, L.P.
3836. CVS EGL Lubbock TX, L.P.
3837. CVS EGL Lumsden Brandon, L.L.C.
3838. CVS EGL Lumsden Road FL, L.L.C.

3839. CVS EGL Mabank TX, L.P.
3840. CVS EGL Macarthur OK, Inc.
3841. CVS EGL Macclenney FL, L.L.C.
3842. CVS EGL Macdill Tampa FL, L.L.C.
3843. CVS EGL Madison Tampa FL, L.L.C.
3844. CVS EGL Magee MS, Inc.
3845. CVS EGL Magnolia FL, L.L.C.
3846. CVS EGL Main Apopka FL, L.L.C.
3847. CVS EGL Main Avon Park FL, L.L.C.
3848. CVS EGL Main Baker LA, Inc.
3849. CVS EGL Main Bushnell FL, L.L.C.
3850. CVS EGL Main Dallas TX, L.P.
3851. CVS EGL Main FL, L.L.C.
3852. CVS EGL Main Franklin LA, Inc.
3853. CVS EGL Main Gainesville FL, L.L.C.
3854. CVS EGL Main Galliano LA, Inc.
3855. CVS EGL Main Inverness FL, L.L.C.
3856. CVS EGL Main Kansas City MO, Inc.
3857. CVS EGL Main Kerrville TX, L.P.
3858. CVS EGL Main Lewisville TX, L.P.
3859. CVS EGL Main Liberty TX, L.P.
3860. CVS EGL Main Martinville LA, Inc.
3861. CVS EGL Main Mesa AZ, L.L.C.
3862. CVS EGL Main Norman OK, Inc.
3863. CVS EGL Main Opelousas LA, Inc.
3864. CVS EGL Main Street TX, L.P.
3865. CVS EGL Main The Colony TX, L.P.
3866. CVS EGL Main Wildwood FL, L.L.C.
3867. CVS EGL Main Windsor CO CVS, L.L.C.
3868. CVS EGL Main Winnfield LA, Inc.
3869. CVS EGL Malabar Palm Bay FL, L.L.C.
3870. CVS EGL Manatee Beach FL, L.L.C.
3871. CVS EGL Manatee Bradenton FL, L.L.C.
3872. CVS EGL Mandalay Ave FL, L.L.C.
3873. CVS EGL Mansfield Fort Worth TX, L.P.
3874. CVS EGL Mansfield Shreveport LA, Inc.
3875. CVS EGL Mansfield TX, L.P.
3876. CVS EGL Maplewood Sulphur LA, Inc.
3877. CVS EGL Marco Island FL, L.L.C.
3878. CVS EGL Margate FL, L.L.C.
3879. CVS EGL Margate Pompano FL, L.L.C.
3880. CVS EGL Marianna FL, L.L.C.
3881. CVS EGL Maricamp Ocala FL, L.L.C.
3882. CVS EGL Market Street TX, L.P.
3883. CVS EGL Market Stuart FL, L.L.C.
3884. CVS EGL Marsh Lane TX, L.P.
3885. CVS EGL Marshall Howard TX, L.P.
3886. CVS EGL Martin Downs FL, L.L.C.
3887. CVS EGL Martin Greenville MS, Inc.
3888. CVS EGL Martin Luther King OK, Inc.
3889. CVS EGL Marty Street KS, Inc.
3890. CVS EGL Mary Esther FL, L.L.C.
3891. CVS EGL Mason Cypress TX, L.P.
3892. CVS EGL Mass Port Richey FL, L.L.C.
3893. CVS EGL Matlock Arlington TX, L.P.
3894. CVS EGL May Oklahoma, Inc.
3895. CVS EGL McCall Englewood FL, L.L.C.

3896. CVS EGL McCart Fort Worth TX, L.P.
3897. CVS EGL McComb MS, Inc.
3898. CVS EGL McDermott Plano TX, L.P.
3899. CVS EGL McDowell Mesa AZ, L.L.C.
3900. CVS EGL McKellips Mesa AZ, L.L.C.
3901. CVS EGL McMullen Booth FL, L.L.C.
3902. CVS EGL Meadowbrook Fort TX, L.P.
3903. CVS EGL Medical San Antonio TX, L.P.
3904. CVS EGL Meeting Place FL, L.L.C.
3905. CVS EGL Memorial Drive TX, L.P.
3906. CVS EGL Memorial Lakeland FL, L.L.C.
3907. CVS EGL Menaul Eubank NM, L.L.C.
3908. CVS EGL Merritt Island FL, L.L.C.
3909. CVS EGL Mesa AZ, L.L.C.
3910. CVS EGL Mesa Houston TX, L.P.
3911. CVS EGL Mesquite TX, L.P.
3912. CVS EGL Metairie Road LA, Inc.
3913. CVS EGL Metcalf KS, Inc.
3914. CVS EGL Meyer Street TX, L.P.
3915. CVS EGL Miami 56th FL, L.L.C.
3916. CVS EGL Miami Beach FL, L.L.C.
3917. CVS EGL Miami Dix FL, L.L.C.
3918. CVS EGL Miami FL, L.L.C.
3919. CVS EGL Military Delray FL, L.L.C.
3920. CVS EGL Military Flores TX, L.P.
3921. CVS EGL Military Palm Beach FL, L.L.C.
3922. CVS EGL Military Pineville LA, Inc.
3923. CVS EGL Military Trail Jupiter FL, L.L.C.
3924. CVS EGL Military West Palm Beach FL, L.L.C.
3925. CVS EGL Mills Miami FL, L.L.C.
3926. CVS EGL Milwaukee TX, L.P.
3927. CVS EGL Minden LA, Inc.
3928. CVS EGL Miramar Dykes FL, L.L.C.
3929. CVS EGL Miramar FL, L.L.C.
3930. CVS EGL Miramar Hollywood FL, L.L.C.
3931. CVS EGL Miramar Indialantic FL, L.L.C.
3932. CVS EGL Miramar Parkway FL, L.L.C.
3933. CVS EGL Miromar Estero FL, L.L.C.
3934. CVS EGL Mississippi Aurora CO CVS, L.L.C.
3935. CVS EGL Mississippi Properties, Inc.
3936. CVS EGL Missouri Ave FL, L.L.C.
3937. CVS EGL Missouri Properties, Inc.
3938. CVS EGL Mizner Boca FL, L.L.C.
3939. CVS EGL Mobile Highway FL, L.L.C.
3940. CVS EGL Mobile Pensacola FL, L.L.C.
3941. CVS EGL Monroe Tallahassee FL, L.L.C.
3942. CVS EGL Montgomery FL, L.L.C.
3943. CVS EGL Montgomery NM, L.L.C.
3944. CVS EGL Monument Saint Joe FL, L.L.C.
3945. CVS EGL Moore OK, Inc.
3946. CVS EGL Moreau Marksville LA, Inc.
3947. CVS EGL Moss Lafayette LA, Inc.
3948. CVS EGL Municipal Drive FL, L.L.C.
3949. CVS EGL Mur Len Olathe KS, Inc.
3950. CVS EGL Murphy TX, L.P.
3951. CVS EGL N 18th Waco TX, L.P.

3952. CVS EGL N Beach Fort Worth TX, L.P.
3953. CVS EGL N Bluegrove Lancaster TX, L.P.
3954. CVS EGL N Carrier Grand Prairie TX, L.P.
3955. CVS EGL N Central Dallas TX, L.P.
3956. CVS EGL N Denton Tap Coppell TX, L.P.
3957. CVS EGL N Frazier Conroe TX, L.P.
3958. CVS EGL N Galloway Mesquite TX, L.P.
3959. CVS EGL N Greer Pittsburg TX, L.P.
3960. CVS EGL N I 35 Denton TX, L.P.
3961. CVS EGL N Industrial Bedford TX, L.P.
3962. CVS EGL N Josey Carrollton TX, L.P.
3963. CVS EGL N Judge Ely Abilene TX, L.P.
3964. CVS EGL N Lamar Austin TX, L.P.
3965. CVS EGL N Macarthur Irving TX, L.P.
3966. CVS EGL N Main Pearland TX, L.P.
3967. CVS EGL N Main Vidor TX, L.P.
3968. CVS EGL N Mccoy New Boston TX, L.P.
3969. CVS EGL N Nacogdoches TX, L.P.
3970. CVS EGL N New Waco TX, L.P.
3971. CVS EGL N Richmond Wharton TX, L.P.
3972. CVS EGL N Saint Marys Beeville TX, L.P.
3973. CVS EGL N Story Irving TX, L.P.
3974. CVS EGL N Tarrant N Richland Hills TX, L.P.
3975. CVS EGL N Walnut Creek Mansfield TX, L.P.
3976. CVS EGL N Willis Abilene TX, L.P.
3977. CVS EGL Nacogdoches San Antonio TX, L.P.
3978. CVS EGL Nall Avenue KS, Inc.
3979. CVS EGL Naples FL, L.L.C.
3980. CVS EGL Narcoosee Road FL, L.L.C.
3981. CVS EGL Nasa Houston TX, L.P.
3982. CVS EGL Natchez MS, Inc.
3983. CVS EGL Navarre FL, L.L.C.
3984. CVS EGL Nebraska Tampa FL, L.L.C.
3985. CVS EGL Nederland TX, L.P.
3986. CVS EGL New Boston Texarkana TX, L.P.
3987. CVS EGL New Braunfels TX, L.P.
3988. CVS EGL New Cedar TX, L.P.
3989. CVS EGL New Orleans LA, Inc.
3990. CVS EGL New Tampa FL, L.L.C.
3991. CVS EGL New Territory Sugar Land TX, L.P.
3992. CVS EGL Newberry Road FL, L.L.C.
3993. CVS EGL Newhaven FL, L.L.C.
3994. CVS EGL Niceville FL, L.L.C.
3995. CVS EGL Nine Mile FL, L.L.C.
3996. CVS EGL Ninth Galveston TX, L.P.
3997. CVS EGL Noble Williston FL, L.L.C.
3998. CVS EGL Nogalitos TX, L.P.
3999. CVS EGL Nomans FL, L.L.C.
4000. CVS EGL Norman OK, Inc.
4001. CVS EGL Normandy FL, L.L.C.
4002. CVS EGL Normandy Jacksonville FL, L.L.C.
4003. CVS EGL North 16th AZ, L.L.C.
4004. CVS EGL North 16th Street TX, L.P.
4005. CVS EGL North Belton MO, Inc.
4006. CVS EGL North Braunfels TX, L.P.

4007. CVS EGL North Cleveland FL, L.L.C.
4008. CVS EGL North Congress FL, L.L.C.
4009. CVS EGL North Dale Tampa FL, L.L.C.
4010. CVS EGL North Davis MS, Inc.
4011. CVS EGL North Federal FL, L.L.C.
4012. CVS EGL North Florida FL, L.L.C.
4013. CVS EGL North Freeway TX, L.P.
4014. CVS EGL North Highland FL, L.L.C.
4015. CVS EGL North Homestead FL, L.L.C.
4016. CVS EGL North Josey Lane TX, L.P.
4017. CVS EGL North Lauderdale FL, L.L.C.
4018. CVS EGL North Market LA, Inc.
4019. CVS EGL North May OK, Inc.
4020. CVS EGL North Miami Beach FL, L.L.C.
4021. CVS EGL North Military Trail FL, L.L.C.
4022. CVS EGL North Nova FL, L.L.C.
4023. CVS EGL North Ocean FL, L.L.C.
4024. CVS EGL North Pensacola FL, L.L.C.
4025. CVS EGL North Rockwell OK, Inc.
4026. CVS EGL North Santa Fe OK, Inc.
4027. CVS EGL North Vero FL, L.L.C.
4028. CVS EGL North Wickham Road FL, L.L.C.
4029. CVS EGL Northeast Ocean FL, L.L.C.
4030. CVS EGL Northern Glendale AZ, L.L.C.
4031. CVS EGL Northpark Humble TX, L.P.
4032. CVS EGL Northwest Freeway TX, L.P.
4033. CVS EGL Northwest Houston TX, L.P.
4034. CVS EGL Nova Daytona Beach FL, L.L.C.
4035. CVS EGL Nova Ormond Beach FL, L.L.C.
4036. CVS EGL NW Loop 436 Carthage TX, L.P.
4037. CVS EGL Oak Kansas City MO, Inc.
4038. CVS EGL Oak Lawn Dallas TX, L.P.
4039. CVS EGL Oak Traffic Kansas City MO, Inc.
4040. CVS EGL Oakhurst Seminole FL, L.L.C.
4041. CVS EGL Oakland Lauderdale FL, L.L.C.
4042. CVS EGL Oakland Park Boulevard FL, L.L.C.
4043. CVS EGL Oakland Park West FL, L.L.C.
4044. CVS EGL Ocala Southwest FL, L.L.C.
4045. CVS EGL Ocean Springs MS, Inc.
4046. CVS EGL Ocoee FL, L.L.C.
4047. CVS EGL Ohio Live Oak FL, L.L.C.
4048. CVS EGL Ohio Lynn Haven FL, L.L.C.
4049. CVS EGL Okeechobee Boulevard FL, L.L.C.
4050. CVS EGL Okeechobee West Palm FL, L.L.C.
4051. CVS EGL Oklahoma City 44 Southwest, Inc.
4052. CVS EGL Oklahoma Properties, Inc.
4053. CVS EGL Olathe KS, Inc.
4054. CVS EGL Old Cutler Miami FL, L.L.C.
4055. CVS EGL Old Quincy Tallahassee FL, L.L.C.
4056. CVS EGL Old Westeimer TX, L.P.
4057. CVS EGL Opa Locka FL, L.L.C.

4058. CVS EGL Orange Blossom Orlando FL, L.L.C.
4059. CVS EGL Orange Blossom Trail FL, L.L.C.
4060. CVS EGL Orange Kissimmee FL, L.L.C.
4061. CVS EGL Orange Orlando FL, L.L.C.
4062. CVS EGL Orange Park FL, L.L.C.
4063. CVS EGL Orange TX, L.P.
4064. CVS EGL Orlando Sanford FL, L.L.C.
4065. CVS EGL Orlando Winter Park FL, L.L.C.
4066. CVS EGL Oro Valley AZ, L.L.C.
4067. CVS EGL Osceola Kissimmee FL, L.L.C.
4068. CVS EGL Oslo Vero FL, L.L.C.
4069. CVS EGL Osprey FL, L.L.C.
4070. CVS EGL Osuna Road NM, L.L.C.
4071. CVS EGL Overland Park KS, Inc.
4072. CVS EGL Overseas Big Pine Key FL, L.L.C.
4073. CVS EGL Overseas Islamorada FL, L.L.C.
4074. CVS EGL Overseas Key Largo FL, L.L.C.
4075. CVS EGL Overseas Marathon FL, L.L.C.
4076. CVS EGL Overseas Tavernier FL, L.L.C.
4077. CVS EGL Oviedo FL, L.L.C.
4078. CVS EGL Oxford FL, L.L.C.
4079. CVS EGL Oyster Creek Lake Jackson TX, L.P.
4080. CVS EGL Palafox Pensacola FL, L.L.C.
4081. CVS EGL Palatka FL, L.L.C.
4082. CVS EGL Palm 19th North FL, L.L.C.
4083. CVS EGL Palm Avenue FL, L.L.C.
4084. CVS EGL Palm Bay FL, L.L.C.
4085. CVS EGL Palm Beach Boulevard FL, L.L.C.
4086. CVS EGL Palm Beach Fort Myers FL, L.L.C.
4087. CVS EGL Palm Coast FL, L.L.C.
4088. CVS EGL Palm Ridge Sanibel FL, L.L.C.
4089. CVS EGL Panama City FL, L.L.C.
4090. CVS EGL Panther Creek TX, L.P.
4091. CVS EGL Park Houma LA, Inc.
4092. CVS EGL Parker Centennial CO CVS, L.L.C.
4093. CVS EGL Parker Denver CO CVS, L.L.C.
4094. CVS EGL Parkway Spring TX, L.P.
4095. CVS EGL Parkwood TX, L.P.
4096. CVS EGL Parmer Cedar TX, L.P.
4097. CVS EGL Parmer Harris TX, L.P.
4098. CVS EGL Parrott Okeechobee FL, L.L.C.
4099. CVS EGL Pascagoula MS, Inc.
4100. CVS EGL Paseo Del Norte NM, L.L.C.
4101. CVS EGL Pat Booker Universal City TX, L.P.
4102. CVS EGL Paul Maillard Luling LA, Inc.
4103. CVS EGL Pearl Boulder CO CVS, L.L.C.
4104. CVS EGL Pearl MS, Inc.
4105. CVS EGL Perdido Pensacola FL, L.L.C.
4106. CVS EGL Perkins Baton Rouge LA, Inc.
4107. CVS EGL Pflugerville TX, L.P.
4108. CVS EGL PGA Boulevard FL, L.L.C.
4109. CVS EGL Phenix City AL, Inc.
4110. CVS EGL Phoenix McDowell AZ, L.L.C.
4111. CVS EGL Picayune MS, Inc.
4112. CVS EGL Pine Island FL, L.L.C.
4113. CVS EGL Pine Naples FL, L.L.C.

4114. CVS EGL Pine Ocala FL, L.L.C.
4115. CVS EGL Pinellas Park FL, L.L.C.
4116. CVS EGL Pines Boulevard FL, L.L.C.
4117. CVS EGL Pines Hollywood FL, L.L.C.
4118. CVS EGL Pines Shreveport LA, Inc.
4119. CVS EGL Pinhook Lafayette LA, Inc.
4120. CVS EGL Pioneer Arlington TX, L.P.
4121. CVS EGL Pipers Glen FL, L.L.C.
4122. CVS EGL Plank Baton Rouge LA, Inc.
4123. CVS EGL Plant City FL, L.L.C.
4124. CVS EGL Platte City MO, Inc.
4125. CVS EGL Plaza Tampa FL, L.L.C.
4126. CVS EGL Pleasant Valley Garland TX, L.P.
4127. CVS EGL Poinciana Destin FL, L.L.C.
4128. CVS EGL Pointe Fort Myers FL, L.L.C.
4129. CVS EGL Polk Houston TX, L.P.
4130. CVS EGL Pompano Beach FL, L.L.C.
4131. CVS EGL Ponchatoula LA, Inc.
4132. CVS EGL Pontchartrain Slidell LA, Inc.
4133. CVS EGL Port Arthur TX, L.P.
4134. CVS EGL Port Lavaca TX, L.P.
4135. CVS EGL Port Neches TX, L.P.
4136. CVS EGL Port Richey FL, L.L.C.
4137. CVS EGL Port Saint Lucie FL, L.L.C.
4138. CVS EGL Port Southwest FL, L.L.C.
4139. CVS EGL Porter TX, L.P.
4140. CVS EGL Post Oak TX, L.P.
4141. CVS EGL Potranco San Antonio TX, L.P.
4142. CVS EGL Power German AZ, L.L.C.
4143. CVS EGL Powers Stetson CO CVS, L.L.C.
4144. CVS EGL Prairie Village KS, Inc.
4145. CVS EGL Precinct Hurst TX, L.P.
4146. CVS EGL Preston Forrest TX, L.P.
4147. CVS EGL Preston Frisco TX, L.P.
4148. CVS EGL Preston Road TX, L.P.
4149. CVS EGL Prima Vista FL, L.L.C.
4150. CVS EGL Providence Deltona FL, L.L.C.
4151. CVS EGL Prytania New Orleans LA, Inc.
4152. CVS EGL Public Lafayette CO CVS, L.L.C.
4153. CVS EGL Quail Roost Miami FL, L.L.C.
4154. CVS EGL Quebec Denver CO CVS, L.L.C.
4155. CVS EGL Queenston TX, L.P.
4156. CVS EGL Quincy Avenue MO, Inc.
4157. CVS EGL Quincy FL, L.L.C.
4158. CVS EGL Quincy Tallahassee FL, L.L.C.
4159. CVS EGL Racetrack Walton FL, L.L.C.
4160. CVS EGL Rattlesnake Hammock FL, L.L.C.
4161. CVS EGL Rattlesnake Naples FL, L.L.C.
4162. CVS EGL Ray McQueen AZ, L.L.C.
4163. CVS EGL Rayford Spring TX, L.P.
4164. CVS EGL Red Bluff Pasadena TX, L.P.
4165. CVS EGL Red Bug FL, L.L.C.
4166. CVS EGL Red Bug Oviedo FL, L.L.C.
4167. CVS EGL Reno Mustang OK, Inc.
4168. CVS EGL Research TX, L.P.
4169. CVS EGL Richardson Henderson TX, L.P.

4170. CVS EGL Richey FL, L.L.C.
4171. CVS EGL Richland MS, Inc.
4172. CVS EGL Richmond Hill FL, L.L.C.
4173. CVS EGL Ridge New Port Richey FL, L.L.C.
4174. CVS EGL Ridgewood Beach FL, L.L.C.
4175. CVS EGL Ridgewood Edgewater FL, L.L.C.
4176. CVS EGL Riggs Chandler AZ, L.L.C.
4177. CVS EGL River Oaks Fort Worth TX, L.P.
4178. CVS EGL Riverview FL, L.L.C.
4179. CVS EGL Robertsdale AL, Inc.
4180. CVS EGL Robinson Norman OK, Inc.
4181. CVS EGL Robstown TX, L.P.
4182. CVS EGL Rock Prairie College Station TX, L.P.
4183. CVS EGL Rockwall TX, L.P.
4184. CVS EGL Rockwell Oklahoma City OK, Inc.
4185. CVS EGL Rogero Jacksonville FL, L.L.C.
4186. CVS EGL Roosevelt FL, L.L.C.
4187. CVS EGL Roosevelt Key West FL, L.L.C.
4188. CVS EGL Rosemont Goodyear AZ, L.L.C.
4189. CVS EGL Rosenburg TX, L.P.
4190. CVS EGL Ross Dallas TX, L.P.
4191. CVS EGL Round Rock TX, L.P.
4192. CVS EGL Rowlett TX, L.P.
4193. CVS EGL Royal Palm Beach FL, L.L.C.
4194. CVS EGL Rufe Snow Keller TX, L.P.
4195. CVS EGL Sadler Fernandina Beach FL, L.L.C.
4196. CVS EGL Saginaw TX, L.P.
4197. CVS EGL Saint Andrews Boca Raton FL, L.L.C.
4198. CVS EGL Saint Augustine FL, L.L.C.
4199. CVS EGL Saint James FL, L.L.C.
4200. CVS EGL Sam Houston LA, Inc.
4201. CVS EGL Sample Pompano Beach FL, L.L.C.
4202. CVS EGL Samuell Dallas TX, L.P.
4203. CVS EGL San Bernardino NM, L.L.C.
4204. CVS EGL San Carlos FL, L.L.C.
4205. CVS EGL San Jose FL, L.L.C.
4206. CVS EGL San Marcos TX, L.P.
4207. CVS EGL San Pedro Avenue TX, L.P.
4208. CVS EGL Sandalfoot Boca Raton FL, L.L.C.
4209. CVS EGL Sandlake Orlando FL, L.L.C.
4210. CVS EGL Sanford FL, L.L.C.
4211. CVS EGL Santa Barbara Cape Coral FL, L.L.C.
4212. CVS EGL Santa Edmond OK, Inc.
4213. CVS EGL Santa Fe OK, Inc.
4214. CVS EGL Sarafruit FL, L.L.C.
4215. CVS EGL Sarasota FL, L.L.C.
4216. CVS EGL Satellite Beach FL, L.L.C.
4217. CVS EGL Sawgrass Ponte Vedra FL, L.L.C.
4218. CVS EGL Scarsdale Houston TX, L.P.
4219. CVS EGL Schillinger Mobile AL, Inc.
4220. CVS EGL Scott Street TX, L.P.
4221. CVS EGL Scottsdale AZ, L.L.C.
4222. CVS EGL Scottsdale Paradise AZ, L.L.C.
4223. CVS EGL Seagoville TX, L.P.
4224. CVS EGL Sebastian FL, L.L.C.
4225. CVS EGL Sebring FL, L.L.C.

4226. CVS EGL Security CO CVS, L.L.C.
4227. CVS EGL Seffner FL, L.L.C.
4228. CVS EGL Seminole Largo FL, L.L.C.
4229. CVS EGL Semmes AL, Inc.
4230. CVS EGL Semoran Winter Park FL, L.L.C.
4231. CVS EGL Seven Springs FL, L.L.C.
4232. CVS EGL Severn Metairie LA, Inc.
4233. CVS EGL Shartel Oklahoma, Inc.
4234. CVS EGL Shaver Pasadena TX, L.P.
4235. CVS EGL Shawnee KS, Inc.
4236. CVS EGL Shea Phoenix AZ, L.L.C.
4237. CVS EGL Sheldon Channelview TX, L.P.
4238. CVS EGL Sheridan Hollywood FL, L.L.C.
4239. CVS EGL Sheridan Pembroke FL, L.L.C.
4240. CVS EGL Sherwood Forest LA, Inc.
4241. CVS EGL Shreveport LA, Inc.
4242. CVS EGL Silsbee TX, L.P.
4243. CVS EGL Silver Springs FL, L.L.C.
4244. CVS EGL Silver Star Orlando FL, L.L.C.
4245. CVS EGL Simon Franklin LA, Inc.
4246. CVS EGL Skillman TX, L.P.
4247. CVS EGL Skyline Tucson AZ, L.L.C.
4248. CVS EGL Snider Plaza TX, L.P.
4249. CVS EGL Snow Mid Cities TX, L.P.
4250. CVS EGL Socrum Loop FL, L.L.C.
4251. CVS EGL South 270 League City TX, L.P.
4252. CVS EGL South 78 Wylie TX, L.P.
4253. CVS EGL South Alameda TX, L.P.
4254. CVS EGL South Boynton FL, L.L.C.
4255. CVS EGL South Bryant OK, Inc.
4256. CVS EGL South Cleveland FL, L.L.C.
4257. CVS EGL South Congress FL, L.L.C.
4258. CVS EGL South Conway FL, L.L.C.
4259. CVS EGL South Deerfield FL, L.L.C.
4260. CVS EGL South Dixie FL, L.L.C.
4261. CVS EGL South East 44th OK, Inc.
4262. CVS EGL South Fort Worth TX, L.P.
4263. CVS EGL South Hampton TX, L.P.
4264. CVS EGL South Hiawassee FL, L.L.C.
4265. CVS EGL South Jefferson TX, L.P.
4266. CVS EGL South Main Houston TX, L.P.
4267. CVS EGL South Mason Katy TX, L.P.
4268. CVS EGL South Miami FL, L.L.C.
4269. CVS EGL South Military FL, L.L.C.
4270. CVS EGL South Monroe FL, L.L.C.
4271. CVS EGL South Orange Orlando FL, L.L.C.
4272. CVS EGL South Ridgewood FL, L.L.C.
4273. CVS EGL South Staples TX, L.P.
4274. CVS EGL South Storey TX, L.P.
4275. CVS EGL South Volusia FL, L.L.C.
4276. CVS EGL South Washington TX, L.P.
4277. CVS EGL South Woodland FL, L.L.C.
4278. CVS EGL Southeast Maricamp FL, L.L.C.

4279. CVS EGL Southern Boulevard FL, L.L.C.
4280. CVS EGL Southern Mesa AZ, L.L.C.
4281. CVS EGL Southern, L.L.C.
4282. CVS EGL Southside Jacksonville FL, L.L.C.
4283. CVS EGL Southwest 88th FL, L.L.C.
4284. CVS EGL Southwest FL, L.L.C.
4285. CVS EGL Southwest Sugar Land TX, L.P.
4286. CVS EGL Southwest Wichita Falls TX, L.P.
4287. CVS EGL Speedway Tucson AZ, L.L.C.
4288. CVS EGL Spencer Highway TX, L.P.
4289. CVS EGL Spencer Pasadena TX, L.P.
4290. CVS EGL Spirit Lake FL, L.L.C.
4291. CVS EGL Spring Champion TX, L.P.
4292. CVS EGL Spring FL, L.L.C.
4293. CVS EGL Spring Hill AL, Inc.
4294. CVS EGL Spring Hill Drive FL, L.L.C.
4295. CVS EGL Spring Hill FL, L.L.C.
4296. CVS EGL SR 13 Jacksonville FL, L.L.C.
4297. CVS EGL St. Cloud FL, L.L.C.
4298. CVS EGL St. Pete Sarasota FL, L.L.C.
4299. CVS EGL Stapley Mesa AZ, L.L.C.
4300. CVS EGL Staring Baton Rouge LA, Inc.
4301. CVS EGL Starkey Seminole FL, L.L.C.
4302. CVS EGL State Altamonte FL, L.L.C.
4303. CVS EGL State Augustine FL, L.L.C.
4304. CVS EGL State Callahan FL, L.L.C.
4305. CVS EGL State Clearwater FL, L.L.C.
4306. CVS EGL State Hollywood FL, L.L.C.
4307. CVS EGL State Jackson MS, Inc.
4308. CVS EGL State Lauderdale FL, L.L.C.
4309. CVS EGL State Line Kansas City MO, Inc.
4310. CVS EGL State Line Road MO, Inc.
4311. CVS EGL State Longwood FL, L.L.C.
4312. CVS EGL State Road 7 FL, L.L.C.
4313. CVS EGL State Valrico FL, L.L.C.
4314. CVS EGL Sterlington Monroe LA, Inc.
4315. CVS EGL Stewart Azle TX, L.P.
4316. CVS EGL Stirling Lauderdale FL, L.L.C.
4317. CVS EGL Stock Island FL, L.L.C.
4318. CVS EGL Stone Kilgore TX, L.P.
4319. CVS EGL Strand Naples FL, L.L.C.
4320. CVS EGL Stribling Brandon MS, Inc.
4321. CVS EGL Stuart FL, L.L.C.
4322. CVS EGL Sulphur Springs TX, L.P.
4323. CVS EGL Summerlin FL, L.L.C.
4324. CVS EGL Sun City FL, L.L.C.
4325. CVS EGL Suncoast FL, L.L.C.
4326. CVS EGL Suncrest Jackson MS, Inc.
4327. CVS EGL Sunrise Commercial FL, L.L.C.
4328. CVS EGL Sunrise Lauderdale FL, L.L.C.
4329. CVS EGL Sunset Drive FL, L.L.C.
4330. CVS EGL Sunset Miami FL, L.L.C.
4331. CVS EGL SW Green Arlington TX, L.P.

4332. CVS EGL SW Wilshire Burleson TX, L.P.
4333. CVS EGL Sycamore School TX, L.P.
4334. CVS EGL Taft Street FL, L.L.C.
4335. CVS EGL Tamiami Bonita Springs FL, L.L.C.
4336. CVS EGL Tamiami Fort Myers FL, L.L.C.
4337. CVS EGL Tamiami Naples FL, L.L.C.
4338. CVS EGL Tamiami Nokomis FL, L.L.C.
4339. CVS EGL Tamiami North Port FL, L.L.C.
4340. CVS EGL Tamiami Port Charlotte FL, L.L.C.
4341. CVS EGL Tamiami Punta Gorda FL, L.L.C.
4342. CVS EGL Tamiami Sarasota FL, L.L.C.
4343. CVS EGL Tamiami Venice FL, L.L.C.
4344. CVS EGL Tampa Jenkins FL, L.L.C.
4345. CVS EGL Tampa Oldsmar FL, L.L.C.
4346. CVS EGL Tampa St. Pete FL, L.L.C.
4347. CVS EGL Tarpon Springs FL, L.L.C.
4348. CVS EGL Tarrant Beach TX, L.P.
4349. CVS EGL Tate Cove Ville Platte LA, Inc.
4350. CVS EGL Tatum Phoenix AZ, L.L.C.
4351. CVS EGL Teel Frisco TX, L.P.
4352. CVS EGL Telephone HoustonTX, L.P.
4353. CVS EGL Temple Starke FL, L.L.C.
4354. CVS EGL Tenaha Center TX, L.P.
4355. CVS EGL Tennessee FL, L.L.C.
4356. CVS EGL Tequesta FL, L.L.C.
4357. CVS EGL Texas Alice TX, L.P.
4358. CVS EGL Texas College Station TX, L.P.
4359. CVS EGL Texas Properties, Inc.
4360. CVS EGL Texoma Sherman TX, L.P.
4361. CVS EGL Thomasville FL, L.L.C.
4362. CVS EGL Thomasville Road FL, L.L.C.
4363. CVS EGL Thomasville Tallahassee FL, L.L.C.
4364. CVS EGL Thompson Nursery FL, L.L.C.
4365. CVS EGL Thompson Peak AZ, L.L.C.
4366. CVS EGL Thornton CO CVS, L.L.C.
4367. CVS EGL Thornton Temple TX, L.P.
4368. CVS EGL Thunderbird Peoria AZ, L.L.C.
4369. CVS EGL Thunderbird Sun City AZ, L.L.C.
4370. CVS EGL Tidwell Houston TX, L.P.
4371. CVS EGL Timberline Collins CO CVS, L.L.C.
4372. CVS EGL Tomball TX, L.P.
4373. CVS EGL Tower Denver CO CVS, L.L.C.
4374. CVS EGL Town FL, L.L.C.
4375. CVS EGL Trade Canton TX, L.P.
4376. CVS EGL Trail Fort Myers FL, L.L.C.
4377. CVS EGL Trail Lake TX, L.P.
4378. CVS EGL Trail Naples FL, L.L.C.
4379. CVS EGL Truman Key West FL, L.L.C.
4380. CVS EGL Tulip FL, L.L.C.
4381. CVS EGL Tuttle Sarasota FL, L.L.C.

4382. CVS EGL Twin Hills Dallas TX, L.P.
4383. CVS EGL Tyler TX, L.P.
4384. CVS EGL Tyndall Panama City FL, L.L.C.
4385. CVS EGL Ulmerton Largo FL, L.L.C.
4386. CVS EGL Ulmerton Road FL, L.L.C.
4387. CVS EGL Underhill Orlando FL, L.L.C.
4388. CVS EGL Union Hills AZ, L.L.C.
4389. CVS EGL University Blvd Orlando FL, L.L.C.
4390. CVS EGL University Bradenton FL, L.L.C.
4391. CVS EGL University Denton TX, L.P.
4392. CVS EGL University Fort Lauderdale FL, L.L.C.
4393. CVS EGL University Hollywood FL, L.L.C.
4394. CVS EGL University Pompano FL, L.L.C.
4395. CVS EGL University Winter Park FL, L.L.C.
4396. CVS EGL US Hwy 19 Holiday FL, L.L.C.
4397. CVS EGL Uvalde Houston TX, L.P.
4398. CVS EGL Val Vista AZ, L.L.C.
4399. CVS EGL Valley Mills TX, L.P.
4400. CVS EGL Vandament Yukon OK, Inc.
4401. CVS EGL Vanderbilt Beach FL, L.L.C.
4402. CVS EGL Vegas Verdes NM, L.L.C.
4403. CVS EGL Venice Bypass FL, L.L.C.
4404. CVS EGL Venice FL, L.L.C.
4405. CVS EGL Veterans Metairie LA, Inc.
4406. CVS EGL Viera Melbourne FL, L.L.C.
4407. CVS EGL Village West Palm FL, L.L.C.
4408. CVS EGL Vine Kissimmee FL, L.L.C.
4409. CVS EGL Vineland Kissimmee FL, L.L.C.
4410. CVS EGL Vivion Kansas City MO, Inc.
4411. CVS EGL Voss Houston TX, L.P.
4412. CVS EGL W 20 Arlington TX, L.P.
4413. CVS EGL W 4th Cameron TX, L.P.
4414. CVS EGL W 7th Corsicana TX, L.P.
4415. CVS EGL W Adams Temple TX, L.P.
4416. CVS EGL W Beauregard TX, L.P.
4417. CVS EGL W Bell Fort TX, L.P.
4418. CVS EGL W Berry Fort Worth TX, L.P.
4419. CVS EGL W Camp Wisdom TX, L.P.
4420. CVS EGL W Davis Conroe TX, L.P.
4421. CVS EGL W Frank Lufkin TX, L.P.
4422. CVS EGL W Gentry Tyler TX, L.P.
4423. CVS EGL W Illinois Dallas TX, L.P.
4424. CVS EGL W Lamar Arlington TX, L.P.
4425. CVS EGL W Little York Houston TX, L.P.
4426. CVS EGL W Loop Longview TX, L.P.
4427. CVS EGL W Main League City TX, L.P.
4428. CVS EGL W Marshall Longview TX, L.P.
4429. CVS EGL W Moore Terrell TX, L.P.

4430. CVS EGL W Northwest Grapevine TX, L.P.
4431. CVS EGL W Park Row TX, L.P.
4432. CVS EGL W Parker TX, L.P.
4433. CVS EGL W Pioneer TX, L.P.
4434. CVS EGL W San Antonio TX, L.P.
4435. CVS EGL W Walker TX, L.P.
4436. CVS EGL W Walnut Garland TX, L.P.
4437. CVS EGL W Washington TX, L.P.
4438. CVS EGL Wabasso FL, L.L.C.
4439. CVS EGL Wadsworth CO CVS, L.L.C.
4440. CVS EGL Walker Houston TX, L.P.
4441. CVS EGL Walker LA, Inc.
4442. CVS EGL Waller TX, L.P.
4443. CVS EGL Walsingham Largo FL, L.L.C.
4444. CVS EGL Walzem San Antonio TX, L.P.
4445. CVS EGL Warner Gilbert AZ, L.L.C.
4446. CVS EGL Washington Franklinton LA, Inc.
4447. CVS EGL Washington Houston TX, L.P.
4448. CVS EGL Washington Miami FL, L.L.C.
4449. CVS EGL Washington TX, L.P.
4450. CVS EGL Weatherford TX, L.P.
4451. CVS EGL Webster TX, L.P.
4452. CVS EGL Wellington Forest FL, L.L.C.
4453. CVS EGL Wemore Tucson AZ, L.L.C.
4454. CVS EGL Wesley Chapel FL, L.L.C.
4455. CVS EGL Wesley Greenville TX, L.P.
4456. CVS EGL West Anderson TX, L.P.
4457. CVS EGL West Arkansas TX, L.P.
4458. CVS EGL West Avenue TX, L.P.
4459. CVS EGL West Bellfort TX, L.P.
4460. CVS EGL West Britton OK, Inc.
4461. CVS EGL West Broward FL, L.L.C.
4462. CVS EGL West Campbell TX, L.P.
4463. CVS EGL West Colonial FL, L.L.C.
4464. CVS EGL West Columbia TX, L.P.
4465. CVS EGL West Davie Boulevard FL, L.L.C.
4466. CVS EGL West Ennis TX, L.P.
4467. CVS EGL West Esplanade LA, Inc.
4468. CVS EGL West FM 1960 TX, L.P.
4469. CVS EGL West Houston TX, L.P.
4470. CVS EGL West Jefferson TX, L.P.
4471. CVS EGL West Lantana FL, L.L.C.
4472. CVS EGL West Park Avenue LA, Inc.
4473. CVS EGL West Pensacola FL, L.L.C.
4474. CVS EGL West River Tucson AZ, L.L.C.
4475. CVS EGL West Rochelle TX, L.P.
4476. CVS EGL West Sample FL, L.L.C.
4477. CVS EGL West Slaughter TX, L.P.
4478. CVS EGL West Sunrise FL, L.L.C.
4479. CVS EGL West Tampa FL, L.L.C.
4480. CVS EGL West Union Hills AZ, L.L.C.
4481. CVS EGL West University FL, L.L.C.
4482. CVS EGL West Waters FL, L.L.C.
4483. CVS EGL Western Center TX, L.P.
4484. CVS EGL Western Oklahoma City OK, Inc.
4485. CVS EGL Westhampton Springs FL, L.L.C.
4486. CVS EGL Westheimer Houston TX, L.P.
4487. CVS EGL Westheimer Road TX, L.P.
4488. CVS EGL Westheimer Suite K TX, L.P.

4489. CVS EGL Westheimer TX, L.P.
4490. CVS EGL Weston Road FL, L.L.C.
4491. CVS EGL Westwego LA, Inc.
4492. CVS EGL Wheatridge CO CVS, L.L.C.
4493. CVS EGL Wheeler Jasper TX, L.P.
4494. CVS EGL White Settlement TX, L.P.
4495. CVS EGL Wichita Falls TX, L.P.
4496. CVS EGL Wickham Melbourne FL, L.L.C.
4497. CVS EGL Wildcat Portland TX, L.P.
4498. CVS EGL Wiles Coral Springs FL, L.L.C.
4499. CVS EGL Wiles Road FL, L.L.C.
4500. CVS EGL William Cannon TX, L.P.
4501. CVS EGL Wills Point TX, L.P.
4502. CVS EGL Windermere Orlando FL, L.L.C.
4503. CVS EGL Winter Garden Vineland FL, L.L.C.
4504. CVS EGL Winter Springs FL, L.L.C.
4505. CVS EGL Woodforest TX, L.P.
4506. CVS EGL Woodland De Land FL, L.L.C.
4507. CVS EGL Woodmen CO CVS, L.L.C.
4508. CVS EGL Woodway TX, L.P.
4509. CVS EGL Wurzbach TX, L.P.
4510. CVS EGL Wynnewood TX, L.P.
4511. CVS EGL Yale Houston TX, L.P.
4512. CVS EGL Yamato Boca Raton FL, L.L.C.
4513. CVS EGL Yamato Road FL, L.L.C.
4514. CVS EGL Young Chiefland FL, L.L.C.
4515. CVS EGL Youree Shreveport LA, Inc.
4516. CVS EGL Zavala TX, L.P.
4517. CVS EGL Zephyrhills FL, L.L.C.
4518. CVS EGL, L.L.C.
4519. CVS Ellicott City MD, L.L.C.
4520. CVS Ellwood City 5710, L.L.C.
4521. CVS Elmont, L.L.C.
4522. CVS Elmsford, L.L.C.
4523. CVS Elmwood Park, L.L.C.
4524. CVS Empire Clinton Store, L.L.C.
4525. CVS Endicott, L.L.C.
4526. CVS ETB Holding Company, L.L.C.
4527. CVS Fairlawn, L.L.C.
4528. CVS Fairport, L.L.C.
4529. CVS Falls Road MD, L.L.C.
4530. CVS Falmouth KY, L.L.C.
4531. CVS Farmington Hills, Inc.
4532. CVS Farmingville Store, L.L.C.
4533. CVS Flint Twp., Inc.
4534. CVS Floral Park, L.L.C.
4535. CVS Flower City, L.L.C.
4536. CVS Foreign, Inc.
4537. CVS Fort Lee, L.L.C.
4538. CVS Foundation
4539. CVS Franklin MN, L.L.C.
4540. CVS Franklin NJ, Inc.
4541. CVS Franklin Square, L.L.C.
4542. CVS Franklin Township, L.L.C.
4543. CVS Fraser, Inc.
4544. CVS Freehold, L.L.C.
4545. CVS Fresh Meadows, L.L.C.
4546. CVS Fuller Leonard, Inc.
4547. CVS Galleria Poughkeepsie, L.L.C.
4548. CVS Garson Culver, L.L.C.
4549. CVS Gate City, L.L.C.
4550. CVS Gerritsen Beach, L.L.C.
4551. CVS Gilbert 3272, L.L.C.
4552. CVS Gilford, L.L.C.
4553. CVS Glen Cove, L.L.C.
4554. CVS Glen Rock, L.L.C.
4555. CVS Glendora, L.P.
4556. CVS Glenmont Plaza, L.L.C.
4557. CVS Gloucester Broadway, L.L.C.
4558. CVS Grand Bay 4782, L.L.C.
4559. CVS Great Neck, L.L.C.

4560. CVS Greece, L.L.C.
4561. CVS Green Acres, L.L.C.
4562. CVS Green Mount, L.L.C.
4563. CVS Greensboro, L.L.C.
4564. CVS Guilderland, L.L.C.
4565. CVS Gulf, Inc.
4566. CVS Haddonfield, L.L.C.
4567. CVS Hamburg Center Store, L.L.C.
4568. CVS Hamilton Township, L.L.C.
4569. CVS Hampton Bays, L.L.C.
4570. CVS Harris Boulevard Charlotte, Inc.
4571. CVS Hartland 8295, L.L.C.
4572. CVS Haverstraw, L.L.C.
4573. CVS Health Applications, LLC
4574. CVS Health Centers, L.L.C.
4575. CVS Health Charity Classic, Inc.
4576. CVS Health Clinical Trial Services LLC
4577. CVS Health Employee Relief Fund
4578. CVS Health Growth Equity, LLC
4579. CVS Health Solutions LLC
4580. CVS Health Ventures Fund GP, LLC
4581. CVS Health Ventures Fund, LP
4582. CVS Health Ventures Management, LLC
4583. CVS Healthcare Practices of California
4584. CVS Healthcare Practices of New Jersey LLC
4585. CVS Healthcare Practices PLLC
4586. CVS Heather Croft, L.L.C.
4587. CVS Henrietta Store, L.L.C.
4588. CVS Henrietta, L.L.C.
4589. CVS Hertel Ave, L.L.C.
4590. CVS Hilliard OH, Inc.
4591. CVS Hillside Ave., L.L.C.
4592. CVS Hoboken, L.L.C.
4593. CVS Holbrook, L.L.C.
4594. CVS Howell 8046, L.L.C.
4595. CVS Hudson Clinton Store, L.L.C.
4596. CVS Huntersville, Inc.
4597. CVS Huntington Beach, L.P.
4598. CVS Huntington, L.L.C.
4599. CVS IN Distribution, Inc.
4600. CVS Indiana, L.L.C.
4601. CVS Indianapolis Distribution, L.L.C.
4602. CVS International, Inc.
4603. CVS International, L.L.C.
4604. CVS Inwood Burnside, L.L.C.
4605. CVS Irondequoit, L.L.C.
4606. CVS Islip Terrace, L.L.C.
4607. CVS Ithaca Clinton Store, L.L.C.
4608. CVS Ithaca, L.L.C.
4609. CVS Jackson NJ, L.L.C.
4610. CVS Jefferson Yorktown, L.L.C.
4611. CVS Jericho, L.L.C.
4612. CVS Jerusalem Avenue, L.L.C.
4613. CVS Jerusalem North Bellmore, L.L.C.
4614. CVS Joe Miller, L.L.C.
4615. CVS Johnson City, L.L.C.
4616. CVS Kalamazoo, Inc.
4617. CVS Keene, L.L.C.
4618. CVS Kenmore Fairfield, L.L.C.
4619. CVS Kenmore Village, L.L.C.
4620. CVS Kensington Amherst, L.L.C.
4621. CVS Kensington, L.L.C.
4622. CVS Kidney Care Advanced Technologies LLC
4623. CVS Kidney Care Health Services LLC
4624. CVS Kidney Care Home Dialysis LLC
4625. CVS Kidney Care, LLC
4626. CVS La Puente, L.P.
4627. CVS Laconia, L.L.C.
4628. CVS Lagrange 4540, L.L.C.
4629. CVS Lake Norwood, Inc.
4630. CVS Lakewood, L.P.
4631. CVS Lansdowne 3142, L.L.C.
4632. CVS Larchmont, L.L.C.
4633. CVS Laurel River, L.L.C.
4634. CVS Lawrenceville Texas, L.L.C.

4635. CVS Leonia N.J., Inc.
4636. CVS Levittown Store, L.L.C.
4637. CVS Lewiston Center Street, L.L.C.
4638. CVS Lewiston, L.L.C.
4639. CVS Lexington Ave., L.L.C.
4640. CVS LF Hamlin, L.L.C.
4641. CVS Lindenhurst, L.L.C.
4642. CVS Lockport Clinton Store, L.L.C.
4643. CVS Logan 3454, L.L.C.
4644. CVS Lombard 2791, L.L.C.
4645. CVS Long Beach Carson, L.P.
4646. CVS Long Island Store, L.L.C.
4647. CVS Long Pond Road, L.L.C.
4648. CVS Lyell Clinton Paine, L.L.C.
4649. CVS M Street Washington DC, L.L.C.
4650. CVS Mack Drug of New York, L.L.C.
4651. CVS MaComb & Mile, Inc.
4652. CVS Mahopac Store, L.L.C.
4653. CVS Mallard Creek Charlotte, Inc.
4654. CVS Mamaroneck Ferndale, L.L.C.
4655. CVS Mamaroneck Finast, L.L.C.
4656. CVS Mamaroneck Harbor Store, L.L.C.
4657. CVS Mamaroneck Post Road, L.L.C.
4658. CVS Mammoth Road, L.L.C.
4659. CVS Managed Care, Inc.
4660. CVS Management Support, LLC
4661. CVS Manalapan NJ, Inc.
4662. CVS Manasquan, L.L.C.
4663. CVS Manchester Elm, L.L.C.
4664. CVS Manchester NH, L.L.C.
4665. CVS Manor Road, L.L.C.
4666. CVS Mansfield, L.P.
4667. CVS Margate Ventnor, L.L.C.
4668. CVS Marietta Piedmont, Inc.
4669. CVS Mayfly Corp.
4670. CVS Mays Landing, L.L.C.
4671. CVS ME Holding Company, L.L.C.
4672. CVS Mechanicville, L.L.C.
4673. CVS Medford NJ, L.L.C.
4674. CVS Medford, L.L.C.
4675. CVS Media Exchange LLC
4676. CVS Medical Practices (KS) LLC
4677. CVS Merchants Clinton Paine, L.L.C.
4678. CVS Merchantville Maple, L.L.C.
4679. CVS Meriden East Main, Inc.
4680. CVS Meridian, Inc.
4681. CVS Merrick Road, L.L.C.
4682. CVS Merrick, L.L.C.
4683. CVS Merrimack Main Street, L.L.C.
4684. CVS Metro Village, L.L.C.
4685. CVS MI Distribution, Inc.
4686. CVS Michigan, L.L.C.
4687. CVS Middle Country, L.L.C.
4688. CVS Midland Park, L.L.C.
4689. CVS Midlothian, L.L.C.
4690. CVS Mill Creek, L.L.C.
4691. CVS Mineola, L.L.C.
4692. CVS MN Holding Company, L.L.C.
4693. CVS Mobile Airport, Inc.
4694. CVS Montclair NJ, Inc.
4695. CVS Montgomery 6094, L.L.C.
4696. CVS Morse, Inc.
4697. CVS Morton Village, L.L.C.
4698. CVS Mount Laurel, L.L.C.
4699. CVS Mt. Hope Clinton Paine, L.L.C.
4700. CVS Mt. Kisco, L.L.C.
4701. CVS Mt. Read Street, L.L.C.
4702. CVS Murrells, Inc.
4703. CVS Mystic CT, Inc.
4704. CVS Nassau Street, L.L.C.
4705. CVS Nations Ford Charlotte, Inc.
4706. CVS NC Distribution, Inc.
4707. CVS Neptune Avenue, L.L.C.
4708. CVS Nesconset, L.L.C.
4709. CVS New Baltimore, Inc.
4710. CVS New Hyde Park, L.L.C.
4711. CVS New Milford, L.L.C.
4712. CVS New Rochelle, L.L.C.
4713. CVS New Scotland, L.L.C.

4714. CVS New York, Inc.
4715. CVS Newburgh Mall, L.L.C.
4716. CVS Newport City, L.L.C.
4717. CVS North Arlington, L.L.C.
4718. CVS North Babylon, L.L.C.
4719. CVS North Bellmore, L.L.C.
4720. CVS North Conway, L.L.C.
4721. CVS North Park Store, L.L.C.
4722. CVS North Portland, L.L.C.
4723. CVS North Wildwood, L.L.C.
4724. CVS Northport, L.L.C.
4725. CVS Northtown Plaza, L.L.C.
4726. CVS Norwell Washington, Inc.
4727. CVS Norwood Bergen, L.L.C.
4728. CVS Novi Distribution, L.L.C.
4729. CVS Nutley, L.L.C.
4730. CVS NV Holding Company, L.L.C.
4731. CVS O.P., L.L.C.
4732. CVS Oakdale, L.L.C.
4733. CVS Ocean Haven, L.L.C.
4734. CVS Ocean Simpson, L.L.C.
4735. CVS Oceanside, L.L.C.
4736. CVS Odenton, L.L.C.
4737. CVS of Concord NH, L.L.C.
4738. CVS of Concord, Mass., Inc.
4739. CVS of DC and VA, Inc.
4740. CVS of Emmaus, Inc.
4741. CVS of Lands Downe, Inc.
4742. CVS of Madison, Conn., Inc.
4743. CVS of Maryland, Inc.
4744. CVS of N. Carolina, Inc.
4745. CVS of North Kingstown, Inc.
4746. CVS of Pennsylvania, Inc.
4747. CVS of Rutland, Vermont, Inc.
4748. CVS of Sandwich, Inc.
4749. CVS of Stroudsburg, Inc.
4750. CVS of Swarthmore, Inc.
4751. CVS of Virginia, Inc.
4752. CVS of Waterville, Maine, L.L.C.
4753. CVS of West Virginia, Inc.
4754. CVS OH Holding Company, L.L.C.
4755. CVS Old Bridge, L.L.C.
4756. CVS Olean Clinton Store, L.L.C.
4757. CVS Oneonta Clinton Store, L.L.C.
4758. CVS Onondaga County, L.L.C.
4759. CVS Orange Avenue, Inc.
4760. CVS Orangeburg Drug Store, L.L.C.
4761. CVS Orlando FL Distribution, L.L.C.
4762. CVS Ossining, L.L.C.
4763. CVS Owl Drug, L.L.C.
4764. CVS Oyster Bay, L.L.C.
4765. CVS Ozone Park, L.L.C.
4766. CVS PA Distribution, Inc.
4767. CVS PA Distribution, L.L.C.
4768. CVS Pace FL, L.L.C.
4769. CVS Paige Colony, L.P.
4770. CVS Palisades Center, L.L.C.
4771. CVS Park Ave Rochester, L.L.C.
4772. CVS Passaic Inc.
4773. CVS Payne Avenue, L.L.C.
4774. CVS Peachtree City, Inc.
4775. CVS Peachtree Suwanee, Inc.
4776. CVS Pearl River, L.L.C.
4777. CVS Pearland Parkway, L.P.
4778. CVS Pembroke Pines 2849, L.L.C.
4779. CVS Penfield Clinton Paine, L.L.C.
4780. CVS Pharmacy Limited of Illinois, Inc.
4781. CVS Pharmacy Overseas Online, LLC
4782. CVS Pine Tree, L.L.C.
4783. CVS Plaistow, L.L.C.
4784. CVS Point Pleasant Beach, L.L.C.
4785. CVS Polifly Road, L.L.C.
4786. CVS Port Jefferson, L.L.C.
4787. CVS Portion Road, L.L.C.
4788. CVS Portland Forest, L.L.C.
4789. CVS Portland-Congress St., L.L.C.
4790. CVS Portsmouth Islington, L.L.C.
4791. CVS Post Avenue, L.L.C.
4792. CVS PR Center, Inc.
4793. CVS PR Holding Company, L.L.C.
4794. CVS Preakness Center, L.L.C.
4795. CVS Prescription Center, Inc.

4796. CVS Presidents Square, L.L.C.
4797. CVS Princeton, L.L.C.
4798. CVS Prospect Avenue, L.L.C.
4799. CVS Pyramid Utica, L.L.C.
4800. CVS Queens Boulevard, L.L.C.
4801. CVS Queensbury, L.L.C.
4802. CVS Ralph Avenue, L.L.C.
4803. CVS Ramapo Valley Road, L.L.C.
4804. CVS Ramapo, L.L.C.
4805. CVS Ramsey, L.L.C.
4806. CVS Raritan NJ, Inc.
4807. CVS RCI, LLC
4808. CVS Reading PA 3242, L.L.C.
4809. CVS Rego Park, L.L.C.
4810. CVS Reseda, L.P.
4811. CVS Revco D.S., Inc.
4812. CVS Rhode Island, Inc.
4813. CVS Richmond Atlee, Inc.
4814. CVS Richmond Hill, L.L.C.
4815. CVS Richmond Main, Inc.
4816. CVS Ridgecrest Plaza, L.L.C.
4817. CVS Ridgefield Park, L.L.C.
4818. CVS Ridgewood, L.L.C.
4819. CVS Riverside Drive, L.L.C.
4820. CVS Robinson Street, L.L.C.
4821. CVS Rochester NH, L.L.C.
4822. CVS Rochester Road, L.L.C.
4823. CVS Rockaway, L.L.C.
4824. CVS Rockville Center, L.L.C.
4825. CVS Rocky Point Village, L.L.C.
4826. CVS Romeo Plank, Inc.
4827. CVS Ronkonkoma, L.L.C.
4828. CVS Roosevelt Field, L.L.C.
4829. CVS Roselle, L.L.C.
4830. CVS Rotterdam Square, L.L.C.
4831. CVS Route 24, L.L.C.
4832. CVS Route 302, L.L.C.
4833. CVS Royal Ridge, L.L.C.
4834. CVS RS 107 Avon AZ, L.L.C.
4835. CVS RS 16th Ave AZ, L.L.C.
4836. CVS RS 19th Ave. AZ, L.L.C.
4837. CVS RS 35 Thunder AZ, L.L.C.
4838. CVS RS 4th Ave. Yuma AZ, L.L.C.
4839. CVS RS 7th Ave AZ, L.L.C.
4840. CVS RS 7th St. Phoenix AZ, L.L.C.
4841. CVS RS Alma School Rd AZ, L.L.C.
4842. CVS RS Anthem Way AZ, L.L.C.
4843. CVS RS Apache Junction AZ, L.L.C.
4844. CVS RS Arizona, L.L.C.
4845. CVS RS Baseline Rd AZ, L.L.C.
4846. CVS RS Bell Rd AZ, L.L.C.
4847. CVS RS Bell Rd. Glendale AZ, L.L.C.
4848. CVS RS Broadway Blvd. AZ, L.L.C.
4849. CVS RS Broadway Rd Tempe AZ, L.L.C.
4850. CVS RS Brown Rd AZ, L.L.C.
4851. CVS RS Bullhead City AZ, L.L.C.
4852. CVS RS Casa Grande AZ, L.L.C.
4853. CVS RS Chandler McQueen AZ, L.L.C.
4854. CVS RS Chandler Ray AZ, L.L.C.
4855. CVS RS Cotton Casa AZ, L.L.C.
4856. CVS RS Cottonwood AZ, L.L.C.
4857. CVS RS E Southern Ave AZ, L.L.C.
4858. CVS RS E. Baseline Mesa AZ, L.L.C.
4859. CVS RS E. Bell Rd Phoenix AZ, L.L.C.
4860. CVS RS E. Santa Fe Hwy 66 AZ, L.L.C.
4861. CVS RS E. University Dr Mesa AZ, L.L.C.
4862. CVS RS Elliot Rd AZ, L.L.C.
4863. CVS RS Elliott Gilbert AZ, L.L.C.
4864. CVS RS Finney Flat AZ, L.L.C.
4865. CVS RS Frank Lloyd Wright Blvd AZ, L.L.C.
4866. CVS RS Gilbert E. Eliot Rd. AZ, L.L.C.
4867. CVS RS Gilbert Mesa AZ, L.L.C.
4868. CVS RS Glen 19 AZ, L.L.C.

4869. CVS RS Golf Links Tucson AZ, L.L.C.
4870. CVS RS Grant Tucson AZ, L.L.C.
4871. CVS RS Green Valley AZ, L.L.C.
4872. CVS RS Guadalupe Gilbert AZ, L.L.C.
4873. CVS RS Higley Mesa AZ, L.L.C.
4874. CVS RS Ina Rd. AZ, L.L.C.
4875. CVS RS Indian School Phoenix AZ, L.L.C.
4876. CVS RS La Canada Tucson AZ, L.L.C.
4877. CVS RS Lindsay Rd AZ, L.L.C.
4878. CVS RS Lone Cava AZ, L.L.C.
4879. CVS RS Mesa N. Brown Rd AZ, L.L.C.
4880. CVS RS Mesa University AZ, L.L.C.
4881. CVS RS Miller Scottsdale AZ, L.L.C.
4882. CVS RS N Alvernon Way AZ, L.L.C.
4883. CVS RS N. 12th St. Phoenix AZ, L.L.C.
4884. CVS RS N. Tatum Blvd. AZ, L.L.C.
4885. CVS RS Oracle Rd AZ, L.L.C.
4886. CVS RS Palisades Blvd. AZ, L.L.C.
4887. CVS RS Peoria Union AZ, L.L.C.
4888. CVS RS Phoenix Bell AZ, L.L.C.
4889. CVS RS Phoenix Central AZ, L.L.C.
4890. CVS RS Phoenix Indian AZ, L.L.C.
4891. CVS RS Phoenix Peoria AZ, L.L.C.
4892. CVS RS Phoenix Union Hills Dr. AZ, L.L.C.
4893. CVS RS Pima Rd. AZ, L.L.C.
4894. CVS RS Prescott AZ, L.L.C.
4895. CVS RS Riverside Parker AZ, L.L.C.
4896. CVS RS S. Central Ave. AZ, L.L.C.
4897. CVS RS S. Dobson Mesa AZ, L.L.C.
4898. CVS RS Scottsdale FLW AZ, L.L.C.
4899. CVS RS Scottsdale Rd AZ, L.L.C.
4900. CVS RS Sierra Vista AZ, L.L.C.
4901. CVS RS Silver Tuc AZ, L.L.C.
4902. CVS RS Sun City West AZ, L.L.C.
4903. CVS RS Sunrise Dr AZ, L.L.C.
4904. CVS RS Sunrise Surprise AZ, L.L.C.
4905. CVS RS Sunrise Tucson AZ, L.L.C.
4906. CVS RS Tanque Verde AZ, L.L.C.
4907. CVS RS Tatum Blvd AZ, L.L.C.
4908. CVS RS Thomas Rd AZ, L.L.C.
4909. CVS RS Thomas Scottsdale AZ, L.L.C.
4910. CVS RS W. Glendale Rd. AZ, L.L.C.
4911. CVS RS W. Peoria Ave AZ, L.L.C.
4912. CVS RS W. Southern AJ AZ, L.L.C.
4913. CVS RS W. Valencia Rd. AZ, L.L.C.
4914. CVS RS West Indian AZ, L.L.C.
4915. CVS RS Wickenburg Way AZ, L.L.C.
4916. CVS RS Yuma AZ, L.L.C.
4917. CVS Rt. 199 Williamsburg, Inc.
4918. CVS Rx Services, Inc.
4919. CVS Rye Route 1, L.L.C.
4920. CVS Rye Store, L.L.C.
4921. CVS Safir Sourcing UK, Ltd
4922. CVS Safir Sourcing, LLC
4923. CVS Salem Stateline, L.L.C.
4924. CVS Salmon Run, L.L.C.
4925. CVS San Dimas, L.P.
4926. CVS San Jacinto CA, L.L.C.
4927. CVS Santa Ana, L.P.
4928. CVS Saratoga Springs, L.L.C.
4929. CVS Saugerties Store, L.L.C.
4930. CVS Saunders Settlement Pharmacy, L.L.C.
4931. CVS Sayville, L.L.C.
4932. CVS SC Distribution, Inc.

4933. CVS SC Distribution, L.L.C.
4934. CVS Scarsdale Centre, L.L.C.
4935. CVS Scarsdale Store, L.L.C.
4936. CVS Schalks Crossing, L.L.C.
4937. CVS Schoolhouse, L.L.C.
4938. CVS Sea Cliff, L.L.C.
4939. CVS Seabrook, L.L.C.
4940. CVS Second Avenue NY, L.L.C.
4941. CVS Selden Store, L.L.C.
4942. CVS Seneca Mall, Inc.
4943. CVS Seneca Street, L.L.C.
4944. CVS Setauket, L.L.C.
4945. CVS Sharon Amity Charlotte, Inc.
4946. CVS Shaw Holdings Inc.
4947. CVS Sheepshead Bay, L.L.C.
4948. CVS Sheridan Harlem Store, L.L.C.
4949. CVS Sheridan Hollywood, L.L.C.
4950. CVS Ship Bottom, L.L.C.
4951. CVS Silver Spring, Inc.
4952. CVS Sixth Avenue NY, L.L.C.
4953. CVS Skippack, Inc.
4954. CVS Solomons MD, L.L.C.
4955. CVS South Albany Store, L.L.C.
4956. CVS South Canal Chicago, L.L.C.
4957. CVS South Farmingdale, L.L.C.
4958. CVS South Ogden, L.L.C.
4959. CVS South Salina Street, L.L.C.
4960. CVS South Schenectady Store, L.L.C.
4961. CVS Southwest Blvd, Inc.
4962. CVS SP 5897 FL, L.L.C.
4963. CVS Sparta, L.L.C.
4964. CVS State Capital, L.L.C.
4965. CVS State NY Store, L.L.C.
4966. CVS State Street, L.L.C.
4967. CVS Staten Island, L.L.C.
4968. CVS Stelton Road, L.L.C.
4969. CVS Stony Point, L.L.C.
4970. CVS Strategic Resources Private Limited
4971. CVS Stratford Barnum, Inc.
4972. CVS Stratford Nichols, Inc.
4973. CVS Stratham, L.L.C.
4974. CVS Suffern Store, L.L.C.
4975. CVS Sunrise Highway, L.L.C.
4976. CVS Surplus 8049 MI, L.L.C.
4977. CVS Syracuse Downtown, L.L.C.
4978. CVS Tampa 2802, L.L.C.
4979. CVS Tampa 3650, L.L.C.
4980. CVS Tarrytown Store, L.L.C.
4981. CVS Teaneck, L.L.C.
4982. CVS Tenafly Town, L.L.C.
4983. CVS Terry Road, L.L.C.
4984. CVS Thompsons Station, Inc.
4985. CVS Thornwood Columbus Avenue, L.L.C.
4986. CVS Thornwood Park, L.L.C.
4987. CVS TN Distribution, Inc.
4988. CVS TN Distribution, L.L.C.
4989. CVS Toms River, L.L.C.
4990. CVS Torrance CA, L.L.C.
4991. CVS Towson MD, L.L.C.
4992. CVS Transportation, Inc.
4993. CVS Transportation, L.L.C.
4994. CVS Trenton MI, L.L.C.
4995. CVS Trousdale Nashville, Inc.
4996. CVS Troy Fifth Street, L.L.C.
4997. CVS Troy Mall Store, L.L.C.
4998. CVS TX Holding Company, L.L.C.
4999. CVS Union, L.L.C.
5000. CVS University of Buffalo, L.L.C.
5001. CVS Upper Montclair, L.L.C.
5002. CVS Upper Valley Drug, L.L.C.
5003. CVS VA Distribution, Inc.
5004. CVS Valley Stream, L.L.C.
5005. CVS Van Nuys, L.P.
5006. CVS Vanguard, Inc.
5007. CVS Ventnor Dorset, L.L.C.
5008. CVS Vero FL Distribution, L.L.C.
5009. CVS Victory Boulevard, L.P.
5010. CVS Wading River, L.L.C.
5011. CVS Wallace Building, L.L.C.
5012. CVS Wanaque, L.L.C.
5013. CVS Wantagh Ave, L.L.C.
5014. CVS Warren, Inc.
5015. CVS Washington 6448, L.L.C.

5016. CVS Washington Avenue, L.L.C.
5017. CVS Washington Township, L.L.C.
5018. CVS Washington Wisconsin DC, L.L.C.
5019. CVS Washington, Inc.
5020. CVS Waterville Valley, L.L.C.
5021. CVS Waxhaw NC, L.L.C.
5022. CVS Wayne Turnpike, L.L.C.
5023. CVS Webster, L.L.C.
5024. CVS West Babylon, L.L.C.
5025. CVS West Gate, L.L.C.
5026. CVS West Haven, Inc.
5027. CVS West Hempstead, L.L.C.
5028. CVS West Islip, L.L.C.
5029. CVS West Orange, L.L.C.
5030. CVS West Park Avenue, L.L.C.
5031. CVS West Side Store, L.L.C.
5032. CVS Westbrook Maine, L.L.C.
5033. CVS Westchester Square, L.L.C.
5034. CVS Westchester Store, L.L.C.
5035. CVS Western Avenue, L.L.C.
5036. CVS Westwood LA, L.P.
5037. CVS Weyman Avenue, L.L.C.
5038. CVS Weymouth 1853, L.L.C.
5039. CVS White Plains Road, L.L.C.
5040. CVS Whittier, L.P.
5041. CVS Wilbraham MA, Inc.
5042. CVS Williamstown, L.L.C.
5043. CVS Williamsville Store, L.L.C.
5044. CVS Williston Park, L.L.C.
5045. CVS Wilton, L.L.C.
5046. CVS Wisconsin Avenue DC, L.L.C.
5047. CVS Wisteria Drive, L.L.C.
5048. CVS Woodbridge Main Street, L.L.C.
5049. CVS Woodbury Mullica, L.L.C.
5050. CVS Woodward, Inc.
5051. CVS WWRE, Inc.
5052. CVS Wyckoff, L.L.C.
5053. CVS Wynantskill, L.L.C.
5054. CVS Yonkers Broadway, L.L.C.
5055. CVS Yonkers, L.L.C.
5056. CVS Yorktown Heights Store, Inc.
5057. CVS Yorkville, L.L.C.
5058. CVS.com OTC, L.L.C.
5059. CVS/pharmacy Charitable Trust, Inc.
5060. CVS-SHC Kidney Care Home Dialysis of Austin LLC
5061. CVS-SHC Kidney Care Home Dialysis of Los Angeles LLC
5062. CVS-SHC Kidney Care Home Dialysis of Philadelphia LLC
5063. CVS-SHC Renal Holdings LLC
5064. Cypress California CVS, Inc.
5065. Cypress Jones CVS, L.P.
5066. Cypress Naples CVS, L.L.C.
5067. Cypresswood Houston CVS, L.P.
5068. D&R Pharmaceutical Services, LLC
5069. D.A.W., LLC
5070. Dacula CVS, Inc.
5071. Dairy Ashford CVS, L.P.
5072. Dale City VA CVS, Inc.
5073. Dale Mabry CVS, Inc.
5074. Dallas GA CVS, Inc.
5075. Dallas PharmaCare Pharmacy, L.L.C.
5076. Dallas ProCare Pharmacy, Inc.
5077. Dallas Waugh CVS, L.P.
5078. Damen Chicago CVS, L.L.C.
5079. Dan Ridge CVS, Inc.
5080. Danbury Central CVS, Inc.
5081. Danbury CVS, Inc.
5082. Danbury Fair CVS, Inc.
5083. Danbury MRC, Inc.
5084. Danbury South Main CVS, Inc.
5085. Danvers Plaza CVS, Inc.
5086. Darien CVS, Inc.
5087. Dartmouth Retailer, Inc.
5088. Davenport FL CVS, L.L.C.
5089. Davison CVS, Inc.
5090. DBD Nocigs 2019-1 LLC
5091. DBD Nocigs 2019-15 LLC
5092. DBD Nocigs 2019-16 LLC
5093. DBD Nocigs 2019-2 LLC
5094. DBD Nocigs 2019-21 LLC

5095. DBD Nocigs 2019-22 LLC
5096. DBD Nocigs 2019-23 LLC
5097. DBD Nocigs 2019-24 LLC
5098. DBD Nocigs 2019-25 LLC
5099. DBD Nocigs 2019-29 LLC
5100. DBD Nocigs 2019-41 LLC
5101. DBD Nocigs 2019-42 LLC
5102. DBD Nocigs 2019-43 LLC
5103. DBD Nocigs 2019-44 LLC
5104. DBD Nocigs 2019-45 LLC
5105. DBD Nocigs 2019-5 LLC
5106. DBD Nocigs 2019-7 LLC
5107. DBD Nocigs 2019-8 LLC
5108. De Soto CVS, L.P.
5109. Decatur CVS, Inc.
5110. Dedham CVS, Inc.
5111. Dedham High Street CVS, Inc.
5112. Deer Park Avenue CVS, Inc.
5113. Del Amo CVS, Inc.
5114. Del Prado CVS, L.L.C.
5115. Delaware CVS Pharmacy, L.L.C.
5116. Delaware Physicians Care - Medicare, Incorporated
5117. Delaware Physicians Care, Incorporated
5118. Delco Apothecary, Inc.
5119. Delran CVS, Inc.
5120. Delta Health HMO, Inc.
5121. Delta Risk Management, L.L.C.
5122. Deltona CVS, L.L.C.
5123. Denver PharmaCare Pharmacy, L.L.C.
5124. Denville CVS, Inc.
5125. Depew Broadway CVS, Inc.
5126. Depew CVS, Inc.
5127. Depot St. CVS, Inc.
5128. Deptford CVS, Inc.
5129. Derby Center CVS, Inc.
5130. Derry Street CVS, Inc.
5131. Des Plaines CVS, L.L.C.
5132. Desert Buffalo CVS, L.L.C.
5133. Desert Eastern CVS, L.L.C.
5134. Desert Inn CVS, L.L.C.
5135. Destin FL CVS, L.L.C.
5136. Detroit CVS, Inc.
5137. Detroit Greenfield CVS, Inc.
5138. Dexter Plaza CVS, Inc.
5139. DG Danville KY LLC
5140. DG Wesley Chapel FL LLC
5141. Diamond Bar CVS, Inc.
5142. Digital eHealth, LLC
5143. Digital Enterprise Realty, L.L.C.
5144. District of Columbia CVS Pharmacy, L.L.C.
5145. Division CVS, L.L.C.
5146. Dobbs Ferry CVS, Inc.
5147. Donlon Distributing, Inc.
5148. Dorchester Lower Mills CVS, Inc.
5149. Dothan CVS, Inc.
5150. Doubleday Ballston CVS, L.L.C.
5151. Douglassville PA CVS, Inc.
5152. Douglasville CVS, Inc.
5153. Dover Delaware CVS, Inc.
5154. Dover NJ CVS, L.L.C.
5155. Dover Randolph CVS, L.L.C.
5156. Dowagiac Clinton Stores, Inc.
5157. Downers Grove CVS, L.L.C.
5158. Downingtown CVS, Inc.
5159. Downtown Miami CVS, L.L.C.
5160. Doylestown CVS, Inc.
5161. Dragon Acquisition Company
5162. Drexel Hill CVS, Inc.
5163. Driftwood Shopping Center CVS, Inc.
5164. Drogaria Onofre Ltda.
5165. Drug World, Inc.
5166. Drugs For Less, Inc.
5167. Drumhill CVS, Inc.
5168. Duarte CVS, Inc.
5169. Dudley Street CVS, Inc.
5170. Duke Street CVS, Inc.
5171. Duluth CVS, Inc.
5172. Duncan SC CVS, Inc.
5173. Dundee Elgin CVS, L.L.C.
5174. Dunedin CVS, L.L.C.
5175. Dunellen CVS, Inc.

5176. Dunkirk Marketplace CVS, Inc.
5177. Dunkirk Marketplace Peoples, Inc.
5178. Dunlap Phoenix CVS, L.L.C.
5179. Dunlop Farms CVS, Inc.
5180. Dupont Circle CVS Realty, Inc.
5181. Durham NC CVS, Inc.
5182. Dyckman Street CVS, L.L.C.
5183. Dynamite Phoenix CVS, L.L.C.
5184. E. Arrow Hwy CVS, L.L.C.
5185. E. T. B., Inc.
5186. e.BENEFITS, INC.
5187. Eagan MN CVS, L.L.C.
5188. Eagle Valley CVS, Inc.
5189. Eagles Landing CVS, Inc.
5190. East 161st Street CVS, Inc.
5191. East Avenue CVS, Inc.
5192. East Bay Drive CVS, Inc.
5193. East Boston CVS, Inc.
5194. East Bradford Plaza CVS, Inc.
5195. East Bridgewater CVS, Inc.
5196. East Brunswick CVS, Inc.
5197. East Flatbush CVS, L.L.C.
5198. East Greenwich CVS, Inc.
5199. East Hampton CVS, Inc.
5200. East Hanover CVS, Inc.
5201. East Hartford CVS, Inc.
5202. East Hartford-Main Street CVS, Inc.
5203. East Haven Main Street CVS, Inc.
5204. East Haverhill Retailer, Inc.
5205. East Hills CVS, Inc.
5206. East Longmeadow CVS, Inc.
5207. East Main Bridgeport CVS, Inc.
5208. East Main St. at Westborough CVS, Inc.
5209. East Market CVS, Inc.
5210. East Market Street CVS, L.L.C.
5211. East Northport CVS, L.L.C.
5212. East Providence CVS, Inc.
5213. East Putnam Avenue CVS, Inc.
5214. East Side CVS, Inc.
5215. East Wareham CVS, Inc.
5216. East Windsor CVS, L.L.C.
5217. Eastampton Township CVS, Inc.
5218. Eastern Avenue CVS, Inc.
5219. Eastfield CVS, Inc.
5220. Eastland CVS, Inc.
5221. Easton Ave. CVS, Inc.
5222. Easton CVS, Inc.
5223. Easton Maryland CVS, Inc.
5224. Easton Nazareth CVS, Inc.
5225. Easton Sullivan CVS, Inc.
5226. Easton Washington Street CVS, Inc.
5227. Easton, Mass. CVS, Inc.
5228. Eatontown CVS, Inc.
5229. Echo Merger Sub, Inc.
5230. Echo Merger Sub, LLC
5231. Eckerd Corporation (for assets / pharmacies acquired by CVS)
5232. Eckerd Corporation of Florida, Inc.
5233. Eckerd Drug Company (for assets / pharmacies acquired by CVS)
5234. Eckerd Drug Company of Florida, Inc.
5235. Eckerd Drug Company of Texas, Inc. (for assets / pharmacies acquired by CVS)
5236. Eckerd Drugs of Florida, Inc. (for assets / pharmacies acquired by CVS)
5237. Eckerd Drugs of Georgia, Inc. (for assets / pharmacies acquired by CVS)
5238. Eckerd Drugs of Louisiana, Inc. (for assets / pharmacies acquired by CVS)
5239. Eckerd Drugs of Mississippi, Inc. (for assets / pharmacies acquired by CVS)
5240. Eckerd Drugs of North Carolina, Inc. (for assets/pharmacies acquired by CVS)
5241. Eckerd Drugs of South Carolina, Inc. (for assets / pharmacies acquired by CVS)

5242. Eckerd Drugs of Texas, Inc. (for assets / pharmacies acquired by CVS)
5243. Eckerd Drugs, Inc. (for assets / pharmacies acquired by CVS)
5244. Eckerd Drugsmarts, Inc. (for assets / pharmacies acquired by CVS)
5245. Eddystone CVS, Inc.
5246. Edgewater CVS, Inc.
5247. Edgewater NJ CVS, L.L.C.
5248. Edgewater Orlando CVS, L.L.C.
5249. Edgewood CVS, Inc.
5250. Edison Wooding CVS, Inc.
5251. Efmile, Inc.
5252. Egg Harbor NJ CVS, L.L.C.
5253. Egypt Audubon CVS, Inc.
5254. eHealth Solutions, Inc.
5255. Eighth New York CVS, L.L.C.
5256. El Camino Houston CVS, L.P.
5257. Electric Avenue CVS, Inc.
5258. Eleventh Street CVS, Inc.
5259. Elgin CVS, L.L.C.
5260. Eliot CVS, Inc.
5261. Elizabeth Westfield Avenue CVS, Inc.
5262. Elkhorn Las Vegas CVS, L.L.C.
5263. Elkhorn NV CVS, L.L.C.
5264. Ellicott City CVS, Inc.
5265. Elliot Tempe CVS, L.L.C.
5266. Ellwood City CVS, L.L.C.
5267. Elmhurst CVS, L.L.C.
5268. Elmora CVS, Inc.
5269. Emerald Square CVS, Inc.
5270. Emmaus Avenue CVS, Inc.
5271. Emmaus, Pennsylvania, CVS, Inc.
5272. Employee Assistance Services, LLC
5273. Enfield CVS, Inc.
5274. Enfield Elm CVS, Inc.
5275. Enfield Phoenix CVS, Inc.
5276. Engleside Plaza CVS, Inc.
5277. Engleside Plaza Peoples, Inc.
5278. Englewood Cliffs CVS, Inc.
5279. Englewood CVS, Inc.
5280. Enloe Drugs LLC
5281. Ennis TX CVS, L.P.
5282. Enterprise Patient Safety Organization, LLC
5283. Erdenheim Saints CVS, Inc.
5284. Eric C. Marshall, M.D. P.C.
5285. Erie CVS, Inc.
5286. Escalante Solutions, LLC
5287. Essence, Inc.
5288. Essex Eastern CVS, Inc.
5289. Essex Martin CVS, Inc.
5290. Essex St. (Salem) CVS, Inc.
5291. Estero Coconut CVS, L.L.C.
5292. Estero Three Oaks CVS, L.L.C.
5293. Estroff Pharmacy Incorporated
5294. ETHIX Care, Inc.
5295. ETHIX Midlands, Inc.
5296. ETHIX Northwest Public Services, Inc.
5297. ETHIX Northwest, Inc.
5298. Euclid Square CVS, Inc.
5299. Evanston IL CVS, L.L.C.
5300. Everett MA CVS, Inc.
5301. Evergreen City CVS, L.L.C.
5302. Evergreen Pharmaceutical of California, Inc.
5303. Evergreen Pharmaceutical of California, LLC
5304. Evergreen Pharmaceutical, LLC
5305. Evergreen Plaza CVS, Inc.
5306. Evesboro CVS, Inc.
5307. Evesham NJ CVS, L.L.C.
5308. Ewing NJ CVS, L.L.C.
5309. Exchange Place CVS, Inc.
5310. Exeter Square CVS, Inc.
5311. Express Pharmacy Services of FL, L.L.C.
5312. Express Pharmacy Services of MO, L.L.C.
5313. Express Pharmacy Services of PA, L.L.C.
5314. Fairfax CVS, Inc.
5315. Fairfax Main Street CVS, Inc.

5316. Fairfax Mall CVS, Inc.
5317. Fairfax Peoples, Inc.
5318. Fairfax Route 29 CVS, Inc.
5319. Fairfield CVS, Inc.
5320. Fairfield Plaza CVS, Inc.
5321. Fairfield Rt. 1 CVS, Inc.
5322. Fairhaven CVS, Inc.
5323. Fairlane CVS, Inc.
5324. Fairlane Village Mall CVS, Inc.
5325. Fairmont Pasadena CVS, L.P.
5326. Fairmount CVS Store, Inc.
5327. Fairview CVS, Inc.
5328. Fairview Township CVS, Inc.
5329. Fall River Retailer, Inc.
5330. Fall River-President CVS, Inc.
5331. Fallbrook Houston CVS, L.P.
5332. Falls Church CVS, Inc.
5333. Falls of Neuse CVS, Inc.
5334. Falls Road CVS, Inc.
5335. Falmouth CVS, Inc.
5336. Falmouth Ferry CVS, Inc.
5337. Falmouth Mall CVS, Inc.
5338. Falmouth Plaza CVS, Inc.
5339. Family Health Plan (FHP), Inc.
5340. Family Health Plan Corporation
5341. Farmingdale CVS, Inc.
5342. Farmington Ave. CVS, Inc.
5343. Farmington CVS, Inc.
5344. Farmington Holdings, Inc.
5345. Farmington Plaza CVS, Inc.
5346. Farmingville CVS Store, Inc.
5347. Fashion Square CVS, Inc.
5348. FDG C41 AR Texarkana LLC
5349. FEASIBLE ALTERNATIVES LIMITED
5350. Feasterville CVS, Inc.
5351. Federal Highway ProCare Pharmacy, Inc.
5352. Fenton Avenue CVS, L.L.C.
5353. Ferrara & Orlando Nurse Practictioners-Family Health P.C.
5354. Ferrara Nurse Practitioner-Family Health, P.C.
5355. FHP Health Plan, Inc.
5356. Fifth Avenue Chess King, Inc.
5357. Fingerlakes CVS Store, Inc.
5358. Firestone Blvd CVS, L.L.C.
5359. First Avenue ProCare Pharmacy, L.L.C.
5360. First Choice of the Midwest LLC
5361. First Choice of the Midwest, Inc.
5362. First Colony CVS, L.P.
5363. First Financial Planner Services, Inc.
5364. First Health Group Corp.
5365. First Health Life & Health Insurance Company
5366. First Health Strategies, Inc.
5367. First Script Network Services, Inc.
5368. Fish Lake Maple Grove CVS, L.L.C.
5369. Fishkill CVS, Inc.
5370. Fitchburg PharmaCare Pharmacy, Inc.
5371. Fitchburg Retailer, Inc.
5372. Flagler 87th Miami CVS, L.L.C.
5373. Flagstone Church, LLC
5374. Flamingo Jones NV CVS, L.L.C.
5375. Flamingo Road CVS, L.L.C.
5376. Flatbush Avenue CVS, Inc.
5377. Flatbush Brooklyn CVS, L.L.C.
5378. Flatlands CVS, L.L.C.
5379. Flatwoods CVS, Inc.
5380. Fleetwood CVS Store, Inc.
5381. Flemington CVS, L.L.C.
5382. Flemington NJ CVS, L.L.C.
5383. Flora Midwest, L.L.C.
5384. Floral Jericho CVS, L.L.C.
5385. Florence CVS, Inc.
5386. Florence NJ CVS, Inc.
5387. Florham Park CVS, Inc.
5388. Florida Collaborative for Health Care Quality, LLC
5389. Florida CVS Pharmacy, L.L.C.
5390. Florida Health Plan Administrators, LLC

5391. Flower Mound CVS, L.P.
5392. Flushing CVS, Inc.
5393. FM 1960 Houston CVS, L.P.
5394. FM 359 TX CVS, L.L.C.
5395. FM 518 League City CVS, L.P.
5396. FM 529 Houston CVS, L.P.
5397. FOCUS Healthcare Management Associates, Inc.
5398. FOCUS HealthCare Management, Inc.
5399. Folsom CVS, Inc.
5400. Fontana Sierra CVS, L.L.C.
5401. Foothill La Verne CVS, Inc.
5402. Foothill Ranch CVS, Inc.
5403. Forbes Avenue CVS, Inc.
5404. Forest Drive CVS, Inc.
5405. Forest Hill MD CVS, L.L.C.
5406. Forest Hills CVS, Inc.
5407. Forest Hills NY CVS, L.L.C.
5408. Forest Hills Peoples, Inc.
5409. Forest Lane Dallas CVS, L.P.
5410. Forest Park CVS, Inc.
5411. Forest Park IL CVS, L.L.C.
5412. Forks Township CVS, Inc.
5413. Formerly Broad Axe CVS, Inc.
5414. Formerly Peoples Drug Stores, Inc
5415. Fort Foote CVS, Inc.
5416. Fort Lee Palisades CVS, Inc.
5417. Fort Mill SC CVS, Inc.
5418. Fort Pierce CVS, L.L.C.
5419. Fort Worth ProCare Pharmacy, Inc.
5420. Foster Nagle CVS, L.L.C.
5421. Foster Street CVS, Inc.
5422. Foundation Health Plan of San Bernardino, Incorporated
5423. Foundation Health, A Florida Health Plan, Inc.
5424. Foundation Health, An Alabama Health Plan, Inc.
5425. Fowler Tampa CVS, Inc.
5426. Fox Run CVS, Inc.
5427. Foxboro CVS, Inc.
5428. Foxon East Haven CVS, Inc.
5429. FPS of Connecticut, Inc.
5430. Fracisquito Sunset CVS, Inc.
5431. Framingham Concord CVS, Inc.
5432. Framingham CVS, Inc.
5433. Framingham Water St. CVS, Inc.
5434. Framingham Worcester CVS, Inc.
5435. Franconia Road CVS, Inc.
5436. Frankford Avenue CVS, Inc.
5437. Frankfort CVS, Inc.
5438. Franklin Avenue CVS, Inc.
5439. Franklin Central CVS, Inc.
5440. Franklin Mahwah CVS, L.L.C.
5441. Franklin Retailer, Inc.
5442. Franklin TN CVS, Inc.
5443. Franklin W. Central St. CVS, Inc.
5444. Fraser Garfield CVS, L.L.C.
5445. Frederick CVS, Inc.
5446. Freehold NJ CVS, L.L.C.
5447. Freeport Long Beach CVS, L.L.C.
5448. Fridley MN CVS, L.L.C.
5449. Friendly Hills Healthcare Network, Inc.
5450. Fries Mill CVS, Inc.
5451. Front Street CVS, Inc.
5452. Frontier Community Health Plans, Inc.
5453. Ft. Lauderdale CVS, Inc.
5454. Ft. Myers CVS, L.L.C.
5455. Fullerton CVS, Inc.
5456. Futrix Inc.
5457. Futrix Limited
5458. G Street CVS, Inc.
5459. Gahanna OH CVS, Inc.
5460. Gainesville CVS, Inc.
5461. Gainesville FL CVS, L.L.C.
5462. Gaithersburg Mall CVS, Inc.
5463. Gaithersburg, MD Bob's, Inc.
5464. Gallivan CVS, Inc.
5465. Galloway CVS, Inc.
5466. Gandy CVS, Inc.
5467. Garden City CVS, Inc.
5468. Garden Grove CVS, Inc.
5469. Garden State HMO

5470. Gardner CVS, Inc.
5471. Garfield Beach CVS, L.L.C.
5472. Garfield CVS, Inc.
5473. Garland CVS, L.P.
5474. Garson Culver CVS, Inc.
5475. Garth Baytown CVS, L.P.
5476. Garwood Chestnut CVS, Inc.
5477. Gastonia CVS, Inc.
5478. Gate City CVS, Inc.
5479. Gatti LTC Services, Inc.
5480. Generation Health, L.L.C.
5481. Genesis Health Services Corp.
5482. Genesis Health Ventures, Inc.
5483. Geneva Carol CVS, L.L.C.
5484. Geneva Clinton Stores, Inc.
5485. Geneva Woods Health Services, LLC
5486. Geneva Woods LTC Pharmacy, LLC
5487. Geneva Woods Management, LLC
5488. Geneva Woods Pharmacy Alaska, LLC
5489. Geneva Woods Pharmacy Washington, LLC
5490. Geneva Woods Pharmacy Wyoming, LLC
5491. Geneva Woods Pharmacy, Inc.
5492. Geneva Woods Pharmacy, LLC
5493. Geneva Woods Retail Pharmacy, LLC
5494. Genito Midlothian CVS, Inc.
5495. GenPlus Managed Care, Inc.
5496. George Safran, M.D., P.C.
5497. Georgetown CVS, Inc.
5498. Georgetown OH CVS, L.L.C.
5499. Georgia CVS Pharmacy, L.L.C.
5500. Georgia Health System, Inc.
5501. German Dobson CVS, L.L.C.
5502. Germantown Avenue CVS, Inc.
5503. Germantown MD CVS, L.L.C.
5504. Gessner Philippine Houston CVS, L.P.
5505. Gibbsboro NJ CVS, L.L.C.
5506. Gilbert AZ CVS, L.L.C.
5507. Gilbert Guadalupe CVS, L.L.C.
5508. Gilbert Warner CVS, L.L.C.
5509. Gilbertsville CVS, Inc.
5510. Girard Avenue ProCare Pharmacy, Inc.
5511. Gladiolus Ft. Myers CVS, L.L.C.
5512. Glastonbury CVS, Inc.
5513. Glebe Road CVS, Inc.
5514. Glebe Road Peoples, Inc.
5515. Glen Allen CVS, Inc.
5516. Glen Burnie MD CVS, L.L.C.
5517. Glen Ellyn IL CVS, L.L.C.
5518. Glen Oaks CVS, L.L.C.
5519. Glendale Avenue CVS, L.P.
5520. Glendale CVS, L.L.C.
5521. Glendale Galleria CVS, Inc.
5522. Glendale Heights CVS, L.L.C.
5523. Glendale NY CVS, L.L.C.
5524. Glendora Foothill CVS, Inc.
5525. Glenriddle CVS, Inc.
5526. Glenview CVS, L.L.C.
5527. Glenwood Avenue CVS, Inc.
5528. Global Claim Services, L.C.
5529. Gloucester Downtown CVS, Inc.
5530. Gloucester Retailer, Inc.
5531. Gloucester-Erial CVS, Inc.
5532. Godfrey Avenue CVS, Inc.
5533. Godshall Franconia CVS, Inc.
5534. Gold Star Blvd. PharmaCare Pharmacy, Inc.
5535. Golden West CVS, Inc.
5536. Goldenrod CVS, Inc.
5537. Goodhealth Worldwide (Americas) Limited
5538. Goodhealth Worldwide (Asia Pacific) Limited
5539. Goodhealth Worldwide (Asia Pacific) Ltd.
5540. Goodhealth Worldwide (Asia) Limited
5541. Goodhealth Worldwide (Bermuda) Limited

5542. Goodhealth Worldwide (Europe) Limited
5543. Goodhealth Worldwide (Global) Limited
5544. Goodhealth Worldwide (Middle East) LLC
5545. Goodhealth Worldwide (Shanghai) Limited
5546. Goodhealth Worldwide Administrators Inc.
5547. Goodhealth Worldwide Limited
5548. Goodhealth Worldwide Management FZ-LLC
5549. Goodlette Naples CVS, L.L.C.
5550. Goodwin Park CVS, Inc.
5551. Goodyear CVS, LLC
5552. Gordon's Corner CVS, Inc.
5553. Goshen Village CVS, Inc.
5554. Governors Boulevard CVS, Inc.
5555. Grafton CVS, Inc.
5556. Grafton Street CVS, Inc.
5557. Graham Charlotte CVS, Inc.
5558. Granby CVS, Inc.
5559. Grand Baldwin CVS, Inc.
5560. Grand Bay CVS, Inc.
5561. Grand Covina CVS, Inc.
5562. Grand Prairie CVS, L.P.
5563. Grand River CVS, Inc.
5564. Grand Schaefer CVS, Inc.
5565. Grand St. Paul CVS, L.L.C.
5566. Grand Street CVS, L.L.C.
5567. Grandview Healthcare, Inc.
5568. Grandview Healthcare, LLC
5569. Grandview Pharmacy, Inc.
5570. Grandview Pharmacy, LLC
5571. Granite Run CVS, Inc.
5572. Granite Street CVS, Inc.
5573. Grapevine CVS, L.P.
5574. Gratiot CVS, Inc.
5575. Gray Houston CVS, L.P.
5576. Gray's Southgate, Inc.
5577. Grayson GA CVS, Inc.
5578. Great Valley CVS, Inc.
5579. Greece Clinton Paine, Inc.
5580. Greece CVS, Inc.
5581. Greece Towne CVS, Inc.
5582. Green Hills Plaza CVS, Inc.
5583. Greenacres CVS, Inc.
5584. Greenbelt CVS, Inc.
5585. Greenbelt-Cherrywood CVS, Inc.
5586. Greenbriar Houston CVS, L.P.
5587. Greencastle PA CVS, Inc.
5588. Greendale Mall CVS, Inc.
5589. Greenfield Federal CVS, Inc.
5590. Greenfield-Cherry Rum CVS, Inc.
5591. Greenlawn CVS, Inc.
5592. Greensboro GA CVS, Inc.
5593. Greenville CVS, Inc.
5594. Greenway Surprise CVS, L.L.C.
5595. Greenwich 99 CVS, Inc.
5596. Greenwich CVS, Inc.
5597. Greenwood Lake CVS, L.L.C.
5598. Grosse Pointe Realty, L.L.C.
5599. Groton CVS, Inc.
5600. Group Dental Service of Maryland, Inc.
5601. Group Dental Service, Inc.
5602. Group Dental Services, Inc.
5603. Group Health Plan of Delaware, LLC
5604. Group Health Plan, Inc.
5605. Grove City CVS, Inc.
5606. Guilford CVS, Inc.
5607. Gun Hill Road CVS, L.L.C.
5608. Gurnee CVS, L.L.C.
5609. Gwinnett CVS, Inc.
5610. GWL (UK) Limited
5611. H.M.S.S., Inc.
5612. Hackensack CVS, L.L.C.
5613. Haddon Heights CVS, L.L.C.
5614. Hadley CVS, Inc.
5615. Hallandale FL CVS, L.L.C.
5616. Haltom City CVS, L.P.
5617. Hamburg Clinton Stores, Inc.
5618. Hamburg Turnpike CVS, Inc.
5619. Hamden Plaza CVS, Inc.

5620. Hamden Retailer, Inc.
5621. Hamden Whitney CVS, Inc.
5622. Hamilton CVS, Inc.
5623. Hamilton CVS, L.L.C.
5624. Hamilton Klockner CVS, Inc.
5625. Hamilton Parkway CVS, L.L.C.
5626. Hamilton Plaza CVS, Inc.
5627. Hamlin CVS, Inc.
5628. Hanover CVS, L.L.C.
5629. Hanover Mass. CVS, Inc.
5630. Hanover Park CVS, L.L.C.
5631. Hanover Shaw Plaza CVS, Inc.
5632. Hanover-Pembroke CVS, Inc.
5633. Hanson CVS, Inc.
5634. Harbor Mall CVS, Inc.
5635. Harbor Santa Ana CVS, L.P.
5636. Harborside CVS, Inc.
5637. Harbour Place CVS, Inc.
5638. Hard Columbus CVS, L.L.C.
5639. Hardscrabble CVS, Inc.
5640. Harlem Chicago CVS, L.L.C.
5641. Harleysville PA CVS, Inc.
5642. Harmon Las Vegas CVS, L.L.C.
5643. Harrisburg CVS, Inc.
5644. Harrisburg NC CVS, Inc.
5645. Harrison Bridge Road CVS, Inc.
5646. Harrison East Orange CVS, Inc.
5647. Harrison Township CVS, Inc.
5648. Hartford Blue Hills CVS, Inc.
5649. Hartford Main Street CVS, Inc.
5650. Harvard Square CVS, Inc.
5651. Harwich CVS, Inc.
5652. Harwichport Main Street CVS, Inc.
5653. Hatfield PA CVS, Inc.
5654. Haverford and City Line CVS, Inc.
5655. Haverford Avenue CVS, Inc.
5656. Haverhill CVS, Inc.
5657. Haverhill Lowell CVS, Inc.
5658. Havertown CVS, Inc.
5659. Haw Creek Circle CVS, Inc.
5660. Hawaiian Gardens CVS, Inc.
5661. Hawley CVS, Inc.
5662. Hawthorne CVS, Inc.
5663. Haymarket VA CVS, Inc.
5664. Hazel Crest CVS, L.L.C.
5665. Hazlet CVS, Inc.
5666. Hazleton CVS, Inc.
5667. Hazleton Plaza CVS Inc.
5668. HCP Acquisition Sub, LLC
5669. Heacock Moreno CVS, L.L.C.
5670. Health America Corporation of Pennsylvania, Inc.
5671. Health and Human Resource Center
5672. Health and Human Resource Center Medical Group, Inc.
5673. Health and Human Resource Center, Inc.
5674. Health Care Management Co. Ltd.
5675. Health Care USA of Tennessee, Inc
5676. Health Cost Consultants, Inc.
5677. Health Data & Management Solutions, Inc.
5678. Health Integration Strategies, L.P.
5679. Health Integration, Inc.
5680. Health Maintenance Organization of New Jersey, Inc.
5681. Health Mart, Inc.
5682. Health Re, Inc.
5683. Healthagen International Limited
5684. Healthagen LLC
5685. HealthAmerica Pennsylvania, Inc.
5686. HealthAssurance Financial Services, Inc.
5687. HealthAssurance Pennsylvania, Inc.
5688. HealthCare America Plans, Inc.
5689. HealthCare USA of Missouri L.L.C.
5690. HealthInfusion, Inc.
5691. Healthmart, Inc.
5692. Healthmaster, Inc.
5693. HealthPASS, Inc.
5694. HealthPlus, Inc.
5695. HealthWays of New York, Inc.
5696. Heartland Healthcare Services, LLC
5697. Heartland Pharmacy of Illinois LLC
5698. Heartland Pharmacy of Maryland, LLC

5699. Heartland Pharmacy of PA, LLC
5700. Heartland Repack Services LLC
5701. Hebron CT CVS, Inc.
5702. Hebron Parkway CVS, L.P.
5703. Hedges Pond CVS, Inc.
5704. Hellertown CVS, Inc.
5705. Hempstead Avenue CVS, Inc.
5706. Hempstead NY CVS, L.L.C.
5707. Henderson CVS, L.L.C.
5708. Henderson Horizon CVS, L.L.C.
5709. Henderson Road CVS, Inc.
5710. Hennepin Avenue CVS, L.L.C.
5711. Henry Philadelphia CVS, Inc.
5712. Henry Street CVS, L.L.C.
5713. Henrydale CVS, Inc.
5714. Hermosa Beach CVS, Inc.
5715. Hewlett CVS, Inc.
5716. HHPF, Inc.
5717. HHRC, Inc.
5718. Hialeah CVS, L.L.C.
5719. Hialeah West 49th CVS, L.L.C.
5720. Hick Hwy CVS, Inc.
5721. Hickory CVS, Inc.
5722. Hickory Hills IL CVS, L.L.C.
5723. High House Road CVS, Inc.
5724. High Ridge Road CVS, Inc.
5725. High Street CVS, Inc.
5726. Highland Avenue CVS, Inc.
5727. Highland Center CVS, Inc.
5728. Highland Cheshire CVS, Inc.
5729. Highland Leasing Corporation
5730. Highland Market CVS, Inc.
5731. Highland Park CVS, L.L.C.
5732. Highlander Plaza CVS, Inc.
5733. Highway 14 SC CVS, Inc.
5734. Highway 17 Mt. Pleasant CVS, Inc.
5735. Highway 19 Palm Harbor CVS, L.L.C.
5736. Highway 92 CVS, Inc.
5737. Highway 98 CVS, Inc.
5738. Highway Charlotte CVS, Inc.
5739. Highway Stockbridge CVS, Inc.
5740. Hillcrest Frisco CVS, L.P.
5741. Hillcroft Houston CVS, L.P.
5742. Hilliard Darby CVS, Inc.
5743. Hilliard Park Mill CVS, Inc.
5744. Hillsboro Road CVS, L.L.C.
5745. Hillsborough Avenue CVS, L.L.C.
5746. Hillsborough CVS, Inc.
5747. Hillside Amarillo TX CVS, L.L.C.
5748. Hillside Avenue CVS, L.L.C.
5749. Hillside CVS, Inc.
5750. Hillside IL CVS, L.L.C.
5751. Hilltop Air Corporation
5752. Hilltown PA CVS, Inc.
5753. Hingham CVS, Inc.
5754. HIP Health Plan of Florida, Inc.
5755. HMIS, Inc.
5756. HMO Of Greater New York, Inc.
5757. HMO of Iowa, Inc.
5758. HMO of New Jersey, Inc.
5759. HMS Colorado, Inc.
5760. HMS Healthcare, Inc.
5761. Hoadley Rd CVS, Inc.
5762. Hokes Bluff CVS, Inc.
5763. Holbrook CVS, Inc.
5764. Holcomb CVS, Inc.
5765. Holden Common CVS, Inc.
5766. Holden PharmaCare Pharmacy, Inc.
5767. Holiday CVS, L.L.C.
5768. Holiday Hwy 19 CVS, L.L.C.
5769. Holliston CVS, Inc.
5770. Holly Springs CVS, Inc.
5771. Holyoke CVS, Inc.
5772. Holyoke Mall CVS, Inc.
5773. Holyoke South Street CVS, Inc.
5774. Home Care Pharmacy, LLC
5775. Home Pharmacy Services, LLC
5776. Homestead 312th FL CVS, L.L.C.
5777. Homestead CVS, L.L.C.
5778. Homeward Pharmacy, LLC
5779. Hook Drugs, Inc. of Michigan
5780. Hooker Avenue CVS, Inc.
5781. Hookset CVS, Inc.
5782. Hook-SupeRx Funding Corp.
5783. Hook-SupeRx, Inc.

5784. Hook-SupeRx, L.L.C.
5785. Hooper Road CVS, Inc.
5786. Hope Mills CVS, Inc.
5787. Hopewell CVS, Inc.
5788. Hopkins CVS, L.L.C.
5789. Horatio Orlando CVS, Inc.
5790. Horizon Behavioral Services, LLC
5791. Horsham CVS, Inc.
5792. Hospital CVS, Inc.
5793. Hospitality Holdings, Inc.
5794. Houston Main Elgin CVS, L.P.
5795. Houston ProCare Pharmacy, Inc.
5796. Houston TX CVS, L.P.
5797. Howell CVS, L.L.C.
5798. Hubbard Sylmar CVS, L.P.
5799. Hudson CVS, Inc.
5800. Hudson N.H. CVS, Inc.
5801. Huffmeister CVS, L.P.
5802. Humble CVS, L.P.
5803. Hunt Valley CVS, Inc.
5804. Huntersville NC CVS, Inc.
5805. Hunting Park CVS, Inc.
5806. Huntingdon Valley CVS, Inc.
5807. Huntington Beach CVS, Inc.
5808. Huntington Center CVS, Inc.
5809. Huntington CVS, Inc.
5810. Huntington Drive CVS, Inc.
5811. Huntington Station CVS, Inc.
5812. Huntington WV CVS, Inc.
5813. Huntsville AL CVS, Inc.
5814. Huntsville Moores Mill CVS, Inc.
5815. Huntsville Whitesburg CVS, Inc.
5816. Hurley MS CVS, Inc.
5817. Hurricane WV CVS, Inc.
5818. Hurst CVS, L.P.
5819. Hwy 544 MB CVS, Inc.
5820. Hyannis CVS, Inc.
5821. Hyannis Main Street CVS, Inc.
5822. Hyattsville CVS, Inc.
5823. Hyde Park Avenue CVS, Inc.
5824. Hytree Pharmacy, Inc.
5825. I.g.G. of America, Inc.
5826. I.g.G. of America, LLC
5827. Idaho CVS Pharmacy, L.L.C.
5828. IHS Acquisition XXX, Inc.
5829. IlliniCare Health Plan, Inc.
5830. Imperial CVS, Inc.
5831. Independence MI CVS, L.L.C.
5832. Independence Plano CVS, L.P.
5833. Independent Investments, Inc.
5834. Indian 59th Phoenix CVS, L.L.C.
5835. Indian Health Organisation Private Limited
5836. Indian School Phoenix CVS, L.L.C.
5837. Indian Trail CVS, Inc.
5838. Indiana CVS, Inc.
5839. Informed Health, LLC.
5840. Ingleside CVS, Inc.
5841. Inland Health Plan
5842. Inman Edison CVS, L.L.C.
5843. Inner Loop Georgetown CVS, L.L.C.
5844. Innovation Health Holdings, LLC
5845. Innovation Health Insurance Company
5846. Innovation Health Plan, Inc.
5847. Innovative Worldwide Distributors (HK) Limited
5848. Institutional Health Care Services LP
5849. Institutional Health Care Services, LLC
5850. Integrated Pharmacy Solutions, Inc.
5851. InterGlobal Holdco Limited
5852. InterGlobal Insurance Company Limited
5853. InterGlobal Japan Corporation Limted
5854. InterGlobal Limited
5855. Interlock Pharmacy Systems, LLC
5856. Iowa CVS Pharmacy, L.L.C.
5857. Ironbound CVS Urban Renewal, L.L.C.
5858. Irvine CA CVS, L.P.
5859. Irving CVS, L.P.
5860. Irving Park CVS, L.L.C.

5861. Irving Streamwood CVS, L.L.C.
5862. Irving Street CVS, Inc.
5863. Island Avenue CVS, Inc.
5864. Islington CVS, Inc.
5865. Ithaca CVS Store, Inc.
5866. iTriage, LLC
5867. Ives Dairy Miami CVS, L.L.C.
5868. Ivyland CVS, Inc.
5869. Ivyland PA CVS, Inc.
5870. J.F.K. Street CVS, Inc.
5871. Jacksboro Highway CVS, L.P.
5872. Jackson Heights CVS, L.L.C.
5873. Jackson NJ CVS, Inc.
5874. Jackson North West CVS, Inc.
5875. Jackson Square CVS, Inc.
5876. Jacksonville CVS, L.L.C.
5877. Jaguar Merger Subsidiary, Inc.
5878. Jamaica CVS, L.L.C.
5879. Jamaica Plain CVS, Inc.
5880. Jamesburg CVS, L.L.C.
5881. JEC Facilities Funding II, Inc.
5882. JEC Funding, Inc.
5883. JEC Funding, LLC
5884. Jefferson CVS, Inc
5885. Jefferson Havens Corner CVS, Inc.
5886. Jefferson Woodbridge CVS, Inc.
5887. Jenkintown CVS, Inc.
5888. Jennersville CVS, Inc.
5889. Jericho Huntington CVS, L.L.C.
5890. Jericho Turnpike CVS, Inc.
5891. Jersey Shore PA CVS, Inc.
5892. Jessup Deptford CVS, L.L.C.
5893. Jewel Ventures Fund GP, LLC
5894. Jewel Ventures Fund, LP
5895. Jewel Ventures Management, LLC
5896. JHC Acquisition LLC
5897. JOCUS LIMITED
5898. Jog Boynton Beach CVS, L.L.C.
5899. Jog Road CVS, L.L.C.
5900. Johnson Hollywood CVS, Inc.
5901. Johnston Centre CVS, Inc.
5902. Joliet CVS, L.L.C.
5903. Jones Hill CVS, Inc.
5904. Jonesboro CVS, Inc.
5905. Josey Carrollton CVS, L.P.
5906. Joy Lake Rd. CVS, Inc.
5907. JRT Investment, Inc.
5908. Jumpers Hole CVS, Inc.
5909. K HOME THERAPEUTICS, INC.
5910. K Street CVS, Inc.
5911. K Street Peoples, Inc.
5912. Kankakee IL CVS, L.L.C.
5913. Kannapolis CVS, Inc.
5914. Kansas CVS Pharmacy, L.L.C.
5915. Kearny CVS, Inc.
5916. Kedzie 59th CVS, L.L.C.
5917. Keene Key CVS, Inc.
5918. Keller CVS, L.P.
5919. Kendall Miami CVS, L.L.C.
5920. Kenmore Retailer, Inc.
5921. Kenmore Village CVS, Inc.
5922. Kennedy Tampa CVS, L.L.C.
5923. Kennesaw CVS, Inc.
5924. Kennesaw Due West CVS, Inc.
5925. Kennett Square CVS, Inc.
5926. Kensington CVS, Inc.
5927. Kentucky CVS Pharmacy, L.L.C.
5928. Kentwood CVS, Inc.
5929. Kern Home Health Resources d/b/a Coram Healthcare
5930. Key Biscayne CVS, Inc.
5931. Keyser CVS, L.L.C.
5932. Keystone Street CVS, Inc.
5933. Kildeer CVS, L.L.C.
5934. Kimberly J. Henderson, M.D., P.C.
5935. Kimberton Nutt CVS, Inc.
5936. King Cherry CVS, Inc.
5937. King Drug Company
5938. King of Prussia CVS, Inc.
5939. King Street CVS, Inc.
5940. Kings Crossing CVS, Inc.
5941. Kings Grant CVS, Inc.
5942. Kings Highway CVS, Inc.
5943. Kingsbury Square CVS, Inc.
5944. Kingsland Katy CVS, L.P.
5945. Kingston Emporium CVS, Inc.

5946. Kingston Market CVS, Inc.
5947. Kingston Road CVS, Inc.
5948. Kingsway Plaza CVS, Inc.
5949. Kingwood CVS, L.P.
5950. Kirby Houston CVS, L.P.
5951. Kirby Pearland CVS, L.P.
5952. Kisco East Main CVS, L.L.C.
5953. Kissimmee CVS, Inc.
5954. Knox Abbott Road CVS, Inc.
5955. Knoxville Emory CVS, Inc.
5956. Kostner Chicago CVS, L.L.C.
5957. Kraemer CA CVS, L.L.C.
5958. Krocks Road CVS, Inc.
5959. L Street CVS, Inc.
5960. L.F. Hamlin, Inc.
5961. La Cienega LA CVS, L.P.
5962. La Cienega Square CVS, Inc.
5963. La Mirada CVS, Inc.
5964. La Palma CVS, Inc.
5965. La Quinta CVS, L.L.C.
5966. Ladera Ranch CA CVS, L.P.
5967. Lafayette CVS, Inc.
5968. LaGrange CVS, L.L.C.
5969. Laguna Hills CVS, Inc.
5970. Laguna Niguel CVS, Inc.
5971. Lahser CVS, Inc.
5972. Lake Charles Ryan CVS, Inc.
5973. Lake Danbury CVS, Inc.
5974. Lake Forest CVS, Inc.
5975. Lake Forest CVS, L.L.C.
5976. Lake Grove CVS, Inc.
5977. Lake in the Hills CVS, L.L.C.
5978. Lake Mead Civic CVS, L.L.C.
5979. Lake Mead Las Vegas CVS, L.L.C.
5980. Lake Pleasant Peoria CVS, L.L.C.
5981. Lake Street CVS, Inc.
5982. Lake Worth Greenacres CVS, L.L.C.
5983. Lakeview Ave. CVS, Inc.
5984. Lakeview Plaza CVS, Inc.
5985. Lakeview Square CVS, Inc.
5986. Lakeville MN CVS, L.L.C.
5987. Lakeway TX CVS, L.L.C.
5988. Lakewood CA CVS, L.L.C.
5989. Lakewood Square CVS, Inc.
5990. Lambertville NJ CVS, L.L.C.
5991. Lancaster 10th CVS, L.L.C.
5992. Lancaster CVS, Inc.
5993. Landis Avenue CVS, Inc.
5994. Landisville CVS, Inc.
5995. Landmark Center CVS, Inc.
5996. Landstar Orlando CVS, L.L.C.
5997. Lanesborough Berkshire Mall CVS, Inc.
5998. Langsam Health Services, LLC
5999. Langsam Medical Products, Inc.
6000. Lansdowne Avenue CVS, Inc.
6001. Lansing CVS, Inc.
6002. LaPalma Anaheim CVS, Inc.
6003. Largo ProCare Pharmacy, Inc.
6004. Las Vegas NV CVS, L.L.C.
6005. Las Vegas Riviera CVS, L.L.C.
6006. Laurel MD CVS, L.L.C.
6007. Laurens Road CVS, Inc.
6008. Lavista Road CVS, Inc.
6009. Lawndale CA CVS, L.L.C.
6010. Lawndale CVS, Inc.
6011. Lawrence Broadway CVS, Inc.
6012. Lawrence Chicago CVS, L.L.C.
6013. Lawrenceville CVS, Inc.
6014. LCPS Acquisition LLC
6015. LDG Property Company, Inc.
6016. LDG Property Company, LLC
6017. Leading Benefit Solutions, LLC
6018. League City CVS, L.P.
6019. Ledgewood NJ CVS, L.L.C.
6020. Lee Highway CVS, Inc.
6021. Lee Highway Peoples, Inc.
6022. Lee Vista Orlando CVS, L.L.C.
6023. Lehigh Street CVS, Inc.
6024. Lehigh Valley CVS, Inc.
6025. Lemec CVS, L.L.C.
6026. Lemmon Dallas CVS, L.P.
6027. Lemont CVS, L.L.C.
6028. Lenox Avenue CVS, L.L.C.
6029. Leominster CVS, Inc.

6030. Leominster Lancaster CVS, Inc.
6031. Leominster Main Street CVS, Inc.
6032. Leominster PharmaCare Pharmacy, Inc.
6033. Levittown PA CVS, Inc.
6034. Lewisville CVS, L.P.
6035. Lexington CVS, Inc.
6036. Lexington Sugar CVS, L.P.
6037. LHS Acquisition Sub, LLC
6038. Liberty Little Ferry CVS, L.L.C.
6039. Liberty Park CVS, Inc.
6040. Liberty Road CVS, Inc.
6041. Liberty Street CVS, Inc.
6042. Library Road CVS, Inc.
6043. Lighthouse Point CVS, L.L.C.
6044. Lilburn CVS, Inc.
6045. Lilburn Harmony Grove CVS, Inc.
6046. Lima PA CVS, Inc.
6047. Limerick CVS, Inc.
6048. Lincoln Corona CVS, Inc.
6049. Lincoln CVS, Inc.
6050. Lincoln Drive (Phil) CVS, Inc.
6051. Lincoln Harbor CVS, Inc.
6052. Lincoln Park CVS, L.L.C.
6053. Lincoln Street CVS, Inc.
6054. Lindbergh CVS, Inc.
6055. Linden Retailer, Inc.
6056. Linden Street CVS, Inc.
6057. Linden Wellesley CVS, Inc.
6058. Lindenhurst CVS, L.L.C.
6059. Linwood CVS, Inc.
6060. Lionville CVS, Inc.
6061. Litchfield Park CVS, L.L.C.
6062. Litchfield Rt. 202 CVS, Inc.
6063. Little York CVS, L.P.
6064. Littleton Road CVS, Inc.
6065. Livingston CVS, Inc.
6066. Livonia 6 Mile CVS, Inc.
6067. Lobdell Goodwood CVS, Inc.
6068. Lobos Acquisition, LLC
6069. Lockport Clinton Stores, Inc.
6070. Lockport CVS, L.L.C.
6071. Locust Philadelphia CVS, Inc.
6072. Lodi CVS, Inc.
6073. Loehmann's Plaza CVS, Inc.
6074. Lombard CVS, L.L.C.
6075. Lombard-Light Streets CVS, Inc.
6076. Lo-Med Prescription Services, LLC
6077. Lomita CVS, Inc.
6078. Lone Oak KY CVS, Inc.
6079. Lone Star Health Plan, Inc.
6080. Lonestar Holding Co.
6081. Long Beach Boulevard CVS, L.P.
6082. Long Beach CVS, Inc.
6083. Long Hill Road CVS, Inc.
6084. Long Island CVS Store, Inc.
6085. Long Shoals Road CVS, Inc.
6086. Longmeadow Massachusetts CVS, Inc.
6087. Longmeadow Street CVS, Inc.
6088. Longs Drug Stores California, Inc.
6089. Longs Drug Stores California, L.L.C.
6090. Longs Drug Stores Corporation
6091. Longs Drug Stores, Inc.
6092. Longs Drug Stores, L.L.C.
6093. Long-Term Care Pharmacy Alliance, LLC
6094. Longwood Avenue CVS, Inc.
6095. Longwood CVS, Inc.
6096. Looch Hwy. CVS, Inc.
6097. Loop 610 Westheimer CVS, L.P.
6098. Loris SC CVS, Inc.
6099. Los Alamitos CVS, L.P.
6100. Los Angeles ProCare Pharmacy, Inc.
6101. Louetta Elderidge CVS, L.P.
6102. Louisiana CVS Pharmacy, L.L.C.
6103. Louisville CVS, Inc.
6104. Lowell Bridge CVS, Inc.
6105. Lowell Discounter, Inc.
6106. Lowell Merrimack CVS, Inc.
6107. Lowell Retailer, Inc.
6108. Lower Azusa Rd CVS, L.L.C.
6109. Lower Buckeye Phoenix CVS, L.L.C.

6110. Lower Buckley Avondale CVS, L.L.C.
6111. Lower Makefield CVS, Inc.
6112. Loyalty Life Insurance Company
6113. Ludlow Acquisition Corp.
6114. Ludlow CVS, Inc.
6115. Luettgens Limited
6116. LV Boulevard CVS, L.L.C.
6117. Lyell Clinton Paine, Inc.
6118. Lynn Boston Street CVS, Inc.
6119. Lynngate-Massachusetts CVS, Inc.
6120. Lynnway Lynn CVS, Inc.
6121. Lyon Twp CVS, L.L.C.
6122. M Street CVS, Inc.
6123. M Street Peoples, Inc.
6124. M Street Washington CVS, Inc.
6125. Mableton GA CVS, Inc.
6126. Mableton Parkway CVS, Inc.
6127. MacArthur Boulevard CVS, Inc.
6128. Macedon Clinton Stores, Inc.
6129. Mack Drug Co. of New Jersey, Inc.
6130. Mack Drug Co. of New York, Inc.
6131. Mack Drug Co. of Pittsfield, Inc.
6132. Macomb Township CVS, L.L.C.
6133. Madera Royale CVS, Inc.
6134. Madison Centre CVS, Inc.
6135. Madison Chicago CVS, L.L.C.
6136. Madison CVS, Inc.
6137. Madison Heights John R CVS, Inc.
6138. Magnolia Anaheim CVS, L.P.
6139. Magnum Health Plan, Inc.
6140. Main Alden CVS, Inc.
6141. Main Annapolis CVS, L.L.C.
6142. Main Devon Bartlett CVS, L.L.C.
6143. Main Harvard CVS, Inc.
6144. Main Houston CVS, L.P.
6145. Main Jefferson CVS, L.L.C.
6146. Main McKinney CVS, L.P.
6147. Main Montgomery CVS, L.L.C.
6148. Main Street Athol CVS, Inc.
6149. Main Street North CVS, Inc.
6150. Main Street Pharmacy, L.L.C.
6151. Main Vineland CVS, L.L.C.
6152. Main Wayland CVS, Inc.
6153. Maine CVS Pharmacy, L.L.C.
6154. Maine Retailer, Inc.
6155. Maine-Bangor CVS, Inc.
6156. Maineville CVS, Inc.
6157. Malaga CVS, Inc.
6158. Malden Broadway CVS, Inc.
6159. Malden Square CVS, Inc.
6160. Male Wind Gap CVS, Inc.
6161. Mall of New Hampshire CVS, Inc.
6162. Managed Care Coordinators, Inc.
6163. Managed HealthCare, Inc.
6164. Managed Healthcare, LLC
6165. Management & Network Services, Inc.
6166. Management and Network Services, L.L.C.
6167. Manalapan CVS, Inc.
6168. Manassas CVS, Inc.
6169. Manatee Bradenton CVS, L.L.C.
6170. Manayunk Plaza CVS, Inc.
6171. Manchester (N.H.) CVS, Inc.
6172. Manchester CVS, Inc.
6173. Manchester North Main CVS, Inc.
6174. Manhattan CVS, Inc.
6175. Manomet Route 3a CVS, Inc.
6176. Manor Road CVS, Inc.
6177. Mansfield CVS, Inc.
6178. Mansfield Shopping Center CVS, Inc.
6179. Manton Avenue CVS, Inc.
6180. Mantua NJ CVS, L.L.C.
6181. Manville CVS, Inc.
6182. Maple Avenue CVS, Inc.
6183. Maple Avenue NJ CVS, Inc.
6184. Maple Glen CVS, Inc.
6185. Maple Grove MN CVS, L.L.C.
6186. Maplewood CVS, L.L.C.
6187. Marblehead CVS, Inc.
6188. Margate CVS, Inc.
6189. Marguerite Parkway CVS, Inc.
6190. Maricopa CVS, L.L.C.
6191. Marietta CVS, Inc.

6192. Marietta Piedmont CVS, Inc.
6193. Mark Steven CVS, Inc.
6194. Market Street CVS, Inc.
6195. Marlboro CVS, Inc.
6196. Marlboro Village Center CVS, Inc.
6197. Marlborough Mall CVS, Inc.
6198. Marley Station CVS, Inc.
6199. Marlton Crossing CVS, Inc.
6200. Marsh Carrollton CVS, L.P.
6201. Marshalls of Citrus Heights, CA., Inc.
6202. Marshalls of Skokie IL, Inc.
6203. MARSHALLS OF TEMPE, AZ., INC.
6204. Marshfield Ocean CVS, Inc.
6205. Marshfield Webster CVS, Inc.
6206. Martin Health Services, Inc.
6207. Martin Health Services, LLC
6208. Mary Street CVS, Inc.
6209. Maryland CVS Pharmacy, L.L.C.
6210. Maryland Parkway CVS, L.L.C.
6211. Maryland St. Paul CVS, L.L.C.
6212. Mashpee CVS, Inc.
6213. Mason CVS, Inc.
6214. Maspeth NY CVS, L.L.C.
6215. Mass. Ave. and Alwife Brook CVS, Inc.
6216. Mass. Ave. CVS, Inc.
6217. Massachusetts Avenue CVS, L.L.C.
6218. Massachusetts CVS Pharmacy, Inc.
6219. Massachusetts CVS Pharmacy, L.L.C.
6220. Massapequa CVS, Inc.
6221. Mattapan MA CVS, Inc.
6222. Matthews CVS, Inc.
6223. Mattituck CVS, L.L.C.
6224. Mattydale Clinton Stores, Inc.
6225. MaxiCare/HealthAmerica Pennsylvania, Inc.
6226. Maxwell & Tennyson, Inc.
6227. May Street PharmaCare Pharmacy, Inc.
6228. Mayfield Collins CVS, L.P.
6229. Mayfield CVS, Inc.
6230. Maynard CVS, Inc.
6231. MC Diagnostic of Connecticut, P.C.
6232. MC RETAIL CORP.
6233. McCalla CVS, Inc.
6234. McDowell Phoenix CVS, L.L.C.
6235. McKeesport CVS, Inc.
6236. McKinney CVS, L.P.
6237. McNab Tamarac CVS, L.L.C.
6238. McNair Farms CVS, Inc.
6239. Mead Clinton Paine, Inc.
6240. Meadow Glen CVS, Inc.
6241. Meadowbrook Newark CVS, Inc.
6242. Meadville Clinton Stores, Inc.
6243. Med Southwest, Inc.
6244. Med World Acquisition Corp.
6245. Med World Acquisition, LLC
6246. Medco Discount Prescription Center, Inc.
6247. Medfield CVS, Inc.
6248. Medford Downtown CVS, Inc.
6249. Medford High CVS, Inc.
6250. Medford Retailer, Inc.
6251. Medford-Malden CVS, Inc.
6252. Media 452 CVS, Inc.
6253. Media CVS, Inc.
6254. Medical Arts Health Care, Inc.
6255. Medical Arts Health Care, LLC
6256. Medical Arts Pharmacy, Inc.
6257. Medical Center Pharmacies, Inc.
6258. Medical Examinations of New York, P.C.
6259. Medicare Drug Stores, Inc.
6260. Medicity LLC
6261. Medicity, Inc.
6262. Medisav, Inc.
6263. MedPartners Acquisition
6264. MedPartners Aviation, Inc.
6265. MedPartners Physician Services, Inc.
6266. MedPartners Professional Management Corporation
6267. MedPartners, Inc.

6268. MedPartners/Mullikin, Inc.
6269. MedPartners/Talbert Medical Management Corporation
6270. Medway CVS, Inc.
6271. Meeting House Road CVS, Inc.
6272. Melrose CVS, Inc.
6273. Melrose Park CVS, L.L.C.
6274. Melville Equipment Leasing Corp.
6275. Melville Realty Company, Inc.
6276. Melville Realty Management Corporation
6277. MemberHealth LLC
6278. Menifee Meadows Office Park Association
6279. Menlo Park CVS, Inc.
6280. Mental Health Associates, Inc.
6281. Mental Health Associates, Inc. of Lousiana, Inc.
6282. Mental Health Network of New York IPA, Inc.
6283. Merchant Plaza CVS, Inc.
6284. Merger LLC D, L.L.C.
6285. Meridan West Main CVS, Inc.
6286. Meriden CVS, Inc.
6287. Meriden Parkade CVS, Inc.
6288. Meriden Road CVS, Inc.
6289. Meridianville CVS, Inc.
6290. Meritain Health Group, Inc.
6291. Meritain Health, Inc.
6292. Merlen Drug CVS, Inc.
6293. Merrick CVS, Inc.
6294. Merrill University CVS, L.L.C.
6295. Merrimack Street CVS, Inc.
6296. Merritt Island CVS, L.L.C.
6297. Merwin IV & Specialty Pharmacy, LLC
6298. Merwin Long Term Care, Inc.
6299. Merwin Long Term Care, LLC
6300. Merwin Rx-Compounding Pharmacy, LLC
6301. Mesa Brown CVS, L.L.C.
6302. Mesquite CVS, L.P.
6303. Methuen Broadway CVS, Inc.
6304. Methuen CVS, Inc.
6305. Methuen Haverhill CVS, Inc.
6306. Methuen Swan CVS, Inc.
6307. MetraComp, Inc.
6308. Metro Boston CVS, Inc.
6309. MHHP Acquisition Company LLC
6310. MHNet Life and Health Insurance Company
6311. MHNet of Florida, Inc.
6312. MHNet Specialty Services, LLC
6313. Miami 147th CVS, L.L.C.
6314. Miami 2nd Avenue CVS, Inc.
6315. Miami 8th CVS, L.L.C.
6316. Miami Flagler CVS, Inc.
6317. Michigan Chicago CVS, L.L.C.
6318. Michigan CVS, Inc.
6319. Mid Cities Boulevard CVS, L.P.
6320. Middle River CVS, Inc.
6321. Middle Smithfield Township CVS, Inc.
6322. Middleboro CVS, Inc.
6323. Middlesex Lowell CVS, Inc.
6324. Middlesex-Mass. CVS, Inc.
6325. Middletown CVS, Inc.
6326. Middletown Township CVS, Inc.
6327. Middletown Washington CVS, Inc.
6328. Midland Clinton Stores, Inc.
6329. Midland Retailer, Inc.
6330. Midport Port St. Lucie CVS, L.L.C.
6331. Milford Broad St. CVS, Inc.
6332. Milford CVS, Inc.
6333. Milford PharmaCare Pharmacy, Inc.
6334. Milford Plaza CVS, Inc.
6335. Milford Square CVS, Inc.
6336. Military Trail CVS, Inc.
6337. Millbourne CVS, Inc.
6338. Millbury CVS, Inc.
6339. Millbury PharmaCare Pharmacy, Inc.
6340. Millcreek CVS, Inc.
6341. Miller Place CVS, L.L.C.
6342. Millis CVS, Inc.
6343. Mills Ave SEC CVS, L.L.C.

6344. Millville CVS, Inc.
6345. Milton Market Place CVS, Inc.
6346. Milwaukee Chicago CVS, L.L.C.
6347. Mineola Jericho CVS, Inc.
6348. Mineral Spring Ave. CVS, Inc.
6349. Minnesota CVS Pharmacy, L.L.C.
6350. Minor Health Enterprise Co, Ltd.
6351. Mint Hill CVS, Inc.
6352. Minute Clinic Diagnostic of North Carolina, P.C.
6353. MinuteClinic Diagnostic Medical Group of California, Inc.
6354. MinuteClinic Diagnostic Medical Group of Orange County, Inc.
6355. MinuteClinic Diagnostic Medical Group of San Diego, Inc.
6356. MinuteClinic Diagnostic of Alabama, L.L.C.
6357. MinuteClinic Diagnostic of Arizona, LLC
6358. MinuteClinic Diagnostic of Arkansas, LLC
6359. MinuteClinic Diagnostic of Colorado LLC
6360. MinuteClinic Diagnostic of Connecticut, LLC
6361. MinuteClinic Diagnostic of Florida, LLC
6362. MinuteClinic Diagnostic of Georgia, LLC
6363. MinuteClinic Diagnostic of Hawaii, L.L.C.
6364. MinuteClinic Diagnostic of Illinois, LLC
6365. MinuteClinic Diagnostic of Kansas, P.A.
6366. MinuteClinic Diagnostic of Kentucky, L.L.C.
6367. MinuteClinic Diagnostic of Louisiana, L.L.C.
6368. MinuteClinic Diagnostic of Maine, L.L.C.
6369. MinuteClinic Diagnostic of Maryland, LLC
6370. MinuteClinic Diagnostic of Massachusetts, LLC
6371. MinuteClinic Diagnostic of Michigan, P.C.
6372. MinuteClinic Diagnostic of Minnesota, P.A.
6373. MinuteClinic Diagnostic of Nebraska, L.L.C.
6374. MinuteClinic Diagnostic of New Hampshire, L.L.C.
6375. MinuteClinic Diagnostic of New Jersey, LLC
6376. MinuteClinic Diagnostic of New Mexico, L.L.C.
6377. MinuteClinic Diagnostic of Ohio, LLC
6378. MinuteClinic Diagnostic of Oklahoma, LLC
6379. MinuteClinic Diagnostic of Oregon, LLC
6380. MinuteClinic Diagnostic of Pennsylvania, LLC
6381. MinuteClinic Diagnostic of Rhode Island, LLC
6382. MinuteClinic Diagnostic of South Carolina, L.L.C.
6383. MinuteClinic Diagnostic of Tennessee, P.C.
6384. MinuteClinic Diagnostic of Texas, LLC
6385. MinuteClinic Diagnostic of Utah, L.L.C.
6386. MinuteClinic Diagnostic of Virginia, LLC
6387. MinuteClinic Diagnostic of Washington, LLC
6388. MinuteClinic Diagnostic of Washington, PLLC
6389. MinuteClinic Diagnostic of Wisconsin, L.L.C.
6390. MinuteClinic Diagnostic, P.A.

6391. MinuteClinic Diagnostics of Indiana, LLC
6392. MinuteClinic Online Diagnostic Services, LLC
6393. MinuteClinic Online Virtual Care California, P.C.
6394. MinuteClinic Physician Practice of Texas
6395. MinuteClinic Telehealth Services of Texas Association
6396. MinuteClinic Telehealth Services, LLC
6397. MinuteClinic Video Virtual Care California, P.C.
6398. MinuteClinic Video Virtual Care North, LLC
6399. MinuteClinic Video Virtual Care of Kansas, LLC
6400. MinuteClinic Video Virtual Care of NC, PC
6401. MinuteClinic Video Virtual Care of Nevada, PLLC
6402. MinuteClinic Video Virtual Care of Wisconsin, S.C.
6403. MinuteClinic Video Virtual Care, P.C.
6404. MinuteClinic Video Virtual Care, PLLC
6405. MinuteClinic, L.L.C.
6406. MinuteClinic, LLC
6407. Miramar CVS, Inc.
6408. Mission Hills CVS, Inc.
6409. Mission Tremont CVS, Inc.
6410. Mission Valley CVS, Inc.
6411. Mission Viejo CVS, Inc.
6412. Mississippi CVS Pharmacy, L.L.C.
6413. Missouri Care, Incorporated
6414. Missouri City CVS, L.P.
6415. Missouri CVS Pharmacy, L.L.C.
6416. MLK Tampa CVS, L.L.C.
6417. Mobile AL CVS, Inc.
6418. Mogadore CVS, Inc.
6419. Mohawk Avenue CVS Store, Inc.
6420. Mohegan Lake CVS, L.L.C.
6421. Mokena CVS, L.L.C.
6422. Monroe CVS, Inc.
6423. Monroe NJ CVS, L.L.C.
6424. Monroe NY CVS, L.L.C.
6425. Monroe Prospect CVS, Inc.
6426. Montana CVS Pharmacy, L.L.C.
6427. Montclair CVS, Inc.
6428. Montebello CVS, Inc.
6429. Montevallo AL CVS, Inc.
6430. Montgomery AL CVS, Inc.
6431. Montgomery Sq. CVS, Inc.
6432. Montrose Chicago CVS, L.L.C.
6433. Montrose Houston CVS, L.P.
6434. Montvale Center CVS, Inc.
6435. Montvale Woburn CVS, Inc.
6436. Moorestown Mall CVS, Inc.
6437. Moorestown NJ Bob's, Inc.
6438. Moorestown West Main CVS, Inc.
6439. Moorpark CVS, Inc.
6440. Morewood Drive CVS, Inc.
6441. Morris Daytona CVS, L.L.C.
6442. Morrisville CVS, Inc.
6443. Morrow CVS, Inc.
6444. Morton Fry CVS, L.P.
6445. Mounds View MN CVS, L.L.C.
6446. Mount Carmel Plaza CVS, Inc.
6447. Mount Dora CVS, L.L.C.
6448. Mountain Avenue CVS, Inc.
6449. Mountain Brook CVS, Inc.
6450. Mountain Grove Investment Group LLC
6451. Mountain Medical Affiliates, Inc.
6452. Mountain Middlesex CVS, Inc.
6453. Movietown Plaza CVS, Inc.
6454. MP Receivables Company
6455. MRC Henderson Devco, Inc.
6456. MRC Manchester Devco, Inc.
6457. MRC Staten Island Devco, Inc.
6458. MRC Westbury Devco, Inc.
6459. MRC Woodlands Devco, Inc.
6460. Mt. Holly CVS, Inc.
6461. Mt. Joy CVS, Inc.

6462. Mt. Morris CVS, Inc.
6463. Mt. Pleasant CVS, Inc.
6464. Mt. Prospect CVS, L.L.C.
6465. Mundelein CVS, L.L.C.
6466. Murray CVS, Inc.
6467. Myrtle Beach CVS, Inc.
6468. N. Bayshore CVS, L.L.C.
6469. N. Sepulveda CVS, L.L.C.
6470. Nahatan Street CVS, Inc.
6471. Nanes Houston CVS, L.P.
6472. Nanuet Retailer, Inc.
6473. Naperville CVS, L.L.C.
6474. Naples CVS, L.L.C.
6475. Naples US 41 CVS, L.L.C.
6476. Nashua CVS, Inc.
6477. Nashua Hollis CVS, Inc.
6478. Nashville CVS, L.L.C.
6479. Natick Mall CVS, Inc.
6480. Natick Retailer, Inc.
6481. Natick Routes 9 and 27 CVS, Inc.
6482. National Motor Club Life & Accident Insurance Company
6483. Naugatuck Bridge St. CVS, Inc.
6484. Naugatuck CVS, Inc.
6485. Navarro Discount Pharmacies No. 1, Inc. (for assets / pharmacies acquired by CVS)
6486. Navarro Discount Pharmacies No. 1, LLC (for assets / pharmacies acquired by CVS)
6487. Navarro Discount Pharmacies No. 10, Inc. (for assets / pharmacies acquired by CVS)
6488. Navarro Discount Pharmacies No. 10, LLC (for assets / pharmacies acquired by CVS)
6489. Navarro Discount Pharmacies No. 11, Inc. (for assets / pharmacies acquired by CVS)
6490. Navarro Discount Pharmacies No. 11, LLC (for assets / pharmacies acquired by CVS)
6491. Navarro Discount Pharmacies No. 12, Inc. (for assets / pharmacies acquired by CVS)
6492. Navarro Discount Pharmacies No. 12, LLC (for assets / pharmacies acquired by CVS)
6493. Navarro Discount Pharmacies No. 13, Inc. (for assets / pharmacies acquired by CVS)
6494. Navarro Discount Pharmacies No. 13, LLC (for assets / pharmacies acquired by CVS)
6495. Navarro Discount Pharmacies No. 14, Inc. (for assets / pharmacies acquired by CVS)
6496. Navarro Discount Pharmacies No. 14, LLC (for assets / pharmacies acquired by CVS)
6497. Navarro Discount Pharmacies No. 15, Inc. (for assets / pharmacies acquired by CVS)
6498. Navarro Discount Pharmacies No. 15, LLC (for assets / pharmacies acquired by CVS)
6499. Navarro Discount Pharmacies No. 16, Inc. (for assets / pharmacies acquired by CVS)
6500. Navarro Discount Pharmacies No. 16, LLC (for assets / pharmacies acquired by CVS)
6501. Navarro Discount Pharmacies No. 17, Inc. (for assets / pharmacies acquired by CVS)
6502. Navarro Discount Pharmacies No. 17, LLC (for assets / pharmacies acquired by CVS)
6503. Navarro Discount Pharmacies No. 18, Inc. (for assets / pharmacies acquired by CVS)
6504. Navarro Discount Pharmacies No. 18, LLC (for assets / pharmacies acquired by CVS)

6505. Navarro Discount Pharmacies No. 19, Inc. (for assets / pharmacies acquired by CVS)
6506. Navarro Discount Pharmacies No. 19, LLC (for assets / pharmacies acquired by CVS)
6507. Navarro Discount Pharmacies No. 2, Inc. (for assets / pharmacies acquired by CVS)
6508. Navarro Discount Pharmacies No. 2, LLC (for assets / pharmacies acquired by CVS)
6509. Navarro Discount Pharmacies No. 20, Inc. (for assets / pharmacies acquired by CVS)
6510. Navarro Discount Pharmacies No. 20, LLC (for assets / pharmacies acquired by CVS)
6511. Navarro Discount Pharmacies No. 21, Inc. (for assets / pharmacies acquired by CVS)
6512. Navarro Discount Pharmacies No. 21, LLC (for assets / pharmacies acquired by CVS)
6513. Navarro Discount Pharmacies No. 22, Inc. (for assets / pharmacies acquired by CVS)
6514. Navarro Discount Pharmacies No. 22, LLC (for assets / pharmacies acquired by CVS)
6515. Navarro Discount Pharmacies No. 23, Inc. (for assets / pharmacies acquired by CVS)
6516. Navarro Discount Pharmacies No. 23, LLC (for assets / pharmacies acquired by CVS)
6517. Navarro Discount Pharmacies No. 24, Inc. (for assets / pharmacies acquired by CVS)
6518. Navarro Discount Pharmacies No. 24, LLC (for assets / pharmacies acquired by CVS)
6519. Navarro Discount Pharmacies No. 25, Inc. (for assets / pharmacies acquired by CVS)
6520. Navarro Discount Pharmacies No. 25, LLC (for assets / pharmacies acquired by CVS)
6521. Navarro Discount Pharmacies No. 26, Inc. (for assets / pharmacies acquired by CVS)
6522. Navarro Discount Pharmacies No. 26, LLC (for assets / pharmacies acquired by CVS)
6523. Navarro Discount Pharmacies No. 27, Inc. (for assets / pharmacies acquired by CVS)
6524. Navarro Discount Pharmacies No. 27, LLC (for assets / pharmacies acquired by CVS)
6525. Navarro Discount Pharmacies No. 28, Inc. (for assets / pharmacies acquired by CVS)
6526. Navarro Discount Pharmacies No. 28, LLC (for assets / pharmacies acquired by CVS)
6527. Navarro Discount Pharmacies No. 29, Inc. (for assets / pharmacies acquired by CVS)
6528. Navarro Discount Pharmacies No. 29, LLC (for assets / pharmacies acquired by CVS)
6529. Navarro Discount Pharmacies No. 3, Inc. (for assets / pharmacies acquired by CVS)
6530. Navarro Discount Pharmacies No. 3, LLC (for assets / pharmacies acquired by CVS)
6531. Navarro Discount Pharmacies No. 30, Inc. (for assets / pharmacies acquired by CVS)
6532. Navarro Discount Pharmacies No. 30, LLC (for assets / pharmacies acquired by CVS)

6533. Navarro Discount Pharmacies No. 31, Inc. (for assets / pharmacies acquired by CVS)
6534. Navarro Discount Pharmacies No. 31, LLC (for assets / pharmacies acquired by CVS)
6535. Navarro Discount Pharmacies No. 32, Inc. (for assets / pharmacies acquired by CVS)
6536. Navarro Discount Pharmacies No. 32, LLC (for assets / pharmacies acquired by CVS)
6537. Navarro Discount Pharmacies No. 33, Inc. (for assets / pharmacies acquired by CVS)
6538. Navarro Discount Pharmacies No. 33, LLC (for assets / pharmacies acquired by CVS)
6539. Navarro Discount Pharmacies No. 34, Inc. (for assets / pharmacies acquired by CVS)
6540. Navarro Discount Pharmacies No. 34, LLC (for assets / pharmacies acquired by CVS)
6541. Navarro Discount Pharmacies No. 35, Inc. (for assets / pharmacies acquired by CVS)
6542. Navarro Discount Pharmacies No. 35, LLC (for assets / pharmacies acquired by CVS)
6543. Navarro Discount Pharmacies No. 36, Inc. (for assets / pharmacies acquired by CVS)
6544. Navarro Discount Pharmacies No. 36, LLC (for assets / pharmacies acquired by CVS)
6545. Navarro Discount Pharmacies No. 37, Inc. (for assets / pharmacies acquired by CVS)
6546. Navarro Discount Pharmacies No. 37, LLC (for assets / pharmacies acquired by CVS)
6547. Navarro Discount Pharmacies No. 38, Inc. (for assets / pharmacies acquired by CVS)
6548. Navarro Discount Pharmacies No. 38, LLC (for assets / pharmacies acquired by CVS)
6549. Navarro Discount Pharmacies No. 4, Inc. (for assets / pharmacies acquired by CVS)
6550. Navarro Discount Pharmacies No. 4, LLC (for assets / pharmacies acquired by CVS)
6551. Navarro Discount Pharmacies No. 5, Inc. (for assets / pharmacies acquired by CVS)
6552. Navarro Discount Pharmacies No. 5, LLC (for assets / pharmacies acquired by CVS)
6553. Navarro Discount Pharmacies No. 6, Inc. (for assets / pharmacies acquired by CVS)
6554. Navarro Discount Pharmacies No. 6, LLC (for assets / pharmacies acquired by CVS)
6555. Navarro Discount Pharmacies No. 7, Inc. (for assets / pharmacies acquired by CVS)
6556. Navarro Discount Pharmacies No. 7, LLC (for assets / pharmacies acquired by CVS)
6557. Navarro Discount Pharmacies No. 8, Inc. (for assets / pharmacies acquired by CVS)
6558. Navarro Discount Pharmacies No. 8, LLC (for assets / pharmacies acquired by CVS)
6559. Navarro Discount Pharmacies No. 9, Inc. (for assets / pharmacies acquired by CVS)
6560. Navarro Discount Pharmacies No. 9, LLC (for assets / pharmacies acquired by CVS)

6561. Navarro Discount Pharmacies, Inc. (for assets / pharmacies acquired by CVS)
6562. Navarro Discount Pharmacies, LLC (for assets / pharmacies acquired by CVS)
6563. NCS Healthcare of Illinois, LLC
6564. NCS Healthcare of Indiana LLC
6565. NCS Healthcare of Indiana, Inc.
6566. NCS Healthcare of Iowa, LLC
6567. NCS Healthcare of Kansas, LLC
6568. NCS Healthcare of Kentucky, Inc.
6569. NCS Healthcare of Kentucky, LLC
6570. NCS Healthcare of Montana, Inc.
6571. NCS Healthcare of Montana, LLC
6572. NCS Healthcare of New Hampshire, Inc.
6573. NCS Healthcare of New Mexico, Inc.
6574. NCS Healthcare of New Mexico, LLC
6575. NCS Healthcare of Ohio, LLC
6576. NCS Healthcare of South Carolina, Inc.
6577. NCS Healthcare of South Carolina, LLC
6578. NCS Healthcare of Tennessee, Inc.
6579. NCS Healthcare of Tennessee, LLC
6580. NCS Healthcare of Washington, Inc.
6581. NCS Healthcare of Wisconsin, LLC
6582. NCS Healthcare, LLC
6583. NCS Services, Inc.
6584. NCSC Acquisition Sub, LLC
6585. NCSH Acquisition Sub, LLC
6586. Nebraska CVS Pharmacy, L.L.C.
6587. NEC Long Beach CVS, L.L.C.
6588. NEC Main CVS, Inc.
6589. NEC Montgomery CVS, L.L.C.
6590. NEC Washington CVS, L.L.C.
6591. Neck Burlington CVS, Inc.
6592. Needham Center CVS, Inc.
6593. Needham CVS, Inc.
6594. Needham St.-Newton CVS, Inc.
6595. NeighborCare Holdings, Inc.
6596. NeighborCare of Indiana, LLC
6597. NeighborCare of New Hampshire, L.L.C.
6598. NeighborCare of Virginia, LLC
6599. NeighborCare Pharmacies, LLC
6600. NeighborCare Pharmacy of Virginia, LLC
6601. NeighborCare Pharmacy Services, Inc.
6602. NeighborCare Pharmacy Services, LLC
6603. NeighborCare Repackaging, Inc.
6604. NeighborCare Services Corporation
6605. NeighborCare, Inc.
6606. NeighborCare-TCI, LLC
6607. Nelson Lake Charles CVS, Inc.
6608. Neshaminy PA CVS, Inc.
6609. Nevada CVS Pharmacy, L.L.C.
6610. Nevada Street CVS, Inc.
6611. New Albany CVS, Inc.
6612. New Britain CVS, Inc.
6613. New Britain Township CVS, Inc.
6614. New Brunswick CVS, Inc.
6615. New Canaan CVS, Inc.
6616. New City CVS, L.L.C.
6617. New Garden CVS, Inc.
6618. New Haven Crown CVS, Inc.
6619. New Haven Melbourne CVS, L.L.C.
6620. New Hope MN CVS, L.L.C.
6621. New Hope Street CVS, Inc.
6622. New Jersey Avenue CVS, L.L.C.
6623. New Jersey CVS Pharmacy, L.L.C.
6624. New Lenox CVS, L.L.C.
6625. New London Ocean Avenue CVS, Inc.
6626. New London Retailer, Inc.
6627. New London Turnpike CVS, Inc.
6628. New Orleans LA CVS, Inc.
6629. New Port Richey CVS, L.L.C.
6630. New Providence CVS, Inc.

6631. New Windsor CVS, Inc.
6632. New York CVS Pharmacy, L.L.C.
6633. New York First Avenue CVS, Inc.
6634. New York Life and Health Insurance Company
6635. New York Life/Sanus Health Plan, Inc.
6636. NEW YORNYHT ACQUISITION, INC.
6637. Newark Delaware CVS, Inc.
6638. Newark East Main CVS, Inc.
6639. Newark Ohio CVS, Inc.
6640. Newark ProCare Pharmacy, Inc.
6641. Newbury Street CVS, Inc.
6642. Newburyport CVS, Inc.
6643. Newington Avenue CVS, Inc.
6644. Newington Cedar CVS, Inc.
6645. Newington CVS, Inc.
6646. Newman Ave. CVS, Inc.
6647. Newnan CVS, Inc.
6648. Newnan Fayetteville CVS, Inc.
6649. Newport CVS, Inc.
6650. Newton Center St. CVS, Inc.
6651. Newton Watertown CVS, Inc.
6652. Newtonville CVS, Inc.
6653. Newtown CVS, Inc.
6654. NH Acquisition Sub, LLC
6655. Niagara Re, Inc.
6656. Nicollet Richfield CVS, L.L.C.
6657. Nihan & Martin LLC
6658. Niles Clinton Stores, Inc.
6659. Niles CVS, Inc.
6660. Niles CVS, L.L.C.
6661. Niles IL CVS, L.L.C.
6662. Niskayuna CVS Store, Inc.
6663. NIV Acquisition, LLC
6664. No. Dartmouth State Rd. CVS, Inc.
6665. Nockamixon CVS, Inc.
6666. Norfolk CVS, Inc.
6667. Norristown CVS, Inc.
6668. North Adams CVS, Inc.
6669. North American Health Plan, Inc.
6670. North Andover CVS, Inc.
6671. North Attleboro CVS, Inc.
6672. North Aurora CVS, L.L.C.
6673. North Boston Pharmacy, Inc.
6674. North Brunswick CVS, L.L.C.
6675. North Carolina Acquisition Corp.
6676. North Carolina CVS Pharmacy, L.L.C.
6677. North Charleston SC CVS, Inc.
6678. North Fort Myers CVS, L.L.C.
6679. North Grace Lombard CVS, L.L.C.
6680. North Haven CVS, Inc.
6681. North Kent CVS, Inc.
6682. North Las Vegas CVS, L.L.C.
6683. North Lindenhurst CVS, Inc.
6684. North Miami ProCare Pharmacy, Inc.
6685. North Naples CVS, L.L.C.
6686. North New Rochelle CVS, L.L.C.
6687. North Olmstead OH CVS, Inc.
6688. North Reading CVS, Inc.
6689. North Shore Pharmacy Services LLC
6690. North Syracuse CVS Store, Inc.
6691. North Towne Sq. CVS, Inc.
6692. Northampton (Mass.) CVS, Inc.
6693. Northampton Main Street CVS, Inc.
6694. Northborough CVS, Inc.
6695. Northbrook IL CVS, L.L.C.
6696. Northeast Philadelphia CVS, Inc.
6697. Northern Jackson Heights CVS, L.L.C.
6698. Northlake Palm Beach CVS, L.L.C.
6699. Northland CVS, Inc.
6700. Northridge Nordhoff CVS, Inc.
6701. Northville Sheldon CVS, L.L.C.
6702. Northville Township CVS, Inc.
6703. Northwest Highway CVS, L.L.C.
6704. Northwest K Street CVS, Inc.
6705. Northwest M Street CVS, L.L.C.
6706. Norton CVS, Inc.
6707. Norton Mansfield St. CVS, Inc.
6708. Norton Primary (Americas) Limited
6709. Norwalk Broad Street CVS, Inc.

6710. Norwalk Square CVS, Inc.
6711. Norwich Main Street CVS, Inc.
6712. Norwood Avenue CVS, L.L.C.
6713. Norwood CVS, Inc.
6714. Nostrand Brooklyn CVS, L.L.C.
6715. Nostrand CVS, L.L.C.
6716. Notre Dame CVS, Inc.
6717. Nottingham PA CVS, Inc.
6718. Novo Innovations, LLC
6719. NovoLogix, Inc.
6720. NovoLogix, LLC
6721. NS Acquisition Sub, LLC
6722. NSPS Acquisition Sub, LLC
6723. Nutmeg CVS, L.L.C.
6724. Nutmeg Life Insurance Company
6725. NWC 63rd Chicago CVS, L.L.C.
6726. NWC 80th Minneapolis CVS, L.L.C.
6727. NWC CVS, Inc
6728. NWC Frank Lloyd Wright CVS, L.L.C.
6729. NWC Northdale CVS, L.L.C.
6730. NWC Rte. 59 CVS, L.L.C.
6731. NY Lexington CVS, L.L.C.
6732. Nyack CVS, L.L.C.
6733. NYLCare Dental Plans of the Southwest, Inc.
6734. NYLCare Health Plans Northwest, Inc.
6735. NYLCare Health Plans of Connecticut, Inc.
6736. NYLCare Health Plans of Maine, Inc.
6737. NYLCare Health Plans of New Jersey, Inc.
6738. NYLCare Health Plans of New York, Inc.
6739. NYLCare Health Plans of Pennsylvania, Inc.
6740. NYLCare Health Plans of the Mid-Atlantic, Inc.
6741. NYLCare Health Plans of the Midwest, Inc.
6742. NYLCare Health Plans, Inc.
6743. NYLCare Health Plans, LLC
6744. NYLCare of New England, Inc.
6745. NYLCare of Texas, Inc.
6746. NYLCare Plus, Inc.
6747. NYLCare Preferred Services, Inc.
6748. Oak Lane CVS, Inc.
6749. Oak Park CVS, L.L.C.
6750. Oak Ridge CVS, L.L.C.
6751. Oak Ridge NC CVS, Inc.
6752. Oak Ridge Orlando CVS, L.L.C.
6753. Oaklawn Ave., Cranston CVS, Inc.
6754. Oaklyn CVS, Inc.
6755. Oakton Niles CVS, L.L.C.
6756. Oakwood CVS, Inc.
6757. Ocala CVS, L.L.C.
6758. Ocean Acquisition Sub, L.L.C.
6759. Ocean City MD CVS, L.L.C.
6760. Ocean County CVS, Inc.
6761. Ocean View Plaza CVS, Inc.
6762. Ocoee FL CVS, L.L.C.
6763. OCR Services Corporation
6764. OCR Services, LLC
6765. OCR-RA Acquisition, LLC
6766. Odd Lot Parent Corporation
6767. Odd Lot Trading, Inc.
6768. Oger Park CVS, L.L.C.
6769. Ohio CVS Pharmacy, L.L.C.
6770. Ohio CVS Stores, L.L.C.
6771. Ohio Primary Care Associates, P.C.
6772. Oklahoma CVS Pharmacy, L.L.C.
6773. Olathe 119th CVS, Inc.
6774. Olathe Ridgeview CVS, Inc.
6775. Old Buncombe Road CVS, Inc.
6776. Old Country CVS, Inc.
6777. Old Cutler Miami CVS, L.L.C.
6778. Old Greenwich CVS, Inc.
6779. Old Hickory CVS, Inc.
6780. Old Maple CVS, Inc.
6781. Old National CVS, Inc.
6782. Old Richmond Sugar Land CVS, L.P.
6783. Old Saybrook CVS, Inc.

6784. Old Tappan CVS, Inc.
6785. Old Winter Orlando CVS, L.L.C.
6786. Olean Center CVS Store, Inc.
6787. Olean Clinton Stores, Inc.
6788. Olive Glendale CVS, L.L.C.
6789. Olympia Fields CVS, L.L.C.
6790. Olympia Way CVS, L.L.C.
6791. Omaha Financial Life Insurance Company
6792. Omnicare Air Transport Services, Inc.
6793. Omnicare Canadian Holdings, Inc.
6794. Omnicare Distribution Center LLC
6795. Omnicare ESC LLC
6796. Omnicare Foundation
6797. Omnicare Headquarters LLC
6798. OmniCare Health Plan, Inc.
6799. Omnicare Holding Company
6800. Omnicare Indiana Partnership Holding Company LLC
6801. Omnicare Management Company
6802. Omnicare of Nevada, LLC
6803. Omnicare of New York, LLC
6804. Omnicare Pharmacies of Pennsylvania East LLC
6805. Omnicare Pharmacies of Pennsylvania West LLC
6806. Omnicare Pharmacies of The Great Plains Holding Company
6807. Omnicare Pharmacies of the Great Plains Holding Company, LLC
6808. Omnicare Pharmacy and Supply Services LLC
6809. Omnicare Pharmacy of Florida, LLC
6810. Omnicare Pharmacy of Florida, LP
6811. Omnicare Pharmacy of Maine LLC
6812. Omnicare Pharmacy of Nebraska, LLC
6813. Omnicare Pharmacy of North Carolina, LLC
6814. Omnicare Pharmacy of Pueblo, LLC
6815. Omnicare Pharmacy of Tennessee, LLC
6816. Omnicare Pharmacy of Texas 1, LP
6817. Omnicare Pharmacy of Texas 2, LP
6818. Omnicare Pharmacy of the Midwest, LLC
6819. Omnicare Property Management, LLC
6820. Omnicare Purchasing Company General Partner, Inc.
6821. Omnicare Purchasing Company Limited Partner, Inc.
6822. Omnicare Purchasing Company LP
6823. Omnicare Resources, LLC
6824. Omnicare SCG, INC.
6825. Omnicare Senior Health Outcomes, LLC
6826. Omnicare, Inc.
6827. Omnicare, LLC
6828. One Liberty Plaza Holdings, Inc.
6829. Oneonta Clinton Stores, Inc.
6830. Onondaga County CVS, Inc.
6831. Ontario CVS, Inc.
6832. OPGP Acquisition Sub, LLC
6833. OPM Acquisition Sub, LLC
6834. OPSS Acquisition Sub, LLC
6835. Orange Blossom CVS, Inc.
6836. Orange Central CVS, Inc.
6837. Orange City CVS, L.L.C.
6838. Orange Coast CVS, Inc.
6839. Orange CVS, Inc.
6840. Orange Winter Park CVS, L.L.C.
6841. Orange-Derby CVS, Inc.
6842. Orangethorpe CVS, L.L.C.
6843. Oregon Avenue CVS, Inc.
6844. Oregon CVS Pharmacy, L.L.C.
6845. Orland Hills CVS, L.L.C.
6846. Orland Park CVS, L.L.C.
6847. Orleans CVS, Inc.
6848. Orleans West Rd. CVS, Inc.
6849. Ormond Beach CVS, L.L.C.
6850. Owings Mills CVS, Inc.
6851. Oxford Casselberry CVS, L.L.C.

6852. Oxford CVS, Inc.
6853. Oxford Valley CVS, Inc.
6854. Oxford Valley, PA Bob's, Inc.
6855. Oyster Bay Kay-Bee Toy, Inc.
6856. P Street CVS, Inc.
6857. PA CVS, Inc.
6858. Pacific Coast Lomita CVS, L.L.C.
6859. Pacific Long Beach CVS, L.P.
6860. PacifiCare of Utah, Inc.
6861. Palm Ave CVS, L.L.C.
6862. Palm Beach CVS, Inc.
6863. Palm Beach Gardens CVS, L.L.C.
6864. Palm Beach Military CVS, L.L.C.
6865. Palm Harbor CVS, Inc.
6866. Palmdale Rancho CVS, L.L.C.
6867. Palmer Thorndike CVS, Inc.
6868. Palos Heights CVS, L.L.C.
6869. Pamplona Saúde e Beleza LTDA
6870. Panorama City CVS, L.P.
6871. Panorama CVS Store, Inc.
6872. Panorama CVS, Inc.
6873. Paoli, PA., CVS, Inc.
6874. Paramus Park CVS, Inc.
6875. Parekh MinuteClinic of Nevada, P.C.
6876. Paris CVS, Inc.
6877. Park Avenue South CVS, Inc.
6878. Park Boulevard CVS, Inc.
6879. Park Charlotte CVS, Inc.
6880. Park City CVS, Inc.
6881. Park City Retailer, Inc.
6882. Park Los Rios Plano CVS, L.L.C.
6883. Park Place CVS, Inc.
6884. Park Plaza CVS, Inc.
6885. Park Street CVS, Inc.
6886. Parker Plano CVS, L.P.
6887. Parker Street CVS, Inc.
6888. Parkersburg CVS, Inc.
6889. Parkhill CVS, Inc.
6890. Parkwin Bald CVS, L.L.C.
6891. Parkwood Circle CVS, Inc.
6892. Parmer Dessau CVS, L.L.C.
6893. Parsonage CVS, Inc.
6894. Part D Holding Company, L.L.C.
6895. Part D Management Services, LLC
6896. PARTNERS Health Plan of California
6897. PARTNERS Health Plan of Florida, Inc.
6898. PARTNERS Health Plan of Louisiana, Inc.
6899. PARTNERS Health Plan of Northern Ohio, Inc.
6900. PARTNERS Health Plan of Southern California
6901. PARTNERS Health Plan of Southern New England, Inc.
6902. PARTNERS Joint Acquisition Company, Inc.
6903. Pasadena CVS, Inc.
6904. Pasadena CVS, L.P.
6905. Pasadena Foothill CVS, L.L.C.
6906. Passyunk Ave. (Phila.) CVS, Inc.
6907. Pataskala CVS, L.L.C.
6908. Paterson CVS, Inc.
6909. Patriot Square CVS, Inc.
6910. Paulsboro CVS, Inc.
6911. Pavilion Boulevard CVS, Inc.
6912. Pawtucket CVS, Inc.
6913. Pawtucket Plaza CVS, Inc.
6914. Pawtucket Retailer, Inc.
6915. Paxton Square CVS, Inc.
6916. PayFlex Holdings, Inc.
6917. PayFlex Systems USA, Inc.
6918. PCS Mail Services of Birmingham, Inc.
6919. PE Holdings, LLC
6920. Peabody Lowell CVS, Inc.
6921. Peabody Lynnfield CVS, Inc.
6922. Peachtree CVS, Inc.
6923. Pearland CVS, L.P.
6924. Pecos Gilbert CVS, L.L.C.
6925. Pelham Manor CVS, Inc.
6926. Pembroke Center St. CVS, Inc.
6927. Pembroke Pines CVS, Inc.
6928. Penn - Daw CVS, Inc.

6929. Penn - Daw Peoples, Inc.
6930. Penn Group Health Plan, Inc.
6931. Penn-Can CVS Store, Inc.
6932. Pennsauken CVS, Inc.
6933. Pennsburg CVS, Inc.
6934. Pennsylvania Ave. CVS, Inc.
6935. Pennsylvania Ave. Peoples, Inc.
6936. Pennsylvania Avenue CVS, Inc.
6937. Pennsylvania Avenue ProCare, Inc.
6938. Pennsylvania Binghamton CVS, L.L.C.
6939. Pennsylvania CVS Pharmacy, L.L.C.
6940. Pennsylvania Life Insurance Company
6941. Pennsylvania LIfe, Health & Accident Insurance Company
6942. Pennsylvania-HealthCare USA, Inc.
6943. Peoples Drug Stores
6944. Peoples Drug Stores, Inc.
6945. Peoples Drug Stores, Incorporated
6946. Peoples of East Moline, Inc.
6947. Peoples Prescription Center, Inc.,
6948. Peoples Service Drug
6949. Peoples Service Drug Stores
6950. Peoples Service Drug Stores, Inc.
6951. Peoria AZ CVS, L.L.C.
6952. Peppertree Plaza CVS, Inc.
6953. Pequannock CVS, Inc.
6954. Performax, Inc.
6955. Perry Hall CVS, L.L.C.
6956. Perry Highway CVS, Inc.
6957. Pershing Drive CVS, Inc.
6958. PersonalCare Insurance of Illinois, Inc.
6959. Pfafftown CVS, Inc.
6960. Pharm Plus Acquisition, Inc.
6961. PharmaCare Captive RE, Ltd.
6962. PharmaCare Direct, L.L.C.
6963. PharmaCare Government Services, Inc.
6964. PharmaCare Healthcare Distributors, L.L.C.
6965. PharmaCare Holding Corporation
6966. Pharmacare Management Services, L.L.C.
6967. PharmaCare Pharmacy LA, L.L.C.
6968. PharmaCare Pharmacy, Inc.
6969. PharmaCare Pharmacy, L.L.C.
6970. PharmaCare Puerto Rico Specialty Pharmacy Holding, L.L.C.
6971. PharmaCare Puerto Rico Specialty Pharmacy, L.L.C.
6972. PharmaCare Specialty Healthcare Distributors, L.L.C.
6973. PharmaCare Support Services, L.L.C.
6974. PharmaCon Corp.
6975. Pharmacy Advisory Company
6976. Pharmacy Associates of Glens Falls, Inc.
6977. Pharmacy Associates of Glens Falls, LLC
6978. Pharmacy Consultants, LLC
6979. Pharmacy Holding #1, LLC
6980. Pharmacy Holding #2, LLC
6981. Pharmasource Healthcare, Inc.
6982. Pharm-Corp of Maine LLC
6983. Pharmed Holdings, Inc.
6984. Pharmed Holdings, LLC
6985. Pharmore Drugs, LLC
6986. Pharmore, Inc.
6987. Pharmore, LLC
6988. Pheasant Nashua CVS, Inc.
6989. PHG Aces Acquisition, LLC
6990. PHG Acquisition Corp.
6991. PHG Mystery Acquisition, LLC
6992. Phila Sun CVS, Inc.
6993. Philadelphia Broad CVS, Inc.
6994. Philadelphia Foxchase CVS, Inc.
6995. Philadelphia Frankford CVS, Inc.
6996. Philadelphia Gallery CVS, Inc.
6997. Philadelphia Harbison CVS, Inc.
6998. Philadelphia PA CVS, Inc.
6999. Philadelphia ProCare, Inc.
7000. Philadelphia Roosevelt CVS, Inc.

7001. Philadelphia South Street CVS, Inc.
7002. Philadelphia, PA Bob's, Inc.
7003. Phillips CVS, Inc.
7004. Phillipsburg CVS, Inc.
7005. Philly Broad Street CVS, Inc.
7006. Phoenix Data Center Hosting Services LLC
7007. Phoenix Data Solutions LLC
7008. Phoenix Glendale CVS, L.L.C.
7009. Phoenixville PA CVS, Inc.
7010. PHPSNE Parent Corporation
7011. Physician Choice Health Plan
7012. Physicians Health Plan of Delaware, LTD.
7013. Physicians Health Plan of Florida, Inc.
7014. Physicians Hospital Management Corporation
7015. Pico Rivera CVS, Inc.
7016. Pigeon Forge TN CVS, Inc.
7017. Pinal County AZ CVS, L.L.C.
7018. Pine Ocala CVS, L.L.C.
7019. Pinecrest CVS, Inc.
7020. Pinellas Park CVS, Inc.
7021. Pinnacle Peak Peoria CVS, L.L.C.
7022. Pio Nono Avenue CVS, Inc.
7023. Pioneer Parkway CVS, L.P.
7024. Piper Glen CVS, Inc.
7025. Pittsburgh Fifth Avenue CVS, Inc.
7026. Pittsfield CVS, Inc.
7027. Pittsfield Retailer, Inc.
7028. Pittston CVS, Inc.
7029. Placentia CVS, Inc.
7030. Plain CVS, Inc.
7031. Plainfield CVS, Inc.
7032. Plainfield Distribution Center, Inc.
7033. Plainfield IL CVS, L.L.C.
7034. Plainfield-Seventh St. CVS, Inc.
7035. Plainview TX CVS, L.L.C.
7036. Plainville East CVS, Inc.
7037. Plano CVS, L.P.
7038. Plantation CVS, L.L.C.
7039. Plantation Street PharmaCare Pharmacy, Inc.
7040. Plaza Boulevard CVS, Inc.
7041. Plaza Retailer, Inc.
7042. Pleasant Fall River CVS, Inc.
7043. Pleasant Ridge CVS, L.P.
7044. Pleasant Street CVS, Inc.
7045. Pleasantville CVS, L.L.C.
7046. Plumstead CVS, Inc.
7047. Plymouth CVS, Inc.
7048. Plymouth Meeting CVS, Inc.
7049. Plymouth MN CVS, L.L.C.
7050. Plymouth Route 44 CVS, Inc.
7051. PMRP Acquisition Company, LLC
7052. Poinciana FL CVS, L.L.C.
7053. Port Chester CVS, L.L.C.
7054. Port Huron Clinton Discount Stores, Inc.
7055. Port Huron CVS, Inc.
7056. Port Orange Realty Services, L.L.C.
7057. Port Richmond CVS, Inc.
7058. Port Washington CVS, Inc.
7059. Portage CVS, Inc.
7060. Porter Square CVS, Inc.
7061. Porters Pass CVS, Inc.
7062. Portsmouth CVS, Inc.
7063. Post Office Square CVS, Inc.
7064. Pottstown High Street CVS, Inc.
7065. Poughkeepsie CVS, L.L.C.
7066. Powell OH CVS, Inc.
7067. PP Acquisition Company, LLC
7068. PPOM, L.L.C.
7069. Prairieville LA CVS, Inc.
7070. Precision Benefit Services, Inc.
7071. President-Quincy CVS, Inc.
7072. Preston Beltline CVS, L.P.
7073. Preston Center CVS, L.P.
7074. Preston Plano CVS, L.P.
7075. Primary Healthcare Asia Limited
7076. Primary Holdings, Inc.
7077. Primary Investments, Inc
7078. Prime Net, Inc.

7079. Prince George's Health Services Foundation Plan, Inc.
7080. Princeton NJ CVS, L.L.C.
7081. Principal Health Care of Delaware, Inc.
7082. Principal Health Care of Georgia, Inc.
7083. Principal Health Care of Iowa, Inc.
7084. Principal Health Care of Kansas City, Inc
7085. Principal Health Care of Louisiana, Inc.
7086. Principal Health Care of Nebraska, Inc.
7087. Principal Health Care of Pennsylvania, Inc.
7088. PRN Pharmaceutical Services, LP
7089. ProCare 3159 General, Inc.
7090. ProCare 4268 Yankee, L.L.C.
7091. ProCare 8th Manhattan, L.L.C.
7092. ProCare 9th Avenue, L.L.C.
7093. ProCare Ave. Pharmacy, L.L.C.
7094. ProCare Boston Pharmacy, Inc.
7095. ProCare DC Pharmacy, Inc.
7096. ProCare Manhattan Pharmacy, L.L.C.
7097. ProCare Meridian Miami, L.L.C.
7098. ProCare N.Y. Pharmacy, Inc.
7099. ProCare Pharmacy 18th Street, Inc.
7100. ProCare Pharmacy A, L.L.C.
7101. ProCare Pharmacy Avenue 1st-483, L.L.C.
7102. ProCare Pharmacy Direct, L.L.C.
7103. ProCare Pharmacy Dryden, L.P.
7104. ProCare Pharmacy East Colonial, Inc.
7105. ProCare Pharmacy Fairfax, Inc.
7106. ProCare Pharmacy Garden Grove, Inc.
7107. ProCare Pharmacy Glendale Boulevard, Inc.
7108. ProCare Pharmacy Limited of Illinois, Inc.
7109. ProCare Pharmacy Miami 54, Inc.
7110. ProCare Pharmacy Monument Street, L.L.C.
7111. ProCare Pharmacy North Orange, Inc.
7112. ProCare Pharmacy of Berkeley, Inc.
7113. ProCare Pharmacy of Broad Street, Inc.
7114. ProCare Pharmacy of Brookline Avenue, Inc.
7115. ProCare Pharmacy of Casselberry, Inc.
7116. ProCare Pharmacy of Chicago, L.L.C.
7117. ProCare Pharmacy of East Morehead, Inc.
7118. ProCare Pharmacy of Glendale, Inc.
7119. ProCare Pharmacy of Kansas City, Inc.
7120. ProCare Pharmacy of Portland, L.L.C.
7121. ProCare Pharmacy of San Antonio, Inc.
7122. ProCare Pharmacy of San Diego, Inc.
7123. ProCare Pharmacy of San Francisco, Inc.
7124. ProCare Pharmacy of Tampa, Inc.
7125. ProCare Pharmacy of West Hollywood, Inc.
7126. ProCare Pharmacy Orange Orlando, Inc.
7127. ProCare Pharmacy Palo Alto, Inc.
7128. ProCare Pharmacy Phoenix, L.L.C.
7129. ProCare Pharmacy Rancho Lane, L.L.C.
7130. ProCare Pharmacy Santa Monica, Inc.
7131. ProCare Pharmacy Sherman Oaks, Inc.
7132. ProCare Pharmacy South Orange, Inc.

7133. ProCare Pharmacy Spruce Street, Inc.
7134. ProCare Pharmacy West Columbia, Inc.
7135. ProCare Pharmacy West Copeland, Inc.
7136. ProCare Pharmacy, L.L.C.
7137. Proctorville CVS, Inc.
7138. Prodigy Health Group Holdings, Inc.
7139. Prodigy Health Group, Inc.
7140. Professional Pharmacy Services, Inc.
7141. Professional Risk Management, Inc.
7142. Prospect CVS, Inc.
7143. Prospect Park CVS, Inc.
7144. Providence Charlotte CVS, Inc.
7145. Providence Place CVS, Inc.
7146. Providence Road CVS, Inc.
7147. Providence Street CVS, Inc.
7148. Providence Thayer Street CVS, Inc.
7149. Providence-Wayland CVS, Inc.
7150. Provider Networks of America, Inc.
7151. Prudential Center for Health Care Research Foundation, Inc.
7152. Prudential Dental Maintenance Organization, Inc.
7153. Prudential Health Care Plan of California, Inc.
7154. Prudential Health Care Plan of Connecticut, Inc.
7155. Prudential Health Care Plan of New York, Inc.
7156. Prudential Health Care Plan, Inc.
7157. Prudential Health Plan of Georgia, Inc.
7158. PSI Arkansas Acquisition, LLC
7159. PT Aetna Management Consulting
7160. PT Asuransi Aetna Asia
7161. PT. Aetna Global Benefits Indonesia
7162. PT. Goodhealth Indonesia
7163. Puente Hills CVS, Inc.
7164. Puerto Rico CVS Pharmacy, L.L.C.
7165. Punta Gorda CVS, L.L.C.
7166. Putnam Pike CVS, Inc.
7167. Quaker Bridge CVS, Inc.
7168. Quakertown CVS, Inc.
7169. Quality Choice Health Plan
7170. Queen Anne Plaza CVS, Inc.
7171. Queen Anne Road CVS, L.L.C.
7172. Queen City AZ CVS, L.L.C.
7173. Queen Creek CVS, L.L.C.
7174. Queens Forest Hills CVS, L.L.C.
7175. Queens Plaza CVS, Inc.
7176. Quention Road CVS, Inc.
7177. Quincy Adams CVS, Inc.
7178. Quincy CVS, Inc.
7179. Quincy Hancock CVS, Inc.
7180. Quincy Parcel Holding Corp.
7181. Quincy Shore Drive CVS, Inc.
7182. R Parks CVS, Inc.
7183. Race Street CVS, Inc.
7184. Race Track Tampa CVS, L.L.C.
7185. Raceway CVS, Inc.
7186. Raleigh CVS, Inc.
7187. Raleigh Millbrook CVS, Inc.
7188. Ralphs Circle CVS, Inc.
7189. Ralph's Corner CVS, Inc.
7190. Ramona Blvd CVS, L.L.C.
7191. Rancho Niguel CVS, Inc.
7192. Randallstown CVS, Inc.
7193. Randolph CVS, Inc.
7194. Randolph Hills CVS, Inc.
7195. Ravenna CVS, Inc.
7196. Ray McClintock CVS, L.L.C.
7197. Rayford Spring CVS, L.P.
7198. Raynham Broadway CVS, Inc.
7199. Raynham CVS, Inc.
7200. Raynham Plaza CVS, Inc.
7201. Rea & Derick, Inc.
7202. Reading CVS, Inc.
7203. Reading, Penna., CVS, Inc.
7204. Recker Mesa CVS, L.L.C.
7205. Red Oak Houston CVS, L.P.
7206. Red Oak Lane CVS, Inc.

7207. Red Oak Sourcing, LLC
7208. Redondo Beach CVS, Inc.
7209. Reed Street CVS, Inc.
7210. Reedy Creek CVS, Inc.
7211. Regency Park Port Richey CVS, L.L.C.
7212. Rehoboth Beach CVS, Inc.
7213. Reidville Drive CVS, Inc.
7214. Renaisance CVS, Inc.
7215. Reseda Northridge CVS, L.P.
7216. Resources for Living, LLC
7217. Reston Plaza America CVS, Inc.
7218. Retail Acquisitions Today, L.L.C.
7219. Retrac, Inc.
7220. Revco D.S., Inc.
7221. Revco Discount Drug Centers, Inc. (MI)
7222. Revco Discount Drug Centers, Inc. (OH)
7223. Revco Drug Stores, Inc.
7224. Revco Golf Charities Foundation
7225. Revco Home Health Care Centers, Inc.
7226. Revco Mail Service Pharmacy, Inc.
7227. Revir CVS, L.L.C.
7228. Reynoldsburg CVS, Inc.
7229. Rhode Island CVS Pharmacy, L.L.C.
7230. Rhode Island Home Therapeutics, Inc.
7231. Rice Mine Tuscaloosa CVS, Inc.
7232. Richards Investment Company
7233. Richardson CVS, L.P.
7234. Richboro Market CVS, Inc.
7235. Richland Hills CVS, L.P.
7236. Richmond CVS, Inc.
7237. Richmond Heights Acquisition Corp.
7238. Richmond Highway 6 CVS, L.P.
7239. Richmond Highway CVS, Inc.
7240. Richmond Houston CVS, L.P.
7241. Richmond Kirby CVS, L.P.
7242. Richmond Montrose CVS, L.P.
7243. Richmond Peoples, Inc.
7244. Richmond RI CVS, Inc.
7245. Richmond Sage CVS, L.P.
7246. Richmond Woodman CVS, Inc.
7247. Richton Park IL CVS, L.L.C.
7248. Ridgefield CT CVS, Inc.
7249. Ridgefield Grove CVS, Inc.
7250. Ridgeley CVS, Inc.
7251. Ridley Acres CVS, Inc.
7252. Ridley CVS, Inc.
7253. Ringgold GA CVS, Inc.
7254. Ringwood NJ CVS, L.L.C.
7255. Rising Sun CVS, Inc.
7256. Risinger Ft. Worth CVS, L.P.
7257. River Edge CVS, Inc.
7258. River Forest CVS, L.L.C.
7259. River Road CVS, Inc.
7260. River View Marketplace CVS, Inc.
7261. Riverdale IL CVS, L.L.C.
7262. Riverside Arlington CVS, INc.
7263. Riverside Danville CVS, Inc.
7264. Riverton NJ CVS, L.L.C.
7265. Riverview FL CVS, L.L.C.
7266. Riverwatch CVS, Inc.
7267. Robbinsdale MN CVS, L.L.C.
7268. Robbinsville CVS, Inc.
7269. Robert St. Paul CVS, L.L.C.
7270. Robious CVS, Inc.
7271. Rochelle Park CVS, L.L.C.
7272. Rochester Main St. CVS Store, Inc.
7273. Rochester N.H. CVS, Inc.
7274. Rockaway (N.J.) CVS, Inc.
7275. Rockingham CVS, L.L.C.
7276. Rockingham Park CVS, Inc.
7277. Rockland CVS, Inc.
7278. Rockledge FL CVS, L.L.C.
7279. Rockville CVS, Inc.
7280. Rockville MD CVS, L.L.C.
7281. Rockville Pike CVS, Inc.
7282. Rockville Pike Peoples, Inc.
7283. Rocky Hill Cromwell CVS, Inc.
7284. Rocky Hill CVS, Inc.
7285. Roeschen's Healthcare LLC

7286. Rolling Manassas CVS, Inc.
7287. Rolling Meadows CVS, L.L.C.
7288. Roosevelt CVS, L.L.C.
7289. Roosevelt Field CVS, Inc.
7290. Roosevelt Plaza CVS, Inc.
7291. Roper Mountain Road CVS, Inc.
7292. Rosa Narg CVS, Inc.
7293. Rosecrans Avenue CVS, Inc.
7294. Rosecrans Hawthorne CVS, L.P.
7295. Rosedale NY CVS, L.L.C.
7296. Roselle IL CVS, L.L.C.
7297. Rosemont PA CVS, Inc.
7298. Rosenberg CVS, L.P.
7299. Roslindale CVS, Inc.
7300. Roslindale MA CVS, Inc.
7301. Roslyn CVS, L.L.C.
7302. Ross Haskell CVS, L.P.
7303. Ross Park CVS, Inc.
7304. Roswell CVS, Inc.
7305. Roswell Rivermont Station CVS, Inc.
7306. Round Lake CVS, L.L.C.
7307. Round Rock 79 CVS, L.L.C.
7308. Route 202 Whitpain CVS, Inc.
7309. Route 23 CVS, Inc.
7310. Route 27 CVS, Inc.
7311. Route 59 CVS, L.L.C.
7312. Route 83 Glastonbury CVS, Inc.
7313. Route 83 Palos Heights CVS, L.L.C.
7314. Route 88 CVS, Inc.
7315. Rowlett TX CVS, L.L.C.
7316. Rowley CVS, Inc.
7317. Roxborough CVS, Inc.
7318. Royal Dallas CVS, L.P.
7319. Royal Oak CVS, Inc.
7320. Royersford CVS, Inc.
7321. Rte 52 IL CVS, L.L.C.
7322. Runnemede CVS, Inc.
7323. Russell Ft. Apache CVS, L.L.C.
7324. Rutherford CVS, Inc.
7325. Rx Connections, Inc.
7326. Rx Innovations 4439, L.L.C.
7327. RxAmerica LLC
7328. RXC Acquisition Company
7329. RxHub, L.L.C.
7330. S. Dartmouth CVS, Inc.
7331. S. Fair Oaks Ave CVS, L.L.C..
7332. S. Houston Lake Rd. CVS, Inc.
7333. S. Main St. CVS, Inc.
7334. S. Western Avenue CVS, Inc.
7335. SABH of Arizona, Incorporated
7336. SABH of Maricopa County, Incorporated
7337. Saddle Brook CVS, Inc.
7338. Sagamore Ridge CVS, Inc.
7339. Sagev CVS, L.L.C.
7340. Saginaw CVS, L.P.
7341. Saginaw Lansing CVS, Inc.
7342. Saguaro Health Plan, Inc.
7343. Salem Lynnfield CVS, Inc.
7344. Salem Mall CVS, Inc.
7345. Salem Mass. CVS, Inc.
7346. Salem Pond CVS, Inc.
7347. Salem VA CVS, Inc.
7348. Sam Furr Road CVS, Inc.
7349. Samoset Avenue CVS, Inc.
7350. San Antonio CareCenter Pharmacy, LLC
7351. San Carlos Ft. Myers CVS, L.L.C.
7352. San Clemente CVS, L.L.C.
7353. San Jose Jacksonville CVS, L.L.C.
7354. Sand Pharmacy St Albans 06306 LLC
7355. Sandusky CVS, Inc.
7356. Sandwich CVS, Inc.
7357. Sandy Plains CVS, Inc.
7358. Sandy Springs CVS, Inc.
7359. Sanford River CVS, Inc.
7360. Santa Ana CVS, Inc.
7361. Santa Marguerita CVS, L.P.
7362. Santa Monica CVS, L.P.
7363. Sanus Corp. Health Systems
7364. Sanus Dental Plan of N.J., Inc.
7365. Sanus Dental Plan of Texas, Inc.
7366. Sanus Health Plan of Illinois, Inc.

7367. Sanus Health Plan of Pennsylvania, Inc.
7368. Sanus of Maine, Inc.
7369. Sanus of New York and New Jersey, Inc.
7370. SANUS of New York, Inc.
7371. Sanus Preferred Providers West, Inc.
7372. Saugus CVS, Inc.
7373. Saugus Walnut CVS, Inc.
7374. Sayre CVS, Inc.
7375. SCAFFALE 03 PARTICIPAÇÕES LTDA.,
7376. Schaller Anderson Acquisition, Incorporated
7377. Schaller Anderson Behavioral Health of Maryland, Incorporated
7378. Schaller Anderson Behavioral Health of Tennessee, Incorporated
7379. Schaller Anderson Behavioral Health of Texas, L.L.C.
7380. Schaller Anderson Behavioral Health of Texas, L.P.
7381. Schaller Anderson Behavioral Health, Incorporated
7382. Schaller Anderson Health Plans, LLC
7383. Schaller Anderson Healthcare, L.L.C.
7384. Schaller Anderson Medical Administrators, Incorporated
7385. Schaller Anderson Network of Arizona, L.L.C.
7386. Schaller Anderson of Arizona, L.L.C.
7387. Schaller Anderson of California, L.L.C.
7388. Schaller Anderson of Delaware, Incorporated
7389. Schaller Anderson of Kansas, L.L.C.
7390. Schaller Anderson of Maryland, L.L.C.
7391. Schaller Anderson of Missouri, L.L.C.
7392. Schaller Anderson of Oklahoma, LLC
7393. Schaller Anderson of Tennessee, LLC
7394. Schaller Anderson of Texas Management, L.L.C.
7395. Schaller Anderson of Texas, L.P.
7396. Schaller Anderson, Incorporated
7397. Schaller Anderson, LLC
7398. Schaumburg CVS, L.L.C.
7399. Schmidt Video Virtual Care of Nevada, PLLC
7400. Schnecksville CVS, Inc.
7401. Schoolcraft Detroit CVS, Inc.
7402. Schwab Road CVS, Inc.
7403. Scituate CVS, Inc.
7404. Scotch Plains CVS, Inc.
7405. Scott Houston CVS, L.P.
7406. Scottsboro AL CVS, Inc.
7407. Scottsdale CVS, L.L.C.
7408. SCP 2003C-31 LLC
7409. SCP 2003C-40 LLC
7410. SCP 2003D-66 LLC
7411. SCP 2003D-8 LLC
7412. SCP 2004E-062 LLC
7413. SCP 2005-C21-013 LLC
7414. SCP 2005-C21-074 LLC
7415. SCP 2005C-C20-016 LLC
7416. SCP 2007-C27-013 LLC
7417. SCP 2007-C27-015 LLC
7418. SCP 2007-C27-017 LLC
7419. SCP 2007-C27-025 LLC
7420. SCP 2007-C27-061 LLC
7421. SCP 2007-C27-066 LLC
7422. SCP 2007-C27-084 LLC
7423. SCP 2007-C27-096, L.L.C.
7424. SCP 2007-C27-540 LLC
7425. SCP 2007-C27-546 LLC
7426. SCP 2009-C32-502 LLC
7427. SCP 2009-C32-504 LLC
7428. SCP 2009-C32-513 LLC

7429. SCP 2009-C32-518 LLC
7430. Scranton Davis CVS, Inc.
7431. Scranton Main CVS, Inc.
7432. Scrip World, LLC
7433. Sea Isle City CVS, Inc.
7434. Seaboard Service System, Ltd.
7435. Seaford NY CVS, L.L.C.
7436. Sears Town Mall CVS, Inc.
7437. Seaside Heights CVS, L.L.C.
7438. Seaville NJ CVS, L.L.C.
7439. SEC CVS, Inc.
7440. SEC Lincoln CVS, L.L.C.
7441. SEC Route 14 CVS, L.L.C.
7442. SEC State CVS, L.L.C.
7443. SEC University MN CVS, L.L.C.
7444. Secaucus Seven CVS, Inc.
7445. Sedalia NC CVS, Inc.
7446. Sedwick Durham CVS, L.L.C.
7447. Seekonk Mall CVS, Inc.
7448. Seminole CVS, Inc.
7449. Senip CVS, L.L.C.
7450. Setauket CVS, Inc.
7451. Seven Corners, VA Bob's, Inc.
7452. Seventh Street CVS, INc.
7453. Severn CVS, Inc.
7454. Seymour CVS, Inc.
7455. Shallowford Road CVS, Inc.
7456. Shamokin CVS, Inc.
7457. Sharon CVS, Inc.
7458. Sharon Hill CVS, Inc.
7459. Sheffield Avenue CVS, L.L.C.
7460. Shelby Township CVS, Inc.
7461. Shelbyville Main CVS, Inc.
7462. SHELFCO (NO. 967) LIMITED
7463. Shepherd Houston CVS, L.P.
7464. Sheridan Cooper CVS, L.L.C.
7465. Ship Bottom NJ CVS, L.L.C.
7466. Shirley CVS, L.L.C.
7467. Shoemakerville CVS, Inc.
7468. Shoppers Village CVS, Inc.
7469. Shoppers World CVS, Inc.
7470. Shopperstown CVS, Inc.
7471. Shore Pharmaceutical Providers, LLC
7472. Shorewood CVS, L.L.C.
7473. Showalter CVS, Inc.
7474. Shrewsbury Retailer, Inc.
7475. SHS NewHMO, Inc.
7476. Sibley Chicago CVS, L.L.C.
7477. Sicklerville Road CVS, Inc.
7478. Sillington Road CVS, Inc.
7479. Silver Hill CVS, Inc.
7480. Silverbrook CVS, Inc.
7481. SilverScript Insurance Company
7482. SilverScript, Inc.
7483. SilverScript, L.L.C.
7484. Silverton CVS, Inc.
7485. Simi Valley CVS, Inc.
7486. Simsbury CVS, Inc.
7487. Sisson Road CVS, Inc.
7488. Skillman Mockingbird CVS, L.P.
7489. Skokie CVS, L.L.C.
7490. Sky Acquisition LLC
7491. Skyport Owner's Association
7492. Sloans Lake Holding Corporation
7493. Sloans Lake Managed Care, Inc.
7494. Sloan's Lake Management Corp.
7495. Smith Northampton CVS, Inc.
7496. Smith Palatine CVS, L.L.C.
7497. Smith Providence CVS, Inc.
7498. Smithville CVS, Inc.
7499. Smyrna Concord Road CVS, Inc.
7500. Smyrna CVS, Inc.
7501. Snellville CVS, Inc.
7502. Snellville GA CVS, Inc.
7503. Snow Road CVS, Inc.
7504. Socastee SC CVS, Inc.
7505. Solomon Office Associates, L.L.C.
7506. Solomons CVS, Inc.
7507. Somerdale CVS, Inc.
7508. Somers Point CVS, Inc.
7509. Somerset CVS, Inc.
7510. Somerville MA CVS, Inc.
7511. Somerville, MA Bob's, Inc.
7512. Sopco, Inc.

7513. Souderton CVS, Inc.
7514. Sourcing Co, LLC
7515. South Attleboro CVS, Inc.
7516. South Boston CVS, Inc.
7517. South Bristol Street CVS, Inc.
7518. South Brook CVS, Inc.
7519. South Brunswick CVS, Inc.
7520. South Carolina CVS Pharmacy, L.L.C.
7521. South Carolina CVS, Inc.
7522. South Dixie CVS, L.L.C.
7523. South Hills CVS Store, Inc.
7524. South Lincoln Newtown CVS, Inc.
7525. South Lyon CVS, Inc.
7526. South Mall CVS, Inc.
7527. South Merrimack CVS, Inc.
7528. South Nashua CVS, Inc.
7529. South Philadelphia CVS, Inc.
7530. South Plainfield CVS, Inc.
7531. South Post Oak CVS, L.P.
7532. South Providence CVS, Inc.
7533. South Sandwich Store Corporation
7534. South Shore League City CVS, L.P.
7535. South Shore Retailer, Inc.
7536. South Street CVS, Inc.
7537. South Wabash CVS, L.L.C.
7538. South Windsor CVS, Inc.
7539. South Yarmouth CVS, Inc.
7540. Southbridge Saga CVS, Inc.
7541. Southbury CVS, Inc.
7542. Southeast Pharmacy Consultants, Inc.
7543. Southern Buckeye CVS, L.L.C.
7544. Southern Greenfield CVS, L.L.C.
7545. Southern Health Services, Inc.
7546. Southern Tempe CVS, L.L.C.
7547. Southington Main Street CVS, Inc.
7548. Southington Queen CVS, Inc.
7549. Southlake CVS, L.P.
7550. Southmore CVS, L.P.
7551. Southport NC CVS, Inc.
7552. Southwest Health Plan, Inc.
7553. Sparkleberry Lane CVS, Inc.
7554. Spatium, LLC
7555. Specialized Pharmacy Services, LLC
7556. Specialty Carts, LLC
7557. Specialty Services Holding LLC
7558. Speedwell CVS Urban Renewal, L.L.C.
7559. Speen Street CVS, Inc.
7560. Spencer Hwy CVS, L.P.
7561. Spencer Main CVS, Inc.
7562. Spencer PharmaCare Pharmacy, Inc.
7563. Spinnaker Bidco Limited
7564. Spinnaker Topco Limited
7565. Spring CVS, L.P.
7566. Spring Cypresswood CVS, L.P.
7567. Spring Falvel TX CVS, L.L.C.
7568. Spring Valley Houston CVS, L.P.
7569. Spring Valley Richardson CVS, L.P.
7570. Springfield Avenue CVS, Inc.
7571. Springfield CVS, Inc.
7572. Springfield Gardens CVS, L.L.C.
7573. Springfield IL CVS, L.L.C.
7574. Springfield NJ CVS, L.L.C.
7575. Springfield PA CVS, Inc.
7576. Springfield Post Road CVS, Inc.
7577. Springfield Sparns CVS, Inc.
7578. Springfield St. James CVS, Inc.
7579. Springhouse PA CVS, Inc.
7580. Sproul Broomall CVS, Inc.
7581. Spruce Street CVS, Inc.
7582. Square One CVS, Inc.
7583. SR 436 CVS, L.L.C.
7584. St. Aug Tuscan, L.L.C.
7585. St. Aug Watson, L.L.C.
7586. St. Charles CVS, L.L.C.
7587. St. Clair CVS, Inc.
7588. St. Cloud CVS, L.L.C.
7589. St. George's Avenue CVS, Inc.
7590. St. Louis Park CVS, L.L.C.
7591. St. Louis PharmaCare Pharmacy, Inc.

7592. St. Mary's CVS, Inc.
7593. St. Paul MN CVS, L.L.C.
7594. St. Petersburg CVS, Inc.
7595. Stamford CVS, Inc.
7596. Stamford Hope Street CVS, Inc.
7597. Stamford Ridgeway CVS, Inc.
7598. Stamford Town Center CVS, Inc.
7599. Standard Drug Company
7600. State College CVS, Inc.
7601. State Park Road CVS, Inc.
7602. State St. CVS Store, Inc.
7603. State Street CVS, L.L.C.
7604. Staten Island New York CVS, Inc.
7605. Station Avenue CVS, Inc.
7606. Steeplegate CVS, Inc.
7607. Stenton Avenue CVS, Inc.
7608. Stephens City VA CVS, Inc.
7609. Stephenville TX CVS, L.L.C.
7610. Sterling Healthcare Services, Inc.
7611. Sterling Healthcare Services, LLC
7612. Sterling Heights CVS, Inc.
7613. Sterrettania Road CVS, Inc.
7614. Steubner-Airline CVS, L.P.
7615. Stockbridge CVS, Inc.
7616. Stokes Road CVS, Inc.
7617. Stone Mountain CVS, Inc.
7618. Stoneham CVS, Inc.
7619. Stony Island Chicago CVS, L.L.C.
7620. Stoughton CVS, Inc.
7621. Strategic Resource Company
7622. Streamwood CVS, L.L.C.
7623. Stroudsburg Mall CVS, Inc.
7624. Structured Benefits Inc.
7625. Sturbridge PharmaCare Pharmacy, Inc.
7626. Sublett Matlock CVS, L.P.
7627. Suburban Medical Services, LLC
7628. Sudbury CVS, Inc.
7629. Sudbury Wayside CVS, Inc.
7630. Suffield Agawam CVS, Inc.
7631. Suffield CVS, Inc.
7632. Sugar Land CVS, L.P.
7633. Sugarloaf Parkway CVS, Inc.
7634. Summer St. CVS, Inc.
7635. Summit Health Plan, Inc
7636. Sumner Belmont CVS, Inc.
7637. Sun City AZ CVS, L.L.C.
7638. Sun Lakes CVS, L.L.C.
7639. Sun Pharmacy, Limited Liability Company
7640. Sunderland Road CVS, Inc.
7641. Sunlake Land CVS, L.L.C.
7642. Sunnyside NY CVS, L.L.C.
7643. Sunrise FL CVS, L.L.C.
7644. Sunset Crossing CVS, Inc.
7645. Sunset Henderson CVS, L.L.C.
7646. Superior Care Pharmacy, Inc.
7647. Superior Care Pharmacy, LLC
7648. Superior Township CVS, L.L.C.
7649. SureScripts LLC
7650. SureScripts-RxHub, LLC
7651. Surfside CVS, Inc.
7652. Surprise CVS, L.L.C.
7653. Sutter Health and Aetna Administrative Services LLC
7654. Sutter Health and Aetna Insurance Company
7655. Sutter Health and Aetna Insurance Holding Company LLC
7656. Suwanee CVS, Inc.
7657. Swamp New Britain CVS, Inc.
7658. Swampscott Retailer, Inc.
7659. Swansea CVS, Inc.
7660. Swansea IL CVS, L.L.C.
7661. Swatara Square CVS, Inc.
7662. SWC Camelback CVS, L.L.C.
7663. SWC CVS, Inc.
7664. SWC M-59 CVS, L.L.C.
7665. SWC Moulton Pkwy CVS, L.L.C.
7666. SWC Progress Boulevard CVS, L.L.C.
7667. SWC Union Hills Drive CVS, L.L.C.
7668. Sylmar Square CVS, Inc.
7669. Synergy Merger, LLC

7670. Syracuse Genesee St. CVS Store, Inc.
7671. Systran Networks, Inc.
7672. T2 Medical, Inc.
7673. Tabernacle CVS, Inc.
7674. Taconic Park CVS Store, Inc.
7675. Taft Street CVS, Inc.
7676. Taft University CVS, Inc.
7677. Takoma Park CVS, Inc.
7678. Tamaqua CVS, Inc.
7679. Tampa Lynn CVS, Inc.
7680. Tanker Six, LLC
7681. Tanner Houston CVS, L.P.
7682. Tannersville CVS, Inc.
7683. Tara Boulevard CVS, Inc.
7684. Tarzana CVS, Inc.
7685. Taunton County CVS, Inc.
7686. Taunton Retailer, Inc.
7687. TCPI Acquisition Corp.
7688. TCPI Acquisition, LLC
7689. TDI Managed Care Services, Inc.
7690. Teasley Denton CVS, L.P.
7691. Telegraph CVS, Inc.
7692. Tennessee CVS Pharmacy, L.L.C.
7693. Terrace Oaks Houston CVS, L.P.
7694. Terrence D. Morton, Jr., MD, P.C.
7695. Tewksbury - Oaks, CVS., Inc.
7696. Tewksbury CVS, Inc.
7697. Texas Health + Aetna Health Insurance Company
7698. Texas Health + Aetna Health Insurance Holding Company LLC
7699. Texas Health + Aetna Health Plan Inc.
7700. Texas Health Network, Inc.
7701. Texas Road CVS, Inc.
7702. The Associated Products Company
7703. The City CVS, Inc.
7704. The ETHIX Corporation
7705. The Jeskey Clinic, LLC
7706. The Lane Drug Company
7707. The Mall of Orange CVS, Inc.
7708. The New Group Health Plan, Inc.
7709. The Vasquez Group Inc.
7710. TheraCom, L.L.C.
7711. Third Avenue N.Y. CVS, Inc.
7712. Third Lake CVS, L.L.C.
7713. Third Party Claims Management, Inc.
7714. Thomas 24th Phoenix CVS, L.L.C.
7715. Thomas 43rd Phoenix CVS, L.L.C.
7716. Thomas Avondale CVS, L.L.C.
7717. Thomas E. Emma CVS Store, L.L.C.
7718. Thomas Phoenix CVS, L.L.C.
7719. Thomaston CVS, Inc.
7720. Thornbury CVS, Inc.
7721. Thorndale PA CVS, Inc.
7722. Thousand Oaks CVS, Inc.
7723. Three Forks Apothecary, LLC
7724. Thunderbird Phoenix CVS, L.L.C.
7725. Thundermist Aviation, Inc.
7726. Thundermist Services, LLC
7727. Tianjin An Hai Tai Hua Medical Information Technology Co., Ltd
7728. Tinley Park CVS, L.L.C.
7729. Tinton Falls CVS, Inc.
7730. Titus Avenue CVS, Inc.
7731. Titusville CVS, L.L.C.
7732. Tiverton CVS, Inc.
7733. Tolland CVS, Inc.
7734. Tomball CVS, L.P.
7735. Tonawanda CVS, Inc.
7736. Toombs Avenue CVS, L.L.C.
7737. Topanga Canyon CVS, Inc.
7738. Torrance Blvd CVS, L.L.C.
7739. Torrance Western CVS, Inc.
7740. Torresdale CVS, Inc.
7741. Torrington Main Street CVS, Inc.
7742. Totowa CVS, Inc.
7743. Totowa Union CVS, Inc.
7744. Towamencin CVS, Inc.
7745. Towanda CVS, Inc.
7746. Tower CVS, Inc.
7747. Town Center CVS, Inc.
7748. Town Center Orlando CVS, L.L.C.

7749. Town Plaza CVS, Inc.
7750. Towne Centre CVS, L.L.C.
7751. Towne Lake Parkway CVS, Inc.
7752. Township Line CVS, Inc.
7753. Towson CVS, Inc.
7754. Trappe CVS, Inc.
7755. Tree Merger Sub, Inc.
7756. Tremont Avenue Bronx CVS, L.L.C.
7757. Tremont Boston CVS, Inc.
7758. Tremont CVS, Inc.
7759. Trenton CVS, Inc.
7760. Trevose Hospitality, Inc.
7761. Trumbull CVS, Inc.
7762. Trumbull Four, Inc.
7763. Trumbull One, Inc.
7764. Tucker CVS, Inc.
7765. Tucson AZ CVS, L.L.C.
7766. Turnpike Augusta CVS, Inc.
7767. Turnpike Street CVS, Inc.
7768. Tuscaloosa CVS, Inc.
7769. Twain MergerSub Corp.
7770. Twain MergerSub, L.L.C.
7771. Twenty Third Fairmount CVS, Inc.
7772. Twinsburg Claims, Inc.
7773. Twinsurance Limited
7774. Tyler Mall CVS, Inc.
7775. Tyler TX CVS, L.P.
7776. Tyrone CVS, Inc.
7777. U. S. Health Insurance Company
7778. U.S. Health Aviation Corp.
7779. U.S. Health Information Systems, Inc.
7780. U.S. Health Insurance Company
7781. U.S. Healthcare Advantage, Inc.
7782. U.S. Healthcare Advantage, LLC
7783. U.S. Healthcare Dental Plan Inc.
7784. U.S. Healthcare Dental Plan, Inc.
7785. U.S. Healthcare Financial Services, LLC
7786. U.S. Healthcare Holdings, LLC
7787. U.S. Healthcare of Georgia, Inc.
7788. U.S. Healthcare of New Hampshire, Inc
7789. U.S. Healthcare of the Carolinas, Inc.
7790. U.S. Healthcare of Washington Inc.
7791. U.S. Healthcare Properties, Inc.
7792. U.S. Healthcare, Inc.
7793. U.S. Healthcare, Inc. (Michigan)
7794. U.S. Managed Care, Inc.
7795. U.S. PatriotCare, Inc.
7796. U.S. Phoenix Corporation
7797. U.S. Quality Algorithms, Inc.
7798. UAC Holding, Inc.
7799. UC Acquisition Corp.
7800. UC Acquisition, LLC
7801. Ulster CVS Store, Inc.
7802. Uni-Care Health Services of Maine, Inc.
7803. Uni-Care Health Services of Maine, LLC
7804. Union Boulevard CVS, Inc.
7805. Union City CVS, Inc.
7806. Union Lehigh CVS, Inc.
7807. Union St. CVS, Inc.
7808. Uniontown CVS, Inc.
7809. United PharmaCare Services, L.P.
7810. United PM Services General, Inc.
7811. United PM Services Limited, Inc.
7812. United States Health Care System, Inc.
7813. United States Health Care Systems of Pennsylvania, Inc.
7814. United States Health Care Systems, Inc.
7815. United States Home Health Care Systems, Inc.
7816. United States Physicians Care Systems, Inc.
7817. Universal American Corp.
7818. University CVS, Inc.
7819. University Drive-Amherst CVS, Inc.
7820. University Mesa CVS, L.L.C.

7821. University St. Paul CVS, L.L.C.
7822. University Tamarac CVS, L.L.C.
7823. University-Wheaton CVS, Inc.
7824. University-Wheaton Peoples, Inc.
7825. Upper Darby CVS, Inc.
7826. Upper Gwynedd CVS, Inc.
7827. Upper Hembree CVS, Inc.
7828. Upper Uwchlan CVS, Inc.
7829. US 19 Port Richey CVS, L.L.C.
7830. US Bioservices Corporation
7831. USHC Management Services Corporation
7832. Utah CVS Pharmacy, L.L.C.
7833. Uvalde Houston CVS, L.P.
7834. Uxbridge CVS, Inc.
7835. V Memorial Houston CVS, L.P.
7836. Val Mesa Pharmacy, Inc.
7837. Valley Road CVS, Inc.
7838. Valley Verde NV CVS, L.L.C.
7839. Value Health Care Services LLC
7840. Van Buren Goodyear CVS, L.L.C.
7841. Van Houten CVS, Inc.
7842. Van Nuys Boulevard CVS, Inc.
7843. Vanoak Plaza CVS, Inc.
7844. VAPS Acquisition Company, LLC
7845. Vassar Poughkeepsie CVS, L.L.C.
7846. Vaughn Montgomery CVS, Inc.
7847. Vaughn Road CVS, Inc.
7848. Velmeir Euclid Co., L.L.C.
7849. Venice FL CVS, L.L.C.
7850. Vermont CVS Pharmacy, L.L.C.
7851. Vernon CVS, Inc.
7852. Vestal Ave. CVS Store, Inc.
7853. VHCS Acquisition Sub, LLC
7854. Victor Valley CVS, Inc.
7855. Victory Van Nuys CVS, L.P.
7856. Village Chestnut Hill CVS, Inc.
7857. Village Grove CVS, Inc.
7858. Village Plaza CVS, Inc.
7859. Villanova Street CVS, L.P.
7860. Vine & Taft CVS, Inc.
7861. Vineland CVS, Inc.
7862. Vinings Jubilee CVS, Inc.
7863. Virginia CVS Pharmacy, L.L.C.
7864. Virginia Mason Health Plan, Inc.
7865. Virtual Acute General Medical PLLC
7866. Virtual Behavioral Health PLLC
7867. Virtual Primary Care PLLC
7868. Vista Health of South Florida, Inc.
7869. Vista Healthplan, Inc.
7870. Vital Care Infusions, Inc.
7871. VivaHealth, Incorporated
7872. Voorhees CVS, L.L.C.
7873. Vultee Street CVS, Inc.
7874. W. Imperial Hwy CVS, L.L.C.
7875. W. Mifflin CVS, Inc.
7876. W. Ponce DeLeon CVS, Inc.
7877. W. Redondo Beach Blvd CVS, L.L.C.
7878. W. Springfield Elm CVS, Inc.
7879. Wade Hampton Blvd. CVS, Inc.
7880. Wadsworth CVS, Inc.
7881. Wadsworth High Street CVS, Inc.
7882. Wagaraw Road CVS, Inc.
7883. Wake Forest CVS, Inc.
7884. Wakefield CVS, Inc.
7885. Wakefield Mass. CVS, Inc.
7886. Waldorf MD CVS, L.L.C.
7887. Walkertown NC CVS, Inc.
7888. Wal-Lex CVS, Inc.
7889. Wallingford Acquisition, Inc.
7890. Wallingford CVS, Inc.
7891. Walmsley Blvd. Peoples, Inc.
7892. Walnut Garland CVS, L.P.
7893. Walnut Hill CVS, L.P.
7894. Walnut Hill Irving CVS, L.L.C.
7895. Walnut Hill Plaza CVS, Inc.
7896. Walnut Street CVS, Inc.
7897. Walpole CVS, Inc.
7898. Walpole Main Street CVS, Inc.
7899. Walpole Plaza CVS, Inc.
7900. Walters Houston CVS, L.P.
7901. Waltham CVS, Inc.
7902. Waltham-Moody CVS, Inc.
7903. Wappingers Falls CVS, L.L.C.

7904. Ware CVS, Inc.
7905. Wareham CVS, Inc.
7906. Waretown CVS, L.L.C.
7907. Warm Springs Rainbow CVS, L.L.C.
7908. Warm Springs Road CVS, L.L.C.
7909. Warminster CVS, Inc.
7910. Warminster, PA Bob's, Inc.
7911. Warner Higley Gilbert CVS, L.L.C.
7912. Warner Huntington CVS, L.P.
7913. Warner McQueen CVS, L.L.C.
7914. Warren Avenue CVS, Inc.
7915. Warren CVS, L.L.C.
7916. Warren R.I. CVS, Inc.
7917. Warrenville IL CVS, L.L.C.
7918. Warwick Centerville CVS, Inc.
7919. Warwick City Hall CVS, Inc.
7920. Warwick Main CVS, L.L.C.
7921. Warwick Neck CVS, Inc.
7922. Warwick NY CVS, L.L.C.
7923. Warwick Retailer, Inc.
7924. Warwick Shaw Plaza CVS, Inc.
7925. Warwick West Shore CVS, Inc.
7926. Washington Chicago CVS, L.L.C.
7927. Washington Connecticut CVS, Inc.
7928. Washington CVS Pharmacy, L.L.C.
7929. Washington E Street CVS, Inc.
7930. Washington Easton CVS, Inc.
7931. Washington GA CVS, L.L.C.
7932. Washington Lamb CVS, L.L.C.
7933. Washington Retailer, Inc.
7934. Washington Square CVS, Inc.
7935. Washington Wisconsin CVS, Inc.
7936. Water Street Fitchburg CVS, Inc.
7937. Waterbury Chase CVS, Inc.
7938. Waterbury West Main CVS, Inc.
7939. Waterbury Westwood CVS, Inc.
7940. Waterbury Wolcott CVS, Inc.
7941. Waterford Boston Post CVS, Inc.
7942. Watertower Plaza CVS, Inc.
7943. Watertown Main Street CVS, Inc.
7944. Waterville CVS, Inc.
7945. Waterville Valley CVS, Inc.
7946. Waterway Drive CVS, Inc.
7947. Waukegan CVS, L.L.C.
7948. Waverly Pharmacy, LLC
7949. Waverly TN CVS, Inc.
7950. Wayland CVS, Inc.
7951. Wayne Avenue CVS, Inc.
7952. Wayne CVS, Inc.
7953. Weber Medical Systems LLC
7954. Webster Avenue CVS, Inc.
7955. Webster Main St. CVS, Inc.
7956. Webster PharmaCare Pharmacy, Inc.
7957. Webster TX CVS, L.P.
7958. Weddington NC CVS, Inc.
7959. Weir CanyonSerrano CVS, Inc.
7960. Wellesley CVS, Inc.
7961. Wellpartner, Inc.
7962. Wellpartner, LLC
7963. WellPath of South Carolina, Inc.
7964. WellPath Select Holding Company, Inc.
7965. WellPath Select, Inc.
7966. Wesley Chapel CVS, L.L.C.
7967. West 14th Street CVS, L.L.C.
7968. West 235th Bronx CVS, L.L.C.
7969. West 42nd Street CVS, L.L.C.
7970. West Aspetuck CVS, Inc.
7971. West Avenue CVS, Inc.
7972. West Bancroft Toledo CVS, Inc.
7973. West Boylston CVS, Inc.
7974. West Bridgewater CVS, Inc.
7975. West Broad Street CVS, Inc.
7976. West Broad Street Peoples, Inc.
7977. West Broadway CVS, Inc.
7978. West Calhoun CVS, Inc.
7979. West Central Toledo CVS, Inc.
7980. West Chelten Avenue CVS, Inc.
7981. West Chester Pike CVS, Inc.
7982. West College Ave CVS, Inc.
7983. West Covina CVS, Inc.
7984. West Hartford Boulevard CVS, Inc.
7985. West Hartford CVS, Inc.
7986. West Hartford Route 4 CVS, Inc.

7987. West Hubbard CVS, L.L.C.
7988. West Hunter Street CVS, L.L.C.
7989. West Jackson CVS, L.L.C.
7990. West Lemon CVS, Inc.
7991. West Main Freehold CVS, Inc.
7992. West Main Street CVS, Inc.
7993. West Miller CVS, Inc.
7994. West Newton Retailer, Inc.
7995. West Peabody CVS, Inc.
7996. West Pike Street CVS, L.L.C.
7997. West Roxbury CVS, Inc.
7998. West Springfield CVS, Inc.
7999. West Virginia CVS Pharmacy, L.L.C.
8000. West Warwick CVS, Inc.
8001. West Warwick Main Street CVS, Inc.
8002. West Warwick Providence CVS, Inc.
8003. Westampton CVS, Inc.
8004. Westboro CVS, Inc.
8005. Westboro PharmaCare Pharmacy, Inc.
8006. Westborough Computer Drive CVS, Inc.
8007. Western Chic CVS, L.L.C.
8008. Western CVS, L.L.C.
8009. Western Reserve Health Plan, Inc.
8010. Western Reserve Individual Practice Association, Inc.
8011. Westfield Franklin CVS, Inc.
8012. Westfield Little River CVS, Inc.
8013. Westfield Shops CVS, Inc.
8014. Westford CVS, Inc.
8015. Westhaven Services Co., LLC
8016. Westheimer Fondren CVS, L.P.
8017. Westheimer Houston CVS, L.P.
8018. Westland CVS, Inc.
8019. Westland MI CVS, L.L.C.
8020. Westminster Mall CVS, Inc.
8021. Westmont CVS, L.L.C.
8022. Weston Blatt CVS, L.L.C.
8023. Westwood CVS, Inc.
8024. Westwood Washington CVS, Inc.
8025. Wethersfield CVS, Inc.
8026. Weymouth Retailer, Inc.
8027. Whalley Avenue CVS, Inc.
8028. Whalon Street CVS, Inc.
8029. Wheaton CVS, L.L.C.
8030. White Bear Lake CVS, L.L.C.
8031. White Cross Stores Inc., No. 14
8032. White Lake CVS, Inc.
8033. White Plains Eastchester CVS, Inc.
8034. White Plains Lexington CVS, Inc.
8035. White Plains Retailer, Inc.
8036. Whitehall CVS, Inc.
8037. Whitestone CVS, L.L.C.
8038. Whitinsville CVS, Inc.
8039. Whitman Plaza CVS, Inc.
8040. Whitmore Lake CVS, Inc.
8041. Whitpain CVS, Inc.
8042. Whittier Blvd CVS, L.L.C.
8043. Whittier Colima CVS, Inc.
8044. Wilcrest Houston CVS, L.P.
8045. Wiles Road CVS, L.L.C.
8046. Williamsbridge Bronx CVS, L.L.C.
8047. Williamsburg CVS, Inc.
8048. Williamson Drug Company, Incorporated
8049. Williamson Drug Company, LLC
8050. Willimantic Main Street CVS, Inc.
8051. Willingboro CVS, Inc.
8052. Willow Grove CVS, Inc.
8053. Willow Hoboken CVS, Inc.
8054. Wilmer Road CVS, L.L.C.
8055. Wilmington CVS, L.L.C.
8056. Wilmington Plaza CVS, Inc.
8057. Wilmore Washington CVS, L.L.C.
8058. Wilson Blvd. CVS, Inc.
8059. Wilson Boulevard CVS, Inc.
8060. Wilton CT CVS, Inc.
8061. Winchester CVS, Inc.
8062. Winchester Huntsville CVS, Inc.
8063. Winchester VA CVS, Inc.
8064. Wind Gap CVS, Inc.
8065. Windsor Broad Street CVS, Inc.

8066. Windsor CVS, Inc.
8067. Windward Plaza CVS, Inc.
8068. Winfield CVS, L.L.C.
8069. Winsted CVS, Inc.
8070. Winter Park CVS, Inc.
8071. Winthrop CVS, Inc.
8072. Wisconsin Avenue CVS, Inc.
8073. Wisconsin CVS Pharmacy, L.L.C.
8074. Wise Avenue CVS, Inc.
8075. Wissahickon Payment Administrators, Inc.
8076. Wisteria Drive Peoples, Inc.
8077. Woburn Centre CVS, Inc.
8078. Woburn Mall CVS, Inc.
8079. Wollaston Quincy CVS, Inc.
8080. Woodbridge CVS, Inc.
8081. Woodbury MN CVS, L.L.C.
8082. Woodbury/Red Bank CVS, Inc.
8083. Woodhaven CVS, Inc.
8084. Woodlawn Avenue CVS, Inc.
8085. Woodlawn Chicago CVS, L.L.C.
8086. Woodridge CVS, L.L.C.
8087. Woodruff Realty Associates, L.L.C.
8088. Woodruff Road CVS, Inc.
8089. Woodside CVS, L.L.C.
8090. Woodside NY CVS, L.L.C.
8091. Woodstock CVS, Inc.
8092. Woodstock CVS, L.L.C.
8093. Woodville CVS, Inc.
8094. Woodward Detroit CVS, L.L.C.
8095. Woodward Manalapan CVS, LL.C.
8096. Woodward Royal Oak CVS, L.L.C.
8097. Woolwich CVS, L.L.C.
8098. Woonsocket CVS, Inc.
8099. Woonsocket Prescription Center, Incorporated
8100. Worcester - Food Village CVS, Inc.
8101. Worcester Center CVS, Inc.
8102. Worcester Park CVS, Inc.
8103. Worcester PharmaCare Pharmacy, Inc.
8104. Worcester-June St. CVS, Inc.
8105. Worcester-Lincoln Plaza CVS, Inc.
8106. Worcester-Stafford CVS, Inc.
8107. Worcester-Tatnuck Square CVS, Inc.
8108. Work & Family Benefits, Inc.
8109. Workers Comp Advantage, Inc.
8110. WP Smart Holdings, LLC
8111. Wrightstown CVS, Inc.
8112. Wrightwood Chicago CVS, L.L.C.
8113. Wylie CVS, L.P.
8114. Wyoming MI CVS, Inc.
8115. Yale Houston CVS, L.P.
8116. Yardley CVS, Inc.
8117. Yarmouth CVS, Inc.
8118. Yeadon (Pa.) CVS, Inc.
8119. Yonkers Bronx River CVS, L.L.C.
8120. Yonkers Central Park CVS, Inc.
8121. Yorba Linda CVS, Inc.
8122. York Mall CVS, Inc.
8123. York Road CVS, Inc.
8124. Ypsilanti Township CVS, L.L.C.
8125. Zephyrhills CVS, L.L.C.
8126. Zieglersville PA CVS, Inc.
8127. Zinc Health Services, LLC
8128. Zinc Health Ventures, LLC
8129. Zion IL CVS, L.L.C.
8130. ZS Acquisition Company, LLC

EXHIBIT K

Subdivision Participation and Release Form

Governmental Entity:	State:
Authorized Official:	
Address 1:	
Address 2:	
City, State, Zip:	
Phone:	
Email:	

The governmental entity identified above ("*Governmental Entity*"), in order to obtain and in consideration for the benefits provided to the Governmental Entity pursuant to the Settlement Agreement dated December 9, 2022 ("*CVS Settlement*"), and acting through the undersigned authorized official, hereby elects to participate in the CVS Settlement, release all Released Claims against all Released Entities, and agrees as follows.

1. The Governmental Entity is aware of and has reviewed the CVS Settlement, understands that all terms in this Participation and Release Form have the meanings defined therein, and agrees that by executing this Participation and Release Form, the Governmental Entity elects to participate in the CVS Settlement and become a Participating Subdivision as provided therein.

2. The Governmental Entity shall promptly, and in any event no later than 14 days after the Reference Date and prior to the filing of the Consent Judgment, dismiss with prejudice any Released Claims that it has filed. With respect to any Released Claims pending in *In re National Prescription Opiate Litigation*, MDL No. 2804, the Governmental Entity authorizes the Plaintiffs' Executive Committee to execute and file on behalf of the Governmental Entity a Stipulation of Dismissal with Prejudice substantially in the form found at [website link to national settlement website to be provided].

3. The Governmental Entity agrees to the terms of the CVS Settlement pertaining to Participating Subdivisions as defined therein.

4. By agreeing to the terms of the CVS Settlement and becoming a Releasor, the Governmental Entity is entitled to the benefits provided therein, including, if applicable, monetary payments beginning after the Effective Date.

5. The Governmental Entity agrees to use any monies it receives through the CVS Settlement solely for the purposes provided therein.

6. The Governmental Entity submits to the jurisdiction of the court in the Governmental Entity's state where the Consent Judgment is filed for purposes limited to that court's role as provided in, and for resolving disputes to the extent provided in, the CVS Settlement. The Governmental Entity likewise agrees to arbitrate before the National Arbitration Panel

as provided in, and for resolving disputes to the extent otherwise provided in, the CVS Settlement.

7. The Governmental Entity has the right to enforce the CVS Settlement as provided therein.

8. The Governmental Entity, as a Participating Subdivision, hereby becomes a Releasor for all purposes in the CVS Settlement, including without limitation all provisions of Section XI (Release), and along with all departments, agencies, divisions, boards, commissions, districts, instrumentalities of any kind and attorneys, and any person in their official capacity elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, and any other entity identified in the definition of Releasor, provides for a release to the fullest extent of its authority. As a Releasor, the Governmental Entity hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the CVS Settlement are intended by the Parties to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of the Governmental Entity to release claims. The CVS Settlement shall be a complete bar to any Released Claim.

9. The Governmental Entity hereby takes on all rights and obligations of a Participating Subdivision as set forth in the CVS Settlement.

10. In connection with the releases provided for in the CVS Settlement, each Governmental Entity expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Governmental Entity hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Governmental Entities' decision to participate in the CVS Settlement.

11. Nothing herein is intended to modify in any way the terms of the CVS Settlement, to which Governmental Entity hereby agrees. To the extent this Participation and Release Form is

interpreted differently from the CVS Settlement in any respect, the CVS Settlement controls.

I have all necessary power and authorization to execute this Participation and Release Form on behalf of the Governmental Entity.

Signature: _____

Name: _____

Title: _____

Date: _____

EXHIBIT L

Settlement Fund Administrator Terms

[Exhibit to be inserted prior to the Initial Subdivision Participation Date]

EXHIBIT M-1: PAYMENT SCHEDULE

Payment Year	Maximum Additional Remediation Amount & All Attorneys' Fees & Costs Funds (Includes CB Fee on Credits)	Maximum Base Payments (38%)	Maximum Incentive Payment A (62%)	Maximum Incentive Payment B (28%)	Maximum Incentive Payment C (28%)	Maximum Incentive Payment D @ 6%	Maximum Total Remediation	Maximum Overall Total
Year 1 June 30, 2023	$125,329,964	$306,016,374	---	---	---	---	$306,016,374	$431,346,338
Year 2 June 30, 2024	$113,977,078	$81,058,849	$162,912,910	$81,456,455	$81,456,455	---	$243,971,759	$357,948,837
Year 3 June 30, 2025	$128,577,766	$161,989,258	$325,567,678	$162,783,839	$162,783,839	---	$487,556,936	$616,134,702
Year 4 June 30, 2026	$128,577,766	$161,989,258	$325,567,678	$162,783,839	$162,783,839	---	$487,556,936	$616,134,702
Year 5 June 30, 2027	$128,577,767	$161,989,258	$325,567,678	$162,783,839	$162,783,839	---	$487,556,936	$616,134,703
Year 6 June 30, 2028	---	$161,989,257	$325,567,679	$137,108,875	$137,108,874	$51,349,930	$487,556,936	$487,556,936
Year 7 June 30, 2029	---	$153,896,217	$309,302,202	$128,976,136	$128,976,136	$51,349,930	$463,198,419	$463,198,419
Year 8 June 30, 2030	---	$145,803,177	$293,036,724	$120,843,397	$120,843,397	$51,349,930	$438,839,901	$438,839,901
Year 9 June 30, 2031	---	$145,674,735	$292,778,585	$120,714,327	$120,714,328	$51,349,930	$438,453,320	$438,453,320
Year 10 June 30, 2032	---	$145,674,735	$292,778,585	$120,714,328	$120,714,327	$51,349,930	$438,453,320	$438,453,320
Total	**$625,040,341**	**$1,626,081,118**	**$2,653,079,719**	**$1,198,165,035**	**$1,198,165,034**	**$256,749,650**	**$4,279,160,837**	**$4,904,201,178**

NOTES:

1. The Maximum Additional Remediation Amount and the state and subdivision attorneys' fees and costs amounts are broken out into separate columns in Exhibit M-3. All payments shown in this schedule are maximum figures.

2. All annual and total figures for Maximum Additional Remediation Amount & All Attorneys' Fees & Costs Fund are maximum figures that may never be exceeded. They are subject to reduction as set forth in the Agreement and its exhibits.

3. All annual and total figures for Maximum Base Payment, Maximum Incentive Payment A, Maximum Incentive Payment B, and Maximum Incentive Payment C are maximum figures that may never be exceeded and reflect the following:
   - An assumption that all Eligible States are Settling States.
   - An assumption that all Settling States earn the full amount of the relevant incentive payment.
   - The figures are subject to reduction as set forth in the Agreement.

4. All annual and total figures for Maximum Incentive Payment D are maximum figures that reflect the following:
   - An assumption that all Eligible States are Settling States.
   - An assumption that all Settling States earn 100% of Incentive Payment C and hence the full amount of D at a value of 6%.
   - Exhibit M-2 shows maximums based on Incentive Payment D values higher than 6% if Incentive Payment C is not earned in full. As set forth in the Agreement and Exhibit M-2, any Incentive Payments D at values higher than 6% for a Settling State must be offset in full by corresponding reductions to Incentive Payment C for that Settling State in prior Payment Years and the same Payment Year, resulting in zero increase to the total Maximum Total Remediation amount ($4,279,160,837) and the total Maximum Overall Total amount ($4,904,201,178).
   - The figures are subject to reduction as set forth in the Agreement.

5. All annual and total figures for Maximum Total Remediation and Maximum Overall Total are maximum payments that reflect the following:
   - The credit amount of $117,882,400 for prior settlements has already been applied.
   - An assumption that all Eligible States are Settling States.
   - An assumption that all Settling States earn their full potential maximum amount of the Maximum Total Remediation through either Incentive Payment A, or Incentive Payments B, C, and D with Incentive Payment D at a value of 6%.
   - All annual and total figures for Maximum Total Remediation and Maximum Overall Total may never be exceeded with the sole and exclusive exception of the annual amounts for Years 6-10, which may increase based on Incentive Payment D as set forth in Exhibit M-2 when Incentive Payment C is not earned in full. Any such increases must be offset in full by corresponding reductions to Incentive Payment C in prior Payment Years and the same Payment Year for that Settling State, resulting in zero increase to the total Maximum Total Remediation amount ($4,279,160,837) and the total Maximum Overall Total amount ($4,904,201,178).
   - Exhibit M-2 shows maximums based on Incentive Payment D values higher than 6%.
   - The figures are subject to reduction as set forth in the Agreement.

6. Any offsets for Eligible States that are Non-Settling States would be deducted from Maximum Base Payment, Maximum Incentive Payment A, Maximum Incentive Payment B, Maximum Incentive Payment C, Maximum Incentive Payment D, and Maximum Total Remediation by

subtracting from all annual and total payments the amount of the payment times the Overall Allocation Percentage assigned to each Non-Settling State in Exhibit F-2.

EXHIBIT M-2: INCENTIVE D PAYMENT RANGE SCHEDULE

Payment Year	Incentive Payment D (6%-15%)		Total Remediation	
	Maximum if All Eligible States Obtain Incentive D at 6%	Maximum if All Eligible States Obtain Incentive D at 15%	Maximum if All Eligible States Obtain Full Potential with Incentive D at 6%	Maximum if All Eligible States Obtain Full Potential with Incentive D at 14.4%
Year 6 June 30, 2028	$51,349,930	$128,374,825	$487,556,936	$518,314,175
Year 7 June 30, 2029	$51,349,930	$128,374,825	$463,198,419	$496,395,480
Year 8 June 30, 2030	$51,349,930	$128,374,825	$438,839,901	$474,476,784
Year 9 June 30, 2031	$51,349,930	$128,374,825	$438,453,320	$474,128,924
Year 10 June 30, 2032	$51,349,930	$128,374,826	$438,453,320	$474,128,924
Total (Years 1-10)	**$256,749,650**	**$641,874,126**	**$4,279,160,837**	**$4,279,160,837**

NOTES:

1. The ranges for Incentive Payment D show the amount earned based on all Settling States obtaining its minimum value of 6% and its maximum value of 15%, and reflect the following:
   - An assumption that all Eligible States are Settling States.
   - An assumption that all Settling States qualify for Incentive Payment D.
   - The high end of the annual and total ranges for Incentive Payment D may never be exceeded and assume that all Settling States earn the full amount of the Total Remediation that they are eligible to receive by achieving, among other incentives, Incentive Payment D at a value of 14.4%. (The Incentive Payment C and Incentive Payment D payment tables do not allow Settling States earning Incentive Payment D at a value of 15% to earn their full potential amount of the Total Remediation.)
   - Any increase above the low end of the annual and total ranges for Incentive Payment D must be offset in full by corresponding reductions to Incentive Payment C in prior Payment Years and the same Payment Year, resulting in zero increase to the total Maximum Total Remediation amount ($4,279,160,837) and the total Maximum Overall Total amount ($4,904,201,178).

- The total Maximum Total Remediation amount ($4,279,160,837) and total Maximum Overall Total amount ($4,904,201,178) may never be exceeded and do not change regardless if all Settling States earn their full potential amount of the total Maximum Total Remediation through Incentive Payment D at a value of 6% or at a value of 14.4%.
- The amounts are subject to reduction as set forth in the Agreement.

2. All ranges for Total Remediation payments reflect the following:
   - The credit amount of $117,882,400 for prior settlements has already been applied.
   - An assumption that all Eligible States are Settling States.
   - The low end of the ranges assume that all Settling States earn their full potential amount of the Total Remediation through 100 percent of Incentive Payment B, 100 percent of Incentive Payment C, and thus Incentive Payment D at a value of 6%.
   - The high end of the annual ranges may never be exceeded and assume that all Settling States earn the full amount of the Total Remediation that they are eligible to receive by achieving, among other incentives, Incentive Payment D at a value of 14.4%. (The Incentive Payment C and Incentive Payment D payment tables do not allow Settling States earning Incentive Payment D at a value of 15% to earn their full potential amount of the Total Remediation.)
   - Any increase above the low end of the annual ranges must be offset in full by corresponding reductions to Incentive Payment C in prior Payment Years and the same Payment Year, resulting in zero increase to the total Maximum Total Remediation amount ($4,279,160,837) and the total Maximum Overall Total amount ($4,904,201,178).
   - The total Maximum Total Remediation amount ($4,279,160,837) and total Maximum Overall Total amount ($4,904,201,178) may never be exceeded and do not change regardless if all Settling States earn their full potential amount of the total Maximum Total Remediation through Incentive Payment D at a value of 6% or at a value of 14.4%.
   - The amounts are subject to reduction as set forth in the Agreement.

3. Any offsets for Eligible States that are Non-Settling States would be deducted from the Incentive Payment D and Total Remediation by subtracting from all payments the amount of the payment times the Overall Allocation Percentage assigned to each Non-Settling State in Exhibit F-2.

EXHIBIT M-3: PAYMENT SCHEDULE FOR FEE FUNDS, COST FUNDS AND ADDITIONAL REMEDIATION
(Breakdown of Second Column in Exhibit M-1)

Payment Year	Maximum Exhibit R Attorney Fee Funds	Exhibit R Attorney Cost Funds	Common Benefit Fee on Credits	State Cost Fund	Maximum State Outside Counsel Fee Fund	Maximum Additional Remediation Amount	Maximum Total (Shown in Ex. M-1, 2nd Column)
Year 1 June 30, 2023	$91,298,571	$15,000,000	$1,914,750	$9,509,246	$3,803,699	$3,803,698	$125,329,964
Year 2 June 30, 2024	$80,678,256	$15,000,000	$1,182,179	$9,509,246	$3,803,698	$3,803,699	$113,977,078
Year 3 June 30, 2025	$109,546,373	---	$1,914,750	$9,509,247	$3,803,698	$3,803,698	$128,577,766
Year 4 June 30, 2026	$109,546,372	---	$1,914,750	---	$8,558,322	$8,558,322	$128,577,766
Year 5 June 30, 2027	$109,546,372	---	$1,914,751	---	$8,558,322	$8,558,322	$128,577,767
Total	**$500,615,944**	**$30,000,000**	**$8,841,180**	**$28,527,739**	**$28,527,739**	**$28,527,739**	**$625,040,341**

EXHIBIT N

Additional Remediation Amount Allocation Percentages

Alabama	2.0094047523%
American Samoa	0.0215590674%
Arizona	2.9911870812%
California	12.4923284542%
Colorado	2.0922099886%
Connecticut	1.6290775863%
District of Columbia	0.2266153628%
Georgia	3.5107212404%
Guam	0.0604844794%
Hawaii	0.4087756176%
Idaho	0.6193769970%
Illinois	4.1882957440%
Indiana	2.7913607538%
Iowa	0.9341820978%
Kansas	0.9872591950%
Louisiana	1.8447419766%
Maine	0.6664875621%
Maryland	2.6575348718%
Massachusetts	2.9005058228%
Minnesota	1.6334209688%
Missouri	2.5253744735%
Montana	0.3935393398%
N. Mariana Islands	0.0210349545%
Nebraska	0.5252526469%
New Jersey	3.4690785339%
New York	6.7872003052%
North Carolina	4.0924962523%
North Dakota	0.2140841267%
Ohio	5.4856657801%
Oklahoma	1.9292810204%
Oregon	1.7302239375%
Pennsylvania	5.7772011360%
Rhode Island	0.5622563667%
South Carolina	1.9381920268%
Tennessee	3.3847318704%
Texas	7.9239877394%

Vermont	0.3204352512%
Virgin Islands	0.0397474619%
Virginia	2.8709652916%
Washington	2.9198056809%
Wisconsin	2.2138760297%
Wyoming	0.2100401547%

EXHIBIT O

Adoption of a State-Subdivision Agreement

A State-Subdivision Agreement shall be applied if it meets the requirements of Section V and is approved by the State and by the State's Subdivisions as follows:

1. *Requirements for Approval*. A State-Subdivision Agreement shall be deemed as agreed to when it has been approved by the State and either (a) Subdivisions whose aggregate "Population Percentages," determined as set forth below, total more than sixty percent (60%), or (b) Subdivisions whose aggregate Population Percentages total more than fifty percent (50%) provided that these Subdivisions also represent fifteen percent (15%) or more of the State's counties or parishes (or, in the case of Settling States whose counties and parishes do not function as local governments, 15% of or more of the Settling State's non-county Subdivisions), by number.

2. *Approval Authority*. Approval by the State shall be by the Attorney General. Approval by a Subdivision shall be by the appropriate official or legislative body pursuant to the required procedures for that Subdivision to agree to a legally binding settlement.

3. *Population Percentage Calculation*. For purposes of this Exhibit O only, Population Percentages shall be determined as follows: For States with functional counties or parishes[1] the Population Percentage of each county or parish shall be deemed to be equal to (a) (1) two hundred percent (200%) of the population of such county or parish, minus (2) the aggregate population of all Primary Incorporated Municipalities located in such county or parish, divided by (b) two hundred percent (200%) of the State's population. A "*Primary Incorporated Municipality*" means a city, town, village or other municipality incorporated under applicable state law with a population of at least 25,000 that is not located within another incorporated municipality. The Population Percentage of each Primary Incorporated Municipality shall be equal to its population (including the population of any incorporated or unincorporated municipality located therein) divided by two hundred percent (200%) of the State's population; provided that the Population Percentage of a Primary Incorporated Municipality that is not located within a county shall be equal to two hundred percent (200%) of its population (including the population of any incorporated or unincorporated municipality located therein) divided by two hundred percent (200%) of the State's population. For all States that do not have functional counties or parishes, the Population Percentage of each non-county Subdivision (including any incorporated or unincorporated municipality located therein), shall be equal to its population divided by the State's population.

4. *Preexisting Agreements and Statutory Provisions*. A State may include with the notice to its Subdivisions an existing agreement, a proposed agreement, or statutory provisions regarding the distribution and use of settlement funds and have the acceptance of such an agreement or

[1] Certain states do not have counties or parishes that have functional governments, including Alaska, Connecticut, Massachusetts, Rhode Island, and Vermont.

statutory provision be part of the requirements to be an Initial Participating Subdivision.

5. *Revised Agreements*. A State-Subdivision Agreement that has been revised, supplemented, or refined shall be applied if it meets the requirements of Section V and is approved by the State and by the State's Subdivisions pursuant to the terms above.

EXHIBIT P

CVS Pharmacy Inc. Injunctive Terms

I. INTRODUCTION

1. Except where these Injunctive Terms specify a different implementation period, CVS Pharmacy, Inc. ("Settling Pharmacy") shall implement the Injunctive Terms set forth below in Sections II through XVII by the Injunctive Terms Implementation Date (defined below).

2. To the extent that Settling Pharmacy already have in place positions, committees, departments, policies or programs that satisfy the Injunctive Terms, no re-naming or other change is required by these Injunctive Terms.

3. Overview

    a. Settling Pharmacy will implement or maintain a Controlled Substance Dispensing Oversight Program ("CSDOP").

    b. The CSDOP must include written standard operating procedures and/or corporate policies (the "CSDOP Policies and Procedures") required by these Injunctive Terms.

    c. The CSDOP shall apply during the term of these Injunctive Terms, to each of Settling Pharmacy's retail pharmacy stores that dispense Schedule II Designated Controlled Substances and are registered or licensed with each Settling State.

    d. Settling Pharmacy shall provide a copy of the relevant CSDOP Policies and Procedures to each Settling State within 60 days of the Injunctive Terms Implementation Date. To the extent any implementation is expected to require additional time, the Parties agree to work together in good faith to establish a timeline for implementation. No later than 30 days after the Injunctive Terms Implementation Date, each Settling State shall identify the person or office to whom Settling Pharmacy must provide a copy of the relevant CSDOP Policies and Procedures and any other State-specific reporting required under these Injunctive Terms.

    e. Settling States shall form the States Injunctive Relief Committee to serve as a point of contact for Settling Pharmacy and to perform such other roles as set forth herein. Upon the committee's formation, Settling States shall provide notice to Settling Pharmacy of the members of the committee.

4. Compliance with Laws

    a. Each Settling Pharmacy acknowledges and agrees that its pharmacies must comply with applicable state and federal laws, regulations, and rules, including those regarding the dispensing of Controlled Substances. The requirements of these Injunctive Terms are in addition to, and not in lieu of, any other requirements of federal, state, or local law. Nothing in the Injunctive Terms shall be construed as relieving the Settling Pharmacy of the obligation of their pharmacies to comply with all federal, state and local laws, regulations or rules, nor shall any of the provisions of the Injunctive Terms be deemed as permission for Settling Pharmacy to engage in any acts or practices prohibited by such laws, regulations or rules.

    b. The Injunctive Terms are not intended to and shall not be interpreted to prevent Settling Pharmacy from taking or implementing any other compliance or policy steps that are more restrictive or that are necessary to conform with federal, state, or local legal requirements, unless such steps would conflict with State or local law. The Injunctive Terms are not intended to and shall not be interpreted to require Settling Pharmacy to inventory any Controlled Substances or any particular Controlled Substances or to require dispensing of any Controlled Substances or of any individual, types, subsets or categories of Controlled Substances prescriptions.

    c. In the event that a Settling Pharmacy determines that there may be a conflict between the Injunctive Terms and the express requirements of federal, state, or local laws, or interpretations of such laws articulated by an agency responsible for enforcing such laws or a court ("Express Interpretations"), such that the Settling Pharmacy determines that it cannot comply with the Injunctive Terms without violating these express requirements or Express Interpretations, Settling Pharmacy shall follow the express requirements of the federal, state or local law or Express Interpretation thereof and shall provide notice to the Settling State(s). Within thirty (30) days after receipt of a notification from a Settling Pharmacy referenced above, the Settling Pharmacy and the State shall meet and discuss the potential conflict, and the Settling Pharmacy shall comply with any reasonable requests from the Settling State as necessary to determine whether there is a conflict between the Injunctive Terms and the express requirements of federal, state, or local laws, or Express Interpretations. In the event that a Settling Pharmacy believes a court or administrative action brought by a governmental body in a Settling State has commenced against it or its pharmacists for actions required by the Injunctive Terms, then the Settling Pharmacy may notify the Attorney General of the Settling State of such pending action. If the State agrees that the court or administrative action is a result of actions required by the Injunctive Terms, the State will engage in best efforts to resolve the conflict or assist in achieving resolution of the court or

administrative action. Nothing in this paragraph shall (i) limit the right of the Settling State to disagree with a Settling Pharmacy as to the conflict; (ii) be deemed to relieve a Settling Pharmacy from following any subsequently enacted law or regulation, or judicial decisions from a regulatory authority with jurisdiction over controlled substances that is more restrictive than the provisions of the Injunctive Terms; (iii) or from following the Injunctive Terms if they are more restrictive than applicable laws at issue in the administrative action if there is no conflict; (iv) be deemed to relieve a Settling Pharmacy from adhering to the outcome of a court or administrative determination that there is no conflict; or (v) limit a Settling State's ability to relieve a Settling Pharmacy of a duty under these Injunctive Terms if that Settling State determines that that term is in conflict with that Settling State's express legal requirements.

d. A Settling Pharmacy shall retain all records it is required to create pursuant to its obligations hereunder for a period no shorter than three years, unless otherwise specified. Nothing in these Injunctive Terms shall prevent a Settling State from issuing a lawful subpoena or Civil Investigative Demand (CID) for records pursuant to an applicable law.

5. No Admission and No Use as Evidence. Settling Pharmacy do not admit liability or wrongdoing. These Injunctive Terms shall not be considered, construed, or represented to be (1) an admission, concession, or evidence of liability, wrongdoing, or the existence of any legal obligations or requirements other than the requirement to follow these Injunctive Terms, (2) an admission, concession or evidence of the reach, requirements, meaning or interpretation of any statute or regulation, or (3) a waiver or limitation of any defense otherwise available to Settling Pharmacy. These Injunctive Terms shall not be offered or received in evidence or otherwise relied on in any action or proceeding for any purpose other than in an action or proceeding to modify or enforce or monitor compliance with these Injunctive Terms.

II. TERM AND SCOPE

1. The term of these Injunctive Terms shall be from the Injunctive Terms Implementation Date until August 15, 2032, unless otherwise specified herein.

2. Except as otherwise stated herein, the Injunctive Terms shall apply to Settling Pharmacy's retail pharmacy stores located in, and registered or licensed with, each Settling State that dispense Schedule II Designated Controlled Substances to Patients, including any Schedule II Designated Controlled Substances dispensed by any such retail pharmacy stores that are mailed or shipped to patients in a Settling State. Should Settling Pharmacy operate an online pharmacy that is registered or licensed to dispense Schedule II Designated Controlled Substances in any Settling State while these

Injunctive Terms are in effect, the Injunctive Terms shall apply to such pharmacy as well.[1]

3. This agreement may be amended by mutual agreement of a majority of the States Injunctive Relief Committee and Settling Pharmacy. Any such amendments must be in writing.

III. DEFINITIONS

1. The term "Distributor Injunctive Terms" means Exhibit P of the Settlement Agreement, dated as of July 21, 2021, between McKesson Corporation, Cardinal Health, Inc., and AmerisourceBergen Corporation and certain States and subdivisions.

2. The term "Block" means an action taken by Settling Pharmacy preventing or otherwise prohibiting any Settling Pharmacy pharmacist from filling prescriptions for Controlled Substances from a specific identified Prescriber.

3. The term "Clearinghouse" means the system established by Section XVII of the Distributor Injunctive Terms.

4. The term "Clearinghouse Advisory Panel" is as defined in Section XVII.B.4 of the Distributor Injunctive Terms.

5. The term "Controlled Substances" means those substances designated under schedules II-V pursuant to the federal Controlled Substances Act.

6. The term "Designated Controlled Substances" shall be limited to: (a) oxycodone; (b) hydrocodone; (c) hydromorphone; (d); tramadol; (e) oxymorphone; (f) morphine; (g) methadone; and (h) fentanyl.

7. The term "Injunctive Terms Implementation Date" means 30 days after the Effective Date of the Settlement Agreement [as defined in Section TK of the full Agreement].

8. The term "National Arbitration Panel" is defined in Section TK of [title of full Agreement].

9. The term "Patient" means any individual who receives a prescription for a Designated Controlled Substance from a Prescriber, whether legally valid or not, and attempts to fill it at one of a Settling Pharmacy's retail pharmacy stores in a Settling State.

10. The term "Prescriber" means any individual that has written a prescription for a Designated Controlled Substance, whether legally valid or not, that is presented to a Settling Pharmacy in a Settling State.

[1] Caremark specialty and mail order pharmacies are not subject to, and are not online pharmacies for purposes of, these Injunctive Terms.

11. The term "Red Flag(s)" means the enumerated Patient Red Flags, Prescription Red Flags, and Prescriber Red Flags set out in Section IX.

12. The term "Settling State(s)" means each State that is a signatory to [Title of Full Agreement].

13. The term "States Injunctive Relief Committee" means a committee representing the Settling States composed of between four and eight members designated by the Settling States. The members of the States Injunctive Relief Committee shall be employees of a Settling State's Office of Attorney General and/or employees of another agency of a Settling State and may not include special assistant attorneys general, contractors, outside counsel, or other non-employees delegated official functions.

IV. CONTROLLED SUBSTANCE OVERSIGHT PERSONNEL

1. Settling Pharmacy shall designate a Chief Pharmacy Controlled Substances Officer, or other appropriately titled position, to be a member of the Controlled Substance Oversight Committee (described below in Section VI), and to oversee a Controlled Substance Professional Practices Department and Settling Pharmacy's compliance with 21 C.F.R. 1306.04 and these Injunctive Terms. As used in these Injunctive Terms, the terms "Controlled Substance Oversight Committee" and "Controlled Substance Professional Practices Department" refer to the entity or entities, however titled, that carry out the functions required by these Injunctive Terms. Notwithstanding the preceding sentence, to the extent an existing position, committee or department carries out the functions required by these Injunctive Terms, any other functions undertaken by such position, committee or department shall not be subject to these Injunctive Terms or oversight by the Settling States pursuant to these Injunctive Terms. The position, committee and department discussed in these Terms may bear different names and need not be limited to the roles and functions set forth herein.

2. The Chief Pharmacy Controlled Substances Officer shall have knowledge of and experience with the laws and regulation of Controlled Substances, in particular the regulations in 21 C.F.R. 1306.04.

3. The Chief Pharmacy Controlled Substances Officer shall provide at least quarterly reports to the Controlled Substance Oversight Committee (described below in Section VI) regarding Settling Pharmacy's compliance with these Injunctive Terms, including the implementation of any changes to the CSDOP Policies and Procedures required by these Injunctive Terms.

4. Staffing levels of Settling Pharmacy's Controlled Substance Professional Practices Department shall be reviewed periodically, but at least on an annual basis, by Settling Pharmacy's Controlled Substance Oversight Committee to assess whether such staffing levels are sufficient for the Controlled Substance Professional Practices Department to comply with this Agreement. This review shall include consideration of relevant developments in technology, law, and regulations.

5. Throughout the term of these Injunctive Terms, Settling Pharmacy shall maintain a telephone and electronic submission hotline(s) (the "Hotline") to permit employees and/or Patients and/or members of the public to anonymously report suspected inappropriate or illegitimate dispensing, prescribing or diversion of Designated Controlled Substances, violations of the CSDOP Policies and Procedures, these Injunctive Terms, Settling Pharmacy's company policy, or other applicable law. The Hotline may be implemented by adding a dedicated option to existing systems that includes reporting regarding Designated Controlled Substances. Settling Pharmacy shall publish their Hotline contact information to its employees and Patients in the Settling States. Settling Pharmacy shall maintain for the duration of Injunctive Terms a record of each complaint made to the Hotline regarding Designated Controlled Substances and documentation regarding any investigation or response to such complaints. Nothing herein shall require Settling Pharmacy to investigate a pharmacist's professional judgment to refuse a prescription that the pharmacist believes was prescribed or is being used for other than a legitimate medical purpose or that the pharmacist believes was not prescribed by an individual Prescriber acting in the usual course of his or her professional practice.

V. INDEPENDENCE

1. Settling Pharmacy's Controlled Substance Professional Practices Department personnel, pharmacists and pharmacist technicians who work at Settling Pharmacy's pharmacies within the Settling States, and field personnel who supervise pharmacists and pharmacist technicians (together, "CSDOP Employees"), shall not be compensated in whole or in part by commissions, bonuses, incentives or any other monetary or non-pecuniary benefit that depends in material part on revenue or profitability targets or expectations to sales of Controlled Substances. Nothing in these Injunctive Terms shall be interpreted to prevent compensation of employees based on sales volume, revenue or profitability targets/expectations for enterprise-, store-, or pharmacy-wide sales that include Controlled Substances.

2. No CSDOP Employees may be terminated, suspended, threatened with or face any other negative employment consequence for failing to meet any revenue or profitability targets or expectations that depends in material part on sales of Controlled Substances. Nothing in these Injunctive Terms shall be interpreted to prevent Settling Pharmacy from taking employment action based on sales volume, revenue or profitability targets/expectations for enterprise-, store-, or pharmacy-wide sales that include Controlled Substances.

3. Personnel in Settling Pharmacy's Controlled Substance Professional Practices Department shall not report to Settling Pharmacy's sales, marketing, or business development departments, and sales, marketing, or business development departments shall not be authorized to make decisions regarding the promotion, compensation, demotion, admonition, discipline, commendation, periodic performance reviews, hiring, or firing of Controlled Substance Professional Practices Department personnel.

This provision does not apply to an officer or executive to whom both the Controlled Substance Professional Practices Department and sales, marketing and/or business development departments report.

4. Settling Pharmacy's sales, marketing and business development departments are prohibited from interfering with, obstructing, or otherwise exerting control over any Controlled Substance Professional Practices Department or Controlled Substance Committee decision-making. This provision does not apply to an officer or executive to whom both the Controlled Substance Professional Practices Department and sales, marketing and/or business development departments report.

5. To the extent necessary to comply with this section, a Settling Pharmacy's Controlled Substance Oversight Committee shall review, modify, and direct any changes to any compensation and non-retaliation policies specific to the sale or dispensing of Designated Controlled Substances.

VI. OVERSIGHT

1. To the extent not already established, within thirty (30) business days of the Injunctive Terms Implementation Date, each Settling Pharmacy shall establish an oversight committee, however titled, that includes representatives from its respective legal, compliance, pharmacy operations and asset protection departments, however named, to provide oversight over the CSDOP and its compliance with the Injunctive Terms. For the purposes of reference herein, this committee, however named, shall be referred to as the "Controlled Substance Oversight Committee." Settling Pharmacy shall maintain its Controlled Substance Oversight Committee for the duration of the term of the Injunctive Terms. The Chief Pharmacy Controlled Substances Officer shall be a member of the Controlled Substance Oversight Committee.

2. A Settling Pharmacy's Controlled Substance Oversight Committee shall have quarterly meetings during which the Chief Pharmacy Controlled Substances Officer shall report on, and the Controlled Substance Oversight Committee shall review, among other things, (a) the Prescription Validation Process, including the CSDOP Policies and Procedures on identifying and resolving Patient, Prescriber and Prescription Red Flags; (b) the training required under the Injunctive Terms; (c) proactive due diligence and site visits; (d) the Prescriber Review Processes; (e) significant new national and regional diversion trends involving Controlled Substances; (f) Settling Pharmacy's adherence to the Injunctive Terms and applicable laws and regulations; and (g) any technology, staffing, or other resource needs for the CSDOP. The Controlled Substance Oversight Committee shall have access to all CSDOP reports described in the following subsection.

3. On an annual basis, a Settling Pharmacy's Controlled Substance Oversight Committee shall provide a written report to the President of the Settling Pharmacy's Retail Division, the Chief Financial Officer of the Settlement Pharmacy's Retail Division, the Chief Legal Officer of the Settling Pharmacy's Retail Division, and the CVS Health

Chief Compliance Officer, outlining (a) the Settling Pharmacy's adherence to, and any material deviations from these Injunctive Terms; (b) the allocation of resources sufficient to comply with these Injunctive Terms; and (c) any revisions to the CSDOP that the Controlled Substance Oversight Committee has approved. The CVS Health Chief Compliance Officer shall determine if and when it is appropriate to make a report to the Board or any subcommittee thereof, but shall report at least annually.

4. Settling Pharmacy, through its Controlled Substance Professional Practices Department and Oversight Committee, shall, at least once every year, review and oversee any enhancements to the CSDOP Policies and Procedures and systems for dispensing activity that the Controlled Substance Oversight Committee deems necessary.

5. The Controlled Substance Oversight Committee shall be responsible for the approval of all material revisions to the CSDOP Policies and Procedures, provided that nothing herein shall prevent Settling Pharmacy from implementing changes to the CSDOP Policies and Procedures pending such review and approval.

VII. MANDATORY TRAINING

1. The CSDOP Policies and Procedures shall be published in a form and location readily accessible to all pharmacy personnel at each of the Settling Pharmacy's retail pharmacy locations in the Settling States. Online availability is sufficient, so long as pharmacy personnel have access to a computer with access to the CSDOP Policies and Procedures.

2. Settling Pharmacy shall launch training for all existing CSDOP Employees, to the extent practical (for example, accounting for employee leave), on the CSDOP Policies and Procedures required under these Injunctive Terms, including the Prescription Validation Process and corresponding responsibility. The training shall be launched within 120 days of the Injunctive Terms Implementation Date. All CSDOP Employee new hires, to the extent practical, shall be required to participate in such trainings within 60 days of hiring or 6 months of the Injunctive Terms Implementation Date, whichever is later. Settling Pharmacy will further require that every CSDOP Employee, to the extent practical, receive such training at least once every 3 years for the term of these Injunctive Terms.

3. On an annual basis for the duration of these Injunctive Terms, Settling Pharmacy shall test their CSDOP Employees on their knowledge regarding the CSDOP Policies and Procedures required under these Injunctive Terms, including the Prescription Validation Process and corresponding responsibility.

4. It shall be a part of the CSDOP Policies and Procedures and all trainings of all CSDOP Employees required under these Injunctive Terms that pharmacists shall refuse to dispense Controlled Substances that they believe were prescribed or are being used for other than a legitimate medical purpose or that they believe were not prescribed by an individual Prescriber acting in the usual course of his or her professional practice.

5. All trainings required under these Injunctive Terms shall also make clear that i) Settling Pharmacy's compensation and non-retaliation policies, including pursuant to these Injunctive Terms, prevent CSDOP Employees from being compensated or penalized in any way related to revenue or profitability targets or expectations specific to sales of Controlled Substances; and ii) pharmacists will not be penalized in any way for exercising their professional judgment to refuse to fill prescriptions for Controlled Substances pursuant to their corresponding responsibility. To the extent that trainings designed and launched prior to the Effective Date of these Injunctive Terms do not reference these policies, they shall be added by the end of 2023.

VIII. THE PRESCRIPTION VALIDATION PROCESS

1. As part of its CSDOP, Settling Pharmacy shall maintain a Prescription Validation Process in the CSDOP Policies and Procedures, as further described and set forth in this section, that each pharmacist employed by Settling Pharmacy in a Settling State must follow when dispensing a prescription for a Controlled Substance. The inclusion of an enumerated Red Flag in these Injunctive Terms shall not be considered, construed, or represented to be an admission, concession, or evidence of any factual or legal contention related to such Red Flag. A Red Flag shall not be interpreted to mean that a prescription is, or is more likely than not, illegitimate and/or not issued in the usual course of professional practice or treatment.

2. A Red Flag will be considered "resolved" if, after further investigation as described below, and given other facts and circumstances surrounding the prescription, a pharmacist determines, in his or her professional judgment, that the facts that triggered the Red Flag do not lead him or her to believe that the prescription was written or is being submitted for an illegitimate medical purpose or outside the usual course of a Prescriber's professional practice.

3. A Settling Pharmacy's CSDOP Policies and Procedures shall provide that if a pharmacist identifies any "Patient Red Flags" associated with a Controlled Substances prescription (described in Section IX(3) below), before filling the prescription the pharmacist must resolve them; and that the method of resolution falls within the judgment of the pharmacist and may include reviewing the Patient's profile and history with the Settling Pharmacy, calling the Prescriber or Prescribers if appropriate, speaking with the Patient if appropriate, calling on the pharmacist's pre-existing knowledge of the Patient or Prescriber, reviewing available Prescription Monitoring Program ("PMP" or "PDMP") data, and/or reviewing other data or information

available to the pharmacist.

4. Each Settling Pharmacy's CSDOP Policies and Procedures shall provide that if forgery or fraud is suspected, or if the pharmacist identifies any other "Prescription Red Flags" associated with a Controlled Substances prescription (described in Section IX(4) below), the pharmacist must resolve the Prescription Red Flags before filling the prescription; and that the method of resolution falls within the judgment of the pharmacist and may include reviewing the Patient's profile and history with the Settling Pharmacy, calling the Prescriber or Prescribers if appropriate, speaking with the Patient if appropriate, calling on the pharmacist's pre-existing knowledge of the Patient or Prescriber, reviewing available PMP or PDMP data, and/or reviewing other data or information available to the pharmacist.

5. Settling Pharmacy's CSDOP Policies and Procedures shall require that if a pharmacist identifies any "Prescriber Red Flags" associated with a Controlled Substances prescription (described in Section IX(5) below), the pharmacist must resolve them before filling the prescription; and that the method of resolution falls within the judgment of the pharmacist and may include reviewing any Settling Pharmacy records regarding the Prescriber, calling the Prescriber if appropriate, speaking with the Patient if appropriate, calling on the pharmacist's pre-existing knowledge of the Patient or Prescriber, reviewing available PMP or PDMP data, and/or reviewing other data or information available to the Settling Pharmacy.

6. A Settling Pharmacy's CSDOP Policies and Procedures shall provide that the resolution of all Red Flags identified by the pharmacist, as well as sufficient details to reflect the steps taken to resolve the Red Flags must be documented by the pharmacist. Any such records shall be maintained for the duration of these Injunctive Terms. To the extent that a Red Flag is resolved based upon facts or circumstances that are already reflected or documented in a Settling Pharmacy's records, further documentation of those facts or circumstances is not required for resolution of substantially the same Red Flag on subsequent prescriptions. For example, if a Patient lives 55 miles from a Settling Pharmacy but works near the pharmacy and that fact is reflected in pharmacy records, no documentation for the resolution of the Red Flag addressing the Patient's distance from the pharmacy is required in connection with individual prescriptions dispensed for that Patient. A lack of documentation does not create a presumption that a pharmacist did not resolve any identified Red Flags.

7. Settling Pharmacy's CSDOP Policies and Procedures shall provide that, even if all Red Flags are resolved, a pharmacist shall reject a prescription if, in his or her professional judgment, he or she believes that it was written or is being submitted for other than a legitimate medical purpose and/or was written outside the usual course of an individual Prescriber's professional practice.

IX. RED FLAGS

1. Settling Pharmacy shall provide quarterly to the Settling States, beginning with an initial report four months after the Injunctive Terms Implementation Date, and quarterly thereafter, (1) data reports (the "Quarterly Data Reports") for each retail pharmacy operated by Settling Pharmacy containing data generated by the periodic proactive compliance reviews set forth in Section XI.1, subject to any potential modifications as a result of the meet and confer process set forth in Section IX.2, on cash, high MME patients, and cocktail prescriptions consistent with the sample report provided by Settling Pharmacy on November 21, 2022, (2) the top twenty-five prescribers of Designated Controlled Substances in each Settling State from CVS's retail dispensing data, and (3) the lists of prescribers subject to disclosure in section X.5. Each Settling State shall provide contact information for receipt of the above information and shall update such contact information as necessary. A Settling State shall not disclose or provide any data provided under this provision during or after the Term of these Injunctive Terms unless required to do so by law or in a proceeding to enforce these Injunctive Terms. If a Settling State receives a request, demand or subpoena for such information or data, or intends to produce said data in a proceeding to enforce these Injunctive Terms, the Settling State shall, before producing any information or data, provide to Settling Pharmacy no less than ten (10) days' notice, unless a shorter period is required by law, and an opportunity to object, seek a protective order, or come to an agreement on confidentiality protections, prior to the expiration of the 10-day notice period. It is CVS's position that the information and data to be provided under these Injunctive Terms is confidential in nature, shall not be disclosed or produced by a Settling State, and is exempted from public record requests under exemptions for confidential commercial information and all other applicable exemptions and exclusions. Nothing in this paragraph shall be deemed to prevent a Settling State from sharing this material with other State or federal law enforcement agencies, provided that such agencies acknowledge and comply with the nondisclosure and notice obligations set forth in the preceding sentences.

2. Within the three months following the provision of the Annual Data Reports, either Settling Pharmacy or the States Injunctive Relief Committee may propose in writing a meet and confer to discuss potential changes to the scope of one or more categories of Red Flags. At such a meeting, Settling Pharmacy or the States Injunctive Relief Committee may provide additional research, information or data available to them beyond that provided in the Annual Data Reports. For example, a Settling Pharmacy might propose reducing the threshold for triggering a particular category of Red Flag or consolidating certain Red Flags or subcategories of Red Flags into a single metric, or the States Injunctive Relief Committee might propose increasing the threshold for triggering a particular Red Flag or expanding that Red Flag to include multiple subcategories (*e.g.*, number of prescriptions, distance thresholds).

a. If Settling Pharmacy and the States Injunctive Relief Committee agree on such changes to one or more Red Flags, they shall document those changes in writing and they shall become a part of these Injunctive Terms for all intents and purposes.

b. If Settling Pharmacy and the States Injunctive Relief Committee cannot agree on the proposed changes during their meeting and confer, the Party seeking the change(s) to the Red Flag(s) may seek a 5-day mediation of the issue at its own expense. If the mediation fails to resolve the dispute between the parties, the party seeking the proposed change(s) may appeal to the National Arbitration Panel to have the National Arbitration Panel modify the Red Flags on the basis that the change(s) would be consistent both with avoiding unnecessary material costs of identifying and resolving Red Flags and materially reducing the diversion of Controlled Substances. In such a proceeding, the Party seeking the proposed change(s) may provide evidence from Annual Data Reports or from other research, data and information.

c. In any such proceedings, there shall be a presumption against imposition of any proposed Red Flags, or proposed modifications to pre-existing Red Flags, that have not been identified by the United States Drug Enforcement Administration or any Settling State's Board of Pharmacy or other Controlled Substance government regulators.

d. The Red Flags required by these Injunctive Terms shall at no point be too numerous or complex to be reasonably workable for pharmacists in the context of protecting patient safety, performing corresponding responsibility, drug utilization review, and their other responsibilities. Any dispute over whether the Red Flags required by these Injunctive Terms have become too numerous or complex to be reasonably workable for pharmacists shall be submitted to the National Arbitration Panel. In the event such a dispute is submitted to the National Arbitration Panel, it shall be the Settling Pharmacy's burden to prove that the Red Flag(s) at issue are too numerous or complex to be reasonably workable for pharmacists. The Arbitration Panel should consider information regarding potential impacts on public health in determining if the red flag(s) at issue are too numerous or complex to be reasonably workable for pharmacists.

3. Settling Pharmacy's CSDOP Policies and Procedures shall require their pharmacists to treat the following circumstances as "Patient Red Flags":

a. A Patient seeks to fill a Schedule II Designated Controlled Substance prescription more than three days prior to the contemplated exhaustion date of an earlier prescription of the same Schedule II Designated Controlled Substance (e.g., exhaustion of the days' supply assuming the prescription has been taken in accordance with the prescribers' directions on the face of the prescription), provided the previous prescription was also dispensed by the same Settling Pharmacy;

b. A Patient seeks to fill a Designated Controlled Substance prescription from a Prescriber after having filled Designated Controlled Substance prescriptions at the same Settling Pharmacy from more than four other Prescribers, from separate practices, in a given 6-month period;[2]

c. A Patient seeks to fill a Designated Controlled Substance prescription after having filled three other Designated Controlled Substance prescriptions written by multiple Prescribers with overlapping days of supply at the same Settling Pharmacy's pharmacies within 30 days;

d. The distance between a Patient's residence and the Settling Pharmacy receiving the Designated Controlled Substance prescription is farther than 50 miles ;

e. The Patient resides more than 100 miles from the Prescriber who issued the Designated Controlled Substances prescription;

f. To the extent personally known to the pharmacist filling the prescription, a Patient seeks to fill a Designated Controlled Substance prescription after having two other prescriptions for Designated Controlled Substances subjected to refusals to fill by a Settling Pharmacy pharmacist within the past 30 days;

g. A patient pays in cash for a Designated Controlled Substance despite having prescription drug insurance on file for that medication;

h. Three or more Patients come to the pharmacy together to fill prescriptions for the same Designated Controlled Substances;

i. A Patient requests a Designated Controlled Substance by its slang or street description, such as "Mallinckrodt blues," "M's" or "the blue pill"; and

j. A Patient presenting a prescription for a Designated Controlled Substance appears visibly altered, intoxicated or incoherent.

4. Settling Pharmacy's CSDOP Policies and Procedures shall require their pharmacists to treat the following circumstances as "Prescription Red Flags:"

[2] In Settling Pharmacies' sole discretion, for administrative convenience Settling Pharmacies may implement this Red Flag without regard to whether Prescribers are at separate practices, thereby resulting in more instances in which the flag occurs.

a. A Controlled Substance prescription fails to meet the requirements of law;

b. A Controlled Substance prescription that appears altered, including but not limited to, a photocopied prescription or a prescription in which an altering agent, such as white out, was used;

c. A Controlled Substance prescription written with misspellings suggesting the prescription may not have been written by a valid Prescriber;

d. A Controlled Substance prescription using atypical abbreviations suggesting the prescription may not have been written by a valid Prescriber; and

e. A Controlled Substance prescription written with multiple colors of ink or in multiple different handwritings.

5. Settling Pharmacy's CSDOP Policies and Procedures shall require their pharmacists to the following circumstances as "Prescriber Red Flags:"

a. A Prescriber provides a Patient with prescriptions for all three of a Schedule II Designated Controlled Substance, a benzodiazepine, and carisoprodol;

b. A Prescriber has no office within 50 miles of the retail pharmacy store where a Designated Controlled Substance prescription is submitted; and

c. A Prescriber of Designated Controlled Substances uses prescriptions that are preprinted or stamped with drug type and amount.

X. PRESCRIBER REVIEW

1. Settling Pharmacy shall regularly review the prescribing patterns and practices of Prescribers of Designated Controlled Substances (the "Prescriber Review Process"). The Prescriber Review Process shall employ algorithms, or other means, to review data on Settling Pharmacy's retail dispensing for potential Prescribers of concern.

2. Settling Pharmacy shall initiate Prescriber Review Process in the following circumstances:

a. Personnel implementing the Prescriber Review Process become aware that a Prescriber of Designated Controlled Substances located in a Settling State has been the subject of a blanket refusal to fill by one or more of the Settling Pharmacy's retail pharmacy stores in the Settling States;

b. Personnel implementing the Prescriber Review Process become aware that a Prescriber of Designated Controlled Substances located in a Settling State has been charged or indicted with a crime related to prescribing Designated Controlled Substances by the Federal Government or law enforcement in a Settling State; or

c. A Settling Pharmacy has received a Hotline complaint that has been investigated and substantiated concerning a Prescriber's illegitimate prescribing of Designated Controlled Substances.

3. Based on the professional judgment of the employees operating the Prescriber Review Process, a Settling Pharmacy may also initiate the Prescriber Review Process when:

   a. Personnel implementing the Prescriber Review Process are notified in writing by law enforcement that a Prescriber of Designated Controlled Substances located in a Settling State is the target of an investigation regarding the prescribing of controlled substances;

   b. A Prescriber of Designated Controlled Substances was flagged for review by a Settling Pharmacy pharmacist in a Settling State (other than through a refusal to fill or blanket refusal to fill) or by field personnel who supervise a Settling Pharmacy's pharmacies in a Settling State; or

   c. A Prescriber of Designated Controlled Substances located in a Settling State was identified through the running of algorithms on Settling Pharmacy's retail dispensing.

4. Once a Settling Pharmacy identifies a Prescriber for further investigation, the Settling Pharmacy shall review pertinent and available data or information pertaining to the Prescriber, which may include interviews or other information gathered in the discretion of the employees operating the Prescriber Review Process. All data and information collected or created as part of the Prescriber Review Process shall be maintained by the Settling Pharmacy for the term of these Injunctive Terms. When permitted by law, nothing contained in this Section prevents a Settling Pharmacy from taking immediate action to Block a Prescriber.

5. If after the Prescriber Review Process those making the decision have not resolved the circumstances that caused a Settling Pharmacy to further investigate the Prescriber, then the Prescriber shall be Blocked from having Controlled Substance prescriptions filled at the Settling Pharmacy's retail pharmacies in the Settling States, when permitted by law. A Prescriber may have an opportunity at the discretion of the Settling Pharmacy to seek future reinstatement by providing information to the Settling Pharmacy that may resolve its concerns. Nothing in this Section shall limit the right or ability of an individual Settling Pharmacy pharmacists to either refuse to fill a given prescription or refuse to fill all prescriptions for Controlled Substances from a given Prescriber independent of any decision by the Settling Pharmacy to Block or not Block a given Prescriber. On written demand, on a quarterly basis, a Settling Pharmacy shall provide to each Settling State the names and DEA or NPI numbers of Prescribers of Designated Controlled Substances within that Settling State that it has Blocked. Each Settling State shall provide contact information in order to receive such information. For each of the

Settling States, on a quarterly basis, a Settling Pharmacy shall provide to the Injunctive Relief Committee the number, names and DEA or NPI numbers of Prescribers who were: (a) blocked, and the number of prescribers who were (b) reviewed but not blocked.

XI. PROACTIVE DUE DILIGENCE AND SITE VISITS

1. During the term of these Injunctive Terms, Settling Pharmacy shall conduct periodic proactive compliance reviews of its retail pharmacy stores in the Settling States to assist with the identification of potential compliance issues related to the dispensing of Designated Controlled Substances at its retail pharmacy stores in the Settling States. This may be satisfied by the use of algorithms, or other electronic means, to analyze data associated with each pharmacy's dispensing of Designated Controlled Substances to identify particular pharmacies for review as required under this Section XI. Documentation of any resulting reviews shall be maintained by the Settling Pharmacy and made accessible to all Controlled Substance Professional Practices Department personnel upon request for the duration of these Injunctive Terms.

2. During the term of these Injunctive Terms, Settling Pharmacy personnel or qualified third-party compliance consultants shall conduct site visits to each pharmacy identified for further review in a calendar year. Settling Pharmacy shall provide a list of such pharmacies to Settling States on an annual basis. These site visits shall at a minimum consist of a review of Controlled Substance dispensing documentation and recordkeeping; and a review of physical surroundings and other circumstances for any indications of potential non-compliance with these Injunctive Terms or the CSDOP Policies and Procedures, or any violations of other applicable laws and regulations related to the dispensing of Controlled Substances.

3. During site visits, Settling Pharmacy's personnel or qualified third-party compliance consultants shall interview relevant pharmacy employees, if appropriate, about any potential areas or issues of concern, including potential violations of laws related to the dispensing of Controlled Substances, the CSDOP Policies and Procedures, and these Injunctive Terms.

4. A Settling Pharmacy's personnel or qualified third-party compliance consultants who conduct site visits shall complete a report reflecting the findings of any site visit pursuant to this section. This report shall document areas or issues of concern, including potential violations of law related to the dispensing of Controlled Substances, the CSDOP Policies and Procedures, and these Injunctive Terms.

5. The site visit reports described above shall be maintained by the Settling Pharmacy and made accessible to all Controlled Substance Professional Practices Department personnel. Upon its request, the States Injunctive Relief Committee shall be provided

sample reports or a report for a particular store.

XII. THEFT AND LOSS PREVENTION

1. In addition to complying with all theft and loss procedures, policies and precautions required by state and federal law, each Settling Pharmacy shall maintain for at least three years information regarding the receipt and disposition of inventory of all Designated Controlled Substances at each retail pharmacy store.

2. In addition to any other reporting obligations under state and federal law, Settling Pharmacy must provide to each Settling State on a quarterly basis any reports it has made to the Drug Enforcement Administration regarding the theft or significant loss of Designated Controlled Substances in that Settling State pursuant to 21 CFR §1301.76(b). Each Settling State shall provide contact information in order to receive such reports. There shall be no obligation to provide these reports to Settling States that receive contemporaneous reporting of thefts or significant losses of Designated Controlled Substances to a Settling State's board of pharmacy.

XIII. REPORTING TO LAW ENFORCEMENT

1. The Settling States shall inform the Settling Pharmacy to what extent their law enforcement authorities would like to receive reports, other than those already required by law or regulation, of any confirmed forged prescriptions. To the extent not already in place, Settling Pharmacy shall implement standard operating procedures directing its employees to report any confirmed forged prescriptions for Designated Controlled Substances to those Settling States who have indicated that they want to accept it, within 5 business days of completing any review of such prescription or conduct. The Settling States shall provide contact information in order to receive such reports.

2. Settling Pharmacy shall document and for at least 2 years maintain records of any such reports that are made to Settling States regarding confirmed fraudulent or forged prescriptions, which are maintained centrally.

XIV. ENFORCEMENT OF INJUNCTIVE TERMS

1. Notice of Potential Violations and Opportunity to Cure.

    a. A "Potential Violation" occurs when the Settling State determines, after appropriate investigation and due diligence, that a Settling Pharmacy is not in substantial compliance with a material aspect of the Injunctive Terms. A Potential Violation may be for a single retail pharmacy. A violation of this Agreement is not presumed to occur when a pharmacist, pharmacist technician,

or other field personnel who supervise pharmacists and/or pharmacist technicians employed by a Settling Pharmacy violates the Settling Pharmacy's CSDOP Policies and Procedures.

b. Potential Violation Discovered by Settling State.

i. In the event of a Potential Violation identified by a Settling State, the Settling State shall notify the Settling Pharmacy in writing (the "State's Notice").

ii. Within thirty (30) days of receipt of the State's Notice, the Settling Pharmacy shall provide a written response to the Settling State. The response shall include Settling Pharmacy's position as to the act(s) of non-compliance, including, possibly, a statement setting forth why the Settling Pharmacy believes it is in substantial compliance with the relevant provision(s) or a statement explaining how the Potential Violation has been addressed.

iii. If the Settling State wishes to meet with a Settling Pharmacy, that Settling Pharmacy shall promptly make itself available for such a meeting.

c. If, after review of a written response and any meeting, the Settling State believes that a Potential Violation is ongoing or has not been substantially addressed, it will provide written notice to a Settling Pharmacy and work in conjunction with the Settling Pharmacy to devise, within thirty (30) days, a corrective action plan ("Corrective Action Plan") to remedy such Potential Violation, including a reasonable period for implementation of such plan.

d. Within 60 and 120 days after implementing the Corrective Action Plan, the Settling Pharmacy will provide a written compliance update to the Settling State and make itself available to meet with the Settling State if requested. If after reviewing the compliance update and any meeting, the Settling State believes a Potential Violation remains ongoing or has not been substantially addressed, the Settling State may commence a 30-day mediation period. If mediation fails to resolve the dispute between the parties, the Settling State may take whatever action it deems necessary, including but not limited to bringing an action to enforce these Injunctive Terms, filing a new action (administrative or civil action) for violation of the Injunctive Terms as allowed by state law, conducting further investigation, or attempting to negotiate an updated Corrective Action Plan with the Settling Pharmacy. But the Settling State may not seek to reinstate claims that have been released as part of the Settlement.

e. If a Settling Pharmacy fails or refuses to provide a written response, to devise or implement a Corrective Action Plan or to provide a compliance update as required by subsections 1(b), 1(c) and/or 1(d), a Settling State may bring an action to enforce these Injunctive Terms, filing a new action (administrative or civil action) for violation of the Injunctive Terms as allowed by state law, conduct further investigation, or attempt to negotiate an updated Corrective Action Plan with the Settling Pharmacy. But the Settling State may not seek to reinstate claims that have been released as part of the Settlement.

f. If, after review of a written response and any meeting, pursuant to subsections 1b. or 1c., above, the Settling State concludes that a Potential Violation is not ongoing or has been substantially addressed, the Settling State will provide written notice of this conclusion to the Settling Pharmacy within 30 days of reaching its conclusion.

2. Enforcement Action. Each Settling State agrees that prior to taking any court or administrative action, other than an action that the Settling State concludes is necessary to address an immediate threat to the health, safety, or welfare of the citizens of the Settling State, or that a public emergency requiring immediate action exists, it will follow the process outlined above. If the Settling State concludes that action is necessary to address an immediate threat to the health, safety, or welfare of the citizens of the Settling State or that a public emergency requiring immediate action exists, it will make best efforts to provide reasonable notice to a Settling Pharmacy prior to initiating any such action.

XV. COMPLIANCE CERTIFICATION

1. Each Settling Pharmacy's Chief Pharmacy Controlled Substances Officer shall, after diligent inquiry, complete an annual compliance certification as set out in Section XV(4).

2. The certification shall be filed annually for the duration of these Injunctive Terms with a Settling State's appropriate licensing and/or regulatory agency and its Attorney General.

3. The certification shall state:

"I understand the compliance requirements and responsibilities as they relate to [insert name of department], an area under my supervision. My job responsibilities include attempting to achieve compliance with regard to the [insert name of department] with all applicable statutory requirements, obligations of the Injunctive Terms, and applicable policies, and I have taken steps to promote such compliance. To the best of my knowledge, the [insert name of department] is in compliance with the obligations of these Injunctive Terms. I understand that this certification is being provided to and relied upon by the State of [Settling State]."

4. If the Chief Pharmacy Controlled Substances Officer is unable to provide such a certification, the Chief Pharmacy Controlled Substances Officer shall provide a written explanation of the reasons why he or she is unable to provide the certification outlined above.

XVI. DATA SHARING

1. Each Settling Pharmacy shall consent to the provision by their distributors of the Settling Pharmacy's unblinded "867 Data" (data sent from the distributor to the manufacturer concerning the sale of its products to Settling Pharmacy) to opioid manufacturers on any particular Designated Controlled Substances manufactured by them as soon as commercially reasonable and at no cost to the manufacturers, provided that, pursuant to a prior written agreement with Settling Pharmacy, the opioid manufacturers agree (a) to ensure the confidentiality of the 867 Data, except as required by law; (b) to implement safeguards and procedures to limit access to and use of the 867 Data, except as required by law; (c) that the 867 Data shall be used solely for compliance purposes as part of their Suspicious Order Monitoring programs; and (d) that the 867 Data shall be shared only with specified personnel and shall not be shared with business or sales personnel.

2. To the extent that Settling Pharmacy provides McKesson Corporation, Cardinal Health, Inc., or AmerisourceBergen Corporation (the "Settling Distributors") with Pharmacy Customer Data (as defined in the Distributor Injunctive Terms) for use in their Controlled Substance Monitoring Programs, Settling Pharmacy agree that the Settling Distributor(s) may share such Pharmacy Customer Data with the Monitor appointed pursuant to the Distributor Injunctive Terms, provided that the Monitor agrees, pursuant to a prior written agreement with Settling Pharmacy, (a) to ensure the confidentiality of the Pharmacy Customer Data; (b) to implement safeguards and procedures to limit access to and use of the Pharmacy Customer Data; (c) that the Pharmacy Customer Data is used solely for the purpose of ensuring the Settling Distributors' compliance with the Distributor Injunctive Terms; and (d) that the Pharmacy Customer Data shall be shared only with specified personnel.

XVII. CLEARINGHOUSE

1. The Settling Pharmacy will confer with any Settling Distributor that distributes Designated Controlled Substances to its retail pharmacies and the States Injunctive Relief Committee for a period not to exceed six months from the Injunctive Terms Implementation Date to determine: what additional deidentified information, if any, is needed from the Settling Pharmacy for a Settling Distributor to perform suspicious order monitoring,; if additional deidentified information is needed, how the Settling Pharmacy shall provide it to a Settling Distributor; and what information provided by the Settling Pharmacy to a Settling Distributor may be deposited by the Settling Distributor into the Clearinghouse. For the avoidance of doubt "deidentified" does not refer to omission of information about Prescribers. If agreements are not reached, the matters in dispute shall be submitted to arbitration. Due to patient privacy and legal restrictions and other confidentiality and commercial concerns, in connection with any meet and confer described above, the Settling Pharmacy may not be compelled to provide individual patient-level or prescription-level data, de-identified or otherwise, to the Settling Distributors.

2. The Settling Pharmacy and Settling Distributors will also determine whether and in what amount each Settling Pharmacy will contribute to the cost of the operation of the Clearinghouse. When a Settling Pharmacy contributes to the costs of the Clearinghouse, Settling Pharmacy, Settling Distributors and all other participants in the Clearinghouse shall determine an equitable amount of the Settling Pharmacy's contribution. If agreements are not reached, the matters in dispute shall be submitted to arbitration.

3. Any data provided by a Settling Pharmacy to a Settling Distributor and/or the Clearinghouse pursuant to these Injunctive Terms shall be treated in compliance with state and federal law, including but not limited to the Health Insurance Portability and Accountability Act of 1996 ("HIPAA") and all applicable state and federal privacy laws.

XVIII. CHANGES & MODIFICATIONS

1. These Injunctive Terms may be amended or modified with the written consent of Settling Pharmacy and a majority of the States Injunctive Relief Committee.

EXHIBIT Q

[Intentionally Omitted]

EXHIBIT R

Agreement on Attorneys' Fees, Costs, and Expenses

This Agreement on Attorneys' Fees, Costs, and Expenses ("Fee Agreement") is entered between CVS and the Plaintiffs' Executive Committee appointed in the multidistrict litigation in the Northern District of Ohio, *In re National Prescription Opiate Litigation*, No. 1:17-MD-2804 ("MDL PEC"), in connection with the CVS Global Opioid Settlement Agreement ("CVS Agreement"). This Fee Agreement becomes effective on the Effective Date of the CVS Agreement or the date that the Consent Judgments anticipated under the CVS Agreement become final in 25 Settling States (whichever is later).

I. Definitions

A. This Fee Agreement incorporates all defined terms in the CVS Agreement, unless otherwise defined herein, and shall be interpreted in a manner consistent with the CVS Agreement.

B. "*Applicant*." Any Attorney or MDL Participating Counsel who seeks an award of attorneys' fees from the Attorney Fee Fund pursuant to the procedures established by the MDL Court and the Fee Panel.

C. "*Attorney*." Any of the following retained through a legal contingency fee or hourly fee contract: a solo practitioner, multi-attorney law firm, or other legal representative of a Participating Subdivision or MDL Participating Counsel. This does not include Subdivision in-house attorneys.

D. "*Attorney Fee Fund*." An account consisting of $500,615,944 allocated to pay attorneys' fees approved pursuant to Section II.B. of this Fee Agreement, established by Order of and under the ongoing jurisdiction of the MDL Court, as provided below.

E. "*Common Benefit*." Work performed for the benefit of all Participating Subdivisions and Tribal Nations, including, but not limited to, pretrial matters, discovery, trial preparation, trial, settlement negotiations, and all other work that advances the interests of the Participating Subdivisions.

F. "*Common Benefit Fund*." The sub fund of the Attorney Fee Fund described in Section II.C.

G. "*Common Benefit Order*." The Ongoing Common Benefit Order (Dkt. #4428) in *In re National Prescription Opiate Litigation*, Case No. 1:17-md-2804, any subsequent amendments or modifications to that order, and any successor orders on Common Benefit.

H. "*Contingency Fee Fund*." The sub fund of the Attorney Fee Fund described in Section II.D.

I. "*Cost and Expense Fund Administrator*." The administrator appointed by the MDL Court on August 12, 2021 (MDL Docket No. 3828), to administer the Cost Fund and its sub funds as provided in the Fee Agreement.

J. "*Cost Fund*." An account consisting of $30,000,000, composed of the MDL Direct Cost Fund and the Subdivision Cost and Expense Fund, as provided below.

K. "*Court Common Benefit Fund*." The Common Benefit Fund established by the MDL Court in its orders of July 22, 2021, MDL Docket No. 3794, and May 9, 2022, MDL Docket No. 4428.

L. "*Fee Entitlement*." Any right, entitlement, or expectation, including but not limited to a fee contract, contingent fee contract, agreement, referral arrangement, co-counsel arrangement, State Back-Stop Agreement, or any other arrangement by which counsel could receive compensation or other consideration. For the avoidance of doubt, the scope of Fee Entitlement under paragraph II.G.3.a. does not include any Attorneys' fees associated with representation of a State.

M. "*Fee Panel*." The three-person panel appointed by the MDL Court on August 12, 2021 (MDL Docket No. 3828), to administer and make recommendations for the allocation and distribution of the Attorney Fee Fund and its sub funds as provided in the Fee Agreement.

N. "*Later Litigating State.*" A State that first files a lawsuit bringing a Released Claim against a Released Entity after December 9, 2022.

O. "*MDL Court*." United States District Court for the Northern District of Ohio Eastern Division, Case No. 1:17-md-2804, Judge Dan Aaron Polster.

P. "*MDL Direct Cost Fund*." The cost fund described in Section II.F below.

Q. "*MDL Participating Counsel."* MDL Participating Counsel includes an attorney or firm authorized by MDL 2804 Lead Counsel to perform work for the Common Benefit of Participating Subdivisions. By way of example, it would include insurance counsel and appellant counsel.

R. "*MDL PEC*." The Plaintiffs' Executive Committee appointed by the MDL Court.

S. "*Non-Participating Litigating Subdivision*." A Litigating Subdivision that is not a Participating Subdivision.

T. "*Non-Participating State.*" A State that is not a Participating State.

U. "*Participating Litigating Subdivision*." A Litigating Subdivision that is also a Participating Subdivision.

V. "*Participation Agreement*." An agreement executed by an Attorney that acknowledges the obligation to pay an appropriate MDL Common Benefit Assessment.

W. "*Qualified Tribal Representation.*" Representation by an attorney of a Participating Tribal Government regarding Released Claims against Released Entities. Such counsel are eligible for Common Benefit Fee consideration. The CVS Tribal Global Settlement will provide for the contribution to the Common Benefit Fund as shall be determined by the MDL Court.

X. "*Qualifying Representation*." Legal services provided for representation of the MDL PEC or Participating Litigating Subdivision regarding Released Claims against Released Entities.

Y. "*State Back-Stop Agreement*." Any agreement by a Settling State and private counsel for Participating Subdivisions in that State (or legislation enacted in that State) to provide, adjust, or guarantee attorneys' fees and costs, whether from the Attorney Fee Fund or any other source recognized in the agreement or legislation.[1]

Z. *"Subdivision Cost and Expense Fund."* The fund created to pay approved Subdivision and Tribal Nations costs and expenses as set forth in Section II.E.

AA. *"CVS*" means (i) CVS Health Corporation and CVS Pharmacy Inc. and (ii) all of their respective past and present direct or indirect parents, subsidiaries, divisions, affiliates, joint ventures, predecessors, successors, and assigns.

II. Fees and Costs

A. *Total Attorneys' Fees and Costs*

1. Total attorneys' fees and costs to be paid by CVS to Attorneys under this Fee Agreement shall be up to, but in no event more than, $530,615,944, subject to the reductions and provisions set forth below. The total attorneys' fees and costs consists of up to $500,615,944 for the Attorney Fee Fund, as set forth in Section II, and $30,000,000 in total for the Cost Fund, divided between the Subdivision Cost and Expense Fund and MDL Direct Cost Fund as set forth in Sections II.E and II.F, respectively. Additionally, CVS shall also pay $8,841,180 into the Court Common Benefit Fund as a common benefit fund assessment on the Credit set forth in Ex. M-3, and such amount shall be paid on the schedule set forth in Ex. M-3. The maximum attorney fees and costs allowed under this Fee Agreement, subject to the reductions set forth herein, are set forth in Ex. M-3 and shall be paid on the schedule in Ex. M-3.

2. If an Eligible State does not join the Agreement by the State Participation Date and is accordingly not a Settling State, the total attorneys' fees and costs to be

[1] Nothing herein shall be understood to indicate approval for additional State Back-Stop Agreements or modifications of existing State Back-Stop Agreements.

paid under this Fee Agreement by CVS shall be reduced by twelve point four percent (12.4%) times the Remediation Payment amount that would have been allocated to that Non-Settling State as set forth in Section IV.B of the CVS Agreement.

3. The total attorneys' fees and costs to be paid under this Fee Agreement by CVS shall also be reduced by the amount of the Contingency Fee Fund for Attorneys representing Litigating Subdivisions in any Settling State that continue to pursue Released Claims ("*Non-Participating Litigating Subdivisions*"), as set forth in Section II.D.4 and II.H.7 below.

4. If CVS settles with any Non-Settling State after December 9, 2022, and such settlement allows for the Subdivision(s) in such Non-Settling State to join the settlement, CVS agrees to withhold from the attorney fee portion of such settlement a Common Benefit Fund assessment, to be deposited in the Court Common Benefit Fund, of 7.5% times the portion of the Remediation Payment that would have been due to such State if it had participated in the CVS Settlement and been awarded its full portion of the Remediation Payment (the "*CVS State Settlement CBF Assessment*"). If CVS settles with any Subdivision(s) in a Non-Settling State other than in connection with a statewide settlement that includes the relevant State after December 9, 2022, then CVS agrees to withhold from the attorney fee portion of such settlement a Common Benefit Fund assessment, to be deposited in the Court Common Benefit Fund, of 7.5% times the portion of the Remediation Payment that would have been due to such Subdivision under this Agreement (the "*CVS Subdivision CBF Assessment,*" and, along with the CVS State Settlement CBF Assessment, each a "*CVS CBF Assessment*"). If (a) CVS settles with a Non-Settling State after December 9, 2022, (b) such settlement does not allow for the Subdivision(s) in such Non-Settling State to join the settlement, and (c) CVS later prevails in asserting that Released Claims of Primary Subdivisions in such Non-Settling State were released as a result of such settlement, CVS agrees to deposit the CVS State Settlement CBF Assessment in the Common Benefit Fund. Any CVS CBF Assessment is inclusive of any assessment related to such settlement that would be required by the Common Benefit Order. To the extent that CVS is required to pay any additional and/or separate assessment on such settlement as a result of the Common Benefit Order, the CVS CBF Assessment shall be reduced by the amount required to be paid pursuant to the Common Benefit Order.

B. *Attorney Fee Fund and Sub Funds*

1. The Attorney Fee Fund shall consist of the Contingency Fee Fund and the Common Benefit Fee Fund. There shall be a split of the Attorney Fee Fund into the Contingency Fee Fund and the Common Benefit Fund. The split shall be 40% to the Contingency Fee Fund and 60% to the Common Benefit Fund.

2. The Cost Fund shall include the MDL Direct Cost Fund and the Subdivision Cost and Expense Fund. The State Counsel Fee Fund and the State Cost Fund shall

be separate funds under the control of the Settling States and are not part of this Fee Agreement.

3. It is the intention of the Parties that the Contingency Fee Fund and the Common Benefit Fund shall be administered by the Fee Panel appointed under MDL Docket No. 3828, which will be governed by the provisions of this Fee Agreement and shall design the process and procedures for the allocation of fees pursuant to this Fee Agreement and the MDL Court's Order. The Cost Funds shall be administered by the Cost and Expense Fund Administrator appointed under MDL Docket No. 3828, who will be governed by the provisions of this Agreement and shall design the process and procedures for the allocation of costs pursuant to this Agreement and the MDL Court's Order.

4. The fees to be paid under this Fee Agreement are available for Attorneys engaged in Qualifying Representations and Qualified Trial Representations only. Fees to be paid under this Fee Agreement are not available prior to the Effective Date of the CVS Agreement, or if the CVS Agreement does not proceed. Fees to be paid under this Fee Agreement are not available for representation of States, Non-Participating Subdivisions, or Non-Litigating Subdivisions and are not available for representation of private hospitals, third-party payors, NAS claimants, personal injury/wrongful death claimants, or any entity other than Participating Litigating Subdivisions. In addition, fees under this Fee Agreement are not available for representation of any individual or entity in matters other than those claims against Released Entities, but may include a reasonable share of representations that involve development of facts for pursuit of opioid-related claims against multiple defendants in the pharmacy, manufacturing, and distribution chain.

5. In no event shall CVS be required to pay more into the Attorney Fee Fund in any Payment Year than the maximum amount specified in paragraph II.A.1., which amounts are reflected in Exhibit M to the CVS Agreement. The amounts allocated to the Contingency Fee Fund and the Common Benefit Fund set by the Fee Panel shall be subject to the reductions set forth in Section II.A.2 and the reductions and refunds set forth below.

6. Awards of fees from the Contingency Fee Fund shall be available to Attorneys with Qualifying Representations of Participating Litigating Subdivisions eligible to receive an allocation under the CVS Agreement, as set forth in Exhibit G to the CVS Agreement, and shall be made by applying the Mathematical Model attached as Exhibit "A" to this Fee Agreement. The collection of the data and calculations for the Mathematical Model has been a cooperative effort among private counsel for a large number of Litigating Subdivisions. The analysis has been spearheaded by Joseph Tann and Andrew Arnold. The Fee Panel is encouraged to continue working with those counsel in application of the Model. The Fee Panel shall oversee the application of the Model and resolve any questions or disputes concerning the eligibility of a Counsel to participate as required in

Section II.G. The Panel is empowered to hear disputes concerning and ensure the accuracy of the mathematical calculation.

7. As to awards from the Contingency Fee Fund, there shall be no right of appeal.

8. Any appeal of an award of the Fee Panel from the Common Benefit Fund will be made to the MDL Court and be reviewed under an abuse of discretion standard.

C. Common Benefit Fund (60% of the Attorney Fee Fund)

1. The maximum potential total Common Benefit Fund payment to be made by CVS into the Attorney Fee Fund is $300,369,566.40, and in no event shall it exceed that amount. CVS's maximum potential Common Benefit Fund payments are subject to the reductions set forth in Section II.A.2. for Non-Settling States and to the adjustments set forth below and, subject to those reductions, shall be paid on the following yearly schedule:

	CVS Maximum Common Benefit
Payment Year 1	$54,779,142.60
Payment Year 2	$48,406,953.60
Payment Year 3	$65,727,823.80
Payment Year 4	$65,727,823.20
Payment Year 5	$65,727,823.20
Total	$300,369,566.40

Additionally, CVS shall also pay $8,841,180 into the Court Common Benefit Fund as a common benefit fund assessment on the Credit set forth in Ex. M-3, which shall be paid on the schedule set forth in Ex. M-3.[2]

[2] For the avoidance of doubt, CVS is not required to pay any sums under this Agreement for matters settled prior to December 6, 2022, other than the $8,841,180 credit referenced above.

2. The Common Benefit Fund shall be available to compensate Attorneys engaged in Qualifying Representations of Participating Litigating Subdivisions and Qualified Tribal Representation of Tribal Participating Governments who:

   a. have performed work for the Common Benefit of all Participating Subdivisions and/or Tribal Nations consistent with the provisions to the guidelines established by Judge Polster set forth in MDL 2804 and the Order dated May 1, 2018, under docket number 358, which is included herein by reference; and

   b. satisfy the eligibility criteria set forth in Section II.G.

   For purposes of Common Benefit Fund distribution, Attorneys representing Tribal Nations litigating against CVS have also reached a settlement for Released Claims with CVS. These settlements are the subject of agreements with CVS. Attorneys representing Tribal Nations are eligible for Common Benefit consideration provided such agreements with CVS became effective under their terms. Such Attorneys must meet the eligibility criteria in Section II.G.

   For purposes of Common Benefit Fund distribution, MDL Participating Counsel not engaged in Qualifying Representations of Participating Litigating Subdivisions but who performed work for the Common Benefit pursuant to authorization from the MDL Co-Leads and meet the eligibility criteria in Section II.G. shall be eligible.

3. CVS's Common Benefit Fund payments under this Fee Agreement satisfy, at a minimum, any assessments or withholdings for the CVS Agreement that are or could be required under the Common Benefit Order for Settling States and their Participating Subdivisions. The Common Benefit Fund shall be overseen by the Fee Panel, which shall determine the allocation of funds to eligible Attorneys consistent with this Fee Agreement and the Common Benefit Order.

4. In assessing the benefits that an Applicant has conferred to Participating Subdivisions (including non-Litigating Subdivisions) and/or Tribes for purposes of any compensation decision, the Fee Panel shall give significant weight to the extent to which (i) the Applicant and his or her clients have contributed to increasing (or reducing) Initial Participation in the CVS Agreement, and (ii) the Applicant and his or her clients have contributed to increasing (or reducing) the amounts achieved under Incentive Payments A-D through participation in the CVS Agreement, including the CVS Tribal Agreement. The Fee Panel shall also consider additional fee recoveries the Applicant may potentially obtain, including, but not limited to, from attorney fee funds under other settlement agreements, State Back-Stop Agreements, representations of States or Tribal Nations, representations of other clients in opioids-related matters, or through the representation of Subdivision clients,

whether they participated in the CVS Agreement or not. It is the intent of this provision to recognize that the goal of the CVS Agreement is to provide for maximum participation by the Subdivisions, maximum abatement funding for all Subdivisions nationally, and the maximum peace for Released Entities. Therefore, representing one or more Non-Participating States or Non-Participating Subdivisions does not further the goal of the CVS Agreement, and should not be considered Common Benefit because it does not increase funds available to Participating Subdivisions' abatement programs. Representing one or more Later Litigating Subdivisions or Later Litigating States is antithetical to the CVS Settlement and detracts from Common Benefit. The Fee Panel shall consider this concept of "common detriment" set forth in this paragraph in all of its decision making with respect to the allocation of the Attorney Fee Fund among Applicants, as well as, in its discretion, any reductions provided to CVS as set forth in Section II.H.[3] The Fee Panel shall consider the totality of the Applicant's Participating Litigating Subdivisions as compared to the Applicant's Non-Participating Litigating Subdivisions; the Parties recognize that, although the goal is for 100% participation, Applicants with a greater number of clients have a greater probability of having one or more Non-Participating Litigating Subdivisions. As used in this paragraph II.C.4, "client" or "representing" a Subdivision shall include any Litigating Subdivision as to which the Applicant has a Fee Entitlement.

5. As set forth in Section II.H, the Fee Panel must consider the factors described in paragraph II.C.4 to determine how and whether to reduce the amounts to be paid by CVS under this Fee Agreement and to determine how to allocate funds among Applicants. They may also, at their discretion, consider other factors not inconsistent with the factors set forth in paragraph II.C.4. and Section II.H. Any reduction in payment obligation or credit to be given CVS in this Fee Agreement shall be applied against Payment Year 5 and then working backwards. Any reduction to an Applicant not credited to CVS shall be allocated to attorneys whose Litigating Subdivision clients participated in the settlement by the Initial Subdivision Participation Date.

D. *Contingency Fee Fund* (40% of the Attorney Fee Fund)

1. The maximum potential total Contingency Fee Fund payment to be made by CVS into the Attorney Fee Fund is $200,246,378.60, and in no event shall it exceed that amount. CVS's maximum potential Contingency Fee Fund payment shall be subject to the reductions set forth in Section II.A.2. for Non-

[3] Regardless of the status of the CT-3 bellwether counties under the CVS Agreement and this Fee Agreement, and notwithstanding any provisions in those agreements to the contrary, it is expressly agreed that the attorneys who represent or worked on behalf of the CT-3 bellwether counties in the CT-3 litigation are eligible to apply to the Fee Panel for attorneys' fees from the Common Benefit Fund for the CT-3 representation and that the Fee Panel has discretion to determine that such representation has achieved common benefit.

Settling States and to the adjustments set forth below and, subject to those reductions, shall be paid on the following yearly schedule:

	CVS Maximum Contingency Fee
Payment Year 1	$36,519,428.40
Payment Year 2	$32,271,302.40
Payment Year 3	$43,818,549.20
Payment Year 4	$43,818,548.80
Payment Year 5	$43,818,548.80
Total	$200,246,377.60

2. The Contingency Fee Fund shall be available to compensate Attorneys engaged in Qualifying Representations of Participating Litigating Subdivisions that meet the criteria set forth in Section II.G.

    a. The Contingency Fee Fund shall be available to Attorneys who represent Litigating Subdivisions that are Participating Subdivisions, whether their actions are filed in state or federal court, and meet the eligibility criteria of Section II.G.

    b. Participation in the Contingency Fee Fund by counsel that have a case that is not subject to the jurisdiction of the MDL Court shall not create, provide, or waive jurisdiction of the MDL Court over that Litigating Subdivision, that case or Attorneys, other than to oversee the fairness of the distribution process, and enforcement of this Fee Agreement.

3. The amount owed by CVS to the Contingency Fee Fund shall be reduced to reflect the non-joinder of Litigating Subdivisions in Settling States by subtracting the amounts identified by the Fee Panel, pursuant to paragraph II.H.7, that would have been owed to counsel for Non-Participating Litigating Subdivisions in Settling States had such Litigating Subdivisions been Participating Subdivisions.

4. In the event that after the date of the CVS Agreement, CVS, prior to the Effective Date of the CVS Agreement, settles with any Litigating Subdivision

that would have been eligible to participate in the CVS Agreement, and, under such settlement agreement pays attorneys' fees, the Fee Panel shall treat those Litigating Subdivisions as Participating Litigating Subdivisions and, applying the same criteria applicable to all Attorneys for Participating Litigating Subdivisions, determine what amount they would have been paid from the Contingency Fee Fund if they had become Participating Subdivisions under the CVS Agreement without such prior settlement. That sum, rather than being paid to the Attorney for the previously settling Litigating Subdivision, shall be returned to CVS, except that such refund shall not be greater than the amount paid to the Attorneys under the Litigating Subdivision's prior settlement agreement.

E. *Subdivision Cost and Expense Fund*

1. CVS shall pay $22,500,000 into the Subdivision Cost and Expense Fund on the schedule set forth below.

	Cost Fund
Payment Year 1	$11,250,000.00
Payment Year 2	$11,250,000.00
Total	$22,500,000.00

2. The Subdivision Cost and Expense Fund shall be available to compensate Attorneys for costs and expenses arising out of representation of Participating Litigating Subdivisions. No funds in the Subdivision Cost and Expense Fund may be used to compensate the costs incurred by Non-Participating Subdivisions or Non-Litigating Subdivisions or costs and expenses arising out of representation of any such Subdivision. In allocating the Subdivision Cost and Expense Fund, the Administrator shall not allocate any funds for costs incurred after December 9, 2022.

3. During the period between December 9, 2022 and the Effective Date of the CVS Agreement, the MDL PEC, as well as Litigating Subdivisions' Attorneys, shall make best efforts to cease litigation activity against CVS, including by jointly seeking stays or severance of claims against CVS, where feasible, or postponements if a motion to stay or sever is not feasible or is denied, so long as such actions are not otherwise detrimental to the Litigating Subdivision.

4. In the event that CVS, prior to the Effective Date of the CVS Agreement, settles with any Litigating Subdivision and, under such settlement agreement, pays costs to the Litigating Subdivision or its Attorney, the MDL Cost and Expense Fund Administrator shall treat those Litigating Subdivisions as Participating Litigating Subdivisions and, using the same criteria applicable to all applicants to the Subdivision Cost and Expense Fund, determine what amount in costs the Litigating

Subdivision or its Attorney would have been paid from the Subdivision Cost and Expense Fund if they had settled under the CVS Agreement. That sum, rather than being paid to the Attorney or the previously settling Litigating Subdivision, shall be credited and/or returned to CVS, except that such sum shall not be greater than the amount paid under the previously settled Litigating Subdivision's settlement agreement.

5. The Cost Fund shall be administered by the Cost Fund and Expense Fund Administrator (MDL Docket No. 3828), who will be governed by the provisions of this Agreement and shall design the process and procedures for the allocation of costs pursuant to this Agreement and the MDL Court's Order.

6. The costs of the Cost and Expense Fund Administrator shall be paid from the Cost Fund and allocated by the Cost and Expense Fund Administrator between the MDL Direct Cost Fund and the Subdivision Cost and Expense Fund to fairly charge each fund the cost incurred in implementing and supervising the specific fund.

7. The Cost and Expense Fund Administrator shall set the process and procedures for submission of and criteria for applications for payment of Subdivisions' and Tribal Nations' costs and expenses. The Cost and Expense Fund Administrator shall receive and evaluate applications from Participating Litigating Subdivisions and litigating Tribal Nations, whether filed in Federal Court or State Court, to seek reimbursement for eligible costs under Section II.E.2 in pursuit of claims against CVS. The process shall require a showing that the costs or expenses sought were reasonably incurred in furtherance of active litigation of a designated state or federal bellwether trial-set case, or Common Benefit. The Cost and Expense Fund Administrator shall require transparency from all applicants as to any other sources for compensating Attorneys for Subdivisions and Tribal Nations for costs incurred. If funds remain after the reimbursement of approved out-of-pocket costs, the Cost and Expense Fund Administrator may consider reasonable and appropriate payment for client time, costs, or expenses incurred by recognized trial bellwether plaintiffs. At the conclusion of the process, any funds not allocated by the Cost and Expense Fund Administrator shall be transferred to the Common Benefit Fund established in this Exhibit R.

8. In the event that States and Subdivisions enter into an additional global settlement with a party or parties other than CVS that is (a) under the jurisdiction of the MDL Court in MDL No. 2804, (b) creates a separate cost fund, and (c) unless the parties agree to another date, such agreement has an effective date prior to June 30, 2023, the Cost and Expense Fund Administrator shall have the authority to aggregate the Cost Fund with the cost fund created under that separate global settlement agreement. The Cost and Expense Fund Administrator shall have the authority to address the appropriate procedures and required information to allow the costs to be funded from the appropriate cost fund or shared by two or more cost funds; *provided, however*, that the Subdivision Cost and Expense Fund shall remain subject to the requirements set forth in Section II.E.2. For the avoidance of doubt, the Subdivision Cost and Expense Fund is available only to compensate Attorneys for costs and expenses arising out of representation of Participating Litigating Subdivisions, and no funds in the Subdivision Cost and Expense Fund may be used to compensate the costs incurred by Non-Participating Subdivisions or Non-Litigating Subdivisions or costs and expenses arising out of representation of any such Subdivision.

F. *MDL Direct Cost Fund*

1. CVS shall pay $7,500,000 into the MDL Direct Cost Fund on the schedule set forth below.

	MDL Direct Cost Fund
Payment Year 1	$3,750,000.00
Payment Year 2	$3,750,000.00
Total	$7,500,000.00

2. The MDL Direct Cost Fund shall be released following the Effective Date of this Fee Agreement without any delay to reimburse the MDL Counsel for an agreed-to portion of the expenses incurred, as approved by the Cost and Expense Fund Administrator. The sum deposited into the MDL Direct Cost Fund will be paid directly to the MDL Opiate Capital Account. The Cost and Expense Fund Administrator may include costs incurred by the MDL PEC in furtherance of litigation, mediation, implementation, and management of the Settlement.

3. In allocating the MDL Direct Cost Fund, the Administrator shall not allocate any funds for costs incurred after December 9, 2022, unless the Administrator determines that there are sufficient funds to cover all Subdivision costs incurred prior to December 9, 2022 and that special circumstances exist to justify costs incurred following the public announcement of the CVS Agreement, including reasonable costs related to the implementation of the CVS Agreement.

G. Eligibility

1. It is the intention of all parties participating in the Fee Panel process that there should be total transparency to the Fee Panel and to all fund participants. In connection with the process to be developed by the Fee Panel, any and all monies in attorney's fees received or awarded, including prior or future Contingency Fees, Common Benefit Fees, referral fees, expenses paid, promises for payment, or any other Fee Entitlement, to any Applicant in any opioid litigation shall be disclosed to the Fee Panel as a condition of participating in the Attorney Fee Fund and prior to an award from the Fee Panel. Any payment, expectation of payment or perceived entitlement to participate in a State Back-Stop Agreement or any other agreement reached with a Settling State or any Subdivision or any other source regarding payment of fees must be disclosed to the Fee Panel. Similarly, any right to payment from any other fund, for example a fund for payment to lawyers representing Settling States or Tribal Nations or Subdivisions shall be disclosed to the Fee Panel. Because it is anticipated that there will be multiple firms listed on contingent fee agreements with Litigating Subdivisions, the Fee Panel shall establish procedures, with input from Attorneys for Participating Litigating Subdivisions, for which party or parties should petition for fees from such groups and to whom the fee shall be paid and thereafter distributed to co-counsel in accordance with applicable agreements. For the avoidance of doubt, all Attorneys that are part of such groups must meet the eligibility criteria in paragraph II.G.3, must be subject to the criteria set forth in paragraph II.C.4, and must be disclosed to the Fee Panel.

2. An Applicant may apply for and recover attorneys' fees from the Common Benefit Fund, the Contingency Fee Fund, and any fund created by a past or future State Back-Stop Agreement, provided the Applicant satisfies the requirements relevant to each such fund and requirements for disclosure to the Fee Panel.

3. An Attorney may not receive any payment from the Attorney Fee Fund (which includes both the Contingency Fee Fund and the Common Benefit Fund) unless the following eligibility criteria are met and annually certified by the Attorney:

   a. The Attorney must expressly waive the enforcement against the Litigating Subdivision client of all Fee Entitlements (other than under State Back-Stop Agreements) arising out of or related to any or all Qualifying Representations of any Participating Litigating Subdivision prior to applying for attorneys' fees from the Attorney Fee Fund. All applications

for attorneys' fees under this Fee Agreement shall include an affirmation by the Attorney of such waiver and notice to the client(s) of such waiver. Such waiver shall not preclude the Attorney from submitting such Fee Entitlements to the Fee Panel as a factor for consideration in allocating payments from the Attorney Fee Fund or in connection with a State Back-Stop Agreement. For the avoidance of doubt, no Attorney may recover fees under this Fee Agreement unless the Attorney expressly agrees not to enforce Fee Entitlements as to each and every Participating Litigating Subdivision represented by that Attorney, but such Attorneys may participate in and receive funds from a State Back-Stop Agreement.

b. The Attorney must represent that s/he has no present intent to represent or participate in the representation of any Later Litigating Subdivision or Later Litigating State with respect to Released Claims against Released Entities.

c. The Attorney must represent that s/he has not and will not engage in any advertising or solicitation related to Released Claims against Released Entities where such advertising or solicitation relates to a representation of a Subdivision eligible to be a Participating Subdivision after the Reference Date except that the Attorney may recommend participation in the Agreement.

d. The Attorney must represent s/he will not charge or accept any referral fees for any Released Claims brought against Released Entities by Later Litigating Subdivisions or Later Litigating States. This representation shall not prohibit Attorneys from receiving allocated shares of any future common benefit assessments arising out of settlements or judgments with Later Litigating Subdivisions or Later Litigating States that are the result of the MDL Court's Common Benefit Order.

e. The Attorney may not have and must represent that s/he does not have a Fee Entitlement related to a Later Litigating Subdivision or Later Litigating State, other than a potential Common Benefit Fee.

f. The Attorney must fully disclose the participation, or the anticipation of participation, in any agreement with a Settling State or Participating Subdivision concerning fees arising out of or related to the CVS Agreement, including any fees paid or anticipated to be paid or any State Back-Stop Agreement.

g. The Attorney must identify for the Fee Panel whether s/he utilized state litigation work product or MDL work product, including but not limited to ARCOS data, document repositories, experts developed in the MDL, trial transcripts, or deposition transcripts. The Attorney must identify whether s/he signed the MDL Participation Agreement.

h. Any Attorney who applies for fees from one or both Funds must represent that, having exercised his/her independent judgment, s/he believes the CVS Agreement to be fair and will make or has made best efforts to recommend the Agreement to his or her Subdivision clients in Settling States. For avoidance of doubt, each Attorney is expected to exercise his or her independent judgment in the best interest of each client individually before determining whether to recommend joining the settlement. All applications for attorneys' fees or costs under this Section shall include an affirmation by the Attorney in compliance with this Subsection.

4. No Attorney receiving fees under this Fee Agreement may apply for or recover from the Attorney Fee Fund fees arising from representing a Non-Settling State or a Non-Participating Subdivision, provided, however, that this provision is not intended to prohibit Attorneys who do not represent or otherwise have a contractual agreement with such Non-Settling State or Non-Participating Subdivision from receiving allocated shares of any future common benefit assessments that arise out of settlements or judgments involving such Non-Settling State or Non-Participating Subdivision. All applications for attorneys' fees under this Section shall include an affirmation by the Attorney of compliance with this Section.

5. An Attorney who has filed an application under this section and received an award of attorneys' fees shall provide a certification of compliance with the requirements of this Fee Agreement annually during the years upon which they are still entitled to receive attorneys' fee payments under this Agreement. This certification will be done as directed by the Panel.

6. If, at any time, the Attorney is unable to make the representations set forth in this Section, such representations become untrue, or the Attorney falsely represents compliance with the eligibility criteria, the Attorney shall cease to be eligible to receive funds from the Attorney Fee Fund until further review by the Fee Panel of the Attorney's eligibility under and compliance with this Section II.

7. If an Attorney has a Fee Entitlement with a Later Litigating Subdivision or Later Litigating State or otherwise becomes unable to reaffirm compliance with the eligibility criteria set forth above, the Attorney shall notify the Fee Panel. For the avoidance of doubt, any Attorney who undertakes any new representation of, or has a Fee Entitlement with, a Later Litigating Subdivision or Later Litigating State shall be prohibited from receiving any future funds from the Attorney Fee Fund. If an Attorney fails to notify the Fee Panel of such Fee Entitlement with a Later Litigating Subdivision or Later Litigating State, the Attorney shall be required to refund amounts previously paid. The Fee Panel shall notify CVS when it receives notification.

8. To the extent an Attorney who has received compensation from the Attorney Fee Fund based on Qualifying Representations of Participating Litigating Subdivisions under the CVS Agreement represents a Later Litigating Subdivision or Later Litigating State, such Attorney shall be obligated to refund such amounts received as compensation from the Attorney Fee Fund to CVS. CVS or such Attorney may bring any dispute as to whether such Attorney shall be obligated to refund such amounts received from the Attorney Fee Fund to CVS, to the Fee Panel. Nothing herein shall require a multi-attorney law firm that has received compensation from the Attorney Fee Fund to refund such amounts if an attorney of the firm that is no longer affiliated with such law firm, after such departure, represents a Later Litigating Subdivision or Later Litigating State, provided that (a) neither the law firm nor any of its other attorneys have any contractual or financial arrangement regarding, stand to benefit directly or indirectly from, or directly or indirectly provide financial or other support of any kind to, the former attorney's representation of the Later Litigating Subdivision or Later Litigating State and (b) if the former attorney was a partner or owner of the multi-attorney law firm at the time that the law firm received compensation from the Attorney Fee Fund, the former attorney shall be obligated to refund such amounts as the former attorney earned as a result of the compensation that the law firm received from the Attorney Fee Fund.

9. In the event that an Attorney is deemed ineligible by the Fee Panel (whether based on its initial application or subsequent recertification), the Fee Panel shall provide notice to the Attorney and give the Attorney 30 days to provide additional information such that the Fee Panel could re-consider the Attorney's eligibility.

10. To the extent that an Attorney has a Fee Entitlement with a Participating Subdivision and is authorized to bring Released Claims against Released Entities, but such authorization is, in scope, less broad than the category of Released Claims set forth in the CVS Agreement, such Attorney may participate fully in both the Contingency Fee Fund and the Common Benefit Fund, without any reduction imposed by the Fee Panel due to the scope of the authorization, so long as the Participating Subdivision fully releases all Released Claims against Released Entities.

11. Attorneys applying to the Attorney Fee Fund knowingly and expressly agree to be bound by the decisions of the Fee Panel, subject to the limited appeal rights set forth in this Fee Agreement, and waive the ability to assert the lack of enforceability of the allocation reached through the procedures outlined herein.

12. Applicants are under an ongoing obligation to inform the Fee Panel in writing of any additional fees earned, expected, or received related to any Opioid litigation throughout the period of the Fee Panel's operation.

H. Calculation of Amounts Due

1. The Fee Panel shall be solely responsible for determining the amount of fees to be paid to each Applicant. None of the Released Entities shall have any responsibility, obligation, or liability of any kind whatsoever with respect to how attorneys' fees are calculated under this Section, except that the Fee Panel may receive information from CVS as to (a) the identity of Participating, Non-Participating, Litigating, Later Litigating, and Non-Litigating Subdivisions; (b) the impact of non-participation by a Litigating Subdivision as is relevant to the Fee Panel's determination in paragraph II.C.4; and (c) such other information as CVS may voluntarily elect to provide.

2. The Fee Panel shall establish procedures for making determinations under this Fee Agreement consistent with this Fee Agreement and orders of the MDL Court. Such procedures may include submission of documentary and/or other evidence, interviews with Applicants and/or other counsel (including counsel for CVS) that the Fee Panel deems appropriate, and/or other means of creating a record upon which fee awards will be based.

3. In making determinations under this Fee Agreement, the Fee Panel must apply the eligibility criteria set forth in Section II.G of this Fee Agreement and the criteria set forth in Section II. The Fee Panel shall ensure that payments are only made for Qualifying Representations of Participating Litigating Subdivisions. In addition, the Fee Panel will give consideration in regard to Common Benefit Fund awards to the *Johnson* factors, as well as the following factors (which factors may be applied and given relative weight in the Fee Panel's discretion):

    a. The Applicant's contemporaneously recorded time and labor dedicated to Qualifying Representations along with the Applicant's financial commitment to such Qualifying Representations. Claimed "time" will not be automatically accepted by the Fee Panel but will be critically reviewed and given substantially more weight and consideration if such time was subject to the audit process described in any Pretrial Order(s) governing the collection of common benefit time;

    b. The novelty, time, and complexity of the Qualifying Representations;

    c. The skill requisite to perform legal services properly and undesirability of the case;

    d. The preclusion of other employment by the Applicant due to time dedicated to Qualifying Representations;

    e. The Common Benefit, if any, alleged to have been conferred by the Applicant and whether such Common Benefit work product by that Applicant was used by others in parallel litigations against Released Entities

whether within or outside the MDL, provided that any Applicant claiming that s/he substantially benefited cases other than those in which s/he entered an appearance as counsel must substantiate such claims by proffering factual support, such as proper supporting affidavits or other documents as determined by the Fee Panel with input from Attorneys for Participating Litigating Subdivisions;

f. Any "common detriment," as set forth in paragraph II.C.4;

g. Any contingent fee agreement or other Fee Entitlement with Participating Subdivisions, enforcement of which, except for State Back-Stop Agreements, are waived in conjunction with the application, the nature and extent of any work for those Participating Subdivisions, whether such Participating Subdivisions actively litigated and, if so, the nature and procedural history of such case(s);

h. The experience, reputation, and ability of the Applicant;

i. Whether the Applicant's clients brought Released Claims against Released Entities;

j. The status of discovery in cases primarily handled by the Applicant;

k. The nature of any work by the Applicant on "bellwether" cases or cases that were similarly active in litigation;

l. Any pressure points successfully asserted by the Applicant in cases against CVS or any risk for CVS created by the Applicant in cases against CVS;

m. Any risk for defendants created by Applicants in cases against CVS;

n. Successful and unsuccessful motion practice in cases worked on by the Applicant;

o. The date of filing of any cases filed by the Applicant;

p. Obtaining consolidation of the litigation in the Applicant's jurisdiction;

q. The number and population of entities represented by the Applicant and the fees that would have been awarded under extinguished contingent fee arrangements;

r. Whether the Applicant's clients brought claims against CVS prior to the announcement of this settlement on December 9, 2022;

s. Whether the Applicant has had a leadership role in the litigation, whether in state or federal court;

t. Whether the Applicant has had a leadership role in any negotiations aimed at resolving the litigation;

u. Whether the Applicant's cases have survived motions to dismiss;

v. The extent to which the Applicant contributed to the work product used for the common benefit of opioids litigants, including, without limitation, work on ARCOS data, Prescription Data Monitoring Programs, IQVIA data, depositions, document production and analysis experts, motions, briefs and pleadings, trial preparations, and trials;

w. The extent to which litigation occurred prior to and contributed to completion of settlement negotiations, as distinct from litigation that occurred after the announcement of the CVS Agreement on December 9, 2022, such latter litigation both being of less value and, the case of litigation filed after the announcement of the CVS Agreement on December 9, 2022, resulting in a common detriment to the settlement process, which in both cases should be viewed less favorably; and

x. Any other factors that the Fee Panel finds to be appropriate to consider after input from Applicants to the Attorney Fee Fund.

4. It is possible that the States and Subdivisions that are litigating Opioid cases will enter additional settlements in close proximity of the time for processing the CVS Agreement. If there are additional settlements and these settlements create a Common Benefit Attorney Fee Fund to be administered by the Fee Panel, the Fee Panel may:

a. Consolidate the Common Benefit approval process to include evaluation of all Common Benefit Applications for all settlements entered after November 1, 2022;

b. Determine the fair and equitable allocation of the Aggregate Common Benefit Fees that come after December 9, 2022, including consideration of beneficial or detrimental actions taken with respect to any Settling Defendant contributing to the Common Benefit Attorney Fee Fund;

c. Give consideration to the amount and timing of each settlement, including the amount and timing of Common Benefit Fees;

d. The Fee Panel shall abide by the applicable Attorney Fee Agreement in each of the Settlements in Allocating the Common Benefit Fees provided for in the Settlement; and

e. Be guided in their work by the Orders of the Court related to Fees and Costs.

5. The Fee Panel shall develop procedures for receiving a single application, which may be updated or amended based on new information (such as participation by additional Litigating Subdivisions) from each Applicant seeking compensation from each sub fund of the Attorney Fee Fund pursuant to processes and procedures developed by the Fee Panel, which shall not be inconsistent with this Fee Agreement. Any request for attorneys' fees not included on the single application or through the updating/amendment process designed by the Fee Panel shall be deemed waived. For purposes of transparency and to permit the Fee Panel to conduct its work, the application from each Applicant shall, at a minimum, require each Applicant to:

   a. Identify all Litigating Subdivisions for which s/he is seeking payment from the Attorney Fee Fund;

   b. Identify all Subdivisions in both Settling and Non-Settling States (and, where applicable, Tribal Nations) with respect to which s/he has a Fee Entitlement with respect to Relevant Claims against Released Entities, and identify all co-counsel in such cases;

   c. Identify which of those Subdivisions are Participating Subdivisions and which are not (with similar information for Tribal Nations, where applicable);

   d. Specify the specific fund or funds within the Attorney Fee Fund from which the Attorney is seeking compensation;

   e. Demonstrate his or her eligibility for compensation from the relevant sub funds within the Attorney Fee Fund pursuant to the criteria set forth for the relevant sub fund;

   f. Identify any and all Fee Entitlements from representations of States, Tribal Nations, or other plaintiffs related to Released Claims against Released Entities or in opioids-related matters;

   g. Notwithstanding "a-f" above, the Panel may consider a supplemental application if the Applicant shows good cause why circumstances exist that will lead to consideration for additional Common Benefit award. Examples would include, but are not limited to, an Applicant having Non-Participating Litigating Subdivision clients that subsequently become Participating Subdivisions, a Bar Date passes that increases participation or an Allocation Agreement is reached.

6. With respect to the Common Benefit Fund, the Fee Panel shall (subject to any applicable MDL Court Order):

    a. Review the applications of all Applicants seeking compensation from the Common Benefit Fund, including determining eligibility for each Applicant as set forth in Section II.G.

    b. Using criteria set forth in Sections II.C and II.G, allocate amounts from the Common Benefit Fund to eligible Applicants, including payment amounts for each Payment Year. In making such allocations, the Panel shall apply the principles set forth in paragraph II.C.5 to the amounts paid to Applicants with a Common Benefit Fee Entitlement.

7. With respect to the Contingency Fee Fund, the Fee Panel shall:

    a. Review the applications of all Attorneys seeking compensation from the Litigating Subdivision Fee Fund, including determining eligibility for each Attorney as set forth in Section II.G.

    b. Apply the Mathematical Model in Exhibit A.

    c. Use such allocations to determine refund amounts owed to CVS from the Attorney Fee Fund, and inform CVS and the MDL PEC of all such adjustments.

8. To the extent that there is a dispute about the calculations of the Fee Panel related to the amount that CVS is required to pay (including application of any reductions or refunds under this Fee Agreement), such disputes shall be presented to the Fee Panel and any disputed funds be paid into/held in escrow. The Fee Panel shall resolve such disputes expeditiously, with either Party having the right to seek review from the MDL Court.

9. For purposes of determination of fee or cost awards, allocations, reductions, and possible reversions under this Fee Agreement, unless specified otherwise a Subdivision will be considered a Non-Participating Subdivision if it is not a Participating Subdivision as of the deadline for the application for the fee at issue (or, if the determination does not involve a specific application, the date on which the record for such determination closes).

10. In the event that the Fee Panel, through the use of the Mathematical Model set forth in Exhibit A, allocates funds from the Contingency Fee Fund for an Attorney based on a Qualifying Representation of a Participating Litigating Subdivision and that Subdivision is in a Settling State in which the Consent Judgment has not been approved, such funds shall be placed into escrow until the Consent Judgment is approved, after which time they shall be released.

I. Miscellaneous

1. The Fee Panel shall charge an hourly rate approved by the Court. The Pre-Effective Date costs associated with the Cost and Expense Fund Administrator shall be paid from funds in the Cost Fund. Post-Effective Date, the cost of the Fee Panel shall be charged against the applicable Fee Fund based on allocation by the Fee Panel and shall not be otherwise funded by CVS.

2. The MDL PEC will seek, and the Attorneys General for Settling States and the CVS will not oppose, a Common Benefit Fee Order requiring an assessment of 7.5% on the gross recovery (by judgment or settlement) of any Non-Participating Subdivision in a non-Settling State that is subject to the federal court jurisdiction, represented by a MDL PEC firm, represented by any Attorney receiving fees from the Common Benefit Fund, represented by any Attorney that signed a Participation Agreement or had been paid in a case otherwise under the jurisdiction of the MDL Court.

3. The MDL PEC shall provide to CVS information they have that identifies Attorneys who represent Litigating Subdivisions who are not Participating Subdivisions and who have an obligation to pay a common benefit assessment, either due to the MDL Court's orders or pursuant to a Participation Agreement.

4. The MDL PEC and CVS agree that it is a conflict of interest for an Attorney that had represented a Participating Subdivision to represent a Later Litigating Subdivision or Later Litigating State. This Subsection shall be enforceable to the extent permitted by the equivalent to Rules 1.16 and 5.6 of the ABA Model Rules of Professional Conduct in the relevant jurisdictions. The MDL PEC represents that it will comply with this provision in the case of the CVS Agreement until the Effective Date of the CVS Agreement, as well as thereafter, if the CVS Agreement proceeds.

5. Participating Subdivisions agree to instruct their counsel to treat information, work product and expert materials as confidential under Rule 1.6 of the ABA Model Rules of Professional Conduct. Accordingly, an Attorney shall not share information or work product with, or experts or materials to, non-participants (other than the Attorney's own current clients or their lawyers, consultants, experts or other representatives or agents). However, nothing herein shall prevent MDL Leadership or PEC Counsel from fulfilling their obligations in any MDL and the MDL Court Order.

III. Miscellaneous

A. *Termination*. If the CVS Agreement does not proceed past the Reference Date, whether because CVS does not determine to proceed or for any other reason, this Fee Agreement shall be null and void, CVS shall have no obligation to make any payments under this Fee Agreement, and CVS and the MDL PEC shall take such steps as are necessary to restore the *status quo ante.*

1. *MDL Court Consideration.* This Fee Agreement shall be attached as an exhibit to the CVS Agreement. This Fee Agreement shall also be submitted by CVS and the MDL PEC to the MDL Court for approval pursuant to the motion and order that shall be attached. The MDL Court shall have no authority to increase the payments made by CVS under this Fee Agreement beyond the amounts described in this Fee Agreement.

2. In the event that the MDL Court, through an order, makes any change to the Fee Panel's consideration of the factors set forth in paragraph II.C.4, or any other material change to the draft Order attached as part of Exhibit B or the terms of this Fee Agreement, CVS and the MDL PEC shall meet and confer concerning such changes.

3. If CVS and the MDL PEC are unable to reach agreement and revisions to this Fee Agreement, this Fee Agreement shall be null and void, CVS shall have no obligation to make any payments under this Fee Agreement, and CVS and the MDL PEC shall take such further steps as are necessary to restore the *status quo ante.*

B. *Amendment*. Once the MDL Court has entered an order implementing this Fee Agreement, this Fee Agreement can only be amended by (1) written agreement of CVS and the MDL PEC and (2) approval by the MDL Court.

C. *Jurisdiction and Enforcement.* The MDL Court shall have exclusive and ongoing jurisdiction over the enforcement and implementation of this Fee Agreement as set forth herein. The MDL PEC shall be the Authorized Party to enforce this Fee Agreement, as to the payment obligations of CVS as set forth in this Fee Agreement and as to Attorneys making application to the Funds under this Fee Agreement. Solely for purposes of assessing or allocating common benefit fees, the MDL Court will continue to have jurisdiction over the work product developed in the MDL Court by and under the direction of the MDL PEC with respect to claims against CVS, including data and documents, depositions, expert reports, briefs and pleadings; and the MDL Court's protective orders, management orders, and other decisions regarding such discovery and other work product, including but not limited to, conditions on its use, will continue in full force and effect. Nothing in this paragraph authorizes the MDL Court to act contrary to this Agreement, or provides the MDL Court with jurisdiction over the CVS Agreement.

Description of Mathematical Model for the Allocation of the Contingency Fee Funds

CVS Settlement Agreement

This document describes the Mathematical Model for allocation of the Contingency Fee Fund described in Exhibit R (Agreement of Attorneys' Fees, Costs, and Expenses) to the CVS Settlement Agreement.[4] Awards of fees from the Contingency Fee Funds shall be available to Attorneys with Qualifying Representations of Participating Litigating Subdivisions eligible to receive an allocation under the CVS Settlement Agreement.[5] A Fee Panel shall oversee the application of the Model and resolve any questions or disputes concerning the eligibility of a counsel to participate. The Panel is empowered to hear disputes concerning and ensure the accuracy of the mathematical calculations.

In general terms, allocation of the Contingency Fee Fund shall be made by (1) determining the amount of the Settlement Fund that is attributable to each Participating Litigating Subdivision; (2) making certain adjustments to these amounts based on when the Subdivision filed suit and the terms of the applicable fee contract; and (3) dividing the Contingency Fee Fund proportionately among counsel for each Participating Litigating Subdivision based on the amounts calculated in subpart 2.

To collect a fee award from the Contingency Fee Fund, a Participating Litigating Subdivision must have named CVS (or any Released Entity) in its lawsuit. The total maximum amount of the Contingency Fee Fund in the CVS Settlement Agreement is $200,246,377.60.[6]

Allocation of the Contingency Fee Fund shall be made according to the following steps. These calculations are made only for purpose of determining the percentage share of the Contingency Fee Fund that Attorneys for each Participating Litigating Subdivision should receive, ***not*** for determining the dollar amount each Subdivision will receive.

(1) For each Settling State, attribute 50% of the settlement funds for that State to its Subdivisions according to the Subdivision Allocation Percentage in Exhibit G to the CVS Settlement Agreement.

Illustrative example:

- Assume that State A is allocated 1.00000% of the $4,279,160,837 Remediation amount [see Exhibit M of the CVS Settlement Agreement].
- 50% of the 1% share allocated to State A is $21,395,804.19.
- Assume that, per Exhibit G of the Agreement, the Subdivision Allocation

[4] *See* CVS Settlement Agreement, Exhibit R § II.D.2.
[5] CVS Settlement Agreement, Exhibit R § II.D.2.
[6] CVS Settlement Agreement, Exhibit R § II.A.1 & II.D.1.

Percentage for City B in State A is 1.00000000%.

- For purposes of determining its counsel's share of the Contingency Fee Fund, City B is attributed 1.00000000% of $21,395,804.19, or $213,958.04.

(2) Adjust the amounts in paragraph 1 as follows:

a. *Upward Adjustment for Early Filers.* Increase the amount calculated in paragraph 1 above by 10% for any Litigating Subdivision that named CVS in a suit before December 5, 2017, the date the National Prescription Opiate Litigation MDL was formed. If the Litigating Subdivision did not name CVS in a suit before December 2, 2022, then fees from the Contingency Fee Fund will not be awarded to Attorneys with otherwise Qualifying Representations of that Participating Litigating Subdivision.

Illustrative Example:

- Assume City C is attributed $1,000,000 under paragraph 1 above.
- If City C named CVS before 12/5/2017, the attributed amount would be adjusted to $1,100,000.

b. *Determine Amount Due under Contingency Fee Contract.* Determine the amount that would be due to Attorneys with Qualifying Representations of each Participating Litigating Subdivision under the terms of the applicable fee contract if the Participating Litigating Subdivision were to receive the amount calculated in paragraph 2.a. This amount can be referred to as the Contingency Fee Assumption.

Illustrative Example:

- Continuing the example given in paragraph 2.a, if Attorneys have a 20% contingency fee contract with City C for the relevant litigation, the amount calculated in this step would be 20% of $1,100,000, or $220,000.

In the next step, the Contingency Fee Assumption is used to determine the percentage share of the Contingency Fee Fund due to Attorneys for each Participating Litigating Subdivision.

(3) Divide the Contingency Fee Fund proportionately among Attorneys for each Participating Litigating Subdivision in two ways:

a. *National Fee Pool Calculation.* Determine each Litigating Subdivision's

percentage share of all amounts due under contingency fee contracts nationwide by dividing the Contingency Fee Assumption calculated for each Subdivision in paragraph 2.b by the sum of all Contingency Fee Assumptions. Then multiply that percentage by the Contingency Fee Fund to figure each Subdivision's dollar share of the Contingency Fee Fund (but only if the Subdivision timely named CVS in a lawsuit).

Illustrative example:

- $220,000 [from para. 2.b] ÷ $220,000,000 [total amount owed under contingency fee contracts nationwide] = 0.1%[7]
- 0.1%* $200,246,377.60 [Contingency Fee Fund] = $200,246.38

b. *Separate State Fee Pools Calculation.* Determine each Litigating Subdivision's percentage share of all amounts due under contingency fee contracts statewide by dividing the Contingency Fee Assumption calculated for each Subdivision in paragraph 2.b by the sum of all Contingency Fee Assumptions in the same State. Then multiply that percentage by the portion of the Contingency Fee Fund that corresponds to that State's Overall Allocation Percentage, shown in Exhibit F of the CVS Settlement Agreement, to figure each Subdivision's dollar share of the Contingency Fee Fund (but only if the Subdivision timely named CVS in a lawsuit).

Illustrative example:

- 1% * $200,246,377.60 = $2,002,463.78 [amount of the Contingency Fee Fund corresponding to State A]
- Assume a total of $2,500,000 is owed under contingency fee contracts for State A.
- $220,000 [from para. 2.b] ÷ $2,500,000 = 8.8%
- 8.8% * $2,002,463.78 = $176,216.81

The award of fees to Attorneys with Qualifying Representations of Participating Litigating Subdivisions will be the average of the final amounts calculated in paragraphs 3.a and 3.b above, less any amounts the Fee Panel is authorized to, and does, withhold.[8]

Paragraph 3.a represents allocation based on a proportional share of a National Fee Pool,

[7] In this example, $220 million is the amount theoretically owed under all contingency fee contracts for litigation against CVS as calculated in paragraph 2.b. This amount is illustrative only; the actual amount will not be known until all litigating subdivisions are identified and the terms of their contingency fee contracts are collected.

[8] The model also enforces a maximum fee award of 20% of the amount calculated in paragraph 2.b. The description in this document of the Mathematical Model is by necessity an abstraction; the precise contours of the calculations are defined in the model itself.

while paragraph 3.b represents allocation based on a proportional share of the Separate State Fee Pools. In other words, for the National Fee Pool described above in paragraph 3.a, the contingency fee contract rate is compared to all other contingency fee contract rates in the nation. For the Separate State Fee Pools described above in paragraph 3.b, the contingency fee contract terms are compared to the other contingency fee contract terms in that same State. The National Fee Pool and the Separate State Fee Pools are given equal weighting.

Using the first methodology, Attorneys for two Subdivisions in different States with the same amount calculated under paragraph 2.b would be assigned the same amount under paragraph 3.a. Using the second methodology, Attorneys for the same two Subdivisions would be assigned different amounts under paragraph 3.b because they are in different States. Specifically, the Subdivision in the State with a smaller proportion of Participating Litigating Subdivisions would be allocated more than the Subdivision in the State with a greater proportion of Participating Litigating Subdivisions.

By: _____

Name:

Date: _____

On behalf of CVS

By: _____

Name: Paul T. Farrell, Jr.

Date: _____

By: _____

Name: Jayne Conroy

Date: _____

By: _____

Name: Joseph F. Rice

Date: _____

On behalf of Plaintiffs' Executive Committee

EXHIBIT S

Agreement on the State Outside Counsel Fee Fund for Chain Pharmacy Settlements

1. **Definitions**.

   a. "Chain Pharmacy" means any of CVS, Walgreens, and Walmart, and "Chain Pharmacies" means all of the foregoing.
   b. "Multistate Chain Pharmacy Settlement Agreement" means This Settlement Agreement along with any other settlement of opioids-related claims among 30 or more states and a Chain Pharmacy.
   c. "This Settlement Agreement" means the settlement agreement between the Settling States and the Chain Pharmacy to which this Agreement is attached as an Exhibit.
   d. "Settling Chain Pharmacy" means the Chain Pharmacy that is a party to This Settlement Agreement.
   e. "Settling States" has the meaning given such term in the relevant Multistate Chain Pharmacy Settlement Agreement.

2. **Creation of a State Outside Counsel Chain Pharmacies Fee Fund.** The Settling States have agreed to the creation of a state outside counsel fee fund to pay reasonable attorneys' fees of Settling States which have retained outside counsel in connection with litigation against one or more Chain Pharmacies (such fund, the "State Outside Counsel Chain Pharmacies Fee Fund").

3. **State Outside Counsel Chain Pharmacies Fee Fund Administration.** The State Outside Counsel Chain Pharmacies Fee Fund shall be administered separately from any other funds for the payment of attorneys fees or costs in connection with This Settlement Agreement, including any common benefit fund, contingency fee fund for subdivision counsel, state cost fund, or MDL expense fund. If necessary, a committee of Attorneys General shall be convened to oversee the State Outside Counsel Chain Pharmacies Fee Fund (the "Chain Pharmacies Fee Fund Committee"). The Chain Pharmacies Fee Fund Committee shall be appointed by the Settling State Members of the Enforcement Committee and shall be comprised solely of Attorneys General of Settling States that engaged outside counsel to pursue litigation against one or more Chain Pharmacies. The Settlement Fund Administrator (the "Fee Fund Administrator") shall administer the State Outside Counsel Chain Pharmacies Fee Fund according to this Exhibit and, if convened, the guidelines and directives of the Chain Pharmacies Fee Fund Committee.

4. **State Outside Counsel Chain Pharmacies Fee Eligibility.**

   a. To receive any amount from the State Outside Counsel Chain Pharmacies Fee Fund, an outside counsel to a Settling State must have filed and maintained an

action in the name of a Settling State or its Attorney General against a Chain Pharmacy in a state or federal court as of November 1, 2022. No Settling State (or its outside counsel) shall receive funds from both the State Outside Counsel Chain Pharmacies Fee Fund and any "Additional Remediation Amount" as may be provided for in This Settlement Agreement.

b. In addition to the eligibility criteria set forth in Paragraph 4.a, above, and for the avoidance of doubt, only Settling States under This Settlement Agreement are eligible to receive any funds paid into the State Outside Counsel Chain Pharmacies Fee Fund as a result of This Settlement Agreement.

5. **State Outside Counsel Chain Pharmacies Fee Fund Amount.** The Settling Chain Pharmacy shall pay funds into the State Outside Counsel Chain Pharmacies Fee Fund in an amount equal to, and on the schedule identified in, Exhibit M (the "Contribution"). The Settling Chain Pharmacy's Contribution shall subject to a reduction as described in Paragraph 8, below.

6. State Outside Counsel Chain Pharmacies Fee Fund Availability and Calculation of Amount.

a. The State Outside Counsel Chain Pharmacies Fee Fund shall be available to compensate private outside counsel for Settling State Attorneys General for approved fees arising out of representation of the Settling State pursuant to the schedule attached to this agreement as Schedule I (the "Fee Schedule").

b. The Fee Schedule is intended to reflect the fee calculation in subparagraph 6.c, below (the "Fee Calculation"). Subject to adjustments required by Paragraph 8, below, in the event of any discrepancy between the Fee Schedule and the Fee Calculation, the Fee Schedule shall control. Each Settling State, by becoming a Participating State in This Settlement Agreement, agrees that the Fee Schedule reflects the Fee Calculation and waives any right to contest the accuracy of the Fee Schedule, absent manifest error, the exclusion of a Settling State, or the inclusion of a Non-Settling State. The version of the Fee Schedule reflecting any necessary adjustments shall be the "Final Fee Schedule."

c. Fees shall be aggregated across the Multistate Chain Pharmacy Settlement Agreements and be calculated by adding two components: (a) a fixed amount consisting of fifty percent (50%) of the amount of remediation funds allocated to a Settling State and its Subdivisions pursuant to the Multistate Chain Pharmacy Settlement Agreements multiplied by 4.5% (or, if lower, the applicable contingency fee percentage in the Settling State's outside counsel contract); and (b) a proportional percentage of the remaining fee due under that Settling State's contract with its outside counsel assuming that fifty percent (50%) of the Settling State's recovery is allocable to a Settling State (rather than allocable to the Settling State's Participating Subdivisions) so that the fees of all eligible Settling States (minus the fixed amount that would have been allocated to any Non-Settling States had they become Settling States)

exhausts the State Outside Counsel Chain Pharmacies Fee Fund. The proportional share percentage will be the same for each Settling State included in the State Outside Counsel Chain Pharmacies Fee Fund. Fees shall be split proportionally among each Multistate Chain Pharmacy Settlement Agreement, as set forth on the Fee Schedule.

d. All amounts paid will be less any costs or fees of the Fee Fund Administrator. The Fee Schedule reflects a holdback amount of $50,000 for such administrative expenses of the Fee Fund Administrator. The remainder of any unused administrative expenses shall be disbursed pro rata to States receiving monies from the State Outside Counsel Chain Pharmacies Fee Fund at the conclusion of such administration.

7. **Payment by the Fee Fund Administrator**.

a. The Fee Fund Administrator shall hold the Contribution in escrow until the earlier of (1) the last of the three Multistate Chain Pharmacy Settlement Agreements becomes effective or (2) when instructed by the Settling State Members of the Enforcement Committee.

b. Subject to eligibility pursuant to Paragraph 4, above, a Settling State's outside counsel may receive funds from the State Outside Counsel Chain Pharmacies Fee Fund in the following scenarios ("Payment Scenarios"):

    1. The Settling State's outside counsel agrees that the amount listed for such state on the Final Fee Schedule either satisfies in full or exceeds the amounts owed to all such Settling State's outside counsel and such counsel has provided written notice waiving all entitlement to additional fee in respect of any Multistate Chain Pharmacy Settlement Agreement.
    2. The Settling State and its outside counsel enter into a signed writing establishing the amount owed to the counsel, which includes an agreement on the payment of the amount listed for such state on the Final Fee Schedule and waives any right of the State or its outside counsel to additional amounts from the State Outside Counsel Chain Pharmacies Fee Fund.
    3. A final judgment is entered that is no longer appealable, which judgement adjudicates the amount owed to the Settling State's counsel in respect of This Settlement Agreement and directs the Chain Pharmacies Fee Fund Committee how to pay the amount listed on the Final Fee Schedule for such State.

    If no Payment Scenario is applicable with respect to a Settling State, then the Settling State's share shall be placed in an interest-bearing escrow account (less reasonable expenses of the Fee Fund Administrator) and held unless and until a Payment Scenario is applicable.

c. Upon the applicability of a Payment Scenario 1 with respect to a Settling State, the Fee Fund Administrator shall pay that Settling State's outside counsel the amount identified on the Final Fee Schedule for such state or

such lesser amount that satisfies the Settling State's obligation to its outside counsel in full. Any remaining allocation to such State shall be paid to the Settling State.

d. Upon the applicability of a Payment Scenario 2 or 3 with respect to a Settling State, the Fee Fund Administrator shall release monies from the State Outside Counsel Chain Pharmacies Fee Fund in either the amount held by the Fee Fund Administrator, if the amount of the agreement or judgment is equal to or more than the amount held, or the amount indicated in the agreement or in the final judgment, if the amount in the agreement or judgment is less than the amount held.

e. Nothing herein, including the amounts listed in Paragraph 6 above or on any Fee Schedule, shall prevent a Settling State from arguing in any proceeding with its outside counsel that (i) its recovery was less than fifty percent (50%) of the recovery in the settlement agreement down to and including fifteen percent (15%) of the total recovery; (ii) any payment should be discounted by an appropriate discount rate commensurate to the risk of the settlement agreement and the timeline that the Settling State is receiving its payments; (iii) the settlement amount should be lower because the amount a Settling State receives was reduced because such Settling State's outside counsel failed to obtain joinder from a Settling State's Subdivision(s) that the outside counsel also represented; or (iv) any limitation placed by the Settling Chain Pharmacy bars payment of a higher fee to outside counsel.

f. In the event the amount due to the Settling State's outside counsel from an escrow account is less than the total amount of funds escrowed on the account of the Settling State, the balance shall be paid to the Settling State. In no event, other than a State becoming a Non-Settling State, shall funds revert to a Chain Pharmacy.

8. **Reduction of Amounts owed**

a. **Non-Settling States; Reversion and Redistribution.** Amounts owed by the Settling Chain Pharmacy to the State Outside Counsel Chain Pharmacies Fee Fund shall be reduced by amounts allocated to the fixed amount for such State under This Settlement Agreement in the event that a listed State becomes a Non-Settling State. Specifically, the reduction in the amount owed by the Settling Chain Pharmacy shall be calculated as 2.25% times the total Remediation Payments that would have been allocated to the Non-Settling State had it been a Settling State. The payments for the other Settling States reflected in the Fee Schedule shall be adjusted by the Fee Fund Administrator to reflect a recalculated proportional percentage under the Fee Calculation.

b. **Settling States; Redistribution**. If a Settling State under This Settlement Agreement (i) would otherwise be entitled to a payment from the State Outside Counsel Chain Pharmacies Fee Fund and (ii) is eligible to be a "Settling State" under either of the two other Multistate Chain Pharmacy

Settlement Agreements but does not become such a "Settling State", then that Settling State's payment from the State Outside Counsel Chain Pharmacies Fee Fund shall be reduced to an amount equal to the Contribution times the Settling State's allocation percentage on Exhibit F, which shall be treated as an additional remediation payment in lieu of a fee payment. The payments for the other Settling States reflected in the Fee Schedule shall be adjusted by the Fee Fund Administrator to reflect a recalculated proportional percentage under the Fee Calculation.

c. If either or both of the other Chain Pharmacies fail to enter into a Multistate Chain Pharmacy Settlement Agreement, or if such Multistate Chain Pharmacy Settlement Agreements fail to take effect by December 15, 2023, then the Settling Chain Pharmacy and the Enforcement Committee shall renegotiate the terms of Paragraph 8.b in order to permit prompt payment to Settling States that terminated contested litigation with the Settling Chain Pharmacy, and permitting additional time if necessary to finalize payments to the other Settling States. In no event will such renegotiation result in additional reversion of monies in the State Outside Counsel Chain Pharmacies Fee Fund to the Settling Chain Pharmacy.

9. **Interpretation**.

a. This Agreement shall be an Exhibit to each Multistate Chain Pharmacy Settlement Agreement and shall include the Fee Schedule setting forth the presumptive payment calculations for each eligible Settling State. By joining This Settlement Agreement, each State agrees on the presumptive accuracy of the Fee Schedule, absent manifest error, the inclusion of a Non-Settling State, or the exclusion of a Settling State.

b. It is the intent of all parties that the State Outside Counsel Chain Pharmacies Fee Fund function in a similar manner, with similar calculations and mechanics, as the "State Outside Counsel Fee Fund" established in Exhibit S of that certain settlement agreement dated as of July 21, 2021 setting forth the terms of settlement between and among McKesson Corporation, Cardinal Health, Inc., and AmerisourceBergen Corporation, on the one hand, and certain settling states and certain participating subdivisions, on the other hand.

Schedule I to Exhibit S

Fee Schedule

[This Fee Schedule is subject to adjustment pursuant to Paragraph 6.b of Exhibit S)]

State	Total Fee	Walgreens Share	Walmart Share	CVS Share
Alaska	$1,851,826.21	$691,943.15	$416,884.80	$742,998.26
Arkansas	$4,873,566.77	$1,821,030.03	$1,097,141.78	$1,955,394.96
Delaware	$3,726,440.37	$1,392,401.12	$838,899.65	$1,495,139.61
Kentucky	$7,773,195.40	$2,904,489.25	$1,749,908.82	$3,118,797.34
Michigan	$22,162,404.67	$8,281,081.68	$4,989,220.69	$8,892,102.29
Mississippi	$4,641,790.38	$1,734,425.75	$1,044,964.07	$1,862,400.56
Nevada	$9,363,802.33	$3,498,826.64	$2,107,987.70	$3,756,987.99
New Hampshire	$5,985,080.61	$2,236,352.15	$1,347,366.79	$2,401,361.67
New Mexico	$2,748,895.55	$2,748,895.55	$-	$-
Puerto Rico	$6,893,516.73	$2,575,793.38	$1,551,874.76	$2,765,848.60
South Dakota	$1,101,349.40	$411,524.13	$247,936.78	$441,888.49
Utah	$2,884,152.67	$1,204,171.82	$603,818.18	$1,076,162.67
West Virginia	$2,399,292.74	$2,399,292.74	$-	$-
	Admin Expense Holdback	$20,875.66	$10,467.86	$18,656.48
	Total	$31,921,103.05	$16,006,471.88	$28,527,738.91

Excluded States:

- Florida (Walgreens; Walmart; CVS)
- New Mexico (Walmart; CVS)
- West Virginia (Walmart; CVS)

EXHIBIT T

Agreement on the Joint State Cost Fund

1. **Definitions**.

   a. "Opioids Defendant" means Walmart, or such other defendant in opioids-related litigation that enters into a Multistate Settlement after November 1, 2022, and "Opioids Defendants" means all of the foregoing.

   b. "Multistate Settlement" means this Settlement Agreement along with any other settlement of opioids-related claims among 30 or more states and an Opioids Defendant.

   c. "Settlement Agreement" means the settlement agreement between the Settling States and the Opioids Defendant to which this Agreement is attached as an Exhibit.

   d. "Settling Opioids Defendant" means the Opioids Defendant that is a party to the Settlement Agreement.

   e. "Settling States" has the meaning given such term in the Settlement Agreement.

2. **Creation of a State Cost Fund.** The Settling Opioids Defendant and the Settling States agree to the creation of a fund to pay costs and expenses associated with litigation and investigations related to the opioids litigation (such fund, the "State Cost Fund"). The State Cost Fund shall be administered separately from any other funds for the payment of attorneys fees or costs in connection with the Settlement Agreement, including any common benefit fund, contingency fee fund for subdivision counsel, subdivision cost fund, or MDL expense fund. However, the State Cost Fund shall be administered jointly with similar "State Cost Funds" created in other Multistate Settlements after November 1, 2022; any state cost funds jointly administered in this manner shall be referred to as the "Joint State Cost Fund." To the extent permissible and feasible, the Joint State Cost Fund may also be jointly administered with any fund for reimbursement of states' litigation and investigation costs established by a bankruptcy plan, including the Mallinckrodt bankruptcy plan, any plans that may emerge from the bankruptcies of Purdue and Endo, and any similar bankruptcies of opioids defendants. To the extent feasible, the Joint State Cost Fund may also be jointly administered with the State Cost Funds established pursuant to the Distributors Multistate Settlement and the Janssen Multistate Settlement.

3. **State Cost Fund Amount.** The Settling Opioids Defendant shall pay into the State Cost Fund in the amount listed on, and on the schedule set forth in, Exhibit M (the "Settling Opioids Defendant's Contribution") for the purpose paying States' costs and expenses associated with to the opioid litigation.

4. **Joint State Cost Fund Committee.** A committee of Attorneys General or their designated

representatives (such committee, the "Joint State Cost Fund Committee") shall oversee the Joint State Cost Fund. The committee shall be appointed by the Settling State Members of the Enforcement Committee, who shall aim to (i) have equal representation between states that retained contingency fee outside counsel and states that did not retain contingency fee outside counsel with respect to opioids-related litigation, and (ii) maintain consistency of committee membership across state cost funds that compose the Joint State Cost Fund. The Settling State Members of the Enforcement Committee may by majority vote add to or change the composition of the Joint State Cost Fund Committee.

5. **Joint State Cost Fund Administrator.**

a. The Joint State Cost Fund Committee may select an administrator (the "Joint State Cost Fund Administrator"), who shall administer the Joint State Cost Fund and direct payments to Settling States according to the guidelines and directives of the Joint State Cost Fund Committee. While the expenses of the Joint State Cost Fund Administrator shall be reimbursable pursuant to the principles and guidelines listed below, the Joint State Cost Fund Administrator shall first rely on any separate funds that may be set aside for such purpose in any Multistate Settlement.

b. The Joint State Cost Fund Administrator shall be responsible, under the direction and supervision of the Joint State Cost Fund Committee, for receiving and reviewing applications for reimbursement from the Joint State Cost Fund. This may include the creation of an audit process to ensure the integrity of submissions, as well as reimbursement rules to incentivize accurate submissions.

6. **State Cost Fund Guidelines and Principles.**

a. Monies in the State Cost Fund shall be released without any delay to reimburse Settling States for documented costs incurred or paid in connection with litigation and investigation related to the opioid litigation.

b. In allocating the Joint State Cost Fund, the Joint State Cost Fund Committee shall seek to comply with the following principles:

1. Each State Cost Fund should be used to reimburse costs incurred by States that are Settling States in the Multistate Settlement from which funds are paid. (However, the foregoing sentence does not preclude a Non-Settling State that joins a separate Multistate Settlement from participating in the Joint State Cost Fund with respect to contributions made by other Opioids Defendants.)

2. Funds in any State Cost Fund shall be primarily used to reimburse costs incurred prior to the date on which the relevant Multistate Settlement was first made available for participation to eligible States. Regardless of other factors considered in prioritizing payments, all costs incurred prior to January 1, 2023, shall be paid

before any costs incurred after that date are paid.

3. The Joint State Cost Fund shall prioritize the reimbursement of the following over reimbursement of any State's litigation or investigation costs:

    - the reasonable costs of the Joint State Cost Fund Administrator;

    - repayment of National Association of Attorneys General grants made in connection with opioid litigation, without regard to when the grants were made;

    - repayment of state-attributable costs of any mediator in connection with negotiations of a Multistate Settlement;

4. The Joint State Cost Fund shall seek to prioritize costs in the following order:

    - litigation-related costs; then

    - investigation-related costs; then

    - settlement and negotiation related costs; then

    - cost shares.

5. Costs incurred by a State's outside counsel that the State is contractually obligated to reimburse shall be treated as costs incurred by a State.

6. As between similar categories of costs (e.g., defendant-specific litigation-related costs), the Joint State Cost Fund shall first reimburse costs incurred by a State's outside counsel that the State is contractually obligated to reimburse out of its recovery, and then reimburse costs directly incurred by States.

7. The Joint State Cost Fund shall be available to reimburse only those costs which have not yet been reimbursed to a State from any other source, including any other fund set aside in a Multistate Settlement or bankruptcy plan for the reimbursement of costs or any individual state settlements.

8. The Joint State Cost Fund should not reimburse expenses that are expected to be reimbursed from another source, such as a bankruptcy debtor, unless such expected reimbursements do not come to fruition within a reasonable amount of time. This includes cost shares paid by states.

9. When coordinating among different state cost funds that each could be used to reimburse a given expense, the Joint State Cost Fund Committee may set guidelines to equitably distribute reimbursements across all state cost funds in a manner that prioritizes costs unlikely to be otherwise reimbursed to a similarly situated State.

10. The Joint State Cost Fund may deny reimbursement of costs, on either an individual basis or a categorical basis, that a supermajority (75%+) of the Joint State Cost Fund Committee determines to be unreasonable.

11. After all costs identified in the foregoing have been reimbursed, the remaining funds in the Joint State Cost Fund shall be distributed to states in proportion to their allocation of remediation payments in the Mallinckrodt bankruptcy plan. Such distribution shall be treated as a reimbursement for States' unenumerated costs of administering the Multistate Settlements and no subdivision shares shall be carved out of such disbursement, nor shall any attorney's fees be assessed against such distribution (unless individually agreed to by a State).

c. In applying the foregoing principles, the Joint State Cost Fund Committee shall have the discretion to vary their application in order to ensure equity among similarly situated states and to facilitate the ease and speed of administering the Joint State Cost Fund. The Joint State Cost Fund Committee may also apply percentages to approximate costs attributable to a particular Opioids Defendant (or categories of Opioids Defendants) in a manner that seeks to treat similarly situated states equitably.

d. The Joint State Cost Fund Committee shall establish guidelines for the submission and approval of expenses eligible for reimbursement from the Joint State Cost Fund, which guidelines may be coordinated and consolidated with any similar cost funds in other state opioid settlements for purposes of joint administration and efficiency.

e. Unless waived by the Joint State Cost Fund Committee, the Joint State Cost Fund Administrator shall, in accordance with such guidelines, receive from Settling States records sufficient to demonstrate the incurrence and payment of each expense.

f. Where the Joint State Cost Fund Committee determines by a supermajority vote (75%+) that outside counsel for a Settling State has failed to exercise reasonable diligence in reviewing submitted costs for allowability, and such failure has resulted in the reimbursement of unallowed costs to such outside counsel, the Committee shall have the discretion to reduce or recover payments made to such outside counsel in an amount calculated to

incentivize the exercise of reasonable diligence.

7. **State Undertakings.** Each State submitting for reimbursement of costs from the Joint State Cost Fund agrees:

   a. to only submit costs allowable under this Joint State Cost Fund Agreement;

   b. to provide all back-up documentation that may be requested with respect to any submitted cost and to make itself available for any questions related to such costs;

   c. to exercise reasonable diligence to ensure that all submitted costs are allowable under (i) this Joint State Cost Fund Agreement, (ii) the State's contract with its outside counsel, if relevant, (iii) state law, and (iv) the policies and procedures applicable to the State's retention of outside counsel, if relevant; and

   d. to promptly return any excess payments made to the State or its outside counsel from the Joint State Cost Fund, including payments made for costs that were reimbursed from another source or are not allowable hereunder.

EXHIBIT U

IRS Form 1098-F

0303 ☐ VOID ☐ CORRECTED

FILER'S name, street address, city or town, state or province, country, ZIP or foreign postal code, and telephone no. **[Appropriate Official]** **[Designated State]** **[Address]**		1 Total amount required to be paid $ *	OMB No. 1545-2284 Form **1098-F** (Rev. January 2022) For calendar year 20 23
		2 Amount to be paid for violation or potential violation $ 0.00	**Fines, Penalties, and Other Amounts**
		3 Restitution/remediation amount $ *	
FILER'S TIN XX-XXXXXXX	PAYER'S TIN 05-0494040	4 Compliance amount $ 0.00	5 Date of order/agreement XX/XX/2023
PAYER'S name **CVS Health Corporation**		6 Court or entity U.S. District Court for the Northern District of Ohio and jurisdictions of other cases settled under the Settlement Agreement entered into by CVS and the Settling States (as defined in such agreement), dated as of [___].	**Copy A** **For Internal Revenue Service Center** **File with Form 1096.**
Street address (including apt. no.) **One CVS Drive**		7 Case number No. 1:17-md-2804 and other cases settled under the Settlement Agreement entered into by CVS and the Settling States (as defined in such agreement), dated as of [___].	For Privacy Act and Paperwork Reduction Act Notice, see the **current General Instructions for Certain Information Returns.**
City or town, state or province, country, and ZIP or foreign postal code **Woonsocket, RI, USA, 02895**		8 Case name or names of parties to suit, order, or agreement **National Prescription Opiate Litigation**	
		9 Code **A,B**	

Form **1098-F** (Rev. 1-2022) Cat. No. 71382B www.irs.gov/Form1098F Department of the Treasury - Internal Revenue Service

Do Not Cut or Separate Forms on This Page — Do Not Cut or Separate Forms on This Page

*** Amounts to be completed following confirmation of settlement participation.**

EXHIBIT V

CVS Settlement Agreement Sign-On Form

This form indicates whether an Eligible State has determined to become a Settling State under the CVS Settlement Agreement. Each Settling State's Attorney General represents that he or she has obtained (or will obtain no later than the Initial Subdivision Participation Date) the authority set forth in Section XI.G of the CVS Settlement Agreement. Attorneys General of Eligible States that determine to become Settling States are committing to obtaining any necessary additional State releases prior to the Effective Date.

The State/Commonwealth/Territory of_____ has determined:

☐ **to become** or
☐ **not to become**

a Settling State under the CVS Settlement Agreement

_____ _____
Signature Date

_____ _____
Printed Name Title

(1) Primary Contact for Your Office

Name:

Title:

Email:

Direct Phone Number:

(2) Secondary Contact for Your Office

Name:

Title:

Email:

Direct Phone Number:

(3) DEADLINE: SATURDAY, DECEMBER 31, 2022 AT 5:00 PM ET

Please email your completed form to the following:

For CVS:

Alexandra W. Miller
Paul B. Hynes, Jr.
Zuckerman Spaeder LLP
1800 M Street, N.W., Suite 1000
Washington, D.C. 20003
smiller@zuckerman.com
phynes@zuckerman.com

For the Attorneys General:

Josh Stein, Attorney General
North Carolina Department of Justice
Attn: Daniel Mosteller, Deputy General Counsel
PO Box 629
Raleigh, NC 27602
Dmosteller@ncdoj.gov

EXHIBIT W

Non-Litigating Threshold Subdivisions[1]

1. Alexander City city, Alabama
2. Anniston city, Alabama
3. Autauga County, Alabama*
4. Barbour County, Alabama
5. Blount County, Alabama*
6. Butler County, Alabama
7. Center Point city, Alabama
8. Chambers County, Alabama*
9. Choctaw County, Alabama
10. Clarke County, Alabama
11. Clay County, Alabama
12. Cleburne County, Alabama
13. Coosa County, Alabama
14. Covington County, Alabama*
15. Crenshaw County, Alabama
16. Dale County, Alabama*
17. DeKalb County, Alabama*
18. Dothan city, Alabama*
19. Escambia County, Alabama*
20. Etowah County, Alabama*
21. Eufaula city, Alabama
22. Fairfield city, Alabama
23. Fort Payne city, Alabama
24. Geneva County, Alabama
25. Hale County, Alabama
26. Henry County, Alabama
27. Houston County, Alabama*
28. Lee County, Alabama*
29. Leeds city, Alabama
30. Limestone County, Alabama*
31. Macon County, Alabama
32. Madison city, Alabama*
33. Monroe County, Alabama
34. Montgomery city, Alabama*
35. Montgomery County, Alabama*
36. Muscle Shoals city, Alabama
37. Oxford city, Alabama
38. Pell City city, Alabama
39. Russell County, Alabama*
40. Scottsboro city, Alabama
41. Shelby County, Alabama*
42. St. Clair County, Alabama*
43. Sumter County, Alabama
44. Tallapoosa County, Alabama*
45. Washington County, Alabama
46. Anchorage municipality, Alaska*
47. Fairbanks city, Alaska*
48. Fairbanks North Star Borough, Alaska*
49. Juneau city and borough, Alaska*
50. Kenai Peninsula Borough, Alaska*
51. Matanuska-Susitna Borough, Alaska*
52. Apache County, Arizona*
53. Apache Junction city, Arizona*
54. Avondale city, Arizona*
55. Buckeye city, Arizona*
56. Bullhead City city, Arizona*
57. Casa Grande city, Arizona*
58. Chandler city, Arizona*
59. Coconino County, Arizona*
60. El Mirage city, Arizona*
61. Flagstaff city, Arizona*
62. Fountain Hills town, Arizona
63. Gila County, Arizona*
64. Gilbert town, Arizona*
65. Glendale city, Arizona*
66. Goodyear city, Arizona*
67. Graham County, Arizona*
68. La Paz County, Arizona
69. Lake Havasu City city, Arizona*
70. Marana town, Arizona*
71. Maricopa city, Arizona*
72. Mesa city, Arizona*

[1] Entities denoted with an asterisk (*) indicate a population of greater than 30,000.

73. Oro Valley town, Arizona*
74. Peoria city, Arizona*
75. Pima County, Arizona*
76. Pinal County, Arizona*
77. Prescott city, Arizona*
78. Prescott Valley town, Arizona*
79. Queen Creek town, Arizona*
80. Sahuarita town, Arizona*
81. San Luis city, Arizona*
82. Santa Cruz County, Arizona*
83. Scottsdale city, Arizona*
84. Sierra Vista city, Arizona*
85. Surprise city, Arizona*
86. Tempe city, Arizona*
87. Tucson city, Arizona*
88. Yavapai County, Arizona*
89. Yuma city, Arizona*
90. Arkadelphia city, Arkansas
91. Arkansas County, Arkansas
92. Ashley County, Arkansas
93. Batesville city, Arkansas
94. Baxter County, Arkansas*
95. Bella Vista city, Arkansas
96. Benton city, Arkansas*
97. Benton County, Arkansas*
98. Bentonville city, Arkansas*
99. Blytheville city, Arkansas
100. Boone County, Arkansas*
101. Bradley County, Arkansas
102. Bryant city, Arkansas
103. Cabot city, Arkansas
104. Camden city, Arkansas
105. Carroll County, Arkansas
106. Centerton city, Arkansas
107. Chicot County, Arkansas
108. Clark County, Arkansas
109. Clay County, Arkansas
110. Cleburne County, Arkansas
111. Columbia County, Arkansas
112. Conway city, Arkansas*
113. Conway County, Arkansas
114. Craighead County, Arkansas*
115. Crawford County, Arkansas*
116. Crittenden County, Arkansas*
117. Cross County, Arkansas
118. Desha County, Arkansas
119. Drew County, Arkansas
120. El Dorado city, Arkansas
121. Faulkner County, Arkansas*
122. Fayetteville city, Arkansas*
123. Forrest City city, Arkansas
124. Fort Smith city, Arkansas*
125. Franklin County, Arkansas
126. Fulton County, Arkansas
127. Garland County, Arkansas*
128. Grant County, Arkansas
129. Greene County, Arkansas*
130. Harrison city, Arkansas
131. Helena-West Helena city, Arkansas
132. Hempstead County, Arkansas
133. Hot Spring County, Arkansas*
134. Hot Springs city, Arkansas*
135. Howard County, Arkansas
136. Independence County, Arkansas*
137. Izard County, Arkansas
138. Jackson County, Arkansas
139. Jacksonville city, Arkansas
140. Jefferson County, Arkansas*
141. Johnson County, Arkansas
142. Jonesboro city, Arkansas*
143. Lawrence County, Arkansas
144. Lincoln County, Arkansas
145. Little River County, Arkansas
146. Little Rock city, Arkansas*
147. Logan County, Arkansas
148. Lonoke County, Arkansas*
149. Madison County, Arkansas
150. Magnolia city, Arkansas
151. Malvern city, Arkansas
152. Marion city, Arkansas
153. Marion County, Arkansas
154. Maumelle city, Arkansas
155. Miller County, Arkansas*
156. Mississippi County, Arkansas*
157. Mountain Home city, Arkansas
158. North Little Rock city, Arkansas*

159. Ouachita County, Arkansas
160. Paragould city, Arkansas
161. Perry County, Arkansas
162. Phillips County, Arkansas
163. Pike County, Arkansas
164. Pine Bluff city, Arkansas*
165. Poinsett County, Arkansas
166. Polk County, Arkansas
167. Pope County, Arkansas*
168. Pulaski County, Arkansas*
169. Randolph County, Arkansas
170. Rogers city, Arkansas*
171. Russellville city, Arkansas
172. Saline County, Arkansas*
173. Scott County, Arkansas
174. Searcy city, Arkansas
175. Sebastian County, Arkansas*
176. Sevier County, Arkansas
177. Sharp County, Arkansas
178. Sherwood city, Arkansas*
179. Siloam Springs city, Arkansas
180. Springdale city, Arkansas*
181. St. Francis County, Arkansas
182. Stone County, Arkansas
183. Texarkana city, Arkansas
184. Union County, Arkansas*
185. Van Buren city, Arkansas
186. Van Buren County, Arkansas
187. Washington County, Arkansas*
188. West Memphis city, Arkansas
189. White County, Arkansas*
190. Yell County, Arkansas
191. Adelanto city, California*
192. Alameda city, California*
193. Alhambra city, California*
194. Aliso Viejo city, California*
195. Antioch city, California*
196. Apple Valley town, California*
197. Arcadia city, California*
198. Atascadero city, California*
199. Azusa city, California*
200. Bakersfield city, California*
201. Baldwin Park city, California*
202. Banning city, California*
203. Beaumont city, California*
204. Bell city, California*
205. Bell Gardens city, California*
206. Bellflower city, California*
207. Berkeley city, California*
208. Beverly Hills city, California*
209. Brea city, California*
210. Brentwood city, California*
211. Buena Park city, California*
212. Burbank city, California*
213. Burlingame city, California*
214. Calexico city, California*
215. Camarillo city, California*
216. Campbell city, California*
217. Carlsbad city, California*
218. Carson city, California*
219. Cathedral City city, California*
220. Ceres city, California*
221. Cerritos city, California*
222. Chino city, California*
223. Chino Hills city, California*
224. Citrus Heights city, California*
225. Claremont city, California*
226. Clovis city, California*
227. Coachella city, California*
228. Colton city, California*
229. Compton city, California*
230. Concord city, California*
231. Contra Costa County, California*
232. Corona city, California*
233. Covina city, California*
234. Culver City city, California*
235. Cupertino city, California*
236. Cypress city, California*
237. Daly City city, California*
238. Dana Point city, California*
239. Danville town, California*
240. Davis city, California*
241. Delano city, California*
242. Diamond Bar city, California*
243. Downey city, California*
244. Eastvale city, California*

245. El Cajon city, California*
246. El Centro city, California*
247. El Monte city, California*
248. El Paso de Robles (Paso Robles) city, California*
249. Elk Grove city, California*
250. Escondido city, California*
251. Fairfield city, California*
252. Folsom city, California*
253. Fontana city, California*
254. Foster City city, California*
255. Fountain Valley city, California*
256. Fremont city, California*
257. Fresno city, California*
258. Garden Grove city, California*
259. Gardena city, California*
260. Gilroy city, California*
261. Glendale city, California*
262. Glendora city, California*
263. Glenn County, California
264. Goleta city, California*
265. Hanford city, California*
266. Hawthorne city, California*
267. Hayward city, California*
268. Hemet city, California*
269. Hesperia city, California*
270. Highland city, California*
271. Hollister city, California*
272. Huntington Park city, California*
273. Indio city, California*
274. Inglewood city, California*
275. Irvine city, California*
276. Jurupa Valley city, California*
277. Kern County, California*
278. Kings County, California*
279. La Mirada city, California*
280. La Puente city, California*
281. La Quinta city, California*
282. La Verne city, California*
283. Laguna Hills city, California*
284. Laguna Niguel city, California*
285. Lake County, California*
286. Lake Elsinore city, California*
287. Lake Forest city, California*
288. Lakewood city, California*
289. Lancaster city, California*
290. Lawndale city, California*
291. Lincoln city, California*
292. Livermore city, California*
293. Lodi city, California*
294. Lompoc city, California*
295. Long Beach city, California*
296. Los Altos city, California*
297. Los Banos city, California*
298. Los Gatos town, California*
299. Lynwood city, California*
300. Madera city, California*
301. Manhattan Beach city, California*
302. Manteca city, California*
303. Martinez city, California*
304. Menifee city, California*
305. Menlo Park city, California*
306. Merced city, California*
307. Milpitas city, California*
308. Mission Viejo city, California*
309. Modesto city, California*
310. Monrovia city, California*
311. Montclair city, California*
312. Montebello city, California*
313. Monterey Park city, California*
314. Moorpark city, California*
315. Moreno Valley city, California*
316. Morgan Hill city, California*
317. Mountain View city, California*
318. Napa city, California*
319. National City city, California*
320. Newark city, California*
321. Newport Beach city, California*
322. Norwalk city, California*
323. Novato city, California*
324. Oakland city, California*
325. Oakley city, California*
326. Oceanside city, California*
327. Ontario city, California*
328. Orange city, California*
329. Orange County, California*

330. Pacifica city, California*
331. Palm Desert city, California*
332. Palm Springs city, California*
333. Palmdale city, California*
334. Palo Alto city, California*
335. Paramount city, California*
336. Pasadena city, California*
337. Perris city, California*
338. Petaluma city, California*
339. Pico Rivera city, California*
340. Pittsburg city, California*
341. Pleasant Hill city, California*
342. Pleasanton city, California*
343. Pomona city, California*
344. Porterville city, California*
345. Poway city, California*
346. Rancho Cordova city, California*
347. Rancho Cucamonga city, California*
348. Rancho Palos Verdes city, California*
349. Rancho Santa Margarita city, California*
350. Redding city, California*
351. Redlands city, California*
352. Redondo Beach city, California*
353. Redwood City city, California*
354. Rialto city, California*
355. Richmond city, California*
356. Riverside city, California*
357. Rocklin city, California*
358. Rohnert Park city, California*
359. Rosemead city, California*
360. Roseville city, California*
361. Salinas city, California*
362. San Benito County, California*
363. San Bernardino city, California*
364. San Bruno city, California*
365. San Buenaventura (Ventura) city, California*
366. San Carlos city, California*
367. San Diego city, California*
368. San Dimas city, California*
369. San Francisco city / San Francisco County, California*
370. San Gabriel city, California*
371. San Jacinto city, California*
372. San Joaquin County, California*
373. San Juan Capistrano city, California*
374. San Luis Obispo city, California*
375. San Marcos city, California*
376. San Mateo city, California*
377. San Mateo County, California*
378. San Pablo city, California*
379. San Rafael city, California*
380. San Ramon city, California*
381. Santa Barbara city, California*
382. Santa Barbara County, California*
383. Santa Clara city, California*
384. Santa Clarita city, California*
385. Santa Cruz city, California*
386. Santa Maria city, California*
387. Santa Monica city, California*
388. Santa Rosa city, California*
389. Santee city, California*
390. Saratoga city, California*
391. Seaside city, California*
392. Simi Valley city, California*
393. Siskiyou County, California*
394. Solano County, California*
395. South Gate city, California*
396. South San Francisco city, California*
397. Stanislaus County, California*
398. Stanton city, California*
399. Stockton city, California*
400. Sunnyvale city, California*
401. Temecula city, California*
402. Temple City city, California*
403. Thousand Oaks city, California*
404. Torrance city, California*
405. Tracy city, California*
406. Turlock city, California*
407. Tustin city, California*
408. Union City city, California*

409. Upland city, California*
410. Vacaville city, California*
411. Vallejo city, California*
412. Victorville city, California*
413. Visalia city, California*
414. Vista city, California*
415. Walnut Creek city, California*
416. Watsonville city, California*
417. West Covina city, California*
418. West Hollywood city, California*
419. West Sacramento city, California*
420. Whittier city, California*
421. Wildomar city, California*
422. Woodland city, California*
423. Yorba Linda city, California*
424. Yuba City city, California*
425. Yucaipa city, California*
426. Alamosa County, Colorado
427. Arvada city, Colorado*
428. Boulder city, Colorado*
429. Castle Rock town, Colorado*
430. Centennial city, Colorado*
431. Chaffee County, Colorado
432. Colorado Springs city, Colorado*
433. Delta County, Colorado*
434. Douglas County, Colorado*
435. Eagle County, Colorado*
436. El Paso County, Colorado*
437. Englewood city, Colorado*
438. Fort Collins city, Colorado*
439. Fountain city, Colorado*
440. Garfield County, Colorado*
441. Grand Junction city, Colorado*
442. La Plata County, Colorado*
443. Lafayette city, Colorado*
444. Lakewood city, Colorado*
445. Las Animas County, Colorado
446. Littleton city, Colorado*
447. Longmont city, Colorado*
448. Loveland city, Colorado*
449. Montrose County, Colorado*
450. Otero County, Colorado
451. Parker town, Colorado*
452. Pueblo city, Colorado*
453. Summit County, Colorado*
454. Weld County, Colorado*
455. Wheat Ridge city, Colorado*
456. Windsor town, Colorado*
457. Ansonia town / Ansonia city, Connecticut
458. Danbury city / Danbury town, Connecticut*
459. Derby city / Derby town, Connecticut
460. Glastonbury town, Connecticut*
461. Greenwich town, Connecticut*
462. Groton town, Connecticut*
463. Hamden town, Connecticut*
464. Hartford city / Hartford town, Connecticut*
465. Manchester town, Connecticut*
466. Meriden city / Meriden town, Connecticut*
467. New Britain town / New Britain city, Connecticut*
468. New Haven town / New Haven city, Connecticut*
469. New London city / New London town, Connecticut
470. Newington town, Connecticut*
471. Norwalk city / Norwalk town, Connecticut*
472. Stamford city / Stamford town, Connecticut*
473. Trumbull town, Connecticut*
474. Wallingford town, Connecticut*
475. West Hartford town, Connecticut*
476. New Castle County, Delaware*
477. Newark city, Delaware*
478. Wilmington city, Delaware*
479. Alpharetta city, Georgia*
480. Bacon County, Georgia
481. Barrow County, Georgia*
482. Berrien County, Georgia
483. Brookhaven city, Georgia*
484. Brooks County, Georgia

485. Brunswick city, Georgia
486. Bryan County, Georgia*
487. Calhoun city, Georgia
488. Canton city, Georgia*
489. Chamblee city, Georgia*
490. Chatham County, Georgia*
491. Colquitt County, Georgia*
492. Coweta County, Georgia*
493. Crawford County, Georgia
494. Dalton city, Georgia*
495. Doraville city, Georgia
496. Douglas County, Georgia*
497. Douglasville city, Georgia*
498. Dunwoody city, Georgia*
499. East Point city, Georgia*
500. Fannin County, Georgia
501. Floyd County, Georgia*
502. Gilmer County, Georgia*
503. Gordon County, Georgia*
504. Grady County, Georgia
505. Harris County, Georgia*
506. Heard County, Georgia
507. Hinesville city, Georgia*
508. Johns Creek city, Georgia*
509. Kennesaw city, Georgia*
510. LaGrange city, Georgia*
511. Lanier County, Georgia
512. Lawrenceville city, Georgia*
513. Marietta city, Georgia*
514. McDonough city, Georgia
515. Meriwether County, Georgia
516. Milton city, Georgia*
517. Moultrie city, Georgia
518. Newnan city, Georgia*
519. Paulding County, Georgia*
520. Peachtree City city, Georgia*
521. Peachtree Corners city, Georgia*
522. Pickens County, Georgia*
523. Pierce County, Georgia
524. Pooler city, Georgia
525. Richmond Hill city, Georgia
526. Roswell city, Georgia*
527. Smyrna city, Georgia*
528. Snellville city, Georgia
529. South Fulton city, Georgia*
530. Statesboro city, Georgia*
531. Stonecrest city, Georgia*
532. Telfair County, Georgia
533. Thomas County, Georgia*
534. Tucker city, Georgia*
535. Valdosta city, Georgia*
536. Villa Rica city, Georgia
537. Walker County, Georgia*
538. Ware County, Georgia*
539. Warner Robins city, Georgia*
540. White County, Georgia*
541. Winder city, Georgia
542. Woodstock city, Georgia*
543. Hawaii County, Hawaii*
544. Honolulu County, Hawaii*
545. Maui County, Hawaii*
546. Bonner County, Idaho*
547. Caldwell city, Idaho*
548. Coeur d'Alene city, Idaho*
549. Idaho Falls city, Idaho*
550. Kootenai County, Idaho*
551. Lewiston city, Idaho*
552. Madison County, Idaho*
553. Meridian city, Idaho*
554. Nampa city, Idaho*
555. Nez Perce County, Idaho*
556. Post Falls city, Idaho*
557. Adams County, Illinois*
558. Addison township, Illinois*
559. Addison village, Illinois*
560. Algonquin township, Illinois*
561. Algonquin village, Illinois*
562. Arlington Heights village, Illinois*
563. Aurora city, Illinois*
564. Aurora township, Illinois*
565. Avon township, Illinois*
566. Bartlett village, Illinois*
567. Batavia township, Illinois*
568. Belleville city, Illinois*
569. Bellwood village, Illinois
570. Bensenville village, Illinois

571. Berwyn city, Illinois*
572. Berwyn township, Illinois*
573. Bloom township, Illinois*
574. Bloomingdale township, Illinois*
575. Bloomington City township, Illinois*
576. Bloomington city, Illinois*
577. Bolingbrook village, Illinois*
578. Bourbonnais township, Illinois*
579. Bremen township, Illinois*
580. Bridgeview village, Illinois
581. Bristol township, Illinois*
582. Buffalo Grove village, Illinois*
583. Burbank city, Illinois
584. Calumet City city, Illinois*
585. Capital township, Illinois*
586. Carbondale city, Illinois
587. Carol Stream village, Illinois*
588. Carpentersville village, Illinois*
589. Caseyville township, Illinois*
590. Champaign City township, Illinois*
591. Champaign city, Illinois*
592. Chicago Heights city, Illinois
593. Chicago Ridge village, Illinois
594. Cicero town / Cicero township, Illinois*
595. Clinton County, Illinois*
596. Collinsville township, Illinois*
597. Crystal Lake city, Illinois*
598. Cunningham township, Illinois*
599. Danville city, Illinois*
600. Decatur city, Illinois*
601. Decatur township, Illinois*
602. DeKalb city, Illinois*
603. DeKalb township, Illinois*
604. Des Plaines city, Illinois*
605. Dolton village, Illinois
606. Downers Grove township, Illinois*
607. Downers Grove village, Illinois*
608. Du Page township, Illinois*
609. Dundee township, Illinois*
610. Edwardsville township, Illinois*
611. Effingham County, Illinois*
612. Ela township, Illinois*
613. Elgin city, Illinois*
614. Elgin township, Illinois*
615. Elk Grove township, Illinois*
616. Elk Grove Village village, Illinois*
617. Elmhurst city, Illinois*
618. Evanston city, Illinois*
619. Evergreen Park village, Illinois
620. Forest Park village, Illinois
621. Frankfort township, Illinois*
622. Franklin Park village, Illinois
623. Fremont township, Illinois*
624. Fulton County, Illinois*
625. Galesburg City township, Illinois*
626. Galesburg city, Illinois*
627. Glendale Heights village, Illinois*
628. Glenview village, Illinois*
629. Grafton township, Illinois*
630. Granite City city, Illinois
631. Grundy County, Illinois*
632. Gurnee village, Illinois*
633. Hanover Park village, Illinois*
634. Hanover township, Illinois*
635. Harlem township, Illinois*
636. Harvey city, Illinois
637. Hoffman Estates village, Illinois*
638. Homer township, Illinois*
639. Jackson County, Illinois*
640. Jersey County, Illinois
641. Joliet city, Illinois*
642. Joliet township, Illinois*
643. Kankakee city, Illinois
644. Knox County, Illinois*
645. La Grange Park village, Illinois
646. Lake County, Illinois*
647. Lake Villa township, Illinois*
648. LaSalle County, Illinois*
649. Lee County, Illinois*
650. Leyden township, Illinois*
651. Libertyville township, Illinois*
652. Lisle township, Illinois*
653. Livingston County, Illinois*
654. Lockport township, Illinois*

655. Lombard village, Illinois*
656. Lyons township, Illinois*
657. Lyons village, Illinois
658. Madison County, Illinois*
659. Maine township, Illinois*
660. Massac County, Illinois
661. Maywood village, Illinois
662. McHenry township, Illinois*
663. McLean County, Illinois*
664. Melrose Park village, Illinois
665. Milton township, Illinois*
666. Moline city, Illinois*
667. Monroe County, Illinois*
668. Moraine township, Illinois*
669. Morgan County, Illinois*
670. Mount Prospect village, Illinois*
671. Mundelein village, Illinois*
672. Naperville city, Illinois*
673. Naperville township, Illinois*
674. New Lenox township, Illinois*
675. New Trier township, Illinois*
676. Niles township, Illinois*
677. Normal town, Illinois*
678. Normal township, Illinois*
679. Northbrook village, Illinois*
680. Northfield township, Illinois*
681. Northlake city, Illinois
682. Nunda township, Illinois*
683. Oak Lawn village, Illinois*
684. Oak Park township, Illinois*
685. Oak Park village, Illinois*
686. Ogle County, Illinois*
687. Orland Park village, Illinois*
688. Orland township, Illinois*
689. Oswego township, Illinois*
690. Oswego village, Illinois*
691. Palatine township, Illinois*
692. Palatine village, Illinois*
693. Palos Heights city, Illinois
694. Palos Hills city, Illinois
695. Palos township, Illinois*
696. Park Ridge city, Illinois*
697. Pekin city, Illinois*
698. Peoria City township, Illinois*
699. Peoria city, Illinois*
700. Peoria County, Illinois*
701. Plainfield township, Illinois*
702. Plainfield village, Illinois*
703. Proviso township, Illinois*
704. Quincy city, Illinois*
705. Quincy township, Illinois*
706. Randolph County, Illinois*
707. Rich township, Illinois*
708. River Forest village, Illinois
709. Rock Island city, Illinois*
710. Rockford township, Illinois*
711. Romeoville village, Illinois*
712. Schaumburg township, Illinois*
713. Schaumburg village, Illinois*
714. Schiller Park village, Illinois
715. Shields township, Illinois*
716. Skokie village, Illinois*
717. South Moline township, Illinois*
718. Springfield city, Illinois*
719. St. Charles city, Illinois*
720. St. Charles township, Illinois*
721. St. Clair County, Illinois*
722. St. Clair township, Illinois*
723. Stickney township, Illinois*
724. Streamwood village, Illinois*
725. Streator city, Illinois
726. Summit village, Illinois
727. Tazewell County, Illinois*
728. Thornton township, Illinois*
729. Tinley Park village, Illinois*
730. Troy township, Illinois*
731. Urbana city, Illinois*
732. Vermilion County, Illinois*
733. Vernon township, Illinois*
734. Warren township, Illinois*
735. Washington County, Illinois
736. Waukegan city, Illinois*
737. Waukegan township, Illinois*
738. Wayne township, Illinois*
739. West Deerfield township, Illinois*
740. Wheatland township, Illinois*

741. Wheaton city, Illinois*
742. Wheeling township, Illinois*
743. Wheeling village, Illinois*
744. Whiteside County, Illinois*
745. Williamson County, Illinois*
746. Winfield township, Illinois*
747. Wood River township, Illinois*
748. Woodford County, Illinois*
749. Woodridge village, Illinois*
750. Worth township, Illinois*
751. York township, Illinois*
752. Aboite township, Indiana*
753. Adams County, Indiana*
754. Adams township, Indiana*
755. Anderson city, Indiana*
756. Anderson township, Indiana*
757. Bartholomew County, Indiana*
758. Boone County, Indiana*
759. Calumet township, Indiana*
760. Carmel city, Indiana*
761. Cass County, Indiana*
762. Center township, Delaware County, Indiana*
763. Center township, Howard County, Indiana*
764. Center township, Lake County, Indiana*
765. Center township, Marion County, Indiana*
766. Center township, Porter County, Indiana*
767. Center township, Vanderburgh County, Indiana*
768. Clark County, Indiana*
769. Clay township, Hamilton County, Indiana*
770. Clay township, St. Joseph County, Indiana*
771. Clinton County, Indiana*
772. Columbus city, Indiana*
773. Columbus township, Indiana*
774. Concord township, Indiana*
775. Crown Point city, Indiana*
776. Daviess County, Indiana*
777. Dearborn County, Indiana*
778. Decatur township, Indiana*
779. DeKalb County, Indiana*
780. Delaware township, Indiana*
781. Dubois County, Indiana*
782. Elkhart city, Indiana*
783. Elkhart County, Indiana*
784. Elkhart township, Indiana*
785. Fairfield township, Indiana*
786. Fall Creek township, Hamilton County, Indiana*
787. Fayette County, Indiana
788. Floyd County, Indiana*
789. Franklin township, Marion County, Indiana*
790. Gibson County, Indiana*
791. Goshen city, Indiana*
792. Grant County, Indiana*
793. Greene County, Indiana*
794. Guilford township, Indiana*
795. Hamilton County, Indiana*
796. Hancock County, Indiana*
797. Harrison township, Vigo County, Indiana*
798. Hendricks County, Indiana*
799. Henry County, Indiana*
800. Hobart township, Indiana*
801. Huntington County, Indiana*
802. Jasper County, Indiana*
803. Jefferson County, Indiana*
804. Jeffersonville township, Indiana*
805. Johnson County, Indiana*
806. Knight township, Indiana*
807. Knox County, Indiana*
808. Kokomo city, Indiana*
809. Kosciusko County, Indiana*
810. LaGrange County, Indiana*
811. Lawrence township, Indiana*
812. Lincoln township, Indiana*
813. Madison city, Indiana
814. Madison County, Indiana*
815. Merrillville town, Indiana*

816. Miami County, Indiana*
817. Michigan City city, Indiana*
818. Mishawaka city, Indiana*
819. Montgomery County, Indiana*
820. New Albany city, Indiana*
821. New Albany township, Indiana*
822. Noble County, Indiana*
823. Noblesville township, Indiana*
824. North township, Indiana*
825. Ohio township, Indiana*
826. Orange County, Indiana
827. Penn township, Indiana*
828. Perry township, Allen County, Indiana*
829. Perry township, Marion County, Indiana*
830. Perry township, Monroe County, Indiana*
831. Pike township, Indiana*
832. Pleasant township, Johnson County, Indiana*
833. Portage city, Indiana*
834. Portage township, Indiana*
835. Portage township, Indiana*
836. Putnam County, Indiana*
837. Ross township, Indiana*
838. Shelby County, Indiana*
839. Shelbyville city, Indiana
840. St. John township, Indiana*
841. St. Joseph township, Indiana*
842. Steuben County, Indiana*
843. Valparaiso city, Indiana*
844. Wabash County, Indiana*
845. Wabash township, Indiana*
846. Warren township, Indiana*
847. Warrick County, Indiana*
848. Washington township, Allen County, Indiana*
849. Washington township, Hamilton County, Indiana*
850. Washington township, Hendricks County, Indiana*
851. Washington township, Marion County, Indiana*
852. Wayne County, Indiana*
853. Wayne township, Allen County, Indiana*
854. Wayne township, Marion County, Indiana*
855. Wayne township, Wayne County, Indiana*
856. Wea township, Indiana*
857. White River township, Indiana*
858. Whitley County, Indiana*
859. Ames city, Iowa*
860. Ankeny city, Iowa*
861. Bettendorf city, Iowa*
862. Cedar Falls city, Iowa*
863. Cedar Rapids city, Iowa*
864. Council Bluffs city, Iowa*
865. Davenport city, Iowa*
866. Des Moines city, Iowa*
867. Dubuque city, Iowa*
868. Dubuque County, Iowa*
869. Iowa City city, Iowa*
870. Linn County, Iowa*
871. Marion city, Iowa*
872. Marshall County, Iowa*
873. Sioux City city, Iowa*
874. Story County, Iowa*
875. Urbandale city, Iowa*
876. Wapello County, Iowa*
877. Warren County, Iowa*
878. Waterloo city, Iowa*
879. West Des Moines city, Iowa*
880. Woodbury County, Iowa*
881. Butler County, Kansas*
882. Cherokee County, Kansas
883. Crawford County, Kansas*
884. Douglas County, Kansas*
885. Ford County, Kansas*
886. Geary County, Kansas*
887. Harvey County, Kansas*
888. Hutchinson city, Kansas*
889. Lawrence city, Kansas*

890. Leavenworth city, Kansas*
891. Leawood city, Kansas*
892. Lenexa city, Kansas*
893. Lyon County, Kansas*
894. Manhattan city, Kansas*
895. Miami County, Kansas*
896. Montgomery County, Kansas*
897. Neosho County, Kansas
898. Olathe city, Kansas*
899. Riley County, Kansas*
900. Salina city, Kansas*
901. Saline County, Kansas*
902. Shawnee city, Kansas*
903. Shawnee County, Kansas*
904. Topeka city, Kansas*
905. Allen County, Kentucky
906. Anderson County, Kentucky
907. Barren County, Kentucky*
908. Bath County, Kentucky
909. Bell County, Kentucky
910. Bowling Green city, Kentucky*
911. Breathitt County, Kentucky
912. Bullitt County, Kentucky*
913. Caldwell County, Kentucky
914. Calloway County, Kentucky*
915. Campbell County, Kentucky*
916. Campbellsville city, Kentucky
917. Carter County, Kentucky
918. Casey County, Kentucky
919. Christian County, Kentucky*
920. Clay County, Kentucky
921. Clinton County, Kentucky
922. Daviess County, Kentucky*
923. Elizabethtown city, Kentucky*
924. Fleming County, Kentucky
925. Florence city, Kentucky*
926. Garrard County, Kentucky
927. Georgetown city, Kentucky*
928. Grant County, Kentucky
929. Graves County, Kentucky*
930. Harrison County, Kentucky
931. Hart County, Kentucky
932. Hopkinsville city, Kentucky*
933. Knox County, Kentucky*
934. Larue County, Kentucky
935. Laurel County, Kentucky*
936. Letcher County, Kentucky
937. Lewis County, Kentucky
938. Lincoln County, Kentucky
939. Logan County, Kentucky
940. Martin County, Kentucky
941. Mason County, Kentucky
942. Mercer County, Kentucky
943. Monroe County, Kentucky
944. Morgan County, Kentucky
945. Mount Washington city, Kentucky
946. Muhlenberg County, Kentucky*
947. Murray city, Kentucky
948. Nelson County, Kentucky*
949. Nicholasville city, Kentucky*
950. Owen County, Kentucky
951. Owensboro city, Kentucky*
952. Powell County, Kentucky
953. Richmond city, Kentucky*
954. Rowan County, Kentucky
955. Russell County, Kentucky
956. Shepherdsville city, Kentucky
957. Spencer County, Kentucky
958. Taylor County, Kentucky
959. Todd County, Kentucky
960. Union County, Kentucky
961. Wayne County, Kentucky
962. Webster County, Kentucky
963. Whitley County, Kentucky*
964. Winchester city, Kentucky
965. Acadia Parish, Louisiana*
966. Bienville Parish, Louisiana
967. Covington city, Louisiana
968. De Soto Parish, Louisiana
969. Gretna city, Louisiana
970. Iberville Parish, Louisiana*
971. Lafayette city, Louisiana*
972. Lincoln Parish, Louisiana*
973. Livingston Parish, Louisiana*
974. Morgan City city, Louisiana
975. Natchitoches city, Louisiana

976. Pointe Coupee Parish, Louisiana
977. Sabine Parish, Louisiana
978. St. Bernard Parish, Louisiana*
979. Tangipahoa Parish, Louisiana*
980. Terrebonne Parish, Louisiana*
981. Franklin County, Maine*
982. Hancock County, Maine*
983. Oxford County, Maine*
984. Annapolis city, Maryland*
985. Anne Arundel County, Maryland*
986. Baltimore County, Maryland*
987. Cecil County, Maryland*
988. College Park city, Maryland*
989. Gaithersburg city, Maryland*
990. Queen Anne's County, Maryland*
991. Rockville city, Maryland*
992. Salisbury city, Maryland*
993. Westminster city, Maryland
994. Worcester County, Maryland*
995. Amherst town, Massachusetts*
996. Andover town, Massachusetts*
997. Arlington town, Massachusetts*
998. Attleboro city, Massachusetts*
999. Barnstable County, Massachusetts*
1000. Boston city, Massachusetts*
1001. Bristol County, Massachusetts*
1002. Dartmouth town, Massachusetts*
1003. Dracut town, Massachusetts*
1004. Franklin Town city, Massachusetts*
1005. Lawrence city, Massachusetts*
1006. Lexington town, Massachusetts*
1007. Marlborough city, Massachusetts*
1008. Nantucket town, Massachusetts
1009. Needham town, Massachusetts*
1010. Newton city, Massachusetts*
1011. Norfolk County, Massachusetts*
1012. Plymouth County, Massachusetts*
1013. Shrewsbury town, Massachusetts*
1014. Taunton city, Massachusetts*
1015. Waltham city, Massachusetts*
1016. Westfield city, Massachusetts*
1017. Allegan County, Michigan*
1018. Ann Arbor city, Michigan*
1019. Barry County, Michigan*
1020. Battle Creek city, Michigan*
1021. Bay City city, Michigan*
1022. Bay County, Michigan*
1023. Bedford township, Michigan*
1024. Bloomfield charter township, Michigan*
1025. Brownstown charter township, Michigan*
1026. Cheboygan County, Michigan
1027. Chesterfield township, Michigan*
1028. Clare County, Michigan*
1029. Commerce charter township, Michigan*
1030. Dearborn city, Michigan*
1031. Dearborn Heights city, Michigan*
1032. Delta charter township, Michigan*
1033. Eastpointe city, Michigan*
1034. Emmet County, Michigan*
1035. Farmington Hills city, Michigan*
1036. Flint charter township, Michigan*
1037. Flint city, Michigan*
1038. Georgetown charter township, Michigan*
1039. Grand Blanc charter township, Michigan*
1040. Harrison charter township, Michigan
1041. Holland charter township, Michigan*
1042. Holland city, Michigan*
1043. Huron County, Michigan*
1044. Independence charter township, Michigan*
1045. Jackson County, Michigan*
1046. Kalamazoo city, Michigan*
1047. Kentwood city, Michigan*
1048. Lapeer County, Michigan*
1049. Lincoln Park city, Michigan*
1050. Macomb township, Michigan*
1051. Mecosta County, Michigan*
1052. Meridian charter township, Michigan*

1053. Midland city, Michigan*
1054. Midland County, Michigan*
1055. Muskegon city, Michigan*
1056. Novi city, Michigan*
1057. Orion charter township, Michigan*
1058. Ottawa County, Michigan*
1059. Plainfield charter township, Michigan*
1060. Portage city, Michigan*
1061. Redford charter township, Michigan*
1062. Rochester Hills city, Michigan*
1063. Roseville city, Michigan*
1064. Royal Oak city, Michigan*
1065. Saginaw charter township, Michigan*
1066. Saginaw city, Michigan*
1067. Shelby charter township, Michigan*
1068. Southfield city, Michigan*
1069. St. Clair Shores city, Michigan*
1070. St. Joseph County, Michigan*
1071. Sterling Heights city, Michigan*
1072. Taylor city, Michigan*
1073. Troy city, Michigan*
1074. Van Buren County, Michigan*
1075. Warren city, Michigan*
1076. Waterford charter township, Michigan*
1077. West Bloomfield charter township, Michigan*
1078. White Lake charter township, Michigan*
1079. Wyoming city, Michigan*
1080. Ypsilanti charter township, Michigan*
1081. Andover city, Minnesota*
1082. Apple Valley city, Minnesota*
1083. Becker County, Minnesota*
1084. Beltrami County, Minnesota*
1085. Benton County, Minnesota*
1086. Blaine city, Minnesota*
1087. Bloomington city, Minnesota*
1088. Blue Earth County, Minnesota*
1089. Brooklyn Center city, Minnesota*
1090. Brooklyn Park city, Minnesota*
1091. Burnsville city, Minnesota*
1092. Carlton County, Minnesota*
1093. Carver County, Minnesota*
1094. Chisago County, Minnesota*
1095. Clay County, Minnesota*
1096. Cottage Grove city, Minnesota*
1097. Crow Wing County, Minnesota*
1098. Dakota County, Minnesota*
1099. Douglas County, Minnesota*
1100. Eagan city, Minnesota*
1101. Eden Prairie city, Minnesota*
1102. Edina city, Minnesota*
1103. Freeborn County, Minnesota*
1104. Goodhue County, Minnesota*
1105. Hennepin County, Minnesota*
1106. Inver Grove Heights city, Minnesota*
1107. Isanti County, Minnesota*
1108. Itasca County, Minnesota*
1109. Kandiyohi County, Minnesota*
1110. Lakeville city, Minnesota*
1111. Mankato city, Minnesota*
1112. Maple Grove city, Minnesota*
1113. Maplewood city, Minnesota*
1114. McLeod County, Minnesota*
1115. Meeker County, Minnesota
1116. Minneapolis city, Minnesota*
1117. Minnetonka city, Minnesota*
1118. Moorhead city, Minnesota*
1119. Morrison County, Minnesota*
1120. Mower County, Minnesota*
1121. Nicollet County, Minnesota*
1122. Olmsted County, Minnesota*
1123. Otter Tail County, Minnesota*
1124. Plymouth city, Minnesota*
1125. Polk County, Minnesota*
1126. Ramsey County, Minnesota*
1127. Rice County, Minnesota*
1128. Richfield city, Minnesota*
1129. Roseau County, Minnesota
1130. Roseville city, Minnesota*

1131. Savage city, Minnesota*
1132. Scott County, Minnesota*
1133. Shakopee city, Minnesota*
1134. Sherburne County, Minnesota*
1135. Sibley County, Minnesota
1136. St. Cloud city, Minnesota*
1137. St. Louis County, Minnesota*
1138. St. Louis Park city, Minnesota*
1139. Stearns County, Minnesota*
1140. Steele County, Minnesota*
1141. Waseca County, Minnesota
1142. Washington County, Minnesota*
1143. Winona County, Minnesota*
1144. Woodbury city, Minnesota*
1145. Wright County, Minnesota*
1146. Alcorn County, Mississippi*
1147. Attala County, Mississippi
1148. Biloxi city, Mississippi*
1149. Brookhaven city, Mississippi
1150. Chickasaw County, Mississippi
1151. Clarke County, Mississippi
1152. Cleveland city, Mississippi
1153. Columbus city, Mississippi
1154. Copiah County, Mississippi
1155. Gautier city, Mississippi
1156. George County, Mississippi
1157. Greene County, Mississippi
1158. Hancock County, Mississippi*
1159. Holmes County, Mississippi
1160. Itawamba County, Mississippi
1161. Jackson County, Mississippi*
1162. Jefferson Davis County, Mississippi
1163. Jones County, Mississippi*
1164. Lafayette County, Mississippi*
1165. Lamar County, Mississippi*
1166. Lauderdale County, Mississippi*
1167. Lawrence County, Mississippi
1168. Lee County, Mississippi*
1169. Lincoln County, Mississippi*
1170. Lowndes County, Mississippi*
1171. Marion County, Mississippi
1172. Marshall County, Mississippi*
1173. Monroe County, Mississippi*
1174. Moss Point city, Mississippi
1175. Neshoba County, Mississippi
1176. Ocean Springs city, Mississippi
1177. Oktibbeha County, Mississippi*
1178. Olive Branch city, Mississippi*
1179. Panola County, Mississippi*
1180. Perry County, Mississippi
1181. Pike County, Mississippi*
1182. Pontotoc County, Mississippi*
1183. Rankin County, Mississippi*
1184. Southaven city, Mississippi*
1185. Starkville city, Mississippi
1186. Sunflower County, Mississippi
1187. Tallahatchie County, Mississippi
1188. Tishomingo County, Mississippi
1189. Tupelo city, Mississippi*
1190. Union County, Mississippi
1191. Vicksburg city, Mississippi
1192. Walthall County, Mississippi
1193. Warren County, Mississippi*
1194. Wayne County, Mississippi
1195. Yalobusha County, Mississippi
1196. Adair County, Missouri
1197. Andrew County, Missouri
1198. Ballwin city, Missouri*
1199. Barry County, Missouri*
1200. Blue Springs city, Missouri*
1201. Butler County, Missouri*
1202. Cape Girardeau city, Missouri*
1203. Cape Girardeau County, Missouri*
1204. Chesterfield city, Missouri*
1205. Christian County, Missouri*
1206. Clay County, Missouri*
1207. Clinton County, Missouri
1208. Columbia city, Missouri*
1209. Crawford County, Missouri
1210. DeKalb County, Missouri
1211. Dent County, Missouri
1212. Dunklin County, Missouri
1213. Florissant city, Missouri*
1214. Greene County, Missouri*
1215. Henry County, Missouri
1216. Independence city, Missouri*

1217. Iron County, Missouri
1218. Jasper County, Missouri*
1219. Jefferson City city, Missouri*
1220. Joplin city, Missouri*
1221. Laclede County, Missouri*
1222. Lafayette County, Missouri*
1223. Lawrence County, Missouri*
1224. Lee's Summit city, Missouri*
1225. Liberty city, Missouri*
1226. Livingston County, Missouri
1227. Madison County, Missouri
1228. McDonald County, Missouri
1229. New Madrid County, Missouri
1230. Newton County, Missouri*
1231. Nodaway County, Missouri
1232. O'Fallon city, Missouri*
1233. Perry County, Missouri
1234. Pike County, Missouri
1235. Platte County, Missouri*
1236. Polk County, Missouri*
1237. Ralls County, Missouri
1238. Ray County, Missouri
1239. Scott County, Missouri*
1240. St. Charles city, Missouri*
1241. St. Louis city, Missouri*
1242. St. Peters city, Missouri*
1243. Ste. Genevieve County, Missouri
1244. Stone County, Missouri*
1245. Taney County, Missouri*
1246. Texas County, Missouri
1247. University City city, Missouri*
1248. Vernon County, Missouri
1249. Washington County, Missouri
1250. Wentzville city, Missouri*
1251. Wildwood city, Missouri*
1252. Billings city, Montana*
1253. Bozeman city, Montana*
1254. Butte-Silver Bow, Montana*
1255. Flathead County, Montana*
1256. Helena city, Montana*
1257. Lewis and Clark County, Montana*
1258. Missoula County, Montana*
1259. Ravalli County, Montana*
1260. Yellowstone County, Montana*
1261. Adams County, Nebraska*
1262. Bellevue city, Nebraska*
1263. Buffalo County, Nebraska*
1264. Dodge County, Nebraska*
1265. Grand Island city, Nebraska*
1266. Hall County, Nebraska*
1267. Kearney city, Nebraska*
1268. Lancaster County, Nebraska*
1269. Lincoln city, Nebraska*
1270. Madison County, Nebraska*
1271. Omaha city, Nebraska*
1272. Platte County, Nebraska*
1273. Scotts Bluff County, Nebraska*
1274. South Sioux City city, Nebraska
1275. Douglas County, Nevada*
1276. Elko County, Nevada*
1277. Fernley city, Nevada
1278. Humboldt County, Nevada
1279. Lyon County, Nevada*
1280. Reno city, Nevada*
1281. Dover city, New Hampshire*
1282. Merrimack County, New Hampshire*
1283. Rochester city, New Hampshire*
1284. Atlantic City city, New Jersey*
1285. Belleville township, New Jersey*
1286. Berkeley township, New Jersey*
1287. Bloomfield township, New Jersey*
1288. Brick township, New Jersey*
1289. Bridgewater township, New Jersey*
1290. Camden city, New Jersey*
1291. Cape May County, New Jersey*
1292. Cherry Hill township, New Jersey*
1293. City of Orange township, New Jersey*
1294. Cumberland County, New Jersey*
1295. Deptford township, New Jersey*
1296. East Brunswick township, New Jersey*
1297. East Orange city, New Jersey*
1298. Edison township, New Jersey*
1299. Egg Harbor township, New Jersey*

1300. Evesham township, New Jersey*
1301. Ewing township, New Jersey*
1302. Fair Lawn borough, New Jersey*
1303. Fort Lee borough, New Jersey*
1304. Franklin township, Somerset County, New Jersey*
1305. Freehold township, New Jersey*
1306. Galloway township, New Jersey*
1307. Garfield city, New Jersey*
1308. Gloucester County, New Jersey*
1309. Gloucester township, New Jersey*
1310. Hackensack city, New Jersey*
1311. Hamilton township, Mercer County, New Jersey*
1312. Hillsborough township, New Jersey*
1313. Hoboken city, New Jersey*
1314. Howell township, New Jersey*
1315. Irvington township, New Jersey*
1316. Jackson township, New Jersey*
1317. Kearny town, New Jersey*
1318. Lakewood township, New Jersey*
1319. Lawrence township, New Jersey*
1320. Linden city, New Jersey*
1321. Livingston township, New Jersey*
1322. Long Branch city, New Jersey*
1323. Manalapan township, New Jersey*
1324. Manchester township, New Jersey*
1325. Marlboro township, New Jersey*
1326. Mercer County, New Jersey*
1327. Middlesex County, New Jersey*
1328. Middletown township, New Jersey*
1329. Monmouth County, New Jersey*
1330. Monroe township, Gloucester County, New Jersey*
1331. Monroe township, Middlesex County, New Jersey*
1332. Montclair township, New Jersey*
1333. Morris County, New Jersey*
1334. Mount Laurel township, New Jersey*
1335. New Brunswick city, New Jersey*
1336. Newark city, New Jersey*
1337. North Bergen township, New Jersey*
1338. North Brunswick township, New Jersey*
1339. Old Bridge township, New Jersey*
1340. Parsippany-Troy Hills township, New Jersey*
1341. Passaic city, New Jersey*
1342. Pennsauken township, New Jersey*
1343. Perth Amboy city, New Jersey*
1344. Piscataway township, New Jersey*
1345. Plainfield city, New Jersey*
1346. Princeton, New Jersey*
1347. Salem County, New Jersey*
1348. Sayreville borough, New Jersey*
1349. Somerset County, New Jersey*
1350. South Brunswick township, New Jersey*
1351. Teaneck township, New Jersey*
1352. Toms River township, New Jersey*
1353. Union City city, New Jersey*
1354. Union County, New Jersey*
1355. Union township, New Jersey*
1356. Warren County, New Jersey*
1357. Washington township, Gloucester County, New Jersey*
1358. Wayne township, New Jersey*
1359. West New York town, New Jersey*
1360. West Orange township, New Jersey*
1361. Willingboro township, New Jersey*
1362. Winslow township, New Jersey*
1363. Woodbridge township, New Jersey*
1364. Amherst town, New York*
1365. Bethlehem town, New York*
1366. Binghamton city, New York*
1367. Brighton town, New York*
1368. Carmel town, New York*
1369. Cattaraugus County, New York*
1370. Cayuga County, New York*
1371. Chautauqua County, New York*
1372. Cheektowaga town, New York*
1373. Chemung County, New York*

1374. Chenango County, New York*
1375. Cicero town, New York*
1376. Clarence town, New York*
1377. Clay town, New York*
1378. Clifton Park town, New York*
1379. Colonie town, New York*
1380. Cortlandt town, New York*
1381. Delaware County, New York*
1382. Eastchester town, New York*
1383. Essex County, New York*
1384. Freeport village, New York*
1385. Greece town, New York*
1386. Greenburgh town, New York*
1387. Guilderland town, New York*
1388. Hamburg town, New York*
1389. Henrietta town, New York*
1390. Irondequoit town, New York*
1391. Lancaster town, New York*
1392. Livingston County, New York*
1393. Madison County, New York*
1394. Manlius town, New York*
1395. Mount Pleasant town, New York*
1396. Mount Vernon city, New York*
1397. New Rochelle city, New York*
1398. Newburgh town, New York*
1399. Niagara Falls city, New York*
1400. North Tonawanda city, New York*
1401. Orleans County, New York*
1402. Ossining town, New York*
1403. Otsego County, New York*
1404. Penfield town, New York*
1405. Perinton town, New York*
1406. Putnam County, New York*
1407. Rye town, New York*
1408. Salina town, New York*
1409. Spring Valley village, New York*
1410. Tioga County, New York*
1411. Tonawanda town, New York*
1412. Union town, New York*
1413. Wappinger town, New York
1414. Warren County, New York*
1415. Warwick town, New York*
1416. Wayne County, New York*
1417. Webster town, New York*
1418. West Seneca town, New York*
1419. White Plains city, New York*
1420. Yates County, New York
1421. Yorktown town, New York*
1422. Alexander County, North Carolina*
1423. Alleghany County, North Carolina
1424. Apex town, North Carolina*
1425. Asheville city, North Carolina*
1426. Bertie County, North Carolina
1427. Burlington city, North Carolina*
1428. Cary town, North Carolina*
1429. Caswell County, North Carolina
1430. Chapel Hill town, North Carolina*
1431. Charlotte city, North Carolina*
1432. Cherokee County, North Carolina
1433. Chowan County, North Carolina
1434. Concord city, North Carolina*
1435. Cornelius town, North Carolina*
1436. Currituck County, North Carolina
1437. Durham city, North Carolina*
1438. Edgecombe County, North Carolina*
1439. Fuquay-Varina town, North Carolina*
1440. Garner town, North Carolina*
1441. Gastonia city, North Carolina*
1442. Goldsboro city, North Carolina*
1443. Greene County, North Carolina
1444. Greenville city, North Carolina*
1445. Harnett County, North Carolina*
1446. Henderson County, North Carolina*
1447. High Point city, North Carolina*
1448. Hoke County, North Carolina*
1449. Holly Springs town, North Carolina*
1450. Huntersville town, North Carolina*
1451. Indian Trail town, North Carolina*
1452. Jackson County, North Carolina*
1453. Johnston County, North Carolina*
1454. Kannapolis city, North Carolina*
1455. Lenoir County, North Carolina*
1456. Macon County, North Carolina*

1457. Matthews town, North Carolina*
1458. Monroe city, North Carolina*
1459. Mooresville town, North Carolina*
1460. Nash County, North Carolina*
1461. Pender County, North Carolina*
1462. Raleigh city, North Carolina*
1463. Rocky Mount city, North Carolina*
1464. Salisbury city, North Carolina*
1465. Sanford city, North Carolina*
1466. Stanly County, North Carolina*
1467. Transylvania County, North Carolina*
1468. Union County, North Carolina*
1469. Wake County, North Carolina*
1470. Wake Forest town, North Carolina*
1471. Warren County, North Carolina
1472. Washington County, North Carolina
1473. Wilson city, North Carolina*
1474. Wilson County, North Carolina*
1475. Cass County, North Dakota*
1476. Fargo city, North Dakota*
1477. Grand Forks city, North Dakota*
1478. Minot city, North Dakota*
1479. Morton County, North Dakota*
1480. West Fargo city, North Dakota*
1481. Adams County, Ohio
1482. Allen County, Ohio*
1483. Alliance city, Ohio
1484. Anderson township, Ohio*
1485. Athens township, Athens County, Ohio*
1486. Aurora city, Ohio
1487. Austintown township, Ohio*
1488. Bath township, Greene County, Ohio*
1489. Beavercreek city, Ohio*
1490. Beavercreek township, Ohio*
1491. Boardman township, Ohio*
1492. Bowling Green city, Ohio*
1493. Brunswick city, Ohio*
1494. Canton city, Ohio*
1495. Carroll County, Ohio
1496. Clark County, Ohio*
1497. Clear Creek township, Ohio*
1498. Cleveland Heights city, Ohio*
1499. Colerain township, Hamilton County, Ohio*
1500. Columbiana County, Ohio*
1501. Columbus city, Ohio*
1502. Concord township, Miami County, Ohio*
1503. Deerfield township, Ohio*
1504. Defiance County, Ohio*
1505. Delaware city, Ohio*
1506. Dublin city, Ohio*
1507. Fairborn city, Ohio*
1508. Fostoria city, Ohio
1509. Franklin township, Warren County, Ohio*
1510. Gahanna city, Ohio*
1511. Green township, Hamilton County, Ohio*
1512. Greene County, Ohio*
1513. Grove City city, Ohio*
1514. Hancock County, Ohio*
1515. Hardin County, Ohio*
1516. Harrison County, Ohio
1517. Highland County, Ohio*
1518. Hilliard city, Ohio*
1519. Holmes County, Ohio*
1520. Huber Heights city, Ohio*
1521. Jackson township, Franklin County, Ohio*
1522. Jackson township, Stark County, Ohio*
1523. Kent city, Ohio
1524. Kettering city, Ohio*
1525. Lancaster city, Ohio*
1526. Liberty township, Butler County, Ohio*
1527. Liberty township, Delaware County, Ohio*
1528. Lima city, Ohio*
1529. Madison County, Ohio*
1530. Mahoning County, Ohio*
1531. Mansfield city, Ohio*

1532. Marietta city, Ohio
1533. Marion city, Ohio*
1534. Marion township, Marion County, Ohio*
1535. Mason city, Ohio*
1536. Massillon city, Ohio*
1537. Medina County, Ohio*
1538. Mentor city, Ohio*
1539. Miami County, Ohio*
1540. Miami township, Clermont County, Ohio*
1541. Miami township, Logan County, Ohio*
1542. Mifflin township, Franklin County, Ohio*
1543. Monroe County, Ohio
1544. Morrow County, Ohio*
1545. Newark city, Ohio*
1546. Norwalk city, Ohio
1547. Norwich township, Franklin County, Ohio*
1548. Orange township, Delaware County, Ohio*
1549. Ottawa County, Ohio*
1550. Pickaway County, Ohio*
1551. Pike County, Ohio
1552. Plain township, Stark County, Ohio*
1553. Preble County, Ohio*
1554. Putnam County, Ohio*
1555. Ravenna city, Ohio
1556. Reynoldsburg city, Ohio*
1557. Sandusky city, Ohio
1558. Springfield city, Ohio*
1559. Springfield Township, Hamilton County, Ohio*
1560. Sylvania township, Ohio*
1561. Union County, Ohio*
1562. Union township, Clermont County, Ohio*
1563. Upper Arlington city, Ohio*
1564. Vinton County, Ohio
1565. Violet township, Ohio*
1566. Warren County, Ohio*
1567. Washington township, Franklin County, Ohio*
1568. Washington township, Montgomery County, Ohio*
1569. West Chester township, Ohio*
1570. Westerville city, Ohio*
1571. Westlake city, Ohio*
1572. Wood County, Ohio*
1573. Wyandot County, Ohio
1574. Youngstown city, Ohio*
1575. Ada city, Oklahoma
1576. Bartlesville city, Oklahoma*
1577. Bethany city, Oklahoma
1578. Broken Arrow city, Oklahoma*
1579. Bryan County, Oklahoma*
1580. Canadian County, Oklahoma*
1581. Carter County, Oklahoma*
1582. Cherokee County, Oklahoma*
1583. Edmond city, Oklahoma*
1584. Garfield County, Oklahoma*
1585. Guthrie city, Oklahoma
1586. Lawton city, Oklahoma*
1587. Moore city, Oklahoma*
1588. Muskogee city, Oklahoma*
1589. Muskogee County, Oklahoma*
1590. Mustang city, Oklahoma
1591. Norman city, Oklahoma*
1592. Owasso city, Oklahoma*
1593. Ponca City city, Oklahoma
1594. Pontotoc County, Oklahoma*
1595. Sequoyah County, Oklahoma*
1596. Wagoner County, Oklahoma*
1597. Albany city, Oregon*
1598. Beaverton city, Oregon*
1599. Bend city, Oregon*
1600. Benton County, Oregon*
1601. Clackamas County, Oregon*
1602. Clatsop County, Oregon*
1603. Columbia County, Oregon*
1604. Corvallis city, Oregon*
1605. Curry County, Oregon
1606. Deschutes County, Oregon*

1607. Douglas County, Oregon*
1608. Eugene city, Oregon*
1609. Grants Pass city, Oregon*
1610. Gresham city, Oregon*
1611. Hillsboro city, Oregon*
1612. Jackson County, Oregon*
1613. Josephine County, Oregon*
1614. Keizer city, Oregon*
1615. Klamath County, Oregon*
1616. Lake Oswego city, Oregon*
1617. Lane County, Oregon*
1618. Lincoln County, Oregon*
1619. Linn County, Oregon*
1620. Malheur County, Oregon*
1621. Marion County, Oregon*
1622. McMinnville city, Oregon*
1623. Medford city, Oregon*
1624. Multnomah County, Oregon*
1625. Oregon City city, Oregon*
1626. Polk County, Oregon*
1627. Redmond city, Oregon*
1628. Salem city, Oregon*
1629. Springfield city, Oregon*
1630. Tigard city, Oregon*
1631. Umatilla County, Oregon*
1632. Washington County, Oregon*
1633. Yamhill County, Oregon*
1634. Abington township, Pennsylvania*
1635. Allentown city, Pennsylvania*
1636. Altoona city, Pennsylvania*
1637. Beaver County, Pennsylvania*
1638. Berks County, Pennsylvania*
1639. Bethel Park municipality, Pennsylvania*
1640. Bethlehem city, Pennsylvania*
1641. Blair County, Pennsylvania*
1642. Butler County, Pennsylvania*
1643. Centre County, Pennsylvania*
1644. Cheltenham township, Pennsylvania*
1645. Chester city, Pennsylvania*
1646. Cranberry township, Pennsylvania*
1647. Crawford County, Pennsylvania*
1648. Cumberland County, Pennsylvania*
1649. Erie city, Pennsylvania*
1650. Falls township, Pennsylvania*
1651. Hampden township, Pennsylvania*
1652. Harrisburg city, Pennsylvania*
1653. Haverford township, Pennsylvania*
1654. Hempfield township, Pennsylvania*
1655. Huntingdon County, Pennsylvania*
1656. Jefferson County, Pennsylvania*
1657. Lancaster city, Pennsylvania*
1658. Lancaster County, Pennsylvania*
1659. Lebanon County, Pennsylvania*
1660. Lower Macungie township, Pennsylvania*
1661. Lower Merion township, Pennsylvania*
1662. Lower Paxton township, Pennsylvania*
1663. Lower Southampton township, Pennsylvania
1664. Manheim township, Pennsylvania*
1665. McKean County, Pennsylvania*
1666. Mifflin County, Pennsylvania*
1667. Millcreek township, Pennsylvania*
1668. Monroe County, Pennsylvania*
1669. Montgomery County, Pennsylvania*
1670. Mount Lebanon township, Pennsylvania*
1671. New Castle city, Pennsylvania
1672. North Huntingdon township, Pennsylvania*
1673. Northampton township, Pennsylvania*
1674. Penn Hills township, Pennsylvania*
1675. Perry County, Pennsylvania*
1676. Radnor township, Pennsylvania*
1677. Reading city, Pennsylvania*
1678. Ridley township, Pennsylvania*
1679. Ross township, Pennsylvania*
1680. Scranton city, Pennsylvania*
1681. Snyder County, Pennsylvania*
1682. Somerset County, Pennsylvania*

1683. State College borough, Pennsylvania*
1684. Susquehanna County, Pennsylvania*
1685. Union County, Pennsylvania*
1686. Upper Darby township, Pennsylvania*
1687. Upper Merion township, Pennsylvania*
1688. Venango County, Pennsylvania*
1689. Warren County, Pennsylvania*
1690. Wayne County, Pennsylvania*
1691. York city, Pennsylvania*
1692. York County, Pennsylvania*
1693. Adjuntas Municipio, Puerto Rico
1694. Arroyo Municipio, Puerto Rico
1695. Barceloneta Municipio, Puerto Rico
1696. Bayamón Municipio, Puerto Rico*
1697. Caguas Municipio, Puerto Rico*
1698. Carolina Municipio, Puerto Rico*
1699. Cataño Municipio, Puerto Rico
1700. Cayey Municipio, Puerto Rico*
1701. Ceiba Municipio, Puerto Rico
1702. Cidra Municipio, Puerto Rico*
1703. Coamo Municipio, Puerto Rico*
1704. Corozal Municipio, Puerto Rico*
1705. Guayama Municipio, Puerto Rico*
1706. Guaynabo Municipio, Puerto Rico*
1707. Gurabo Municipio, Puerto Rico*
1708. Humacao Municipio, Puerto Rico*
1709. Las Piedras Municipio, Puerto Rico*
1710. Mayagüez Municipio, Puerto Rico*
1711. San Sebastián Municipio, Puerto Rico*
1712. Toa Baja Municipio, Puerto Rico*
1713. Villalba Municipio, Puerto Rico
1714. Yauco Municipio, Puerto Rico*
1715. Providence city, Rhode Island*
1716. Aiken city, South Carolina*
1717. Columbia city, South Carolina*
1718. Darlington County, South Carolina*
1719. Florence city, South Carolina*
1720. Goose Creek city, South Carolina*
1721. Greenville city, South Carolina*
1722. Greer city, South Carolina*
1723. Hilton Head Island town, South Carolina*
1724. Rock Hill city, South Carolina*
1725. Spartanburg city, South Carolina*
1726. Sumter city, South Carolina*
1727. Brookings County, South Dakota*
1728. Brown County, South Dakota*
1729. Lincoln County, South Dakota*
1730. Minnehaha County, South Dakota*
1731. Pennington County, South Dakota*
1732. Rapid City city, South Dakota*
1733. Sioux Falls city, South Dakota*
1734. Bartlett city, Tennessee*
1735. Bedford County, Tennessee*
1736. Brentwood city, Tennessee*
1737. Cannon County, Tennessee
1738. Carter County, Tennessee*
1739. Chattanooga city, Tennessee*
1740. Cheatham County, Tennessee*
1741. Clarksville city, Tennessee*
1742. Cleveland city, Tennessee*
1743. Coffee County, Tennessee*
1744. Collierville town, Tennessee*
1745. Columbia city, Tennessee*
1746. Cookeville city, Tennessee*
1747. Crockett County, Tennessee
1748. Crossville city, Tennessee
1749. Cumberland County, Tennessee*
1750. Decatur County, Tennessee
1751. DeKalb County, Tennessee
1752. Dickson County, Tennessee*
1753. Dyer County, Tennessee*
1754. Fayette County, Tennessee*
1755. Fentress County, Tennessee
1756. Franklin city, Tennessee*
1757. Gallatin city, Tennessee*
1758. Germantown city, Tennessee*
1759. Gibson County, Tennessee*
1760. Giles County, Tennessee
1761. Hamblen County, Tennessee*

1762. Haywood County, Tennessee
1763. Henderson County, Tennessee
1764. Hendersonville city, Tennessee*
1765. Henry County, Tennessee*
1766. Jackson city, Tennessee*
1767. Johnson City city, Tennessee*
1768. Johnson County, Tennessee
1769. Kingsport city, Tennessee*
1770. La Vergne city, Tennessee*
1771. Lauderdale County, Tennessee
1772. Lawrence County, Tennessee*
1773. Lawrenceburg city, Tennessee
1774. Lebanon city, Tennessee*
1775. Lewisburg city, Tennessee
1776. Lincoln County, Tennessee*
1777. Marshall County, Tennessee*
1778. Maryville city, Tennessee
1779. Maury County, Tennessee*
1780. McMinnville city, Tennessee
1781. Montgomery County, Tennessee*
1782. Morgan County, Tennessee
1783. Morristown city, Tennessee*
1784. Mount Juliet city, Tennessee*
1785. Murfreesboro city, Tennessee*
1786. Nashville-Davidson metropolitan government, Tennessee*
1787. Obion County, Tennessee*
1788. Overton County, Tennessee
1789. Putnam County, Tennessee*
1790. Robertson County, Tennessee*
1791. Scott County, Tennessee
1792. Shelbyville city, Tennessee
1793. Smith County, Tennessee
1794. Smyrna town, Tennessee*
1795. Spring Hill city, Tennessee*
1796. Sullivan County, Tennessee*
1797. Sumner County, Tennessee*
1798. Tipton County, Tennessee*
1799. Warren County, Tennessee*
1800. Wayne County, Tennessee
1801. Weakley County, Tennessee*
1802. White County, Tennessee
1803. Wilson County, Tennessee*
1804. Abilene city, Texas*
1805. Allen city, Texas*
1806. Amarillo city, Texas*
1807. Anderson County, Texas*
1808. Arlington city, Texas*
1809. Atascosa County, Texas*
1810. Austin city, Texas*
1811. Austin County, Texas*
1812. Bastrop County, Texas*
1813. Baytown city, Texas*
1814. Beaumont city, Texas*
1815. Bedford city, Texas*
1816. Bee County, Texas*
1817. Bell County, Texas*
1818. Blanco County, Texas
1819. Brazoria County, Texas*
1820. Brown County, Texas*
1821. Brownsville city, Texas*
1822. Bryan city, Texas*
1823. Burleson city, Texas*
1824. Burleson County, Texas
1825. Burnet County, Texas*
1826. Caldwell County, Texas*
1827. Calhoun County, Texas
1828. Cameron County, Texas*
1829. Carrollton city, Texas*
1830. Cass County, Texas*
1831. Cedar Hill city, Texas*
1832. Cedar Park city, Texas*
1833. Chambers County, Texas*
1834. Cibolo city, Texas*
1835. Cleburne city, Texas*
1836. College Station city, Texas*
1837. Collin County, Texas*
1838. Colorado County, Texas
1839. Comal County, Texas*
1840. Conroe city, Texas*
1841. Cooke County, Texas*
1842. Coppell city, Texas*
1843. Copperas Cove city, Texas*
1844. Corpus Christi city, Texas*
1845. Dallas city, Texas*
1846. Deer Park city, Texas*

1847. Del Rio city, Texas*
1848. Denton city, Texas*
1849. Denton County, Texas*
1850. DeSoto city, Texas*
1851. Dimmit County, Texas
1852. Duncanville city, Texas*
1853. Ector County, Texas*
1854. Edinburg city, Texas*
1855. El Paso city, Texas*
1856. El Paso County, Texas*
1857. Erath County, Texas*
1858. Euless city, Texas*
1859. Falls County, Texas
1860. Fannin County, Texas*
1861. Farmers Branch city, Texas*
1862. Flower Mound town, Texas*
1863. Fort Bend County, Texas*
1864. Fort Worth city, Texas*
1865. Franklin County, Texas
1866. Friendswood city, Texas*
1867. Frisco city, Texas*
1868. Galveston city, Texas*
1869. Galveston County, Texas*
1870. Garland city, Texas*
1871. Georgetown city, Texas*
1872. Grand Prairie city, Texas*
1873. Grapevine city, Texas*
1874. Grayson County, Texas*
1875. Gregg County, Texas*
1876. Guadalupe County, Texas*
1877. Hale County, Texas*
1878. Haltom City city, Texas*
1879. Hardin County, Texas*
1880. Harker Heights city, Texas*
1881. Harlingen city, Texas*
1882. Harris County, Texas*
1883. Harrison County, Texas*
1884. Hays County, Texas*
1885. Hidalgo County, Texas*
1886. Hill County, Texas*
1887. Hood County, Texas*
1888. Hopkins County, Texas*
1889. Houston city, Texas*
1890. Houston County, Texas
1891. Howard County, Texas*
1892. Hunt County, Texas*
1893. Huntsville city, Texas*
1894. Hurst city, Texas*
1895. Irving city, Texas*
1896. Jasper County, Texas*
1897. Jefferson County, Texas*
1898. Jones County, Texas
1899. Keller city, Texas*
1900. Kendall County, Texas*
1901. Kerr County, Texas*
1902. Killeen city, Texas*
1903. Kyle city, Texas*
1904. La Porte city, Texas*
1905. Lancaster city, Texas*
1906. League City city, Texas*
1907. Leander city, Texas*
1908. Leon County, Texas
1909. Leon Valley city, Texas
1910. Lewisville city, Texas*
1911. Liberty County, Texas*
1912. Limestone County, Texas
1913. Little Elm city, Texas*
1914. Longview city, Texas*
1915. Lubbock city, Texas*
1916. Lubbock County, Texas*
1917. Lufkin city, Texas*
1918. Madison County, Texas
1919. Mansfield city, Texas*
1920. Matagorda County, Texas*
1921. McAllen city, Texas*
1922. McKinney city, Texas*
1923. Medina County, Texas*
1924. Mesquite city, Texas*
1925. Midland city, Texas*
1926. Midland County, Texas*
1927. Midlothian city, Texas*
1928. Milam County, Texas
1929. Mission city, Texas*
1930. Missouri City city, Texas*
1931. Morris County, Texas
1932. Nacogdoches city, Texas*

1933. Nacogdoches County, Texas*
1934. Navarro County, Texas*
1935. New Braunfels city, Texas*
1936. Newton County, Texas
1937. Nolan County, Texas
1938. North Richland Hills city, Texas*
1939. Nueces County, Texas*
1940. Odessa city, Texas*
1941. Orange County, Texas*
1942. Panola County, Texas
1943. Parker County, Texas*
1944. Pasadena city, Texas*
1945. Pearland city, Texas*
1946. Pflugerville city, Texas*
1947. Pharr city, Texas*
1948. Plano city, Texas*
1949. Port Arthur city, Texas*
1950. Potter County, Texas*
1951. Randall County, Texas*
1952. Red River County, Texas
1953. Richardson city, Texas*
1954. Robertson County, Texas
1955. Rockwall city, Texas*
1956. Rosenberg city, Texas*
1957. Round Rock city, Texas*
1958. Rowlett city, Texas*
1959. San Angelo city, Texas*
1960. San Juan city, Texas*
1961. San Marcos city, Texas*
1962. San Patricio County, Texas*
1963. Schertz city, Texas*
1964. Shelby County, Texas
1965. Sherman city, Texas*
1966. Socorro city, Texas*
1967. Southlake city, Texas*
1968. Starr County, Texas*
1969. Sugar Land city, Texas*
1970. Taylor County, Texas*
1971. Temple city, Texas*
1972. Texarkana city, Texas*
1973. Texas City city, Texas*
1974. The Colony city, Texas*
1975. Tom Green County, Texas*
1976. Travis County, Texas*
1977. Trinity County, Texas
1978. Tyler city, Texas*
1979. Upshur County, Texas*
1980. Uvalde County, Texas
1981. Val Verde County, Texas*
1982. Van Zandt County, Texas*
1983. Victoria city, Texas*
1984. Victoria County, Texas*
1985. Waco city, Texas*
1986. Waller County, Texas*
1987. Washington County, Texas*
1988. Waxahachie city, Texas*
1989. Weatherford city, Texas*
1990. Weslaco city, Texas*
1991. Wharton County, Texas*
1992. Wichita Falls city, Texas*
1993. Wilson County, Texas*
1994. Wise County, Texas*
1995. Wood County, Texas*
1996. Wylie city, Texas*
1997. American Fork city, Utah*
1998. Bountiful city, Utah*
1999. Box Elder County, Utah*
2000. Carbon County, Utah
2001. Cedar City city, Utah*
2002. Clearfield city, Utah*
2003. Cottonwood Heights city, Utah*
2004. Davis County, Utah*
2005. Draper city, Utah*
2006. Duchesne County, Utah
2007. Eagle Mountain city, Utah*
2008. Emery County, Utah
2009. Herriman city, Utah*
2010. Holladay city, Utah*
2011. Iron County, Utah*
2012. Juab County, Utah
2013. Kaysville city, Utah*
2014. Kearns metro township, Utah*
2015. Layton city, Utah*
2016. Lehi city, Utah*
2017. Logan city, Utah*
2018. Midvale city, Utah*

2019. Millard County, Utah
2020. Millcreek city, Utah*
2021. Murray city, Utah*
2022. Ogden city, Utah*
2023. Orem city, Utah*
2024. Pleasant Grove city, Utah*
2025. Provo city, Utah*
2026. Riverton city, Utah*
2027. Roy city, Utah*
2028. Salt Lake City city, Utah*
2029. Salt Lake County, Utah*
2030. San Juan County, Utah
2031. Sandy city, Utah*
2032. Sanpete County, Utah*
2033. Saratoga Springs city, Utah*
2034. South Jordan city, Utah*
2035. Spanish Fork city, Utah*
2036. Springville city, Utah*
2037. St. George city, Utah*
2038. Syracuse city, Utah*
2039. Taylorsville city, Utah*
2040. Tooele city, Utah*
2041. West Jordan city, Utah*
2042. West Valley City city, Utah*
2043. Addison County, Vermont*
2044. Bennington County, Vermont*
2045. Brattleboro town, Vermont
2046. Burlington city, Vermont*
2047. Chittenden County, Vermont*
2048. Franklin County, Vermont*
2049. Rutland County, Vermont*
2050. Washington County, Vermont*
2051. Windham County, Vermont*
2052. Windsor County, Vermont*
2053. Albemarle County, Virginia*
2054. Augusta County, Virginia*
2055. Bedford County, Virginia*
2056. Blacksburg town, Virginia*
2057. Campbell County, Virginia*
2058. Caroline County, Virginia*
2059. Charlottesville city, Virginia*
2060. Gloucester County, Virginia*
2061. Grayson County, Virginia
2062. Hampton city, Virginia*
2063. Hanover County, Virginia*
2064. Harrisonburg city, Virginia*
2065. James City County, Virginia*
2066. Leesburg town, Virginia*
2067. Lynchburg city, Virginia*
2068. Manassas city, Virginia*
2069. Newport News city, Virginia*
2070. Orange County, Virginia*
2071. Petersburg city, Virginia*
2072. Rockingham County, Virginia*
2073. Russell County, Virginia
2074. Spotsylvania County, Virginia*
2075. Suffolk city, Virginia*
2076. York County, Virginia*
2077. Anacortes city, Washington
2078. Auburn city, Washington*
2079. Bellevue city, Washington*
2080. Bellingham city, Washington*
2081. Benton County, Washington*
2082. Bothell city, Washington*
2083. Bremerton city, Washington*
2084. Burien city, Washington*
2085. Clallam County, Washington*
2086. Clark County, Washington*
2087. Cowlitz County, Washington*
2088. Des Moines city, Washington*
2089. Douglas County, Washington*
2090. Edmonds city, Washington*
2091. Everett city, Washington*
2092. Federal Way city, Washington*
2093. Grant County, Washington*
2094. Grays Harbor County, Washington*
2095. Issaquah city, Washington*
2096. Kennewick city, Washington*
2097. Kent city, Washington*
2098. Kirkland city, Washington*
2099. Kittitas County, Washington*
2100. Lacey city, Washington*
2101. Lake Stevens city, Washington*
2102. Lakewood city, Washington*
2103. Lincoln County, Washington
2104. Longview city, Washington*

2105. Lynnwood city, Washington*
2106. Marysville city, Washington*
2107. Mason County, Washington*
2108. Mount Vernon city, Washington*
2109. Okanogan County, Washington*
2110. Olympia city, Washington*
2111. Pasco city, Washington*
2112. Pullman city, Washington*
2113. Puyallup city, Washington*
2114. Redmond city, Washington*
2115. Renton city, Washington*
2116. Richland city, Washington*
2117. Sammamish city, Washington*
2118. San Juan County, Washington
2119. Seattle city, Washington*
2120. Sedro-Woolley city, Washington
2121. Shoreline city, Washington*
2122. Skagit County, Washington*
2123. Snohomish County, Washington*
2124. Spokane Valley city, Washington*
2125. Stevens County, Washington*
2126. University Place city, Washington*
2127. Vancouver city, Washington*
2128. Walla Walla city, Washington*
2129. Wenatchee city, Washington*
2130. Whitman County, Washington*
2131. Yakima city, Washington*
2132. Yakima County, Washington*
2133. Appleton city, Wisconsin*
2134. Beloit city, Wisconsin*
2135. Brookfield city, Wisconsin*
2136. Eau Claire city, Wisconsin*
2137. Fitchburg city, Wisconsin*
2138. Fond du Lac city, Wisconsin*
2139. Green Bay city, Wisconsin*
2140. Janesville city, Wisconsin*
2141. La Crosse city, Wisconsin*
2142. Madison city, Wisconsin*
2143. Manitowoc city, Wisconsin*
2144. Menomonee Falls village, Wisconsin*
2145. Mount Pleasant village, Wisconsin
2146. New Berlin city, Wisconsin*
2147. Oshkosh city, Wisconsin*
2148. Polk County, Wisconsin*
2149. Racine city, Wisconsin*
2150. Sheboygan city, Wisconsin*
2151. Sun Prairie city, Wisconsin*
2152. Wausau city, Wisconsin*
2153. Wauwatosa city, Wisconsin*
2154. West Bend city, Wisconsin*
2155. Albany County, Wyoming*
2156. Campbell County, Wyoming*
2157. Carbon County, Wyoming
2158. Casper city, Wyoming*
2159. Cheyenne city, Wyoming*
2160. Fremont County, Wyoming*
2161. Gillette city, Wyoming*
2162. Green River city, Wyoming
2163. Laramie city, Wyoming*
2164. Laramie County, Wyoming*
2165. Natrona County, Wyoming*
2166. Riverton city, Wyoming
2167. Rock Springs city, Wyoming
2168. Sheridan County, Wyoming*
2169. Sweetwater County, Wyoming*

EXHIBIT X

Governor's Release of Opioid-Related Claims Pursuant to the CVS Settlement Agreement

I, [NAME], Governor of the [Commonwealth]/[State]/[Territory] of [Commonwealth]/[State]/[Territory], hereby authorize Attorney General [NAME] to settle and release, to the maximum extent of my power as Governor, all Released Claims of (1) all of [Commonwealth]/[State]/[Territory]'s past and present executive departments, agencies, divisions, boards, commissions and instrumentalities with regulatory authority to enforce state and federal controlled substances acts and (2) all of [Commonwealth]/[State]/[Territory]'s past and present executive departments, agencies, divisions, boards, commissions and instrumentalities that have the authority to bring Claims related to Alleged Harms and/or Covered Conduct seeking money (including abatement and/or remediation) or revocation of a pharmaceutical distribution or dispensing license. The foregoing authorization is given in connection with Section XI.G of the CVS Settlement Agreement dated as of December [●], 2022 setting forth the terms of settlement between and among CVS, on the one hand, and the Settling States and Participating Subdivisions, on the other hand. This release is intended to be a "release from a State's Governor" as contemplated in such section. Capitalized terms used herein and defined in the Settlement Agreement have the meanings given to them in such settlement agreement.

_____

[Name]
Governor of the [Commonwealth]/[State]/[Territory] of [Commonwealth]/[State]/[Territory]

Date: _____

TEVA GLOBAL OPIOID SETTLEMENT AGREEMENT

I. Definitions 2
II. Participation by States and Condition to Preliminary Agreement 17
III. Cessation of Litigation Activities 18
IV. Injunctive Relief 19
V. Release 19
VI. Monetary Relief Overview and Maximum Payments 24
VII. Annual Payments to Settlement Fund 25
VIII. Allocation and Use of Settlement Funds 36
IX. Settlement Product 43
X. Participation by Subdivisions and Special Districts 44
XI. Condition to Effectiveness of Agreement and Filing of Consent Judgment 48
XII. Potential Payment Adjustments 49
XIII. Additional Restitution Amount 50
XIV. Plaintiffs' Attorneys' Fees and Costs 50
XV. Enforcement and Dispute Resolution 50
XVI. Miscellaneous 56

TEVA GLOBAL OPIOID SETTLEMENT AGREEMENT

Whereas, the Settling States, Participating Subdivisions, Participating Special Districts, and Teva (as those terms are defined below) share a common desire to resolve disputes between them relating to opioid medications according to the terms set out in this agreement dated as of November 22, 2022 (the "*Agreement*");

Whereas, the Parties, Participating Subdivisions, and Participating Special Districts agree and understand that upon satisfaction of the conditions set forth in Sections II and XI, this Agreement will be binding on the Settling States, Teva, Participating Subdivisions, and Participating Special Districts;

Whereas, the Parties, Participating Subdivisions, and Participating Special Districts agree and understand that this Agreement will then be filed as part of Consent Judgments in the respective courts of each of the Settling States, pursuant to the terms set forth in Section III;

Whereas, the Parties, Participating Subdivisions, and Participating Special Districts agree and understand that they shall at all times act in good faith to implement and execute their obligations under this Agreement and shall not act in any way to purposefully frustrate the right of any party to receive the benefits due under the Agreement;

Whereas, it is recognized that Naloxone Hydrochloride Nasal Spray is a medication that counteracts the life-threatening effects of opioid overdose and significantly reduces opioid-overdose mortality;

Whereas, the Parties, Participating Subdivisions, and Participating Special Districts to this Agreement now desire to avoid further expense and proceedings and to settle their disputes under the terms and conditions of this Agreement as set forth below;

NOW, THEREFORE, IT IS HEREBY AGREED by and between the Parties, Participating Subdivisions, and Participating Special Districts by and through their respective counsel, as follows:

I. Definitions

Unless otherwise specified, the following definitions apply:

1. "*Abatement Accounts Fund*" means a component of the Settlement Fund described in subsection VIII.F.

2. "*Actavis Generic Entities*" means Actavis LLC (f/k/a Actavis Inc.), Actavis Elizabeth LLC, Actavis Kadian LLC, Actavis Pharma, Inc. (f/k/a Watson Pharma, Inc.), Actavis Kadian LLC, Actavis Laboratories UT, Inc. (f/k/a Watson Laboratories, Inc. - Utah), Actavis Mid Atlantic LLC, Actavis Totowa LLC, Actavis Laboratories FL, Inc. (f/k/a Watson Laboratories, Inc. - Florida), Actavis South Atlantic LLC, Warner Chilcott Company LLC, and Watson Laboratories, Inc.

3. "*Additional Restitution Amount*" means the amount available to Settling States listed in Exhibit M-3 of $28,669,762.00.

4. "*Agreement*" means this Teva Global Opioid Agreement, inclusive of all exhibits.

5. "*Alleged Harms*" means the alleged past, present, and future financial or societal and related expenditures arising out of the alleged misuse and abuse of opioid products, non-exclusive examples of which are described in the documents listed on Exhibit A, that have allegedly arisen as a result of the physical and bodily injuries sustained by individuals suffering from opioid-related addiction, abuse, death, and other related diseases and disorders, and that have allegedly been caused by Teva.

6. "*Allergan*" means Allergan Finance, LLC (f/k/a Actavis, Inc., which, in turn, was f/k/a/ Watson Pharmaceuticals, Inc.) and Allergan Limited (f/k/a Allergan plc, which, in turn, was f/k/a Actavis plc).

7. "*Allergan Global Opioid Settlement Agreement*" means the settlement agreement between and among States, Participating Subdivisions, Participating Special Districts, and Allergan to resolve opioid-related Claims against Allergan and other released entities (as defined therein).

8. "*Allocation Statute*" means a state law that governs allocation, distribution, and/or use of some or all of the Settlement Fund amounts allocated to that State and/or its Subdivisions and/or its Special Districts. In addition to modifying the allocation, as set forth in subsection VIII.E.2, an Allocation Statute may, without limitation, contain a Statutory Trust, further restrict expenditure of funds, form an advisory committee, establish oversight and reporting requirements, or address other default provisions and other matters related to the funds. An Allocation Statute is not required to address all three (3) types of funds comprising the Settlement Fund or all default provisions.

9. "*Annual Payment*" means the total amount of the Net Abatement Amount payable into the Settlement Fund by Teva on each Payment Date (including the Initial Year Payment), as calculated by the Settlement Fund Administrator pursuant to subsection VII.B.4 or agreed to pursuant to subsection VII.B.5, which shall not exceed the maximum payment for any given year as set forth in Exhibit M-1. This term does not include the Additional Restitution Amount, the Settlement Product Cash Conversion Amount, or amounts paid pursuant to Section XIV.

10. "*Appropriate Official*" means the official defined in subsection XVI.F.3.

11. "*Attorney Fee and Cost Payment*" means the total amount of the Global Settlement Attorney Fee Amount payable by Teva on the Payment Date of each year into the (1) Attorney Fee and Cost Fund, described in Exhibit R, (2) the State Cost Fund described in Exhibit S, and (3) the State Outside Counsel Fee Fund described in Exhibit T, for attorneys' fees, expenses, and costs of the Settling States, and Participating Subdivisions.

12. "*Attorney Fee and Cost Fund*" means an account consisting of $331,295,027.54 to pay attorneys' fees and costs of Litigating Subdivisions that become Participating Subdivisions and the MDL Expense Fund amounts pursuant to the agreement on attorneys' fees and costs attached as Exhibit R.

13. "*Bar*" means either (1) a ruling by the highest court of the State, or the intermediate court of appeals when not subject to further review by the highest court of the State in a State with a single intermediate court of appeals, setting forth the general principle that no Subdivisions or Special Districts in the State may maintain Released Claims against Released Entities, whether on the ground of the Agreement (or the release in it) or otherwise; (2) a law barring Subdivisions and Special Districts in the State from maintaining or asserting Released Claims against Released Entities (either through a direct bar or through a grant of authority to release claims and that authority is exercised in full); or (3) a Settlement Class Resolution in the State with full force and effect. For the avoidance of doubt, a law or ruling that is conditioned or predicated upon payment by a Released Entity (apart from payments by Teva incurred under the Agreement) shall not constitute a Bar.

14. "*Base Payment*" means the payments made pursuant to subsection VII.D.

15. "*Case-Specific Resolution*" means either (1) a law barring specified Subdivisions or Special Districts from maintaining Released Claims against Released Entities (either through a direct Bar or through a grant of authority to release claims and that authority is exercised in full) or (2) a ruling by a court of competent jurisdiction over a particular Subdivision or Special District that has the legal effect of barring the Subdivision or Special District from maintaining any Released Claims at issue against Released Entities, whether on the ground of the Agreement (or the release in it) or otherwise. For the avoidance of doubt, a law, ruling, or release that is conditioned or predicated upon a post-Effective Date payment by a Released Entity (apart from payments by Teva incurred under the Agreement or injunctive relief obligations incurred by it) shall not constitute a Case-Specific Resolution.

16. "*Claim*" means any past, present or future cause of action, claim for relief, cross-claim or counterclaim, theory of liability, demand, derivative claim, request, assessment, charge, covenant, damage, debt, lien, loss, fine, penalty, restitution, reimbursement, disgorgement, expenses, judgment, right, obligation, dispute, suit, contract, controversy, agreement, parens patriae claim, promise, performance, warranty, omission, or grievance of any nature whatsoever, whether legal, equitable, statutory, regulatory or administrative, whether arising under federal, state or local common law, statute, regulation, guidance, ordinance or principles of equity, whether filed or unfiled, whether asserted or unasserted, whether known or unknown, whether accrued or unaccrued, whether foreseen, unforeseen or unforeseeable, whether discovered or undiscovered, whether suspected or unsuspected, whether fixed or contingent, and whether existing or hereafter arising, in all such cases, including but not limited to any request for declaratory, injunctive, or equitable relief, compensatory, punitive, or statutory damages, absolute liability, strict liability, restitution, subrogation, contribution, indemnity, apportionment, disgorgement, reimbursement, attorney fees, expert fees, consultant fees, fines,

penalties, expenses, costs or any other legal, equitable, civil, administrative, or regulatory remedy whatsoever. Claim does not include any individuals' personal injury or wrongful death cause of action.

17. "*Claim Over*" means a Claim asserted by a Non-Released Entity against a Released Entity on the basis of contribution, indemnity, or other claim-over on any theory relating to a Non-Party Covered Conduct Claim asserted by a Releasor.

18. "*Compensatory Restitution Amount*" means the aggregate amount of payments by Teva hereunder other than amounts paid as attorneys' fees and costs or identified pursuant to subsection VIII.C as being used to pay attorneys' fees and investigation costs or litigation costs, plus the actual aggregate cost of Settlement Product provided to the Settling States by Teva.

19. "*Consent Judgment*" means a state-specific consent judgment, the general terms of which shall be agreed by the Settling States and Teva prior to the Reference Date and shall include (1) approval of this Agreement and (2) the release set forth in Section V, including the full and final resolution of any Released Claims that the Settling State has brought against Released Entities.

20. "*Court*" means the respective court for each Settling State to which the Agreement and the Consent Judgment are presented for approval and/or entry as to that Settling State, or the Northern District of Ohio for purposes of administering the Attorney Fee and Cost Fund and any related fee and cost agreements.

21. "*Covered Conduct*" means any actual or alleged act, failure to act, negligence, statement, error, omission, breach of any duty, conduct, event, transaction, agreement, service, work, misstatement, misleading statement, or other activity of any kind whatsoever from the beginning of time through the Reference Date of this Agreement (and any past, present, or future consequence of any such act, failure to act, negligence, statement, error, omission, breach of duty, conduct, event, transaction, agreement, service, work, misstatement, misleading statement, or other activity) arising from or relating in any way to (a) the availability, discovery, research, development, manufacture, packaging, repackaging, marketing, promotion, advertising, labeling, relabeling, recall, withdrawal, distribution, delivery, monitoring, reporting, supply, sale, prescribing, dispensing, physical security, warehousing, use or abuse of, or operating procedures relating to, any Product, or any system, plan, policy, procedure, or advocacy relating to any Product or class of Products, including, but not limited to, any unbranded or branded promotion, marketing, or advertising, unbranded information, patient support or assistance, educational programs, consultancy, research, or other programs, campaigns, lobbying, or grants, sponsorships, charitable donations, or other funding relating to any Product or class of Products; (b) the characteristics, properties, risks, or benefits of any Product or class of Products; (c) the monitoring, reporting, disclosure, non-monitoring, non-reporting, or non-disclosure to federal, state, or other regulators of orders for any Product or class of Products; (d) the selective breeding, harvesting, extracting, purifying, exporting, importing, applying for quota for, procuring quota for, handling, promoting, manufacturing, processing,

packaging, supplying, distributing, converting, or selling of, or otherwise engaging in any activity relating to, precursor or component Products, including but not limited to natural, synthetic, semi-synthetic, or chemical raw materials, starting materials, finished active pharmaceutical ingredients, drug substances, or any related intermediate Products; or (e) diversion control programs or suspicious order monitoring related to any Product. The foregoing is not intended to apply to claims alleging contamination of products.

22. "*Covered Special District*" means a Special District that is (1) a school district with K-12 student enrollment of at least 25,000 or 0.12% of a State's population, whichever is greater; (2) a fire district that covers a population of 25,000, or 0.20% of a State's population if a State's population is greater than 18 million (though, if a fire district's population is not easily calculable from state data sources and agreed to between the State and Teva, it is calculated by dividing the population of the county or counties a fire district serves by the number of fire districts in the county or counties); or (3) a healthcare district or hospital district with at least 125 hospital beds in one or more hospitals rendering services in that district.

23. "*Designated State*" means New York.

24. "*Effective Date*" means the date sixty (60) days after the Reference Date.

25. "*Eligible State*" means a State that is not a Prior Settling State and is thus eligible to participate in this Agreement and become a Settling State.

26. "*Enforcement Committee*" means a committee consisting of representatives of the Settling States and of the Participating Subdivisions. Exhibit B contains the organizational bylaws of the Enforcement Committee. Notice pursuant to subsection XVI.P shall be provided when there are changes in membership or contact information.

27. "*Exhibit G Participant"* means a Participating Subdivision or Participating Special District that appears in Exhibit G at the relevant point in time. Nothing about the use of the term Exhibit G Participant changes the ability to amend the list of entities listed on Exhibit G pursuant to this Agreement.

28. "*Force Majeure Event*" means any event reasonably beyond the control of Teva that prevents Teva from manufacturing or distributing Settlement Product, including wars, hostilities, revolution, riots, civil commotion, national emergency, unavailability of supplies, epidemics, fire, flood, earthquake, force of nature, explosion, terrorist act, embargo, or any act of God, or any law, regulation, ordinance, or other act or order of any court or governmental authority.

29. "*Global Settlement Abatement Amount*" means the total abatement amount of $3,611,561,762.00. (This figure does not reflect the application of the Prior Settlements Credit or potential offsets. It also does not include amounts paid to the Additional Restitution Amount, which may be used for abatement.)

30. "*Global Settlement Amount*" means $4,246,567,371.76 and consists of the Global Settlement Abatement Amount, the Global Settlement Attorney Fee Amount, the Additional Restitution Amount, and the Settlement Product Cash Conversion Amount.

31. "*Global Settlement Attorney Fee Amount*" means $366,335,847.76, which consists of the Attorney Fee and Cost Fund, the State Outside Counsel Fee Fund, and the State Cost Fund.

32. "*Implementation Administrator*" means the vendor agreed to by the Parties and retained by Teva and Allergan to provide notice pursuant to subsection X.A and to manage the initial joinder period for Subdivisions and Special Districts, including the issuance and receipt of Settlement Participation Forms.

33. "*Implementation Costs*" means the costs for the Implementation Administrator, which shall be paid for pursuant to subsection VI.C.

34. "*Incentive A*" means the incentive payment described in subsection VII.E.5.

35. "*Incentive B*" means the incentive payment described in subsection VII.E.6.

36. "*Incentive C*" means the incentive payment described in subsection VII.E.7.

37. "*Incentive D*" means the incentive payment described in subsection VII.E.8.

38. "*Incentive Payment*" means the payments made pursuant to subsection VII.E.

39. "*Initial Participating Special District*" means a Special District that meets the requirements set forth in subsection X.L.

40. "*Initial Participating Subdivision*" means a Subdivision that meets the requirements set forth in subsection X.D.

41. "*Initial Participation Date*" means the date ninety (90) days after the Preliminary Agreement Date, unless it is extended by written agreement of Teva and the Enforcement Committee.

42. "*Initial Year Payment*" means the first Annual Payment of the Net Abatement Amount payable into the Settlement Fund by Teva on the Payment Date as calculated by the Settlement Fund Administrator pursuant to subsection VII.B.4 or agreed to pursuant to subsection VII.B.5, which shall not exceed the maximum payment for the Initial Year Payment as set forth in Exhibit M-1.

43. *"Injunctive Relief Terms*" means the terms described in Section IV and set forth in Exhibit P.

44. "*Later Litigating Special District*" means a Special District (or Special District official asserting the right of or for the Special District to recover for Alleged Harms to the Special District and/or the people thereof) that is not a Litigating Special

District and that files a lawsuit bringing a Released Claim against a Released Entity, or that adds such a Claim to a pre-existing lawsuit, after the Preliminary Agreement Date. It may also include a Litigating Special District whose Claims were resolved by a Bar or Case-Specific Resolution, which is later revoked following the execution date of this Agreement, when such Litigating Special District takes any affirmative step in its lawsuit other than seeking a stay, removal or dismissal with prejudice.

45. "*Later Litigating Subdivision*" means a Subdivision (or Subdivision official asserting the right of or for the Subdivision to recover for Alleged Harms to the Subdivision and/or the people thereof) that is not a Litigating Subdivision and that files a lawsuit bringing a Released Claim against a Released Entity, or that adds such a Claim to a pre-existing lawsuit, after the Preliminary Agreement Date. It may also include a Litigating Subdivision whose Claims were resolved by a Bar or Case-Specific Resolution, which is later revoked following the execution date of this Agreement, when such Litigating Subdivision takes any affirmative step in its lawsuit other than seeking a stay, removal, or dismissal with prejudice.

46. "*Later Participating Special District*" means a Participating Special District that meets the requirements of subsection X.M but is not an Initial Participating Special District.

47. "*Later Participating Subdivision*" means a Participating Subdivision that meets the requirements of subsection X.E but is not an Initial Participating Subdivision.

48. "*Litigating Special District*" means a Special District (or Special District official asserting the right of or for the Special District to recover for Alleged Harms to the Special District and/or the people thereof) that brought any Released Claims against any Released Entities on or before the Preliminary Agreement Date that were not separately resolved prior to that date. Exhibit C includes an agreed list of the Litigating Special Districts. Exhibit C will be updated (including with any corrections) periodically, and a final version of Exhibit C will be attached hereto as of the Effective Date.

49. "*Litigating Subdivision*" means a Subdivision (or Subdivision official asserting the right of or for the Subdivision to recover for Alleged Harms to the Subdivision and/or the people thereof) that brought any Released Claims against any Released Entities on or before the Preliminary Agreement Date that were not separately resolved prior to that date. A Prior Settling Subdivision shall not be considered a Litigating Subdivision. Exhibit C includes an agreed list of the Litigating Subdivisions. Exhibit C will be updated (including with any corrections) periodically, and a final version of Exhibit C will be attached hereto as of the Effective Date.

50. "*National Arbitration Panel*" means the panel described in subsection XV.G.4.

51. "*National Disputes*" means the disputes described in subsection XV.G.4.a.

52. "*Net Abatement Amount*" means $2,945,529,111.00, which is the Global Settlement Abatement Amount adjusted for the Prior Settlements Credit pursuant to subsection VII.C.2.

53. "*Non-Litigating Covered Special District*" means a Covered Special District that is not a Litigating Special District.

54. "*Non-Litigating Special District"* means a Special District that is neither a Litigating Special District nor a Later Litigating Special District.

55. "*Non-Litigating Subdivision*" means a Subdivision that is not (1) a Litigating Subdivision, (2) a Later Litigating Subdivision, or (3) a Prior Settling Subdivision.

56. "*Non-Participating Special District*" means a Special District that is not a Participating Special District.

57. "*Non-Participating Subdivision*" means a Subdivision that is not a Participating Subdivision. For the avoidance of doubt, Non-Participating Subdivision also includes Prior Settling Subdivisions.

58. "*Non-Party Covered Conduct Claim*" means a Claim against any Non-Released Entity involving, arising out of, or related to Covered Conduct (or conduct that would be Covered Conduct if engaged in by a Released Entity).

59. "*Non-Party Settlement*" means a settlement by any Releasor that settles any Non-Party Covered Conduct Claim and includes a release of any Non-Released Entity.

60. "*Non-Released Entity*" means an entity that is not a Released Entity.

61. "*Non-Settling State*" means a State that is an Eligible State but not a Settling State.

62. "*Opioid Remediation*" means care, treatment, and other programs and expenditures (including reimbursement for past such programs or expenditures except where this Agreement restricts the use of funds solely to future Opioid Remediation) designed to (1) address the misuse and abuse of opioid products, (2) treat or mitigate opioid use or related disorders, or (3) mitigate other alleged effects of the opioid abuse crisis, including on those injured as a result of the opioid abuse crisis. Exhibit E provides a non-exhaustive list of expenditures that qualify as being paid for Opioid Remediation. Qualifying expenditures may include reasonable related administrative expenses.

63. "*Participating Special District*" means a Special District that signs the Settlement Participation Form annexed hereto as Exhibit K and meets the requirements for becoming a Participating Special District under Section X. Participating Special Districts include both Initial Participating Special Districts and Later Participating Special Districts.

64. "*Participating Subdivision*" means a Subdivision that signs a Settlement Participation Form annexed hereto as Exhibit K and meets requirements for

becoming a Participating Subdivision under Section X. Participating Subdivisions include both Initial Participating Subdivisions and Later Participating Subdivisions.

65. "*Parties*" means Teva and the Settling States (each, a "*Party*").

66. "*Payment Date*" means the date on which Teva makes its Annual Payments (including its Initial Year Payment), Additional Restitution Payments, Settlement Product Cash Conversion Amount, and Attorney Fee and Cost Payments, pursuant to Section VII and XIII and Exhibit M. The first Payment Date is thirty (30) days after the Effective Date. The second Payment Date is July 15, 2024. The Payment Date is July 15 in all subsequent years.

67. "*Payment Year*" means the calendar year during which the applicable Annual Payment is due pursuant to subsection VII.B. Payment Year 1 is 2023, Payment Year 2 is 2024 and so forth. References to payment "for a Payment Year" mean the Annual Payment due that year. References to eligibility "for a Payment Year" mean eligibility in connection with the Annual Payment due during that year.

68. "*Preliminary Agreement Date*" means the date on which Teva gives notice to the Settling States and MDL Plaintiffs' Executive Committee of its determination that a sufficient number of States have agreed to be Settling States to proceed with notice pursuant to subsection X.A. This date shall be no more than fourteen (14) days after the end of the notice period to States (as set forth in subsection II.A) unless it is extended by written agreement of Teva and the Enforcement Committee.

69. "*Primary Subdivision*" means a Subdivision that has a population of 30,000 or more. A list of Primary Subdivisions in each State is provided in Exhibit I, and such list shall be updated if any Primary Subdivision is inadvertently missed or included.

70. *"Prior Settlements Credit"* means the credit of $666,032,651.00, reflecting that the allocations for Prior Settling States and Prior Settling Subdivisions for Claims related to the Covered Conduct against Teva and/or other Released Entities were or will be separately settled. The credit is applied pursuant to subsection VI.A.1.

71. *"Prior Settling State"* means Florida, Louisiana, Rhode Island, Texas, and West Virginia and all Subdivisions and Special Districts within those States, and Oklahoma,[1] whose Claims were released as part of those States' settlements

72. *"Prior Settling Subdivision"* means the City and County of San Francisco, California, Cuyahoga County, Ohio, and Summit County, Ohio.

73. "*Product*" means any chemical substance, whether used for medicinal or non-medicinal purposes, and whether natural, synthetic, or semi-synthetic, or any

[1] Claims of Oklahoma Subdivisions and Special Districts were not released as part of Teva's settlement with Oklahoma and therefore have the opportunity to participate. Terms related to Oklahoma Subdivisions and Special Districts are to be addressed in Exhibit H, which shall be prepared by Teva and presented to the Oklahoma Subdivisions and Special Districts during the notice period to States.

finished pharmaceutical product made from or with such substance, that is an opioid or opiate, as well as any product containing any such substance. It also includes: 1) the following when used in combination with opioids or opiates: benzodiazepine, carisoprodol, zolpidem, or gabapentin; and 2) a combination or "cocktail" of any stimulant or other chemical substance prescribed, sold, bought, or dispensed to be used together that includes opioids or opiates. For the avoidance of doubt, "*Product*" does not include benzodiazepine, carisoprodol, zolpidem, or gabapentin when not used in combination with opioids or opiates. "*Product*" includes but is not limited to any substance consisting of or containing buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, naloxone, naltrexone, oxycodone, oxymorphone, pentazocine, propoxyphene, tapentadol, tramadol, opium, heroin, carfentanil, any variant of these substances, or any similar substance. "*Product*" also includes any natural, synthetic, semi-synthetic or chemical raw materials, starting materials, finished active pharmaceutical ingredients, drug substances, and any related intermediate products used or created in the manufacturing process for any of the substances described in the preceding sentence.

74. "*Reference Date*" means the date on which Teva is to inform the Settling States and MDL Plaintiffs' Executive Committee of its determination whether there is sufficient resolution of Claims and potential Claims at the Subdivision level to go forward with the settlement. The Reference Date shall be no later than thirty (30) days after the Initial Participation Date, unless it is extended by written agreement of Teva and the Enforcement Committee.

75. "*Released Claims*" means any and all Claims that directly or indirectly are based on, arise out of, or in any way relate to or concern the Covered Conduct occurring prior to the Reference Date. Without limiting the foregoing, "Released Claims" include any Claims that have been asserted against the Released Entities by any Settling State or any of its Litigating Subdivisions or Litigating Special Districts in any federal, state or local action or proceeding (whether judicial, arbitral, or administrative) based on, relating to, in whole or in part, the Covered Conduct, or any such Claims that could be or could have been asserted now or in the future in those actions or in any comparable action or proceeding brought by a State, any of its Subdivisions or Special Districts, or any Releasors (whether or not such State, Subdivision, Special District, or Releasor has brought such action or proceeding). Released Claims also include all Claims against Released Entities asserted in any proceeding to be dismissed pursuant to the Agreement, whether or not such claims relate to Covered Conduct. "Released Claims" shall be interpreted broadly. This Agreement does not release Claims by private individuals. Claims by private individuals shall be treated in accordance with applicable law. Released Claims is also used herein to describe Claims brought by a Later Litigating Subdivision or other non-party Subdivision or Special District that would have been Released Claims if they had been brought by a Releasor against a Released Entity.

76. "*Released Entities*" means Teva; and (1) all of Teva's respective past and present direct or indirect parents, subsidiaries, divisions, affiliates, joint ventures (but excluding joint venture partners), predecessors, successors and assigns; (2) Teva's

insurers (solely in their role as insurers with respect to the Released Claims); and (3) Teva's past and present officers, directors, members, shareholders (solely in their capacity as shareholders of the foregoing entities), partners, trustees, employees, agents and attorneys (for actions that occurred during and related to their work for, or employment with, Teva). Any person or entity described in clauses (2)-(3) shall be a Released Entity solely in the capacity described in such clause. A list of all of the indirect parents, subsidiaries, affiliates and joint ventures released pursuant to clause (1) is attached as Exhibit J. For the avoidance of doubt, any entity acquired, or joint venture entered into, by Teva after the Reference Date is not a Released Entity, regardless of whether they are listed on Exhibit J.

77. "*Releasors*" means (1) each Settling State; (2) each Participating Subdivision; (3) each Participating Special District; and (4) without limitation and to the maximum extent of the power of each Settling State's Attorney General and/or Participating Subdivision and Participating Special District to release Claims, (a) the Settling State's, Participating Subdivision's, and Participating Special District's departments, agencies, divisions, boards, commissions, Subdivisions, districts, instrumentalities of any kind and attorneys, including its Attorney General, and any person in their official capacity whether elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, (b) any public entities, public instrumentalities, public educational institutions, unincorporated districts, fire districts, irrigation districts, water districts, emergency services districts, school districts, healthcare districts, hospital districts, Sheriffs and law enforcement districts, library districts, coroner's offices, and public transportation authorities, and other Special Districts in a Settling State, including those with the regulatory authority to enforce state and federal controlled substances acts or the authority to bring Claims related to Covered Conduct seeking money (including abatement (or remediation and/or restitution)) or revoke a pharmaceutical distribution license, and (c) any person or entity acting in a parens patriae, sovereign, quasi-sovereign, private attorney general, qui tam, taxpayer, or other capacity seeking relief, including but not limited to, fines, penalties, or punitive damages, on behalf of or generally applicable to the general public with respect to a Settling State or a Subdivision or Special District in a Settling State, whether or not any of them participate in the Agreement. "Releasors" does not include persons acting in an individual capacity, regardless of the type of relief sought. The inclusion of a specific reference to a type of entity in this definition shall not be construed as meaning that the entity is not a Subdivision. In addition to being a Releasor as provided herein, Participating Subdivisions and Participating Special Districts shall also provide a Settlement Participation Form providing for a release to the fullest extent of the Participating Subdivision's and Participating Special District's authority, which is attached as Exhibit K. Each Settling State's Attorney General represents that he or she has or has obtained (or will obtain no later than the Effective Date) the authority set forth in the Representation and Warranty subsection of Section V.

78. "*Revocation Event*" means with respect to a Bar, Settlement Class Resolution, or Case-Specific Resolution, a legislative amendment or a revocation, rescission,

reversal, overruling, or interpretation that in any way limits the effect of such Bar, Settlement Class Resolution, or Case-Specific Resolution on Released Claims or any other action or event that otherwise deprives the Bar, Settlement Class Resolution or Case-Specific Resolution of force or effect in any material respect.

79. "*Settlement Class Resolution*" means a class action resolution in a court of competent jurisdiction in a Settling State with respect to a class of Subdivisions and Special Districts in that State that (1) conforms with that Settling State's statutes, case law, and/or rules of procedure regarding class actions; (2) is approved and entered as an order of a court of competent jurisdiction in that State and has become final as defined in "State-Specific Finality"; (3) is binding on all Non-Participating Subdivisions and Non-Participating Special Districts in that State (other than opt outs as permitted under the next sentence); (4) provides that all such Non-Participating Subdivisions or Non-Participating Special Districts may not bring Released Claims against Released Entities, whether on the ground of the Agreement (or the releases herein) or otherwise; and (5) does not impose any costs or obligations on Teva other than those provided for in the Agreement, or contain any provision inconsistent with any provision of the Agreement. If applicable state law requires that opt-out rights be afforded to members of the class, a class action resolution otherwise meeting the foregoing requirements shall qualify as a Settlement Class Resolution unless Subdivisions collectively representing more than 1% of the total population of all of that State's Subdivisions listed in Exhibit G opt out. In seeking certification of any Settlement Class, the applicable State and Participating Subdivisions shall make clear that certification is sought solely for settlement purposes and shall have no applicability beyond approval of the settlement for which certification is sought. Nothing in this Agreement constitutes an admission by any Party that class certification would be appropriate for litigation purposes in any case.

80. "*Settlement Fund*" means the interest-bearing fund established under the Agreement into which Annual Payments by Teva are made pursuant to Section VII. The Settlement Fund comprises the Abatement Accounts Fund, State Fund, and Subdivision Fund.

81. "*Settlement Fund Administrator*" means the entity that determines the Annual Payments (including calculating Incentive Payments pursuant to Section VI and any amounts subject to offset pursuant to Sections VII.C and XII), and administers and distributes amounts into the Settlement Fund. It shall also administer and distribute the Additional Restitution Amount pursuant to Section XIII. The duties of the Settlement Fund Administrator shall be governed by this Agreement. Prior to the Initial Participation Date, the Parties shall agree to selection and removal processes for and a detailed description of the Settlement Fund Administrator's duties all of which shall be appended to the Agreement as Exhibit L.

82. "*Settlement Fund Administrator Costs*" means any costs and fees associated with or arising out of the duties of the Settlement Fund Administrator with regard to Teva and Allergan's payments to the Settlement Fund as described in Exhibit L and

elsewhere in this Agreement, including those arising from the use of a bank or other financial institution to receive and disburse payments.

83. "*Settlement Fund Escrow*" means the interest-bearing escrow fund established pursuant to this Agreement to hold disputed payments made under this Agreement.

84. "*Settlement Participation Form*" means the form attached as Exhibit K that Participating Subdivisions and Participating Special Districts must execute and provide to Teva and the Implementation Administrator or Settlement Fund Administrator, and which shall (1) make such Participating Subdivisions and Participating Special Districts signatories to this Agreement, (2) include a full and complete release of any and all of such Participating Subdivisions' and Participating Special Districts' Claims and (3) require prompt cessation of litigation activity as set forth in Section III, and request for dismissal with prejudice of any Released Claims that have been filed against Released Entities by any such Participating Subdivisions or Participating Special Districts within fourteen (14) business days after the Reference Date.

85. "*Settlement Payment Schedule*" means the schedule of payments attached to this Agreement as Exhibit M. Actual payment amounts are subject to adjustments consistent with this Agreement.

86. "*Settlement Product*" means finished good kits (two (2) devices per kit) of "Naloxone Hydrochloride Nasal Spray" (4 mg strength) that is listed in Teva's then-current generics catalog, which can be viewed at www.tevagenerics.com, and is provided to the Settling State as part of the settlement, at no cost as set forth in Section IX and Exhibit D.

87. "*Settlement Product Cash Conversion Amount*" means the resulting dollar amount from when a Settling State has elected to convert all or a portion of its Settlement Product allocation into a cash payment pursuant to Section IX and Exhibit D. The aggregate, maximum amount that could be paid from the conversion of Settlement Product into cash is $240,000,000.00.

88. "*Settlement Product Election Form*" means the form a Settling State uses to submit its election of the Settling State's allocation of Settlement Product or cash conversion of Settlement Product pursuant to Section IX and Exhibit D.

89. "*Settling State*" means any Eligible State that has entered into this Agreement.

90. "*Special District*" means (1) formal and legally recognized sub-entities of a State recognized by the U.S. Census Bureau[2] and those listed on Exhibit C, and (2) any person, official, or entity thereof acting in an official capacity. Special Districts do not include sub-entities of a State that provide general governance for a defined

[2] All such entities are found on the "Special District," "School District," and "DEP School District" tabs of the Census Bureau's 2017 Government Units Listing spreadsheet available at https://www2.census.gov/programs-surveys/gus/datasets/2017/govt_units_2017.ZIP.

area that would qualify as a Subdivision. Entities that include any of the following words or phrases in its name shall not be considered a Special District: mosquito, pest, insect, spray, vector, animal, air quality, air pollution, clean air, coastal water, tuberculosis, and sanitary.

91. "*State*" means any state of the United States of America, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands. Additionally, the use of non-capitalized "state" to describe something (e.g., "state court") shall also be read to include parallel entities in commonwealths, territories, and the District of Columbia (e.g., "territorial court").

92. "*State Allocation Percentage*" means the allocation percentages for Eligible States as set forth in Exhibit F-2, which have been adjusted from the State Global Allocation Percentages to account for the Prior Settlements Credit.

93. "*State Cost Fund*" means the fund totaling $6,371,058.22 and described in Exhibit S.

94. "*State Global Allocation Percentage*" means the allocation percentages for all States as set forth in Exhibit F-1, which represents allocations before the Prior Settlements Credit is applied.

95. "*State Fund*" means a component of the Settlement Fund described in subsection VIII.D.

96. "*State Outside Counsel Fee Fund*" means the fund totaling $28,669,762.00 and described in Exhibit T.

97. "*State-Specific Finality*" means, with respect to the Settling State in question:

    a. the Agreement and the Consent Judgment have been approved and entered by the Court as to Teva, including the release of all Released Claims against Released Entities as provided in this Agreement;

    b. for all lawsuits brought by the Settling State against Released Entities for Released Claims, either previously filed or filed as part of the entry of the Consent Judgment, the Court has stated in the Consent Judgment or otherwise entered an order finding that all Released Claims against Released Entities asserted in the lawsuit have been resolved by agreement; and

    c. (1) the time for appeal or to seek review of or permission to appeal from the approval and entry as described in subsection (a) hereof and entry of such order described in subsection (b) hereof has expired; or (2) in the event of an appeal, the appeal has been dismissed or denied, or the approval and entry described in (a) hereof and the order described in subsection (b) hereof have been affirmed in all material respects (to the extent challenged in the appeal) by the court of last resort to which such appeal has been taken and

such dismissal or affirmance has become no longer subject to further appeal (including, without limitation, review by the United States Supreme Court).

98. "*State-Subdivision Agreement*" means an agreement that a Settling State reaches with the Subdivisions in that State regarding the allocation, distribution, and/or use of funds allocated to that State and to Exhibit G Participants in that State. A State-Subdivision Agreement shall be effective if approved pursuant to the provisions of Exhibit O or if adopted by statute. Preexisting agreements addressing funds other than those allocated pursuant to this Agreement shall qualify if the approval requirements of Exhibit O are met. A State and its Subdivisions may revise, supplement, or refine a State-Subdivision Agreement if approved pursuant to the provisions of Exhibit O or if adopted by statute.

99. "*Statewide Payment Amount"* means the amount from an Annual Payment to be paid to a Settling State, its separate types of funds (if applicable), and its Exhibit G Participants.

100. "*Statutory Trust*" means a trust fund established by state law to receive funds allocated to a State's Abatement Accounts Fund and restrict their expenditure to Opioid Remediation purposes subject to reasonable administrative expenses. A State may give a Statutory Trust authority to allocate one or more of the three Settlement Funds, but this is not required.

101. "*Subdivision*" means (1) a formal and legally recognized sub-entity of a State that provides general governance for a defined area, such as a municipality, county, parish, city, town, incorporated township, village, borough, or any other entities that provide municipal-type government within a State, and (2) any person, official, or entity thereof acting in an official capacity on behalf of the Subdivision (including, without limitation, district attorneys, county attorneys, city attorneys, Sheriffs, and any other official, employee, or representative). Unless otherwise specified, "Subdivision" includes all functional counties and parishes and other functional levels of sub-entities of a State that provide general governance for a defined area. Historic, non-functioning sub-entities of a State (such as Connecticut counties) are not Subdivisions, unless the entity has filed a lawsuit that includes a Released Claim against a Released Entity in a direct, parens patriae, or any other capacity. For purposes of this Agreement, the term Subdivision does not include Special Districts.

102. "*Subdivision and Special District Allocation Percentage*" means for Subdivisions and Special Districts in a Settling State that are eligible to receive an allocation from the Subdivision Fund pursuant to subsection VIII.D or subsection VIII.E, the percentage as set forth in Exhibit G. The aggregate Subdivision and Special District Allocation Percentage of all Subdivisions and Special Districts receiving a Subdivision and Special District Allocation Percentage in each State shall equal 100%. Immediately upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary

redistribution allowed by subsection VIII.E.3) that addresses allocation from the Subdivision Fund, whether before or after the Initial Participation Date, Exhibit G will automatically be amended to reflect the allocation from the Subdivision Fund pursuant to the State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3. The Subdivision and Special District Allocation Percentages contained in Exhibit G may not change once notice is distributed pursuant to subsection X.A, except upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3) that addresses allocation from the Subdivision Fund. For the avoidance of doubt, no Subdivision or Special District not listed on Exhibit G shall receive an allocation from the Subdivision Fund and no provision of this Agreement shall be interpreted to create such an entitlement.

103. "*Subdivision Fund*" means a component of the Settlement Fund described in subsection VIII.D.

104. "*Teva*" means (i) Teva Pharmaceutical Industries Ltd. and (ii) all of its respective past and present direct or indirect parents, subsidiaries, divisions, affiliates, joint ventures, predecessors, successors, assigns, including but not limited to Teva Pharmaceuticals USA, Inc., the Actavis Generic Entities, and Anda Inc.

105. "*Threshold Motion*" means a motion to dismiss or equivalent dispositive motion made at the outset of litigation under applicable procedure. A Threshold Motion must include as potential grounds for dismissal, any applicable Bar or the relevant release by a Settling State, Participating Subdivision, or Participating Special District provided under this Agreement and, where appropriate under applicable law, any applicable limitations defense.

II. Participation by States and Condition to Preliminary Agreement

A. *Notice to States*. On November 22, 2022, this Agreement shall be distributed to all Eligible States. The Eligible States' Attorneys General shall then have a period of thirty (30) days to decide whether to become Settling States. Eligible States will decide whether to become Settling States for both this Agreement and the Allergan Global Opioid Settlement Agreement, or decline participation in both settlements. If a State is only an Eligible State with respect to one of the Agreements, the State need only decide whether to become a Settling State with respect to the Agreement for which it is an Eligible State. States that determine to become Settling States shall so notify the Enforcement Committee and Teva within thirty (30) days after November 22, 2022, and shall further commit to obtaining any

necessary additional State releases prior to the Effective Date. This notice period for States may be extended by written agreement of Teva and the Enforcement Committee.

B. *Ineligible States.* Non-Settling States and Prior Settling States shall not be eligible for any payments or have any rights in connection with this Agreement, except for Subdivisions and Special Districts within Oklahoma as specified in Exhibit H.

C. *Condition to Preliminary Agreement*. Following the notice period to Eligible States set forth in subsection II.A above, Teva shall determine on or before the Preliminary Agreement Date whether, in its sole discretion enough States have agreed to become Settling States to proceed with notice to Subdivisions as set forth in Section X below. The determination to proceed shall be in the sole discretion of Teva and may be based on any criteria or factors deemed relevant by Teva. If Teva determines that this condition has been satisfied, and that notice to the Subdivisions should proceed, it will so notify the Settling States by providing notice to the Enforcement Committee on the Preliminary Agreement Date. If Teva determines that this condition has not been satisfied, it will so notify the Settling States by providing notice to the Enforcement Committee, and this Agreement will have no further effect and all releases and other commitments or obligations contained herein will be void other than Teva's funding of Implementation Costs incurred to date. The Preliminary Agreement Date may be extended by written agreement of Teva and the Enforcement Committee.

D. *Later Joinder by States*. After the Preliminary Agreement Date, an Eligible State may only become a Settling State with the consent of Teva, in its sole discretion. If a State becomes a Settling State more than thirty (30) days after the Preliminary Agreement Date, the Subdivisions and Special Districts in that State that become Participating Subdivisions and Participating Special Districts within ninety (90) days of the State becoming a Settling State shall be considered Initial Participating Subdivisions or Initial Participating Special Districts.

III. Cessation of Litigation Activities

A. Following the Preliminary Agreement Date, if Teva has determined to proceed with notice pursuant to subsection X.A, all Litigating States that intend to become Settling States and that are engaged in or have engaged in discovery and/or substantive motion practice ("*Active Litigation*") against a Released Entity shall make reasonable efforts to immediately cease litigation activity (e.g., written and document discovery, depositions, expert disclosures, and motion practice) against Teva, where feasible, or to minimize litigation activity by means of agreed deadline extensions and agreed postponement of depositions, document productions, and motion practice. Teva shall cooperate in such efforts. The obligations under this subsection do not extend past the Reference Date if Teva determines it is not going forward with the Agreement. This subsection III.A does not apply to Litigating States with a trial date within six (6) months of the Preliminary Agreement Date, though such Litigating States and Teva shall engage in good faith discussions regarding the potential cessation of litigation activity.

B. Following the execution of the Settlement Participation Form, attached as Exhibit K, indicating its intention to participate in the global settlement, a Litigating Subdivision

or Litigating Special District shall take reasonable steps to immediately cease all litigation activity (e.g., written and document discovery, depositions, expert disclosures, and motion practice) against Teva, where feasible, or minimize litigation activity by means of an agreed upon temporary "stay" of litigation and/or deadline extensions or postponement of litigation activity including depositions, document productions, and motion practice, unless the Litigating Subdivision or Litigating Special District reasonably concludes that it would be prejudiced by doing so. Teva shall cooperate in such efforts. The obligations under this subsection do not extend past the Reference Date if Teva determines it is not going forward with the settlement. This paragraph III.B does not apply to Litigating Subdivisions and Litigating Special Districts with a trial date within six (6) months of the Preliminary Agreement Date, though such Litigating Subdivisions and Litigating Special Districts and Teva shall engage in good faith discussions regarding the potential cessation of litigation activity.

C. Following the Reference Date, the Settling States shall endeavor to file Consent Judgments (the contents of which must be agreed upon with Teva) within thirty (30) days of the Reference Date. Participating Subdivisions and Participating Special Districts, as applicable, shall request dismissal of their actions with prejudice within fourteen (14) days of the Reference Date. The Settling States, Participating Subdivisions, and Participating Special Districts shall use best efforts to get Consent Judgments or orders of dismissal with prejudice, as applicable, entered promptly after filing.

IV. Injunctive Relief

A. *Entry of Injunctive Relief*. As part of the Consent Judgment, the Parties agree to the Injunctive Relief Terms attached as Exhibit P.

V. Release

A. *Scope*. As of the Effective Date, the Released Entities will be released and forever discharged from all of the Releasors' Released Claims. Each Settling State (for itself and its Releasors) and Participating Subdivision (for itself and its Releasors), and Participating Special District (for itself and its Releasors) will, on or before the Effective Date, absolutely, unconditionally, and irrevocably covenant not to bring, file, or claim, or to cause, assist in bringing, or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the Agreement are intended to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of each Settling State and its Attorney General to release Claims. The Release shall be a complete bar to any Released Claim.

B. *Claim Over and Non-Party Settlement*.

1. *Statement of Intent.* It is the intent of the Parties that:

   a. Released Entities should not seek contribution or indemnification (other than pursuant to an insurance contract) from other parties for their payment obligations under this Agreement;

   b. the payments made under this Agreement shall be the sole payments made by the Released Entities to the Releasors involving, arising out of, or related to Covered Conduct (or conduct that would be Covered Conduct if engaged in by a Released Entity);

   c. Claims by Releasors against non-Parties should not result in additional payments by Released Entities, whether through contribution, indemnification or any other means; and

   d. the Settlement meets the requirements of the Uniform Contribution Among Joint Tortfeasors Act and any similar state law or doctrine that reduces or discharges a released party's liability to any other parties. Any amounts payable by Teva pursuant to this Agreement, including but not limited to the Net Abatement Amount and any attorneys' fees, shall not be reduced or otherwise affected by any obligation by Teva to pay any contractual indemnity or agreed-to contribution amount to Allergan.

   The provisions of this subsection V.B are intended to be implemented consistent with these principles. This Agreement and the releases and dismissals provided for herein are made in good faith.

2. *Contribution/Indemnity Prohibited*. No Released Entity shall seek to recover for amounts paid under this Agreement based on indemnification, contribution, or any other theory from a manufacturer, pharmacy, hospital, pharmacy benefit manager, health insurer, third-party vendor, trade association, distributor, or health care practitioner, provided that a Released Entity shall be relieved of this prohibition with respect to any entity that asserts a Claim Over against it. For the avoidance of doubt, nothing herein shall prohibit a Released Entity from recovering amounts owed pursuant to insurance contracts.

3. *Non-Party Settlement*. To the extent that, on or after the Reference Date, any Releasor enters into a Non-Party Settlement, including in any bankruptcy case or through any plan of reorganization (whether individually or as a class of creditors), the Releasor will include (or in the case of a Non-Party Settlement made in connection with a bankruptcy case, will cause the debtor to include), unless prohibited from doing so under applicable law, in the Non-Party Settlement a prohibition on contribution or indemnity of any kind substantially equivalent to that required from Teva in subsection V.B.2, or a release from such Non-Released Entity in favor of the Released Entities (in a form equivalent to the releases contained in this Agreement) of any Claim Over. However, and notwithstanding

the foregoing, this provision shall not preclude Allergan from seeking indemnification under its agreement with Teva. The obligation to obtain the prohibition and/or release required by this subsection is a material term of this Agreement.

4. *Claim Over*. In the event that any Releasor obtains a judgment with respect to Non-Party Covered Conduct against a Non-Released Entity that does not contain a prohibition like that in subsection V.B.3, or any Releasor files a Non-Party Covered Conduct Claim against a Non-Released Entity in bankruptcy or a Releasor is prevented for any reason from obtaining a prohibition/release in a Non-Party Settlement as provided in subsection V.B.3, and such Non-Released Entity asserts a Claim Over against a Released Entity, that Releasor and Teva shall take the following actions to ensure that the Released Entities do not pay more with respect to Covered Conduct to Releasors or to Non-Released Entities than the amounts owed under this Agreement by Teva:

   a. Teva shall notify that Releasor of the Claim-Over within sixty (60) days of the assertion of the Claim-Over or sixty (60) days of the Effective Date of this Agreement, whichever is later;

   b. Teva and that Releasor shall meet and confer concerning the means to hold Released Entities harmless and ensure that it is not required to pay more with respect to Covered Conduct than the amounts owed by Teva under this Agreement;

   c. That Releasor and Teva shall take steps sufficient and permissible under the law of the State of the Releasor to hold Released Entities harmless from the Claim-Over and ensure Released Entities are not required to pay more with respect to Covered Conduct than the amounts owed by Teva under this Agreement. Such steps may include, where permissible:

      (i) Filing of motions to dismiss or such other appropriate motion by Teva or Released Entities, and supported by Releasors, in response to any Claim filed in litigation or arbitration;

      (ii) Reduction of that Releasor's Claim and any judgment it has obtained or may obtain against such Non-Released Entity by whatever amount or percentage is necessary to extinguish such Claim-Over under applicable law, up to the amount that Releasor has obtained, may obtain, or has authority to control from such Non-Released Entity;

      (iii) Placement into escrow of funds paid by the Non-Released Entities such that those funds are available to satisfy the Claim-Over;

      (iv) Return of monies paid by Teva to that Releasor under this Agreement to permit satisfaction of a judgment against or settlement with the Non-Released Entity to satisfy the Claim-Over;

(v) Payment of monies to Teva by that Releasor to ensure it is held harmless from such Claim-Over, up to the amount that Releasor has obtained, may obtain, or has authority to control from such Non-Released Entity;

(vi) Credit to Teva under this Agreement to reduce the overall amounts to be paid under the Agreement such that it is held harmless from the Claim-Over; and

(vii) Such other actions as that Releasor and Teva may devise to hold Teva harmless from the Claim Over.

d. The actions of that Releasor and Teva taken pursuant to paragraph (c) must, in combination, ensure Teva is not required to pay more with respect to Covered Conduct than the amounts owed by Teva under this Agreement.

e. In the event of any dispute over the sufficiency of the actions taken pursuant to paragraph (c), that Releasor and Teva may seek review by the National Arbitration Panel, provided that, if the Parties agree, such dispute may be heard by the state Court where the relevant Consent Judgment was filed. The National Arbitration Panel shall have authority to require Releasors to implement a remedy that includes one or more of the actions specified in paragraph (c) sufficient to hold Released Entities fully harmless. In the event that the panel's actions do not result in Released Entities being held fully harmless, Teva shall have a Claim for breach of this Agreement by Releasors, with the remedy being payment of sufficient funds to hold Teva harmless from the Claim Over. For the avoidance of doubt, the prior sentence does not limit or eliminate any other remedy that Teva may have.

5. To the extent that the Claim Over is based on a contractual indemnity, the obligations under subsection V.B.4 shall extend solely to a Non-Party Covered Conduct Claim against a pharmacy, clinic, hospital or other purchaser or dispenser of Products, a manufacturer that sold Products, a consultant, and/or a pharmacy benefit manager or other third-party payor. Teva shall notify the Settling States, to the extent permitted by applicable law, in the event that any of these types of Non-Released Entities asserts a Claim-Over arising out of contractual indemnity against it.

C. *General Release*. In connection with the releases provided for in the Agreement, each Settling State (for itself and its Releasors), Participating Subdivision and Participating Special District expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her, would

have materially affected his or her settlement with the debtor or released party.

A Releasor may thereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Settling State (for itself and its Releasors), Participating Subdivision and Participating Special District hereby expressly waives and fully, finally, and forever settles, releases, and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Settling States' decision to enter into the Agreement, the Participating Subdivisions' decision to participate in the Agreement, or the Participating Special District's decision to participate in the Agreement.

D. *Res Judicata*. Nothing in the Agreement shall be deemed to reduce the scope of the res judicata or claim preclusive effect that the settlement memorialized in the Agreement, and/or any Consent Judgment or other judgment entered on the Agreement, gives rise to under applicable law.

E. *Representation and Warranty*. The signatories hereto on behalf of their respective Settling States, its Participating Subdivisions, and its Participating Special Districts expressly represent and warrant that they will obtain on or before the Effective Date (or have obtained) the authority to settle and release, to the maximum extent of the State's power, all Released Claims of (1) their respective Settling States; (2) any of the respective Settling State's past and present executive departments, state agencies, divisions, boards, commissions and instrumentalities with the regulatory authority to enforce state and federal controlled substances acts; (3) any of their respective Settling State's past and present executive departments, agencies, divisions, boards, commissions and instrumentalities that have the authority to bring Claims related to Covered Conduct seeking money (including abatement and/or remediation) or revocation of a pharmaceutical distribution license; (4) any Participating Subdivisions; and (5) any Participating Special District. For the purposes of clause (3) above, executive departments, agencies, divisions, boards, commissions, and instrumentalities are those that are under the executive authority or direct control of the State's Governor. Also, for the purposes of clause (3), a release from a State's Governor is sufficient to demonstrate that the appropriate releases have been obtained.

F. *Effectiveness*. The releases set forth in the Agreement shall not be impacted in any way by any dispute that exists, has existed, or may later exist between or among the Releasors. Nor shall such releases be impacted in any way by any current or future law, regulation, ordinance, or court or agency order limiting, seizing, or controlling the distribution or use of the Settlement Fund or any portion thereof, or by the enactment of future laws, or by any seizure of the Settlement Fund or any portion thereof.

G. *Cooperation*. Releasors (i) will not encourage any person or entity to bring or maintain any Released Claim against any Released Entity and (ii) will reasonably cooperate with and not oppose any effort by a Released Entity to secure the prompt dismissal of any and all Released Claims.

H. *Non-Released Claims.* Notwithstanding the foregoing or anything in the definition of Released Claims, the Agreement does not waive, release or limit any criminal liability, Claims for any outstanding liability under any tax or securities law, Claims against parties who are not Released Entities, Claims by private individuals, Claims for Medicaid rebates, Claims asserted, or that could be asserted, by any State or Subdivision, related to the causes of action in *In re: Generic Pharmaceuticals Pricing Antitrust Litigation*, in the United States District court for the District of Pennsylvania, MDL No. 2724, and any related action (such excluded claims include, but are not limited to, all antitrust claims and any claims related to any non-opioid generic drugs), and any claims arising under the Agreement for enforcement of the Agreement.

VI. Monetary Relief Overview and Maximum Payments

A. Excluding Teva's share of Implementation Costs and Settlement Fund Administrator Costs, there are four main categories of monetary payments:

1. *Annual Payments to the Settlement Fund*. These payments are generally addressed in Section VII. The maximum amount Teva shall pay in Annual Payments to the Settlement Fund is the Net Abatement Amount of $2,945,529,111.00, which reflects the application of the Prior Settlements Credit to the Global Settlement Abatement Amount. Annual Payments will be made over thirteen (13) years on the Payment Dates. The actual amount paid will depend on, among other things, the level of participation of Eligible States, their Subdivisions, and their Special Districts.

2. *Cash Conversion of Settlement Product*. These potential monetary payments are generally addressed in Section IX. The maximum monetary amount Teva shall pay for the cash conversion of Settlement Product is $240,000,000.00. Payments for cash conversion of Settlement Product will be made over twelve (12) years on the Payment Dates. The actual amount paid will depend on, among other things, the level of participation of Eligible States and the number of Settling States opting for cash conversion.

3. *Additional Restitution Amount*. These payments are generally addressed in Section XIII. The maximum amount Teva shall pay for the Additional Restitution Amount is $28,669,762.00. Payments for the Additional Restitution Amount will be made over six (6) years on the Payment Dates. The actual amount paid will depend on the number of Eligible States listed in Exhibit F-2 that become Settling States.

4. *Attorney Fee and Cost Payments*. These payments are generally addressed in Section XIV and Exhibits M, R, S and T. They consist of payments for the State Outside Counsel Fee Fund, the State Cost Fund, and the Attorney Fee and Cost Fund. These payments will be made over six (6) years on the Payment Dates. The maximum amount Teva shall pay into these funds is the Global Settlement Attorney Fee Amount of $366,335,847.76.

B. The aggregate maximum amount Teva shall pay for these for these payment categories is $3,580,534,720.76. This figure does not include costs related to injunctive relief and

document disclosure addressed in Exhibits P and V, Implementation Costs and Settlement Fund Administrator Costs addressed in this Agreement, or WAC value of Settlement Product.

C. *Settlement Fund Administrator and Implementation Costs*. If this Agreement becomes effective, Teva shall be responsible for one-third of the Implementation Costs. The full amount of the Implementation Costs shall be jointly advanced by Teva and Allergan. If this Agreement becomes effective, then Teva shall deduct from Teva's Initial Year Payment the difference between the excess amount it advanced for Implementation Costs and its one-third obligation for such costs. Settlement Fund Administrator Costs shall be paid out of interest accrued on the Settlement Fund. Should such interest prove insufficient to fully cover the costs, the remaining cost amounts shall be paid one-third by Teva, one-third by Allergan and one-third from the Settlement Fund through the disbursement of Teva's final Annual Payment.

VII. Annual Payments to Settlement Fund

A. Structure of Payments to Settlement Fund

1. All payments under this Section VII shall be made into the Settlement Fund, except that where specified, they shall be made into the Settlement Fund Escrow. The Settlement Fund shall be allocated and used only as specified in Section VIII.

2. Teva shall pay into the Settlement Fund the Net Abatement Amount consisting of $2,945,529,111.00 minus: (1) any offsets specified in subsection VII.C below; (2) any unearned Incentive Payments under subsection VII.E below; and (3) any adjustments under Section XII below.

3. The payments to the Settlement Fund shall be divided into Base Payments and Incentive Payments as provided in subsections VII.D and VII.E below and set out in Exhibit M-1.

B. Settlement Fund Payment Process

1. Except as otherwise provided in this Agreement, Teva shall make one Initial Year Payment (the first Annual Payment) and twelve (12) additional Annual Payments of equal installments of the Net Abatement Amount (after all applicable offsets) into the Settlement Fund. The Settlement Payment Schedule is set forth in Exhibit M. Annual Payments shall be made on the Payment Date, provided that the necessary wire instructions and W-9 form for the Settlement Fund are provided to Teva at least twenty-one (21) days before the relevant payment is due. If there is a delay in making a payment because wire instructions and/or a W-9 form were not provided at least twenty-one (21) days in advance of the Payment Date, then the Annual Payment will be made within twenty-one (21) days of both the wire instructions and W-9 form being provided.

2. The Initial Year Payment shall consist of only Base Payments (after all applicable offsets). The other twelve (12) Annual Payments shall each consist of Base

Payments (after all applicable offsets) and Incentive Payments (after all applicable offsets). The amount of the Initial Year Payment and each other Annual Payment, payable by Teva shall not exceed the maximum amounts allocated to each Payment Year in Exhibit M.

3. To determine each Annual Payment for Payment Year 2 forward, the Settlement Fund Administrator shall use the data in its records sixty (60) days prior to the Payment Date for each payment. Prior to the Effective Date, the Parties will include an exhibit to the Agreement setting forth in detail the process for the Settlement Fund Administrator obtaining relevant data and for distributing funds to Settling States and Exhibit G Participants consistent with the terms of this Agreement as quickly as practical.

4. The Settlement Fund Administrator shall determine the Annual Payment and the Statewide Payment Amount for each Settling State, consistent with the provisions in Exhibit L, by:

   a. determining, for each Settling State, the amount of Base Payments and Incentive Payments to which the State is entitled by applying the criteria in this Section;

   b. applying any reductions or offsets required by Sections VII and XII; and

   c. determining the total amount owed by Teva to all Settling States and Exhibit G Participants.

5. If, no later than fifty (50) days prior to the Payment Date for each payment for Payment Year 2 forward, Teva and the Enforcement Committee inform the Settlement Fund Administrator that they agree on the amount of the Annual Payment and the Statewide Payment Amount for each Settling State, Teva shall pay the agreed-upon Annual Payment amount on the Payment Date and the Settlement Fund Administrator shall treat those amounts as the determination described in subsection VII.B.4. If the Settlement Fund Administrator is not so informed, it shall give notice to Teva, the Settling States, and the Enforcement Committee of the amount of the Annual Payment, and the Statewide Payment Amount for each Settling State, following the determination described in subsection VII.B.4, and the following timeline shall apply:

   a. Within twenty-one (21) days of the notice provided by the Settlement Fund Administrator, Teva, any Settling State or the Enforcement Committee may dispute, in writing, the calculation of the Annual Payment, or the Statewide Payment Amount for a Settling State. Such disputing party must provide a written notice of dispute to the Settlement Fund Administrator, the Enforcement Committee, any affected Settling State, and Teva identifying the nature of the dispute, the amount of money that is disputed, and the Settling State(s) affected.

b. Within twenty-one (21) days of the sending of a written notice of dispute, any affected party may submit a response, in writing, to the Settlement Fund Administrator, the Enforcement Committee, any affected Settling State, and Teva identifying the basis for disagreement with the notice of dispute.

c. If no response is filed, the Settlement Fund Administrator shall adjust the amount calculated consistent with the written notice of dispute, and Teva shall pay the adjusted amount as the Annual Payment on the Payment Date. If a written response to the written notice of dispute is timely sent to the Settlement Fund Administrator, the Settlement Fund Administrator shall notify Teva of the preliminary amount to be paid, which shall be the greater of the amount originally calculated by the Settlement Fund Administrator or the amount that would be consistent with the notice of dispute, *provided, however* that in no circumstances shall the preliminary amount to be paid be higher than the maximum amount of Base Payments and Incentive Payments for that payment as set forth in Exhibit M. For the avoidance of doubt, a transfer of payments from the Settlement Fund Escrow for other Payment Years does not count toward determining whether the amount to be paid is higher than the maximum amount of Base Payments and Incentive Payments for that payment as set forth in Exhibit M.

d. The Settlement Fund Administrator shall place any disputed amount of the preliminary amount paid by Teva into the Settlement Fund Escrow and shall disburse any undisputed amount to each Settling State and its Exhibit G Participants.

6. If a Settling State informs the Settlement Fund Administrator that it and its Exhibit G Participants have reached consensus on the amount of its Statewide Payment Amount, determined pursuant to subsections VII.B.3 or VII.B.4, to be distributed to the Settling State, among its separate types of funds (if applicable), and among its Exhibit G Participants, the Settlement Administrator shall disburse the Statewide Payment Amount pursuant to the consensus distribution amounts provided by the Settling State. For a Settling States that does not so notify the Settlement Fund Administrator, the Settlement Fund Administrator shall allocate the Settling State's Statewide Payment Amount, pursuant to Section VII, among the separate types of funds for the Settling State (if applicable), and among its Exhibit G Participants using the following procedures:

a. As soon as possible for each payment and following the determination described in subsections VII.B.3 and VII.B.4, the Settlement Fund Administrator shall give notice to the relevant Settling States and their Exhibit G Participants of the amount to be received by each Settling State, the amount to be received by the separate types of funds for each Settling State (if applicable), and the amount to be received by each Settling State's Exhibit G Participants.

b. Within twenty-one (21) days of the notice provided by the Settlement Fund Administrator, any Settling State or Exhibit G Participant may dispute, in

writing, the calculation of the amount to be received by a Settling State and/or its Exhibit G Participants. A dispute will be deemed invalid and disregarded if it challenges the allocations adopted by a State-Subdivision Agreement approved pursuant to the provisions of Exhibit O or by statute. Such disputing party must provide a written notice of dispute to the Settlement Fund Administrator, any affected Settling State, and any affected Exhibit G Participant identifying the nature of the dispute, the amount of money that is disputed, and the Settling State(s) affected.

c. Within twenty-one (21) days of the sending of a written notice of dispute, any affected Settling State or any affected Exhibit G Participant may submit a response, in writing, to the Settlement Fund Administrator, any affected Settling State and any affected Exhibit G Participant identifying the basis for disagreement with the notice of dispute.

d. If no response is filed, the Settlement Fund Administrator shall adjust the amount calculated consistent with the written notice of dispute.

e. The Settlement Fund Administrator shall place any disputed amount into the Settlement Fund Escrow and shall disburse any undisputed amount to the Settling State and its Exhibit G Participants.

7. Disputes described in this subsection (other than those for which no response is filed under subsections VII.B.5.c or VII.B.6.d) shall be resolved in accordance with the terms of Section XV.

8. The Settlement Fund Administrator may combine the disbursements of Annual Payments with disbursement of funds under other comparable opioid settlements. In determining when disbursements for each Annual Payment will be made, the Settlement Fund Administrator may take into account the timeline for the availability of disbursements under other comparable opioid settlements.

9. For the avoidance of doubt, Subdivisions and Special Districts not listed on Exhibit G shall not receive an allocation from the Subdivision Fund.

C. Offsets to Annual Payments to the Settlement Fund for Non-Settling States

1. An offset equal to the Net Abatement Amount of $2,945,529,111.00 times the State Allocation Percentage assigned to each Non-Settling State in Exhibit F-2 shall be deducted from the total amount to be paid by Teva to the Settlement Fund.

2. Non-Settling States shall not be eligible for any payments or have any rights in connection with this Agreement. Accordingly, the stated maximum dollar amounts of the Annual Payments specified in Exhibit M are reduced by the aggregate State Allocation Percentage of Non-Settling States as set forth in Exhibit F-2.

D. Base Payments

1. Teva shall make Base Payments into the Settlement Fund in an amount equal to 45% of the Net Abatement Amount of $2,945,529,111.00 minus any offsets for Non-Settling States specified in subsection VII.C.1. The maximum total for Base Payments is $1,325,488,100.00. The Base Payments will be paid in accordance with the Settlement Payment Schedule specified by Exhibit M-1, subject to potential offsets for Non-Settling States as provided in subsection VII.C.1.

2. The Base Payments will be allocated by Settling State proportionate to each Settling State's State Allocation Percentage in Exhibit F-2, adjusted for any Non-Settling State.

E. Incentive Abatement Payments

1. Teva shall make potential Incentive Payments totaling up to a maximum of 55% of the Net Abatement Amount of $2,945,529,111.00 for all Settling States with the actual amount depending on whether and the extent to which the criteria set forth below are met in each Settling State. The maximum total for Incentive Payments is $1,620,041,011.00.

2. The maximum total Incentive Payment for any Settling State shall be no more than the maximum total for Incentive Payments listed in subsection VII.E.1 times the Settling State's State Allocation Percentage specified in Exhibit F-2. Incentive Payments are state-specific, with each Settling State receiving an Incentive Payment based on the incentives for which it is eligible for that year under the criteria set forth below and any offset specified in Section XII.

3. The Incentive Payments shall be divided among four (4) categories, referred to as Incentives A–D. Incentives A–C will be due in installments over the twelve (12) Payment Years beginning with Payment Year 2, and Incentive D will be due in installments over ten (10) years beginning with Payment Year 4, as shown on Exhibit M-1. The total amount of Incentive Payments in an Annual Payment shall be the sum of the Incentive Payments for which individual Settling States are eligible for that Payment Year under the criteria set forth below. The Incentive Payments shall be made with respect to a specific Settling State based on its eligibility for that Payment Year under the criteria set forth below.

4. The maximum amount available for Incentive Payments, $1,620,041,011.00, is divided into two pools. The maximum amount of Incentive Payments for Incentives A-C shall be $1,413,853,973.00, which is 48% of the maximum Net Abatement Amount. A Settling State may be eligible for its full allocable share of this payment by either achieving Incentive A or by fully earning both Incentives B and C. The maximum amount of Incentive Payments for Incentive D shall be $206,187,038.00, which is 7% of the maximum Net Abatement Amount. (These figures represent maximum payments prior to being adjusted for any offsets and assumes every State is a Settling State and will satisfy the requirements specified below to earn its maximum incentive amount. The Incentive Payments will be paid in accordance

with the payment schedule in Exhibit M-1, subject to potential deductions as provided herein.) A Settling State qualifies to receive Incentive Payments in addition to Base Payments if it meets the incentive eligibility requirements specified below. Settling States may qualify for Incentive Payments in four ways. If a Settling State qualifies for Incentive A, it will become entitled to receive the maximum payment allocable to the State for Incentives A-C as stated in subsection VII.E.5. If a Settling State does not qualify for Incentive A, it can alternatively qualify for Incentive B and/or Incentive C. A Settling State can qualify for Incentive D regardless of whether it qualifies for another Incentive Payment.

5. *Incentive A: Full Participation or Fully Released Claims of Litigating Subdivisions, Litigating Special Districts, Non-Litigating Subdivisions with Population Greater Than 10,000, and Non-Litigating Covered Special Districts*.

a. A Settling State's total potential Incentive A payment allocation is $1,413,853,973.00 times the percentage allocation assigned that Settling State in Exhibit F-2.

b. A State qualifies for Incentive A by: (1) complete participation in the form of releases consistent with Section V above from all Litigating Subdivisions, Litigating Special Districts, and Subdivisions with a population of 10,000 or more, and Non-Litigating Covered Special Districts; (2) a Bar; or (3) a combination of approaches in clauses (1)-(2) that achieves the same level of resolution of Subdivision and Special District Claims (e.g., a law barring future litigation combined with full joinder by Litigating Subdivisions and Litigating Special Districts). For purposes of Incentive A, a Subdivision or Special District is considered a "Litigating Subdivision" or "Litigating Special District" if it has brought Released Claims against Released Entities on or before the Reference Date; all other Subdivisions and Special Districts are considered "Non-Litigating." For purposes of Incentive A, Non-Litigating Covered Special Districts shall not include a Special District with any of the following words or phrases in its name: mosquito, pest, insect, spray, vector, animal, air quality, air pollution, clean air, coastal water, tuberculosis, and sanitary.

c. If a Settling State qualifies for Incentive A after receiving an Incentive Payment under Incentives B or C, described below, the Settling State's payments under Incentive A will equal the remainder of its total potential Incentive A payments less any payments previously received under Incentives B or C. A Settling State that receives all of its total potential Incentive A payment allocation shall not receive additional Incentive Payments under Incentives B or C.

d. A Settling State that is not eligible for Incentive A as of two (2) years after the Effective Date shall not be eligible for Incentive A for that Payment Year or any subsequent Payment Years.

6. *Incentive B: Early Participation or Released Claims by Litigating Subdivisions and Litigating Special Districts.*

a. If a Settling State does not qualify for Incentive A, it may still qualify to receive up to 60% of its total potential Incentive A payment allocation under Incentive B.

b. A Settling State can qualify for an Incentive B payment if Litigating Subdivisions and Litigating Special Districts collectively representing at least 75% of the Settling State's litigating population are either Participating Subdivisions, Participating Special Districts, or have their claims resolved through Case-Specific Resolutions.

(i) A Settling State's litigating population is the sum of the population of all Litigating Subdivisions and Litigating Special Districts. A Settling State's litigating population shall include all Litigating Subdivisions and Litigating Special Districts whose populations overlap in whole or in part with other Litigating Subdivisions and Litigating Special Districts, for instance in the case of a Litigating Special District, city, or township contained within a county.

(ii) For example, if School District A is a Litigating Special District in City B with a population of 1, City B is itself a Litigating Subdivision with a population of 8, and City B is located within County C, and County C is a Litigating Subdivision with a population 10, then each of their individual populations shall be added together (i.e., 1 + 8 +10) to determine the total litigating population (i.e., 19).

c. The following time periods apply to Incentive B payments:

(i) Period 1: Zero to two hundred ten (210) days after the Effective Date.

(ii) Period 2: Two hundred eleven (211) days to one year after the Effective Date.

(iii) Period 3: One year and one day to two years after the Effective Date.

d. Within Period 1: If Litigating Subdivisions and Litigating Special Districts collectively representing at least 75% of a Settling State's litigating population are Participating Subdivisions or Participating Special Districts, or have their Claims resolved through Case-Specific Resolutions during Period 1, then a sliding scale will determine the share of the funds available under Incentive B, with a maximum of 60% of the Settling State's total potential Incentive Payment allocation available. Under that sliding scale, if Litigating Subdivisions and Litigating Special Districts collectively representing 75% of a Settling State's litigating population become

Participating Subdivisions or Participating Special Districts, or achieve Case-Specific Resolution status by the end of Period 1, a Settling State will receive 50% of the total amount available to it under Incentive B. If more Litigating Subdivisions and Litigating Special Districts become Participating Subdivisions or Participating Special Districts, or achieve Case-Specific Resolution status, the Settling State shall receive an increased percentage of the total amount available to it under Incentive B as shown in the table below.

Participation or Case-Specific Resolution Levels (As percentage of litigating population)	**Incentive B Award** (As percentage of total amount available to Settling State for Incentive B)
75%	50%
76%	52%
77%	54%
78%	56%
79%	58%
80%	60%
85%	70%
90%	80%
95%	90%
100%	100%

e. Within Period 2: If a Settling State did not qualify for an Incentive B payment in Period 1 but Litigating Subdivisions and Litigating Special Districts collectively representing at least 75% of the Settling State's litigating population become Participating Subdivisions or Participating Special Districts, or achieve Case-Specific Resolution status by the end of Period 2, then the Settling State qualifies for 75% of the Incentive B payment it would have qualified for in Period 1.

f. Within Period 3: If a Settling State did not qualify for an Incentive B payment in Periods 1 or 2, but Litigating Subdivisions and Litigating Special Districts collectively representing at least 75% of the Settling State's litigating population become Participating Subdivisions or Participating Special Districts, or achieve Case-Specific Resolution status by the end of Period 3, then the Settling State qualifies for 50% of the Incentive B payment it would have qualified for in Period 1.

g. A Settling State that receives the Incentive B payment for Periods 1 and/or 2 can receive additional payments if it secures participation from additional Litigating Subdivisions and/or Litigating Special Districts (or Case-Specific Resolutions of their Claims) during Periods 2 and/or 3. Those additional payments would equal 75% (for additional participation or Case-Specific Resolutions during Period 2) and 50% (for additional participation or Case-Specific Resolutions during Period 3) of the amount by which the increased

litigating population levels would have increased the Settling State's Incentive B payment if they had been achieved in Period 1.

h. The percentage of the available Incentive B amount for which a Settling State is eligible by the end of Period 3 shall cap its eligibility for that Payment Year and all subsequent Payment Years. If Litigating Subdivisions and Litigating Special Districts that have become Participating Subdivisions or Participating Special Districts, or achieved Case-Specific Resolution status collectively represent less than 75% of a Settling State's litigating population by the end of Period 3, the Settling State shall not receive any Incentive B payment.

i. If there are no Litigating Subdivisions or Litigating Special Districts in a Settling State, and that Settling State is otherwise eligible for Incentive B, that Settling State will receive its full allocable share of Incentive B.

j. Incentives earned under Incentive B shall accrue after each of Periods 1, 2, and 3. Calculations to increase Incentive Payments in later periods based on additional joinder shall not reduce any amount already vested at the end of a prior period.

7. *Incentive C: Participation or Release of Claims by Primary Subdivisions*

a. If a Settling State does not qualify for Incentive A, it may still qualify to receive up to 40% of its total potential Incentive A payment allocation under Incentive C, which has two parts.

b. Part 1: Under Incentive C, Part 1, a Settling State can receive up to 75% of its Incentive C allocation. A Settling State can qualify for a payment under Incentive C, Part 1 only if Primary Subdivisions (whether Litigating Primary Subdivisions or Non-Litigating Primary Subdivisions as of the Reference Date) collectively representing at least 60% of the Settling State's Primary Subdivision population become Participating Subdivisions or achieve Case-Specific Resolution status.

(i) A Settling State's Primary Subdivision population is the sum of the population of all Primary Subdivisions (whether Litigating Primary Subdivisions or Non-Litigating Primary Subdivisions as of the Reference Date). A Settling State's Primary Subdivision population shall include all Primary Subdivisions whose populations overlap in whole or in part with other Primary Subdivisions, for instance in the case of a Primary Subdivision that is a city contained within a Primary Subdivision that is a county. Because Primary Subdivisions include Subdivisions whose populations overlap in whole or in part with other Subdivisions, the Settling State's Primary Subdivision population may be greater than the Settling State's total population. (Special Districts are not relevant for purposes of Incentive C calculations.)

(ii) For example, if City A is a Primary Subdivision with a population of 1 within County B, and County B is a Primary Subdivision with a population of 10, then each of their individual populations shall be added together (i.e., 1+10) to determine the total Primary Subdivision population (i.e., 11).

c. A sliding scale will determine the share of the funds available under Incentive C, Part 1 to Settling States meeting the minimum 60% threshold. Under that sliding scale, if a Settling State secures participation or Case-Specific Resolutions from Primary Subdivisions representing 60% of its total Primary Subdivision population, it will receive 40% of the total amount potentially available to it under Incentive C, Part 1. If a Settling State secures participation or Case-Specific Resolutions from Primary Subdivisions representing more than 60% of its Primary Subdivision population, the Settling State shall be entitled to receive a higher percentage of the total amount potentially available to it under Incentive C, Part 1, on the scale shown in the table below. If there are no Primary Subdivisions, and that Settling State is otherwise eligible for Incentive C, that Settling State will receive its full allocable share of Incentive C, Part 1.

Participation or Case-Specific Resolution Levels (As percentage of total Primary Subdivision population)	**Incentive C, Part 1 Award** (As percentage of total amount available to Settling State for Incentive C, Part 1)
60%	40%
70%	45%
80%	50%
85%	55%
90%	60%
91%	65%
92%	70%
93%	80%
94%	90%
95%	100%

d. Part 2: If a Settling State qualifies to receive an incentive under Incentive C, Part 1, the Settling State can also qualify to receive an additional incentive amount equal to 25% of its total potential Incentive C allocation by securing 100% participation of the ten (10) largest Subdivisions by population in the Settling State. (Special Districts are not relevant for purposes of this calculation.) If a Settling State does not qualify for any amount under Incentive C, Part 1, it cannot qualify for Incentive C, Part 2.

e. Incentives earned under Incentive C shall accrue on an annual basis up to three years after the Effective Date. At one, two, and three years after the Effective Date, the Settlement Fund Administrator will conduct a lookback to assess which Subdivisions had agreed to participate or had their Claim

resolved through a Case-Specific Resolution that year. Based on the look-back, the Settlement Fund Administrator will calculate the incentives accrued under Incentive C for the year. The percentage of the available Incentive C amount, for both Part 1 and Part 2, for which a Settling State is eligible three years after the Effective Date shall cap its eligibility for that Payment Year and all subsequent Payment Years.

8. *Incentive D: No Qualifying Lawsuits Surviving Threshold Motions at Two Look-Back Dates.*

a. A Settling State's total potential Incentive D payment allocation is $206,187,038.00 times the percentage allocation assigned that Settling State in Exhibit F-2.

b. If, at any time within five and one-half (5.5) years of the Preliminary Agreement Date, any Subdivision or Special District within a Settling State files litigation pursuing Released Claims against any Released Entity (a "*Qualifying Lawsuit*"), then Teva shall, within thirty (30) days of Teva or any Released Entity being served or otherwise informed of the prosecution of such Released Claims, provide notice to the Settling State in which such Released Claims are being pursued and shall give the relevant Settling State a reasonable opportunity to extinguish the Released Claims without any payment or any other obligations being imposed upon any Released Entities (apart from the Global Settlement Amount payable by Teva under the Agreement or the Injunctive Relief Terms incurred by it). The relevant Settling State and Teva shall confer and use reasonable efforts to promptly resolve a Qualifying Lawsuit so that it is dismissed with prejudice. Nothing in this subsection creates an obligation for a Settling State to make a monetary payment or incur any other obligation to an entity filing a Qualifying Lawsuit.

c. Part 1: Under Incentive D, Part 1, a Settling State shall receive 50% of its total potential Incentive D payment allocation if, at two years after the Effective Date (the "*First Look-Back Date*"), there are no pending Released Claims from a Qualifying Lawsuit that survived a Threshold Motion within the Settling State against any Released Entities.

(i) After the First Look-Back Date, a Settling State can become re-eligible for Incentive Payment D, Part 1 if the lawsuit that survived a Threshold Motion is dismissed pursuant to a later motion on grounds included in the Threshold Motion, in which case the Settling State shall become eligible for Incentive Payment D less any litigation fees and cost incurred by the Released Entity in the interim, except that if the dismissal motion occurs after the

completion of opening statements in such action, the Settling State shall not be eligible for Incentive Payment D.

d. Part 2: Under Incentive D, Part 2, a Settling State shall receive 50% of its total potential Incentive D payment allocation if, at five and one-half (5.5) years after the Preliminary Agreement Date (the "*Second Look-Back* Date"), there are no pending Released Claims from a Qualifying Lawsuit that survived a Threshold Motion within the Settling State against any Released Entities.

VIII. Allocation and Use of Settlement Funds

A. *Components of Settlement Fund*. The Settlement Fund shall be comprised of an Abatement Accounts Fund, a State Fund, and a Subdivision Fund for each Settling State. The payments under Section VI into the Settlement Fund shall be initially allocated among those three (3) sub-funds and distributed and used as provided below or as provided for by a State-Subdivision Agreement (or other State-specific allocation of funds). Unless otherwise specified herein, payments placed into the Settlement Fund do not revert back to Teva.

B. *Use of Settlement Payments*. It is the intent of the Parties that the payments disbursed from the Settlement Fund to Settling States and Exhibit G Participants be for Opioid Remediation, subject to limited exceptions that must be documented in accordance with subsection VIII.C. In no event may less than 85% of Teva's payments pursuant to subsection VI.A.1–4 over the entirety of all Payment Years (but not any single Payment Year) be spent on Opioid Remediation.

C. While disfavored by the Parties, a Settling State or Exhibit G Participant may use monies from the Settlement Fund (that have not been restricted by this Agreement solely to future Opioid Remediation) for purposes that do not qualify as Opioid Remediation. If, at any time, a Settling State or Exhibit G Participant uses any monies from the Settlement Fund for a purpose that does not qualify as Opioid Remediation, such Settling State or Exhibit G Participant shall identify such amounts and report to the Settlement Fund Administrator and Teva how such funds were used, including if used to pay attorneys' fees, investigation costs, litigation costs, or costs related to the operation and enforcement of this Agreement. It is the intent of the Parties that the reporting under this subsection VIII.C shall be available to the public. For the avoidance of doubt, (a) any amounts not identified under this subsection VIII.C as used to pay attorneys' fees, investigation costs, or litigation costs shall be included in the "Compensatory Restitution Amount" for purposes of subsection VIII.G and (b) Participating Subdivisions not listed on Exhibit G or Participating Special Districts that receive monies from the Settlement Fund indirectly may only use such monies from the Settlement Fund for purposes that qualify as Opioid Remediation.

D. *Allocation of Settlement Fund.* The allocation of the Settlement Fund allows for different approaches to be taken in different states, such as through a State-Subdivision Agreement. Given the uniqueness of States and their Subdivisions, Settling States and Participating Subdivisions are encouraged to enter into State-Subdivision Agreements in order to direct the allocation of their portion of the Settlement Fund. As set out below, the Settlement Fund Administrator will make an initial allocation to three (3) state-level sub-funds. The

Settlement Fund Administrator will then, for each Settling State and its Exhibit G Participants, apply the terms of this Agreement and any relevant State-Subdivision Agreement, Statutory Trust, Allocation Statute, or voluntary redistribution of funds as set out below before disbursing the funds.

1. Base Payments. The Settlement Fund Administrator will allocate Base Payments under subsection VII.D among the Settling States in proportion to their respective State Allocation Percentages. Base Payments for each Settling State will then be allocated 15% to its State Fund, 70% to its Abatement Accounts Fund, and 15% to its Subdivision Fund. Amounts may be reallocated and will be distributed as provided in subsection VIII.E.

2. Incentive Payments. The Settlement Fund Administrator will treat Incentive Payments under subsection VII.E on a State-specific basis. Incentive payments for which a Settling State is eligible under subsection VII.E will be allocated 15% to its State Fund, 70% to its Abatement Accounts Fund, and 15% to its Subdivision Fund. Amounts may be reallocated and will be distributed as provided in subsection VIII.E.

3. Application of Adjustments. If any offset under Section XII applies with respect to a Settling State, the offset shall be applied proportionally to all amounts that would otherwise be apportioned and distributed to the State Fund, the Abatement Accounts Fund, and the Subdivision Fund for that State.

4. Settlement Fund Administrator. Prior to the Initial Participation Date, Teva and the Enforcement Committee will agree to a detailed mechanism consistent with the foregoing for the Settlement Fund Administrator to follow in allocating, apportioning, and distributing payments, which shall be appended hereto as Exhibit L.

E. *Settlement Fund Reallocation and Distribution*. As set forth below, within a particular Settling State's account, amounts contained in the Settlement Fund sub-funds may be reallocated and distributed per a State-Subdivision Agreement or other means. If the apportionment of amounts is not addressed and controlled under subsections VIII.E.1–2, then the default provisions of subsection VIII.E.4 apply. It is not necessary that a State-Subdivision Agreement or other means of allocating funds pursuant to subsections VIII.E.1–2 address all of the Settlement Fund sub-funds. For example, a Statutory Trust might only address disbursements from a Settling State's Abatement Accounts Fund.

1. Distribution by State-Subdivision Agreement. If a Settling State has a State-Subdivision Agreement, amounts apportioned to that State's State Fund, Abatement Accounts Fund, and Subdivision Fund under subsection VIII.D shall be reallocated and distributed as provided by that agreement. Any State-Subdivision Agreement entered into or amended after July 26, 2022 shall be applied only if it requires: (1) that all amounts be used for Opioid Remediation except as allowed by subsection VIII.C, and (2) that at least 70% of amounts be used solely for future Opioid Remediation (references to "future Opioid Remediation" include amounts paid to satisfy any future demand by another governmental entity to make a

required reimbursement in connection with the past care and treatment of a person related to the Alleged Harms). For a State-Subdivision Agreement to be applied to the relevant portion of an Annual Payment, notice must be provided to Teva and the Settlement Fund Administrator at least sixty (60) days prior to the Payment Date.

2. Distribution by Allocation Statute. If a Settling State has an Allocation Statute and/or a Statutory Trust that addresses allocation or distribution of amounts apportioned to such State's State Fund, Abatement Accounts Fund, and/or Subdivision Fund and that, to the extent any or all such sub-funds are addressed, requires (1) all amounts to be used for Opioid Remediation except as allowed by subsection VIII.C, and (2) at least 70% of all amounts to be used solely for future Opioid Remediation, then, to the extent allocation or distribution is addressed, the amounts apportioned to that State's State Fund, Abatement Accounts Fund, and Subdivision Fund under subsection VIII.D shall be allocated and distributed as addressed and provided by the applicable Allocation Statute or Statutory Trust. For the avoidance of doubt, an Allocation Statute or Statutory Trust need not address all three (3) sub-funds that comprise the Settlement Fund, and if the applicable Allocation Statute or Statutory Trust does not address distribution of all or some of these three (3) sub-funds, the applicable Allocation Statute or Statutory Trust does not replace the default provisions in subsection VIII.E.4 of any such unaddressed fund. For example, if an Allocation Statute or Statutory Trust that meets the requirements of this subsection VIII.E only addresses funds restricted to abatement, then the default provisions in this Agreement concerning allocation among the three (3) sub-funds comprising the Settlement Fund and the distribution of the State Fund and Subdivision Fund for that State would still apply, while the distribution of the applicable State's Abatement Accounts Fund would be governed by the qualifying Allocation Statute or Statutory Trust.

3. Voluntary Redistribution. A Settling State may choose to reallocate all or a portion of its State Fund to its Abatement Accounts Fund. An Exhibit G Participant may choose to reallocate all or a portion of its allocation from the Subdivision Fund to the State's Abatement Accounts Fund or to another Participating Subdivision or Participating Special District. The Settlement Fund Administrator is not required to honor voluntary redistribution for which notice is provided to it less than sixty (60) days prior to the Payment Date.

4. Distribution in the Absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust. If subsections VIII.E.1–2 do not apply, and subject to any voluntary redistribution pursuant to subsection VIII.E.3, amounts apportioned to that State's State Fund, Abatement Accounts Fund, and Subdivision Fund under subsection VII.D shall be distributed as follows:

   a. Amounts apportioned to that State's State Fund shall be distributed to that State.

   b. Amounts apportioned to that State's Abatement Accounts Fund shall be distributed consistent with subsection VIII.F. Each Settling State shall

submit to the Settlement Fund Administrator a designation of a lead state agency or other entity to serve as the single point of contact for that Settling State's funding requests from the Abatement Accounts Fund and other communications with the Settlement Fund Administrator. The designation of an individual entity is for administrative purposes only and such designation shall not limit funding to such entity or even require that such entity receive funds from this Agreement. The designated entity shall be the only entity authorized to request funds from the Settlement Fund Administrator to be disbursed from that Settling State's Abatement Accounts Fund. If a Settling State has established a Statutory Trust, then that Settling State's single point of contact may direct the Settlement Fund Administrator to release the State's Abatement Accounts Fund to the Statutory Trust.

c. Amounts apportioned to that State's Subdivision Fund shall be distributed to Participating Subdivisions in that State listed on Exhibit G per the Subdivision Allocation Percentage listed in Exhibit G. Subsection X.I shall govern amounts that would otherwise be distributed to Non-Participating Subdivisions listed in Exhibit G.

d. Special Districts shall not be allocated funds from the Subdivision Fund, except through a voluntary redistribution allowed by subsection VIII.E.3. A Settling State may allocate funds from its State Fund or Abatement Accounts Fund for Special Districts.

5. Restrictions on Distribution. No amounts may be distributed from the Subdivision Fund contrary to Section X, *i.e.*, no amounts may be distributed directly to Non-Participating Subdivisions or to Later Participating Subdivisions in excess of what is permissible under subsection X.E. Amounts allocated to the Subdivision Fund that cannot be distributed by virtue of the preceding sentence shall be distributed into the sub-account in the Abatement Accounts Fund for the Settling State in which the Subdivision is located, unless those payments are redirected elsewhere by a State-Subdivision Agreement described in subsection VIII.E.1 or by an Allocation Statute or a Statutory Trust described in subsection VIII.E.2.

F. *Provisions Regarding Abatement Accounts Fund.*

1. State-Subdivision Agreement, Allocation Statute, and Statutory Trust Fund Provisions. A State-Subdivision Agreement, Allocation Statute, or Statutory Trust may govern the operation and use of amounts in that State's Abatement Accounts Fund so long as it complies with the requirements of subsections VIII.E.1 or VIII.E.2 as applicable, and all direct payments to Subdivisions comply with subsections X.E–H.

2. Absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust. In the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust that addresses distribution, the Abatement Accounts Fund will be used solely

for future Opioid Remediation and the following shall apply with respect to a Settling State:

a. *Regional Remediation.*

(i) At least 50% of distributions for remediation from a State's Abatement Accounts Fund shall be annually allocated and tracked to the regional level. A Settling State may allow the Advisory Committee established pursuant to subsection VIII.F.2.d to define its regions and assign regional allocations percentages. Otherwise, a Settling State shall (1) define its initial regions, which shall consist of one (1) or more Subdivisions and which shall be designated by the State agency with primary responsibility for substance abuse disorder services employing, to the maximum extent practical, existing regions established in that State for opioid abuse treatment or other public health purposes; and (2) assign initial regional allocation percentages to the regions based on the Subdivision Allocation Percentages in Exhibit G and an assumption that all Subdivisions listed on Exhibit G will become Participating Subdivisions.

(ii) This minimum regional expenditure percentage is calculated on the Settling State's initial Abatement Accounts Fund allocation and does not include any additional amounts a Settling State has directed to its Abatement Accounts Fund from its State Fund, or any other amounts directed to the fund. A Settling State may dedicate more than 50% of its Abatement Accounts Fund to the regional expenditure and may annually adjust the percentage of its Abatement Accounts Fund dedicated to regional expenditures as long as the percentage remains above the minimum amount.

(iii) The Settling State (1) has the authority to adjust the definition of the regions, and (2) may annually revise the percentages allocated to each region to reflect the number of Subdivisions in each region that are Non-Participating Subdivisions.

b. *Subdivision Block Grants*. Certain Subdivisions listed on Exhibit G shall be eligible to receive regional allocation funds in the form of a block grant for future Opioid Remediation. A Participating Subdivision listed on Exhibit G eligible for block grants is a county or parish (or in the case of States that do not have counties or parishes that function as political subdivisions, a city) that (1) does not contain a Litigating Subdivision or a Later Litigating Subdivision for which it has the authority to end the litigation through a release, Bar, or other action; (2) either (i) has a population of 400,000 or more or (ii) in the case of California has a population of 750,000 or more; and (3) has funded or otherwise managed an established health care or treatment infrastructure (e.g., health department or similar agency). Each

Subdivision listed on Exhibit G eligible to receive block grants shall be assigned its own region.

c. *Small States*. Notwithstanding the provisions of subsection VIII.F.2.a, Settling States with populations under four (4) million that do not have existing regions described in subsection VIII.F.2.a shall not be required to establish regions. However, such a Settling State that contains one (1) or more Subdivisions listed on Exhibit G eligible for block grants under subsection VIII.F.2.b shall be divided regionally so that each block-grant eligible Subdivision listed on Exhibit G is a region and the remainder of the State is a region.

d. *Advisory Committee*. The Settling State shall designate an Opioid Settlement Remediation Advisory Committee (the "*Advisory Committee*") to provide input and recommendations regarding remediation spending from that Settling State's Abatement Accounts Fund. A Settling State may elect to use an existing advisory committee or similar entity (created outside of a State-Subdivision Agreement or Allocation Statute); *provided, however*, the Advisory Committee or similar entity shall meet the following requirements:

(i) Written guidelines that establish the formation and composition of the Advisory Committee, terms of service for members, contingency for removal or resignation of members, a schedule of meetings, and any other administrative details;

(ii) Composition that includes at least an equal number of local representatives as state representatives;

(iii) A process for receiving input from Subdivisions and other communities regarding how the opioid crisis is affecting their communities, their abatement needs, and proposals for abatement strategies and responses; and

(iv) A process by which Advisory Committee recommendations for expenditures for Opioid Remediation will be made to and considered by the appropriate state agencies.

3. Abatement Accounts Fund Reporting. The Settlement Fund Administrator shall track and assist in the report of remediation disbursements as agreed to among the Parties.

G. *Nature of Payment.* Teva, the Settling States, the Participating Subdivisions, and the Participating Special Districts, acknowledge and agree that notwithstanding anything to the contrary in this Agreement, including, but not limited to, the scope of the Released Claims:

1. Teva has entered into this Agreement to avoid the delay, expense, inconvenience, and uncertainty of further litigation;

2. The Settling States, the Participating Subdivisions, and the Participating Special Districts sought compensatory restitution (within the meaning of 26 U.S.C. § 162(f)(2)(A)) as damages for the Alleged Harms allegedly suffered by the Settling States, Participating Subdivisions and Participating Special Districts;

3. By executing this Agreement the Settling States, the Participating Subdivisions, and the Participating Special Districts certify that: (a) the Compensatory Restitution Amount is no greater than the amount, in the aggregate, of the Alleged Harms allegedly suffered by the Settling States, Participating Subdivisions and Participating Special Districts; and (b) the portion of the Compensatory Restitution Amount received by each Settling State, Participating Subdivision or Participating Special Districts is no greater than the amount of the Alleged Harms allegedly suffered by such Settling State, Participating Subdivision or Participating Special Districts;

4. The payment of the Compensatory Restitution Amount by Teva constitutes, and is paid for, compensatory restitution (within the meaning of 26 U.S.C. § 162(f)(2)(A)) for alleged damage or harm (as compensation for alleged damage or harm arising out of alleged bodily injury) allegedly caused by Teva;

5. The Compensatory Restitution Amount is being paid as compensatory restitution (within the meaning of 26 U.S.C. § 162(f)(2)(A)) in order to restore, in whole or in part, the Settling States, Participating Subdivisions and Participating Special Districts to the same position or condition that they would be in had the Settling States, Participating Subdivisions and Participating Special Districts not suffered the Alleged Harms;

6. No portion of the Compensatory Restitution Amount represents reimbursement to any Settling State, Participating Subdivision, Participating Special District, or other person or entity for the costs of any investigation or litigation. The entire Compensatory Restitution Amount is properly characterized as described in subsection VIII.G. No portion of the Compensatory Restitution Amount constitutes disgorgement or is properly characterized as the payment of statutory or other fines, penalties, punitive damages, other punitive assessments, or attorneys' fees; and

7. The Designated State, on behalf of all Settling States, Participating Subdivisions, and Participating Special Districts (the "Form 1098-F Filer") shall complete and file Form 1098-F with the Internal Revenue Service on or before February 28 (March 31 if filed electronically) of the year following the calendar year in which the order entering this Agreement becomes binding. On the Form 1098-F, the Form 1098-F Filer shall identify the entire Compensatory Restitution Amount received by the Form 1098-F Filer as remediation/restitution, including the provision of Settlement Product set out in Section IX below. The Form 1098-F Filer shall also, on or before January 31 of the year following the calendar year in which the order entering this Agreement becomes binding, furnish Copy B of such Form 1098-F (or an acceptable substitute statement) to Teva.

IX. Settlement Product

A. The Settlement Product is Naloxone Hydrochloride Nasal Spray (generic Narcan®), a medication that counteracts the life-threatening effects of opioid overdose and significantly reduces opioid-overdose mortality.

B. For the purposes of this Agreement, Teva has agreed to provide the Settling States Settlement Product valued at $1,200,000,000, which equals 9,600,000 kits of Settlement Product, valued at a fixed WAC of $125 per kit, allocated in accordance with the allocation percentage as reflected in Exhibit D-1. Teva shall cover the cost of the Settlement Product distribution set forth in this Agreement. For the avoidance of doubt, Participating Subdivisions and Participating Special Districts are not eligible to make a Settlement Product election pursuant to this Agreement.

C. Consistent with the Settlement Product Election Form contained in Exhibit D, each Settling State shall have the discretion to convert any portion of the Settlement Product allocated to the Settling State into a cash value equaling twenty percent (20%) of the WAC value of the Settling State's allocated Settlement Product in the following years: 2023, 2025, 2027, 2029, and 2031. The State's election shall apply and remain in place for each following year until the next election date.

D. Within thirty (30) days of the Effective Date, each Settling State shall notify Teva and the Settlement Fund Administrator of its Settlement Product election by submitting the Settlement Product Election Form reflected in Exhibit D.

E. Settling States that do not make a Settlement Product Election within 30 days of the Effective Date shall be deemed to have elected to receive the full Settlement Product Cash Conversion Amount for the first two-year period, allocated in accordance with the State Allocation Percentage as reflected in Exhibit D-1. Commencing within thirty (30) days of the Effective Date, the Settling States that have submitted a Settlement Product Election Form may place periodic orders for Settlement Product consistent with Section IX and Exhibit D.

F. By or before January 1, 2025, 2027, 2029 and 2031, each Settling State may submit a new or updated Settlement Product Election Form, which will be effective beginning with the Forecast submitted on the same date for the following calendar year. Settling States that do not submit a new or updated Settlement Product Election Form will be deemed to have made no changes to their most recent Settlement Product Election Form.

G. As is reflected in Exhibit D and the Settlement Product Election Form contained therein, Settling States may elect to convert all or a percentage of their allocation of Settlement Product into a Settlement Product Cash Conversion Amount, in the manner and method described in Exhibit D.

H. Teva will make Settlement Product Cash Conversion Amount payments to Settling States that have elected to receive a full or partial Settlement Product Cash Conversion beginning with its second Annual Payment in accordance with the Settlement Payment Schedule as set forth in Exhibit M-2.

I. The Parties understand that the provision of Settlement Product constitutes compensatory restitution within the meaning of 26 U.S.C. § 162(f)(2)(A) and that the receipt of Settlement Product must be reported on IRS Form 1098-F consistent with subsection VIII.G.7 above.

J. In addition to offering Naloxone Hydrochloride Nasal Spray per this Section IX and Exhibit D, Teva, at its sole discretion, may also offer Settling States different versions or greater amounts of Settlement Product or different products that can be accepted by the Settling State in lieu of its full allotment of the Settlement Product or Settlement Product Cash Conversion Amount. Distribution and other terms related to such substitute product shall be set out in Teva's offer. Nothing in this subsection IX.J changes the terms of this Agreement regarding the provision of Settlement Product or the calculation or availability of the Settlement Product Cash Conversion Amount. With regard to the annual product delivery schedule, to the extent that the Settling State's needs for each drug varies from year to year, such that the Settling State needs a reasonably lesser quantity one year to be offset by a reasonably greater quantity the next year, Teva will use reasonable commercial efforts to be flexible in meeting that variation in demand.

K. In the event of a Force Majeure Event, Teva shall promptly provide written notice to the Settling States. Teva and the States shall meet and confer within seven (7) days of such written notice to establish a commercially reasonable plan to resolve any inability to supply as quickly as reasonably possible, it being understood that, unless otherwise agreed to by the Parties, it is Teva's obligation to use reasonable efforts which are consistent with accepted industry practices to resume performance as soon as practicable under the circumstances.

X. Participation by Subdivisions and Special Districts

A. *Notice*. No later than fifteen (15) days after the Preliminary Agreement Date, the Settling States, with the cooperation of Teva, shall send individual written notice (which may be delivered via e-mail or other electronic means) of the opportunity to participate in this Agreement and the requirements of participation to all Subdivisions and Special Districts in the Settling State that are (1) Litigating Subdivisions or Litigating Special Districts, or (2) Non-Litigating Subdivisions listed in Exhibit G.[3] To the extent a Non-Litigating Special District is entitled to an allocation for a direct payment through its inclusion in Exhibit G pursuant to a State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution, the Settling States shall also send individual written notice (which may be delivered via e-mail or other electronic means) of the opportunity to participate in this Agreement and the requirements of participation to such Special Districts. Unless otherwise agreed by the Parties, the version of Exhibit G used for notice shall be the one in place as of the Preliminary Agreement Date. Teva's share of costs of the written notice shall be paid by Teva as part of the Implementation Costs. Notice (which may be delivered via e-mail or other electronic means) shall also be provided simultaneously to counsel of record for Litigating Subdivisions, Litigating Special

[3] Because Teva has settled with Oklahoma, but not with Oklahoma Subdivisions and Special Districts, Teva shall send individual written notice of the opportunity to participate in this Agreement and the requirements of participation to all Oklahoma Subdivisions and Special Districts. For purposes of this Section X, references to a "Subdivision in a Settling State" or "Special District in a Settling State" shall include Subdivisions and Special Districts in Oklahoma.

Districts, and known counsel for Non-Litigating Subdivisions listed on Exhibit G and Non-Litigating Special Districts listed on Exhibit G. The notice will include that the deadline for becoming an Initial Participating Subdivision or Initial Participating Special District is the Initial Participation Date. Nothing contained herein shall preclude a Settling State from providing further notice to or otherwise contacting any of its Subdivisions or Special Districts about becoming a Participating Subdivision or Participating Special District, including beginning any of the activities described in this paragraph prior to the Preliminary Agreement Date.

B. *Requirements for Becoming a Participating Subdivision: Non-Litigating Subdivisions*. A Non-Litigating Subdivision in a Settling State may become a Participating Subdivision by returning an executed Settlement Participation Form to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) specifying (1) that the Subdivision agrees to the terms of this Agreement pertaining to Subdivisions, (2) that the Subdivision releases all Released Claims against all Released Entities, (3) that the Subdivision agrees to use monies it receives, if any, from the Settlement Fund pursuant to the applicable requirements of Section VIII, and (4) that the Subdivision submits to the jurisdiction of the Court where the Consent Judgment is filed for purposes limited to that Court's role under the Agreement. The required Settlement Participation Form is attached as Exhibit K. A Non-Litigating Subdivision will decide whether to become a Participating Subdivision for both this Agreement and the Allergan Global Opioid Settlement Agreement, or neither.

C. *Requirements for Becoming a Participating Subdivision: Litigating Subdivisions/Later Litigating Subdivisions*. A Litigating Subdivision or Later Litigating Subdivision in a Settling State may become a Participating Subdivision by returning an executed Settlement Participation Form to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) that, in addition to the requirements set out in subsection X.B for Non-Litigating Subdivisions, commits it to promptly dismissal its legal action. The required Settlement Participation Form is attached as Exhibit K. A Litigating Subdivision or Later Litigating Subdivision will decide whether to become a Participating Subdivision for both this Agreement and the Allergan Global Opioid Settlement Agreement, or neither. Except for trials begun before the Initial Participation Date, a Litigating Subdivision or a Later Litigating Subdivision may not become a Participating Subdivision after the completion of opening statements in a trial of a legal action it brought that includes a Released Claim against a Released Entity.

D. *Initial Participating Subdivisions.* A Subdivision qualifies as an Initial Participating Subdivision if it meets the applicable requirements for becoming a Participating Subdivision set forth in subsections X.B or X.C by the Initial Participation Date. Provided however, all Subdivision Settlement Participation Forms shall be held by the Implementation Administrator until Teva provides the notice in subsection XI.B that it intends to proceed with the settlement, at which time the obligations created by such forms become effective. If Teva determines not to proceed, all Settlement Participation Forms shall be returned to Counsel for Litigating Subdivisions or to the Subdivisions not

represented by counsel or destroyed to the extent that such destruction is not prohibited by then existing document preservation obligations.

E. *Later Participating Subdivisions.* A Subdivision that is not an Initial Participating Subdivision may become a Later Participating Subdivision by meeting the applicable requirements for becoming a Participating Subdivision after the Initial Participation Date and agreeing to be subject to the terms of a State-Subdivision Agreement (if any) or any other structure adopted or applicable pursuant to subsections VIII.E or VIII.F. The following provisions govern what a Later Participating Subdivision can receive (but do not apply to Initial Participating Subdivisions):

1. A Later Participating Subdivision shall not receive any share of any Base or Incentive Payments paid to the Subdivision Fund that were due before it became a Participating Subdivision.

2. A Later Participating Subdivision that becomes a Participating Subdivision after Initial Participation Date but before June 15, 2023 shall receive 75% of the share of the Initial Year Payment that it would have received had it become an Initial Participating Subdivision (unless the Later Participating Subdivision is subject to subsections X.E.3 or X.E.4 below). A Later Participating Subdivision that becomes a Participating Subdivision after June 15, 2023 shall receive no share of the Initial Year Payment.

3. A Later Participating Subdivision that, after the Initial Participation Date, maintains a lawsuit for a Released Claim(s) against a Released Entity and has judgment entered against it on every such Claim before it became a Participating Subdivision (other than a consensual dismissal with prejudice) shall receive 50% of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Subdivision prior to such judgment; *provided, however*, that if the Subdivision appeals the judgment and the judgment is affirmed with finality before the Subdivision becomes a Participating Subdivision, the Subdivision shall not receive any share of any Base Payments or Incentive Payments.

4. A Later Participating Subdivision that becomes a Participating Subdivision while a Bar or Case-Specific Resolution involving a different Subdivision exists in its State shall receive 25% of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Subdivision without such Bar or Case-Specific Resolution.

F. *No Increase in Payments*. Amounts to be received by Later Participating Subdivisions or Later Participating Special Districts shall not increase the payments due from Teva.

G. *Ineligible Subdivisions and Special Districts.* Except for Subdivisions and Special Districts in Oklahoma, prior Settling Subdivisions, and Subdivisions and Special Districts in Non-Settling States or Prior Settling States are not eligible to be Participating Subdivisions or Participating Special Districts.

H. *Non-Participating Subdivisions and Non-Participating Special Districts*. Non-Participating Subdivisions and Non-Participating Special Districts shall not directly receive any portion of any Base Payments or Incentive Payments, including from the State Fund and direct distributions from the Abatement Accounts Fund; however, a Settling State may choose to fund future Opioid Remediation that indirectly benefits Non-Participating Subdivisions and Non-Participating Special Districts.

I. *Unpaid Allocations to Later Participating and Non-Participating Subdivisions*. Any Base Payments and Incentive Payments allocated pursuant to subsection VIII.E to a Later Participating or Non-Participating Subdivision or a Later Participating or Non-Participating Special District that cannot be paid pursuant to Section X, will be allocated to the Abatement Accounts Fund for the Settling State in which the Subdivision is located, unless those payments are redirected elsewhere by a State-Subdivision Agreement or by a Statutory Trust.

J. *Requirements for Becoming a Participating Special District: Non-Litigating Special Districts*. A Non-Litigating Special District in a Settling State may become a Participating Special District by returning an executed Settlement Participation Form to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) specifying (1) that the Special District agrees to the terms of this Agreement pertaining to Special Districts, (2) that the Special District releases all Released Claims against all Released Entities, (3) that the Special District agrees to use monies it receives, if any, from the Settlement Fund pursuant to the applicable requirements of Section VIII, and (4) that the Special District submits to the jurisdiction of the Court where the Consent Judgment is filed for purposes limited to that Court's role under the Agreement. The required Settlement Participation Form is attached as Exhibit K. A Non-Litigating Special District will decide whether to become a Participating Special District for both this Agreement and the Allergan Global Opioid Settlement Agreement, or neither.

K. *Requirements for Becoming a Participating Special District: Litigating Special Districts/Later Litigating Special Districts.* A Litigating Special District or Later Litigating Special District in a Settling State may become a Participating Special District by returning an executed Settlement Participation Form to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) that, in addition to the requirements set out in subsection X.J for Non-Litigating Special Districts, commits it to promptly dismiss its legal action. The required Settlement Participation Form is attached as Exhibit K. A Litigating Special District or a Later Litigating Special District will decide whether to become a Participating Special District for both this Agreement and the Allergan Global Opioid Settlement Agreement, or neither. Except for trials begun before the Initial Participation Date, a Litigating Special District or a Later Litigating Special District may not become a Participating Special District after the completion of opening statements in a trial of a legal action it brought that includes a Released Claim against a Released Entity.

L. *Initial Participating Special Districts*. A Special District qualifies as an Initial Participating Special District if it meets the applicable requirements for becoming a Participating Special

District set forth in subsections X.J or X.K by the Initial Participation Date. Provided however, all Special District Settlement Participation Forms shall be held by the Implementation Administrator until Teva provides the notice in subsection XI.B that it intends to proceed with the settlement, at which time the obligations created by such forms become effective.

M. *Later Participating Special Districts.* A Special District that is not an Initial Participating Special District may become a Later Participating Special District by meeting the applicable requirements for becoming a Participating Special District after the Initial Participation Date and agreeing to be subject to the terms of a State-Subdivision Agreement (if any) or any other structure adopted or applicable pursuant to subsections VIII.E or VIII.F. or any agreement reached by the applicable Settling State with Initial Participating Special Districts. The following provisions govern what a Later Participating Special District can receive (but do not apply to Initial Participating Special Districts):

1. Except for the Initial Year Payment, a Later Participating Special District shall not receive any share of any Base or Incentive Payments paid to the Subdivision Fund that were due before it became a Participating Special District.

2. A Later Participating Special District that becomes a Participating Special District after Initial Participation Date but before June 15, 2023 shall receive 75% of the share of the Initial Year Payment that it would have received had it become an Initial Participating Special District (unless the Later Participating Special District is subject to subsections X.M.3 or X.M.4 below). A Later Participating Special District that becomes a Participating Special District after June 15, 2023 shall receive no share of the Initial Year Payment.

3. A Later Participating Special District that, after the Initial Participation Date, maintains a lawsuit for a Released Claim(s) against a Released Entity and has judgment entered against it on every such Claim before it became a Participating Special District (other than a consensual dismissal with prejudice) shall receive 50% of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Special District prior to such judgment; *provided, however*, that if the Special District appeals the judgment and the judgment is affirmed with finality before the Special District becomes a Participating Special District, the Special District shall not receive any share of any Base Payments or Incentive Payments.

4. A Later Participating Special District that becomes a Participating Special District while a Bar or Case-Specific Resolution involving a different Special District exists in its State shall receive 25% of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Special District without such Bar or Case-Specific Resolution.

XI. Condition to Effectiveness of Agreement and Filing of Consent Judgment

A. *Determination to Proceed With Settlement.* Teva will determine on or before the Reference Date whether there has been a sufficient resolution of the Claims of the Litigating

Subdivisions and Litigating Special Districts in the Settling States (through participation under Section X, Case-Specific Resolution(s), and Bar(s)) to proceed with this Agreement. The determination shall be in the sole discretion of Teva, in good faith, and may be based on any criteria or factors deemed relevant by Teva.

B. *Notice by Teva*. On or before the Reference Date, Teva shall inform the Settling States and MDL Plaintiffs' Executive Committee of its determination pursuant to subsection XI.A. If Teva determines to proceed, the Parties will proceed to file the Consent Judgments. If Teva determines not to proceed, this Agreement will have no further effect and all releases (including those given by Participating Subdivisions and Special Districts) and other commitments or obligations contained herein will be void and Settlement Participation Forms shall be returned to the Subdivision or Special District or destroyed to the extent not prohibited by then existing legal obligations or document holds.

XII. Potential Payment Adjustments

A. *Settlement Class Resolution Opt Outs.* If a Settling State is eligible for Incentive A on the basis of a Settlement Class Resolution, and a Primary Subdivision that opted out of the Settlement Class Resolution maintains a lawsuit asserting a Released Claim against a Released Entity, the following shall apply: If the lawsuit asserting a Released Claim either survives a Threshold Motion or has an unresolved Threshold Motion fewer than sixty (60) days prior to the scheduled start of a trial involving a Released Claim, and is resolved with finality on terms requiring payment by the Released Entity, Teva shall receive a dollar-for-dollar offset for the amount paid against its obligation to make remaining Incentive A payments that would be apportioned to that State or Participating Subdivisions listed on Exhibit G.

B. *Revoked Bar, Settlement Class Resolution, or Case-Specific Resolution.*

1. If Teva made a payment as a result of the existence of a Bar, Settlement Class Resolution, or Case-Specific Resolution in a Settling State, and that Bar, Settlement Class Resolution, or Case-Specific Resolution is subject to a Revocation Event, Teva shall receive a dollar-for-dollar offset against its obligation to make remaining payments that would be apportioned to that State and its Exhibit G Participants. This offset will be calculated as the dollar amount difference between (1) the total amount of Incentive Payments paid by Teva during the time the Bar, Settlement Class Resolution, or Case-Specific Resolution subject to the Revocation Event was in effect, and (2) the total amount of Incentive Payments that would have been due from Teva during that time without the Bar, Settlement Class Resolution, or Case-Specific Resolution subject to the Revocation Event being in effect. The amount of Incentive Payments that would have been due, referenced in (2) above, will be calculated based on considering any Subdivision or Special District that provides a release within one hundred eighty (180) days after the Revocation Event as having been a Participating Subdivision or Participating Special District (in addition to all other Participating Subdivisions and Participating Special Districts) during the time that the Bar, Settlement Class Resolution, or Case-Specific Resolution subject to the Revocation Event was in effect. If a Revocation Event causes a Settling State to no longer qualify for one or both parts of Incentive D, the Settling State and its

Exhibit G participants shall return to Teva all relevant payments made under Incentive D through offsets as set forth above.

2. Notwithstanding anything to the contrary in paragraph 1 above, if a Bar or Case-Specific Resolution is reinstated by the Settling State, either through the same or different means as the initial Bar or Case-Specific Resolution, Teva's right to an offset is extinguished and any amounts withheld to offset amounts paid on account of the revoked, rescinded, reversed, or overruled Bar or Case-Specific Resolution shall be returned to the Settling State, less and except any Incentive Payments that would have been paid during the period in which the Bar or Case-Specific Resolution was revoked, rescinded, reversed, or overruled.

XIII. Additional Restitution Amount

Additional Restitution Amount. Teva shall pay an Additional Restitution Amount to each Settling State listed in Exhibit N in the amount and on the schedule set forth in Exhibit M-3. The maximum Additional Restitution Amount of $28,669,762.00 shall be reduced by the allocation set forth on Exhibit F-2 for any Non-Settling States listed on Exhibit N. The Settlement Fund Administrator shall allocate such funds among and within the Settling States listed in Exhibit N at the same time as its allocation of Annual Payments pursuant to subsection VII.B.

Additional Restitution Amount funds shall not be subject to allocation as provided in Sections VIII.D through VIII.F

XIV. Plaintiffs' Attorneys' Fees and Costs

Attorneys' fees and costs are addressed in the following exhibits and are incorporated herein by reference:

1. The State Outside Counsel Fee Fund is addressed in Exhibit T.

2. The State Cost Fund is addressed in Exhibit S.

3. The Attorney Fee and Cost Fund is addressed and the Agreement on Attorneys' Fees, Expenses and Costs is set forth in Exhibit R.

XV. Enforcement and Dispute Resolution

A. *Enforceability*. The terms of the Agreement and Consent Judgment applicable to or in a Settling State will be enforceable solely by that Settling State and Teva. Settling States or Participating Subdivisions shall not have enforcement rights with respect either to the terms of this Agreement that apply only to or in other States or to any Consent Judgment entered into by another Settling State. Participating Subdivisions shall not have enforcement rights against Teva with respect to the Agreement or any Consent Judgment except as to payments that would be allocated to the Subdivision Fund or Abatement Accounts Fund pursuant to Section VII; *provided, however,* that each Settling State shall allow

Participating Subdivisions in that State to notify it of any perceived violations of the Agreement or Consent Judgment.

B. *Consent to Jurisdiction and Service of Process*. Teva consents to the jurisdiction of the Court in which the Consent Judgment is filed, and any appellate court thereof, limited to resolution of disputes identified in subsection XV.G.2; for a civil action for any appropriate relief to enforce compliance with the Parties' Agreement for Injunctive Relief pursuant to Exhibit P, subsection K.5 herein; and for any proceedings for or related to the enforcement or collection of any payments on the Consent Judgment for resolution in the Court in which the Consent Judgment is filed. Teva further agrees any service of process or notice required for such action or proceeding may be effectuated on Teva through delivery of all required papers by hand or by a nationally recognized private courier on Teva's representatives identified in subsection XVI.P herein. To be clear, for the purposes of this Agreement only, Teva consents to personal jurisdiction before such courts, and will not contend service must be effectuated through personal service of the Hague Convention process.

C. *Specific Terms Dispute Resolution.*

1. Any dispute that is addressed by the provisions set forth in the Injunctive Relief Terms in Exhibit P shall be resolved as provided therein and pursuant to subsection XV.E.3 herein.

2. In the event Teva believes the 85% threshold established in subsection VIII.B is not being satisfied, any Party may request that Teva and the Enforcement Committee meet and confer regarding the use of funds under subsection VIII.B. The completion of such meet-and-confer process is a precondition to further action regarding any such dispute. Further action concerning subsection VIII.B shall: (i) be limited to Teva seeking to reduce its Annual Payments by no more than 5% of the difference between the actual amount of Opioid Remediation and the 85% threshold established in subsection VIII.B; (ii) only reduce Annual Payments to those Settling States and its Participating Subdivisions that are below the 85% threshold established in subsection VIII.B; and (iii) not reduce Annual Payments restricted to future Opioid Remediation.

D. *State-Subdivision Enforcement.*

1. A Participating Subdivision shall not have enforcement rights against a Settling State in which it is located with respect to the Agreement or any Consent Judgment except: (1) as provided for in a State-Subdivision Agreement, Allocation Statute, or Statutory Trust with respect to intrastate allocation; or (2) in the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust, as to allegations that: (a) the Settling State's use of Abatement Accounts Fund monies were not used for uses similar to or in the nature of those uses contained in Exhibit E; or (b) a Settling State failed to pay funds directly from the Abatement Accounts Fund to a Participating Subdivision eligible to receive a block grant pursuant to subsection VIII.F.2.b.

2. A Settling State shall have enforcement rights against a Participating Subdivision located in its territory: (1) as provided for in a State-Subdivision Agreement, Allocation Statute, or Statutory Trust; or (2) in the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust, as to allegations that the uses of Abatement Accounts Fund monies by Participating Subdivisions listed on Exhibit G were not for uses similar to or in the nature of those uses contained in Exhibit E.

3. As between Settling States and Participating Subdivisions, the above rights are contractual in nature and nothing herein is intended to limit, restrict, change, or alter any other existing rights under law.

E. *Enforcement Committee Actions to Enforce Agreement.*

1. The Parties agree that in the event of any failure by Teva to make any required payments under this Agreement, the Enforcement Committee, on its own or through its designee such as a Settling State or Participating Subdivision acting by its authorization and on its behalf, shall have the ability and right to file an action or proceeding in any New York state court, or federal court of the United States of America, sitting in New York, for or related to the enforcement or collection of such payments.

2. If any National Dispute involving a Settling State, Participating Subdivision, and/or Teva is pending before a National Arbitration Panel concerning a given year's payment to all Settling States, any action or proceeding pursuant to this subsection XV.E shall be stayed as to any disputed amounts only, but may proceed as to any and all undisputed amounts. In the event there is a dispute between the Parties as to the disputed amounts at issue, the Enforcement Committee or any party to that dispute may seek an expedited determination from the National Arbitration Panel for that proceeding as to the disputed and undisputed amounts.

3. The Parties further agree that in the event of Teva's breach of the Parties' Agreement for Injunctive Relief (Exhibit P attached hereto), the Enforcement Committee, on its own or through its designee such as a Settling State or Participating Subdivision acting by its authorization and on its behalf, shall have the ability and right to file a civil action pursuant to Exhibit P, subection K.5, in any New York state court, or federal court of the United States of America, sitting in New York, seeking any appropriate relief to enforce compliance with such Agreement for Injunctive Relief.

4. Teva consents to the jurisdiction of the New York state court, or federal court of the United States of America, sitting in New York, and any appellate court from any thereof, in which any action or proceeding is initiated pursuant to this subsection XV.E, and for enforcement or collection of any related judgment entered by such court. Teva further agrees any service of process or notice required for such action or proceeding, including for any action or proceeding for enforcement or collection of any judgment entered thereon, may be effectuated on Teva through delivery of all required papers by hand or by a nationally recognized private courier on Teva's representatives identified in subsection XVI.P herein. For the purposes

of this Agreement only, Teva consents to personal jurisdiction before such courts and will not contend service must be effectuated through personal service or the Hague Convention process.

5. The enforcement rights under this subsection XV.E are in addition to, and not in lieu of, any other enforcement and collection rights of the Parties herein, including but not limited to enforcement rights as to payments as allowed by subsection XV.A.

F. *Subdivision Payment Enforcement.* A Participating Subdivision shall have the same right as a Settling State pursuant to subsection XV.G.4.a.iv to seek resolution of any failure by Teva to make its required Base Payments and/or Incentive Payments in a Payment Year.

G. *Other Dispute Resolution Terms.*

1. Except as provided in subsection XV.C, the parties to a dispute shall promptly meet and confer in good faith to resolve any dispute. If the parties cannot resolve the dispute informally, and unless otherwise agreed in writing, they shall follow the remaining provisions of this subsection XV.G to resolve the dispute.

2. Except as provided in subsections XV.C and XV.G.4, disputes not resolved informally shall be resolved in either the Court that entered the relevant Consent Judgment or, if no Consent Judgment was entered, a state or territorial court with jurisdiction located wherever the seat of state government is located. State court proceedings shall be governed by the rules and procedures of the forum. For the avoidance of doubt, disputes to be resolved in state court include, but are not limited to, the following:

   a. disputes concerning whether expenditures qualify for Opioid Remediation;

   b. disputes between a Settling State and Participating Subdivisions located in such Settling State as provided by subsection XV.D, except to the extent the State-Subdivision Agreement provides for other dispute resolution mechanisms. For the avoidance of doubt, disputes between a Settling State and any Participating Subdivision shall not be considered National Disputes;

   c. whether this Agreement and relevant Consent Judgment are binding under state law;

   d. the extent of the Attorney General's or other participating entity's authority under state law, including the extent of the authority to release Claims;

   e. whether the requirements of a Bar, a Case-Specific Resolution, State-Specific Finality, Later Litigating Subdivision, Litigating Subdivision, or a Threshold Motion have been met; and

   f. all other disputes not specifically identified in subsections XV.C and XV.G.4.

3. Any Party may request that the National Arbitration Panel provide an interpretation of any provision of the settlement that is relevant to the state court determination, and the National Arbitration Panel shall make reasonable best efforts to supply such interpretation within the earlier of thirty (30) days or the time period required by the state court proceedings. Any Party may submit that interpretation to the state court to the extent permitted by, and for such weight provided by, the state court's rules and procedures. If requested by a Party, the National Arbitration Panel shall request that its interpretation be accepted in the form of an amicus curiae brief, and any attorneys' fees and costs for preparing any such filing shall be paid for by the requesting Party.

4. National Disputes involving a Settling State, Participating Subdivision, and/or Teva shall be resolved by a National Arbitration Panel.

   a. "*National Disputes*" are disputes that are exceptions to subsection XV.G.2's presumption of resolution in state courts because they involve issues of interpretation of Agreement terms applicable to all Settling States without reference to a particular State's law. Disputes between a State and any Participating Subdivisions shall not be considered National Disputes. National Disputes are limited to the following:

      (i) the amount of offset and/or credit attributable to Non-Settling States;

      (ii) issues involving the scope and definition of "Product";

      (iii) interpretation and application of the terms "Covered Conduct" and "Released Entities";

      (iv) disputes over a given year's Annual Payment or the payment of the Additional Restitution Amount to all Settling States (for the avoidance of doubt, disputes between a Settling State and Teva over the amounts owed to only that State shall not be considered National Disputes);

      (v) questions regarding the performance and/or removal of the Settlement Fund Administrator;

      (vi) disputes involving liability of successor entities;

      (vii) disputes that require a determination of sufficient Subdivision and Special District participation to qualify for Incentives A, B, C, or D,;

      (viii) disputes that require interpretation of Agreement terms (i) that concretely affect four (4) or more Settling States; and (ii) do not turn on unique definitions and interpretations under State law; and

      (ix) any dispute subject to resolution under subsection XV.G.2 but for which all parties to the dispute agree to arbitration before the

National Arbitration Panel under the provisions of this subsection XV.G.4.

b. The "*National Arbitration Panel*" shall be comprised of three (3) neutral arbitrators. One (1) arbitrator shall be chosen by Teva, one (1) arbitrator shall be chosen by the Enforcement Committee with due input from Participating Subdivisions, and the third arbitrator shall be agreed upon by the first two (2) arbitrators. The membership of the National Arbitration Panel is intended to remain constant throughout the term of this Agreement, but in the event that replacements are required, the retiring arbitrator shall be replaced by the party that selected him/her.

(i) The National Arbitration Panel shall make reasonable best efforts to decide all matters within one hundred eighty (180) days of filing, and in no event shall it take longer than one (1) year.

(ii) The National Arbitration Panel shall conduct all proceedings in a reasonably streamlined process consistent with an opportunity for the parties to be heard. Issues shall be resolved without the need for live witnesses where feasible, and with a presumption in favor of remote participation to minimize the burdens on the parties.

(iii) To the extent allowed under state law, a Settling State, Participating Subdivision, and (at any party's request) the National Arbitration Panel may certify to an appropriate state court any question of state law. The National Arbitration Panel shall be bound by a final state court determination of such a certified question. The time period for the arbitration shall be tolled during the course of the certification process.

(iv) The arbitrators will give due deference to any authoritative interpretation of state law, including any declaratory judgment or similar relief obtained by a Settling State, Participating Subdivision, or Teva on a state law issue.

(v) The decisions of the National Arbitration Panel shall be binding on Settling States, Participating Subdivisions, Teva, and the Settlement Fund Administrator. In any proceeding before the National Arbitration Panel involving a dispute between a Settling State and Teva whose resolution could prejudice the rights of a Participating Subdivision(s) or Participating Special District(s) in that Settling State, such Participating Subdivision(s) or Participating Special District(s) shall be allowed to file a statement of view in the proceeding.

c. Nothing herein shall be construed so as to limit or otherwise restrict a State from seeking injunctive or other equitable relief in state court to protect the health, safety, or welfare of its citizens.

d. Each party shall bear its own costs in any arbitration or court proceeding arising under this subsection XV.G. The costs for the arbitrators on the National Arbitration Panel shall be divided and paid equally by the disputing sides for each individual dispute, *e.g.*, a dispute between Teva and Settling States/Participating Subdivisions shall be split 50% by Teva and 50% by the Settling States/Participating Subdivisions that are parties to the dispute; a dispute between a Settling State and a Participating Subdivision shall be split 50% by the Settling State and 50% by any Participating Subdivisions that are party to the dispute.

5. Prior to initiating an action to enforce pursuant to this subsection XV.G, the complaining party must:

a. Provide written notice to the Enforcement Committee of its complaint, including the provision of the Consent Judgment and/or Agreement that the practice appears to violate, as well as the basis for its interpretation of the disputed provision. The Enforcement Committee shall establish a reasonable process and timeline for obtaining additional information from the involved parties; *provided*, *however*, that the date the Enforcement Committee establishes for obtaining additional information from the parties shall not be more than forty-five (45) days following the notice. The Enforcement Committee may advise the involved parties of its views on the complaint and/or seek to resolve the complaint informally.

b. Wait to commence any enforcement action until thirty (30) days after the date that the Enforcement Committee establishes for obtaining additional information from the involved parties.

6. If the parties to a dispute cannot agree on the proper forum for resolution of the dispute under the provisions of subsections XV.G.2 or XV.G.4, a committee comprising the Enforcement Committee and sufficient representatives of Teva such that the members of the Enforcement Committee have a majority of one (1) member will determine the forum where the dispute will be initiated within twenty-eight (28) days of receiving notification of the dispute relating to the proper forum. The forum identified by such committee shall be the sole forum for determining where the dispute shall be heard, and the committee's identification of such forum shall not be entitled to deference by the forum selected.

H. *No Effect*. Nothing in this Agreement shall be interpreted to limit the Settling State's Civil Investigative Demand ("CID") or investigative subpoena authority, to the extent such authority exists under applicable state law and the CID or investigative subpoena is issued pursuant to such authority, and Teva reserves all of its rights in connection with a CID or investigative subpoena issued pursuant to such authority.

XVI. Miscellaneous

A. *No Admission.* Teva does not admit liability or wrongdoing. Neither this Agreement nor the Consent Judgments shall be considered, construed, or represented to be (1) an

admission, concession, or evidence of liability or wrongdoing or (2) a waiver or any limitation of any defense otherwise available to Teva.

B. *Population of Subdivisions*. The population figures for Subdivisions shall be the published U.S. Census Bureau's population estimates for July 1, 2019, released May 2020. These population figures shall remain unchanged during the term of this Agreement.

C. *Population of Special Districts*. For any purpose in this Agreement in which the population of a Special District is used, other than the use of "Covered Special District": (a) School Districts' population will be measured by the number of students enrolled who are eligible under the Individuals with Disabilities Education Act ("*IDEA*") or Section 504 of the Rehabilitation Act of 1973; (b) Health Districts' and Hospital Districts' population will be measured at 25% of discharges; and (c) all other Special Districts' (including Fire Districts' and Library Districts') population will be measured at 10% of the population served.

D. *Population Associated with Sheriffs*. For any purpose in this Agreement in which the population associated with a lawsuit by a sheriff is used, the population will be measured at 20% of the capacity of the jail(s) operated by the sheriff.

E. *Most-Favored-Nation Provision*.

1. If Teva enters into any settlement agreement with any Non-Settling State after November 23, 2022 that resolves Claims similar in scope to the Claims released by a Settling State under this Agreement on overall payment terms that are more favorable to such Non-Settling State on a net present value basis (calculated with a 7% discount rate) on overall payment terms the Non-Settling State would have received under this Agreement based on the same level of participation, then the Settling States, individually or collectively, may elect to seek review, pursuant to Section XVI.E.3, of the overall payment terms of this Agreement and the Non-Settling State agreement so that the Settling State(s) may obtain, with respect to Teva, overall payment terms at least as favorable as those obtained by such Non-Settling State. "*Overall payment terms*" refers to consideration of all payment terms of the two agreements, taken together, including, but not limited to the amount of payments, the timing of payments, and conditions or contingencies on payments.

2. For any settlement with a Non-Settling State involving Released Claims, Teva shall provide the Enforcement Committee with a copy of the settlement agreement or relevant Consent Judgment within thirty (30) calendar days of the consummation of such settlement. The Enforcement Committee will promptly distribute such copy to all Settling States.

3. In the event that the one or more Settling State(s) believes that the overall payment terms of an agreement by Teva with a Non-Settling State are more favorable to the Non-Settling State, when compared based on the totality of the considerations set forth in Section XVI.E.1, the Settling State(s) and Teva shall engage in the following process:

a. The Settling State(s) shall provide notice, within sixty (60) calendar days of the date on which a settlement agreement or Consent Judgment is provided to the Enforcement Committee, to Teva of its intent to seek revision of this Agreement to provide payment terms that are, on an overall basis, as favorable as those obtained by the Non-Settling State. Such notice shall be confidential and not disclosed publicly to the extent allowed by law and shall state, in detail, the basis for the Settling State's belief that it is entitled to a revision of the Agreement.

b. Teva shall, within thirty (30) calendar days, provide a response to the Settling State(s), explaining its position, in detail, as to whether the Settling State(s) is entitled to more favorable overall payment terms than those provided for in this Agreement.

c. In the event the Settling State(s) and Teva do not reach agreement as to the application of Section XVI.E.1, the Settling State(s) may petition the National Arbitration Panel to seek a ruling from the Panel as to the applicability of Section XVI.E.1, provided that the Settling State(s) may seek such review only if at least five (5) Settling States co-sign the petition. The Panel shall consider submissions and argument by the parties pursuant to the procedures set forth in Section XV.G.4.

d. The Settling State(s) and Teva shall be bound by the determination of the National Arbitration Panel.

4. This Section XVI.E does not apply to, and there is no ability of any Settling State to seek or obtain revision of this Agreement based on, any Non-Settling State agreement with Teva that is entered into: (a) either the earlier of (i) after the close of expert discovery or (ii) after a date ninety (90) calendar days prior to the scheduled start date of a trial between Teva and the Non-Settling State or any severed or bifurcated portion thereof, provided that, where, in order to complete a settlement, a Non-Settling State and Teva jointly request an adjournment of the scheduled start date of a trial within ninety (90) days of that date, this exception will apply as if the trial date had not been adjourned; (b) with a Non-Settling State that previously litigated to judgment a case related to opioids against any manufacturer, distributor, or pharmacy; or, (c) the earlier of: (i) after a Non-Settling State has obtained any court order or judicial determination that grants judgment (in whole or in part) against Teva in the Non-Settling State's case; (ii) after a sanctions ruling against Teva in the Non-Settling State's case against Teva; or, (iii) after any ruling has issued in the Non-Settling State's case against any manufacturer, distributor, or pharmacy on the issue of joint and several liability. The National Arbitration Panel shall have no power to review agreements that satisfy any of the conditions described in this paragraph.

5. This Section does not apply to, and there is no ability of any Settling State to seek or obtain revision of this Agreement based on, any agreement between Teva and (a) federally-recognized tribe(s), (b) Non-Participating Subdivisions or (3) Non-

Participating Special Districts. This Section XVI.E will not apply to any agreement entered into more than six (6) months after the Reference Date.

F. *Tax Reporting and Cooperation.*

1. Upon request by Teva, the Settling States, Participating Subdivisions, and Participating Special Districts agree to perform such further acts and to execute and deliver such further documents as may be reasonably necessary for Teva to establish the statements set forth in subsection VIII.G to the satisfaction of their tax advisors, their independent financial auditors, the Internal Revenue Service, or any other governmental authority, including as contemplated by Treasury Regulations Section 1.162-21(b)(3)(ii) and any subsequently proposed or finalized relevant regulations or administrative guidance.

2. Without limiting the generality of subsection XVI.F, each Settling State, Participating Subdivision, and Participating Special District shall cooperate in good faith with Teva with respect to any tax claim, dispute, investigation, audit, examination, contest, litigation, or other proceeding relating to this Agreement.

3. The Designated State, on behalf of all Settling States, Participating Subdivisions, and Participating Special Districts, shall designate one of its officers or employees to act as the "appropriate official" within the meaning of Treasury Regulations Section 1.6050X-1(f)(1)(ii)(B) (the "Appropriate Official").

4. Neither Teva nor the Settling States, Participating Subdivisions, and Participating Special Districts make any warranty or representation to any Settling jurisdiction or Releasor as to the tax consequences of the payment of the Compensatory Restitution Amount (or any portion thereof).

G. *No Third-Party Beneficiaries.* Except as expressly provided in this Agreement, no portion of this Agreement shall provide any rights to, or be enforceable by, any person or entity that is not a Settling State or Released Entity. No Settling State may assign or otherwise convey any right to enforce any provision of this Agreement.

H. *Calculation.* Any figure or percentage referred to in this Agreement shall be carried to seven decimal places.

I. *Construction.* None of the Parties and no Participating Subdivision shall be considered to be the drafter of this Agreement or of any of its provisions for the purpose of any statute, case law, or rule of interpretation or construction that would or might cause any provision to be construed against the drafter of this Agreement. The headings of the provisions of this Agreement are not binding and are for reference only and do not limit, expand, or otherwise affect the contents or meaning of this Agreement.

J. *Cooperation.* Each Party and each Participating Subdivision agrees to use its best efforts and to cooperate with the other Parties and Participating Subdivisions to cause this Agreement and the Consent Judgments to become effective, to obtain all necessary approvals, consents and authorizations, if any, and to execute all documents and to take

such other action as may be appropriate in connection herewith. Consistent with the foregoing, each Party and each Participating Subdivision agrees that it will not directly or indirectly assist or encourage any challenge to this Agreement or any Consent Judgment by any other person, and will support the integrity and enforcement of the terms of this Agreement and the Consent Judgments.

K. *Entire Agreement*. This Agreement, its exhibits and any other attachments, including the attorneys' fees and cost agreement in Exhibit R, embodies the entire agreement and understanding between and among the Parties and Participating Subdivisions relating to the subject matter hereof and supersedes (1) all prior agreements and understandings relating to such subject matter, whether written or oral and (2) all purportedly contemporaneous oral agreements and understandings relating to such subject matter.

L. *Execution*. This Agreement may be executed in counterparts and by different signatories on separate counterparts, each of which shall be deemed an original, but all of which shall together be one and the same Agreement. One or more counterparts of this Agreement may be delivered by facsimile or electronic transmission with the intent that it or they shall constitute an original counterpart hereof. One or more counterparts of this Agreement may be signed by electronic signature.

M. *Good Faith and Voluntary Entry*. Each Party warrants and represents that it negotiated the terms of this Agreement in good faith. Each of the Parties and signatories to this Agreement warrants and represents that it freely and voluntarily entered into this Agreement without any degree of duress or compulsion. The Parties state that no promise of any kind or nature whatsoever (other than the written terms of this Agreement) was made to them to induce them to enter into this Agreement.

N. *No Prevailing Party.* The Parties each agree that they are not the prevailing party in this action, for purposes of any Claim for fees, costs, or expenses as prevailing parties arising under common law or under the terms of any statute, because the Parties have reached a good faith settlement. The Parties each further waive any right to challenge or contest the validity of this Agreement on any ground, including, without limitation, that any term is unconstitutional or is preempted by, or in conflict with, any current or future law.

O. *Non-Admissibility.* The settlement negotiations resulting in this Agreement have been undertaken by the Parties and by certain representatives of the Participating Subdivisions in good faith and for settlement purposes only, and no evidence of negotiations or discussions underlying this Agreement shall be offered or received in evidence in any action or proceeding for any purpose. This Agreement shall not be offered or received in evidence in any action or proceeding for any purpose other than in an action or proceeding arising under or relating to this Agreement or in any litigation or arbitration concerning Teva's right to coverage under an insurance contract.

P. *Notices.* All notices or other communications under this Agreement shall be in writing (including but not limited to electronic communications) and shall be given to the recipients indicated below:

1. For the Attorney(s) General:

Josh Stein, Attorney General
North Carolina Department of Justice
Attn: Daniel Mosteller
PO Box 629
Raleigh, NC 27602
Dmosteller@ncdoj.gov

Tom Miller, Attorney General
Office of the Attorney General of Iowa
Attn: Nathan Blake
1305 E. Walnut St.
Des Moines, IA 50319
Nathan.Blake@ag.iowa.gov

Jonathan Skrmetti, Attorney General
Office of the Tennessee Attorney General
Attn: Michael Leftwich
P.O. Box 20207
Nashville, TN, 37202-0207
Michael.Leftwich@ag.tn.gov

2. For the Plaintiffs' Executive Committee:

Paul F. Farrell
Farrell Law
P.O. Box 1180
Huntington, WV 25714-1180
paul@farrellfuller.com

Jayne Conroy
Simmons Hanly Conroy LLC
112 Madison Avenue, 7th Floor
New York, NY 10016-7416
JConroy@simmonsfirm.com

Joseph F. Rice
Motley Rice LLC
28 Bridgeside Blvd.
Mount Pleasant, SC 29464
jrice@motleyrice.com

Peter Mougey
Levin Papantonio Rafferty
316 South Baylen St.
Pensacola, FL 32502
pmougey@levinlaw.com

Paul J. Geller
Robbins Geller Rudman & Dowd LLP
120 East Palmetto Park Road
Boca Raton, FL 33432
PGeller@rgrdlaw.com

Steven Skikos
Skikos, Crawford, Skikos & Joseph, LLC
One Sansom Street, Suite 2830
San Francisco, CA 94104
sskikos@skikos.com

3. For Teva:

Eric W. Sitarchuk
Rebecca J. Hillyer
Morgan Lewis & Bockius LLP
1701 Market Street
Philadelphia, PA 19103
Eric.sitarchuck@morganlewis.com
Rebecca.hillyer@morganlewis.com

Frank Cavanagh
Director and Counsel - Government Investigations and Litigation
Teva Pharmaceuticals
400 Interpace Pkwy
Parsippany, NJ 07054
frank.cavanagh@tevapharm.com

Any Party or the Plaintiffs' Executive Committee may change or add the contact information of the persons designated to receive notice on its behalf by notice given (effective upon the giving of such notice) as provided in this subsection.

Q. *No Waiver*. The waiver of any rights conferred hereunder shall be effective only if made by written instrument executed by the waiving Party or Parties. The waiver by any Party of any breach of this Agreement shall not be deemed to be or construed as a waiver of any other breach, whether prior, subsequent, or contemporaneous, nor shall such waiver be deemed to be or construed as a waiver by any other Party.

R. *Preservation of Privilege.* Nothing contained in this Agreement or any Consent Judgment, and no act required to be performed pursuant to this Agreement or any Consent Judgment, is intended to constitute, cause, or effect any waiver (in whole or in part) of any attorney-client privilege, work product protection, or common interest/joint defense privilege, and each Party agrees that it shall not make or cause to be made in any forum any assertion to the contrary.

S. *Successors*.

1. This Agreement shall be binding upon, and inure to the benefit of, Teva and its respective successors and assigns.

2. Teva shall not sell the majority of its voting stock or substantially all its assets without obtaining the acquiror's agreement that it will constitute a successor with respect to Teva's obligations under this Agreement.

3. Teva shall not in one (1) transaction, or a series of related transactions, sell, or transfer assets (other than sales or transfers of inventories, or sales or transfers to an entity owed directly or indirectly by Teva) having a fair market value equal to twenty-five percent (25%) or more of the consolidated assets of Teva where the sale or transfer transaction is announced after the Reference Date, is not for fair consideration, and would foreseeably and unreasonably jeopardize Teva's ability to make the payments under this Agreement that are due on or before the third Payment Date following the close of a sale or transfer transaction. The above restriction shall not apply if Teva obtains the acquiror's agreement that it will be either a guarantor of or successor to the percentage of Teva's remaining Payment Obligations under this Agreement equal to the percentage of Teva's consolidated assets being sold or transferred in such transaction. Percentages under this section shall be determined in accordance with the United States generally accepted accounting principles and as of the date of Teva's most recent publicly filed consolidated balance sheet prior to the date of entry into the sale or transfer agreement at issue. This subsection XVI.S.3 shall be enforceable solely by the Enforcement Committee, and any objection under this subsection XVI.S.3 not raised within twenty (20) calendar days from the date that Teva transmits notice of the transaction to the Enforcement Committee is waived. Any dispute under this subsection XVI.S.3 shall be a National Dispute as described in subsection XV.E and must be raised exclusively with the National Arbitration Panel as described therein within twenty (20) calendar days of the announcement, and the sole remedy shall be an order enjoining the transaction.

T. *Modification, Amendment, Alteration*. After the Reference Date, any modification, amendment, or alteration of this Agreement by the Parties shall be binding only if evidenced in writing signed by Teva along with the signatures of at least thirty-seven (37) of those then-serving Attorneys General of the Settling States along with a representation from each Attorney General that either: (1) the advisory committee or similar entity established or recognized by that Settling State (either pursuant to subsection VIII.F.2, by a State-Subdivision Agreement, or by statute) voted in favor of the modification, amendment, or alteration of this Agreement including at least one Participating Subdivision-appointed member; or (2) in States without any advisory committee, that 50.1% of the Participating Subdivisions by population expressed approval of the modification, amendment, or alteration of this Agreement in writing. Provided, however, in the event the modification, amendment, or alteration relates to injunctive relief, interstate allocation between the Settling States, intrastate allocation in a particular Settling State, or fees or costs of Settling States and Participating Subdivisions, then every Settling State and each Participating Subdivision affected by that modification, amendment, or alteration

must assent in writing. Provided further that, in the event the modification, amendment, or alteration relates to injunctive relief, then such amendment, modification, or alteration of injunctive relief against Teva will not be effective unless and until any Consent Judgment is modified by a court of competent jurisdiction, except as otherwise provided by the Injunctive Terms.

U. *Termination.*

1. Unless otherwise agreed to by Teva and the Settling State in question, this Agreement and all of its terms (except subsection XVI.O and any other non-admissibility provisions, which shall continue in full force and effect) shall be canceled and terminated with respect to the Settling State, and the Agreement and all orders issued by the courts in the Settling State pursuant to the Agreement shall become null and void and of no effect if one or more of the following conditions applies:

    a. A Consent Judgment approving this Agreement without modification of any of the Agreement's terms has not been entered as to the Settling State by a court of competent jurisdiction on or before one hundred eighty (180) days after the Effective Date; or

    b. This Agreement or the Consent Judgment as to that Settling State has been disapproved by a court of competent jurisdiction to which it was presented for approval and/or entry (or, in the event of an appeal from or review of a decision of such a court to approve this Agreement and the Consent Judgment, by the court hearing such appeal or conducting such review), and the time to appeal from such disapproval has expired, or, in the event of an appeal from such disapproval, the appeal has been dismissed or the disapproval has been affirmed by the court of last resort to which such appeal has been taken and such dismissal or disapproval has become no longer subject to further appeal (including, without limitation, review by the United States Supreme Court).

2. If this Agreement is terminated with respect to a Settling State and its Participating Subdivisions for whatever reason pursuant to subsection XVI.U.1, then:

    a. An applicable statute of limitation or any similar time requirement (excluding any statute of repose) shall be tolled from the date the Settling State signed this Agreement until the later of the time permitted by applicable law or for one year from the date of such termination, with the effect that Teva and the Settling State in question shall be in the same position with respect to the statute of limitation as they were at the time the Settling State filed its action; and

    b. Teva and the Settling State and its Participating Subdivisions in question shall jointly move the relevant court of competent jurisdiction for an order reinstating the actions and Claims dismissed pursuant to the terms of this Agreement governing dismissal, with the effect that Teva and the Settling

State and its Participating Subdivisions in question shall be in the same position with respect to those actions and Claims as they were at the time the action or Claim was stayed or dismissed.

3. Unless Teva and the Enforcement Committee agree otherwise, this Agreement, with the exception of the Injunctive Relief Terms that have their own provisions on duration, shall terminate as to all Parties as of the Payment Date for Payment Year 13, *provided* that Teva has performed its payment obligations under the Agreement as of that date. Notwithstanding any other provision in this Agreement, all releases under this Agreement will remain effective despite any termination under this paragraph.

V. *Waiver*. Teva, for good and valuable consideration the receipt of which is acknowledged, hereby (a) waives, foregoes and relinquishes all rights to utilize and/or seek relief under any of the following laws of the State of Texas for the restructuring of any of its business affairs: Tex. Bus. Orgs. Code § 10.003 (Contents of Plan of Merger: More Than One Successor) or any other statute of Subchapter A of Chapter 10 of Tex. Bus. Orgs. Code to the extent such statute relates to multi-successor mergers (and/or any other similar laws or statutes in any other state or territory); Tex. Bus. Orgs. Code §§ 11.01–11.414 (Winding Up and Termination of Domestic Entity); or Tex. Bus. & Com. Code §§ 23.01–23.33 (Assignments for the Benefit of Creditors) (collectively, the "Texas Statutes"), and (b) agrees, warrants and represents that it will not file, request or petition for relief under the Texas Statutes, in each case until such time as all of Teva's obligations incurred hereunder are satisfied in full. The foregoing waiver and relinquishment includes, without limitation, until such time as all of Teva's obligations hereunder are satisfied in full, Teva's rights to execute a divisional merger or equivalent transaction or restructuring that in each case has the intent or foreseeable effect of (i) separating material assets from material liabilities and (ii) assigning or allocating all or a substantial portion of those liabilities to any subsidiary or affiliate that files for relief under chapter 11 of the Bankruptcy Code, or pursuant to which such subsidiary or affiliate that files for relief under chapter 11 of the Bankruptcy Code would be assuming or retaining all or a substantial portion of those liabilities.

W. *Affirmative Representation of Solvency.* Teva Pharmaceutical Industries Ltd. and Teva Pharmaceuticals USA, Inc. hereby warrant and represent that, as of the date of the execution of this Agreement, it is not insolvent as such term is defined and interpreted under 11 U.S.C. §§101 et seq. ("Code") including, without limitation, Code §§ 547 and 548.

X. *Governing Law.* Except (1) as otherwise provided in the Agreement or (2) as necessary, in the sole judgment of the National Arbitration Panel, to promote uniformity of interpretation for matters within the scope of the National Arbitration Panel's authority, this Agreement shall be governed by and interpreted in accordance with the respective laws of the Settling State, without regard to the conflict of law rules of such Settling State, that is seeking to enforce the Agreement against Teva or against which Teva is seeking enforcement. Notwithstanding any other provision in this subsection on governing law, any disputes relating to the Settlement Fund Escrow shall be governed by and interpreted in accordance with the law of the state where the escrow agent has its primary place of business.

Teva Global Settlement Exhibits

Exhibit A Alleged Harms A-1

Exhibit B Enforcement Committee Organizational Bylaws B-1

Exhibit C Litigating Subdivisions and Special District List C-1

Exhibit D Settling States Plan for Acceptance and Delivery of Settlement Product D-1

Exhibit E List of Opioid Remediation Uses E1

Exhibit F-1 "State Global Allocation Percentages" F-1

Exhibit F-2 "State Allocation Percentages" F-3

Exhibit G Subdivisions and Special Districts Eligible to Receive Direct Allocations from the Subdivision Fund and Subdivision Fund Allocation Percentages G-1

Exhibit H Participation by Oklahoma Subdivisions and Special Districts H-1

Exhibit I Primary Subdivisions and Subdivisions with Population Over 10,000 ..... I-1

Exhibit J Teva's Subsidiaries, Affiliates, and Joint Ventures J-1

Exhibit K Subdivision and Special District Settlement Participation Form K-1

Exhibit L Settlement Fund Administrator L-1

Exhibit M Settlement Payment Schedule M-1

Exhibit N Additional Restitution Amount Allocation N-1

Exhibit O Adoption of a State-Subdivision Agreement O-1

Exhibit P Teva Injunctive Term Sheet P-1

Exhibit Q Anda Injunctive Relief Q-1

Exhibit R Agreement on Attorneys' Fees, Expenses and Costs R-1

Exhibit S Agreement on the State Outside Counsel Fee Fund for Manufacturer Settlements S-1

Exhibit T Agreement on the State Cost Fund Administration T-1

Exhibit A
Alleged Harms

The following export reports that were filed in connection with the case captioned *In re National Prescription Opiate Litigation*, No. 1-17-md-02804 (S.D. Ohio):

1. Expert report of Professor David Cutler, dated March 25, 2019.

2. Expert report of Dr. Jeffrey B. Liebman, dated March 25, 2019.

3. Expert report of Professor Thomas McGuire regarding damages to Bellwethers, dated March 25, 2019.

4. Report of Professor Thomas McGuire regarding public nuisance, dated March 25, 2019.

Exhibit B
Enforcement Committee Organizational Bylaws

ARTICLE I

These bylaws constitute the code of rules adopted by the Settling States and Participating Subdivisions for the creation of an Enforcement Committee (the "Committee") to exist and operate during the term of the Agreement in connection with Teva and shall control the regulation and management of the Committee's affairs.

ARTICLE II
Purpose

The Committee is organized for the sole purpose of evaluating and taking such action as deemed reasonable, necessary, and appropriate by the members of the Committee on the matters delegated to the Committee under that certain Settlement Agreement between the Settling States and Teva dated November 22, 2022.

ARTICLE III
Members of the Committee

(1) Number of Members

The Committee will consist of thirteen (13) members (the "Members"). Upon majority resolution of the Committee, the number of Members may be increased or decreased from time to time, but in no event shall a decrease have the effect of decreasing the total number of Members to less than seven Members.

(2) Initial Members

The Committee initially will consist of eight (8) Settling State Members and five (5) Participating Subdivision Members; two (2) of the Participating Subdivisions shall be counties; two (2) shall be municipalities, and the fifth Participating Subdivision Member may be either a county or a municipality. The initial Settling State Members are representatives from: California, Illinois, Iowa, New York, North Carolina, Ohio, Tennessee and Virginia. The initial Participating Subdivision Members are: [•]. Until the date fifteen (15) months from the Effective Date contained in the Settlement Agreement, the Participating Subdivisions may designate their outside counsel to serve as their representative. After the date fifteen (15) months from the Effective Date, an employee or official of the Participating Subdivision must be designated as the representative of the Participating Subdivision.

(3) Term of Members

The term of office for Members of the Committee will be until the end of the term of the Settlement Agreement, thirteen (13) years, unless and until a Member withdraws or resigns from the Committee.

(4) Resignation

Any Member may resign at any time by delivering written notice to the Chairperson of the Committee. Such resignation shall take effect upon receipt or, if later, at the time specified in the notice.

(5) Removal

(a) Any Member may be removed without cause, at any time, by a majority of the entire Committee, at a Regular or Special Meeting called for that purpose. Any Member under consideration of removal must first be notified about the consideration by written notice at least five days prior to the meeting at which the vote takes place.

(b) In the event that any Member is not a Settling State or a Participating Subdivision or the Member subsequently becomes a Later Litigating Subdivision, the Member shall be removed immediately without notice or vote of the Committee.

(6) Vacancies

In the event of a vacancy, the Members of the same type (Settling State or Participating Subdivision) shall select another Settling State or Participating Subdivision to fill that Member's position.

(7) Compensation

Members shall not receive any salaries or other compensation for their services, but, by resolution of the Committee, may be reimbursed for any actual expenses incurred in the performance of their duties for the Committee, as long as a majority of disinterested Members approve the reimbursement. Any reimbursement shall be sought from the Settlement Fund Administrator.

ARTICLE IV
Conflicts of Interest and Code of Ethics

If a Member, agent, or employee of the Committee has a conflict of interest, he or she may not participate in a vote, discussion, or decision about the matter. Each Member shall follow any applicable state or local law with respect to conflicts, gifts, and ethics.

ARTICLE V
Committee Meetings

(1) Place of Meetings

Meetings of the Committee will be held at any place that the Chairperson may designate, including by telephonic or electronic means.

(2) Regular Meetings

Regular meetings of the Committee shall be held as deemed necessary by the Chairperson or any three members.

(3) Notice of Meetings

Written notice of the date, time, place and subject of each meeting must be provided to the Members at least 72 hours before the scheduled time of the meeting, except when there is an emergency or urgent public necessity.

(4) Quorum

A majority of the incumbent Members (not counting vacancies) shall constitute a quorum for the purposes of convening a meeting or conducting business.

(5) Voting and Proxy

When it is necessary to vote on any matter before the Committee, Members may vote by electronic means as provided in these Bylaws. Proxy voting is permitted. In order for a matter to pass, the matter must have a majority vote of Members present and must have at least one vote from a Settling State Member and a Participating Subdivision Member. In the event that there is a Quorum, but no Settling State or Participating Subdivision Member is present, then a matter may pass with a simple majority vote.

(6) Minutes

The Committee shall prepare and keep minutes. The minutes must state the subject of each deliberation and indicate each vote, order, decision, or other action taken.

ARTICLE VI

Officers

(1) Roster of Officers

The Committee shall have a Chairperson, a Vice Chairperson, and a Secretary. The Committee may have at its discretion, such other officers as may be appointed by the Members of the Committee. One person may hold two or more offices, except those serving as Chairperson.

(2) Election and Removal of Officers

All officers shall serve two-year terms. The election shall be conducted at the first meeting of the fiscal year. Officers shall remain in office until their successors have been selected. Officers may serve consecutive terms without limit. The election of officers shall be by majority vote of the Members of the Committee attending the meeting.

(3) Vacancies

If a vacancy occurs during the term of office for any elected officer, the Members of the Committee shall elect a new officer to fill the remainder of the term as soon as practical, by majority vote of Members present.

(4) Chairperson

The Chairperson will supervise and control the affairs of the Committee and shall exercise such supervisory powers as may be given him/her by the Members of the Committee. The Chairperson will perform all duties incident to such office and such other duties as may be provided in these bylaws or as may be prescribed from time to time by the Committee. The Chairperson shall preside at all meetings and shall exercise parliamentary control in accordance with Robert's Rules of Order.

(5) Vice Chairperson

The Vice Chairperson shall act in place of the Chairperson in the event of the Chairperson's absence, inability, or refusal to act, and shall exercise and discharge such other duties as may be required by the Committee. The Vice Chairperson shall serve as the parliamentarian and interpret any ambiguities of the bylaws.

(6) Secretary

The Secretary will keep and maintain all records related to the Committee and take minutes of all meetings.

(7) Records

All elected officers and committee chairpersons shall relinquish their records to the Chairperson immediately upon the completion of their term of office or completion of a project.

(8) Resignation

An officer may resign the office while not resigning membership from the Committee, by submitting a letter to the Chairperson. Vacancies occurring in any office shall be appointed for the remainder of the term.

ARTICLE VII
Duties

(1) Prior to the Reference Date

The Committee shall be responsible for any additional negotiations with Teva, including, but not limited to, negotiating extensions of any periods created by the Settlement Agreement.

(2) After the Effective Date

The Committee shall establish procedures for the receipt of notices that a dispute exists concerning the Agreement and review of such disputes, pursuant to Section XV of the Agreement. Members may engage with Teva, Settling States, and Participating Subdivisions attempting to resolve any dispute without further action by the Committee. The Committee may request additional information from Teva, Settling States, and Participating Subdivisions to the extent the Committee believes such information is necessary to understand, resolve, or provide advice related to a dispute. The Committee

shall endeavor to provide advice relative to the dispute no later than 60 days after receipt of notice.

ARTICLE VIII
Rules of Procedure

The proceedings and business of the Committee shall be governed by Robert's Rules of Order unless otherwise waived by the Committee.

ARTICLE IX
Operations

(1) Records

The Committee will keep correct and complete records and will also keep minutes of the proceedings of the Committee meetings and Committees. The Committee will keep such records at its principal place of business at a place designated by the Chairperson**.**

All elected officers and committee chairpersons shall relinquish their records to the Chairperson, immediately upon the completion of their term of office.

(2) Inspection of Books and Records

The minutes of a meeting are public records and shall be available for public inspection and copying on request to the Committee's Chairperson or the Chairperson's designee.

(3) Amendments

The bylaws may be amended at any time by a vote of a majority of Members present and must have at least one vote from a Settling State Member and a Participating Subdivision Member. In the event that there is a Quorum, but no Settling State or Participating Subdivision Member is present, then a matter may pass with a simple majority vote.

Exhibit C
Litigating Subdivisions and Special District List

1. Abbeville (AL), City of, Alabama
2. Alabaster (AL), City of, Alabama
3. Albertville (AL), City of, Alabama
4. Alexander (AL), City of, Alabama
5. Anniston (AL), City of, Alabama
6. Arab (AL), City of, Alabama
7. Argo (AL), City of, Alabama
8. Ashland (AL), City of, Alabama
9. Ashville (AL), City of, Alabama
10. Athens (AL), City of, Alabama
11. Attalla (AL), City of, Alabama
12. Attentus Moulton, LLC d/b/a Lawrence Medical Center Lawrence (AL), Alabama
13. Auburn (AL), City of, Alabama
14. Autauga (AL), County of, Alabama
15. Baldwin (AL), County of, Alabama
16. Barbour (AL), County of, Alabama
17. Bay Minette (AL), City of, Alabama
18. Berry (AL), Town of, Alabama
19. Bessemer (AL), City of, Alabama
20. Bibb (AL), County of, Alabama
21. Bibb County Healthcare Authority (AL), Alabama
22. Birmingham (AL), City of, Alabama
23. Blount (AL), County of, Alabama
24. Boaz (AL), City of, Alabama
25. Brent (AL), City of, Alabama
26. Brewton (AL), City of, Alabama
27. Bridgeport (AL), City of, Alabama
28. Brookwood (AL), City of, Alabama
29. Brundidge (AL), City of, Alabama
30. Bullock (AL), County of, Alabama
31. Butler (AL), County of, Alabama
32. Butler (AL), Town of, Alabama
33. Calera (AL), City of, Alabama
34. Calhoun (AL), County of, Alabama
35. Camp Hill (AL), Town of, Alabama
36. Carbon Hill (AL), City of, Alabama
37. Cedar Bluff (AL), Town of, Alabama
38. Center Point (AL), City of, Alabama
39. Centre (AL), City of, Alabama
40. Centreville (AL), City of, Alabama
41. Chambers (AL), County of, Alabama
42. Cherokee (AL), County of, Alabama
43. Cherokee (AL), Town of, Alabama
44. Chickasaw (AL), City of, Alabama
45. Childersburg (AL), City of, Alabama
46. Chilton, AL (AL), County of, Alabama
47. Choctaw (AL), County of, Alabama
48. Clanton (AL), City of, Alabama
49. Clarke (AL), County of, Alabama
50. Clay (AL), County of, Alabama
51. Cleburne (AL), County of, Alabama
52. Cleveland (AL), Town of, Alabama
53. Coffee (AL), County of, Alabama
54. Colbert (AL), County of, Alabama
55. Conecuh (AL), County of, Alabama
56. Coosa (AL), County of, Alabama
57. Cordova (AL), City of, Alabama
58. Covington (AL), County of, Alabama
59. Crenshaw (AL), County of, Alabama
60. Cullman (AL), City of, Alabama
61. Cullman (AL), County of, Alabama
62. Cullman County Health Care Authority (AL), Alabama
63. Dadeville (AL), City of, Alabama
64. Dale (AL), County of, Alabama
65. Dale County Healthcare Authority (AL), Alabama
66. Daleville (AL), City of, Alabama
67. Dallas (AL), County of, Alabama
68. Daphne (AL), City of, Alabama
69. Dauphin Island (AL), Town of, Alabama
70. Decatur (AL), City of, Alabama
71. DeKalb (AL), County of, Alabama
72. Demopolis (AL), City of, Alabama

73. Dora (AL), City of, Alabama
74. Dothan (AL), City of, Alabama
75. Double Springs (AL), Town of, Alabama
76. Douglas (AL), Town of, Alabama
77. East Brewton (AL), City of, Alabama
78. Elmore (AL), County of, Alabama
79. Enterprise (AL), City of, Alabama
80. Escambia (AL), County of, Alabama
81. Etowah (AL), County of, Alabama
82. Etowah (AL), County of (Sheriff), Alabama
83. Eufaula (AL), City of, Alabama
84. Evergreen (AL), City of, Alabama
85. Fairfield (AL), City of, Alabama
86. Fairhope (AL), City of, Alabama
87. Faunsdale (AL), Town of, Alabama
88. Fayette (AL), City of, Alabama
89. Fayette (AL), County of, Alabama
90. Fayette (AL), County of (Sheriff), Alabama
91. Florence (AL), City of, Alabama
92. Foley (AL), City of, Alabama
93. Fort Deposit (AL), Town of, Alabama
94. Fort Payne (AL), City of, Alabama
95. Franklin (AL), County of, Alabama
96. Fultondale (AL), City of, Alabama
97. Gadsden (AL), City of, Alabama
98. Geneva (AL), City of, Alabama
99. Geneva (AL), County of, Alabama
100. Geneva County Healthcare Authority (AL), Alabama
101. Georgiana (AL), City of, Alabama
102. Geraldine (AL), Town of, Alabama
103. Gilbertown (AL), Town of, Alabama
104. Grant (AL), Town of, Alabama
105. Graysville (AL), City of, Alabama
106. Greene (AL), County of, Alabama
107. Greene County Hospital Board (AL), Alabama
108. Greensboro (AL), City of, Alabama
109. Greenville (AL), City of, Alabama
110. Guin (AL), City of, Alabama
111. Guntersville (AL), City of, Alabama
112. Gurley (AL), Town of, Alabama
113. Hale (AL), County of, Alabama
114. Haleyville (AL), City of, Alabama
115. Hamilton (AL), City of, Alabama
116. Hammondville (AL), Town of, Alabama
117. Hartselle (AL), City of, Alabama
118. Headland (AL), City of, Alabama
119. Henagar (AL), City of, Alabama
120. Henry (AL), County of, Alabama
121. HH Health System - Athens Limestone, LLC d/b/a Athens Limestone Hospital (AL), Alabama
122. HH Health System - Morgan, LLC d/b/a Decatur Morgan Hospital - Decatur and Decatur Morgan Hospital - Parkway (AL), Alabama
123. HH Health System - Shoals, LLC d/b/a Helen Keller Hospital and Red Bay Hospital (AL), Alabama
124. Homewood (AL), City of, Alabama
125. Hoover (AL), City of, Alabama
126. Houston (AL), County of, Alabama
127. Hueytown (AL), City of, Alabama
128. Huntsville (AL), City of, Alabama
129. Irondale (AL), City of, Alabama
130. J. Paul Jones Hospital (AL), Alabama
131. Jackson (AL), County of, Alabama
132. Jackson County Health Care Authority (AL), Alabama
133. Jacksonville (AL), City of, Alabama
134. Jasper (AL), City of, Alabama
135. Jefferson (AL), County of, Alabama
136. Jefferson (AL), County of (Sheriff), Alabama
137. Killen (AL), City of, Alabama
138. Lamar (AL), County of, Alabama
139. Lamar (AL), County of (Sheriff), Alabama
140. Lanett (AL), City of, Alabama
141. Lauderdale (AL), County of, Alabama
142. Lawrence (AL), County of, Alabama
143. Leeds (AL), City of, Alabama
144. Leesburg (AL), City of, Alabama
145. Leighton (AL), Town of, Alabama

146. Level Plains (AL), City of, Alabama
147. Limestone (AL), County of, Alabama
148. Lincoln (AL), City of, Alabama
149. Linden (AL), City of, Alabama
150. Locust Fork (AL), Town of, Alabama
151. Louisville (AL), City of, Alabama
152. Lowndes (AL), County of, Alabama
153. Loxley (AL), Town of, Alabama
154. Luverne (AL), City of, Alabama
155. Macon (AL), County of, Alabama
156. Madison (AL), City of, Alabama
157. Madison (AL), County of, Alabama
158. Marengo (AL), County of, Alabama
159. Marion (AL), City of, Alabama
160. Marion (AL), County of, Alabama
161. Marshall (AL), County of, Alabama
162. Marshall County Health Care Authority, (AL), County of, Alabama
163. McKenzie (AL), Town of, Alabama
164. Medical West Hospital Authority, d/b/a Medical West (AL), Alabama
165. Midfield (AL), City of, Alabama
166. Millbrook (AL), City of, Alabama
167. Mobile (AL), City of, Alabama
168. Mobile (AL), County of, Alabama
169. Mobile County Board of Health and Family Oriented Primary Health Care Clinic (AL), Alabama
170. Mobile County Emergency Medical Services System Rescue Squad (AL), Alabama
171. Monroe (AL), County of, Alabama
172. Monroeville (AL), City of, Alabama
173. Montgomery (AL), City of, Alabama
174. Montgomery (AL), County of, Alabama
175. Moody (AL), City of, Alabama
176. Morgan (AL), County of, Alabama
177. Moulton (AL), City of, Alabama
178. Mountain Brook (AL), City of, Alabama
179. Munford (AL), Town of, Alabama
180. Muscle Shoals (AL), City of, Alabama
181. Nauvoo (AL), City of, Alabama
182. New Hope (AL), City of, Alabama
183. Northport, AL, (AL), City of, Alabama
184. Oakman (AL), City of, Alabama
185. Oakman (AL), Town of, Alabama
186. Oneonta (AL), City of, Alabama
187. Opelika (AL), City of, Alabama
188. Opp (AL), City of, Alabama
189. Orange Beach (AL), City of, Alabama
190. Oxford (AL), City of, Alabama
191. Ozark (AL), City of, Alabama
192. Parrish (AL), City of, Alabama
193. Pell City (AL), City of, Alabama
194. Perry (AL), County of, Alabama
195. Phenix (AL), City of, Alabama
196. Pickens (AL), County of, Alabama
197. Piedmont (AL), City of, Alabama
198. Pike (AL), County of, Alabama
199. Pleasant Grove (AL), City of, Alabama
200. Powell (AL), Town of, Alabama
201. Prattville (AL), City of, Alabama
202. Priceville (AL), Town of, Alabama
203. Prichard (AL), City of, Alabama
204. Ragland (AL), City of, Alabama
205. Rainbow City (AL), City of, Alabama
206. Rainsville (AL), City of, Alabama
207. Randolph (AL), County of, Alabama
208. Red Bay (AL), City of, Alabama
209. Roanoke (AL), City of, Alabama
210. Robertsdale (AL), City of, Alabama
211. Rockford (AL), Town of, Alabama
212. Russell (AL), County of, Alabama
213. Russellville (AL), City of, Alabama
214. Saint Clair (AL), County of, Alabama
215. Saraland (AL), City of, Alabama
216. Satsuma (AL), City of, Alabama
217. Scottsboro (AL), City of, Alabama
218. Semmes (AL), City of, Alabama
219. Selma (AL), City of, Alabama
220. Sheffield (AL), City of, Alabama
221. Shelby (AL), County of, Alabama
222. Sipsey (AL), City of, Alabama

223. Slocomb (AL), City of, Alabama
224. Spanish Fort (AL), City of, Alabama
225. Springville (AL), City of, Alabama
226. Summerdale (AL), Town of, Alabama
227. Sumiton (AL), City of, Alabama
228. Sumter (AL), County of, Alabama
229. Sweet Water (AL), Town of, Alabama
230. Sylacauga (AL), City of, Alabama
231. Sylacauga Health Care Authority (AL), Alabama
232. Talladega (AL), City of, Alabama
233. Talladega (AL), County of, Alabama
234. Tallapoosa (AL), County of, Alabama
235. The DCH Health Care Authority, d/b/a DCH Regional Medical Center (AL), Alabama
236. The Health Care Authority of Clarke d/b/a Grove Hill Memorial Hospital (AL), County of, Alabama
237. The Health Care Authority of Morgan - City of Decatur (AL), County of, Alabama
238. The Health Care Authority of the City of Huntsville d/b/a HH Health System (AL), Alabama
239. The Health Care Authority of the City of Huntsville d/b/a Huntsville Hospital (AL), Alabama
240. The Health Care Authority of the City of Huntsville d/b/a Huntsville Hospital for Women and Children (AL), Alabama
241. The Health Care Authority of the City of Huntsville d/b/a Madison Hospital (AL), Alabama
242. The Healthcare Authority for Baptist Health, d/b/a Baptist Medical Center East (AL), Alabama
243. Thomasville (AL), City of, Alabama
244. Tombigbee HealthCare Authority (AL), Alabama
245. Troy (AL), City of, Alabama
246. Trussville (AL), City of, Alabama
247. Tuscaloosa (AL), City of, Alabama
248. Tuscaloosa (AL), County of, Alabama
249. Tuscumbia (AL), City of, Alabama
250. Tuskegee (AL), City of, Alabama
251. Union Springs (AL), City of, Alabama
252. Uniontown (AL), City of, Alabama
253. Vance (AL), Town of, Alabama
254. Vernon (AL), City of, Alabama
255. Vestavia Hills (AL), City of, Alabama
256. Walker (AL), County of, Alabama
257. Washington (AL), County of, Alabama
258. Weaver (AL), City of, Alabama
259. West Blocton (AL), Town of, Alabama
260. Wetumpka (AL), City of, Alabama
261. Wilcox (AL), County of, Alabama
262. Winfield (AL), City of, Alabama
263. Woodville (AL), Town of, Alabama
264. Yellow Bluff (AL), Town of, Alabama
265. Apache (AZ), County of, Arizona
266. Bullhead (AZ), City of, Arizona
267. Cochise (AZ), County of, Arizona
268. Glendale (AZ), City of, Arizona
269. Kingman (AZ), City of, Arizona
270. La Paz (AZ), County of, Arizona
271. Maricopa (AZ), County of, Arizona
272. Mohave (AZ), County of, Arizona
273. Navajo (AZ), County of, Arizona
274. Phoenix (AZ), City of, Arizona
275. Pima (AZ), County of, Arizona
276. Pinal (AZ), County of, Arizona
277. Prescott (AZ), City of, Arizona
278. Surprise (AZ), City of, Arizona
279. Tucson (AZ), City of, Arizona
280. Yuma (AZ), County of, Arizona
281. Adona (AR), City of, Arkansas
282. Alexander (AR), City of, Arkansas
283. Alicia (AR), City of, Arkansas
284. Allport (AR), City of, Arkansas
285. Alma (AR), City of, Arkansas
286. Almyra (AR) City of, Arkansas
287. Alpena (AR), City of, Arkansas
288. Altheimer (AR), City of, Arkansas
289. Altus (AR), City of, Arkansas
290. Amagon (AR), City of, Arkansas

291. Amity (AR), City of, Arkansas
292. Anthonyville (AR), City of, Arkansas
293. Antoine (AR), City of, Arkansas
294. Arkadelphia (AR), City of, Arkansas
295. Arkansas (AR), County of, Arkansas
296. Arkansas City (AR), City of, Arkansas
297. Ash Flat (AR), City of, Arkansas
298. Ashdown (AR), City of, Arkansas
299. Ashley (AR), County of, Arkansas
300. Atkins (AR), City of, Arkansas
301. Aubrey (AR), City of, Arkansas
302. Augusta (AR), City of, Arkansas
303. Austin (AR), City of, Arkansas
304. Avoca (AR), City of, Arkansas
305. Bald Knob (AR), City of, Arkansas
306. Banks (AR), City of, Arkansas
307. Barling (AR), City of, Arkansas
308. Bassett (AR), City of, Arkansas
309. Batesville (AR), City of, Arkansas
310. Bauxite (AR), City of, Arkansas
311. Baxter (AR), County of, Arkansas
312. Bay (AR), City of, Arkansas
313. Bearden (AR), City of, Arkansas
314. Beaver (AR), City of, Arkansas
315. Beebe (AR), City of, Arkansas
316. Beedeville (AR), City of, Arkansas
317. Bella Vista (AR), City of, Arkansas
318. Bellefonte (AR), City of, Arkansas
319. Belleville (AR), City of, Arkansas
320. Ben Lomond (AR), City of, Arkansas
321. Benton (AR), City of, Arkansas
322. Benton (AR), County of, Arkansas
323. Bentonville (AR), City of, Arkansas
324. Bergman (AR), City of, Arkansas
325. Berryville (AR), City of, Arkansas
326. Big Flat (AR), City of, Arkansas
327. Bigelow (AR), City of, Arkansas
328. Biggers (AR), City of, Arkansas
329. Birdsong (AR), City of, Arkansas
330. Black Oak (AR), City of, Arkansas
331. Black Rock (AR), City of, Arkansas
332. Black Springs (AR), City of, Arkansas
333. Blevins (AR), City of, Arkansas
334. Blue Eye (AR), City of, Arkansas
335. Blue Mountain (AR), City of, Arkansas
336. Bluff City (AR), City of, Arkansas
337. Blytheville (AR), City of, Arkansas
338. Bodcaw (AR), City of, Arkansas
339. Bonanza (AR), City of, Arkansas
340. Bono (AR), City of, Arkansas
341. Boone (AR), County of, Arkansas
342. Booneville (AR), City of, Arkansas
343. Bradford (AR), City of, Arkansas
344. Bradley (AR), City of, Arkansas
345. Bradley (AR), County of, Arkansas
346. Branch (AR), City of, Arkansas
347. Briarcliff (AR), City of, Arkansas
348. Brinkley (AR), City of, Arkansas
349. Brookland (AR), City of, Arkansas
350. Bryant (AR), City of, Arkansas
351. Buckner (AR), City of, Arkansas
352. Bull Shoals (AR), City of, Arkansas
353. Burdette (AR), City of, Arkansas
354. Cabot (AR), City of, Arkansas
355. Caddo Valley (AR), City of, Arkansas
356. Caldwell (AR), City of, Arkansas
357. Cale (AR), City of, Arkansas
358. Calhoun (AR), County of, Arkansas
359. Calico Rock (AR), City of, Arkansas
360. Calion (AR), City of, Arkansas
361. Camden (AR), City of, Arkansas
362. Cammack Village (AR), City of, Arkansas
363. Campbell Station (AR), City of, Arkansas
364. Caraway (AR), City of, Arkansas
365. Carlisle (AR), City of, Arkansas
366. Carroll (AR), County of, Arkansas
367. Carthage (AR), City of, Arkansas
368. Casa (AR), City of, Arkansas
369. Cash (AR), City of, Arkansas
370. Caulksville (AR), City of, Arkansas
371. Cave City (AR), City of, Arkansas
372. Cave Springs (AR), City of, Arkansas

373. Cedarville (AR), City of, Arkansas
374. Centerton (AR), City of, Arkansas
375. Central City (AR), City of, Arkansas
376. Charleston (AR), City of, Arkansas
377. Cherokee Village (AR), City of, Arkansas
378. Cherry Valley (AR), City of, Arkansas
379. Chester (AR), City of, Arkansas
380. Chicot (AR), County of, Arkansas
381. Chidester (AR), City of, Arkansas
382. Clarendon (AR), City of, Arkansas
383. Clark (AR), County of, Arkansas
384. Clarkedale (AR), City of, Arkansas
385. Clarksville (AR), City of, Arkansas
386. Clay (AR), County of, Arkansas
387. Cleburne (AR), County of, Arkansas
388. Cleveland (AR), County of, Arkansas
389. Clinton (AR), City of, Arkansas
390. Coal Hill (AR), City of, Arkansas
391. Colt (AR), City of, Arkansas
392. Columbia (AR), County of, Arkansas
393. Concord (AR), City of, Arkansas
394. Conway (AR), City of, Arkansas
395. Conway (AR), County of, Arkansas
396. Corinth (AR), City of, Arkansas
397. Corning (AR), City of, Arkansas
398. Cotter (AR), City of, Arkansas
399. Cotton Plant (AR), City of, Arkansas
400. Cove (AR), City of, Arkansas
401. Coy (AR), City of, Arkansas
402. Craighead (AR), County of, Arkansas
403. Crawford (AR), County of, Arkansas
404. Crawfordsville (AR), City of, Arkansas
405. Crittenden (AR), County of, Arkansas
406. Cross (AR), County of, Arkansas
407. Crossett (AR), City of, Arkansas
408. Cushman (AR), City of, Arkansas
409. Daisy (AR), City of, Arkansas
410. Dallas (AR), County of, Arkansas
411. Damascus (AR), City of, Arkansas
412. Danville (AR), City of, Arkansas
413. Dardanelle (AR), City of, Arkansas
414. Datto (AR), City of, Arkansas
415. De Queen (AR), City of, Arkansas
416. De Valls Bluff (AR), City of, Arkansas
417. Decatur (AR), City of, Arkansas
418. Delaplaine (AR), City of, Arkansas
419. Delight (AR), City of, Arkansas
420. Dell (AR), City of, Arkansas
421. Denning (AR), City of, Arkansas
422. Dermott (AR), City of, Arkansas
423. Des Arc (AR), City of, Arkansas
424. Desha (AR), County of, Arkansas
425. DeWitt (AR), City of, Arkansas
426. Diamond City (AR), City of, Arkansas
427. Diaz (AR), City of, Arkansas
428. Dierks (AR), City of, Arkansas
429. Donaldson (AR), City of, Arkansas
430. Dover (AR), City of, Arkansas
431. Drew County (AR), Arkansas
432. Dumas (AR), City of, Arkansas
433. Dyer (AR), City of, Arkansas
434. Dyess (AR), City of, Arkansas
435. Earle (AR), City of, Arkansas
436. East Camden (AR), City of, Arkansas
437. Edmondson (AR), City of, Arkansas
438. Egypt (AR), City of, Arkansas
439. El Dorado (AR), City of, Arkansas
440. Elaine (AR), City of, Arkansas
441. Elkins (AR), City of, Arkansas
442. Elm Springs (AR), City of, Arkansas
443. Emerson (AR), City of, Arkansas
444. Emmet (AR), City of, Arkansas
445. England (AR), City of, Arkansas
446. Enola (AR), City of, Arkansas
447. Etowah (AR), City of, Arkansas
448. Eudora (AR), City of, Arkansas
449. Eureka Springs (AR), City of, Arkansas
450. Evening Shade (AR), City of, Arkansas
451. Everton (AR), City of, Arkansas
452. Fairfield Bay (AR), City of, Arkansas
453. Fargo (AR), City of, Arkansas
454. Farmington (AR), City of, Arkansas

455. Faulkner (AR), County of, Arkansas
456. Fayetteville (AR), City of, Arkansas
457. Felsenthal (AR), City of, Arkansas
458. Fifty-Six (AR), City of, Arkansas
459. Fisher (AR), City of, Arkansas
460. Flippin (AR), City of, Arkansas
461. Fordyce (AR), City of, Arkansas
462. Foreman (AR), City of, Arkansas
463. Forrest City (AR), City of, Arkansas
464. Fort Smith (AR), City of, Arkansas
465. Fouke (AR), City of, Arkansas
466. Fountain Hill (AR), City of, Arkansas
467. Fountain Lake (AR), City of, Arkansas
468. Fourche (AR), City of, Arkansas
469. Franklin (AR), City of, Arkansas
470. Franklin (AR), County of, Arkansas
471. Fredonia (Biscoe) (AR), City of, Arkansas
472. Friendship (AR), City of, Arkansas
473. Fulton (AR), City of, Arkansas
474. Fulton (AR), County of, Arkansas
475. Garfield (AR), City of, Arkansas
476. Garland (AR), City of, Arkansas
477. Garland (AR), County of, Arkansas
478. Garner (AR), City of, Arkansas
479. Gassville (AR), City of, Arkansas
480. Gateway (AR), City of, Arkansas
481. Gentry (AR), City of, Arkansas
482. Georgetown (AR), City of, Arkansas
483. Gilbert (AR), City of, Arkansas
484. Gillett (AR), City of, Arkansas
485. Gillham (AR), City of, Arkansas
486. Gilmore (AR), City of, Arkansas
487. Glenwood (AR), City of, Arkansas
488. Goshen (AR), City of, Arkansas
489. Gosnell (AR), City of, Arkansas
490. Gould (AR), City of, Arkansas
491. Grady (AR), City of, Arkansas
492. Grannis (AR), City of, Arkansas
493. Grant (AR), County of, Arkansas
494. Gravette (AR), City of, Arkansas
495. Green Forest (AR), City of, Arkansas
496. Greenbrier (AR), City of, Arkansas
497. Greene (AR), County of, Arkansas
498. Greenland (AR), City of, Arkansas
499. Greenway (AR), City of, Arkansas
500. Greenwood (AR), City of, Arkansas
501. Greers Ferry (AR), City of, Arkansas
502. Griffithville (AR), City of, Arkansas
503. Grubbs (AR), City of, Arkansas
504. Guion (AR), City of, Arkansas
505. Gum Springs (AR), City of, Arkansas
506. Gurdon (AR), City of, Arkansas
507. Guy (AR), City of, Arkansas
508. Hackett (AR), City of, Arkansas
509. Hamburg (AR), City of, Arkansas
510. Hampton (AR), City of, Arkansas
511. Hardy (AR), City of, Arkansas
512. Harrell (AR), City of, Arkansas
513. Harrisburg (AR), City of, Arkansas
514. Harrison (AR), City of, Arkansas
515. Hartford (AR), City of, Arkansas
516. Hartman (AR), City of, Arkansas
517. Haskell (AR), City of, Arkansas
518. Hatfield (AR), City of, Arkansas
519. Havana (AR), City of, Arkansas
520. Haynes (AR), City of, Arkansas
521. Hazen (AR), City of, Arkansas
522. Heber Springs (AR), City of, Arkansas
523. Hector (AR), City of, Arkansas
524. Helena-West Helena (AR), City of, Arkansas
525. Hempstead (AR), County of, Arkansas
526. Hermitage (AR), City of, Arkansas
527. Hickory Ridge (AR), City of, Arkansas
528. Higden (AR), City of, Arkansas
529. Higginson (AR), City of, Arkansas
530. Highfill (AR), City of, Arkansas
531. Highland (AR), City of, Arkansas
532. Hindsville (AR), City of, Arkansas
533. Holiday Island (AR), City of, Arkansas
534. Holland (AR), City of, Arkansas
535. Holly Grove (AR), City of, Arkansas

536. Hope (AR), City of, Arkansas
537. Horatio (AR), City of, Arkansas
538. Horseshoe Bend (AR), City of, Arkansas
539. Horseshoe Lake (AR), City of, Arkansas
540. Hot Spring (AR), County of, Arkansas
541. Hot Springs (AR), City of, Arkansas
542. Houston (AR), City of, Arkansas
543. Howard (AR), County of, Arkansas
544. Hoxie (AR), City of, Arkansas
545. Hughes (AR), City of, Arkansas
546. Humnoke (AR), City of, Arkansas
547. Humphrey (AR), City of, Arkansas
548. Hunter (AR), City of, Arkansas
549. Huntington (AR), City of, Arkansas
550. Huntsville (AR), City of, Arkansas
551. Huttig (AR), City of, Arkansas
552. Imboden (AR), City of, Arkansas
553. Independence (AR), County of, Arkansas
554. Izard (AR), County of, Arkansas
555. Jackson (AR), County of, Arkansas
556. Jacksonport (AR), City of, Arkansas
557. Jacksonville (AR), City of, Arkansas
558. Jacksonville (AR), City of, Arkansas
559. Jasper (AR), City of, Arkansas
560. Jefferson (AR), County of, Arkansas
561. Jennette (AR), City of, Arkansas
562. Jericho (AR), City of, Arkansas
563. Jerome (AR), City of, Arkansas
564. Johnson (AR), City of, Arkansas
565. Johnson (AR), County of, Arkansas
566. Joiner (AR), City of, Arkansas
567. Jonesboro (AR), City of, Arkansas
568. Judsonia (AR), City of, Arkansas
569. Junction City (AR), City of, Arkansas
570. Keiser (AR), City of, Arkansas
571. Kensett (AR), City of, Arkansas
572. Keo (AR), City of, Arkansas
573. Kibler (AR), City of, Arkansas
574. Kingsland (AR), City of, Arkansas
575. Knobel (AR), City of, Arkansas
576. Knoxville (AR), City of, Arkansas
577. Lafayette (AR), County of, Arkansas
578. Lafe (AR), City of, Arkansas
579. LaGrange (AR), City of, Arkansas
580. Lake City (AR), City of, Arkansas
581. Lake View (AR), City of, Arkansas
582. Lake Village (AR), City of, Arkansas
583. Lakeview (AR), City of, Arkansas
584. Lamar (AR), City of, Arkansas
585. Lavaca (AR), City of, Arkansas
586. Lawrence (AR), County of, Arkansas
587. Leachville (AR), City of, Arkansas
588. Lead Hill (AR), City of, Arkansas
589. Lee (AR), County of, Arkansas
590. Leola (AR), City of, Arkansas
591. Lepanto (AR), City of, Arkansas
592. Leslie (AR), City of, Arkansas
593. Letona (AR), City of, Arkansas
594. Lewisville (AR), City of, Arkansas
595. Lexa (AR), City of, Arkansas
596. Lincoln (AR), City of, Arkansas
597. Lincoln (AR), County of, Arkansas
598. Little Flock (AR), City of, Arkansas
599. Little River (AR), County of, Arkansas
600. Little Rock (AR), City of, Arkansas
601. Lockesburg (AR), City of, Arkansas
602. Logan (AR), County of, Arkansas
603. London (AR), City of, Arkansas
604. Lonoke (AR), City of, Arkansas
605. Lonoke (AR), County of, Arkansas
606. Lonsdale (AR), City of, Arkansas
607. Louann (AR), City of, Arkansas
608. Lowell (AR), City of, Arkansas
609. Luxora (AR), City of, Arkansas
610. Lynn (AR), City of, Arkansas
611. Madison (AR), City of, Arkansas
612. Madison (AR), County of, Arkansas
613. Magazine (AR), City of, Arkansas
614. Magness (AR), City of, Arkansas
615. Magnolia (AR), City of, Arkansas
616. Malvern (AR), City of, Arkansas
617. Mammoth Spring (AR), City of, Arkansas

618. Manila (AR), City of, Arkansas
619. Mansfield (AR), City of, Arkansas
620. Marianna (AR), City of, Arkansas
621. Marie (AR), City of, Arkansas
622. Marion (AR), City of, Arkansas
623. Marion (AR), County of, Arkansas
624. Marked Tree (AR), City of, Arkansas
625. Marmaduke (AR), City of, Arkansas
626. Marshall (AR), City of, Arkansas
627. Marvell (AR), City of, Arkansas
628. Maumelle (AR), City of, Arkansas
629. Mayflower (AR), City of, Arkansas
630. Maynard (AR), City of, Arkansas
631. McCaskill (AR), City of, Arkansas
632. McCrory (AR), City of, Arkansas
633. McDougal (AR), City of, Arkansas
634. McGehee (AR), City of, Arkansas
635. McNab (AR), City of, Arkansas
636. McNeil (AR), City of, Arkansas
637. McRae (AR), City of, Arkansas
638. Melbourne (AR), City of, Arkansas
639. Mena (AR), City of, Arkansas
640. Menifee (AR), City of, Arkansas
641. Midland (AR), City of, Arkansas
642. Midway (AR), City of, Arkansas
643. Miller (AR), County of, Arkansas
644. Mineral Springs (AR), City of, Arkansas
645. Minturn (AR), City of, Arkansas
646. Mississippi (AR), County of, Arkansas
647. Mitchellville (AR), City of, Arkansas
648. Monette (AR), City of, Arkansas
649. Monroe (AR), County of, Arkansas
650. Monroe County Healthcare Authority (AL), Alabama
651. Montgomery (AR), County of, Arkansas
652. Monticello (AR), City of, Arkansas
653. Montrose (AR), City of, Arkansas
654. Moorefield (AR), City of, Arkansas
655. Moro (AR), City of, Arkansas
656. Morrilton (AR), City of, Arkansas
657. Morrison Bluff (AR), City of, Arkansas
658. Mount Ida (AR), City of, Arkansas
659. Mount Pleasant (AR), City of, Arkansas
660. Mount Vernon (AR), City of, Arkansas
661. Mountain Home (AR), City of, Arkansas
662. Mountain Pine (AR), City of, Arkansas
663. Mountain View (AR), City of, Arkansas
664. Mountainburg (AR), City of, Arkansas
665. Mulberry (AR), City of, Arkansas
666. Murfreesboro (AR), City of, Arkansas
667. Nashville (AR), City of, Arkansas
668. Nevada (AR), County of, Arkansas
669. Newark (AR), City of, Arkansas
670. Newport (AR), City of, Arkansas
671. Newton (AR), County of, Arkansas
672. Nimmons (AR), City of, Arkansas
673. Norfork (AR), City of, Arkansas
674. Norman (AR), City of, Arkansas
675. Norphlet (AR), City of, Arkansas
676. North Little Rock (AR), City of, Arkansas
677. Oak Grove (AR), City of, Arkansas
678. Oak Grove Heights (AR), City of, Arkansas
679. Oakhaven (AR), City of, Arkansas
680. Oden (AR), City of, Arkansas
681. Ogden (AR), City of, Arkansas
682. Oil Trough (AR), City of, Arkansas
683. O'Kean (AR), City of, Arkansas
684. Okolona (AR), City of, Arkansas
685. Ola (AR), City of, Arkansas
686. Omaha (AR), City of, Arkansas
687. Oppelo (AR), City of, Arkansas
688. Osceola (AR), City of, Arkansas
689. Ouachita (AR), County of, Arkansas
690. Oxford (AR), City of, Arkansas
691. Ozan (AR), City of, Arkansas
692. Ozark (AR), City of, Arkansas
693. Palestine (AR), City of, Arkansas
694. Pangburn (AR), City of, Arkansas
695. Paragould (AR), City of, Arkansas
696. Paris (AR), City of, Arkansas
697. Parkdale (AR), City of, Arkansas
698. Parkin (AR), City of, Arkansas

699. Patmos (AR), City of, Arkansas
700. Patterson (AR), City of, Arkansas
701. Pea Ridge (AR), City of, Arkansas
702. Peach Orchard (AR), City of, Arkansas
703. Perla (AR), City of, Arkansas
704. Perry (AR), City of, Arkansas
705. Perrytown (AR), City of, Arkansas
706. Perry (AR), County of, Arkansas
707. Perryville (AR), City of, Arkansas
708. Phillips (AR), County of, Arkansas
709. Piggott (AR), City of, Arkansas
710. Pike (AR), County of, Arkansas
711. Pindall (AR), City of, Arkansas
712. Pine Bluff (AR), City of, Arkansas
713. Pineville (AR), City of, Arkansas
714. Plainview (AR), City of, Arkansas
715. Pleasant Plains (AR), City of, Arkansas
716. Plumerville (AR), City of, Arkansas
717. Pocahontas (AR), City of, Arkansas
718. Poinsett (AR), County of, Arkansas
719. Polk (AR), County of, Arkansas
720. Pollard (AR), City of, Arkansas
721. Pope (AR), County of, Arkansas
722. Portia (AR), City of, Arkansas
723. Portland (AR), City of, Arkansas
724. Pottsville (AR), City of, Arkansas
725. Powhatan (AR), City of, Arkansas
726. Poyen (AR), City of, Arkansas
727. Prairie (AR), County of, Arkansas
728. Prairie Grove (AR), City of, Arkansas
729. Prattsville (AR), City of, Arkansas
730. Prescott (AR), City of, Arkansas
731. Pulaski (AR), County of, Arkansas
732. Pyatt (AR), City of, Arkansas
733. Quitman (AR), City of, Arkansas
734. Randolph (AR), County of, Arkansas
735. Ratcliff (AR), City of, Arkansas
736. Ravenden (AR), City of, Arkansas
737. Ravenden Springs (AR), City of, Arkansas
738. Rector (AR), City of, Arkansas
739. Redfield (AR), City of, Arkansas
740. Reed (AR), City of, Arkansas
741. Reyno (AR), City of, Arkansas
742. Rison (AR), City of, Arkansas
743. Rockport (AR), City of, Arkansas
744. Roe (AR), City of, Arkansas
745. Rogers (AR), City of, Arkansas
746. Rondo (AR), City of, Arkansas
747. Rose Bud (AR), City of, Arkansas
748. Rosston (AR), City of, Arkansas
749. Rudy (AR), City of, Arkansas
750. Russell (AR), City of, Arkansas
751. Russellville (AR), City of, Arkansas
752. Salem (AR), City of, Arkansas
753. Salesville (AR), City of, Arkansas
754. Saline (AR), County of, Arkansas
755. Scott (AR), County of, Arkansas
756. Scranton (AR), City of, Arkansas
757. Searcy (AR), City of, Arkansas
758. Searcy (AR), County of, Arkansas
759. Sebastian (AR), County of, Arkansas
760. Sedgwick (AR), City of, Arkansas
761. Sevier (AR), County of, Arkansas
762. Shannon Hills (AR), City of, Arkansas
763. Sharp (AR), County of, Arkansas
764. Sheridan (AR), City of, Arkansas
765. Sherrill (AR), City of, Arkansas
766. Sherwood (AR), City of, Arkansas
767. Shirley (AR), City of, Arkansas
768. Sidney (AR), City of, Arkansas
769. Siloam Springs (AR), City of, Arkansas
770. Smackover (AR), City of, Arkansas
771. Smithville (AR), City of, Arkansas
772. South Lead Hill (AR), City of, Arkansas
773. Southside (AR), City of, Arkansas
774. Sparkman (AR), City of, Arkansas
775. Spring (AR), City of, Arkansas
776. Springdale (AR), City of, Arkansas
777. St. Charles (AR), City of, Arkansas
778. St. Francis (AR), City of, Arkansas
779. St. Francis (AR), County of, Arkansas
780. St. Joe (AR), City of, Arkansas

781. St. Paul (AR), City of, Arkansas
782. Stamps (AR), City of, Arkansas
783. Star City (AR), City of, Arkansas
784. Stephens (AR), City of, Arkansas
785. Stone (AR), County of, Arkansas
786. Strawberry (AR), City of, Arkansas
787. Strong (AR), City of, Arkansas
788. Stuttgart (AR), City of, Arkansas
789. Subiaco (AR), City of, Arkansas
790. Success (AR), City of, Arkansas
791. Sulphur Rock (AR), City of, Arkansas
792. Sulphur Springs (AR), City of, Arkansas
793. Summit (AR), City of, Arkansas
794. Sunset (AR), City of, Arkansas
795. Swifton (AR), City of, Arkansas
796. Taylor (AR), City of, Arkansas
797. Texarkana (AR), City of, Arkansas
798. Thornton (AR), City of, Arkansas
799. Tillar (AR), City of, Arkansas
800. Tinsman (AR), City of, Arkansas
801. Tollette (AR), City of, Arkansas
802. Tontitown (AR), City of, Arkansas
803. Traskwood (AR), City of, Arkansas
804. Trumann (AR), City of, Arkansas
805. Tuckerman (AR), City of, Arkansas
806. Tull (AR), City of, Arkansas
807. Tupelo (AR), City of, Arkansas
808. Turrell (AR), City of, Arkansas
809. Twin Groves (AR), City of, Arkansas
810. Tyronza (AR), City of, Arkansas
811. Ulm (AR), City of, Arkansas
812. Union (AR), County of, Arkansas
813. Valley Springs (AR), City of, Arkansas
814. Van Buren (AR), City of, Arkansas
815. Van Buren (AR), County of, Arkansas
816. Vandervoort (AR), City of, Arkansas
817. Victoria (AR), City of, Arkansas
818. Vilonia (AR), City of, Arkansas
819. Viola (AR), City of, Arkansas
820. Wabbaseka (AR), City of, Arkansas
821. Waldenburg (AR), City of, Arkansas
822. Waldo (AR), City of, Arkansas
823. Waldron (AR), City of, Arkansas
824. Walnut Ridge (AR), City of, Arkansas
825. Ward (AR), City of, Arkansas
826. Warren (AR), City of, Arkansas
827. Washington (AR), City of, Arkansas
828. Washington (AR), County of, Arkansas
829. Watson (AR), City of, Arkansas
830. Weiner (AR), City of, Arkansas
831. Weldon (AR), City of, Arkansas
832. West Fork (AR), City of, Arkansas
833. West Memphis (AR), City of, Arkansas
834. West Point (AR), City of, Arkansas
835. Western Grove (AR), City of, Arkansas
836. Wheatley (AR), City of, Arkansas
837. Whelen Springs (AR), City of, Arkansas
838. White (AR), County of, Arkansas
839. White Hall (AR), City of, Arkansas
840. Wickes (AR), City of, Arkansas
841. Widener (AR), City of, Arkansas
842. Wiederkehr Village (AR), City of, Arkansas
843. Williford (AR), City of, Arkansas
844. Willisville (AR), City of, Arkansas
845. Wilmar (AR), City of, Arkansas
846. Wilmot (AR), City of, Arkansas
847. Wilson (AR), City of, Arkansas
848. Wilton (AR), City of, Arkansas
849. Winchester (AR), City of, Arkansas
850. Winslow (AR), City of, Arkansas
851. Winthrop (AR), City of, Arkansas
852. Woodruff (AR), County of, Arkansas
853. Wooster (AR), City of, Arkansas
854. Wrightsville (AR), City of, Arkansas
855. Wynne (AR), City of, Arkansas
856. Yellville (AR), City of, Arkansas
857. Zinc (AR), City of, Arkansas
858. Yell (AR), County of, Arkansas
859. Alameda (CA), County of, California
860. Amador (CA), County of, California
861. Anaheim (CA), City of, California

862. Butte (CA), County of, California
863. Calaveras (CA), County of, California
864. Central California Alliance for Health (CA), California
865. Chico (CA), City of, California
866. Chula Vista (CA), City of, California
867. Clearlake (CA), City of, California
868. Commission on Medical Care, d/b/a Partnership HealthPlan of California (CA), California
869. Contra Costa (CA), County of, California
870. Costa Mesa (CA), City of, California
871. Del Norte (CA), County of, California
872. Downey Unified School District (CA), California
873. Dublin (CA), City of, California
874. El Dorado (CA), County of, California
875. El Monte (CA), City of, California
876. Elk Grove Unified School District (CA), California
877. Encinitas (CA), City of, California
878. Eureka (CA), City of, California
879. Fresno (CA), County of, California
880. Fullerton (CA), City of, California
881. Glenn (CA), County of, California
882. Health Plan of San Joaquin (CA), California
883. Humboldt (CA), County of, California
884. Huntington Beach (CA), City of, California
885. Imperial (CA), County of, California
886. Inland Empire Health Plan (CA), California
887. Inyo (CA), County of, California
888. Irvine (CA), City of, California
889. Kern (CA), County of, California
890. Kern High School District (CA), California
891. La Habra (CA), City of, California
892. La Mesa (CA), City of, California
893. Laguna Beach (CA), City of, California
894. Lakeport (CA), City of, California
895. Lassen (CA), County of, California
896. Local Initiative Health Care Authority for Los Angeles County (CA), California
897. Los Angeles (CA), City of, California
898. Los Angeles (CA), County of, California
899. Madera (CA), County of, California
900. Marin (CA), County of, California
901. Mariposa (CA), County of, California
902. Mendocino (CA), County of, California
903. Merced (CA), County of, California
904. Modoc (CA), County of, California
905. Mono (CA), County of, California
906. Monterey (CA), County of, California
907. Montezuma Fire Protection District (CA), California
908. Murrieta (CA), City of, California
909. Napa (CA), County of, California
910. Nevada (CA), County of, California
911. Oakland (CA), City of, California
912. Orange (CA), County of, California
913. Oxnard (CA), City of, California
914. Placentia (CA), City of, California
915. Placer (CA), County of, California
916. Plumas (CA), County of, California
917. Riverside (CA), County of, California
918. Sacramento (CA), City of, California
919. Sacramento (CA), County of, California
920. San Benito (CA), County of, California
921. San Bernardino (CA), County of, California
922. San Clemente (CA), City of, California
923. San Diego (CA), City of, California
924. San Diego (CA), County of, California
925. San Joaquin (CA), County of, California
926. San Jose (CA), City of, California
927. San Luis Obispo (CA), County of, California
928. San Mateo (CA), County of, California
929. Santa Ana (CA), City of, California
930. Santa Barbara (CA), County of, California
931. Santa Barbara San Luis Obispo Regional Health Authority, d/b/a CenCal Health (CA), California
932. Santa Clara (CA), County of, California
933. Santa Cruz (CA), County of, California
934. Shasta (CA), County of, California

935. Siskiyou (CA), County of, California
936. Sonoma (CA), County of, California
937. Stockton (CA), City of, California
938. Sutter (CA), County of, California
939. Tehama (CA), County of, California
940. Trinity (CA), County of, California
941. Tulare (CA), County of, California
942. Tuolumne (CA), County of, California
943. Ventura (CA), County of, California
944. Ventura County Medi-Cal Managed Care Commission d/b/a Gold Coast Health Plan (CA), California
945. Westminster (CA), City of, California
946. Yolo (CA), County of, California
947. Yuba (CA), County of, California
948. Adams (CO), County of, Colorado
949. Alamosa (CO), City of, Colorado
950. Alamosa (CO), County of, Colorado
951. Arapahoe (CO), County of, Colorado
952. Aurora (CO), City of, Colorado
953. Black Hawk (CO), City of, Colorado
954. Boulder (CO), County of, Colorado
955. Brighton (CO), City of, Colorado
956. Broomfield (City and) (CO), County of, Colorado
957. Chaffee (CO), County of, Colorado
958. Commerce City (CO), City of, Colorado
959. Conejos (CO), County of, Colorado
960. Crowley (CO), County of, Colorado
961. Denver (CO), City and County of, Colorado
962. Federal Heights (CO), City of, Colorado
963. Fremont (CO), County of, Colorado
964. Greeley (CO), City of, Colorado
965. Hudson (CO), Town of, Colorado
966. Huerfano (CO), County of, Colorado
967. Jefferson, (CO), County of, Colorado
968. Lakewood (CO), City of, Colorado
969. Larimer (CO), County of, Colorado
970. Las Animas (CO), County of, Colorado
971. Mesa (CO), County of, Colorado
972. Mesa County Valley School District 51 (CO), Colorado
973. Northglenn (CO), City of, Colorado
974. Otero (CO), County of, Colorado
975. Pueblo (CO), County of, Colorado
976. Sheridan (CO), City of, Colorado
977. Teller (CO), County of, Colorado
978. Thornton (CO), City of, Colorado
979. Westminster (CO), City of, Colorado
980. Wheat Ridge (CO), City of, Colorado
981. Ansonia (CT), City of, Connecticut
982. Beacon Falls (CT), Town of, Connecticut
983. Berlin (CT), Town of, Connecticut
984. Bethlehem (CT), Town of, Connecticut
985. Bridgeport (CT), City of, Connecticut
986. Bristol (CT), City of, Connecticut
987. Coventry (CT), Town of, Connecticut
988. Danbury (CT), City of, Connecticut
989. Derby (CT), City of, Connecticut
990. East Hartford (CT), Town of, Connecticut
991. Enfield (CT), Town of, Connecticut
992. Fairfield (CT), Town of, Connecticut
993. Middlebury (CT), Town of, Connecticut
994. Middletown (CT), City of, Connecticut
995. Milford (CT), City of, Connecticut
996. Monroe (CT), Town of, Connecticut
997. Naugatuck (CT), Borough of, Connecticut
998. New Britain (CT), City of, Connecticut
999. New Haven (CT), City of, Connecticut
1000. New London (CT), City of, Connecticut
1001. New Milford (CT), Town of, Connecticut
1002. Newtown (CT), Town of, Connecticut
1003. North Haven (CT), Town of, Connecticut
1004. Norwalk (CT), City of, Connecticut
1005. Norwich (CT), City of, Connecticut
1006. Oxford (CT), Town of, Connecticut
1007. Prospect (CT), Town of, Connecticut
1008. Roxbury (CT), Town of, Connecticut
1009. Seymour (CT), Town of, Connecticut
1010. Shelton (CT), City of, Connecticut
1011. Southbury (CT), Town of, Connecticut
1012. Southington (CT), Town of, Connecticut
1013. Stratford (CT), Town of, Connecticut

1014. Thomaston (CT), Town of, Connecticut
1015. Tolland (CT), Town of, Connecticut
1016. Torrington (CT), City of, Connecticut
1017. Wallingford (CT), Town of, Connecticut
1018. Waterbury (CT), City of, Connecticut
1019. West Haven (CT), City of, Connecticut
1020. Wethersfield (CT), Town of, Connecticut
1021. Windham (CT), Town of, Connecticut
1022. Wolcott (CT), Town of, Connecticut
1023. Woodbury (CT), Town of, Connecticut
1024. Dover (DE), City of, Delaware
1025. Kent (DE), County of, Delaware
1026. Seaford (DE), City of, Delaware
1027. Sussex (DE), County of, Delaware
1028. Adel (GA), City of, Georgia
1029. Advantage Behavioral Health Systems (GA), Georgia
1030. Albany (GA), City of, Georgia
1031. Albany Area Community Service Board d/b/a Aspire Behavioral Health & Developmental Disability Services (GA), Georgia
1032. Alma (GA), City of, Georgia
1033. Appling (GA), County of, Georgia
1034. Appling d/b/a Appling Health Care System (GA), County of, Georgia
1035. Appling (GA), County of (Sheriff), Georgia
1036. Arlington (GA), City of, Georgia
1037. Athens-Clarke (GA), County of, Georgia
1038. Atkinson (GA), County of, Georgia
1039. Atlanta (GA), City of, Georgia
1040. Augusta (GA), Georgia
1041. Bacon (GA), County of, Georgia
1042. Bacon, GA, Hospital Foundation Inc. d/b/a Bacon Hospital and Health System (GA), County of, Georgia
1043. Bainbridge (GA), City of, Georgia
1044. Baldwin, GA (Sheriff) (GA), County of, Georgia
1045. Banks (GA), County of, Georgia
1046. Bartow (GA), County of, Georgia
1047. Ben Hill (GA), County of, Georgia
1048. Berrien (GA), County of, Georgia
1049. Bibb (GA), County of (Sheriff), Georgia
1050. Bibb County School District (GA), Georgia
1051. Blackshear (GA), City of, Georgia
1052. Blakely (GA), City of, Georgia
1053. Brantley (GA), County of, Georgia
1054. Brooks (GA), County of, Georgia
1055. Brunswick (GA), City of, Georgia
1056. Bulloch (GA), County of, Georgia
1057. Burke (GA), County of, Georgia
1058. Butts (GA), County of, Georgia
1059. Camden (GA), County of, Georgia
1060. Candler (GA), County of, Georgia
1061. Candler County Health Authority (GA), Georgia
1062. Carroll (GA), County of, Georgia
1063. Cartersville (GA), City of, Georgia
1064. Catoosa (GA), County of, Georgia
1065. Charlton (GA), County of, Georgia
1066. Chatham (GA), County of, Georgia
1067. Chatham County Hospital Authority (GA), Georgia
1068. Chattooga (GA), County of, Georgia
1069. Cherokee (GA), County of, Georgia
1070. Clay (GA), County of, Georgia
1071. Clayton (GA), County of, Georgia
1072. Clayton Community MH/SA/DS Service Board (GA), Georgia
1073. Clinch (GA), County of, Georgia
1074. Clinch County Hospital Authority (GA), Georgia
1075. Cobb (GA), County of, Georgia
1076. Cobb County Community Service Board (GA) Georgia
1077. Coffee (GA), County of (Sheriff), Georgia
1078. Columbia (GA), County of, Georgia
1079. Columbus (GA), City of, Georgia
1080. Community Mental Health Center of East Central Georgia d/b/a Serenity Behavioral Health Systems (GA), Georgia
1081. Community Service Board of Middle Georgia (GA), Georgia
1082. Cook (GA), County of, Georgia

1083. Crawford (GA), County of (Sheriff), Georgia
1084. Crisp (GA), County of, Georgia
1085. Crisp (GA), County of (Sheriff), Georgia
1086. Dade (GA), County of, Georgia
1087. Damascus (GA), City of, Georgia
1088. Dawson (GA), City of, Georgia
1089. Dawson (GA), County of, Georgia
1090. Decatur (GA), County of, Georgia
1091. DeKalb (GA), County of, Georgia
1092. Demorest (GA), City of, Georgia
1093. Dodge County Hospital Authority (GA), Georgia
1094. Dooly (GA), County of, Georgia
1095. Doraville (GA), City of, Georgia
1096. Dougherty (GA), County of, Georgia
1097. Dunwoody (GA), City of, Georgia
1098. Early (GA), County of, Georgia
1099. Echols (GA), County of, Georgia
1100. Effingham (GA), County of, Georgia
1101. Elbert (GA), County of, Georgia
1102. Emanuel (GA), County of, Georgia
1103. Evans (GA), County of, Georgia
1104. Evans Memorial Hospital Inc. (GA), Georgia
1105. Fannin (GA), County of, Georgia
1106. Fayette (GA), County of, Georgia
1107. Fitzgerald (GA), City of, Georgia
1108. Floyd (GA), County of, Georgia
1109. Forsyth (GA), County of, Georgia
1110. Fulton (GA), County of, Georgia
1111. Gainesville (GA), City of, Georgia
1112. Gateway Community Service Board (GA), Georgia
1113. Georgia Mountains Community Services d/b/a Avita Community Partners. GA (GA), Georgia
1114. Georgia Pines Community Service Board (GA), Georgia
1115. Glascock (GA), County of, Georgia
1116. Glynn, GA (GA), County of, Georgia
1117. Glynn, GA (GA), County of (Sheriff), Georgia
1118. Grady (GA), County of, Georgia
1119. Greene (GA), County of, Georgia
1120. Gwinnett (GA), County of, Georgia
1121. Habersham (GA), County of, Georgia
1122. Habersham County Medical Center (GA), Georgia
1123. Hall (GA), County of, Georgia
1124. Hancock (GA), County of, Georgia
1125. Harris (GA), County of (Sheriff), Georgia
1126. Heard (GA), County of, Georgia
1127. Henry (GA), County of, Georgia
1128. Highland Rivers Community Service Board d/b/a Highland Rivers Health (GA), Georgia
1129. Hospital Authority of Bainbridge and Decatur County (GA), Georgia
1130. Hospital Authority of Baxley (GA), Georgia
1131. Hospital Authority of Bleckley (GA), County of, Georgia
1132. Hospital Authority of Valdosta and Lowndes County (GA), Georgia
1133. Hospital Authority of Wayne County (GA), Georgia
1134. Houston (GA), County of, Georgia
1135. Houston (GA), County of (Sheriff), Georgia
1136. Irwin (GA), County of, Georgia
1137. Jackson (GA), County of, Georgia
1138. Jasper (GA), County of, Georgia
1139. Jeff Davis (GA), County of, Georgia
1140. Jeff Davis (GA), County of (Sheriff), Georgia
1141. Jefferson (GA), County of, Georgia
1142. Johnson (GA), County of, Georgia
1143. Jones, GA (GA), County of, Georgia
1144. Jones, GA (GA), County of (Sheriff), Georgia
1145. Lakeland (GA), City of, Georgia
1146. Lanier (GA), County of, Georgia
1147. Laurens (GA), County of, Georgia
1148. Laurens (GA), County of (Sheriff), Georgia
1149. Lee (GA), County of, Georgia

1150. Liberty (GA), County of, Georgia
1151. Lincoln (GA), County of, Georgia
1152. Long (GA), County of, Georgia
1153. Lookout Mountain Community Service Board (GA), Georgia
1154. Lowndes (GA), County of, Georgia
1155. Lumpkin (GA), County of, Georgia
1156. Macon (GA), County of, Georgia
1157. Macon Bibb (GA), County of, Georgia
1158. Madison (GA), County of, Georgia
1159. McDuffie (GA), County of, Georgia
1160. McIntosh (GA), County of, Georgia
1161. Meriwether (GA), County of, Georgia
1162. Meriwether (GA), County of (Sheriff), Georgia
1163. Middle Flint Area Community Service Board d/b/a Middle Flint Behavioral HealthCare (GA), Georgia
1164. Milledgeville (GA), City of, Georgia
1165. Monroe (GA), County of, Georgia
1166. Montgomery (GA), County of, Georgia
1167. Murray (GA), County of (Sheriff), Georgia
1168. Nashville (GA), City of, Georgia
1169. New Horizons Community Service Board (GA), Georgia
1170. Newton (GA), County of, Georgia
1171. Oconee (GA), County of, Georgia
1172. Oconee (GA), County of (Sheriff), Georgia
1173. Oglethorpe (GA), County of, Georgia
1174. Peach (GA), County of, Georgia
1175. Peach (GA), County of (Sheriff), Georgia
1176. Pierce (GA), County of, Georgia
1177. Pierce (GA), County of (Sheriff), Georgia
1178. Pike (GA), County of, Georgia
1179. Pineland Behavioral Health and Developmental Disabilities CSB (GA), Georgia
1180. Polk (GA), County of, Georgia
1181. Pooler (GA), City of, Georgia
1182. Pulaski (GA), County of, Georgia
1183. Rabun (GA), County of, Georgia
1184. Randolph (GA), County of, Georgia
1185. Richmond Hill (GA), City of, Georgia
1186. River Edge Behavioral Health (GA), Georgia
1187. Rockdale (GA), County of, Georgia
1188. Rome (GA), City of, Georgia
1189. Sandy Springs (GA), City of, Georgia
1190. Satilla Community Services d/b/a Unison Behavioral Health (GA), Georgia
1191. Savannah (GA), City of, Georgia
1192. Schley (GA), County of, Georgia
1193. Screven (GA), County of, Georgia
1194. Screven (GA), County of (Sheriff), Georgia
1195. Seminole (GA), County of, Georgia
1196. Spalding (GA), County of, Georgia
1197. Springfield (GA), City of, Georgia
1198. Stephens (GA), County of, Georgia
1199. Sumter (GA), County of, Georgia
1200. Taliaferro (GA), County of, Georgia
1201. Tattnall (GA), County of, Georgia
1202. Telfair (GA), County of (Sheriff), Georgia
1203. Tift (GA), County of, Georgia
1204. Tifton (GA), City of, Georgia
1205. Toombs (GA), County of, Georgia
1206. Towns (GA), County of, Georgia
1207. Troup (GA), County of, Georgia
1208. Twiggs (GA), County of, Georgia
1209. Union (GA), County of, Georgia
1210. Walton (GA), County of, Georgia
1211. Ware (GA), County of, Georgia
1212. Warren (GA), County of, Georgia
1213. Warwick (GA), City of, Georgia
1214. Washington (GA), County of, Georgia
1215. Wayne (GA), County of, Georgia
1216. Wayne (GA), County of (Sheriff), Georgia
1217. Whitfield (GA), County of, Georgia
1218. Wilcox (GA), County of, Georgia
1219. Wilkes (GA), County of, Georgia
1220. Wilkinson (GA), County of, Georgia
1221. Woodbury (GA), City of, Georgia
1222. Worth (GA), County of, Georgia
1223. Hawai'i (HI), County of, Hawaii

1224. Kaua'i (HI), County of, Hawaii
1225. Ada (ID), County of, Idaho
1226. Adams (ID), County of, Idaho
1227. Bannock (ID), County of, Idaho
1228. Bingham (ID), County of, Idaho
1229. Blaine (ID), County of, Idaho
1230. Boise (ID), City of, Idaho
1231. Boise (ID), County of, Idaho
1232. Bonneville (ID), County of, Idaho
1233. Camas (ID), County of, Idaho
1234. Canyon (ID), County of, Idaho
1235. Caribou (ID), County of, Idaho
1236. Cassia (ID), County of, Idaho
1237. Chubbuck (ID), City of, Idaho
1238. Elmore (ID), County of, Idaho
1239. Gooding (ID), County of, Idaho
1240. Latah (ID), County of, Idaho
1241. Minidoka (ID), County of, Idaho
1242. Owyhee (ID), County of, Idaho
1243. Payette (ID), County of, Idaho
1244. Pocatello (ID), City of, Idaho
1245. Preston (ID), City of, Idaho
1246. Twin Falls (ID), City of, Idaho
1247. Twin Falls (ID), County of, Idaho
1248. Addison (IL), Village of, Illinois
1249. Alexander (IL), County of, Illinois
1250. Anna (IL), City of, Illinois
1251. Anna Hospital Corporation d/b/a Union County Hospital (IL), Illinois
1252. Bedford Park (IL), Village of, Illinois
1253. Bellwood (IL), Village of, Illinois
1254. Bensenville (Village (IL), Illinois
1255. Benton (IL), City of, Illinois
1256. Berkeley (IL), Village of, Illinois
1257. Berwyn (IL), City of, Illinois
1258. Board of Education of East Aurora, School District 131 (IL), Illinois
1259. Board of Education of Joliet High School, District 204 (IL), Township of, Illinois
1260. Board of Education of Thornton Fractional High Schools, District 215 (IL), Township of, Illinois
1261. Board of Education of Thornton Public School District 205 (IL), Illinois
1262. Bolingbrook (IL), Village of, Illinois
1263. Bond (IL), County of, Illinois
1264. Boone (IL), County of, Illinois
1265. Bridgeview (IL), Village of, Illinois
1266. Broadview (IL), Village of, Illinois
1267. Burbank (IL), City of, Illinois
1268. Bureau (IL), County of, Illinois
1269. Calhoun (IL), County of, Illinois
1270. Carbondale (IL), City of, Illinois
1271. Champaign (IL), County of, Illinois
1272. Chicago (IL), City of, Illinois
1273. Chicago Heights (IL), City of, Illinois
1274. Chicago Ridge (IL), Village of, Illinois
1275. Chicago Board of Education District No. 299 (IL), Illinois
1276. Christian (IL), County of, Illinois
1277. Coles (IL), County of, Illinois
1278. Cook (IL), County of, Illinois
1279. Countryside (IL), City of, Illinois
1280. Dekalb (IL), County of, Illinois
1281. Dolton (IL), Village of, Illinois
1282. DuPage (IL), County of, Illinois
1283. Edwards (IL), County of, Illinois
1284. Effingham (IL), County of, Illinois
1285. Evergreen Park (IL), Village of, Illinois
1286. Forest Park (IL), Village of, Illinois
1287. Franklin (IL), County of, Illinois
1288. Franklin Park (IL), Village of, Illinois
1289. Gallatin (IL), County of, Illinois
1290. Granite City (IL), City of, Illinois
1291. Hamilton (IL), County of, Illinois
1292. Hardin (IL), County of, Illinois
1293. Harrisburg (IL), City of, Illinois
1294. Harvey (IL), City of, Illinois
1295. Harwood Heights (IL), Village of, Illinois
1296. Henry (IL), County of, Illinois
1297. Herrin (IL), City of, Illinois
1298. Hillside (IL), Village of, Illinois
1299. Hodgkins (IL), Village of, Illinois

1300. Hoffman Estates (IL), Village of, Illinois
1301. Jasper (IL), County of, Illinois
1302. Jefferson (IL), County of, Illinois
1303. Jersey (IL), County of, Illinois
1304. Johnson (IL), County of, Illinois
1305. Kane (IL), County of, Illinois
1306. Kankakee (IL), City of, Illinois
1307. Kankakee (IL), County of, Illinois
1308. Kendall (IL), County of, Illinois
1309. La Grange Park (IL), Village of, Illinois
1310. Lake (IL), County of, Illinois
1311. Lake (IL), County of (Sheriff), Illinois
1312. LaSalle (IL), County of, Illinois
1313. Lawrence (IL), County of, Illinois
1314. Lee (IL), County of, Illinois
1315. Livingston (IL), County of, Illinois
1316. Lyons (IL), Township of, Illinois
1317. Lyons (IL), Village of, Illinois
1318. Macon (IL), County of, Illinois
1319. Macoupin (IL), County of, Illinois
1320. Marion (IL), City of, Illinois
1321. Marion (IL), County of, Illinois
1322. Massac (IL), County of, Illinois
1323. Massac Memorial, LLC d/b/a Massac Memorial Hospital (IL), Illinois
1324. Maywood (IL), Village of, Illinois
1325. McCook (IL), Village of, Illinois
1326. McHenry (IL), County of, Illinois
1327. McLean (IL), County of, Illinois
1328. Melrose Park (IL), Village of, Illinois
1329. Merrionette Park (IL), Village of, Illinois
1330. Metropolis (IL), City of, Illinois
1331. North Riverside (IL), Village of, Illinois
1332. Northlake (IL), City of, Illinois
1333. Oak Lawn (IL), Village of, Illinois
1334. Oak Park (IL), Village of, Illinois
1335. Orland Park (IL), Village of, Illinois
1336. Orland Park Fire Protection District (IL), Illinois
1337. Palos Heights (IL), City of, Illinois
1338. Palos Hills (IL), City of, Illinois
1339. Pekin (IL), City of, Illinois
1340. Peoria (IL), City of, Illinois
1341. Piatt (IL), County of, Illinois
1342. Posen (IL), Village of, Illinois
1343. Princeton (IL), City of, Illinois
1344. Pulaski (IL), County of, Illinois
1345. River Forest (IL), Village of, Illinois
1346. River Grove (IL), Village of, Illinois
1347. Riverside (IL), Village of, Illinois
1348. Rockford (IL), City of, Illinois
1349. Saint Clair, IL (IL), County of, Illinois
1350. Saline (IL), County of, Illinois
1351. Sangamon (IL), County of, Illinois
1352. Schiller Park (IL), Village of, Illinois
1353. Schuyler (IL), County of, Illinois
1354. Sesser (IL), City of, Illinois
1355. Shelby (IL), County of, Illinois
1356. Stone Park (IL), Village of, Illinois
1357. Streator (IL), City of, Illinois
1358. Summit (IL), Village of, Illinois
1359. Tinley Park (IL), Village of, Illinois
1360. Union (IL), County of, Illinois
1361. Wabash (IL), County of, Illinois
1362. Washington (IL), County of, Illinois
1363. Waukegan Community Unit School District (IL), Illinois
1364. West Frankfort (IL), City of, Illinois
1365. White (IL), County of, Illinois
1366. Will (IL), County of, Illinois
1367. Williamson (IL), County of, Illinois
1368. Winnebago (IL), County of, Illinois
1369. Alexandria (IN), City of, Indiana
1370. Allen (IN), County of, Indiana
1371. Atlanta (IN), Town of, Indiana
1372. Austin (IN), City of, Indiana
1373. Beech Grove (IN), City of, Indiana
1374. Benton (IN), County of, Indiana
1375. Blackford (IN), County of, Indiana
1376. Bloomington (IN), City of, Indiana
1377. Brownstown (IN), Town of, Indiana
1378. Chandler (IN), Town of, Indiana

1379. Connersville (IN), City of, Indiana
1380. Danville (IN), Town of, Indiana
1381. Delaware (IN), County of, Indiana
1382. Elwood (IN), City of, Indiana
1383. Evansville (IN), City of, Indiana
1384. Fayette (IN), County of, Indiana
1385. Fishers (IN), City of, Indiana
1386. Fort Wayne (IN), City of, Indiana
1387. Fort Wayne Community Schools (IN), Indiana
1388. Franklin (IN), City of, Indiana
1389. Franklin (IN), County of, Indiana
1390. Gary (IN), City of, Indiana
1391. Greenwood (IN), City of, Indiana
1392. Hammond (IN), City of, Indiana
1393. Harrison (IN), County of, Indiana
1394. Hartford (IN), City of, Indiana
1395. Howard (IN), County of, Indiana
1396. Huntington (IN), City of, Indiana
1397. Indianapolis (IN), City of, Indiana
1398. Jackson (IN), County of, Indiana
1399. Jasper (IN), City of, Indiana
1400. Jay (IN), County of, Indiana
1401. Jeffersonville (IN), City of, Indiana
1402. Jennings (IN), County of, Indiana
1403. Kokomo (IN), City of, Indiana
1404. Lafayette (IN), City of, Indiana
1405. Lake (IN), County of, Indiana
1406. Laporte (IN), County of, Indiana
1407. Lawrence (IN), City of, Indiana
1408. Lawrence (IN), County of, Indiana
1409. Logansport (IN), City of, Indiana
1410. Madison (IN), City of, Indiana
1411. Madison (IN), County of, Indiana
1412. Marion (IN), County of, Indiana
1413. Marshall (IN), County of, Indiana
1414. Martinsville (IN), City of, Indiana
1415. Mishawaka (IN), City of, Indiana
1416. Monroe (IN), County of, Indiana
1417. Montpelier (IN), City of, Indiana
1418. Mooresville (IN), Town of, Indiana
1419. Morgan (IN), County of, Indiana
1420. Muncie (IN), City of, Indiana
1421. New Albany (IN), City of, Indiana
1422. New Castle (IN), City of, Indiana
1423. Noblesville (IN), City of, Indiana
1424. Orange (IN), County of, Indiana
1425. Pendleton (IN), Town of, Indiana
1426. Penn-Harris-Madison School Corporation (IN), Indiana
1427. Peru (IN), City of, Indiana
1428. Plainfield (IN), Town of, Indiana
1429. Porter (IN), County of, Indiana
1430. Portland (IN), City of, Indiana
1431. Pulaski (IN), County of, Indiana
1432. Richmond (IN), City of, Indiana
1433. Ripley (IN), County of, Indiana
1434. School City of Mishawaka (IN), Indiana
1435. Scott (IN), County of, Indiana
1436. Saint Joseph (IN), County of, Indiana
1437. Seymour (IN), City of, Indiana
1438. Shelbyville (IN), City of, Indiana
1439. Sheridan (IN), Town of, Indiana
1440. Smith-Green Community Schools (IN), Indiana
1441. South Bend (IN), City of, Indiana
1442. South Bend Community School Corporation (IN), Indiana
1443. Starke (IN), County of, Indiana
1444. Terre Haute (IN), City of, Indiana
1445. Tippecanoe (IN), County of, Indiana
1446. Upland (IN), Town of, Indiana
1447. Vanderburgh (IN), County of, Indiana
1448. Vigo (IN), County of, Indiana
1449. West Lafayette (IN), City of, Indiana
1450. Westfield (IN), City of, Indiana
1451. Zionsville (IN), Town of, Indiana
1452. Adair (IA), County of, Iowa
1453. Adams (IA), County of, Iowa
1454. Allamakee (IA), County of, Iowa
1455. Appanoose (IA), County of, Iowa
1456. Audubon (IA), County of, Iowa
1457. Benton (IA), County of, Iowa

1458. Black Hawk (IA), County of, Iowa
1459. Bremer (IA), County of, Iowa
1460. Buchanan (IA), County of, Iowa
1461. Buena Vista (IA), County of, Iowa
1462. Calhoun (IA), County of, Iowa
1463. Carroll (IA), County of, Iowa
1464. Cedar (IA), County of, Iowa
1465. Cerro Gordo (IA), County of, Iowa
1466. Cherokee (IA), County of, Iowa
1467. Chickasaw (IA), County of, Iowa
1468. Clay (IA), County of, Iowa
1469. Clayton (IA), County of, Iowa
1470. Clinton (IA), County of, Iowa
1471. Dallas (IA), County of, Iowa
1472. Delaware (IA), County of, Iowa
1473. Des Moines (IA), County of, Iowa
1474. Emmet (IA), County of, Iowa
1475. Fayette (IA), County of, Iowa
1476. Fremont (IA), County of, Iowa
1477. Hamilton (IA), County of, Iowa
1478. Hancock (IA), County of, Iowa
1479. Hardin (IA), County of, Iowa
1480. Harrison (IA), County of, Iowa
1481. Henry (IA), County of, Iowa
1482. Howard (IA), County of, Iowa
1483. Humboldt (IA), County of, Iowa
1484. Ida (IA), County of, Iowa
1485. Jasper (IA), County of, Iowa
1486. Johnson (IA), County of, Iowa
1487. Jones (IA), County of, Iowa
1488. Keokuk (IA), County of, Iowa
1489. Lee (IA), County of, Iowa
1490. Lyon (IA), County of, Iowa
1491. Madison (IA), County of, Iowa
1492. Mahaska (IA), County of, Iowa
1493. Marion (IA), County of, Iowa
1494. Mills (IA), County of, Iowa
1495. Mitchell (IA), County of, Iowa
1496. Monroe (IA), County of, Iowa
1497. Montgomery (IA), County of, Iowa
1498. Muscatine (IA), County of, Iowa
1499. O'Brien (IA), County of, Iowa
1500. Osceola (IA), County of, Iowa
1501. Plymouth (IA), County of, Iowa
1502. Pocahontas (IA), County of, Iowa
1503. Polk (IA), County of, Iowa
1504. Pottawattamie (IA), County of, Iowa
1505. Poweshiek (IA), County of, Iowa
1506. Sac (IA), County of, Iowa
1507. Scott (IA), County of, Iowa
1508. Shelby (IA), County of, Iowa
1509. Sioux (IA), County of, Iowa
1510. Tama (IA), County of, Iowa
1511. Taylor (IA), County of, Iowa
1512. Union (IA), County of, Iowa
1513. Webster (IA), County of, Iowa
1514. Winnebago (IA), County of, Iowa
1515. Winneshiek (IA), County of, Iowa
1516. Worth (IA), County of, Iowa
1517. Wright (IA), County of, Iowa
1518. Allen (KS), County of, Kansas
1519. Barber (KS), County of, Kansas
1520. Bourbon (KS), County of, Kansas
1521. Cherokee (KS), County of, Kansas
1522. Cowley (KS), County of, Kansas
1523. Crawford (KS), County of, Kansas
1524. Dickinson (KS), County of, Kansas
1525. Elk (KS), County of, Kansas
1526. Elkhart (KS), City of, Kansas
1527. Finney (KS), County of, Kansas
1528. Ford (KS), County of, Kansas
1529. Grant (KS), County of, Kansas
1530. Greenwood (KS), County of, Kansas
1531. Harvey (KS), County of, Kansas
1532. Johnson (KS), County of, Kansas
1533. Leavenworth (KS), County of, Kansas
1534. Manter (KS), City of, Kansas
1535. Meade (KS), County of, Kansas
1536. Montgomery (KS), County of, Kansas
1537. Morton (KS), County of, Kansas
1538. Neosho (KS), County of, Kansas
1539. Overland Park (KS), City of, Kansas

1540. Pratt (KS), County of, Kansas
1541. Reno (KS), County of, Kansas
1542. Sedgwick, KS, Commission (KS), County of, Kansas
1543. Seward (KS), County of, Kansas
1544. Shawnee (KS), County of, Kansas
1545. Stanton (KS), County of, Kansas
1546. Ulysses (KS), City of, Kansas
1547. Wabaunsee (KS), County of, Kansas
1548. Wichita (KS), City of, Kansas
1549. Wyandotte County/Kansas City (KS), Unified Government of, Kansas
1550. Adair (KY), County of (Fiscal Court), Kentucky
1551. Allen (KY), County of (Fiscal Court), Kentucky
1552. Anderson (KY), County of (Fiscal Court), Kentucky
1553. Ballard (KY), County of, Kentucky
1554. Bath (KY), County of (Fiscal Court), Kentucky
1555. Bell (KY), County of (Fiscal Court), Kentucky
1556. Bellefonte (KY), City of, Kentucky
1557. Benham (KY), City of, Kentucky
1558. Board of Education of Breathitt Public Schools (KY), County of, Kentucky
1559. Board of Education of Bullitt Public Schools (KY), County of, Kentucky
1560. Board of Education of Estill Public Schools (KY), County of, Kentucky
1561. Board of Education of Fayette Public Schools. (KY), County of, Kentucky
1562. Board of Education of Harrison Public Schools (KY), County of, Kentucky
1563. Board of Education of Hart Public Schools (KY), County of, Kentucky
1564. Board of Education of Jefferson Public Schools (KY), County of, Kentucky
1565. Board of Education of Johnson Public School District ((KY), County of, Kentucky
1566. Board of Education of LaRue Public Schools (KY), County of, Kentucky
1567. Board of Education of Lawrence Public Schools (KY), County of, Kentucky
1568. Board of Education of Martin Public Schools (KY), County of, Kentucky
1569. Board of Education of Menifee Public Schools (KY), County of, Kentucky
1570. Board of Education of Owsley Public Schools (KY), County of, Kentucky
1571. Board of Education of Wolfe Public Schools (KY), County of, Kentucky
1572. Boone (KY), County of (Fiscal Court), Kentucky
1573. Bourbon (KY), County of (Fiscal Court), Kentucky
1574. Boyd (KY), County of, Kentucky
1575. Boyle (KY), County of (Fiscal Court), Kentucky
1576. Bracken (KY), County of (Fiscal Court), Kentucky
1577. Breathitt (KY), County of (Fiscal Court), Kentucky
1578. Breckinridge (KY), County of (Fiscal Court), Kentucky
1579. Buckhorn (KY), City of, Kentucky
1580. Bullitt (KY), County of (Fiscal Court), Kentucky
1581. Caldwell (KY), County of (Fiscal Court), Kentucky
1582. Calloway (KY), County of, Kentucky
1583. Campbell (KY), County of (Fiscal Court), Kentucky
1584. Campbellsville (KY), City of, Kentucky
1585. Carlisle (KY), County of (Fiscal Court), Kentucky
1586. Carter (KY), County of (Fiscal Court), Kentucky
1587. Casey (KY), County of (Fiscal Court), Kentucky
1588. Christian (KY), County of (Fiscal Court), Kentucky
1589. Clark (KY), County of (Fiscal Court), Kentucky
1590. Clay (KY), County of (Fiscal Court), Kentucky

1591. Clinton (KY), County of (Fiscal Court), Kentucky
1592. Columbia (KY), City of, Kentucky
1593. Covington (KY), City of, Kentucky
1594. Cumberland (KY), County of (Fiscal Court), Kentucky
1595. Daviess (KY), County of (Fiscal Court), Kentucky
1596. Edmonson (KY), County of (Fiscal Court), Kentucky
1597. Elliott (KY), County of (Fiscal Court), Kentucky
1598. Estill (KY), County of, Kentucky
1599. Estill Emergency Medical Services (KY), County of, Kentucky
1600. Fleming (KY), County of (Fiscal Court), Kentucky
1601. Florence (KY), City of, Kentucky
1602. Floyd (KY), County of, Kentucky
1603. Franklin (KY), County of (Fiscal Court), Kentucky
1604. Fulton (KY), County of (Fiscal Court), Kentucky
1605. Gallatin (KY), County of (Fiscal Court), Kentucky
1606. Garrard (KY), County of (Fiscal Court), Kentucky
1607. Grant (KY), County of (Fiscal Court), Kentucky
1608. Grayson (KY), City of, Kentucky
1609. Green (KY), County of (Fiscal Court), Kentucky
1610. Greenup (KY), City of, Kentucky
1611. Greenup (KY), County of, Kentucky
1612. Hancock (KY), County of (Fiscal Court), Kentucky
1613. Hardin (KY), County of (Fiscal Court), Kentucky
1614. Hardin Memorial Hospital (KY, Kentucky
1615. Harlan (KY), City of, Kentucky
1616. Harlan (KY), County of (Fiscal Court), Kentucky
1617. Harrison (KY), County of (Fiscal Court), Kentucky
1618. Hart (KY), County of (Fiscal Court), Kentucky
1619. Henderson (KY), City of, Kentucky
1620. Henderson (KY), County of (Fiscal Court), Kentucky
1621. Henry (KY), County of (Fiscal Court), Kentucky
1622. Hickman (KY), County of (Fiscal Court), Kentucky
1623. Hillview (KY), City of, Kentucky
1624. Hopkins (KY), County of (Fiscal Court), Kentucky
1625. Hyden (KY), City of, Kentucky
1626. Inez (KY), City of, Kentucky
1627. Jamestown (KY), City of, Kentucky
1628. Jenkins (KY), City of, Kentucky
1629. Jessamine (KY), County of (Fiscal Court), Kentucky
1630. Kenton (KY), County of (Discal Court), Kentucky
1631. Kentucky River District Health Department (KY), Kentucky
1632. Knott (KY), County of, Kentucky
1633. Knox (KY), County of (Fiscal Court), Kentucky
1634. LaRue (KY), County of (Fiscal Court), Kentucky
1635. Laurel (KY), County of, Kentucky
1636. Lawrence (KY), County of, Kentucky
1637. Lee (KY), County of (Fiscal Court), Kentucky
1638. Leslie (KY), County of (Fiscal Court), Kentucky
1639. Letcher (KY), County of (Fiscal Court), Kentucky
1640. Lewis (KY), County of (Fiscal Court), Kentucky
1641. Lexington-Fayette, KY Urban Government (KY), County of, Kentucky
1642. Lincoln (KY), County of (Fiscal Court), Kentucky
1643. Logan (KY), County of (Fiscal Court), Kentucky
1644. London (KY), City of, Kentucky

1645. Louisville-Jefferson (KY), County of, Kentucky
1646. Loyall (KY), City of, Kentucky
1647. Lynch (KY), City of, Kentucky
1648. Madison (KY), County of (Fiscal Court), Kentucky
1649. Manchester (KY), City of, Kentucky
1650. Marshall (KY), County of (Fiscal Court), Kentucky
1651. Martin (KY), County of (Fiscal Court), Kentucky
1652. Mason (KY), County of (Fiscal Court), Kentucky
1653. McCracken (KY), County of, Kentucky
1654. McLean (KY), County of (Fiscal Court), Kentucky
1655. Meade (KY), County of (Fiscal Court), Kentucky
1656. Mercer (KY), County of (Fiscal Court), Kentucky
1657. Monroe (KY), County of (Fiscal Court), Kentucky
1658. Montgomery (KY), County of (Fiscal Court), Kentucky
1659. Morehead (KY), City of, Kentucky
1660. Morgan (KY), County of (Fiscal Court), Kentucky
1661. Morganfield (KY), City of, Kentucky
1662. Mt. Washington (KY), City of, Kentucky
1663. Muhlenberg (KY), County of (Fiscal Court), Kentucky
1664. Murray (KY), City of, Kentucky
1665. Nicholas (KY), County of (Fiscal Court), Kentucky
1666. Ohio (KY), County of (Fiscal Court), Kentucky
1667. Oldham (KY), County of (Fiscal Court), Kentucky
1668. Owen (KY), County of (Fiscal Court), Kentucky
1669. Owensboro (KY), City of, Kentucky
1670. Owsley (KY), County of (Fiscal Court), Kentucky
1671. Paducah (KY), City of, Kentucky
1672. Paintsville (KY), City of, Kentucky
1673. Pendleton (KY), County of (Fiscal Court), Kentucky
1674. Perry (KY), County of, Kentucky
1675. Pike (KY), County of, Kentucky
1676. Pineville (KY), City of, Kentucky
1677. Pippa Passes (KY), City of, Kentucky
1678. Powell (KY), County of (Fiscal Court), Kentucky
1679. Prestonsburg (KY), City of, Kentucky
1680. Pulaski (KY), County of, Kentucky
1681. Rowan (KY), County of (Fiscal Court), Kentucky
1682. Russel Springs (KY), City of, Kentucky
1683. Russell (Fiscal Court) (KY), County of, Kentucky
1684. Russell (KY), City of, Kentucky
1685. Scott (KY), County of (Fiscal Court), Kentucky
1686. Shelby (KY), County of (Fiscal Court), Kentucky
1687. Shepherdsville (KY), City of, Kentucky
1688. South Shore (KY), City of, Kentucky
1689. Spencer (KY), County of (Fiscal Court), Kentucky
1690. Taylor (KY), County of (Fiscal Court), Kentucky
1691. Todd (KY), County of (Fiscal Court), Kentucky
1692. Union (KY), County of (Fiscal Court), Kentucky
1693. Vanceburg (KY), City of, Kentucky
1694. Warfield (KY), City of, Kentucky
1695. Warren (KY), County of, Kentucky
1696. Wayne, KY Fiscal Court (KY), County of, Kentucky
1697. Webster (KY), County of (Fiscal Court), Kentucky
1698. West Liberty (KY), City of, Kentucky
1699. Whitesburg (KY), City of, Kentucky
1700. Whitley (KY), County of (Fiscal Court), Kentucky
1701. Winchester (KY), City of, Kentucky

1702. Wolfe (KY), County of (Fiscal Court), Kentucky
1703. Woodford (KY), County of (Fiscal Court), Kentucky
1704. Worthington (KY), City of, Kentucky
1705. Androscoggin (ME), County of, Maine
1706. Aroostook (ME), County of, Maine
1707. Auburn (ME), City of, Maine
1708. Augusta (ME), City of, Maine
1709. Bangor (ME), City of, Maine
1710. Biddeford (ME), City of, Maine
1711. Board of Education of Bangor School Department (ME), Maine
1712. Board of Education of Cape Elizabeth School Department (ME), Maine
1713. Board of Education of Ellsworth School Department (ME), Maine
1714. Board of Education of Maine Regional School Unit ("RSU") 9 (ME), Maine
1715. Board of Education of Maine RSU 10 (ME), Maine
1716. Board of Education of Maine RSU 13 (ME), Maine
1717. Board of Education of Maine RSU 25 (ME), Maine
1718. Board of Education of Maine RSU 26 (ME), Maine
1719. Board of Education of Maine RSU 29 (ME), Maine
1720. Board of Education of Maine RSU 34 (ME), Maine
1721. Board of Education of Maine RSU 40 (ME), Maine
1722. Board of Education of Maine RSU 50 (ME), Maine
1723. Board of Education of Maine RSU 57 (ME), Maine
1724. Board of Education of Maine RSU 60 (ME), Maine
1725. Board of Education of Maine RSU 71 (ME), Maine
1726. Board of Education of Maine SAD 6 (ME), Maine
1727. Board of Education of Maine School Administrative District ("SAD") 11 (ME), Maine
1728. Board of Education of Maine SAD 15 (ME), Maine
1729. Board of Education of Maine SAD 28/Five Town Central School District (ME), Maine
1730. Board of Education of Maine SAD 35 (ME), Maine
1731. Board of Education of Maine SAD 44 (ME), Maine
1732. Board of Education of Maine SAD 53 (ME), Maine
1733. Board of Education of Maine SAD 55 (ME), Maine
1734. Board of Education of Maine SAD 61 (ME), Maine
1735. Board of Education of Maine SAD 72 (ME), Maine
1736. Board of Education of Portland School Department (ME), Maine
1737. Board of Education of Scarborough School Department (ME), Maine
1738. Board of Education of South Portland School Department (ME), Maine
1739. Board of Education of St. George Municipal School District (ME), Maine
1740. Board of Education of Waterville School Department (ME), Maine
1741. Calais (ME), City of, Maine
1742. Cumberland (ME), County of, Maine
1743. Kennebec (ME), County of, Maine
1744. Knox (ME), County of, Maine
1745. Lewiston (ME), City of, Maine
1746. Lincoln (ME), County of, Maine
1747. Penobscot (ME), County of, Maine
1748. Portland (ME), City of, Maine
1749. Rockland (ME), City of, Maine
1750. Saco (ME), City of, Maine
1751. Sagadahoc (ME), County of, Maine
1752. Sanford (ME), City of, Maine
1753. Somerset (ME), County of, Maine
1754. Waldo (ME), County of, Maine
1755. Washington (ME), County of, Maine

1756. Waterville (ME), City of, Maine
1757. York (ME), County of, Maine
1758. Aberdeen (MD), City of, Maryland
1759. Allegany (MD), County of, Maryland
1760. Annapolis (MD), City of, Maryland
1761. Anne Arundel (MD), County of, Maryland
1762. Baltimore (MD), County of, Maryland
1763. Baltimore (MD), City of, Maryland
1764. Baltimore City Board of School Commissioners (MD), Maryland
1765. Bel Air (MD), City of, Maryland
1766. Berlin (MD), City of, Maryland
1767. Bowie (MD), City of, Maryland
1768. Calvert (MD), County of, Maryland
1769. Cambridge (MD), City of, Maryland
1770. Caroline (MD), County of, Maryland
1771. Carroll (MD), County of, Maryland
1772. Cecil (MD), County of, Maryland
1773. Charles (MD), County of, Maryland
1774. Charlestown (MD), City of, Maryland
1775. Cottage City (MD), Town of, Maryland
1776. Cumberland (MD), City of, Maryland
1777. Dorchester (MD), County of, Maryland
1778. Forest Heights (MD), Town of, Maryland
1779. Frederick (MD), City of, Maryland
1780. Frederick (MD), County of, Maryland
1781. Frostburg (MD), City of, Maryland
1782. Garrett (MD), County of, Maryland
1783. Grantsville (MD), City of, Maryland
1784. Hagerstown (MD), City of, Maryland
1785. Harford (MD), County of, Maryland
1786. Havre De Grace (MD), City of, Maryland
1787. Howard (MD), County of, Maryland
1788. Laurel (MD), City of, Maryland
1789. Montgomery (MD), County of, Maryland
1790. Mountain Lake Park (MD), City of, Maryland
1791. North Brentwood (MD), Town of, Maryland
1792. North East (MD), City of, Maryland
1793. Oakland (MD), City of, Maryland
1794. Perryville (MD), City of, Maryland
1795. Prince George's (MD), County of, Maryland
1796. Rockville (MD), City of (Mayor and Common Council), Maryland
1797. Saint Mary's (MD), County of, Maryland
1798. Seat Pleasant (MD), City of, Maryland
1799. Somerset (MD), County of, Maryland
1800. Talbot (MD), County of, Maryland
1801. Upper Marlboro (MD), Town of, Maryland
1802. Vienna (MD), City of, Maryland
1803. Washington (MD), County of, Maryland
1804. Westminster (MD), City of, (Mayor and Common Council) (MD), Maryland
1805. Wicomico (MD), County of, Maryland
1806. Acushnet (MA), Town of, Massachusetts
1807. Agawam (MA), Town of, Massachusetts
1808. Amesbury (MA), City of, Massachusetts
1809. Andover (MA), Town of, Massachusetts
1810. Aquinnah (MA), Town of, Massachusetts
1811. Athol (MA), Town of, Massachusetts
1812. Auburn (MA), Town of, Massachusetts
1813. Ayer (MA), Town of, Massachusetts
1814. Barnstable (MA), Town of, Massachusetts
1815. Belchertown (MA), Town of, Massachusetts
1816. Beverly (MA), City of, Massachusetts
1817. Billerica (MA), Town of, Massachusetts
1818. Boston (MA), City of, Massachusetts
1819. Boston Housing Authority (MA), Massachusetts
1820. Boston Public Health Commission (MA), Massachusetts
1821. Braintree (MA), Town of, Massachusetts
1822. Brewster (MA), Town of, Massachusetts
1823. Bridgewater (MA), Town of, Massachusetts
1824. Brockton (MA), City of, Massachusetts
1825. Brookline (MA), Town of, Massachusetts
1826. Cambridge (MA), City of, Massachusetts
1827. Canton (MA), Town of, Massachusetts
1828. Carver (MA), Town of, Massachusetts
1829. Charlton (MA), Town of, Massachusetts
1830. Chelmsford (MA), Town of, Massachusetts

1831. Chelsea (MA), City of, Massachusetts
1832. Chicopee (MA), City of, Massachusetts
1833. Clarksburg (MA), Town of, Massachusetts
1834. Clinton (MA), Town of, Massachusetts
1835. Danvers (MA), Town of, Massachusetts
1836. Dedham (MA), Town of, Massachusetts
1837. Dennis (MA), Town of, Massachusetts
1838. Douglas (MA), Town of, Massachusetts
1839. Dudley (MA), Town of, Massachusetts
1840. East Bridgewater (MA), Town of, Massachusetts
1841. Eastham (MA), Town of, Massachusetts
1842. Easthampton (MA), City of, Massachusetts
1843. Easton (MA), Town of, Massachusetts
1844. Everett (MA), City of, Massachusetts
1845. Fairhaven (MA), Town of, Massachusetts
1846. Fall River (MA), City of, Massachusetts
1847. Falmouth (MA), Town of, Massachusetts
1848. Fitchburg (MA), City of, Massachusetts
1849. Framingham (MA), City of, Massachusetts
1850. Freetown (MA), Town of, Massachusetts
1851. Georgetown (MA), Town of, Massachusetts
1852. Gloucester (MA), City of, Massachusetts
1853. Grafton (MA), Town of, Massachusetts
1854. Greenfield (MA), City of, Massachusetts
1855. Hanson (MA), Town of, Massachusetts
1856. Haverhill (MA), City of, Massachusetts
1857. Holliston (MA), Town of, Massachusetts
1858. Holyoke (MA), City of, Massachusetts
1859. Hopedale (MA), Town of, Massachusetts
1860. Hull (MA), Town of, Massachusetts
1861. Kingston (MA), Town of, Massachusetts
1862. Lakeville (MA), Town of, Massachusetts
1863. Leicester (MA), Town of, Massachusetts
1864. Leominster (MA), City of, Massachusetts
1865. Leverett (MA), Town of, Massachusetts
1866. Longmeadow (MA), Town of, Massachusetts
1867. Lowell (MA), City of, Massachusetts
1868. Ludlow (MA), Town of, Massachusetts
1869. Lunenberg (MA), Town of, Massachusetts
1870. Lynn (MA), City of, Massachusetts
1871. Lynnfield (MA), Town of, Massachusetts
1872. Malden (MA), City of, Massachusetts
1873. Marblehead (MA), Town of, Massachusetts
1874. Marshfield (MA), Town of, Massachusetts
1875. Mashpee (MA), Town of, Massachusetts
1876. Mattapoisett (MA), Town of, Massachusetts
1877. Medford (MA), City of, Massachusetts
1878. Melrose (MA), City of, Massachusetts
1879. Methuen (MA), City of, Massachusetts
1880. Middleborough (MA), Town of, Massachusetts
1881. Milford (MA), Town of, Massachusetts
1882. Millbury (MA), Town of, Massachusetts
1883. Millis (MA), Town of, Massachusetts
1884. Nantucket (MA), Town of, Massachusetts
1885. Natick (MA), Town of, Massachusetts
1886. New Bedford (MA), City of, Massachusetts
1887. Newburyport (MA), City of, Massachusetts
1888. North Adams (MA), City of, Massachusetts
1889. North Andover (MA), Town of, Massachusetts
1890. North Attleborough (MA), Town of, Massachusetts
1891. North Reading (MA), Town of, Massachusetts
1892. Northampton (MA), City of, Massachusetts
1893. Northbridge (MA), Town of, Massachusetts
1894. Norton (MA), Town of, Massachusetts
1895. Norwell (MA), Town of, Massachusetts
1896. Norwood (MA), Town of, Massachusetts
1897. Orange (MA), Town of, Massachusetts
1898. Oxford (MA), Town of, Massachusetts
1899. Palmer (MA), Town of, Massachusetts
1900. Peabody (MA), City of, Massachusetts
1901. Pembroke (MA), Town of, Massachusetts
1902. Pittsfield (MA), City of, Massachusetts
1903. Plainville (MA), Town of, Massachusetts
1904. Plymouth (MA), Town of, Massachusetts
1905. Provincetown (MA), Town of, Massachusetts

1906. Quincy (MA), City of, Massachusetts
1907. Randolph (MA), Town of, Massachusetts
1908. Rehoboth (MA), Town of, Massachusetts
1909. Revere (MA), City of, Massachusetts
1910. Rockland (MA), Town of, Massachusetts
1911. Salem (MA), City of, Massachusetts
1912. Salisbury (MA), Town of, Massachusetts
1913. Sandwich (MA), Town of, Massachusetts
1914. Scituate (MA), Town of, Massachusetts
1915. Seekonk (MA), Town of, Massachusetts
1916. Sheffield (MA), Town of, Massachusetts
1917. Shirley (MA), Town of, Massachusetts
1918. Somerset (MA), Town of, Massachusetts
1919. Somerville (MA), City of, Massachusetts
1920. South Hadley (MA), Town of, Massachusetts
1921. Southbridge (MA), Town of, Massachusetts
1922. Spencer (MA), Town of, Massachusetts
1923. Springfield (MA), City of, Massachusetts
1924. Stoneham (MA), Town of, Massachusetts
1925. Stoughton (MA), Town of, Massachusetts
1926. Sturbridge (MA), Town of, Massachusetts
1927. Sudbury (MA), Town of, Massachusetts
1928. Sutton (MA), Town of, Massachusetts
1929. Swampscott (MA), Town of, Massachusetts
1930. Templeton (MA), Town of, Massachusetts
1931. Tewksbury (MA), Town of, Massachusetts
1932. Truro (MA), Town of, Massachusetts
1933. Tyngsborough (MA), Town of, Massachusetts
1934. Upton (MA), Town of, Massachusetts
1935. Wakefield (MA), Town of, Massachusetts
1936. Walpole (MA), Town of, Massachusetts
1937. Ware (MA), Town of, Massachusetts
1938. Warren (MA), Town of, Massachusetts
1939. Watertown (MA), Town of, Massachusetts
1940. Wellfleet (MA), Town of, Massachusetts
1941. West Boylston (MA), Town of, Massachusetts
1942. West Bridgewater (MA), Town of, Massachusetts
1943. West Springfield (MA), Town of, Massachusetts
1944. West Tisbury (MA), Town of, Massachusetts
1945. Westborough (MA), Town of, Massachusetts
1946. Westford (MA), Town of, Massachusetts
1947. Weymouth (MA), Town of, Massachusetts
1948. Williamsburg (MA), Town of, Massachusetts
1949. Wilmington (MA), Town of, Massachusetts
1950. Winchendon (MA), Town of, Massachusetts
1951. Winthrop (MA), Town of, Massachusetts
1952. Woburn (MA), City of, Massachusetts
1953. Worcester (MA), City of, Massachusetts
1954. Alcona (MI), County of, Michigan
1955. Alger (MI), County of, Michigan
1956. Alpena (MI), County of, Michigan
1957. Antrim (MI), County of, Michigan
1958. Arenac (MI), County of, Michigan
1959. Baraga (MI), County of, Michigan
1960. Bay (MI), County of, Michigan
1961. Benzie (MI), County of, Michigan
1962. Berrien (MI), County of, Michigan
1963. Branch (MI), County of, Michigan
1964. Calhoun (MI), County of, Michigan
1965. Canton (MI), Charter Township of, Michigan
1966. Cass (MI), County of, Michigan
1967. Charlevoix (MI), County of, Michigan
1968. Cheboygan, (MI), County of, Michigan
1969. Chippewa (MI), County of, Michigan
1970. Clinton (MI), County of, Michigan
1971. Clinton (MI), Charter Township of, Michigan
1972. Crawford (MI), County of, Michigan
1973. Delta (MI), County of, Michigan
1974. Detroit (MI), City of, Michigan
1975. Detroit Wayne Mental Health Authority (MI), Michigan
1976. Dickinson (MI), County of, Michigan
1977. East Lansing (MI), City of, Michigan

1978. Eaton (MI), County of, Michigan
1979. Escanaba (MI), City of, Michigan
1980. Flint (MI), City of, Michigan
1981. Genesee (MI), County of, Michigan
1982. Grand Rapids (MI), City of, Michigan
1983. Grand Traverse (MI), County of, Michigan
1984. Gratiot (MI), County of, Michigan
1985. Harrison (MI), Township of, Michigan
1986. Hillsdale (MI), County of, Michigan
1987. Houghton (MI), County of, Michigan
1988. Huron (MI), Charter Township of, Michigan
1989. Ingham (MI), County of, Michigan
1990. Ionia (MI), County of, Michigan
1991. Iosco (MI), County of, Michigan
1992. Iron (MI), County of, Michigan
1993. Iron Mountain (MI), City of, Michigan
1994. Isabella (MI), County of, Michigan
1995. Jackson (MI), City of, Michigan
1996. Kalamazoo (MI), County of, Michigan
1997. Kent (MI), County of, Michigan
1998. Lake (MI), County of, Michigan
1999. Lansing (MI), City of, Michigan
2000. Leelanau (MI), County of, Michigan
2001. Lenawee (MI), County of, Michigan
2002. Livingston (MI), County of, Michigan
2003. Livonia (MI), City of, Michigan
2004. Luce (MI), County of, Michigan
2005. Macomb (MI), County of, Michigan
2006. Manistee (MI), County of, Michigan
2007. Marquette (MI), County of, Michigan
2008. Mason (MI), County of, Michigan
2009. Monroe (MI), County of, Michigan
2010. Montcalm (MI), County of, Michigan
2011. Montmorency (MI), County of, Michigan
2012. Muskegon (MI), County of, Michigan
2013. Newaygo (MI), County of, Michigan
2014. Northville (MI), Charter Township of, Michigan
2015. Oakland (MI), County of, Michigan
2016. Oceana (MI), County of, Michigan
2017. Ogemaw (MI), County of, Michigan
2018. Ontonagon (MI), County of, Michigan
2019. Osceola (MI), County of, Michigan
2020. Otsego (MI), County of, Michigan
2021. Pittsfield (MI), Township of, Michigan
2022. Pontiac (MI), City of, Michigan
2023. Presque Isle (MI), County of, Michigan
2024. Romulus (MI), City of, Michigan
2025. Roscommon (MI), County of, Michigan
2026. Saginaw (MI), County of, Michigan
2027. Saint Clair (MI), County of, Michigan
2028. Sanilac (MI), County of, Michigan
2029. Sault Sainte Marie (MI), City of, Michigan
2030. Shiawassee (MI), County of, Michigan
2031. Sterling Heights (MI), City of, Michigan
2032. Traverse (MI), City of, Michigan
2033. Tuscola (MI), County of, Michigan
2034. Van Buren (MI), Charter Township of, Michigan
2035. Warren (MI), City of, Michigan
2036. Washtenaw (MI), County of, Michigan
2037. Wayne (MI), City of, Michigan
2038. Wayne (MI), County of, Michigan
2039. Westland (MI), City of, Michigan
2040. Wexford (MI), County of, Michigan
2041. Anoka (MN), County of, Minnesota
2042. Beltrami (MN), County of, Minnesota
2043. Big Stone (MN), County of, Minnesota
2044. Board of Education of Minnetonka School District No. 276 (ME), Maine
2045. Carlton (MN), County of, Minnesota
2046. Carver (MN), County of, Minnesota
2047. Coon Rapids (MN), City of, Minnesota
2048. Dakota (MN), County of, Minnesota
2049. Douglas (MN), County of, Minnesota
2050. Duluth (MN), City of, Minnesota
2051. Freeborn (MN), County of, Minnesota
2052. Hennepin (MN), County of, Minnesota
2053. Itasca (MN), County of, Minnesota
2054. McLeod (MN), County of, Minnesota
2055. Meeker (MN), County of, Minnesota

2056. Minneapolis (MN), Minnesota
2057. Minnesota Prairie Health Alliance (MN), Minnesota
2058. Morrison (MN), County of, Minnesota
2059. Mower (MN), County of, Minnesota
2060. North Saint Paul (MN), City of, Minnesota
2061. Olmsted (MN), County of, Minnesota
2062. Pine (MN), County of, Minnesota
2063. Proctor (MN), City of, Minnesota
2064. Ramsey (MN), County of, Minnesota
2065. Rochester (MN), City of, Minnesota
2066. Roseau (MN), County of, Minnesota
2067. Saint Louis (MN), County of, Minnesota
2068. Saint Paul (MN), City of, Minnesota
2069. Sibley (MN), County of, Minnesota
2070. Steele (MN), County of, Minnesota
2071. Waseca (MN), County, Minnesota
2072. Washington (MN), County of, Minnesota
2073. Winona (MN), County of, Minnesota
2074. Wright (MN), County of, Minnesota
2075. Yellow Medicine (MN), County of, Minnesota
2076. Adams (MS), County of, Mississippi
2077. Amite (MS), County of, Mississippi
2078. Amory (MS), City of, Mississippi
2079. Arcola (MS), Town of, Mississippi
2080. Attala (MS), County of, Mississippi
2081. Benton (MS), County of, Mississippi
2082. Bolivar (MS), County of, Mississippi
2083. Brookhaven (MS), City of, Mississippi
2084. Caledonia (MS), Town of, Mississippi
2085. Carroll (MS), County of, Mississippi
2086. Charleston (MS), City of, Mississippi
2087. Chickasaw (MS), County of, Mississippi
2088. Claiborne (MS), County of, Mississippi
2089. Clarke (MS), County of, Mississippi
2090. Clarksdale (MS), City of, Mississippi
2091. Cleveland (MS), City of, Mississippi
2092. Columbia (MS), City of, Mississippi
2093. Columbus (MS), City of, Mississippi
2094. Covington (MS), County of, Mississippi
2095. Desoto (MS), County of, Mississippi
2096. Diamondhead (MS), City of, Mississippi
2097. Forrest (MS), County of, Mississippi
2098. Franklin (MS), County of, Mississippi
2099. Gautier (MS), City of, Mississippi
2100. George (MS), County of, Mississippi
2101. Greene (MS), County of, Mississippi
2102. Greenwood (MS), City of, Mississippi
2103. Grenada (MS), City of, Mississippi
2104. Grenada (MS), County of, Mississippi
2105. Gulfport (MS), City of, Mississippi
2106. Hancock (MS), County of, Mississippi
2107. Harrison (MS), County of, Mississippi
2108. Hattiesburg (MS), City of, Mississippi
2109. Hinds (MS), County of, Mississippi
2110. Holly Springs (MS), City of, Mississippi
2111. Holmes (MS), County of, Mississippi
2112. Humphreys (MS), County of, Mississippi
2113. Indianola (MS), City of, Mississippi
2114. Issaquena (MS), County of, Mississippi
2115. Itawamba (MS), County of, Mississippi
2116. Iuka (MS), City of, Mississippi
2117. Jackson (MS), City of, Mississippi
2118. Jackson (MS), County of, Mississippi
2119. Jefferson (MS), County of, Mississippi
2120. Jefferson Davis (MS), County of, Mississippi
2121. Jones (MS), County of, Mississippi
2122. Jonestown (MS), City of, Mississippi
2123. Kemper (MS), County of, Mississippi
2124. Kosciusko (MS), City of, Mississippi
2125. Lafayette (MS), County of, Mississippi
2126. Lauderdale (MS), County of, Mississippi
2127. Laurel (MS), City of, Mississippi
2128. Lawrence (MS), County of, Mississippi
2129. Leakesville (MS), Town of, Mississippi
2130. Lee (MS), County of, Mississippi
2131. Leflore (MS), County of, Mississippi
2132. Lincoln (MS), County of, Mississippi
2133. Long Beach (MS), City of, Mississippi
2134. Lumberton (MS), City of, Mississippi

2135. Madison (MS), County of, Mississippi
2136. Marion (MS), County of, Mississippi
2137. Marshall (MS), County of, Mississippi
2138. McLain (MS), Town of, Mississippi
2139. Memorial Hospital at Gulfport (MS), Mississippi
2140. Meridian (MS), City of, Mississippi
2141. Monroe (MS), County of, Mississippi
2142. Morton (MS), City of, Mississippi
2143. Moss Point (MS), City of, Mississippi
2144. Mound Bayou (MS), City of, Mississippi
2145. Neshoba (MS), County of, Mississippi
2146. Nettleton (MS), City of, Mississippi
2147. New Albany (MS), City of, Mississippi
2148. Ocean Springs (MS), City of, Mississippi
2149. Panola (MS), County of, Mississippi
2150. Pascagoula (MS), City of, Mississippi
2151. Pearl River (MS), County of, Mississippi
2152. Pearl River Hospital & Nursing Home (MS), County of, Mississippi
2153. Perry (MS), County of, Mississippi
2154. Philadelphia (MS), City of, Mississippi
2155. Prentiss (MS), County of, Mississippi
2156. Quitman (MS), City of, Mississippi
2157. Scott (MS), County of, Mississippi
2158. Shannon (MS), City of, Mississippi
2159. Sharkey-Issaquena Community Hospital (MS), Mississippi
2160. Shubuta (MS), Town of, Mississippi
2161. South Central Regional Medical Center (MS), Mississippi
2162. Southwest Mississippi Regional Medical Center (MS), Mississippi
2163. Starkville (MS), City of, Mississippi
2164. Stone (MS), County of, Mississippi
2165. Summit (MS), Town of, Mississippi
2166. Sunflower (MS), County of, Mississippi
2167. Tallahatchie (MS), County of, Mississippi
2168. Tate (MS), County of, Mississippi
2169. Tippah (MS), County of, Mississippi
2170. Tishomingo (MS), County of, Mississippi
2171. Tunica (MS), County of, Mississippi
2172. Tupelo (MS), City of, Mississippi
2173. Union (MS), County of, Mississippi
2174. Verona (MS), City of, Mississippi
2175. Vicksburg (MS), City of, Mississippi
2176. Walthall (MS), County of, Mississippi
2177. Washington (MS), County of, Mississippi
2178. Wayne (MS), County of, Mississippi
2179. Waynesboro (MS), City of, Mississippi
2180. Webb (MS), City of, Mississippi
2181. Wiggins (MS), City of, Mississippi
2182. Yalobusha (MS), County of, Mississippi
2183. Adair (MO), County of, Missouri
2184. Andrew (MO), County of, Missouri
2185. Atchison (MO), County of, Missouri
2186. Audrain (MO), County of, Missouri
2187. Barry (MO), County of, Missouri
2188. Barton (MO), County of, Missouri
2189. Boone (MO), County of, Missouri
2190. Buchanan (MO), County of, Missouri
2191. Butler (MO), County of, Missouri
2192. Callaway (MO), County of, Missouri
2193. Camden (MO), County of, Missouri
2194. Cape Girardeau (MO), County of, Missouri
2195. Cass (MO), County of, Missouri
2196. Chariton (MO), County of, Missouri
2197. Christian (MO), County of, Missouri
2198. Citizens Memorial Hospital District d/b/a Citizens Memorial Hospital (MO), Missouri
2199. Clinton (MO), County of, Missouri
2200. Cole (MO), County of, Missouri
2201. Crawford (MO), County of, Missouri
2202. Dade (MO), County of, Missouri
2203. Dekalb (MO), County of, Missouri
2204. Dent (MO), County of, Missouri
2205. Douglas (MO), County of, Missouri
2206. Dunklin (MO), County of, Missouri
2207. Franklin (MO), County of, Missouri
2208. Gasconade (MO), County of, Missouri
2209. Greene (MO), County of, Missouri
2210. Greene (MO), County of, Missouri

2211. Grundy (MO), County of, Missouri
2212. Harrisonville (MO), City of, Missouri
2213. Henry (MO), County of, Missouri
2214. Hickory (MO), County of, Missouri
2215. Howell (MO), County of, Missouri
2216. Independence (MO), City of, Missouri
2217. Iron (MO), County of, Missouri
2218. Jackson (MO), County of, Missouri
2219. Jasper (MO), County of, Missouri
2220. Jasper (MO), County of, Missouri
2221. Jefferson (MO), County of, Missouri
2222. Johnson (MO), County of, Missouri
2223. Joplin (MO), City of, Missouri
2224. Kansas City (MO), City of, Missouri
2225. Kinloch Fire Protection District of Saint Louis County (MO), Missouri
2226. Knox (MO), County of, Missouri
2227. Lafayette (MO), County of, Missouri
2228. Lawrence (MO), County of, Missouri
2229. Lewis (MO), County of, Missouri
2230. Lincoln (MO), County of, Missouri
2231. Livingston (MO), County of, Missouri
2232. Madison (MO), County of, Missouri
2233. Maries (MO), County of, Missouri
2234. McDonald (MO), County of, Missouri
2235. Miller (MO), County of, Missouri
2236. Moniteau (MO), County of, Missouri
2237. Montgomery (MO), County of, Missouri
2238. Morgan (MO), County of, Missouri
2239. New Madrid (MO), County of, Missouri
2240. Nodaway (MO), County of, Missouri
2241. Northeast Ambulance and Fire Protection District Of Saint Louis (MO), Missouri
2242. Osage (MO), County of, Missouri
2243. Ozark (MO), County of, Missouri
2244. Pemiscot (MO), County of, Missouri
2245. Perry (MO), County of, Missouri
2246. Pettis (MO), County of, Missouri
2247. Phelps (MO), County of, Missouri
2248. Pike (MO), County of, Missouri
2249. Polk (MO), County of, Missouri
2250. Pulaski (MO), County of, Missouri
2251. Ralls (MO), County of, Missouri
2252. Randolph (MO), County of, Missouri
2253. Ray (MO), County of, Missouri
2254. Reynolds (MO), County of, Missouri
2255. Ripley (MO), County of, Missouri
2256. Saint Charles (MO), County of, Missouri
2257. Saint Clair (MO), County of, Missouri
2258. Saint Francois (MO), County of, Missouri
2259. Saint Joseph (MO), City of, Missouri
2260. Saint Louis (MO), City of, Missouri
2261. Saint Louis (MO), County of, Missouri
2262. Schuyler (MO), County of, Missouri
2263. Scott (MO), County of, Missouri
2264. Sedalia, Pettis County (MO), City of, Missouri
2265. Shannon (MO), County of, Missouri
2266. Shelby (MO), County of, Missouri
2267. Springfield (MO), City of, Missouri
2268. Ste Genevieve (MO), County of, Missouri
2269. Stone (MO), County of, Missouri
2270. Taney (MO), County of, Missouri
2271. Texas (MO), County of, Missouri
2272. Vernon (MO), County of, Missouri
2273. Warren (MO), County of, Missouri
2274. Washington (MO), County of, Missouri
2275. Webster (MO), County of, Missouri
2276. Worth (MO), County of, Missouri
2277. Wright (MO), County of, Missouri
2278. Anaconda-Deer Lodge (MT), County of, Montana
2279. Cascade (MT), County of, Montana
2280. Gallatin (MT), County of, Montana
2281. Great Falls (MT), City of, Montana
2282. Lake (MT), County of, Montana
2283. Missoula (MT), City of, Montana
2284. Missoula (MT), County of, Montana
2285. Douglas (NE), County of, Nebraska
2286. Keith (NE), County of, Nebraska
2287. Knox (NE), County of, Nebraska
2288. Lincoln (NE), County of, Nebraska

2289. Sarpy (NE), County of, Nebraska
2290. South Sioux (NE), City of, Nebraska
2291. Boulder (NV), City of, Nevada
2292. Carson City (NV), Nevada
2293. Central Lyon Fire Protection District (NV), County of, Nevada
2294. Churchill (NV), County of, Nevada
2295. Clark (NV), County of, Nevada
2296. Douglas (NV), County of, Nevada
2297. Ely (NV), City of, Nevada
2298. Esmeralda (NV), County of, Nevada
2299. Fernley (NV), City of, Nevada
2300. Henderson (NV), City of, Nevada
2301. Humboldt (NV), County of, Nevada
2302. Las Vegas (NV), City of, Nevada
2303. Lincoln (NV), County of, Nevada
2304. Lyon (NV), County of, Nevada
2305. Mesquite (NV), City of, Nevada
2306. Mineral (NV), County of, Nevada
2307. North Las Vegas (NV), City of, Nevada
2308. North Lyon County Fire Protection District (NV) Nevada
2309. Nye (NV), County of, Nevada
2310. Reno (NV), City of, Nevada
2311. Sparks (NV), City of, Nevada
2312. Washoe (NV), County of, Nevada
2313. West Wendover (NV), City of, Nevada
2314. White Pine (NV), County of, Nevada
2315. Belknap (NH), County of, New Hampshire
2316. Belmont (NH), City of, New Hampshire
2317. Berlin (NH), City of, New Hampshire
2318. Board of Education of Goshen School District (NH), New Hampshire
2319. Board of Education of Kearsarge RSU-School Administrative Unit 65 (NH), New Hampshire
2320. Board of Education of Lebanon School District (NH), New Hampshire
2321. Board of Education of Pittsfield School District (NH), New Hampshire
2322. Board of Education of Tamworth School District (NH), New Hampshire
2323. Carroll (NH), County of, New Hampshire
2324. Chesire (NH), County of, New Hampshire
2325. Claremont (NH), City of, New Hampshire
2326. Concord (NH), City of, New Hampshire
2327. Coos (NH), County of, New Hampshire
2328. Derry (NH), Town of, New Hampshire
2329. Dover (NH), City of, New Hampshire
2330. Franklin (NH), City of, New Hampshire
2331. Grafton (NH), County of, New Hampshire
2332. Hillsborough (NH), County of, New Hampshire
2333. Keene, HN (NH), City of, New Hampshire
2334. Laconia (NH), City of, New Hampshire
2335. Londonderry (NH), Town of, New Hampshire
2336. Manchester (NH), City of, New Hampshire
2337. Merrimack (NH), County of, New Hampshire
2338. Nashua (NH), City of, New Hampshire
2339. Rochester (NH), City of, New Hampshire
2340. Rockingham (NH), County of, New Hampshire
2341. Strafford (NH), County of, New Hampshire
2342. Sullivan (NH), County of, New Hampshire
2343. Atlantic (NJ), County of, New Jersey
2344. Barnegat (NJ), Township of, New Jersey
2345. Bayonne (NJ), City of, New Jersey
2346. Bergen (NJ), County of, New Jersey
2347. Bloomfield (NJ), Township of, New Jersey
2348. Brick (NJ), Township of, New Jersey
2349. Burlington (NJ), County of, New Jersey
2350. Camden (NJ), County of, New Jersey
2351. Cape May (NJ), County of, New Jersey
2352. Clifton (NJ), City of, New Jersey
2353. Clinton (NJ), Town of, New Jersey
2354. Cumberland (NJ), County of, New Jersey
2355. Elizabeth (NJ), City of, New Jersey
2356. Essex (NJ), County of, New Jersey
2357. Hudson (NJ), County of, New Jersey
2358. Hunterdon (County) (NJ), New Jersey
2359. Irvington (NJ), Township of, New Jersey
2360. Jersey City (NJ), City of, New Jersey
2361. Monmouth (NJ), County of, New Jersey

2362. Newark (NJ), City of, New Jersey
2363. Ocean (NJ), County of, New Jersey
2364. Paramus (NJ), Borough of, New Jersey
2365. Passaic (NJ), County of, New Jersey
2366. Paterson (NJ), City of, New Jersey
2367. Ridgefield (NJ), Borough of, New Jersey
2368. Saddle Brook (NJ), Township of, New Jersey
2369. Sussex (NJ), County of, New Jersey
2370. Teaneck (NJ), Township of, New Jersey
2371. Trenton (NJ), City of, New Jersey
2372. Union (NJ), County of, New Jersey
2373. Alamogordo (NM), City of, New Mexico
2374. Albuquerque (NM), City of, New Mexico
2375. Bernalillo (NM), County of, New Mexico
2376. Catron (NM), County of, New Mexico
2377. Cibola (NM), County of, New Mexico
2378. Colfax (NM), County of, New Mexico
2379. Curry (NM), County of, New Mexico
2380. Dona Ana (NM), County of, New Mexico
2381. Eddy (NM), County of, New Mexico
2382. Espanola (NM), City of, New Mexico
2383. Grant (NM), County of, New Mexico
2384. Hidalgo, NM, Commission (NM), County of, New Mexico
2385. Hobbs (NM), City of, New Mexico
2386. Las Cruces (NM), City of, New Mexico
2387. Lea (NM), County of, New Mexico
2388. Lincoln (NM), County of, New Mexico
2389. Luna, NM, Commission (NM), County of, New Mexico
2390. McKinley (NM), County of, New Mexico
2391. Mora (NM), County of, New Mexico
2392. Otero (NM), County of, New Mexico
2393. Rio Arriba (NM), County of, New Mexico
2394. Roosevelt (NM), County of, New Mexico
2395. San Juan (NM), County of, New Mexico
2396. San Miguel, NM, Commission (NM), County of, New Mexico
2397. Sandoval (NM), County of, New Mexico
2398. Santa Fe (NM), City of, New Mexico
2399. Santa Fe (NM), County of, New Mexico
2400. Sierra (NM), County of, New Mexico
2401. Socorro (NM), County of, New Mexico
2402. Taos (NM), County of, New Mexico
2403. Torrance (NM), County of, New Mexico
2404. Union (NM), County of, New Mexico
2405. Valencia (NM), County of, New Mexico
2406. Albany (NY), City of, New York
2407. Albany (NY), County of, New York
2408. Allegany (NY), County of, New York
2409. Amherst (NY), Town of, New York
2410. Amityville (NY), Village of, New York
2411. Amsterdam (NY), City of, New York
2412. Auburn (NY), City of, New York
2413. Babylon (NY), Town of, New York
2414. Babylon (NY), Village of, New York
2415. Bellmore Fire District (NY), New York
2416. Bellport (NY), Village of, New York
2417. Board of Education of Rochester City School District (NY), New York
2418. Brookhaven (NY), Town of, New York
2419. Broome (NY), County of, New York
2420. Buffalo (NY), City of, New York
2421. Cattaraugus (NY), County of, New York
2422. Cayuga (NY), County of, New York
2423. Centereach Fire District (NY), New York
2424. Centerport Fire District (NY), New York
2425. Chautauqua (NY), County of, New York
2426. Cheektowaga (NY), County of, New York
2427. Chemung (NY), County of, New York
2428. Chenango (NY), County of, New York
2429. Clarkstown (NY), Town of, New York
2430. Clinton (NY), County of, New York
2431. Columbia (NY), County of, New York
2432. Cortland (NY), County of, New York
2433. Dutchess (NY), County of, New York
2434. East Hampton Village (NY), New York
2435. East Rockaway (NY), Incorporated Village of, New York
2436. Erie (NY), County of, New York
2437. Essex (NY), County of, New York
2438. Farmingdale (NY), Incorporated Village of, New York

2439. Floral Park (NY), Incorporated Village of, New York
2440. Franklin (NY), County of, New York
2441. Fulton (NY), County of, New York
2442. Garden City (NY), Incorporated Village of, New York
2443. Genesee (NY), County of, New York
2444. Geneva (NY), City of, New York
2445. Great Neck (NY), Village of, New York
2446. Greene (NY), County of, New York
2447. Greenport (NY), Village of, New York
2448. Hamilton (NY), County of, New York
2449. Hauppauge Fire District (NY), New York
2450. Haverstraw (NY), Town of, New York
2451. Hempstead (NY), Town of, New York
2452. Hempstead (NY), Village of, New York
2453. Herkimer (NY), County of, New York
2454. Herkimer (NY), Village of, New York
2455. Hicksville Water District (NY), New York
2456. Huntington (NY), Town of, New York
2457. Island Park (Incorporated Village) (NY), New York
2458. Island Park (NY), Village of, New York
2459. Islandia (Incorporated Village) (NY), New York
2460. Islip (NY), Town of, New York
2461. Islip Terrace Fire District (NY), New York
2462. Ithaca (NY), City of, New York
2463. Jefferson (NY), County of, New York
2464. Kingston (NY), City of, New York
2465. Lackawanna (NY), City of, New York
2466. Lake Grove (Incorporated Village) (NY), New York
2467. Lake Grove (NY), Village of, New York
2468. Lancaster (NY), Town of, New York
2469. Lawrence (Incorporated Village) (NY), New York
2470. Levittown Fire District (NY), New York
2471. Lewis (NY), County of, New York
2472. Lindenhurst (Incorporated Village) (NY), New York
2473. Livingston (NY), County of, New York
2474. Lloyd Harbor (Incorporated Village) (NY), New York
2475. Long Beach (NY), City of, New York
2476. Lynbrook (Village) (NY), New York
2477. Madison (NY), County of, New York
2478. Massapequa Park (NY), Incorporated Village of, New York
2479. Melville Fire District (NY), New York
2480. Merrick Library (NY), New York
2481. Mill Neck (NY), Incorporated Village of, New York
2482. Miller Place Fire District (NY), New York
2483. Millerton (NY), Village of, New York
2484. Monroe (NY), County of, New York
2485. Montgomery (NY), County of, New York
2486. Mount Sinai Fire District (NY), New York
2487. Mount Vernon (NY), City of, New York
2488. Nassau (NY), County of, New York
2489. Nesconset Fire District (NY), New York
2490. New Hyde Park (Incorporated Village) (NY), New York
2491. New York (NY), City of, New York
2492. Niagara (NY), County of, New York
2493. Nissequoge (NY) Incorporated Village of, New York
2494. North Hempstead (NY), Town of, New York
2495. North Merrick Fire District (NY), New York
2496. North Patchogue Fire District (NY), New York
2497. Northport (NY), Incorporated Village of, New York
2498. Ogdensburg (NY), City of, New York
2499. Old Westbury (NY), Incorporated Village of, New York
2500. Oneida (NY), County of, New York
2501. Onondaga (NY), County of, New York
2502. Ontario (NY), County of, New York
2503. Orange (NY), County of, New York
2504. Orangetown (NY), Town of, New York
2505. Orleans (NY), County of, New York
2506. Oswego (NY), County of, New York

2507. Otsego (NY), County of, New York
2508. Oyster Bay (NY), Town of, New York
2509. Patchogue (Incorporated Village) (NY), New York
2510. Plainview – Old Bethpage Public Library (NY), New York
2511. Plattsburgh (NY), City of, New York
2512. Poquott (NY) Incorporated Village of, New York
2513. Port Washington North (NY), Village of, New York
2514. Port Washington Water District (NY), New York
2515. Poughkeepsie (NY), City of, New York
2516. Poughkeepsie (NY), Town of, New York
2517. Putman (NY), County of, New York
2518. Ramapo (NY), Town of, New York
2519. Rensselaer (NY), County of, New York
2520. Ridge Fire District (NY), New York
2521. Riverhead (NY), Town of, New York
2522. Rochester (NY), City of, New York
2523. Rockland (NY), County of, New York
2524. Rockville Centre Public Library (NY), New York
2525. Rome (NY), City of, New York
2526. Rosalyn Water District (NY), New York
2527. Saint James Fire District (NY), New York
2528. Saint Lawrence (NY), County of, New York
2529. Saltaire (NY), Village of, New York
2530. Saratoga (NY), County of, New York
2531. Saratoga Springs (NY), City of, New York
2532. Schenectady (NY), City of, New York
2533. Schenectady (NY), County of, New York
2534. Schoharie (NY), County of, New York
2535. Schuyler (NY), County of, New York
2536. Seneca (NY), County of, New York
2537. Smithtown (NY), Town of, New York
2538. Smithtown Fire District (NY), New York
2539. South Farmindale Fire District (NY), New York
2540. Southampton (NY), Town of, New York
2541. Southold (NY), Town of, New York
2542. Southwestern Central School District (NY), New York
2543. Steuben (NY), County of, New York
2544. Stewart Manor (NY), Village of, New York
2545. Stony Brook Fire District (NY), New York
2546. Stony Point (NY), Town of, New York
2547. Suffern (NY), Village of, New York
2548. Suffolk (NY), County of, New York
2549. Sullivan (NY), County of, New York
2550. Syracuse (NY), City of, New York
2551. The Branch (NY), Village of, New York
2552. Tioga (NY), County of, New York
2553. Tompkins (NY), County of, New York
2554. Tonawanda (NY), Town of, New York
2555. Troy (NY), City of, New York
2556. Ulster (NY), County of, New York
2557. Uniondale Fire District (NY), New York
2558. Utica (NY), City of, New York
2559. Valley Stream (NY), Village of, New York
2560. Wappinger (NY), Town of, New York
2561. Wappinger Falls (NY), Town of, New York
2562. Wappingers Falls (NY), Village of, New York
2563. Warren (NY), County of, New York
2564. Washington (NY), County of, New York
2565. West Hampton Dunes (NY) Incorporated Village, New York
2566. West Haverstraw (NY), Village of, New York
2567. West Hempstead Public Library (NY), New York
2568. Westbury (NY), Incorporated Village of, New York
2569. Westbury (NY), Village of, New York
2570. Westchester (NY), County of, New York
2571. Wyoming (NY), County of, New York
2572. Yates (NY), County of, New York
2573. Yonkers (NY), City of, New York
2574. Alamance (NC), County of, North Carolina
2575. Alexander (NC), County of, North Carolina
2576. Alleghany (NC), County of, North Carolina
2577. Anson (NC), County of, North Carolina

2578. Ashe (NC), County of, North Carolina
2579. Beaufort (NC), County of, North Carolina
2580. Bertie (NC), County of, North Carolina
2581. Bladen (NC), County of, North Carolina
2582. Brunswick (NC), County of, North Carolina
2583. Buncombe (NC), County of, North Carolina
2584. Burke (NC), County of, North Carolina
2585. Cabarrus (NC), County of, North Carolina
2586. Caldwell (NC), County of, North Carolina
2587. Camden (NC), County of, North Carolina
2588. Canton (NC), City of, North Carolina
2589. Carteret (NC), County of, North Carolina
2590. Caswell (NC), County of, North Carolina
2591. Catawba (NC), County of, North Carolina
2592. Chatham (NC), County of, North Carolina
2593. Cherokee (NC), County of, North Carolina
2594. Chowan (NC), County of, North Carolina
2595. Cleveland (NC), County of, North Carolina
2596. Columbus (NC), County of, North Carolina
2597. Craven (NC), County of, North Carolina
2598. Cumberland (NC), County of, North Carolina
2599. Currituck (NC), County of, North Carolina
2600. Dare (NC), County of, North Carolina
2601. Davidson (NC), County of, North Carolina
2602. Davie (NC), County of, North Carolina
2603. Duplin (NC), County of, North Carolina
2604. Durham (NC), County of, North Carolina
2605. Fayetteville (NC), City of, North Carolina
2606. Forsyth (NC), County of, North Carolina
2607. Franklin (NC), County of, North Carolina
2608. Gaston (NC), County of, North Carolina
2609. Granville (NC), County of, North Carolina
2610. Greene (NC), County of, North Carolina
2611. Greensboro (NC), City of, North Carolina
2612. Guilford (NC), County of, North Carolina
2613. Halifax (NC), County of, North Carolina
2614. Haywood (NC), County of, North Carolina
2615. Henderson (NC), City of, North Carolina
2616. Hickory (NC), City of, North Carolina
2617. Iredell (NC), County of, North Carolina
2618. Jacksonville (NC), City of, North Carolina
2619. Jones (NC), County of, North Carolina
2620. Lee (NC), County of, North Carolina
2621. Lenoir (NC), County of, North Carolina
2622. Lincoln (NC), County of, North Carolina
2623. Madison (NC), County of, North Carolina
2624. Martin (NC), County of, North Carolina
2625. McDowell (NC), County of, North Carolina
2626. Mecklenburg (NC), County of, North Carolina
2627. Mitchell (NC), County of, North Carolina
2628. Moore (NC), County of, North Carolina
2629. New Hanover (NC), County of, North Carolina
2630. Onslow (NC), County of, North Carolina
2631. Orange (NC), County of, North Carolina
2632. Pamlico (NC), County of, North Carolina
2633. Pasquotank (NC), County of, North Carolina
2634. Person (NC), County of, North Carolina
2635. Pitt (NC), County of, North Carolina
2636. Polk (NC), County of, North Carolina
2637. Randolph (NC), County of, North Carolina
2638. Richmond (NC), County of, North Carolina
2639. Robeson (NC), County of, North Carolina
2640. Rockingham (NC), County of, North Carolina
2641. Rowan (NC), County of, North Carolina
2642. Rutherford (NC), County of, North Carolina
2643. Sampson (NC), County of, North Carolina
2644. Scotland (NC), County of, North Carolina
2645. Stokes (NC), County of, North Carolina
2646. Surry (NC), County of, North Carolina
2647. Tyrrell (NC), County of, North Carolina
2648. Vance (NC), County of, North Carolina
2649. Warren (NC), County of, North Carolina
2650. Washington (NC), County of, North Carolina
2651. Watauga (NC), County of, North Carolina
2652. Wayne (NC), County of, North Carolina

2653. Wilkes (NC), County of, North Carolina
2654. Wilmington (NC), City of, North Carolina
2655. Winston-Salem (NC), City of, North Carolina
2656. Yadkin (NC), County of, North Carolina
2657. Yancey (NC), County of, North Carolina
2658. Barnes (ND), County of, North Dakota
2659. Benson (ND), County of, North Dakota
2660. Bismarck (ND), City of, North Dakota
2661. Burleigh (ND), County of, North Dakota
2662. Cass (ND), County of, North Dakota
2663. Devils Lake (ND), City of, North Dakota
2664. Dickey (ND), County of, North Dakota
2665. Dunn (ND), County of, North Dakota
2666. Eddy (ND), County of, North Dakota
2667. Fargo (ND), City of, North Dakota
2668. Foster (ND), County of, North Dakota
2669. Grand Forks (ND), City of, North Dakota
2670. Grand Forks (ND), County of, North Dakota
2671. Lamoure (ND), County of, North Dakota
2672. Lisbon (ND), City of, North Dakota
2673. McKenzie (ND), County of, North Dakota
2674. McLean (ND), County of, North Dakota
2675. Mercer (ND), County of, North Dakota
2676. Mountrail (ND), County of, North Dakota
2677. Pembina (ND), County of, North Dakota
2678. Pierce (ND), County of, North Dakota
2679. Ramsey (ND), County of, North Dakota
2680. Ransom (ND), County of, North Dakota
2681. Richland (ND), County of, North Dakota
2682. Rolette (ND), County of, North Dakota
2683. Sargent (ND), County of, North Dakota
2684. Stark (ND), County of, North Dakota
2685. Towner (ND), County of, North Dakota
2686. Walsh (ND), County of, North Dakota
2687. Ward (ND), County of, North Dakota
2688. Wells (ND), County of, North Dakota
2689. Williams (ND), County of, North Dakota
2690. Adams (OH), County of, Ohio
2691. Akron (OH), City of, Ohio
2692. Allen (OH), County of, Ohio
2693. Alliance (OH), City of, Ohio
2694. Ashland (OH), City of, Ohio
2695. Ashland (OH), County of, Ohio
2696. Ashtabula (OH), County of, Ohio
2697. Athens (OH), County of, Ohio
2698. Auglaize (OH), County of, Ohio
2699. Aurora (OH), City of, Ohio
2700. Barberton (OH), City of, Ohio
2701. Belmont (OH), County of, Ohio
2702. Board of Education of Boardman Local Schools (OH), Ohio
2703. Board of Education of Liberty Local Schools (OH), Ohio
2704. Boston (OH), Township of, Ohio
2705. Boston Heights (OH), Village of, Ohio
2706. Broadview Heights (OH), City of, Ohio
2707. Brooklyn Heights (OH), Village of, Ohio
2708. Brown (OH), County of, Ohio
2709. Brunswick (OH), City of, Ohio
2710. Butler (OH), County of, Ohio
2711. Canton (OH), City of, Ohio
2712. Carroll (OH), County of, Ohio
2713. Champaign (OH), County of, Ohio
2714. Cincinnati (OH), City of, Ohio
2715. Clermont, OH, Commission (OH), County of, Ohio
2716. Cleveland (OH), City of, Ohio
2717. Clinton (OH), County of, Ohio
2718. Clinton (OH), Village of, Ohio
2719. Columbiana (OH), County of, Ohio
2720. Columbus (OH), City of, Ohio
2721. Copley (OH), Township of, Ohio
2722. Coshocton, OH, Commission (OH), County of, Ohio
2723. Coventry (OH), Township of, Ohio
2724. Crawford (OH), County of, Ohio
2725. Cuyahoga Falls (OH), City of, Ohio
2726. Darke (OH), County of, Ohio
2727. Dayton (OH), City of, Ohio
2728. Delaware (OH), County of, Ohio
2729. East Cleveland (OH), City of, Ohio

2730. Elyria (OH), City of, Ohio
2731. Erie (OH), County of, Ohio
2732. Euclid (OH), City of, Ohio
2733. Fairfield (OH), City of, Ohio
2734. Fairfield (OH), County of, Ohio
2735. Fairlawn (OH), City of, Ohio
2736. Fayette (OH), County of, Ohio
2737. Findlay (OH), City of, Ohio
2738. Fostoria (OH), City of, Ohio
2739. Franklin (OH), County of, Ohio
2740. Fulton (OH), County of, Ohio
2741. Gallia (OH), County of, Ohio
2742. Garfield Heights (OH), City of, Ohio
2743. Geauga (OH), County of, Ohio
2744. Green (OH), City of, Ohio
2745. Guernsey (OH), County of, Ohio
2746. Hamilton (OH), City of, Ohio
2747. Hamilton (OH), County of, Ohio
2748. Hancock (OH), County of, Ohio
2749. Harrison (OH), County of, Ohio
2750. Hocking (OH), County of, Ohio
2751. Huron (OH), City of, Ohio
2752. Huron (OH), County of, Ohio
2753. Ironton (OH), City of, Ohio
2754. Jackson (OH), County of, Ohio
2755. Jefferson (OH), County of, Ohio
2756. Kent (OH), City of, Ohio
2757. Knox (OH), County of, Ohio
2758. Lake (OH), County of, Ohio
2759. Lakemore (OH), Village of, Ohio
2760. Lakewood (OH), City of, Ohio
2761. Lawrence (OH), County of, Ohio
2762. Lebanon (OH), City of, Ohio
2763. Lexington (OH), Village of, Ohio
2764. Licking (OH), County of, Ohio
2765. Lima (OH), City of, Ohio
2766. Logan (OH), County of, Ohio
2767. Lorain (OH), City of, Ohio
2768. Lorain (OH), County of, Ohio
2769. Lucas (OH), County of, Ohio
2770. Lucas County Children Services Board of Trustees (OH), Ohio
2771. Lyndhurst (OH), City of, Ohio
2772. Macedonia (OH), City of, Ohio
2773. Mansfield (OH), City of, Ohio
2774. Marietta (OH), City of, Ohio
2775. Marion (OH), County of, Ohio
2776. Massillon (OH), City of, Ohio
2777. Mayfield Heights (OH), City of, Ohio
2778. Medina (OH), County of, Ohio
2779. Meigs (OH), County of, Ohio
2780. Mental Health & Recovery Services Board of Allen, Auglaize, and Hardin Counties (OH), Ohio
2781. Mental Health & Recovery Services Board of Lucas County (OH), Ohio
2782. Mercer (OH), County of, Ohio
2783. Miami (OH), County of, Ohio
2784. Middletown (OH), City of, Ohio
2785. Mogadore (OH), Village of, Ohio
2786. Monroe (OH), County of, Ohio
2787. Montgomery, (OH), County of, Ohio
2788. Morrow (OH), County of, Ohio
2789. Munroe Falls (OH), City of, Ohio
2790. Muskingham (OH), County of, Ohio
2791. New Franklin (OH), City of, Ohio
2792. Newburgh Heights (OH), Village of, Ohio
2793. Noble (OH), County of, Ohio
2794. North Olmsted (OH), City of, Ohio
2795. North Ridgeville (OH), City of, Ohio
2796. North Royalton (OH), City of, Ohio
2797. Norton (OH), City of, Ohio
2798. Norwalk (OH), City of, Ohio
2799. Olmsted Falls (OH), City of, Ohio
2800. Ottawa (OH), County of, Ohio
2801. Painesville (OH), Township of, Ohio
2802. Parma (OH), City of, Ohio
2803. Parma Heights (OH), City of, Ohio
2804. Peninsula (OH), Village of, Ohio
2805. Perry (OH), County of, Ohio
2806. Pike (OH), County of, Ohio
2807. Portage (OH), County of, Ohio

2808. Portsmouth (OH), City of, Ohio
2809. Ravenna (OH), City of, Ohio
2810. Richfield (OH), Village of, Ohio
2811. Richland County Children's Services (OH), Ohio
2812. Ross (OH), County of, Ohio
2813. Saint Marys (OH), City of, Ohio
2814. Sandusky (OH), City of, Ohio
2815. Sandusky (OH), County of, Ohio
2816. Scioto (OH), County of, Ohio
2817. Seneca (OH), County of, Ohio
2818. Seven Hills (OH), City of, Ohio
2819. Shelby (OH), County of, Ohio
2820. Silver Lake (OH), Village of, Ohio
2821. Springfield (OH), Township of, Ohio
2822. Stark (OH), County of, Ohio
2823. Stow (OH), City of, Ohio
2824. Strongsville (OH), City of, Ohio
2825. Tallmadge (OH), City of, Ohio
2826. Toledo (OH), City of, Ohio
2827. Trumbull (OH), County of, Ohio
2828. Tuscarawas (OH), County of, Ohio
2829. Valley Fire District (OH), Ohio
2830. Van Wert (OH), City of, Ohio
2831. Van Wert (OH), County of, Ohio
2832. Vinton (OH), County of, Ohio
2833. Warren (OH), City of, Ohio
2834. Warrensville Heights (OH), City of, Ohio
2835. Washington (OH), County of, Ohio
2836. Wayne (OH), County of, Ohio
2837. Wickliffe (OH), City of, Ohio
2838. Williams (OH), County of, Ohio
2839. Wyandot (OH), County of, Ohio
2840. Youngstown (OH), City of, Ohio
2841. Ada (OK), City of, Oklahoma
2842. Altus (OK), City of, Oklahoma
2843. Anadarko (OK), City of, Oklahoma
2844. Atoka (OK), County of, Oklahoma
2845. Beckham (OK), County of, Oklahoma
2846. Bethany (OK), City of, Oklahoma
2847. Broken Arrow (OK), City of, Oklahoma
2848. Burns Flat (OK), City of, Oklahoma
2849. Caddo (OK), County of, Oklahoma
2850. Choctaw (OK), County of, Oklahoma
2851. Cimarron (OK), County of, Oklahoma
2852. Cleveland (OK), County of, Oklahoma
2853. Coal (OK), County of, Oklahoma
2854. Comanche (OK), County of, Oklahoma
2855. Craig (OK), County of, Oklahoma
2856. Creek (OK), County of, Oklahoma
2857. Custer (OK), County of, Oklahoma
2858. Delaware (OK), County of, Oklahoma
2859. Dewey (OK), County of, Oklahoma
2860. Edmond (OK), City of, Oklahoma
2861. El Reno (OK), City of, California
2862. Elk City (OK), City of, Oklahoma
2863. Enid (OK), City of, Oklahoma
2864. Fort Cobb (OK), City of, Oklahoma
2865. Garvin (OK), County of, Oklahoma
2866. Grady (OK), County of, Oklahoma
2867. Greer (OK), County of, Oklahoma
2868. Guthrie (OK), City of, Oklahoma
2869. Harmon (OK), County of, Oklahoma
2870. Harper (OK), County of, Oklahoma
2871. Haskell (OK), County of, Oklahoma
2872. Hughes (OK), County of, Oklahoma
2873. Jackson (OK), County of, Oklahoma
2874. Jefferson (OK) County of, Oklahoma
2875. Jenks (OK), City of, Oklahoma
2876. Johnston, (OK), Oklahoma
2877. Kay (OK), County of, Oklahoma
2878. Kiowa (OK), County of, Oklahoma
2879. Latimer (OK), County of, Oklahoma
2880. Lawton (OK), City of, Oklahoma
2881. Le Flore (OK), County of, Oklahoma
2882. Lincoln (OK), County of, Oklahoma
2883. Logan (OK), County of, Oklahoma
2884. Love (OK), County of, Oklahoma
2885. Major (OK), County of, Oklahoma
2886. Mayes (OK), County of, Oklahoma
2887. McClain (OK), County of, Oklahoma
2888. McCurtain (OK), County of, Oklahoma

2889. Midwest City (OK), City of, Oklahoma
2890. Muskogee (OK), City of, Oklahoma
2891. Muskogee (OK), County of, Oklahoma
2892. Mustang (OK), City of, Oklahoma
2893. Noble (OK), County of, Oklahoma
2894. Nowata (OK), County of, Oklahoma
2895. Okfuskee (OK), County of, Oklahoma
2896. Oklahoma City (OK), City of, Oklahoma
2897. Oklahoma (OK), County of, Oklahoma
2898. Okmulgee (OK), County of, Oklahoma
2899. Osage (OK), County of, Oklahoma
2900. Ottawa (OK), County of, Oklahoma
2901. Owasso (OK), City of, Oklahoma
2902. Pawnee (OK), County of, Oklahoma
2903. Payne (OK), County of, Oklahoma
2904. Pittsburg (OK), County of, Oklahoma
2905. Ponca City (OK), City of, Oklahoma
2906. Pottawatomie (OK), County of, Oklahoma
2907. Roger Mills (OK), County of, Oklahoma
2908. Rogers (OK), County of, Oklahoma
2909. Seminole (OK), City of, Oklahoma
2910. Seminole (OK), County of, Oklahoma
2911. Shawnee (OK), City of, Oklahoma
2912. Stephens (OK), County of, Oklahoma
2913. Stillwater (OK), City of, Oklahoma
2914. Texas (OK), County of, Oklahoma
2915. Tillman (OK), County of, Oklahoma
2916. Tulsa (OK), City of, Oklahoma
2917. Tulsa (OK), County of, Oklahoma
2918. Washington (OK), County of, Oklahoma
2919. Woods (OK), County of, Oklahoma
2920. Woodward (OK), County of, Oklahoma
2921. Yukon (OK), City of, Oklahoma
2922. Clackamas (OR), County of, Oregon
2923. Clatsop (OR), County of, Oregon
2924. Columbia (OR), County of, Oregon
2925. Coos (OR), County of, Oregon
2926. Curry (OR), County of, Oregon
2927. Jackson (OR), County of, Oregon
2928. Josephine (OR), County of, Oregon
2929. Lane (OR), County of, Oregon
2930. Multnomah (OR), County of, Oregon
2931. Portland (OR), City of, Oregon
2932. Washington (OR), County of, Oregon
2933. Yamhill (OR), County of, Oregon
2934. Adams (PA), County of, Pennsylvania
2935. Aliquippa (PA), City of, Pennsylvania
2936. Allegheny (PA), County of, Pennsylvania
2937. Allentown (PA), City of, Pennsylvania
2938. Armstrong (PA), County of, Pennsylvania
2939. Beaver (PA), County of, Pennsylvania
2940. Bedford (PA), County of, Pennsylvania
2941. Bensalem (PA), Township of, Pennsylvania
2942. Berks (PA), County of (DA), Pennsylvania
2943. Bradford (PA), County of, Pennsylvania
2944. Bristol (PA), Township of, Pennsylvania
2945. Bucks (PA), County of, Pennsylvania
2946. Cambria (PA), County of, Pennsylvania
2947. Carbon (PA), County of, Pennsylvania
2948. Chester (PA), County of, Pennsylvania
2949. Chester (PA), County of (DA), Pennsylvania
2950. Clarion (PA), County of, Pennsylvania
2951. Clearfield (PA), County of (DA), Pennsylvania
2952. Clearfield (PA), County of, Pennsylvania
2953. Clinton (PA), County of, Pennsylvania
2954. Coatesville (PA), City of, Pennsylvania
2955. Columbia (PA), County of, Pennsylvania
2956. Cumberland (PA), County of, Pennsylvania
2957. Dauphin (PA), County of, Pennsylvania
2958. Dauphin (PA), County of (DA), Pennsylvania
2959. Delaware (PA), County of, Pennsylvania
2960. Delaware (PA), County of (DA), Pennsylvania
2961. Edwardsville (PA), Borough of, Pennsylvania
2962. Erie (PA), County of, Pennsylvania
2963. Exeter (PA), Borough of, Pennsylvania
2964. Fairview (PA), Township of, Pennsylvania
2965. Fayette (PA), County of, Pennsylvania
2966. Forty Fort (PA), Borough of, Pennsylvania

2967. Franklin (PA), County of, Pennsylvania
2968. Greene (PA), County of, Pennsylvania
2969. Hanover (PA), Township of, Pennsylvania
2970. Hazleton (PA), City of, Pennsylvania
2971. Huntingdon (PA), County of, Pennsylvania
2972. Indiana (PA), County of, Pennsylvania
2973. Kingston (PA), Borough of, Pennsylvania
2974. Lackawanna (PA), County of, Pennsylvania
2975. Lawrence (PA), County of, Pennsylvania
2976. Lehigh (PA), County of, Pennsylvania
2977. Lock Haven (PA), City of, Pennsylvania
2978. Lower Makefield (PA), Township of, Pennsylvania
2979. Lower Southampton (PA), Pennsylvania
2980. Luzerne (PA), County of, Pennsylvania
2981. Lycoming (PA), County of, Pennsylvania
2982. Mahoning (PA), Township of, Pennsylvania
2983. Mercer (PA), County of, Pennsylvania
2984. Middletown (PA), Township of, Pennsylvania
2985. Monroe (PA), County of, Pennsylvania
2986. Morrisville (PA), Borough of, Pennsylvania
2987. Nanticoke (PA), City of, Pennsylvania
2988. New Castle (PA), City of, Pennsylvania
2989. Newtown (PA), Township of, Pennsylvania
2990. Norristown (PA), Municipality of, Pennsylvania
2991. Northampton (PA), County of, Pennsylvania
2992. Northumberland (PA), County of, Pennsylvania
2993. Philadelphia (PA), City of, Pennsylvania
2994. Pike (PA), County of, Pennsylvania
2995. Pittsburgh (PA), City of, Pennsylvania
2996. Plains (PA), Township of, Pennsylvania
2997. Schuylkill (PA), County of, Pennsylvania
2998. Sugar Notch Borough (PA), Pennsylvania
2999. Tioga (PA), County of, Pennsylvania
3000. Union (PA), Township of, Pennsylvania
3001. Wampum (PA), Borough of, Pennsylvania
3002. Warminster (PA), Township of, Pennsylvania
3003. Warrington (PA), Township of, Pennsylvania
3004. Washington (PA), County of, Pennsylvania
3005. West Norriton (PA), Township of, Pennsylvania
3006. West Pittston (PA), Pennsylvania
3007. Westmoreland (PA), County of, Pennsylvania
3008. Westmoreland (PA), County of (DA), Pennsylvania
3009. Wilkes-Barre (PA), City of, Pennsylvania
3010. Wilkes-Barre (PA), Township of, Pennsylvania
3011. Wright (PA), Township of, Pennsylvania
3012. Wyoming (PA), County of, Pennsylvania
3013. Wyoming (PA), Borough of, Pennsylvania
3014. York (PA), County of, Pennsylvania
3015. Adjuntas (PR), Municipality of, Puerto Rico
3016. Arroyo (PR), Municipality of, Puerto Rico
3017. Barceloneta (PR), Municipality of, Puerto Rico
3018. Bayamon (PR), Municipality of, Puerto Rico
3019. Caguas (PR), Municipality of, Puerto Rico
3020. Canovanas (PR), Municipality of, Puerto Rico
3021. Catano (PR), Municipality of, Puerto Rico
3022. Cayey (PR), Municipality of, Puerto Rico
3023. Ceiba (PR), Municipality of, Puerto Rico
3024. Cidra (PR), Municipality of, Puerto Rico
3025. Coamo (PR), Municipality of, Puerto Rico
3026. Guayanilla (PR), Municipality of, Puerto Rico
3027. Isla De Vieques (PR), Municipality of, Puerto Rico
3028. Juncos (PR), Municipality of, Puerto Rico
3029. Loiza (PR), Municipality of, Puerto Rico
3030. Rio Grande (PR), City of, Puerto Rico
3031. Sabana Grande (PR), Municipality of, Puerto Rico

3032. San Juan (PR), Municipality of, Puerto Rico
3033. Vega Alta (PR), Municipality of, Puerto Rico
3034. Villalba (PR), Municipality of, Puerto Rico
3035. Yabucoa (PR), Municipality of, Puerto Rico
3036. Abbeville (SC), County of, South Carolina
3037. Aiken (SC), County of, South Carolina
3038. Allendale (SC), County of, South Carolina
3039. Anderson (SC), County of, South Carolina
3040. Bamberg (SC), County of, South Carolina
3041. Barnwell (SC), County of, South Carolina
3042. Beaufort (SC), County of, South Carolina
3043. Berkeley (SC), County of, South Carolina
3044. Calhoun (SC), County of, South Carolina
3045. Charleston (SC), City of, South Carolina
3046. Charleston (SC), County of, South Carolina
3047. Cherokee (SC), County of, South Carolina
3048. Chester (SC), City of, South Carolina
3049. Chester (SC), County of, South Carolina
3050. Chesterfield (SC), County of, South Carolina
3051. Clarendon (SC), County of, South Carolina
3052. Colleton (SC), County of, South Carolina
3053. Columbia (SC), City of, South Carolina
3054. Dillon (SC), County of, South Carolina
3055. Dorchester (SC), County of, South Carolina
3056. Edgefield (SC), County of, South Carolina
3057. Fairfield (SC), County of, South Carolina
3058. Florence (SC), County of, South Carolina
3059. Georgetown (SC), City of, South Carolina
3060. Georgetown (SC), County of, South Carolina
3061. Greenville (SC), County of, South Carolina
3062. Greenwood (SC), County of, South Carolina
3063. Hampton (SC), County of, South Carolina
3064. Horry (SC), County of, South Carolina
3065. Jasper (SC), County of, South Carolina
3066. Kershaw (SC), County of, South Carolina
3067. Kershaw County Hospital Board a/k/a Kershawhealth d/b/a Health Service District of Kershaw (SC), South Carolina
3068. Lancaster (SC), County of, South Carolina
3069. Laurens (SC), County of, South Carolina
3070. Lee (SC), County of, South Carolina
3071. Lexington (SC), County of, South Carolina
3072. Marion (SC), County of, South Carolina
3073. Marlboro (SC), County of, South Carolina
3074. McCormick (SC), County of, South Carolina
3075. Mount Pleasant (SC), Town of, South Carolina
3076. Myrtle Beach (SC), City of, South Carolina
3077. Newberry (SC), County of, South Carolina
3078. North Charleston (SC), City of, South Carolina
3079. Oconee (SC), County of, South Carolina
3080. Orangeburg (SC), City of, South Carolina
3081. Orangeburg (SC), County of, South Carolina
3082. Pickens (SC), County of, South Carolina
3083. Richland (SC), County of, South Carolina
3084. Saluda (SC), County of, South Carolina
3085. Spartanburg (SC), County of, South Carolina
3086. Summerville (SC), Town of, South Carolina
3087. Sumter (SC), County of, South Carolina
3088. Union (SC), County of, South Carolina
3089. Williamsburg (SC), County of, South Carolina
3090. York (SC), County of, South Carolina
3091. Pennington (SD), County of, South Dakota
3092. Alexandria (TN), Town of, Tennessee
3093. Algood (TN), City of, Tennessee
3094. Anderson (TN), County of, Tennessee
3095. Arlington (TN), Town of, Tennessee
3096. Auburntown (TN), Town of, Tennessee
3097. Baxter (TN), Town of, Tennessee
3098. Bedford (TN), County of, Tennessee
3099. Bledsoe (TN), County of, Tennessee
3100. Blount (TN), County of, Tennessee

3101. Bradley (TN), County of, Tennessee
3102. Campbell (TN), County of, Tennessee
3103. Cannon (TN), County of, Tennessee
3104. Celina (TN), City of, Tennessee
3105. Centertown (TN), Town of, Tennessee
3106. Centerville (TN), Town of, Tennessee
3107. Claiborne (TN), County of, Tennessee
3108. Clarksville (TN), City of, Tennessee
3109. Clay (TN), County of, Tennessee
3110. Clifton (TN), City of, Tennessee
3111. Cocke (TN), County of, Tennessee
3112. Columbia (TN), City of, Tennessee
3113. Cookeville (TN), City of, Tennessee
3114. Cornersville (TN), Town of, Tennessee
3115. Crockett (TN), County of, Tennessee
3116. Crossville (TN), City of, Tennessee
3117. Cumberland (TN), County of, Tennessee
3118. Dandridge (TN), Town of, Tennessee
3119. Decatur (TN), County of, Tennessee
3120. Decatur (TN), Town of, Tennessee
3121. Dekalb (TN), County of, Tennessee
3122. Eagleville (TN), City of, Tennessee
3123. Fayetteville (TN), City of, Tennessee
3124. Fentress (TN), County of, Tennessee
3125. Forge (TN), City of, Tennessee
3126. Franklin (TN), County of, Tennessee
3127. Gatlinburg (TN), City of, Tennessee
3128. Germantown (TN), City of, Tennessee
3129. Giles (TN), County of, Tennessee
3130. Grainger (TN), County of, Tennessee
3131. Greene (TN), County of, Tennessee
3132. Grundy (TN), County of, Tennessee
3133. Hamblen County Board of Education, individually (TN), Tennessee
3134. Hamilton (TN), County of, Tennessee
3135. Hancock (TN), County of, Tennessee
3136. Hancock County Board of Education (TN) Tennessee
3137. Hawkins (TN), County of, Tennessee
3138. Haywood (TN), County of, Tennessee
3139. Henderson (TN), County of, Tennessee
3140. Jefferson (TN), County of, Tennessee
3141. Johnson (TN), County of, Tennessee
3142. Knox (TN), County of, Tennessee
3143. Knoxville (TN), City of, Tennessee
3144. La Vergene (TN), Tennessee
3145. Lauderdale (TN), County of, Tennessee
3146. Lewisburg (TN), City of, Tennessee
3147. Lexington (TN), Tennessee
3148. Loudon (TN), County of, Tennessee
3149. Madison (TN), County of, Tennessee
3150. Marion (TN), County of, Tennessee
3151. Marshall (TN), County of, Tennessee
3152. Maryville (TN), City of, Tennessee
3153. McMinn (TN), County of, Tennessee
3154. Meigs (TN), County of, Tennessee
3155. Memphis (TN), City of, Tennessee
3156. Millington (TN), City of, Tennessee
3157. Monroe (TN), County of, Tennessee
3158. Montgomery (TN), County of, Tennessee
3159. Moore (TN), County of, Tennessee
3160. Morgan (TN), County of, Tennessee
3161. Mount Pleasant (TN), City of, Tennessee
3162. Murfreesboro (TN), City of, Tennessee
3163. Nashville and Davidson (TN), City of, County of, Tennessee
3164. Obion (TN), County of, Tennessee
3165. Overton (TN), County of, Tennessee
3166. Pickett (TN), County of, Tennessee
3167. Pigeon (TN), City of, Tennessee
3168. Pigeon Forge (TN), City of, Tennessee
3169. Polk (TN), County of, Tennessee
3170. Putnam (TN), County of, Tennessee
3171. Rhea (TN), County of, Tennessee
3172. Ripley (TN), City of, Tennessee
3173. Roane (TN), County of, Tennessee
3174. Rutherford (TN), County of, Tennessee
3175. Rutledge (TN), Town of, Tennessee
3176. Scott (TN), County of, Tennessee
3177. Sequatchie (TN), County of, Tennessee
3178. Sevier (TN), County of, Tennessee
3179. Shelby (TN), County of, Tennessee

3180. Shelbyville (TN), City of, Tennessee
3181. Smith (TN), County of, Tennessee
3182. Smithville (TN), City of, Tennessee
3183. Sparta (TN), City of, Tennessee
3184. Spencer (TN), City of, Tennessee
3185. Spring Hill (TN), City of, Tennessee
3186. Sumner (TN), County of, Tennessee
3187. Union (TN), County of, Tennessee
3188. Van Buren (TN), County of, Tennessee
3189. Warren (TN), County of, Tennessee
3190. Wartrace (TN), Town of, Tennessee
3191. Washington (TN), County of, Tennessee
3192. Wayne (TN), County of, Tennessee
3193. White (TN), County of, Tennessee
3194. Williamson (TN), County of, Tennessee
3195. Beaver (UT), County of, Utah
3196. Cache (UT), County of, Utah
3197. Carbon (UT), County of, Utah
3198. Daggett (UT), County of, Utah
3199. Davis (UT), County of, Utah
3200. Duchesne (UT), County of, Utah
3201. Emery (UT), County of, Utah
3202. Garfield (UT), County of, Utah
3203. Grand (UT), County of, Utah
3204. Iron (UT), County of, Utah
3205. Juab (UT), County of, Utah
3206. Kane (UT), County of, Utah
3207. Millard (UT), County of, Utah
3208. Piute (UT), County of, Utah
3209. Rich (UT), County of, Utah
3210. Salt Lake (UT), County of, Utah
3211. San Juan (UT), County of, Utah
3212. Sanpete (UT), County of, Utah
3213. Sevier (UT), County of, Utah
3214. Summit (UT), County of, Utah
3215. Tooele (UT), County of, Utah
3216. Tri-County Health Department (UT), Utah
3217. Uintah (UT), County of, Utah
3218. Utah (UT), County of, Utah
3219. Wasatch (UT), County of, Utah
3220. Washington (UT), County of, Utah
3221. Wayne (UT), County of, Utah
3222. Weber (UT), County of, Utah
3223. Bennington (VT), Town of, Vermont
3224. Brattleboro (VT), Town of, Vermont
3225. Saint Albans (VT), City of, Vermont
3226. Sharon (VT), Town of, Vermont
3227. Accomack (VA), County of, Virginia
3228. Alexandria (VA), City of, Virginia
3229. Alleghany (VA), County of, Virginia
3230. Amherst (VA), County of, Virginia
3231. Arlington (VA), County of, Virginia
3232. Bland (VA), County of, Virginia
3233. Botetourt (VA), County of, Virginia
3234. Bristol (VA), City of, Virginia
3235. Buchanan (VA), County of, Virginia
3236. Buena Vista (VA), City of, Virginia
3237. Carroll (VA), County of, Virginia
3238. Charlotte (VA), County of, Virginia
3239. Chesapeake (VA), City of, Virginia
3240. Chesapeake Hospital Corporation (VA), Virginia
3241. Chesterfield (VA), County of, Virginia
3242. Covington (VA), City of, Virginia
3243. Culpeper (VA), County of, Virginia
3244. Cumberland (VA), County of, Virginia
3245. Danville (VA), City of, Virginia
3246. Dickenson (VA), County of, Virginia
3247. Dinwiddie (VA), County of, Virginia
3248. Emporia (VA), City of, Virginia
3249. Fairfax (VA), City of, Virginia
3250. Fairfax (VA), County of, Virginia
3251. Fauquier (VA), County of, Virginia
3252. Floyd (VA), County of, Virginia
3253. Franklin (VA), County of, Virginia
3254. Frederick (VA), County of, Virginia
3255. Fredericksburg (VA), City of, Virginia
3256. Galax (VA), City of, Virginia
3257. Giles (VA), County of, Virginia
3258. Goochland (VA), County of, Virginia
3259. Grayson (VA), County of, Virginia
3260. Greensville (VA), County of, Virginia

3261. Halifax (VA), County of, Virginia
3262. Henrico (VA), County of, Virginia
3263. Henry (VA), County of, Virginia
3264. Hopewell (VA), City of, Virginia
3265. Isle of Wight (VA), County of, Virginia
3266. King and Queen (VA), County of, Virginia
3267. Lee (VA), County of, Virginia
3268. Lexington (VA), City of, Virginia
3269. Loudoun (VA), County of, Virginia
3270. Louisa (VA), County of, Virginia
3271. Madison (VA), County of, Virginia
3272. Martinsville (VA), City of, Virginia
3273. Mecklenburg (VA), County of, Virginia
3274. Montgomery (VA), County of, Virginia
3275. Norfolk (VA), City of, Virginia
3276. Northampton (VA), County of, Virginia
3277. Northumberland (VA), County of, Virginia
3278. Norton (VA), City of, Virginia
3279. Page (VA), County of, Virginia
3280. Patrick (VA), County of, Virginia
3281. Pittsylvania (VA), County of, Virginia
3282. Portsmouth (VA), City of, Virginia
3283. Prince George (VA), County of, Virginia
3284. Prince William (VA), County of, Virginia
3285. Pulaski (VA), County of, Virginia
3286. Radford (VA), City of, Virginia
3287. Richlands (VA), Town of, Virginia
3288. Richmond (VA), City of, Virginia
3289. Richmond (VA), County of, Virginia
3290. Roanoke (VA), City of, Virginia
3291. Roanoke (VA), County of, Virginia
3292. Rockbridge (VA), County of, Virginia
3293. Russell, VA (1) (VA), County of, Virginia
3294. Salem (VA), City of, Virginia
3295. Scott (VA), County of, Virginia
3296. Shenandoah (VA), County of, Virginia
3297. Smyth (VA), County of, Virginia
3298. Stafford (VA), County of, Virginia
3299. Tazewell (VA), County of, Virginia
3300. Virginia Beach (VA), City of, Virginia
3301. Virginia Beach (VA), City of (Sheriff), Virginia
3302. Warren (VA), County of, Virginia
3303. Washington (VA), County of, Virginia
3304. Waynesboro (VA), City of, Virginia
3305. Westmoreland (VA), County of, Virginia
3306. Winchester (VA), City of, Virginia
3307. Wise (VA), County of, West Virginia
3308. Wythe (VA), County of, Virginia
3309. Anacortes (WA), City of, Washington
3310. Bainbridge Island (WA), City of, Washington
3311. Burlington (WA), City of, Washington
3312. Chelan (WA), County of, Washington
3313. Clallam (WA), County of, Washington
3314. Clark (WA), County of, Washington
3315. Everett (WA), City of, Washington
3316. Franklin (WA), County of, Washington
3317. Island (WA), County of, Washington
3318. Jefferson (WA), County of, Washington
3319. Kent (WA), City of, Washington
3320. King (WA), County of, Washington
3321. Kirkland (WA), City of, Washington
3322. Kitsap (WA), County of, Washington
3323. Kittitas (WA), County of, Washington
3324. La Conner School District (WA), Washington
3325. Lakewood (WA), City of, Washington
3326. Lewis (WA), County of, Washington
3327. Lincoln (WA), County of, Washington
3328. Mount Vernon (WA), City of, Washington
3329. Mount Vernon School District (WA), Washington
3330. Olympia (WA), City of, Washington
3331. Pierce (WA), County of, Washington
3332. San Juan (WA), County of, Washington
3333. Seattle (WA), City of, Washington
3334. Sedro-Wooley (WA), City of, Washington
3335. Sedro-Wooley School District (WA), Washington
3336. Skagit (WA), County of, Washington
3337. Snohomish (WA), County of, Washington

3338. Spokane (WA), City of, Washington
3339. Spokane (WA), County of, Washington
3340. Tacoma (WA), City of, Washington
3341. Thurston (WA), County of, Washington
3342. Vancouver (WA), City of, Washington
3343. Walla Walla (WA), County of, Washington
3344. Whatcom (WA), County of, Washington
3345. Whitman (WA), County of, Washington
3346. Adams (WI), County of, Wisconsin
3347. Ashland (WI), County of, Wisconsin
3348. Barron (WI), County of, Wisconsin
3349. Bayfield (WI), County of, Wisconsin
3350. Brown (WI), County of, Wisconsin
3351. Buffalo (WI), County of, Wisconsin
3352. Burnett (WI), County of, Wisconsin
3353. Calumet (WI), County of, Wisconsin
3354. Chippewa (WI), County of, Wisconsin
3355. Clark (WI), County of, Wisconsin
3356. Columbia (WI), County of, Wisconsin
3357. Crawford (WI), County of, Wisconsin
3358. Cudahy (WI), City of, Wisconsin
3359. Dane (WI), County of, Wisconsin
3360. Dodge (WI), County of, Wisconsin
3361. Door (WI), County of, Wisconsin
3362. Douglas (WI), County of, Wisconsin
3363. Dunn (WI), County of, Wisconsin
3364. Eau Claire (WI), County of, Wisconsin
3365. Florence (WI), County of, Wisconsin
3366. Fond du Lac (WI), County of, Wisconsin
3367. Forest (WI), County of, Wisconsin
3368. Franklin (WI), City of, Wisconsin
3369. Grant (WI), County of, Wisconsin
3370. Green (WI), County of, Wisconsin
3371. Green Lake (WI), County of, Wisconsin
3372. Greenfield (WI), City of, Wisconsin
3373. Iowa (WI), County of, Wisconsin
3374. Iron (WI), County of, Wisconsin
3375. Jackson (WI), County of, Wisconsin
3376. Jefferson (WI), County of, Wisconsin
3377. Juneau (WI), County of, Wisconsin
3378. Kenosha (WI), City of, Wisconsin
3379. Kenosha (WI), County of, Wisconsin
3380. Kewaunee (WI), County of, Wisconsin
3381. La Crosse (WI), County of, Wisconsin
3382. Lafayette (WI), County of, Wisconsin
3383. Langlade (WI), County of, Wisconsin
3384. Lincoln (WI), County of, Wisconsin
3385. Manitowoc (WI), County of, Wisconsin
3386. Marathon (WI), County of, Wisconsin
3387. Marinette (WI), City of, Wisconsin
3388. Marinette (WI), County of, Wisconsin
3389. Marquette (WI), County of, Wisconsin
3390. Menominee (WI), County of, Wisconsin
3391. Milwaukee (WI), City of, Wisconsin
3392. Milwaukee (WI), County of, Wisconsin
3393. Monroe (WI), County of, Wisconsin
3394. Mount Pleasant (WI), Village of, Wisconsin
3395. Oak Creek (WI), City of, Wisconsin
3396. Oconto (WI), County of, Wisconsin
3397. Oneida (WI), County of, Wisconsin
3398. Outagamie (WI), County of, Wisconsin
3399. Ozaukee (WI), County of, Wisconsin
3400. Pepin (WI), County of, Wisconsin
3401. Pierce (WI), County of, Wisconsin
3402. Pleasant Prairie (WI), Village of, Wisconsin
3403. Portage (WI), County of, Wisconsin
3404. Price (WI), County of, Wisconsin
3405. Racine (WI), County of, Wisconsin
3406. Richland (WI), County of, Wisconsin
3407. Rock (WI), County of, Wisconsin
3408. Rusk (WI), County of, Wisconsin
3409. Saint Croix (WI), County of, Wisconsin
3410. Sauk (WI), County of, Wisconsin
3411. Sawyer (WI), County of, Wisconsin
3412. Shawano (WI), County of, Wisconsin
3413. Sheboygan (WI), County of, Wisconsin
3414. South Milwaukee (WI), City of, Wisconsin
3415. Sturtevant (WI), Village of, Wisconsin
3416. Superior (WI), City of, Wisconsin
3417. Taylor (WI), County of, Wisconsin

3418. Trempealeau (WI), County of, Wisconsin
3419. Union Grove (WI), Village of, Wisconsin
3420. Vernon (WI), County of, Wisconsin
3421. Vilas (WI), County of, Wisconsin
3422. Walworth (WI), County of, Wisconsin
3423. Washburn (WI), County of, Wisconsin
3424. Washington (WI), County of, Wisconsin
3425. Waukesha (WI), County of, Wisconsin
3426. Waupaca (WI), County of, Wisconsin
3427. Waushara (WI), County of, Wisconsin
3428. Wauwatosa (WI), City of, Wisconsin
3429. West Allis (WI), City of, Wisconsin
3430. Winnebago (WI), County of, Wisconsin
3431. Wood (WI), County of, Wisconsin
3432. Yorkville (WI), Village of, Wisconsin
3433. Carbon (WY), County of, Wyoming
3434. Casper (WY), Wyoming
3435. Cheyenne (WY), Wyoming
3436. Green River (WY), City of, Wyoming
3437. Riverton (WY), City of, Wyoming
3438. Rock Springs (WY), Wyoming
3439. Sweetwater (WY), County of, Wyoming

Exhibit D
Settling States Plan for Acceptance and Delivery of Settlement Product

1. Completion of the Settlement Product Election Form

Within thirty (30) days of the Effective Date and on or before January 1 in each of the calendar years 2025, 2027, 2029 and 2031 (each, an "Election Year"), before placing any orders for Settlement Product for the two (2) calendar years immediately following the Election Year ("Two-Year Term"), each Settling State must execute and return to the Settlement Fund Administrator the Settlement Product Election Form as set forth below in this Exhibit D if it elects to receive, consistent with the Settlement Product Election Form, all or any portion of the Settlement Product allocated to the Settling State as reflected in Schedule D-1 ("Product Election Amount"). The Two-Year Terms are: (1) 2024-2025; (2) 2026-2027; (3) 2028-2029; (4) 2030-2031; and (5) 2032-2033.

2. Settlement Product Allocation

Schedule D-I (attached hereto) sets forth the maximum annual quantity of Settlement Product ("Maximum Annual Quantity") and maximum 10-year total quantity of Settlement Product ("Maximum Total Quantity") for each Settling State. The Parties agree that the total WAC value of the Settlement Product to be provided to a Settling State under this Agreement is set forth next to the Settling State's name on Schedule D-I, and that for purposes of this Agreement the WAC value per kit of Settlement Product is $125.

For each calendar year during the applicable Two-Year Term, the difference in quantity of Settlement Product between the Settling State's Maximum Annual Quantity and the annual Product Election Amount will be converted (the "Converted Quantity") into a cash value equaling twenty percent (20%) of the WAC value of the Converted Quantity.

A Settling State shall not request in its annual Forecast quantities of Settlement Product that exceed the Product Election Amount for the applicable period. The quantities of Settlement Product set forth in a Settling State's four (4) quarterly Purchase Orders per calendar year shall not exceed the quantities set forth in the Settling State's Forecast.

3. Calculation and Payment of Cash Conversion Amount

A Settling State that elects to receive Settlement Product Cash Conversion Amount in any Two-Year Term will receive a Settlement Product Cash Conversion Amount in each year of that Two-Year Term in proportion to 8.33% (i.e. 1/12) of the State's total Settlement Product Cash Conversion Amount. The remaining Settlement Product Cash Conversion Amount owed to the State for that Two-Year Term will be paid out in two equal installments of 1.67% of the State's total Settlement Product Cash Conversion Amount in Payment Years 12 and 13 as reflected in Exhibit M-2.

For example, assume State X is allocated $60 million in Settlement Product at WAC, which would convert to $12 million in Settlement Product Cash Conversion (based on the 20% conversion rate). Therefore, State X would receive $6 million in Settlement Product at WAC annually over 10 years

or $1 million in Settlement Product Cash Conversion annually over 12 years if it elected full Settlement Product Cash Conversion in Year 1. However, if State X elects to convert to cash for a given Two-Year Term, it would receive: (i) $999,600 (i.e., 8.33% of $12 million) in each calendar year of that Two-Year Term, and (ii) $200,400 (i.e., 1.67% of $12 million) in Payment Years 12 and 13, for a total Settlement Product Cash Conversion of $2.4 million.

4. Forecast, Orders, Purchase Order Fulfillment, Distribution & Delivery

Forecast to TEVA USA

Within one hundred and twenty (120) days of the Effective Date, and each January 1 thereafter, each Settling State that elects to order Settlement Product shall provide Teva USA a written forecast of the estimated quantities of Settlement Product that the Settling State anticipates ordering from Teva USA for delivery during the immediately following calendar year (each, a "Forecast").

Orders to TEVA USA

The Office of the Attorney General, or a state office, agency, officer or official designated by the Office of the Attorney General, on behalf of each Settling State, shall have the right to place periodic purchase orders setting forth the quantity of the Settlement Product to be delivered and the Settling State's desired delivery date (each, a "Purchase Order") based on annual Forecasts submitted by the Settling State. Not less than six (6) months prior to its desired first delivery date, the Settling State will issue its first Purchase Order. Thereafter, the Settling State shall place periodic Purchase Orders not to exceed four (4) quarterly Purchase Orders per calendar year to Teva USA for fulfillment of Settlement Product over a period of ten (10) calendar years commencing six (6) months after the Settling State submits its first Forecast and ending on December 31, 2033.

Each Purchase Order from the Settling State shall be in writing and directed to Teva USA's affiliate Anda, Inc., 2915 Weston Road, Weston, FL 33331, Attention: Patrick Cochrane, patrick.cochrane@andanet.com and Anthony Mihelich, anthony.mihelich@andanet.com. If the Settling State has any questions regarding the Settlement Product, the Settling State will contact Anda Customer and Sales Support, Attention: Elizabeth Shefferman at elizabeth.shefferman@andanet.com or (954) 217-4500 x76806 ("Anda Customer and Sales Support"). The Settling State shall designate, in each Purchase Order, up to five (5) delivery locations within the Settling State that will receive the Settlement Product on behalf of the Settling State ("Delivery Locations").

Fulfillment of Purchase Orders by TEVA USA

Purchase Orders submitted to Teva USA on behalf of a Settling State pursuant to this Agreement shall in all respects be processed and filled by Teva USA as though such Purchase Orders had been submitted by Teva USA's regular paying customers, except to the extent inconsistent with the terms of this Agreement.

The delivery date of Settlement Product for the Settling State's first Purchase Order shall be no earlier than the later of (a) six (6) months after the Settling State submits its first Forecast and (b)

January 1, 2024. For a Settling State's first Purchase Order, Teva USA will use its good faith efforts to ship the order directly to the Delivery Locations within six (6) months of Teva USA's receipt of the Purchase Order, at no cost to the Settling State. For all Purchase Orders received after the first Purchase Order, Teva USA will use its good faith efforts to deliver Settlement Product within ninety (90) days of Teva USA's receipt of the applicable Purchase Order for Settlement Product.

Teva USA shall respond to the Settling State's Purchase Order request within seven (7) calendar days confirming the order. Teva will use commercially reasonable efforts to fulfil the orders but will have the right to allocate the quantities forecasted by the Settling State evenly on a calendar quarter basis during such calendar year. For each Purchase Order received, Teva USA shall provide the Settling State with estimated delivery dates for receipt of the Settlement Product. Teva USA will use good faith efforts to deliver Settlement Product with at least thirteen (13) months remaining shelf life.

Teva USA will have the right to reject any Purchase Order that would result in quantities of Settlement Product being ordered during a calendar year in excess of the annual Forecast for that calendar year. In the event the Settling State desires to order less than the amount set forth in its Forecast, it shall notify Teva USA in writing of any changes to the Settling State's Forecast promptly after the changes are known by the Settling State. The Settling State shall use its good faith efforts to ensure the accuracy of its Forecasts and to monitor its inventory levels of Settlement Product to ensure that it does not order Settlement Product in excess of its requirements thereby increasing available Settlement Product for patients in need and mitigating the possibility of expired Settlement Product in the Settling State's inventory. In the event a Settling State does not order the quantities of Settlement Product set forth in its Forecast in a given calendar year, it will not be permitted to order any shortfall during any subsequent calendar year.

For purposes of this Agreement, the term "Force Majeure Event" means any event reasonably beyond the control of Teva, including wars, hostilities, revolution, riots, civil commotion, national emergency, unavailability of supplies, epidemics, fire, flood, earthquake, force of nature, explosion, terrorist act, embargo, or any act of God, or any law, proclamation, regulation, ordinance, or other act or order of any court or governmental authority. In the event of a Force Majeure Event or other inability to supply any order made by a Settling State for Settlement Product, Teva USA shall promptly provide written notice to the Settling State. Teva USA and the Settling State shall meet and confer within seven (7) days of such written notice to establish a commercially reasonable plan to resolve any inability to supply as quickly as reasonably possible.

Summary of Election, Forecast and Purchase Order Process

Two-Year Term	Settlement Product Election Form for Two-Year Term Due By	Annual Forecast Due By	Purchase Orders (PO)
2024	Within 30 days of Effective Date	Within 120 days of Effective Date	May be made 4x/year, once a quarter. PO must be submitted at least 90 days *before* desired delivery date, except first order must be submitted at least 6 months beforehand
2025		January 1, 2024	
2026	January 1, 2025	January 1, 2025	
2027		January 1, 2026	
2028	January 1, 2027	January 1, 2027	
2029		January 1, 2028	
2030	January 1, 2029	January 1, 2029	
2031		January 1, 2030	
2032	January 1, 2031	January 1, 2031	
2033		January 1, 2032	

5. Delivery to State-Designated Facility

Delivery of the Settlement Product shall occur no more than five (5) business days after the shipment date. Should delivery within this deadline not occur, Teva USA agrees to notify the Settling State in writing and to work in good faith to resolve shipping or delivery issues that may arise.

Shipping shall occur in the same manner that Teva USA regularly ships this Settlement Product and any damages to the Settlement Product or other shipping damages or liability arising prior to receipt of the Settlement Product by the Settling State shall be fully the responsibility of Teva USA. Should damage to Settlement Product occur during shipping, Teva USA agrees to re-ship the amount damaged promptly and at no cost to the Settling State.

The Settling State shall ensure that the Delivery Locations (i) have appropriate storage accommodations and (ii) comply with all applicable state and federal laws surrounding receipt of the Settlement Product. The Settling State reserves the right to designate different Delivery Locations within its state during the pendency of this Agreement at its discretion.

Should the Settling State determine that alternate Delivery Locations will receive the Settlement

Product during the pendency of this Agreement, the Settling State shall notify Teva USA and its affiliate Anda, Inc. in writing through the Purchase Order.

The Settling State shall inspect the Settlement Product within ten (10) business days upon arrival at the Delivery Locations. If the Settling State identifies damages to the Settlement Product during the inspection, the Settling State will notify Anda Customer and Sales Support and Teva USA agrees to work in good faith to replace the damaged Settlement Product promptly. If the Settling State identifies a shortage in the shipment of Settlement Product during the inspection, the Settling State will notify Anda Customer and Sales Support and Teva USA agrees to work in good faith to ship the missing Settlement Product promptly. The Settling State will ship any damaged Settlement Product in accordance with Anda Customer and Sales Support's instructions. The Settling State will destroy and dispose of expired or otherwise unusable Settlement Product in accordance with all applicable laws, rules and regulations.

Delivery of the Settlement Product is complete when Teva USA delivers all units of a particular order to a Delivery Location and when both parties or their designees sign an invoice confirming the amount of units of Settlement Product received by the Settling State.

6. Distribution by State

The Settling State may distribute the Settlement Product throughout its state at its sole discretion. The time, place, and manner of any distribution of the Settlement Product by the Settling State will be determined solely by the Settling State. The Settling State will comply with any state or federal laws regarding the distribution of the Settlement Product.

The Settling State retains the right to alter its distribution plan according to the Settling State's needs, including the right to store the Settlement Product at a state facility for any length of time. The Settling State may distribute the Settlement Product as it deems best to address the opioid-related public health crisis in its state, and alteration of distribution to recipients shall be at the sole discretion of the Settling State without regard to the preferences or recommendations of Teva USA.

Schedule D-I

Maximum Settlement Product Quantity

State	Exhibit D-1 Allocation Percentages	Maximum Annual Quantity	Total Maximum Quantity	Total WAC Value
Alabama	1.9398529714%	18,623	186,226	$23,278,235.66
Alaska	0.2775222702%	2,664	26,642	$3,330,267.24
American Samoa	0.0208128407%	200	1,998	$249,754.09
Arizona	2.8876527444%	27,721	277,215	$34,651,832.93
Arkansas	1.1331536145%	10,878	108,783	$13,597,843.37
California	11.7946460861%	113,229	1,132,286	$141,535,753.03
Colorado	2.0197920596%	19,390	193,900	$24,237,504.72
Connecticut	1.5726901178%	15,098	150,978	$18,872,281.41
Delaware	0.5373074251%	5,158	51,582	$6,447,689.10
District of Columbia	0.2187714966%	2,100	21,002	$2,625,257.96
Georgia	3.3892042020%	32,536	325,364	$40,670,450.42
Guam	0.0583909225%	561	5,606	$700,691.07
Hawaii	0.3946266154%	3,788	37,884	$4,735,519.38
Idaho	0.5979384226%	5,740	57,402	$7,175,261.07
Illinois	4.0433257336%	38,816	388,159	$48,519,908.80
Indiana	2.6947430310%	25,870	258,695	$32,336,916.37
Iowa	0.9018471346%	8,658	86,577	$10,822,165.62
Kansas	0.9530870676%	9,150	91,496	$11,437,044.81
Kentucky	2.4266429216%	23,296	232,958	$29,119,715.06
Maine	0.6434183438%	6,177	61,768	$7,721,020.13
Maryland	2.5655492811%	24,629	246,293	$30,786,591.37
Massachusetts	2.8001102479%	26,881	268,811	$33,601,322.97
Michigan	4.1353271673%	39,699	396,991	$49,623,926.01
Minnesota	1.5768831621%	15,138	151,381	$18,922,597.95
Mississippi	1.0483295400%	10,064	100,640	$12,579,954.48
Missouri	2.4379633673%	23,404	234,044	$29,255,560.41
Montana	0.3799177128%	3,647	36,472	$4,559,012.55
N. Mariana Islands	0.0203068690%	195	1,949	$243,682.43
Nebraska	0.5070720106%	4,868	48,679	$6,084,864.13
Nevada	1.4608054311%	14,024	140,237	$17,529,665.17
New Hampshire	0.7031751667%	6,750	67,505	$8,438,102.00
New Jersey	3.3490028797%	32,150	321,504	$40,188,034.56
New Mexico	0.9711484745%	9,323	93,230	$11,653,781.69

New York	6.5522740824%	62,902	629,018	$78,627,288.99
North Carolina	3.9508421618%	37,928	379,281	$47,410,105.94
North Dakota	0.2066740057%	1,984	19,841	$2,480,088.07
Ohio	5.2957897365%	50,840	508,396	$63,549,476.84
Oklahoma	0.3711236081%	3,563	35,628	$4,453,483.30
Oregon	1.6703354774%	16,035	160,352	$20,044,025.73
Pennsylvania	5.5772341422%	53,541	535,414	$66,926,809.71
Puerto Rico	0.8631853526%	8,287	82,866	$10,358,224.23
South Carolina	1.8711051410%	17,963	179,626	$22,453,261.69
South Dakota	0.2409305541%	2,313	23,129	$2,891,166.65
Tennessee	3.2675757180%	31,369	313,687	$39,210,908.62
Utah	1.3938458743%	13,381	133,809	$16,726,150.49
Vermont	0.3093439854%	2,970	29,697	$3,712,127.82
Virgin Islands	0.0383716780%	368	3,684	$460,460.14
Virginia	2.7715922068%	26,607	266,073	$33,259,106.48
Washington	2.8187420775%	27,060	270,599	$33,824,904.93
Wisconsin	2.1372468586%	20,518	205,176	$25,646,962.30
Wyoming	0.2027700082%	1,947	19,466	$2,433,240.10
Total		960,000	9,600,000	$1,200,000,000.00

Settlement Product Election Form

State	
Attorney General	
Address:	
City, State, Zip:	
Phone:	
Email:	
Election Year	2023 2025 2027 2029 2031

As of the date the Settling State submits this Settlement Product Election Form, the Settling State identified above, acting through the undersigned Attorney General, or other state office, agency, officer or official designated by the Attorney General hereby elects to receive during each calendar year of the applicable Two-Year Term:

____% of the Settling State's Maximum Annual Quantity as Settlement Product (Product Election Amount)

____% of the Settling State's Maximum Annual Quantity converted to a cash value (Converted Quantity)

100 % Total

The cash value of Settlement Product is equal to twenty percent (20%) of the WAC value of the Settling State's Converted Quantity. This Settlement Election Form shall be applicable to the Two-Year Term immediately following the Election Year, as specified in Section IX of the Agreement.

I have all necessary power and authorization to execute this Settlement Product Election Form on behalf of the Settling State.

Signature: _____

Name: _____

Title: _____

Date: _____

Exhibit E
List of Opioid Remediation Uses

Schedule A
Core Strategies

Settling States and Exhibit G Participants may choose from among the abatement strategies listed in Schedule B. However, priority may be given to the following core abatement strategies ("*Core Strategies*").[1]

A. NALOXONE OR OTHER FDA-APPROVED DRUG TO REVERSE OPIOID OVERDOSES

1. Expand training for first responders, schools, community support groups and families; and

2. Increase distribution to individuals who are uninsured or whose insurance does not cover the needed service.

B. MEDICATION-ASSISTED TREATMENT ("*MAT*") DISTRIBUTION AND OTHER OPIOID-RELATED TREATMENT

1. Increase distribution of MAT to individuals who are uninsured or whose insurance does not cover the needed service;

2. Provide education to school-based and youth-focused programs that discourage or prevent misuse;

3. Provide MAT education and awareness training to healthcare providers, EMTs, law enforcement, and other first responders; and

4. Provide treatment and recovery support services such as residential and inpatient treatment, intensive outpatient treatment, outpatient therapy or counseling, and recovery housing that allow or integrate medication and with other support services.

[1] As used in this Schedule A, words like "expand," "fund," "provide" or the like shall not indicate a preference for new or existing programs.

C. PREGNANT & POSTPARTUM WOMEN

1. Expand Screening, Brief Intervention, and Referral to Treatment ("*SBIRT*") services to non-Medicaid eligible or uninsured pregnant women;

2. Expand comprehensive evidence-based treatment and recovery services, including MAT, for women with co-occurring Opioid Use Disorder ("*OUD*") and other Substance Use Disorder ("*SUD*")/Mental Health disorders for uninsured individuals for up to 12 months postpartum; and

3. Provide comprehensive wrap-around services to individuals with OUD, including housing, transportation, job placement/training, and childcare.

D. EXPANDING TREATMENT FOR NEONATAL ABSTINENCE SYNDROME ("*NAS*")

1. Expand comprehensive evidence-based and recovery support for NAS babies;

2. Expand services for better continuum of care with infant-need dyad; and

3. Expand long-term treatment and services for medical monitoring of NAS babies and their families.

E. EXPANSION OF WARM HAND-OFF PROGRAMS AND RECOVERY SERVICES

1. Expand services such as navigators and on-call teams to begin MAT in hospital emergency departments;

2. Expand warm hand-off services to transition to recovery services;

3. Broaden scope of recovery services to include co-occurring SUD or mental health conditions;

4. Provide comprehensive wrap-around services to individuals in recovery, including housing, transportation, job placement/training, and childcare; and

5. Hire additional social workers or other behavioral health workers to facilitate expansions above.

F. TREATMENT FOR INCARCERATED POPULATION

1. Provide evidence-based treatment and recovery support, including MAT for persons with OUD and co-occurring SUD/MH disorders within and transitioning out of the criminal justice system; and

2. Increase funding for jails to provide treatment to inmates with OUD.

G. PREVENTION PROGRAMS

1. Funding for media campaigns to prevent opioid use (similar to the FDA's "Real Cost" campaign to prevent youth from misusing tobacco);

2. Funding for evidence-based prevention programs in schools;

3. Funding for medical provider education and outreach regarding best prescribing practices for opioids consistent with CDC guidelines, including providers at hospitals (academic detailing);

4. Funding for community drug disposal programs; and

5. Funding and training for first responders to participate in pre-arrest diversion programs, post-overdose response teams, or similar strategies that connect at-risk individuals to behavioral health services and supports.

H. EXPANDING SYRINGE SERVICE PROGRAMS

1. Provide comprehensive syringe services programs with more wrap-around services, including linkage to OUD treatment, access to sterile syringes and linkage to care and treatment of infectious diseases.

I. EVIDENCE-BASED DATA COLLECTION AND RESEARCH ANALYZING THE EFFECTIVENESS OF THE ABATEMENT STRATEGIES WITHIN THE STATE

Schedule B
Approved Uses

Support treatment of Opioid Use Disorder (OUD) and any co-occurring Substance Use Disorder or Mental Health (SUD/MH) conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

PART ONE: TREATMENT

A. TREAT OPIOID USE DISORDER (OUD)

Support treatment of Opioid Use Disorder ("*OUD*") and any co-occurring Substance Use Disorder or Mental Health ("*SUD/MH*") conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:[2]

1. Expand availability of treatment for OUD and any co-occurring SUD/MH conditions, including all forms of Medication-Assisted Treatment ("*MAT*") approved by the U.S. Food and Drug Administration.

2. Support and reimburse evidence-based services that adhere to the American Society of Addiction Medicine ("*ASAM*") continuum of care for OUD and any co-occurring SUD/MH conditions.

3. Expand telehealth to increase access to treatment for OUD and any co-occurring SUD/MH conditions, including MAT, as well as counseling, psychiatric support, and other treatment and recovery support services.

4. Improve oversight of Opioid Treatment Programs ("*OTPs*") to assure evidence-based or evidence-informed practices such as adequate methadone dosing and low threshold approaches to treatment.

5. Support mobile intervention, treatment, and recovery services, offered by qualified professionals and service providers, such as peer recovery coaches, for persons with OUD and any co-occurring SUD/MH conditions and for persons who have experienced an opioid overdose.

6. Provide treatment of trauma for individuals with OUD (*e.g.*, violence, sexual assault, human trafficking, or adverse childhood experiences) and family members (*e.g.*, surviving family members after an overdose or overdose fatality), and training of health care personnel to identify and address such trauma.

[2] As used in this Schedule B, words like "expand," "fund," "provide" or the like shall not indicate a preference for new or existing programs.

7. Support evidence-based withdrawal management services for people with OUD and any co-occurring mental health conditions.

8. Provide training on MAT for health care providers, first responders, students, or other supporting professionals, such as peer recovery coaches or recovery outreach specialists, including telementoring to assist community-based providers in rural or underserved areas.

9. Support workforce development for addiction professionals who work with persons with OUD and any co-occurring SUD/MH conditions.

10. Offer fellowships for addiction medicine specialists for direct patient care, instructors, and clinical research for treatments.

11. Offer scholarships and supports for behavioral health practitioners or workers involved in addressing OUD and any co-occurring SUD/MH or mental health conditions, including, but not limited to, training, scholarships, fellowships, loan repayment programs, or other incentives for providers to work in rural or underserved areas.

12. Provide funding and training for clinicians to obtain a waiver under the federal Drug Addiction Treatment Act of 2000 ("*DATA 2000*") to prescribe MAT for OUD, and provide technical assistance and professional support to clinicians who have obtained a DATA 2000 waiver.

13. Disseminate web-based training curricula, such as the American Academy of Addiction Psychiatry's Provider Clinical Support Service–Opioids web-based training curriculum and motivational interviewing.

14. Develop and disseminate new curricula, such as the American Academy of Addiction Psychiatry's Provider Clinical Support Service for Medication–Assisted Treatment.

B. SUPPORT PEOPLE IN TREATMENT AND RECOVERY

Support people in recovery from OUD and any co-occurring SUD/MH conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the programs or strategies that:

1. Provide comprehensive wrap-around services to individuals with OUD and any co-occurring SUD/MH conditions, including housing, transportation, education, job placement, job training, or childcare.

2. Provide the full continuum of care of treatment and recovery services for OUD and any co-occurring SUD/MH conditions, including supportive housing, peer support services and counseling, community navigators, case management, and connections to community-based services.

3. Provide counseling, peer-support, recovery case management and residential treatment with access to medications for those who need it to persons with OUD and any co-occurring SUD/MH conditions.

4. Provide access to housing for people with OUD and any co-occurring SUD/MH conditions, including supportive housing, recovery housing, housing assistance programs, training for housing providers, or recovery housing programs that allow or integrate FDA-approved mediation with other support services.

5. Provide community support services, including social and legal services, to assist in deinstitutionalizing persons with OUD and any co-occurring SUD/MH conditions.

6. Support or expand peer-recovery centers, which may include support groups, social events, computer access, or other services for persons with OUD and any co-occurring SUD/MH conditions.

7. Provide or support transportation to treatment or recovery programs or services for persons with OUD and any co-occurring SUD/MH conditions.

8. Provide employment training or educational services for persons in treatment for or recovery from OUD and any co-occurring SUD/MH conditions.

9. Identify successful recovery programs such as physician, pilot, and college recovery programs, and provide support and technical assistance to increase the number and capacity of high-quality programs to help those in recovery.

10. Engage non-profits, faith-based communities, and community coalitions to support people in treatment and recovery and to support family members in their efforts to support the person with OUD in the family.

11. Provide training and development of procedures for government staff to appropriately interact and provide social and other services to individuals with or in recovery from OUD, including reducing stigma.

12. Support stigma reduction efforts regarding treatment and support for persons with OUD, including reducing the stigma on effective treatment.

13. Create or support culturally appropriate services and programs for persons with OUD and any co-occurring SUD/MH conditions, including new Americans.

14. Create and/or support recovery high schools.

15. Hire or train behavioral health workers to provide or expand any of the services or supports listed above.

C. CONNECT PEOPLE WHO NEED HELP TO THE HELP THEY NEED (CONNECTIONS TO CARE)

Provide connections to care for people who have—or are at risk of developing—OUD and any co-occurring SUD/MH conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Ensure that health care providers are screening for OUD and other risk factors and know how to appropriately counsel and treat (or refer if necessary) a patient for OUD treatment.

2. Fund SBIRT programs to reduce the transition from use to disorders, including SBIRT services to pregnant women who are uninsured or not eligible for Medicaid.

3. Provide training and long-term implementation of SBIRT in key systems (health, schools, colleges, criminal justice, and probation), with a focus on youth and young adults when transition from misuse to opioid disorder is common.

4. Purchase automated versions of SBIRT and support ongoing costs of the technology.

5. Expand services such as navigators and on-call teams to begin MAT in hospital emergency departments.

6. Provide training for emergency room personnel treating opioid overdose patients on post-discharge planning, including community referrals for MAT, recovery case management or support services.

7. Support hospital programs that transition persons with OUD and any co-occurring SUD/MH conditions, or persons who have experienced an opioid overdose, into clinically appropriate follow-up care through a bridge clinic or similar approach.

8. Support crisis stabilization centers that serve as an alternative to hospital emergency departments for persons with OUD and any co-occurring SUD/MH conditions or persons that have experienced an opioid overdose.

9. Support the work of Emergency Medical Systems, including peer support specialists, to connect individuals to treatment or other appropriate services following an opioid overdose or other opioid-related adverse event.

10. Provide funding for peer support specialists or recovery coaches in emergency departments, detox facilities, recovery centers, recovery housing, or similar settings; offer services, supports, or connections to care to persons with OUD and any co-occurring SUD/MH conditions or to persons who have experienced an opioid overdose.

11. Expand warm hand-off services to transition to recovery services.

12. Create or support school-based contacts that parents can engage with to seek immediate treatment services for their child; and support prevention, intervention, treatment, and recovery programs focused on young people.

13. Develop and support best practices on addressing OUD in the workplace.

14. Support assistance programs for health care providers with OUD.

15. Engage non-profits and the faith community as a system to support outreach for treatment.

16. Support centralized call centers that provide information and connections to appropriate services and supports for persons with OUD and any co-occurring SUD/MH conditions.

D. ADDRESS THE NEEDS OF CRIMINAL JUSTICE-INVOLVED PERSONS

Address the needs of persons with OUD and any co-occurring SUD/MH conditions who are involved in, are at risk of becoming involved in, or are transitioning out of the criminal justice system through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Support pre-arrest or pre-arraignment diversion and deflection strategies for persons with OUD and any co-occurring SUD/MH conditions, including established strategies such as:

    1. Self-referral strategies such as the Angel Programs or the Police Assisted Addiction Recovery Initiative ("*PAARI*");

    2. Active outreach strategies such as the Drug Abuse Response Team ("*DART*") model;

    3. "Naloxone Plus" strategies, which work to ensure that individuals who have received naloxone to reverse the effects of an overdose are then linked to treatment programs or other appropriate services;

    4. Officer prevention strategies, such as the Law Enforcement Assisted Diversion ("*LEAD*") model;

    5. Officer intervention strategies such as the Leon County, Florida Adult Civil Citation Network or the Chicago Westside Narcotics Diversion to Treatment Initiative; or

    6. Co-responder and/or alternative responder models to address OUD-related 911 calls with greater SUD expertise.

2. Support pre-trial services that connect individuals with OUD and any co-occurring SUD/MH conditions to evidence-informed treatment, including MAT, and related services.

3. Support treatment and recovery courts that provide evidence-based options for persons with OUD and any co-occurring SUD/MH conditions.

4. Provide evidence-informed treatment, including MAT, recovery support, harm reduction, or other appropriate services to individuals with OUD and any co-occurring SUD/MH conditions who are incarcerated in jail or prison.

5. Provide evidence-informed treatment, including MAT, recovery support, harm reduction, or other appropriate services to individuals with OUD and any co-occurring SUD/MH conditions who are leaving jail or prison or have recently left jail or prison, are on probation or parole, are under community corrections supervision, or are in re-entry programs or facilities.

6. Support critical time interventions ("*CTI*"), particularly for individuals living with dual-diagnosis OUD/serious mental illness, and services for individuals who face immediate risks and service needs and risks upon release from correctional settings.

7. Provide training on best practices for addressing the needs of criminal justice-involved persons with OUD and any co-occurring SUD/MH conditions to law enforcement, correctional, or judicial personnel or to providers of treatment, recovery, harm reduction, case management, or other services offered in connection with any of the strategies described in this section.

E. ADDRESS THE NEEDS OF PREGNANT OR PARENTING WOMEN AND THEIR FAMILIES, INCLUDING BABIES WITH NEONATAL ABSTINENCE SYNDROME

Address the needs of pregnant or parenting women with OUD and any co-occurring SUD/MH conditions, and the needs of their families, including babies with neonatal abstinence syndrome ("*NAS*"), through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Support evidence-based or evidence-informed treatment, including MAT, recovery services and supports, and prevention services for pregnant women—or women who could become pregnant—who have OUD and any co-occurring SUD/MH conditions, and other measures to educate and provide support to families affected by Neonatal Abstinence Syndrome.

2. Expand comprehensive evidence-based treatment and recovery services, including MAT, for uninsured women with OUD and any co-occurring SUD/MH conditions for up to 12 months postpartum.

3. Provide training for obstetricians or other healthcare personnel who work with pregnant women and their families regarding treatment of OUD and any co-occurring SUD/MH conditions.

4. Expand comprehensive evidence-based treatment and recovery support for NAS babies; expand services for better continuum of care with infant-need dyad; and expand long-term treatment and services for medical monitoring of NAS babies and their families.

5. Provide training to health care providers who work with pregnant or parenting women on best practices for compliance with federal requirements that children born with NAS get referred to appropriate services and receive a plan of safe care.

6. Provide child and family supports for parenting women with OUD and any co-occurring SUD/MH conditions.

7. Provide enhanced family support and child care services for parents with OUD and any co-occurring SUD/MH conditions.

8. Provide enhanced support for children and family members suffering trauma as a result of addiction in the family; and offer trauma-informed behavioral health treatment for adverse childhood events.

9. Offer home-based wrap-around services to persons with OUD and any co-occurring SUD/MH conditions, including, but not limited to, parent skills training.

10. Provide support for Children's Services—Fund additional positions and services, including supportive housing and other residential services, relating to children being removed from the home and/or placed in foster care due to custodial opioid use.

PART TWO: PREVENTION

F. PREVENT OVER-PRESCRIBING AND ENSURE APPROPRIATE PRESCRIBING AND DISPENSING OF OPIOIDS

Support efforts to prevent over-prescribing and ensure appropriate prescribing and dispensing of opioids through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Funding medical provider education and outreach regarding best prescribing practices for opioids consistent with the Guidelines for Prescribing Opioids for Chronic Pain from the U.S. Centers for Disease Control and Prevention, including providers at hospitals (academic detailing).

2. Training for health care providers regarding safe and responsible opioid prescribing, dosing, and tapering patients off opioids.

3. Continuing Medical Education (CME) on appropriate prescribing of opioids.

4. Providing Support for non-opioid pain treatment alternatives, including training providers to offer or refer to multi-modal, evidence-informed treatment of pain.

5. Supporting enhancements or improvements to Prescription Drug Monitoring Programs ("*PDMPs*"), including, but not limited to, improvements that:

    1. Increase the number of prescribers using PDMPs;

    2. Improve point-of-care decision-making by increasing the quantity, quality, or format of data available to prescribers using PDMPs, by improving the interface that prescribers use to access PDMP data, or both; or

    3. Enable states to use PDMP data in support of surveillance or intervention strategies, including MAT referrals and follow-up for individuals identified within PDMP data as likely to experience OUD in a manner that complies with all relevant privacy and security laws and rules.

6. Ensuring PDMPs incorporate available overdose/naloxone deployment data, including the United States Department of Transportation's Emergency Medical Technician overdose database in a manner that complies with all relevant privacy and security laws and rules.

7. Increasing electronic prescribing to prevent diversion or forgery.

8. Educating dispensers on appropriate opioid dispensing.

G. PREVENT MISUSE OF OPIOIDS

Support efforts to discourage or prevent misuse of opioids through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Funding media campaigns to prevent opioid misuse.

2. Corrective advertising or affirmative public education campaigns based on evidence.

3. Public education relating to drug disposal.

4. Drug take-back disposal or destruction programs.

5. Funding community anti-drug coalitions that engage in drug prevention efforts.

6. Supporting community coalitions in implementing evidence-informed prevention, such as reduced social access and physical access, stigma reduction—including staffing, educational campaigns, support for people in treatment or recovery, or training of coalitions in evidence-informed implementation, including the Strategic Prevention Framework developed by the U.S. Substance Abuse and Mental Health Services Administration ("*SAMHSA*").

7. Engaging non-profits and faith-based communities as systems to support prevention.

8. Funding evidence-based prevention programs in schools or evidence-informed school and community education programs and campaigns for students, families, school employees, school athletic programs, parent-teacher and student associations, and others.

9. School-based or youth-focused programs or strategies that have demonstrated effectiveness in preventing drug misuse and seem likely to be effective in preventing the uptake and use of opioids.

10. Create or support community-based education or intervention services for families, youth, and adolescents at risk for OUD and any co-occurring SUD/MH conditions.

11. Support evidence-informed programs or curricula to address mental health needs of young people who may be at risk of misusing opioids or other drugs, including emotional modulation and resilience skills.

12. Support greater access to mental health services and supports for young people, including services and supports provided by school nurses, behavioral health workers or other school staff, to address mental health needs in young people that (when not properly addressed) increase the risk of opioid or another drug misuse.

H. PREVENT OVERDOSE DEATHS AND OTHER HARMS (HARM REDUCTION)

Support efforts to prevent or reduce overdose deaths or other opioid-related harms through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Increased availability and distribution of naloxone and other drugs that treat overdoses for first responders, overdose patients, individuals with OUD and their friends and family members, schools, community navigators and outreach workers, persons being released from jail or prison, or other members of the general public.

2. Public health entities providing free naloxone to anyone in the community.

3. Training and education regarding naloxone and other drugs that treat overdoses for first responders, overdose patients, patients taking opioids, families, schools, community support groups, and other members of the general public.

4. Enabling school nurses and other school staff to respond to opioid overdoses, and provide them with naloxone, training, and support.

5. Expanding, improving, or developing data tracking software and applications for overdoses/naloxone revivals.

6. Public education relating to emergency responses to overdoses.

7. Public education relating to immunity and Good Samaritan laws.

8. Educating first responders regarding the existence and operation of immunity and Good Samaritan laws.

9. Syringe service programs and other evidence-informed programs to reduce harms associated with intravenous drug use, including supplies, staffing, space, peer support services, referrals to treatment, fentanyl checking, connections to care, and the full range of harm reduction and treatment services provided by these programs.

10. Expanding access to testing and treatment for infectious diseases such as HIV and Hepatitis C resulting from intravenous opioid use.

11. Supporting mobile units that offer or provide referrals to harm reduction services, treatment, recovery supports, health care, or other appropriate services to persons that use opioids or persons with OUD and any co-occurring SUD/MH conditions.

12. Providing training in harm reduction strategies to health care providers, students, peer recovery coaches, recovery outreach specialists, or other professionals that provide care to persons who use opioids or persons with OUD and any co-occurring SUD/MH conditions.

13. Supporting screening for fentanyl in routine clinical toxicology testing.

PART THREE: OTHER STRATEGIES

I. FIRST RESPONDERS

In addition to items in section C, D and H relating to first responders, support the following:

1. Education of law enforcement or other first responders regarding appropriate practices and precautions when dealing with fentanyl or other drugs.

2. Provision of wellness and support services for first responders and others who experience secondary trauma associated with opioid-related emergency events.

J. LEADERSHIP, PLANNING AND COORDINATION

Support efforts to provide leadership, planning, coordination, facilitations, training and technical assistance to abate the opioid epidemic through activities, programs, or strategies that may include, but are not limited to, the following:

1. Statewide, regional, local or community regional planning to identify root causes of addiction and overdose, goals for reducing harms related to the opioid epidemic, and areas and populations with the greatest needs for treatment intervention services, and

to support training and technical assistance and other strategies to abate the opioid epidemic described in this opioid abatement strategy list.

2. A dashboard to (a) share reports, recommendations, or plans to spend opioid settlement funds; (b) to show how opioid settlement funds have been spent; (c) to report program or strategy outcomes; or (d) to track, share or visualize key opioid- or health-related indicators and supports as identified through collaborative statewide, regional, local or community processes.

3. Invest in infrastructure or staffing at government or not-for-profit agencies to support collaborative, cross-system coordination with the purpose of preventing overprescribing, opioid misuse, or opioid overdoses, treating those with OUD and any co-occurring SUD/MH conditions, supporting them in treatment or recovery, connecting them to care, or implementing other strategies to abate the opioid epidemic described in this opioid abatement strategy list.

4. Provide resources to staff government oversight and management of opioid abatement programs.

K. TRAINING

In addition to the training referred to throughout this document, support training to abate the opioid epidemic through activities, programs, or strategies that may include, but are not limited to, those that:

1. Provide funding for staff training or networking programs and services to improve the capability of government, community, and not-for-profit entities to abate the opioid crisis.

2. Support infrastructure and staffing for collaborative cross-system coordination to prevent opioid misuse, prevent overdoses, and treat those with OUD and any co-occurring SUD/MH conditions, or implement other strategies to abate the opioid epidemic described in this opioid abatement strategy list (*e.g.*, health care, primary care, pharmacies, PDMPs, etc.).

L. RESEARCH

Support opioid abatement research that may include, but is not limited to, the following:

1. Monitoring, surveillance, data collection and evaluation of programs and strategies described in this opioid abatement strategy list.

2. Research non-opioid treatment of chronic pain.

3. Research on improved service delivery for modalities such as SBIRT that demonstrate promising but mixed results in populations vulnerable to opioid use disorders.

4. Research on novel harm reduction and prevention efforts such as the provision of fentanyl test strips.

5. Research on innovative supply-side enforcement efforts such as improved detection of mail-based delivery of synthetic opioids.

6. Expanded research on swift/certain/fair models to reduce and deter opioid misuse within criminal justice populations that build upon promising approaches used to address other substances (*e.g.*, Hawaii HOPE and Dakota 24/7).

7. Epidemiological surveillance of OUD-related behaviors in critical populations, including individuals entering the criminal justice system, including, but not limited to approaches modeled on the Arrestee Drug Abuse Monitoring ("ADAM") system.

8. Qualitative and quantitative research regarding public health risks and harm reduction opportunities within illicit drug markets, including surveys of market participants who sell or distribute illicit opioids.

9. Geospatial analysis of access barriers to MAT and their association with treatment engagement and treatment outcomes.

Exhibit F-1
"State Global Allocation Percentages"

Alabama	1.5958653635%
Alaska	0.2283101787%
American Samoa	0.0171221696%
Arizona	2.3755949882%
Arkansas	0.9322152924%
California	9.9213830698%
Colorado	1.6616291219%
Connecticut	1.2938102647%
Delaware	0.4420285052%
District of Columbia	0.1799774824%
Florida	7.0259134409%
Georgia	2.7882080114%
Guam	0.0480366565%
Hawaii	0.3246488040%
Idaho	0.4919080117%
Illinois	3.3263363702%
Indiana	2.2168933059%
Iowa	0.7419256132%
Kansas	0.7840793410%
Kentucky	1.9963344879%
Louisiana	1.4650905059%
Maine	0.5293231313%
Maryland	2.1106090494%
Massachusetts	2.3035761083%
Michigan	3.4020234989%
Minnesota	1.2972597706%
Mississippi	0.8624327860%
Missouri	2.0056475170%
Montana	0.3125481816%
N. Mariana Islands	0.0167059202%
Nebraska	0.4171546352%
Nevada	1.2017657135%
New Hampshire	0.5784834777%
New Jersey	2.7551354545%
New Mexico	0.7989379794%
New York	5.3903813405%
North Carolina	3.2502525994%

North Dakota	0.1700251989%
Ohio	4.3567051408%
Oklahoma	1.5322312508%
Oregon	1.3741405009%
Pennsylvania	4.5882419559%
Puerto Rico	0.7101195950%
Rhode Island	0.4465429178%
South Carolina	1.5393083548%
South Dakota	0.1982071487%
Tennessee	2.6881474977%
Texas	6.2932157196%
Utah	1.1466798699%
Vermont	0.2544890561%
Virgin Islands	0.0315673573%
Virginia	2.2801150757%
Washington	2.3189040182%
West Virginia	1.0567416533%
Wisconsin	1.7582560561%
Wyoming	0.1668134842%

Exhibit F-2
"State Allocation Percentages"

Alabama	1.9398529714%
Alaska	0.2775222702%
American Samoa	0.0208128407%
Arizona	2.8876527444%
Arkansas	1.1331536145%
California	11.7946460861%
Colorado	2.0197920596%
Connecticut	1.5726901178%
Delaware	0.5373074251%
District of Columbia	0.2187714966%
Georgia	3.3892042020%
Guam	0.0583909225%
Hawaii	0.3946266154%
Idaho	0.5979384226%
Illinois	4.0433257336%
Indiana	2.6947430310%
Iowa	0.9018471346%
Kansas	0.9530870676%
Kentucky	2.4266429216%
Maine	0.6434183438%
Maryland	2.5655492811%
Massachusetts	2.8001102479%
Michigan	4.1353271673%
Minnesota	1.5768831621%
Mississippi	1.0483295400%
Missouri	2.4379633673%
Montana	0.3799177128%
N. Mariana Islands	0.0203068690%
Nebraska	0.5070720106%
Nevada	1.4608054311%
New Hampshire	0.7031751667%
New Jersey	3.3490028797%
New Mexico	0.9711484745%
New York	6.5522740824%
North Carolina	3.9508421618%
North Dakota	0.2066740057%
Ohio	5.2957897365%

Oklahoma	0.3711236081%
Oregon	1.6703354774%
Pennsylvania	5.5772341422%
Puerto Rico	0.8631853526%
South Carolina	1.8711051410%
South Dakota	0.2409305541%
Tennessee	3.2675757180%
Utah	1.3938458743%
Vermont	0.3093439854%
Virgin Islands	0.0383716780%
Virginia	2.7715922068%
Washington	2.8187420775%
Wisconsin	2.1372468586%
Wyoming	0.2027700082%

Exhibit G
Subdivisions and Special Districts Eligible to Receive Direct Allocations from the Subdivision Fund and Subdivision Fund Allocation Percentages

The Subdivisions and Special Districts set forth on this Exhibit G are eligible to receive direct allocations from the Subdivision Fund, if such Subdivisions and Special Districts are otherwise eligible to receive such funds under this Agreement. By default, the Subdivisions and Special Districts set forth on this Exhibit G shall include all Subdivisions and Special Districts set forth on Exhibit G of the national opioid settlement agreement dated July 21, 2021 with Janssen Pharmaceuticals, Inc., et al., including all amendments up to the Preliminary Agreement Date of this Agreement. A State may elect to add any additional Subdivisions and Special Districts to this Exhibit G at any time prior to the Initial Participation Date.

Immediately upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3) that addresses allocation from the Subdivision Fund, whether before or after the Initial Participation Date, this Exhibit G will automatically be amended to reflect the allocation from the Subdivision Fund pursuant to the State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3.

For the avoidance of doubt, inclusion on this Exhibit G shall not create any claim for any amount of the Settlement Fund, and no such amounts shall be allocated or distributed to any Subdivision or Special District included herein if such Subdivision or Special District does not otherwise meet all requirements to receive any such funds pursuant to the Agreement.

[List to be Added]

Exhibit H
Participation by Oklahoma Subdivisions and Special Districts

[To be handled directly between Oklahoma subdivisions and Teva.]

Exhibit I
Primary Subdivisions and Subdivisions with Population Over 10,000[1]

1. Alabaster City, Alabama
2. Albertville City, Alabama
3. Alexander City City, Alabama
4. Anniston City, Alabama
5. Athens City, Alabama
6. Barbour County, Alabama
7. Bessemer City, Alabama
8. Bibb County, Alabama
9. Bullock County, Alabama
10. Butler County, Alabama
11. Calera City, Alabama
12. Center Point City, Alabama
13. Chelsea City, Alabama
14. Cherokee County, Alabama
15. Choctaw County, Alabama
16. Clarke County, Alabama
17. Clay County, Alabama
18. Cleburne County, Alabama
19. Conecuh County, Alabama
20. Coosa County, Alabama
21. Crenshaw County, Alabama
22. Cullman City, Alabama
23. Daphne City, Alabama
24. Enterprise City, Alabama
25. Eufaula City, Alabama
26. Fairfield City, Alabama
27. Fairhope City, Alabama
28. Fayette County, Alabama
29. Foley City, Alabama
30. Fort Payne City, Alabama
31. Gardendale City, Alabama
32. Geneva County, Alabama
33. Gulf Shores City, Alabama
34. Hale County, Alabama
35. Hartselle City, Alabama
36. Helena City, Alabama
37. Henry County, Alabama
38. Homewood City, Alabama
39. Hueytown City, Alabama
40. Irondale City, Alabama
41. Jacksonville City, Alabama
42. Jasper City, Alabama
43. Lamar County, Alabama
44. Leeds City, Alabama
45. Macon County, Alabama
46. Marengo County, Alabama
47. Marion County, Alabama
48. Millbrook City, Alabama
49. Monroe County, Alabama
50. Moody City, Alabama
51. Mountain Brook City, Alabama
52. Muscle Shoals City, Alabama
53. Northport City, Alabama
54. Oxford City, Alabama
55. Ozark City, Alabama
56. Pelham City, Alabama
57. Pell City City, Alabama
58. Pickens County, Alabama
59. Pike Road town, Alabama
60. Prichard City, Alabama
61. Randolph County, Alabama
62. Saraland City, Alabama
63. Scottsboro City, Alabama
64. Selma City, Alabama
65. Sumter County, Alabama
66. Sylacauga City, Alabama
67. Talladega City, Alabama
68. Troy City, Alabama
69. Trussville City, Alabama
70. Washington County, Alabama
71. Wilcox County, Alabama
72. Winston County, Alabama
73. Auburn City, Alabama*
74. Autauga County, Alabama*
75. Baldwin County, Alabama*
76. Birmingham City, Alabama*
77. Blount County, Alabama*
78. Calhoun County, Alabama*
79. Chambers County, Alabama*
80. Chilton County, Alabama*
81. Coffee County, Alabama*
82. Colbert County, Alabama*
83. Covington County, Alabama*
84. Cullman County, Alabama*
85. Dale County, Alabama*
86. Dallas County, Alabama*
87. Decatur City, Alabama*
88. DeKalb County, Alabama*
89. Dothan City, Alabama*
90. Elmore County, Alabama*
91. Escambia County, Alabama*
92. Etowah County, Alabama*
93. Florence City, Alabama*
94. Franklin County, Alabama*
95. Gadsden City, Alabama*
96. Hoover City, Alabama*
97. Houston County, Alabama*
98. Huntsville City, Alabama*
99. Jackson County, Alabama*
100. Jefferson County, Alabama*
101. Lauderdale County, Alabama*
102. Lawrence County, Alabama*
103. Lee County, Alabama*
104. Limestone County, Alabama*
105. Madison City, Alabama*
106. Madison County, Alabama*

[1] Entities denoted with an asterisk (*) are Primary Subdivisions with population greater than 30,000. All other entities listed have population greater than 10,000 but less than 30,000.

107. Marshall County, Alabama*
108. Mobile City, Alabama*
109. Mobile County, Alabama*
110. Montgomery City, Alabama*
111. Montgomery County, Alabama*
112. Morgan County, Alabama*
113. Opelika City, Alabama*
114. Phenix City City, Alabama*
115. Pike County, Alabama*
116. Prattville City, Alabama*
117. Russell County, Alabama*
118. Shelby County, Alabama*
119. St. Clair County, Alabama*
120. Talladega County, Alabama*
121. Tallapoosa County, Alabama*
122. Tuscaloosa City, Alabama*
123. Tuscaloosa County, Alabama*
124. Vestavia Hills City, Alabama*
125. Walker County, Alabama*
126. Ketchikan Gateway Borough, Alaska
127. Kodiak Island Borough, Alaska
128. Wasilla City, Alaska
129. Anchorage municipality, Alaska*
130. Fairbanks City, Alaska*
131. Fairbanks North Star Borough, Alaska*
132. Juneau City and borough, Alaska*
133. Kenai Peninsula Borough, Alaska*
134. Matanuska-Susitna Borough, Alaska*
135. Camp Verde town, Arizona
136. Chino Valley town, Arizona
137. Coolidge City, Arizona
138. Cottonwood City, Arizona
139. Douglas City, Arizona
140. Eloy City, Arizona
141. Florence town, Arizona
142. Fountain Hills town, Arizona
143. La Paz County, Arizona
144. Nogales City, Arizona
145. Paradise Valley town, Arizona
146. Payson town, Arizona
147. Sedona City, Arizona
148. Show Low City, Arizona
149. Somerton City, Arizona
150. Apache County, Arizona*
151. Apache Junction City, Arizona*
152. Avondale City, Arizona*
153. Buckeye City, Arizona*
154. Bullhead City City, Arizona*
155. Casa Grande City, Arizona*
156. Chandler City, Arizona*
157. Cochise County, Arizona*
158. Coconino County, Arizona*
159. El Mirage City, Arizona*
160. Flagstaff City, Arizona*
161. Gila County, Arizona*
162. Gilbert town, Arizona*
163. Glendale City, Arizona*
164. Goodyear City, Arizona*
165. Graham County, Arizona*
166. Kingman City, Arizona*
167. Lake Havasu City City, Arizona*
168. Marana town, Arizona*
169. Maricopa City, Arizona*
170. Maricopa County, Arizona*
171. Mesa City, Arizona*
172. Mohave County, Arizona*
173. Navajo County, Arizona*
174. Oro Valley town, Arizona*
175. Peoria City, Arizona*
176. Phoenix City, Arizona*
177. Pima County, Arizona*
178. Pinal County, Arizona*
179. Prescott City, Arizona*
180. Prescott Valley town, Arizona*
181. Queen Creek town, Arizona*
182. Sahuarita town, Arizona*
183. San Luis City, Arizona*
184. Santa Cruz County, Arizona*
185. Scottsdale City, Arizona*
186. Sierra Vista City, Arizona*
187. Surprise City, Arizona*
188. Tempe City, Arizona*
189. Tucson City, Arizona*
190. Yavapai County, Arizona*
191. Yuma City, Arizona*
192. Yuma County, Arizona*
193. Arkadelphia City, Arkansas
194. Arkansas County, Arkansas
195. Ashley County, Arkansas
196. Batesville City, Arkansas
197. Bella Vista City, Arkansas
198. Blytheville City, Arkansas
199. Bradley County, Arkansas
200. Bryant City, Arkansas
201. Cabot City, Arkansas
202. Camden City, Arkansas
203. Carroll County, Arkansas
204. Centerton City, Arkansas
205. Chicot County, Arkansas
206. Clark County, Arkansas
207. Clay County, Arkansas
208. Cleburne County, Arkansas

209. Columbia County, Arkansas
210. Conway County, Arkansas
211. Cross County, Arkansas
212. Desha County, Arkansas
213. Drew County, Arkansas
214. El Dorado City, Arkansas
215. Forrest City City, Arkansas
216. Franklin County, Arkansas
217. Fulton County, Arkansas
218. Grant County, Arkansas
219. Harrison City, Arkansas
220. Helena-West Helena City, Arkansas
221. Hempstead County, Arkansas
222. Howard County, Arkansas
223. Izard County, Arkansas
224. Jackson County, Arkansas
225. Jacksonville City, Arkansas
226. Johnson County, Arkansas
227. Lawrence County, Arkansas
228. Lincoln County, Arkansas
229. Little River County, Arkansas
230. Logan County, Arkansas
231. Madison County, Arkansas
232. Magnolia City, Arkansas
233. Malvern City, Arkansas
234. Marion City, Arkansas
235. Marion County, Arkansas
236. Maumelle City, Arkansas
237. Mountain Home City, Arkansas
238. Ouachita County, Arkansas
239. Paragould City, Arkansas
240. Perry County, Arkansas
241. Phillips County, Arkansas
242. Pike County, Arkansas
243. Poinsett County, Arkansas
244. Polk County, Arkansas
245. Randolph County, Arkansas
246. Russellville City, Arkansas
247. Scott County, Arkansas
248. Searcy City, Arkansas
249. Sevier County, Arkansas
250. Sharp County, Arkansas
251. Siloam Springs City, Arkansas
252. St. Francis County, Arkansas
253. Stone County, Arkansas
254. Texarkana City, Arkansas
255. Van Buren City, Arkansas
256. Van Buren County, Arkansas
257. West Memphis City, Arkansas
258. Yell County, Arkansas
259. Baxter County, Arkansas*
260. Benton City, Arkansas*
261. Benton County, Arkansas*
262. Bentonville City, Arkansas*
263. Boone County, Arkansas*
264. Conway City, Arkansas*
265. Craighead County, Arkansas*
266. Crawford County, Arkansas*
267. Crittenden County, Arkansas*
268. Faulkner County, Arkansas*
269. Fayetteville City, Arkansas*
270. Fort Smith City, Arkansas*
271. Garland County, Arkansas*
272. Greene County, Arkansas*
273. Hot Spring County, Arkansas*
274. Hot Springs City, Arkansas*
275. Independence County, Arkansas*
276. Jefferson County, Arkansas*
277. Jonesboro City, Arkansas*
278. Little Rock City, Arkansas*
279. Lonoke County, Arkansas*
280. Miller County, Arkansas*
281. Mississippi County, Arkansas*
282. North Little Rock City, Arkansas*
283. Pine Bluff City, Arkansas*
284. Pope County, Arkansas*
285. Pulaski County, Arkansas*
286. Rogers City, Arkansas*
287. Saline County, Arkansas*
288. Sebastian County, Arkansas*
289. Sherwood City, Arkansas*
290. Springdale City, Arkansas*
291. Union County, Arkansas*
292. Washington County, Arkansas*
293. White County, Arkansas*
294. Agoura Hills City, California
295. Albany City, California
296. American Canyon City, California
297. Anderson City, California
298. Arcata City, California
299. Arroyo Grande City, California
300. Artesia City, California
301. Arvin City, California
302. Atwater City, California
303. Auburn City, California
304. Avenal City, California
305. Barstow City, California

306. Belmont City, California
307. Benicia City, California
308. Blythe City, California
309. Brawley City, California
310. Calabasas City, California
311. California City City, California
312. Canyon Lake City, California
313. Capitola City, California
314. Carpinteria City, California
315. Chowchilla City, California
316. Clayton City, California
317. Clearlake City, California
318. Coalinga City, California
319. Colusa County, California
320. Commerce City, California
321. Corcoran City, California
322. Coronado City, California
323. Cudahy City, California
324. Del Norte County, California
325. Desert Hot Springs City, California
326. Dinuba City, California
327. Dixon City, California
328. Duarte City, California
329. East Palo Alto City, California
330. El Cerrito City, California
331. El Segundo City, California
332. Emeryville City, California
333. Eureka City, California
334. Exeter City, California
335. Farmersville City, California
336. Fillmore City, California
337. Fortuna City, California
338. Galt City, California
339. Glenn County, California
340. Grand Terrace City, California
341. Grass Valley City, California
342. Greenfield City, California
343. Grover Beach City, California
344. Half Moon Bay City, California
345. Hawaiian Gardens City, California
346. Healdsburg City, California
347. Hercules City, California
348. Hermosa Beach City, California
349. Hillsborough town, California
350. Imperial Beach City, California
351. Imperial City, California
352. Inyo County, California
353. Kerman City, California
354. King City City, California
355. Kingsburg City, California
356. La Cañada Flintridge City, California
357. La Palma City, California
358. Lafayette City, California
359. Laguna Beach City, California
360. Laguna Woods City, California
361. Larkspur City, California
362. Lathrop City, California
363. Lemon Grove City, California
364. Lemoore City, California
365. Lindsay City, California
366. Livingston City, California
367. Loma Linda City, California
368. Lomita City, California
369. Los Alamitos City, California
370. Malibu City, California
371. Marina City, California
372. Mariposa County, California
373. Marysville City, California
374. Maywood City, California
375. McFarland City, California
376. Mendota City, California
377. Mill Valley City, California
378. Millbrae City, California
379. Mono County, California
380. Monterey City, California
381. Moraga town, California
382. Morro Bay City, California
383. Newman City, California
384. Norco City, California
385. Oakdale City, California
386. Orange Cove City, California
387. Orinda City, California
388. Oroville City, California
389. Pacific Grove City, California
390. Palos Verdes Estates City, California
391. Parlier City, California
392. Patterson City, California
393. Piedmont City, California
394. Pinole City, California
395. Placerville City, California
396. Plumas County, California
397. Port Hueneme City, California
398. Rancho Mirage City, California
399. Red Bluff City, California
400. Reedley City, California
401. Ridgecrest City, California
402. Ripon City, California
403. Riverbank City, California
404. San Anselmo town, California
405. San Fernando City, California
406. San Francisco Count, California*
407. San Marino City, California

408. Sanger City, California
409. Santa Fe Springs City, California
410. Santa Paula City, California
411. Scotts Valley City, California
412. Seal Beach City, California
413. Selma City, California
414. Shafter City, California
415. Shasta Lake City, California
416. Sierra Madre City, California
417. Signal Hill City, California
418. Solana Beach City, California
419. Soledad City, California
420. Sonoma City, California
421. South El Monte City, California
422. South Lake Tahoe City, California
423. South Pasadena City, California
424. Suisun City City, California
425. Susanville City, California
426. Tehachapi City, California
427. Trinity County, California
428. Truckee town, California
429. Twentynine Palms City, California
430. Ukiah City, California
431. Walnut City, California
432. Wasco City, California
433. Windsor town, California
434. Yucca Valley town, California
435. Adelanto City, California*
436. Alameda City, California*
437. Alameda County, California*
438. Alhambra City, California*
439. Aliso Viejo City, California*
440. Amador County, California*
441. Anaheim City, California*
442. Antioch City, California*
443. Apple Valley town, California*
444. Arcadia City, California*
445. Atascadero City, California*
446. Azusa City, California*
447. Bakersfield City, California*
448. Baldwin Park City, California*
449. Banning City, California*
450. Beaumont City, California*
451. Bell City, California*
452. Bell Gardens City, California*
453. Bellflower City, California*
454. Berkeley City, California*
455. Beverly Hills City, California*
456. Brea City, California*
457. Brentwood City, California*
458. Buena Park City, California*
459. Burbank City, California*
460. Burlingame City, California*
461. Butte County, California*
462. Calaveras County, California*
463. Calexico City, California*
464. Camarillo City, California*
465. Campbell City, California*
466. Carlsbad City, California*
467. Carson City, California*
468. Cathedral City City, California*
469. Ceres City, California*
470. Cerritos City, California*
471. Chico City, California*
472. Chino City, California*
473. Chino Hills City, California*
474. Chula Vista City, California*
475. Citrus Heights City, California*
476. Claremont City, California*
477. Clovis City, California*
478. Coachella City, California*
479. Colton City, California*
480. Compton City, California*
481. Concord City, California*
482. Contra Costa County, California*
483. Corona City, California*
484. Costa Mesa City, California*
485. Covina City, California*
486. Culver City City, California*
487. Cupertino City, California*
488. Cypress City, California*
489. Daly City City, California*
490. Dana Point City, California*
491. Danville town, California*
492. Davis City, California*
493. Delano City, California*
494. Diamond Bar City, California*
495. Downey City, California*
496. Dublin City, California*
497. Eastvale City, California*
498. El Cajon City, California*
499. El Centro City, California*
500. El Dorado County, California*

501. El Monte City, California*
502. Elk Grove City, California*
503. Encinitas City, California*
504. Escondido City, California*
505. Fairfield City, California*
506. Folsom City, California*
507. Fontana City, California*
508. Foster City City, California*
509. Fountain Valley City, California*
510. Fremont City, California*
511. Fresno City, California*
512. Fresno County, California*
513. Fullerton City, California*
514. Garden Grove City, California*
515. Gardena City, California*
516. Gilroy City, California*
517. Glendale City, California*
518. Glendora City, California*
519. Goleta City, California*
520. Hanford City, California*
521. Hawthorne City, California*
522. Hayward City, California*
523. Hemet City, California*
524. Hesperia City, California*
525. Highland City, California*
526. Hollister City, California*
527. Humboldt County, California*
528. Huntington Beach City, California*
529. Huntington Park City, California*
530. Imperial County, California*
531. Indio City, California*
532. Inglewood City, California*
533. Irvine City, California*
534. Jurupa Valley City, California*
535. Kern County, California*
536. Kings County, California*
537. La Habra City, California*
538. La Mesa City, California*
539. La Mirada City, California*
540. La Puente City, California*
541. La Quinta City, California*
542. La Verne City, California*
543. Laguna Hills City, California*
544. Laguna Niguel City, California*
545. Lake County, California*
546. Lake Elsinore City, California*
547. Lake Forest City, California*
548. Lakewood City, California*
549. Lancaster City, California*
550. Lassen County, California*
551. Lawndale City, California*
552. Lincoln City, California*
553. Livermore City, California*
554. Lodi City, California*
555. Lompoc City, California*
556. Long Beach City, California*
557. Los Altos City, California*
558. Los Angeles City, California*
559. Los Angeles County, California*
560. Los Banos City, California*
561. Los Gatos town, California*
562. Lynwood City, California*
563. Madera City, California*
564. Madera County, California*
565. Manhattan Beach City, California*
566. Manteca City, California*
567. Marin County, California*
568. Martinez City, California*
569. Mendocino County, California*
570. Menifee City, California*
571. Menlo Park City, California*
572. Merced City, California*
573. Merced County, California*
574. Milpitas City, California*
575. Mission Viejo City, California*
576. Modesto City, California*
577. Monrovia City, California*
578. Montclair City, California*
579. Montebello City, California*
580. Monterey County, California*
581. Monterey Park City, California*
582. Moorpark City, California*
583. Moreno Valley City, California*
584. Morgan Hill City, California*
585. Mountain View City, California*
586. Murrieta City, California*
587. Napa City, California*
588. Napa County, California*
589. National City City, California*

590. Nevada County, California*
591. Newark City, California*
592. Newport Beach City, California*
593. Norwalk City, California*
594. Novato City, California*
595. Oakland City, California*
596. Oakley City, California*
597. Oceanside City, California*
598. Ontario City, California*
599. Orange City, California*
600. Orange County, California*
601. Oxnard City, California*
602. Pacifica City, California*
603. Palm Desert City, California*
604. Palm Springs City, California*
605. Palmdale City, California*
606. Palo Alto City, California*
607. Paramount City, California*
608. Pasadena City, California*
609. Perris City, California*
610. Petaluma City, California*
611. Pico Rivera City, California*
612. Pittsburg City, California*
613. Placentia City, California*
614. Placer County, California*
615. Pleasant Hill City, California*
616. Pleasanton City, California*
617. Pomona City, California*
618. Porterville City, California*
619. Poway City, California*
620. Rancho Cordova City, California*
621. Rancho Cucamonga City, California*
622. Rancho Palos Verdes City, California*
623. Rancho Santa Margarita City, California*
624. Redding City, California*
625. Redlands City, California*
626. Redondo Beach City, California*
627. Redwood City City, California*
628. Rialto City, California*
629. Richmond City, California*
630. Riverside City, California*
631. Riverside County, California*
632. Rocklin City, California*
633. Rohnert Park City, California*
634. Rosemead City, California*
635. Roseville City, California*
636. Sacramento City, California*
637. Sacramento County, California*
638. Salinas City, California*
639. San Benito County, California*
640. San Bernardino City, California*
641. San Bernardino County, California*
642. San Bruno City, California*
643. San Carlos City, California*
644. San Clemente City, California*
645. San Diego City, California*
646. San Diego County, California*
647. San Dimas City, California*
648. San Gabriel City, California*
649. San Jacinto City, California*
650. San Joaquin County, California*
651. San Jose City, California*
652. San Juan Capistrano City, California*
653. San Leandro City, California*
654. San Luis Obispo City, California*
655. San Luis Obispo County, California*
656. San Marcos City, California*
657. San Mateo City, California*
658. San Mateo County, California*
659. San Pablo City, California*
660. San Rafael City, California*
661. San Ramon City, California*
662. Santa Ana City, California*
663. Santa Barbara City, California*
664. Santa Barbara County, California*
665. Santa Clara City, California*
666. Santa Clara County, California*
667. Santa Clarita City, California*
668. Santa Cruz City, California*
669. Santa Cruz County, California*
670. Santa Maria City, California*
671. Santa Monica City, California*
672. Santa Rosa City, California*
673. Santee City, California*

674. Saratoga City, California*
675. Seaside City, California*
676. Shasta County, California*
677. Simi Valley City, California*
678. Siskiyou County, California*
679. Solano County, California*
680. Sonoma County, California*
681. South Gate City, California*
682. South San Francisco City, California*
683. Stanislaus County, California*
684. Stanton City, California*
685. Stockton City, California*
686. Sunnyvale City, California*
687. Sutter County, California*
688. Tehama County, California*
689. Temecula City, California*
690. Temple City City, California*
691. Thousand Oaks City, California*
692. Torrance City, California*
693. Tracy City, California*
694. Tulare City, California*
695. Tulare County, California*
696. Tuolumne County, California*
697. Turlock City, California*
698. Tustin City, California*
699. Union City City, California*
700. Upland City, California*
701. Vacaville City, California*
702. Vallejo City, California*
703. Ventura County, California*
704. Victorville City, California*
705. Visalia City, California*
706. Vista City, California*
707. Walnut Creek City, California*
708. Watsonville City, California*
709. West Covina City, California*
710. West Hollywood City, California*
711. West Sacramento City, California*
712. Westminster City, California*
713. Whittier City, California*
714. Wildomar City, California*
715. Woodland City, California*
716. Yolo County, California*
717. Yorba Linda City, California*
718. Yuba City City, California*
719. Yuba County, California*
720. Yucaipa City, California*
721. Alamosa County, Colorado
722. Archuleta County, Colorado
723. Broomfield City / Broomfield County, Colorado*
724. Cañon City City, Colorado
725. Castle Pines City, Colorado
726. Chaffee County, Colorado
727. Denver City / Denver County, Colorado*
728. Durango City, Colorado
729. Elbert County, Colorado
730. Erie town, Colorado
731. Evans City, Colorado
732. Federal Heights City, Colorado
733. Firestone town, Colorado
734. Fort Morgan City, Colorado
735. Frederick town, Colorado
736. Fruita City, Colorado
737. Golden City, Colorado
738. Grand County, Colorado
739. Greenwood Village City, Colorado
740. Gunnison County, Colorado
741. Johnstown town, Colorado
742. Las Animas County, Colorado
743. Logan County, Colorado
744. Lone Tree City, Colorado
745. Louisville City, Colorado
746. Moffat County, Colorado
747. Montezuma County, Colorado
748. Montrose City, Colorado
749. Morgan County, Colorado
750. Otero County, Colorado
751. Park County, Colorado
752. Pitkin County, Colorado
753. Prowers County, Colorado
754. Rio Grande County, Colorado
755. Routt County, Colorado
756. Steamboat Springs City, Colorado
757. Sterling City, Colorado
758. Superior town, Colorado
759. Teller County, Colorado
760. Wellington town, Colorado
761. Yuma County, Colorado
762. Adams County, Colorado*
763. Arapahoe County, Colorado*
764. Arvada City, Colorado*
765. Aurora City, Colorado*
766. Boulder City, Colorado*
767. Boulder County, Colorado*
768. Brighton City, Colorado*

769. Castle Rock town, Colorado*
770. Centennial City, Colorado*
771. Colorado Springs City, Colorado*
772. Commerce City City, Colorado*
773. Delta County, Colorado*
774. Douglas County, Colorado*
775. Eagle County, Colorado*
776. El Paso County, Colorado*
777. Englewood City, Colorado*
778. Fort Collins City, Colorado*
779. Fountain City, Colorado*
780. Fremont County, Colorado*
781. Garfield County, Colorado*
782. Grand Junction City, Colorado*
783. Greeley City, Colorado*
784. Jefferson County, Colorado*
785. La Plata County, Colorado*
786. Lafayette City, Colorado*
787. Lakewood City, Colorado*
788. Larimer County, Colorado*
789. Littleton City, Colorado*
790. Longmont City, Colorado*
791. Loveland City, Colorado*
792. Mesa County, Colorado*
793. Montrose County, Colorado*
794. Northglenn City, Colorado*
795. Parker town, Colorado*
796. Pueblo City, Colorado*
797. Pueblo County, Colorado*
798. Summit County, Colorado*
799. Thornton City, Colorado*
800. Weld County, Colorado*
801. Westminster City, Colorado*
802. Wheat Ridge City, Colorado*
803. Windsor town, Colorado*
804. Ansonia City / Ansonia Town, Connecticut
805. Avon town, Connecticut
806. Berlin town, Connecticut
807. Bethel town, Connecticut
808. Bloomfield town, Connecticut
809. Branford town, Connecticut
810. Bridgeport Town / Bridgeport City, Connecticut*
811. Bristol City / Bristol Town, Connecticut*
812. Brookfield town, Connecticut
813. Canton town, Connecticut
814. Cheshire town, Connecticut
815. Clinton town, Connecticut
816. Colchester town, Connecticut
817. Coventry town, Connecticut
818. Cromwell town, Connecticut
819. Danbury City / Danbury Town, Connecticut*
820. Darien town, Connecticut
821. Derby City / Derby town, Connecticut
822. East Hampton town, Connecticut
823. East Haven town, Connecticut
824. East Lyme town, Connecticut
825. East Windsor town, Connecticut
826. Ellington town, Connecticut
827. Farmington town, Connecticut
828. Granby town, Connecticut
829. Griswold town, Connecticut
830. Guilford town, Connecticut
831. Hartford City / Hartford Town, Connecticut*
832. Killingly town, Connecticut
833. Ledyard town, Connecticut
834. Madison town, Connecticut
835. Mansfield town, Connecticut
836. Meriden City / Meriden Town, Connecticut*
837. Middletown City / Middletown Town, Connecticut*
838. Monroe town, Connecticut
839. Montville town, Connecticut
840. Naugatuck Borough / Naugatuck Town, Connecticut*
841. New Britain City / New Britain Town, Connecticut*
842. New Canaan town, Connecticut
843. New Fairfield town, Connecticut
844. New Haven Town / New Haven City, Connecticut*
845. New London City / New London Town, Connecticut
846. New Milford town, Connecticut
847. Newtown town, Connecticut
848. North Branford town, Connecticut
849. North Haven town, Connecticut
850. Norwalk City / Norwalk Town, Connecticut*

851. Norwich City / Norwich Town, Connecticut*
852. Old Saybrook town, Connecticut
853. Orange town, Connecticut
854. Oxford town, Connecticut
855. Plainfield town, Connecticut
856. Plainville town, Connecticut
857. Plymouth town, Connecticut
858. Ridgefield town, Connecticut
859. Rocky Hill town, Connecticut
860. Seymour town, Connecticut
861. Shelton City / Shelton Town, Connecticut*
862. Simsbury town, Connecticut
863. Somers town, Connecticut
864. South Windsor town, Connecticut
865. Southbury town, Connecticut
866. Stafford town, Connecticut
867. Stamford City / Stamford Town, Connecticut*
868. Stonington town, Connecticut
869. Suffield town, Connecticut
870. Tolland town, Connecticut
871. Torrington City / Torrington Town, Connecticut*
872. Vernon town, Connecticut
873. Waterbury City / Waterbury Town, Connecticut*
874. Waterford town, Connecticut
875. Watertown town, Connecticut
876. West Haven Town / West Haven City, Connecticut*
877. Weston town, Connecticut
878. Westport town, Connecticut
879. Wethersfield town, Connecticut
880. Wilton town, Connecticut
881. Winchester town, Connecticut
882. Windham town, Connecticut
883. Windsor Locks town, Connecticut
884. Windsor town, Connecticut
885. Wolcott town, Connecticut
886. East Hartford town, Connecticut*
887. Enfield town, Connecticut*
888. Fairfield town, Connecticut*
889. Glastonbury town, Connecticut*
890. Greenwich town, Connecticut*
891. Groton town, Connecticut*
892. Hamden town, Connecticut*
893. Manchester town, Connecticut*
894. Milford City, Connecticut*
895. Milford town, Connecticut*
896. Newington town, Connecticut*
897. Southington town, Connecticut*
898. Stratford town, Connecticut*
899. Trumbull town, Connecticut*
900. Wallingford town, Connecticut*
901. West Hartford town, Connecticut*
902. Middletown town, Delaware
903. Milford City, Delaware
904. Smyrna town, Delaware
905. Dover City, Delaware*
906. Kent County, Delaware*
907. New Castle County, Delaware*
908. Newark City, Delaware*
909. Sussex County, Delaware*
910. Wilmington City, Delaware*
911. Acworth City, Georgia
912. Americus City, Georgia
913. Appling County, Georgia
914. Bacon County, Georgia
915. Bainbridge City, Georgia
916. Banks County, Georgia
917. Ben Hill County, Georgia
918. Berrien County, Georgia
919. Bleckley County, Georgia
920. Brantley County, Georgia
921. Braselton town, Georgia
922. Brooks County, Georgia
923. Brunswick City, Georgia
924. Buford City, Georgia
925. Burke County, Georgia
926. Butts County, Georgia
927. Calhoun City, Georgia
928. Candler County, Georgia
929. Carrollton City, Georgia
930. Cartersville City, Georgia
931. Charlton County, Georgia
932. Chattooga County, Georgia
933. Clarkston City, Georgia
934. College Park City, Georgia
935. Columbus City / Muscogee County, Georgia*
936. Conyers City, Georgia
937. Cook County, Georgia
938. Cordele City, Georgia
939. Covington City, Georgia
940. Crawford County, Georgia
941. Crisp County, Georgia
942. Dade County, Georgia
943. Dallas City, Georgia

944. Dawson County, Georgia
945. Decatur City, Georgia
946. Decatur County, Georgia
947. Dodge County, Georgia
948. Dooly County, Georgia
949. Doraville City, Georgia
950. Douglas City, Georgia
951. Dublin City, Georgia
952. Duluth City, Georgia
953. Early County, Georgia
954. Elbert County, Georgia
955. Emanuel County, Georgia
956. Evans County, Georgia
957. Fairburn City, Georgia
958. Fannin County, Georgia
959. Fayetteville City, Georgia
960. Forest Park City, Georgia
961. Franklin County, Georgia
962. Grady County, Georgia
963. Greene County, Georgia
964. Griffin City, Georgia
965. Grovetown City, Georgia
966. Haralson County, Georgia
967. Hart County, Georgia
968. Heard County, Georgia
969. Holly Springs City, Georgia
970. Jasper County, Georgia
971. Jeff Davis County, Georgia
972. Jefferson City, Georgia
973. Jefferson County, Georgia
974. Jones County, Georgia
975. Kingsland City, Georgia
976. Lamar County, Georgia
977. Lanier County, Georgia
978. Lee County, Georgia
979. Lilburn City, Georgia
980. Loganville City, Georgia
981. Long County, Georgia
982. Macon County, Georgia
983. Madison County, Georgia
984. McDonough City, Georgia
985. McDuffie County, Georgia
986. McIntosh County, Georgia
987. Meriwether County, Georgia
988. Milledgeville City, Georgia
989. Mitchell County, Georgia
990. Monroe City, Georgia
991. Monroe County, Georgia
992. Morgan County, Georgia
993. Moultrie City, Georgia
994. Norcross City, Georgia
995. Oglethorpe County, Georgia
996. Peach County, Georgia
997. Perry City, Georgia
998. Pierce County, Georgia
999. Pike County, Georgia
1000. Pooler City, Georgia
1001. Powder Springs City, Georgia
1002. Pulaski County, Georgia
1003. Putnam County, Georgia
1004. Rabun County, Georgia
1005. Richmond Hill City, Georgia
1006. Rincon City, Georgia
1007. Riverdale City, Georgia
1008. Screven County, Georgia
1009. Snellville City, Georgia
1010. St. Marys City, Georgia
1011. Stephens County, Georgia
1012. Stockbridge City, Georgia
1013. Sugar Hill City, Georgia
1014. Sumter County, Georgia
1015. Suwanee City, Georgia
1016. Tattnall County, Georgia
1017. Telfair County, Georgia
1018. Thomasville City, Georgia
1019. Tifton City, Georgia
1020. Toombs County, Georgia
1021. Towns County, Georgia
1022. Union City City, Georgia
1023. Union County, Georgia
1024. Upson County, Georgia
1025. Vidalia City, Georgia
1026. Villa Rica City, Georgia
1027. Washington County, Georgia
1028. Waycross City, Georgia
1029. Wayne County, Georgia
1030. Winder City, Georgia
1031. Worth County, Georgia
1032. Albany City, Georgia*
1033. Alpharetta City, Georgia*
1034. Athens-Clarke County unified government, Georgia*
1035. Atlanta City, Georgia*
1036. Augusta-Richmond County consolidated government, Georgia*
1037. Baldwin County, Georgia*
1038. Barrow County, Georgia*
1039. Bartow County, Georgia*
1040. Brookhaven City, Georgia*
1041. Bryan County, Georgia*
1042. Bulloch County, Georgia*
1043. Camden County, Georgia*
1044. Canton City, Georgia*
1045. Carroll County, Georgia*
1046. Catoosa County, Georgia*
1047. Chamblee City, Georgia*
1048. Chatham County, Georgia*
1049. Cherokee County, Georgia*
1050. Clayton County, Georgia*
1051. Cobb County, Georgia*
1052. Coffee County, Georgia*
1053. Colquitt County, Georgia*
1054. Columbia County, Georgia*
1055. Coweta County, Georgia*

1056. Cusseta-Chattahoochee County unified government, Georgia
1057. Dalton City, Georgia*
1058. DeKalb County, Georgia*
1059. Dougherty County, Georgia*
1060. Douglas County, Georgia*
1061. Douglasville City, Georgia*
1062. Dunwoody City, Georgia*
1063. East Point City, Georgia*
1064. Effingham County, Georgia*
1065. Fayette County, Georgia*
1066. Floyd County, Georgia*
1067. Forsyth County, Georgia*
1068. Fulton County, Georgia*
1069. Gainesville City, Georgia*
1070. Gilmer County, Georgia*
1071. Glynn County, Georgia*
1072. Gordon County, Georgia*
1073. Gwinnett County, Georgia*
1074. Habersham County, Georgia*
1075. Hall County, Georgia*
1076. Harris County, Georgia*
1077. Henry County, Georgia*
1078. Hinesville City, Georgia*
1079. Houston County, Georgia*
1080. Jackson County, Georgia*
1081. Johns Creek City, Georgia*
1082. Kennesaw City, Georgia*
1083. LaGrange City, Georgia*
1084. Laurens County, Georgia*
1085. Lawrenceville City, Georgia*
1086. Liberty County, Georgia*
1087. Lowndes County, Georgia*
1088. Lumpkin County, Georgia*
1089. Macon-Bibb County, Georgia*
1090. Marietta City, Georgia*
1091. Milton City, Georgia*
1092. Murray County, Georgia*
1093. Newnan City, Georgia*
1094. Newton County, Georgia*
1095. Oconee County, Georgia*
1096. Paulding County, Georgia*
1097. Peachtree City City, Georgia*
1098. Peachtree Corners City, Georgia*
1099. Pickens County, Georgia*
1100. Polk County, Georgia*
1101. Rockdale County, Georgia*
1102. Rome City, Georgia*
1103. Roswell City, Georgia*
1104. Sandy Springs City, Georgia*
1105. Savannah City, Georgia*
1106. Smyrna City, Georgia*
1107. South Fulton City, Georgia*
1108. Spalding County, Georgia*
1109. Statesboro City, Georgia*
1110. Stonecrest City, Georgia*
1111. Thomas County, Georgia*
1112. Tift County, Georgia*
1113. Troup County, Georgia*
1114. Tucker City, Georgia*
1115. Valdosta City, Georgia*
1116. Walker County, Georgia*
1117. Walton County, Georgia*
1118. Ware County, Georgia*
1119. Warner Robins City, Georgia*
1120. White County, Georgia*
1121. Whitfield County, Georgia*
1122. Woodstock City, Georgia*
1123. Honolulu County / Honolulu City, Hawaii*
1124. Hawaii County, Hawaii*
1125. Kauai County, Hawaii*
1126. Maui County, Hawaii*
1127. Ammon City, Idaho
1128. Blackfoot City, Idaho
1129. Blaine County, Idaho
1130. Boundary County, Idaho
1131. Burley City, Idaho
1132. Cassia County, Idaho
1133. Chubbuck City, Idaho
1134. Eagle City, Idaho
1135. Elmore County, Idaho
1136. Franklin County, Idaho
1137. Fremont County, Idaho
1138. Garden City City, Idaho
1139. Gem County, Idaho
1140. Gooding County, Idaho
1141. Hayden City, Idaho
1142. Idaho County, Idaho
1143. Jefferson County, Idaho
1144. Jerome City, Idaho
1145. Jerome County, Idaho
1146. Kuna City, Idaho
1147. Minidoka County, Idaho
1148. Moscow City, Idaho
1149. Mountain Home City, Idaho
1150. Owyhee County, Idaho
1151. Payette County, Idaho
1152. Rexburg City, Idaho
1153. Shoshone County, Idaho
1154. Star City, Idaho
1155. Teton County, Idaho
1156. Valley County, Idaho
1157. Washington County, Idaho

1158. Ada County, Idaho*
1159. Bannock County, Idaho*
1160. Bingham County, Idaho*
1161. Boise City City, Idaho*
1162. Bonner County, Idaho*
1163. Bonneville County, Idaho*
1164. Caldwell City, Idaho*
1165. Canyon County, Idaho*
1166. Coeur d'Alene City, Idaho*
1167. Idaho Falls City, Idaho*
1168. Kootenai County, Idaho*
1169. Latah County, Idaho*
1170. Lewiston City, Idaho*
1171. Madison County, Idaho*
1172. Meridian City, Idaho*
1173. Nampa City, Idaho*
1174. Nez Perce County, Idaho*
1175. Pocatello City, Idaho*
1176. Post Falls City, Idaho*
1177. Twin Falls City, Idaho*
1178. Twin Falls County, Idaho*
1179. Alsip village, Illinois
1180. Alton City, Illinois
1181. Alton township, Illinois
1182. Antioch township, Illinois
1183. Antioch village, Illinois
1184. Aux Sable township, Illinois
1185. Barrington township, Illinois
1186. Barrington village, Illinois
1187. Batavia City, Illinois
1188. Beach Park village, Illinois
1189. Bellwood village, Illinois
1190. Belvidere City, Illinois
1191. Belvidere township, Illinois
1192. Bensenville village, Illinois
1193. Benton township, Illinois
1194. Blackberry township, Illinois
1195. Bloomingdale village, Illinois
1196. Blue Island City, Illinois
1197. Bond County, Illinois
1198. Bourbonnais village, Illinois
1199. Bradley village, Illinois
1200. Bridgeview village, Illinois
1201. Brookfield village, Illinois
1202. Bruce township, Illinois
1203. Burbank City, Illinois
1204. Burr Ridge village, Illinois
1205. Cahokia village, Illinois
1206. Calumet township, Illinois
1207. Campton Hills village, Illinois
1208. Campton township, Illinois
1209. Canton City, Illinois
1210. Canton township, Illinois
1211. Carbondale City, Illinois
1212. Carbondale township, Illinois
1213. Carroll County, Illinois
1214. Cary village, Illinois
1215. Cass County, Illinois
1216. Centralia City, Illinois
1217. Centralia township, Illinois
1218. Centreville township, Illinois
1219. Champaign township, Illinois
1220. Channahon township, Illinois
1221. Channahon village, Illinois
1222. Charleston City, Illinois
1223. Charleston township, Illinois
1224. Chatham village, Illinois
1225. Cherry Valley township, Illinois
1226. Chicago Heights City, Illinois
1227. Chicago Ridge village, Illinois
1228. Cicero Town / Cicero Township, Illinois*
1229. Clark County, Illinois
1230. Clay County, Illinois
1231. Collinsville City, Illinois
1232. Coloma township, Illinois
1233. Columbia City, Illinois
1234. Cortland township, Illinois
1235. Country Club Hills City, Illinois
1236. Crawford County, Illinois
1237. Crest Hill City, Illinois
1238. Crestwood village, Illinois
1239. Crete township, Illinois
1240. Cuba township, Illinois
1241. Cumberland County, Illinois
1242. Danville township, Illinois
1243. Darien City, Illinois
1244. De Witt County, Illinois
1245. Deerfield village, Illinois
1246. Dixon City, Illinois
1247. Dixon township, Illinois
1248. Dolton village, Illinois
1249. Dorr township, Illinois
1250. Douglas County, Illinois
1251. Douglas township, Illinois
1252. East Moline City, Illinois
1253. East Peoria City, Illinois
1254. East St. Louis City, Illinois
1255. East St. Louis township, Illinois
1256. Edgar County, Illinois
1257. Edwardsville City, Illinois
1258. Effingham City, Illinois
1259. Elmwood Park village, Illinois

1260. Evergreen Park village, Illinois
1261. Fairview Heights City, Illinois
1262. Fayette County, Illinois
1263. Flagg township, Illinois
1264. Fondulac township, Illinois
1265. Ford County, Illinois
1266. Forest Park village, Illinois
1267. Fox Lake village, Illinois
1268. Frankfort village, Illinois
1269. Franklin Park village, Illinois
1270. Freeport City, Illinois
1271. Freeport township, Illinois
1272. Geneva City, Illinois
1273. Geneva township, Illinois
1274. Glen Carbon village, Illinois
1275. Glen Ellyn village, Illinois
1276. Godfrey township, Illinois
1277. Godfrey village, Illinois
1278. Granite City City, Illinois
1279. Granite City township, Illinois
1280. Grant township, Illinois*
1281. Grayslake village, Illinois
1282. Greene County, Illinois
1283. Greenwood township, Illinois
1284. Groveland township, Illinois
1285. Hampton township, Illinois
1286. Hancock County, Illinois
1287. Harrisburg township, Illinois
1288. Harvey City, Illinois
1289. Hazel Crest village, Illinois
1290. Herrin City, Illinois
1291. Hickory Hills City, Illinois
1292. Hickory Point township, Illinois
1293. Highland Park City, Illinois
1294. Hinsdale village, Illinois
1295. Homer Glen village, Illinois
1296. Homewood village, Illinois
1297. Huntley village, Illinois
1298. Iroquois County, Illinois
1299. Jacksonville City, Illinois
1300. Jarvis township, Illinois
1301. Jersey County, Illinois
1302. Jo Daviess County, Illinois
1303. Johnson County, Illinois
1304. Justice village, Illinois
1305. Kankakee City, Illinois
1306. Kankakee township, Illinois
1307. Kewanee City, Illinois
1308. La Grange Park village, Illinois
1309. La Grange village, Illinois
1310. Lake Forest City, Illinois
1311. Lake in the Hills village, Illinois
1312. Lake Zurich village, Illinois
1313. Lansing village, Illinois
1314. LaSalle township, Illinois
1315. Lawrence County, Illinois
1316. Lemont township, Illinois
1317. Lemont village, Illinois
1318. Libertyville village, Illinois
1319. Limestone township, Illinois
1320. Lincoln City, Illinois
1321. Lincolnwood village, Illinois
1322. Lindenhurst village, Illinois
1323. Lisle village, Illinois
1324. Little Rock township, Illinois
1325. Lockport City, Illinois
1326. Logan County, Illinois
1327. Long Creek township, Illinois
1328. Loves Park City, Illinois
1329. Lyons village, Illinois
1330. Machesney Park village, Illinois
1331. Macomb City, Illinois
1332. Macomb City township, Illinois
1333. Mahomet township, Illinois
1334. Manhattan township, Illinois
1335. Manteno township, Illinois
1336. Marion City, Illinois
1337. Markham City, Illinois
1338. Marshall County, Illinois
1339. Mason County, Illinois
1340. Massac County, Illinois
1341. Matteson village, Illinois
1342. Mattoon City, Illinois
1343. Mattoon township, Illinois
1344. Maywood village, Illinois
1345. McDonough County, Illinois
1346. McHenry City, Illinois
1347. Medina township, Illinois
1348. Melrose Park village, Illinois
1349. Menard County, Illinois
1350. Mercer County, Illinois
1351. Midlothian village, Illinois
1352. Minooka village, Illinois
1353. Mokena village, Illinois
1354. Moline township, Illinois
1355. Monee township, Illinois
1356. Montgomery County, Illinois
1357. Montgomery village, Illinois

1358. Morris City, Illinois
1359. Morton Grove village, Illinois
1360. Morton township, Illinois
1361. Morton village, Illinois
1362. Moultrie County, Illinois
1363. Mount Vernon City, Illinois
1364. Mount Vernon township, Illinois
1365. Nameoki township, Illinois
1366. New Lenox village, Illinois
1367. Newell township, Illinois
1368. Niles village, Illinois
1369. Norridge village, Illinois
1370. North Aurora village, Illinois
1371. North Chicago City, Illinois
1372. Northlake City, Illinois
1373. Norwood Park township, Illinois
1374. Oak Forest City, Illinois
1375. O'Fallon City, Illinois
1376. O'Fallon township, Illinois
1377. Ottawa City, Illinois
1378. Ottawa township, Illinois
1379. Palos Heights City, Illinois
1380. Palos Hills City, Illinois
1381. Park Forest village, Illinois
1382. Pekin township, Illinois
1383. Perry County, Illinois
1384. Peru township, Illinois
1385. Piatt County, Illinois
1386. Pike County, Illinois
1387. Plano City, Illinois
1388. Pontiac City, Illinois
1389. Pontiac township, Illinois
1390. Prospect Heights City, Illinois
1391. Rantoul township, Illinois
1392. Rantoul village, Illinois
1393. Richland County, Illinois
1394. Richton Park village, Illinois
1395. River Forest township, Illinois
1396. River Forest village, Illinois
1397. Riverdale village, Illinois
1398. Riverside township, Illinois
1399. Rock Island township, Illinois
1400. Rockton township, Illinois
1401. Rolling Meadows City, Illinois
1402. Roscoe township, Illinois
1403. Roscoe village, Illinois
1404. Roselle village, Illinois
1405. Round Lake Beach village, Illinois
1406. Round Lake village, Illinois
1407. Rutland township, Illinois
1408. Saline County, Illinois
1409. Sauk Village village, Illinois
1410. Schiller Park village, Illinois
1411. Shelby County, Illinois
1412. Shiloh Valley township, Illinois
1413. Shiloh village, Illinois
1414. Shorewood village, Illinois
1415. South Elgin village, Illinois
1416. South Holland village, Illinois
1417. South Rock Island township, Illinois
1418. Sterling City, Illinois
1419. Sterling township, Illinois
1420. Streator City, Illinois
1421. Sugar Grove township, Illinois
1422. Summit village, Illinois
1423. Swansea village, Illinois
1424. Sycamore City, Illinois
1425. Sycamore township, Illinois
1426. Taylorville City, Illinois
1427. Taylorville township, Illinois
1428. Troy City, Illinois
1429. Union County, Illinois
1430. Vernon Hills village, Illinois
1431. Villa Park village, Illinois
1432. Wabash County, Illinois
1433. Warren County, Illinois
1434. Warrenville City, Illinois
1435. Washington City, Illinois
1436. Washington County, Illinois
1437. Washington township, Illinois*
1438. Waterloo City, Illinois
1439. Wauconda township, Illinois
1440. Wauconda village, Illinois
1441. Wayne County, Illinois
1442. West Chicago City, Illinois
1443. Westchester village, Illinois
1444. Western Springs village, Illinois
1445. Westmont village, Illinois
1446. White County, Illinois
1447. Wilmette village, Illinois
1448. Winnetka village, Illinois
1449. Wood Dale City, Illinois
1450. Wood River City, Illinois
1451. Woodside township, Illinois
1452. Woodstock City, Illinois
1453. Worth village, Illinois
1454. Yorkville City, Illinois

1455. Zion City, Illinois
1456. Zion township, Illinois
1457. Adams County, Illinois*
1458. Addison township, Illinois*
1459. Addison village, Illinois*
1460. Algonquin township, Illinois*
1461. Algonquin village, Illinois*
1462. Arlington Heights village, Illinois*
1463. Aurora City, Illinois*
1464. Aurora township, Illinois*
1465. Avon township, Illinois*
1466. Bartlett village, Illinois*
1467. Batavia township, Illinois*
1468. Belleville City, Illinois*
1469. Berwyn City, Illinois*
1470. Berwyn township, Illinois*
1471. Bloom township, Illinois*
1472. Bloomingdale township, Illinois*
1473. Bloomington City, Illinois*
1474. Bloomington City township, Illinois*
1475. Bolingbrook village, Illinois*
1476. Bolingbrook village, Illinois*
1477. Boone County, Illinois*
1478. Bourbonnais township, Illinois*
1479. Bremen township, Illinois*
1480. Bristol township, Illinois*
1481. Buffalo Grove village, Illinois*
1482. Bureau County, Illinois*
1483. Calumet City City, Illinois*
1484. Capital township, Illinois*
1485. Carol Stream village, Illinois*
1486. Carpentersville village, Illinois*
1487. Caseyville township, Illinois*
1488. Champaign City, Illinois*
1489. Champaign City township, Illinois*
1490. Champaign County, Illinois*
1491. Chicago City, Illinois*
1492. Christian County, Illinois*
1493. Clinton County, Illinois*
1494. Coles County, Illinois*
1495. Collinsville township, Illinois*
1496. Cook County, Illinois*
1497. Crystal Lake City, Illinois*
1498. Cunningham township, Illinois*
1499. Danville City, Illinois*
1500. Decatur City, Illinois*
1501. Decatur township, Illinois*
1502. DeKalb City, Illinois*
1503. DeKalb County, Illinois*
1504. DeKalb township, Illinois*
1505. Des Plaines City, Illinois*
1506. Downers Grove township, Illinois*
1507. Downers Grove village, Illinois*
1508. Du Page township, Illinois*
1509. Dundee township, Illinois*
1510. DuPage County, Illinois*
1511. Edwardsville township, Illinois*
1512. Effingham County, Illinois*
1513. Ela township, Illinois*
1514. Elgin City, Illinois*
1515. Elgin township, Illinois*
1516. Elk Grove township, Illinois*
1517. Elk Grove Village village, Illinois*
1518. Elmhurst City, Illinois*
1519. Evanston City, Illinois*
1520. Frankfort township, Illinois*
1521. Franklin County, Illinois*
1522. Fremont township, Illinois*
1523. Fulton County, Illinois*
1524. Galesburg City, Illinois*
1525. Galesburg City township, Illinois*
1526. Glendale Heights village, Illinois*
1527. Glenview village, Illinois*
1528. Grafton township, Illinois*
1529. Grundy County, Illinois*
1530. Gurnee village, Illinois*
1531. Hanover Park village, Illinois*
1532. Hanover township, Illinois*
1533. Harlem township, Illinois*
1534. Henry County, Illinois*
1535. Hoffman Estates village, Illinois*
1536. Homer township, Illinois*
1537. Jackson County, Illinois*
1538. Jefferson County, Illinois*
1539. Joliet City, Illinois*
1540. Joliet township, Illinois*
1541. Kane County, Illinois*
1542. Kankakee County, Illinois*
1543. Kendall County, Illinois*
1544. Knox County, Illinois*
1545. Lake County, Illinois*
1546. Lake Villa township, Illinois*

1547. LaSalle County, Illinois*
1548. Lee County, Illinois*
1549. Leyden township, Illinois*
1550. Libertyville township, Illinois*
1551. Lisle township, Illinois*
1552. Livingston County, Illinois*
1553. Lockport township, Illinois*
1554. Lombard village, Illinois*
1555. Lyons township, Illinois*
1556. Macon County, Illinois*
1557. Macoupin County, Illinois*
1558. Madison County, Illinois*
1559. Maine township, Illinois*
1560. Marion County, Illinois*
1561. McHenry County, Illinois*
1562. McHenry township, Illinois*
1563. McLean County, Illinois*
1564. Milton township, Illinois*
1565. Moline City, Illinois*
1566. Monroe County, Illinois*
1567. Moraine township, Illinois*
1568. Morgan County, Illinois*
1569. Mount Prospect village, Illinois*
1570. Mundelein village, Illinois*
1571. Naperville City, Illinois*
1572. Naperville township, Illinois*
1573. New Lenox township, Illinois*
1574. New Trier township, Illinois*
1575. Niles township, Illinois*
1576. Normal town, Illinois*
1577. Normal township, Illinois*
1578. Northbrook village, Illinois*
1579. Northfield township, Illinois*
1580. Nunda township, Illinois*
1581. Oak Lawn village, Illinois*
1582. Oak Park township, Illinois*
1583. Oak Park village, Illinois*
1584. Ogle County, Illinois*
1585. Orland Park village, Illinois*
1586. Orland Park village, Illinois*
1587. Orland township, Illinois*
1588. Oswego township, Illinois*
1589. Oswego village, Illinois*
1590. Palatine township, Illinois*
1591. Palatine village, Illinois*
1592. Palos township, Illinois*
1593. Park Ridge City, Illinois*
1594. Pekin City, Illinois*
1595. Peoria City, Illinois*
1596. Peoria City township, Illinois*
1597. Peoria County, Illinois*
1598. Plainfield township, Illinois*
1599. Plainfield village, Illinois*
1600. Proviso township, Illinois*
1601. Quincy City, Illinois*
1602. Quincy township, Illinois*
1603. Randolph County, Illinois*
1604. Rich township, Illinois*
1605. Rock Island City, Illinois*
1606. Rock Island County, Illinois*
1607. Rockford City, Illinois*
1608. Rockford township, Illinois*
1609. Romeoville village, Illinois*
1610. Sangamon County, Illinois*
1611. Schaumburg township, Illinois*
1612. Schaumburg village, Illinois*
1613. Shields township, Illinois*
1614. Skokie village, Illinois*
1615. South Moline township, Illinois*
1616. Springfield City, Illinois*
1617. St. Charles City, Illinois*
1618. St. Charles township, Illinois*
1619. St. Clair County, Illinois*
1620. St. Clair township, Illinois*
1621. Stephenson County, Illinois*
1622. Stickney township, Illinois*
1623. Streamwood village, Illinois*
1624. Tazewell County, Illinois*
1625. Thornton township, Illinois*
1626. Tinley Park village, Illinois*
1627. Tinley Park village, Illinois*
1628. Troy township, Illinois*
1629. Urbana City, Illinois*
1630. Vermilion County, Illinois*
1631. Vernon township, Illinois*
1632. Warren township, Illinois*
1633. Waukegan City, Illinois*
1634. Waukegan township, Illinois*

1635. Wayne township, Illinois*
1636. West Deerfield township, Illinois*
1637. Wheatland township, Illinois*
1638. Wheaton City, Illinois*
1639. Wheeling township, Illinois*
1640. Wheeling village, Illinois*
1641. Whiteside County, Illinois*
1642. Will County, Illinois*
1643. Williamson County, Illinois*
1644. Winfield township, Illinois*
1645. Winnebago County, Illinois*
1646. Wood River township, Illinois*
1647. Woodford County, Illinois*
1648. Woodridge village, Illinois*
1649. Worth township, Illinois*
1650. York township, Illinois*
1651. Addison township, Indiana
1652. Auburn City, Indiana
1653. Avon town, Indiana
1654. Bainbridge township, Indiana
1655. Baugo township, Indiana
1656. Bedford City, Indiana
1657. Beech Grove City, Indiana
1658. Blackford County, Indiana
1659. Bluffton City, Indiana
1660. Boon township, Indiana
1661. Brown County, Indiana
1662. Brown township, Indiana*
1663. Brownsburg town, Indiana
1664. Carroll County, Indiana
1665. Cedar Creek township, Indiana
1666. Cedar Lake town, Indiana
1667. Center township, Indiana*
1668. Centre township, Indiana
1669. Charlestown township, Indiana
1670. Chesterton town, Indiana
1671. Clarksville town, Indiana
1672. Clay County, Indiana
1673. Cleveland township, Indiana
1674. Columbia township, Indiana
1675. Connersville City, Indiana
1676. Connersville township, Indiana
1677. Coolspring township, Indiana
1678. Crawford County, Indiana
1679. Crawfordsville City, Indiana
1680. Danville town, Indiana
1681. Decatur County, Indiana
1682. Dyer town, Indiana
1683. East Chicago City, Indiana
1684. Eel township, Indiana
1685. Fall Creek township, Indiana*
1686. Fayette County, Indiana
1687. Fountain County, Indiana
1688. Frankfort City, Indiana
1689. Franklin City, Indiana
1690. Franklin County, Indiana
1691. Franklin township, Indiana*
1692. Fulton County, Indiana
1693. Georgetown township, Indiana
1694. Greencastle City, Indiana
1695. Greencastle township, Indiana
1696. Greenfield City, Indiana
1697. Greensburg City, Indiana
1698. Griffith town, Indiana
1699. Hanover township, Indiana
1700. Harris township, Indiana
1701. Harrison township, Indiana*
1702. Henry township, Indiana
1703. Highland town, Indiana
1704. Hobart City, Indiana
1705. Honey Creek township, Indiana
1706. Huntington City, Indiana
1707. Huntington township, Indiana
1708. Jackson township, Indiana*
1709. Jasper City, Indiana
1710. Jay County, Indiana
1711. Jefferson township, Indiana*
1712. Jennings County, Indiana
1713. Keener township, Indiana
1714. La Porte City, Indiana
1715. Lake Station City, Indiana
1716. Lawrenceburg township, Indiana
1717. Lebanon City, Indiana
1718. Logansport City, Indiana
1719. Lost Creek township, Indiana
1720. Madison City, Indiana
1721. Madison township, Indiana*
1722. Marion City, Indiana
1723. Marion County / Indianapolis city, Indiana*
1724. Marion Township, Indiana*
1725. Martin County, Indiana
1726. Martinsville City, Indiana
1727. Michigan township, Indiana
1728. Mill township, Indiana
1729. Munster town, Indiana
1730. New Castle City, Indiana

1731. New Haven City, Indiana
1732. Newton County, Indiana
1733. Noble township, Indiana
1734. Orange County, Indiana
1735. Osolo township, Indiana
1736. Owen County, Indiana
1737. Parke County, Indiana
1738. Patoka township, Indiana
1739. Perry County, Indiana
1740. Perry township, Indiana*
1741. Peru City, Indiana
1742. Peru township, Indiana
1743. Pigeon township, Indiana*
1744. Pike County, Indiana
1745. Pipe Creek township, Indiana
1746. Pleasant township, Indiana*
1747. Posey County, Indiana
1748. Pulaski County, Indiana
1749. Randolph County, Indiana
1750. Richland township, Indiana*
1751. Ripley County, Indiana
1752. Rush County, Indiana
1753. Schererville town, Indiana
1754. Scott County, Indiana
1755. Seymour City, Indiana
1756. Shawswick township, Indiana
1757. Shelbyville City, Indiana
1758. Silver Creek township, Indiana
1759. Speedway town, Indiana
1760. Spencer County, Indiana
1761. St. John town, Indiana
1762. Starke County, Indiana
1763. Sugar Creek township, Indiana
1764. Sullivan County, Indiana
1765. Switzerland County, Indiana
1766. Tipton County, Indiana
1767. Troy township, Indiana
1768. Union township, Indiana*
1769. Van Buren township, Indiana*
1770. Vermillion County, Indiana
1771. Vernon township, Indiana
1772. Vincennes City, Indiana
1773. Vincennes township, Indiana
1774. Warsaw City, Indiana
1775. Washington City, Indiana
1776. Washington County, Indiana
1777. Washington township, Indiana*
1778. Wayne township, Indiana*
1779. Wells County, Indiana
1780. Westchester township, Indiana
1781. White County, Indiana
1782. Winfield township, Indiana
1783. Yorktown town, Indiana
1784. Zionsville town, Indiana
1785. Aboite township, Indiana*
1786. Adams County, Indiana*
1787. Adams township, Indiana*
1788. Allen County, Indiana*
1789. Anderson City, Indiana*
1790. Anderson township, Indiana*
1791. Bartholomew County, Indiana*
1792. Bloomington City, Indiana*
1793. Bloomington township, Indiana*
1794. Boone County, Indiana*
1795. Calumet township, Indiana*
1796. Carmel City, Indiana*
1797. Cass County, Indiana*
1798. Clark County, Indiana*
1799. Clay township, Indiana*
1800. Clinton County, Indiana*
1801. Columbus City, Indiana*
1802. Columbus township, Indiana*
1803. Concord township, Indiana*
1804. Crown Point City, Indiana*
1805. Daviess County, Indiana*
1806. Dearborn County, Indiana*
1807. Decatur township, Indiana*
1808. DeKalb County, Indiana*
1809. Delaware County, Indiana*
1810. Delaware township, Indiana*
1811. Dubois County, Indiana*
1812. Elkhart City, Indiana*
1813. Elkhart County, Indiana*
1814. Elkhart township, Indiana*
1815. Evansville City, Indiana*
1816. Fairfield township, Indiana*
1817. Fishers City, Indiana*
1818. Floyd County, Indiana*
1819. Fort Wayne City, Indiana*
1820. Gary City, Indiana*
1821. Gibson County, Indiana*
1822. Goshen City, Indiana*
1823. Grant County, Indiana*
1824. Greene County, Indiana*
1825. Greenwood City, Indiana*
1826. Guilford township, Indiana*
1827. Hamilton County, Indiana*
1828. Hammond City, Indiana*
1829. Hancock County, Indiana*
1830. Harrison County, Indiana*
1831. Hendricks County, Indiana*

1832. Henry County, Indiana*
1833. Hobart township, Indiana*
1834. Howard County, Indiana*
1835. Huntington County, Indiana*
1836. Jackson County, Indiana*
1837. Jasper County, Indiana*
1838. Jefferson County, Indiana*
1839. Jeffersonville City, Indiana*
1840. Jeffersonville township, Indiana*
1841. Johnson County, Indiana*
1842. Knight township, Indiana*
1843. Knox County, Indiana*
1844. Kokomo City, Indiana*
1845. Kosciusko County, Indiana*
1846. Lafayette City, Indiana*
1847. LaGrange County, Indiana*
1848. Lake County, Indiana*
1849. LaPorte County, Indiana*
1850. Lawrence City, Indiana*
1851. Lawrence County, Indiana*
1852. Lawrence township, Indiana*
1853. Lincoln township, Indiana*
1854. Madison County, Indiana*
1855. Marshall County, Indiana*
1856. Merrillville town, Indiana*
1857. Miami County, Indiana*
1858. Michigan City City, Indiana*
1859. Mishawaka City, Indiana*
1860. Monroe County, Indiana*
1861. Montgomery County, Indiana*
1862. Morgan County, Indiana*
1863. Muncie City, Indiana*
1864. New Albany City, Indiana*
1865. New Albany township, Indiana*
1866. Noble County, Indiana*
1867. Noblesville City, Indiana*
1868. Noblesville township, Indiana*
1869. North township, Indiana*
1870. Ohio township, Indiana*
1871. Penn township, Indiana*
1872. Pike township, Indiana*
1873. Plainfield town, Indiana*
1874. Portage City, Indiana*
1875. Portage township, Indiana*
1876. Porter County, Indiana*
1877. Putnam County, Indiana*
1878. Richmond City, Indiana*
1879. Ross township, Indiana*
1880. Shelby County, Indiana*
1881. South Bend City, Indiana*
1882. St. John township, Indiana*
1883. St. Joseph County, Indiana*
1884. St. Joseph township, Indiana*
1885. Steuben County, Indiana*
1886. Terre Haute City, Indiana*
1887. Tippecanoe County, Indiana*
1888. Valparaiso City, Indiana*
1889. Vanderburgh County, Indiana*
1890. Vigo County, Indiana*
1891. Wabash County, Indiana*
1892. Wabash township, Indiana*
1893. Warren township, Indiana*
1894. Warrick County, Indiana*
1895. Wayne County, Indiana*
1896. Wea township, Indiana*
1897. West Lafayette City, Indiana*
1898. Westfield City, Indiana*
1899. White River township, Indiana*
1900. Whitley County, Indiana*
1901. Allamakee County, Iowa
1902. Altoona City, Iowa
1903. Appanoose County, Iowa
1904. Benton County, Iowa
1905. Boone City, Iowa
1906. Boone County, Iowa
1907. Bremer County, Iowa
1908. Buchanan County, Iowa
1909. Buena Vista County, Iowa
1910. Burlington City, Iowa
1911. Butler County, Iowa
1912. Carroll County, Iowa
1913. Cass County, Iowa
1914. Cedar County, Iowa
1915. Cherokee County, Iowa
1916. Chickasaw County, Iowa
1917. Clay County, Iowa
1918. Clayton County, Iowa
1919. Clinton City, Iowa
1920. Clive City, Iowa
1921. Coralville City, Iowa
1922. Crawford County, Iowa
1923. Delaware County, Iowa
1924. Dickinson County, Iowa
1925. Fairfield City, Iowa
1926. Fayette County, Iowa
1927. Floyd County, Iowa
1928. Fort Dodge City, Iowa
1929. Fort Madison City, Iowa
1930. Franklin County, Iowa
1931. Grimes City, Iowa
1932. Grundy County, Iowa

1933. Guthrie County, Iowa
1934. Hamilton County, Iowa
1935. Hancock County, Iowa
1936. Hardin County, Iowa
1937. Harrison County, Iowa
1938. Henry County, Iowa
1939. Indianola City, Iowa
1940. Iowa County, Iowa
1941. Jackson County, Iowa
1942. Jefferson County, Iowa
1943. Johnston City, Iowa
1944. Jones County, Iowa
1945. Keokuk City, Iowa
1946. Keokuk County, Iowa
1947. Kossuth County, Iowa
1948. Le Mars City, Iowa
1949. Louisa County, Iowa
1950. Lyon County, Iowa
1951. Madison County, Iowa
1952. Mahaska County, Iowa
1953. Marshalltown City, Iowa
1954. Mason City City, Iowa
1955. Mills County, Iowa
1956. Mitchell County, Iowa
1957. Muscatine City, Iowa
1958. Newton City, Iowa
1959. North Liberty City, Iowa
1960. Norwalk City, Iowa
1961. O'Brien County, Iowa
1962. Oskaloosa City, Iowa
1963. Ottumwa City, Iowa
1964. Page County, Iowa
1965. Pella City, Iowa
1966. Pleasant Hill City, Iowa
1967. Plymouth County, Iowa
1968. Poweshiek County, Iowa
1969. Shelby County, Iowa
1970. Spencer City, Iowa
1971. Storm Lake City, Iowa
1972. Tama County, Iowa
1973. Union County, Iowa
1974. Washington County, Iowa
1975. Waukee City, Iowa
1976. Waverly City, Iowa
1977. Winnebago County, Iowa
1978. Winneshiek County, Iowa
1979. Wright County, Iowa
1980. Ames City, Iowa*
1981. Ankeny City, Iowa*
1982. Bettendorf City, Iowa*
1983. Black Hawk County, Iowa*
1984. Cedar Falls City, Iowa*
1985. Cedar Rapids City, Iowa*
1986. Cerro Gordo County, Iowa*
1987. Clinton County, Iowa*
1988. Council Bluffs City, Iowa*
1989. Dallas County, Iowa*
1990. Davenport City, Iowa*
1991. Des Moines City, Iowa*
1992. Des Moines County, Iowa*
1993. Dubuque City, Iowa*
1994. Dubuque County, Iowa*
1995. Iowa City City, Iowa*
1996. Jasper County, Iowa*
1997. Johnson County, Iowa*
1998. Lee County, Iowa*
1999. Linn County, Iowa*
2000. Marion City, Iowa*
2001. Marion County, Iowa*
2002. Marshall County, Iowa*
2003. Muscatine County, Iowa*
2004. Polk County, Iowa*
2005. Pottawattamie County, Iowa*
2006. Scott County, Iowa*
2007. Sioux City City, Iowa*
2008. Sioux County, Iowa*
2009. Story County, Iowa*
2010. Urbandale City, Iowa*
2011. Wapello County, Iowa*
2012. Warren County, Iowa*
2013. Waterloo City, Iowa*
2014. Webster County, Iowa*
2015. West Des Moines City, Iowa*
2016. Woodbury County, Iowa*
2017. Allen County, Kansas
2018. Andover City, Kansas
2019. Arkansas City City, Kansas
2020. Atchison City, Kansas
2021. Atchison County, Kansas
2022. Barton County, Kansas
2023. Bourbon County, Kansas
2024. Bruno township, Kansas
2025. Cherokee County, Kansas
2026. Derby City, Kansas
2027. Dickinson County, Kansas
2028. Dodge City City, Kansas
2029. El Dorado City, Kansas
2030. Ellis County, Kansas
2031. Emporia City, Kansas
2032. Fairmount township, Kansas
2033. Franklin County, Kansas
2034. Garden City City, Kansas
2035. Gardner City, Kansas
2036. Great Bend City, Kansas
2037. Hays City, Kansas
2038. Haysville City, Kansas
2039. Jackson County, Kansas
2040. Jefferson County, Kansas
2041. Junction City City, Kansas
2042. Labette County, Kansas
2043. Lansing City, Kansas
2044. Liberal City, Kansas
2045. Madison township, Kansas
2046. Marion County, Kansas
2047. McPherson City, Kansas
2048. McPherson County, Kansas
2049. Merriam City, Kansas
2050. Nemaha County, Kansas
2051. Neosho County, Kansas
2052. Newton City, Kansas
2053. Osage County, Kansas
2054. Ottawa City, Kansas
2055. Pittsburg City, Kansas
2056. Pottawatomie County, Kansas
2057. Prairie Village City, Kansas
2058. Riverside township, Kansas

2059. Rockford township, Kansas
2060. Seward County, Kansas
2061. Soldier township, Kansas
2062. Sumner County, Kansas
2063. Winfield City, Kansas
2064. Butler County, Kansas*
2065. Cowley County, Kansas*
2066. Crawford County, Kansas*
2067. Douglas County, Kansas*
2068. Finney County, Kansas*
2069. Ford County, Kansas*
2070. Geary County, Kansas*
2071. Harvey County, Kansas*
2072. Hutchinson City, Kansas*
2073. Johnson County, Kansas*
2074. Lawrence City, Kansas*
2075. Leavenworth City, Kansas*
2076. Leavenworth County, Kansas*
2077. Leawood City, Kansas*
2078. Lenexa City, Kansas*
2079. Lyon County, Kansas*
2080. Manhattan City, Kansas*
2081. Miami County, Kansas*
2082. Montgomery County, Kansas*
2083. Olathe City, Kansas*
2084. Overland Park City, Kansas*
2085. Reno County, Kansas*
2086. Riley County, Kansas*
2087. Salina City, Kansas*
2088. Saline County, Kansas*
2089. Sedgwick County, Kansas*
2090. Shawnee City, Kansas*
2091. Shawnee County, Kansas*
2092. Topeka City, Kansas*
2093. Wichita City, Kansas*
2094. Adair County, Kentucky
2095. Allen County, Kentucky
2096. Anderson County, Kentucky
2097. Ashland City, Kentucky
2098. Bardstown City, Kentucky
2099. Bath County, Kentucky
2100. Bell County, Kentucky
2101. Berea City, Kentucky
2102. Bourbon County, Kentucky
2103. Breathitt County, Kentucky
2104. Breckinridge County, Kentucky
2105. Butler County, Kentucky
2106. Caldwell County, Kentucky
2107. Campbellsville City, Kentucky
2108. Carroll County, Kentucky
2109. Carter County, Kentucky
2110. Casey County, Kentucky
2111. Clay County, Kentucky
2112. Clinton County, Kentucky
2113. Danville City, Kentucky
2114. Edmonson County, Kentucky
2115. Erlanger City, Kentucky
2116. Estill County, Kentucky
2117. Fleming County, Kentucky
2118. Fort Thomas City, Kentucky
2119. Frankfort City, Kentucky
2120. Garrard County, Kentucky
2121. Glasgow City, Kentucky
2122. Grant County, Kentucky
2123. Grayson County, Kentucky
2124. Green County, Kentucky
2125. Harlan County, Kentucky
2126. Harrison County, Kentucky
2127. Hart County, Kentucky
2128. Henderson City, Kentucky
2129. Henry County, Kentucky
2130. Independence City, Kentucky
2131. Jackson County, Kentucky
2132. Jeffersontown City, Kentucky
2133. Johnson County, Kentucky
2134. Knott County, Kentucky
2135. Larue County, Kentucky
2136. Lawrence County, Kentucky
2137. Lawrenceburg City, Kentucky
2138. Letcher County, Kentucky
2139. Lewis County, Kentucky
2140. Lincoln County, Kentucky
2141. Logan County, Kentucky
2142. Lyndon City, Kentucky
2143. Madisonville City, Kentucky
2144. Magoffin County, Kentucky
2145. Marion County, Kentucky
2146. Martin County, Kentucky
2147. Mason County, Kentucky
2148. McCreary County, Kentucky
2149. Meade County, Kentucky
2150. Mercer County, Kentucky
2151. Metcalfe County, Kentucky
2152. Monroe County, Kentucky
2153. Montgomery County, Kentucky
2154. Morgan County, Kentucky
2155. Mount Washington City, Kentucky
2156. Murray City, Kentucky
2157. Newport City, Kentucky

2158. Ohio County, Kentucky
2159. Owen County, Kentucky
2160. Paducah City, Kentucky
2161. Pendleton County, Kentucky
2162. Perry County, Kentucky
2163. Powell County, Kentucky
2164. Radcliff City, Kentucky
2165. Rockcastle County, Kentucky
2166. Rowan County, Kentucky
2167. Russell County, Kentucky
2168. Shelbyville City, Kentucky
2169. Shepherdsville City, Kentucky
2170. Shively City, Kentucky
2171. Simpson County, Kentucky
2172. Somerset City, Kentucky
2173. Spencer County, Kentucky
2174. St. Matthews City, Kentucky
2175. Taylor County, Kentucky
2176. Todd County, Kentucky
2177. Trigg County, Kentucky
2178. Union County, Kentucky
2179. Washington County, Kentucky
2180. Wayne County, Kentucky
2181. Webster County, Kentucky
2182. Winchester City, Kentucky
2183. Woodford County, Kentucky
2184. Barren County, Kentucky*
2185. Boone County, Kentucky*
2186. Bowling Green City, Kentucky*
2187. Boyd County, Kentucky*
2188. Boyle County, Kentucky*
2189. Bullitt County, Kentucky*
2190. Calloway County, Kentucky*
2191. Campbell County, Kentucky*
2192. Christian County, Kentucky*
2193. Clark County, Kentucky*
2194. Covington City, Kentucky*
2195. Daviess County, Kentucky*
2196. Elizabethtown City, Kentucky*
2197. Florence City, Kentucky*
2198. Floyd County, Kentucky*
2199. Franklin County, Kentucky*
2200. Georgetown City, Kentucky*
2201. Graves County, Kentucky*
2202. Greenup County, Kentucky*
2203. Hardin County, Kentucky*
2204. Henderson County, Kentucky*
2205. Hopkins County, Kentucky*
2206. Hopkinsville City, Kentucky*
2207. Jessamine County, Kentucky*
2208. Kenton County, Kentucky*
2209. Knox County, Kentucky*
2210. Laurel County, Kentucky*
2211. Lexington-Fayette urban county, Kentucky*
2212. Louisville/Jefferson County metro government, Kentucky*
2213. Madison County, Kentucky*
2214. Marshall County, Kentucky*
2215. McCracken County, Kentucky*
2216. Muhlenberg County, Kentucky*
2217. Nelson County, Kentucky*
2218. Nicholasville City, Kentucky*
2219. Oldham County, Kentucky*
2220. Owensboro City, Kentucky*
2221. Pike County, Kentucky*
2222. Pulaski County, Kentucky*
2223. Richmond City, Kentucky*
2224. Scott County, Kentucky*
2225. Shelby County, Kentucky*
2226. Warren County, Kentucky*
2227. Whitley County, Kentucky*
2228. Auburn City, Maine
2229. Augusta City, Maine
2230. Biddeford City, Maine
2231. Brunswick town, Maine
2232. Falmouth town, Maine
2233. Gorham town, Maine
2234. Kennebunk town, Maine
2235. Orono town, Maine
2236. Piscataquis County, Maine
2237. Saco City, Maine
2238. Sanford City, Maine
2239. Scarborough town, Maine
2240. South Portland City, Maine
2241. Standish town, Maine
2242. Waterville City, Maine
2243. Wells town, Maine
2244. Westbrook City, Maine
2245. Windham town, Maine
2246. York town, Maine

2247. Androscoggin County, Maine*
2248. Aroostook County, Maine*
2249. Bangor City, Maine*
2250. Cumberland County, Maine*
2251. Franklin County, Maine*
2252. Hancock County, Maine*
2253. Kennebec County, Maine*
2254. Knox County, Maine*
2255. Lewiston City, Maine*
2256. Lincoln County, Maine*
2257. Oxford County, Maine*
2258. Penobscot County, Maine*
2259. Portland City, Maine*
2260. Sagadahoc County, Maine*
2261. Somerset County, Maine*
2262. Waldo County, Maine*
2263. Washington County, Maine*
2264. York County, Maine*
2265. Aberdeen City, Maryland
2266. Bel Air town, Maryland
2267. Cambridge City, Maryland
2268. Cumberland City, Maryland
2269. Easton town, Maryland
2270. Elkton town, Maryland
2271. Garrett County, Maryland
2272. Greenbelt City, Maryland
2273. Havre de Grace City, Maryland
2274. Hyattsville City, Maryland
2275. Kent County, Maryland
2276. Laurel City, Maryland
2277. New Carrollton City, Maryland
2278. Somerset County, Maryland
2279. Takoma Park City, Maryland
2280. Westminster City, Maryland
2281. Allegany County, Maryland*
2282. Annapolis City, Maryland*
2283. Anne Arundel County, Maryland*
2284. Baltimore City, Maryland*
2285. Baltimore County, Maryland*
2286. Bowie City, Maryland*
2287. Calvert County, Maryland*
2288. Caroline County, Maryland*
2289. Carroll County, Maryland*
2290. Cecil County, Maryland*
2291. Charles County, Maryland*
2292. College Park City, Maryland*
2293. Dorchester County, Maryland*
2294. Frederick City, Maryland*
2295. Frederick County, Maryland*
2296. Gaithersburg City, Maryland*
2297. Hagerstown City, Maryland*
2298. Harford County, Maryland*
2299. Howard County, Maryland*
2300. Montgomery County, Maryland*
2301. Prince George's County, Maryland*
2302. Queen Anne's County, Maryland*
2303. Rockville City, Maryland*
2304. Salisbury City, Maryland*
2305. St. Mary's County, Maryland*
2306. Talbot County, Maryland*
2307. Washington County, Maryland*
2308. Wicomico County, Maryland*
2309. Worcester County, Maryland*
2310. Abington town, Massachusetts
2311. Acton town, Massachusetts
2312. Acushnet town, Massachusetts
2313. Agawam Town City, Massachusetts
2314. Amesbury Town City, Massachusetts
2315. Ashland town, Massachusetts
2316. Athol town, Massachusetts
2317. Auburn town, Massachusetts
2318. Bedford town, Massachusetts
2319. Belchertown town, Massachusetts
2320. Bellingham town, Massachusetts
2321. Belmont town, Massachusetts
2322. Bourne town, Massachusetts
2323. Bridgewater Town City, Massachusetts
2324. Burlington town, Massachusetts
2325. Canton town, Massachusetts
2326. Carver town, Massachusetts
2327. Charlton town, Massachusetts
2328. Clinton town, Massachusetts
2329. Concord town, Massachusetts

2330. Danvers town, Massachusetts
2331. Dedham town, Massachusetts
2332. Dennis town, Massachusetts
2333. Dudley town, Massachusetts
2334. Dukes County, Massachusetts
2335. Duxbury town, Massachusetts
2336. East Bridgewater town, Massachusetts
2337. East Longmeadow town, Massachusetts
2338. Easthampton Town City, Massachusetts
2339. Easton town, Massachusetts
2340. Fairhaven town, Massachusetts
2341. Foxborough town, Massachusetts
2342. Gardner City, Massachusetts
2343. Grafton town, Massachusetts
2344. Greenfield Town City, Massachusetts
2345. Groton town, Massachusetts
2346. Hanover town, Massachusetts
2347. Hanson town, Massachusetts
2348. Harwich town, Massachusetts
2349. Hingham town, Massachusetts
2350. Holbrook town, Massachusetts
2351. Holden town, Massachusetts
2352. Holliston town, Massachusetts
2353. Hopkinton town, Massachusetts
2354. Hudson town, Massachusetts
2355. Hull town, Massachusetts
2356. Ipswich town, Massachusetts
2357. Kingston town, Massachusetts
2358. Lakeville town, Massachusetts
2359. Leicester town, Massachusetts
2360. Littleton town, Massachusetts
2361. Longmeadow town, Massachusetts
2362. Ludlow town, Massachusetts
2363. Lunenburg town, Massachusetts
2364. Lynnfield town, Massachusetts
2365. Mansfield town, Massachusetts
2366. Marblehead town, Massachusetts
2367. Marshfield town, Massachusetts
2368. Mashpee town, Massachusetts
2369. Maynard town, Massachusetts
2370. Medfield town, Massachusetts
2371. Medway town, Massachusetts
2372. Melrose City, Massachusetts
2373. Middleborough town, Massachusetts
2374. Middleton town, Massachusetts
2375. Milford town, Massachusetts
2376. Millbury town, Massachusetts
2377. Milton town, Massachusetts
2378. Nantucket Town / Nantucket County, Massachusetts
2379. Newburyport City, Massachusetts
2380. Norfolk town, Massachusetts
2381. North Adams City, Massachusetts
2382. North Attleborough town, Massachusetts
2383. North Reading town, Massachusetts
2384. Northampton City, Massachusetts
2385. Northborough town, Massachusetts
2386. Northbridge town, Massachusetts
2387. Norton town, Massachusetts
2388. Norwell town, Massachusetts
2389. Norwood town, Massachusetts
2390. Oxford town, Massachusetts
2391. Palmer Town City, Massachusetts
2392. Pembroke town, Massachusetts
2393. Pepperell town, Massachusetts
2394. Raynham town, Massachusetts
2395. Reading town, Massachusetts
2396. Rehoboth town, Massachusetts
2397. Rockland town, Massachusetts
2398. Sandwich town, Massachusetts
2399. Saugus town, Massachusetts
2400. Scituate town, Massachusetts
2401. Seekonk town, Massachusetts
2402. Sharon town, Massachusetts
2403. Somerset town, Massachusetts
2404. South Hadley town, Massachusetts

2405. Southborough town, Massachusetts
2406. Southbridge Town City, Massachusetts
2407. Spencer town, Massachusetts
2408. Stoneham town, Massachusetts
2409. Stoughton town, Massachusetts
2410. Sudbury town, Massachusetts
2411. Swampscott town, Massachusetts
2412. Swansea town, Massachusetts
2413. Tyngsborough town, Massachusetts
2414. Uxbridge town, Massachusetts
2415. Wakefield town, Massachusetts
2416. Walpole town, Massachusetts
2417. Wareham town, Massachusetts
2418. Wayland town, Massachusetts
2419. Webster town, Massachusetts
2420. Wellesley town, Massachusetts
2421. West Springfield Town City, Massachusetts
2422. Westborough town, Massachusetts
2423. Westford town, Massachusetts
2424. Weston town, Massachusetts
2425. Westport town, Massachusetts
2426. Westwood town, Massachusetts
2427. Whitman town, Massachusetts
2428. Wilbraham town, Massachusetts
2429. Wilmington town, Massachusetts
2430. Winchendon town, Massachusetts
2431. Winchester town, Massachusetts
2432. Winthrop Town City, Massachusetts
2433. Wrentham town, Massachusetts
2434. Yarmouth town, Massachusetts
2435. Amherst town, Massachusetts*
2436. Andover town, Massachusetts*
2437. Arlington town, Massachusetts*
2438. Attleboro City, Massachusetts*
2439. Barnstable County, Massachusetts*
2440. Barnstable Town City, Massachusetts*
2441. Beverly City, Massachusetts*
2442. Billerica town, Massachusetts*
2443. Boston City, Massachusetts*
2444. Braintree Town City, Massachusetts*
2445. Bristol County, Massachusetts*
2446. Brockton City, Massachusetts*
2447. Brookline town, Massachusetts*
2448. Cambridge City, Massachusetts*
2449. Chelmsford town, Massachusetts*
2450. Chelsea City, Massachusetts*
2451. Chicopee City, Massachusetts*
2452. Dartmouth town, Massachusetts*
2453. Dracut town, Massachusetts*
2454. Everett City, Massachusetts*
2455. Fall River City, Massachusetts*
2456. Falmouth town, Massachusetts*
2457. Fitchburg City, Massachusetts*
2458. Framingham City, Massachusetts*
2459. Franklin Town City, Massachusetts*
2460. Gloucester City, Massachusetts*
2461. Haverhill City, Massachusetts*
2462. Holyoke City, Massachusetts*
2463. Lawrence City, Massachusetts*
2464. Leominster City, Massachusetts*
2465. Lexington town, Massachusetts*
2466. Lowell City, Massachusetts*
2467. Lynn City, Massachusetts*
2468. Malden City, Massachusetts*
2469. Marlborough City, Massachusetts*
2470. Medford City, Massachusetts*
2471. Methuen Town City, Massachusetts*
2472. Natick town, Massachusetts*
2473. Needham town, Massachusetts*
2474. New Bedford City, Massachusetts*
2475. Newton City, Massachusetts*
2476. Norfolk County, Massachusetts*
2477. North Andover town, Massachusetts*
2478. Peabody City, Massachusetts*
2479. Pittsfield City, Massachusetts*

2480. Plymouth County, Massachusetts*
2481. Plymouth town, Massachusetts*
2482. Quincy City, Massachusetts*
2483. Randolph Town City, Massachusetts*
2484. Revere City, Massachusetts*
2485. Salem City, Massachusetts*
2486. Shrewsbury town, Massachusetts*
2487. Somerville City, Massachusetts*
2488. Springfield City, Massachusetts*
2489. Taunton City, Massachusetts*
2490. Tewksbury town, Massachusetts*
2491. Waltham City, Massachusetts*
2492. Watertown Town City, Massachusetts*
2493. Westfield City, Massachusetts*
2494. Weymouth Town City, Massachusetts*
2495. Woburn City, Massachusetts*
2496. Worcester City, Massachusetts*
2497. Ada township, Michigan
2498. Adrian City, Michigan
2499. Alcona County, Michigan
2500. Algoma township, Michigan
2501. Allen Park City, Michigan
2502. Allendale charter township, Michigan
2503. Alpena County, Michigan
2504. Alpine township, Michigan
2505. Antrim County, Michigan
2506. Antwerp township, Michigan
2507. Arenac County, Michigan
2508. Auburn Hills City, Michigan
2509. Bangor charter township, Michigan
2510. Bath charter township, Michigan
2511. Benton charter township, Michigan
2512. Benzie County, Michigan
2513. Berkley City, Michigan
2514. Beverly Hills village, Michigan
2515. Big Rapids City, Michigan
2516. Birmingham City, Michigan
2517. Blackman charter township, Michigan
2518. Brandon charter township, Michigan
2519. Brighton township, Michigan
2520. Burton City, Michigan
2521. Byron township, Michigan
2522. Cadillac City, Michigan
2523. Caledonia township, Michigan
2524. Cannon township, Michigan
2525. Cascade charter township, Michigan
2526. Charlevoix County, Michigan
2527. Cheboygan County, Michigan
2528. Clawson City, Michigan
2529. Coldwater City, Michigan
2530. Comstock charter township, Michigan
2531. Cooper charter township, Michigan
2532. Crawford County, Michigan
2533. Davison township, Michigan
2534. Delhi charter township, Michigan
2535. DeWitt charter township, Michigan
2536. Dickinson County, Michigan
2537. East Bay township, Michigan
2538. East Grand Rapids City, Michigan
2539. Egelston township, Michigan
2540. Emmett charter township, Michigan
2541. Escanaba City, Michigan
2542. Farmington City, Michigan
2543. Fenton charter township, Michigan
2544. Fenton City, Michigan
2545. Ferndale City, Michigan
2546. Flat Rock City, Michigan
2547. Flushing charter township, Michigan
2548. Fort Gratiot charter township, Michigan
2549. Fraser City, Michigan
2550. Frenchtown township, Michigan
2551. Fruitport charter township, Michigan
2552. Gaines charter township, Michigan
2553. Garden City City, Michigan
2554. Garfield charter township, Michigan
2555. Genesee charter township, Michigan
2556. Genoa township, Michigan
2557. Gladwin County, Michigan
2558. Gogebic County, Michigan
2559. Grand Haven charter township, Michigan

2560. Grand Haven City, Michigan
2561. Grand Rapids charter township, Michigan
2562. Grandville City, Michigan
2563. Green Oak township, Michigan
2564. Grosse Ile township, Michigan
2565. Grosse Pointe Park City, Michigan
2566. Grosse Pointe Woods City, Michigan
2567. Hamburg township, Michigan
2568. Hamtramck City, Michigan
2569. Harper Woods City, Michigan
2570. Harrison charter township, Michigan
2571. Hartland township, Michigan
2572. Hazel Park City, Michigan
2573. Highland charter township, Michigan
2574. Highland Park City, Michigan
2575. Holly township, Michigan
2576. Huron charter township, Michigan
2577. Inkster City, Michigan
2578. Ionia City, Michigan
2579. Iosco County, Michigan
2580. Iron County, Michigan
2581. Kalamazoo charter township, Michigan
2582. Kalkaska County, Michigan
2583. Lake County, Michigan
2584. Leelanau County, Michigan
2585. Lenox township, Michigan
2586. Leoni township, Michigan
2587. Lincoln charter township, Michigan
2588. Lyon charter township, Michigan
2589. Mackinac County, Michigan
2590. Madison Heights City, Michigan
2591. Manistee County, Michigan
2592. Marion township, Michigan
2593. Marquette City, Michigan
2594. Mason County, Michigan
2595. Melvindale City, Michigan
2596. Menominee County, Michigan
2597. Milford charter township, Michigan
2598. Missaukee County, Michigan
2599. Monitor charter township, Michigan
2600. Monroe charter township, Michigan
2601. Monroe City, Michigan
2602. Mount Clemens City, Michigan
2603. Mount Morris township, Michigan
2604. Mount Pleasant City, Michigan
2605. Mundy township, Michigan
2606. Muskegon charter township, Michigan
2607. Muskegon Heights City, Michigan
2608. New Baltimore City, Michigan
2609. Niles City, Michigan
2610. Niles township, Michigan
2611. Northville township, Michigan
2612. Norton Shores City, Michigan
2613. Oak Park City, Michigan
2614. Oakland charter township, Michigan
2615. Oceana County, Michigan
2616. Oceola township, Michigan
2617. Ogemaw County, Michigan
2618. Osceola County, Michigan
2619. Oshtemo charter township, Michigan
2620. Otsego County, Michigan
2621. Owosso City, Michigan
2622. Oxford charter township, Michigan
2623. Park township, Michigan
2624. Plymouth charter township, Michigan
2625. Port Huron charter township, Michigan
2626. Port Huron City, Michigan
2627. Presque Isle County, Michigan
2628. Riverview City, Michigan
2629. Rochester City, Michigan
2630. Romulus City, Michigan
2631. Roscommon County, Michigan
2632. Sault Ste. Marie City, Michigan
2633. Scio township, Michigan
2634. South Lyon City, Michigan
2635. Southfield township, Michigan
2636. Southgate City, Michigan
2637. Spring Lake township, Michigan
2638. Springfield charter township, Michigan
2639. Sturgis City, Michigan
2640. Summit township, Michigan
2641. Superior charter township, Michigan
2642. Texas charter township, Michigan

2643. Thomas township, Michigan
2644. Traverse City City, Michigan
2645. Trenton City, Michigan
2646. Tyrone township, Michigan
2647. Union charter township, Michigan
2648. Van Buren charter township, Michigan
2649. Vienna charter township, Michigan
2650. Walker City, Michigan
2651. Washington township, Michigan*
2652. Wayne City, Michigan
2653. Wixom City, Michigan
2654. Woodhaven City, Michigan
2655. Wyandotte City, Michigan
2656. Ypsilanti City, Michigan
2657. Zeeland charter township, Michigan
2658. Allegan County, Michigan*
2659. Ann Arbor City, Michigan*
2660. Barry County, Michigan*
2661. Battle Creek City, Michigan*
2662. Bay City City, Michigan*
2663. Bay County, Michigan*
2664. Bedford township, Michigan*
2665. Berrien County, Michigan*
2666. Bloomfield charter township, Michigan*
2667. Branch County, Michigan*
2668. Brownstown charter township, Michigan*
2669. Calhoun County, Michigan*
2670. Canton charter township, Michigan*
2671. Cass County, Michigan*
2672. Chesterfield township, Michigan*
2673. Chippewa County, Michigan*
2674. Clare County, Michigan*
2675. Clinton charter township, Michigan*
2676. Clinton County, Michigan*
2677. Commerce charter township, Michigan*
2678. Dearborn City, Michigan*
2679. Dearborn Heights City, Michigan*
2680. Delta charter township, Michigan*
2681. Delta County, Michigan*
2682. Detroit City, Michigan*
2683. East Lansing City, Michigan*
2684. Eastpointe City, Michigan*
2685. Eaton County, Michigan*
2686. Emmet County, Michigan*
2687. Farmington Hills City, Michigan*
2688. Flint charter township, Michigan*
2689. Flint City, Michigan*
2690. Genesee County, Michigan*
2691. Georgetown charter township, Michigan*
2692. Grand Blanc charter township, Michigan*
2693. Grand Rapids City, Michigan*
2694. Grand Traverse County, Michigan*
2695. Gratiot County, Michigan*
2696. Hillsdale County, Michigan*
2697. Holland charter township, Michigan*
2698. Holland City, Michigan*
2699. Houghton County, Michigan*
2700. Huron County, Michigan*
2701. Independence charter township, Michigan*
2702. Ingham County, Michigan*
2703. Ionia County, Michigan*
2704. Isabella County, Michigan*
2705. Jackson City, Michigan*
2706. Jackson County, Michigan*
2707. Kalamazoo City, Michigan*
2708. Kalamazoo County, Michigan*
2709. Kent County, Michigan*
2710. Kentwood City, Michigan*
2711. Lansing City, Michigan*
2712. Lapeer County, Michigan*
2713. Lenawee County, Michigan*
2714. Lincoln Park City, Michigan*
2715. Livingston County, Michigan*
2716. Livonia City, Michigan*
2717. Macomb County, Michigan*
2718. Macomb township, Michigan*
2719. Marquette County, Michigan*
2720. Mecosta County, Michigan*
2721. Meridian charter township, Michigan*
2722. Midland City, Michigan*
2723. Midland County, Michigan*
2724. Monroe County, Michigan*
2725. Montcalm County, Michigan*
2726. Muskegon City, Michigan*

2727. Muskegon County, Michigan*
2728. Newaygo County, Michigan*
2729. Novi City, Michigan*
2730. Oakland County, Michigan*
2731. Orion charter township, Michigan*
2732. Ottawa County, Michigan*
2733. Pittsfield charter township, Michigan*
2734. Plainfield charter township, Michigan*
2735. Pontiac City, Michigan*
2736. Portage City, Michigan*
2737. Redford charter township, Michigan*
2738. Rochester Hills City, Michigan*
2739. Roseville City, Michigan*
2740. Royal Oak City, Michigan*
2741. Saginaw charter township, Michigan*
2742. Saginaw City, Michigan*
2743. Saginaw County, Michigan*
2744. Sanilac County, Michigan*
2745. Shelby charter township, Michigan*
2746. Shiawassee County, Michigan*
2747. Southfield City, Michigan*
2748. St. Clair County, Michigan*
2749. St. Clair Shores City, Michigan*
2750. St. Joseph County, Michigan*
2751. Sterling Heights City, Michigan*
2752. Taylor City, Michigan*
2753. Troy City, Michigan*
2754. Tuscola County, Michigan*
2755. Van Buren County, Michigan*
2756. Warren City, Michigan*
2757. Washtenaw County, Michigan*
2758. Waterford charter township, Michigan*
2759. Wayne County, Michigan*
2760. West Bloomfield charter township, Michigan*
2761. Westland City, Michigan*
2762. Wexford County, Michigan*
2763. White Lake charter township, Michigan*
2764. Wyoming City, Michigan*
2765. Ypsilanti charter township, Michigan*
2766. Aitkin County, Minnesota
2767. Albert Lea City, Minnesota
2768. Alexandria City, Minnesota
2769. Anoka City, Minnesota
2770. Arden Hills City, Minnesota
2771. Austin City, Minnesota
2772. Bemidji City, Minnesota
2773. Big Lake City, Minnesota
2774. Brainerd City, Minnesota
2775. Brown County, Minnesota
2776. Buffalo City, Minnesota
2777. Cass County, Minnesota
2778. Champlin City, Minnesota
2779. Chanhassen City, Minnesota
2780. Chaska City, Minnesota
2781. Chippewa County, Minnesota
2782. Cloquet City, Minnesota
2783. Columbia Heights City, Minnesota
2784. Cottonwood County, Minnesota
2785. Crystal City, Minnesota
2786. Dodge County, Minnesota
2787. East Bethel City, Minnesota
2788. Elk River City, Minnesota
2789. Fairmont City, Minnesota
2790. Faribault City, Minnesota
2791. Faribault County, Minnesota
2792. Farmington City, Minnesota
2793. Fergus Falls City, Minnesota
2794. Fillmore County, Minnesota
2795. Forest Lake City, Minnesota
2796. Fridley City, Minnesota
2797. Golden Valley City, Minnesota
2798. Grand Rapids City, Minnesota
2799. Ham Lake City, Minnesota
2800. Hastings City, Minnesota
2801. Hibbing City, Minnesota
2802. Hopkins City, Minnesota
2803. Houston County, Minnesota
2804. Hubbard County, Minnesota
2805. Hugo City, Minnesota
2806. Hutchinson City, Minnesota
2807. Kanabec County, Minnesota
2808. Koochiching County, Minnesota
2809. Lake County, Minnesota
2810. Le Sueur County, Minnesota
2811. Lino Lakes City, Minnesota

2812. Little Canada City, Minnesota
2813. Lyon County, Minnesota
2814. Marshall City, Minnesota
2815. Martin County, Minnesota
2816. Meeker County, Minnesota
2817. Mendota Heights City, Minnesota
2818. Mille Lacs County, Minnesota
2819. Monticello City, Minnesota
2820. Mounds View City, Minnesota
2821. New Brighton City, Minnesota
2822. New Hope City, Minnesota
2823. New Ulm City, Minnesota
2824. Nobles County, Minnesota
2825. North Branch City, Minnesota
2826. North Mankato City, Minnesota
2827. North St. Paul City, Minnesota
2828. Northfield City, Minnesota
2829. Oakdale City, Minnesota
2830. Otsego City, Minnesota
2831. Owatonna City, Minnesota
2832. Pennington County, Minnesota
2833. Pine County, Minnesota
2834. Pope County, Minnesota
2835. Prior Lake City, Minnesota
2836. Ramsey City, Minnesota
2837. Red Wing City, Minnesota
2838. Redwood County, Minnesota
2839. Renville County, Minnesota
2840. Robbinsdale City, Minnesota
2841. Rogers City, Minnesota
2842. Roseau County, Minnesota
2843. Rosemount City, Minnesota
2844. Sartell City, Minnesota
2845. Sauk Rapids City, Minnesota
2846. Shoreview City, Minnesota
2847. Sibley County, Minnesota
2848. South St. Paul City, Minnesota
2849. St. Michael City, Minnesota
2850. St. Peter City, Minnesota
2851. Stillwater City, Minnesota
2852. Todd County, Minnesota
2853. Vadnais Heights City, Minnesota
2854. Victoria City, Minnesota
2855. Wabasha County, Minnesota
2856. Waconia City, Minnesota
2857. Wadena County, Minnesota
2858. Waseca County, Minnesota
2859. Watonwan County, Minnesota
2860. West St. Paul City, Minnesota
2861. White Bear Lake City, Minnesota
2862. White Bear township, Minnesota
2863. Willmar City, Minnesota
2864. Winona City, Minnesota
2865. Worthington City, Minnesota
2866. Andover City, Minnesota*
2867. Anoka County, Minnesota*
2868. Apple Valley City, Minnesota*
2869. Becker County, Minnesota*
2870. Beltrami County, Minnesota*
2871. Benton County, Minnesota*
2872. Blaine City, Minnesota*
2873. Bloomington City, Minnesota*
2874. Blue Earth County, Minnesota*
2875. Brooklyn Center City, Minnesota*
2876. Brooklyn Park City, Minnesota*
2877. Burnsville City, Minnesota*
2878. Carlton County, Minnesota*
2879. Carver County, Minnesota*
2880. Chisago County, Minnesota*
2881. Clay County, Minnesota*
2882. Coon Rapids City, Minnesota*
2883. Cottage Grove City, Minnesota*
2884. Crow Wing County, Minnesota*
2885. Dakota County, Minnesota*
2886. Douglas County, Minnesota*
2887. Duluth City, Minnesota*
2888. Eagan City, Minnesota*
2889. Eden Prairie City, Minnesota*
2890. Edina City, Minnesota*
2891. Freeborn County, Minnesota*
2892. Goodhue County, Minnesota*
2893. Hennepin County, Minnesota*
2894. Inver Grove Heights City, Minnesota*
2895. Isanti County, Minnesota*

2896. Itasca County, Minnesota*
2897. Kandiyohi County, Minnesota*
2898. Lakeville City, Minnesota*
2899. Mankato City, Minnesota*
2900. Maple Grove City, Minnesota*
2901. Maplewood City, Minnesota*
2902. McLeod County, Minnesota*
2903. Minneapolis City, Minnesota*
2904. Minnetonka City, Minnesota*
2905. Moorhead City, Minnesota*
2906. Morrison County, Minnesota*
2907. Mower County, Minnesota*
2908. Nicollet County, Minnesota*
2909. Olmsted County, Minnesota*
2910. Otter Tail County, Minnesota*
2911. Plymouth City, Minnesota*
2912. Polk County, Minnesota*
2913. Ramsey County, Minnesota*
2914. Rice County, Minnesota*
2915. Richfield City, Minnesota*
2916. Rochester City, Minnesota*
2917. Roseville City, Minnesota*
2918. Savage City, Minnesota*
2919. Scott County, Minnesota*
2920. Shakopee City, Minnesota*
2921. Sherburne County, Minnesota*
2922. St. Cloud City, Minnesota*
2923. St. Louis County, Minnesota*
2924. St. Louis Park City, Minnesota*
2925. St. Paul City, Minnesota*
2926. Stearns County, Minnesota*
2927. Steele County, Minnesota*
2928. Washington County, Minnesota*
2929. Winona County, Minnesota*
2930. Woodbury City, Minnesota*
2931. Wright County, Minnesota*
2932. Amite County, Mississippi
2933. Attala County, Mississippi
2934. Bay St. Louis City, Mississippi
2935. Brandon City, Mississippi
2936. Brookhaven City, Mississippi
2937. Byram City, Mississippi
2938. Calhoun County, Mississippi
2939. Canton City, Mississippi
2940. Chickasaw County, Mississippi
2941. Clarke County, Mississippi
2942. Clarksdale City, Mississippi
2943. Clay County, Mississippi
2944. Cleveland City, Mississippi
2945. Clinton City, Mississippi
2946. Coahoma County, Mississippi
2947. Columbus City, Mississippi
2948. Copiah County, Mississippi
2949. Corinth City, Mississippi
2950. Covington County, Mississippi
2951. D'Iberville City, Mississippi
2952. Gautier City, Mississippi
2953. George County, Mississippi
2954. Greene County, Mississippi
2955. Greenville City, Mississippi
2956. Greenwood City, Mississippi
2957. Grenada City, Mississippi
2958. Grenada County, Mississippi
2959. Hernando City, Mississippi
2960. Holmes County, Mississippi
2961. Horn Lake City, Mississippi
2962. Itawamba County, Mississippi
2963. Jasper County, Mississippi
2964. Jefferson Davis County, Mississippi
2965. Laurel City, Mississippi
2966. Lawrence County, Mississippi
2967. Leake County, Mississippi
2968. Leflore County, Mississippi
2969. Long Beach City, Mississippi
2970. Madison City, Mississippi
2971. Marion County, Mississippi
2972. McComb City, Mississippi
2973. Moss Point City, Mississippi
2974. Natchez City, Mississippi
2975. Neshoba County, Mississippi

2976. Newton County, Mississippi
2977. Noxubee County, Mississippi
2978. Ocean Springs City, Mississippi
2979. Oxford City, Mississippi
2980. Pascagoula City, Mississippi
2981. Pearl City, Mississippi
2982. Perry County, Mississippi
2983. Petal City, Mississippi
2984. Picayune City, Mississippi
2985. Prentiss County, Mississippi
2986. Ridgeland City, Mississippi
2987. Scott County, Mississippi
2988. Simpson County, Mississippi
2989. Smith County, Mississippi
2990. Starkville City, Mississippi
2991. Stone County, Mississippi
2992. Sunflower County, Mississippi
2993. Tallahatchie County, Mississippi
2994. Tate County, Mississippi
2995. Tippah County, Mississippi
2996. Tishomingo County, Mississippi
2997. Union County, Mississippi
2998. Vicksburg City, Mississippi
2999. Walthall County, Mississippi
3000. Wayne County, Mississippi
3001. West Point City, Mississippi
3002. Winston County, Mississippi
3003. Yalobusha County, Mississippi
3004. Yazoo City City, Mississippi
3005. Yazoo County, Mississippi
3006. Adams County, Mississippi*
3007. Alcorn County, Mississippi*
3008. Biloxi City, Mississippi*
3009. Bolivar County, Mississippi*
3010. DeSoto County, Mississippi*
3011. Forrest County, Mississippi*
3012. Gulfport City, Mississippi*
3013. Hancock County, Mississippi*
3014. Harrison County, Mississippi*
3015. Hattiesburg City, Mississippi*
3016. Hinds County, Mississippi*
3017. Jackson City, Mississippi*
3018. Jackson County, Mississippi*
3019. Jones County, Mississippi*
3020. Lafayette County, Mississippi*
3021. Lamar County, Mississippi*
3022. Lauderdale County, Mississippi*
3023. Lee County, Mississippi*
3024. Lincoln County, Mississippi*
3025. Lowndes County, Mississippi*
3026. Madison County, Mississippi*
3027. Marshall County, Mississippi*
3028. Meridian City, Mississippi*
3029. Monroe County, Mississippi*
3030. Oktibbeha County, Mississippi*
3031. Olive Branch City, Mississippi*
3032. Panola County, Mississippi*
3033. Pearl River County, Mississippi*
3034. Pike County, Mississippi*
3035. Pontotoc County, Mississippi*
3036. Rankin County, Mississippi*
3037. Southaven City, Mississippi*
3038. Tupelo City, Mississippi*
3039. Warren County, Mississippi*
3040. Washington County, Mississippi*
3041. Adair County, Missouri
3042. Andrew County, Missouri
3043. Arnold City, Missouri
3044. Audrain County, Missouri
3045. Barton County, Missouri
3046. Bates County, Missouri
3047. Bellefontaine Neighbors City, Missouri
3048. Belton City, Missouri
3049. Benton County, Missouri
3050. Bolivar City, Missouri
3051. Bollinger County, Missouri
3052. Branson City, Missouri
3053. Bridgeton City, Missouri
3054. Carthage City, Missouri
3055. Cedar County, Missouri
3056. Clayton City, Missouri
3057. Clinton County, Missouri
3058. Cooper County, Missouri
3059. Crawford County, Missouri

3060. Crestwood City, Missouri
3061. Creve Coeur City, Missouri
3062. Dallas County, Missouri
3063. Dardenne Prairie City, Missouri
3064. DeKalb County, Missouri
3065. Dent County, Missouri
3066. Douglas County, Missouri
3067. Dunklin County, Missouri
3068. Eureka City, Missouri
3069. Excelsior Springs City, Missouri
3070. Farmington City, Missouri
3071. Ferguson City, Missouri
3072. Festus City, Missouri
3073. Fulton City, Missouri
3074. Gasconade County, Missouri
3075. Gladstone City, Missouri
3076. Grain Valley City, Missouri
3077. Grandview City, Missouri
3078. Hannibal City, Missouri
3079. Harrisonville City, Missouri
3080. Hazelwood City, Missouri
3081. Henry County, Missouri
3082. Howard County, Missouri
3083. Independence township, Missouri
3084. Iron County, Missouri
3085. Jackson City, Missouri
3086. Jennings City, Missouri
3087. Kearney City, Missouri
3088. Kennett City, Missouri
3089. Kirksville City, Missouri
3090. Kirkwood City, Missouri
3091. Lake St. Louis City, Missouri
3092. Lebanon City, Missouri
3093. Liberty township, Missouri
3094. Linn County, Missouri
3095. Livingston County, Missouri
3096. Macon County, Missouri
3097. Madison County, Missouri
3098. Manchester City, Missouri
3099. Marion County, Missouri
3100. Marshall City, Missouri
3101. Maryland Heights City, Missouri
3102. Maryville City, Missouri
3103. McDonald County, Missouri
3104. Mexico City, Missouri
3105. Miller County, Missouri
3106. Mississippi County, Missouri
3107. Moberly City, Missouri
3108. Moniteau County, Missouri
3109. Montgomery County, Missouri
3110. Morgan County, Missouri
3111. Neosho City, Missouri
3112. New Madrid County, Missouri
3113. Nixa City, Missouri
3114. Nodaway County, Missouri
3115. Oregon County, Missouri
3116. Osage County, Missouri
3117. Overland City, Missouri
3118. Ozark City, Missouri
3119. Pemiscot County, Missouri
3120. Perry County, Missouri
3121. Pike County, Missouri
3122. Polk township, Missouri
3123. Poplar Bluff City, Missouri
3124. Ralls County, Missouri
3125. Randolph County, Missouri
3126. Ray County, Missouri
3127. Raymore City, Missouri
3128. Raytown City, Missouri
3129. Republic City, Missouri
3130. Ripley County, Missouri
3131. Rolla City, Missouri
3132. Saline County, Missouri
3133. Sedalia City, Missouri
3134. Sikeston City, Missouri
3135. Smithville City, Missouri
3136. St. Ann City, Missouri
3137. Ste. Genevieve County, Missouri
3138. Stoddard County, Missouri
3139. Texas County, Missouri
3140. Town and Country City, Missouri
3141. Troy City, Missouri
3142. Union City, Missouri
3143. Vernon County, Missouri
3144. Warrensburg City, Missouri
3145. Washington City, Missouri
3146. Washington County, Missouri
3147. Wayne County, Missouri
3148. Webb City City, Missouri
3149. Webster Groves City, Missouri
3150. West Plains City, Missouri
3151. Wright County, Missouri
3152. Ballwin City, Missouri*
3153. Barry County, Missouri*
3154. Blue Springs City, Missouri*
3155. Boone County, Missouri*
3156. Buchanan County, Missouri*
3157. Butler County, Missouri*
3158. Callaway County, Missouri*
3159. Camden County, Missouri*
3160. Cape Girardeau City, Missouri*

3161. Cape Girardeau County, Missouri*
3162. Cass County, Missouri*
3163. Chesterfield City, Missouri*
3164. Christian County, Missouri*
3165. Clay County, Missouri*
3166. Cole County, Missouri*
3167. Columbia City, Missouri*
3168. Florissant City, Missouri*
3169. Franklin County, Missouri*
3170. Greene County, Missouri*
3171. Howell County, Missouri*
3172. Independence City, Missouri*
3173. Jackson County, Missouri*
3174. Jasper County, Missouri*
3175. Jefferson City City, Missouri*
3176. Jefferson County, Missouri*
3177. Johnson County, Missouri*
3178. Joplin City, Missouri*
3179. Kansas City City, Missouri*
3180. Laclede County, Missouri*
3181. Lafayette County, Missouri*
3182. Lawrence County, Missouri*
3183. Lee's Summit City, Missouri*
3184. Liberty City, Missouri*
3185. Lincoln County, Missouri*
3186. Newton County, Missouri*
3187. O'Fallon City, Missouri*
3188. Pettis County, Missouri*
3189. Phelps County, Missouri*
3190. Platte County, Missouri*
3191. Polk County, Missouri*
3192. Pulaski County, Missouri*
3193. Scott County, Missouri*
3194. Springfield City, Missouri*
3195. St. Charles City, Missouri*
3196. St. Charles County, Missouri*
3197. St. Francois County, Missouri*
3198. St. Joseph City, Missouri*
3199. St. Louis City, Missouri*
3200. St. Louis County, Missouri*
3201. St. Peters City, Missouri*
3202. Stone County, Missouri*
3203. Taney County, Missouri*
3204. University City City, Missouri*
3205. Warren County, Missouri*
3206. Webster County, Missouri*
3207. Wentzville City, Missouri*
3208. Wildwood City, Missouri*
3209. Big Horn County, Montana
3210. Carbon County, Montana
3211. Custer County, Montana
3212. Fergus County, Montana
3213. Glacier County, Montana
3214. Hill County, Montana
3215. Jefferson County, Montana
3216. Kalispell City, Montana
3217. Lincoln County, Montana
3218. Park County, Montana
3219. Richland County, Montana
3220. Roosevelt County, Montana
3221. Sanders County, Montana
3222. Billings City, Montana*
3223. Bozeman City, Montana*
3224. Butte-Silver Bow, Montana*
3225. Cascade County, Montana*
3226. Flathead County, Montana*
3227. Gallatin County, Montana*
3228. Great Falls City, Montana*
3229. Helena City, Montana*
3230. Lake County, Montana*
3231. Lewis and Clark County, Montana*
3232. Missoula City, Montana*
3233. Missoula County, Montana*
3234. Ravalli County, Montana*
3235. Yellowstone County, Montana*
3236. Beatrice City, Nebraska
3237. Box Butte County, Nebraska
3238. Cass County, Nebraska
3239. Colfax County, Nebraska
3240. Columbus City, Nebraska
3241. Custer County, Nebraska
3242. Dakota County, Nebraska
3243. Dawson County, Nebraska
3244. Fremont City, Nebraska
3245. Gage County, Nebraska
3246. Hastings City, Nebraska
3247. Holt County, Nebraska
3248. La Vista City, Nebraska
3249. Lexington City, Nebraska
3250. Norfolk City, Nebraska

3251. North Platte City, Nebraska
3252. Otoe County, Nebraska
3253. Papillion City, Nebraska
3254. Red Willow County, Nebraska
3255. Saline County, Nebraska
3256. Saunders County, Nebraska
3257. Scottsbluff City, Nebraska
3258. Seward County, Nebraska
3259. South Sioux City City, Nebraska
3260. Washington County, Nebraska
3261. York County, Nebraska
3262. Adams County, Nebraska*
3263. Bellevue City, Nebraska*
3264. Buffalo County, Nebraska*
3265. Dodge County, Nebraska*
3266. Douglas County, Nebraska*
3267. Grand Island City, Nebraska*
3268. Hall County, Nebraska*
3269. Kearney City, Nebraska*
3270. Lancaster County, Nebraska*
3271. Lincoln City, Nebraska*
3272. Lincoln County, Nebraska*
3273. Madison County, Nebraska*
3274. Omaha City, Nebraska*
3275. Platte County, Nebraska*
3276. Sarpy County, Nebraska*
3277. Scotts Bluff County, Nebraska*
3278. Boulder City City, Nevada
3279. Churchill County, Nevada
3280. Elko City, Nevada
3281. Fernley City, Nevada
3282. Humboldt County, Nevada
3283. Mesquite City, Nevada
3284. Carson City, Nevada*
3285. Clark County, Nevada*
3286. Douglas County, Nevada*
3287. Elko County, Nevada*
3288. Henderson City, Nevada*
3289. Las Vegas City, Nevada*
3290. Lyon County, Nevada*
3291. North Las Vegas City, Nevada*
3292. Nye County, Nevada*
3293. Reno City, Nevada*
3294. Sparks City, Nevada*
3295. Washoe County, Nevada*
3296. Amherst town, New Hampshire
3297. Bedford town, New Hampshire
3298. Berlin City, New Hampshire
3299. Claremont City, New Hampshire
3300. Conway town, New Hampshire
3301. Durham town, New Hampshire
3302. Exeter town, New Hampshire
3303. Goffstown town, New Hampshire
3304. Hampton town, New Hampshire
3305. Hanover town, New Hampshire
3306. Hooksett town, New Hampshire
3307. Hudson town, New Hampshire
3308. Keene City, New Hampshire
3309. Laconia City, New Hampshire
3310. Lebanon City, New Hampshire
3311. Londonderry town, New Hampshire
3312. Merrimack town, New Hampshire
3313. Milford town, New Hampshire
3314. Pelham town, New Hampshire
3315. Portsmouth City, New Hampshire
3316. Raymond town, New Hampshire
3317. Salem town, New Hampshire
3318. Somersworth City, New Hampshire
3319. Windham town, New Hampshire
3320. Belknap County, New Hampshire*
3321. Carroll County, New Hampshire*
3322. Cheshire County, New Hampshire*
3323. Concord City, New Hampshire*
3324. Coos County, New Hampshire*
3325. Derry town, New Hampshire*
3326. Dover City, New Hampshire*
3327. Grafton County, New Hampshire*
3328. Hillsborough County, New Hampshire*
3329. Manchester City, New Hampshire*
3330. Merrimack County, New Hampshire*
3331. Nashua City, New Hampshire*
3332. Rochester City, New Hampshire*
3333. Rockingham County, New Hampshire*
3334. Strafford County, New Hampshire*

3335. Sullivan County, New Hampshire*
3336. Aberdeen township, New Jersey
3337. Asbury Park City, New Jersey
3338. Barnegat township, New Jersey
3339. Beachwood borough, New Jersey
3340. Bellmawr borough, New Jersey
3341. Bergenfield borough, New Jersey
3342. Berkeley Heights township, New Jersey
3343. Bernards township, New Jersey
3344. Bordentown township, New Jersey
3345. Bound Brook borough, New Jersey
3346. Branchburg township, New Jersey
3347. Bridgeton City, New Jersey
3348. Burlington township, New Jersey
3349. Carteret borough, New Jersey
3350. Cedar Grove township, New Jersey
3351. Chatham township, New Jersey
3352. Cinnaminson township, New Jersey
3353. Clark township, New Jersey
3354. Cliffside Park borough, New Jersey
3355. Clinton township, New Jersey
3356. Collingswood borough, New Jersey
3357. Cranford township, New Jersey
3358. Delran township, New Jersey
3359. Denville township, New Jersey
3360. Dover town, New Jersey
3361. Dumont borough, New Jersey
3362. East Greenwich township, New Jersey
3363. East Hanover township, New Jersey
3364. East Windsor township, New Jersey
3365. Eatontown borough, New Jersey
3366. Edgewater borough, New Jersey
3367. Elmwood Park borough, New Jersey
3368. Englewood City, New Jersey
3369. Fairview borough, New Jersey
3370. Florence township, New Jersey
3371. Florham Park borough, New Jersey
3372. Franklin Lakes borough, New Jersey
3373. Franklin township, New Jersey*
3374. Freehold borough, New Jersey
3375. Glassboro borough, New Jersey
3376. Glen Rock borough, New Jersey
3377. Gloucester City City, New Jersey
3378. Guttenberg town, New Jersey
3379. Haddon township, New Jersey
3380. Haddonfield borough, New Jersey
3381. Hammonton town, New Jersey
3382. Hanover township, New Jersey
3383. Harrison town, New Jersey
3384. Harrison township, New Jersey
3385. Hasbrouck Heights borough, New Jersey
3386. Hawthorne borough, New Jersey
3387. Hazlet township, New Jersey
3388. Highland Park borough, New Jersey
3389. Hillsdale borough, New Jersey
3390. Hillside township, New Jersey
3391. Holmdel township, New Jersey
3392. Hopatcong borough, New Jersey
3393. Hopewell township, New Jersey
3394. Jefferson township, New Jersey
3395. Lacey township, New Jersey
3396. Lincoln Park borough, New Jersey
3397. Lindenwold borough, New Jersey
3398. Little Egg Harbor township, New Jersey
3399. Little Falls township, New Jersey
3400. Little Ferry borough, New Jersey
3401. Lodi borough, New Jersey
3402. Lower township, New Jersey
3403. Lumberton township, New Jersey
3404. Lyndhurst township, New Jersey
3405. Madison borough, New Jersey
3406. Mahwah township, New Jersey
3407. Mantua township, New Jersey
3408. Manville borough, New Jersey
3409. Maple Shade township, New Jersey
3410. Maplewood township, New Jersey

3411. Medford township, New Jersey
3412. Metuchen borough, New Jersey
3413. Middle township, New Jersey
3414. Middlesex borough, New Jersey
3415. Millburn township, New Jersey
3416. Millstone township, New Jersey
3417. Millville City, New Jersey
3418. Montgomery township, New Jersey
3419. Montville township, New Jersey
3420. Moorestown township, New Jersey
3421. Morris township, New Jersey
3422. Morristown town, New Jersey
3423. Mount Olive township, New Jersey
3424. Neptune township, New Jersey
3425. New Milford borough, New Jersey
3426. New Providence borough, New Jersey
3427. North Arlington borough, New Jersey
3428. North Plainfield borough, New Jersey
3429. Nutley township, New Jersey
3430. Oakland borough, New Jersey
3431. Ocean City City, New Jersey
3432. Ocean township, New Jersey*
3433. Palisades Park borough, New Jersey
3434. Paramus borough, New Jersey
3435. Pemberton township, New Jersey
3436. Pennsville township, New Jersey
3437. Pequannock township, New Jersey
3438. Phillipsburg town, New Jersey
3439. Pine Hill borough, New Jersey
3440. Plainsboro township, New Jersey
3441. Pleasantville City, New Jersey
3442. Point Pleasant borough, New Jersey
3443. Pompton Lakes borough, New Jersey
3444. Rahway City, New Jersey
3445. Ramsey borough, New Jersey
3446. Randolph township, New Jersey
3447. Raritan township, New Jersey
3448. Readington township, New Jersey
3449. Red Bank borough, New Jersey
3450. Ridgefield borough, New Jersey
3451. Ridgefield Park village, New Jersey
3452. Ridgewood village, New Jersey
3453. Ringwood borough, New Jersey
3454. River Edge borough, New Jersey
3455. Robbinsville township, New Jersey
3456. Rockaway township, New Jersey
3457. Roselle borough, New Jersey
3458. Roselle Park borough, New Jersey
3459. Roxbury township, New Jersey
3460. Rutherford borough, New Jersey
3461. Saddle Brook township, New Jersey
3462. Scotch Plains township, New Jersey
3463. Secaucus town, New Jersey
3464. Somers Point City, New Jersey
3465. Somerville borough, New Jersey
3466. South Orange Village township, New Jersey
3467. South Plainfield borough, New Jersey
3468. South River borough, New Jersey
3469. Southampton township, New Jersey
3470. Sparta township, New Jersey
3471. Springfield township, New Jersey
3472. Stafford township, New Jersey
3473. Summit City, New Jersey
3474. Tenafly borough, New Jersey
3475. Tinton Falls borough, New Jersey
3476. Totowa borough, New Jersey
3477. Upper township, New Jersey
3478. Vernon township, New Jersey
3479. Verona township, New Jersey
3480. Voorhees township, New Jersey
3481. Waldwick borough, New Jersey
3482. Wall township, New Jersey
3483. Wallington borough, New Jersey
3484. Wanaque borough, New Jersey
3485. Wantage township, New Jersey

3486. Warren township, New Jersey
3487. Waterford township, New Jersey
3488. Weehawken township, New Jersey
3489. West Caldwell township, New Jersey
3490. West Deptford township, New Jersey
3491. West Milford township, New Jersey
3492. West Windsor township, New Jersey
3493. Westfield town, New Jersey
3494. Westwood borough, New Jersey
3495. Woodland Park borough, New Jersey
3496. Woolwich township, New Jersey
3497. Wyckoff township, New Jersey
3498. Atlantic City City, New Jersey*
3499. Atlantic County, New Jersey*
3500. Bayonne City, New Jersey*
3501. Belleville township, New Jersey*
3502. Bergen County, New Jersey*
3503. Berkeley township, New Jersey*
3504. Bloomfield township, New Jersey*
3505. Brick township, New Jersey*
3506. Bridgewater township, New Jersey*
3507. Burlington County, New Jersey*
3508. Camden City, New Jersey*
3509. Camden County, New Jersey*
3510. Cape May County, New Jersey*
3511. Cherry Hill township, New Jersey*
3512. City of Orange township, New Jersey*
3513. Clifton City, New Jersey*
3514. Cumberland County, New Jersey*
3515. Deptford township, New Jersey*
3516. East Brunswick township, New Jersey*
3517. East Orange City, New Jersey*
3518. Edison township, New Jersey*
3519. Egg Harbor township, New Jersey*
3520. Elizabeth City, New Jersey*
3521. Essex County, New Jersey*
3522. Evesham township, New Jersey*
3523. Ewing township, New Jersey*
3524. Fair Lawn borough, New Jersey*
3525. Fort Lee borough, New Jersey*
3526. Freehold township, New Jersey*
3527. Galloway township, New Jersey*
3528. Garfield City, New Jersey*
3529. Gloucester County, New Jersey*
3530. Gloucester township, New Jersey*
3531. Hackensack City, New Jersey*
3532. Hamilton township, New Jersey*
3533. Hillsborough township, New Jersey*
3534. Hoboken City, New Jersey*
3535. Howell township, New Jersey*
3536. Hudson County, New Jersey*
3537. Hunterdon County, New Jersey*
3538. Irvington township, New Jersey*
3539. Jackson township, New Jersey*
3540. Jersey City City, New Jersey*
3541. Kearny town, New Jersey*
3542. Lakewood township, New Jersey*
3543. Lawrence township, New Jersey*
3544. Linden City, New Jersey*
3545. Livingston township, New Jersey*
3546. Long Branch City, New Jersey*
3547. Manalapan township, New Jersey*
3548. Manchester township, New Jersey*
3549. Marlboro township, New Jersey*
3550. Mercer County, New Jersey*
3551. Middlesex County, New Jersey*
3552. Middletown township, New Jersey*
3553. Monmouth County, New Jersey*
3554. Monroe township, New Jersey*
3555. Montclair township, New Jersey*
3556. Morris County, New Jersey*
3557. Mount Laurel township, New Jersey*
3558. New Brunswick City, New Jersey*
3559. Newark City, New Jersey*
3560. North Bergen township, New Jersey*

3561. North Brunswick township, New Jersey*
3562. Ocean County, New Jersey*
3563. Old Bridge township, New Jersey*
3564. Parsippany-Troy Hills township, New Jersey*
3565. Passaic City, New Jersey*
3566. Passaic County, New Jersey*
3567. Paterson City, New Jersey*
3568. Pennsauken township, New Jersey*
3569. Perth Amboy City, New Jersey*
3570. Piscataway township, New Jersey*
3571. Plainfield City, New Jersey*
3572. Princeton, New Jersey*
3573. Salem County, New Jersey*
3574. Sayreville borough, New Jersey*
3575. Somerset County, New Jersey*
3576. South Brunswick township, New Jersey*
3577. Sussex County, New Jersey*
3578. Teaneck township, New Jersey*
3579. Toms River township, New Jersey*
3580. Trenton City, New Jersey*
3581. Union City City, New Jersey*
3582. Union County, New Jersey*
3583. Union township, New Jersey*
3584. Vineland City, New Jersey*
3585. Warren County, New Jersey*
3586. Washington township, New Jersey*
3587. Wayne township, New Jersey*
3588. West New York town, New Jersey*
3589. West Orange township, New Jersey*
3590. Willingboro township, New Jersey*
3591. Winslow township, New Jersey*
3592. Woodbridge township, New Jersey*
3593. Artesia City, New Mexico
3594. Bernalillo town, New Mexico
3595. Carlsbad City, New Mexico
3596. Cibola County, New Mexico
3597. Colfax County, New Mexico
3598. Deming City, New Mexico
3599. Española City, New Mexico
3600. Gallup City, New Mexico
3601. Grant County, New Mexico
3602. Las Vegas City, New Mexico
3603. Lincoln County, New Mexico
3604. Los Alamos County, New Mexico
3605. Los Lunas village, New Mexico
3606. Lovington City, New Mexico
3607. Luna County, New Mexico
3608. Portales City, New Mexico
3609. Roosevelt County, New Mexico
3610. San Miguel County, New Mexico
3611. Sierra County, New Mexico
3612. Socorro County, New Mexico
3613. Sunland Park City, New Mexico
3614. Torrance County, New Mexico
3615. Alamogordo City, New Mexico*
3616. Albuquerque City, New Mexico*
3617. Bernalillo County, New Mexico*
3618. Chaves County, New Mexico*
3619. Clovis City, New Mexico*
3620. Curry County, New Mexico*
3621. Doña Ana County, New Mexico*
3622. Eddy County, New Mexico*
3623. Farmington City, New Mexico*
3624. Hobbs City, New Mexico*
3625. Las Cruces City, New Mexico*
3626. Lea County, New Mexico*
3627. McKinley County, New Mexico*
3628. Otero County, New Mexico*
3629. Rio Arriba County, New Mexico*
3630. Rio Rancho City, New Mexico*
3631. Roswell City, New Mexico*
3632. San Juan County, New Mexico*
3633. Sandoval County, New Mexico*
3634. Santa Fe City, New Mexico*
3635. Santa Fe County, New Mexico*
3636. Taos County, New Mexico*

3637. Valencia County, New Mexico*
3638. Amsterdam City, New York
3639. Arcadia town, New York
3640. Auburn City, New York
3641. Aurora town, New York
3642. Babylon village, New York
3643. Ballston town, New York
3644. Batavia City, New York
3645. Bath town, New York
3646. Beacon City, New York
3647. Bedford town, New York
3648. Beekman town, New York
3649. Blooming Grove town, New York
3650. New York City / Bronx County / Kings County / New York County / Queens County / Richmond County, New York*
3651. Brunswick town, New York
3652. Camillus town, New York
3653. Canandaigua City, New York
3654. Canandaigua town, New York
3655. Canton town, New York
3656. Catskill town, New York
3657. Chenango town, New York
3658. Chester town, New York
3659. Chili town, New York
3660. Cohoes City, New York
3661. Corning City, New York
3662. Cornwall town, New York
3663. Cortland City, New York
3664. De Witt town, New York
3665. Depew village, New York
3666. Dobbs Ferry village, New York
3667. Dryden town, New York
3668. Dunkirk City, New York
3669. East Fishkill town, New York
3670. East Greenbush town, New York
3671. East Hampton town, New York
3672. Elma town, New York
3673. Elmira City, New York
3674. Endicott village, New York
3675. Evans town, New York
3676. Fallsburg town, New York
3677. Farmington town, New York
3678. Fishkill town, New York
3679. Floral Park village, New York
3680. Fredonia village, New York
3681. Fulton City, New York
3682. Garden City village, New York
3683. Gates town, New York
3684. Geddes town, New York
3685. Geneseo town, New York
3686. Geneva City, New York
3687. German Flatts town, New York
3688. Glen Cove City, New York
3689. Glens Falls City, New York
3690. Glenville town, New York
3691. Gloversville City, New York
3692. Goshen town, New York
3693. Grand Island town, New York
3694. Great Neck village, New York
3695. Halfmoon town, New York
3696. Harrison town, New York
3697. Harrison village, New York
3698. Haverstraw village, New York
3699. Highlands town, New York
3700. Horseheads town, New York
3701. Hyde Park town, New York
3702. Ithaca town, New York
3703. Jamestown City, New York
3704. Johnson City village, New York
3705. Kenmore village, New York
3706. Kent town, New York
3707. Kingsbury town, New York
3708. Kingston City, New York
3709. Kirkland town, New York
3710. Kiryas Joel village, New York
3711. La Grange town, New York
3712. Lackawanna City, New York
3713. Lake Grove village, New York
3714. Lancaster village, New York
3715. Lansing town, New York
3716. Le Ray town, New York
3717. Lewis County, New York
3718. Lewisboro town, New York
3719. Lewiston town, New York
3720. Lindenhurst village, New York
3721. Lloyd town, New York
3722. Lockport City, New York
3723. Lockport town, New York

3724. Lynbrook village, New York
3725. Lysander town, New York
3726. Malone town, New York
3727. Malta town, New York
3728. Mamakating town, New York
3729. Mamaroneck town, New York
3730. Mamaroneck village, New York
3731. Massapequa Park village, New York
3732. Massena town, New York
3733. Massena village, New York
3734. Middletown City, New York
3735. Milton town, New York
3736. Mineola village, New York
3737. Monroe town, New York
3738. Montgomery town, New York
3739. Moreau town, New York
3740. Mount Kisco Village / Mount Kisco Town, New York
3741. New Castle town, New York
3742. New Hartford town, New York
3743. New Paltz town, New York
3744. New Windsor town, New York
3745. Newburgh City, New York
3746. Niskayuna town, New York
3747. North Castle town, New York
3748. North Greenbush town, New York
3749. Ogden town, New York
3750. Ogdensburg City, New York
3751. Olean City, New York
3752. Oneida City, New York
3753. Oneonta City, New York
3754. Onondaga town, New York
3755. Ontario town, New York
3756. Orchard Park town, New York
3757. Ossining village, New York
3758. Oswego City, New York
3759. Owego town, New York
3760. Palm Tree town, New York
3761. Parma town, New York
3762. Patchogue village, New York
3763. Patterson town, New York
3764. Peekskill City, New York
3765. Pelham town, New York
3766. Pittsford town, New York
3767. Plattekill town, New York
3768. Plattsburgh City, New York
3769. Plattsburgh town, New York
3770. Pomfret town, New York
3771. Port Chester village, New York
3772. Potsdam town, New York
3773. Putnam Valley town, New York
3774. Queensbury town, New York
3775. Red Hook town, New York
3776. Rockville Centre village, New York
3777. Rotterdam town, New York
3778. Rye City, New York
3779. Saratoga Springs City, New York
3780. Saugerties town, New York
3781. Scarsdale Village / Scarsdale Town, New York
3782. Schodack town, New York
3783. Schuyler County, New York
3784. Shawangunk town, New York
3785. Sleepy Hollow village, New York
3786. Somers town, New York
3787. Southeast town, New York
3788. Southold town, New York
3789. Stony Point town, New York
3790. Suffern village, New York
3791. Sullivan town, New York
3792. Sweden town, New York
3793. Tarrytown village, New York
3794. Thompson town, New York
3795. Tonawanda City, New York
3796. Ulster town, New York
3797. Van Buren town, New York
3798. Vestal town, New York
3799. Victor town, New York
3800. Wallkill town, New York
3801. Wappinger town, New York
3802. Watertown City, New York
3803. Wawarsing town, New York
3804. West Haverstraw village, New York
3805. Westbury village, New York
3806. Wheatfield town, New York
3807. Whitestown town, New York

3808. Wilton town, New York
3809. Woodbury town, New York
3810. Woodbury village, New York
3811. Yates County, New York
3812. Albany City, New York*
3813. Albany County, New York*
3814. Allegany County, New York*
3815. Amherst town, New York*
3816. Babylon town, New York*
3817. Bethlehem town, New York*
3818. Binghamton City, New York*
3819. Brighton town, New York*
3820. Brookhaven town, New York*
3821. Broome County, New York*
3822. Buffalo City, New York*
3823. Carmel town, New York*
3824. Cattaraugus County, New York*
3825. Cayuga County, New York*
3826. Chautauqua County, New York*
3827. Cheektowaga town, New York*
3828. Chemung County, New York*
3829. Chenango County, New York*
3830. Cicero town, New York*
3831. Clarence town, New York*
3832. Clarkstown town, New York*
3833. Clay town, New York*
3834. Clifton Park town, New York*
3835. Clinton County, New York*
3836. Colonie town, New York*
3837. Columbia County, New York*
3838. Cortland County, New York*
3839. Cortlandt town, New York*
3840. Delaware County, New York*
3841. Dutchess County, New York*
3842. Eastchester town, New York*
3843. Erie County, New York*
3844. Essex County, New York*
3845. Franklin County, New York*
3846. Freeport village, New York*
3847. Fulton County, New York*
3848. Genesee County, New York*
3849. Greece town, New York*
3850. Greenburgh town, New York*
3851. Greene County, New York*
3852. Guilderland town, New York*
3853. Hamburg town, New York*
3854. Haverstraw town, New York*
3855. Hempstead town, New York*
3856. Hempstead village, New York*
3857. Henrietta town, New York*
3858. Herkimer County, New York*
3859. Huntington town, New York*
3860. Irondequoit town, New York*
3861. Islip town, New York*
3862. Ithaca City, New York*
3863. Jefferson County, New York*
3864. Lancaster town, New York*
3865. Livingston County, New York*
3866. Long Beach City, New York*
3867. Madison County, New York*
3868. Manlius town, New York*
3869. Monroe County, New York*
3870. Montgomery County, New York*
3871. Mount Pleasant town, New York*
3872. Mount Vernon City, New York*
3873. Nassau County, New York*
3874. New Rochelle City, New York*
3875. Newburgh town, New York*
3876. Niagara County, New York*
3877. Niagara Falls City, New York*
3878. North Hempstead town, New York*
3879. North Tonawanda City, New York*
3880. Oneida County, New York*
3881. Onondaga County, New York*
3882. Ontario County, New York*
3883. Orange County, New York*
3884. Orangetown town, New York*
3885. Orleans County, New York*

3886. Ossining town, New York*
3887. Oswego County, New York*
3888. Otsego County, New York*
3889. Oyster Bay town, New York*
3890. Penfield town, New York*
3891. Perinton town, New York*
3892. Poughkeepsie City, New York*
3893. Poughkeepsie town, New York*
3894. Putnam County, New York*
3895. Ramapo town, New York*
3896. Rensselaer County, New York*
3897. Riverhead town, New York*
3898. Rochester City, New York*
3899. Rockland County, New York*
3900. Rome City, New York*
3901. Rye town, New York*
3902. Salina town, New York*
3903. Saratoga County, New York*
3904. Schenectady City, New York*
3905. Schenectady County, New York*
3906. Schoharie County, New York*
3907. Seneca County, New York*
3908. Smithtown town, New York*
3909. Southampton town, New York*
3910. Spring Valley village, New York*
3911. St. Lawrence County, New York*
3912. Steuben County, New York*
3913. Suffolk County, New York*
3914. Sullivan County, New York*
3915. Syracuse City, New York*
3916. Tioga County, New York*
3917. Tompkins County, New York*
3918. Tonawanda town, New York*
3919. Troy City, New York*
3920. Ulster County, New York*
3921. Union town, New York*
3922. Utica City, New York*
3923. Valley Stream village, New York*
3924. Warren County, New York*
3925. Warwick town, New York*
3926. Washington County, New York*
3927. Wayne County, New York*
3928. Webster town, New York*
3929. West Seneca town, New York*
3930. Westchester County, New York*
3931. White Plains City, New York*
3932. Wyoming County, New York*
3933. Yonkers City, New York*
3934. Yorktown town, New York*
3935. Albemarle City, North Carolina
3936. Alleghany County, North Carolina
3937. Anson County, North Carolina
3938. Archdale City, North Carolina
3939. Ashe County, North Carolina
3940. Asheboro City, North Carolina
3941. Avery County, North Carolina
3942. Belmont City, North Carolina
3943. Bertie County, North Carolina
3944. Boone town, North Carolina
3945. Camden County, North Carolina
3946. Carrboro town, North Carolina
3947. Caswell County, North Carolina
3948. Cherokee County, North Carolina
3949. Chowan County, North Carolina
3950. Clay County, North Carolina
3951. Clayton town, North Carolina
3952. Clemmons village, North Carolina
3953. Currituck County, North Carolina
3954. Davidson town, North Carolina
3955. Eden City, North Carolina
3956. Elizabeth City City, North Carolina
3957. Elon town, North Carolina
3958. Gates County, North Carolina
3959. Graham City, North Carolina
3960. Greene County, North Carolina
3961. Harrisburg town, North Carolina
3962. Havelock City, North Carolina
3963. Henderson City, North Carolina
3964. Hendersonville City, North Carolina

3965. Hertford County, North Carolina
3966. Hope Mills town, North Carolina
3967. Kernersville town, North Carolina
3968. Kings Mountain City, North Carolina
3969. Kinston City, North Carolina
3970. Knightdale town, North Carolina
3971. Laurinburg City, North Carolina
3972. Leland town, North Carolina
3973. Lenoir City, North Carolina
3974. Lewisville town, North Carolina
3975. Lexington City, North Carolina
3976. Lincolnton City, North Carolina
3977. Lumberton City, North Carolina
3978. Madison County, North Carolina
3979. Martin County, North Carolina
3980. Mebane City, North Carolina
3981. Mint Hill town, North Carolina
3982. Mitchell County, North Carolina
3983. Montgomery County, North Carolina
3984. Morganton City, North Carolina
3985. Morrisville town, North Carolina
3986. Mount Airy City, North Carolina
3987. Mount Holly City, North Carolina
3988. New Bern City, North Carolina
3989. Newton City, North Carolina
3990. Northampton County, North Carolina
3991. Pamlico County, North Carolina
3992. Perquimans County, North Carolina
3993. Pinehurst village, North Carolina
3994. Polk County, North Carolina
3995. Reidsville City, North Carolina
3996. Roanoke Rapids City, North Carolina
3997. Shelby City, North Carolina
3998. Smithfield town, North Carolina
3999. Southern Pines town, North Carolina
4000. Spring Lake town, North Carolina
4001. Stallings town, North Carolina
4002. Statesville City, North Carolina
4003. Summerfield town, North Carolina
4004. Swain County, North Carolina
4005. Tarboro town, North Carolina
4006. Thomasville City, North Carolina
4007. Warren County, North Carolina
4008. Washington County, North Carolina
4009. Waxhaw town, North Carolina
4010. Waynesville town, North Carolina
4011. Weddington town, North Carolina
4012. Yancey County, North Carolina
4013. Alamance County, North Carolina*
4014. Alexander County, North Carolina*
4015. Apex town, North Carolina*
4016. Asheville City, North Carolina*
4017. Beaufort County, North Carolina*
4018. Bladen County, North Carolina*
4019. Brunswick County, North Carolina*
4020. Buncombe County, North Carolina*
4021. Burke County, North Carolina*
4022. Burlington City, North Carolina*
4023. Cabarrus County, North Carolina*
4024. Caldwell County, North Carolina*
4025. Carteret County, North Carolina*
4026. Cary town, North Carolina*
4027. Catawba County, North Carolina*
4028. Chapel Hill town, North Carolina*
4029. Charlotte City, North Carolina*
4030. Chatham County, North Carolina*
4031. Cleveland County, North Carolina*
4032. Columbus County, North Carolina*
4033. Concord City, North Carolina*
4034. Cornelius town, North Carolina*
4035. Craven County, North Carolina*
4036. Cumberland County, North Carolina*
4037. Dare County, North Carolina*
4038. Davidson County, North Carolina*
4039. Davie County, North Carolina*

4040. Duplin County, North Carolina*
4041. Durham City, North Carolina*
4042. Durham County, North Carolina*
4043. Edgecombe County, North Carolina*
4044. Fayetteville City, North Carolina*
4045. Forsyth County, North Carolina*
4046. Franklin County, North Carolina*
4047. Fuquay-Varina town, North Carolina*
4048. Garner town, North Carolina*
4049. Gaston County, North Carolina*
4050. Gastonia City, North Carolina*
4051. Goldsboro City, North Carolina*
4052. Granville County, North Carolina*
4053. Greensboro City, North Carolina*
4054. Greenville City, North Carolina*
4055. Guilford County, North Carolina*
4056. Halifax County, North Carolina*
4057. Harnett County, North Carolina*
4058. Haywood County, North Carolina*
4059. Henderson County, North Carolina*
4060. Hickory City, North Carolina*
4061. High Point City, North Carolina*
4062. Hoke County, North Carolina*
4063. Holly Springs town, North Carolina*
4064. Huntersville town, North Carolina*
4065. Indian Trail town, North Carolina*
4066. Iredell County, North Carolina*
4067. Jackson County, North Carolina*
4068. Jacksonville City, North Carolina*
4069. Johnston County, North Carolina*
4070. Kannapolis City, North Carolina*
4071. Lee County, North Carolina*
4072. Lenoir County, North Carolina*
4073. Lincoln County, North Carolina*
4074. Macon County, North Carolina*
4075. Matthews town, North Carolina*
4076. McDowell County, North Carolina*
4077. Mecklenburg County, North Carolina*
4078. Monroe City, North Carolina*
4079. Moore County, North Carolina*
4080. Mooresville town, North Carolina*
4081. Nash County, North Carolina*
4082. New Hanover County, North Carolina*
4083. Onslow County, North Carolina*
4084. Orange County, North Carolina*
4085. Pasquotank County, North Carolina*
4086. Pender County, North Carolina*
4087. Person County, North Carolina*
4088. Pitt County, North Carolina*
4089. Raleigh City, North Carolina*
4090. Randolph County, North Carolina*
4091. Richmond County, North Carolina*
4092. Robeson County, North Carolina*
4093. Rockingham County, North Carolina*
4094. Rocky Mount City, North Carolina*
4095. Rowan County, North Carolina*
4096. Rutherford County, North Carolina*
4097. Salisbury City, North Carolina*
4098. Sampson County, North Carolina*
4099. Sanford City, North Carolina*
4100. Scotland County, North Carolina*
4101. Stanly County, North Carolina*
4102. Stokes County, North Carolina*
4103. Surry County, North Carolina*
4104. Transylvania County, North Carolina*
4105. Union County, North Carolina*
4106. Vance County, North Carolina*
4107. Wake County, North Carolina*
4108. Wake Forest town, North Carolina*
4109. Watauga County, North Carolina*
4110. Wayne County, North Carolina*
4111. Wilkes County, North Carolina*
4112. Wilmington City, North Carolina*
4113. Wilson City, North Carolina*
4114. Wilson County, North Carolina*

4115. Winston-Salem City, North Carolina*
4116. Yadkin County, North Carolina*
4117. Barnes County, North Dakota
4118. Dickinson City, North Dakota
4119. Jamestown City, North Dakota
4120. Mandan City, North Dakota
4121. McKenzie County, North Dakota
4122. Mountrail County, North Dakota
4123. Ramsey County, North Dakota
4124. Richland County, North Dakota
4125. Rolette County, North Dakota
4126. Stutsman County, North Dakota
4127. Walsh County, North Dakota
4128. Williston City, North Dakota
4129. Bismarck City, North Dakota*
4130. Burleigh County, North Dakota*
4131. Cass County, North Dakota*
4132. Fargo City, North Dakota*
4133. Grand Forks City, North Dakota*
4134. Grand Forks County, North Dakota*
4135. Minot City, North Dakota*
4136. Morton County, North Dakota*
4137. Stark County, North Dakota*
4138. Ward County, North Dakota*
4139. West Fargo City, North Dakota*
4140. Williams County, North Dakota*
4141. Adams County, Ohio
4142. Alliance City, Ohio
4143. Alliance City, Ohio
4144. American township, Ohio
4145. Amherst City, Ohio
4146. Ashland City, Ohio
4147. Ashtabula City, Ohio
4148. Ashtabula township, Ohio
4149. Athens City, Ohio
4150. Aurora City, Ohio
4151. Avon City, Ohio
4152. Avon Lake City, Ohio
4153. Bainbridge township, Ohio
4154. Barberton City, Ohio
4155. Batavia township, Ohio
4156. Bay Village City, Ohio
4157. Beachwood City, Ohio
4158. Bedford City, Ohio
4159. Bedford Heights City, Ohio
4160. Bellefontaine City, Ohio
4161. Berea City, Ohio
4162. Bethel township, Ohio
4163. Bexley City, Ohio
4164. Blue Ash City, Ohio
4165. Brecksville City, Ohio
4166. Brimfield township, Ohio
4167. Broadview Heights City, Ohio
4168. Brook Park City, Ohio
4169. Brooklyn City, Ohio
4170. Brunswick Hills township, Ohio
4171. Bucyrus City, Ohio
4172. Cambridge City, Ohio
4173. Cambridge township, Ohio
4174. Canfield township, Ohio
4175. Canton township, Ohio
4176. Carroll County, Ohio
4177. Celina City, Ohio
4178. Centerville City, Ohio
4179. Chester township, Ohio
4180. Chillicothe City, Ohio
4181. Chippewa township, Ohio
4182. Circleville City, Ohio
4183. Clayton City, Ohio
4184. Clinton township, Ohio*
4185. Concord township, Ohio*
4186. Conneaut City, Ohio
4187. Copley township, Ohio
4188. Coshocton City, Ohio
4189. Coventry township, Ohio
4190. Defiance City, Ohio
4191. Defiance township, Ohio
4192. Delaware City, Ohio*
4193. Delhi township, Ohio
4194. Dover City, Ohio
4195. Duchouquet township, Ohio
4196. East Cleveland City, Ohio
4197. East Liverpool City, Ohio
4198. Eastlake City, Ohio
4199. Englewood City, Ohio
4200. Etna township, Ohio
4201. Fairfield township, Ohio*
4202. Fairview Park City, Ohio
4203. Falls township, Ohio
4204. Fayette County, Ohio
4205. Forest Park City, Ohio
4206. Fostoria City, Ohio
4207. Fostoria City, Ohio
4208. Franklin City, Ohio
4209. Franklin township, Ohio*
4210. Fremont City, Ohio
4211. Gallia County, Ohio
4212. Garfield Heights City, Ohio
4213. Geneva township, Ohio
4214. Genoa township, Ohio
4215. Goshen township, Ohio*
4216. Granville township, Ohio
4217. Green City, Ohio
4218. Greenville City, Ohio
4219. Greenville township, Ohio

4220. Hamilton township, Ohio*
4221. Harrison City, Ohio
4222. Harrison County, Ohio
4223. Harrison township, Ohio*
4224. Heath City, Ohio
4225. Henry County, Ohio
4226. Hocking County, Ohio
4227. Howland township, Ohio
4228. Hubbard township, Ohio
4229. Hudson City, Ohio
4230. Huron township, Ohio
4231. Ironton City, Ohio
4232. Jefferson township, Ohio*
4233. Kent City, Ohio
4234. Lake township, Ohio*
4235. Lancaster City, Ohio*
4236. Lawrence township, Ohio
4237. Lebanon City, Ohio
4238. Lemon township, Ohio
4239. London City, Ohio
4240. Loveland City, Ohio
4241. Lyndhurst City, Ohio
4242. Macedonia City, Ohio
4243. Mad River township, Ohio
4244. Madison township, Ohio*
4245. Maple Heights City, Ohio
4246. Marietta City, Ohio
4247. Marysville City, Ohio
4248. Maumee City, Ohio
4249. Mayfield Heights City, Ohio
4250. Medina City, Ohio
4251. Medina City township, Ohio
4252. Meigs County, Ohio
4253. Miamisburg City, Ohio
4254. Middleburg Heights City, Ohio
4255. Monclova township, Ohio
4256. Monroe City, Ohio
4257. Monroe County, Ohio
4258. Monroe township, Ohio*
4259. Montgomery City, Ohio
4260. Montville township, Ohio
4261. Moorefield township, Ohio
4262. Morgan County, Ohio
4263. Mount Vernon City, Ohio
4264. New Albany City, Ohio
4265. New Franklin City, Ohio
4266. New Philadelphia City, Ohio
4267. Niles City, Ohio
4268. Noble County, Ohio
4269. North Canton City, Ohio
4270. Norton City, Ohio
4271. Norwalk City, Ohio
4272. Norwood City, Ohio
4273. Olmsted township, Ohio
4274. Oregon City, Ohio
4275. Oxford City, Ohio
4276. Oxford township, Ohio*
4277. Painesville City, Ohio
4278. Painesville township, Ohio
4279. Paris township, Ohio*
4280. Parma Heights City, Ohio
4281. Pataskala City, Ohio
4282. Paulding County, Ohio
4283. Pease township, Ohio
4284. Perkins township, Ohio
4285. Perry township, Ohio*
4286. Perrysburg City, Ohio
4287. Perrysburg township, Ohio
4288. Pickerington City, Ohio
4289. Pierce township, Ohio
4290. Pike County, Ohio
4291. Piqua City, Ohio
4292. Pleasant township, Ohio*
4293. Poland township, Ohio
4294. Portsmouth City, Ohio
4295. Powell City, Ohio
4296. Prairie township, Ohio
4297. Ravenna City, Ohio
4298. Reading City, Ohio
4299. Richland township, Ohio*
4300. Richmond Heights City, Ohio
4301. Riverside City, Ohio
4302. Rocky River City, Ohio
4303. Sagamore Hills township, Ohio
4304. Salem City, Ohio
4305. Sandusky City, Ohio
4306. Scioto township, Ohio*
4307. Seven Hills City, Ohio
4308. Shaker Heights City, Ohio
4309. Sharon township, Ohio*
4310. Sharonville City, Ohio
4311. Sharonville City, Ohio
4312. Shawnee township, Ohio
4313. Sidney City, Ohio
4314. Solon City, Ohio
4315. South Euclid City, Ohio
4316. Springboro City, Ohio
4317. Springdale City, Ohio
4318. St. Marys township, Ohio
4319. Steubenville City, Ohio
4320. Streetsboro City, Ohio
4321. Struthers City, Ohio
4322. Sycamore township, Ohio
4323. Sylvania City, Ohio
4324. Symmes township, Ohio
4325. Tallmadge City, Ohio
4326. Tiffin City, Ohio
4327. Tipp City City, Ohio
4328. Trenton City, Ohio
4329. Trotwood City, Ohio
4330. Troy City, Ohio
4331. Truro township, Ohio
4332. Turtlecreek township, Ohio
4333. Twinsburg City, Ohio
4334. University Heights City, Ohio
4335. Upper township, Ohio
4336. Urbana City, Ohio
4337. Urbana township, Ohio
4338. Van Wert City, Ohio
4339. Van Wert County, Ohio
4340. Vandalia City, Ohio
4341. Vermilion City, Ohio
4342. Vinton County, Ohio
4343. Wadsworth City, Ohio
4344. Warrensville Heights City, Ohio

4345. Washington Court House City, Ohio
4346. Weathersfield township, Ohio
4347. West Carrollton City, Ohio
4348. Whitehall City, Ohio
4349. Wickliffe City, Ohio
4350. Willoughby City, Ohio
4351. Willowick City, Ohio
4352. Wilmington City, Ohio
4353. Wooster City, Ohio
4354. Worthington City, Ohio
4355. Wyandot County, Ohio
4356. Xenia City, Ohio
4357. Zanesville City, Ohio
4358. Akron City, Ohio*
4359. Allen County, Ohio*
4360. Anderson township, Ohio*
4361. Ashland County, Ohio*
4362. Ashtabula County, Ohio*
4363. Athens County, Ohio*
4364. Athens township, Ohio*
4365. Auglaize County, Ohio*
4366. Austintown township, Ohio*
4367. Bath township, Ohio*
4368. Beavercreek City, Ohio*
4369. Beavercreek township, Ohio*
4370. Belmont County, Ohio*
4371. Boardman township, Ohio*
4372. Bowling Green City, Ohio*
4373. Brown County, Ohio*
4374. Brunswick City, Ohio*
4375. Butler County, Ohio*
4376. Canton City, Ohio*
4377. Champaign County, Ohio*
4378. Cincinnati City, Ohio*
4379. Clark County, Ohio*
4380. Clear Creek township, Ohio*
4381. Clermont County, Ohio*
4382. Cleveland City, Ohio*
4383. Cleveland Heights City, Ohio*
4384. Clinton County, Ohio*
4385. Colerain township, Ohio*
4386. Columbiana County, Ohio*
4387. Columbus City, Ohio*
4388. Columbus City, Ohio*
4389. Coshocton County, Ohio*
4390. Crawford County, Ohio*
4391. Cuyahoga County, Ohio*
4392. Cuyahoga Falls City, Ohio*
4393. Darke County, Ohio*
4394. Dayton City, Ohio*
4395. Deerfield township, Ohio*
4396. Defiance County, Ohio*
4397. Delaware City township, Ohio*
4398. Delaware County, Ohio*
4399. Dublin City, Ohio*
4400. Elyria City, Ohio*
4401. Erie County, Ohio*
4402. Euclid City, Ohio*
4403. Fairborn City, Ohio*
4404. Fairfield City, Ohio*
4405. Fairfield County, Ohio*
4406. Findlay City, Ohio*
4407. Franklin County, Ohio*
4408. Fulton County, Ohio*
4409. Gahanna City, Ohio*
4410. Geauga County, Ohio*
4411. Green township, Ohio*
4412. Greene County, Ohio*
4413. Grove City City, Ohio*
4414. Guernsey County, Ohio*
4415. Hamilton City, Ohio*
4416. Hamilton County, Ohio*
4417. Hancock County, Ohio*
4418. Hardin County, Ohio*
4419. Highland County, Ohio*
4420. Hilliard City, Ohio*
4421. Holmes County, Ohio*
4422. Huber Heights City, Ohio*
4423. Huron County, Ohio*
4424. Jackson County, Ohio*
4425. Jackson township, Ohio*
4426. Jefferson County, Ohio*
4427. Kettering City, Ohio*
4428. Knox County, Ohio*
4429. Lake County, Ohio*
4430. Lakewood City, Ohio*
4431. Lancaster City township, Ohio*
4432. Lawrence County, Ohio*
4433. Liberty township, Ohio*
4434. Licking County, Ohio*
4435. Lima City, Ohio*
4436. Logan County, Ohio*
4437. Lorain City, Ohio*
4438. Lorain County, Ohio*
4439. Lucas County, Ohio*
4440. Madison County, Ohio*
4441. Mahoning County, Ohio*
4442. Mansfield City, Ohio*
4443. Marion City, Ohio*
4444. Marion County, Ohio*
4445. Marion township, Ohio*
4446. Mason City, Ohio*
4447. Massillon City, Ohio*
4448. Medina County, Ohio*
4449. Mentor City, Ohio*
4450. Mercer County, Ohio*
4451. Miami County, Ohio*
4452. Miami township, Ohio*
4453. Middletown City, Ohio*
4454. Middletown City, Ohio*
4455. Mifflin township, Ohio*
4456. Montgomery County, Ohio*
4457. Morrow County, Ohio*
4458. Muskingum County, Ohio*
4459. Newark City, Ohio*
4460. North Olmsted City, Ohio*
4461. North Ridgeville City, Ohio*
4462. North Royalton City, Ohio*
4463. Norwich township, Ohio*
4464. Orange township, Ohio*
4465. Ottawa County, Ohio*
4466. Parma City, Ohio*
4467. Perry County, Ohio*
4468. Pickaway County, Ohio*

4469. Plain township, Ohio*
4470. Portage County, Ohio*
4471. Preble County, Ohio*
4472. Putnam County, Ohio*
4473. Reynoldsburg City, Ohio*
4474. Richland County, Ohio*
4475. Ross County, Ohio*
4476. Sandusky County, Ohio*
4477. Scioto County, Ohio*
4478. Seneca County, Ohio*
4479. Shelby County, Ohio*
4480. Springfield City, Ohio*
4481. Springfield township, Ohio*
4482. Stark County, Ohio*
4483. Stow City, Ohio*
4484. Strongsville City, Ohio*
4485. Summit County, Ohio*
4486. Sylvania township, Ohio*
4487. Toledo City, Ohio*
4488. Trumbull County, Ohio*
4489. Tuscarawas County, Ohio*
4490. Union County, Ohio*
4491. Union township, Ohio*
4492. Upper Arlington City, Ohio*
4493. Violet township, Ohio*
4494. Warren City, Ohio*
4495. Warren County, Ohio*
4496. Washington County, Ohio*
4497. Washington township, Ohio*
4498. Wayne County, Ohio*
4499. West Chester township, Ohio*
4500. Westerville City, Ohio*
4501. Westerville City, Ohio*
4502. Westlake City, Ohio*
4503. Williams County, Ohio*
4504. Wood County, Ohio*
4505. Youngstown City, Ohio*
4506. Ada City, Oklahoma
4507. Adair County, Oklahoma
4508. Altus City, Oklahoma
4509. Ardmore City, Oklahoma
4510. Atoka County, Oklahoma
4511. Beckham County, Oklahoma
4512. Bethany City, Oklahoma
4513. Bixby City, Oklahoma
4514. Caddo County, Oklahoma
4515. Chickasha City, Oklahoma
4516. Choctaw City, Oklahoma
4517. Choctaw County, Oklahoma
4518. Claremore City, Oklahoma
4519. Coweta City, Oklahoma
4520. Craig County, Oklahoma
4521. Custer County, Oklahoma
4522. Del City City, Oklahoma
4523. Duncan City, Oklahoma
4524. Durant City, Oklahoma
4525. El Reno City, Oklahoma
4526. Elk City City, Oklahoma
4527. Garvin County, Oklahoma
4528. Glenpool City, Oklahoma
4529. Guthrie City, Oklahoma
4530. Guymon City, Oklahoma
4531. Haskell County, Oklahoma
4532. Hughes County, Oklahoma
4533. Jackson County, Oklahoma
4534. Jenks City, Oklahoma
4535. Johnston County, Oklahoma
4536. Kingfisher County, Oklahoma
4537. Latimer County, Oklahoma
4538. Love County, Oklahoma
4539. Marshall County, Oklahoma
4540. McAlester City, Oklahoma
4541. McIntosh County, Oklahoma
4542. Miami City, Oklahoma
4543. Murray County, Oklahoma
4544. Mustang City, Oklahoma
4545. Newcastle City, Oklahoma
4546. Noble County, Oklahoma
4547. Nowata County, Oklahoma
4548. Okfuskee County, Oklahoma
4549. Okmulgee City, Oklahoma
4550. Pawnee County, Oklahoma
4551. Ponca City City, Oklahoma
4552. Pushmataha County, Oklahoma
4553. Sand Springs City, Oklahoma
4554. Sapulpa City, Oklahoma
4555. Seminole County, Oklahoma
4556. Tahlequah City, Oklahoma
4557. Texas County, Oklahoma
4558. Warr Acres City, Oklahoma
4559. Washita County, Oklahoma
4560. Weatherford City, Oklahoma
4561. Woodward City, Oklahoma
4562. Woodward County, Oklahoma
4563. Yukon City, Oklahoma
4564. Bartlesville City, Oklahoma*
4565. Broken Arrow City, Oklahoma*
4566. Bryan County, Oklahoma*
4567. Canadian County, Oklahoma*

4568. Carter County, Oklahoma*
4569. Cherokee County, Oklahoma*
4570. Cleveland County, Oklahoma*
4571. Comanche County, Oklahoma*
4572. Creek County, Oklahoma*
4573. Delaware County, Oklahoma*
4574. Edmond City, Oklahoma*
4575. Enid City, Oklahoma*
4576. Garfield County, Oklahoma*
4577. Grady County, Oklahoma*
4578. Kay County, Oklahoma*
4579. Lawton City, Oklahoma*
4580. Le Flore County, Oklahoma*
4581. Lincoln County, Oklahoma*
4582. Logan County, Oklahoma*
4583. Mayes County, Oklahoma*
4584. McClain County, Oklahoma*
4585. McCurtain County, Oklahoma*
4586. Midwest City City, Oklahoma*
4587. Moore City, Oklahoma*
4588. Muskogee City, Oklahoma*
4589. Muskogee County, Oklahoma*
4590. Norman City, Oklahoma*
4591. Oklahoma City City, Oklahoma*
4592. Oklahoma County, Oklahoma*
4593. Okmulgee County, Oklahoma*
4594. Osage County, Oklahoma*
4595. Ottawa County, Oklahoma*
4596. Owasso City, Oklahoma*
4597. Payne County, Oklahoma*
4598. Pittsburg County, Oklahoma*
4599. Pontotoc County, Oklahoma*
4600. Pottawatomie County, Oklahoma*
4601. Rogers County, Oklahoma*
4602. Sequoyah County, Oklahoma*
4603. Shawnee City, Oklahoma*
4604. Stephens County, Oklahoma*
4605. Stillwater City, Oklahoma*
4606. Tulsa City, Oklahoma*
4607. Tulsa County, Oklahoma*
4608. Wagoner County, Oklahoma*
4609. Washington County, Oklahoma*
4610. Ashland City, Oregon
4611. Astoria City, Oregon
4612. Baker County, Oregon
4613. Canby City, Oregon
4614. Central Point City, Oregon
4615. Coos Bay City, Oregon
4616. Cornelius City, Oregon
4617. Cottage Grove City, Oregon
4618. Crook County, Oregon
4619. Curry County, Oregon
4620. Dallas City, Oregon
4621. Forest Grove City, Oregon
4622. Gladstone City, Oregon
4623. Happy Valley City, Oregon
4624. Hermiston City, Oregon
4625. Hood River County, Oregon
4626. Independence City, Oregon
4627. Jefferson County, Oregon
4628. Klamath Falls City, Oregon
4629. La Grande City, Oregon
4630. Lebanon City, Oregon
4631. Milwaukie City, Oregon
4632. Monmouth City, Oregon
4633. Morrow County, Oregon
4634. Newberg City, Oregon
4635. Newport City, Oregon
4636. Ontario City, Oregon
4637. Pendleton City, Oregon
4638. Prineville City, Oregon
4639. Roseburg City, Oregon
4640. Sandy City, Oregon
4641. Sherwood City, Oregon
4642. Silverton City, Oregon
4643. St. Helens City, Oregon
4644. The Dalles City, Oregon
4645. Tillamook County, Oregon
4646. Troutdale City, Oregon
4647. Tualatin City, Oregon
4648. Union County, Oregon
4649. Wasco County, Oregon
4650. West Linn City, Oregon
4651. Wilsonville City, Oregon
4652. Woodburn City, Oregon
4653. Albany City, Oregon*
4654. Beaverton City, Oregon*
4655. Bend City, Oregon*
4656. Benton County, Oregon*
4657. Clackamas County, Oregon*
4658. Clatsop County, Oregon*
4659. Columbia County, Oregon*
4660. Coos County, Oregon*
4661. Corvallis City, Oregon*
4662. Deschutes County, Oregon*
4663. Douglas County, Oregon*
4664. Eugene City, Oregon*
4665. Grants Pass City, Oregon*

4666. Gresham City, Oregon*
4667. Hillsboro City, Oregon*
4668. Jackson County, Oregon*
4669. Josephine County, Oregon*
4670. Keizer City, Oregon*
4671. Klamath County, Oregon*
4672. Lake Oswego City, Oregon*
4673. Lane County, Oregon*
4674. Lincoln County, Oregon*
4675. Linn County, Oregon*
4676. Malheur County, Oregon*
4677. Marion County, Oregon*
4678. McMinnville City, Oregon*
4679. Medford City, Oregon*
4680. Multnomah County, Oregon*
4681. Oregon City City, Oregon*
4682. Polk County, Oregon*
4683. Portland City, Oregon*
4684. Redmond City, Oregon*
4685. Salem City, Oregon*
4686. Springfield City, Oregon*
4687. Tigard City, Oregon*
4688. Umatilla County, Oregon*
4689. Washington County, Oregon*
4690. Yamhill County, Oregon*
4691. Adams township, Pennsylvania
4692. Amity township, Pennsylvania
4693. Antrim township, Pennsylvania
4694. Aston township, Pennsylvania
4695. Baldwin borough, Pennsylvania
4696. Bethlehem township, Pennsylvania
4697. Bloomsburg town, Pennsylvania
4698. Buckingham township, Pennsylvania
4699. Butler City, Pennsylvania
4700. Butler township, Pennsylvania*
4701. Caln township, Pennsylvania
4702. Carlisle borough, Pennsylvania
4703. Cecil township, Pennsylvania
4704. Center township, Pennsylvania
4705. Chambersburg borough, Pennsylvania
4706. Chestnuthill township, Pennsylvania
4707. Coal township, Pennsylvania
4708. Coatesville City, Pennsylvania
4709. College township, Pennsylvania
4710. Columbia borough, Pennsylvania
4711. Concord township, Pennsylvania
4712. Coolbaugh township, Pennsylvania
4713. Cumru township, Pennsylvania
4714. Darby borough, Pennsylvania
4715. Derry township, Pennsylvania*
4716. Dingman township, Pennsylvania
4717. Douglass township, Pennsylvania
4718. Dover township, Pennsylvania
4719. Doylestown township, Pennsylvania
4720. Dunmore borough, Pennsylvania
4721. East Cocalico township, Pennsylvania
4722. East Goshen township, Pennsylvania
4723. East Hempfield township, Pennsylvania
4724. East Lampeter township, Pennsylvania
4725. East Norriton township, Pennsylvania
4726. East Pennsboro township, Pennsylvania
4727. East Stroudsburg borough, Pennsylvania
4728. East Whiteland township, Pennsylvania
4729. Easton City, Pennsylvania
4730. Easttown township, Pennsylvania
4731. Elizabeth township, Pennsylvania
4732. Elizabethtown borough, Pennsylvania
4733. Elk County, Pennsylvania
4734. Emmaus borough, Pennsylvania
4735. Ephrata borough, Pennsylvania
4736. Ephrata township, Pennsylvania
4737. Exeter township, Pennsylvania
4738. Fairview township, Pennsylvania*
4739. Ferguson township, Pennsylvania
4740. Forks township, Pennsylvania
4741. Franconia township, Pennsylvania
4742. Franklin Park borough, Pennsylvania
4743. Fulton County, Pennsylvania
4744. Greene township, Pennsylvania*
4745. Greensburg City, Pennsylvania
4746. Guilford township, Pennsylvania

4747. Hamilton township, Pennsylvania
4748. Hampton township, Pennsylvania
4749. Hanover borough, Pennsylvania
4750. Hanover township, Pennsylvania*
4751. Harborcreek township, Pennsylvania
4752. Harrison township, Pennsylvania
4753. Hatfield township, Pennsylvania
4754. Hazleton City, Pennsylvania
4755. Hermitage City, Pennsylvania
4756. Hilltown township, Pennsylvania
4757. Hopewell township, Pennsylvania
4758. Horsham township, Pennsylvania
4759. Indiana borough, Pennsylvania
4760. Jefferson Hills borough, Pennsylvania
4761. Johnstown City, Pennsylvania
4762. Juniata County, Pennsylvania
4763. Kingston borough, Pennsylvania
4764. Lancaster township, Pennsylvania
4765. Lansdale borough, Pennsylvania
4766. Lansdowne borough, Pennsylvania
4767. Lebanon City, Pennsylvania
4768. Lehigh township, Pennsylvania
4769. Lehman township, Pennsylvania
4770. Limerick township, Pennsylvania
4771. Logan township, Pennsylvania
4772. Lower Allen township, Pennsylvania
4773. Lower Burrell City, Pennsylvania
4774. Lower Gwynedd township, Pennsylvania
4775. Lower Moreland township, Pennsylvania
4776. Lower Pottsgrove township, Pennsylvania
4777. Lower Providence township, Pennsylvania
4778. Lower Salford township, Pennsylvania
4779. Lower Saucon township, Pennsylvania
4780. Lower Southampton township, Pennsylvania
4781. Loyalsock township, Pennsylvania
4782. Manchester township, Pennsylvania
4783. Manor township, Pennsylvania
4784. Marple township, Pennsylvania
4785. McCandless township, Pennsylvania
4786. McKeesport City, Pennsylvania
4787. Meadville City, Pennsylvania
4788. Middle Smithfield township, Pennsylvania
4789. Middletown township, Pennsylvania*
4790. Milford township, Pennsylvania
4791. Monroeville municipality, Pennsylvania
4792. Montgomery township, Pennsylvania*
4793. Montour County, Pennsylvania
4794. Moon township, Pennsylvania
4795. Mount Joy township, Pennsylvania
4796. Mount Pleasant township, Pennsylvania
4797. Muhlenberg township, Pennsylvania
4798. Munhall borough, Pennsylvania
4799. Murrysville municipality, Pennsylvania
4800. Nanticoke City, Pennsylvania
4801. Nether Providence township, Pennsylvania
4802. New Britain township, Pennsylvania
4803. New Castle City, Pennsylvania
4804. New Garden township, Pennsylvania
4805. New Hanover township, Pennsylvania
4806. New Kensington City, Pennsylvania
4807. Newberry township, Pennsylvania
4808. Newtown township, Pennsylvania*
4809. North Fayette township, Pennsylvania
4810. North Lebanon township, Pennsylvania
4811. North Middleton township, Pennsylvania
4812. North Strabane township, Pennsylvania
4813. North Union township, Pennsylvania
4814. North Whitehall township, Pennsylvania
4815. Palmer township, Pennsylvania
4816. Patton township, Pennsylvania
4817. Penn township, Pennsylvania*
4818. Peters township, Pennsylvania
4819. Philadelphia City / Philadelphia County, Pennsylvania*
4820. Phoenixville borough, Pennsylvania
4821. Pine township, Pennsylvania

4822. Plum borough, Pennsylvania
4823. Plumstead township, Pennsylvania
4824. Plymouth township, Pennsylvania
4825. Pocono township, Pennsylvania
4826. Potter County, Pennsylvania
4827. Pottstown borough, Pennsylvania
4828. Pottsville City, Pennsylvania
4829. Rapho township, Pennsylvania
4830. Richland township, Pennsylvania*
4831. Robinson township, Pennsylvania
4832. Rostraver township, Pennsylvania
4833. Salisbury township, Pennsylvania
4834. Sandy township, Pennsylvania
4835. Scott township, Pennsylvania
4836. Shaler township, Pennsylvania
4837. Sharon City, Pennsylvania
4838. Silver Spring township, Pennsylvania
4839. Skippack township, Pennsylvania
4840. Somerset township, Pennsylvania
4841. South Fayette township, Pennsylvania
4842. South Lebanon township, Pennsylvania
4843. South Middleton township, Pennsylvania
4844. South Park township, Pennsylvania
4845. South Union township, Pennsylvania
4846. South Whitehall township, Pennsylvania
4847. Spring Garden township, Pennsylvania
4848. Spring township, Pennsylvania*
4849. Springettsbury township, Pennsylvania
4850. Springfield township, Pennsylvania*
4851. St. Marys City, Pennsylvania
4852. Stroud township, Pennsylvania
4853. Susquehanna township, Pennsylvania
4854. Swatara township, Pennsylvania
4855. Towamencin township, Pennsylvania
4856. Tredyffrin township, Pennsylvania
4857. Unity township, Pennsylvania
4858. Upper Allen township, Pennsylvania
4859. Upper Chichester township, Pennsylvania
4860. Upper Dublin township, Pennsylvania
4861. Upper Gwynedd township, Pennsylvania
4862. Upper Macungie township, Pennsylvania
4863. Upper Moreland township, Pennsylvania
4864. Upper Providence township, Pennsylvania*
4865. Upper Saucon township, Pennsylvania
4866. Upper Southampton township, Pennsylvania
4867. Upper St. Clair township, Pennsylvania
4868. Upper Uwchlan township, Pennsylvania
4869. Uwchlan township, Pennsylvania
4870. Walker Township, Pennsylvania
4871. Warrington township, Pennsylvania
4872. Warwick township, Pennsylvania*
4873. Washington City, Pennsylvania
4874. Washington township, Pennsylvania*
4875. Waynesboro borough, Pennsylvania
4876. West Bradford township, Pennsylvania
4877. West Chester borough, Pennsylvania
4878. West Deer township, Pennsylvania
4879. West Goshen township, Pennsylvania
4880. West Hanover township, Pennsylvania
4881. West Hempfield township, Pennsylvania
4882. West Lampeter township, Pennsylvania
4883. West Manchester township, Pennsylvania
4884. West Mifflin borough, Pennsylvania
4885. West Norriton township, Pennsylvania
4886. West Whiteland township, Pennsylvania
4887. Westtown township, Pennsylvania
4888. White township, Pennsylvania
4889. Whitehall borough, Pennsylvania
4890. Whitehall township, Pennsylvania
4891. Whitemarsh township, Pennsylvania
4892. Whitpain township, Pennsylvania
4893. Wilkinsburg borough, Pennsylvania
4894. Williamsport City, Pennsylvania
4895. Willistown township, Pennsylvania
4896. Windsor township, Pennsylvania

4897. Worcester township, Pennsylvania
4898. Wyoming County, Pennsylvania
4899. Wyomissing borough, Pennsylvania
4900. Yeadon borough, Pennsylvania
4901. York township, Pennsylvania
4902. Abington township, Pennsylvania*
4903. Adams County, Pennsylvania*
4904. Allegheny County, Pennsylvania*
4905. Allentown City, Pennsylvania*
4906. Altoona City, Pennsylvania*
4907. Armstrong County, Pennsylvania*
4908. Beaver County, Pennsylvania*
4909. Bedford County, Pennsylvania*
4910. Bensalem township, Pennsylvania*
4911. Berks County, Pennsylvania*
4912. Bethel Park municipality, Pennsylvania*
4913. Bethlehem City, Pennsylvania*
4914. Blair County, Pennsylvania*
4915. Bradford County, Pennsylvania*
4916. Bristol township, Pennsylvania*
4917. Bucks County, Pennsylvania*
4918. Butler County, Pennsylvania*
4919. Cambria County, Pennsylvania*
4920. Carbon County, Pennsylvania*
4921. Centre County, Pennsylvania*
4922. Cheltenham township, Pennsylvania*
4923. Chester City, Pennsylvania*
4924. Chester County, Pennsylvania*
4925. Clarion County, Pennsylvania*
4926. Clearfield County, Pennsylvania*
4927. Clinton County, Pennsylvania*
4928. Columbia County, Pennsylvania*
4929. Cranberry township, Pennsylvania*
4930. Crawford County, Pennsylvania*
4931. Cumberland County, Pennsylvania*
4932. Dauphin County, Pennsylvania*
4933. Delaware County, Pennsylvania*
4934. Erie City, Pennsylvania*
4935. Erie County, Pennsylvania*
4936. Falls township, Pennsylvania*
4937. Fayette County, Pennsylvania*
4938. Franklin County, Pennsylvania*
4939. Greene County, Pennsylvania*
4940. Hampden township, Pennsylvania*
4941. Harrisburg City, Pennsylvania*
4942. Haverford township, Pennsylvania*
4943. Hempfield township, Pennsylvania*
4944. Huntingdon County, Pennsylvania*
4945. Indiana County, Pennsylvania*
4946. Jefferson County, Pennsylvania*
4947. Lackawanna County, Pennsylvania*
4948. Lancaster City, Pennsylvania*
4949. Lancaster County, Pennsylvania*
4950. Lawrence County, Pennsylvania*
4951. Lebanon County, Pennsylvania*
4952. Lehigh County, Pennsylvania*
4953. Lower Macungie township, Pennsylvania*
4954. Lower Makefield township, Pennsylvania*
4955. Lower Merion township, Pennsylvania*
4956. Lower Paxton township, Pennsylvania*
4957. Luzerne County, Pennsylvania*
4958. Lycoming County, Pennsylvania*
4959. Manheim township, Pennsylvania*
4960. McKean County, Pennsylvania*
4961. Mercer County, Pennsylvania*
4962. Mifflin County, Pennsylvania*
4963. Millcreek township, Pennsylvania*
4964. Monroe County, Pennsylvania*
4965. Montgomery County, Pennsylvania*
4966. Mount Lebanon township, Pennsylvania*
4967. Norristown borough, Pennsylvania*
4968. North Huntingdon township, Pennsylvania*
4969. Northampton County, Pennsylvania*
4970. Northampton township, Pennsylvania*
4971. Northumberland County, Pennsylvania*
4972. Penn Hills township, Pennsylvania*

4973. Perry County, Pennsylvania*
4974. Pike County, Pennsylvania*
4975. Pittsburgh City, Pennsylvania*
4976. Radnor township, Pennsylvania*
4977. Reading City, Pennsylvania*
4978. Ridley township, Pennsylvania*
4979. Ross township, Pennsylvania*
4980. Schuylkill County, Pennsylvania*
4981. Scranton City, Pennsylvania*
4982. Snyder County, Pennsylvania*
4983. Somerset County, Pennsylvania*
4984. State College borough, Pennsylvania*
4985. Susquehanna County, Pennsylvania*
4986. Tioga County, Pennsylvania*
4987. Union County, Pennsylvania*
4988. Upper Darby township, Pennsylvania*
4989. Upper Merion township, Pennsylvania*
4990. Venango County, Pennsylvania*
4991. Warminster township, Pennsylvania*
4992. Warren County, Pennsylvania*
4993. Washington County, Pennsylvania*
4994. Wayne County, Pennsylvania*
4995. Westmoreland County, Pennsylvania*
4996. Wilkes-Barre City, Pennsylvania*
4997. York City, Pennsylvania*
4998. York County, Pennsylvania*
4999. Adjuntas Municipio, Puerto Rico
5000. Aguada Municipio, Puerto Rico*
5001. Aguadilla Municipio, Puerto Rico*
5002. Aguas Buenas Municipio, Puerto Rico
5003. Aibonito Municipio, Puerto Rico
5004. Añasco Municipio, Puerto Rico
5005. Arecibo Municipio, Puerto Rico*
5006. Arroyo Municipio, Puerto Rico
5007. Barceloneta Municipio, Puerto Rico
5008. Barranquitas Municipio, Puerto Rico
5009. Bayamón Municipio, Puerto Rico*
5010. Cabo Rojo Municipio, Puerto Rico*
5011. Caguas Municipio, Puerto Rico*
5012. Camuy Municipio, Puerto Rico*
5013. Canóvanas Municipio, Puerto Rico*
5014. Carolina Municipio, Puerto Rico*
5015. Cataño Municipio, Puerto Rico
5016. Cayey Municipio, Puerto Rico*
5017. Ceiba Municipio, Puerto Rico
5018. Ciales Municipio, Puerto Rico
5019. Cidra Municipio, Puerto Rico*
5020. Coamo Municipio, Puerto Rico*
5021. Comerío Municipio, Puerto Rico
5022. Corozal Municipio, Puerto Rico*
5023. Dorado Municipio, Puerto Rico*
5024. Fajardo Municipio, Puerto Rico
5025. Florida Municipio, Puerto Rico
5026. Guánica Municipio, Puerto Rico
5027. Guayama Municipio, Puerto Rico*
5028. Guayanilla Municipio, Puerto Rico
5029. Guaynabo Municipio, Puerto Rico*
5030. Gurabo Municipio, Puerto Rico*
5031. Hatillo Municipio, Puerto Rico*
5032. Hormigueros Municipio, Puerto Rico
5033. Humacao Municipio, Puerto Rico*
5034. Isabela Municipio, Puerto Rico*
5035. Jayuya Municipio, Puerto Rico
5036. Juana Díaz Municipio, Puerto Rico*
5037. Juncos Municipio, Puerto Rico*
5038. Lajas Municipio, Puerto Rico
5039. Lares Municipio, Puerto Rico
5040. Las Piedras Municipio, Puerto Rico*
5041. Loíza Municipio, Puerto Rico
5042. Luquillo Municipio, Puerto Rico
5043. Manatí Municipio, Puerto Rico*
5044. Maunabo Municipio, Puerto Rico
5045. Mayagüez Municipio, Puerto Rico*
5046. Moca Municipio, Puerto Rico*
5047. Morovis Municipio, Puerto Rico*

5048. Naguabo Municipio, Puerto Rico
5049. Naranjito Municipio, Puerto Rico
5050. Orocovis Municipio, Puerto Rico
5051. Patillas Municipio, Puerto Rico
5052. Peñuelas Municipio, Puerto Rico
5053. Ponce Municipio, Puerto Rico*
5054. Quebradillas Municipio, Puerto Rico
5055. Rincón Municipio, Puerto Rico
5056. Río Grande Municipio, Puerto Rico*
5057. Sabana Grande Municipio, Puerto Rico
5058. Salinas Municipio, Puerto Rico
5059. San Germán Municipio, Puerto Rico*
5060. San Juan Municipio, Puerto Rico*
5061. San Lorenzo Municipio, Puerto Rico*
5062. San Sebastián Municipio, Puerto Rico*
5063. Santa Isabel Municipio, Puerto Rico
5064. Toa Alta Municipio, Puerto Rico*
5065. Toa Baja Municipio, Puerto Rico*
5066. Trujillo Alto Municipio, Puerto Rico*
5067. Utuado Municipio, Puerto Rico
5068. Vega Alta Municipio, Puerto Rico*
5069. Vega Baja Municipio, Puerto Rico*
5070. Villalba Municipio, Puerto Rico
5071. Yabucoa Municipio, Puerto Rico*
5072. Yauco Municipio, Puerto Rico*
5073. Abbeville County, South Carolina
5074. Anderson City, South Carolina
5075. Bamberg County, South Carolina
5076. Barnwell County, South Carolina
5077. Beaufort City, South Carolina
5078. Bluffton town, South Carolina
5079. Calhoun County, South Carolina
5080. Cayce City, South Carolina
5081. Clemson City, South Carolina
5082. Conway City, South Carolina
5083. Easley City, South Carolina
5084. Edgefield County, South Carolina
5085. Fairfield County, South Carolina
5086. Forest Acres City, South Carolina
5087. Fort Mill town, South Carolina
5088. Fountain Inn City, South Carolina
5089. Gaffney City, South Carolina
5090. Greenwood City, South Carolina
5091. Hampton County, South Carolina
5092. Hanahan City, South Carolina
5093. Irmo town, South Carolina
5094. James Island town, South Carolina
5095. Lee County, South Carolina
5096. Lexington town, South Carolina
5097. Marlboro County, South Carolina
5098. Mauldin City, South Carolina
5099. Moncks Corner town, South Carolina
5100. Newberry City, South Carolina
5101. North Augusta City, South Carolina
5102. North Myrtle Beach City, South Carolina
5103. Orangeburg City, South Carolina
5104. Port Royal town, South Carolina
5105. Saluda County, South Carolina
5106. Simpsonville City, South Carolina
5107. Tega Cay City, South Carolina
5108. Union County, South Carolina
5109. West Columbia City, South Carolina
5110. Aiken City, South Carolina*
5111. Aiken County, South Carolina*
5112. Anderson County, South Carolina*
5113. Beaufort County, South Carolina*
5114. Berkeley County, South Carolina*
5115. Charleston City, South Carolina*
5116. Charleston County, South Carolina*
5117. Cherokee County, South Carolina*
5118. Chester County, South Carolina*
5119. Chesterfield County, South Carolina*
5120. Clarendon County, South Carolina*
5121. Colleton County, South Carolina*
5122. Columbia City, South Carolina*

5123. Darlington County, South Carolina*
5124. Dillon County, South Carolina*
5125. Dorchester County, South Carolina*
5126. Florence City, South Carolina*
5127. Florence County, South Carolina*
5128. Georgetown County, South Carolina*
5129. Goose Creek City, South Carolina*
5130. Greenville City, South Carolina*
5131. Greenville County, South Carolina*
5132. Greenwood County, South Carolina*
5133. Greer City, South Carolina*
5134. Hilton Head Island town, South Carolina*
5135. Horry County, South Carolina*
5136. Jasper County, South Carolina*
5137. Kershaw County, South Carolina*
5138. Lancaster County, South Carolina*
5139. Laurens County, South Carolina*
5140. Lexington County, South Carolina*
5141. Marion County, South Carolina*
5142. Mount Pleasant town, South Carolina*
5143. Myrtle Beach City, South Carolina*
5144. Newberry County, South Carolina*
5145. North Charleston City, South Carolina*
5146. Oconee County, South Carolina*
5147. Orangeburg County, South Carolina*
5148. Pickens County, South Carolina*
5149. Richland County, South Carolina*
5150. Rock Hill City, South Carolina*
5151. Spartanburg City, South Carolina*
5152. Spartanburg County, South Carolina*
5153. Summerville town, South Carolina*
5154. Sumter City, South Carolina*
5155. Sumter County, South Carolina*
5156. Williamsburg County, South Carolina*
5157. York County, South Carolina*
5158. Aberdeen City, South Dakota
5159. Beadle County, South Dakota
5160. Box Elder City, South Dakota
5161. Brandon City, South Dakota
5162. Brookings City, South Dakota
5163. Butte County, South Dakota
5164. Clay County, South Dakota
5165. Codington County, South Dakota
5166. Davison County, South Dakota
5167. Hughes County, South Dakota
5168. Huron City, South Dakota
5169. Lake County, South Dakota
5170. Lawrence County, South Dakota
5171. Meade County, South Dakota
5172. Mitchell City, South Dakota
5173. Oglala Lakota County, South Dakota
5174. Pierre City, South Dakota
5175. Roberts County, South Dakota
5176. Spearfish City, South Dakota
5177. Todd County, South Dakota
5178. Union County, South Dakota
5179. Vermillion City, South Dakota
5180. Watertown City, South Dakota
5181. Yankton City, South Dakota
5182. Yankton County, South Dakota
5183. Brookings County, South Dakota*
5184. Brown County, South Dakota*
5185. Lincoln County, South Dakota*
5186. Minnehaha County, South Dakota*
5187. Pennington County, South Dakota*
5188. Rapid City City, South Dakota*
5189. Sioux Falls City, South Dakota*
5190. Arlington town, Tennessee
5191. Athens City, Tennessee
5192. Benton County, Tennessee
5193. Bledsoe County, Tennessee
5194. Bristol City, Tennessee
5195. Cannon County, Tennessee
5196. Carroll County, Tennessee
5197. Chester County, Tennessee
5198. Clinton City, Tennessee
5199. Collegedale City, Tennessee

5200. Crockett County, Tennessee
5201. Crossville City, Tennessee
5202. Decatur County, Tennessee
5203. DeKalb County, Tennessee
5204. Dickson City, Tennessee
5205. Dyersburg City, Tennessee
5206. East Ridge City, Tennessee
5207. Elizabethton City, Tennessee
5208. Farragut town, Tennessee
5209. Fentress County, Tennessee
5210. Giles County, Tennessee
5211. Goodlettsville City, Tennessee
5212. Goodlettsville City, Tennessee
5213. Grainger County, Tennessee
5214. Greeneville town, Tennessee
5215. Grundy County, Tennessee
5216. Hardeman County, Tennessee
5217. Hardin County, Tennessee
5218. Hartsville/Trousdale County, Tennessee
5219. Haywood County, Tennessee
5220. Henderson County, Tennessee
5221. Hickman County, Tennessee
5222. Humphreys County, Tennessee
5223. Jackson County, Tennessee
5224. Johnson County, Tennessee
5225. Lakeland City, Tennessee
5226. Lauderdale County, Tennessee
5227. Lawrenceburg City, Tennessee
5228. Lewis County, Tennessee
5229. Lewisburg City, Tennessee
5230. Macon County, Tennessee
5231. Manchester City, Tennessee
5232. Marion County, Tennessee
5233. Martin City, Tennessee
5234. Maryville City, Tennessee
5235. McMinnville City, Tennessee
5236. McNairy County, Tennessee
5237. Meigs County, Tennessee
5238. Millington City, Tennessee
5239. Morgan County, Tennessee
5240. Nolensville town, Tennessee
5241. Oak Ridge City, Tennessee
5242. Overton County, Tennessee
5243. Paris City, Tennessee
5244. Polk County, Tennessee
5245. Portland City, Tennessee
5246. Red Bank City, Tennessee
5247. Scott County, Tennessee
5248. Sequatchie County, Tennessee
5249. Sevierville City, Tennessee
5250. Shelbyville City, Tennessee
5251. Smith County, Tennessee
5252. Soddy-Daisy City, Tennessee
5253. Springfield City, Tennessee
5254. Stewart County, Tennessee
5255. Tullahoma City, Tennessee
5256. Unicoi County, Tennessee
5257. Union City City, Tennessee
5258. Union County, Tennessee
5259. Wayne County, Tennessee
5260. White County, Tennessee
5261. White House City, Tennessee
5262. Anderson County, Tennessee*
5263. Bartlett City, Tennessee*
5264. Bedford County, Tennessee*
5265. Blount County, Tennessee*
5266. Bradley County, Tennessee*
5267. Brentwood City, Tennessee*
5268. Campbell County, Tennessee*
5269. Carter County, Tennessee*
5270. Chattanooga City, Tennessee*
5271. Cheatham County, Tennessee*
5272. Claiborne County, Tennessee*
5273. Clarksville City, Tennessee*
5274. Cleveland City, Tennessee*
5275. Cocke County, Tennessee*
5276. Coffee County, Tennessee*
5277. Collierville town, Tennessee*
5278. Columbia City, Tennessee*

5279. Cookeville City, Tennessee*
5280. Cumberland County, Tennessee*
5281. Dickson County, Tennessee*
5282. Dyer County, Tennessee*
5283. Fayette County, Tennessee*
5284. Franklin City, Tennessee*
5285. Franklin County, Tennessee*
5286. Gallatin City, Tennessee*
5287. Germantown City, Tennessee*
5288. Gibson County, Tennessee*
5289. Greene County, Tennessee*
5290. Hamblen County, Tennessee*
5291. Hamilton County, Tennessee*
5292. Hawkins County, Tennessee*
5293. Hendersonville City, Tennessee*
5294. Henry County, Tennessee*
5295. Jackson City, Tennessee*
5296. Jefferson County, Tennessee*
5297. Johnson City City, Tennessee*
5298. Kingsport City, Tennessee*
5299. Knox County, Tennessee*
5300. Knoxville City, Tennessee*
5301. La Vergne City, Tennessee*
5302. Lawrence County, Tennessee*
5303. Lebanon City, Tennessee*
5304. Lincoln County, Tennessee*
5305. Loudon County, Tennessee*
5306. Madison County, Tennessee*
5307. Marshall County, Tennessee*
5308. Maury County, Tennessee*
5309. McMinn County, Tennessee*
5310. Memphis City, Tennessee*
5311. Monroe County, Tennessee*
5312. Montgomery County, Tennessee*
5313. Morristown City, Tennessee*
5314. Mount Juliet City, Tennessee*
5315. Murfreesboro City, Tennessee*
5316. Nashville-Davidson metropolitan government, Tennessee*
5317. Nashville-Davidson metropolitan government, Tennessee*
5318. Obion County, Tennessee*
5319. Putnam County, Tennessee*
5320. Rhea County, Tennessee*
5321. Roane County, Tennessee*
5322. Robertson County, Tennessee*
5323. Rutherford County, Tennessee*
5324. Sevier County, Tennessee*
5325. Shelby County, Tennessee*
5326. Smyrna town, Tennessee*
5327. Spring Hill City, Tennessee*
5328. Sullivan County, Tennessee*
5329. Sumner County, Tennessee*
5330. Tipton County, Tennessee*
5331. Warren County, Tennessee*
5332. Washington County, Tennessee*
5333. Weakley County, Tennessee*
5334. Williamson County, Tennessee*
5335. Wilson County, Tennessee*
5336. Alpine City, Utah
5337. Bluffdale City, Utah
5338. Brigham City City, Utah
5339. Carbon County, Utah
5340. Cedar Hills City, Utah
5341. Centerville City, Utah
5342. Clinton City, Utah
5343. Duchesne County, Utah
5344. Emery County, Utah
5345. Farmington City, Utah
5346. Grantsville City, Utah
5347. Heber City, Utah
5348. Highland City, Utah
5349. Hurricane City, Utah
5350. Juab County, Utah
5351. Lindon City, Utah
5352. Magna metro township, Utah
5353. Mapleton City, Utah
5354. Millard County, Utah
5355. Morgan County, Utah
5356. North Logan City, Utah
5357. North Ogden City, Utah
5358. North Salt Lake City, Utah
5359. Payson City, Utah
5360. Pleasant View City, Utah
5361. San Juan County, Utah
5362. Santaquin City, Utah
5363. Sevier County, Utah
5364. Smithfield City, Utah
5365. South Ogden City, Utah
5366. South Salt Lake City, Utah

5367. Vernal City, Utah
5368. Vineyard town, Utah
5369. Washington City, Utah
5370. West Haven City, Utah
5371. West Point City, Utah
5372. Woods Cross City, Utah
5373. American Fork City, Utah*
5374. Bountiful City, Utah*
5375. Box Elder County, Utah*
5376. Cache County, Utah*
5377. Cedar City City, Utah*
5378. Clearfield City, Utah*
5379. Cottonwood Heights City, Utah*
5380. Davis County, Utah*
5381. Draper City, Utah*
5382. Eagle Mountain City, Utah*
5383. Herriman City, Utah*
5384. Holladay City, Utah*
5385. Iron County, Utah*
5386. Kaysville City, Utah*
5387. Kearns metro township, Utah*
5388. Layton City, Utah*
5389. Lehi City, Utah*
5390. Logan City, Utah*
5391. Midvale City, Utah*
5392. Millcreek City, Utah*
5393. Murray City, Utah*
5394. Ogden City, Utah*
5395. Orem City, Utah*
5396. Pleasant Grove City, Utah*
5397. Provo City, Utah*
5398. Riverton City, Utah*
5399. Roy City, Utah*
5400. Salt Lake City City, Utah*
5401. Salt Lake County, Utah*
5402. Sandy City, Utah*
5403. Sanpete County, Utah*
5404. Saratoga Springs City, Utah*
5405. South Jordan City, Utah*
5406. Spanish Fork City, Utah*
5407. Springville City, Utah*
5408. St. George City, Utah*
5409. Summit County, Utah*
5410. Syracuse City, Utah*
5411. Taylorsville City, Utah*
5412. Tooele City, Utah*
5413. Tooele County, Utah*
5414. Uintah County, Utah*
5415. Utah County, Utah*
5416. Wasatch County, Utah*
5417. Washington County, Utah*
5418. Weber County, Utah*
5419. West Jordan City, Utah*
5420. West Valley City City, Utah*
5421. Bennington town, Vermont
5422. Brattleboro town, Vermont
5423. Caledonia County, Vermont
5424. Colchester town, Vermont
5425. Essex Junction village, Vermont
5426. Essex town, Vermont
5427. Lamoille County, Vermont
5428. Milton town, Vermont
5429. Orange County, Vermont
5430. Orleans County, Vermont
5431. Rutland City, Vermont
5432. South Burlington City, Vermont
5433. Williston town, Vermont
5434. Addison County, Vermont*
5435. Bennington County, Vermont*
5436. Burlington City, Vermont*
5437. Chittenden County, Vermont*
5438. Franklin County, Vermont*
5439. Rutland County, Vermont*
5440. Washington County, Vermont*
5441. Windham County, Vermont*
5442. Windsor County, Vermont*
5443. Alleghany County, Virginia
5444. Amelia County, Virginia
5445. Appomattox County, Virginia
5446. Bristol City, Virginia
5447. Brunswick County, Virginia
5448. Buchanan County, Virginia
5449. Buckingham County, Virginia
5450. Carroll County, Virginia
5451. Charlotte County, Virginia
5452. Christiansburg town, Virginia
5453. Clarke County, Virginia
5454. Colonial Heights City, Virginia
5455. Culpeper town, Virginia
5456. Dickenson County, Virginia
5457. Dinwiddie County, Virginia
5458. Essex County, Virginia
5459. Fairfax City, Virginia
5460. Falls Church City, Virginia
5461. Floyd County, Virginia
5462. Fluvanna County, Virginia
5463. Fredericksburg City, Virginia
5464. Front Royal town, Virginia
5465. Giles County, Virginia
5466. Goochland County, Virginia
5467. Grayson County, Virginia
5468. Greene County, Virginia
5469. Greensville County, Virginia
5470. Herndon town, Virginia
5471. Hopewell City, Virginia

5472. King George County, Virginia
5473. King William County, Virginia
5474. Lancaster County, Virginia
5475. Lee County, Virginia
5476. Lunenburg County, Virginia
5477. Madison County, Virginia
5478. Manassas Park City, Virginia
5479. Martinsville City, Virginia
5480. Middlesex County, Virginia
5481. Nelson County, Virginia
5482. New Kent County, Virginia
5483. Northampton County, Virginia
5484. Northumberland County, Virginia
5485. Nottoway County, Virginia
5486. Page County, Virginia
5487. Patrick County, Virginia
5488. Poquoson City, Virginia
5489. Powhatan County, Virginia
5490. Prince Edward County, Virginia
5491. Purcellville town, Virginia
5492. Radford City, Virginia
5493. Rockbridge County, Virginia
5494. Russell County, Virginia
5495. Salem City, Virginia
5496. Scott County, Virginia
5497. Southampton County, Virginia
5498. Staunton City, Virginia
5499. Sussex County, Virginia
5500. Vienna town, Virginia
5501. Warrenton town, Virginia
5502. Waynesboro City, Virginia
5503. Westmoreland County, Virginia
5504. Williamsburg City, Virginia
5505. Winchester City, Virginia
5506. Wythe County, Virginia
5507. Accomack County, Virginia*
5508. Albemarle County, Virginia*
5509. Alexandria City, Virginia*
5510. Amherst County, Virginia*
5511. Arlington County, Virginia*
5512. Augusta County, Virginia*
5513. Bedford County, Virginia*
5514. Blacksburg town, Virginia*
5515. Botetourt County, Virginia*
5516. Campbell County, Virginia*
5517. Caroline County, Virginia*
5518. Charlottesville City, Virginia*
5519. Chesapeake City, Virginia*
5520. Chesterfield County, Virginia*
5521. Culpeper County, Virginia*
5522. Danville City, Virginia*
5523. Fairfax County, Virginia*
5524. Fauquier County, Virginia*
5525. Franklin County, Virginia*
5526. Frederick County, Virginia*
5527. Gloucester County, Virginia*
5528. Halifax County, Virginia*
5529. Hampton City, Virginia*
5530. Hanover County, Virginia*
5531. Harrisonburg City, Virginia*
5532. Henrico County, Virginia*
5533. Henry County, Virginia*
5534. Isle of Wight County, Virginia*
5535. James City County, Virginia*
5536. Leesburg town, Virginia*
5537. Loudoun County, Virginia*
5538. Louisa County, Virginia*
5539. Lynchburg City, Virginia*
5540. Manassas City, Virginia*
5541. Mecklenburg County, Virginia*
5542. Montgomery County, Virginia*
5543. Newport News City, Virginia*
5544. Norfolk City, Virginia*
5545. Orange County, Virginia*
5546. Petersburg City, Virginia*
5547. Pittsylvania County, Virginia*
5548. Portsmouth City, Virginia*
5549. Prince George County, Virginia*
5550. Prince William County, Virginia*
5551. Pulaski County, Virginia*
5552. Richmond City, Virginia*
5553. Roanoke City, Virginia*
5554. Roanoke County, Virginia*
5555. Rockingham County, Virginia*
5556. Shenandoah County, Virginia*

5557. Smyth County, Virginia*
5558. Spotsylvania County, Virginia*
5559. Stafford County, Virginia*
5560. Suffolk City, Virginia*
5561. Tazewell County, Virginia*
5562. Virginia Beach City, Virginia*
5563. Warren County, Virginia*
5564. Washington County, Virginia*
5565. Wise County, Virginia*
5566. York County, Virginia*
5567. Aberdeen City, Washington
5568. Adams County, Washington
5569. Anacortes City, Washington
5570. Arlington City, Washington
5571. Asotin County, Washington
5572. Bainbridge Island City, Washington
5573. Battle Ground City, Washington
5574. Bonney Lake City, Washington
5575. Camas City, Washington
5576. Centralia City, Washington
5577. Cheney City, Washington
5578. Covington City, Washington
5579. East Wenatchee City, Washington
5580. Edgewood City, Washington
5581. Ellensburg City, Washington
5582. Enumclaw City, Washington
5583. Ferndale City, Washington
5584. Fife City, Washington
5585. Gig Harbor City, Washington
5586. Grandview City, Washington
5587. Kelso City, Washington
5588. Kenmore City, Washington
5589. Klickitat County, Washington
5590. Lake Forest Park City, Washington
5591. Liberty Lake City, Washington
5592. Lincoln County, Washington
5593. Lynden City, Washington
5594. Maple Valley City, Washington
5595. Mercer Island City, Washington
5596. Mill Creek City, Washington
5597. Monroe City, Washington
5598. Moses Lake City, Washington
5599. Mountlake Terrace City, Washington
5600. Mukilteo City, Washington
5601. Newcastle City, Washington
5602. Oak Harbor City, Washington
5603. Pacific County, Washington
5604. Pend Oreille County, Washington
5605. Port Angeles City, Washington
5606. Port Orchard City, Washington
5607. Poulsbo City, Washington
5608. San Juan County, Washington
5609. SeaTac City, Washington
5610. Sedro-Woolley City, Washington
5611. Shelton City, Washington
5612. Skamania County, Washington
5613. Snohomish City, Washington
5614. Snoqualmie City, Washington
5615. Sumner City, Washington
5616. Sunnyside City, Washington
5617. Tukwila City, Washington
5618. Tumwater City, Washington
5619. Washougal City, Washington
5620. West Richland City, Washington
5621. Woodinville City, Washington
5622. Auburn City, Washington*
5623. Bellevue City, Washington*
5624. Bellingham City, Washington*
5625. Benton County, Washington*
5626. Bothell City, Washington*
5627. Bremerton City, Washington*
5628. Burien City, Washington*
5629. Chelan County, Washington*
5630. Clallam County, Washington*
5631. Clark County, Washington*
5632. Cowlitz County, Washington*
5633. Des Moines City, Washington*
5634. Douglas County, Washington*
5635. Edmonds City, Washington*

5636. Everett City, Washington*
5637. Federal Way City, Washington*
5638. Franklin County, Washington*
5639. Grant County, Washington*
5640. Grays Harbor County, Washington*
5641. Island County, Washington*
5642. Issaquah City, Washington*
5643. Jefferson County, Washington*
5644. Kennewick City, Washington*
5645. Kent City, Washington*
5646. King County, Washington*
5647. Kirkland City, Washington*
5648. Kitsap County, Washington*
5649. Kittitas County, Washington*
5650. Lacey City, Washington*
5651. Lake Stevens City, Washington*
5652. Lakewood City, Washington*
5653. Lewis County, Washington*
5654. Longview City, Washington*
5655. Lynnwood City, Washington*
5656. Marysville City, Washington*
5657. Mason County, Washington*
5658. Mount Vernon City, Washington*
5659. Okanogan County, Washington*
5660. Olympia City, Washington*
5661. Pasco City, Washington*
5662. Pierce County, Washington*
5663. Pullman City, Washington*
5664. Puyallup City, Washington*
5665. Redmond City, Washington*
5666. Renton City, Washington*
5667. Richland City, Washington*
5668. Sammamish City, Washington*
5669. Seattle City, Washington*
5670. Shoreline City, Washington*
5671. Skagit County, Washington*
5672. Snohomish County, Washington*
5673. Spokane City, Washington*
5674. Spokane County, Washington*
5675. Spokane Valley City, Washington*
5676. Stevens County, Washington*
5677. Tacoma City, Washington*
5678. Thurston County, Washington*
5679. University Place City, Washington*
5680. Vancouver City, Washington*
5681. Walla Walla City, Washington*
5682. Walla Walla County, Washington*
5683. Wenatchee City, Washington*
5684. Whatcom County, Washington*
5685. Whitman County, Washington*
5686. Yakima City, Washington*
5687. Yakima County, Washington*
5688. Adams County, Wisconsin
5689. Allouez village, Wisconsin
5690. Ashland County, Wisconsin
5691. Ashwaubenon village, Wisconsin
5692. Baraboo City, Wisconsin
5693. Bayfield County, Wisconsin
5694. Beaver Dam City, Wisconsin
5695. Bellevue village, Wisconsin
5696. Brown Deer village, Wisconsin
5697. Buffalo County, Wisconsin
5698. Burlington City, Wisconsin
5699. Burnett County, Wisconsin
5700. Caledonia village, Wisconsin
5701. Cedarburg City, Wisconsin
5702. Chippewa Falls City, Wisconsin
5703. Crawford County, Wisconsin
5704. Cudahy City, Wisconsin
5705. De Pere City, Wisconsin
5706. DeForest village, Wisconsin
5707. Door County, Wisconsin
5708. Elkhorn City, Wisconsin
5709. Fort Atkinson City, Wisconsin
5710. Fox Crossing village, Wisconsin
5711. Germantown village, Wisconsin
5712. Glendale City, Wisconsin
5713. Grafton village, Wisconsin
5714. Grand Chute town, Wisconsin

5715. Green Lake County, Wisconsin
5716. Greendale village, Wisconsin
5717. Greenville town, Wisconsin
5718. Harrison village, Wisconsin
5719. Hartford City, Wisconsin
5720. Hobart village, Wisconsin
5721. Holmen village, Wisconsin
5722. Howard village, Wisconsin
5723. Hudson City, Wisconsin
5724. Iowa County, Wisconsin
5725. Jackson County, Wisconsin
5726. Juneau County, Wisconsin
5727. Kaukauna City, Wisconsin
5728. Kewaunee County, Wisconsin
5729. Lafayette County, Wisconsin
5730. Langlade County, Wisconsin
5731. Lincoln County, Wisconsin
5732. Lisbon town, Wisconsin
5733. Little Chute village, Wisconsin
5734. Marinette City, Wisconsin
5735. Marquette County, Wisconsin
5736. Marshfield City, Wisconsin
5737. Menasha City, Wisconsin
5738. Menomonie City, Wisconsin
5739. Mequon City, Wisconsin
5740. Middleton City, Wisconsin
5741. Monroe City, Wisconsin
5742. Mount Pleasant village, Wisconsin
5743. Muskego City, Wisconsin
5744. Neenah City, Wisconsin
5745. Oconomowoc City, Wisconsin
5746. Onalaska City, Wisconsin
5747. Oregon village, Wisconsin
5748. Pewaukee City, Wisconsin
5749. Platteville City, Wisconsin
5750. Pleasant Prairie village, Wisconsin
5751. Plover village, Wisconsin
5752. Port Washington City, Wisconsin
5753. Portage City, Wisconsin
5754. Price County, Wisconsin
5755. Richfield village, Wisconsin
5756. Richland County, Wisconsin
5757. River Falls City, Wisconsin
5758. Rusk County, Wisconsin
5759. Salem Lakes village, Wisconsin
5760. Sawyer County, Wisconsin
5761. Shorewood village, Wisconsin
5762. South Milwaukee City, Wisconsin
5763. Stevens Point City, Wisconsin
5764. Stoughton City, Wisconsin
5765. Suamico village, Wisconsin
5766. Superior City, Wisconsin
5767. Sussex village, Wisconsin
5768. Taylor County, Wisconsin
5769. Trempealeau County, Wisconsin
5770. Two Rivers City, Wisconsin
5771. Verona City, Wisconsin
5772. Vilas County, Wisconsin
5773. Washburn County, Wisconsin
5774. Watertown City, Wisconsin
5775. Waunakee village, Wisconsin
5776. Waupun City, Wisconsin
5777. Waushara County, Wisconsin
5778. Weston village, Wisconsin
5779. Whitefish Bay village, Wisconsin
5780. Whitewater City, Wisconsin
5781. Wisconsin Rapids City, Wisconsin
5782. Appleton City, Wisconsin*
5783. Barron County, Wisconsin*
5784. Beloit City, Wisconsin*
5785. Brookfield City, Wisconsin*
5786. Brown County, Wisconsin*
5787. Calumet County, Wisconsin*
5788. Chippewa County, Wisconsin*
5789. Clark County, Wisconsin*
5790. Columbia County, Wisconsin*
5791. Dane County, Wisconsin*
5792. Dodge County, Wisconsin*
5793. Douglas County, Wisconsin*
5794. Dunn County, Wisconsin*
5795. Eau Claire City, Wisconsin*
5796. Eau Claire County, Wisconsin*

5797. Fitchburg City, Wisconsin*
5798. Fond du Lac City, Wisconsin*
5799. Fond du Lac County, Wisconsin*
5800. Franklin City, Wisconsin*
5801. Grant County, Wisconsin*
5802. Green Bay City, Wisconsin*
5803. Green County, Wisconsin*
5804. Greenfield City, Wisconsin*
5805. Janesville City, Wisconsin*
5806. Jefferson County, Wisconsin*
5807. Kenosha City, Wisconsin*
5808. Kenosha County, Wisconsin*
5809. La Crosse City, Wisconsin*
5810. La Crosse County, Wisconsin*
5811. Madison City, Wisconsin*
5812. Manitowoc City, Wisconsin*
5813. Manitowoc County, Wisconsin*
5814. Marathon County, Wisconsin*
5815. Marinette County, Wisconsin*
5816. Menomonee Falls village, Wisconsin*
5817. Milwaukee City, Wisconsin*
5818. Milwaukee County, Wisconsin*
5819. Monroe County, Wisconsin*
5820. New Berlin City, Wisconsin*
5821. Oak Creek City, Wisconsin*
5822. Oconto County, Wisconsin*
5823. Oneida County, Wisconsin*
5824. Oshkosh City, Wisconsin*
5825. Outagamie County, Wisconsin*
5826. Ozaukee County, Wisconsin*
5827. Pierce County, Wisconsin*
5828. Polk County, Wisconsin*
5829. Portage County, Wisconsin*
5830. Racine City, Wisconsin*
5831. Racine County, Wisconsin*
5832. Rock County, Wisconsin*
5833. Sauk County, Wisconsin*
5834. Shawano County, Wisconsin*
5835. Sheboygan City, Wisconsin*
5836. Sheboygan County, Wisconsin*
5837. St. Croix County, Wisconsin*
5838. Sun Prairie City, Wisconsin*
5839. Vernon County, Wisconsin*
5840. Walworth County, Wisconsin*
5841. Washington County, Wisconsin*
5842. Waukesha City, Wisconsin*
5843. Waukesha County, Wisconsin*
5844. Waupaca County, Wisconsin*
5845. Wausau City, Wisconsin*
5846. Wauwatosa City, Wisconsin*
5847. West Allis City, Wisconsin*
5848. West Bend City, Wisconsin*
5849. Winnebago County, Wisconsin*
5850. Wood County, Wisconsin*
5851. Big Horn County, Wyoming
5852. Carbon County, Wyoming
5853. Converse County, Wyoming
5854. Evanston City, Wyoming
5855. Goshen County, Wyoming
5856. Green River City, Wyoming
5857. Jackson town, Wyoming
5858. Lincoln County, Wyoming
5859. Park County, Wyoming
5860. Riverton City, Wyoming
5861. Rock Springs City, Wyoming
5862. Sheridan City, Wyoming
5863. Teton County, Wyoming
5864. Uinta County, Wyoming
5865. Albany County, Wyoming*
5866. Campbell County, Wyoming*
5867. Casper City, Wyoming*
5868. Cheyenne City, Wyoming*
5869. Fremont County, Wyoming*
5870. Gillette City, Wyoming*
5871. Laramie City, Wyoming*
5872. Laramie County, Wyoming*
5873. Natrona County, Wyoming*
5874. Sheridan County, Wyoming*
5875. Sweetwater County, Wyoming*

Exhibit J
Teva's Subsidiaries, Affiliates, and Joint Ventures

The following includes a list of Teva's current indirect parents, subsidiaries, affiliates, and joint ventures. Teva made reasonable efforts to identify all current indirect parents, subsidiaries, affiliates, and joint ventures and believes this list is complete.

1. 10009474 Canada Inc.
2. 1453350 Ontario Inc.
3. 9985247 Canada Inc.
4. Abic Investment (1959) Ltd.
5. Abic Ltd.
6. AbZ-Pharma GmbH
7. Actavis d.o.o. Belgrade
8. Actavis Dutch Holding B.V.
9. Actavis Elizabeth LLC
10. Actavis Finance LLC
11. Actavis Group PTC ehf.
12. Actavis Holdco US, Inc.
13. Actavis Kadian LLC
14. Actavis Laboratories FL, Inc.
15. Actavis Laboratories UT, Inc.
16. Actavis Limited
17. Actavis LLC
18. Actavis Mid Atlantic LLC
19. Actavis Pharma S. de R.L. de C.V.
20. Actavis Pharma, Inc.
21. Actavis Pharmaceuticals NJ, Inc.
22. Actavis Puerto Rico Holdings Inc.
23. Actavis South Atlantic LLC
24. Actavis Totowa LLC
25. Actavis Ukraine LLC
26. Actavis US Holding LLC
27. Anda Holdco Corp.
28. Anda Marketing, Inc.
29. Anda Pharmaceuticals, Inc.
30. Anda Puerto Rico Inc.
31. Anda Veterinary Supply, Inc.
32. Anda, Inc.
33. Andrx LLC
34. Anesta LLC
35. Arana Therapeutics, Inc.
36. Asaph II B.V.
37. Assia Chemical Industries Ltd.
38. Auspex Pharmaceuticals, Inc.
39. Balkanpharma Dupnitsa AD
40. Barr International Services, Inc.
41. Barr Laboratories, Inc.
42. Barr Pharmaceuticals, LLC
43. Cephalon (UK) Limited
44. Cephalon Australia (VIC) Pty Ltd
45. Cephalon Clinical Partners, LP
46. Cephalon Development Corporation
47. Cephalon LLC
48. CIMA Labs Inc.
49. Circa Pharmaceuticals West, Inc.
50. Cobalt Laboratories LLC
51. Copper Acquisition Corp.
52. Coventry Acquisition, LLC
53. Cupric Holding Co. LLC
54. Cybear, LLC
55. Doral Manufacturing, Inc.
56. East End Insurance, Ltd
57. FEI Products, LLC
58. Gecko Health Innovations, Inc.
59. GeminX Pharmaceuticals Canada, Inc
60. Genchem Pharma LLC
61. Goldline Laboratories, Inc.
62. Inmobiliaria Lemery, S.A. de C.V.
63. INSPIRE INCUBATOR, LIMITED PARTNERSHIP
64. IVAX (Bermuda) Ltd.
65. IVAX Argentina S.A.
66. IVAX Far East, Inc.
67. IVAX Holdings C.I.
68. IVAX International B.V.
69. IVAX Laboratories Puerto Rico, Inc.

70. IVAX LLC
71. IVAX Pharmaceuticals B.V.
72. IVAX Pharmaceuticals Caribe, Inc.
73. IVAX Pharmaceuticals Mexico, S.A. de C.V.
74. IVAX Pharmaceuticals NV, LLC
75. IVAX Pharmaceuticals, LLC
76. IVAX Specialty Chemicals Sub, LLC
77. IVAX UK Limited
78. Kilburn B.V.
79. Laboratorio Chile, S.A.
80. Laboratorios Davur S.L.U.
81. Labrys Biologics, Inc.
82. Lemery S.A. de C.V.
83. Limited Liability Company "Teva Ukraine"
84. Maancirkel Holding B.V.
85. Marsam Pharmaceuticals LLC
86. Med All Enterprise Consulting (Shanghai) Co.,Limited
87. Mepha Investigação, Desenvolvimento e Fabricação Farmacêutica, Lda.
88. Mepha Pharma AG
89. Mepha Schweiz AG
90. Merckle GmbH
91. MicroDose Therapeutx, Inc.
92. MORIAH BIOTECHNOLOGY LTD
93. Norton (Waterford) Limited
94. Norton Healthcare (1998) Limited
95. Norton Healthcare Limited
96. Novopharm Holdings, Inc.
97. NT Pharma Canada Ltd.
98. Nupathe Inc.
99. Nuvelution TS Pharma, Inc.
100. Odyssey Pharmaceuticals, Inc.
101. Oncotest Teva Ltd
102. Orvet UK
103. Patient Services and Solutions, Inc.
104. Pharma de Espana, Inc.
105. Pharmachemie (Proprietary) Limited
106. Pharmachemie B.V.
107. PharmaPlantex Limited
108. Pharmatrade S.A.
109. PharmNovo LLC
110. Plantex Ltd.
111. PLIVA d.o.o. SARAJEVO
112. PLIVA HRVATSKA d.o.o.
113. PLIVA Ljubljana d.o.o.
114. Pliva Real Estate GmbH
115. PLIVA SKOPJE d.o.o.
116. PLIVA, Inc.
117. Plus Chemicals, branch of Teva Pharmaceuticals International GmbH
118. PT Actavis Indonesia
119. Rakepoll Holding B.V.
120. ratiopharm - Comercio e Industria de Produtos Farmaceuticos, Lda.
121. ratiopharm Arzneimittel Vertriebs-GmbH
122. ratiopharm España S.A.
123. ratiopharm GmbH
124. ratiopharm Immobilienverwaltung GmbH & Co. KG
125. ratiopharm Kazakhstan LLP
126. Representaciones E Investigaciones Medicas S.A. - also called RIMSA
127. Rise Healthcare Ltd
128. Royce Research and Development Limited Partner I
129. Salomon, Levin & Elstein Ltd.
130. Sicor de México S.A. de C.V.
131. Sicor Inc.
132. Sicor Società Italiana Corticosteroidi S.r.l.
133. Sindan-Pharma Srl
134. TAGCO Incorporated
135. TAPI Puerto Rico, Inc.
136. Teva API B.V.
137. Teva API Inc.
138. TEVA API INDIA Private Limited
139. Teva API Japan LTD.
140. Teva API Services Mexico, S.de R.L. de C.V.
141. Teva B.V.
142. Teva Biopharmaceuticals USA, Inc.
143. Teva Biotech GmbH

144. Teva Branded Pharmaceutical Products R&D, Inc.
145. Teva Canada Innovation G.P. - S.E.N.C.
146. TEVA CANADA LIMITED / TEVA CANADA LIMITEE
147. Teva Capital Services Switzerland, branch of Teva Pharmaceuticals International GmbH
148. Teva Czech Industries s.r.o.
149. Teva Denmark A/S
150. Teva Digital Health, Inc.
151. Teva Farmaceutica Ltda
152. Teva Finance Holding B.V.
153. Teva Finance Services II B.V.
154. Teva Finance Services LLC
155. Teva Finland Oy
156. Teva Global Products Limited Partnership
157. Teva GmbH
158. Teva Health GmbH
159. Teva Healthcare India Private Limited
160. Teva Holdco US, Inc.
161. Teva Holdings GK
162. Teva Holdings Ltd.
163. Teva İlaçları Sanayi ve Ticaret Anonim Şirketi
164. Teva India Private Limited
165. TEVA INVERSIONES Y EXPORTACIONES SpA
166. Teva Investments (Pty) Ltd.
167. Teva Israel Ltd
168. Teva İstanbul İlaç San. Ve Tic. Ltd. Şti
169. Teva Italia S.r.l.
170. Teva Laboratoires
171. Teva Limited Liability Company
172. Teva Logistics Services B.V.
173. Teva Medical (Marketing) Ltd.
174. Teva Medical Ltd.
175. Teva Nechasim Ltd.
176. Teva Nederland B.V.
177. Teva Neuroscience, Inc.
178. Teva Norway AS (f.k.a. ratiopharm Norway AS)
179. TEVA OPERATIONS POLAND SPÓŁKA z OGRANICZONĄ ODPOWIEDZIALNOŚCIĄ
180. Teva Parenteral Medicines, Inc.
181. TEVA PERU S.A.
182. Teva Pharma - Produtos Farmacêuticos Lda
183. Teva Pharma (MS) Pty Ltd
184. Teva Pharma (New Zealand) Limited
185. Teva Pharma AG
186. Teva Pharma Australia Pty Ltd
187. Teva Pharma B.V.
188. Teva Pharma Belgium N.V.
189. Teva Pharma EAD
190. Teva Pharma Holdings Limited
191. Teva Pharma Iceland
192. Teva Pharma S.L.U.
193. TEVA PHARMA UK LIMITED
194. Teva Pharmaceutical and Chemical Industries India Private Limited
195. Teva Pharmaceutical Finance Company B.V.
196. Teva Pharmaceutical Finance Company LLC
197. Teva Pharmaceutical Finance IV B.V.
198. Teva Pharmaceutical Finance IV, LLC
199. Teva Pharmaceutical Finance Netherlands II B.V.
200. Teva Pharmaceutical Finance Netherlands III B.V.
201. Teva Pharmaceutical Finance Netherlands IV B.V.
202. Teva Pharmaceutical Finance V B.V.
203. Teva Pharmaceutical Finance V, LLC
204. Teva Pharmaceutical Finance VI, LLC
205. Teva Pharmaceutical Industries Ltd.
206. Teva Pharmaceutical Information Consulting (Shanghai) Co., Ltd.
207. Teva Pharmaceutical Investments Singapore Pte. Ltd
208. Teva Pharmaceutical R&D LP
209. TEVA Pharmaceutical Works Private Limited Company
210. Teva Pharmaceuticals Australia Pty Ltd
211. Teva Pharmaceuticals Colombia S.A.
212. Teva Pharmaceuticals CR, s.r.o.

213. Teva Pharmaceuticals Curacao N.V.
214. Teva Pharmaceuticals Europe B.V.
215. Teva Pharmaceuticals Finance Netherlands B.V.
216. Teva Pharmaceuticals International GmbH
217. TEVA Pharmaceuticals Mexico S.A. de C.V.
218. Teva Pharmaceuticals Panama, S.A
219. Teva Pharmaceuticals Polska spółka z ograniczoną odpowiedzialnością
220. Teva Pharmaceuticals S.R.L.
221. TEVA Pharmaceuticals Slovakia s.r.o.
222. Teva Pharmaceuticals USA, Inc.
223. Teva Pharmaceuticals, Inc.
224. Teva Puerto Rico LLC
225. Teva Respiratory, LLC
226. Teva Sales and Marketing, Inc.
227. Teva Santé SAS
228. Teva Sweden AB
229. Teva Takeda Pharma Ltd.
230. Teva Takeda Yakuhin Ltd.
231. Teva UK Holdings Limited
232. Teva UK Limited
233. TEVA Uruguay S.A.
234. Teva Women's Health, LLC
235. Tevamiri Limited
236. TEVAPHARM INDIA PRIVATE LTD.
237. TEVCO Incorporated
238. TPI U.S. Holdings, Inc.
239. Transpharm Logistik GmbH
240. UAB Teva Baltics
241. Valmed Pharmaceutical, Inc.
242. Watson Laboratories, Inc.
243. Watson Laboratories, Inc.
244. Watson Laboratories, LLC
245. Watson Management Corporation

Exhibit K
Subdivision and Special District Settlement Participation Form

Governmental Entity	State:
Authorized Official	
Address 1:	
Address 2:	
City, State, Zip:	
Phone:	
Email:	

The governmental entity identified above ("*Governmental Entity*"), in order to obtain and in consideration for the benefits provided to the Governmental Entity pursuant to the Agreement dated November 22, 2022 ("*Teva Settlement*"), and acting through the undersigned authorized official, hereby elects to participate in the Teva Settlement, release all Released Claims against all Released Entities, and agrees as follows.

1. The Governmental Entity is aware of and has reviewed the Teva Settlement, understands that all terms in this Election and Release have the meanings defined therein, and agrees that by this Election, the Governmental Entity elects to participate in the Teva Settlement as provided therein.

2. Following the execution of this Settlement Participation Form, the Governmental Entity shall comply with Section III.B of the Teva Settlement regarding Cessation of Litigation Activities.

3. The Governmental Entity shall, within 14 days of the Reference Date and prior to the filing of the Consent Judgment, file a request to dismiss with prejudice any Released Claims that it has filed. With respect to any Released Claims pending in In re National Prescription Opiate Litigation, MDL No. 2804, the Governmental Entity authorizes the Plaintiffs' Executive Committee to execute and file on behalf of the Governmental Entity a Stipulation of Dismissal With Prejudice substantially in the form found at [website link to national settlement website to be provided].

4. The Governmental Entity agrees to the terms of the Teva Settlement pertaining to Subdivisions as defined therein.

5. By agreeing to the terms of the Teva Settlement and becoming a Releasor, the Governmental Entity is entitled to the benefits provided therein, including, if applicable, monetary payments beginning after the Effective Date.

6. The Governmental Entity agrees to use any monies it receives through the Teva Settlement solely for the purposes provided therein.

7. The Governmental Entity submits to the jurisdiction of the court in the Governmental Entity's state where the Consent Judgment is filed for purposes limited to that court's

role as provided in, and for resolving disputes to the extent provided in, the Teva Settlement.

8. The Governmental Entity has the right to enforce the Teva Settlement as provided therein.

9. The Governmental Entity, as a Participating Subdivision or Participating Special District, hereby becomes a Releasor for all purposes in the Teva Settlement, including but not limited to all provisions of Section V (Release), and along with all departments, agencies, divisions, boards, commissions, districts, instrumentalities of any kind and attorneys, and any person in their official capacity elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, and any other entity identified in the definition of Releasor, provides for a release to the fullest extent of its authority. As a Releasor, the Governmental Entity hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the Teva Settlement are intended by Released Entitles and the Governmental Entity to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of the Governmental Entity to release claims. The Teva Settlement shall be a complete bar to any Released Claim.

10. The Governmental Entity hereby takes on all rights and obligations of a Participating Subdivision or Participating Special District as set forth in the Teva Settlement.

11. In connection with the releases provided for in the Teva Settlement, each Governmental Entity expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her, would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Governmental Entity hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Governmental Entities' decision to participate in the Teva Settlement.

12. Nothing herein is intended to modify in any way the terms of the Teva Settlement, to which Governmental Entity hereby agrees. To the extent this Election and Release is interpreted differently from the Teva Settlement in any respect, the Teva Settlement controls.

I have all necessary power and authorization to execute this Election and Release on behalf of the Governmental Entity.

Signature: _____

Name: _____

Title: _____

Date: _____

Exhibit L
Settlement Fund Administrator

[Plaintiffs to Add]

Exhibit M
Settlement Payment Schedule

EXHIBIT M-1: PAYMENT SCHEDULE (Excluding Product)

Payment Year	Additional Restitution Amount & All Attorneys' Fees & Costs Funds	Base Payments (45%)	Incentives A, B, & C (maximum) (48%)	Incentive D Part 1 (maximum) (3.5%)	Incentive D Part 2 (maximum) (3.5%)	Total Abatement	Overall Total (Excluding Product)
Year 1 2023: Effective Date + 30 days	$65,834,268.30	$226,579,162.39	---	---	---	$226,579,162.39	$292,413,430.69
Year 2 July 15, 2024	$65,834,268.30	$108,757,997.98	$117,821,164.41	---	---	$226,579,162.39	$292,413,430.69
Year 3 July 15, 2025	$65,834,268.29	$108,757,997.98	$117,821,164.41	---	---	$226,579,162.39	$292,413,430.68
Year 4 July 15, 2026	$65,834,268.29	$88,139,294.18	$117,821,164.41	$20,618,703.80	---	$226,579,162.39	$292,413,430.68
Year 5 July 15, 2027	$65,834,268.29	$88,139,294.18	$117,821,164.41	$20,618,703.80	---	$226,579,162.39	$292,413,430.68
Year 6 July 15, 2028	$65,834,268.29	$88,139,294.17	$117,821,164.42	$20,618,703.80	---	$226,579,162.39	$292,413,430.68
Year 7 July 15, 2029		$88,139,294.16	$117,821,164.42	$10,309,351.90	$10,309,351.90	$226,579,162.38	$226,579,162.38
Year 8 July 15, 2030		$88,139,294.16	$117,821,164.42	$10,309,351.90	$10,309,351.90	$226,579,162.38	$226,579,162.38
Year 9 July 15, 2031		$88,139,294.16	$117,821,164.42	$10,309,351.90	$10,309,351.90	$226,579,162.38	$226,579,162.38
Year 10 July 15, 2032		$88,139,294.16	$117,821,164.42	$10,309,351.90	$10,309,351.90	$226,579,162.38	$226,579,162.38
Year 11 July 15, 2033		$88,139,294.16	$117,821,164.42	---	$20,618,703.80	$226,579,162.38	$226,579,162.38
Year 12		$88,139,294.16	$117,821,164.42	---	$20,618,703.80	$226,579,162.38	$226,579,162.38

July 15, 2034							
Year 13 July 15, 2035		$88,139,294.16	$117,821,164.42	---	$20,618,703.80	$226,579,162.38	$226,579,162.38
Total	**$395,005,609.76**	**$1,325,488,100.00**	**$1,413,853,973.00**	**$103,093,519.00**	**$103,093,519.00**	**$2,945,529,111.00**	**$3,340,534,720.76**

NOTES:

1. All figures for the base and incentive payments are maximum figures that reflect the following:

   - The credits amount of $666,032,651 for prior settlements, including San Francisco, have already been applied.
   - An assumption that all Eligible States are Settling States.
   - An assumption that all incentives are earned.

2. The Additional Restitution Amount and the state and subdivision fees and costs amounts will be broken out into separate columns before the exhibit is finalized.

3. Any offsets under Section V.C for Non-Settling States would be deducted from the Base Payments and the maximum Incentive Payments (A, B & C and D) by subtracting from all payments the amount of the payment times the State Allocation Percentage assigned to each Non-Settling State in Exhibit F-2.

4. A schedule for Product is in Exhibit M-2 below. Settlement Product (and Settlement Product Cash Conversion Amount) are not included in this Exhibit M-1.

EXHIBIT M-2: PRODUCT PAYMENT SCHEDULE

Payment Year	Settlement Product Maximum (Valued at WAC)	Settlement Product Cash Conversion Maximum
Year 1 2023: Effective Date + 30 days	---	---
Year 2 July 15, 2024	$120,000,000.00	$20,000,000.00
Year 3 July 15, 2025	$120,000,000.00	$20,000,000.00
Year 4 July 15, 2026	$120,000,000.00	$20,000,000.00
Year 5 July 15, 2027	$120,000,000.00	$20,000,000.00
Year 6 July 15, 2028	$120,000,000.00	$20,000,000.00
Year 7 July 15, 2029	$120,000,000.00	$20,000,000.00
Year 8 July 15, 2030	$120,000,000.00	$20,000,000.00
Year 9 July 15, 2031	$120,000,000.00	$20,000,000.00
Year 10 July 15, 2032	$120,000,000.00	$20,000,000.00
Year 11 July 15, 2033	$120,000,000.00	$20,000,000.00
Year 12 July 15, 2034	---	$20,000,000.00
Year 13 July 15, 2035	---	$20,000,000.00
Total	**$1,200,000,000.00**	**$240,000,000.00**

NOTE: The Product Payment Schedule is showing the maximum amount of product offered (valued at WAC), which assumes all states choose to accept their full allotment of Settlement Product, and the maximum available Settlement Product Cash Conversion Amount, which assumes all

states fully convert the Settlement Product to cash payments. The purpose of the chart is to show the periods of time in which Settlement Product or Settlement Product Cash Conversion would be provided and the maximum amount of each per payment year. Individual Settling States will choose between Settlement Product and Settlement Product Cash Conversion (or a mix of both). The maximum amount of Settlement Product available to each Individual Settling State measured in quantity of kits per payment year is shown in Exhibit D, Schedule D-I. The deadlines in Exhibit D govern the Parties' Settlement Product obligations related to forecasting, ordering, shipment, and delivery. This chart should not suggest any obligation of Teva to provide both the maximum amount of product and the maximum amount of cash conversion.

EXHIBIT M-3: PAYMENT SCHEDULE FOR FEE FUNDS, COST FUNDS AND ADDITIONAL RESTITUTION

(Breakdown of Second Column in Exhibit M-1)

Payment Year	Attorney Fee and MDL Cost Fund	State Cost Fund	State Outside Counsel Fee Fund	Additional Restitution Amount	Total (Shown in Ex. M-1, 2nd Column)
Year 1 2023: Effective Date + 30 days	$55,215,837.93	$6,371,058.22	$2,123,686.08	$2,123,686.07	$65,834,268.30
Year 2 July 15, 2024	$55,215,837.93	---	$5,309,215.19	$5,309,215.18	$65,834,268.30
Year 3 July 15, 2025	$55,215,837.92	---	$5,309,215.19	$5,309,215.18	$65,834,268.29
Year 4 July 15, 2026	$55,215,837.92	---	$5,309,215.18	$5,309,215.19	$65,834,268.29
Year 5 July 15, 2027	$55,215,837.92	---	$5,309,215.18	$5,309,215.19	$65,834,268.29
Year 6 July 15, 2028	$55,215,837.92	---	$5,309,215.18	$5,309,215.19	$65,834,268.29
Total	**$331,295,027.54**	**$6,371,058.22**	**$28,669,762.00**	**$28,669,762.00**	**$395,005,609.76**

Exhibit N
Additional Restitution Amount Allocation

Alabama	2.3544553964%
American Samoa	0.0252611439%
Arizona	3.5048272664%
Arkansas	1.3753411634%
California	14.6374841151%
Colorado	2.4514797691%
Connecticut	1.9088192709%
District of Columbia	0.2655292635%
Guam	0.0708707436%
Illinois	4.9075008432%
Indiana	3.2706871936%
Iowa	1.0945978299%
Kansas	1.1567892116%
Maine	0.7809353668%
Maryland	3.1138810201%
Massachusetts	3.3985744182%
Michigan	5.0191656318%
Minnesota	1.9139084896%
Missouri	2.9590263237%
Montana	0.4611170652%
N. Mariana Islands	0.0246470315%
Nebraska	0.6154478970%
New Hampshire	0.8534639430%
New Jersey	4.0647812071%
New York	7.9526836824%
North Carolina	4.7952508697%
North Dakota	0.2508461905%
Oregon	2.0273342550%
Pennsylvania	6.7692496373%
South Carolina	2.2710141754%
Tennessee	3.9659507168%
Utah	1.6917508641%
Vermont	0.3754597005%
Virgin Islands	0.0465728102%
Virginia	3.3639612508%
Washington	3.4211884061%
Wisconsin	2.5940380399%
Wyoming	0.2461077964%

Exhibit O
Adoption of a State-Subdivision Agreement

A State-Subdivision Agreement shall be applied if it meets the requirements of Section VIII and is approved by the State and by the State's Subdivisions as follows:

1. *Requirements for Approval*. A State-Subdivision Agreement shall be deemed as agreed to when it has been approved by the State and either (a) Subdivisions whose aggregate "Population Percentages," determined as set forth below, total more than sixty percent (60%), or (b) Subdivisions whose aggregate Population Percentages total more than fifty percent (50%) provided that these Participating Subdivisions also represent fifteen percent (15%) or more of the State's counties or parishes (or, in the case of Settling States whose counties and parishes do not function as local governments, 15% of or more of the Settling State's non-county Subdivisions), by number.

2. *Approval Authority*. Approval by the State shall be by the Attorney General. Approval by a Subdivision shall be by the appropriate official or legislative body pursuant to the required procedures for that Subdivision to agree to a legally binding settlement.

3. *Population Percentage Calculation*. For purposes of this Exhibit O only, Population Percentages shall be determined as follows: For States with functional counties or parishes[4] the Population Percentage of each county or parish shall be deemed to be equal to (a) (1) two hundred percent (200%) of the population of such county or parish, minus (2) the aggregate population of all Primary Incorporated Municipalities located in such county or parish, divided by (b) two hundred percent (200%) of the State's population. A "*Primary Incorporated Municipality*" means a city, town, village or other municipality incorporated under applicable state law with a population of at least 25,000 that is not located within another incorporated municipality. The Population Percentage of each Primary Incorporated Municipality shall be equal to its population (including the population of any incorporated or unincorporated municipality located therein) divided by two hundred percent (200%) of the State's population; provided that the Population Percentage of a Primary Incorporated Municipality that is not located within a county shall be equal to two hundred percent (200%) of its population (including the population of any incorporated or unincorporated municipality located therein) divided by two hundred percent (200%) of the State's population. For all States that do not have functional counties or parishes, the Population Percentage of each non-county Subdivision (including any incorporated or unincorporated municipality located therein), shall be equal to its population divided by the State's population.

4. *Preexisting Agreements and Statutory Provisions*. A State may include with the notice to its Subdivisions an existing agreement, a proposed agreement, or statutory provisions regarding the distribution and use of settlement funds and have the acceptance of such an agreement or statutory provision be part of the requirements to be an Initial Participating Subdivision.

[4] Certain states do not have counties or parishes that have functional governments, including: Alaska, Connecticut, Massachusetts, Rhode Island, and Vermont.

5. *Revised Agreements*. A State-Subdivision Agreement that has been revised, supplemented, or refined shall be applied if it meets the requirements of Section VIII and is approved by the State and by the State's Subdivisions pursuant to the terms above.

Exhibit P
Teva Injunctive Term Sheet

I. DEFINITIONS

A. "Cancer-Related Pain Care" shall mean care that provides relief from pain resulting from a patient's active cancer or cancer treatment, as distinguished from treatment provided during remission**.**

B. "CDC Guideline Recommendations" shall mean the 12 enumerated Recommendations published by the U.S. Centers for Disease Control and Prevention (CDC) for the prescribing of opioid pain medication for patients 18 and older in primary care settings as part of its 2016 Guideline for Prescribing Opioids for Chronic Pain (CDC Guidelines), as updated or amended by the CDC.

C. "Downstream Customer Data" shall mean transaction information that Teva collects relating to its direct customers' sales to Downstream Customers, including but not limited to chargeback data tied to Teva providing certain discounts, "867 data," and IQVIA data.

D. "Downstream Customers" shall mean the customers to which Teva's direct customers sell Teva product.

E. "End-of-Life Care" shall mean care for persons with a terminal illness or at high risk for dying in the near future in hospice care, hospitals, long-term care settings, or at home.

F. "Health Care Provider" shall mean any U.S.-based physician or U.S.-based health care practitioner who is licensed to provide health care services or to prescribe pharmaceutical products and any U.S.-based medical facility, practice, hospital, clinic or pharmacy.

G. "Host Institution" shall refer to the academic institution(s) selected by the Settling States to host and maintain the Public Document Repository, by, without limitation: maintaining control and security over documents in the Public Document Repository; providing an accessible user interface; and providing clear and transparent explanations of its procedures to the public.

H. "In-Kind Support" shall mean payment or assistance in the form of goods, commodities, services, or anything else of value.

I. "Investigator Sponsored Study" (ISS) shall mean a study in which an individual both initiates and conducts an investigation, and under whose immediate direction the investigational drug is administered or dispensed. In addition to the standard investigator responsibilities, the sponsor-investigator is also responsible for planning, conducting, and monitoring the study, managing data, preparing reports, and providing oversight, monitoring, and compliance with regulatory reporting requirements.

J. "Lobby" and "Lobbying" shall have the same meaning as "lobbying activities" and "lobbying contacts" under the federal lobbying disclosure act, 2 U.S.C. § 1602 *et seq*., and any analogous state or local provisions governing the person or entity being lobbied. As used in this Agreement, "Lobby" and "Lobbying" include Lobbying directly or indirectly, through grantees or Third Parties.

K. "Opioid(s)" shall mean all naturally occurring, synthetic, or semisynthetic substances that interact with opioid receptors and act like opium.

L. "Opioid-Induced Side Effects Treatment Product" shall mean any pharmaceutical product that has been approved by the FDA and indicated for the treatment of Opioid-induced side effects. The term "Opioid-Induced Side Effects Treatment Product" shall not include products that treat opioid abuse, addiction or overdose, or respiratory depression.

M. "Opioid Product(s)" shall mean all current and future medications containing Opioids approved by the U.S. Food & Drug Administration (FDA) and listed by the DEA as Schedule II, III, or IV drugs pursuant to the federal Controlled Substances Act, including but not limited to buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, oxycodone, oxymorphone, tapentadol, and tramadol. The term "Opioid Products(s)" shall not include methadone, buprenorphine, and other substances when used exclusively to treat opioid abuse, addiction or overdose; raw materials and/or immediate precursors used in the manufacture or study of Opioids or Opioid Products, but only when such materials and/or immediate precursors are sold or marketed exclusively to DEA-licensed manufacturers or DEA-licensed researchers.

N. "OUD" shall mean opioid use disorder defined in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM–5)*, as updated or amended.

O. "Promote," "Promoting," and "Promotion" shall mean dissemination of information or other practices intended or that could be reasonably anticipated to (i) increase sales, prescriptions, or the utilization of prescription products in the United States, or (ii) that attempt to influence prescribing practices or formulary decisions in the United States. These terms shall not include the provision of scientific information or data in response to unsolicited requests from Health Care Providers or payors as allowed in Section II. A. 2. (e)-(h).

P. "Qualified Researcher" shall mean any researcher holding a faculty appointment or research position at an institution of higher education, a research organization, a nonprofit organization, or a government agency.

Q. "Suspicious Order" shall have the same meaning as provided by the Controlled Substances Act, 21 U.S.C. §§ 801-904, and the regulations promulgated thereunder and analogous state laws and regulations.

R. "Teva" shall mean Teva Pharmaceutical Industries Ltd., Teva Pharmaceuticals USA, Inc., Cephalon, Inc., Watson Laboratories, Inc., Actavis LLC, and Actavis Pharma, Inc., f/k/a

Watson Pharma Inc., and each of their parents, subsidiaries, predecessors, successors, affiliates, divisions, assigns, officers, directors, agents, employees and principals, but shall exclude Teva's wholly owned distributor subsidiary, Anda, Inc. For the avoidance of doubt, Teva does not include entities or individuals controlled by or employed by separate and distinct legal entities that are not directly or indirectly owned by Teva.

S. "Teva Opioid Products" shall mean Vantrela ER and Opioid Products listed on Teva's product catalog as of the Effective Date or that are added thereafter.

T. "Third Party" shall mean any person or entity other than Teva or a government entity.

U. "Treatment of Pain" shall mean the provision of therapeutic modalities to alleviate or reduce pain.

V. "Unbranded Information" shall mean any information that does not identify a specific product(s).

II. INJUNCTIVE RELIEF

A. Ban on Promotion

1. Teva shall not engage in the Promotion of Opioids or Opioid Products including, but not limited to, by:

    a. Employing or contracting with sales representatives or other persons to Promote Opioids or Opioid Products to Health Care Providers or patients, or to persons that influence or determine the Opioid Products included in formularies;

    b. Using speakers, key opinion leaders, thought leaders, lecturers, and/or speaking events for Promotion of Opioids or Opioid Products;

    c. Sponsoring, or otherwise providing financial support or In-Kind Support to medical education programs relating to Opioids or Opioid Products;

    d. Creating, sponsoring, operating, controlling, or otherwise providing financial support or In-Kind Support to any website, network, and/or social or other media account for the Promotion of Opioids or Opioid Products;

    e. Creating, sponsoring, distributing, or otherwise providing financial support or In-Kind Support for materials Promoting Opioids or Opioid Products, including, but not limited to,

brochures, newsletters, pamphlets, journals, books, and guides that Promote Opioids or Opioid Products;

f. Creating, sponsoring, or otherwise providing financial support or In-Kind Support for advertisements that Promote Opioids or Opioid Products, including, but not limited to, internet advertisements or similar content that Promote Opioids or Opioid Products, and providing hyperlinks or otherwise directing internet traffic to advertisements that Promote Opioids or Opioid Products; and

g. Engaging in Internet search engine optimization or other techniques designed to Promote Opioids or Opioid Products by improving rankings or making content appear among the top results in an Internet search or otherwise be more visible or more accessible to the public on the Internet.

2. Notwithstanding Section II.A.1 directly above, Teva may:

a. Maintain corporate websites;

b. Maintain a website for any Opioid Product that contains principally the following content: the FDA-approved package insert, medication guide, and labeling, and a statement directing patients or caregivers to speak with a licensed Health Care Provider;

c. Provide information or support the provision of information as expressly required by law or any state or federal government agency with jurisdiction in the State where the information is provided. Teva may, in relation to its expressly required participation in the TIRF REMS program, remain involved in the preparation of materials and training concerning the process for enrollment in the TIRF REMS program;

d. Provide the following by mail, electronic mail, on or through Teva's corporate or product websites or through other electronic or digital methods: FDA-approved package insert, medication guide, approved labeling for Opioid Products or other prescribing information for Opioid Products that are published by a state or federal government agency with jurisdiction in the State where the information is provided;

e. Provide scientific and/or medical information in response to an unsolicited request by a Health Care Provider consistent with the standards set forth in the FDA's Draft Guidance for Industry, *Responding to Unsolicited Requests for Off-Label Information About Prescription Drugs and Medical Devices* (Dec. 2011, as updated or amended by the FDA) and Guidance for Industry, *Good Reprint Practices for the Distribution of Medical Journal Articles and*

Medical or Scientific Reference Publications on Unapproved New Uses of Approved Drugs and Approved or Cleared Medical Devices (Jan. 2009, as updated or amended by the FDA). However, Teva shall not provide the following publication in response to an unsolicited request by a Health Care Provider: Weinstein, SM, et al., Fentanyl buccal tablet for the treatment of breakthrough pain in opioid-tolerant patients with chronic cancer pain: a long-term, open-label safety study. *Cancer*; 2009;115:2571-2579.

f. Provide a response to any unsolicited question or request from a patient or caregiver, directing the patient or caregiver to the FDA-approved labeling or to speak with a licensed Health Care Provider without describing the safety or effectiveness of Opioids or any Opioid Product (beyond directing the patient or caregiver to the label) or naming any specific provider or healthcare institution; or directing the patient or caregiver to speak with their insurance carrier regarding coverage of an Opioid Product;

g. Provide Health Care Economic Information, as defined at 21 U.S.C. § 352(a), to a payor, formulary committee, or other similar entity with knowledge and expertise in the area of health care economic analysis consistent with standards set forth in the FDA's Draft Questions and Answers Guidance for Industry and Review Staff, *Drug and Device Manufacturer Communications With Payors, Formulary Committees, and Similar Entities* (Jan. 2018*)*, as updated or amended by the FDA;

h. Provide information relating solely to the pricing and availability of any Opioid Product and negotiate contract and pricing terms with direct customers or Downstream Customers;

i. Sponsor or provide financial support or In-Kind Support for an accredited or approved continuing medical education program required by either an FDA-approved Risk Evaluation and Mitigation Strategy (REMS) program or other federal or state law or regulation applicable in the State where the information is provided through an independent Third Party, which shall be responsible for the continuing medical education program's content without the participation of Teva; and

j. Provide Unbranded Information in connection with managing pain in End-of-Life Care and/or Cancer-Related Pain Care relating to: the use of Opioids for managing such pain, as long as the Unbranded Information identifies Teva as the source of the information.

3. Teva shall not engage in the following specific Promotional activity relating to any Opioid-Induced Side Effects Treatment Product.

a. Employing or contracting with sales representatives or other persons to Promote Opioid-Induced Side Effects Treatment Products to Health Care Providers or patients;

b. Using speakers, key opinion leaders, thought leaders, lecturers, and/or speaking events for Promotion of Opioid-Induced Side Effects Treatment Products;

c. Sponsoring, or otherwise providing financial support or In-Kind Support to medical education programs relating to Opioid-Induced Side Effects Treatment Products;

d. Creating, sponsoring, or otherwise providing financial support or In-Kind Support for advertisements that Promote Opioid-Induced Side Effects Treatment Products, including, but not limited to, internet advertisements or similar content that Promote Opioid-Induced Side Effects Treatment Products, and providing hyperlinks or otherwise directing internet traffic to advertisements that Promote Opioid-Induced Side Effects Treatment Products; and

e. Engaging in any other Promotion of Opioid-Induced Side Effects Treatment Products in a manner that encourages the utilization of Opioids or Opioid Products or normalizes the use of Opioids or Opioid Products for chronic pain.

4. Notwithstanding Section II.A.3 directly above, Teva may engage in Promotional activity for Opioid-Induced Side Effects Treatment Products that have non-Opioid related indications, so long as such Promotion does not explicitly or implicitly associate such Opioid-Induced Side Effects Treatment Product with Opioids or Opioid Products, except for linking to the FDA label associated with such Opioid-Induced Side Effects Treatment Product.

5. Treatment of Pain.

a. Teva shall not, either through Teva or through Third Parties, Promote the Treatment of Pain in a manner that directly or indirectly encourages the utilization of Opioids or Opioid Products.

b. Teva shall not, either through Teva or through Third Parties, Promote the concept that pain is undertreated in a manner that directly or indirectly encourages the utilization of Opioids or Opioid Products.

c. Teva shall not disseminate Unbranded Information, including Unbranded Information about a medical condition or disease state that contains links to branded information about Opioid Products or that generates data that Teva uses for Promotion of Opioids or Opioid Products.

6. To the extent that Teva engages in conduct permitted by Sections II.A.2 and A.4 above, Teva shall do so in a manner that is:

   a. Consistent with the CDC Guideline Recommendations, as applicable; and

   b. Truthful, non-misleading, accurate, non-deceptive, and does not omit any relevant information.

B. No Financial Reward or Discipline Based on Volume of Opioid Sales

1. Teva shall not provide financial incentives to its sales and marketing employees or discipline its sales and marketing employees based upon sales volume or sales quotas for Opioid Products. However, this provision shall not prohibit financial incentives based on overall company performance.

2. Teva shall not offer or pay any remuneration (including any kickback, bribe, or rebate) not subject to the Discount/Rebate Safe Harbor directly or indirectly, to or from any person in return for the prescribing, sale, use or distribution of Opioid Product.

3. Teva's compensation policies and procedures shall be designed to ensure compliance with this Agreement and other legal requirements.

C. Ban on Funding/Grants to Third Parties.

1. Teva shall not directly or indirectly provide financial support or In-Kind Support to any Third Party that Promotes or is for education about Opioids, Opioid Products, the Treatment of Pain, or Opioid-Induced Side Effects Treatment Products, excluding financial support otherwise required by the Judgment or by a federal or state agency.

2. Teva shall not create, sponsor, provide financial support or In-Kind Support to, operate, or control any medical society or patient advocacy group relating to any Opioids, Opioid Products, Treatment of Pain, or Opioid-Induced Side Effects Treatment Product.

3. Teva shall not provide a direct link to any Third Party website or materials or otherwise distribute materials created by a Third Party relating to any Opioids, Opioid Products, the Treatment of Pain, or Opioid-Induced Side Effects Treatment Products.

4. The above prohibitions do not prevent Teva from engaging with Third Parties in connection with and consistent with the activities Teva is permitted to undertake pursuant to Sections II.A.2 and II.A.4.

5. Teva shall not use, assist, or employ any Third Party to engage in any activity that Teva itself would be prohibited from engaging in pursuant to this Agreement.

6. Teva shall not enter into any contract or agreement with any person or entity or otherwise attempt to influence any person or entity in such a manner that has the purpose or foreseeable effect of limiting the dissemination of information regarding the risks and side effects of using Opioids.

7. Teva shall not compensate or support Health Care Providers or organizations to advocate for formulary access or treatment guideline changes that would have the effect of increasing access to any Opioid Product by third-party payers, *i.e.*, any entity, other than an individual, that pays or reimburses for the dispensing of prescription medicines, including, but not limited to, managed care organizations and pharmacy benefit managers.

8. No Board of Directors member, Executive Officer, or senior management-level employee of a United States Teva entity may serve as a director, board member, employee, agent, or officer of any entity that engages in Promotion relating to Opioids, Opioid Products, the Treatment of Pain, or Opioid-Induced Side Effects Treatment Products. For the avoidance of doubt, nothing in this provision shall preclude an officer or executive management-level employee of Teva from concurrently serving on the board of a hospital.

9. Teva shall play no role in appointing persons to the board, or hiring persons to the staff, of any entity that engages in Promotion relating to any Opioids, Opioid Products, the Treatment of Pain, or Opioid-Induced Side Effects Treatment Products.

10. For the avoidance of doubt:

    a. Nothing in this Section II.C shall be construed or used to prohibit Teva from providing financial or In-Kind Support to:

        i. universities, medical institutions, or hospitals, for the purpose of addressing, or providing education on (I) the treatment of OUD; (II) the prevention and treatment of opioid abuse, addiction, or overdose, including medication-assisted treatment for opioid addiction; and/or (III) rescue medications for opioid overdose;

        ii. the American Medical Association (AMA), the American Cancer Society (ACS) or any other medical society solely dedicated to cancer treatment; or

        iii. broad based trade associations including, without limitation, PhRMA (Pharmaceutical Research and Manufacturers of

America), HDA (Healthcare Distribution Alliance), AAM (Association for Accessible Medications), PCMA (Pharmaceutical Care Management Association), and NACDS (National Association of Chain Drug Stores), or successor organizations to any of the foregoing.

11. Teva will be in compliance with Sections II.C.2 and II.C.3 with respect to support of an individual Third Party to the extent that the Independent Monitor determines that such support does not increase the risk of the inappropriate use of Opioids and that Teva has not acted for the purpose of increasing the use of Opioids.

12. The above prohibitions do not apply to the donation of product pursuant to any settlement agreements or resolutions to litigation and/or investigations.

13. Reference to any specific Third Party organization above shall in no way be construed as an approval or sanction by the States of such Third Party's conduct or business practices.

D. Lobbying Restrictions.

1. Teva shall not Lobby for the enactment of any federal, state, or local legislation or promulgation of any rule or regulation that:

   a. Encourages or requires Health Care Providers to prescribe Opioids or sanctions Health Care Providers for failing to prescribe Opioids or failing to treat pain with Opioids;

   b. Would have the effect of limiting access to any non-Opioid alternative pain treatments; or

   c. Pertains to the classification of any Opioid or Opioid Product as a scheduled drug under the Controlled Substances Act.

2. Teva shall not Lobby against the enactment of any provision within any federal, state, local legislation, rule, or regulation that supports:

   a. The use of non-pharmacologic therapy and/or non-Opioid pharmacologic therapy to treat chronic pain over or instead of Opioid use, including but not limited to third party payment or reimbursement for such therapies;

   b. The use and/or prescription of immediate release Opioids instead of extended release Opioids when Opioid use is initiated, including but not limited to third party reimbursement or payment for such prescriptions;

   c. The prescribing of the lowest effective dose of an Opioid, including but not limited to third party reimbursement or payment for such prescription;

d. The limitation of initial prescriptions of Opioids to treat acute pain;

e. The prescribing and other means of distribution of naloxone to minimize the risk of overdose, including but not limited to third party reimbursement or payment for naloxone;

f. The use of urine testing before starting Opioid use and annual urine testing when Opioids are prescribed, including but not limited to third party reimbursement or payment for such testing;

g. Evidence-based treatment (such as using medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for OUD, including but not limited to third party reimbursement or payment for such treatment; or

h. The implementation or use of Opioid drug disposal systems.

3. Teva shall not Lobby against the enactment of any federal, state or local legislation or promulgation of any rule or regulation expanding the operation or use of PDMPs, including but not limited to provisions requiring Health Care Providers to review PDMPs when Opioid use is initiated and with every prescription thereafter.

4. Notwithstanding the foregoing restrictions in subparagraphs II.D.1-3, the following conduct is not restricted:

a. Challenging the enforcement of, or suing for declaratory or injunctive relief with respect to legislation, rules or regulations referred to in subparagraphs II.D.1;

b. Communications made by Teva in response to a statute, rule, regulation, or order requiring such communication;

c. Communications by a Teva representative appearing before a federal or state legislative or administrative body, committee, or subcommittee as result of a mandatory order or subpoena commanding that person to testify; or
Responding, in a manner consistent with this Agreement, to an unsolicited request for the input on the passage of legislation or the promulgation of any rule or regulation when such request is submitted in writing specifically to Teva from a government entity directly involved in the passage of that legislation or promulgation of that rule or regulation;

d. Conduct permitted pursuant to Section II.C.10; or

e. Responding to requests from government agencies and/or participating in panels at the request of a government agency.

5. Teva shall require all of its officers and employees engaged in Lobbying to certify

in writing to Teva that they are aware of and will fully comply with the provisions of this Exhibit P with respect to Lobbying.

E. Monitoring and Reporting of Off-Label Use of Transmucosal Immediate-Release Fentanyl (TIRF) Products.

1. Teva shall monitor for off-label prescribing of its TIRF products in the United States, including analysis that utilizes prescription and patient diagnosis data, using the TIRF REMS program data accessible to Teva to determine:

    a. the indication(s) or diagnoses for which the TIRF product was prescribed in the United States and whether those indications or diagnoses were on-label or off-label; and

    b. use by opioid-intolerant patients in the United States.

2. Upon request of one of the following in a Settling State, Teva shall provide the requestor with the data and analysis described in Subsection II.E.1, to be used for law enforcement, counter-detailing, academic or medical research, or public health and other non-commercial purposes: State Attorney General or other law enforcement agency, State medical board, State board of pharmacy, Qualified Researchers, medical and pharmacy directors of health systems or clinics, medical associations, and other public health officials, including but not limited to city health authorities, county medical directors, and State public health authorities.

3. Teva shall provide the data and analysis described in Subsection II.E.1 in chart format, including breakdown of prescriptions by year, diagnosis, and county.

F. Ban on High Dose Opioids.

1. After any related commercial commitments existing on February 15, 2022 have expired, Teva shall not manufacture, promote, or distribute any oxycodone pill that exceeds 40 milligrams.

G. Ban on Prescription Savings Programs.

1. Teva shall not directly or indirectly offer any discounts, coupons, rebates, or other methods which have the effect of reducing or eliminating a patient's co-payments or the cost of prescriptions (*e.g.*, free trial prescriptions) for any Opioid Product. This does not preclude Teva from offering discounts, rebates, or other customary pricing adjustments to commercial partners for the non-retail sale of any Opioid Product, including providing discounts, coupons, rebates, or other methods for use by retail chain pharmacies, such as CVS, Walgreens, Rite Aid and the like, as well as contracting intermediaries, such as Buying Groups, Group Purchasing Organizations, and Pharmacy Benefit Managers.

2. Teva shall not directly or indirectly provide financial support to any Third Party that offers coupons, discounts, rebates or other methods which have the effect of reducing or

eliminating a patient's co-payments or the cost of prescriptions (*e.g.*, free trial prescriptions) for any Opioid Product.

3. Teva shall not directly or indirectly assist patients, Health Care Providers, or pharmacies regarding the claims and/or prior authorization process required for third-party payers to approve claims involving any Opioid Product.

H. Monitoring and Reporting of Direct and Downstream Customers.

1. Teva shall operate an effective monitoring and reporting system in compliance with 21 C.F.R. § 1301.71(a), 21 C.F.R. §1301.74(b), 21 U.S.C. § 823(e) and Section 3292 of the SUPPORT for Patients and Communities Act, that shall include processes and procedures that:

    a. Utilize all reasonably available transaction information to identify a Suspicious Order of an Opioid Product by a direct customer;

    b. Utilize all reasonably available Downstream Customer Data to identify whether a Downstream Customer poses a material risk of diversion of an Opioid Product;

    c. Utilize all information Teva receives that bears upon a direct customer's or a Downstream Customer's diversion activity or potential for diversion activity, including reports by Teva's employees, customers, Health Care Providers, law enforcement, state, tribal, or federal agencies, or the media; and

    d. Upon request (unless otherwise required by law), report to a State agency any direct customer or Downstream Customer in such agency's State identified as part of the monitoring required by (a)-(c), above, and any customer relationship in such State terminated by Teva relating to diversion or potential for diversion. These reports shall include the following information, to the extent known to Teva:

        i. The identity of the downstream registrant and the direct customer(s) identified by Teva engaged in the controlled substance transaction(s), to include each registrant's name, address, business type, and DEA registration number;

        ii. The dates of reported distribution of controlled substances by direct customers to the downstream registrant during the relevant time period;

        iii. The drug name, drug family or NDC and dosage amounts reportedly distributed;

        iv. The transaction or order number of the reported distribution; and

        v. A brief narrative providing a description of the circumstances leading to Teva's conclusion that there is a risk of diversion.

2. Teva shall not provide to any direct customer an Opioid Product to fill an order identified as a Suspicious Order unless Teva's DEA Compliance Department investigates and finds that the order is not suspicious.

3. Upon request, Teva shall provide full cooperation and assistance to any federal, state or local law enforcement investigations of potential diversion or suspicious circumstances involving Opioid Products, including criminal law enforcement agencies, drug control agencies, professional licensing boards, and Attorney General's offices.

I. General Terms

1. To the extent that any provision in the Agreement between Teva and the States conflicts with federal or state law or regulation, the requirements of the law or regulation will prevail.

2. Teva shall not make any written or oral statement about Opioids or any Opioid Product that is unfair, false, misleading, deceptive or unconscionable. For purposes of this paragraph, "Opioid Product" shall also include methadone, buprenorphine, and other substances when used exclusively to treat opioid abuse, addiction, or overdose

3. Teva shall not represent that Opioids or any Opioid Product(s) have approvals, characteristics, uses, benefits, or qualities that they do not have. For purposes of this paragraph, "Opioid Product" shall also include methadone, buprenorphine and other substances when used exclusively to treat opioid abuse, addiction, or overdose.

4. For the avoidance of doubt, nothing in this Agreement is intended to or shall be construed to prohibit Teva in any way whatsoever from (a) taking legal or factual positions with regard to its Opioid Product(s) in defense of litigation or other legal proceedings or investigations, (b) communicating its positions and responding to media inquiries concerning litigation, investigations, reports, or other documents or proceedings relating to Teva or its Opioid Products, or (c) maintaining a website explaining its litigation positions and responding to allegations concerning its Opioid Products.

5. Upon the request of any Settling State Attorney General, Teva shall provide the requesting State Attorney General with copies of the following, within 30 days of the request:

    a. Any litigation or civil or criminal law enforcement subpoenas or Civil Investigative Demands relating to Teva's Opioid Product(s); and

    b. Warning or untitled letters issued by the FDA regarding Teva's Opioid Product(s) and all correspondence between Teva and the FDA related to such letters.

6. Nothing contained herein shall prohibit Teva from divesting any Opioid or Opioid Product, in each case, including providing technical development services, transferring know-how and patents, and/or providing such other support services in connection therewith, provided

that all provisions of this Exhibit P shall apply to any subsequent purchaser with respect to the divested Opioid or Opioid Product.

7. This Exhibit P applies to the manufacture, sales, Promotion, marketing and distribution by Teva within the United States and its territories or involving Health Care Providers.

8. For the avoidance of doubt, nothing in this Exhibit P is intended to prohibit or restrict Teva's Promotion of non-Opioid products that are approved for the Treatment of Pain (including Ajovy), including by providing educational or other information about such non-Opioid products or providing support or funding to Third Parties specifically to support the use of such non-Opioid products. Teva shall not be restricted from referencing current pain care treatments or treatment modalities for purposes of Promotion of such non-Opioid products so long as such reference does not Promote Opioids or Opioid Products. The exclusion from this Consent Judgment of non-Opioid products approved for the Treatment of Pain shall in no way be construed as an approval or a sanction by the States of Teva's business practices with respect to any such non-Opioid product.

J. Compliance with All Laws and Regulations Relating to the Sale, Promotion, and Distribution of Any Opioid Product

1. Teva shall comply with all state laws and regulations that relate to the sale, promotion, distribution, and disposal of any Opioid Product, provided that nothing in this paragraph requires Teva to violate federal law or regulations, including but not limited to:

   a. State Controlled Substances Act, including all guidance issued by applicable state regulator(s);

   b. State Consumer Protection Laws and Unfair Trade Practices Acts;

   c. State laws and regulations related to opioid prescribing, distribution and disposal; and

   d. State Specific Laws.

K. Compliance Deadlines.

1. Teva must be in full compliance with the provisions included in Exhibit P by the Effective Date.

L. Training

1. Teva shall provide regular training, at least once per year, to relevant employees on their obligations imposed by this Agreement.

III. CLINICAL DATA TRANSPARENCY

A. Data to Be Shared

1. Teva shall share the following clinical data through a third-party data archive that conforms to the requirements defined below to increase the transparency of its clinical research.

    a. Teva shall make available all previously disclosed data and/or information regarding Teva Opioid Products;

    b. Teva shall make available all previously unreleased data regarding Teva Opioid Products located in its possession, custody or control after a reasonably diligent search, for both approved and unapproved indications, including:

        i. Full analyzable data set(s) (including individual participant-level data de-identified by an independent biostatistician);

        ii. The clinical study report(s) redacted for commercial or personal identifying information;

        iii. The full protocol(s) (including the initial version, final version, and all amendments); and

        iv. Full statistical analysis plan(s) (including all amendments and documentation for additional work processes); and

    c. Teva shall make available the above information for all studies for any new Teva Opioid Product or new indications within 6 months after regulatory approval or 18 months after study completion, whichever occurs later.

    d. Data related to Investigator Sponsored Studies completed prior to the Effective Date are subject to the requirements in this Section III.A.1 if such data can be located in Teva's possession, custody or control after a reasonably diligent search.

    e. Data related to Investigator Sponsored Studies completed after the Effective Date are subject to the requirements of this Section III.A.1.

B. Third-Party Data Archive

1. Teva shall share the above information via a third-party data archive that makes clinical data available to Qualified Researchers with a bona fide scientific research proposal.

2. The data archive shall have a panel of reviewers with independent review authority to determine whether the researchers are qualified, whether a research application seeks data for bona fide scientific research, and whether a research proposal is complete.

3. The panel may exclude research proposals with a commercial interest.

C. Non Interference

1. Teva shall not interfere with decisions made by the staff or reviewers associated with the third-party data archive.

D. Data Use Agreement

1. Any data sharing agreement with a Qualified Researcher who receives shared data via the third-party data archive shall contain contact information for Teva's pharmacovigilance staff. Every agreement shall require the lead Qualified Researcher to inform Teva's pharmacovigilance staff within 24 hours of any determination that research findings could detrimentally impact the risk-benefit assessment regarding the product. The lead Qualified Researcher may also inform regulatory authorities of the safety signal impacting the risk-benefit assessment. Teva's pharmacovigilance staff shall take all necessary and appropriate steps upon receipt of such safety information, including but not limited to notifying regulatory authorities or the public.

E. Cost

1. Teva shall bear all costs for making data and/or information available.

IV. TERM

A. Unless addressed in Section IV.B below, each term of this Exhibit P shall apply for thirteen (13) years from the Effective Date.

B. The provisions of Section II.A ("Ban on Promotion"), Section II.I ("General Provisions"), and Section II.J ("Compliance with All Laws and Regulations Relating to the Sale, Promotion and Distribution of Any Opioid Product") shall not be subject to any term.

V. DOCUMENT DISCLOSURE

A. Documents Subject to Public Disclosure

The following documents must be provided to each Settling State and are subject to public disclosure in perpetuity, except for the redactions authorized by section B:

1. All Teva-produced documents admitted as trial exhibits in *In re Opioid Litigation*, Index No. 400000/2017 (N.Y. Sup. Ct., Suffolk County), *The City and County of*

San Francisco, California and the People of the State of California, acting by and through San Francisco City Attorney David Chiu v. Purdue Pharma L.P., et al., Case No. 3:18-cv-7591-CRB (N.D. Cal.), *The State of West Virginia ex rel. Patrick Morrisey, Attorney General v. Teva Pharmaceutical Industries Ltd., et al.*, Civil Action No. 19-C-104 BNE (W. Va. Cir. Ct., Boone County), or *The People of the State of California, acting by and through Santa Clara County Counsel James R. Williams, Orange County District Attorney Tony Rackauckas, Los Angeles County Counsel Mary C. Wickham, and Oakland City Attorney Barbara J. Parker v. Purdue Pharma L.P., et al.*, Case No. 30-2014-00725287-CU-BT-CXC (Cal. Super. Ct., Orange County) and *Oklahoma v. Purdue Pharma L.P., et al.*, No. CJ-2017-816 (Cleveland Cty., Okla. Dist. Ct.), together with complete trial transcripts.

2. All Teva deposition transcripts and exhibits from or produced in the matters identified in section A.1, as well as in *In re Nat'l Prescription Opiate Litig.*, No. 1:17-MD-2804 (N.D. Ohio).

3. All summary judgment filings, proposed findings of fact and law, and expert reports relating to the claims against Teva that were filed in the matters identified in section A.2 and A.3, together with related exhibits.

4. All documents, indices, and privilege logs produced in *In re Nat'l Prescription Opiate Litig.*, No. 1:17-MD-2804 (N.D. Ohio) ("the MDL") bearing the bates prefixes Acquired_Actavis and TEVA_MDL_A and produced on or before October 4, 2019, except personnel files produced on Jan. 16, 2019, Jan. 20, 2019, Feb. 8, 2019, and Aug. 10, 2019.

5. All documents provided under this provision must be provided in an appropriate electronic format with appropriate metadata.

B. Information That Teva May Redact

1. The following categories of information are exempt from public disclosure:

   a. Information subject to trade secret protection. A "trade secret" is information, including a formula, pattern, compilation, program, device, method, technique or process, that (a) derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure and use; and (b) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy. Even if the information falls within the definition, "trade secret" does not include information reflecting sales or promotional strategies, tactics, targeting, or data, or internal communications related to sales or promotion or information in documents dated more than five (5) years before the disclosure required by this section.

   b. Confidential personal information. "Confidential personal information" means individual Social Security or tax identification numbers, personal financial account numbers, passport numbers, driver license numbers, home

addresses, home telephone numbers, personal email addresses, and other personally identifiable information protected by law from disclosure. "Confidential personal information" does not include the names of Teva's officers, directors, employees, consultants, agents, or attorneys or of prescribers or of officials of a government agency.

c. Information that is inappropriate for public disclosure because it is subject to personal privacy interests recognized by law (e.g., HIPAA), or contractual rights of third parties that Teva may not abrogate.

d. Information regarding Teva employees' personal matters unrelated to Teva, including emails produced by Teva custodians discussing vacation or sick leave, family, or other personal matters.

e. Information that is protected by the attorney–client or attorney work product privilege.

f. Financial documents designated as "Highly Confidential" or "Highly Confidential Information" under Case Management Order No. 2 in *In re Nat'l Prescription Opiate Litig.*, No. 1:17-MD-2804 (N.D. Ohio) and produced in response to the April 3, 2019 Ruling Regarding Jurisdictional Discovery on Defendants Teva, and Mallinckrodt, including tax returns including all schedules and attachments, policies regarding accounting, and annual reports.

C. Redaction of Documents Containing Protected Information

1. Whenever a document contains information subject to a claim of exemption pursuant to section B, Teva will provide the document in redacted form. Such redactions must indicate that trade secret and/or private information, as appropriate, has been redacted. Redactions are limited to the minimum redactions possible, consistent with section B.

2. Teva must provide to each Settling State a log noting each document redacted. The log must also provide fields stating the basis for redacting the document, with sufficient detail to allow an assessment of the merits of the assertion. The log is subject to public disclosure in perpetuity. The log shall be provided by the production deadline.

3. In addition to the redacted documents, Teva shall, upon any Settling State's request, also produce all documents identified in Section A above in unredacted form to such Settling State at the same time, but only to the extent the document was produced by Teva in an unredacted form in the underlying litigation, and only for the purpose of permitting a merits assessment and potential challenge of the redaction pursuant to section VII herein.

D. Public Disclosure Through a Document Repository

1. Each Settling State may publicly disclose all documents covered by this section through a public repository maintained by a governmental, non-profit, or academic institution. Each Settling State may specify the terms of any such repository's use of those documents, including allowing the repository to index and make searchable all documents subject to public disclosure, including the metadata associated with those documents.

E. Timeline for Production

1. Teva shall produce all documents required by Section A within nine months from the Effective Date.

F. Support Payment

1. Within thirty (30) calendar days of the Effective Date, Teva will make one-time payments totaling $1,375,000 to the University of California, San Francisco Foundation (UCSF Foundation) and The Johns Hopkins University, to be used to support a public repository of documents subject to this section.

VI. INDEPENDENT MONITOR

A. Independent Monitor Committee

1. Within thirty (30) calendar days of the Effective Date, the Settling States shall designate a group of States to serve on an Independent Monitor Committee as the Settling States' representatives in the administration of the relevant terms of these Independent Monitor provisions (hereinafter, "Independent Monitor Committee").

B. Independent Monitor Selection and Engagement

1. Teva shall engage an Independent Monitor to review Teva's compliance with this Exhibit P. The Independent Monitor shall have or shall employ or retain personnel who have appropriate qualifications and experience related to the pharmaceutical industry and the laws governing the manufacture, marketing and sale of pharmaceuticals and controlled substances and the applicable requirements of federal and state law. To the extent that additional expertise is required for the engagement, the Independent Monitor may retain the services of third-parties, after consultation with and input from Teva and the Independent Monitor Committee.

2. The Independent Monitor and any retained third-parties shall at all times act in good faith and with integrity and fairness towards all parties.

3. The parties have agreed that the initial Independent Monitor shall be Gil Soffer of Katten, Muchin Rosenman LLP

4. The Independent Monitor can be replaced upon agreement of the Independent Monitor Committee and Teva. If the parties so agree, the process for selecting a replacement Independent Monitor shall be the process described in paragraphs i-iii below. The provisions of this Exhibit P shall apply to any successor Independent Monitor.

    i. The Independent Monitor Committee and Teva will each identify the names of up to three (3) individuals, groups of individuals or firms as the pool of recommended candidates to serve as the Monitor, within (60) calendar days of the date the parties agree to replace the Monitor.

    ii. The Independent Monitor Committee and Teva shall have the right to meet with and otherwise evaluate the candidates and conduct appropriate interviews of the personnel who are expected to work on the project. The following qualifications may be relevant considerations for the Independent Monitor Committee and Teva in evaluating candidates: (a) prior monitorship or oversight experience; (b) experience with federal health care and suspicious order monitoring laws, regulations, and programs; (c) experience with the pharmaceutical or health care industry; (d) access to sufficient resources to carry out the duties of the Monitor; and (e) experience with internal investigations or the investigative process.

iii. If the Independent Monitor Committee and Teva do not agree on the appointment of any of the candidates from the initial pool of recommendations, the Independent Monitor Committee and/or Teva may identify additional qualified candidates, as the timeline permits. However, in the event the parties fail to reach agreement on a Monitor within ninety (90) calendar days of the date the parties agree to replace the monitor, the Independent Monitor Committee shall appoint an Independent Monitor.

5. In the event that the Independent Monitor Committee and Teva do not agree to the dismissal of the Independent Monitor, either the Independent Monitor Committee (through one of the Settling States on the Independent Monitor Committee) or Teva may submit the question of the Independent Monitor's dismissal to the court to which the Consent Judgment was presented in any Settling States on the Independent Monitor Committee, and the Independent Monitor shall only be dismissed if the court finds that there is Good Cause for dismissal. Good Cause for dismissal shall mean (a) a material and substantial breach of the terms of this Exhibit P by the Independent Monitor, including the failure to comply with the terms and limitations of this Exhibit P; (b) any act of dishonesty, misappropriation, embezzlement, intentional fraud, or similar conduct by the Independent Monitor; (c) any intentional act of bias or prejudice in favor or against either party by the Independent Monitor; or (d) conduct by the Independent Monitor that demonstrates unfitness to fulfill the functions of the Independent Monitor reasonably and competently. Good Cause shall not include disagreements with the decisions of the Independent Monitor pursuant to this Exhibit P, unless there is a clear pattern in the Independent Monitor's decisions that demonstrates that the Independent Monitor has not been acting as an independent third party in rendering decisions.

C. **Costs of the Independent Monitor**

1. Teva shall pay all reasonable and necessary fees and costs of the Independent Monitor. Reasonable and necessary fees and costs shall be limited to those set out in the Independent Monitor work plan and contract, but in no event shall they exceed $1,000,000 per year, inclusive of fees and costs for any personnel or third-parties that the Independent Monitor engages or retains.

D. **Term and Reporting Periods**

1. The term of the Independent Monitor will be five (5) years from the Effective Date, divided into ten (10) six-month periods for purposes of the reviews and reporting described in Section VI.H ("Reporting Periods").

2. The Independent Monitor shall be terminated and the oversight shall cease within thirty (30) calendar days of the Independent Monitor Committee receiving a certification from Teva that it has stopped selling Opioid Products for end-use consumption in the United States.

E. **Independent Monitor's Scope of Work**

1. The Independent Monitor's responsibilities shall encompass Teva's ongoing compliance

with the specific requirements of the Exhibit P as it relates to the following areas: (1) Promotion and sale of Opioids or Opioid Products; (2) Promotion of Opioid-Induced Side Effects Treatment Product; (3) Promotion relating to the Treatment of Pain; (4) Financial Reward or Discipline Based on Volume of Opioid Sales; (5) funding and grants to third parties concerning Opioids, Opioid Products, or the Treatment of Pain; (6) lobbying concerning Opioids, Opioid Products, or the Treatment of Pain; (7) Prescription Savings Programs for Opioid Products; (8) Monitoring and Reporting of Direct and Downstream Customers; (9) training concerning Teva's obligations under Exhibit P (hereinafter referred to as the "Scope of Work"). The Independent Monitor's Scope of Work and review applies to the manufacture, sales, Promotion, marketing and distribution by Teva within the United States and its territories or involving Health Care Providers. The Independent Monitor will report his or her findings as provided in Section VI.H below.

2. Within thirty (30) calendar days after the appointment of the Independent Monitor, the Independent Monitor Committee and Teva shall agree with the Independent Monitor on a work plan and contract. The work plan shall set forth in detail the manner in which the Independent Monitor will carry out his or her responsibilities under this Exhibit P, and the general scope of information that the Independent Monitor will seek to review in fulfilling the Independent Monitor's Scope of Work. It is not intended that the Independent Monitor will conduct his or her own inquiry into the historical events that allegedly gave rise to this Consent Judgment or into matters beyond the scope of the Injunctive Terms of this Consent Judgment. The work plan shall also include all reasonable and necessary costs of the Independent Monitor, as well as a process by which Teva may challenge Independent Monitor costs as excessive, duplicative or unnecessary.

3. If the Independent Monitor, the Independent Monitor Committee and Teva fail to reach agreement on a work plan within the designated time frame, the Independent Monitor Committee shall determine a fair and reasonable work plan and contract in consultation with Teva and the Independent Monitor.

4. At least annually, and more frequently if appropriate, Teva and the Independent Monitor Committee will meet in person or virtually to discuss the work of the Independent Monitor and any suggestions, comments, or improvements Teva may wish to discuss with or propose to the Independent Monitor Committee, including with respect to the scope and costs of the work of the Independent Monitor, unless Teva and the Independent Monitor Committee believe such a meeting is unnecessary.

F. **Independent Monitor Access to Information**

1. In connection with its review of Teva's compliance with the terms identified in Section VI.E above, the Independent Monitor shall be vested with reasonably broad discretion to review Teva's compliance with the terms of Exhibit P covered by the Scope of Work, including access to documents and the right to interview employees, as is reasonably necessary to fulfill its duties under this Consent Judgment, with reasonable notice to Teva and without unreasonable interference in Teva's or its employees' ability to perform day-to-day operations. The Independent Monitor shall have all powers reasonable and necessary to efficiently and effectively discharge its responsibilities.

2. The Chief Compliance Officer of Teva shall serve as the primary point of contact for the Independent Monitor to facilitate the Independent Monitor's reasonable access to documents, materials, or employees necessary to review for compliance with Exhibit P. The Independent Monitor shall make a good faith effort to leverage Teva's existing compliance mechanisms when reviewing Teva's compliance with the terms of Exhibit P identified in Section VI.E, above. The Independent Monitor shall communicate any request for documents, materials, or access to employees to the Chief Compliance Officer, but, subject to the terms hereof, is not prohibited from speaking with any other current or former employees of Teva. Teva shall not intimidate, harass, threaten, or penalize any employee or former employee for his or her cooperation with or assistance to the Independent Monitor.

3. If at any time the Independent Monitor reasonably believes that there is undue delay, resistance, interference, limitation, or denial of access to any records or to any employee deemed necessary by the Independent Monitor to implement or review compliance by Teva with the Injunctive Terms, the Independent Monitor may meet and confer with Teva's Chief Compliance Officer. If the Independent Monitor cannot resolve such limitation or denial, it shall be immediately reported to the Independent Monitor Committee.

4. To the extent that any of the documents requested by the Independent Monitor contain material protected from disclosure by the attorney-client privilege or attorney work product doctrine, Teva may redact the privileged material before providing the documents to the Independent Monitor.

G. **Settling States' Access to Independent Monitor**

1. There shall be no limitation on the ability of the Independent Monitor to communicate at any time with Settling States regarding Teva's conduct.

H. **Independent Monitor Reports**

1. Observations and Recommendations

   i. To the extent that the reviews conducted by the Independent Monitor raise questions or concerns about particular decisions made or conduct engaged in by Teva regarding issues within the Scope of Work, the Independent Monitor may conduct interviews of personnel of Teva who were involved in the decisions or conduct at issue. If the Independent Monitor continues to have questions or concerns about particular decisions or conduct, after conducting interviews, the Independent Monitor shall include a description of the question or concern in the Final Report described below. If the Independent Monitor notes any areas for potential improvement regarding matters within the Scope of Work during the course of the reviews conducted pursuant to the Injunctive Relief Terms, the Independent Monitor shall include any such recommendations in the Final Report. Collectively, any such questions, concerns or recommendations will be referred to as "Observations and Recommendations."

2. Draft and Final Reports

i. No later than thirty (30) calendar days after the close of a Reporting Period and/or at any other time deemed reasonably necessary by the Independent Monitor, the Independent Monitor shall provide Teva with a draft report identifying and detailing any Potential Violations and the bases therefore (the "Draft Report"). Potential Violations shall mean Teva's failure to comply with the specific provisions of Exhibit P that the Independent Monitor is tasked with overseeing as set forth in the Scope of Work and work plan, as reasonably determined by the Independent Monitor and supported by documentation (where available). Identification of Potential Violations in the Draft Report shall not be considered a breach of the Consent Judgment. Teva shall have the right to cure any Potential Violation, in accordance with the below provisions. The Draft Report will also contain detailed descriptions of any Observations and Recommendations.

ii. Within thirty (30) calendar days of its receipt of the Draft Report, Teva will provide comments and responses to the Draft Report. Teva will, among other things:

(1) Respond to each Potential Violation, including, where appropriate, explaining why no violation occurred, or describing any corrective action taken (or to be taken) as a result of the findings made by the Independent Monitor, including, where appropriate, providing documentation supporting a relevant decision or additional context explaining the Potential Violation and why it occurred.

(2) Respond to each Observation and Recommendation.

iii. Within thirty (30) calendar days of receipt of Teva's comments and responses to the Draft Report, the Independent Monitor shall provide a final report (the "Final Report"). The Final Report shall be provided simultaneously to the Independent Monitor Committee and Teva. The Independent Monitor Committee may share the Final Report with any Settling State. The Independent Monitor shall provide the Independent Monitor Committee with a copy of any Draft Report that has been subsequently revised upon conferral with Teva and, upon request, the Independent Monitor Committee shall be granted access to any other Draft Reports.

iv. The Final Report shall set forth:

(1) The Independent Monitor's evaluation of Teva's compliance with the provisions identified in Sections VI.E and VI.F above and the factual basis for the Independent Monitor's conclusions, including whether a Potential Violation has occurred and an explanation of the nature of the Potential Violation.

(2) The Independent Monitor's conclusion as to whether Teva has cured any Potential Violations. In the event that the Independent Monitor changes its initial determination after receiving Teva's response, the Independent Monitor will report its initial determination and its revised determination in the Final Report in sufficient detail so that the Independent Monitor

Committee can evaluate the basis for both determinations. The identification of uncured Potential Violations in the Final Report can be considered a breach of the Consent Judgment.

(3) The Final Report need not recite or describe comprehensively Teva's history or compliance policies, procedures and practices, but rather may focus on those areas with respect to which the Independent Monitor wishes to make recommendations, if any, for improvement or which the Independent Monitor otherwise concludes merit particular attention.

(4) The Final Report shall include a listing of the Observations and Recommendations made by the Independent Monitor and responses of Teva.

v. For the duration of the Independent Monitor's term, the Settling States may take any action against Teva to enforce the Injunctive Relief terms within the Independent Monitor's Scope of Work as identified in Section VI.E above upon receiving notice of an uncured Potential Violation in a Final Report. The Settling States are not required to abide by the procedures set forth in the Notice and Cure provision below with regard to such uncured Potential Violations.

vi. For the duration of the Independent Monitor's term, should a Settling State disagree with the Independent Monitor's determination as to whether a Potential Violation has occurred or been cured under the Injunctive Relief terms within the Independent Monitor's Scope of Work as identified in Section VI.E above, the Settling State shall meet and confer with the Independent Monitor, the Independent Monitor Committee, and Teva to express its concerns. Teva shall have a reasonable opportunity to explain why it believes it is in compliance with Exhibit P, to further explain the actions taken to cure the Potential Violation and/or to take additional corrective actions to address the state's concerns. If, after engaging in this meet and confer process and affording Teva a reasonable opportunity to explain or take further action, the Settling State is not satisfied that the Potential Violation has been cured, it may take any action to enforce the terms of this Consent Judgment.

vii. Notwithstanding Sections VI.H.2.v and VI.H.2.vi, the Settling States may take any action, including, but not limited to legal action to enforce compliance with the Consent Judgment, without delay if the Settling State believes that a threat to the health or safety of the public requires immediate action.

viii. The Independent Monitor's reports and testimony may be used by the Settling States in any action or proceeding. No action or lack of action by the Settling States regarding information received from the Independent Monitor regarding Teva's conduct shall be considered affirmation, acceptance, or ratification of that conduct by the Settling States.

ix. Nothing in this Judgment limits the right of the Settling States to conduct investigations or examinations unrelated to the work of the Independent Monitor.

I. **Confidentiality**

1. Teva may designate materials and information that it believes contain trade secret or other commercially sensitive information as "Confidential." Materials and information provided by Teva to the Independent Monitor that are designated "Confidential" (and any parts, portions, or derivations thereof) and shall not be disclosed or distributed to any person or entity other than those authorized by these provisions, subject to the provisions in Section VI.H.2.e.

2. All materials obtained from Teva by the Independent Monitor and in the Independent Monitor's possession shall be returned to Teva or destroyed at the conclusion of the Independent Monitor's term.

3. If any of the Settling States receive a request for disclosure of any material or information received by the Settling State from the Independent Monitor, pursuant to a subpoena, court order, data practices act, freedom of information act, public information act, public records act, or similar law ("Third Party Request") the Attorney General shall notify Teva of the Third Party Request and the Confidential Information to be disclosed so that Teva may seek a protective order or otherwise challenge or object to the disclosure. Each of the Settling States agrees to provide Teva with at least ten (10) business days' advance notice before complying with any Third-Party Request for Confidential Information, except where state law requires a lesser period of advance notice.

J. **Retention of Documents**

1. Teva shall generate, retain and make readily available to any of the Settling States for inspection, upon reasonable notice and without the necessity of a subpoena or other legal process, all material records and documents reasonably necessary to document compliance with Exhibit P. Teva shall maintain these records and documents for a minimum of five (5) years after the Independent Monitor's last Final Report.

VII. ENFORCEMENT

A. For the purposes of resolving disputes with respect to compliance with Exhibit P, other than those addressed in Sections VI.H.2.v and VI.H.2.vi, should any of the Settling States have reason to believe that Teva has violated a provision of Exhibit P, then such Settling State shall notify Teva in writing of the specific objection, identify with particularity the provisions of Exhibit P that the practice appears to violate, and give Teva thirty (30) days to respond to the notification ("Response Period").

B. Upon receipt of written notice from any of the Settling States, Teva shall provide a written response to the Settling State's notification, containing either a statement explaining why Teva believes it is in compliance with Exhibit P, or a detailed explanation of how the alleged violation occurred and a statement explaining how and when Teva intends to remedy or has remedied the alleged violation. Teva may request a reasonable amount of additional time to cure any violation through such remedial measures ("Cure Period") and the Settling State shall not unreasonably withhold approval of such request.

C. The Settling State may not take any action concerning the alleged violation of Exhibit P during the Response and Cure Periods. Nothing shall prevent the Settling State from agreeing in writing to provide Teva with additional time beyond the thirty (30) days to respond to the notice. However, the Settling State may take any action, including, but not limited to legal action to enforce compliance with the Consent Judgment, without delay if the Settling State believes that a threat to the health or safety of the public requires immediate action.

D. The Settling State may bring an action against Teva to enforce the terms of Exhibit P, but only after providing Teva an opportunity to respond to the notification and, if agreed upon, a period to cure any violation, as described above, or within any other period as agreed to by Teva and the Settling State.

E. Nothing in this Consent Judgment shall be interpreted to limit any Settling State's Civil Investigative Demand ("CID") or investigative subpoena authority, to the extent such authority exists under applicable state law.

F. Nothing herein shall be construed to exonerate any failure to comply with any provision of Exhibit P after the Effective Date, or to compromise the authority of any Settling State to take action for any failure to comply with Exhibit P.

Exhibit Q
Anda Injunctive Relief

I. INTRODUCTION

A. Within ninety (90) days of the Effective Date unless otherwise set forth herein, Anda shall implement the injunctive relief terms set forth in Sections II through XIX (the "*Injunctive Relief Terms*") in its Controlled Substance Monitoring Program ("*CSMP*").

B. The Effective Date of these Injunctive Relief Terms shall be defined by Section I of the Settlement Agreement, dated as of November 22, 2022, which incorporates these Injunctive Relief Terms as Exhibit Q.

C. The parties acknowledge that agreement to the Injunctive Relief Terms does not constitute an admission that Anda's existing CSMP does not comply with the requirements of law. Anda shall modify its CSMP as required by the Injunctive Relief Terms within ninety (90) days of the Effective Date.

D. The Parties acknowledge that Anda is predominantly a Secondary Source Distributor (as defined herein) to the Anda Customers, has in place a CSMP, and will develop a modified CSMP in accordance with this Agreement, that is tailored to the business of distributing products to Customers as a Secondary Source Distributor. The Parties acknowledge that the Anda CSMP may be different from the CSMPs implemented by other distributors, including other Primary or Secondary Source Distributors.

E. Primary Source Distributors and Secondary Source Distributors may use different analytical tools to identify and characterize Customers' ordering patterns, order frequencies and order sizes, and deviations therefrom. Analytical tools and, where applicable, algorithms, adopted and implemented by any particular distributor are not dispositive of the appropriate methods and tools to be implemented by Anda or other distributors.

F. Nothing contained herein shall prohibit Anda from divesting any or all of its distribution operations provided that all provisions of this Injunctive Relief shall apply to any subsequent purchaser with respect to the divested operations.

II. TERM

A. The duration of the Injunctive Relief Terms contained in Sections IV through XVI shall be ten (10) years from the Effective Date.

III. DEFINITIONS

A. *"Anda."* Anda, Inc. and Anda Pharmaceuticals, Inc. and each of their current and former parents, subsidiaries, predecessors, successors, affiliates, divisions, assigns, officers, directors, agents, employees and principals.

B. *"Audit Report."* As defined in Section XVIII.I.3.

C. *"Big 3 Distributor Injunctive Terms."* Exhibit P of the Settlement Agreement, dated as of July 21, 2021, between McKesson Corporation, Cardinal Health, Inc., and AmerisourceBergen Corporation and certain States and subdivisions.

D. *"Chain Customers."* Chain retail pharmacies that have centralized corporate headquarters and have multiple specific retail pharmacy locations from which Controlled Substances are dispensed to individual patients.

E. *"Chief Diversion Control Officer."* As defined in Section IV.A.

F. *"Clearinghouse."* The system established by Section XVII of the Big 3 Distributor Injunctive Terms.

G. *"Clearinghouse Advisory Panel."* As defined in Section XVII.B.4 of the Big 3 Distributor Injunctive Terms.

H. *"Controlled Substances."* Those substances designated under schedules II-V pursuant to the federal Controlled Substances Act and the laws and regulations of the Settling States that incorporate federal schedules II-V. For purposes of the requirements of the Injunctive Relief Terms, Gabapentin shall be treated as a Controlled Substance, except for purposes of Section XII for Customers located in States that do not regulate it as a controlled substance or similar designation (e.g., drug of concern).

I. *"Corrective Action Plan."* As defined in Section XIX.B.7.b.

J. *"CSMP."* As defined in Section I.A.

K. *"CSMP Committee."* As defined in Section VI.A.

L. *"Customers."* Refers collectively to current, or where applicable potential, Chain Customers and Independent Retail Pharmacy Customers. "Customers" do not include long-term care facilities, hospital pharmacies, and pharmacies that serve exclusively inpatient facilities.

M. *"Data Security Event."* Refers to any compromise, or threat that gives rise to a reasonable likelihood of compromise, by unauthorized access or inadvertent disclosure impacting the confidentiality, integrity, or availability of Dispensing Data.

N. *"Dispensing Data."* Includes, unless altered by the Clearinghouse Advisory Panel: (i) unique patient IDs; (ii) patient zip codes; (iii) the dates prescriptions were dispensed; (iv) the NDC numbers of the drugs dispensed; (v) the quantities of drugs dispensed; (vi) the day's supply of the drugs dispensed; (vii) the methods of payment for the drugs dispensed; (viii) the prescribers' names; (ix) the prescribers' NPI or

DEA numbers; and (x) the prescribers' zip codes or addresses. The Clearinghouse will be solely responsible for collecting Dispensing Data.

O. *"Draft Report."* As defined in Section XVIII.I.1.

P. *"Effective Date."* As defined in Section I.B.

Q. *"Highly Diverted Controlled Substances*." Includes: (i) oxycodone; (ii) hydrocodone; (iii) hydromorphone; (iv) tramadol; (v) oxymorphone; (vi) morphine; (vii) methadone; (viii) carisoprodol; (ix) alprazolam; and (x) fentanyl. Anda shall annually review this list to determine whether changes are appropriate and shall add Controlled Substances to the list of Highly Diverted Controlled Substances as needed based on information provided by the DEA and/or other sources related to drug diversion trends. Anda shall notify the State Compliance Review Committee and the Monitor of any additions to the list of Highly Diverted Controlled Substances. Access to Controlled Substances predominately used for Medication-Assisted Treatment shall be considered when making such additions.

R. *"Independent Retail Pharmacy Customers."* Retail pharmacy locations that do not have centralized corporate headquarters and dispense Controlled Substances to individual patients.

S. *"Injunctive Relief Terms."* As defined in Section I.A.

T. *"Monitor."* As defined in Section XVIII.

U. *"National Arbitration Panel."* As defined by Section I of the Settlement Agreement, dated as of November 22, 2022 which incorporates these Injunctive Relief Terms as Exhibit.

V. *"NDC."* National Drug Code.

W. *"Non-Controlled Substance."* Prescription medications that are not Controlled Substances.

X. *"Notice of Potential Violation."* As defined in Section XIX.B.2.

Y. *"Order."* A unique Customer request on a specific date for (i) a certain amount of a specific dosage form or strength of a Controlled Substance or (ii) multiple dosage forms and/or strengths of a Controlled Substance. For the purposes of this definition, each line item on a purchasing document or DEA Form 222 is a separate order, except that a group of line items either in the same drug family or DEA base code (based upon the structure of Anda's CSMP) may be considered to be a single order.

Z. *"Pharmacy Customer Data."* Aggregated and/or non-aggregated data provided by the Customer for a 90-day period.

1. To the extent feasible based on the functionality of a Customer's pharmacy management system, Pharmacy Customer Data shall contain (or, in the case of non-aggregated data, shall be sufficient to determine) the following:

    a) A list of the total number of prescriptions and dosage units for each NDC for all Controlled Substances and non-Controlled Substances;

    b) A list of the top five prescribers of each Highly Diverted Controlled Substance by dosage volume and the top ten prescribers of all Highly Diverted Controlled Substances combined by dosage volume. For each prescriber, the data shall include the following information:

        (1) Number of prescriptions and doses prescribed for each Highly Diverted Controlled Substance NDC;

        (2) Number of prescriptions for each unique dosage amount (number of pills per prescription) for each Highly Diverted Controlled Substance NDC;

        (3) Prescriber name, DEA registration number, and address; and

        (4) Medical practice/specialties, if available;

    c) Information on whether the method of payment was cash for (a) Controlled Substances, and (b) non-Controlled Substances; and

    d) Information on top ten patient residential areas by five-digit ZIP code prefix for filled Highly Diverted Controlled Substances by dosage volume, including number of prescriptions and doses for each Highly Diverted Controlled Substance NDC.

2. Anda is not required to obtain Pharmacy Customer Data for all Customers. Pharmacy Customer Data only needs to be obtained under circumstances required by the Injunctive Relief Terms and the applicable CSMP policies and procedures. Anda's CSMP policies and procedures shall describe the appropriate circumstances under which and methods to be used to obtain and analyze Pharmacy Customer Data.

3. Anda shall only collect, use, disclose or retain Pharmacy Customer Data consistent with applicable federal and state privacy and consumer protections laws. Anda shall not be required to collect, use, disclose or retain any data element that is prohibited by law or any element that would require notice to or consent from the party who is the subject of the data element, including, but not limited to, a third party (such as a prescriber) to permit collection, use, disclosure and/or retention of the data.

AA. *"Primary Source Distributor."* With respect to any individual Customer, a distributor of pharmaceutical products who serves with respect to such Customer as the primary source of Controlled Substances to such Customer.

BB. *"Potential Violation*." As defined in Section XIX.B.1.

CC. "*Reporting Periods."* As defined in Section XVIII.D.1.

DD. *"Secondary Source Distributor."* With respect to any individual Customer, a distributor of pharmaceutical products who does not serve with respect to such Customer as the primary source of Controlled Substances to such Customer.

EE. *"Settling State."* Means any Eligible State that has entered into the Settlement Agreement, dated as of November 22, 2022 which incorporates these Injunctive Relief Terms as Exhibit Q.

FF. *"State Compliance Review Committee."* The initial State Compliance Review Committee members are representatives from the Attorneys General Offices of Connecticut, North Carolina, and Tennessee. The membership of the State Compliance Review Committee may be amended at the discretion of the Settling States.

GG. *"Suspicious Orders."* As defined under federal law and regulation and the laws and regulations of the Settling States that incorporate the federal Controlled Substances Act. Suspicious Orders currently include, but are not limited to, orders of unusual size, orders deviating substantially from a normal pattern, and orders of unusual frequency.

HH. *"Threshold."* The total volume of a particular drug family, DEA base code, or a particular formulation of a Controlled Substance that Anda shall allow a Customer to purchase in any particular period. This term may be reassessed during Phase 2-B of the Clearinghouse.

II. *"Third Party Request."* A request from an entity other than Anda, a Settling State, or the Monitor pursuant to a subpoena, court order, data practices act, freedom of information act, public information act, public records act, or similar law.

JJ. *"Top Prescriber."* A prescriber who, for a Customer, is either (i) among the top five (5) prescribers of each Highly Diverted Controlled Substance or (ii) among the top ten (10) prescribers of Highly Diverted Controlled Substances combined, as determined from the most recent Pharmacy Customer Data for that Customer.

IV. CSMP PERSONNEL

A. Anda shall establish or maintain the position of Chief Diversion Control Officer, or other appropriately titled position, to oversee Anda's CSMP. The Chief Diversion Control Officer shall have appropriate experience regarding compliance with the laws and regulations concerning Controlled Substances, in particular laws and regulations requiring effective controls against the potential diversion of Controlled Substances. The Chief Diversion Control Officer shall report directly to either the

senior executive responsible for U.S. pharmaceutical distribution or the most senior legal officer at Anda.

B. The Chief Diversion Control Officer shall be responsible for the approval of material revisions to the CSMP.

C. The Chief Diversion Control Officer shall provide at least quarterly reports to the CSMP Committee regarding Anda's operation of the CSMP, including the implementation of any changes to the CSMP required by these Injunctive Relief Terms.

D. Anda's CSMP functions, including, but not limited to, the onboarding and approval of new Customers for the sale of Controlled Substances, setting and adjusting Customer Thresholds for Controlled Substances, terminating or suspending Customers, and submitting Suspicious Orders and other reports to Settling States (or the Clearinghouse, when operational), but excluding support necessary to perform these functions, shall be conducted exclusively by Anda's CSMP personnel or qualified third-party consultants.

E. Staffing levels of Anda's CSMP department shall be reviewed periodically, but at least on an annual basis, by Anda's CSMP Committee. This review shall include consideration of relevant developments in technology, law, and regulations to ensure the necessary resources are in place to carry out the program in an effective manner.

F. Personnel in Anda's CSMP department shall not report to individuals in Anda's sales department, and sales personnel shall not be authorized to make decisions regarding the promotion, compensation, demotion, admonition, discipline, commendation, periodic performance reviews, hiring, or firing of CSMP personnel.

G. The CSMP policies and procedures shall be published in a form and location readily accessible to all CSMP personnel at Anda.

V. INDEPENDENCE

A. Anda's sales personnel compensated with commissions shall not be compensated based on revenue or profitability targets or expectations for sales of Controlled Substances. However, Anda's personnel may, as applicable, be compensated (including incentive compensation) based on formulas that include total sales for all of Anda's products, including Controlled Substances. The compensation of sales personnel shall not include incentive compensation tied solely to sales of Controlled Substances.

B. For any Anda personnel who are compensated at least in part based on Customer sales, Anda shall ensure the compensation of such personnel is not decreased by a CSMP-related suspension or termination of a Customer or as a direct result of the reduction of sales of Controlled Substances to a Customer pursuant to the CSMP.

C. Anda's sales personnel shall not be authorized to make decisions regarding the implementation of CSMP policies and procedures, the design of the CSMP, the setting or adjustment of Thresholds, or other actions taken pursuant to the CSMP, except sales personnel must provide information regarding compliance issues to CSMP personnel promptly. Anda's sales personnel are prohibited from interfering with, obstructing, or otherwise exerting control over any CSMP department decision-making.

D. Anda shall review its compensation and non-retaliation policies and, if necessary, modify and implement changes to those policies to effectuate the goals of, and incentivize compliance with, the CSMP.

E. Anda shall maintain a telephone, email, and/or web-based "hotline" to permit employees and/or Customers to anonymously report suspected diversion of Controlled Substances or violations of the CSMP, Anda company policy related to the distribution of Controlled Substances, or applicable law. Anda shall share the hotline contact information with their employees and Customers. Anda shall maintain all complaints made to the hotline, and document the determinations and bases for those determinations made in response to all complaints.

VI. OVERSIGHT

A. To the extent not already established, Anda shall establish a committee that includes senior executives with responsibility for legal, compliance, distribution and finance to provide oversight over its CSMP (the "CSMP Committee"). The Chief Diversion Control Officer shall be a member of the CSMP Committee. The CSMP Committee shall not include any employee(s) or person(s) performing any sales functions on behalf of Anda; provided that service on the CSMP Committee by any senior executives listed in this paragraph whose responsibilities may include, but are not limited to, management of sales functions shall not constitute a breach of the Injunctive Relief Terms.

B. Anda's CSMP Committee shall have regular meetings during which the Chief Diversion Control Officer shall present to the CSMP Committee with respect to, and the CSMP Committee shall evaluate, among other things: (1) any material modifications and potential enhancements to the CSMP including, but not limited to, those relating to Customer due diligence and Suspicious Order monitoring and reporting; (2) any significant new national and regional diversion trends involving Controlled Substances; (3) Anda's adherence to the CSMP policies and procedures, the Injunctive Relief Terms, and applicable laws and regulations governing the distribution of Controlled Substances; and (4) any technology, staffing, or other resource needs for the CSMP. The CSMP Committee shall have access to all CSMP reports. The CSMP Committee will review and approve the specific metrics used to identify the Red Flags set forth in Section VIII.

C. On a quarterly basis, Anda's CSMP Committee shall send a written report to Anda's Chief Executive, Chief Financial, and Chief Legal Officer, as well as its Board of Directors, addressing: (1) Anda's substantial adherence to the CSMP policies and

procedures, the Injunctive Relief Terms, and applicable laws and regulations governing the distribution of Controlled Substances; (2) recommendations as appropriate about the allocation of resources to ensure the proper functioning of Anda's CSMP; and (3) significant revisions to the CSMP. The Board of Directors or a committee thereof at Anda shall document in its minutes its review of the quarterly CSMP Committee reports.

D. To the extent not already established, the Board of Directors of Anda shall establish its own compliance committee (the "Board Compliance Committee") to evaluate, at a minimum, and on a quarterly basis: (1) the CSMP Committee's written reports; (2) Anda's substantial adherence to the CSMP policies and procedures, the Injunctive Relief Terms, and applicable laws and regulations governing the distribution of Controlled Substances; (3) Anda's code of conduct and any whistleblower reporting policies, including those prescribed by Section V.E; and (4) any significant regulatory and/or government enforcement matters within the review period relating to the distribution of Controlled Substances. Anda meets this requirement if it established, prior to the Effective Date, multiple committees of its Board of Directors that together have responsibilities outlined in this paragraph.

E. The Board Compliance Committee shall have the authority to: (1) require management of Anda to conduct audits on any CSMP or legal and regulatory concern pertaining to Controlled Substances distribution, and to update its full Board of Directors on those audits; (2) to commission studies, reviews, reports, or surveys to evaluate Anda's CSMP performance; (3) request meetings with Anda's management and CSMP staff; and (4) review the appointment, compensation, performance, and replacement of Anda's Chief Diversion Control Officer.

VII. MANDATORY TRAINING

A. Anda shall require all new CSMP personnel to attend trainings on its CSMP, its obligations under the Injunctive Relief Terms, and its duties with respect to maintaining effective controls against potential diversion of Controlled Substances and reporting Suspicious Orders pursuant to state and federal laws and regulations prior to conducting any compliance activities for Anda without supervision.

B. Anda shall provide annual trainings to CSMP personnel on its CSMP, its obligations under the Injunctive Relief Terms, and its duties to maintain effective controls against potential diversion of Controlled Substances and report Suspicious Orders pursuant to state and federal laws and regulations.

C. On an annual basis, Anda shall test its CSMP personnel on their knowledge regarding its CSMP, its obligations under the Injunctive Relief Terms, and its duties to maintain effective controls against potential diversion of Controlled Substances and to report Suspicious Orders pursuant to state and federal laws and regulations.

D. Anda shall train all third-party compliance consultants (defined as non-employees who are expected to devote fifty percent (50%) or more of their time to performing work related to Anda's CSMP, excluding information technology consultants not

engaged in substantive functions related to Anda's CSMP) performing compliance functions for Anda in the same manner as Anda's CSMP personnel.

E. At least every three (3) years in the case of existing employees, and within the first six (6) months of hiring new employees, Anda shall require operations, sales, and senior executive employees to attend trainings on its CSMP, its obligations under the Injunctive Relief Terms, the hotline established in Section V.E, and its duties to maintain effective controls against potential diversion of Controlled Substances and report Suspicious Orders pursuant to state and federal laws and regulations.

VIII. RED FLAGS

A. Within one hundred and twenty days (120) of the Effective Date, Anda shall, at a minimum, apply specific metrics to identify the potential Red Flags described in Section VIII.D with respect to Independent Retail Pharmacy Customers. For Chain Customers, the metrics used to identify the Red Flags described in Section VIII.D may be adjusted based on the specific business model and supplier relationships of the Chain Customer.

B. Anda shall evaluate and, if necessary, enhance or otherwise adjust the specific metrics it uses to identify Red Flags set forth in Section VIII.D.

C. Anda shall provide annually to the Monitor the specific metrics it uses to identify Red Flags as set forth in Section VIII.D. The Monitor shall review the metrics used to identify Red Flags as set forth in Section VIII.D to assess whether the metrics are reasonable. The Monitor may, at its discretion, suggest revisions to the metrics in the annual Audit Report as part of the Red Flags Review set forth in Section XVIII.G.3.f. Anda may rely on its specific metrics to comply with the requirements of Section VIII unless and until the Monitor proposes a revised metric in connection with Section XVIII.

D. For purposes of the Injunctive Relief Terms, "Red Flags" are defined as follows:

1. **Ordering ratio of Highly Diverted Controlled Substances to non-Controlled Substances:** Analyze the ratio of the order volume of all Highly Diverted Controlled Substances to the order volume of all non-Controlled Substances to identify Customers with significant rates of ordering Highly Diverted Controlled Substances.

2. **Ordering ratio of Highly Diverted Controlled Substance base codes or drug families to non-Controlled Substances:** Analyze the ratio of the order volume of each Highly Diverted Controlled Substance base code or drug family to the total order volume of all non-Controlled Substances to identify Customers with significant rates of ordering each Highly Diverted Controlled Substance base code or drug family.

3. **Excessive ordering growth of Controlled Substances**: Analyze significant increases in the ordering volume of Controlled Substances using criteria to

identify customers that exhibit percentage growth of Controlled Substances substantially in excess of the percentage growth of non-Controlled Substances.

4. **Unusual formulation ordering:** Analyze ordering of Highly Diverted Controlled Substances to identify customers with significant ordering of high-risk formulations. High-risk formulations include, but are not limited to, 10mg hydrocodone, 8mg hydromorphone, 2mg alprazolam, single-ingredient buprenorphine (i.e., buprenorphine without naloxone), and highly-abused formulations of oxycodone. On an annual basis (or as otherwise necessary), high-risk formulations of Highly Diverted Controlled Substances may be added, removed, or revised based on Anda's assessment and regulatory guidance.

5. **Out-of-area patients:** Analyze Pharmacy Customer Data or Dispensing Data to assess volume of prescriptions for Highly Diverted Controlled Substances for out-of-area patients (based on number of miles traveled between a patient's zip code and the pharmacy location, depending on the geographic area of interest) taking into consideration the percentage of out-of-area patients for non-Controlled Substances.

6. **Cash prescriptions:** Analyze Pharmacy Customer Data or Dispensing Data to assess percentage of cash payments for purchases of Controlled Substances taking into consideration the percentage of cash payments for purchases of non-Controlled Substances.

7. **Prescriber activity of Customers:** Analyze Pharmacy Customer Data or Dispensing Data to identify Customers that are dispensing Highly Diverted Controlled Substance prescriptions for Top Prescribers as follows:

   a) Top Prescribers representing a significant volume of dispensing where the prescriber's practice location is in excess of 50 miles from the pharmacy ("out-of-area"), relative to the percentage of out-of-area prescriptions for non-Controlled Substances.

   b) Top Prescribers representing prescriptions for the same Highly Diverted Controlled Substances in the same quantities and dosage forms indicative of pattern prescribing (e.g., a prescriber providing many patients with the same high-dose, high-quantity supply of 30mg oxycodone HCL prescription without attention to the varying medical needs of the prescriber's patient population).

   c) Top Prescribers where the top five (5) or fewer prescribers represent more than fifty percent (50%) of total prescriptions for Highly Diverted Controlled Substances during a specified period.

8. **Public regulatory actions against Customers:** Review information retrieved from companies that provide licensing and disciplinary history records (e.g., LexisNexis), and/or other public sources, including governmental entities, showing that the Customer, pharmacists working for that Customer, or the Customer's Top Prescribers have been subject, in the last five (5) years, to professional disciplinary sanctions regarding the

dispensing or handling of Controlled Substances or law enforcement action related to Controlled Substances diversion. Continued licensing by a relevant state agency may be considered, but shall not be dispositive, in resolving the Red Flag. For Chain Customer locations, representations from each Chain Customer that it reviews its pharmacists' licensing statuses annually and for the regulatory actions described in this paragraph has either (i) taken appropriate employment action, or (ii) disclosed the regulatory action to Anda, may be considered in resolving the Red Flag.

9. **Customer termination data:** Review information from Anda's due diligence files and, when operable, from the Clearinghouse, subject to Section VIII.F, regarding Customers that have been terminated from ordering Controlled Substances by another distributor due to concerns regarding Controlled Substances.

E. For any Red Flag evaluation in Section VIII.D that may be performed using Pharmacy Customer Data or Dispensing Data, Anda will analyze the Red Flag using Pharmacy Customer Data, to the extent feasible based on the functionality of a Customer's pharmacy management system, until Dispensing Data is collected and analyzed by the Clearinghouse as described in Section XVII. Until Dispensing Data is collected and analyzed by the Clearinghouse, Anda may satisfy the Red Flag evaluations in Sections VIII.D.5 through VIII.D.7 by engaging in considerations of out-of-area patients, cash payments for prescriptions and Top Prescribers without satisfying the specific requirements of Sections VIII.D.5 through VIII.D.7. In the event that the Clearinghouse is not collecting and analyzing Dispensing Data within two years of the Effective Date, Anda and the State Compliance Review Committee shall meet and confer to consider alternatives for the performance of the analysis required by Sections VIII.D.5 through VIII.D.7 using Pharmacy Customer Data.

F. The foregoing Red Flag evaluations may be performed by the Clearinghouse and reported to Anda.

G. Anda and the State Compliance Review Committee shall work in good faith to identify additional potential Red Flags that can be derived from the data analytics to be performed by the Clearinghouse.

IX. ONBOARDING

A. Anda, prior to initiating the sale of Controlled Substances to a potential Customer, a member of Anda's CSMP department (or a qualified third-party compliance consultant trained on Anda's CSMP) shall perform the following due diligence:

1. Interview the pharmacist-in-charge, either over the telephone, via videoconference, or in person. The interview shall include questions regarding the manner in which the potential Customer maintains effective controls against the potential diversion of Controlled Substances.

2. Obtain a "Pharmacy Questionnaire" completed by the owner and/or pharmacist-in-charge of the potential Customer. The Pharmacy Questionnaire shall require going-concern potential Customers to list their

top ten (10) prescribers for Highly Diverted Controlled Substances combined, along with the prescriber's specialty, unless Anda is able to obtain this data otherwise. The Pharmacy Questionnaire shall also require disclosure of the identity of all other distributors that serve the potential Customer, and whether the potential Customer has been terminated or suspended from ordering Controlled Substances by another distributor and the reason for any termination or suspension. The Pharmacy Questionnaire shall request information that would allow Anda to identify Red Flags, including questions regarding the manner in which the potential Customer maintains effective controls against the potential diversion of Controlled Substances. A potential Customer's responses to the Pharmacy Questionnaire shall be verified, to the extent applicable and practicable, against external sources (for example, the Clearinghouse, once operational, and Automation of Reports and Consolidated Orders System ("ARCOS") data made available to Anda by the DEA). The Pharmacy Questionnaire shall be maintained by Anda in a database accessible to its CSMP personnel.

3. Complete a written onboarding report to be maintained in a database accessible to Anda's CSMP personnel reflecting the findings of the interview and any site visit, the findings regarding the identification of and, if applicable, conclusion concerning any Red Flag associated with the pharmacy, as well as an analysis of the Pharmacy Questionnaire referenced in the preceding paragraph.

4. For going-concern potential Customers, review Pharmacy Customer Data to assist with the identification of any Red Flags.

5. Document whether the potential Customer or the pharmacist-in-charge has been subject to any professional disciplinary sanctions or law enforcement activity related to Controlled Substances dispensing, and, if so, the basis for that action. For Chain Customers, this provision shall apply to the potential specific pharmacies in question.

B. For Chain Customers, Anda may obtain the information in Section IX.A from a corporate representative of the Chain Customer.

C. In the event that Anda identifies one or more unresolved Red Flags or other information indicative of potential diversion of Controlled Substances through the onboarding process or otherwise, Anda shall refrain from selling Controlled Substances to the potential Customer pending additional due diligence. If following additional due diligence, Anda is unable to resolve the Red Flags or other information indicative of diversion, Anda shall not initiate the sale of Controlled Substances to the potential Customer and shall report the potential Customer consistent with Section XIV. If Anda determines that the potential Customer may be onboarded for the sale of Controlled Substances, Anda shall document the decision and the bases for its decision. Such a good faith determination, if

documented, shall not serve, without more, as the basis of a future claim of non-compliance with the Injunctive Relief Terms. For Chain Customers, these provisions shall apply to the potential specific pharmacies in question.

X. ONGOING DUE DILIGENCE

A. Anda shall periodically review its procedures and systems for detecting patterns or trends in Customer order data or other information used to evaluate whether a Customer is maintaining effective controls against diversion.

B. Anda shall conduct periodic proactive compliance reviews of its Customers' performance in satisfying their corresponding responsibilities to maintain effective controls against the diversion of Controlled Substances.

C. Anda shall review ARCOS data made available to it by the DEA and, once operational, by the Clearinghouse, to assist with Customer specific due diligence. For Chain Customers, this provision shall apply to the potential specific pharmacies in question.

D. Anda shall conduct due diligence as set forth in its CSMP policies and procedures in response to concerns of potential diversion of Controlled Substances at its Customers. For Chain Customers, these provisions shall apply to the specific pharmacies in question. The due diligence required by Anda's CSMP policies and procedures may depend on the information or events at issue. The information or events raising concerns of potential diversion of Controlled Substances at a Customer include but are not limited to:

1. The discovery of one or more unresolved Red Flags;
2. The receipt of information directly from law enforcement or regulators concerning potential diversion of Controlled Substances at or by a Customer;
3. The receipt of information concerning the suspension or revocation of pharmacist's DEA registration or state license related to potential diversion of Controlled Substances;
4. The receipt of reliable information through the hotline established in Section V.E concerning suspected diversion of Controlled Substances at the Customer;
5. The receipt of reliable information from another distributor concerning suspected diversion of Controlled Substances at the Customer; or
6. Receipt of other reliable information that the Customer is engaged in conduct indicative of diversion or is failing to adhere to its corresponding responsibility to prevent the diversion of Highly Diverted Controlled Substances.

E. On an annual basis, Anda shall obtain updated pharmacy questionnaires from one hundred (100) Customers to include the following:

1. The top 25 Customers by combined volume of Highly Diverted Controlled Substances purchased from Anda measured as of the end of the relevant calendar year; and

2. Additional Customers selected as a representative sample of various geographic regions, customer types (Independent Retail Pharmacy Customers and Chain Customers), and distribution centers. Anda's Chief Diversion Control Officer shall develop risk-based criteria for the sample selection.

F. Scope of Review

1. For reviews triggered by Section X.D, Anda shall conduct due diligence and obtain updated Pharmacy Customer Data or equivalent, or more comprehensive data from the Clearinghouse if needed, as set forth in its CSMP policies and procedures.

2. For questionnaires collected pursuant to Section X.E, Anda shall conduct a due diligence review consistent with Anda's CSMP policies and procedures. These annual diligence reviews shall be performed in addition to any of the diligence reviews performed under Section X.D, but may reasonably rely on reviews performed under Section X.D.

3. If Anda decides to terminate the Customer due to concerns regarding potential diversion of Controlled Substances, Anda shall promptly cease the sale of Controlled Substances to the Customer and report the Customer consistent with Section XIV. If Anda decides not to terminate the Customer, Anda shall document that determination and the basis therefor. Such a good faith determination, if documented, shall not, without more, serve as the basis of a future claim of non-compliance with the Injunctive Relief Terms.

XI. SITE VISITS

A. Anda shall conduct site visits, including unannounced site visits, where appropriate, of Customers, as necessary, as part of Customer due diligence.

B. During site visits, Anda's CSMP personnel or qualified third-party compliance consultants shall interview the pharmacist-in-charge or other relevant Customer employees, if appropriate, about any potential Red Flags and the Customer's maintenance of effective controls against the potential diversion of Controlled Substances.

C. Anda's CSMP personnel or qualified third-party compliance consultants who conduct site visits shall document the findings of any site visit.

D. Site visit and all other compliance reports shall be maintained by Anda in a database accessible to all CSMP personnel.

XII. THRESHOLDS

A. Anda shall use Thresholds to identify potentially Suspicious Orders of Controlled Substances from Customers.

B. Anda's CSMP department shall be responsible for the oversight of the process for establishing and modifying Thresholds. The sales departments of Anda shall not have the authority to establish or adjust Thresholds for any Customer or participate in any decisions regarding establishment or adjustment of Thresholds.

C. Anda shall not provide Customers specific information about their Thresholds or how their Thresholds are calculated.

1. Threshold Setting

a) Anda shall primarily use model-based thresholds. For certain circumstances, Anda may apply a non-model threshold based on documented customer diligence and analysis.

b) Anda shall include in its Annual Threshold Analysis and Assessment Report (as required by Section XVIII.G.3.c) to the Monitor summary statistics regarding the use of non-model thresholds and such information shall be considered by the Monitor as part of its Threshold Setting Process Review in the annual Audit Report.

c) For the purposes of establishing and maintaining Thresholds, Anda shall take into account the Controlled Substances diversion risk of each drug base code. The diversion risk of each base code should be defined and reassessed annually by Anda's CSMP Committee and reviewed by the Monitor.

d) Anda shall establish Thresholds for new Customers prior to supplying those Customers with Controlled Substances and shall continue to have Thresholds in place at all times for each Customer to which it supplies Controlled Substances.

e) When ordering volume from other distributors becomes readily available from the Clearinghouse, Anda shall consider including such information as soon as reasonably practicable in establishing and maintaining Thresholds.

f) Anda shall incorporate the following guiding principles in establishing and maintaining Customer Thresholds, except when inapplicable to non-model Thresholds:

(1) Thresholds shall take into account the number of non-Controlled Substance dosage units distributed to, dispensed and/or number of prescriptions dispensed by the Customer to assist with the determination of Customer size. As a general

matter, smaller customers should have lower Thresholds than larger customers.

(2) For the purposes of establishing and maintaining Thresholds, Anda shall use statistical models that are appropriate to the underlying data.

(3) For the purposes of establishing and maintaining Thresholds, Anda shall take into account a Customer's ordering and/or dispensing history for a specified period of time.

(4) For the purposes of establishing and maintaining Thresholds, Anda shall take into account the ordering history of Customers within similar geographic regions, or, where appropriate for Chain Customers, ordering history within the chain.

(5) If appropriate, Thresholds may take into account the characteristics of Customers with similar business models.

(a) A Customer's statement that it employs a particular business model must be verified, to the extent practicable, before that business model is taken into account in establishing and maintaining a Customer's Threshold.

2. Threshold Auditing

a) Anda shall review their respective Customer Thresholds at least on an annual basis and modify them where appropriate.

b) Anda's CSMP department shall annually evaluate its Threshold setting methodology and processes and its CSMP personnel's performance in adhering to those policies.

3. Threshold Changes

a) Anda may increase or decrease a Customer Threshold as set forth in its CSMP policies and procedures, subject to Sections XII.C.3.b through XII.C.3.e.

b) Prior to approving any Threshold change request by a Customer, Anda shall conduct due diligence to determine whether an increase to the Threshold is warranted. This due diligence shall include obtaining from the Customer the basis for the Threshold change request, obtaining and reviewing Dispensing Data and/or Pharmacy Customer Data for the previous three (3) months for due diligence purposes, and, as needed, conducting an on-site visit to the Customer. This Threshold change request diligence shall be conducted by Anda's CSMP personnel.

c) Anda shall not proactively contact a Customer to suggest that the Customer request an increase to any of its Thresholds, to inform the Customer that its Orders-to-date are approaching its Thresholds or to recommend to the Customer the amount of a requested Threshold increase. It shall not be a violation of this paragraph to provide Chain Customer headquarters reporting on one or more individual Chain Customer pharmacy location(s) to support the anti-diversion efforts of the Chain Customer's headquarters staff, and it shall not be a violation of this paragraph for Anda's CSMP personnel to contact Customers to seek to understand a Customer's ordering patterns.

d) Anda's Chief Diversion Control Officer may approve criteria for potential adjustments to Customer Thresholds to account for circumstances where the Thresholds produced by the ordinary operation of the statistical models require modification. Such circumstances include adjustments to account for seasonal ordering of certain Controlled Substances that are based on documented diligence and analysis, adjustments made to permit ordering of certain Controlled Substances during a declared national or state emergency (e.g., COVID-19 pandemic), IT errors, and data anomalies causing results that are inconsistent with the design of the statistical models. Anda shall include in its Annual Threshold Analysis and Assessment Report (as required by Section XVIII.G.3.c) to the Monitor information regarding the use of this paragraph and such information shall be considered by the Monitor as part of its Threshold Setting Process Review in the annual Audit Report.

e) Any decision to raise a Customer's Threshold in response to a request by a Customer to adjust its Threshold must be documented in a writing and state the reason(s) for the change. The decision must be consistent with Anda's CSMP and documented appropriately.

XIII. SUSPICIOUS ORDER REPORTING AND NON-SHIPMENT

A. Anda shall report Suspicious Orders to the Settling States ("Suspicious Order Reports" or "SORs"), including those Settling States that do not currently require such SORs, at the election of the Settling State.

B. For the SORs required by the Injunctive Relief Terms, Anda shall report Orders that exceed a Threshold for Controlled Substances set pursuant to the processes in Section XII that are blocked and not shipped.

C. Anda shall not ship any Order that it (i) reports pursuant to Sections XIII.A or XIII.B, or (ii) would have been required to report pursuant to Sections XIII.A or XIII.B had the Settling State elected to receive SORs.

D. In reporting Suspicious Orders to the Settling States, Anda shall file SORs in a standardized electronic format that is uniform among the Settling States and contains the following information fields:

1. Customer name;

2. Customer address;

3. DEA registration number;

4. State pharmacy license number;

5. Date of order;

6. NDC number;

7. Quantity;

8. Explanation for why the order is suspicious (up to 250 characters): Details that are order-specific regarding why an order was flagged as a Suspicious Order, including specific criteria used by Anda's Threshold system (except phrases such as "order is of unusual size" without any additional detail are not acceptable); and

9. Name and contact information for a knowledgeable designee within Anda's CSMP department to be a point of contact for the SORs.

E. On a quarterly basis, Anda shall provide a summary report to the Settling States that elect to receive it that provides the following information for the relevant quarter with respect to the top ten (10) Customers by volume for each Highly Diverted Controlled Substance base code that have placed a Suspicious Order for that base code, in that quarter (for Chain Customers, only individual pharmacies in the chain will considered for evaluation as a top ten (10) Customer):

1. The number of SORs submitted for that Customer by base code;

2. The Customer's order volume by base code for the quarter for all Highly Diverted Controlled Substances;

3. The Customer's order frequency by base code for the quarter for all Highly Diverted Controlled Substances;

4. For each Highly Diverted Controlled Substance base code, the ratio of the Customer's order volume for that base code to the volume of all pharmaceutical orders for the quarter; and

5. The ratio of the Customer's order volume of all Controlled Substances to the volume of all pharmaceutical orders for the quarter.

F. Anda shall only be required to file a single, uniform, electronic form of SOR with any Settling State that receives SORs pursuant to these Injunctive Relief Terms. A Settling State retains the authority pursuant to applicable state law or relevant state agency authority to request additional information about a particular SOR.

G. It is the objective of the Settling States and Anda for Anda to provide SORs to Settling States that identify the same Suspicious Orders as reported to the DEA pursuant to the definition and requirements of the federal Controlled Substances Act and its regulations, although the fields of the SORs submitted to the Settling States as required by Section XIII may differ from the content required by the DEA. To the extent federal definitions and requirements materially change during the term of the Injunctive Relief Terms, Anda may be required to adjust the format and content of the SORs to meet these federal requirements. Anda and the State Compliance Review Committee will engage in good faith discussions regarding such adjustments.

H. It shall not be a violation of the Injunctive Relief Terms if Anda ships a Suspicious Order or fails to submit or transmit a SOR if:

1. The shipment of the Suspicious Order or failed SOR transmission was due to a computer error (data entry mistakes, coding errors, computer logic issues, software malfunctions, and other computer errors or IT failures); and

2. Anda reports the error, including a description of measures that will be taken to prevent recurrence of the error, to any affected Settling State, the State Compliance Review Committee, and the Monitor within five (5) business days of its discovery.

XIV. TERMINATED CUSTOMERS

A. Anda shall report to the Clearinghouse, once operational, within five (5) business days (or as otherwise required by state statute or regulation), Customers it has terminated from eligibility to receive Controlled Substances or refused to onboard for the sale of Controlled Substances due to concerns regarding the Customer's ability to provide effective controls against the potential diversion of Controlled Substances following the Effective Date.

B. Anda shall report to the relevant Settling State(s), within five (5) business days (or as otherwise required by state statute or regulation) Customers located in such Settling States that it has terminated from eligibility to receive Controlled Substances or refused to onboard for the sale of Controlled Substances due to concerns regarding the Customer's ability to provide effective controls against the potential diversion of Controlled Substances following the Effective Date. Such reports will be made in a uniform format. Anda and the State Compliance Review Committee shall use best efforts to agree on such uniform format for inclusion prior to the requirement taking effect.

C. In determining whether a Customer should be terminated from eligibility to receive Controlled Substances, Anda shall apply factors set out in its CSMP policies and procedures, which shall include the following conduct by a Customer:

1. Has generated an excessive number of Suspicious Orders, which cannot otherwise be explained;

2. Has routinely demonstrated unresolved Red Flag activity;

3. Has continued to fill prescriptions for Highly Diverted Controlled Substances that raise Red Flags following Anda's warning or communication about such practices;

4. Has failed to provide Pharmacy Customer Data or Dispensing Data in response to a request from Anda or otherwise refuses to cooperate with Anda's CSMP after providing the Customer with a reasonable amount of time to respond to Anda's requests;

5. Has been found to have made material omissions or false statements on a Pharmacy Questionnaire (the requirements for the contents of a Pharmacy Questionnaire are described in Section IX); or

6. Has been the subject of discipline by a State Board of Pharmacy within the past three (3) years or has had its owner(s) or pharmacist-in-charge subject to license probation or termination within the past five (5) years by a State Board of Pharmacy for matters related to Controlled Substances dispensing or a federal or state felony conviction.

D. Once the Clearinghouse has made Customer termination data available to Anda, Anda shall consider terminating Customers that have been terminated from eligibility to receive Controlled Substances by another distributor as a result of suspected diversion of Controlled Substances if the Customer is ordering only Controlled Substances from Anda. If Anda determines not to terminate Customers to which this paragraph applies, Anda shall document its decision-making. A good-faith decision to continue shipping Controlled Substances to Customers to which this paragraph applies, shall not serve, without more, as the basis of a future claim of non-compliance with the Injunctive Relief Terms.

E. For Chain Customers, the provisions in Section XIV.A-D shall apply to the specific pharmacies in question.

XV. EMERGENCIES

A. In the circumstances of declared national or state emergencies in which the healthcare community relies on Anda for critical medicines, medical supplies, products, and services, Anda may be required to temporarily modify its CSMP processes to meet the critical needs of the supply chain. These modifications may conflict with the requirements of the Injunctive Relief Terms.

B. In the case of a declared national or state emergency, Anda shall be required to give notice to the State Compliance Review Committee of any temporary material changes to its CSMP processes which may conflict with the requirements of the Injunctive Relief Terms and specify the sections of the Injunctive Relief Terms which will be affected by the temporary change.

C. Anda shall document all temporary changes to their CSMP processes and appropriately document all customer-specific actions taken as a result of the declared national or state emergency.

D. Anda shall provide notice to the State Compliance Review Committee at the conclusion of the declared national or state emergency, or sooner, stating that the temporary CSMP processes put into place have been suspended.

E. Provided Anda complies with the provisions of Sections XV.A through XV.D, Anda will not face liability for any deviations from the requirements of the Injunctive Relief Terms taken in good faith to meet the critical needs of the supply chain in response to the declared national or state emergency. Nothing herein shall limit Settling States from pursuing claims against Anda based on deviations from the requirements of the Injunctive Relief Terms not taken in good faith to meet the critical needs of the supply chain in response to a declared national or state emergency.

XVI. COMPLIANCE WITH LAWS AND RECORDKEEPING

A. Anda acknowledge and agree that it must comply with applicable state and federal laws governing the distribution of Controlled Substances.

B. Good faith compliance with the Injunctive Relief Terms creates a presumption that Anda is acting reasonably and in the public interest with respect to Settling States' existing laws requiring effective controls against diversion of Controlled Substances and with respect to the identification, reporting, and blocking of Suspicious Orders of Controlled Substances.

C. The requirements of the Injunctive Relief Terms are in addition to, and not in lieu of, any other requirements of state or federal law applicable to Controlled Substances distribution. Except as provided in Section XVI.D, nothing in the Injunctive Relief Terms shall be construed as relieving Anda of the obligation to comply with such laws, regulations, or rules. No provision of the Injunctive Relief Terms shall be deemed as permission for Anda to engage in any acts or practices prohibited by such laws, regulations, or rules.

D. In the event of a conflict between the requirements of the Injunctive Relief Terms and any other law, regulation, or requirement such that Anda cannot comply with the law without violating the Injunctive Relief Terms or being subject to adverse action, including fines and penalties, Anda shall document such conflicts and notify the State Compliance Review Committee and any affected Settling State the extent to which it will comply with the Injunctive Relief Terms in order to eliminate the conflict within thirty (30) days of Anda's discovery of the conflict. Anda shall comply with the Injunctive Relief Terms to the fullest extent possible without violating the law.

E. In the event of a change or modification of federal or state law governing the distribution of Controlled Substances that creates an actual or potential conflict with the Injunctive Relief Terms, Anda, any affected Settling State, or the State Compliance Review Committee may request that Anda, State Compliance Review Committee, and any affected Settling State meet and confer regarding the law change. During the meet and confer, Anda, the State Compliance Review Committee, and any affected Settling State will address whether the change or modification in federal or state law requires an amendment to the Injunctive Relief Terms. In the event Anda, the State Compliance Review Committee, and any affected Settling State cannot agree on a resolution, and the dispute relates to whether the generally applicable Injunctive Relief Terms herein should be changed, Anda, the State Compliance Review Committee, or any affected Settling State may submit the question to the National Arbitration Panel. If the dispute relates to whether a change in an individual State's law requires a modification of the Injunctive Relief Terms only with respect to that State, Anda, the State Compliance Review Committee, or any affected Settling State may seek resolution of the dispute pursuant to Section XIX. Maintenance of competition in the industry and the potential burden of inconsistent obligations on Anda shall be a relevant consideration in such resolution.

F. Recordkeeping: Anda shall retain records it is required to create pursuant to its obligations hereunder in an electronic or otherwise readily accessible format. The Settling States shall have the right to review records provided to the Monitor pursuant to Section XVIII. Nothing in the Injunctive Relief Terms prohibits a Settling State from issuing a lawful subpoena for records pursuant to an applicable law.

XVII. CLEARINGHOUSE

A. Starting ninety (90) days after the Effective Date, Anda shall participate in Phase 1 and Phase 2-A of the Clearinghouse.

B. Anda shall provide to the Clearinghouse and/or facilitate the Clearinghouse's collection of the following:

1. Anda's transaction data for Controlled Substances and non-Controlled Substances, specified at the NDC, date, quantity, and customer level.

2. Anda's information on Customers that have been terminated and/or declined onboarding due to concerns regarding Controlled Substance dispensing following the Effective Date.

C. Anda shall comply with state and federal transactional and Suspicious Order reporting requirements related to Controlled Substances as follows:

1. Until such time as the Clearinghouse is able to provide transactional and Suspicious Order regulatory reporting to the states on behalf of Anda, Anda shall continue to file all required reports under state law and those reports required by these Injunctive Relief Terms.

2. Once the Clearinghouse is able to process and submit such reports, the Clearinghouse may process and submit those reports on behalf of Anda to

the states. At all times during Phase 1, Anda shall remain responsible for the identification of Suspicious Orders and will remain liable for a failure to submit transactional data or Suspicious Order reports required under state law or these Injunctive Relief Terms.

3. Anda may elect to fulfill its reporting obligations directly, rather than have the Clearinghouse assume the responsibility for the transmission of the various reports.

D. Anda shall receive information, analyses and reports from the Clearinghouse on the same basis as other distributors participating in Phase 1 and 2-A of the Clearinghouse.

1. Anda shall be permitted to use information obtained from the Clearinghouse for anti-diversion purposes, including the uses expressly contemplated by the Injunctive Relief Terms.

2. Anda shall ensure any data obtained from the Clearinghouse cannot be accessed by any of its parent's business units, or their employees or agents, who are involved in manufacturing or marketing of pharmaceuticals or sales or distribution of pharmaceuticals they manufacture.

3. Anda shall not receive from the Clearinghouse information specific to another distributor. Notwithstanding the prior sentence, Anda may receive from the Clearinghouse blinded data reflecting total Orders (across all distributors) for a particular Customer, region, and/or state at the base code and NDC number level and all transactional data information.

4. Anda may use information it receives from the Clearinghouse only for the purposes of identifying, minimizing, or otherwise addressing the risk of Controlled Substances diversion. Anda shall not attempt to obtain revenue from this information.

5. Anda shall not sell (or obtain license fees for) data obtained from Clearinghouse to any third-parties. Nothing in the Injunctive Relief Terms shall prohibit Anda from using its own data, including data provided to Anda by third-parties other than the Clearinghouse, for any commercial purposes, including selling or licensing its data to third-parties.

E. Anda, in its sole discretion, may elect whether to participate in Phase 2-B of the Clearinghouse. CSMP functions that are assumed by the Clearinghouse during Phase 2-B will no longer be performed by Anda individually through its CSMPs. CSMP functions performed by the Clearinghouse during Phase 2-B will assist Anda to satisfy the applicable legal obligations of Anda. In the event that Anda elects not to participate in Phase 2-B, Anda shall have no obligation to implement the Clearinghouse's determinations as to identification of Suspicious Orders and Suspicious Order reporting.

F. Liability Related to the Clearinghouse.

1. Anda is entitled to rely upon information or data received from the Clearinghouse, whether in oral, written, or other form. Anda shall not have any liability (whether direct or indirect, in contract or tort or otherwise) to any party for or in connection with any action taken or not taken by the Clearinghouse. In addition, Anda shall not have any liability (whether direct or indirect, in contract or tort or otherwise) to any party for or in connection with any action taken or not taken by Anda based on incorrect, inaccurate, incomplete or otherwise erroneous information or data provided by the Clearinghouse, unless the information or data was incorrect, inaccurate, incomplete or otherwise erroneous because Anda itself provided incorrect, inaccurate, incomplete or otherwise erroneous data or information to the Clearinghouse.

2. Reports or analysis generated by the Clearinghouse may not be based on complete data due to a lack of participation by other distributors and pharmacies. As such, Anda shall not be held responsible for actions or inactions related to reports and analysis prepared by the Clearinghouse which may be based on incomplete data due to a lack of participation by other distributors and pharmacies.

3. Nothing in the Injunctive Relief Terms shall require Anda to indemnify or otherwise be responsible to pharmacy customers for any claims resulting from the provision of Dispensing Data to the Clearinghouse, including, but not limited to, claims related to any data breaches occurring with the data transmitted to or maintained by the Clearinghouse.

4. Anda and the Settling States shall not be liable for any breaches of any databases maintained by the Clearinghouse. This does not excuse the Clearinghouse or its vendor(s) from compliance with all state and federal laws and regulations governing (1) the protection of personal information and protected health information, or (2) notifications relating to Data Security Events.

5. The Clearinghouse's performance of CSMP functions during Phase 2-B will not relieve Anda from its legal obligations unless (i) Anda and the State Compliance Review Committee jointly enter into a written agreement for the Clearinghouse to assume legal requirements during Phase 2-B; and (ii) all vendors and consultants working on the Clearinghouse agree in writing to assume such obligations.

G. Funding Obligations.

1. For a period of ten (10) years from the Effective Date, Anda will contribute to the cost of the operation of the Clearinghouse in an amount to be determined based on the financial and relative size of Anda compared to the three distributors initially participating in the Clearinghouse.

2. Anda shall engage with the three distributors initially participating in the Clearinghouse and the State Compliance Review Committee to determine

Anda's required contribution. If Anda and the State Compliance Review Committee cannot reach an agreement on the amount of the contribution, the issue will be submitted to the National Arbitration Panel for resolution subject to the cap provided by Section XVII.G.4.

3. In the event that Anda elects not to participate in Phase 2-B, Anda shall have no obligation to fund future costs directly related to Phase 2-B of the Clearinghouse.

4. In no case shall Anda's required contribution for Phase 1 and Phase 2-A during the first two (2) years of its participation in the Clearinghouse exceed $250,000 per year, nor shall it exceed $100,000 per year during its third through tenth years of participation.

5. Anda and the State Compliance Review Committee agree to engage in good faith discussions regarding potential continued operation and funding of the Clearinghouse following the initial ten (10) year period.

XVIII. MONITOR

A. Anda shall engage a Monitor to perform the reviews described in Section XVIII.G in a professionally independent and objective fashion. The Monitor shall employ or retain personnel who have appropriate qualifications related to the pharmaceutical industry and the laws governing the distribution of pharmaceuticals, the distribution of Controlled Substances, and the applicable requirements of federal and state law. The Monitor may also employ or retain personnel who have appropriate qualifications in the audit and review of sample documents in order to conduct the reviews described in Section XVIII.G. To the extent additional expertise is required for the engagement, the Monitor may retain the services of third-party consultants after consultation with and input from Anda and the State Compliance Review Committee.

B. The Monitor and any retained third-parties shall at all times act in good faith and with integrity and fairness towards all parties.

C. Monitor Selection and Engagement
   1. The parties have agreed that the initial Monitor shall be Gil Soffer of Katten, Muchin Rosenman LLP.

   2. The Monitor can be replaced upon agreement of the State Compliance Review Committee and Anda. If the parties so agree, the process for selecting a replacement Monitor shall be the process described in paragraphs i-iii below. The provisions of this Exhibit Qshall apply to any successor Monitor.

      i. State Compliance Review Committee and Anda will each identify the names of up to three (3) individuals, groups of individuals or firms as the pool of recommended candidates to serve as the Monitor, within (60) calendar days of the date the parties agree to replace the Monitor.

ii. The State Compliance Review Committee and Anda shall have the right to meet with and otherwise evaluate the candidates and conduct appropriate interviews of the personnel who are expected to work on the project. The following qualifications may be relevant considerations for the State Compliance Review Committee and Anda in evaluating candidates: (a) prior monitorship or oversight experience; (b) experience with applicable laws and regulations governing the distribution of Controlled Substances; (c) experience with the pharmaceutical; (d) access to sufficient resources to carry out the duties of the Monitor; and (e) experience with internal investigations or the investigative process.

iii. If the State Compliance Review Committee and Anda do not agree on the appointment of any of the candidates from the initial pool of recommendations, State Compliance Review Committee and/or Anda may identify additional qualified candidates, as the timeline permits. However, in the event the parties fail to reach agreement on a Monitor within ninety (90) calendar days of the date the parties agree to replace the monitor, the State Compliance Review Committee shall appoint a Monitor.

3. In the event that the State Compliance Review Committee and Anda do not agree to the dismissal of the Independent Monitor, either the State Compliance Review Committee (through one of the Settling States on the State Compliance Review Committee) or Anda may submit the question of the Monitor's dismissal to the court to which the Consent Judgment was presented in any Settling States on the State Compliance Review Committee, and the Monitor shall only be dismissed if the court finds that there is Good Cause for dismissal. Good Cause for dismissal shall mean (a) a material and substantial breach of the terms of this Exhibit Q by the Monitor, including the failure to comply with the terms and limitations of this Exhibit Q; (b) any act of dishonesty, misappropriation, embezzlement, intentional fraud, or similar conduct by the Monitor; (c) any intentional act of bias or prejudice in favor or against either party by the Monitor; or (d) conduct by the Monitor that demonstrates unfitness to fulfill the functions of the Monitor reasonably and competently. Good Cause shall not include disagreements with the decisions of the Monitor pursuant to this Exhibit Q, unless there is a clear pattern in the Monitor's decisions that demonstrates that the Independent Monitor has not been acting as an independent third party in rendering decisions.

4. Anda shall be responsible for the Monitor's fees and costs directly related to its performance of the work specified by the Injunctive Relief Terms up to a limit of $300,000 per year. Should the Monitor require additional fees and costs to perform adequately the work specified in these Anda Injunctive Terms, the Monitor may request an increase in the budget to cover these unanticipated costs, and Anda will not unreasonably withhold approval of same. Further, to the extent there remains funds not yet expended under Teva's monitor budget (Section VI.C. of Exhibit P of the Settlement Agreement), those may be used to cover these unanticipated costs at Teva's discretion.

D. Term and Reporting Periods

1. The term of the Monitor will be five (5) years from the date the Monitor is appointed, divided into one-year periods for purposes of the reviews and reporting described in Section XVIII ("Reporting Periods"). The Monitor may align Anda's Reporting Periods with the reporting periods provided by the Big 3 Distributor Injunctive Relief Terms.

E. Monitor Access to Information

1. In connection with its reviews set forth in Section XVIII.G, the Monitor may request to interview employees with appropriate authority and responsibilities as necessary. In the event that Anda believes that the Monitor is requesting an unreasonable number of interviews or requesting interviews of employees who do not have relevant information to the reviews required by Section XVIII.G, Anda and State Compliance Review Committee shall meet and confer in good faith to resolve this issue.

2. The Chief Diversion Control Officer of Anda or a direct report of the Chief Diversion Control Officer shall serve as the primary point of contact for the Monitor to facilitate the Monitor's access to documents, materials, or staff necessary to conduct the reviews specified in Section XVIII.G. The Monitor shall communicate any request for documents, materials, or access to staff to the Chief Diversion Control Officer or her designee.

3. If at any time the Monitor believes there is undue delay, resistance, interference, limitation, or denial of access to any records or to any employee or former employee deemed necessary by the Monitor to conduct the reviews specified in Section XVIII.G, the Monitor shall notify the Chief Diversion Control Officer of Anda and they shall meet and confer to resolve such issue. If the Monitor believes that the matter was not resolved, the Monitor shall immediately report the issue to the State Compliance Review Committee.

4. To the extent any of the documents requested by the Monitor contain material protected from disclosure by any legal privilege, including the attorney-client privilege or attorney work product protections, Anda may redact such material before providing the documents to the Monitor, but must provide the Monitor with a privilege log describing the redacted information and identifying the basis for redaction.

5. Notwithstanding any other information referenced and produced pursuant to Section XVIII, the Monitor shall have access to, and Anda's Chief Diversion Control Officer shall produce to the Monitor, any settlement agreements with government entities entered into after the Effective Date specifically concerning the requirements contained in the Injunctive Relief Terms and Anda's distribution of Controlled Substances (as opposed to distribution of pharmaceutical products in general).

F. Settling States' Access to Monitor

1. Other than in connection with the initiation of a Notice of Potential Violation set forth in Section XIX.B.2, should the Monitor believe it needs to initiate communication with the State Compliance Review Committee regarding Anda's compliance with the Injunctive Relief Terms, the Monitor's communications should include the Chief Diversion Control Officer or counsel of Anda, regardless of the form of communication.

2. The State Compliance Review Committee shall have access to any settlement agreements produced to the Monitor pursuant to Section XVIII.E.5.

G. Reviews to be Conducted by the Monitor

1. There shall be two (2) types of reviews to be conducted by the Monitor:

a) Customer-specific reviews, as set forth in Section XVIII.G.2; and

b) System reviews, as set forth in Section XVIII.G.3.

2. Customer-Specific Reviews

a) The following Customer-specific reviews will be conducted by the Monitor for each of the Reporting Periods:

(1) Threshold Change Request Review ("TCR Review");

(2) Onboarding New Customer Review ("Onboarding Review");

(3) Ongoing Due Diligence Review ("Ongoing Diligence Review");

(4) Customer Termination Review ("Termination Review"); and

(5) Orders that Exceed Thresholds but are Shipped Review ("Exceeded Threshold Review").

b) Sample selection and audit periods for TCR Reviews, Onboarding Reviews, Ongoing Diligence Reviews, Termination Reviews, and Exceeded Threshold Reviews:

(1) For each Reporting Period, the Monitor will review a representative sample of files for the performance of the TCR Reviews, Onboarding Reviews, and Ongoing Diligence Reviews. The Monitor shall select a sample representative of various geographic regions, customer types (Independent Retail Pharmacy Customers or Chain Customer), and distribution centers.

(2) The Monitor will meet and confer with Anda to determine the appropriate audit period within each Reporting Period from which the samples will be selected (e.g. samples will be selected from the first six (6) months of a reporting period to

allow the Monitor time to perform its review during the remainder of the reporting period).

(3) Within thirty (30) calendar days following the close of the agreed-upon audit period, Anda (or the Clearinghouse once operational, if able to do so) will provide the Monitor with the following lists of relevant Customers for each type of review:

(a) A list of all Customers that requested at least one Threshold increase for a Highly Diverted Controlled Substance during the relevant audit period, including the number of such requests by each Customer;

(b) A list of all Customers that were onboarded during the relevant audit period and, during that period, ordered and received Highly Diverted Controlled Substances;

(c) A list of all Customers that were the subject of an Ongoing Diligence Review during the relevant audit period;

(d) A list of all Customers that, for reasons related to Controlled Substance regulatory compliance, were terminated during the relevant audit period; and

(e) A list of all Orders for Highly Diverted Controlled Substances where a decision was made to ship the Order even though the order exceeded the otherwise applicable Threshold, with number of such shipped orders.

(4) Within fifteen (15) calendar days of compiling this Customer information for sample selection, Anda shall propose a reasonable number of customer files for each review to the Monitor.

(5) Within fifteen (15) calendar days of receiving the lists specified above from Anda, the Monitor shall choose representative files to be reviewed from these lists. Each list will include the Customers' zip code, geographic region, distribution center, and customer type (Independent Retail Pharmacy Customer or Chain Customer).

c) TCR Reviews

(1) For each Reporting Period, the Monitor shall conduct a TCR Review for a sample review of Customers who requested at least one Threshold increase for Highly Diverted Controlled Substances. For the TCR Reviews, the Monitor shall review the information contained in the files of the sample Customers

and determine whether the information reflects substantial compliance with the requirements of Section XII.C.3.

d) Onboarding Reviews

(1) For each Reporting Period, the Monitor shall conduct an Onboarding Review of a sample of Customers that were onboarded during the applicable audit period and, during that period, ordered and received Highly Diverted Controlled Substances from Anda. For the Onboarding Reviews, the Monitor shall review the information contained in the files of the sample Customers and determine whether the information reflects substantial compliance with the requirements of Section IX.

e) Ongoing Diligence Reviews

(1) For each Reporting Period, the Monitor shall conduct an Ongoing Diligence Review of a sample of Customers that were the subject of Anda's Ongoing Diligence Review under Section X during the relevant audit period. For the Ongoing Diligence Reviews, the Monitor shall review the information contained in the files of the sample of Customers and determine whether the information reflects substantial compliance with the requirements of Section X.

f) Termination Reviews

(1) For each Reporting Period, the Monitor shall conduct a review of a sample of Customers that were terminated by Anda during the audit period. For the Termination Reviews, the Monitor shall review the information contained in the files of the sample of Customers and determine whether the information reflects substantial compliance with the requirements of Section XIV.

g) Exceeded Threshold Review

(1) For each Reporting Period, the Monitor shall conduct a review of a sample of Orders for Highly Diverted Controlled Substances where a decision was made by Anda to ship the Order even though the Order exceeded the applicable Threshold. For the Exceeded Threshold Reviews, the Monitor shall review the information contained in the Customer files related to the Orders and determine whether the information reflects substantial compliance with the requirements of Section XIII.B.

3. Annual System Reviews:

a) The following system reviews will be conducted by the Monitor for each of the Reporting Periods:

(1) CSMP Review;

(2) Threshold Setting Process Review;

(3) Suspicious Orders and Suspicious Order Report Review;

(4) Compensation Review;

(5) Red Flag Review; and

(6) Review of CSMP Integration with Clearinghouse.

b) CSMP Review

(1) For each Reporting Period, the Monitor shall conduct a review of the following materials from Anda:

(a) Current CSMP policies and procedures;

(b) Organizational charts for the departments that are relevant to the CSMP organization;

(c) Logs and/or summaries of any reports received on the "hot line" required by Section V.E and the action or response of Anda to any such reports;

(d) Copies of the quarterly reports provided by the Chief Diversion Control Officer to the CSMP Committee as required by Section IV.C;

(e) Copies of the quarterly reports provided by the CSMP Committee to senior management and the Board of Directors as required by Section VI.C; and

(f) Copies of the materials used for the training required by Section VII and lists of the attendees of the training.

c) Threshold Setting Process Review:

(1) For each Reporting Period, Anda or its outside consultants shall prepare a summary report describing how its Threshold-setting methodology for Independent Retail Pharmacy Customers and Chain Customers complies with Section XII (the "Annual Threshold Analysis and Assessment Report").

(2) For each Reporting Period, the Monitor shall review the Annual Threshold Analysis and Assessment Report, determine whether the information reflects substantial compliance with the requirements of Section XII, and include any Observations and Recommendations, as defined in Section XVIII.H, in its annual Audit Report.

d) Suspicious Orders and Suspicious Order Reporting Review:

(1) For each Reporting Period, Anda will provide the Monitor with a report containing summary metrics for the Suspicious Orders that were reported to the DEA and the Settling States (the "Suspicious Order Metrics Report"). In the Suspicious Order Metrics Report, Anda will also provide summary metrics for Orders of Highly Diverted Controlled Substances that exceeded a Threshold but were still shipped.

(2) For each Reporting Period, the Monitor shall review the Suspicious Order Metrics Report, determine whether the information reflects substantial compliance with the requirements of Section XIII, and include any Observations and Recommendations in its annual Audit Report.

e) Compensation Reviews:

(1) For each Reporting Period, the Monitor will review compensation-related policy documents for sales personnel. The Monitor shall analyze those documents and determine whether the compensation policies of Anda comply with the requirements contained in Section V.

f) Red Flags Review:

(1) For each Reporting Period, the Monitor shall review the Red Flags defined in Section VIII and their incorporation into Anda's policies and procedures. The Monitor shall determine whether the information reflects substantial compliance with the requirements of Section VIII and include any Observations and Recommendations, as called for by Section VIII.C, about those definitions in its annual Audit Report.

(g) Review of CSMP Integration with the Clearinghouse:

(1) For each Reporting Period, Anda shall prepare a report summarizing the status of Anda's CSMP integration with the operation of the Clearinghouse ("Clearinghouse Integration Report"). The Monitor shall review Anda's Clearinghouse Integration Report, determine whether the information reflects substantial compliance with the requirements of Section XVII,

and include any Observations and Recommendations in its annual Audit Report.

H. Observations and Recommendations:

1. If the Monitor notes any areas for potential improvement during the course of the reviews conducted pursuant to the Injunctive Relief Terms, the Monitor shall include any such recommendations in the Audit Report. Collectively, any such questions, concerns or recommendations will be referred to as "Observations and Recommendations."

I. Audit Reports:

1. No later than one hundred and twenty (120) calendar days prior to the end of a Reporting Period and/or at any other time deemed reasonably necessary by the Monitor, the Monitor shall provide Anda with a draft report detailing any instances of substantial noncompliance with the applicable provisions of the Injunctive Relief Terms from the reviews in Section XVIII.G (the "Draft Report"). The Draft Report will also describe any Observations and Recommendations.

2. Within thirty (30) calendar days of its receipt of the Draft Report, Anda will provide comments and responses to the Draft Report. Anda will, among other things:

a) Respond to each instance of substantial non-compliance, including, where appropriate, describing any corrective action taken (or to be taken).

b) Respond to each Observation and Recommendation.

3. Within thirty (30) calendar days of its receipt of Anda's responses to the Draft Report, the Monitor shall provide a final report (the "Audit Report") to Anda and the State Compliance Review Committee. The Monitor shall provide the State Compliance Review Committee with a copy of Anda's response to the Draft Report.

4. No action or lack of action by the Settling States regarding information received from the Monitor concerning Anda's conduct shall be considered affirmation, acceptance, or ratification of that conduct by the Settling States.

J. Confidentiality:

1. Materials and information provided by Anda to the Monitor that are designated "Confidential" (and any parts, portions, or derivations thereof) (the "Confidential Information") will be kept confidential and not be shown, disclosed, or distributed to any other party, including any other distributor.

2. The Monitor will not use materials or information received from Anda, or information or analysis developed using the Confidential Information of Anda, in its assessment of any other distributor. Because Anda operates pursuant to its own unique policies and procedures intended to comply with legal and other requirements of the Injunctive Relief Terms, the Monitor shall apply the standards of Anda to its reviews without preference to the practices or standards applied by any other distributor.

3. If any of the Settling States or the Monitor receive a request for disclosure of any material or information created or shared under the Injunctive Relief Terms, pursuant to a Third Party Request, the Settling State or the Monitor, respectively, shall notify Anda of the Third Party Request and the Confidential Information to be disclosed so that Anda may seek a protective order or otherwise challenge or object to the disclosure. The Settling State or the Monitor will provide Anda with at least ten (10) days' advance notice before complying with any Third Party Request for Confidential Information, except where state law requires a lesser period of advance notice.

4. Nothing herein will be deemed to prevent any party from claiming any applicable exemption to the public information act, freedom of information act, public records act, or similar law.

XIX. ENFORCEMENT OF INJUNCTIVE RELIEF TERMS

A. State Compliance Review Committee:

1. Any Settling State may initiate a review of a Potential Violation consistent with the process set forth in Section XIX.

2. The State Compliance Review Committee shall assign the Monitor the responsibilities set forth in Sections XIX.B.3 through XIX.B.7, regarding review of a Potential Violation and an opportunity to cure, except with respect to matters requiring interpretation of the Injunctive Relief Terms subject to Section XIX.C.2. The objective of the Monitor shall be to facilitate a resolution among the parties, providing an opportunity to cure, as applicable, for the party against whom a Potential Violation has been alleged.

3. No less than six (6) months before the Monitor's term expires pursuant to Section XVIII, the State Compliance Review Committee and Anda shall meet and confer in good faith to determine the parameters and processes for continued enforcement, consistent to the maximum extent possible with the provisions set forth in Section XIX, for the period after the Monitor's term has ended. Absent agreement between the State Compliance Review Committee and Anda, all provisions set forth in Section XIX involving the Monitor are excused after the Monitor's term has ended.

4. Should Anda allege in good faith that a Settling State or the Monitor has impaired the ability of Anda to meet the Injunctive Relief Terms, Anda may

request the State Compliance Review Committee to mediate any dispute in an effort to avoid the time and expense of litigation regarding interpretation and enforcement of the Injunctive Relief Terms.

B. Process for Review of Potential Violations and Opportunity to Cure:

1. Definition of "Potential Violation": A Potential Violation occurs when Anda is alleged to not be in substantial compliance with (i) the Injunctive Relief Terms or (ii) a Corrective Action Plan adopted consistent with the process set forth in Section XIX.B.7.

2. Submission of Notice of Potential Violation. An allegation of a Potential Violation shall be submitted to the State Compliance Review Committee in writing by one or more Settling States ("Notice of Potential Violation" or "Notice") and shall include the following to the extent practicable:

a) Specification of the particular Injunctive Relief Term(s) and/or Corrective Action Plan(s) implicated by the Potential Violation;

b) Description of the Potential Violation with specificity;

c) The reasoning for and, if available, any documentation supporting the allegation that a Potential Violation has occurred, including whether the Potential Violation is a matter identified by the Monitor in an Audit Report; and

d) Description of the time-sensitivity of the Potential Violation, if relevant.

3. Assignment to Monitor. The State Compliance Review Committee shall review every Notice. If the State Compliance Review Committee reasonably believes that further review is warranted, the State Compliance Review Committee shall forward the Notice to the Monitor. The Monitor shall ensure that Anda receives a copy of the Notice and a proposed schedule consistent with the process set forth in Sections XIX.B.4 and XIX.B.

4. Response to Notice of Potential Violation. Within thirty (30) days of receipt of the Notice of Potential Violation, Anda shall provide a written response to the referring Settling State(s), the Monitor, and the State Compliance Review Committee (collectively with Anda, the "parties to the Notice")". The response (a) shall set forth the reasons Anda believes that it is in substantial compliance with the relevant Injunctive Relief Term(s) and/or Corrective Action Plan(s), and (b) as applicable, shall explain efforts undertaken to cure the Potential Violation and a schedule for completing the efforts to cure.

5. Conference for Parties re Notice of Potential Violation. The parties to the Notice shall meet or otherwise confer regarding the Potential Violation. The parties and the Monitor shall make themselves available for such a meeting (which may at any party's election be a virtual or technology-based

meeting), provided, however, that the meeting is not required to take place sooner than fifteen (15) days after a written response to the Notice of Potential Violation.

6. Process for Previously-Submitted Notices of Potential Violation. At the request of the parties to a Notice, the Monitor shall determine whether the Notice implicates the same or similar issues as a previously submitted Notice involving Anda or is a matter previously identified by the Monitor in an Audit Report involving Anda, and make an initial determination as to whether the issues needs to be addressed anew. The Monitor shall inform the Settling State and Anda of its determination within five (5) business days of receipt of the Notice. The Settling State and Anda shall have five (5) business days to object to the determination. If an objection is made, the Monitor shall respond to the objection within five (5) business days. If no objection is made, the party involved in the prior Notice may rely on the response to the previously submitted Notice or matter previously identified by the Monitor in an Audit Report and no further action shall be required.

7. Monitor Resolution of Potential Violation and Opportunity to Cure. Within thirty (30) days of the meeting pursuant to Section XIX.B.5, the Monitor, taking into consideration the submissions of the parties involved in the Notice and other information available to the Monitor, shall resolve the Notice as follows:

   a) If the Monitor reasonably believes that a Potential Violation is not ongoing or has been substantially resolved as of thirty (30) days from the meeting pursuant to Section XIX.B.5, the Monitor shall provide written notice to the State Compliance Review Committee and the Settling State(s) and Anda.

   b) If the Monitor reasonably believes that a Potential Violation is ongoing and has not been substantially resolved as of thirty (30) days from the meeting pursuant to Section XIX.B.5, the Monitor shall provide written notice to the State Compliance Review Committee and the Settling State(s) and Anda and request that Anda prepare, within thirty (30) days of the receipt of such written notice, a Corrective Action Plan to remedy such Potential Violation, including a reasonable period for implementation of such plan. The Monitor may extend the period of time to submit a Corrective Action Plan up to ninety (90) days based on a reasonable request by the affected party.

   c) A Corrective Action Plan may address multiple Potential Violations, and an existing Corrective Action Plan may be amended to address additional Potential Violations.

   d) Within ten (10) business days of submission of a Corrective Action Plan regarding a Potential Violation, the Monitor shall confer with

the State Compliance Review Committee and the Settling State(s) and Anda regarding the proposed Corrective Action Plan. The Monitor may recommend revisions in its discretion. The conference required by this paragraph may at any party's election be a virtual or technology-based meeting.

(e) Within thirty (30) days of the conference in Section XIX.B.7.d, the Monitor shall advise the State Compliance Review Committee and the Settling State(s) and Anda whether the Monitor has adopted the proposed Corrective Action Plan or whether the Monitor has adopted it after making modifications. The Monitor shall also set forth a reasonable period for implementation of any such plan that has been adopted. Anda must begin to comply with the Corrective Action Plan within five (5) business days of receiving notice of the Corrective Action Plan has been adopted, unless it seeks review by the State Compliance Review Committee pursuant to Section XIX.C.1.

C. Enforcement Responsibilities of State Compliance Review Committee:

1. The Settling State(s) or Anda may request the State Compliance Review Committee to review the resolution (including a resolution pursuant to Section XIX.B.7.a) and/or Corrective Action Plan adopted by the Monitor regarding that Notice. Any such request must be made within five (5) business days of a resolution or adoption of a Corrective Action Plan by the Monitor. The State Compliance Review Committee, taking into consideration the resolution by the Monitor, submissions of the Settling State(s) or Anda, and other information available to the Committee, shall within thirty (30) days of receipt of the request resolve the matter by written notice to the affected parties, which shall include the State Compliance Review Committee's reasoning in reaching its resolution. The State Compliance Review Committee may agree, disagree, or modify any resolution or Corrective Action Plan that it reviews. If the Corrective Action Plan is affirmed or affirmed as amended by the State Compliance Review Committee, Anda must within five (5) business days begin to comply with the Corrective Action Plan.

2. The State Compliance Review Committee shall review any issues raised by a Notice regarding the interpretation of the Injunctive Relief Terms at the request of the Settling State(s), Anda, or the Monitor. Such a request may be made at any time after the Notice's submission, and the request will not extend the timelines set forth in Sections XIX.B and XIX.C.1. The State Compliance Review Committee shall notify the Monitor, Settling State(s) and Anda of its determination. Settling States and Anda do not waive their rights to challenge the interpretation of the Injunctive Relief Terms by the State Compliance Review Committee in any subsequent proceeding pursuant to Section XIX.E.2.

3. The State Compliance Review Committee may, independent of a Notice of Potential Violation, review requests by a Monitor, Settling State, or Anda regarding the interpretation of the Injunctive Relief Terms. The State

Compliance Review Committee shall notify the Monitor and requesting party of its interpretation, including the State Compliance Review Committee's reasoning in reaching its conclusion. Settling States and Anda do not waive their rights to challenge the interpretation of the Injunctive Relief Terms by the State Compliance Review Committee in any subsequent proceeding pursuant to Section XIX.E.2.

4. The State Compliance Review Committee shall make available to all Settling States and Anda any interpretation it issues pursuant to Sections XIX.C.2 and XIX.C.3.

D. Composition of State Compliance Review Committee:

1. A Settling State on the State Compliance Review Committee that is in active litigation with Anda, or in another potential conflict of interest involving compliance with Controlled Substances laws and regulations, may not serve on the State Compliance Review Committee, and the remaining Settling States on the State Compliance Review Committee shall within five (5) business days select an alternate Settling State as a replacement.

2. If the affected state on the State Compliance Review Committee disputes that it has a disqualifying active litigation or other conflict of interest, the determination of whether that state has a conflict disqualifying it from serving on the State Compliance Review Committee shall be made by the remaining states on the State Compliance Review Committee.

E. Enforcement Actions:

1. Any written notice or resolution by the State Compliance Review Committee regarding the matters set forth in Sections XIX.B and XIX.C shall provide the State Compliance Review Committee's assessment of the matter but will not be an official opinion of any individual Settling State.

2. Following the issuance of a written notice or resolution of the State Compliance Review Committee pursuant to Section XIX.C, a Settling State or Anda may take whatever action it deems necessary related to the written notice or resolution issued by the State Compliance Review Committee, provided that the Settling State or Anda is either (a) the Settling State that sought review by the State Compliance Review Committee, or (b) Anda. Such action may include but is not limited to bringing an action to enforce the settlement agreement, filing a new original action, or, the parties to a Notice attempting to negotiate a Corrective Action Plan directly with each other.

3. The Settling States agree that prior to taking any court or administrative action, other than an action that is necessary to address an immediate threat to the health, safety, or welfare of the citizens of the Settling State, or that a public emergency requiring immediate action exists, it will follow the process outlined in Sections XIX.B and XIX.C.

4. A Settling State or Anda must bring a court or administrative action within six (6) months of any resolution of the State Compliance Review Committee, unless the alleged violation is also an independent violation of state or federal law, or an action that a Settling State concludes is necessary to address an immediate threat to the health, safety, or welfare of the citizens of the State, or that a public emergency requiring immediate action exists, in which cases, the applicable statute of limitations (if any) for sovereign actions shall apply.

Exhibit R
Agreement on Attorneys' Fees, Expenses and Costs

This Agreement on Attorneys' Fees, Expenses, and Costs ("Fee Agreement") is entered between Teva, Allergan, and the Plaintiffs' Executive Committee appointed in the multidistrict litigation in the Northern District of Ohio, *In re National Prescription Opiate Litigation*, No. 1:17-MD-2804 ("MDL PEC"), in connection with the Teva Global Opioid Settlement Agreement ("Teva Agreement") and the Allergan Public Global Opioid Settlement Agreement ("Allergan Agreement"). This Fee Agreement becomes effective on the Effective Date of the Teva Agreement and Allergan Agreement or the date that the Consent Judgments anticipated under the Teva Agreement and Allergan Agreement become final in 25 Settling States (whichever is later).

I. Definitions

A. This Fee Agreement incorporates all defined terms in the Teva Agreement and Allergan Agreement, unless otherwise defined herein, and shall be interpreted in a manner consistent with the Teva Agreement and Allergan Agreement.

B. *"Allergan."* Allergan Finance, LLC (f/k/a Actavis, Inc., which, in turn, was f/k/a/ Watson Pharmaceuticals, Inc.) and Allergan Limited (f/k/a Allergan plc, which, in turn, was f/k/a Actavis plc). *Allergan* does not include Teva Pharmaceuticals Industries Ltd. (*"Teva Ltd."*), Teva Pharmaceuticals USA, Inc. (*"Teva USA"*), Cephalon, Inc. (*"Cephalon"*), Actavis LLC (f/k/a Actavis Inc.) (*"Actavis LLC"*), Watson Laboratories, Inc. (*"Watson"*), Actavis Pharma, Inc. (f/k/a Watson Pharma, Inc.) (*"Actavis Pharma"*), Actavis Elizabeth LLC (*"Actavis Elizabeth"*), Actavis Kadian LLC (*"Actavis Kadian"*), Actavis Laboratories FL, Inc. (f/k/a Watson Laboratories, Inc. - Florida) (*"Actavis Labs FL"*), Actavis Laboratories UT, Inc. (f/k/a Watson Laboratories, Inc. - Utah) (*"Actavis Labs UT"*), Actavis Mid Atlantic LLC (*"Actavis Mid"*), Actavis South Atlantic LLC (*"Actavis South"*), Actavis Totowa LLC (*"Actavis Totowa"*), or Anda, Inc. (*"Anda"*).

C. "*Applicant*." Any Attorney or MDL Participating Counsel who seeks an award of attorneys' fees from the Attorney Fee Fund pursuant to the procedures established by the MDL Court and the Fee Panel.

D. "*Attorney*." Any of the following retained through a legal contingency fee or hourly fee contract: a solo practitioner, multi-attorney law firm, or other legal representative of a Participating Subdivision or MDL Participating Counsel. This does not include Subdivision in-house attorneys.

E. "*Attorney Fee Fund*." An account consisting of funds allocated to pay attorneys' fees approved pursuant to Section III of this Fee Agreement established by Order of and under the ongoing jurisdiction of the MDL Court, as provided below.

F. "*Common Benefit*." Work performed for the benefit of all Participating Subdivisions or Tribal Nations, including, but not limited to, pretrial matters, discovery, trial preparation, trial, settlement negotiations, and all other work that advances the interests of the Participating Subdivisions.

G. "*Common Benefit Fund*." The sub fund of the Attorney Fee Fund described in subsection III.E.

H. "*Contingency Fee Fund*." The sub fund of the Attorney Fee Fund described in subsection III.F.

I. "*Cost and Expense Fund Administrator*." The administrator appointed by the MDL Court on August 12, 2021 (MDL Docket No. 3828), to administer the Cost Fund and its sub funds as provided in the Fee Agreement.

J. "*Court Common Benefit Fund*." The Common Benefit Fund established by the MDL Court in its orders of July 22, 2021, MDL Docket No. 3794, and May 9, 2022, MDL Docket No. 4428.

K. "*Fee Entitlement*." Any right, entitlement, or expectation, including but not limited to a fee contract, contingent fee contract, agreement, referral arrangement, co-counsel arrangement, State Back-Stop agreement, or any other arrangement by which counsel could receive compensation or other consideration. For the avoidance of doubt, the scope of Fee Entitlement under subparagraph III.G.3.a does not include any Attorneys' fees associated with representation of a State.

L. "*Fee Panel*." The three-person panel appointed by the MDL Court on August 12, 2021 (MDL Docket No. 3828), to administer and make recommendations for the allocation and distribution of the Attorney Fee Fund and its sub funds as provided in the Fee Agreement.

M. "*Later Litigating State*" means a State that first files a lawsuit bringing a Released Claim against a Released Entity after the Preliminary Agreement Date.

N. "*MDL Court*." United States District Court for the Northern District of Ohio Eastern Division, Case No. 1:17-md-2804, Judge Dan Aaron Polster.

O. "*MDL Direct Cost Fund*." The cost fund described in subparagraph II.A.3.a below.

P. "*MDL Participating Counsel*." MDL Participating Counsel includes an attorney or firm authorized by MDL 2804 Lead Counsel to perform work for the Common Benefit of Participating Subdivisions. By way of example, it would include insurance counsel and appellant counsel.

Q. "*MDL PEC*." The Plaintiffs' Executive Committee appointed by the MDL Court.

R. "*Non-Participating Litigating Subdivision*." A Litigating Subdivision that is not a Participating Subdivision.

S. "*Non-Participating State.*" A State that is not a Participating State.

T. "*Participating Litigating Subdivision*." A Litigating Subdivision that is also a Participating Subdivision.

U. "*Participation Agreement*." An agreement executed by an Attorney that acknowledges the obligation to pay an appropriate MDL Common Benefit Assessment.

V. "*Qualified Tribal Representation.*" Representation by an attorney of a Participating Tribal Government regarding Released Claims against Released Entities. Such counsel are eligible for Common Benefit Fee consideration. The Teva Tribal Global Settlement and the Allergan Tribal Global Settlement will provide for the contribution to the Common Benefit Fund as determined by the MDL Court.

W. "*Qualifying Representation*." Legal services provided for representation of the MDL PEC or Participating Litigating Subdivision regarding Released Claims against Released Entities.

X. "*State Back-Stop Agreement*." Any agreement by a Settling State and private counsel for Participating Subdivisions in that State (or legislation enacted in that State) to provide, adjust, or guarantee attorneys' fees and costs, whether from the Attorney Fee Fund or any other source recognized in the agreement or legislation.[1]

Y. *"Subdivision Cost and Expense Fund."* The fund created to pay approved Subdivision and Tribal Nations costs and expenses as set forth in subparagraph II.A.3.b.

Z. *"Teva"* means (i) Teva Pharmaceutical Industries Ltd. and (ii) all of its respective past and present direct or indirect parents, subsidiaries, divisions, affiliates, joint ventures, predecessors, successors, assigns, including but not limited to Teva Pharmaceuticals USA, Inc., the Actavis Generic Entities, and Anda Inc.

II. MDL Direct Cost Fund and Subdivision Cost and Expense Fund ("*Cost Fund*")

A. The total Cost Fund shall be $30 million dollars funded as set forth below.

1. Total cost to be paid by Teva in each of the relevant Payment Years[2] under this Agreement shall be up to the following amounts, subject to the provisions set forth below:

[1] Nothing herein shall be understood to indicate approval for additional State Back-Stop Agreements or modifications of existing State Back-Stop Agreements.

[2] Payment Year shall have the same meaning for Teva as set forth in the Teva Agreement and Teva Exhibits M-1 and M-3. Payment Year shall carry the same definition for Allergan as set forth in the Allergan Agreement and Allergan Exhibits M-1 and M-2.

	Cost Fund
Payment Year 1	$9,000,000.00
Payment Year 2	$9,000,000.00

2. Total cost to be paid by Allergan in each of the relevant Payment Years under this Agreement shall be up to the following amounts, subject to the provisions set forth below:

	Cost Fund
Payment Year 1	$6,000,000.00
Payment Year 2	$6,000,000.00

3. The Cost Fund shall be split into the MDL Direct Cost Fund and the Subdivision Cost and Expense Fund.

    a. The MDL Direct Cost Fund shall be Seven Million Five Hundred Thousand Dollars ($7,500,000), payable 50% in Year One, and 50% in Year Two. The MDL Direct Cost Fund shall make payment without any delay to reimburse the MDL PEC for an agreed-to portion of the expenses incurred, provided the costs have been approved by the Cost and Expense Fund Administrator appointed by the Court. The MDL Direct Cost Fund will be paid directly to the MDL Opiate Capital Account. The Cost and Expense Fund Administrator may include costs incurred by the MDL PEC in furtherance of litigation, mediation, implementation, and management of the Settlements.

    b. The Subdivision Cost and Expense Fund shall be Twenty-Two Million Five Hundred Thousand Dollars ($22,500,000), payable 50% in Year One and 50% in Year Two.

    c. It is the intention of the Parties that the Cost Fund shall be administered by the Cost Fund and Expense Fund Administrator (MDL Docket No. 3828), who will be governed by the provisions of this Agreement and shall design the process and procedures for the allocation of costs pursuant to this Agreement and the MDL Court's Order.

    d. The costs of the Cost and Expense Fund Administrator shall be paid from the Cost Fund and allocated by the Cost and Expense Fund Administrator between the MDL Direct Cost Fund and the Subdivision Cost and Expense Fund to fairly charge each fund the cost incurred in implementing and supervising the specific fund.

    e. The Cost and Expense Fund Administrator shall set the process and procedures for submission of and criteria for applications for payment of

Subdivisions' and Tribal Nations' costs and expenses. The Cost and Expense Fund Administrator shall receive and evaluate applications from Participating Litigating Subdivisions and litigating Tribal Nations, whether filed in Federal Court or State Court, to seek reimbursement for eligible costs in pursuit of claims against Allergan or Teva. The process shall require a showing that the costs or expenses sought were reasonably incurred in furtherance of active litigation of a designated state or federal bellwether trial-set case, or Common Benefit. The Cost and Expense Fund Administrator shall require transparency from all applicants as to any other sources for compensating Attorneys for Subdivisions and Tribal Nations for costs incurred. If funds remain after the reimbursement of approved out-of-pocket costs, the Cost and Expense Fund Administrator may consider reasonable and appropriate payment for client time, costs, or expenses incurred by recognized trial bellwether plaintiffs. At the conclusion of the process, any funds not allocated by the Cost and Expense Fund Administrator shall be transferred to the Common Benefit Fund established in this Exhibit R.

4. In the event that States and Subdivisions enter into an additional global settlement with a party or parties other than Teva or Allergan that is (a) under the jurisdiction of the MDL Court in MDL No. 2804, (b) creates a separate cost fund, and (c) unless the parties agree to another date, such agreement has an effective date prior to June 30, 2023, the Cost and Expense Fund Administrator shall have the authority to aggregate the Cost Fund with the cost fund created under that global settlement agreement. The Cost and Expense Fund Administrator shall have the authority to address the appropriate procedures and required information to allow the costs to be funded from the appropriate cost fund or shared by two or more cost funds.

III. Attorney Fee Fund

A. An Attorney Fee Fund shall be paid in the following amounts and years:

	Teva Shall Pay	Allergan Shall Pay
Payment Year 1	$ 46,215,837.93	$ 40,778,855.53
Payment Year 2	$ 46,215,837.93	$ 40,778,855.53
Payment Year 3	$ 55,215,837.92	$ 46,778,855.53
Payment Year 4	$ 55,215,837.92	$ 46,778,855.53
Payment Year 5	$ 55,215,837.92	$ 0.00
Payment Year 6	$ 55,215,837.92	$ 0.00

B. The Attorney Fee Fund shall consist of the Contingency Fee Fund and the Common Benefit Fund.

1. It is the intention of the Parties that the Contingency Fee Fund and the Common Benefit Fund shall be administered by the Fee Panel (MDL Docket No. 3828), which will be governed by the provisions of this Fee Agreement and shall design the process and procedures for the allocation of fees pursuant to this Fee Agreement and the MDL Court's Order.

C. The fees to be paid under this Fee Agreement are available for Attorneys engaged in Qualifying Representations and Qualified Tribal Representations only. Fees to be paid under this Fee Agreement are not available prior to the Effective Date of the Teva Agreement and Allergan Agreement or if the Teva Agreement does not proceed past Teva's determination in subsection XI.A of the Teva Agreement or if the Allergan Agreement does not proceed past Allergan's determination in subsection X.A of the Allergan Agreement. Fees to be paid under this Fee Agreement are not available for representation of States, Non-Participating Subdivisions or Non-Litigating Subdivisions and are not available for representation of private hospitals, third-party payors, NAS claimants, personal injury/wrongful death claimants, or any entity other than Participating Litigating Subdivisions. In addition, fees under this Fee Agreement are not available for representation of any individual or entity in matters other than those claims against Released Entities, but may include a reasonable share of representations that involve development of facts for pursuit of opioid-related claims against multiple defendants in the pharmacy, manufacturing, and distribution chain.

D. *Attorney Fee Fund and Sub Funds.*

1. There shall be a split of the Attorney Fee Fund into the Contingency Fee Fund and the Common Benefit Fund. The split shall be 40% to the Contingency Fee Fund and 60% to the Common Benefit Fund.

2. In no event shall Teva or Allergan be required to pay more into the Attorney Fee Fund in any Payment Year than the maximum amount specified for that Payment Year in subsection III.A., which amounts are reflected in Exhibit M to the Teva Agreement and Allergan Agreement. The amounts allocated to the Contingency Fee Fund and the Common Benefit Fund set by the Fee Panel shall be subject to the reductions and offsets set forth below.

3. Awards of fees from the Contingency Fee Fund shall be available to Attorneys with Qualifying Representations of Participating Litigating Subdivisions eligible to receive an allocation under the Teva Agreement and Allergan Agreement, as set forth in Exhibits F-2 and G to the Teva Agreement and Exhibits F and G to the Allergan Agreement, and shall be made applying the Mathematical Model attached as Exhibit "A" to this Fee Agreement. The collection of the data and calculations for the Mathematical Model has been a cooperative effort among private counsel for a large number of Litigating Subdivisions. The analysis has been spearheaded by Joseph Tann and Andrew Arnold. The Fee Panel is

encouraged to continue working with those counsel in application of the Model. The Fee Panel shall oversee the application of the Model and resolve any questions or disputes concerning the eligibility of a Counsel to participate as required in subsection III.G. The Panel is empowered to hear disputes concerning and ensure the accuracy of the mathematical calculation.

4. As to awards from the Contingency Fee Fund, there shall be no right of appeal.

5. Any appeal of an award of the Fee Panel from the Common Benefit Fund will be made to the MDL Court and be reviewed under an abuse of discretion standard.

E. *Common Benefit Fund (60% of the Attorney Fee Fund).*

1. Funds in the Attorney Fee Fund shall be allocated to the Common Benefit Fund according to the schedule set forth below, subject to the adjustments described in paragraph III.E.6. The payments are to be made on the following yearly schedule, subject to the adjustments set forth below:

	Teva Shall Pay	Allergan Shall Pay
Payment Year 1	$ 27,729,502.76	$ 24,467,313.32
Payment Year 2	$ 27,729,502.76	$ 24,467,313.32
Payment Year 3	$ 33,129,502.75	$ 28,067,313.32
Payment Year 4	$ 33,129,502.75	$ 28,067,313.32
Payment Year 5	$ 33,129,502.75	$ 0.00
Payment Year 6	$ 33,129,502.75	$ 0.00

2. The Common Benefit Fund shall be available to compensate Attorneys engaged in Qualifying Representations of Participating Litigating Subdivisions and Qualified Tribal Representation of Tribal Participating Governments who:

   a. have performed work for the Common Benefit of all Participating Subdivisions and/or Tribal Nations consistent with the provisions to the guidelines established by Judge Polster set forth in MDL 2804 and the May 1, 2018 Order, under docket number 358, which is incorporated herein by reference; and

   b. satisfy the eligibility criteria set forth in subsection III.G.

3. For purposes of Common Benefit Fund distribution, Attorneys representing Tribal Nations litigating against Teva or Allergan have also reached a settlement for Released Claims with Teva and Allergan. These settlements shall be the subject of separate agreements with Teva and Allergan. Attorneys representing

Tribal Nations are eligible for Common Benefit consideration, provided such agreements with Teva and Allergan became effective under their terms. Such Attorneys must meet the eligibility criteria in subsection III.G.

4. For purposes of Common Benefit Fund distribution, MDL Participating Counsel not engaged in Qualifying Representations of Participating Litigating Subdivisions but who performed work for the Common Benefit pursuant to authorization from the MDL Co-Leads and meet the eligibility criteria in subsection III.G shall be eligible.

5. The Common Benefit Fund shall be overseen by the Fee Panel, which shall determine the allocation of funds to eligible Attorneys consistent with this Fee Agreement and the May 1, 2018 Order.

6. In assessing the benefits that an Applicant has conferred to Participating Subdivisions (including non-Litigating Subdivisions) and/or Tribes for purposes of any compensation decision, the Fee Panel shall give significant weight to the extent to which (i) the Applicant and his or her clients have contributed to increasing (or reducing) the Initial Participation in the Teva Agreement or the Allergan Agreement, and (ii) the Applicant and his or her clients have contributed to increasing (or reducing) the amounts achieved under Incentive Payments A-D through participation in the Teva Agreement, including the Teva Tribal Agreement, or the Allergan Agreement, including the Allergan Tribal Agreement. The Fee Panel shall also consider additional fee recoveries the Applicant may potentially obtain, including, but not limited to, from attorney fee funds under other settlement agreements, State Back-Stop Agreements, representations of States or Tribal Nations, representations of other clients in opioids-related matters, or through the representation of Subdivision clients, whether they participated in the Teva Agreement or Allergan Agreement or not. It is the intent of this provision to recognize that the goal of the Teva Agreement and Allergan Agreement is to provide for maximum participation by the Subdivisions, maximum abatement funding for all Subdivisions nationally, and the maximum peace for Released Entities. Therefore, representing one or more Non-Participating States or Non-Participating Subdivisions does not further the goal of the Teva Agreement or Allergan Agreement, and should not be considered Common Benefit because it does not increase funds available to Participating Subdivisions' abatement programs. Representing one or more Later Litigating States or Later Litigating Subdivisions is antithetical to the Teva Settlement and the Allergan Agreement and detracts from Common Benefit. The Fee Panel shall consider this concept of "common detriment" set forth in this paragraph in all of its decision making with respect to the allocation of the Attorney Fee Fund among Applicants, as well as, in its discretion, any offsets provided to Teva or Allergan as set forth in subsection III.H. The Fee Panel shall consider the totality of the Applicant's Participating Litigating Subdivisions as compared to the Applicant's Non-Participating Litigating Subdivisions; the Parties recognize that, although the goal is for 100% participation, Applicants with a greater number of clients have a greater probability of having one or more Non-Participating Litigating Subdivisions. As used in this paragraph, "client" or

"representing" a Subdivision shall include any Litigating Subdivision as to which the Applicant has a Fee Entitlement.

7. As set forth in subsection III.H, the Fee Panel must consider the factors described in paragraph III.E.6 to determine how and whether to reduce the amounts to be paid by Teva or Allergan under this Fee Agreement and to determine how to allocate funds among Applicants. They may also, at their discretion, consider other factors. Any reduction in payment obligation or credit to be given Teva or Allergan in this Fee Agreement shall be applied against the last Payment Year for that defendant and working backwards. Any reduction to an Applicant not credited to Teva or Allergan shall be allocated to attorneys whose Litigating Subdivision clients participated in the settlement by the Initial Participation Date.

8. The MDL PEC will seek, and the Attorneys General for Settling States, Teva, and Allergan, will not oppose, a Common Benefit Fee Order requiring an assessment of 7.5% on the gross recovery (by judgment or settlement) of any Non-Participating Subdivision that is subject to the federal court jurisdiction, represented by a MDL PEC firm, represented by any Attorney receiving fees from the Common Benefit Fund, represented by any Attorney that signed a Participation Agreement or paid in a case otherwise under the jurisdiction of the MDL Court.

9. If Teva and Allergan agree to go forward with their respective Agreements under subsections XI.A and X.A of their Agreements, they shall pay the full Common Benefit (60%) Fee into the Common Benefit Fund without regard to the number of Settling States or Participating Subdivisions. Should Teva and/or Allergan pay a judgment to, or settle with, a Non-Participating State or a Non-Participating Litigating Subdivision subsequent to the Reference Date, and such settlement or judgment results in a common benefit fee assessment paid into the Common Benefit Fund or the Court Common Benefit Fund, the following shall apply:

   a. Teva or Allergan shall be credited dollar-for-dollar for the amount paid for the fee assessment up to 7.5% of the abatement amount derived from the application of the State Global Allocation Percentage as set forth in Exhibit F-1 or the abatement amount derived from the application of the Subdivision and Special District Allocation Percentage as set forth in Exhibit G that the Non-Participating State or Non-Participating Litigating Subdivision would have received if it had participated in the Settlement Agreement;

   b. Except as set forth below in subparagraph III.E.9.c, for any settlement or judgment that meets the requirements of paragraph III.E.9 that exceeds the abatement amount derived from the application of the State Global Allocation Percentage as set forth in Exhibit F-1 or the abatement amount derived from the application of the Subdivision and Special District Allocation Percentage as set forth in Exhibit G, no credits shall be taken against Teva or Allergan's obligation to make payments into the Common Benefit Fund for that portion of the settlement or judgment in excess of the abatement amount derived from the application of the State Global Allocation Percentage as set forth in Exhibit

F-1 or the abatement amount derived from the application of the Subdivision and Special District Allocation Percentage as set forth in Exhibit G;

c. For any settlement or judgment that meets the requirements of paragraph III.E.9 that exceeds the abatement amount derived from the application of the State Global Allocation Percentage as set forth in Exhibit F-1 or the abatement amount derived from the application of the Subdivision and Special District Allocation Percentage as set forth in Exhibit G that the Later Litigating State or Later Litigating Subdivision would have received if it had participated in the Settlement Agreement, where the Later Litigating State or Later Litigating Subdivision is represented by any member of the MDL PEC or that member's law firm, Teva or Allergan shall be credited dollar-for-dollar for the full amount of the 7.5% common benefit fee assessment paid into the Common Benefit Fund or the Court Common Benefit Fund;

d. If a credit is made to Allergan or Teva pursuant to subparagraph III.E.9.c., then that amount shall be calculated as a direct reduction to any common benefit fee award made under this Fee Agreement to the MDL PEC firm(s) that represented the Later Litigating State or Later Litigating Subdivision;

e. Any credits shall be taken first against Teva's or Allergan's payment to the Common Benefit Fund in Teva's or Allergan's respective final Payment Year as set forth in paragraph III.E.1 (for Teva Year 6; for Allergan Year 4), up to the full amount of Teva's or Allergan's final year payment obligation, then from the next-to-final Payment Year's payment obligation, and so on;

f. Teva and Allergan shall not be entitled to any credits against the Common Benefit Fund for settlements or judgments paid after Teva's or Allergan's final fee Payment Year.

F. *Contingency Fee Fund (40% of the Attorney Fee Fund).*

1. Funds from the Attorney Fee Fund shall be allocated to the Contingency Fee Fund on the following yearly schedule, subject to the adjustments set forth below:

	Teva Shall Pay	Allergan Shall Pay
Payment Year 1	$ 18,486,335.17	$ 16,311,542.21
Payment Year 2	$ 18,486,335.17	$ 16,311,542.21
Payment Year 3	$ 22,086,335.17	$ 18,711,542.21
Payment Year 4	$ 22,086,335.17	$ 18,711,542.21
Payment Year 5	$ 22,086,335.17	$ 0.00
Payment Year 6	$ 22,086,335.17	$ 0.00

2. The Contingency Fee Fund shall be available to compensate Attorneys engaged in Qualifying Representations of Participating Litigating Subdivisions that meet the criteria set forth in subsection III.G.

    a. The Contingency Fee Fund shall be available to Attorneys who represent Litigating Subdivisions that are Participating Subdivisions, whether their actions are filed in state or federal court, and meet the eligibility criteria of subsection III.G.

    b. Participation in the Contingency Fee Fund by counsel that have a case that is not subject to the jurisdiction of the MDL Court shall not create, provide, or waive jurisdiction of the MDL Court over that Litigating Subdivision, that case or Attorneys, other than to oversee the fairness of the distribution process, and enforcement of this Fee Agreement.

    c. Under the terms of the Teva Agreement and Allergan Agreement Litigating Subdivisions must become a Participating Litigating Subdivision under both Agreements to be eligible to participate. Therefore, Exhibit R applies jointly to Teva and Allergan with the Attorneys' Fee Fund and MDL Cost Fund to include the combined payment from Teva and Allergan.

3. Teva and/or Allergan shall each be entitled to a pro-rata reduction to their own portion of the Contingency Fee Fund payment(s) in accordance with subsection III.F.4., unless, by the Payment Date for the Initial Year Payment, (i) 41 states are Settling States for Teva or 43 states are Settling States for Allergan, (ii) 98% of all Litigating Subdivisions are Participating Subdivisions and/or Subdivisions Subject to a Bar, Case-Specific Resolution, and, (iii) 97% of all Non-Litigating Subdivisions with Populations over 10,000 as listed in Exhibit I are Participating Subdivisions and/or Subdivisions Subject to a Bar, Case-Specific Resolution, in which case no offset shall be applied.

4. If the participation conditions in paragraph III.F.3 are not met, then the amounts owed by Teva and/or Allergan to the Contingency Fee Fund shall be reduced as follows:

    a. For Non-Settling States, the Contingency Fee Fund payments shall first be reduced by the amounts identified by the Fee Panel, pursuant to paragraph III.H.7, that would have been owed to counsel for Litigating Subdivisions in Non-Settling States, had those States and those Litigating Subdivisions been Settling States and Participating Subdivisions.

    b. Following the calculation in subparagraph III.F.4.a., the Contingency Fee Fund payments shall be reduced to reflect the non-joinder of Litigating Subdivisions in Settling States by subtracting the amounts identified by the Fee Panel, pursuant to paragraph III.H.7, that would have been owed to counsel for Non-Participating Litigating Subdivisions in Settling States had such Litigating Subdivisions been Participating Subdivisions.

5. In the event that after the date of the Settlement Agreement Teva, prior to the Effective Date of the Teva Agreement, or Allergan, prior to the Effective Date of the Allergan Agreement, settles with any Litigating Subdivision that would have been eligible to participate in the defendant's Agreement, and, under such settlement agreement pays attorneys' fees, the Fee Panel shall treat those Litigating Subdivisions as Participating Litigating Subdivisions and, applying the same criteria applicable to all Attorneys for Participating Litigating Subdivisions, determine what amount they would have been paid from the Contingency Fee Fund if they had become Participating Subdivisions under the Teva Agreement or the Allergan Agreement without such prior settlement. That sum, rather than being paid to the Attorney for the previously settling Litigating Subdivision, shall be credited and/or returned to Teva or Allergan as if determined under (a)(ii) above, except that such credit shall not be greater than the amount paid to the Attorneys under the Litigating Subdivision's prior settlement agreement and credits apply equally over the Fee Payment Years.

6. During the period between the Preliminary Agreement Date and the Effective Date, the MDL PEC, as well as Litigating Subdivisions' Attorneys, shall make best efforts to cease litigation activity against Teva and Allergan, including by jointly seeking stays or severance of claims against Teva and Allergan, where feasible, or postponements if a motion to stay or sever is not feasible or is denied, so long as such actions are not otherwise detrimental to the Litigating Subdivision.

G. *Eligibility.*

1. It is the intention of all parties participating in the Fee Panel process that there should be total transparency to the Fee Panel and to all fund participants. In connection with the process to be developed by the Fee Panel, any and all monies in attorney's fees received or awarded, including prior or future Contingency Fees, Common Benefit Fees, referral fees, expenses paid, promises for payment, or any other Fee Entitlement, to any Applicant in any opioid litigation shall be disclosed to the Fee Panel as a condition of participating in the Attorney Fee Fund and prior to an award from the Fee Panel. Any payment, expectation of payment or perceived entitlement to participate in a State Back-Stop Agreement or any other agreement reached with a Settling State or any Subdivision or any other source regarding payment of fees must be disclosed to the Fee Panel. Similarly, any right to payment from any other fund, for example a fund for payment to lawyers representing Settling States or Tribal Nations or Subdivisions shall be disclosed to the Fee Panel. Because it is anticipated that there will be multiple firms listed on contingent fee agreements with Litigating Subdivisions, the Fee Panel shall establish procedures, with input from Attorneys for Participating Litigating Subdivisions, for who should petition for fees from such groups and to whom the fee shall be paid and thereafter distributed to co-counsel in accordance with applicable agreements. For the avoidance of doubt, all Attorneys that are part of such groups must meet the eligibility criteria in paragraph III.G.3, must be subject to the criteria set forth in subsection III.C, and must be disclosed to the Fee Panel.

2. An Applicant may apply for and recover attorneys' fees from the Common Benefit Fund, the Contingency Fee Fund, and any fund created by a past or future State Back-Stop Agreement, provided the Applicant satisfies the requirements relevant to each such fund and requirements for disclosure to the Fee Panel.

3. An Attorney may not receive any payment from the Attorney Fee Fund (which includes both the Contingency Fee Fund and the Common Benefit Fund) unless the following eligibility criteria are met and annually certified by the Attorney:

    a. The Attorney must expressly waive the enforcement against the Litigating Subdivision client of all Fee Entitlements (other than under State Back-Stop Agreements) arising out of or related to any or all Qualifying Representations of any Participating Litigating Subdivision prior to applying for attorneys' fees from the Attorney Fee Fund. All applications for attorneys' fees under this Fee Agreement shall include an affirmation by the Attorney of such waiver and notice to the client(s) of such waiver. Such waiver shall not preclude the Attorney from submitting such Fee Entitlements to the Fee Panel as a factor for consideration in allocating payments from the Attorney Fee Fund or in connection with a State Back-Stop Agreement. For the avoidance of doubt, no Attorney may recover fees under this Fee Agreement unless the Attorney expressly agrees not to enforce Fee Entitlements as to each and every Participating Litigating Subdivision represented by that Attorney, but such Attorneys may participate in and receive funds from a State Back-Stop Agreement.

    b. The Attorney must represent that s/he has no present intent to represent or participate in the representation of any Later Litigating Subdivision or Later Litigating State with respect to Released Claims against Released Entities.

    c. The Attorney must represent that s/he has not and will not engage in any advertising or solicitation related to Released Claims against Released Entities where such advertising or solicitation relates to a representation of a Subdivision eligible to be a Participating Subdivision after the Reference Date unless the Attorney is recommending participation in the Agreement.

    d. The Attorney must represent s/he will not charge or accept any referral fees for any Released Claims brought against Released Entities by Later Litigating Subdivisions or Later Litigating States. This representation shall not prohibit Attorneys from receiving allocated shares of any future common benefit assessments arising out of settlements or judgments with Later Litigating Subdivisions or Later Litigating States that are the result of the MDL Court's Common Benefit order.

    e. The Attorney may not have and must represent that s/he does not have a Fee Entitlement related to a Later Litigating Subdivision or Later Litigating State, other than a potential Common Benefit Fee.

f. The Attorney must fully disclose the participation, or the anticipation of participation, in any agreement with a Settling State or Participating Subdivision concerning fees arising out of or related to the Teva Agreement or Allergan Agreement, including any fees paid or anticipated to be paid or any State Back-Stop Agreement.

g. The Attorney must identify for the Fee Panel whether s/he utilized state litigation work product or MDL work product, including but not limited to ARCOS data, document repositories, experts developed in the MDL, trial transcripts, or deposition transcripts. The Attorney must identify whether s/he signed the MDL Participation Agreement.

h. Any Attorney who applies for fees from one or both Funds must represent that, having exercised his/her independent judgment, s/he believes the Teva Agreement and the Allergan Agreement to be fair and will make or has made best efforts to recommend both Agreements to his or her Subdivision clients in Settling States. For avoidance of doubt, each Attorney is expected to exercise his or her independent judgment in the best interest of each client individually before determining whether to recommend joining the settlement. All applications for attorneys' fees or costs under this subsection shall include an affirmation by the Attorney in compliance with the foregoing subparagraphs.

4. No Attorney receiving fees under this Fee Agreement may apply for or recover from the Attorney Fee Fund fees arising from representing a Non-Participating Subdivision except Common Benefit Fees as described in paragraph III.E.2. All applications for attorneys' fees under this subsection shall include an affirmation by the Attorney of compliance with this paragraph.

5. An Attorney who has filed an application under this subsection and received an award of attorneys' fees shall provide a certification of compliance with the requirements of this Fee Agreement annually during the years upon which they are still entitled to receive attorneys' fee payments under this Agreement. This certification will be done as directed by the Panel.

6. If, at any time, the Attorney is unable to make the representations set forth in this subsection, such representations become untrue, or the Attorney falsely represents compliance with the eligibility criteria, the Attorney shall cease to be eligible to receive funds from the Attorney Fee Fund until further review by the Fee Panel of the Attorney's eligibility under and compliance with this subsection.

7. If an Attorney has a Fee Entitlement with a Later Litigating Subdivision or Later Litigating State or otherwise becomes unable to reaffirm compliance with the eligibility criteria set forth above, the Attorney shall notify the Fee Panel. For the avoidance of doubt, any Attorney who undertakes any new representation of, or has a Fee Entitlement with, a Later Litigating Subdivision or Later Litigating State shall be prohibited from receiving any future funds from the Attorney Fee Fund.

If an Attorney fails to notify the Fee Panel of such Fee Entitlement with a Later Litigating Subdivision or Later Litigating State, the Attorney shall be required to refund amounts previously paid. The Fee Panel shall notify Teva and Allergan when it receives notification.

8. To the extent an Attorney who has received compensation from the Attorney Fee Fund based on Qualifying Representations of Participating Litigating Subdivisions under the Teva Agreement or the Allergan Agreement, represents a Later Litigating Subdivision or Later Litigating State, such Attorney shall be obligated to refund such amounts received as compensation from the Attorney Fee Fund to Teva or Allergan. Teva, Allergan, or such Attorney may bring any dispute as to whether such Attorney shall be obligated to refund such amounts received from the Attorney Fee Fund to Allergan or Teva to the Fee Panel. Nothing herein shall require a multi-attorney law firm that has received compensation from the Attorney Fee Fund to refund such amounts if an attorney of the firm that is no longer affiliated with such law firm, after such departure, represents a Later Litigating Subdivision or Later Litigating State, provided that (a) neither the law firm nor any of its other attorneys have any contractual or financial arrangement regarding, stand to benefit directly or indirectly from, or directly or indirectly provide financial or other support of any kind to, the former attorney's representation of the Later Litigating Subdivision or Later Litigating State and (b) if the former attorney was a partner or owner of the multi-attorney law firm at the time that the law firm received compensation from the Attorney Fee Fund, the former attorney shall be obligated to refund such amounts as the former attorney earned as a result of the compensation that the law firm received from the Attorney Fee Fund.

9. In the event that an Attorney is deemed ineligible by the Fee Panel (whether based on its initial application or subsequent recertification), the Fee Panel shall provide notice to the Attorney and give the Attorney 30 days to provide additional information such that the Fee Panel could re-consider the Attorney's eligibility.

10. To the extent that an Attorney has a Fee Entitlement with a Participating Subdivision and is authorized to bring Released Claims against Released Entities, but such authorization is, in scope, less broad than the category of Released Claims set forth in the Teva Agreement or Allergan Agreement, such Attorney may participate fully in both the Contingency Fee Fund and the Common Benefit Fund, without any reduction imposed by the Fee Panel due to the scope of the authorization, so long as the Participating Subdivision fully releases all Released Claims against Released Entities.

11. Attorneys applying to the Attorney Fee Fund knowingly and expressly agree to be bound by the decisions of the Fee Panel, subject to the limited appeal rights set forth in this Fee Agreement, and waive the ability to assert the lack of enforceability of the allocation reached through the procedures outlined herein.

12. Applicants are under an ongoing obligation to inform the Fee Panel in writing of any additional fees earned, expected, or received related to any Opioid litigation throughout the period of the Fee Panel's operation.

H. *Calculation of Amounts Due.*

1. The Fee Panel shall be solely responsible for determining the amount of fees to be paid to each Applicant. None of the Released Entities shall have any responsibility, obligation, or liability of any kind whatsoever with respect to how attorneys' fees are calculated under this subsection, except that the Fee Panel may receive information from Teva or Allergan as to (a) the identity of Participating, Non-Participating, Litigating, Later Litigating, and Non-Litigating Subdivisions; (b) the impact of non-participation by a Litigating Subdivision as is relevant to the Fee Panel's determination in paragraph III.E.6; and (c) such other information as Teva or Allergan may voluntarily elect to provide.

2. The Fee Panel shall establish procedures for making determinations under this Fee Agreement consistent with this Fee Agreement and orders of the MDL Court. Such procedures may include submission of documentary and/or other evidence, interviews with Applicants and/or other counsel (including counsel for Teva and Allergan) that the Fee Panel deems appropriate, and/or other means of creating a record upon which fee awards will be based.

3. In making determinations under this Fee Agreement, the Fee Panel must apply the eligibility criteria set forth in subsection III.G of this Fee Agreement and the criteria set forth in paragraph III.E.2. In addition, the Fee Panel will give consideration in regard to Common Benefit Fund awards to the *Johnson* factors, as well as the following factors (which factors may be applied and given relative weight in the Fee Panel's discretion):

    a. The Applicant's contemporaneously recorded time and labor dedicated to Qualifying Representations along with the Applicant's financial commitment to such Qualifying Representations. Claimed "time" will not be automatically accepted by the Fee Panel but will be critically reviewed and given substantially more weight and consideration if such time was subject to the audit process described in any Pretrial Order(s) governing the collection of common benefit time;

    b. The novelty, time, and complexity of the Qualifying Representations;

    c. The skill requisite to perform legal services properly and undesirability of the case;

    d. The preclusion of other employment by the Applicant due to time dedicated to Qualifying Representations;

    e. The Common Benefit, if any, alleged to have been conferred by the Applicant and whether such Common Benefit work product by that Applicant was used by others in parallel litigations against Released Entities whether within or outside the MDL, provided that any Applicant claiming that s/he substantially benefited cases other than those in which s/he entered an appearance as

counsel must substantiate such claims by proffering factual support, such as proper supporting affidavits or other documents as determined by the Fee Panel with input from Attorneys for Participating Litigating Subdivisions;

f. Any "common detriment," as set forth in paragraph III.E.6.

g. Any contingent fee agreement or other Fee Entitlement with Participating Subdivisions, enforcement of which, except for State Back-Stop Agreements, are waived in conjunction with the application, the nature and extent of any work for those Participating Subdivisions, whether such Participating Subdivisions actively litigated and, if so, the nature and procedural history of such case(s);

h. The experience, reputation, and ability of the Applicant;

i. Whether the Applicant's clients brought Released Claims against Released Entities;

j. The status of discovery in cases primarily handled by the Applicant;

k. The nature of any work by the Applicant on "bellwether" cases or cases that were similarly active in litigation;

l. Any pressure points successfully asserted by the Applicant in cases against Teva or Allergan or any risk for Teva or Allergan created by the Applicant in cases against them;

m. Any risk for defendants created by Applicants in cases against Teva or Allergan;

n. Successful and unsuccessful motion practice in cases worked on by the Applicant;

o. The date of filing of any cases filed by the Applicant;

p. Obtaining consolidation of the litigation in the Applicant's jurisdiction;

q. The number and population of entities represented by the Applicant and the fees that would have been awarded under extinguished contingent fee arrangements;

r. Whether the Applicant's clients brought claims against Teva or Allergan;

s. Whether the Applicant has had a leadership role in the litigation, whether in state or federal court;

t. Whether the Applicant has had a leadership role in any negotiations aimed at resolving the litigation;

u. Whether the Applicant's cases have survived motions to dismiss;

v. The extent to which the Applicant contributed to the work product used for the common benefit of opioids litigants, including, without limitation, work on ARCOS data, Prescription Data Monitoring Programs, IQVIA data, depositions, document production and analysis experts, motions, briefs and pleadings, trial preparations, and trials;

w. The extent to which litigation was done prior to and contributed to completion of settlement negotiations, as distinct from litigation that was done litigating after the announcement of the Teva Agreement or Allergan Agreement, such latter litigation both being of less value and potentially resulting a common detriment to the settlement process; and

x. Any other factors that the Fee Panel finds to be appropriate to consider after input from Applicants to the Attorney Fee Fund.

4. In the event that States and Subdivisions enter into an additional global settlement with a party or parties other than Teva or Allergan that is (a) under the jurisdiction of the MDL Court in MDL No. 2804, (b) creates a separate common benefit fund to be administered by the Fee Panel, and (c) unless the parties agree to another date, such agreement has an effective date prior to June 30, 2023, the Fee Panel may:

   a. Consolidate the Common Benefit approval process to include evaluation of all Common Benefit Applications for all settlements entered after November 14, 2022;

   b. Determine the fair and equitable allocation of the Aggregate Common Benefit Fees that come after November 14, 2022;

   c. Give consideration to the amount and timing of each settlement, including the amount and timing of Common Benefit Fees;

   d. The Fee Panel shall abide by the applicable Attorney Fee Agreement in each of the Settlements in Allocating the Common Benefit Fees provided for in the Settlement; and

   e. Be guided in their work by the Orders of the Court related to Fees and Costs.

5. The Fee Panel shall develop procedures for receiving a single application, which may be updated or amended based on new information (such as participation by additional Litigating Subdivisions) from each Applicant seeking compensation from each sub fund of the Attorney Fee Fund pursuant to processes and procedures developed by the Fee Panel, which shall not be inconsistent with this Fee Agreement. Any request for attorneys' fees not included on the single application or through the updating/amendment process designed by the Fee Panel

shall be deemed waived. For purposes of transparency and to permit the Fee Panel to conduct its work, the application from each Applicant shall, at a minimum, require each Applicant to:

a. Identify all Litigating Subdivisions for which s/he is seeking payment from the Attorney Fee Fund;

b. Identify all Subdivisions in both Settling and Non-Settling States (and, where applicable, Tribal Nations) with respect to which s/he has a Fee Entitlement with respect to Relevant Claims against Released Entities, and identify all co-counsel in such cases;

c. Identify which of those Subdivisions are Participating Subdivisions and which are not (with similar information for Tribal Nations, where applicable);

d. Specify the specific fund or funds within the Attorney Fee Fund from which the Attorney is seeking compensation;

e. Demonstrate his or her eligibility for compensation from the relevant sub funds within the Attorney Fee Fund pursuant to the criteria set forth for the relevant sub fund;

f. Identify any and all Fee Entitlements from representations of States, Tribal Nations, or other plaintiffs related to Released Claims against Released Entities or in opioids-related matters;

g. Notwithstanding "a-f" above, the Panel may consider a supplemental application if the Applicant shows good cause why circumstances exist that will lead to consideration for additional Common Benefit award. Examples would include, but are not limited to, an Applicant having Non-Participating Litigating Subdivision clients that subsequently become Participating Subdivisions, a Bar Date passes that increases participation or the Participation Tier, or an Allocation Agreement is reached.

6. With respect to the Common Benefit Fund, the Fee Panel shall (subject to any applicable MDL Court Order):

a. Review the applications of all Applicants seeking compensation from the Common Benefit Fund, including determining eligibility for each Applicant as set forth in subsection III.G.

b. Reduce, on an annual basis, Teva's or Allergan's payment obligations, as set forth in paragraph III.E.7. The Panel shall inform Teva or Allergan, and the MDL PEC of all such amounts and adjust payment obligations accordingly.

c. Using criteria set forth in subsections III.E and III.H, allocate amounts from the Common Benefit Fund to eligible Applicants, including payment amounts for each Payment Year. In making such allocations, the Panel shall apply the

principles set forth in paragraph III.E.6 and shall allocate any reduction in the payments specified in paragraph III.E.7 to the amounts paid to Applicants with a Common Benefit Fee Entitlement.

7. With respect to the Contingency Fee Fund, the Fee Panel shall:

   a. Review the applications of all Attorneys seeking compensation from the Litigating Subdivision Fee Fund, including determining eligibility for each Attorney as set forth in subsection III.G.

   b. Apply the Mathematical Model in Exhibit A.

   c. Use such allocations to reduce on an annual basis the payment obligations of Teva or Allergan to the Attorney Fee Fund as set forth in paragraph III.F.4, and distributions therefrom, and inform Teva or Allergan and the MDL PEC of all such adjustments.

8. To the extent that there is a dispute about the calculations of the Fee Panel related to the amounts that Teva or Allergan is required to pay (including application of any reductions or offsets under this Fee Agreement), such disputes shall be presented to the Fee Panel and any disputed funds be paid into/held in escrow. The Fee Panel shall resolve such disputes expeditiously, with either Party having the right to seek review from the MDL Court.

9. For purposes of determination of fee or cost awards, allocations, reductions, and possible reversions under this Fee Agreement, unless specified otherwise a Subdivision will be considered a Non-Participating Subdivision if it is not a Participating Subdivision as of the deadline for the application for the fee at issue (or, if the determination does not involve a specific application, the date on which the record for such determination closes).

10. In the event that the Fee Panel, through the use of the Mathematical Model set forth in Exhibit A, allocates funds from the Contingency Fee Fund for an Attorney based on a Qualifying Representation of a Participating Litigating Subdivision and that Subdivision is in a Settling State in which the Consent Judgment has not been approved, such funds shall be placed into escrow until the Consent Judgment is approved, after which time they shall be released.

I. *Miscellaneous.*

1. The Fee Panel shall charge an hourly rate approved by the Court. The Pre-Effective Date costs associated with the Cost and Expense Fund Administrator shall be paid from funds in the Cost Fund. Post-Effective Date, the cost of the Fee Panel shall be charged against the applicable Fee Fund based on allocation by the Fee Panel and shall not be otherwise funded by Teva and Allergan.

2. The MDL PEC shall provide to Teva and Allergan information they have that identifies Attorneys who represent Litigating Subdivisions who are not

Participating Subdivisions and who have an obligation to pay a common benefit assessment, either due to the MDL Court's orders or pursuant to a Participation Agreement.

3. Participating Subdivisions agree to instruct their counsel to treat information, work product and expert materials as confidential under Rule 1.6 of the ABA Model Rules of Professional Conduct. Accordingly, an Attorney shall not share information or work product with, or experts or materials to, non-participants (other than the Attorney's own current clients or their lawyers, consultants, experts or other representatives or agents). However, nothing herein shall prevent MDL Leadership or PEC Counsel from fulfilling their obligations in any MDL and the MDL Court Order.

IV. Miscellaneous

A. *Termination*. If the Teva Agreement or Allergan Agreement does not proceed past the Reference Date, whether because Teva and Allergan do not determine to proceed or for any other reason, this Fee Agreement shall be null and void, neither Teva nor Allergan shall have any obligation to make any payments under this Fee Agreement other than Fee Panel costs advanced, and Teva, Allergan, and the PEC shall take such steps as are necessary to restore the *status quo ante*.

B. *MDL Court Consideration*. This Fee Agreement shall be attached as an exhibit to the Teva Agreement and Allergan Agreement. This Fee Agreement shall also be submitted by Teva, Allergan, and the MDL PEC to the MDL Court for approval pursuant to the motion and order that shall be attached, prior to the Preliminary Agreement Date of the Agreements, as Exhibit B.

1. In the event that the MDL Court, through an order, makes any change to the amounts potentially to be paid by Teva and Allergan under this Fee Agreement, makes any change to the Fee Panel's consideration of the factors set forth in paragraph III.E.6, or any other material change to the draft Order attached as part of Exhibit B or the terms of this Fee Agreement, Teva, Allergan, and the MDL PEC shall meet and confer concerning such changes.

2. If Teva, Allergan, and the MDL PEC are unable to reach agreement and revisions to this Fee Agreement, this Fee Agreement shall be null and void, Teva and Allergan shall have no obligation to make any payments under this Fee Agreement, and Teva, Allergan, and the MDL PEC shall take such steps as are necessary to restore the *status quo ante*.

C. *Amendment*. Once the MDL Court has entered an order implementing this Fee Agreement, this Fee Agreement can only be amended by (1) written agreement of Teva, Allergan, and the MDL PEC and (2) approval by the MDL Court.

D. *Jurisdiction and Enforcement*. The MDL Court shall have exclusive and ongoing jurisdiction over the enforcement and implementation of this Fee Agreement as set forth herein. The MDL PEC shall be the Authorized Party to enforce this Fee

Agreement, as to the payment obligations of Teva and Allergan as set forth in this subsection and as to Attorneys making application to the Funds under this Fee Agreement. Solely for purposes of assessing or allocating common benefit fees, the MDL Court will continue to have jurisdiction over the work product developed in the MDL Court by and under the direction of the MDL PEC with respect to claims against Teva or Allergan, including data and documents, depositions, expert reports, briefs and pleadings; and the MDL Court's protective orders, management orders, and other decisions regarding such discovery and other work product, including but not limited to, conditions on its use, will continue in full force and effect. Nothing in this subsection authorizes the MDL Court to act contrary to this Agreement or provides the MDL Court with jurisdiction over the Teva Agreement or Allergan Agreement.

EXHIBIT S
Agreement on the State Outside Counsel Fee Fund for Manufacturer Settlements

1. **Definitions**.

a. "Manufacturer" means any of Teva and Allergan, and "Manufacturers" means all of the foregoing.

b. "Multistate Manufacturer Settlement Agreement" means This Settlement Agreement along with the separate settlement of opioids-related claims among 30 or more states and the other Manufacturer.

c. "This Settlement Agreement" means the settlement agreement between the Settling States and the Manufacturer to which this Agreement is attached as an Exhibit.

d. "Settling Manufacturer" means the Manufacturer that is a party to This Settlement Agreement.

e. "Settling States" has the meaning given such term in the relevant Multistate Manufacturer Settlement Agreement.

2. **Creation of a State Outside Counsel Manufacturers Fee Fund.** The Settling States have agreed to the creation of a state outside counsel fee fund to pay reasonable attorneys' fees of Settling States which have retained outside counsel in connection with litigation against one or more Manufacturers (such fund, the "State Outside Counsel Manufacturers Fee Fund").

3. **State Outside Counsel Manufacturers Fee Fund Administration.** The State Outside Counsel Manufacturers Fee Fund shall be administered separately from any other funds for the payment of attorneys fees or costs in connection with This Settlement Agreement, including any common benefit fund, contingency fee fund for subdivision counsel, state cost fund, or MDL expense fund. If necessary, a committee of Attorneys General shall be convened to oversee the State Outside Counsel Manufacturers Fee Fund (the "Manufacturers Fee Fund Committee"). The Manufacturers Fee Fund Committee shall be appointed by the Settling State Members of the Enforcement Committee and shall be comprised solely of Attorneys General of Settling States that engaged outside counsel to pursue litigation against one or more Manufacturers. The Settlement Fund Administrator (the "Fee Fund Administrator") shall administer the State Outside Counsel Manufacturers Fee Fund according to this Exhibit and, if convened, the guidelines and directives of the Manufacturers Fee Fund Committee.

4. **State Outside Counsel Manufacturers Fee Eligibility.**

a. To receive any amount from the State Outside Counsel Manufacturers Fee Fund, both of the following must be true:

1. an outside counsel to a Settling State must have filed and maintained

an action in the name of a Settling State or its Attorney General against a Manufacturer in a state or federal court as of November 1, 2022; and

2. the State must become a Settling State for each Multistate Manufacturer Settlement Agreement for which it is eligible.

b. No Settling State (or its outside counsel) shall receive funds from both the State Outside Counsel Manufacturers Fee Fund and any "Additional Restitution Amount" as may be provided for in This Settlement Agreement.

c. In addition to the eligibility criteria set forth in Paragraph 4.a, above, and for the avoidance of doubt, only Settling States under This Settlement Agreement are eligible to receive any funds paid into the State Outside Counsel Manufacturers Fee Fund as a result of This Settlement Agreement.

5. **State Outside Counsel Manufacturers Fee Fund Amount.** The Settling Manufacturer shall pay funds into the State Outside Counsel Manufacturers Fee Fund in an amount equal to, and on the schedule identified in, Exhibit M (the "Contribution"). The Settling Manufacturer's Contribution shall be subject to a reduction as described in Paragraph 8, below.

6. **State Outside Counsel Manufacturers Fee Fund Availability and Calculation of Amount.**

a. The State Outside Counsel Manufacturers Fee Fund shall be available to compensate private outside counsel for Settling State Attorneys General for approved fees arising out of representation of the Settling State pursuant to the schedule attached to this agreement as Schedule I (the "Fee Schedule").

b. The Fee Schedule is intended to reflect the fee calculation in subparagraphs 6.c and 6.d, below (the "Fee Calculation"). Subject to adjustments required by Paragraph 8, below, in the event of any discrepancy between the Fee Schedule and the Fee Calculation, the Fee Schedule shall control. Each Settling State, by becoming a Participating State in This Settlement Agreement, agrees that the Fee Schedule reflects the Fee Calculation and waives any right to contest the accuracy of the Fee Schedule, absent manifest error, the exclusion of a Settling State, or the inclusion of a Non-Settling State. The version of the Fee Schedule reflecting any necessary adjustments shall be the "Final Fee Schedule."

c. Except as provided in Paragraph 6.d, below, fees shall be aggregated across the Multistate Manufacturer Settlement Agreements and be calculated by adding two components: (a) a fixed amount consisting of fifty percent (50%) of the amount of remediation funds allocated to a Settling State and its Subdivisions pursuant to the Multistate Manufacturer Settlement Agreements multiplied by 4.5% (or, if lower, the applicable contingency fee percentage in the Settling State's outside counsel contract); and (b) a proportional percentage of the

remaining fee due under that Settling State's contract with its outside counsel assuming that fifty percent (50%) of the Settling State's recovery is allocable to a Settling State (rather than allocable to the Settling State's Participating Subdivisions) so that the fees of all eligible Settling States (minus the fixed amount that would have been allocated to any Non-Settling States had they become Settling States) exhausts the State Outside Counsel Manufacturers Fee Fund. The proportional share percentage will be the same for each Settling State included in the State Outside Counsel Manufacturers Fee Fund. Except as set forth in Paragraph 6.d, fees shall be split proportionally among each Multistate Manufacturer Settlement Agreement, as set forth on the Fee Schedule.

d. Notwithstanding the foregoing, fees for the State of Oklahoma, if it becomes a Settling State under the Multistate Manufacturer Settlement Agreement with Allergan, shall be limited to Oklahoma's share of the State Outside Counsel Manufacturers Fee Fund derived from Allergan's Contribution. Oklahoma's share of the State Outside Counsel Manufacturers Fee Fund derived from Teva's Contribution shall be reallocated proportionally among the other Settling States eligible to receive payments from the State Outside Counsel Manufacturer Fee Fund.

e. All amounts paid will be less the following:

    1. Any costs or fees of the Fee Fund Administrator. The Fee Schedule reflects a holdback amount of $50,000 for such administrative expenses of the Fee Fund Administrator, the remainder of which shall be disbursed proportionally to States receiving monies from the State Outside Counsel Manufacturers Fee Fund at the conclusion of such administration.

7. **Payment by the Fee Fund Administrator**.

a. The Fee Fund Administrator shall hold the Contribution in escrow until the earlier of (1) both Multistate Manufacturer Settlement Agreements become effective or (2) when instructed by the Settling State Members of the Enforcement Committee.

b. Subject to eligibility pursuant to Paragraph 4, above, a Settling State's outside counsel may receive funds from the State Outside Counsel Manufacturers Fee Fund in the following scenarios ("Payment Scenarios"):

    1. The Settling State's outside counsel agrees that the amount listed for such state on the Final Fee Schedule either satisfies in full or exceeds the amounts owed to all such Settling State's outside counsel and such counsel has provided written notice waiving all entitlement to additional fee in respect of any Multistate Manufacturer Settlement

Agreement.

2. The Settling State and its outside counsel enter into a signed writing establishing the amount owed to the counsel, which includes an agreement on the payment of the amount listed for such state on the Final Fee Schedule and waives any right of the State or its outside counsel to additional amounts from the State Outside Counsel Manufacturers Fee Fund.

3. A final judgment is entered that is no longer appealable, which judgement adjudicates the amount owed to the Settling State's counsel in respect of This Settlement Agreement and directs the Manufacturers Fee Fund Committee how to pay the amount listed on the Final Fee Schedule for such State.

If no Payment Scenario is applicable with respect to a Settling State, then the Settling State's share shall be placed in an interest-bearing escrow account (less reasonable expenses of the Fee Fund Administrator) and held unless and until a Payment Scenario is applicable.

c. Upon the applicability of a Payment Scenario 1 with respect to a Settling State, the Fee Fund Administrator shall pay that Settling State's outside counsel the amount identified on the Final Fee Schedule for such state or such lesser amount that satisfies the Settling State's obligation to its outside counsel in full. Any remaining allocation to such State shall be paid to the Settling State.

d. Upon the applicability of a Payment Scenario 2 or 3 with respect to a Settling State, the Fee Fund Administrator shall release monies from the State Outside Counsel Manufacturers Fee Fund in either the amount held by the Fee Fund Administrator, if the amount of the agreement or judgment is equal to or more than the amount held, or the amount indicated in the agreement or in the final judgment, if the amount in the agreement or judgment is less than the amount held.

e. Nothing herein, including the amounts listed in Paragraph 6 above or on any Fee Schedule, shall prevent a Settling State from arguing in any proceeding with its outside counsel that (i) its recovery was less than fifty percent (50%) of the recovery in the settlement agreement down to and including fifteen percent (15%) of the total recovery; (ii) any payment should be discounted by an appropriate discount rate commensurate to the risk of the settlement agreement and the timeline that the Settling State is receiving its payments; (iii) the settlement amount should be lower because the amount a Settling State receives was reduced because such Settling State's outside counsel failed to obtain joinder from a Settling State's Subdivision(s) that the outside counsel also represented; or (iv) any

limitation placed by the Settling Manufacturer bars payment of a higher fee to outside counsel.

f. In the event the amount due to the Settling State's outside counsel from an escrow account is less than the total amount of funds escrowed on the account of the Settling State, the balance shall be paid to the Settling State. In no event, other than a State becoming a Non-Settling State, shall funds revert to a Manufacturer.

8. **Non-Settling States; Reversion and Redistribution.** Amounts owed by the Settling Manufacturer to the State Outside Counsel Manufacturers Fee Fund shall be reduced by amounts allocated to the fixed amount for such State under This Settlement Agreement in the event that a listed State becomes a Non-Settling State. The payments for the other Settling States reflected in the Fee Schedule shall be adjusted by the Fee Fund Administrator to reflect a recalculated proportional percentage under the Fee Calculation.

9. **Interpretation**.

a. This Agreement shall be an Exhibit to each Multistate Manufacturer Settlement Agreement and shall include the Fee Schedule setting forth the presumptive payment calculations for each eligible Settling State. By joining This Settlement Agreement, each State agrees on the presumptive accuracy of the Fee Schedule, absent manifest error, the inclusion of a Non-Settling State, or the exclusion of a Settling State.

b. It is the intent of all parties that the State Outside Counsel Manufacturers Fee Fund function in a similar manner, with similar calculations and mechanics, as the "State Outside Counsel Fee Fund" established in Exhibit S of that certain settlement agreement dated as of July 21, 2021 setting forth the terms of settlement between and among McKesson Corporation, Cardinal Health, Inc., and AmerisourceBergen Corporation, on the one hand, and certain settling states and certain participating subdivisions, on the other hand.

Schedule I to Exhibit S

Fee Schedule

State	Total Fee	Allergan Share	Teva Share
Alaska	$1,252,625.36	$424,966.99	$827,658.36
Delaware	$2,194,254.56	$744,425.11	$1,449,829.45
Georgia	$6,557,324.06	$2,224,644.65	$4,332,679.41
Hawaii	$1,272,349.43	$431,658.60	$840,690.83
Idaho	$1,413,869.58	$479,670.88	$934,198.70
Kentucky	$5,087,998.16	$1,726,159.60	$3,361,838.56
Mississippi	$1,737,202.53	$589,365.16	$1,147,837.38
Nevada	$6,279,564.47	$2,130,411.64	$4,149,152.83
New Mexico	$5,218,189.24	$1,770,328.36	$3,447,860.88
Ohio	$6,831,882.94	$2,317,791.78	$4,514,091.16
Oklahoma	$1,470,349.73	$1,470,349.73	$-
Puerto Rico	$4,823,581.25	$1,636,453.24	$3,187,128.01
South Dakota	$673,251.45	$228,408.00	$444,843.46
	Admin Expense Holdbacks	$18,047.03	$31,952.97
	Total	**$16,192,680.76**	**$28,669,762.00**

Exhibit T
Agreement on the Joint State Cost Fund

1. **Definitions**.

a. "Opioids Defendant" means Teva, Allergan, or such other defendant in opioids-related litigation that enters into a Multistate Settlement after November 1, 2022, and "Opioids Defendants" means all of the foregoing.

b. "Multistate Settlement" means this Settlement Agreement along with any other settlement of opioids-related claims among 30 or more states and an Opioids Defendant.

c. "Settlement Agreement" means the settlement agreement between the Settling States and the Opioids Defendant to which this Agreement is attached as an Exhibit.

d. "Settling Opioids Defendant" means the Opioids Defendant that is a party to the Settlement Agreement.

e. "Settling States" has the meaning given such term in the Settlement Agreement.

2. **Creation of a State Cost Fund.** The Settling Opioids Defendant and the Settling States agree to the creation of a fund to pay costs and expenses associated with litigation and investigations related to the opioids litigation (such fund, the "State Cost Fund"). The State Cost Fund shall be administered separately from any other funds for the payment of attorneys fees or costs in connection with the Settlement Agreement, including any common benefit fund, contingency fee fund for subdivision counsel, subdivision cost fund, or MDL expense fund. However, the State Cost Fund shall be administered jointly with similar "State Cost Funds" created in other Multistate Settlements after November 1, 2022; any state cost funds jointly administered in this manner shall be referred to as the "Joint State Cost Fund." To the extent permissible and feasible, the Joint State Cost Fund may also be jointly administered with any fund for reimbursement of states' litigation and investigation costs established by a bankruptcy plan, including the Mallinckrodt bankruptcy plan, any plans that may emerge from the bankruptcies of Purdue and Endo, and any similar bankruptcies of opioids defendants. To the extent feasible, the Joint State Cost Fund may also be jointly administered with the State Cost Funds established pursuant to the Distributors Multistate Settlement and the Janssen Multistate Settlement.

3. **State Cost Fund Amount.** The Settling Opioids Defendant shall pay into the State Cost Fund in the amount listed on, and on the schedule set forth in, Exhibit M (the "Settling Opioids Defendant's Contribution") for the purpose paying States' costs and expenses associated with to the opioid litigation.

4. **Joint State Cost Fund Committee.** A committee of Attorneys General or their designated representatives (such committee, the "Joint State Cost Fund Committee") shall oversee the Joint State Cost Fund. The committee shall be appointed by the Settling State Members of the Enforcement Committee, who shall aim to (i) have equal representation between states that retained contingency fee outside counsel and states that did not retain contingency fee outside counsel with respect to opioids-related litigation, and (ii) maintain consistency of committee membership across state cost funds that compose the Joint State Cost Fund. The Settling State Members of the Enforcement Committee may by majority vote add to or change the composition of the Joint State Cost Fund Committee.

5. **Joint State Cost Fund Administrator.**

a. The Joint State Cost Fund Committee may select an administrator (the "Joint State Cost Fund Administrator"), who shall administer the Joint State Cost Fund and direct payments to Settling States according to the guidelines and directives of the Joint State Cost Fund Committee. While the expenses of the Joint State Cost Fund Administrator shall be reimbursable pursuant to the principles and guidelines listed below, the Joint State Cost Fund Administrator shall first rely on any separate funds that may be set aside for such purpose in any Multistate Settlement.

b. The Joint State Cost Fund Administrator shall be responsible, under the direction and supervision of the Joint State Cost Fund Committee, for receiving and reviewing applications for reimbursement from the Joint State Cost Fund. This may include the creation of an audit process to ensure the integrity of submissions, as well as reimbursement rules to incentivize accurate submissions.

6. **State Cost Fund Guidelines and Principles.**

a. Monies in the State Cost Fund shall be released without any delay to reimburse Settling States for documented costs incurred or paid in connection with litigation and investigation related to the opioid litigation.

b. In allocating the Joint State Cost Fund, the Joint State Cost Fund Committee shall seek to comply with the following principles:

1. Each State Cost Fund should be used to reimburse costs incurred by States that are Settling States in the Multistate Settlement from which funds are paid. (However, the foregoing sentence does not preclude a Non-Settling State that joins a separate Multistate Settlement from participating in the Joint State Cost Fund with respect to contributions made by other Opioids Defendants.)

2. Funds in any State Cost Fund shall be primarily used to reimburse

costs incurred prior to the date on which the relevant Multistate Settlement was first made available for participation to eligible States. Regardless of other factors considered in prioritizing payments, all costs incurred prior to January 1, 2023, shall be paid before any costs incurred after that date are paid.

3. The Joint State Cost Fund shall prioritize the reimbursement of the following over reimbursement of any State's litigation or investigation costs:

    - the reasonable costs of the Joint State Cost Fund Administrator;

    - repayment of National Association of Attorneys General grants made in connection with opioid investigations and litigation, without regard to when the grants were made;

    - repayment of state-attributable costs of any mediator in connection with negotiations of a Multistate Settlement;

4. The Joint State Cost Fund shall seek to prioritize costs in the following order:

    - litigation-related costs; then

    - investigation-related costs; then

    - settlement and negotiation related costs; then

    - cost shares.

5. Costs incurred by a State's outside counsel that the State is contractually obligated to reimburse shall be treated as costs incurred by a State.

6. As between similar categories of costs (e.g., defendant-specific litigation-related costs), the Joint State Cost Fund shall first reimburse costs incurred by a State's outside counsel that the State is contractually obligated to reimburse out of its recovery, and then reimburse costs directly incurred by States.

7. The Joint State Cost Fund shall be available to reimburse only those costs which have not yet been reimbursed to a State from any other source, including any other fund set aside in a Multistate Settlement or bankruptcy plan for the reimbursement of costs or any individual

state settlements.

8. The Joint State Cost Fund should not reimburse expenses that are expected to be reimbursed from another source, such as a bankruptcy debtor, unless such expected reimbursements do not come to fruition within a reasonable amount of time. This includes cost shares paid by states.

9. When coordinating among different state cost funds that each could be used to reimburse a given expense, the Joint State Cost Fund Committee may set guidelines to equitably distribute reimbursements across all state cost funds in a manner that prioritizes costs unlikely to be otherwise reimbursed to a similarly situated State.

10. The Joint State Cost Fund may deny reimbursement of costs, on either an individual basis or a categorical basis, that a supermajority (75%+) of the Joint State Cost Fund Committee determines to be unreasonable.

11. After all costs identified in the foregoing have been reimbursed, the remaining funds in the Joint State Cost Fund shall be distributed to states in proportion to their allocation of remediation payments in the Mallinckrodt bankruptcy plan. Such distribution shall be treated as a reimbursement for States' unenumerated costs of administering the Multistate Settlements and no subdivision shares shall be carved out of such disbursement, nor shall any attorney's fees be assessed against such distribution (unless individually agreed to by a State).

c. In applying the foregoing principles, the Joint State Cost Fund Committee shall have the discretion to vary their application in order to ensure equity among similarly situated states and to facilitate the ease and speed of administering the Joint State Cost Fund. The Joint State Cost Fund Committee may also apply percentages to approximate costs attributable to a particular Opioids Defendant (or categories of Opioids Defendants) in a manner that seeks to treat similarly situated states equitably.

d. The Joint State Cost Fund Committee shall establish guidelines for the submission and approval of expenses eligible for reimbursement from the Joint State Cost Fund, which guidelines may be coordinated and consolidated with any similar cost funds in other state opioid settlements for purposes of joint administration and efficiency.

e. Unless waived by the Joint State Cost Fund Committee, the Joint State Cost

Fund Administrator shall, in accordance with such guidelines, receive from Settling States records sufficient to demonstrate the incurrence and payment of each expense.

f. Where the Joint State Cost Fund Committee determines by a supermajority vote (75%+) that outside counsel for a Settling State has failed to exercise reasonable diligence in reviewing submitted costs for allowability, and such failure has resulted in the reimbursement of unallowed costs to such outside counsel, the Committee shall have the discretion to reduce or recover payments made to such outside counsel in an amount calculated to incentivize the exercise of reasonable diligence.

7. **State Undertakings.** Each State submitting for reimbursement of costs from the Joint State Cost Fund agrees:

a. to only submit costs allowable under this Joint State Cost Fund Agreement;

b. to provide all back-up documentation that may be requested with respect to any submitted cost and to make itself available for any questions related to such costs;

c. to exercise reasonable diligence to ensure that all submitted costs are allowable under (i) this Joint State Cost Fund Agreement, (ii) the State's contract with its outside counsel, if relevant, (iii) state law, and (iv) the policies and procedures applicable to the State's retention of outside counsel, if relevant; and

d. to promptly return any excess payments made to the State or its outside counsel from the Joint State Cost Fund, including payments made for costs that were reimbursed from another source or are not allowable hereunder.

ALLERGAN PUBLIC GLOBAL OPIOID SETTLEMENT AGREEMENT

I. Definitions 2
II. Participation by States and Condition to Preliminary Agreement 18
III. Cessation of Litigation Activities 19
IV. Injunctive Relief 20
V. Release 20
VI. Monetary Relief Overview and Maximum Payments 25
VII. Annual Payments to Settlement Fund 26
VIII. Allocation and Use of Settlement Funds 38
IX. Participation by Subdivisions and Special Districts 44
X. Condition to Effectiveness of Agreement and Filing of Consent Judgment 49
XI. Potential Payment Adjustments 49
XII. Additional Restitution Amount 50
XIII. Plaintiffs' Attorneys' Fees and Costs 51
XIV. Enforcement and Dispute Resolution 51
XV. Judgment and Settlement Set-Off Related to Teva 57
XVI. Miscellaneous 58

ALLERGAN PUBLIC GLOBAL OPIOID SETTLEMENT AGREEMENT

Whereas, the Settling States, Participating Subdivisions, Participating Special Districts, and Allergan (as those terms are defined below) share a common desire to resolve disputes between them relating to opioid medications according to the terms set out in this agreement dated as of November 22, 2022 (the "*Agreement*");

Whereas, the Parties, Participating Subdivisions, and Participating Special Districts agree and understand that upon satisfaction of the conditions set forth in Sections II and XI, this Agreement will be binding on the Settling States, Allergan, Participating Subdivisions, and Participating Special Districts;

Whereas, the Parties, Participating Subdivisions, and Participating Special Districts agree and understand that this Agreement will then be filed as part of Consent Judgments in the respective courts of each of the Settling States, pursuant to the terms set forth in Section III;

Whereas, the Parties, Participating Subdivisions, and Participating Special Districts agree and understand that they shall at all times act in good faith to implement and execute their obligations under this Agreement and shall not act in any way to purposefully frustrate the right of any party to receive the benefits due under the Agreement;

Whereas, the Parties, Participating Subdivisions, and Participating Special Districts to this Agreement now desire to avoid further expense and proceedings and to settle their disputes under the terms and conditions of this Agreement as set forth below;

NOW, THEREFORE, IT IS HEREBY AGREED by and between the Parties, Participating Subdivisions, and Participating Special Districts by and through their respective counsel, as follows:

I. Definitions

Unless otherwise specified, the following definitions apply:

1. "*Abatement Accounts Fund*" means a component of the Settlement Fund described in subsection VIII.F.

2. "*Additional Restitution Amount*" means the amount available to Settling States listed in Exhibit M of $16,192,680.76.

3. "*Affiliated Company(ies)*" means (1) when used with respect to AbbVie Inc. ("AbbVie") all of the entities listed in Exhibit J-1; (2) when used with respect to Allergan all of the entities listed in Exhibit J-2; and (3) additionally shall include other entities owned now or in the past either wholly or partially and either directly or indirectly by either AbbVie or Allergan and/or each of their respective past parents, but only to the extent those other entities played any role relating to Covered Conduct and/or Released Claims during the period when they were owned

either wholly or partially and either directly or indirectly by either AbbVie or Allergan and/or each of their respective past parents.

4. "*Agreement*" means this Allergan Public Global Opioid Settlement Agreement, inclusive of all exhibits.

5. "*Alleged Harms*" means the alleged past, present, and future financial or societal and related expenditures arising out of the alleged misuse and abuse of opioid products, non-exclusive examples of which are described in the documents listed on Exhibit A, that have allegedly arisen as a result of the physical and bodily injuries sustained by individuals suffering from opioid-related addiction, abuse, death, and other related diseases and disorders, and that have allegedly been caused by Allergan.

6. "*Allergan*" means Allergan Finance, LLC (f/k/a Actavis, Inc., which, in turn, was f/k/a/ Watson Pharmaceuticals, Inc.) and Allergan Limited (f/k/a Allergan plc, which, in turn, was f/k/a Actavis plc). *Allergan* does not include Teva Pharmaceuticals Industries Ltd. ("*Teva Ltd.*"), Teva Pharmaceuticals USA, Inc. ("*Teva USA*"), Cephalon, Inc. ("*Cephalon*"), Actavis LLC (f/k/a Actavis Inc.) ("*Actavis LLC*"), Watson Laboratories, Inc. ("*Watson*"), Actavis Pharma, Inc. (f/k/a Watson Pharma, Inc.) ("*Actavis Pharma*"), Actavis Elizabeth LLC ("*Actavis Elizabeth*"), Actavis Kadian LLC ("*Actavis Kadian*"), Actavis Laboratories FL, Inc. (f/k/a Watson Laboratories, Inc. - Florida) ("*Actavis Labs FL*"), Actavis Laboratories UT, Inc. (f/k/a Watson Laboratories, Inc. - Utah) ("*Actavis Labs UT*"), Actavis Mid Atlantic LLC ("*Actavis Mid*"), Actavis South Atlantic LLC ("*Actavis South*"), Actavis Totowa LLC ("*Actavis Totowa*"), or Anda, Inc. ("*Anda*").

7. "*Allocation Statute*" means a state law that governs allocation, distribution, and/or use of some or all of the Settlement Fund amounts allocated to that State and/or its Subdivisions and/or its Special Districts. In addition to modifying the allocation, as set forth in subsection VIII.E.2, an Allocation Statute may, without limitation, contain a Statutory Trust, further restrict expenditure of funds, form an advisory committee, establish oversight and reporting requirements, or address other default provisions and other matters related to the funds. An Allocation Statute is not required to address all three (3) types of funds comprising the Settlement Fund or all default provisions.

8. "*Annual Payment*" means the total amount of the Net Abatement Amount payable into the Settlement Fund by Allergan on each Payment Date (including the Initial Year Payment), as calculated by the Settlement Fund Administrator pursuant to Section VII or agreed to pursuant to Section VII.B.6, which shall not exceed the maximum payment for any given year as set forth in Exhibit M. This term does not include the Additional Restitution Amount or amounts paid pursuant to Section XIII.

9. "*Appropriate Official*" means the official defined in subsection XVI.F.4.

10. "*Attorney Fee and Cost Payment*" means the total amount of the Global Settlement Attorney Fee Amount payable by Allergan on the Payment Date of each year into the (1) Attorney Fee and Cost Fund described in Exhibit R, (2) the State Cost Fund described in Exhibit T, and (3) the State Outside Counsel Fee Fund described in Exhibit S, for attorneys' fees, expenses, and costs of the Settling States and Participating Subdivisions.

11. "*Attorney Fee and Cost Fund*" means an account consisting of $187,115,422.10 to pay attorneys' fees and costs of Litigating Subdivisions that become Participating Subdivisions and the MDL Expense Fund, amounts pursuant to the agreement on attorneys' fees and costs attached as Exhibit R.

12. "*Bar*" means either (1) a ruling by the highest court of the State, or the intermediate court of appeals when not subject to further review by the highest court of the State in a State with a single intermediate court of appeals, setting forth the general principle that no Subdivisions or Special Districts in the State may maintain Released Claims against Released Entities, whether on the ground of the Agreement (or the release in it) or otherwise; (2) a law barring Subdivisions and Special Districts in the State from maintaining or asserting Released Claims against Released Entities (either through a direct bar or through a grant of authority to release claims and that authority is exercised in full); or (3) a Settlement Class Resolution in the State with full force and effect. For the avoidance of doubt, a law or ruling that is conditioned or predicated upon payment by a Released Entity (apart from payments by Allergan incurred under the Agreement) shall not constitute a Bar.

13. "*Base Payment*" means the payments made pursuant to Section VII.D.

14. "*Case-Specific Resolution*" means either (1) a law barring specified Subdivisions or Special Districts from maintaining Released Claims against Released Entities (either through a direct Bar or through a grant of authority to release claims and that authority is exercised in full) or (2) a ruling by a court of competent jurisdiction over a particular Subdivision or Special District that has the legal effect of barring the Subdivision or Special District from maintaining any Released Claims at issue against Released Entities, whether on the ground of the Agreement (or the release in it) or otherwise. For the avoidance of doubt, a law, ruling, or release that is conditioned or predicated upon a post-Effective Date payment by a Released Entity (apart from payments by Allergan incurred under the Agreement or injunctive relief obligations incurred by it) shall not constitute a Case-Specific Resolution.

15. "*Claim*" means any past, present or future cause of action, claim for relief, cross-claim or counterclaim, theory of liability, demand, derivative, claim, request, assessment, charge, covenant, damage, debt, lien, loss, fine, penalty, restitution, reimbursement, disgorgement, expenses, judgment, right, obligation, dispute, suit, contract, controversy, agreement, parens patriae claim, promise, performance, warranty, omission, or grievance of any nature whatsoever, whether legal, equitable, statutory, regulatory or administrative, whether arising under federal,

state or local common law, statute, regulation, guidance, ordinance or principles of equity, whether filed or unfiled, whether asserted or unasserted, whether known or unknown, whether accrued or unaccrued, whether foreseen, unforeseen or unforeseeable, whether discovered or undiscovered, whether suspected or unsuspected, whether fixed or contingent, and whether existing or hereafter arising, in all such cases, including but not limited to any request for declaratory, injunctive, or equitable relief, compensatory, punitive, or statutory damages, absolute liability, strict liability, restitution, subrogation, contribution, indemnity, apportionment, disgorgement, reimbursement, attorney fees, expert fees, consultant fees, fines, penalties, expenses, costs or any other legal, equitable, civil, administrative, or regulatory remedy whatsoever. Claim does not include any individuals' personal injury or wrongful death cause of action.

16. "*Claim Over*" means a Claim asserted by a Non-Released Entity against a Released Entity on the basis of contribution, indemnity, or other claim over on any theory relating to a Non-Party Covered Conduct Claim asserted by a Releasor.

17. "*Compensatory Restitution Amount*" means the aggregate amount of payments by Allergan hereunder other than amounts paid as attorneys' fees and costs or identified pursuant to subsection VIII.C as being used to pay attorneys' fees and investigation costs or litigation costs.

18. "*Consent Judgment*" means a state-specific consent judgment, the general terms of which shall be agreed by the Settling States and Allergan prior to the Reference Date and shall include (1) approval of this Agreement and (2) the release set forth in Section V, including the full and final resolution of any Released Claims that the Settling State has brought against Released Entities.

19. "*Court*" means the respective court for each Settling State to which the Agreement and the Consent Judgment are presented for approval and/or entry as to that Settling State, or the Northern District of Ohio for purposes of administering the Attorney Fee and Cost Fund and any related fee and cost agreements.

20. "*Covered Conduct*" means any actual or alleged act, failure to act, negligence, statement, error, omission, breach of any duty, conduct, event, transaction, agreement, service, work, misstatement, misleading statement, or other activity of any kind whatsoever from the beginning of time through the Reference Date of this Agreement (and any past, present, or future consequence of any such act, failure to act, negligence, statement, error, omission, breach of duty, conduct, event, transaction, agreement, service, work, misstatement, misleading statement, or other activity) arising from or relating in any way to (a) the availability, discovery, research, development, manufacture, packaging, repackaging, marketing, promotion, advertising, labeling, relabeling, recall, withdrawal, distribution, delivery, monitoring, reporting, supply, sale, prescribing, dispensing, physical security, warehousing, use or abuse of, or operating procedures relating to, any Product, or any system, plan, policy, procedure, or advocacy relating to any Product or class of Products, including, but not limited to, any unbranded or branded

promotion, marketing, or advertising, unbranded information, patient support or assistance, educational programs, consultancy, research, or other programs, campaigns, lobbying, or grants, sponsorships, charitable donations, or other funding relating to any Product or class of Products; (b) the characteristics, properties, risks, or benefits of any Product or class of Products; (c) the monitoring, reporting, disclosure, non-monitoring, non-reporting, or non-disclosure to federal, state, or other regulators of orders for any Product or class of Products; (d) the selective breeding, harvesting, extracting, purifying, exporting, importing, applying for quota for, procuring quota for, handling, promoting, manufacturing, processing, packaging, supplying, distributing, converting, or selling of, or otherwise engaging in any activity relating to, a precursor or component of Product, including but not limited to natural, synthetic, semi-synthetic, or chemical raw materials, starting materials, finished active pharmaceutical ingredients, drug substances, or any related intermediate of Product; and/or (e) diversion control programs or suspicious order monitoring related to any Product. The foregoing is not intended to apply to claims alleging contamination of products.

21. "*Covered Special Districts*" means a Special District that is (1) a school district with K-12 student enrollment of at least 25,000 or 0.12% of a State's population, whichever is greater; (2) a fire district that covers a population of 25,000, or 0.20% of a State's population if a State's population is greater than 18 million (though, if a fire district's population is not easily calculable from state data sources and agreed to between the State and Allergan, it is calculated by dividing the population of the county or counties a fire district serves by the number of fire districts in the county or counties); or (3) a healthcare district or hospital district with at least 125 hospital beds in one or more hospitals rendering services in that district.

22. "*Designated State*" means New York.

23. "*Divested Actavis Generic Entity(ies)*" means Actavis LLC, Watson, Actavis Pharma, Actavis Elizabeth, Actavis Kadian, Actavis Labs FL, Actavis Labs UT, Actavis Mid, Actavis South, and Actavis Totowa.

24. "*Divested Entity(ies)*" means those companies listed on Exhibit J-3, which includes the Divested Actavis Generic Entities.

25. "*Effective Date*" means the date sixty (60) days after the Reference Date.

26. "*Eligible State*" means a State that is not a Prior Settling State and is thus eligible to participate in this Agreement and become a Settling State.

27. "*Enforcement Committee*" means a committee consisting of representatives of the Settling States and of the Participating Subdivisions. Exhibit B contains the organizational bylaws of the Enforcement Committee. Notice pursuant to subsection XVI.P shall be provided when there are changes in membership or contact information.

28. "*Exhibit G Participant"* means a Participating Subdivision or Participating Special District that appears in Exhibit G at the relevant point in time. Nothing about the use of the term Exhibit G Participant changes the ability to amend the list of entities listed on Exhibit G pursuant to this Agreement.

29. "*Global Settlement Abatement Amount*" means the total abatement amount of $2,149,873,027.00. (This figure does not reflect the application of the Prior Settlements Credit or potential offsets. It also does not include amounts paid to the Additional Restitution Amount, which may be used for abatement.)

30. "*Global Settlement Amount*" means $2,372,972,184.12 and consists of the Global Settlement Abatement Amount, the Global Settlement Attorney Fee Amount, and the Additional Restitution Amount.

31. "*Global Settlement Attorney Fee Amount*" means $206,906,476.36, which consists of the Attorney Fee and Cost Fund, the State Outside Counsel Fee Fund, and the State Cost Fund.

32. "*Implementation Administrator*" means the vendor agreed to by the Parties and retained by Teva and Allergan to provide notice pursuant to Section X.A and to manage the initial joinder period for Subdivisions and Special Districts, including the issuance and receipt of Settlement Participation Forms.

33. "*Implementation Costs*" means the costs for the Implementation Administrator, which shall be paid for pursuant to subsection VI.D.

34. "*Incentive A*" means the incentive payment described in subsection VII.E.5.

35. "*Incentive B*" means the incentive payment described in subsection VII.E.6.

36. "*Incentive C*" means the incentive payment described in subsection VII.E.7.

37. "*Incentive D*" means the incentive payment described in subsection VII.E.8.

38. "*Incentive Payment*" means the payments made pursuant to Section VII.E.

39. "*Initial Participating Special District*" means a Special District that meets the requirements set forth in subsection IX.L.

40. "*Initial Participating Subdivision*" means a Subdivision that meets the requirements set forth in subsection IX.D.

41. "*Initial Participation Date*" means the date ninety (90) days after the Preliminary Agreement Date, unless it is extended by written agreement of Allergan and the Enforcement Committee.

42. "*Initial Year Payment*" means the first Annual Payment of the Net Abatement Amount payable into the Settlement Fund by Allergan on the Payment Date as

calculated by the Settlement Fund Administrator pursuant to Section VII or agreed to pursuant to Section VII.B.6, which shall not exceed the maximum payment for the Initial Year Payment as set forth in Exhibit M.

43. "*Injunctive Relief Terms*" means the terms described in Section IV and set forth in Exhibit P.

44. "*Later Litigating Special District*" means a Special District (or Special District official asserting the right of or for the Special District to recover for Alleged Harms to the Special District and/or the people thereof) that is not a Litigating Special District and that files a lawsuit bringing a Released Claim against a Released Entity, or that adds such a Claim to a pre-existing lawsuit, after the Preliminary Agreement Date. It may also include a Litigating Special District whose Claims were resolved by a Bar or Case-Specific Resolution, which is later revoked following the execution date of this Agreement, when such Litigating Special District takes any affirmative step in its lawsuit other than seeking a stay, removal or dismissal with prejudice.

45. "*Later Litigating Subdivision*" means a Subdivision (or Subdivision official asserting the right of or for the Subdivision to recover for Alleged Harms to the Subdivision and/or the people thereof) that is not a Litigating Subdivision and that files a lawsuit bringing a Released Claim against a Released Entity, or that adds such a Claim to a pre-existing lawsuit, after the Preliminary Agreement Date. It may also include a Litigating Subdivision whose Claims were resolved by a Bar or Case-Specific Resolution, which is later revoked following the execution date of this Agreement, when such Litigating Subdivision takes any affirmative step in its lawsuit other than seeking a stay, removal, or dismissal with prejudice.

46. "*Later Participating Special District*" means a Participating Special District that meets the requirements of subsection IX.M but is not an Initial Participating Special District.

47. "*Later Participating Subdivision*" means a Participating Subdivision that meets the requirements of subsection IX.E but is not an Initial Participating Subdivision.

48. "*Litigating Special District*" means a Special District (or Special District official asserting the right of or for the Special District to recover for Alleged Harms to the Special District and/or the people thereof) that brought any Released Claims against any Released Entities on or before the Preliminary Agreement Date that were not separately resolved prior to that date. Exhibit C includes an agreed list of the Litigating Special Districts. Exhibit C will be updated (including with any corrections) periodically, and a final version of Exhibit C will be attached hereto as of the Effective Date.

49. "*Litigating Subdivision*" means a Subdivision (or Subdivision official asserting the right of or for the Subdivision to recover for Alleged Harms to the Subdivision and/or the people thereof) that brought any Released Claims against any Released

Entities on or before the Preliminary Agreement Date that were not separately resolved prior to that date. A Prior Settling Subdivision shall not be considered a Litigating Subdivision. Exhibit C includes an agreed list of the Litigating Subdivisions. Exhibit C will be updated (including with any corrections) periodically, and a final version of Exhibit C will be attached hereto as of the Effective Date.

50. "*National Arbitration Panel*" means the panel described in subsection XIV.G.4.

51. "*National Disputes*" means the disputes described in subsection XIV.G.

52. "*Net Abatement Amount*" means $1,799,186,751.00, which is the Global Settlement Abatement Amount adjusted for the Prior Settlements Credit pursuant to subsection VI.C.2.

53. "*Non-Litigating Covered Special District*" means a Covered Special District that is not a Litigating Special District.

54. "*Non-Litigating Special District"* means a Special District that is neither a Litigating Special District nor a Later Litigating Special District.

55. "*Non-Litigating Subdivision*" means a Subdivision that is not (1) a Litigating Subdivision, (2) a Later Litigating Subdivision, or (3) a Prior Settling Subdivision.

56. "*Non-Participating Special District*" means a Special District that is not a Participating Special District.

57. "*Non-Participating Subdivision*" means a Subdivision that is not a Participating Subdivision. For the avoidance of doubt, Non-Participating Subdivision also includes Prior Settling Subdivisions.

58. "*Non-Party Covered Conduct Claim*" means a Claim against any Non-Released Entity involving, arising out of, or related to Covered Conduct (or conduct that would be Covered Conduct if engaged in by a Released Entity).

59. "*Non-Party Settlement*" means a settlement by any Releasor that settles any Non-Party Covered Conduct Claim and includes a release of any Non-Released Entity.

60. "*Non-Released Entity*" means an entity that is not a Released Entity.

61. "*Non-Settling State*" means a State that is an Eligible State but not a Settling State.

62. "*Opioid Remediation*" means care, treatment, and other programs and expenditures (including reimbursement for past such programs or expenditures except where this Agreement restricts the use of funds solely to future Opioid Remediation) designed to (1) address the misuse and abuse of opioid products, (2) treat or mitigate opioid use or related disorders, or (3) mitigate other alleged effects of the opioid abuse crisis, including on those injured as a result of the opioid abuse crisis. Exhibit E

provides a non-exhaustive list of expenditures that qualify as being paid for Opioid Remediation. Qualifying expenditures may include reasonable related administrative expenses.

63. "*Participating Special District*" means a Special District that signs the Settlement Participation Form annexed hereto as Exhibit K and meets the requirements for becoming a Participating Special District under Section IX. Participating Special Districts include both Initial Participating Special Districts and Later Participating Special Districts.

64. "*Participating Subdivision*" means a Subdivision that signs a Settlement Participation Form annexed hereto as Exhibit K and meets requirements for becoming a Participating Subdivision under Section IX. Participating Subdivisions include both Initial Participating Subdivisions and Later Participating Subdivisions.

65. "*Parties*" means Allergan and the Settling States (each, a "*Party*").

66. "*Payment Date*" means the date on which Allergan makes its Annual Payments (including its Initial Year Payment), Additional Restitution Payments, and Attorney Fee and Cost Payments, pursuant to Section VII and XIII and Exhibits M-1 and M-2. The first Payment Date is thirty (30) days after the Effective Date. The second Payment Date is July 15, 2024, the third Payment Date is July 15, 2025, the fourth Payment Date is July 15, 2026, the fifth Payment Date is July 15, 2027, the sixth Payment Date is July 15, 2028, and the seventh Payment Date is July 15, 2029.

67. "*Payment Year*" means the calendar year during which the applicable Annual Payment is due pursuant to subsection VII.B. Payment Year 1 is 2023, Payment Year 2 is 2024, and so forth. References to payment "for a Payment Year" mean the Annual Payment due that year. References to eligibility "for a Payment Year" mean eligibility in connection with the Annual Payment due during that year.

68. "*Preliminary Agreement Date*" means the date on which Allergan gives notice to the Settling States and MDL Plaintiffs' Executive Committee of its determination that a sufficient number of States have agreed to be Settling States to proceed with notice pursuant to Section IX.A. This date shall be no more than fourteen (14) days after the end of the notice period to States (as set forth in Section II.A) unless it is extended by written agreement of Allergan and the Enforcement Committee.

69. "*Primary Subdivision*" means a Subdivision that has a population of 30,000 or more. A list of Primary Subdivisions in each State is provided in Exhibit I, and such list shall be updated if any Primary Subdivision is inadvertently missed or included.

70. *"Prior Settlements Credit"* means the credit of $350,686,276.00, reflecting that the allocations for Prior Settling States and Prior Settling Subdivisions for Claims related to the Covered Conduct against Allergan and/or other Released Entities were or will be separately settled. The credit is applied pursuant to subsection VI.A.1.

71. *"Prior Settling State(s)"* means Florida, Louisiana, New York, Rhode Island, and West Virginia and all Subdivisions and Special Districts within those States whose Claims were released as part of those States' settlements.

72. *"Prior Settling Subdivision(s)"* means the City and County of San Francisco, California, Cuyahoga County, Ohio, and Summit County, Ohio.

73. "*Product*" means any chemical substance, whether used for medicinal or non-medicinal purposes, and whether natural, synthetic, or semi-synthetic, or any finished pharmaceutical product made from or with such substance, that is an opioid or opiate, as well as any product containing any such substance. It also includes: 1) the following when used in combination with opioids or opiates: benzodiazepine, carisoprodol, zolpidem, gabapentin, diazepam, estazolam, quazepam, alprazolam, clonazepam, oxazepam, flurazepam, triozolam, temazepam, midazolam; and 2) a combination or "cocktail" of any stimulant or other chemical substance prescribed, sold, bought, or dispensed to be used together that includes opioids or opiates. For the avoidance of doubt, "*Product*" does not include benzodiazepine, carisoprodol, zolpidem, or gabapentin when not used in combination with opioids or opiates. "*Product*" includes but is not limited to any substance consisting of or containing buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, naloxone, naltrexone, oxycodone, oxymorphone, pentazocine, propoxyphene, tapentadol, tramadol, opium, heroin, carfentanil, any variant of these substances, or any similar substance. "*Product*" also includes any natural, synthetic, semi-synthetic or chemical raw materials, starting materials, finished active pharmaceutical ingredients, drug substances, and any related intermediate products used or created in the manufacturing process for any of the substances described in the preceding sentence. Further, "Product(s)" includes, but is not limited to, the following: (a) Anexsia, Bancap HC, Combunox, Dilaudid, Dilaudid HP, Duradyne, Esgic with Codeine, Fiorinal with Codeine, Fioricet with Codeine, Kadian, Lorcet, Lorcet Plus, Maxidone, MoxDuo, Norco, Procet, Reprexain, Vicodin, Vicodin ES, Vicodin HP, and Vicoprofen, and any type, version, strength, or dosage of the foregoing; and (b) Aspirin + butalbital + caffeine + codeine phosphate, Fentanyl citrate injection, Fentanyl citrate tablet, Fentanyl transdermal, Homatropine methylbromide + hydrocodone bitartrate, Hydrocodone + acetaminophen, Hydrocodone + ibuprofen, Hydromorphone tablet, Meperidine hydrochloride injection, Meperidine hydrochloride tablet, Morphine sulfate capsule, Morphine sulfate injection, Morphine sulfate tablet, Oxycodone, Oxycodone + acetaminophen, Oxycodone + aspirin, Oxycodone + hydrochloride, Oxycodone + ibuprofen, Oxymorphone tablet, Tramadol hydrocholoride, and any type, version, strength, or dosage of the foregoing.

74. "*Reference Date*" means the date on which Allergan is to inform the Settling States and MDL Plaintiffs' Executive Committee of its determination whether there is sufficient resolution of Claims and potential Claims at the Subdivision level to go forward with the settlement. The Reference Date shall be no later than thirty (30) days after the Initial Participation Date, unless it is extended by written agreement of Allergan and the Enforcement Committee.

75. "*Released Claims*" means any and all Claims that directly or indirectly are based on, arise out of, or in any way relate to or concern the Covered Conduct occurring prior to the Reference Date. Without limiting the foregoing, "Released Claims" include any Claims that have been asserted against the Released Entities by any Settling State or any of its Litigating Subdivisions or Litigating Special Districts in any federal, state, or local action or proceeding (whether judicial, arbitral, or administrative) based on, relating to, in whole or in part, the Covered Conduct, or any such Claims that could be or could have been asserted now or in the future in those actions or in any comparable action or proceeding brought by a State or any of its Subdivisions or Special Districts or any Releasors (whether or not such State, Subdivision, Special District, or Releasor has brought such action or proceeding). Released Claims also include all Claims against Released Entities asserted in any proceeding to be dismissed pursuant to the Agreement, whether or not such claims relate to Covered Conduct. "Released Claims" shall be interpreted broadly. This Agreement does not release Claims by private individuals. Claims by private individuals shall be treated in accordance with applicable law. Released Claims is also used herein to describe Claims brought by a Later Litigating Subdivision, Later Litigating Special District, or other non-party Subdivision or Special District that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date.

76. "*Released Entities*" means Allergan and (1) all of Allergan's past and present direct or indirect parents, subsidiaries, divisions, joint ventures, predecessors, successors, affiliates, business units, assigns, agents (all of the foregoing solely in their capacity as such with respect to the Released Claims), and insurers (solely in their role as insurers, if any, with respect to the Released Claims), including, but not limited to, (a) AbbVie and (b) Divested Actavis Generic Entities and other Divested Entities (and their respective past and current parents, subsidiaries, and affiliates, including but not limited to Teva Ltd., Teva USA, and their subsidiaries and affiliates) but solely as to the branded opioid drugs that are Products distributed and/or sold before August 2, 2016 by Divested Actavis Generic Entities and other Divested Entities and the operation of the Divested Actavis Generic Entities and other Divested Entities related to those branded opioid drugs that are Products before August 2, 2016; (2) any person or entity to the extent, and only to the extent, that such person or entity may have a Claim based on such person or entity having a business relationship with Allergan or AbbVie and/or any of Allergan or AbbVie's Affiliated Companies, including, but not limited to, for contractual indemnity, equitable or implied indemnity, contribution, comparative fault, reimbursement, or apportionment (including, but not limited to, the respective past and present direct or indirect parents, subsidiaries, divisions, joint ventures, predecessors, successors, affiliates, business units, assigns, partners, manufacturers, contractors, agents, and insurers (all of the foregoing solely in their capacity as such with respect to the Released Claims) of any of the foregoing in (1), including Abbott Laboratories and Abbott Laboratories Inc. ("Abbott"), provided that, for avoidance of doubt, Abbott is not a Released Entity for purposes of Claims related to OxyContin, Purdue Pharma, or Purdue Pharma Inc.; and (ii) Halo Pharmaceuticals, Inc., Shionogi Inc., Mikart, LLC, PDI, Inc., TMS Health, LLC, National Health Information Network,

Inc., Ventiv Commercial Services, LLC, inVentiv Commercial Services, LLC, UPS Supply Chain Solutions, Inc., and King Pharmaceuticals, Inc., and their respective past and current parents, subsidiaries, and affiliates) against Allergan or AbbVie and/or any of Allergan or AbbVie's Affiliated Companies relating to any Covered Conduct, Products, class of Products, and/or Released Claims arising from such business relationship; and (3) the respective past and present employees, officers, directors, members, shareholders, partners, trustees, contractors, consultants, and agents (all of the foregoing solely in their capacity as such with respect to the Released Claims) of any of the foregoing in (1) and (2). Notwithstanding the foregoing (and subject to certain provisions, including, but not limited to, the Non-Party Settlement at Section V.B.2 and the Set-Off at Section XV below), Released Entities shall exclude Divested Actavis Generic Entities and other Divested Entities (and their respective past and current parents, subsidiaries, and affiliates, including but not limited to Teva Ltd., Teva USA, and their subsidiaries and affiliates, but not Allergan and other Released Entities), but solely as to: (i) their generic opioid drugs that are Products, and/or (ii) the operation of Divested Actavis Generic Entities and other Divested Entities related to those generic opioid drugs that are Products for which Releasors have also sought to hold Allergan (and/or other Released Entities) liable. For the avoidance of doubt, any entity acquired, or joint venture entered into by Allergan after the Reference date is not a Released Entity.

77. "*Releasors*" means (1) each Settling State; (2) each Participating Subdivision; (3) each Participating Special District; and (4) without limitation and to the maximum extent of the power of each Settling State's Attorney General and/or Participating Subdivision and Participating Special District to release Claims, (a) the Settling State's, Participating Subdivision's, and Participating Special District's departments, agencies, divisions, boards, commissions, Subdivisions, districts, instrumentalities of any kind and attorneys, including its Attorney General, and any person in their official capacity whether elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, (b) any public entities, public instrumentalities, public educational institutions, unincorporated districts, fire districts, irrigation districts, water districts, emergency services districts, school districts, healthcare districts, hospital districts, Sheriffs and law enforcement districts, library districts, coroner's offices, and public transportation authorities, and other Special Districts in a Settling State, including those with the regulatory authority to enforce state and federal controlled substances acts or the authority to bring Claims related to Covered Conduct seeking money (including abatement (or remediation and/or restitution)) or revoke a pharmaceutical distribution license, and (c) any person or entity acting in a parens patriae, sovereign, quasi-sovereign, private attorney general, qui tam, taxpayer, or other capacity seeking relief, including but not limited to, fines, penalties, or punitive damages, on behalf of or generally applicable to the general public with respect to a Settling State or a Subdivision or Special District in a Settling State, whether or not any of them participate in the Agreement. "Releasors" does not include persons acting in an individual capacity, regardless of the type of relief sought. In addition to being a Releasor as provided herein, Participating Subdivisions and Participating Special Districts shall also provide a Settlement

Participation Form, which is attached as Exhibit K. Each Settling State's Attorney General represents that he or she has or has obtained (or will obtain no later than the Effective Date) the authority set forth in the Representation and Warranty subsection of Section V.

78. "*Revocation Event*" means with respect to a Bar, Settlement Class Resolution, or Case-Specific Resolution, a legislative amendment or a revocation, rescission, reversal, overruling, or interpretation that in any way limits the effect of such Bar, Settlement Class Resolution, or Case-Specific Resolution on Released Claims or any other action or event that otherwise deprives the Bar, Settlement Class Resolution or Case-Specific Resolution of force or effect in any material respect.

79. "*Settlement Class Resolution*" means a class action resolution in a court of competent jurisdiction in a Settling State with respect to a class of Subdivisions and Special Districts in that State that (1) conforms with that Settling State's statutes, case law, and/or rules of procedure regarding class actions; (2) is approved and entered as an order of a court of competent jurisdiction in that State and has become final as defined in "State-Specific Finality"; (3) is binding on all Non-Participating Subdivisions and Non-Participating Special Districts in that State (other than opt outs as permitted under the next sentence); (4) provides that all such Non-Participating Subdivisions or Non-Participating Special Districts may not bring Released Claims against Released Entities, whether on the ground of the Agreement (or the releases herein) or otherwise; and (5) does not impose any costs or obligations on Allergan other than those provided for in the Agreement, or contain any provision inconsistent with any provision of the Agreement. If applicable state law requires that opt-out rights be afforded to members of the class, a class action resolution otherwise meeting the foregoing requirements shall qualify as a Settlement Class Resolution unless Subdivisions collectively representing more than 1% of the total population of all of that State's Subdivisions listed in Exhibit G opt out. In seeking certification of any Settlement Class, the applicable State and Participating Subdivisions shall make clear that certification is sought solely for settlement purposes and shall have no applicability beyond approval of the settlement for which certification is sought. Nothing in this Agreement constitutes an admission by any Party that class certification would be appropriate for litigation purposes in any case.

80. "*Settlement Fund*" means the interest-bearing fund established under the Agreement into which Annual Payments by Allergan are made pursuant to subsection VII. The Settlement Fund comprises the Abatement Accounts Fund, State Fund, and Subdivision Fund.

81. "*Settlement Fund Administrator*" means the entity that determines the Annual Payments (including calculating Incentive Payments pursuant to Section VII and any amounts subject to offset pursuant to Sections VII.C and XI), and administers and distributes amounts into the Settlement Fund. It shall also administer and distribute the Additional Restitution Amount pursuant to Section XII. The duties of the Settlement Fund Administrator shall be governed by this Agreement. Prior to

the Initial Participation Date, the Parties shall agree to selection and removal processes for and a detailed description of the Settlement Fund Administrator's duties all of which shall be appended to the Agreement as Exhibit L.

82. "*Settlement Fund Administrator Costs*" means any costs and fees associated with or arising out of the duties of the Settlement Fund Administrator with regard to Teva and Allergan's payments to the Settlement Fund as described in Exhibit L and elsewhere in this Agreement, including those arising from the use of a bank or other financial institution to receive and disburse payments.

83. "*Settlement Fund Escrow*" means the interest-bearing escrow fund established pursuant to this Agreement to hold disputed payments made under this Agreement.

84. "*Settlement Participation Form*" means the form attached as Exhibit K that Participating Subdivisions and Participating Special Districts must execute and provide to Allergan and the Implementation Administrator or Settlement Fund Administrator, and which shall (1) make such Participating Subdivisions and Participating Special Districts signatories to this Agreement, (2) include a full and complete release of any and all of such Participating Subdivisions' and Participating Special Districts' Claims and (3) require prompt cessation of litigation activity as set forth in Section III, and request for dismissal with prejudice of any Released Claims that have been filed against Released Entities by any such Participating Subdivisions or Participating Special Districts within fourteen (14) business days after the Reference Date.

85. "*Settlement Payment Schedule*" means the schedule of payments attached to this Agreement as Exhibit M. Actual payment amounts are subject to adjustments consistent with this Agreement.

86. "*Settling State*" means any Eligible State that has entered into this Agreement.

87. "*Special District*" means (1) formal and legally recognized sub-entities of a State recognized by the U.S. Census Bureau[1] and those listed on Exhibit C; and (2) any person, official, or entity thereof acting in an official capacity on behalf of the Special District. Special Districts do not include sub-entities of a State that provide general governance for a defined area that would qualify as a Subdivision. Entities that include any of the following words or phrases in its name shall not be considered a Special District: mosquito, pest, insect, spray, vector, animal, air quality, air pollution, clean air, coastal water, tuberculosis, and sanitary.

88. "*State*" means any state of the United States of America, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands. Additionally, the use of non-capitalized "state" to describe

[1] All such entities are found on the "Special District," "School District," and "DEP School District" tabs of the Census Bureau's 2017 Government Units Listing spreadsheet available at https://www2.census.gov/programs-surveys/gus/datasets/2017/govt_units_2017.ZIP.

something (e.g., "state court") shall also be read to include parallel entities in commonwealths, territories, and the District of Columbia (e.g., "territorial court").

89. "*State Allocation Percentage*" means the allocation percentages for Eligible States as set forth in Exhibit F-2, which have been adjusted from the State Global Allocation Percentages to account for the Prior Settlements Credit.

90. "*State Cost Fund*" means the fund totaling $3,598,373.50 and described in Exhibit T.

91. "*State Global Allocation Percentage*" means the allocation percentages for all States as set forth in Exhibit F-1, which represents allocations before the Prior Settlements Credit is applied.

92. "*State Fund*" means a component of the Settlement Fund described in subsection VIII.D.

93. "*State Outside Counsel Fee Fund*" means the fund totaling $16,192,680.76 described in Exhibit S.

94. "*State-Specific Finality*" means, with respect to the Settling State in question:

a. the Agreement and the Consent Judgment have been approved and entered by the Court as to Allergan, including the release of all Released Claims against Released Entities as provided in this Agreement;

b. for all lawsuits brought by the Settling State against Released Entities for Released Claims, either previously filed or filed as part of the entry of the Consent Judgment, the Court has stated in the Consent Judgment or otherwise entered an order finding that all Released Claims against Released Entities asserted in the lawsuit have been resolved by agreement; and

c. (1) the time for appeal or to seek review of or permission to appeal from the approval and entry as described in subsection (a) hereof and entry of such order described in subsection (b) hereof has expired; or (2) in the event of an appeal, the appeal has been dismissed or denied, or the approval and entry described in (a) hereof and the order described in subsection (b) hereof have been affirmed in all material respects (to the extent challenged in the appeal) by the court of last resort to which such appeal has been taken and such dismissal or affirmance has become no longer subject to further appeal (including, without limitation, review by the United States Supreme Court).

95. "*State-Subdivision Agreement*" means an agreement that a Settling State reaches with the Subdivisions in that State regarding the allocation, distribution, and/or use of funds allocated to that State and to Exhibit G Participants in that State. A State-Subdivision Agreement shall be effective if approved pursuant to the provisions of Exhibit O or if adopted by statute. Preexisting agreements addressing funds other

than those allocated pursuant to this Agreement shall qualify if the approval requirements of Exhibit O are met. A State and its Subdivisions may revise, supplement, or refine a State-Subdivision Agreement if approved pursuant to the provisions of Exhibit O or if adopted by statute.

96. "*Statewide Payment Amount"* means the amount from an Annual Payment to be paid to a Settling State, its separate types of funds (if applicable), and its Exhibit G Participants.

97. "*Statutory Trust*" means a trust fund established by state law to receive funds allocated to a State's Abatement Accounts Fund and restrict their expenditure to Opioid Remediation purposes subject to reasonable administrative expenses. A State may give a Statutory Trust authority to allocate one or more of the three Settlement Funds, but this is not required.

98. "*Subdivision*" means (1) a formal and legally recognized sub-entity of a State that provide general governance for a defined area, such as a municipality, county, parish, city, town, incorporated township, village, borough, or any other entities that provide municipal-type government within a State, and (2) any person, official, or entity thereof acting in an official capacity on behalf of the Subdivision (including, without limitation, district attorneys, county attorneys, city attorneys, Sheriffs, and any other official, employee, or representative). Unless otherwise specified, "Subdivision" includes all functional counties and parishes and other functional levels of sub-entities of a State that provide general governance for a defined area. Historic, non-functioning sub-entities of a State (such as Connecticut counties) are not Subdivisions, unless the entity has filed a lawsuit that includes a Released Claim against a Released Entity in a direct, parens patriae, or any other capacity. For purposes of this Agreement, the term Subdivision does not include Special Districts.

99. "*Subdivision and Special District Allocation Percentage*" means for Subdivisions and Special Districts in a Settling State that are eligible to receive an allocation from the Subdivision Fund pursuant to subsection VIII.D or subsection VIII.E, the percentage as set forth in Exhibit G. The aggregate Subdivision and Special District Allocation Percentage of all Subdivisions and Special Districts receiving a Subdivision and Special District Allocation Percentage in each State shall equal 100%. Immediately upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3) that addresses allocation from the Subdivision Fund, whether before or after the Initial Participation Date, Exhibit G will automatically be amended to reflect the allocation from the Subdivision Fund pursuant to the State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by Section VIII.E.3. The Subdivision and Special District Allocation Percentages contained in Exhibit G may not change once notice is distributed pursuant to subsection X.A, except upon the effectiveness

of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3 (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by subsection VIII.E.3) that addresses allocation from the Subdivision Fund. For the avoidance of doubt, no Subdivision or Special District not listed on Exhibit G shall receive an allocation from the Subdivision Fund and no provision of this Agreement shall be interpreted to create such an entitlement.

100. "*Subdivision Fund*" means a component of the Settlement Fund described in subsection VIII.A.

101. "*Teva*" means (i) Teva Pharmaceutical Industries Ltd. and, (ii) all of its respective past and present direct or indirect parents, subsidiaries, divisions, affiliates, joint ventures, predecessors, successors, assigns, including but not limited to the Divested Actavis Generic Entities and Anda Inc.

102. "*Teva Global Opioid Settlement Agreement*" means the settlement agreement between and among the Settling States, Participating Subdivisions, Participating Special Districts, and Teva to resolve opioid-related Claims against Teva and the other Released Entities (as defined therein).

103. "*Threshold Motion*" means a motion to dismiss or equivalent dispositive motion made at the outset of litigation under applicable procedure. A Threshold Motion must include as potential grounds for dismissal, any applicable Bar or the relevant release by a Settling State, Participating Subdivision, or Participating Special District provided under this Agreement and, where appropriate under applicable law, any applicable limitations defense.

II. Participation by States and Condition to Preliminary Agreement

A. *Notice to States*. On November 22, 2022 this Agreement shall be distributed to all Eligible States. The Eligible States' Attorneys General shall then have a period of thirty (30) days to decide whether to become Settling States. Eligible States will decide whether to become Settling States for both this Agreement and the Teva Global Opioid Settlement Agreement, or decline participation in both settlements. However, if Teva enters bankruptcy prior to the Effective Date, Eligible States can choose to only join this Agreement. If a State is only an Eligible State with respect to one of the Agreements, the State need only decide whether to become a Settling State with respect to the Agreement for which it is an Eligible State. States that determine to become Settling States shall so notify the Enforcement Committee and Allergan within thirty (30) days after November 22, 2022 and shall further commit to obtaining any necessary additional State releases prior to the Effective Date. This notice

period for States may be extended by written agreement of Allergan and the Enforcement Committee.

B. *Ineligible States.* Non-Settling States and Prior Settling States shall not be eligible for any payments or have any rights in connection with this Agreement.

C. *Condition to Preliminary Agreement*. Following the notice period to Eligible States set forth in subsection II.A above, Allergan shall determine on or before the Preliminary Agreement Date whether, in its sole discretion enough States have agreed to become Settling States to proceed with notice to Subdivisions as set forth in Section X below. The determination to proceed shall be in the sole discretion of Allergan and may be based on any criteria or factors deemed relevant by Allergan. If Allergan determines that this condition has been satisfied, and that notice to the Subdivisions should proceed, it will so notify the Settling States by providing notice to the Enforcement Committee on the Preliminary Agreement Date. If Allergan determines that this condition has not been satisfied, it will so notify the Settling States by providing notice to the Enforcement Committee, and this Agreement will have no further effect and all releases and other commitments or obligations contained herein will be void, other than Allergan's funding of Implementation Costs to date. The Preliminary Agreement Date may be extended by written agreement of Allergan and the Enforcement Committee.

D. *Later Joinder by States*. After the Preliminary Agreement Date, an Eligible State may only become a Settling State with the consent of Allergan, in its sole discretion. If a State becomes a Settling State more than thirty (30) days after the Preliminary Agreement Date, the Subdivisions and Special Districts in that State that become Participating Subdivisions and Participating Special Districts within ninety (90) days of the State becoming a Settling State shall be considered Initial Participating Subdivisions or Initial Participating Special Districts.

III. Cessation of Litigation Activities

A. Following the Preliminary Agreement Date, if Allergan has determined to proceed with notice pursuant to Section II, all Litigating States that intend to become Settling States and that are engaged in or have engaged in discovery and/or substantive motion practice ("*Active Litigation*") against a Released Entity shall make reasonable efforts to immediately cease litigation activity (e.g., written and document discovery, depositions, expert disclosures, and motion practice) against Allergan where feasible, or to minimize litigation activity by means of agreed deadline extensions and agreed postponement of depositions, document productions, and motion practice. Allergan shall cooperate in such efforts. The obligations under this subsection do not extend past the Reference Date if Allergan determines it is not going forward with the Agreement. This paragraph III.A does not apply to Litigating States with a trial date within six (6) months of the Preliminary Agreement Date, though such Litigating States and Allergan shall engage in good faith discussions regarding the potential cessation of litigation activity.

B. Following the execution of the Settlement Participation Form, attached as Exhibit K, a Litigating Subdivision or Litigating Special District that is engaged in active litigation

against a Released Entity shall make all reasonable efforts to immediately cease all litigation activity (e.g., written and document discovery, depositions, expert disclosures, and motion practice) against Allergan, where feasible, or to minimize litigation activity by means of agreed deadline extensions and agreed postponement of litigation activity by means of agreed deadline extensions and agreed postponement of depositions, document productions, and motion practices. Allergan shall cooperate in such efforts. The obligations under this subsection do not extend past the Reference Date if Allergan determines it is not going forward with the settlement. This paragraph III.B does not apply to Litigating Subdivisions or Litigating Special Districts with a trial date within six (6) months of the Preliminary Agreement Date, though such Litigating Subdivisions or Litigating Special Districts and Allergan shall engage in good faith discussions regarding the potential cessation of litigation activity. Notwithstanding this provision no Litigating Subdivision is required to cease its litigation if it determines such action would be detrimental to its litigation.

C. Following the Reference Date, the Settling States shall endeavor to file Consent Judgments (the contents of which must be agreed upon with Allergan) within thirty (30) days of the Reference Date. Participating Subdivisions and Participating Special Districts, as applicable, shall request dismissal of their actions with prejudice within fourteen (14) days of the Reference Date. The Settling States, Participating Subdivisions, and Participating Special Districts shall use best efforts to get Consent Judgments or orders of dismissal with prejudice, as applicable, entered promptly after filing.

IV. Injunctive Relief

A. *Entry of Injunctive Relief.* As part of the Consent Judgment, the Parties agree to the Injunctive Relief Terms attached as Exhibit P.

V. Release

A. *Scope.* As of the Effective Date, the Released Entities will be released and forever discharged from all of the Releasors' Released Claims. Each Settling State (for itself and its Releasors) and Participating Subdivision (for itself and its Releasors), and Participating Special District (for itself and its Releasors) will, on or before the Effective Date, absolutely, unconditionally, and irrevocably covenant not to bring, file, or claim, or to cause, assist in bringing, or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the Agreement are intended to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of each Settling State, its Attorney General, each Participating Subdivision, and each Participating Special District to release Claims. The release shall be a complete bar to any Released Claim of all Releasors. Nothing in this Agreement shall release or impair any Claims against Teva Ltd., Teva USA, Cephalon, or Anda, except to the extent expressly set forth in this Agreement.

B. *Claim Over and Non-Party Settlement*.

1. *Statement of Intent.* It is the intent of the Parties that:

   a. Released Entities should not seek contribution or indemnification (other than pursuant to an insurance contract) from other parties for their payment obligations under this Agreement;

   b. the payments made under this Agreement shall be the sole payments made by the Released Entities to the Releasors involving, arising out of, or related to Covered Conduct (or conduct that would be Covered Conduct if engaged in by a Released Entity);

   c. Claims by Releasors against non-Parties should not result in additional payments by Released Entities, whether through contribution, indemnification or any other means; and

   d. the Settlement meets the requirements of the Uniform Contribution Among Joint Tortfeasors Act and any similar state law or doctrine that reduces or discharges a released party's liability to any other parties.

   e. The provisions of this subsection V.B are intended to be implemented consistent with these principles. This Agreement and the releases and dismissals provided for herein are made in good faith.

2. *Contribution/Indemnity Prohibited*. No Released Entity shall seek to recover for amounts paid under this Agreement based on indemnification, contribution, or any other theory from a manufacturer, pharmacy, hospital, pharmacy benefit manager, health insurer, third-party vendor, trade association, distributor, or health care practitioner, provided that a Released Entity shall be relieved of this prohibition with respect to any entity that asserts a Claim Over against it. However, and notwithstanding the foregoing, this provision shall not preclude any Released Entity from seeking indemnification, contribution, or any other theory from and against Teva Ltd., Divested Entities, Pfizer Inc., King Pharmaceuticals, Inc., and Alpharma Inc., and/or each of their respective past and current parents, subsidiaries, and/or affiliates. For the avoidance of doubt, nothing herein shall prohibit a Released Entity from recovering amounts owed pursuant to insurance contracts.

3. *Non-Party Settlement*. To the extent that, on or after the Reference Date, any Releasor enters into a Non-Party Settlement, including in any bankruptcy case or through any plan of reorganization (whether individually or as a class of creditors), the Releasor will include (or in the case of a Non-Party Settlement made in connection with a bankruptcy case, will cause the debtor to include), unless prohibited from doing so under applicable law, in the Non-Party Settlement a prohibition on contribution or indemnity of any kind substantially equivalent to that required from Allergan in subsection V.B.2, or a release from such Non-Released Entity in favor of the Released Entities (in a form equivalent to the releases

contained in this Agreement) of any Claim Over. The obligation to obtain the prohibition and/or release required by this subsection is a material term of this Agreement. The sole remedy for a Releasor's failure to include such a provision in a Non-Party Settlement shall be the application of Section V.B.4 below. Non-Released Entities include, but are not limited to, Teva Ltd., Teva USA, Divested Actavis Generic Entities or other Divested Entities, and Anda.

4. *Claim Over*. In the event that any Releasor obtains a judgment with respect to Non-Party Covered Conduct against a Non-Released Entity that does not contain a prohibition like that in subsection V.B.3, or any Releasor files a Non-Party Covered Conduct Claim against a Non-Released Entity in bankruptcy or a Releasor is prevented for any reason from obtaining a prohibition/release in a Non-Party Settlement as provided in subsection V.B.3, and such Non-Released Entity asserts a Claim Over against a Released Entity, then Releasor and Allergan shall take the following actions to ensure that the Released Entities do not pay more with respect to Covered Conduct to Releasors or to Non-Released Entities than the amounts owed under this Agreement by Allergan:

   a. Allergan shall notify that Releasor of the Claim Over within sixty (60) days of the assertion of the Claim Over or sixty (60) days of the Effective Date of this Agreement, whichever is later;

   b. Allergan and that Releasor shall meet and confer concerning the means to hold Released Entities harmless and ensure that it is not required to pay more with respect to Covered Conduct than the amounts owed by Allergan under this Agreement;

   c. That Releasor and Allergan shall take steps sufficient and permissible under the law of the State of the Releasor to hold Released Entities harmless from the Claim Over and ensure Released Entities are not required to pay more with respect to Covered Conduct than the amounts owed by Allergan under this Agreement. Such steps may include, where permissible:

      (i) Filing of motions to dismiss or such other appropriate motion by Allergan or Released Entities, and supported by Releasors, in response to any Claim filed in litigation or arbitration;

      (ii) Reduction of that Releasor's Claim and any judgment it has obtained or may obtain against such Non-Released Entity by whatever amount or percentage is necessary to extinguish such Claim Over under applicable law, up to the amount that Releasor has obtained, may obtain, or has authority to control from such Non-Released Entity;

      (iii) Placement into escrow of funds paid by the Non-Released Entities such that those funds are available to satisfy the Claim Over;

(iv) Return of monies paid by Allergan to that Releasor under this Agreement to permit satisfaction of a judgment against or settlement with the Non-Released Entity to satisfy the Claim Over;

(v) Payment of monies to Allergan by that Releasor to ensure it is held harmless from such Claim Over, up to the amount that Releasor has obtained, may obtain, or has authority to control from such Non-Released Entity;

(vi) Credit to Allergan under this Agreement to reduce the overall amounts to be paid under the Agreement such that it is held harmless from the Claim Over; and

(vii) Such other actions as that Releasor and Allergan may devise to hold Allergan harmless from the Claim Over.

d. The actions of that Releasor and Allergan taken pursuant to paragraph (c) must, in combination, ensure Allergan is not required to pay more with respect to Covered Conduct than the amounts owed by Allergan under this Agreement.

e. In the event of any dispute over the sufficiency of the actions taken pursuant to paragraph (c), that Releasor and Allergan may seek review by the National Arbitration Panel, provided that, if the Parties agree, such dispute may be heard by the state court where the relevant Consent Judgment was filed. The National Arbitration Panel shall have authority to require Releasors to implement a remedy that includes one or more of the actions specified in paragraph (c) sufficient to hold Released Entities fully harmless. In the event that the panel's actions do not result in Released Entities being held fully harmless, Allergan shall have a Claim for breach of this Agreement by Releasors, with the remedy being payment of sufficient funds to hold Allergan harmless from the Claim Over. For the avoidance of doubt, the prior sentence does not limit or eliminate any other remedy that Allergan may have.

C. To the extent that the Claim Over is based on a contractual indemnity, the obligations under subsection V.B.4 shall extend solely to a Non-Party Covered Conduct Claim against a pharmacy, clinic, hospital or other purchaser or dispenser of Products, a manufacturer that sold or promoted Products, a consultant, and/or a pharmacy benefit manager or other third-party payor. Allergan shall notify the Settling States, to the extent permitted by applicable law, in the event that any of these types of Non-Released Entities asserts a Claim Over arising out of contractual indemnity against it.

D. *General Release*. In connection with the releases provided for in the Agreement, each Settling State (for itself and its Releasors), Participating Subdivision and Participating Special District expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or

other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her, would have materially affected his or her settlement with the debtor or released party.

A Releasor may thereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Settling State (for itself and its Releasors), Participating Subdivision and Participating Special District hereby expressly waives and fully, finally, and forever settles, releases, and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Settling States' decision to enter into the Agreement, the Participating Subdivisions' decision to participate in the Agreement, or the Participating Special District's decision to participate in the Agreement.

E. *Res Judicata*. Nothing in the Agreement shall be deemed to reduce the scope of the res judicata or claim preclusive effect that the settlement memorialized in the Agreement, and/or any Consent Judgment or other judgment entered on the Agreement, gives rise to under applicable law.

F. *Representation and Warranty.* The signatories hereto on behalf of their respective Settling State, its Participating Subdivisions, and its Participating Special Districts, expressly represent and warrant that they will obtain on or before the Effective Date (or have obtained) the authority to settle and release, to the maximum extent of the State's power, all Released Claims of (1) their respective Settling State; (2) any of the Settling State's past and present executive departments, state agencies, divisions, boards, commissions and instrumentalities with the regulatory authority to enforce state and federal controlled substances acts; (3) any of their respective Settling State's past and present executive departments, agencies, divisions, boards, commissions and instrumentalities that have the authority to bring Claims related to Covered Conduct seeking money (including abatement and/or remediation) or revocation of a pharmaceutical distribution license; (4) any Participating Subdivisions; and (5) any Participating Special District. For the purposes of clause (3) above, executive departments, agencies, divisions, boards, commissions, and instrumentalities are those that are under the executive authority or direct control of the State's Governor. Also, for the purposes of clause (3), a release from a State's Governor is sufficient to demonstrate that the appropriate releases have been obtained.

G. *Effectiveness*. The releases set forth in the Agreement shall not be impacted in any way by any dispute that exists, has existed, or may later exist between or among the Releasors. Nor shall such releases be impacted in any way by any current or future law, regulation, ordinance, or court or agency order limiting, seizing, or controlling the distribution or use

of the Settlement Fund or any portion thereof, or by the enactment of future laws, or by any seizure of the Settlement Fund or any portion thereof.

H. *Cooperation*. Releasors (i) will not encourage any person or entity to bring or maintain any Released Claim against any Released Entity and (ii) will reasonably cooperate with and not oppose any effort by a Released Entity to secure the prompt dismissal of any and all Released Claims.

I. *Non-Released Claims.* Notwithstanding the foregoing or anything in the definition of Released Claims, the Agreement does not waive, release or limit any criminal liability, Claims for any outstanding liability under any tax or securities law, Claims against parties who are not Released Entities, Claims by private individuals, Claims for Medicaid rebates, Claims asserted, or that could be asserted, by any State, Subdivision, or Special District related to the causes of action in *In re: Generic Pharmaceuticals Pricing Antitrust Litigation*, in the United States District court for the District of Pennsylvania, MDL No. 2724, and any related action (such excluded claims include, but are not limited to, all antitrust claims and any claims related to any non-opioid generic drugs), and any claims arising under the Agreement for enforcement of the Agreement.

VI. Monetary Relief Overview and Maximum Payments

A. Excluding Allergan's share of Implementation Costs and costs of the Settlement Fund Administrator, there are three main categories of monetary payments:

1. *Annual Payments to the Settlement Fund*. These payments are generally addressed in Section VII. The maximum amount Allergan shall pay in Annual Payments to the Settlement Fund is the Net Abatement Amount of $1,799,186,751.00, which reflects the application of the Prior Settlements Credit to the Global Settlement Abatement Amount. Annual Payments will be made over seven (7) years on the Payment Dates. The actual amount paid will depend on, among other things, the level of participation of Eligible States, their Subdivisions, and their Special Districts.

2. *Additional Restitution Amount*. These payments are generally addressed in Section XII. The maximum amount Allergan shall pay for the Additional Restitution Amount is $16,192,680.76. Payments for the Additional Restitution Amount will be made over four (4) years on the Payment Dates. The actual amount paid will depend on the number of Eligible States listed in Exhibit N that become Settling States.

3. *Attorney Fee and Cost Payments*. These payments are generally addressed in Section XII and Exhibits M, R, S, and T. They consist of payments for the State Outside Counsel Fee Fund, the State Cost Fund, and the Attorney Fee and Cost Fund. These payments will be made over four (4) on the Payment Dates. The maximum amount Allergan shall pay into these funds is the Global Settlement Attorney Fee Amount of $206,906,476.36.

B. The aggregate maximum amount Allergan shall pay for these for these payment categories is $2,022,285,908.12 (the "*Post-Credit Global Settlement Amount*"). This figure does not include costs related to injunctive relief and document disclosure addressed in Exhibit P, Implementation Costs, and Settlement Fund Administrator Costs addressed in this Agreement. AbbVie agrees to satisfy the obligations to make the payments due in this Section VI if for any reason Allergan fails to fulfill its payment obligations under Section VI (the "*Payment Obligations*").

C. For purposes of this Agreement only, Releasors represent that fifty-six percent (56%) of the Post-Credit Global Settlement Amount payable by Allergan constitutes consideration for the settlement of Claims involving, arising from, or related to generic opioid drugs that are Products distributed and/or sold before August 2, 2016 by Divested Actavis Generic Entities and other Divested Entities and the operation of Divested Actavis Generic Entities and other Divested Entities related to those generic opioid drugs that are Products before August 2, 2016 that the Releasors are asserting or might otherwise assert or could assert that Allergan (or any other Released Entity) is directly or indirectly and/or jointly or severally liable, including but not limited to, based on parent or control liability or a substantially similar theory. Releasors represent that forty-four percent (44%) of the Post-Credit Global Settlement Amount payable by Allergan constitutes consideration for the settlement of Claims involving, arising from, or related to branded opioid drugs that are Products of or attributable to Allergan or any other Released Entity (including but not limited to branded opioid drugs that are Products distributed and/or sold before August 2, 2016 by Divested Actavis Generic Entities and other Divested Entities and the operation of the Divested Actavis Generic Entities and the other Divested Entities related to those branded opioid drugs that are Products before August 2, 2016) that the Releasors are asserting or might otherwise assert or could assert against Allergan or any other Released Entity, of which seventy-seven percent (77%) is specifically involving, arising from, or related to Kadian® (including but not limited to Kadian® manufactured, distributed, marketed, and/or sold from 1997 through 2008 by King Pharmaceuticals, Inc. and/or Alpharma Inc.).

D. *Settlement Fund Administrator and Implementation Costs*. If this Agreement becomes effective, Allergan shall be responsible for one-third of the Implementation Costs. The full amount of the Implementation Costs shall be jointly advanced by Teva and Allergan. If this Agreement becomes effective, then Allergan shall deduct from Allergan's Initial Year Payment the difference between the excess amount it advanced for Implementation Costs and its one-third obligation for such costs. Settlement Fund Administrator Costs shall be paid out of interest accrued on the Settlement Fund. Should such interest prove insufficient to fully cover the costs, the remaining cost amounts shall be paid one-third by Teva, one-third by Allergan and one-third from the Settlement Fund through the disbursement of Allergan's final Payment Allergan shall not be responsible for any costs incurred by the Settlement Fund Administrator after the disbursement of its final Payment.

VII. Annual Payments to Settlement Fund

A. Structure of Payments to Settlement Fund

1. All payments under this Section VII shall be made into the Settlement Fund, except that where specified, they shall be made into the Settlement Fund Escrow. The Settlement Fund shall be allocated and used only as specified in Section VIII.

2. Allergan shall pay into the Settlement Fund the Net Abatement Amount consisting of $1,799,186,751.00 minus: (1) any offsets specified in subsection VII.C below; (2) any unearned Incentive Payments under subsection VII.E below; and (3) any adjustments under Section XI below.

3. The payments to the Settlement Fund shall be divided into Base Payments and Incentive Payments as provided in subsections VII.D and VII.E below and set out in Exhibit M.

B. Settlement Fund Payment Process

1. Except as otherwise provided in this Agreement, Allergan shall make one Initial Year Payment (the first Annual Payment) and six (6) additional Annual Payments of equal installments of the Net Abatement Amount (after all applicable offsets) into the Settlement Fund. The Settlement Payment Schedule is set forth in Exhibit M. Annual Payments shall be made on the Payment Date, provided that the necessary wire instructions, W-9 form, and Allergan's Bank Verification Form process is completed for the Settlement Fund at least twenty-one (21) days before the relevant payment is due and Allergan has completed any process required by the Settlement Fund Administrator and/or its financial institution(s) to complete the transaction. If there is a delay in making a payment because any of these conditions were not completed at least twenty-one (21) days in advance of the Payment Date, then the Annual Payment will be made within twenty-one (21) days of the completion of these conditions.

2. The Initial Year Payment shall consist of only Base Payments (after all applicable offsets). The other six (6) Annual Payments shall each consist of Base Payments (after all applicable offsets) and Incentive Payments (after all applicable offsets). The amount of the Initial Year Payment and each other Annual Payment, payable by Allergan shall not exceed the maximum amounts allocated to each Payment Year in Exhibit M.

3. To determine each Annual Payment for Payment Year 2 forward, the Settlement Fund Administrator shall use the data in its records sixty (60) days prior to the Payment Date for each payment. Prior to the Effective Date, the Parties will include an exhibit to the Agreement setting forth in detail the process for the Settlement Fund Administrator obtaining relevant data and for distributing funds to Settling States and Exhibit G Participants consistent with the terms of this Agreement as quickly as practical.

4. The Settlement Fund Administrator shall determine the Annual Payment and the Statewide Payment Amount for each Settling State, consistent with the provisions in Exhibit L, by:

   a. determining, for each Settling State, the amount of Base Payments and Incentive Payments to which the State is entitled by applying the criteria in this Section;

   b. applying any reductions, or offsets required by Sections VII and XI; and

   c. determining the total amount owed by Allergan to all Settling States and Exhibit G Participant.

5. If, no later than fifty (50) days prior to the Payment Date for each payment for Payment Year 2 forward, Allergan and the Enforcement Committee inform the Settlement Fund Administrator that they agree on the amount of the Annual Payment and the Statewide Payment Amount for each Settling State, Allergan shall pay the agreed-upon Annual Payment amount on the Payment Date and the Settlement Fund Administrator shall treat those amounts as the determination described in subsection VII.B.4. If the Settlement Fund Administrator is not so informed, it shall give notice to Allergan, the Settling States, and the Enforcement Committee of the amount of the Annual Payment, and the Statewide Payment Amount for each Settling State, following the determination described in subsection VII.B.4, and the following timeline shall apply:

   a. Within twenty-one (21) days of the notice provided by the Settlement Fund Administrator, Allergan, any Settling State or the Enforcement Committee may dispute, in writing, the calculation of the Annual Payment, or the Statewide Payment Amount for a Settling State. Such disputing party must provide a written notice of dispute to the Settlement Fund Administrator, the Enforcement Committee, any affected Settling State, and Allergan identifying the nature of the dispute, the amount of money that is disputed, and the Settling State(s) affected.

   b. Within twenty-one (21) days of the sending of a written notice of dispute, any affected party may submit a response, in writing, to the Settlement Fund Administrator, the Enforcement Committee, any affected Settling State, and Allergan identifying the basis for disagreement with the notice of dispute.

   c. If no response is filed, the Settlement Fund Administrator shall adjust the amount calculated consistent with the written notice of dispute, and Allergan shall pay the adjusted amount as the Annual Payment on the Payment Date. If a written response to the written notice of dispute is timely sent to the Settlement Fund Administrator, the Settlement Fund Administrator shall notify Allergan of the preliminary amount to be paid, which shall be the greater of the amount originally calculated by the Settlement Fund Administrator or the amount that would be consistent with

the notice of dispute, *provided, however* that in no circumstances shall the preliminary amount to be paid be higher than the maximum amount of Base Payments and Incentive Payments for that payment as set forth in Exhibit M. For the avoidance of doubt, a transfer of payments from the Settlement Fund Escrow for other Payment Years does not count toward determining whether the amount to be paid is higher than the maximum amount of Base Payments and Incentive Payments for that payment as set forth in Exhibit M.

d. The Settlement Fund Administrator shall place any disputed amount of the preliminary amount paid by Allergan into the Settlement Fund Escrow and shall disburse any undisputed amount to each Settling State and its Exhibit G Participants.

6. If a Settling State informs the Settlement Fund Administrator that it and its Exhibit G Participants have reached consensus on the amount of its Statewide Payment Amount, determined pursuant to subsection VII.B.3 or VII.B.4, to be distributed to the Settling State, among its separate types of funds (if applicable), and among its Exhibit G Participants, the Settlement Fund Administrator shall disburse the Statewide Payment Amount pursuant to the consensus distribution amounts provided by the Settling State. For a Settling States that does not so notify the Settlement Fund Administrator, the Settlement Fund Administrator shall allocate the Settling State's Statewide Payment Amount, pursuant to Section VII, among the separate types of funds for the Settling State (if applicable), and among its Exhibit G Participants using the following procedures:

a. As soon as possible for each payment and following the determination described in subsection VII.B.3 and VII.B.4, the Settlement Fund Administrator shall give notice to the relevant Settling States and their Exhibit G Participants of the amount to be received by each Settling State, the amount to be received by the separate types of funds for each Settling State (if applicable), and the amount to be received by each Settling State's Exhibit G Participants.

b. Within twenty-one (21) days of the notice provided by the Settlement Fund Administrator, any Settling State or Exhibit G Participant may dispute, in writing, the calculation of the amount to be received by a Settling State and/or its Exhibit G Participants. A dispute will be deemed invalid and disregarded if it challenges the allocations adopted by a State-Subdivision Agreement approved pursuant to the provisions of Exhibit O or by statute. Such disputing party must provide a written notice of dispute to the Settlement Fund Administrator, any affected Settling State, and any affected Exhibit G Participant identifying the nature of the dispute, the amount of money that is disputed, and the Settling State(s) affected.

c. Within twenty-one (21) days of the sending of a written notice of dispute, any affected Settling State or any affected Exhibit G Participant may submit

a response, in writing, to the Settlement Fund Administrator, any affected Settling State and any affected Exhibit G Participant identifying the basis for disagreement with the notice of dispute.

d. If no response is filed, the Settlement Fund Administrator shall adjust the amount calculated consistent with the written notice of dispute.

e. The Settlement Fund Administrator shall place any disputed amount into the Settlement Fund Escrow and shall disburse any undisputed amount to the Settling State and its Exhibit G Participants.

7. Disputes described in this subsection (other than those for which no response is filed under subsection VII.B.5.c or VII.B.6.d) shall be resolved in accordance with the terms of Section XIV.

8. The Settlement Fund Administrator may combine the disbursements of Annual Payments with disbursement of funds under other comparable opioid settlements. In determining when disbursements for each Annual Payment will be made, the Settlement Fund Administrator may take into account the timeline for the availability of disbursements under other comparable opioid settlements.

9. For the avoidance of doubt, Subdivisions and Special Districts not listed on Exhibit G shall not receive an allocation from the Subdivision Fund.

C. Offsets to Annual Payments to the Settlement Fund for Non-Settling States

1. An offset equal to the Net Abatement Amount of $1,799,186,751.00 times the State Allocation Percentage assigned to each Non-Settling State in Exhibit F-2 shall be deducted from the total amount to be paid by Allergan to the Settlement Fund.

2. Non-Settling States shall not be eligible for any payments or have any rights in connection with this Agreement. Accordingly, the stated maximum dollar amounts of the Annual Payments specified in Exhibit M are reduced by the aggregate State Allocation Percentage of Non-Settling States as set forth in Exhibit F-2.

D. Base Payments

1. Allergan shall make Base Payments into the Settlement Fund in an amount equal to 45% of the Net Abatement Amount of $1,799,186,751.00 minus any offsets for Non-Settling States specified in Section VII.C.I. The maximum total for Base Payments is $809,634,037.95. The Base Payments will be paid in accordance with the Settlement Payment Schedule specified by Exhibit M, subject to potential offsets for Non-Settling States as provided in Section VII.C.1.

2. The Base Payments will be allocated by Settling State proportionate to each Settling State's State Allocation Percentage in Exhibit F-2, adjusted for any Non-Settling State.

E. Incentive Abatement Payments

1. Allergan shall make potential Incentive Payments totaling up to a maximum of 55% of the Net Abatement Amount of $1,799,186,751.00 for all Settling States with the actual amount depending on whether and the extent to which the criteria set forth below are met in each Settling State. The maximum total for Incentive Payments is $989,552,713.05.

2. The maximum total Incentive Payment for any Settling State shall be no more than the maximum total for Incentive Payments listed in Section VII.E.1 times the Settling State's State Allocation Percentage specified in Exhibit F-2. Incentive Payments are state-specific, with each Settling State receiving an Incentive Payment based on the incentives for which it is eligible for that year under the criteria set forth below and any offset specified in Section XI.

3. The Incentive Payments shall be divided among four (4) categories, referred to as Incentives A–D. Incentives A–C will be due in installments over six (6) Payment Years beginning with Annual Payment 2 and Incentive D will be due in installments over four (4) years beginning with Annual Payment 4, as shown on Exhibit M. The total amount of Incentive Payments in an Annual Payment shall be the sum of the Incentive Payments for which individual Settling States are eligible for that Payment Year under the criteria set forth below. The Incentive Payments shall be made with respect to a specific Settling State based on its eligibility for that Payment Year under the criteria set forth below.

4. The maximum amount available for Incentive Payments, $989,552,713.05, is divided into two pools. The maximum amount of Incentive Payments for Incentives A-C shall be $863,609,640.48, which is 48% of the maximum Net Abatement Amount. A Settling State may be eligible for its full allocable share of this payment by either achieving Incentive A or by fully earning both Incentives B and C. The maximum amount of Incentive Payments for Incentive D shall be $125,943,072.57, which is 7% of the maximum Net Abatement Amount. (These figures represent maximum payments prior to being adjusted for any offsets and assumes every State is a Settling State and will satisfy the requirements specified below to earn its maximum incentive amount. The Incentive Payments will be paid in accordance with the payment schedule in Exhibit M, subject to potential deductions as provided herein.) A Settling State qualifies to receive Incentive Payments in addition to Base Payments if it meets the incentive eligibility requirements specified below. Settling States may qualify for Incentive Payments in four ways. If a Settling State qualifies for Incentive A, it will become entitled to receive the maximum payment allocable to the State for Incentives A-C as stated in subsection VII.E.5. If a Settling State does not qualify for Incentive A, it can alternatively qualify for Incentive B and/or Incentive C. A Settling State can qualify for Incentive D regardless of whether it qualifies for another Incentive Payment.

5. *Incentive A: Full Participation or Fully Released Claims of Litigating Subdivisions, Litigating Special Districts, Non-Litigating Subdivisions with Population Greater Than 10,000, and Non-Litigating Covered Special Districts*.

   a. A Settling State's total potential Incentive A payment allocation is $863,609,640.48 times the percentage allocation assigned that Settling State in Exhibit F-2.

   b. A State qualifies for Incentive A by: (1) complete participation in the form of releases consistent with Section V above from all Litigating Subdivisions and Litigating Special Districts, Non-Litigating Subdivisions with population over 10,000, and Non-Litigating Covered Special Districts; (2) a Bar; or (3) a combination of approaches in clauses (1)-(2) that achieves the same level of resolution of Subdivision and Special District Claims (e.g., a law barring future litigation combined with full joinder by Litigating Subdivisions and Litigating Special Districts). For purposes of Incentive A, a Subdivision or Special District is considered a "Litigating Subdivision" or "Litigating Special District" if it has brought Released Claims against Released Entities on or before the Reference Date; all other Subdivisions and Special Districts are considered "Non-Litigating." For purposes of Incentive A, Non-Litigating Covered Special Districts shall not include a Special District with any of the following words or phrases in its name: mosquito, pest, insect, spray, vector, animal, air quality, air pollution, clean air, coastal water, tuberculosis, and sanitary.

   c. If a Settling State qualifies for Incentive A after receiving an Incentive Payment under Incentives B or C, described below, the Settling State's payments under Incentive A will equal the remainder of its total potential Incentive A payments less any payments previously received under Incentives B or C. A Settling State that receives all of its total potential Incentive A payment allocation shall not receive additional Incentive Payments under Incentives B or C.

   d. A Settling State that is not eligible for Incentive A as of two (2) years after the Effective Date shall not be eligible for Incentive A for that Payment Year or any subsequent Payment Years.

6. *Incentive B: Early Participation or Released Claims by Litigating Subdivisions and Litigating Special Districts.*

   a. If a Settling State does not qualify for Incentive A, it may still qualify to receive up to 60% of its total potential Incentive A payment allocation under Incentive B.

   b. A Settling State can qualify for an Incentive B payment if Litigating Subdivisions and Litigating Special Districts collectively representing at least 75% of the Settling State's litigating population are either Participating

Subdivisions, Participating Special Districts, or have their claims resolved through Case-Specific Resolutions.

(i) A Settling State's litigating population is the sum of the population of all Litigating Subdivisions and Litigating Special Districts. A Settling State's litigating population shall include all Litigating Subdivisions and Litigating Special Districts whose populations overlap in whole or in part with other Litigating Subdivisions and Litigating Special Districts, for instance in the case of a Litigating Special District, city, or township contained within a county.

(ii) For example, if School District A is a Litigating Special District in City B with a population of 1, City B is itself a Litigating Subdivision with a population of 8, and City B is located within County C, and County C is a Litigating Subdivision with a population 10, then each of their individual populations shall be added together (i.e., 1 + 8 +10) to determine the total litigating population (i.e., 19).

c. The following time periods apply to Incentive B payments:

(i) Period 1: Zero to two hundred ten (210) days after the Effective Date.

(ii) Period 2: Two hundred eleven (211) days to one year after the Effective Date.

(iii) Period 3: One year and one day to two years after the Effective Date.

d. Within Period 1: If Litigating Subdivisions and Litigating Special Districts collectively representing at least 75% of a Settling State's litigating population are Participating Subdivisions or Participating Special Districts, or have their Claims resolved through Case-Specific Resolutions during Period 1, then a sliding scale will determine the share of the funds available under Incentive B, with a maximum of 60% of the Settling State's total potential Incentive Payment allocation available. Under that sliding scale, if Litigating Subdivisions and Litigating Special Districts collectively representing 75% of a Settling State's litigating population become Participating Subdivisions or Participating Special Districts, or achieve Case-Specific Resolution status by the end of Period 1, a Settling State will receive 50% of the total amount available to it under Incentive B. If more Litigating Subdivisions and Litigating Special Districts become Participating Subdivisions or Participating Special Districts, or achieve Case-Specific Resolution status, the Settling State shall receive an increased percentage of the total amount available to it under Incentive B as shown in the table below.

Participation or Case-Specific Resolution Levels (As percentage of litigating population)	**Incentive B Award** (As percentage of total amount available to Settling State for Incentive B)
75%	50%
76%	52%
77%	54%
78%	56%
79%	58%
80%	60%
85%	70%
90%	80%
95%	90%
100%	100%

e. Within Period 2: If a Settling State did not qualify for an Incentive B payment in Period 1 but Litigating Subdivisions and Litigating Special Districts collectively representing at least 75% of the Settling State's litigating population become Participating Subdivisions or Participating Special Districts, or achieve Case-Specific Resolution status by the end of Period 2, then the Settling State qualifies for 75% of the Incentive B payment it would have qualified for in Period 1.

f. Within Period 3: If a Settling State did not qualify for an Incentive B payment in Periods 1 or 2, but Litigating Subdivisions and Litigating Special Districts collectively representing at least 75% of the Settling State's litigating population become Participating Subdivisions or Participating Special Districts, or achieve Case-Specific Resolution status by the end of Period 3, then the Settling State qualifies for 50% of the Incentive B payment it would have qualified for in Period 1.

g. A Settling State that receives the Incentive B payment for Periods 1 and/or 2 can receive additional payments if it secures participation from additional Litigating Subdivisions and/or Litigating Special Districts (or Case-Specific Resolutions of their Claims) during Periods 2 and/or 3. Those additional payments would equal 75% (for additional participation or Case-Specific Resolutions during Period 2) and 50% (for additional participation or Case-Specific Resolutions during Period 3) of the amount by which the increased litigating population levels would have increased the Settling State's Incentive B payment if they had been achieved in Period 1.

h. The percentage of the available Incentive B amount for which a Settling State is eligible by the end of Period 3 shall cap its eligibility for that Payment Year and all subsequent Payment Years. If Litigating Subdivisions and Litigating Special Districts that have become Participating Subdivisions or Participating Special Districts, or achieved Case-Specific Resolution

status collectively represent less than 75% of a Settling State's litigating population by the end of Period 3, the Settling State shall not receive any Incentive B payment.

i. If there are no Litigating Subdivisions or Litigating Special Districts in a Settling State, and that Settling State is otherwise eligible for Incentive B, that Settling State will receive its full allocable share of Incentive B.

j. Incentives earned under Incentive B shall accrue after each of Periods 1, 2, and 3. Calculations to increase Incentive Payments in later periods based on additional joinder shall not reduce any amount already vested at the end of a prior period.

7. *Incentive C: Participation or Release of Claims by Primary Subdivisions*

a. If a Settling State does not qualify for Incentive A, it may still qualify to receive up to 40% of its total potential Incentive A payment allocation under Incentive C, which has two parts.

b. Part 1: Under Incentive C, Part 1, a Settling State can receive up to 75% of its Incentive C allocation. A Settling State can qualify for a payment under Incentive C, Part 1 only if Primary Subdivisions (whether Litigating Primary Subdivisions or Non-Litigating Primary Subdivisions as of the Reference Date) collectively representing at least 60% of the Settling State's Primary Subdivision population become Participating Subdivisions or achieve Case-Specific Resolution status.

(i) A Settling State's Primary Subdivision population is the sum of the population of all Primary Subdivisions (whether Litigating Primary Subdivisions or Non-Litigating Primary Subdivisions as of the Reference Date). A Settling State's Primary Subdivision population shall include all Primary Subdivisions whose populations overlap in whole or in part with other Primary Subdivisions, for instance in the case of a Primary Subdivision that is a city contained within a Primary Subdivision that is a county. Because Primary Subdivisions include Subdivisions whose populations overlap in whole or in part with other Subdivisions, the Settling State's Primary Subdivision population may be greater than the Settling State's total population. (Special Districts are not relevant for purposes of Incentive C calculations.)

(ii) For example, if City A is a Primary Subdivision with a population of 1 within County B, and County B is a Primary Subdivision with a population of 10, then each of their individual populations shall be added together (i.e., 1+10) to determine the total Primary Subdivision population (i.e., 11).

c. A sliding scale will determine the share of the funds available under Incentive C, Part 1 to Settling States meeting the minimum 60% threshold. Under that sliding scale, if a Settling State secures participation or Case-Specific Resolutions from Primary Subdivisions representing 60% of its total Primary Subdivision population, it will receive 40% of the total amount potentially available to it under Incentive C, Part 1. If a Settling State secures participation or Case-Specific Resolutions from Primary Subdivisions representing more than 60% of its Primary Subdivision population, the Settling State shall be entitled to receive a higher percentage of the total amount potentially available to it under Incentive C, Part 1, on the scale shown in the table below. If there are no Primary Subdivisions, and that Settling State is otherwise eligible for Incentive C, that Settling State will receive its full allocable share of Incentive C, Part 1.

Participation or Case-Specific Resolution Levels (As percentage of total Primary Subdivision population)	**Incentive C, Part 1 Award** (As percentage of total amount available to Settling State for Incentive C, Part 1)
60%	40%
70%	45%
80%	50%
85%	55%
90%	60%
91%	65%
92%	70%
93%	80%
94%	90%
95%	100%

d. Part 2: If a Settling State qualifies to receive an incentive under Incentive C, Part 1, the Settling State can also qualify to receive an additional incentive amount equal to 25% of its total potential Incentive C allocation by securing 100% participation of the ten (10) largest Subdivisions by population in the Settling State. (Special Districts are not relevant for purposes of this calculation.) If a Settling State does not qualify for any amount under Incentive C, Part 1, it cannot qualify for Incentive C, Part 2.

e. Incentives earned under Incentive C shall accrue on an annual basis up to three years after the Effective Date. At one, two, and three years after the Effective Date, the Settlement Fund Administrator will conduct a lookback to assess which Subdivisions had agreed to participate or had their Claim resolved through a Case-Specific Resolution that year. Based on the look-back, the Settlement Fund Administrator will calculate the incentives accrued under Incentive C for the year. The percentage of the available Incentive C amount, for both Part 1 and Part 2, for which a Settling State is

eligible three years after the Effective Date shall cap its eligibility for that Payment Year and all subsequent Payment Years.

8. *Incentive D: No Qualifying Lawsuits Surviving Threshold Motions at Two Look-Back Dates.*

a. A Settling State's total potential Incentive D payment allocation is $125,943,072.57 times the percentage allocation assigned that Settling State in Exhibit F-2.

b. If, at any time within five and one-half (5.5) years of the Preliminary Agreement Date, any Subdivision or Special District within a Settling State files litigation pursuing Released Claims against any Released Entity (a "*Qualifying Lawsuit*"), then Allergan shall, within thirty (30) days of Allergan or any Released Entity being served or otherwise informed of the prosecution of such Released Claims, provide notice to the Settling State in which such Released Claims are being pursued and shall give the relevant Settling State a reasonable opportunity to extinguish the Released Claims without any payment or any other obligations being imposed upon any Released Entities (apart from the Global Settlement Amount payable by Allergan under the Agreement or the Injunctive Relief Terms incurred by it). The relevant Settling State and Allergan shall confer and use reasonable efforts to promptly resolve a Qualifying Lawsuit so that it is dismissed with prejudice. Nothing in this subsection creates an obligation for a Settling State to make a monetary payment or incur any other obligation to an entity filing a Qualifying Lawsuit.

c. Part 1: Under Incentive D, Part 1, a Settling State shall receive 50% of its total potential Incentive D payment allocation if, at two years after the Effective Date (the "*First Look-Back Date*"), there are no pending Released Claims from a Qualifying Lawsuit that survived a Threshold Motion within the Settling State against any Released Entities.

d. Part 2: Under Incentive D, Part 2, a Settling State shall receive 50% of its total potential Incentive D payment allocation if, at five and one-half (5.5) years after the Preliminary Agreement Date (the "*Second Look-Back* Date"), there are no pending Released Claims from a Qualifying Lawsuit that survived a Threshold Motion within the Settling State against any Released Entities.

e. After the First Look-Back Date, a Settling State can become re-eligible for Incentive Payment D Part 1 if the lawsuit that survived a Threshold Motion is dismissed pursuant to a later motion on grounds included in the Threshold Motion, in which case the Settling State shall become eligible for Incentive Payment D less any litigation fees and cost incurred by the Released Entity in the interim, except that if the dismissal motion occurs after the

completion of opening statements in such action, the Settling State shall not be eligible for Incentive Payment D.

VIII. Allocation and Use of Settlement Funds

A. *Components of Settlement Fund*. The Settlement Fund shall be comprised of an Abatement Accounts Fund, a State Fund, and a Subdivision Fund for each Settling State. The payments under Section VI into the Settlement Fund shall be initially allocated among those three (3) sub-funds and distributed and used as provided below or as provided for by a State-Subdivision Agreement (or other State-specific allocation of funds). Unless otherwise specified herein, payments placed into the Settlement Fund do not revert back to Allergan.

B. *Use of Settlement Payments*. It is the intent of the Parties that the payments disbursed from the Settlement Fund to Settling States and Exhibit G Participants be for Opioid Remediation, subject to limited exceptions that must be documented in accordance with subsection VII.C. In no event may less than 85% of Allergan's payments pursuant to Section VI.A.1-3 over the entirety of all Payment Years (but not any single Payment Year) be spent on Opioid Remediation.

C. While disfavored by the Parties, a Settling State or Exhibit G Participant may use monies from the Settlement Fund (that have not been restricted by this Agreement solely to future Opioid Remediation) for purposes that do not qualify as Opioid Remediation. If, at any time, a Settling State or Exhibit G Participant uses any monies from the Settlement Fund for a purpose that does not qualify as Opioid Remediation, such Settling State or Exhibit G Participant shall identify such amounts and report to the Settlement Fund Administrator and Allergan how such funds were used, including if used to pay attorneys' fees, investigation costs, litigation costs, or costs related to the operation and enforcement of this Agreement, respectively. It is the intent of the Parties that the reporting under this subsection VIII.C shall be available to the public. For the avoidance of doubt, (a) any amounts not identified under this subsection VIII.C as used to pay attorneys' fees, investigation costs, or litigation costs shall be included in the "Compensatory Restitution Amount" for purposes of subsection VIII.G and (b) Participating Subdivisions not listed on Exhibit G or Participating Special Districts that receive monies from the Settlement Fund indirectly may only use such monies from the Settlement Fund for purposes that qualify as Opioid Remediation.

D. *Allocation of Settlement Fund.* The allocation of the Settlement Fund allows for different approaches to be taken in different states, such as through a State-Subdivision Agreement. Given the uniqueness of States and their Subdivisions, Settling States and Participating Subdivisions are encouraged to enter into State-Subdivision Agreements in order to direct the allocation of their portion of the Settlement Fund. As set out below, the Settlement Fund Administrator will make an initial allocation to three (3) state-level sub-funds. The Settlement Fund Administrator will then, for each Settling State and its Exhibit G Participants, apply the terms of this Agreement and any relevant State-Subdivision Agreement, Statutory Trust, Allocation Statute, or voluntary redistribution of funds as set out below before disbursing the funds.

1. Base Payments. The Settlement Fund Administrator will allocate Base Payments under subsection VII.D among the Settling States in proportion to their respective State Allocation Percentages. Base Payments for each Settling State will then be allocated 15% to its State Fund, 70% to its Abatement Accounts Fund, and 15% to its Subdivision Fund. Amounts may be reallocated and will be distributed as provided in subsection VIII.E.

2. Incentive Payments. The Settlement Fund Administrator will treat Incentive Payments under subsection VII.E on a State-specific basis. Incentive payments for which a Settling State is eligible under subsection VII.E will be allocated 15% to its State Fund, 70% to its Abatement Accounts Fund, and 15% to its Subdivision Fund. Amounts may be reallocated and will be distributed as provided in subsection VIII.E.

3. Application of Adjustments. If any offset under Section XI applies with respect to a Settling State, the offset shall be applied proportionally to all amounts that would otherwise be apportioned and distributed to the State Fund, the Abatement Accounts Fund, and the Subdivision Fund for that State.

4. Settlement Fund Administrator. Prior to the Initial Participation Date, Allergan and the Enforcement Committee will agree to a detailed mechanism consistent with the foregoing for the Settlement Fund Administrator to follow in allocating, apportioning, and distributing payments, which shall be appended hereto as Exhibit L.

E. *Settlement Fund Reallocation and Distribution*. As set forth below, within a particular Settling State's account, amounts contained in the Settlement Fund sub-funds may be reallocated and distributed per a State-Subdivision Agreement or other means. If the apportionment of amounts is not addressed and controlled under subsections VIII.E.1-2, then the default provisions of subsection VIII.E.4 apply. It is not necessary that a State-Subdivision Agreement or other means of allocating funds pursuant to subsections VIII.E.1-2 address all of the Settlement Fund sub-funds. For example, a Statutory Trust might only address disbursements from a Settling State's Abatement Accounts Fund.

1. Distribution by State-Subdivision Agreement. If a Settling State has a State-Subdivision Agreement, amounts apportioned to that State's State Fund, Abatement Accounts Fund, and Subdivision Fund under subsection VIII.D shall be reallocated and distributed as provided by that agreement. Any State-Subdivision Agreement entered into or amended after July 26, 2022 shall be applied only if it requires: (1) that all amounts be used for Opioid Remediation except as allowed by subsection VIII.C, and (2) that at least 70% of amounts be used solely for future Opioid Remediation (references to "future Opioid Remediation" include amounts paid to satisfy any future demand by another governmental entity to make a required reimbursement in connection with the past care and treatment of a person related to the Alleged Harms). For a State-Subdivision Agreement to be applied to the relevant portion of an Annual Payment, notice must be provided to Allergan

and the Settlement Fund Administrator at least sixty (60) days prior to the Payment Date.

2. Distribution by Allocation Statute. If a Settling State has an Allocation Statute and/or a Statutory Trust that addresses allocation or distribution of amounts apportioned to such State's State Fund, Abatement Accounts Fund, and/or Subdivision Fund and that, to the extent any or all such sub-funds are addressed, requires (1) all amounts to be used for Opioid Remediation except as allowed by subsection VIII.C, and (2) at least 70% of all amounts to be used solely for future Opioid Remediation, then, to the extent allocation or distribution is addressed, the amounts apportioned to that State's State Fund, Abatement Accounts Fund, and Subdivision Fund under subsection VIII.D shall be allocated and distributed as addressed and provided by the applicable Allocation Statute or Statutory Trust. For the avoidance of doubt, an Allocation Statute or Statutory Trust need not address all three (3) sub-funds that comprise the Settlement Fund, and if the applicable Allocation Statute or Statutory Trust does not address distribution of all or some of these three (3) sub-funds, the applicable Allocation Statute or Statutory Trust does not replace the default provisions in subsection VIII.E.4 of any such unaddressed fund. For example, if an Allocation Statute or Statutory Trust that meets the requirements of this subsection VIII.E only addresses funds restricted to abatement, then the default provisions in this Agreement concerning allocation among the three (3) sub-funds comprising the Settlement Fund and the distribution of the State Fund and Subdivision Fund for that State would still apply, while the distribution of the applicable State's Abatement Accounts Fund would be governed by the qualifying Allocation Statute or Statutory Trust.

3. Voluntary Redistribution. A Settling State may choose to reallocate all or a portion of its State Fund to its Abatement Accounts Fund. An Exhibit G Participant may choose to reallocate all or a portion of its allocation from the Subdivision Fund to the State's Abatement Accounts Fund or to another Participating Subdivision or Participating Special District. The Settlement Fund Administrator is not required to honor voluntary redistribution for which notice is provided to it less than sixty (60) days prior to the Payment Date.

4. Distribution in the Absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust. If subsections VIII.E.1-2 do not apply, and subject to any voluntary redistribution pursuant to subsection VIII.E.3, amounts apportioned to that State's State Fund, Abatement Accounts Fund, and Subdivision Fund under subsection VIII.D shall be distributed as follows:

   a. Amounts apportioned to that State's State Fund shall be distributed to that State.

   b. Amounts apportioned to that State's Abatement Accounts Fund shall be distributed consistent with subsection VIII.F. Each Settling State shall submit to the Settlement Fund Administrator a designation of a lead state agency or other entity to serve as the single point of contact for that Settling

State's funding requests from the Abatement Accounts Fund and other communications with the Settlement Fund Administrator. The designation of an individual entity is for administrative purposes only and such designation shall not limit funding to such entity or even require that such entity receive funds from this Agreement. The designated entity shall be the only entity authorized to request funds from the Settlement Fund Administrator to be disbursed from that Settling State's Abatement Accounts Fund. If a Settling State has established a Statutory Trust then that Settling State's single point of contact may direct the Settlement Fund Administrator to release the State's Abatement Accounts Fund to the Statutory Trust.

c. Amounts apportioned to that State's Subdivision Fund shall be distributed to Participating Subdivisions in that State listed on Exhibit G per the Subdivision Allocation Percentage listed in Exhibit G. Subsection X.I shall govern amounts that would otherwise be distributed to Non-Participating Subdivisions listed in Exhibit G.

d. Special Districts shall not be allocated funds from the Subdivision Fund, except through a voluntary redistribution allowed by subsection VIII.E.3. A Settling State may allocate funds from its State Fund or Abatement Accounts Fund for Special Districts.

5. Restrictions on Distribution. No amounts may be distributed from the Subdivision Fund contrary to Section IX, *i.e.*, no amounts may be distributed directly to Non-Participating Subdivisions or to Later Participating Subdivisions in excess of what is permissible under subsection IX.E. Amounts allocated to the Subdivision Fund that cannot be distributed by virtue of the preceding sentence shall be distributed into the sub-account in the Abatement Accounts Fund for the Settling State in which the Subdivision is located, unless those payments are redirected elsewhere by a State-Subdivision Agreement described in subsection VIII.E.1 or by an Allocation Statute or a Statutory Trust described in subsection VIII.E.2.

F. *Provisions Regarding Abatement Accounts Fund.*

1. State-Subdivision Agreement, Allocation Statute, and Statutory Trust Fund Provisions. A State-Subdivision Agreement, Allocation Statute, or Statutory Trust may govern the operation and use of amounts in that State's Abatement Accounts Fund so long as it complies with the requirements of subsection VIII.E.1 or VIII.E.2 as applicable, and all direct payments to Subdivisions comply with subsections IX.E-H.

2. Absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust. In the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust that addresses distribution, the Abatement Accounts Fund will be used solely for future Opioid Remediation and the following shall apply with respect to a Settling State:

a. *Regional Remediation.*

(i) At least 50% of distributions for remediation from a State's Abatement Accounts Fund shall be annually allocated and tracked to the regional level. A Settling State may allow the Advisory Committee established pursuant to subsection VIII.F.2.d to define its regions and assign regional allocations percentages. Otherwise, a Settling State shall (1) define its initial regions, which shall consist of one (1) or more Subdivisions and which shall be designated by the State agency with primary responsibility for substance abuse disorder services employing, to the maximum extent practical, existing regions established in that State for opioid abuse treatment or other public health purposes; and (2) assign initial regional allocation percentages to the regions based on the Subdivision Allocation Percentages in Exhibit G and an assumption that all Subdivisions listed on Exhibit G will become Participating Subdivisions.

(ii) This minimum regional expenditure percentage is calculated on the Settling State's initial Abatement Accounts Fund allocation and does not include any additional amounts a Settling State has directed to its Abatement Accounts Fund from its State Fund, or any other amounts directed to the fund. A Settling State may dedicate more than 50% of its Abatement Accounts Fund to the regional expenditure and may annually adjust the percentage of its Abatement Accounts Fund dedicated to regional expenditures as long as the percentage remains above the minimum amount.

(iii) The Settling State (1) has the authority to adjust the definition of the regions, and (2) may annually revise the percentages allocated to each region to reflect the number of Subdivisions in each region that are Non-Participating Subdivisions.

b. *Subdivision Block Grants*. Certain Subdivisions listed on Exhibit G shall be eligible to receive regional allocation funds in the form of a block grant for future Opioid Remediation. A Participating Subdivision listed on Exhibit G eligible for block grants is a county or parish (or in the case of States that do not have counties or parishes that function as political subdivisions, a city) that (1) does not contain a Litigating Subdivision or a Later Litigating Subdivision for which it has the authority to end the litigation through a release, Bar, or other action; (2) either (i) has a population of 400,000 or more or (ii) in the case of California has a population of 750,000 or more; and (3) has funded or otherwise managed an established health care or treatment infrastructure (e.g., health department or similar agency). Each Subdivision listed on Exhibit G eligible to receive block grants shall be assigned its own region.

c. *Small States*. Notwithstanding the provisions of subsection VIII.F.2.a, Settling States with populations under four (4) million that do not have existing regions described in subsection VIII.F.2.a shall not be required to establish regions. However, such a Settling State that contains one (1) or more Subdivisions listed on Exhibit G eligible for block grants under subsection VIII.F.2.b shall be divided regionally so that each block-grant eligible Subdivision listed on Exhibit G is a region and the remainder of the State is a region.

d. *Advisory Committee*. The Settling State shall designate an Opioid Settlement Remediation Advisory Committee (the "*Advisory Committee*") to provide input and recommendations regarding remediation spending from that Settling State's Abatement Accounts Fund. A Settling State may elect to use an existing advisory committee or similar entity (created outside of a State-Subdivision Agreement or Allocation Statute); *provided, however*, the Advisory Committee or similar entity shall meet the following requirements:

(i) Written guidelines that establish the formation and composition of the Advisory Committee, terms of service for members, contingency for removal or resignation of members, a schedule of meetings, and any other administrative details;

(ii) Composition that includes at least an equal number of local representatives as state representatives;

(iii) A process for receiving input from Subdivisions and other communities regarding how the opioid crisis is affecting their communities, their abatement needs, and proposals for abatement strategies and responses; and

(iv) A process by which Advisory Committee recommendations for expenditures for Opioid Remediation will be made to and considered by the appropriate state agencies.

3. Abatement Accounts Fund Reporting. The Settlement Fund Administrator shall track and assist in the report of remediation disbursements as agreed to among the Parties.

G. *Nature of Payment.* Allergan, the Settling States, the Participating Subdivisions, and the Participating Special Districts, acknowledge and agree that notwithstanding anything to the contrary in this Agreement, including, but not limited to, the scope of the Released Claims:

1. Allergan has entered into this Agreement to avoid the delay, expense, inconvenience, and uncertainty of further litigation;

2. The Settling States, the Participating Subdivisions, and the Participating Special Districts sought compensatory restitution (within the meaning of 26 U.S.C.

§ 162(f)(2)(A)) as damages for the Alleged Harms allegedly suffered by the Settling States, Participating Subdivisions and Participating Special Districts;

3. By executing this Agreement the Settling States, the Participating Subdivisions, and the Participating Special Districts certify that: (a) the Compensatory Restitution Amount is no greater than the amount, in the aggregate, of the Alleged Harms allegedly suffered by the Settling States, Participating Subdivisions and Participating Special Districts; and (b) the portion of the Compensatory Restitution Amount received by each Settling State, Participating Subdivision or Participating Special Districts is no greater than the amount of the Alleged Harms allegedly suffered by such Settling State, Participating Subdivision or Participating Special Districts;

4. The payment of the Compensatory Restitution Amount by Allergan constitutes, and is paid for, compensatory restitution (within the meaning of 26 U.S.C. § 162(f)(2)(A)) for alleged damage or harm (as compensation for alleged damage or harm arising out of alleged bodily injury) allegedly caused by Allergan;

5. The Compensatory Restitution Amount is being paid as compensatory restitution (within the meaning of 26 U.S.C. § 162(f)(2)(A)) in order to restore, in whole or in part, the Settling States, Participating Subdivisions and Participating Special Districts to the same position or condition that they would be in had the Settling States, Participating Subdivisions and Participating Special Districts not suffered the Alleged Harms;

6. No portion of the Compensatory Restitution Amount represents reimbursement to any Settling State, Participating Subdivision, Participating Special District, or other person or entity for the costs of any investigation or litigation. The entire Compensatory Restitution Amount is properly characterized as described in subsection VIII.G. No portion of the Compensatory Restitution Amount constitutes disgorgement or is properly characterized as the payment of statutory or other fines, penalties, punitive damages, other punitive assessments, or attorneys' fees; and

7. The Designated State, on behalf of all Settling States, Participating Subdivisions, and Participating Special Districts (the "Form 1098-F Filer") shall complete and file Form 1098-F with the Internal Revenue Service on or before February 28 (March 31 if filed electronically) of the year following the calendar year in which the order entering this Agreement becomes binding. On the Form 1098-F, the Form 1098-F Filer shall identify the entire Compensatory Restitution Amount received by the Form 1098-F Filer as remediation/restitution. The Form 1098-F Filer shall also, on or before January 31 of the year following the calendar year in which the order entering this Agreement becomes binding, furnish Copy B of such Form 1098-F (or an acceptable substitute statement) to Allergan.

IX. Participation by Subdivisions and Special Districts

A. *Notice.* No later than fifteen (15) days after the Preliminary Agreement Date, the Settling States, with the cooperation of Allergan, shall send individual written notice (which may be delivered via e-mail or other electronic means) of the opportunity to participate in this Agreement and the requirements of participation to all Subdivisions and Special Districts in the Settling State that are (1) Litigating Subdivisions or Litigating Special Districts, or (2) Non-Litigating Subdivisions listed in Exhibit G. To the extent a Non-Litigating Special District is entitled to an allocation for a direct payment through its inclusion in Exhibit G pursuant to a State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution, the Settling States shall also send individual written notice (which may be delivered via e-mail or other electronic means) of the opportunity to participate in this Agreement and the requirements of participation to such Special District. Unless otherwise agreed by the Parties, the version of Exhibit G used for notice shall be the one in place as of the Preliminary Agreement Date. Allergan's share of costs of the written notice shall be paid by Allergan as part of the Implementation Costs. Notice (which may be delivered via e-mail or other electronic means) shall also be provided simultaneously to counsel of record for Litigating Subdivisions, Litigating Special Districts, and known counsel for Non-Litigating Subdivisions listed on Exhibit G and Non-Litigating Special Districts listed on Exhibit G. The notice will include that the deadline for becoming an Initial Participating Subdivision or Initial Participating Special District is the Initial Participation Date. Nothing contained herein shall preclude a Settling State from providing further notice to or otherwise contacting any of its Subdivisions or Special Districts about becoming a Participating Subdivision or Participating Special District, including beginning any of the activities described in this paragraph prior to the Preliminary Agreement Date.

B. *Requirements for Becoming a Participating Subdivision: Non-Litigating Subdivisions*. A Non-Litigating Subdivision in a Settling State may become a Participating Subdivision by returning an executed Settlement Participation Form to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) specifying (1) that the Subdivision agrees to the terms of this Agreement pertaining to Subdivisions, (2) that the Subdivision releases all Released Claims against all Released Entities, (3) that the Subdivision agrees to use monies it receives, if any, from the Settlement Fund pursuant to the applicable requirements of Section VIII, and (4) that the Subdivision submits to the jurisdiction of the Court where the Consent Judgment is filed for purposes limited to that Court's role under the Agreement. The required Settlement Participation Form is attached as Exhibit K. A Non-Litigating Subdivision will decide whether to become a Participating Subdivision for both this Agreement and the Teva Global Opioid Settlement Agreement, or neither. However, if Teva enters bankruptcy prior to the Effective Date, a Non-Litigating Subdivision can choose to only join this Agreement.

C. *Requirements for Becoming a Participating Subdivision: Litigating Subdivisions/Later Litigating Subdivisions*. A Litigating Subdivision or Later Litigating Subdivision in a Settling State may become a Participating Subdivision by returning an executed Settlement Participation Form to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) that, in addition to the requirements set out in subsection IX.B for Non-Litigating Subdivisions, commits it to

promptly dismissal its legal action. The required Settlement Participation Form is attached as Exhibit K. A Litigating Subdivision or Later Litigating Subdivision will decide whether to become a Participating Subdivision for both this Agreement and the Teva Global Opioid Settlement Agreement, or neither. However, if Teva enters bankruptcy prior to the Effective Date, a Litigating Subdivision or Later Litigating Subdivision can choose to only join this Agreement. Except for trials begun before the Initial Participation Date, a Litigating Subdivision or a Later Litigating Subdivision may not become a Participating Subdivision after the completion of opening statements in a trial of a legal action it brought that includes a Released Claim against a Released Entity.

D. *Initial Participating Subdivisions.* A Subdivision qualifies as an Initial Participating Subdivision if it meets the applicable requirements for becoming a Participating Subdivision set forth in subsections IX.B or IX.C by the Initial Participation Date. Provided however, all Subdivision Settlement Participation Forms shall be held by the Implementation Administrator until Allergan provides the notice in subsection X.B that it intends to proceed with the settlement, at which time the obligations created by such forms become effective. If Allergan determines not to proceed, all Settlement Participation Forms shall be returned to Counsel for Litigating Subdivisions or to the Subdivisions not represented by counsel or destroyed to the extent that such destruction is not prohibited by then existing document preservation obligations.

E. *Later Participating Subdivisions.* A Subdivision that is not an Initial Participating Subdivision may become a Later Participating Subdivision by meeting the applicable requirements for becoming a Participating Subdivision after the Initial Participation Date and agreeing to be subject to the terms of a State-Subdivision Agreement (if any) or any other structure adopted or applicable pursuant to subsections VIII.E or VIII.F. The following provisions govern what a Later Participating Subdivision can receive (but do not apply to Initial Participating Subdivisions):

1. A Later Participating Subdivision shall not receive any share of any Base or Incentive Payments paid to the Subdivision Fund that were due before it became a Participating Subdivision.

2. A Later Participating Subdivision that becomes a Participating Subdivision after the Initial Participation Date but before June 15, 2023 shall receive 75% of the share of the Initial Year Payment that it would have received had it become an Initial Participating Subdivision (unless the Later Participating Subdivision is subject to subsections IX.E.3 or IX.E.4 below). A Later Participating Subdivision that becomes a Participating Subdivision after June 15, 2023 shall receive no share of the Initial Year Payment.

3. A Later Participating Subdivision that, after the Initial Participation Date, maintains a lawsuit for a Released Claim(s) against a Released Entity and has judgment entered against it on every such Claim before it became a Participating Subdivision (other than a consensual dismissal with prejudice) shall receive 50% of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Subdivision prior to such judgment; *provided,*

however, that if the Subdivision appeals the judgment and the judgment is affirmed with finality before the Subdivision becomes a Participating Subdivision, the Subdivision shall not receive any share of any Base Payments or Incentive Payments.

4. A Later Participating Subdivision that becomes a Participating Subdivision while a Bar or Case-Specific Resolution involving a different Subdivision exists in its State shall receive 25% of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Subdivision without such Bar or Case-Specific Resolution.

F. *No Increase in Payments*. Amounts to be received by Later Participating Subdivisions or Later Participating Special Districts shall not increase the payments due from Allergan.

G. *Ineligible Subdivisions and Special Districts.* Prior Settling Subdivisions and Subdivisions and Special Districts in Non-Settling States or Prior Settling States are not eligible to be Participating Subdivisions or Participating Special Districts.

H. *Non-Participating Subdivisions and Non-Participating Special Districts*. Non-Participating Subdivisions and Non-Participating Special Districts shall not directly receive any portion of any Base Payments or Incentive Payments, including from the State Fund and direct distributions from the Abatement Accounts Fund; however, a Settling State may choose to fund future Opioid Remediation that indirectly benefits Non-Participating Subdivisions and Non-Participating Special Districts.

I. *Unpaid Allocations to Later Participating and Non-Participating Subdivisions*. Any Base Payments and Incentive Payments allocated pursuant to subsection VII.E to a Later Participating or Non-Participating Subdivision or a Later Participating or Non-Participating Special District that cannot be paid pursuant to Section IX, will be allocated to the Abatement Accounts Fund for the Settling State in which the Subdivision is located, unless those payments are redirected elsewhere by a State-Subdivision Agreement or by a Statutory Trust.

J. *Requirements for Becoming a Participating Special District: Non-Litigating Special Districts*. A Non-Litigating Special District in a Settling State may become a Participating Special District by returning an executed Settlement Participation Form to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) specifying (1) that the Special District agrees to the terms of this Agreement pertaining to Special Districts, (2) that the Special District releases all Released Claims against all Released Entities, (3) that the Special District agrees to use monies it receives, if any, from the Settlement Fund pursuant to the applicable requirements of Section VIII, and (4) that the Special District submits to the jurisdiction of the Court where the Consent Judgment is filed for purposes limited to that Court's role under the Agreement. The required Settlement Participation Form is attached as Exhibit K. A Non-Litigating Special District will decide whether to become a Participating Special District for both this Agreement and the Teva Global Opioid Settlement Agreement, or neither.

However, if Teva enters bankruptcy prior to the Effective Date, a Non-Litigating Special District can choose to only join this Agreement.

K. *Requirements for Becoming a Participating Special District: Litigating Special Districts/Later Litigating Special Districts.* A Litigating Special District or Later Litigating Special District in a Settling State may become a Participating Special District by returning an executed Settlement Participation Form to the Implementation Administrator or Settlement Fund Administrator (which may be executed and returned by electronic means established by the Implementation Administrator or Settlement Fund Administrator) that, in addition to the requirements set out in subsection IX.J for Non-Litigating Special Districts, commits it to promptly dismiss its legal action. The required Settlement Participation Form is attached as Exhibit K. A Litigating Special District or Later Litigating Special District will decide whether to become a Participating Special District for both this Agreement and the Teva Global Opioid Settlement Agreement, or neither. However, if Teva enters bankruptcy prior to the Effective Date, a Litigating Special District or Later Litigating Special District can choose to only join this Agreement. Except for trials begun before the Initial Participation Date, a Litigating Special District or a Later Litigating Special District may not become a Participating Special District after the completion of opening statements in a trial of a legal action it brought that includes a Released Claim against a Released Entity.

L. *Initial Participating Special Districts*. A Special District qualifies as an Initial Participating Special District if it meets the applicable requirements for becoming a Participating Special District set forth in subsections IX.J or IX.K by the Initial Participation Date. Provided however, all Special District Settlement Participation Forms shall be held by the Implementation Administrator until Allergan provides the notice in subsection X.B that it intends to proceed with the settlement, at which time the obligations created by such forms become effective.

M. *Later Participating Special Districts.* A Special District that is not an Initial Participating Special District may become a Later Participating Special District by meeting the applicable requirements for becoming a Participating Special District after the Initial Participation Date and agreeing to be subject to the terms of a State-Subdivision Agreement (if any) or any other structure adopted or applicable pursuant to subsections VIII.E or VIII.F. or any agreement reached by the applicable Settling State with Initial Participating Special Districts. The following provisions govern what a Later Participating Special District can receive (but do not apply to Initial Participating Special Districts):

1. Except for the Initial Year Payment, a Later Participating Special District shall not receive any share of any Base or Incentive Payments paid to the Subdivision Fund that were due before it became a Participating Special District.

2. A Later Participating Special District that becomes a Participating Special District after Initial Participation Date but before June 15, 2023 shall receive 75% of the share of the Initial Year Payment that it would have received had it become an Initial Participating Special District (unless the Later Participating Special District is subject to subsections IX.M.3 or IX.M.4 below). A Later Participating Special

District that becomes a Participating Special District after June 15, 2023 shall receive no share of the Initial Year Payment.

3. A Later Participating Special District that, after the Initial Participation Date, maintains a lawsuit for a Released Claim(s) against a Released Entity and has judgment entered against it on every such Claim before it became a Participating Special District (other than a consensual dismissal with prejudice) shall receive 50% of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Special District prior to such judgment; *provided, however*, that if the Special District appeals the judgment and the judgment is affirmed with finality before the Special District becomes a Participating Special District, the Special District shall not receive any share of any Base Payments or Incentive Payments.

4. A Later Participating Special District that becomes a Participating Special District while a Bar or Case-Specific Resolution involving a different Special District exists in its State shall receive 25% of the share of future Base Payments or Incentive Payments that it would have received had it become a Later Participating Special District without such Bar or Case-Specific Resolution.

X. Condition to Effectiveness of Agreement and Filing of Consent Judgment

A. *Determination to Proceed With Settlement.* Allergan will determine on or before the Reference Date whether there has been a sufficient resolution of the Claims of the Subdivisions and Special Districts in the Settling States (through participation under Section IX, Case-Specific Resolution(s), and Bar(s)) to proceed with this Agreement. The determination shall be in the sole discretion of Allergan, in good faith, and may be based on any criteria or factors deemed relevant by Allergan.

B. *Notice by Allergan*. On or before the Reference Date, Allergan shall inform the Settling States and MDL Plaintiffs' Executive Committee of its determination pursuant to subsection X.A. If Allergan determines to proceed, the Parties will proceed to file the Consent Judgments. If Allergan determines not to proceed, this Agreement will have no further effect and all releases (including those given by Participating Subdivisions and Participating Special Districts) and other commitments or obligations contained herein will be void and Settlement Participation Forms returned to the Subdivision or Special District or destroyed to the extent not prohibited by then existing legal obligations or document holds.

XI. Potential Payment Adjustments

A. *Settlement Class Resolution Opt Outs.* If a Settling State is eligible for Incentive A on the basis of a Settlement Class Resolution, and a Primary Subdivision that opted out of the Settlement Class Resolution maintains a lawsuit asserting a Released Claim against a Released Entity, the following shall apply. If the lawsuit asserting a Released Claim either survives a Threshold Motion or has an unresolved Threshold Motion fewer than sixty (60) days prior to the scheduled start of a trial involving a Released Claim, and is resolved with

finality on terms requiring payment by the Released Entity, Allergan shall receive a dollar-for-dollar offset for the amount paid against its obligation to make remaining Incentive A payments that would be apportioned to that State or Participating Subdivisions listed on Exhibit G.

B. *Revoked Bar, Settlement Class Resolution, or Case-Specific Resolution.*

1. If Allergan made a payment as a result of the existence of a Bar, Settlement Class Resolution, or Case-Specific Resolution in a Settling State, and that Bar, Settlement Class Resolution, or Case-Specific Resolution is subject to a Revocation Event, Allergan shall receive a dollar-for-dollar offset against its obligation to make remaining payments that would be apportioned to that State or Participating Subdivisions or Participating Special Districts listed on Exhibit G. This offset will be calculated as the dollar amount difference between (1) the total amount of Incentive Payments paid by Allergan during the time the Bar, Settlement Class Resolution, or Case-Specific Resolution subject to the Revocation Event was in effect, and (2) the total amount of Incentive Payments that would have been due from Allergan during that time without the Bar, Settlement Class Resolution, or Case-Specific Resolution subject to the Revocation Event being in effect. The amount of Incentive Payments that would have been due, referenced in (2) above, will be calculated based on considering any Subdivision or Special District that provides a release within one hundred eighty (180) days after the Revocation Event as having been a Participating Subdivision or Participating Special District (in addition to all other Participating Subdivisions and Participating Special Districts) during the time that the Bar, Settlement Class Resolution, or Case-Specific Resolution subject to the Revocation Event was in effect. If a Revocation Event causes a Settling State to no longer qualify for one or both parts of Incentive D, the Settling State and its Exhibit G participants shall return to Allergan all relevant payments made under Incentive D through offsets as set forth above.

2. Notwithstanding anything to the contrary in paragraph 1 above, if a Bar or Case-Specific Resolution is reinstated by the Settling State, either through the same or different means as the initial Bar or Case-Specific Resolution, Allergan's right to an offset is extinguished and any amounts withheld to offset amounts paid on account of the revoked, rescinded, reversed, or overruled Bar or Case-Specific Resolution shall be returned to the Settling State, less and except any Incentive Payments that would have been paid during the period in which the Bar or Case-Specific Resolution was revoked, rescinded, reversed, or overruled.

XII. Additional Restitution Amount

A. *Additional Restitution Amount.* Allergan shall pay an Additional Restitution Amount to each Settling State listed in Exhibit N in the amount and on the schedule set forth in Exhibit M. The maximum Additional Restitution Amount of $16,192,680.76 shall be reduced by the allocation set forth on Exhibit N for any Non-Settling States listed on Exhibit N. The Settlement Fund Administrator shall allocate such funds among and within the Settling

States listed in Exhibit N at the same time as its allocation of Annual Payments pursuant to Section VII.B.

B. Additional Restitution Amount funds shall not be subject to allocation as provided in Sections VIII.D through VIII.F

XIII. Plaintiffs' Attorneys' Fees and Costs

A. Attorneys' fees and costs are addressed in the following exhibits and are incorporated herein by reference:

1. The State Outside Counsel Fee Fund is addressed in Exhibit U.

2. The State Cost Fund is addressed in Exhibit S.

3. The Attorney Fee and Cost Fund is addressed and the Agreement on Attorneys' Fees, Expenses and Costs is set forth in Exhibit R.

XIV. Enforcement and Dispute Resolution

A. *Enforceability*. The terms of the Agreement and Consent Judgment applicable to or in a Settling State will be enforceable solely by that Settling State and Allergan. Settling States or Participating Subdivisions shall not have enforcement rights with respect either to the terms of this Agreement that apply only to or in other States or to any Consent Judgment entered into by another Settling State. Participating Subdivisions shall not have enforcement rights against Allergan with respect to the Agreement or any Consent Judgment except as to payments that would be allocated to the Subdivision Fund or Abatement Accounts Fund pursuant to Section VII; *provided, however*, that each Settling State shall allow Participating Subdivisions in that State to notify it of any perceived violations of the Agreement or Consent Judgment.

B. *Consent to Jurisdiction and Service of Process*. Allergan consents to the jurisdiction of the Court in which the Consent Judgment is filed, and any appellate court thereof, limited to resolution of disputes identified in subsection XIV.G.2; for a civil action for any appropriate relief to enforce compliance with the Parties' Agreement for Injunctive Relief pursuant to Exhibit P, Section K.5 herein; and for any proceedings for or related to the enforcement or collection of any payments on the Consent Judgment for resolution in the Court in which the Consent Judgment is filed. Allergan further agrees any service of process or notice required for such action or proceeding may be effectuated on Allergan through delivery of all required papers by hand or by a nationally recognized private courier on Allergan's representatives identified in Section XVI.P herein. To be clear, for the purposes of this Agreement only, Allergan consents to personal jurisdiction before such courts, and will not contend service must be effectuated through personal service of the Hague Convention process.

C. *Specific Terms Dispute Resolution.*

1. Any dispute that is addressed by the provisions set forth in the Injunctive Relief Terms in Exhibit P shall be resolved as provided therein and pursuant to Section VIII.E.3 herein.

2. In the event Allergan believes the 85% threshold established in subsection VIII.B is not being satisfied, any Party may request that Allergan and the Enforcement Committee meet and confer regarding the use of funds under subsection VIII.B. The completion of such meet-and-confer process is a precondition to further action regarding any such dispute. Further action concerning subsection VIII.B shall: (i) be limited to Allergan seeking to reduce its Annual Payments by no more than 5% of the difference between the actual amount of Opioid Remediation and the 85% threshold established in subsection VIII.B; (ii) only reduce Annual Payments to those Settling States and its Participating Subdivisions that are below the 85% threshold established in subsection VIII.B; and (iii) not reduce Annual Payments restricted to future Opioid Remediation.

D. *State-Subdivision Enforcement.*

1. A Participating Subdivision shall not have enforcement rights against a Settling State in which it is located with respect to the Agreement or any Consent Judgment except: (1) as provided for in a State-Subdivision Agreement, Allocation Statute, or Statutory Trust with respect to intrastate allocation; or (2) in the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust, as to allegations that: (a) the Settling State's use of Abatement Accounts Fund monies were not used for uses similar to or in the nature of those uses contained in Exhibit E; or (b) a Settling State failed to pay funds directly from the Abatement Accounts Fund to a Participating Subdivision eligible to receive a block grant pursuant to subsection VIII.F.2.b.

2. A Settling State shall have enforcement rights against a Participating Subdivision located in its territory: (1) as provided for in a State-Subdivision Agreement, Allocation Statute, or Statutory Trust; or (2) in the absence of a State-Subdivision Agreement, Allocation Statute, or Statutory Trust, as to allegations that the uses of Abatement Accounts Fund monies by Participating Subdivisions listed on Exhibit G were not for uses similar to or in the nature of those uses contained in Exhibit E.

3. As between Settling States and Participating Subdivisions, the above rights are contractual in nature and nothing herein is intended to limit, restrict, change, or alter any other existing rights under law.

E. *Enforcement Committee Actions to Enforce Agreement.*

1. The Parties agree that in the event of any failure by Allergan to make any required payments under this Agreement, the Enforcement Committee, on its own or through its designee such as a Settling State or Participating Subdivision acting by its authorization and on its behalf, shall have the ability and right to file an action or proceeding in any New York state court, or federal court of the United States of

America, sitting in New York, for or related to the enforcement or collection of such payments.

2. If any National Dispute involving a Settling State, Participating Subdivision, and/or Allergan is pending before a National Arbitration Panel concerning a given year's payment to all Settling States, any action or proceeding pursuant to this subsection XIV.E shall be stayed as to any disputed amounts only, but may proceed as to any and all undisputed amounts. In the event there is a dispute between the Parties as to the disputed amounts at issue, the Enforcement Committee or any party to that dispute may seek an expedited determination from the National Arbitration Panel for that proceeding as to the disputed and undisputed amounts.

3. The Parties further Agree that in the event of Allergan's breach of the Parties' Agreement for Injunctive Relief (Exhibit P attached hereto), the Enforcement Committee, on its own or through a single designee such as a Settling State shall have the ability and right to file a civil action pursuant to Exhibit P, after completing the processes laid out in Exhibit P, in any New York state court, or federal court of the United States of America, sitting in New York, seeking any appropriate relief to enforce compliance with such Agreement for Injunctive Relief.

4. Allergan and other Released Entities consent to the jurisdiction of the New York state court, or federal court of the United States of America, sitting in New York, and any appellate court from any thereof, in which any action or proceeding is initiated pursuant to this subsection XIV.E, and for enforcement or collection of any related judgment entered by such court. Allergan further agrees any service of process or notice required for such action or proceeding, including for any action or proceeding for enforcement or collection of any judgment entered thereon, may be effectuated on Allergan through delivery of all required papers by hand or by a nationally recognized private courier on Allergan's representatives identified in Section XVI.P herein. For the purposes of this Agreement only, Allergan consents to personal jurisdiction before such courts and will not contend service must be effectuated through personal service or the Hague Convention process.

5. The enforcement rights under this subsection XIV.E are in addition to, and not in lieu of, any other enforcement and collection rights of the Parties herein, including but not limited to enforcement rights as to payments as allowed by subsection XV.A.

F. *Subdivision Payment Enforcement.* A Participating Subdivision shall have the same right as a Settling State pursuant to subsection XIV.G.4.a(iv) to seek resolution of any failure by Allergan to make its required Base Payments and/or Incentive Payments in a Payment Year.

G. *Other Dispute Resolution Terms.*

1. Except as provided in subsection VIII.C, the parties to a dispute shall promptly meet and confer in good faith to resolve any dispute prior to any filing or

presentation to the Court or National Arbitration Panel. If the parties cannot resolve the dispute informally, and unless otherwise agreed in writing, they shall follow the remaining provisions of this Section XIV to resolve the dispute.

2. Except as provided in subsections XIV.C and XIV.G.4, disputes not resolved informally shall be resolved in either the Court that entered the relevant Consent Judgment or, if no Consent Judgment was entered, a state or territorial court with jurisdiction located wherever the seat of state government is located. State court proceedings shall be governed by the rules and procedures of the forum. For the avoidance of doubt, disputes to be resolved in state court include, but are not limited to, the following:

    a. disputes concerning whether expenditures qualify for Opioid Remediation;

    b. disputes between a Settling State and Participating Subdivisions located in such Settling State as provided by subsection XIV.D, except to the extent the State-Subdivision Agreement provides for other dispute resolution mechanisms. For the avoidance of doubt, disputes between a Settling State and any Participating Subdivision shall not be considered National Disputes;

    c. whether this Agreement and relevant Consent Judgment are binding under state law;

    d. the extent of the Attorney General's or other participating entity's authority under state law, including the extent of the authority to release Claims;

    e. whether the requirements of a Bar, a Case-Specific Resolution, State-Specific Finality, Later Litigating Subdivision, Litigating Subdivision, or a Threshold Motion have been met; and

    f. all other disputes not specifically identified in subsections XIV.C and XIV.G.4.

3. Any Party may request that the National Arbitration Panel provide an interpretation of any provision of the settlement that is relevant to the state court determination, and the National Arbitration Panel shall make reasonable best efforts to supply such interpretation within the earlier of thirty (30) days or the time period required by the state court proceedings. Any Party may submit that interpretation to the state court to the extent permitted by, and for such weight provided by, the state court's rules and procedures. If requested by a Party, the National Arbitration Panel shall request that its interpretation be accepted in the form of an amicus curiae brief, and any attorneys' fees and costs for preparing any such filing shall be paid for by the requesting Party.

4. National Disputes involving a Settling State, Participating Subdivision, and/or Allergan shall be resolved by a National Arbitration Panel.

a. "*National Disputes*" are disputes that are exceptions to subsection XIV.G.2's presumption of resolution in state courts because they involve issues of interpretation of Agreement terms applicable to all Settling States without reference to a particular State's law. Disputes between a State and any Participating Subdivisions shall not be considered National Disputes. National Disputes are limited to the following:

(i) the amount of offset and/or credit attributable to Non-Settling States;

(ii) issues involving the scope and definition of "Product";

(iii) interpretation and application of the terms "Covered Conduct" and "Released Entities";

(iv) disputes over a given year's Annual Payment or the payment of the Additional Restitution Amount to all Settling States (for the avoidance of doubt, disputes between a Settling State and Allergan over the amounts owed to only that State shall not be considered National Disputes);

(v) questions regarding the performance and/or removal of the Settlement Fund Administrator;

(vi) disputes involving liability of successor entities;

(vii) disputes that require a determination of sufficient Subdivision and Special District participation to qualify for Incentives A, B, C, or D,;

(viii) disputes that require interpretation of Agreement terms (i) that concretely affect four (4) or more Settling States; and (ii) do not turn on unique definitions and interpretations under State law; and

(ix) any dispute subject to resolution under subsection XIV.G.2 but for which all parties to the dispute agree to arbitration before the National Arbitration Panel under the provisions of this subsection XIV.G.4.

b. The "*National Arbitration Panel*" shall be comprised of three (3) neutral arbitrators. One (1) arbitrator shall be chosen by Allergan, one (1) arbitrator shall be chosen by the Enforcement Committee with due input from Participating Subdivisions, and the third arbitrator shall be agreed upon by the first two (2) arbitrators. The membership of the National Arbitration Panel is intended to remain constant throughout the term of this Agreement, but in the event that replacements are required, the retiring arbitrator shall be replaced by the party that selected him/her.

(i) The National Arbitration Panel shall make reasonable best efforts to decide all matters within one hundred eighty (180) days of filing, and in no event shall it take longer than one (1) year.

(ii) The National Arbitration Panel shall conduct all proceedings in a reasonably streamlined process consistent with an opportunity for the parties to be heard. Issues shall be resolved without the need for live witnesses where feasible, and with a presumption in favor of remote participation to minimize the burdens on the parties.

(iii) To the extent allowed under state law, a Settling State, Participating Subdivision, and (at any party's request) the National Arbitration Panel may certify to an appropriate state court any question of state law. The National Arbitration Panel shall be bound by a final state court determination of such a certified question. The time period for the arbitration shall be tolled during the course of the certification process.

(iv) The arbitrators will give due deference to any authoritative interpretation of state law, including any declaratory judgment or similar relief obtained by a Settling State, Participating Subdivision, or Allergan on a state law issue.

(v) The decisions of the National Arbitration Panel shall be binding on Settling States, Participating Subdivisions, Allergan, and the Settlement Fund Administrator. In any proceeding before the National Arbitration Panel involving a dispute between a Settling State and Allergan whose resolution could prejudice the rights of a Participating Subdivision(s) or Participating Special District(s) in that Settling State, such Participating Subdivision(s) or Participating Special District(s) shall be allowed to file a statement of view in the proceeding.

c. Nothing herein shall be construed so as to limit or otherwise restrict a State from seeking injunctive or other equitable relief in state court to protect the health, safety, or welfare of its citizens.

d. Each party shall bear its own costs in any arbitration or court proceeding arising under this subsection XIV.G. The costs for the arbitrators on the National Arbitration Panel shall be divided and paid equally by the disputing sides for each individual dispute, *e.g.*, a dispute between Allergan and Settling States/Participating Subdivisions shall be split 50% by Allergan and 50% by the Settling States/Participating Subdivisions that are parties to the dispute; a dispute between a Settling State and a Participating Subdivision shall be split 50% by the Settling State and 50% by any Participating Subdivisions that are party to the dispute.

5. Prior to initiating an action to enforce pursuant to this subsection XIV.G, the complaining party must:

a. Provide written notice to the Enforcement Committee of its complaint, including the provision of the Consent Judgment and/or Agreement that the practice appears to violate, as well as the basis for its interpretation of the disputed provision. The Enforcement Committee shall establish a reasonable process and timeline for obtaining additional information from the involved parties; *provided, however*, that the date the Enforcement Committee establishes for obtaining additional information from the parties shall not be more than forty-five (45) days following the notice. The Enforcement Committee may advise the involved parties of its views on the complaint and/or seek to resolve the complaint informally.

b. Wait to commence any enforcement action until thirty (30) days after the date that the Enforcement Committee establishes for obtaining additional information from the involved parties.

6. If the parties to a dispute cannot agree on the proper forum for resolution of the dispute under the provisions of subsections XIV.G.2 or XIV.G.4, a committee comprising the Enforcement Committee and sufficient representatives of Allergan such that the members of the Enforcement Committee have a majority of one (1) member will determine the forum where the dispute will be initiated within twenty-eight (28) days of receiving notification of the dispute relating to the proper forum. The forum identified by such committee shall be the sole forum for determining where the dispute shall be heard, and the committee's identification of such forum shall not be entitled to deference by the forum selected.

H. *No Effect*. Nothing in this Agreement shall be interpreted to limit the Settling State's Civil Investigative Demand ("CID") or investigative subpoena authority, to the extent such authority exists under applicable state law and the CID or investigative subpoena is issued pursuant to such authority, and Allergan reserves all of its rights in connection with a CID or investigative subpoena issued pursuant to such authority.

XV. Judgment and Settlement Set-Off Related to Teva

A. The Parties recognize that some of the Settling States, Participating Subdivisions, and Participating Special Districts are pursuing Claims against Teva Ltd., Teva USA, Cephalon, Divested Actavis Generic Entities, and/or other Divested Entities, and/or each of their respective parents, subsidiaries, and/or affiliates. If any of them achieves a judgment by verdict, judicial decision, or means other than settlement against any of Teva Ltd., Teva USA, Cephalon, Divested Actavis Generic Entities, and/or other Divested Entities, and/or each of their respective parents, subsidiaries, and/or affiliates, each plaintiff listed above shall represent and agree that any payment(s) that the Settling States, Participating Subdivisions, and Participating Special Districts or their counsel receives from Teva Ltd., Teva USA, Cephalon, Divested Actavis Generic Entities, and/or other Divested Entities, and/or each of their respective parents, subsidiaries, and/or affiliates

reflects the amount over and above 56% of the amount they or their counsel received from the Global Settlement Amount due under this Agreement that each and all of them deem to reflect a fair overall settlement value for liability attributable to the generic opioid drugs that are Products distributed and/or sold before August 2, 2016 by Divested Actavis Generic Entities and/or other Divested Entities and/or attributable to the operation of the Divested Actavis Generic Entities and/or other Divested Entities related to those generic opioid drugs that are Products before August 2, 2016.

B. The Settling States, Participating Subdivisions, and Participating Special Districts may reach a settlement agreement with Teva Ltd., Teva USA, Cephalon, Divested Actavis Generic Entities, and/or other Divested Entities, and/or each of their respective parents, subsidiaries, and/or affiliates that resolves some or all of their respective Claims. In that event, the Releasors represent and agree that any payment(s) that the Settling States, Participating Subdivisions, and Participating Special Districts or their counsel receives from Teva Ltd., Teva USA, Cephalon, Divested Actavis Generic Entities, and/or other Divested Entities, and/or each of their respective parents, subsidiaries, and/or affiliates reflects the amount over and above 56% of the amount they or they counsel received from the Global Settlement Amount due under this Agreement that each and all of them deem to reflect a fair overall settlement value for liability attributable to the generic opioid drugs that are Products distributed and/or sold before August 2, 2016 by Divested Actavis Generic Entities and/or other Divested Entities and/or attributable to the operation of the Divested Actavis Generic Entities and/or other Divested Entities related to those generic opioid drugs that are Products before August 2, 2016. In any such settlement agreement with Teva Ltd., Teva USA, Cephalon, Divested Actavis Generic Entities, and/or other Divested Entities, and/or each of their respective parents, subsidiaries, and/or affiliates, the Settling States, Participating Subdivisions, and Participating Special Districts agree that the agreed settlement amount reflects the value the parties to the agreement deem a fair settlement value over and above the payments made or due to be paid under the Allergan Public Global Opioid Settlement Agreement for generic opioid drugs that are Products distributed and/or sold before August 2, 2016 by Divested Actavis Generic Entities and/or other Divested Entities and/or relate to the operation of Divested Actavis Generic Entities and other Divested Entities related to those generic opioid drugs that are Products before August 2, 2016.

XVI. Miscellaneous

A. *No Admission.* Allergan does not admit liability or wrongdoing. Neither this Agreement nor the Consent Judgments shall be considered, construed, or represented to be (1) an admission, concession, or evidence of liability or wrongdoing or (2) a waiver or any limitation of any defense otherwise available to Allergan.

B. *Population of Subdivisions*. The population figures for Subdivisions shall be the published U.S. Census Bureau's population estimates for July 1, 2019, released May 2020. These population figures shall remain unchanged during the term of this Agreement.

C. *Population of Special Districts*. For any purpose in this Agreement in which the population of a Special District is used: (a) School Districts' population will be measured by the

number of students enrolled who are eligible under the Individuals with Disabilities Education Act ("*IDEA*") or Section 504 of the Rehabilitation Act of 1973; (b) Health Districts' and Hospital Districts' population will be measured at 25% of discharges; and (c) all other Special Districts' (including Fire Districts' and Library Districts') population will be measured at 10% of the population served.

D. *Population Associated with Sheriffs*. For any purpose in this Agreement in which the population associated with a lawsuit by a sheriff is used, the population will be measured at 20% of the capacity of the jail(s) operated by the sheriff.

E. *Most-Favored-Nation Provision.*

1. If Allergan enters into any settlement agreement with any Non-Settling State after November 23, 2022 that resolves Claims similar in scope to the Claims released by a Settling State under this Agreement on overall payment terms that are more favorable to such Non-Settling State on a net present value basis (calculated with a 7% discount rate) on overall payment terms the Non-Settling State would have received under this Agreement based on the same level of participation, then the Settling States, individually or collectively, may elect to seek review, pursuant to Section XVI.E.3, of the overall payment terms of this Agreement and the Non-Settling State agreement so that the Settling State(s) may obtain, with respect to Allergan, overall payment terms at least as favorable as those obtained by such Non-Settling State. "*Overall payment terms*" refers to consideration of all payment terms of the two agreements, taken together, including, but not limited to the amount of payments, the timing of payments, and conditions or contingencies on payments.

2. For any settlement with a Non-Settling State involving Released Claims, Allergan shall provide the Enforcement Committee with a copy of the settlement agreement or relevant Consent Judgment within thirty (30) calendar days of the consummation of such settlement. The Enforcement Committee will promptly distribute such copy to all Settling States.

3. In the event that one or more Settling State(s) believes that the overall payment terms of an agreement by Allergan with a Non-Settling State are more favorable to the Non-Settling State, when compared based on the totality of the considerations set forth in Section XVI.E.1, the Settling State(s) and Allergan shall engage in the following process:

    a. The Settling State(s) shall provide notice, within sixty (60) calendar days of the date on which a settlement agreement or Consent Judgment is provided to the Enforcement Committee, to Allergan of its intent to seek revision of this Agreement to provide payment terms that are, on an overall basis, as favorable as those obtained by the Non-Settling State. Such notice shall be confidential and not disclosed publicly to the extent allowed by law and shall state, in detail, the basis for the Settling State's belief that it is entitled to a revision of the Agreement.

b. Allergan shall, within thirty (30) calendar days, provide a response to the Settling State(s), explaining its position, in detail, as to whether the Settling State(s) is entitled to more favorable overall payment terms than those provided for in this Agreement.

c. In the event the Settling State(s) and Allergan do not reach agreement as to the application of Section XVI.E.1, the Settling State(s) may petition the National Arbitration Panel to seek a ruling from the Panel as to the applicability of Section XVI.E.1, provided that the Settling State(s) may seek such review only if at least five (5) Settling States co-sign the petition. The Panel shall consider submissions and argument by the parties pursuant to the procedures set forth in Section XIV.G.4.

d. The Settling State(s) and Allergan shall be bound by the determination of the National Arbitration Panel.

4. This Section XVI.E does not apply to, and there is no ability of any Settling State to seek or obtain revision of this Agreement based on, any Non-Settling State agreement with Allergan that is entered into: (a) either the earlier of (i) after the close of expert discovery or (ii) after a date ninety (90) calendar days prior to the scheduled start date of a trial between Allergan and the Non-Settling State or any severed or bifurcated portion thereof, provided that, where, in order to complete a settlement, a Non-Settling State and Allergan jointly request an adjournment of the scheduled start date of a trial within ninety (90) days of that date, this exception will apply as if the trial date had not been adjourned; (b) with a Non-Settling State that previously litigated to judgment a case related to opioids against any manufacturer, distributor, or pharmacy; or (c) the earlier of (i) after a Non-Settling State has obtained any court order or judicial determination that grants judgment (in whole or in part) against Allergan in the Non-Settling State's case, (ii) after a sanctions ruling against Allergan in the Non-Settling State's case against Allergan; or (iii) after any ruling has issued in the Non-Settling State's case against any manufacturer, distributor, or pharmacy on the issue of joint and several liability. The National Arbitration Panel shall have no power to review agreements that satisfy any of the conditions described in this paragraph.

5. This Section does not apply to, and there is no ability of any Settling State to seek or obtain revision of this Agreement based on, any agreement between Allergan and (a) federally-recognized tribe(s),(b) Non-Participating Subdivisions or (3) Non-Participating Special Districts. This Section XVI.E will not apply to any agreement entered into more than six (6) months after the Reference Date.

F. *Tax Reporting and Cooperation*.

1. The Parties agree that, unless otherwise required by law, Allergan's payment of the Compensatory Restitution Amount (after all applicable offsets) payable by Allergan shall be directed to Opioid Remediation for restitution of Alleged Harms allegedly caused by Allergan. By executing this Agreement (or the Settlement

Participation Form and thereby becoming a signatory to this Agreement), each Settling State, Participating Subdivision, and Participating Special District certify that: (1) the entity suffered Alleged Harms allegedly caused by Allergan; (2) the Compensatory Restitution Amount to be paid by Allergan to the entity represent an amount that is less than or equal to the actual monetary damage allegedly caused by Allergan; and (3) the entity shall use such payments for the sole purpose of Opioid Remediation.

2. Upon request by Allergan, the Settling States, Participating Subdivisions, and Participating Special Districts agree to perform such further acts and to execute and deliver such further documents as may be reasonably necessary for Allergan to establish the statements set forth in subsection VIII.G to the satisfaction of their tax advisors, their independent financial auditors, the Internal Revenue Service, or any other governmental authority, including as contemplated by Treasury Regulations Section 1.162-21(b)(3)(ii) and any subsequently proposed or finalized relevant regulations or administrative guidance.

3. Without limiting the generality of subsection XVI.F, each Settling State, Participating Subdivision, and Participating Special District shall cooperate in good faith with Allergan with respect to any tax claim, dispute, investigation, audit, examination, contest, litigation, or other proceeding relating to this Agreement.

4. The Designated State, on behalf of all Settling States, Participating Subdivisions, and Participating Special Districts, shall designate one of its officers or employees to act as the "appropriate official" within the meaning of Treasury Regulations Section 1.6050X-1(f)(1)(ii)(B) (the "Appropriate Official").

5. Neither Allergan nor the Settling States, Participating Subdivisions, and Participating Special Districts make any warranty or representation to any Settling jurisdiction or Releasor as to the tax consequences of the payment of the Compensatory Restitution Amount (or any portion thereof).

G. *No Third-Party Beneficiaries.* Except as expressly provided in this Agreement, no portion of this Agreement shall provide any rights to, or be enforceable by, any person or entity that is not a Settling State or Released Entity. No Settling State may assign or otherwise convey any right to enforce any provision of this Agreement.

H. *Calculation*. Any figure or percentage referred to in this Agreement shall be carried to seven decimal places.

I. *Construction*. None of the Parties and no Participating Subdivision shall be considered to be the drafter of this Agreement or of any of its provisions for the purpose of any statute, case law, or rule of interpretation or construction that would or might cause any provision to be construed against the drafter of this Agreement. The headings of the provisions of this Agreement are not binding and are for reference only and do not limit, expand, or otherwise affect the contents or meaning of this Agreement.

J. *Cooperation*. Each Party and each Participating Subdivision agrees to use its best efforts and to cooperate with the other Parties and Participating Subdivisions to cause this Agreement and the Consent Judgments to become effective, to obtain all necessary approvals, consents and authorizations, if any, and to execute all documents and to take such other action as may be appropriate in connection herewith. Consistent with the foregoing, each Party and each Participating Subdivision agrees that it will not directly or indirectly assist or encourage any challenge to this Agreement or any Consent Judgment by any other person, and will support the integrity and enforcement of the terms of this Agreement and the Consent Judgments.

K. *Entire Agreement*. This Agreement, its exhibits and any other attachments, including the attorneys' fees and cost agreement in Exhibit R, embodies the entire agreement and understanding between and among the Parties and Participating Subdivisions relating to the subject matter hereof and supersedes (1) all prior agreements and understandings relating to such subject matter, whether written or oral and (2) all purportedly contemporaneous oral agreements and understandings relating to such subject matter.

L. *Execution*. This Agreement may be executed in counterparts and by different signatories on separate counterparts, each of which shall be deemed an original, but all of which shall together be one and the same Agreement. One or more counterparts of this Agreement may be delivered by facsimile or electronic transmission with the intent that it or they shall constitute an original counterpart hereof. One or more counterparts of this Agreement may be signed by electronic signature.

M. *Good Faith and Voluntary Entry*. Each Party warrants and represents that it negotiated the terms of this Agreement in good faith. Each of the Parties and signatories to this Agreement warrants and represents that it freely and voluntarily entered into this Agreement without any degree of duress or compulsion. The Parties state that no promise of any kind or nature whatsoever (other than the written terms of this Agreement) was made to them to induce them to enter into this Agreement.

N. *No Prevailing Party.* The Parties each agree that they are not the prevailing party in this action, for purposes of any Claim for fees, costs, or expenses as prevailing parties arising under common law or under the terms of any statute, because the Parties have reached a good faith settlement. The Parties each further waive any right to challenge or contest the validity of this Agreement on any ground, including, without limitation, that any term is unconstitutional or is preempted by, or in conflict with, any current or future law.

O. *Non-Admissibility.* The settlement negotiations resulting in this Agreement have been undertaken by the Parties and by certain representatives of the Participating Subdivisions in good faith and for settlement purposes only, and no evidence of negotiations or discussions underlying this Agreement shall be offered or received in evidence in any action or proceeding for any purpose. This Agreement shall not be offered or received in evidence in any action or proceeding for any purpose other than in an action or proceeding arising under or relating to this Agreement or in any litigation or arbitration concerning Allergan's right to coverage under an insurance contract.

P. *Notices.* All notices or other communications under this Agreement shall be in writing (including but not limited to electronic communications) and shall be given to the recipients indicated below:

1. For the Attorney(s) General:

Josh Stein, Attorney General
North Carolina Department of Justice
Attn: Daniel Mosteller
PO Box 629
Raleigh, NC 27602
Dmosteller@ncdoj.gov

Tom Miller, Attorney General
Office of the Attorney General of Iowa
Attn: Nathan Blake
1305 E. Walnut St.
Des Moines, IA 50319

Jonathan Skrmetti, Attorney General
Office of the Tennessee Attorney General
Attn: Michael Leftwich
P.O. Box 20207
Nashville, TN, 37202-0207

2. For the Plaintiffs' Executive Committee:

Paul F. Farrell
Farrell Law
P.O. Box 1180
Huntington, WV 25714-1180

Jayne Conroy
Simmons Hanly Conroy LLC
112 Madison Avenue, 7th Floor
New York, NY 10016-7416
JConroy@simmonsfirm.com

Joseph F. Rice
Motley Rice LLC
28 Bridgeside Blvd.
Mount Pleasant, SC 29464
jrice@motleyrice.com

Peter Mougey

Levin Papantonio Rafferty
316 South Baylen St.
Pensacola, FL 32502
pmougey@levinlaw.com

Paul J. Geller
Robbins Geller Rudman & Dowd LLP
120 East Palmetto Park Road
Boca Raton, FL 33432
PGeller@rgrdlaw.com

Steven Skikos
Skikos, Crawford, Skikos & Joseph, LLC
One Sansom Street, Suite 2830
San Francisco, CA 94104
sskikos@skikos.com

3. For Allergan:

Office of General Counsel
One North Waukegan Road
North Chicago, IL 60064

Copy to Allergan's attorneys at:

James F. Hurst, P.C.
Kirkland & Ellis LLP
300 North LaSalle
Chicago, IL 60654
james.hurst@kirkland.com

Any Party or the Plaintiffs' Executive Committee may change or add the contact information of the persons designated to receive notice on its behalf by notice given (effective upon the giving of such notice) as provided in this subsection.

Q. *No Waiver*. The waiver of any rights conferred hereunder shall be effective only if made by written instrument executed by the waiving Party or Parties. The waiver by any Party of any breach of this Agreement shall not be deemed to be or construed as a waiver of any other breach, whether prior, subsequent, or contemporaneous, nor shall such waiver be deemed to be or construed as a waiver by any other Party.

R. *Preservation of Privilege.* Nothing contained in this Agreement or any Consent Judgment, and no act required to be performed pursuant to this Agreement or any Consent Judgment, is intended to constitute, cause, or effect any waiver (in whole or in part) of any attorney-client privilege, work product protection, or common interest/joint defense privilege, and each Party agrees that it shall not make or cause to be made in any forum any assertion to the contrary.

S. *Successors*

1. The Agreement shall be binding upon, and insure to the benefit of, Allergan and its respective successors and assigns.

2. Prior to Allergan's last Payment Date, Allergan shall not sell the majority of its voting stock or substantially all its assets without obtaining the acquiror's agreement that it will constitute a successor with respect to Allergan's obligations under this Agreement.

3. Prior to Allergan's last Payment Date, Allergan shall not in one (1) transaction, or a series of related transactions, sell, or transfer assets (other than sales or transfers of inventories, or sales or transfers to an entity owed directly or indirectly by Allergan) having a fair market value equal to twenty-five percent (25%) or more of the consolidated assets of Allergan where the sale or transfer transaction is announced after the Reference Date, is not for fair consideration, and would foreseeably and unreasonably jeopardize Allergan's ability to make the payments under this Agreement that are due on or before the third Payment Date following the close of a sale or transfer transaction. The above restriction shall not apply if Allergan obtains the acquiror's agreement that it will be either a guarantor of or successor to the percentage of Allergan's remaining Payment Obligations under this Agreement equal to the percentage of Allergan's consolidated assets being sold or transferred in such transaction. Percentages under this section shall be determined in accordance with the United States generally accepted accounting principles and as of the date of Allergan's most recent publicly filed consolidated balance sheet prior to the date of entry into the sale or transfer agreement at issue. This Section XVI.S.3 shall be enforceable solely by the Enforcement Committee, and any objection under this Section X.VI.S.3 not raised within twenty (20) calendar days from the date that Allergan transmits notice of the transaction to the Enforcement Committee is waived. Any dispute under this Section XVI.S.3 shall be a National Dispute as described in Section XIV.G and must be raised exclusively with the National Arbitration Panel as described therein within twenty (20) calendar days of the announcement, and the sole remedy shall be an order enjoining the transaction.

T. *Modification, Amendment, Alteration*. After the Reference Date, any modification, amendment, or alteration of this Agreement by the Parties shall be binding only if evidenced in writing signed by Allergan along with the signatures of at least thirty-seven (37) of those then-serving Attorneys General of the Settling States along with a representation from each Attorney General that either: (1) the advisory committee or similar entity established or recognized by that Settling State (either pursuant to subsection VIII.F.2, by a State-Subdivision Agreement, or by statute) voted in favor of the modification, amendment, or alteration of this Agreement including at least one Participating Subdivision-appointed member; or (2) in States without any advisory committee, that 50.1% of the Participating Subdivisions by population expressed approval of the modification, amendment, or alteration of this Agreement in writing. Provided, however, in the event the modification, amendment, or alteration relates to injunctive relief, interstate allocation between the Settling States, intrastate allocation in a particular Settling State, or fees or costs of Settling States and Participating Subdivisions, then every Settling

State and each Participating Subdivision affected by that modification, amendment, or alteration must assent in writing. Provided further that, in the event the modification, amendment, or alteration relates to injunctive relief, then such amendment, modification, or alteration of injunctive relief against Allergan will not be effective unless and until any Consent Judgment is modified by a court of competent jurisdiction, except as otherwise provided by the Injunctive Terms.

U. *Termination.*

1. Unless otherwise agreed to by Allergan and the Settling State in question, this Agreement and all of its terms (except subsection XVI.O and any other non-admissibility provisions, which shall continue in full force and effect) shall be canceled and terminated with respect to the Settling State, and the Agreement and all orders issued by the courts in the Settling State pursuant to the Agreement shall become null and void and of no effect if one or more of the following conditions applies:

    a. A Consent Judgment approving this Agreement without modification of any of the Agreement's terms has not been entered as to the Settling State by a court of competent jurisdiction on or before one hundred eighty (180) days after the Effective Date; or

    b. This Agreement or the Consent Judgment as to that Settling State has been disapproved by a court of competent jurisdiction to which it was presented for approval and/or entry (or, in the event of an appeal from or review of a decision of such a court to approve this Agreement and the Consent Judgment, by the court hearing such appeal or conducting such review), and the time to appeal from such disapproval has expired, or, in the event of an appeal from such disapproval, the appeal has been dismissed or the disapproval has been affirmed by the court of last resort to which such appeal has been taken and such dismissal or disapproval has become no longer subject to further appeal (including, without limitation, review by the United States Supreme Court).

2. If this Agreement is terminated with respect to a Settling State and its Participating Subdivisions for whatever reason pursuant to subsection XVI.U.1, then:

    a. An applicable statute of limitation or any similar time requirement (excluding any statute of repose) shall be tolled from the date the Settling State signed this Agreement until the later of the time permitted by applicable law or for one year from the date of such termination, with the effect that Allergan and the Settling State in question shall be in the same position with respect to the statute of limitation as they were at the time the Settling State filed its action; and

    b. Allergan and the Settling State and its Participating Subdivisions in question shall jointly move the relevant court of competent jurisdiction for an order

reinstating the actions and Claims dismissed pursuant to the terms of this Agreement governing dismissal, with the effect that Allergan and the Settling State and its Participating Subdivisions in question shall be in the same position with respect to those actions and Claims as they were at the time the action or Claim was stayed or dismissed.

3. Unless Allergan and the Enforcement Committee agree otherwise, this Agreement, with the exception of the Injunctive Relief Terms that have their own provisions on duration, shall terminate as to all Parties as of Annual Payment 6, *provided* that Allergan has performed its payment obligations under the Agreement as of that date. Notwithstanding any other provision in this Agreement, all releases under this Agreement will remain effective despite any termination under this paragraph.

V. *Waiver.* Allergan, for good and valuable consideration the receipt of which is acknowledged, hereby (a) waives, foregoes and relinquishes all rights to utilize and/or seek relief under any of the following laws of the State of Texas for the restructuring of its debts or liabilities related to Released Claims or Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement: Tex. Bus. Orgs. Code § 10.003 (Contents of Plan of Merger: More Than One Successor) or any other statute of Subchapter A of Chapter 10 of Tex. Bus. Orgs. Code to the extent such statute relates to multi-successor or divisive mergers (and/or any other similar laws or statutes in any other state or territory); Tex. Bus. Orgs. Code §§ 11.01–11.414 (Winding Up and Termination of Domestic Entity); or Tex. Bus. & Com. Code §§ 23.01–23.33 (Assignments for the Benefit of Creditors) (collectively, the "Texas Statutes"), and (b) agrees, warrants and represents that it will not file, request or petition for relief under the Texas Statutes related to its debts or liabilities related to Released Claims or Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement, in each case until such time as all of Allergan's payment obligations incurred hereunder are satisfied in full. The foregoing waiver and relinquishment includes, without limitation, until such time as all of Allergan's payment obligations hereunder are satisfied in full, Allergan's rights to execute a divisional merger or equivalent transaction or restructuring related to its debts or liabilities related to Released Claims or Claims that would have been Released Claims if they had been brought by a Releasor against a Released Entity before the Effective Date, or this Agreement that in each case has the intent or foreseeable effect of (i) separating material assets from material liabilities and (ii) assigning or allocating all or a substantial portion of those liabilities to any subsidiary or affiliate that files for relief under chapter 11 of the Bankruptcy Code, or pursuant to which such subsidiary or affiliate that files for relief under chapter 11 of the Bankruptcy Code would be assuming or retaining all or a substantial portion of those liabilities.

W. *Governing Law.* Except (1) as otherwise provided in the Agreement or (2) as necessary, in the sole judgment of the National Arbitration Panel, to promote uniformity of interpretation for matters within the scope of the National Arbitration Panel's authority, this Agreement shall be governed by and interpreted in accordance with the respective laws of the Settling State, without regard to the conflict of law rules of such Settling State, that is seeking to enforce the Agreement against Allergan or against which Allergan is seeking enforcement.

Notwithstanding any other provision in this subsection on governing law, any disputes relating to the Settlement Fund Escrow shall be governed by and interpreted in accordance with the law of the state where the escrow agent has its primary place of business.

ALLERGAN PUBLIC GLOBAL OPIOID SETTLEMENT EXHIBITS

EXHIBIT A Alleged Harms A-1

EXHIBIT B Enforcement Committee Organizational Bylaws B-1

EXHIBIT C Litigating Subdivisions and Special Districts List C-1

EXHIBIT D [Intentionally Omitted] D-1

EXHIBIT E List of Opioid Remediation Uses E-1

EXHIBIT F-1 List of States and Pre-Credit Overall Allocation Percentages F-1

EXHIBIT F-2 List of Eligible Settling States and Overall Allocation Percentages F-3

EXHIBIT G Subdivisions and Special Districts Eligible to Receive Direct Allocations from the Subdivision Fund and Subdivision Fund Allocation Percentages G-1

EXHIBIT H [Intentionally Omitted] H-1

EXHIBIT I Subdivisions with a Population Greater than 10,000 ..... I-1

EXHIBIT J-1 AbbVie Entities J-1

EXHIBIT J-2 Allergan Entities J-2

EXHIBIT J-3 Divested Entities J-3

EXHIBIT K Subdivision and Special District Settlement Participation Form K-1

EXHIBIT L Settlement Fund Administrator L-1

EXHIBIT M-1 Payment Schedule M-1

EXHIBIT M-2 Payment Schedule for Fee Funds, Cost Funds, and Additional Restitution M-2

EXHIBIT N Additional Restitution Amount Allocation N-1

EXHIBIT O Adoption of a State-Subdivision Agreement O-1

EXHIBIT P Injunctive Relief P-1

EXHIBIT Q [Intentionally Omitted] Q-1

EXHIBIT R Agreement on Attorneys' Fees, Costs, and Expenses R-1

EXHIBIT S Agreement on the State Outside Counsel Fee Fund for Manufacturer Settlements S-1

EXHIBIT T Agreement on the State Cost Fund Administration T-1

EXHIBIT A
Alleged Harms

The following export reports that were filed in connection with the case captioned *In re National Prescription Opiate Litigation*, No. 1:17-md-02804 (N.D. Ohio):

1. Expert report of Professor David Cutler, dated March 25, 2019.

2. Expert report of Dr. Jeffrey B. Liebman, dated March 25, 2019.

3. Expert report of Professor Thomas McGuire regarding damages to Bellwethers, dated March 25, 2019.

4. Report of Professor Thomas McGuire regarding public nuisance, dated March 25, 2019.

EXHIBIT B
Enforcement Committee Organizational Bylaws

ARTICLE I

These bylaws constitute the code of rules adopted by the Settling States and Participating Subdivisions for the creation of an Enforcement Committee (the "Committee") to exist and operate during the term of the Agreement in connection with Allergan and shall control the regulation and management of the Committee's affairs.

ARTICLE II

Purpose

The Committee is organized for the sole purpose of evaluating and taking such action as deemed reasonable, necessary, and appropriate by the members of the Committee on the matters delegated to the Committee under that certain Settlement Agreement between the Settling States and Allergan, dated November ___, 2022.

ARTICLE III

Members of the Committee

(1) Number of Members

The Committee will consist of thirteen (13) members (the "Members"). Upon majority resolution of the Committee, the number of Members may be increased or decreased from time to time, but in no event shall a decrease have the effect of decreasing the total number of Members to less than seven Members.

(2) Initial Members

The Committee initially will consist of eight (8) Settling State Members and five (5) Participating Subdivision Members; two (2) of the Participating Subdivisions shall be counties and two (2) shall be municipalities, and the fifth Participating Subdivision member may be either a county or a municipality. The initial Settling State Members are representatives from: California, Illinois, Iowa, New York, North Carolina, Ohio, Tennessee, and Virginia. The initial Participating Subdivision Members are: [•]. Until the date fifteen (15) months from the Effective Date contained in the Settlement Agreement, the Participating Subdivisions may designate their outside counsel to serve as their representative. After the date fifteen (15) months from the Effective Date, an employee or official of the Participating Subdivision must be the designated as the representative of the Participating Subdivision.

(3) Term of Members

The term of office for Members of the Committee will be until the end of the term of the Settlement Agreement, six (6) years, unless and until a Member withdraws or resigns from the Committee.

(4) Resignation

Any Member may resign at any time by delivering written notice to the Chairperson of the Committee. Such resignation shall take effect upon receipt or, if later, at the time specified in the notice.

(5) Removal

(a) Any Member may be removed without cause, at any time, by a majority of the entire Committee, at a Regular or Special Meeting called for that purpose. Any Member under consideration of removal must first be notified about the consideration by written notice at least five days prior to the meeting at which the vote takes place.

(b) In the event that any Member is not a Settling State or a Participating Subdivision or the Member subsequently becomes a Later Litigating Subdivision, the Member shall be removed immediately without notice or vote of the Committee.

(6) Vacancies

In the event of a vacancy, the Members of the same type (Settling State or Participating Subdivision) shall select another Settling State or Participating Subdivision to fill that Member's position.

(7) Compensation

Members shall not receive any salaries or other compensation for their services, but, by resolution of the Committee, may be reimbursed for any actual expenses incurred in the performance of their duties for the Committee, as long as a majority of disinterested Members approve the reimbursement. Any reimbursement shall be sought from the Settlement Fund Administrator.

ARTICLE IV

Conflicts of Interest and Code of Ethics

If a Member, agent, or employee of the Committee has a conflict of interest, he or she may not participate in a vote, discussion, or decision about the matter. Each Member shall follow any applicable state or local law with respect to conflicts, gifts, and ethics.

ARTICLE V

Committee Meetings

(1) Place of Meetings

Meetings of the Committee will be held at any place that the Chairperson may designate, including by telephonic or electronic means.

(2) Regular Meetings

Regular meetings of the Committee shall be held as deemed necessary by the Chairperson or any three members.

(3) Notice of Meetings

Written notice of the date, time, place and subject of each meeting must be provided to the Members at least 72 hours before the scheduled time of the meeting, except when there is an emergency or urgent public necessity.

(4) Quorum

A majority of the incumbent Members (not counting vacancies) shall constitute a quorum for the purposes of convening a meeting or conducting business.

(5) Voting and Proxy

When it is necessary to vote on any matter before the Committee, Members may vote by electronic means as provided in these Bylaws. Proxy voting is permitted. In order for a matter to pass, the matter must have a majority vote of Members present and must have at least one vote from a Settling State Member and a Participating Subdivision Member. In the event that there is a Quorum, but no Settling State or Participating Subdivision Member is present, then a matter may pass with a simple majority vote.

(6) Minutes

The Committee shall prepare and keep minutes. The minutes must state the subject of each deliberation and indicate each vote, order, decision, or other action taken.

ARTICLE VI

Officers

(1) Roster of Officers

The Committee shall have a Chairperson, a Vice Chairperson, and a Secretary. The Committee may have at its discretion, such other officers as may be appointed by the Members of the Committee. One person may hold two or more offices, except those serving as Chairperson.

(2) Election and Removal of Officers

All officers shall serve two-year terms. The election shall be conducted at the first meeting of the fiscal year. Officers shall remain in office until their successors have been selected. Officers may serve consecutive terms without limit. The election of officers shall be by majority vote of the Members of the Committee attending the meeting.

(3) Vacancies

If a vacancy occurs during the term of office for any elected officer, the Members of the Committee shall elect a new officer to fill the remainder of the term as soon as practical, by majority vote of Members present.

(4) Chairperson

The Chairperson will supervise and control the affairs of the Committee and shall exercise such supervisory powers as may be given him/her by the Members of the Committee. The Chairperson will perform all duties incident to such office and such other duties as may be provided in these bylaws or as may be prescribed from time to time by the Committee. The Chairperson shall preside at all meetings and shall exercise parliamentary control in accordance with Robert's Rules of Order.

(5) Vice Chairperson

The Vice Chairperson shall act in place of the Chairperson in the event of the Chairperson's absence, inability, or refusal to act, and shall exercise and discharge such other duties as may be required by the Committee. The Vice Chairperson shall serve as the parliamentarian and interpret any ambiguities of the bylaws.

(6) Secretary

The Secretary will keep and maintain all records related to the Committee and take minutes of all meetings.

(7) Records

All elected officers and committee chairpersons shall relinquish their records to the Chairperson immediately upon the completion of their term of office or completion of a project.

(8) Resignation

An officer may resign the office while not resigning membership from the Committee, by submitting a letter to the Chairperson. Vacancies occurring in any office shall be appointed for the remainder of the term.

ARTICLE VII

Duties

(1) Prior to the Reference Date

The Committee shall be responsible for any additional negotiations with Allergan, including, but not limited to, negotiating extensions of any periods created by the Settlement Agreement.

(2) After the Effective Date

The Committee shall establish procedures for the receipt of notices that a dispute exists concerning the Agreement and review of such disputes, pursuant to **Section XIV** of the Agreement. Members may engage with Allergan, Settling States, and Participating Subdivisions attempting to resolve any dispute without further action by the Committee. The Committee may request additional information from Allergan, Settling States, and Participating Subdivisions to the extent the Committee believes such information is necessary to understand, resolve, or provide advice related to a dispute. The Committee shall endeavor to provide advice relative to the dispute no later than 60 days after receipt of notice.

ARTICLE VIII

Rules of Procedure

The proceedings and business of the Committee shall be governed by Robert's Rules of Order unless otherwise waived by the Committee.

ARTICLE IX

Operations

(1) Records

The Committee will keep correct and complete records and will also keep minutes of the proceedings of the Committee meetings and Committees. The Committee will keep such records at its principal place of business at a place designated by the Chairperson**.**

All elected officers and committee chairpersons shall relinquish their records to the Chairperson, immediately upon the completion of their term of office.

(2) Inspection of Books and Records

The minutes of a meeting are public records and shall be available for public inspection and copying on request to the Committee's Chairperson or the Chairperson's designee.

(3) Amendments

The bylaws may be amended at any time by a vote of a majority of Members present and must have at least one vote from a Settling State Member and a Participating Subdivision

Member. In the event that there is a Quorum, but no Settling State or Participating Subdivision Member is present, then a matter may pass with a simple majority vote.

EXHIBIT C
Litigating Subdivisions and Special Districts List[1]

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	Attentus Moulton, LLC d/b/a Lawrence Medical Center	*The Health Care Authority of the City of Huntsville D/B/A HH Health System; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital; The Health Care Authority of the City of Huntsville D/B/A Madison Hospital; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital for Women and Children; HH Health System-Morgan, LLC D/B/A Decatur Morgan Hospital - Decatur And Decatur Morgan Hospital - Parkway; The Health Care Authority Of Morgan County - City Of Decatur; HH Health System-Shoals, LLC D/B/A Helen Keller Hospital and Red Bay Hospital; HH Health System-Athens Limestone, LLC D/B/A Athens Limestone Hospital; Attentus Moulton, LLC D/B/A Lawrence Medical Center v. Purdue Pharma L.P., et al.*	1:19-op-45143	N.D. Ohio (Federal)
AL	Bibb County Healthcare Authority d/b/a Bibb Medical Center	*Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority; Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga Health Care Authority; Russellville Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority*	CV-2021-900016	AL - Circuit Court of Conecuh County (State)

[1] This list is subject to amendment in the event it proves to be incomplete and other entities that satisfy the definition for "Litigating Subdivision" or "Litigating Special District" are subsequently identified.

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.		
AL	City of Abbeville	*City of Abbeville, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45437	N.D. Ohio (Federal)
AL	City of Alabaster	*City of Alabaster, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45013	N.D. Ohio (Federal)
AL	City of Albertville	*Marshall County; the Cities of Albertville, Arab, Boaz and Guntersville; and the Towns of Douglas and Grant, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45230	N.D. Ohio (Federal)
AL	City of Alexander	*City of Alexander City, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45827	N.D. Ohio (Federal)
AL	City of Arab	*Marshall County; the Cities of Albertville, Arab, Boaz and Guntersville; and the Towns of Douglas and Grant, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45230	N.D. Ohio (Federal)
AL	City of Argo	*City of Argo v. Purdue Pharma L.P., et al.*	1:19-op-45744	N.D. Ohio (Federal)
AL	City of Ashland	*City of Ashland, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46102	N.D. Ohio (Federal)
AL	City of Ashville	*City of Leesburg, City of Jacksonville, City of Rainbow City, City of Ashville, City of Springville, City of Moody, City of Ragland and City of Thomasville v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45261	N.D. Ohio (Federal)
AL	City of Athens	*City of Athens, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45953	N.D. Ohio (Federal)
AL	City of Attalla	*City of Fultondale, City of Graysville, City of Centre, Town of Cedar Bluff, City of Dadeville, Town of Camp Hill, Town of Oakman, City of Attalla and Town of Gilbertown, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45265	N.D. Ohio (Federal)
AL	City of Auburn	*City of Auburn, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45282	N.D. Ohio (Federal)
AL	City of Bay Minette	*City of Bay Minette, Alabama; Town of Loxley, Alabama; and Town of Summerdale, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45018	N.D. Ohio (Federal)
AL	City of Bessemer	*The City of Bessemer, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45014	N.D. Ohio (Federal)
AL	City of Birmingham	*City of Birmingham v. Purdue Pharma L.P., et al.*	1:17-op-45008	N.D. Ohio (Federal)
AL	City of Boaz	*Marshall County; the Cities of Albertville, Arab, Boaz and Guntersville; and the Towns of Douglas and Grant, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45230	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	City of Brent	*City of Brent, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45910	N.D. Ohio (Federal)
AL	City of Brewton	*City of Brewton, Alabama, and City of Semmes, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45113	N.D. Ohio (Federal)
AL	City of Bridgeport	*Jackson County, City of Bridgeport, City of Henagar, City of New Hope, City of Scottsboro, Town of Geraldine and Town of Woodville, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45634	N.D. Ohio (Federal)
AL	City of Brundidge	*City of Brundidge, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46128	N.D. Ohio (Federal)
AL	City of Calera	*City of Calera, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:21-op-45070	N.D. Ohio (Federal)
AL	City of Carbon Hill	*The City of Nauvoo, The City of Cordova, The City of Carbon Hill, The City of Sipsey, The City of Parrish and The City of Oakman, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45737	N.D. Ohio (Federal)
AL	City of Center Point	*City of Center Point, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46103	N.D. Ohio (Federal)
AL	City of Centre	*City of Fultondale, City of Graysville, City of Centre, Town of Cedar Bluff, City of Dadeville, Town of Camp Hill, Town of Oakman, City of Attalla and Town of Gilbertown, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45265	N.D. Ohio (Federal)
AL	City of Centreville	*City of Centreville, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46120	N.D. Ohio (Federal)
AL	City of Chickasaw	*City of Chickasaw, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45115	N.D. Ohio (Federal)
AL	City of Childersburg	*City of Childersburg, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45020	N.D. Ohio (Federal)
AL	City of Clanton	*City of Clanton, Alabama v. AmerisourceBergen Drug Corporation, et al. / The City of Clanton, Alabama; The City of Columbiana, Alabama; The City of Helena, Alabama; The City of Pelham, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46084 / 1:22-op-45016	N.D. Ohio (Federal)
AL	City of Columbiana	*The City of Clanton, Alabama; The City of Columbiana, Alabama; The City of Helena, Alabama; The City of Pelham, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45016	N.D. Ohio (Federal)
AL	City of Cordova	*The City of Nauvoo, The City of Cordova, The City of Carbon Hill, The City of Sipsey, The City of Parrish and The City of Oakman, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45737	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	City of Cullman	*City of Cullman, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45248	N.D. Ohio (Federal)
AL	City of Dadeville	*City of Dadeville, Alabama v. Purdue Pharma L.P., et al. / City of Fultondale, City of Graysville, City of Centre, Town of Cedar Bluff, City of Dadeville, Town of Camp Hill, Town of Oakman, City of Attalla and Town of Gilbertown, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45779 / 1:20-op-45265	N.D. Ohio (Federal)
AL	City of Daleville	*City of Daleville, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45778	N.D. Ohio (Federal)
AL	City of Daphne	*City of Daphne, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45227	N.D. Ohio (Federal)
AL	City of Decatur	*City of Decatur, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45201	N.D. Ohio (Federal)
AL	City of Demopolis	*City of Demopolis, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45183	N.D. Ohio (Federal)
AL	City of Dora	*The Counties of Marion, Pickens and Walker, Alabama and the Cities of Dora, Jasper, and Sumiton, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45171	N.D. Ohio (Federal)
AL	City of Dothan	*City of Dothan, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45886	N.D. Ohio (Federal)
AL	City of East Brewton	*City of East Brewton, Alabama v. Teva Pharmaceuticals USA Inc., et al.*	1:22-op-45005	N.D. Ohio (Federal)
Al	City of Enterprise	*City of Enterprise, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45213	N.D. Ohio (Federal)
AL	City of Eufaula	*City of Eufaula v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46132	N.D. Ohio (Federal)
AL	City of Evergreen	*City of Evergreen, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45422	N.D. Ohio (Federal)
AL	City of Fairfield	*City of Fairfield, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45089	N.D. Ohio (Federal)
AL	City of Fairhope	*City of Fairhope, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:22-op-45002	N.D. Ohio (Federal)
AL	City of Fayette	*Fayette County, City of Fayette, Town of Berry and Rodney Ingle, in his capacity as Sheriff of Fayette County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45211	N.D. Ohio (Federal)
AL	City of Florence	*The City of Florence v. Purdue Pharma L.P., et al.*	1:19-op-45073	N.D. Ohio (Federal)
AL	City of Foley	*City of Foley, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45287	N.D. Ohio (Federal)
AL	City of Fort Payne	*City of Fort Payne, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45079	N.D. Ohio (Federal)
AL	City of Fultondale	*City of Fultondale, City of Graysville, City of Centre, Town of Cedar Bluff, City of Dadeville, Town of Camp Hill, Town of*	1:20-op-45265	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Oakman, City of Attalla and Town of Gilbertown, Alabama v. Teva Pharmaceuticals USA, Inc., et al.		
AL	City of Gadsden	*City of Gadsden, Etowah County, and Todd Entrekin, Sheriff of Etowah County, Alabama v. Purdue Pharma L.P., et al.*	1:17-op-45101	N.D. Ohio (Federal)
AL	City of Geneva	*City of Geneva, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45986	N.D. Ohio (Federal)
AL	City of Georgiana	*City of Georgiana, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45436	N.D. Ohio (Federal)
AL	City of Graysville	*City of Fultondale, City of Graysville, City of Centre, Town of Cedar Bluff, City of Dadeville, Town of Camp Hill, Town of Oakman, City of Attalla and Town of Gilbertown, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45265	N.D. Ohio (Federal)
AL	City of Greensboro	*City of Greensboro, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45421	N.D. Ohio (Federal)
AL	City of Greenville	*City of Greenville, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45023	N.D. Ohio (Federal)
AL	City of Guin	*City of Guin, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45457	N.D. Ohio (Federal)
AL	City of Gulf Shores	*The City of Gulf Shores, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45019	N.D. Ohio (Federal)
AL	City of Guntersville	*Marshall County; the Cities of Albertville, Arab, Boaz and Guntersville; and the Towns of Douglas and Grant, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45230	N.D. Ohio (Federal)
AL	City of Haleyville	*City of Haleyville, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46118	N.D. Ohio (Federal)
AL	City of Hamilton	*City of Hamilton, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45564	N.D. Ohio (Federal)
AL	City of Hartselle	*City of Hartselle, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45736	N.D. Ohio (Federal)
AL	City of Headland	*City of Headland, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46131	N.D. Ohio (Federal)
AL	City of Helena	*The City of Clanton, Alabama; The City of Columbiana, Alabama; The City of Helena, Alabama; The City of Pelham, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45016	N.D. Ohio (Federal)
AL	City of Henagar	*Jackson County, City of Bridgeport, City of Henagar, City of New Hope, City of Scottsboro, Town of Geraldine and Town of Woodville, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45634	N.D. Ohio (Federal)
AL	City of Homewood	*City of Homewood, Alabama v. McKesson Corporation, et al.*	1:19-op-45973	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	City of Hoover	*City of Hoover, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45746	N.D. Ohio (Federal)
AL	City of Hueytown	*Jefferson County, Jefferson County Board of Health, City of Pleasant Grove, City of Hueytown and City of Mountain Brook and Mike Hale, in his capacity as Sheriff of Jefferson County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45558	N.D. Ohio (Federal)
AL	City of Huntsville	*City of Huntsville, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45947	N.D. Ohio (Federal)
AL	City of Irondale	*City of Irondale, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45012	N.D. Ohio (Federal)
AL	City of Jacksonville	*City of Leesburg, City of Jacksonville, City of Rainbow City, City of Ashville, City of Springville, City of Moody, City of Ragland and City of Thomasville v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45261	N.D. Ohio (Federal)
AL	City of Jasper	*The Counties of Marion, Pickens and Walker, Alabama and the Cities of Dora, Jasper, Sumiton, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45171	N.D. Ohio (Federal)
AL	City of Killen	*The City of Killen, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45218	N.D. Ohio (Federal)
AL	City of Lanett	*City of Lanett, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46130	N.D. Ohio (Federal)
AL	City of Leeds	*City of Leeds, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45088	N.D. Ohio (Federal)
AL	City of Leesburg	*City of Leesburg, City of Jacksonville, City of Rainbow City, City of Ashville, City of Springville, City of Moody, City of Ragland and City of Thomasville v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45261	N.D. Ohio (Federal)
AL	City of Level Plains	*City of Level Plains, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45100	N.D. Ohio (Federal)
AL	City of Lincoln	*City of Lincoln, Alabama v. Cardinal Health, Inc., et al.*	1:18-op-45786	N.D. Ohio (Federal)
AL	City of Linden	*City of Linden v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45118	N.D. Ohio (Federal)
AL	City of Louisville	*The City of Louisville, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46058	N.D. Ohio (Federal)
AL	City of Luverne	*City of Luverne, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45109	N.D. Ohio (Federal)
AL	City of Madison	*The City of Madison, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45198	N.D. Ohio (Federal)
AL	City of Marion	*City of Marion, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45217	N.D. Ohio (Federal)
AL	City of Midfield	*City of Midfield, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45416	N.D. Ohio (Federal)
AL	City of Millbrook	*City of Millbrook, Alabama and City of Wetumpka, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45135	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	City of Mobile	*City of Mobile, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45076	N.D. Ohio (Federal)
AL	City of Monroeville	*Monroe County, Alabama; The City of Monroeville, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:20-op-45273	N.D. Ohio (Federal)
AL	City of Montgomery	*City of Montgomery, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45494	N.D. Ohio (Federal)
AL	City of Moody	*City of Leesburg, City of Jacksonville, City of Rainbow City, City of Ashville, City of Springville, City of Moody, City of Ragland and City of Thomasville v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45261	N.D. Ohio (Federal)
AL	City of Moulton	*City of Moulton, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45202	N.D. Ohio (Federal)
AL	City of Mountain Brook	*Jefferson County, Jefferson County Board of Health, City of Pleasant Grove, City of Hueytown and City of Mountain Brook and Mike Hale, in his capacity as Sheriff of Jefferson County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45558	N.D. Ohio (Federal)
AL	City of Muscle Shoals	*The City of Muscle Shoals, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:20-op-45268	N.D. Ohio (Federal)
AL	City of Nauvoo	*The City of Nauvoo, The City of Cordova, The City of Carbon Hill, The City of Sipsey, The City of Parrish and The City of Oakman, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45737	N.D. Ohio (Federal)
AL	City of New Hope	*Jackson County, City of Bridgeport, City of Henagar, City of New Hope, City of Scottsboro, Town of Geraldine and Town of Woodville, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45634	N.D. Ohio (Federal)
AL	City of Northport	*City of Northport, City of Robertsdale and Town of Brookwood, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45272	N.D. Ohio (Federal)
AL	City of Oakman	*The City of Nauvoo, The City of Cordova, The City of Carbon Hill, The City of Sipsey, The City of Parrish and The City of Oakman, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45737	N.D. Ohio (Federal)
AL	City of Oneonta	*The City of Oneonta, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45210	N.D. Ohio (Federal)
AL	City of Opelika	*City of Opelika, City of Spanish Fort, City of Centreville, City of Slocomb and Town of West Blocton v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45208	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	City of Opp	*City of Opp, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45011	N.D. Ohio (Federal)
AL	City of Orange Beach	*City of Orange Beach, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45784	N.D. Ohio (Federal)
AL	City of Oxford	*City of Oxford, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45774	N.D. Ohio (Federal)
AL	City of Ozark	*City of Ozark, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45214	N.D. Ohio (Federal)
AL	City of Parrish	*The City of Nauvoo, The City of Cordova, The City of Carbon Hill, The City of Sipsey, The City of Parrish and The City of Oakman, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45737	N.D. Ohio (Federal)
AL	City of Pelham	*The City of Clanton, Alabama; The City of Columbiana, Alabama; The City of Helena, Alabama; The City of Pelham, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45016	N.D. Ohio (Federal)
AL	City of Pell City	*City of Pell City, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45091	N.D. Ohio (Federal)
AL	City of Phenix	*Phenix City, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45179	N.D. Ohio (Federal)
AL	City of Piedmont	*City of Piedmont v. AmerisourceBergen Drug Corporation, et al.*	21-op-45049	N.D. Ohio (Federal)
AL	City of Pleasant Grove	*Jefferson County, Jefferson County Board of Health, City of Pleasant Grove, City of Hueytown and City of Mountain Brook and Mike Hale, in his capacity as Sheriff of Jefferson County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45558	N.D. Ohio (Federal)
AL	City of Prattville	*City of Prattville, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45783	N.D. Ohio (Federal)
AL	City of Prichard	*City of Prichard, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45690	N.D. Ohio (Federal)
AL	City of Ragland	*City of Leesburg, City of Jacksonville, City of Rainbow City, City of Ashville, City of Springville, City of Moody, City of Ragland and City of Thomasville v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45261	N.D. Ohio (Federal)
AL	City of Rainbow City	*City of Leesburg, City of Jacksonville, City of Rainbow City, City of Ashville, City of Springville, City of Moody, City of Ragland and City of Thomasville v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45261	N.D. Ohio (Federal)
AL	City of Rainsville	*City of Rainsville and Town of Hammondville, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45135	N.D. Ohio (Federal)
AL	City of Red Bay	*City of Red Bay, City of Russellville, City of Sheffield and Town of Leighton,*	1:19-op-45136	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Alabama v. AmerisourceBergen Drug Corporation, et al.		
AL	City of Roanoke	*City of Roanoke, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	22-op-45011	N.D. Ohio (Federal)
AL	City of Robertsdale	*City of Northport, City of Robertsdale and Town of Brookwood, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45272	N.D. Ohio (Federal)
AL	City of Russellville	*City of Red Bay, City of Russellville, City of Sheffield and Town of Leighton, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45136	N.D. Ohio (Federal)
AL	City of Saraland	*City of Saraland, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	22-op-45017	N.D. Ohio (Federal)
AL	City of Satsuma	*City of Satsuma, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45116	N.D. Ohio (Federal)
AL	City of Scottsboro	*Jackson County, City of Bridgeport, City of Henagar, City of New Hope, City of Scottsboro, Town of Geraldine and Town of Woodville, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45634	N.D. Ohio (Federal)
AL	City of Selma	*City of Selma, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45198	N.D. Ohio (Federal)
AL	City of Semmes	*City of Brewton, Alabama, and City of Semmes, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45113	N.D. Ohio (Federal)
AL	City of Sheffield	*City of Red Bay, City of Russellville, City of Sheffield and Town of Leighton, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45136	N.D. Ohio (Federal)
AL	City of Sipsey	*The City of Nauvoo, The City of Cordova, The City of Carbon Hill, The City of Sipsey, The City of Parrish and The City of Oakman, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45737	N.D. Ohio (Federal)
AL	City of Slocomb	*City of Opelika, City of Spanish Fort, City of Centreville, City of Slocomb and Town of West Blocton v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45208	N.D. Ohio (Federal)
AL	City of Spanish Fort	*City of Opelika, City of Spanish Fort, City of Centreville, City of Slocomb and Town of West Blocton v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45208	N.D. Ohio (Federal)
AL	City of Springville	*City of Leesburg, City of Jacksonville, City of Rainbow City, City of Ashville, City of Springville, City of Moody, City of Ragland and City of Thomasville v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45261	N.D. Ohio (Federal)
AL	City of Sumiton	*The Counties of Marion, Pickens and Walker, Alabama and the Cities of Dora, Jasper, Sumiton, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45171	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	City of Sylacauga	*City of Sylacauga, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45900	N.D. Ohio (Federal)
AL	City of Talladega	*Talladega County and City of Talladega, Alabama v. Cardinal Health, Inc., et al.*	1:18-op-45190	N.D. Ohio (Federal)
AL	City of Thomasville	*City of Leesburg, City of Jacksonville, City of Rainbow City, City of Ashville, City of Springville, City of Moody, City of Ragland and City of Thomasville v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45261	N.D. Ohio (Federal)
AL	City of Troy	*City of Troy, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45947	N.D. Ohio (Federal)
AL	City of Trussville	*The City of Trussville, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45192	N.D. Ohio (Federal)
AL	City of Tuscaloosa	*City of Tuscaloosa, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45553	N.D. Ohio (Federal)
AL	City of Tuscumbia	*The Town of Cherokee and the City of Tuscumbia, Alabama, and the Counties of Colbert and Franklin, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45005	N.D. Ohio (Federal)
AL	City of Tuskegee	*City of Tuskegee, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45544	N.D. Ohio (Federal)
AL	City of Union Springs	*City of Union Springs, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45204	N.D. Ohio (Federal)
AL	City of Uniontown	*City of Uniontown, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45117	N.D. Ohio (Federal)
AL	City of Vernon	*Lamar County, Alabama, City of Vernon, Alabama and Hal Allred, in his capacity as Sheriff of Lamar County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45210	N.D. Ohio (Federal)
AL	City of Vestavia Hills	*City of Vestavia Hills, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45141	N.D. Ohio (Federal)
AL	City of Weaver	*City of Weaver, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45565	N.D. Ohio (Federal)
AL	City of Wetumpka	*City of Millbrook, Alabama and City of Wetumpka, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45135	N.D. Ohio (Federal)
AL	City of Winfield	*The City of Winfield, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45738	N.D. Ohio (Federal)
AL	County of Autauga	*Autauga County v. Purdue Pharma L.P., et al.*	1:19-op-45086	N.D. Ohio (Federal)
AL	County of Babour	*Babour County, Alabama v. Purdue Pharma L.P., et al*	1:18-op-45244	N.D. Ohio (Federal)
AL	County of Baldwin	*Baldwin County, Alabama, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45152	N.D. Ohio (Federal)
AL	County of Bibb	*Bibb County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45413	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	County of Blount	*Blount County v. Purdue Pharma L.P., et al.*	1:18-op-45415	N.D. Ohio (Federal)
AL	County of Bullock	*Bullock County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45246	N.D. Ohio (Federal)
AL	County of Butler	*Butler County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45441	N.D. Ohio (Federal)
AL	County of Calhoun	*Calhoun County, Alabama v. Cardinal Health, Inc., et al.*	1:18-op-45191	N.D. Ohio (Federal)
AL	County of Chambers	*Chambers County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45408	N.D. Ohio (Federal)
AL	County of Cherokee	*Cherokee County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45207	N.D. Ohio (Federal)
AL	County of Chilton	*Chilton County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45735	N.D. Ohio (Federal)
AL	County of Choctaw	*Choctaw County, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45770	N.D. Ohio (Federal)
AL	County of Clarke	*Clarke County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45247	N.D. Ohio (Federal)
AL	County of Clay	*Clay County, Alabama v. Cardinal Health, Inc., et al.*	1:18-op-45248	N.D. Ohio (Federal)
AL	County of Cleburne	*Cleburne County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45566	N.D. Ohio (Federal)
AL	County of Coffee	*Coffee County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45182	N.D. Ohio (Federal)
AL	County of Colbert	*The Town of Cherokee and the City of Tuscumbia, Alabama, and the Counties of Colbert and Franklin, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45005	N.D. Ohio (Federal)
AL	County of Conecuh	*Conecuh County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45957	N.D. Ohio (Federal)
AL	County of Coosa	*Coosa County, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45995	N.D. Ohio (Federal)
AL	County of Covington	*Covington County, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45751	N.D. Ohio (Federal)
AL	County of Crenshaw	*Crenshaw County, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45983	N.D. Ohio (Federal)
AL	County of Cullman	*Cullman County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45227	N.D. Ohio (Federal)
AL	County of Dale	*Dale County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45561	N.D. Ohio (Federal)
AL	County of Dallas	*Dallas County, Alabama v. AmerisourceBergen Drug Corporation, et al*	1:18-op-45667	N.D. Ohio (Federal)
AL	County of DeKalb	*Dekalb County and the Town of Powell, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45209	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	County of Elmore	*Elmore County, Alabama, and Randolph County, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:22-op-45003	N.D. Ohio (Federal)
AL	County of Escambia	*Escambia County, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45112	N.D. Ohio (Federal)
AL	County of Etowah	*City of Gadsden, Etowah County, and Todd Entrekin, Sheriff of Etowah County, Alabama v. Purdue Pharma L.P., et al.*	1:17-op-45101	N.D. Ohio (Federal)
AL	County of Fayette	*Fayette County, City of Fayette, Town of Berry and Rodney Ingle, in his capacity as Sheriff of Fayette County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45211	N.D. Ohio (Federal)
AL	County of Franklin	*The Town of Cherokee and the City of Tuscumbia, Alabama, and the Counties of Colbert and Franklin, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45005	N.D. Ohio (Federal)
AL	County of Geneva	*Geneva County, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45105	N.D. Ohio (Federal)
AL	County of Greene	*Greene County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45209	N.D. Ohio (Federal)
AL	County of Hale	*Hale County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45420	N.D. Ohio (Federal)
AL	County of Henry	*Henry County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45543	N.D. Ohio (Federal)
AL	County of Houston	*Houston County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45019	N.D. Ohio (Federal)
AL	County of Jackson	*Jackson County, City of Bridgeport, City of Henagar, City of New Hope, City of Scottsboro, Town of Geraldine and Town of Woodville, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45634	N.D. Ohio (Federal)
AL	County of Jefferson	*Jefferson County, Jefferson County Board of Health, City of Pleasant Grove, City of Hueytown and City of Mountain Brook and Mike Hale, in his capacity as Sheriff of Jefferson County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45558	N.D. Ohio (Federal)
AL	County of Lamar	*Lamar County, Alabama, City of Vernon, Alabama and Hal Allred, in his capacity as Sheriff of Lamar County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45210	N.D. Ohio (Federal)
AL	County of Lauderdale	*Lauderdale County, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45845	N.D. Ohio (Federal)
AL	County of Lawrence	*Lawrence County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45228	N.D. Ohio (Federal)
AL	County of Limestone	*Limestone County, Alabama v. Purdue Pharma L.P., et al*	1:18-op-45328	N.D. Ohio (Federal)
AL	County of Lowndes	*Lowndes County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45203	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	County of Macon	*Macon County, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45982	N.D. Ohio (Federal)
AL	County of Madison	*Madison County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45006	N.D. Ohio (Federal)
AL	County of Marengo	*Marengo County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45188	N.D. Ohio (Federal)
AL	County of Marion	*The Counties of Marion, Pickens and Walker, Alabama and the Cities of Dora, Jasper, Sumiton, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45171	N.D. Ohio (Federal)
AL	County of Marshall	*Marshall County; the Cities of Albertville, Arab, Boaz and Guntersville; and the Towns of Douglas and Grant, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45230	N.D. Ohio (Federal)
AL	County of Mobile	*Mobile County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45186	N.D. Ohio (Federal)
AL	County of Monroe	*Monroe County, Alabama; The City of Monroeville, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:20-op-45273	N.D. Ohio (Federal)
AL	County of Montgomery	*Montgomery County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45445	N.D. Ohio (Federal)
AL	County of Morgan	*Morgan County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45200	N.D. Ohio (Federal)
AL	County of Perry	*Perry County, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45158	N.D. Ohio (Federal)
AL	County of Pickens	*The Counties of Marion, Pickens and Walker, Alabama and the Cities of Dora, Jasper, Sumiton, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45171	N.D. Ohio (Federal)
AL	County of Pike	*Pike County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45803	N.D. Ohio (Federal)
AL	County of Randolph	*Elmore County, Alabama, and Randolph County, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:22-op-45003	N.D. Ohio (Federal)
AL	County of Russell	*Russell County, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45826	N.D. Ohio (Federal)
AL	County of Shelby	*Shelby County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45414	N.D. Ohio (Federal)
AL	County of St. Clair	*St. Clair County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45614	N.D. Ohio (Federal)
AL	County of Sumter	*Sumter County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45194	N.D. Ohio (Federal)
AL	County of Talladega	*Talladega County and City of Talladega, Alabama v. Cardinal Health, Inc., et al.*	1:18-op-45190	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	County of Tallapoosa	*Tallapoosa County, Alabama v. AmerisourceBergen Drug Corporation et al.*	1:17-op-45097	N.D. Ohio (Federal)
AL	County of Tuscaloosa	*Tuscaloosa County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45196	N.D. Ohio (Federal)
AL	County of Walker	*The Counties of Marion, Pickens and Walker, Alabama and the Cities of Dora, Jasper, Sumiton, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45171	N.D. Ohio (Federal)
AL	County of Washington	*Washington County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45180	N.D. Ohio (Federal)
AL	County of Wilcox	*Wilcox County, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45181	N.D. Ohio (Federal)
AL	Cullman Regional Medical Center, Inc.	*The Health Care Authority of Cullman County; Cullman Regional Medical Center, Inc. v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46059	N.D. Ohio (Federal)
AL	Dale County Health Care Authority d/b/a Dale Medical Center	*Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority; Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga Health Care Authority; Russellville Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.*	CV-2021-900016	AL - Circuit Court of Conecuh County (State)
AL	DCH Health Care Authority	*The DCH Health Care Authority, The Healthcare Authority for Baptist Health, an affiliate of UAB Health System,*	CV-2019-000007 / CV-2021-900016	AL - Circuit Court of Conecuh

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Medical West Hospital Authority, an affiliate of Uab Health System, Evergreen Medical Center, LLC, Gilliard Health Services, Inc., Crest Wood Healthcare, L.P., Triad of Alabama, LLC, QHG of Enterprise, Inc., Affinity Hospital, LLC, Gadsden Regional Medical Center, LLC, Foley Hospital Corporation, The Health Care Authority Of Clarke County, Alabama, BBH PBMC, LLC, BBH, WBMC, LLC, BBH SB MC, LLC, BBH CBMC, LLC, BBH BMC, LLC v. Purdue Pharma L.P., et al. / Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority; Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga Health Care Authority; Russellville Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.		County (State)
AL	Geneva County Health Care Authority d/b/a Wiregrass Medical Center	*Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority; Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga Health Care Authority; Russellville*	CV-2021-900016	AL - Circuit Court of Conecuh County (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.		
AL	Greene County Hospital Board	*Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority; Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga Health Care Authority; Russellville Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.*	CV-2021-900016	AL - Circuit Court of Conecuh County (State)
AL	Healthcare Authority for Baptist Health	*The DCH Health Care Authority, The Healthcare Authority for Baptist Health, an affiliate of UAB Health System, Medical West Hospital Authority, an affiliate of Uab Health System, Evergreen*	CV-2019-000007 / CV-2021-900016	AL - Circuit Court of Conecuh County (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Medical Center, LLC, Gilliard Health Services, Inc., Crest Wood Healthcare, L.P., Triad of Alabama, LLC, QHG of Enterprise, Inc., Affinity Hospital, LLC, Gadsden Regional Medical Center, LLC, Foley Hospital Corporation, The Health Care Authority Of Clarke County, Alabama, BBH PBMC, LLC, BBH, WBMC, LLC, BBH SB MC, LLC, BBH CBMC, LLC, BBH BMC, LLC v. Purdue Pharma L.P., et al. / Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority; Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga Health Care Authority; Russellville Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.		
AL	HH Health System-Athens Limestone, LLC d/b/a Athens Limestone Hospital	*The Health Care Authority of the City of Huntsville D/B/A HH Health System; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital; The Health Care Authority of the City of Huntsville D/B/A Madison Hospital; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital for Women and Children; HH Health System-Morgan, LLC D/B/A Decatur Morgan Hospital - Decatur And Decatur Morgan Hospital - Parkway; The Health Care Authority Of Morgan County - City Of*	1:19-op-45143	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Decatur; HH Health System-Shoals, LLC D/B/A Helen Keller Hospital and Red Bay Hospital; HH Health System-Athens Limestone, LLC D/B/A Athens Limestone Hospital; Attentus Moulton, LLC D/B/A Lawrence Medical Center v. Purdue Pharma L.P., et al.		
AL	HH Health System-Morgan, LLC d/b/a Decatur Morgan Hospital - Decatur and Decatur Morgan Hospital - Parkway	*The Health Care Authority of the City of Huntsville D/B/A HH Health System; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital; The Health Care Authority of the City of Huntsville D/B/A Madison Hospital; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital for Women and Children; HH Health System-Morgan, LLC D/B/A Decatur Morgan Hospital - Decatur And Decatur Morgan Hospital - Parkway; The Health Care Authority Of Morgan County - City Of Decatur; HH Health System-Shoals, LLC D/B/A Helen Keller Hospital and Red Bay Hospital; HH Health System-Athens Limestone, LLC D/B/A Athens Limestone Hospital; Attentus Moulton, LLC D/B/A Lawrence Medical Center v. Purdue Pharma L.P., et al.*	1:19-op-45143	N.D. Ohio (Federal)
AL	HH Health System-Shoals, LLC d/b/a Helen Keller Hospital and Red Bay Hospital	*The Health Care Authority of the City of Huntsville D/B/A HH Health System; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital; The Health Care Authority of the City of Huntsville D/B/A Madison Hospital; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital for Women and Children; HH Health System-Morgan, LLC D/B/A Decatur Morgan Hospital - Decatur And Decatur Morgan Hospital - Parkway; The Health Care Authority Of Morgan County - City Of Decatur; HH Health System-Shoals, LLC D/B/A Helen Keller Hospital and Red Bay Hospital; HH Health System-Athens Limestone, LLC D/B/A Athens Limestone Hospital; Attentus Moulton, LLC D/B/A Lawrence Medical Center v. Purdue Pharma L.P., et al.*	1:19-op-45143	N.D. Ohio (Federal)
AL	Jefferson County Board of Health	*Jefferson County, Jefferson County Board of Health, City of Pleasant Grove, City of Hueytown and City of Mountain Brook and Mike Hale, in his capacity as Sheriff of Jefferson County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45558	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	Medical West Hospital Authority	*The DCH Health Care Authority, The Healthcare Authority for Baptist Health, an affiliate of UAB Health System, Medical West Hospital Authority, an affiliate of Uab Health System, Evergreen Medical Center, LLC, Gilliard Health Services, Inc., Crest Wood Healthcare, L.P., Triad of Alabama, LLC, QHG of Enterprise, Inc., Affinity Hospital, LLC, Gadsden Regional Medical Center, LLC, Foley Hospital Corporation, The Health Care Authority Of Clarke County, Alabama, BBH PBMC, LLC, BBH, WBMC, LLC, BBH SB MC, LLC, BBH CBMC, LLC, BBH BMC, LLC v. Purdue Pharma L.P., et al. / Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority; Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga Health Care Authority; Russellville Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.*	CV-2019-000007 / CV-2021-900016	AL - Circuit Court of Conecuh County (State)
AL	Mobile County Board of Health	*Mobile County Board of Health and Family Oriented Primary Health Care Clinic v. Purdue Pharma L.P., et al*	02-CV-2019-902806	AL - Circuit Court of Mobile County (State)
AL	Monroe County Healthcare Authority	*Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority;*	CV-2021-900016	AL - Circuit Court of Conecuh

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga Health Care Authority; Russellville Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.		County (State)
AL	Sheriff of Etowah County (Sheriff Todd Entrekin)	*City of Gadsden, Etowah County, and Todd Entrekin, Sheriff of Etowah County, Alabama v. Purdue Pharma L.P., et al.*	1:17-op-45101	N.D. Ohio (Federal)
AL	Sheriff of Fayette County (Sheriff Rodney Ingle)	*Fayette County, City of Fayette, Town of Berry and Rodney Ingle, in his capacity as Sheriff of Fayette County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45211	N.D. Ohio (Federal)
AL	Sheriff of Jefferson County (Sheriff Mike Hale)	*Jefferson County, Jefferson County Board of Health, City of Pleasant Grove, City of Hueytown and City of Mountain Brook and Mike Hale, in his capacity as Sheriff of Jefferson County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45558	N.D. Ohio (Federal)
AL	Sheriff of Lamar County (Sheriff Hal Allred)	*Lamar County, Alabama, City of Vernon, Alabama and Hal Allred, in his capacity as Sheriff of Lamar County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45210	N.D. Ohio (Federal)
AL	Sylacauga Health Care Authority d/b/a Coosa Valley Medical Center	*Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority; Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga*	CV-2021-900016	AL - Circuit Court of Conecuh County (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Health Care Authority; Russellville Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.		
AL	The Health Care Authority of Clarke County	*The DCH Health Care Authority, The Healthcare Authority for Baptist Health, an affiliate of UAB Health System, Medical West Hospital Authority, an affiliate of Uab Health System, Evergreen Medical Center, LLC, Gilliard Health Services, Inc., Crest Wood Healthcare, L.P., Triad of Alabama, LLC, QHG of Enterprise, Inc., Affinity Hospital, LLC, Gadsden Regional Medical Center, LLC, Foley Hospital Corporation, The Health Care Authority Of Clarke County, Alabama, BBH PBMC, LLC, BBH, WBMC, LLC, BBH SB MC, LLC, BBH CBMC, LLC, BBH BMC, LLC v. Purdue Pharma L.P., et al. / Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority; Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga Health Care Authority; Russellville Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An*	CV-2019-000007 / CV-2021-900016	AL - Circuit Court of Conecuh County (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.		
AL	The Health Care Authority of Cullman County	*The Health Care Authority of Cullman County; Cullman Regional Medical Center, Inc. v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46059	N.D. Ohio (Federal)
AL	The Health Care Authority of Morgan County - City of Decatur	*The Health Care Authority of the City of Huntsville D/B/A HH Health System; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital; The Health Care Authority of the City of Huntsville D/B/A Madison Hospital; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital for Women and Children; HH Health System-Morgan, LLC D/B/A Decatur Morgan Hospital - Decatur And Decatur Morgan Hospital - Parkway; The Health Care Authority Of Morgan County - City Of Decatur; HH Health System-Shoals, LLC D/B/A Helen Keller Hospital and Red Bay Hospital; HH Health System-Athens Limestone, LLC D/B/A Athens Limestone Hospital; Attentus Moulton, LLC D/B/A Lawrence Medical Center v. Purdue Pharma L.P., et al.*	1:19-op-45143	N.D. Ohio (Federal)
AL	The Health Care Authority of the City of Huntsville d/b/a HH Health System	*The Health Care Authority of the City of Huntsville D/B/A HH Health System; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital; The Health Care Authority of the City of Huntsville D/B/A Madison Hospital; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital for Women and Children; HH Health System-Morgan, LLC D/B/A Decatur Morgan Hospital - Decatur And Decatur Morgan Hospital - Parkway; The Health Care Authority Of Morgan County - City Of Decatur; HH Health System-Shoals, LLC D/B/A Helen Keller Hospital and Red Bay Hospital; HH Health System-Athens Limestone, LLC D/B/A Athens Limestone Hospital; Attentus Moulton, LLC D/B/A*	1:19-op-45143	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Lawrence Medical Center v. Purdue Pharma L.P., et al.		
AL	The Health Care Authority of the City of Huntsville d/b/a Huntsville Hospital	*The Health Care Authority of the City of Huntsville D/B/A HH Health System; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital; The Health Care Authority of the City of Huntsville D/B/A Madison Hospital; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital for Women and Children; HH Health System-Morgan, LLC D/B/A Decatur Morgan Hospital - Decatur And Decatur Morgan Hospital - Parkway; The Health Care Authority Of Morgan County - City Of Decatur; HH Health System-Shoals, LLC D/B/A Helen Keller Hospital and Red Bay Hospital; HH Health System-Athens Limestone, LLC D/B/A Athens Limestone Hospital; Attentus Moulton, LLC D/B/A Lawrence Medical Center v. Purdue Pharma L.P., et al.*	1:19-op-45143	N.D. Ohio (Federal)
AL	The Health Care Authority of the City of Huntsville d/b/a Huntsville Hospital for Women and Children	*The Health Care Authority of the City of Huntsville D/B/A HH Health System; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital; The Health Care Authority of the City of Huntsville D/B/A Madison Hospital; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital for Women and Children; HH Health System-Morgan, LLC D/B/A Decatur Morgan Hospital - Decatur And Decatur Morgan Hospital - Parkway; The Health Care Authority Of Morgan County - City Of Decatur; HH Health System-Shoals, LLC D/B/A Helen Keller Hospital and Red Bay Hospital; HH Health System-Athens Limestone, LLC D/B/A Athens Limestone Hospital; Attentus Moulton, LLC D/B/A Lawrence Medical Center v. Purdue Pharma L.P., et al.*	1:19-op-45143	N.D. Ohio (Federal)
AL	The Health Care Authority of the City of Huntsville d/b/a Madison Hospital	*The Health Care Authority of the City of Huntsville D/B/A HH Health System; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital; The Health Care Authority of the City of Huntsville D/B/A Madison Hospital; The Health Care Authority of the City of Huntsville D/B/A Huntsville Hospital for Women and Children; HH Health System-Morgan, LLC D/B/A Decatur Morgan Hospital - Decatur And Decatur Morgan Hospital - Parkway; The Health Care*	1:19-op-45143	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Authority Of Morgan County - City Of Decatur; HH Health System-Shoals, LLC D/B/A Helen Keller Hospital and Red Bay Hospital; HH Health System-Athens Limestone, LLC D/B/A Athens Limestone Hospital; Attentus Moulton, LLC D/B/A Lawrence Medical Center v. Purdue Pharma L.P., et al.		
AL	The Jackson County Health Care Authority	*The Jackson County Health Care Authority v. Purdue Pharma L.P., et al.*	1:19-op-45134	N.D. Ohio (Federal)
AL	The Marshall County Health Care Authority d/b/a Marshall Medical Center North d/b/a Marshall Medical Center South	*The Marshall County Health Care Authority, a Public Corporation d/b/a Marshall Medical Center North d/b/a Marshall Medical Center South v. Purdue Pharma L.P., et al*	1:18-op-45538	N.D. Ohio (Federal)
AL	Tombigbee Health Care Authority d/b/a Brian W. Whitfield Memorial Hospital	*Fort Payne Hospital Corporation; The Bibb County Healthcare Authority; The Dale County Health Care Authority; Greene County Hospital Board; Jackson Hospital & Clinic, Inc.; Escambia County Alabama Community Hospitals, Inc.; Mizell Memorial Hospital, Inc.; The Tombigbee Health Care Authority; Geneva County Health Care Authority; Community Hospital, Inc.; The Sylacauga Health Care Authority; Russellville Hospital, Inc.; Lakeland Community Hospital, Inc.; Monroe County Healthcare Authority; Infirmary Health Hospitals, Inc.; The DCH Health Care Authority; The Healthcare Authority For Baptist Health, An Affiliate Of UAB Health System; Medical West Hospital Authority, An Affiliate Of UAB Health System; Evergreen Medical Center, LLC; Gilliard Health Services, Inc.; Crestwood Healthcare, L.P.; Triad Of Alabama, LLC; QHG Of Enterprise, Inc.; Affinity Hospital, LLC; Gadsden Regional Medical Center, LLC; Foley Hospital Corporation; The Health Care Authority Of Clarke County, Alabama; BBH PBMC, LLC; BBH, WBMC, LLC; BBH SBMC, LLC; BBH CBMC, LLC; and BBH BMC, LLC v. McKesson Corporation, et al.*	CV-2021-900016	AL - Circuit Court of Conecuh County (State)
AL	Town of Berry	*Fayette County, City of Fayette, Town of Berry and Rodney Ingle, in his capacity as Sheriff of Fayette County, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45211	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	Town of Brookwood	*City of Northport, City of Robertsdale and Town of Brookwood, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45272	N.D. Ohio (Federal)
AL	Town of Butler	*Town of Butler, Alabama v. McKesson Corporation, et al.*	1:18-op-45216	N.D. Ohio (Federal)
AL	Town of Camp Hill	*City of Fultondale, City of Graysville, City of Centre, Town of Cedar Bluff, City of Dadeville, Town of Camp Hill, Town of Oakman, City of Attalla and Town of Gilbertown, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45265	N.D. Ohio (Federal)
AL	Town of Cedar Bluff	*City of Fultondale, City of Graysville, City of Centre, Town of Cedar Bluff, City of Dadeville, Town of Camp Hill, Town of Oakman, City of Attalla and Town of Gilbertown, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45265	N.D. Ohio (Federal)
AL	Town of Cherokee	*The Town of Cherokee and the City of Tuscumbia, Alabama, and the Counties of Colbert and Franklin, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45005	N.D. Ohio (Federal)
AL	Town of Cleveland	*Town of Cleveland, Town of Gurley and Town of Priceville, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45217	N.D. Ohio (Federal)
AL	Town of Dauphin Island	*Town of Dauphin Island, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45119	N.D. Ohio (Federal)
AL	Town of Double Springs	*Town of Double Springs, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45739	N.D. Ohio (Federal)
AL	Town of Douglas	*Marshall County; the Cities of Albertville, Arab, Boaz and Guntersville; and the Towns of Douglas and Grant, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45230	N.D. Ohio (Federal)
AL	Town of Faunsdale	*Town of Faunsdale, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45122	N.D. Ohio (Federal)
AL	Town of Fort Deposit	*Town of Fort Deposit, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45427	N.D. Ohio (Federal)
AL	Town of Geraldine	*Jackson County, City of Bridgeport, City of Henagar, City of New Hope, City of Scottsboro, Town of Geraldine and Town of Woodville, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45634	N.D. Ohio (Federal)
AL	Town of Gilbertown	*City of Fultondale, City of Graysville, City of Centre, Town of Cedar Bluff, City of Dadeville, Town of Camp Hill, Town of Oakman, City of Attalla and Town of Gilbertown, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45265	N.D. Ohio (Federal)
AL	Town of Grant	*Marshall County; the Cities of Albertville, Arab, Boaz and Guntersville; and the Towns of Douglas and Grant, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45230	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
AL	Town of Gurley	*Town of Cleveland, Town of Gurley and Town of Priceville, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45217	N.D. Ohio (Federal)
AL	Town of Hammondville	*City of Rainsville and Town of Hammondville, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45135	N.D. Ohio (Federal)
AL	Town of Leighton	*City of Red Bay, City of Russellville, City of Sheffield and Town of Leighton, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45136	N.D. Ohio (Federal)
AL	Town of Locust Fork	*Town of Locust Fork v. Purdue Pharma L.P., et al.*	1:19-op-45777	N.D. Ohio (Federal)
AL	Town of Loxley	*City of Bay Minette, Alabama; Town of Loxley, Alabama; and Town of Summerdale, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45018	N.D. Ohio (Federal)
AL	Town of McKenzie	*Town of McKenzie, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45435	N.D. Ohio (Federal)
AL	Town of Munford	*Town of Munford, Alabama v. Cardinal Health, Inc., et al.*	1:18-op-45785	N.D. Ohio (Federal)
AL	Town of Oakman	*City of Fultondale, City of Graysville, City of Centre, Town of Cedar Bluff, City of Dadeville, Town of Camp Hill, Town of Oakman, City of Attalla and Town of Gilbertown, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45265	N.D. Ohio (Federal)
AL	Town of Powell	*Dekalb County and the Town of Powell, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45209	N.D. Ohio (Federal)
AL	Town of Priceville	*Town of Cleveland, Town of Gurley and Town of Priceville, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45217	N.D. Ohio (Federal)
AL	Town of Rockford	*Town of Rockford, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45915	N.D. Ohio (Federal)
AL	Town of Summerdale	*City of Bay Minette, Alabama; Town of Loxley, Alabama; and Town of Summerdale, Alabama v. AmerisourceBergen Drug Corporation, et al.*	1:22-op-45018	N.D. Ohio (Federal)
AL	Town of Sweet Water	*Town of Sweet Water, Alabama v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45120	N.D. Ohio (Federal)
AL	Town of Vance	*Town of Vance, Alabama v. Purdue Pharma L.P., et al.*	1:19-op-45909	N.D. Ohio (Federal)
AL	Town of West Blocton	*City of Opelika, City of Spanish Fort, City of Centreville, City of Slocomb and Town of West Blocton v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45208	N.D. Ohio (Federal)
AL	Town of Woodville	*Jackson County, City of Bridgeport, City of Henagar, City of New Hope, City of Scottsboro, Town of Geraldine and Town of Woodville, Alabama v.*	1:18-op-45634	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		AmerisourceBergen Drug Corporation, et al.		
AL	Town of Yellow Bluff	*Town of Yellow Bluff, Alabama v. Purdue Pharma L.P., et al.*	1:18-op-45423	N.D. Ohio (Federal)
AZ	City of Bullhead	*Bullhead City, Arizona v. Actavis, Inc., et al.*	1:21-op-45085	N.D. Ohio (Federal)
AZ	City of Glendale	*City of Glendale, Arizona v. Actavis, Inc., et al.*	1:21-op-45086	N.D. Ohio (Federal)
AZ	City of Kingman	*City of Kingman v. Purdue Pharma L.P., et al.*	1:18-op-46057	N.D. Ohio (Federal)
AZ	City of Phoenix	*City of Phoenix, Arizona v. Purdue Pharma L.P., et al.*	1:18-op-45510	N.D. Ohio (Federal)
AZ	City of Prescott	*The City of Prescott, Arizona v. Actavis, Inc., et al.*	1:21-op-45090	N.D. Ohio (Federal)
AZ	City of Surprise	*City of Surprise, Arizona v. Actavis, Inc., et al.*	1:21-op-45091	N.D. Ohio (Federal)
AZ	City of Tucson	*City of Tucson v. Purdue Pharma L.P., et al.*	1:19-op-45267	N.D. Ohio (Federal)
AZ	County of Apache	*County of Apache, Arizona v. Actavis, Inc., et al.*	1:21-op-45084	N.D. Ohio (Federal)
AZ	County of Cochise	*Cochise County v. Purdue Pharma L.P., et al.*	1:18-op-45855	N.D. Ohio (Federal)
AZ	County of La Paz	*County of La Paz, Arizona v. Actavis, Inc., et al.*	1:21-op-45087	N.D. Ohio (Federal)
AZ	County of Maricopa	*Maricopa County v. Purdue Pharma L.P., et al.*	1:19-op-45020	N.D. Ohio (Federal)
AZ	County of Mohave	*Mohave County v. Purdue Pharma L.P., et al.*	1:19-op-45117	N.D. Ohio (Federal)
AZ	County of Navajo	*Navajo County v. Purdue Pharma L.P., et al.*	1:19-op-45217	N.D. Ohio (Federal)
AZ	County of Pima	*Pima County v. Purdue Pharma L.P., et al.*	1:19-op-45268	N.D. Ohio (Federal)
AZ	County of Pinal	*Pinal County, Arizona v. Actavis, Inc., et al.*	1:21-op-45088	N.D. Ohio (Federal)
AZ	County of Yuma	*Yuma County v. Purdue Pharma L.P., et al.*	1:19-op-45575	N.D. Ohio (Federal)
CA	City and County of San Francisco (City Attorney Dennis J. Herrera)	*The City and County of San Francisco, California and the People of the State of California, acting by and through San Francisco City Attorney Dennis J. Herrera v. Purdue Pharma L.P., et al.*	3:18-cv-07591	N.D. California (Federal)
CA	City of Anaheim (City Attorney Robert Fabela)	*County of Alameda; City of Costa Mesa; City of Anaheim; City of Santa Ana; City of San Clemente; City of Encinitas; City of La Habra; City of La Mesa; City of Oxnard; City of Placentia; and The People of The State of California, by and through Alameda County Counsel Donna Ziegler, Costa Mesa City Attorney Kimberly Hall Barlow, and Anaheim City Attorney Robert Fabela, Santa Ana City Attorney Sonia R. Carvalho, San Clemente City Attorney Scott C. Smith,*	1:20-op-45055	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Encinitas City Attorney Leslie Devaney, La Habra City Attorney Richard D. Jones, La Mesa City Attorney Glenn Sabine, Oxnard City Attorney Stephen Fischer, Placentia City Attorney Christian Bettenhausen v. Purdue Pharma L.P., et al.		
CA	City of Chico	*City of Chico, California; The People of the State of California, acting by and through the City of Chico, Plaintiffs v. AmerisourceBergen Drug Corporation, et al.*	1:20-op-45189	N.D. Ohio (Federal)
CA	City of Chula Vista	*City of Chula Vista, California v. Purdue Pharma L.P., et al.*	1:19-op-45750	N.D. Ohio (Federal)
CA	City of Clearlake	*City of Clearlake, California; The People of the State of California, acting by and through the City of Clearlake v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45251	N.D. Ohio (Federal)
CA	City of Costa Mesa (City Attorney Kimberly Hall Barlow)	*County of Alameda; City of Costa Mesa; City of Anaheim; City of Santa Ana; City of San Clemente; City of Encinitas; City of La Habra; City of La Mesa; City of Oxnard; City of Placentia; and The People of The State of California, by and through Alameda County Counsel Donna Ziegler, Costa Mesa City Attorney Kimberly Hall Barlow, and Anaheim City Attorney Robert Fabela, Santa Ana City Attorney Sonia R. Carvalho, San Clemente City Attorney Scott C. Smith, Encinitas City Attorney Leslie Devaney, La Habra City Attorney Richard D. Jones, La Mesa City Attorney Glenn Sabine, Oxnard City Attorney Stephen Fischer, Placentia City Attorney Christian Bettenhausen v. Purdue Pharma L.P., et al.*	1:20-op-45055	N.D. Ohio (Federal)
CA	City of Dublin (City Attorney John Bakker)	*City of Dublin, City of Murrieta and The People of the State of California, by and through Dublin City Attorney John Bakker and Murrieta City Attorney Leslie Devaney v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45255	N.D. Ohio (Federal)
CA	City of El Monte (City Attorney Rick Olivarez)	*City of El Monte and the People of the State of California, by and through El Monte City Attorney Rick Olivarcz v. Purdue Pharma L.P., et al*	JCCP 5029	MDL - Prescription Opioid Cases (CA - County of Los Angeles) (State MDL)
CA	City of Encinitas (City Attorney Leslie Devaney)	*County of Alameda; City of Costa Mesa; City of Anaheim; City of Santa Ana; City of San Clemente; City of Encinitas; City*	1:20-op-45055	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of La Habra; City of La Mesa; City of Oxnard; City of Placentia; and The People of The State of California, by and through Alameda County Counsel Donna Ziegler, Costa Mesa City Attorney Kimberly Hall Barlow, and Anaheim City Attorney Robert Fabela, Santa Ana City Attorney Sonia R. Carvalho, San Clemente City Attorney Scott C. Smith, Encinitas City Attorney Leslie Devaney, La Habra City Attorney Richard D. Jones, La Mesa City Attorney Glenn Sabine, Oxnard City Attorney Stephen Fischer, Placentia City Attorney Christian Bettenhausen v. Purdue Pharma L.P., et al.		
CA	City of Eureka (City Attorney Robert Norris Black)	*City of Eureka, the People of the State of California, acting by and through Interim Eureka City Attorney, Robert Norris Black v. Purdue Pharma L.P., et al.*	1:18-op-46092	N.D. Ohio (Federal)
CA	City of Fullerton (City Attorney Richard D. Jones)	*City of Fullerton, City of Westminster and the People of the State of California, by and through Fullerton and Westminster City Attorney Richard D. Jones v. Cephalon, Inc., et al.*	1:20-op-45143	N.D. Ohio (Federal)
CA	City of Huntington Beach	*City of Huntington Beach, California v. Purdue Pharma L.P., et al.*	1:18-op-45588	N.D. Ohio (Federal)
CA	City of Irvine (City Attorney Jeffrey Melching)	*City of Irvine and the People of the State of California, by and through Irvine City Attorney Jeffrey Melching v. Purdue Pharma L.P., et al.*	1:19-op-45734	N.D. Ohio (Federal)
CA	City of La Habra (City Attorney Richard D. Jones)	*County of Alameda; City of Costa Mesa; City of Anaheim; City of Santa Ana; City of San Clemente; City of Encinitas; City of La Habra; City of La Mesa; City of Oxnard; City of Placentia; and The People of The State of California, by and through Alameda County Counsel Donna Ziegler, Costa Mesa City Attorney Kimberly Hall Barlow, and Anaheim City Attorney Robert Fabela, Santa Ana City Attorney Sonia R. Carvalho, San Clemente City Attorney Scott C. Smith, Encinitas City Attorney Leslie Devaney, La Habra City Attorney Richard D. Jones, La Mesa City Attorney Glenn Sabine, Oxnard City Attorney Stephen Fischer, Placentia City Attorney Christian Bettenhausen v. Purdue Pharma L.P., et al.*	1:20-op-45055	N.D. Ohio (Federal)
CA	City of La Mesa (City Attorney Glenn Sabine)	*County of Alameda; City of Costa Mesa; City of Anaheim; City of Santa Ana; City of San Clemente; City of Encinitas; City*	1:20-op-45055	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of La Habra; City of La Mesa; City of Oxnard; City of Placentia; and The People of The State of California, by and through Alameda County Counsel Donna Ziegler, Costa Mesa City Attorney Kimberly Hall Barlow, and Anaheim City Attorney Robert Fabela, Santa Ana City Attorney Sonia R. Carvalho, San Clemente City Attorney Scott C. Smith, Encinitas City Attorney Leslie Devaney, La Habra City Attorney Richard D. Jones, La Mesa City Attorney Glenn Sabine, Oxnard City Attorney Stephen Fischer, Placentia City Attorney Christian Bettenhausen v. Purdue Pharma L.P., et al.		
CA	City of Laguna Beach	*City of Laguna Beach, California v. Purdue Pharma L.P., et al.*	1:19-op-45447	N.D. Ohio (Federal)
CA	City of Lakeport	*City of Lakeport, California; The People of the State of California, acting by and through the City of Lakeport v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45242	N.D. Ohio (Federal)
CA	City of Los Angeles	*City of Los Angeles, California v. Purdue Pharma L.P., et al.*	1:18-op-45601	N.D. Ohio (Federal)
CA	City of Murrieta (City Attorney Leslie Devaney)	*City of Dublin, City of Murrieta and The People of the State of California, by and through Dublin City Attorney John Bakker and Murrieta City Attorney Leslie Devaney v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45255	N.D. Ohio (Federal)
CA	City of Oakland (City Attorney Barbara J. Parker)	*The People of the State of California, acting by and through Santa Clara County Counsel James R. Williams, Orange County District Attorney Tony Rackauckas, Los Angeles County Counsel Mary C. Wickham, and Oakland City Attorney Barbara J. Parker v. Purdue Pharma L.P., et al.*	30-2014-00725287-CU-BT-CXC	CA - County of Orange (State)
CA	City of Oxnard (City Attorney Stephen Fischer)	*County of Alameda; City of Costa Mesa; City of Anaheim; City of Santa Ana; City of San Clemente; City of Encinitas; City of La Habra; City of La Mesa; City of Oxnard; City of Placentia; and The People of The State of California, by and through Alameda County Counsel Donna Ziegler, Costa Mesa City Attorney Kimberly Hall Barlow, and Anaheim City Attorney Robert Fabela, Santa Ana City Attorney Sonia R. Carvalho, San Clemente City Attorney Scott C. Smith, Encinitas City Attorney Leslie Devaney, La Habra City Attorney Richard D. Jones, La Mesa City Attorney Glenn Sabine,*	1:20-op-45055	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Oxnard City Attorney Stephen Fischer, Placentia City Attorney Christian Bettenhausen v. Purdue Pharma L.P., et al.		
CA	City of Placentia (City Attorney Christian Bettenhausen)	*County of Alameda; City of Costa Mesa; City of Anaheim; City of Santa Ana; City of San Clemente; City of Encinitas; City of La Habra; City of La Mesa; City of Oxnard; City of Placentia; and The People of The State of California, by and through Alameda County Counsel Donna Ziegler, Costa Mesa City Attorney Kimberly Hall Barlow, and Anaheim City Attorney Robert Fabela, Santa Ana City Attorney Sonia R. Carvalho, San Clemente City Attorney Scott C. Smith, Encinitas City Attorney Leslie Devaney, La Habra City Attorney Richard D. Jones, La Mesa City Attorney Glenn Sabine, Oxnard City Attorney Stephen Fischer, Placentia City Attorney Christian Bettenhausen v. Purdue Pharma L.P., et al.*	1:20-op-45055	N.D. Ohio (Federal)
CA	City of Sacramento (City Attorney Susana Alcala Wood)	*The City of Sacramento and The People of the State of California, acting by and through the City of Sacramento City Attorney Susana Alcala Wood v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45290	N.D. Ohio (Federal)
CA	City of San Clemente (City Attorney Scott C. Smith)	*County of Alameda; City of Costa Mesa; City of Anaheim; City of Santa Ana; City of San Clemente; City of Encinitas; City of La Habra; City of La Mesa; City of Oxnard; City of Placentia; and The People of The State of California, by and through Alameda County Counsel Donna Ziegler, Costa Mesa City Attorney Kimberly Hall Barlow, and Anaheim City Attorney Robert Fabela, Santa Ana City Attorney Sonia R. Carvalho, San Clemente City Attorney Scott C. Smith, Encinitas City Attorney Leslie Devaney, La Habra City Attorney Richard D. Jones, La Mesa City Attorney Glenn Sabine, Oxnard City Attorney Stephen Fischer, Placentia City Attorney Christian Bettenhausen v. Purdue Pharma L.P., et al.*	1:20-op-45055	N.D. Ohio (Federal)
CA	City of San Diego (City Attorney Mara W. Elliot)	*The City of San Diego and the People of the State of California, by and through Mara W. Elliot, City Attorney of San Diego v. Purdue Pharma L.P., et al.*	1:19-op-45192	N.D. Ohio (Federal)
CA	City of San Jose	*City of San Jose, California, The People of the State of California, acting by and*	1:19-op-45768	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		through the City of San Jose v. Purdue Pharma L.P., et al.		
CA	City of Santa Ana (City Attorney Sonia R. Carvalho)	*County of Alameda; City of Costa Mesa; City of Anaheim; City of Santa Ana; City of San Clemente; City of Encinitas; City of La Habra; City of La Mesa; City of Oxnard; City of Placentia; and The People of The State of California, by and through Alameda County Counsel Donna Ziegler, Costa Mesa City Attorney Kimberly Hall Barlow, and Anaheim City Attorney Robert Fabela, Santa Ana City Attorney Sonia R. Carvalho, San Clemente City Attorney Scott C. Smith, Encinitas City Attorney Leslie Devaney, La Habra City Attorney Richard D. Jones, La Mesa City Attorney Glenn Sabine, Oxnard City Attorney Stephen Fischer, Placentia City Attorney Christian Bettenhausen v. Purdue Pharma L.P., et al.*	1:20-op-45055	N.D. Ohio (Federal)
CA	City of Westminster (City Attorney Richard D. Jones)	*City of Fullerton, City of Westminster and the People of the State of California, by and through Fullerton and Westminster City Attorney Richard D. Jones v. Cephalon, Inc., et al.*	1:20-op-45143	N.D. Ohio (Federal)
CA	County of Alameda (County Counsel Donna Ziegler)	*County of Alameda; City of Costa Mesa; City of Anaheim; City of Santa Ana; City of San Clemente; City of Encinitas; City of La Habra; City of La Mesa; City of Oxnard; City of Placentia; and The People of The State of California, by and through Alameda County Counsel Donna Ziegler, Costa Mesa City Attorney Kimberly Hall Barlow, and Anaheim City Attorney Robert Fabela, Santa Ana City Attorney Sonia R. Carvalho, San Clemente City Attorney Scott C. Smith, Encinitas City Attorney Leslie Devaney, La Habra City Attorney Richard D. Jones, La Mesa City Attorney Glenn Sabine, Oxnard City Attorney Stephen Fischer, Placentia City Attorney Christian Bettenhausen v. Purdue Pharma L.P., et al.*	1:20-op-45055	N.D. Ohio (Federal)
CA	County of Amador	*County of Amador; The People of the State of California, acting by and through the County of Amador v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46075	N.D. Ohio (Federal)
CA	County of Butte	*County of Butte; The People of the State of California, acting by and through the County of Butte v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45627	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
CA	County of Calaveras	*County of Calaveras; The People of the State of California, acting by and through the County of Calaveras v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45645	N.D. Ohio (Federal)
CA	County of Contra Costa	*County of Contra Costa; The People of the State of California, acting by and through the County of Contra Costa v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45656	N.D. Ohio (Federal)
CA	County of Del Norte	*County of Del Norte; The People of the State of California, acting by and through the County of Del Norte v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45655	N.D. Ohio (Federal)
CA	County of El Dorado	*County of El Dorado; The People of the State of California, acting by and through the County of El Dorado v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45629	N.D. Ohio (Federal)
CA	County of Fresno	*County of Fresno v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45644	N.D. Ohio (Federal)
CA	County of Glenn	*County of Glenn; The People of the State of California, acting by and through the County of Glenn v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45639	N.D. Ohio (Federal)
CA	County of Humboldt	*Humboldt County, California v. Purdue Pharma L.P., et al.*	1:18-op-45942	N.D. Ohio (Federal)
CA	County of Imperial	*County of Imperial; The People of the State of California, acting by and through the County of Imperial v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45631	N.D. Ohio (Federal)
CA	County of Inyo	*County of Inyo v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45646	N.D. Ohio (Federal)
CA	County of Kern (County Attorney Margo Raison)	*County of Kern and the People of the State of California, by and through Kern County Attorney Margo Raison v. Purdue Pharma L.P., et al.*	JCCP 5029	MDL - Prescription Opioid Cases (CA - County of Los Angeles) (State MDL)
CA	County of Lassen	*County of Lassen v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45609	N.D. Ohio (Federal)
CA	County of Los Angeles (County Counsel Mary C. Wickham)	*The People of the State of California, acting by and through Santa Clara County Counsel James R. Williams, Orange County District Attorney Tony Rackauckas, Los Angeles County Counsel Mary C. Wickham, and Oakland City Attorney Barbara J. Parker v. Purdue Pharma L.P., et al.*	30-2014-00725287-CU-BT-CXC	CA - County of Orange (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
CA	County of Madera	*County of Madera v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45647	N.D. Ohio (Federal)
CA	County of Marin	*County of Marin v. Purdue Pharma L.P., et al.*	1:18-op-45657	N.D. Ohio (Federal)
CA	County of Mariposa	*County of Mariposa v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45618	N.D. Ohio (Federal)
CA	County of Mendocino	*County of Mendocino v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45654	N.D. Ohio (Federal)
CA	County of Merced	*County of Merced v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45643	N.D. Ohio (Federal)
CA	County of Modoc	*County of Modoc v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45641	N.D. Ohio (Federal)
CA	County of Mono	*County of Mono v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45626	N.D. Ohio (Federal)
CA	County of Monterey	*County of Monterey v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45615	N.D. Ohio (Federal)
CA	County of Napa	*County of Napa, California v. Purdue Pharma L.P., et al.*	1:18-op-45750	N.D. Ohio (Federal)
CA	County of Nevada	*County of Nevada v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45628	N.D. Ohio (Federal)
CA	County of Orange (District Attorney Tony Rackauckas)	*The People of the State of California, acting by and through Santa Clara County Counsel James R. Williams, Orange County District Attorney Tony Rackauckas, Los Angeles County Counsel Mary C. Wickham, and Oakland City Attorney Barbara J. Parker v. Purdue Pharma L.P., et al.*	30-2014-00725287-CU-BT-CXC	CA - County of Orange (State)
CA	County of Placer	*County of Placer v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45642	N.D. Ohio (Federal)
CA	County of Plumas	*County of Plumas v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45649	N.D. Ohio (Federal)
CA	County of Riverside	*County of Riverside v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45878	N.D. Ohio (Federal)
CA	County of Sacramento	*County of Sacramento v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45608	N.D. Ohio (Federal)
CA	County of San Benito	*County of San Benito v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45653	N.D. Ohio (Federal)
CA	County of San Bernardino	*County of San Bernardino v. Purdue Pharma L.P., et al.*	1:18-op-46032	N.D. Ohio (Federal)
CA	County of San Diego	*County of San Diego v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45613	N.D. Ohio (Federal)
CA	County of San Luis Obispo	*County of San Luis Obispo, California v. Purdue Pharma L.P., et al.*	1:18-op-46290	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
CA	County of San Mateo	*County of San Mateo, California v. McKesson Corporation, et al. / County of San Mateo v. Purdue Pharma L.P., et al.*	1:18-op-46319 / 1:19-op-45126	N.D. Ohio (Federal)
CA	County of Santa Barbara	*County of Santa Barbara, the People of the State of California v. Purdue Pharma L.P., et al.*	1:19-op-45128	N.D. Ohio (Federal)
CA	County of Santa Clara (County Counsel James R. Williams)	*The People of the State of California, acting by and through Santa Clara County Counsel James R. Williams, Orange County District Attorney Tony Rackauckas, Los Angeles County Counsel Mary C. Wickham, and Oakland City Attorney Barbara J. Parker v. Purdue Pharma L.P., et al.*	30-2014-00725287-CU-BT-CXC	CA - County of Orange (State)
CA	County of Santa Cruz	*County of Santa Cruz, California v. Purdue Pharma L.P., et al.*	1:18-op-45679	N.D. Ohio (Federal)
CA	County of Shasta	*County of Shasta v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45651	N.D. Ohio (Federal)
CA	County of Siskiyou	*County of Siskiyou v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45630	N.D. Ohio (Federal)
CA	County of Sonoma	*County of Sonoma, California v. Purdue Pharma L.P., et al.*	1:18-op-45849	N.D. Ohio (Federal)
CA	County of Sutter	*County of Sutter v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45640	N.D. Ohio (Federal)
CA	County of Tehama	*County of Tehama v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45680	N.D. Ohio (Federal)
CA	County of Trinity	*County of Trinity v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45650	N.D. Ohio (Federal)
CA	County of Tulare	*County of Tulare, California v. Purdue Pharma L.P., et al.*	1:18-op-45997	N.D. Ohio (Federal)
CA	County of Tuolumne	*County of Tuolumne v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45619	N.D. Ohio (Federal)
CA	County of Ventura	*County of Ventura v. Purdue Pharma L.P., et al.*	1:19-op-45747	N.D. Ohio (Federal)
CA	County of Yolo (County Counsel Philip Pogledich)	*County of Yolo; The People of the State of California, acting by and through the Yolo County Counsel v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45351	N.D. Ohio (Federal)
CA	County of Yuba	*County of Yuba v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45648	N.D. Ohio (Federal)
CA	Downey Unified School District	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville,*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		
CA	Elk Grove Unified School District	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)
CA	Health Plan of San Joaquin	*Health Plan of San Joaquin v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46093	N.D. Ohio (Federal)
CA	Kern High School District	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		District of Harris County) (State MDL) / N.D. Ohio (Federal)
CA	Lassen County Office of Education	*Susanville Elementary School District and Lassen County Office of Education v. Cephalon, Inc., et al.*	1:22-op-45031	N.D. Ohio (Federal)
CA	Local Initiative Health Authority for Los Angeles County o/a L.A. Care Health Plan	*Local Initiative Health Authority for Los Angeles County, a California local public agency operating as L.A. Care Health Plan v. Purdue Pharma L.P., et al.*	1:19-op-45212	N.D. Ohio (Federal)
CA	Pleasant Valley School District	*Pleasant Valley School District v. Cephalon, Inc., et al.*	1:21-op-45120	N.D. Ohio (Federal)
CA	San Leandro Unified School District	*San Leandro Unified School District v. Cephalon, Inc., et al.*	1:21-op-45114	N.D. Ohio (Federal)
CA	Susanville Elementary School District	*Susanville Elementary School District and Lassen County Office of Education v. Cephalon, Inc., et al.*	1:22-op-45031	N.D. Ohio (Federal)
CO	City and County of Broomfield	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board*	1:19-op-45036	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.		
CO	City and County of Denver	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CO	City of Alamosa	*Conejos County; Las Animas County; Chaffee County; Otero County; Alamosa County; and The City of Alamosa v. Purdue Pharma L.P., et al.*	1:18-op-45740	N.D. Ohio (Federal)
CO	City of Aurora	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CO	City of Black Hawk	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of*	1:19-op-45036	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.		
CO	City of Brighton	*City of Brighton v. Purdue Pharma L.P., et al.*	1:19-op-45298	N.D. Ohio (Federal)
CO	City of Commerce City	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CO	City of Federal Heights	*City of Federal Heights v. Purdue Pharma L.P., et al.*	1:19-op-45573	N.D. Ohio (Federal)
CO	City of Greeley	*City of Greeley v. Purdue Pharma L.P., et al.*	1:19-op-45977	N.D. Ohio (Federal)
CO	City of Lakewood	*The City of Lakewood, and the City of Wheat Ridge v. Purdue Pharma L.P., et al.*	1:18-op-45800	N.D. Ohio (Federal)
CO	City of Northglenn	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CO	City of Sheridan	*City of Sheridan v. Purdue Pharma L.P., et al.*	1:19-op-45572	N.D. Ohio (Federal)
CO	City of Thornton	*City of Thornton v. Purdue Pharma L.P., et al.*	1:19-op-45034	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
CO	City of Westminster	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CO	City of Wheat Ridge	*The City of Lakewood, and the City of Wheat Ridge v. Purdue Pharma L.P., et al.*	1:18-op-45800	N.D. Ohio (Federal)
CO	County of Adams (Board of County Commissioners)	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CO	County of Alamosa	*Conejos County; Las Animas County; Chaffee County; Otero County; Alamosa County; and The City of Alamosa v. Purdue Pharma L.P., et al.*	1:18-op-45740	N.D. Ohio (Federal)
CO	County of Arapahoe (Board of County Commissioners)	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board*	1:19-op-45036	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.		
CO	County of Boulder (Board of County Commissioners)	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CO	County of Chaffee	*Conejos County; Las Animas County; Chaffee County; Otero County; Alamosa County; and The City of Alamosa v. Purdue Pharma L.P., et al.*	1:18-op-45740	N.D. Ohio (Federal)
CO	County of Conejos	*Conejos County; Las Animas County; Chaffee County; Otero County; Alamosa County; and The City of Alamosa v. Purdue Pharma L.P., et al.*	1:18-op-45740	N.D. Ohio (Federal)
CO	County of Fremont (Board of County Commissioners)	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CO	County of Huerfano	*County of Huerfano v. Purdue Pharma L.P., et al.*	1:18-op-45168	N.D. Ohio (Federal)
CO	County of Jefferson (Board of County Commissioners)	*The Board of County Commissioners of The County of Jefferson v. Purdue Pharma L.P., et al.*	1:19-op-45035	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
CO	County of Larimer (Board of County Commissioners)	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CO	County of Las Animas	*Conejos County; Las Animas County; Chaffee County; Otero County; Alamosa County; and The City of Alamosa v. Purdue Pharma L.P., et al.*	1:18-op-45740	N.D. Ohio (Federal)
CO	County of Mesa (Board of County Commissioners)	*The Board of County Commissioners of the County of Mesa v. Purdue Pharma L.P., et al.*	1:19-op-45923	N.D. Ohio (Federal)
CO	County of Otero	*Conejos County; Las Animas County; Chaffee County; Otero County; Alamosa County; and The City of Alamosa v. Purdue Pharma L.P., et al.*	1:18-op-45740	N.D. Ohio (Federal)
CO	County of Pueblo	*Pueblo County v. Purdue Pharma L.P., et al.*	1:18-op-45801	N.D. Ohio (Federal)
CO	County of Teller (Board of County Commissioners)	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CO	Mesa County Valley School District 51	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		Harris County) (State MDL) / N.D. Ohio (Federal)
CO	Town of Hudson	*The Board of County Commissioners of The County of Adams, The Board of County Commissioners of The County of Arapahoe, City of Aurora, City of Black Hawk, The Board of County Commissioners of The County of Boulder, City and County of Broomfield, City of Commerce City, City and County of Denver, The Board of County Commissioners of The County of Fremont, Town of Hudson, The Board of County Commissioners of The County of Larimer, City of Northglenn, The Board of County Commissioners of The County of Teller, City of Westminster, and Tri-County Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45036	N.D. Ohio (Federal)
CT	City of Ansonia	*The City of Ansonia, The City of Danbury, The City of Derby and The City of Norwalk v. Purdue Pharma L.P., et al.*	X07 HHD CV 17 6086134 S (consolidated)	MDL - In re Opioid Litigation (CT - Superior Court, Judicial District of Hartford) (State MDL)
CT	City of Danbury	*The City of Ansonia, The City of Danbury, The City of Derby and The City of Norwalk v. Purdue Pharma L.P., et al.*	X07 HHD CV 17 6086134 S (consolidated)	MDL - In re Opioid Litigation (CT -

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Superior Court, Judicial District of Hartford) (State MDL)
CT	City of Derby	*The City of Ansonia, The City of Danbury, The City of Derby and The City of Norwalk v. Purdue Pharma L.P., et al.*	X07 HHD CV 17 6086134 S (consolidated)	MDL - In re Opioid Litigation (CT - Superior Court, Judicial District of Hartford) (State MDL)
CT	City of Middletown	*City of Middletown v. Purdue Pharma L.P., et al.*	1:19-op-45651	N.D. Ohio (Federal)
CT	City of New London	*City of New London v. Purdue Pharma L.P., et al.*	X07 HHD CV 17 6086134 S (consolidated)	MDL - In re Opioid Litigation (CT - Superior Court, Judicial District of Hartford) (State MDL)
CT	City of Norwalk	*The City of Ansonia, The City of Danbury, The City of Derby and The City of Norwalk v. Purdue Pharma L.P., et al.*	X07 HHD CV 17 6086134 S (consolidated)	MDL - In re Opioid Litigation (CT - Superior Court, Judicial District of Hartford) (State MDL)
CT	City of Norwich	*City of Norwich v. Purdue Pharma L.P., et al.*	1:19-op-45840	N.D. Ohio (Federal)
CT	Town of Enfield	*Town of Enfield v. Purdue Pharma L.P., et al.*	1:19-op-45581	N.D. Ohio (Federal)
CT	Town of Monroe	*The Town of Monroe, Connecticut v. Purdue Pharma L.P., et al.*	1:19-op-45441	N.D. Ohio (Federal)
CT	Town of Wallingford	*Town of Wallingford v. Purdue Pharma L.P., et al*	X07 HHD CV 17 6086134 S (consolidated)	MDL - In re Opioid Litigation (CT - Superior Court, Judicial District of

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Hartford) (State MDL)
CT	Town of Wethersfield	*Town of Wethersfield v. Purdue Pharma L.P., et al.*	1:19-op-45663	N.D. Ohio (Federal)
CT	Town of Windham	*Town of Windham v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45103	N.D. Ohio (Federal)
DE	City of Dover	*City of Dover, City of Seaford and Kent County v. Purdue Pharma L.P., et al.*	K19C-06-022	DE - Superior Court of the State of Delaware (State)
DE	City of Seaford	*City of Dover, City of Seaford and Kent County v. Purdue Pharma L.P., et al.*	K19C-06-022	DE - Superior Court of the State of Delaware (State)
DE	County of Kent	*City of Dover, City of Seaford and Kent County v. Purdue Pharma L.P., et al.*	K19C-06-022	DE - Superior Court of the State of Delaware (State)
DE	County of Sussex	*Sussex County, Delaware v. Purdue Pharma L.P., et al.*	1:19-op-45723	N.D. Ohio (Federal)
FL	Halifax Hospital Medical Center	*Florida Health Sciences Center, Inc., North Broward Hospital District, Halifax Hospital Medical Center, Bayfront HMA Medical Center, LLC, CGH Hospital, Ltd., Citrus HMA, LLC, Central Florida Health, Crestview Hospital Corporation, Delray Medical Center, Inc., Flagler Hospital, Inc., Good Samaritan Medical Center, Inc., Haines City HMA, LLC, Hernando HMA, LLC, Hialeah Hospital, Inc., HMA Santa Rosa Medical Center, LLC, Key West HMA, LLC, Lake Shore HMA, LLC, Lake Wales Hospital Corporation, Larkin Community Hospital Palm Springs Campus, LLC, Larkin Community Hospital, Inc., Larkin Community Hospital Behavioral Service, Inc., Leesburg Regional Medical Center, Inc., Lifemark Hospitals Of Florida, Inc., Live Oak HMA, LLC, Naples HMA, LLC, North Shore Medical Center, Inc., Osceolasc LLC, Palm Beach Gardens Community Hospital, Inc., Port Charlotte HMA, LLC, Punta Gorda HMA, LLC, St. Mary's Medical Center, Inc., Starke HMA, LLC, The Villages Tri-County Medical Center, Inc., and Venice HMA, LLC v. Richard Sackler, et al.*	CACE-19-018882	FL - 17th Judicial Circuit Court of Broward County (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
FL	Lee Memorial Health System d/b/a Lee Health	*Lee Memorial Health System v. Actavis LLC, et al.*	1:21-op-45092	N.D. Ohio (Federal)
FL	North Broward Hospital District	*Florida Health Sciences Center, Inc., North Broward Hospital District, Halifax Hospital Medical Center, Bayfront HMA Medical Center, LLC, CGH Hospital, Ltd., Citrus HMA, LLC, Central Florida Health, Crestview Hospital Corporation, Delray Medical Center, Inc., Flagler Hospital, Inc., Good Samaritan Medical Center, Inc., Haines City HMA, LLC, Hernando HMA, LLC, Hialeah Hospital, Inc., HMA Santa Rosa Medical Center, LLC, Key West HMA, LLC, Lake Shore HMA, LLC, Lake Wales Hospital Corporation, Larkin Community Hospital Palm Springs Campus, LLC, Larkin Community Hospital, Inc., Larkin Community Hospital Behavioral Service, Inc., Leesburg Regional Medical Center, Inc., Lifemark Hospitals Of Florida, Inc., Live Oak HMA, LLC, Naples HMA, LLC, North Shore Medical Center, Inc., Osceolasc LLC, Palm Beach Gardens Community Hospital, Inc., Port Charlotte HMA, LLC, Punta Gorda HMA, LLC, St. Mary's Medical Center, Inc., Starke HMA, LLC, The Villages Tri-County Medical Center, Inc., and Venice HMA, LLC v. Richard Sackler, et al.*	CACE-19-018882	FL - 17th Judicial Circuit Court of Broward County (State)
FL	Putnam County School Board	*Putnam County School Board v. Cephalon, Inc., et al.*	1:22-op-45025	N.D. Ohio (Federal)
FL	Sarasota County Public Hospital District d/b/a Memorial Healthcare System, Inc.	*Sarasota County Public Hospital District v. Purdue Pharma L.P., et al.*	1:18-op-46136	N.D. Ohio (Federal)
FL	School Board of Miami-Dade	*The School Board of Miami-Dade v. Purdue Pharma L.P., et al.*	1:19-op-45913	N.D. Ohio (Federal)
FL	South Florida Behavioral Health Network	*South Florida Behavioral Health Network v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46070	N.D. Ohio (Federal)
GA	Bibb County School District	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		/ N.D. Ohio (Federal)
GA	Chatham County Hospital Authority	*Chatham County Hospital Authority, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45725	N.D. Ohio (Federal)
GA	City of Adel	*City of Adel, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45318	N.D. Ohio (Federal)
GA	City of Albany	*The City of Albany v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46337	N.D. Ohio (Federal)
GA	City of Alma	*City of Alma, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45620	N.D. Ohio (Federal)
GA	City of Arlington	*The City of Blakely; the City of Arlington; the City of Damascus v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45129	N.D. Ohio (Federal)
GA	City of Atlanta	*The City of Atlanta v. Purdue Pharma L.P., et al.*	1:18-op-46308	N.D. Ohio (Federal)
GA	City of Augusta	*Augusta, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45233	N.D. Ohio (Federal)
GA	City of Bainbridge	*The City of Bainbridge, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45383	N.D. Ohio (Federal)
GA	City of Blackshear	*City of Blackshear v. Purdue Pharma L.P., et al.*	1:19-op-45802	N.D. Ohio (Federal)
GA	City of Blakely	*The City of Blakely; the City of Arlington; the City of Damascus v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45129	N.D. Ohio (Federal)
GA	City of Brunswick	*City of Brunswick, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45270	N.D. Ohio (Federal)
GA	City of Cartersville	*City of Rome, Floyd County, Chattooga County, Whitefield County and City of Cartersville v. Purdue Pharma L.P., et al.*	1:18-op-45282	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
GA	City of Columbus	*Columbus, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45567	N.D. Ohio (Federal)
GA	City of Damascus	*The City of Blakely; the City of Arlington; the City of Damascus v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45129	N.D. Ohio (Federal)
GA	City of Dawson	*City of Dawson, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45619	N.D. Ohio (Federal)
GA	City of Demorest	*City of Demorest, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46113	N.D. Ohio (Federal)
GA	City of Doraville	*The City of Doraville, Georgia v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46056	N.D. Ohio (Federal)
GA	City of Dunwoody	*The City of Dunwoody, Georgia v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46054	N.D. Ohio (Federal)
GA	City of Fitzgerald	*The City of Fitzgerald, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45603	N.D. Ohio (Federal)
GA	City of Gainesville	*The City of Gainesville, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45486	N.D. Ohio (Federal)
GA	City of Lakeland	*City of Lakeland, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45618	N.D. Ohio (Federal)
GA	City of Milledgeville	*The City of Milledgeville, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45495	N.D. Ohio (Federal)
GA	City of Nashville	*City of Nashville, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45617	N.D. Ohio (Federal)
GA	City of Pooler	*City of Pooler, Georgia v. AmerisourceBergen Drug Corporation, et al*	1:18-op-45391	N.D. Ohio (Federal)
GA	City of Richmond Hill	*City of Richmond Hill, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45305	N.D. Ohio (Federal)
GA	City of Rome	*City of Rome, Floyd County, Chattooga County, Whitefield County and City of Cartersville v. Purdue Pharma L.P., et al.*	1:18-op-45282	N.D. Ohio (Federal)
GA	City of Sandy Springs	*The City of Sandy Springs, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45516	N.D. Ohio (Federal)
GA	City of Savannah	*The Mayor and Alderman of the City of Savannah v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45550	N.D. Ohio (Federal)
GA	City of Springfield	*City of Springfield, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45199	N.D. Ohio (Federal)
GA	City of Tifton	*The City of Tifton, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45454	N.D. Ohio (Federal)
GA	City of Warwick	*City of Warwick, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45621	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
GA	City of Woodbury	*The City of Woodbury v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45575	N.D. Ohio (Federal)
GA	Clinch County Hospital Authority	*Clinch County Hospital Authority v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45453	N.D. Ohio (Federal)
GA	County of Appling	*Appling County, Georgia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45081	N.D. Ohio (Federal)
GA	County of Athens-Clarke (Unified Government)	*The Unified Government of Athens-Clarke County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45218	N.D. Ohio (Federal)
GA	County of Atkinson	*Atkinson County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45118	N.D. Ohio (Federal)
GA	County of Bacon	*Bacon County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46105	N.D. Ohio (Federal)
GA	County of Banks	*Banks County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45378	N.D. Ohio (Federal)
GA	County of Bartow	*Bartow County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45045	N.D. Ohio (Federal)
GA	County of Ben Hill	*Ben Hill County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45505	N.D. Ohio (Federal)
GA	County of Berrien	*Berrien County, Georgia v. Purdue Pharma L.P., et al.*	1:18-op-45834	N.D. Ohio (Federal)
GA	County of Brantley	*Brantley County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45714	N.D. Ohio (Federal)
GA	County of Brooks	*Brooks County, Georgia v. Purdue Pharma L.P., et al.*	1:18-op-45981	N.D. Ohio (Federal)
GA	County of Bulloch	*Bulloch County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45394	N.D. Ohio (Federal)
GA	County of Burke	*Burke County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45207	N.D. Ohio (Federal)
GA	County of Butts	*Butts County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45490	N.D. Ohio (Federal)
GA	County of Camden	*Camden County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45717	N.D. Ohio (Federal)
GA	County of Candler	*Candler County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45165	N.D. Ohio (Federal)
GA	County of Carroll	*Carroll County v. Purdue Pharma L.P., et al.*	1:18-op-46269	N.D. Ohio (Federal)
GA	County of Catoosa	*Catoosa County, Georgia v. Purdue Pharma L.P., et al.*	1:18-op-45497	N.D. Ohio (Federal)
GA	County of Charlton	*Charlton County v. Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45713	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
GA	County of Chatham	*Chatham County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45267	N.D. Ohio (Federal)
GA	County of Chattooga	*City of Rome, Floyd County, Chattooga County, Whitefield County and City of Cartersville v. Purdue Pharma L.P., et al.*	1:18-op-45282	N.D. Ohio (Federal)
GA	County of Cherokee	*Cherokee County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45174	N.D. Ohio (Federal)
GA	County of Clay	*Clay County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45194	N.D. Ohio (Federal)
GA	County of Clayton	*Clayton County, Georgia v. Purdue Pharma L.P., et al.*	1:18-op-46298	N.D. Ohio (Federal)
GA	County of Clinch	*Clinch County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45197	N.D. Ohio (Federal)
GA	County of Cobb	*Cobb County v. Purdue Pharma L.P., et al.*	1:18-op-45817	N.D. Ohio (Federal)
GA	County of Columbia	*Columbia County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45607	N.D. Ohio (Federal)
GA	County of Cook	*Cook County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45284	N.D. Ohio (Federal)
GA	County of Crisp	*Crisp County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45238	N.D. Ohio (Federal)
GA	County of Dade	*Dade County, Georgia v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46099	N.D. Ohio (Federal)
GA	County of Dawson	*Dawson County, Georgia v. Purdue Pharma L.P., et al.*	19-op-45210	N.D. Ohio (Federal)
GA	County of Decatur	*Decatur County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45334	N.D. Ohio (Federal)
GA	County of DeKalb	*DeKalb County, Georgia v. Purdue Pharma L.P., et al.*	1:18-op-45503	N.D. Ohio (Federal)
GA	County of Dooly	*Dooly County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45712	N.D. Ohio (Federal)
GA	County of Dougherty	*Dougherty County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45491	N.D. Ohio (Federal)
GA	County of Early	*Early County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45180	N.D. Ohio (Federal)
GA	County of Echols	*Echols County, Georgia v. Purdue Pharma L.P., et al.*	18-op-46204	N.D. Ohio (Federal)
GA	County of Effingham	*Effingham County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45178	N.D. Ohio (Federal)
GA	County of Elbert	*Elbert County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45381	N.D. Ohio (Federal)
GA	County of Emanuel	*Emanuel County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45209	N.D. Ohio (Federal)
GA	County of Evans	*Evans County, Georgia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45080	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
GA	County of Fannin	*County of Fannin v. Rite Aid of Georgia, Inc., et al.*	1:19-op-45269	N.D. Ohio (Federal)
GA	County of Fayette	*Fayette County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45293	N.D. Ohio (Federal)
GA	County of Floyd	*City of Rome, Floyd County, Chattooga County, Whitefield County and City of Cartersville v. Purdue Pharma L.P., et al.*	1:18-op-45282	N.D. Ohio (Federal)
GA	County of Forsyth	*Forsyth County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45420	N.D. Ohio (Federal)
GA	County of Fulton	*County of Fulton v. Purdue Pharma L.P., et al.*	18-op-45374	N.D. Ohio (Federal)
GA	County of Glascock	*Glascock County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45175	N.D. Ohio (Federal)
GA	County of Glynn	*Glynn County, Georgia v. Purdue Pharma L.P., et al.*	18-op-46115	N.D. Ohio (Federal)
GA	County of Grady	*Grady County, Georgia v. Purdue Pharma L.P., et al.*	18-op-46338	N.D. Ohio (Federal)
GA	County of Greene	*Greene County, Georgia v. Purdue Pharma L.P., et al.*	19-op-45203	N.D. Ohio (Federal)
GA	County of Gwinnett	*Gwinnett County, Georgia v. Purdue Pharma L.P., et al.*	18-op-45758	N.D. Ohio (Federal)
GA	County of Habersham	*Habersham County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45559	N.D. Ohio (Federal)
GA	County of Hall	*Hall County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45286	N.D. Ohio (Federal)
GA	County of Hancock	*Hancock County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45535	N.D. Ohio (Federal)
GA	County of Heard	*Heard County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45130	N.D. Ohio (Federal)
GA	County of Henry	*Henry County, Georgia v. Purdue Pharma L.P., et al.*	18-op-46310	N.D. Ohio (Federal)
GA	County of Houston	*Houston County v. Purdue Pharma L.P., et al.*	18-op-45946	N.D. Ohio (Federal)
GA	County of Irwin	*Irwin County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45283	N.D. Ohio (Federal)
GA	County of Jackson	*Jackson County , Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45581	N.D. Ohio (Federal)
GA	County of Jasper	*Jasper County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45504	N.D. Ohio (Federal)
GA	County of Jeff Davis	*Jeff Davis County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45237	N.D. Ohio (Federal)
GA	County of Jefferson	*Jefferson County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45201	N.D. Ohio (Federal)
GA	County of Johnson	*Johnson County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45716	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
GA	County of Jones	*Jones County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45424	N.D. Ohio (Federal)
GA	County of Lanier	*Lanier County, Georgia v. Purdue Pharma L.P., et al.*	18-op-46066	N.D. Ohio (Federal)
GA	County of Laurens	*Laurens County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45945	N.D. Ohio (Federal)
GA	County of Lee	*Lee County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-46171	N.D. Ohio (Federal)
GA	County of Liberty	*Liberty County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45200	N.D. Ohio (Federal)
GA	County of Lincoln	*Lincoln County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45508	N.D. Ohio (Federal)
GA	County of Long	*Long County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45196	N.D. Ohio (Federal)
GA	County of Lowndes	*Lowndes County, Georgia v. Purdue Pharma L.P., et al.*	18-op-45835	N.D. Ohio (Federal)
GA	County of Lumpkin	*Lumpkin County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45211	N.D. Ohio (Federal)
GA	County of Macon	*The County of Macon, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45577	N.D. Ohio (Federal)
GA	County of Madison	*Madison County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45296	N.D. Ohio (Federal)
GA	County of McDuffie	*McDuffie County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45509	N.D. Ohio (Federal)
GA	County of McIntosh	*McIntosh County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45173	N.D. Ohio (Federal)
GA	County of Meriwether	*Meriwether County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45305	N.D. Ohio (Federal)
GA	County of Monroe	*Monroe County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45672	N.D. Ohio (Federal)
GA	County of Montgomery	*Montgomery County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45292	N.D. Ohio (Federal)
GA	County of Newton	*Newton County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45578	N.D. Ohio (Federal)
GA	County of Oconee	*Oconee County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45219	N.D. Ohio (Federal)
GA	County of Oglethorpe	*Oglethorpe County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45262	N.D. Ohio (Federal)
GA	County of Peach	*The County of Peach, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45579	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
GA	County of Pierce	*Pierce County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46107	N.D. Ohio (Federal)
GA	County of Pike	*Pike County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45179	N.D. Ohio (Federal)
GA	County of Polk	*Polk County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45046	N.D. Ohio (Federal)
GA	County of Pulaski	*Pulaski County, Georgia v. Purdue Pharma L.P., et al*	1:19-op-45176	N.D. Ohio (Federal)
GA	County of Rabun	*Rabun County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45177	N.D. Ohio (Federal)
GA	County of Randolph	*Randolph County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45202	N.D. Ohio (Federal)
GA	County of Rockdale	*Rockdale County, Georgia v. Purdue Pharma L.P., et al.*	1:18-op-46296	N.D. Ohio (Federal)
GA	County of Schley	*The County of Schley, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45580	N.D. Ohio (Federal)
GA	County of Screven	*Screven County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45198	N.D. Ohio (Federal)
GA	County of Seminole	*Seminole County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45181	N.D. Ohio (Federal)
GA	County of Spalding	*Spalding County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45208	N.D. Ohio (Federal)
GA	County of Stephens	*Stephens County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45195	N.D. Ohio (Federal)
GA	County of Sumter	*Sumter County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45250	N.D. Ohio (Federal)
GA	County of Taliaferro	*Taliaferro County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45562	N.D. Ohio (Federal)
GA	County of Tattnall	*Tattnall County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45574	N.D. Ohio (Federal)
GA	County of Toombs	*Toombs County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45576	N.D. Ohio (Federal)
GA	County of Towns	*Towns County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45172	N.D. Ohio (Federal)
GA	County of Troup	*Troup County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45715	N.D. Ohio (Federal)
GA	County of Twiggs	*Twiggs County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45379	N.D. Ohio (Federal)
GA	County of Union	*Union County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46284	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
GA	County of Walton	*Walton County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45297	N.D. Ohio (Federal)
GA	County of Warren	*Warren County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45425	N.D. Ohio (Federal)
GA	County of Washington	*Washington County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45563	N.D. Ohio (Federal)
GA	County of Wayne	*Wayne County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45204	N.D. Ohio (Federal)
GA	County of Whitefield	*City of Rome, Floyd County, Chattooga County, Whitefield County and City of Cartersville v. Purdue Pharma L.P., et al.*	1:18-op-45282	N.D. Ohio (Federal)
GA	County of Wilcox	*The County of Wilcox, Georgia v. Purdue Pharma L.P., et al.*	1:18-op-45506	N.D. Ohio (Federal)
GA	County of Wilkes	*Wilkes County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45171	N.D. Ohio (Federal)
GA	County of Wilkinson	*Wilkinson County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45671	N.D. Ohio (Federal)
GA	County of Worth	*Worth County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45602	N.D. Ohio (Federal)
GA	Dodge County Hospital Authority d/b/a Dodge County Hospital	*Dodge County Hospital Authority d/b/a Dodge County Hospital v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45830	N.D. Ohio (Federal)
GA	Habersham County Medical Center	*Habersham County Medical Center v. AmerisourceBergen Drug Corporation, et al.*	18-op-46114	N.D. Ohio (Federal)
GA	Hospital Authority of Bainbridge and Decatur County	*Hospital Authority of Bainbridge and Decatur County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	18-op-45382	N.D. Ohio (Federal)
GA	Hospital Authority of Baxley County and Appling County d/b/a Appling Health Care System	*Hospital Authority of Baxley and Appling County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46157	N.D. Ohio (Federal)
GA	Hospital Authority of Bleckley County d/b/a Bleckley Memorial Hospital	*Hospital Authority of Bleckley County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46170	N.D. Ohio (Federal)
GA	Macon-Bibb County (Unified Government)	*The Unified Government of Macon-Bibb County, Georgia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45407	N.D. Ohio (Federal)
GA	Sheriff of Appling County (Sheriff Mark Melton)	*Mark Melton in his official capacity as the Sheriff of Appling County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45307	N.D. Ohio (Federal)
GA	Sheriff of Baldwin County (Sheriff	*William C. Massee, Jr. in his official capacity as the Sheriff of Baldwin County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45361	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
	William C. Massee, Jr.)			
GA	Sheriff of Bibb County (Sheriff David J. Davis)	*David J. Davis, in his official capacity as Sheriff of Bibb County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45360	N.D. Ohio (Federal)
GA	Sheriff of Coffee County (Sheriff Doyle T. Wooten)	*Doyle T. Wooten, in his official capacity as the Sheriff of Coffee County v. Purdue Pharma L.P., et al.*	1:19-op-45145	N.D. Ohio (Federal)
GA	Sheriff of Crawford County (Sheriff Lewis S. Walker)	*Lewis S. Walker, in his official capacity as the Sheriff of Crawford County v. Purdue Pharma L.P., et al.*	19-op-45146	N.D. Ohio (Federal)
GA	Sheriff of Crisp County (Sheriff H.W. "Billy" Hancock)	*H.W. "Billy" Hancock, in his official capacity as the Sheriff of Crisp County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45562	N.D. Ohio (Federal)
GA	Sheriff of Glynn County (Sheriff E. Neal Jump)	*E. Neal Jump, in his official capacity as the Sheriff of Glynn County v. Purdue Pharma L.P., et al.*	19-op-45155	N.D. Ohio (Federal)
GA	Sheriff of Harris County (Sheriff Mike Jolley)	*Mike Jolley, in his official capacity as the Sheriff of Harris County v. Purdue Pharma L.P., et al.*	1:19-op-45147	N.D. Ohio (Federal)
GA	Sheriff of Houston County (Sheriff Cullen Talton)	*Cullen Talton in his official capacity as the Sheriff of Houston County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45308	N.D. Ohio (Federal)
GA	Sheriff of Jeff Davis County (Sheriff Preston Bohannon)	*Preston Bohannon, in his official capacity as the Sheriff of Jeff Davis County v. Purdue Pharma L.P., et al.*	1:19-op-45161	N.D. Ohio (Federal)
GA	Sheriff of Jones County (Sheriff R.N. "Butch" Reece)	*R.N. "Butch" Reece, in his official capacity as the Sheriff of Jones County v. Purdue Pharma L.P., et al.*	1:19-op-45162	N.D. Ohio (Federal)
GA	Sheriff of Laurens County (Sheriff Larry H. Dean)	*Larry H. Dean, in his official capacity as the Sheriff of Laurens County v. Purdue Pharma L.P., et al.*	1:19-op-45163	N.D. Ohio (Federal)
GA	Sheriff of Meriwether County (Sheriff Chuck Smith)	*Chuck Smith in his official capacity as the Sheriff of Meriwether County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45306	N.D. Ohio (Federal)
GA	Sheriff of Murray County (Sheriff Gary Langford)	*Gary Langford, in his official capacity as the Sheriff of Murray County v. Purdue Pharma L.P., et al.*	1:19-op-45164	N.D. Ohio (Federal)
GA	Sheriff of Oconee County (Sheriff Scott R. Berry)	*Scott R. Berry, in his official capacity as the Sheriff of Oconee County v. Purdue Pharma L.P., et al.*	1:19-op-45165	N.D. Ohio (Federal)
GA	Sheriff of Peach County (Sheriff Terry Deese)	*Terry Deese in his official capacity as the Sheriff of Peach County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45314	N.D. Ohio (Federal)
GA	Sheriff of Pierce County (Sheriff Ramsey Bennett)	*Ramsey Bennett, in his official capacity as the Sheriff of Pierce County v. Purdue Pharma L.P., et al.*	1:19-op-45166	N.D. Ohio (Federal)
GA	Sheriff of Screven County (Sheriff Mike Kile)	*Mike Kile, in his official capacity as the Sheriff of Screven County v. Purdue Pharma L.P., et al.*	1:19-op-45167	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
GA	Sheriff of Telfair County (Sheriff Chris Steverson)	*Chris Steverson in his official capacity as the Sheriff of Telfair County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45313	N.D. Ohio (Federal)
GA	Sheriff of Tift County (Sheriff Gene Scarbrough)	*Gene Scarbrough, in his official capacity as the Sheriff of Tift County v. Purdue Pharma L.P., et al.*	1:19-op-45168	N.D. Ohio (Federal)
GA	Sheriff of Ware County (Sheriff Randy F. Royal)	*Randy F. Royal, in his official capacity as the Sheriff of Ware County v. Purdue Pharma L.P., et al.*	1:19-op-45169	N.D. Ohio (Federal)
GA	Sheriff of Wayne County (Sheriff John G. Carter)	*John G. Carter, in his official capacity as the Sheriff of Wayne County v. Purdue Pharma L.P., et al.*	1:19-op-45170	N.D. Ohio (Federal)
GA	The Candler County Hospital Authority	*The Candler County Hospital Authority v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45167	N.D. Ohio (Federal)
GA	The Hospital Authority of Valdosta County and Lowndes County d/b/a South Georgia Medical Center	*The Hospital Authority of Valdosta and Lowndes County, Georgia d/b/a South Georgia Medical Center v. Purdue Pharma L.P., et al.*	1:19-op-45133	N.D. Ohio (Federal)
GA	The Hospital Authority of Wayne County	*The Hospital Authority of Wayne County, Georgia v. Purdue Pharma L.P., et al.*	1:19-op-45278	N.D. Ohio (Federal)
HI	County of Hawai'i	*County of Hawai'i v. Purdue Pharma L.P., et al.*	1:20-op-45014	N.D. Ohio (Federal)
HI	County of Kaua'i	*County of Kaua'i v. Purdue Pharma L.P., et al.*	1:19-op-45862	N.D. Ohio (Federal)
IA	County of Adair	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Adams	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Allamakee	*Allamakee County v. Purdue Pharma L.P., et al.*	1:18-op-45983	N.D. Ohio (Federal)
IA	County of Appanoose	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Audubon	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Benton	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Black Hawk	*Black Hawk County, Des Moines County, Harrison County, Howard County, Jasper County, Lyon County, Mills County, Tama County, Union County, and Worth County v. Purdue Pharma L.P., et al.*	1:18-op-45303	N.D. Ohio (Federal)
IA	County of Bremer	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Buchanan	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Buena Vista	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County,*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Calhoun	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Carroll	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Cedar	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Cerro Gordo	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Cherokee	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Chickasaw	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Clay	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Clayton	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County,*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Clinton	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Dallas	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Delaware	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Des Moines	*Black Hawk County, Des Moines County, Harrison County, Howard County, Jasper County, Lyon County, Mills County, Tama County, Union County, and Worth County v. Purdue Pharma L.P., et al.*	1:18-op-45303	N.D. Ohio (Federal)
IA	County of Emmet	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Fayette	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Fremont	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Hamilton	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County,*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Hancock	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Hardin	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Harrison	*Black Hawk County, Des Moines County, Harrison County, Howard County, Jasper County, Lyon County, Mills County, Tama County, Union County, and Worth County v. Purdue Pharma L.P., et al.*	1:18-op-45303	N.D. Ohio (Federal)
IA	County of Henry	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County,*	1:21-op-45051	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Winnebago County, and Wright County v. Allergan plc, et al.		
IA	County of Howard	*Black Hawk County, Des Moines County, Harrison County, Howard County, Jasper County, Lyon County, Mills County, Tama County, Union County, and Worth County v. Purdue Pharma L.P., et al.*	1:18-op-45303	N.D. Ohio (Federal)
IA	County of Humboldt	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Ida	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Jasper	*Black Hawk County, Des Moines County, Harrison County, Howard County, Jasper County, Lyon County, Mills County, Tama County, Union County, and Worth County v. Purdue Pharma L.P., et al.*	1:18-op-45303	N.D. Ohio (Federal)
IA	County of Johnson	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Jones	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Keokuk	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Lee	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Lyon	*Black Hawk County, Des Moines County, Harrison County, Howard County, Jasper County, Lyon County, Mills County, Tama County, Union County, and Worth County v. Purdue Pharma L.P., et al.*	1:18-op-45303	N.D. Ohio (Federal)
IA	County of Madison	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
IA	County of Mahaska	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Marion	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Mills	*Black Hawk County, Des Moines County, Harrison County, Howard County, Jasper County, Lyon County, Mills County, Tama County, Union County, and Worth County v. Purdue Pharma L.P., et al.*	1:18-op-45303	N.D. Ohio (Federal)
IA	County of Mitchell	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Monroe	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Montgomery	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Muscatine	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of O'Brien	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Osceola	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Plymouth	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Pocahontas	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Polk	*Polk County v. Purdue Pharma L.P., et al.*	1:18-op-45116	N.D. Ohio (Federal)
IA	County of Pottawattamie	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Poweshiek	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Sac	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Scott	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Shelby	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Sioux	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Tama	*Black Hawk County, Des Moines County, Harrison County, Howard County, Jasper County, Lyon County, Mills County, Tama County, Union County, and Worth County v. Purdue Pharma L.P., et al.*	1:18-op-45303	N.D. Ohio (Federal)
IA	County of Taylor	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County,*	1:18-op-45122	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.		
IA	County of Union	*Black Hawk County, Des Moines County, Harrison County, Howard County, Jasper County, Lyon County, Mills County, Tama County, Union County, and Worth County v. Purdue Pharma L.P., et al.*	1:18-op-45303	N.D. Ohio (Federal)
IA	County of Webster	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Winnebago	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County, Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.*	1:21-op-45051	N.D. Ohio (Federal)
IA	County of Winneshiek	*Adair County, Adams County, Audubon County, Benton County, Bremer County, Buchanan County, Buena Vista County, Calhoun County, Carroll County, Cedar County, Clay County, Clayton County, Clinton County, Dallas County, Delaware County, Fayette County, Hamilton County, Hardin County, Humboldt County, Johnson County, Lee County, Mahaska County, Marion County, Mitchell County, Monroe County, Montgomery County, O'Brien County, Plymouth County, Pottawattamie County, Sac County, Scott County, Shelby County, Sioux County, Taylor County, and Winneshiek County v. Purdue Pharma L.P., et al.*	1:18-op-45122	N.D. Ohio (Federal)
IA	County of Worth	*Black Hawk County, Des Moines County, Harrison County, Howard County, Jasper County, Lyon County, Mills County, Tama County, Union County, and Worth County v. Purdue Pharma L.P., et al.*	1:18-op-45303	N.D. Ohio (Federal)
IA	County of Wright	*Appanoose County, Cerro Gordo County, Cherokee County, Chickasaw County,*	1:21-op-45051	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Emmet County, Fremont County, Hancock County, Henry County, Ida County, Jones County, Keokuk County, Madison County, Muscatine County, Osceola County, Pocahontas County, Poweshiek County, Webster County, Winnebago County, and Wright County v. Allergan plc, et al.		
ID	City of Boise	*City of Boise v. Purdue Pharma L.P., et al.*	1:18-op-46289	N.D. Ohio (Federal)
ID	City of Cubbuck	*City of Cubbuck v. Purdue Pharma L.P., et al.*	1:19-op-45729	N.D. Ohio (Federal)
ID	City of Pocatello	*City of Pocatello v. Purdue Pharma L.P., et al.*	1:19-op-45578	N.D. Ohio (Federal)
ID	City of Preston	*City of Preston v. Purdue Pharma L.P., et al.*	1:19-op-45067	N.D. Ohio (Federal)
ID	City of Twin Falls	*City of Twin Falls v. Purdue Pharma L.P., et al.*	1:19-op-45743	N.D. Ohio (Federal)
ID	County of Ada	*Ada County v. Purdue Pharma L.P., et al.*	1:19-op-45775	N.D. Ohio (Federal)
ID	County of Adams	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Bannock	*Bannock County v. Purdue Pharma L.P., et al.*	1:19-op-45359	N.D. Ohio (Federal)
ID	County of Bingham	*Bingham County v. Purdue Pharma L.P., et al.*	1:19-op-45758	N.D. Ohio (Federal)
ID	County of Blaine	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Boise	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Bonneville	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Camas	*Camas County, Idaho v. Purdue Pharma L.P., et al.*	1:19-op-45407	N.D. Ohio (Federal)
ID	County of Canyon	*Canyon County v. Purdue Pharma L.P., et al.*	1:18-op-46277	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
ID	County of Caribou	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Cassia	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Elmore	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Gooding	*Gooding County, Idaho v. Purdue Pharma L.P., et al.*	1:19-op-45404	N.D. Ohio (Federal)
ID	County of Latah	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Minidoka	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Owyhee	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Payette	*Adams County, Blaine County, Boise County, Bonneville County, Caribou County, Cassia County, Elmore County, Latah County, Minidoka County, Owyhee County and Payette County v. Purdue Pharma L.P., et al.*	1:18-op-46062	N.D. Ohio (Federal)
ID	County of Twin Falls	*Twin Falls County, Idaho v. Purdue Pharma L.P., et al.*	1:19-op-45828	N.D. Ohio (Federal)
IL	Board of Education of East Aurora, School District 131	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
IL	Board of Education of Joliet Township High School, District 204	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
IL	Board of Education of Thornton Fractional Township High Schools, District 215	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
IL	Board of Education of Thornton Township High Schools, District 205	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
IL	City of Berwyn	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	City of Chicago	*City of Chicago v. Purdue Pharma L.P., et al.*	1:14-cv-04361	N.D. Illinois (Federal)
IL	City of Chicago Heights	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	City of Granite City	*City of Granite City, IL v. AmerisourceBergen Drug Corporation, et al.*	2018-L-010351	MDL - In re Opioid Litigation (IL - Circuit Court of Cook County) (State MDL)
IL	City of Harrisburg	*City of Harrisburg, Illinois v. Purdue Pharma L.P., et al.*	1:18-op-45594	N.D. Ohio (Federal)
IL	City of Harvey	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.*	1:18-op-46335	N.D. Ohio (Federal)
IL	City of Herrin	*City of Herrin, Illinois, a home rule unit v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45192	N.D. Ohio (Federal)
IL	City of Kankakee	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of*	1:21-op-45018	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Streator v. Teva Pharmaceuticals USA, Inc., et al.		
IL	City of Marion	*City of Marion, Illinois v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45215	N.D. Ohio (Federal)
IL	City of Metropolis	*City of Metropolis, Illinois v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45537	N.D. Ohio (Federal)
IL	City of Northlake	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	City of Pekin	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	City of Peoria	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.*	1:18-op-46335	N.D. Ohio (Federal)
IL	City of Princeton	*City of Princeton, Illinois v. Purdue Pharma L.P., et al.*	1:18-op-45599	N.D. Ohio (Federal)
IL	City of Rockford	*City of Rockford v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45309	N.D. Ohio (Federal)
IL	City of Streator	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	City of West Frankfort	*City of West Frankfort, Illinois v. Teva Pharmaceutical Industries Ltd., et al.*	1:20-op-45191	N.D. Ohio (Federal)
IL	County of Alexander	*The People of the State of Illinois, the People of Alexander County, and County of Alexander v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45050	N.D. Ohio (Federal)
IL	County of Bond	*The People of the State of Illinois, The People of Bond County, and County of*	1:18-op-45004	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Bond v. AmerisourceBergen Drug Corporation, et al.		
IL	County of Calhoun	*The People of the State of Illinois, The People of Calhoun County, and County of Calhoun v. Purdue Pharma L.P., et al.*	1:18-op-46294	N.D. Ohio (Federal)
IL	County of Christian	*The People of the State of Illinois, The People of Christian County, and County of Christian v. AmerisourceBergen Drug Corporation, et al.*	17-op-45078	N.D. Ohio (Federal)
IL	County of Coles	*The People of the State of Illinois, The People of Coles County, and County of Coles v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45138	N.D. Ohio (Federal)
IL	County of Edwards	*The People of The State of Illinois, The People of Edwards County, and The County of Edwards v. AmerisourceBergen Drug Corporation, et al.*	18-op-45049	N.D. Ohio (Federal)
IL	County of Effingham	*The People of The State of Illinois, The People of Effingham County, and The County of Effingham v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45499	N.D. Ohio (Federal)
IL	County of Franklin	*The People of the State of Illinois, The People of Franklin County, and County of Franklin v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45194	N.D. Ohio (Federal)
IL	County of Gallatin	*The People of the State of Illinois, The People of Gallatin County, and County of Gallatin v. AmerisourceBergen Drug Corporation, et al.*	17-op-45152	N.D. Ohio (Federal)
IL	County of Hamilton	*The People of the State of Illinois, The People of Hamilton County, and County of Hamilton v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45157	N.D. Ohio (Federal)
IL	County of Hardin	*The People of the State of Illinois, The People of Hardin County, and County of Hardin v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45003	N.D. Ohio (Federal)
IL	County of Jasper	*The People of The State of Illinois, The People of Jasper County, and The County of Jasper v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45026	N.D. Ohio (Federal)
IL	County of Jefferson	*The People of The State of Illinois, The People of Jefferson County, and The County of Jefferson v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45539	N.D. Ohio (Federal)
IL	County of Jersey	*The People of the State of Illinois, The People of Jersey County, and Jersey County v. Purdue Pharma L.P., et al.*	2018-L-003908	MDL - In re Opioid Litigation (IL - Circuit Court of Cook

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				County) (State MDL)
IL	County of Johnson	*The People of the State of Illinois, The People of Johnson County and County of Johnson v. Purdue Pharma L.P., et al.*	1:18-op-46148	N.D. Ohio (Federal)
IL	County of LaSalle	*The People of the State of Illinois and LaSalle County, Illinois v. Purdue Pharma L.P., et al.*	2019-L-008722	MDL - In re Opioid Litigation (IL - Circuit Court of Cook County) (State MDL)
IL	County of Lawrence	*The People of The State of Illinois, The People of Lawrence County, and The County of Lawrence v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45518	N.D. Ohio (Federal)
IL	County of Lee	*The People of The State of Illinois, The People of Lee County, and The County of Lee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45606	N.D. Ohio (Federal)
IL	County of Livingston	*The People of The State of Illinois, The People of Livingston County, and The County of Livingston v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45527	N.D. Ohio (Federal)
IL	County of Marion	*The People of The State of Illinois, The People of Marion County, and The County of Marion v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45532	N.D. Ohio (Federal)
IL	County of Massac	*The People of The State of Illinois, The People of Massac County, and The County of Massac v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45519	N.D. Ohio (Federal)
IL	County of McLean	*The People of the State of Illinois and McLean County, Illinois v. Purdue Pharma L.P., et al.*	2019-L-013365	MDL - In re Opioid Litigation (IL - Circuit Court of Cook County) (State MDL)
IL	County of Pulaski	*The People of the State of Illinois, The People of Pulaski County, and County of Pulaski v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45158	N.D. Ohio (Federal)
IL	County of Saline	*The People of The State of Illinois, The People of Saline County, and The County of Saline v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45528	N.D. Ohio (Federal)
IL	County of Sangamon	*The People of the State Of Illinois, The People of Sangamon County, and County*	1:20-op-45154	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of Sangamon v. Teva Pharmaceuticals USA, Inc., et al.		
IL	County of Schuyler	*The People of The State of Illinois, The People of Schuyler County, and The County of Schuyler v. Purdue Pharma L.P., et al.*	1:18-op-46147	N.D. Ohio (Federal)
IL	County of Shelby	*The People of The State of Illinois, The People of Shelby County, and The County of Shelby v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45007	N.D. Ohio (Federal)
IL	County of Union	*The People of the State of Illinois, The People of Union County, and Union County v. Purdue Pharma L.P., et al.*	1:19-op-45286	N.D. Ohio (Federal)
IL	County of Wabash	*The People of the State of Illinois, The People of Wabash County, and County of Wabash v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45103	N.D. Ohio (Federal)
IL	County of Washington	*The People of the State of Illinois, The People of Washington County, and Washington County v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45151	N.D. Ohio (Federal)
IL	County of White	*The People of The State of Illinois, The People of White County, and The County of White v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45024	N.D. Ohio (Federal)
IL	County of Winnebago	*The People of the State of Illinois, The People of Winnebago County, and the County of Winnebago v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45310	N.D. Ohio (Federal)
IL	Illinois Public Risk Fund	*Illinois Public Risk Fund v. Purdue Pharma L.P., et al.*	2019 CH 05847	IL - Circuit Court of Cook County (State)
IL	Orland Fire Protection District	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.*	1:18-op-46335	N.D. Ohio (Federal)
IL	The Board of Education of the City of Chicago, School District No. 299	*The Board of Education of the City of Chicago, School District No. 299 ("Chicago Public Schools") v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46042	N.D. Ohio (Federal)
IL	Village of Addison	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of*	1:21-op-45018	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.		
IL	Village of Bellwood	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	Village of Bensenville	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	Village of Berkeley	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	Village of Bolingbrook	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	Village of Broadview	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.*	1:18-op-46335	N.D. Ohio (Federal)
IL	Village of Chicago Ridge	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North*	1:18-op-46335	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.		
IL	Village of Dolton	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.*	1:18-op-46335	N.D. Ohio (Federal)
IL	Village of Forest Park	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	Village of Franklin Park	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	Village of Harwood Heights	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	Village of Hillside	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	Village of Hoffman Estates	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of*	1:18-op-46335	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.		
IL	Village of La Grange Park	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	Village of Maywood	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.*	1:18-op-46335	N.D. Ohio (Federal)
IL	Village of McCook	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	Village of Melrose Park	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	Village of Merrionette Park	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.*	1:18-op-46335	N.D. Ohio (Federal)
IL	Village of North Riverside	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of*	1:18-op-46335	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.		
IL	Village of Oak Lawn	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	Village of Oak Park	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	Village of Orland Park	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.*	1:18-op-46335	N.D. Ohio (Federal)
IL	Village of Posen	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.*	1:18-op-46335	N.D. Ohio (Federal)
IL	Village of River Forest	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	Village of River Grove	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of*	1:18-op-46335	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.		
IL	Village of Riverside	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	Village of Schiller Park	*Village of Addison, Village of Bensenville, Village of Bolingbrook, Village of Forest Park, Village of Franklin Park, Village of Harwood Heights, City of Kankakee, Village of La Grange Park, Village of McCook, Village of Oak Park, Village of Riverside, Village of Schiller Park, City of Streator v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45018	N.D. Ohio (Federal)
IL	Village of Stone Park	*City of Harvey, Village of Broadview, Village of Chicago Ridge, Village of Dolton, Village of Hoffman Estates, Village of Maywood, Village of Merrionette Park, Village of North Riverside, Village of Orland Park, City of Peoria, Village of Posen, Village of River Grove, Village of Stone Park, and Orland Fire Protection District v. Purdue Pharma L.P., et al.*	1:18-op-46335	N.D. Ohio (Federal)
IL	Village of Tinley Park	*Village of Melrose Park, Village of Bellwood, Village of Berkeley, City of Berwyn, City of Chicago Heights, Village of Hillside, City of Northlake, Village of Oak Lawn, City of Pekin, Village of River Forest, And Village of Tinley Park v. Purdue Pharma L.P., et al.*	1:18-op-46312	N.D. Ohio (Federal)
IL	Waukegan Community Unit School District	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville,*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		
IN	City of Alexandria	*City of Alexandria, City of Elwood and Madison County v. Purdue Pharma L.P., et al.*	1:18-op-45151	N.D. Ohio (Federal)
IN	City of Beech Grove	*City of Beech Grove, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46103	N.D. Ohio (Federal)
IN	City of Bloomington	*City of Bloomington and Monroe County v. Purdue Pharma L.P., et al.*	1:18-op-45235	N.D. Ohio (Federal)
IN	City of Connersville	*City of Connersville and Fayette County v. Purdue Pharma L.P., et al.*	1:18-op-45159	N.D. Ohio (Federal)
IN	City of Elwood	*City of Alexandria, City of Elwood and Madison County v. Purdue Pharma L.P., et al.*	1:18-op-45151	N.D. Ohio (Federal)
IN	City of Evansville	*City of Evansville, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45591	N.D. Ohio (Federal)
IN	City of Fishers	*City of Fishers, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45845	N.D. Ohio (Federal)
IN	City of Fort Wayne	*City of Fort Wayne, Indiana v. Cardinal Health, Inc., et al.*	1:18-op-45123	N.D. Ohio (Federal)
IN	City of Franklin	*City of Franklin, Town of Pendleton and City of Richmond v. Purdue Pharma L.P., et al.*	1:18-op-46182	N.D. Ohio (Federal)
IN	City of Gary	*City of Gary, Indiana v. Purdue Pharma L.P., et al.*	1:18-op-45929	N.D. Ohio (Federal)
IN	City of Greenwood	*City of Greenwood, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45109	N.D. Ohio (Federal)
IN	City of Hammond	*City of Hammond v. Purdue Pharma L.P., et al.*	1:17-op-45082	N.D. Ohio (Federal)
IN	City of Hartford	*Hartford City, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45854	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
IN	City of Indianapolis	*City of Indianapolis and Marion County v. Purdue Pharma L.P., et al.*	1:17-op-45091	N.D. Ohio (Federal)
IN	City of Jasper	*City of Jasper, Indiana v. AmerisourceBergen Drug Corporation, et al.*	18-op-46027	N.D. Ohio (Federal)
IN	City of Jeffersonville	*City of Jeffersonville, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45961	N.D. Ohio (Federal)
IN	City of Kokomo	*City of Kokomo, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45127	N.D. Ohio (Federal)
IN	City of Lafayette	*City of Lafayette v. Purdue Pharma L.P., et al.*	1:17-op-45081	N.D. Ohio (Federal)
IN	City of Lawrence	*City of Lawrence, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45805	N.D. Ohio (Federal)
IN	City of Logansport	*City of Logansport v. Purdue Pharma L.P., et al.*	18-op-45692	N.D. Ohio (Federal)
IN	City of Martinsville	*City of Martinsville, Indiana v. AmerisourceBergen Drug Corporation, et al.*	18-op-45346	N.D. Ohio (Federal)
IN	City of Mishawaka	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)
IN	City of Montpelier	*City of Montpelier, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45806	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
IN	City of Muncie	*City of Muncie, Indiana v. Cardinal Health, Inc., et al.*	1:18-op-45126	N.D. Ohio (Federal)
IN	City of New Albany	*City of New Albany, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46333	N.D. Ohio (Federal)
IN	City of New Castle	*City of New Castle v. Purdue Pharma L.P., et al.*	1:18-op-45016	N.D. Ohio (Federal)
IN	City of Noblesville	*City of Noblesville, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45124	N.D. Ohio (Federal)
IN	City of Peru	*City of Peru, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45794	N.D. Ohio (Federal)
IN	City of Portland	*City of Portland and Jay County v. Purdue Pharma L.P., et al.*	1:18-op-46140	N.D. Ohio (Federal)
IN	City of Richmond	*City of Franklin, Town of Pendleton and City of Richmond v. Purdue Pharma L.P., et al.*	1:18-op-46182	N.D. Ohio (Federal)
IN	City of Seymour	*City of Seymour, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45673	N.D. Ohio (Federal)
IN	City of Shelbyville	*City of Shelbyville, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45960	N.D. Ohio (Federal)
IN	City of South Bend	*City of South Bend, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45400	N.D. Ohio (Federal)
IN	City of Terre Haute	*City of Terre Haute, Indiana v. Cardinal Health, Inc., et al.*	1:18-op-45129	N.D. Ohio (Federal)
IN	City of West LaFayette	*City of West LaFayette v. Purdue Pharma L.P., et al.*	1:18-op-45300	N.D. Ohio (Federal)
IN	City of Westfield	*City of Westfield, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46056	N.D. Ohio (Federal)
IN	County of Allen (Board of Commissioners)	*The Board of Commissioners of the County of Allen v. Purdue Pharma L.P., et al.*	1:18-op-45121	N.D. Ohio (Federal)
IN	County of Benton	*Benton County v. Purdue Pharma L.P., et al.*	1:18-op-46201	N.D. Ohio (Federal)
IN	County of Blackford	*Blackford County, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46336	N.D. Ohio (Federal)
IN	County of Delaware	*Delaware County v. Purdue Pharma L.P., et al.*	1:18-op-45963	N.D. Ohio (Federal)
IN	County of Fayette	*City of Connersville and Fayette County v. Purdue Pharma L.P., et al.*	1:18-op-45159	N.D. Ohio (Federal)
IN	County of Franklin (Board of Commissioners)	*The Board of Commissioners of the County of Franklin v. Purdue Pharma L.P., et al.*	1:18-op-45827	N.D. Ohio (Federal)
IN	County of Harrison	*Harrison County, Indiana v. Cardinal Health, Inc., et al.*	1:18-op-45130	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
IN	County of Howard	*Howard County, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45172	N.D. Ohio (Federal)
IN	County of Jackson	*Jackson County, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45439	N.D. Ohio (Federal)
IN	County of Jay	*City of Portland and Jay County v. Purdue Pharma L.P., et al.*	1:18-op-46140	N.D. Ohio (Federal)
IN	County of Jennings	*Jennings County v. Purdue Pharma L.P., et al.*	1:18-op-45131	N.D. Ohio (Federal)
IN	County of Lake	*Lake County, v. Purdue Pharma L.P., et al.*	1:18-op-45156	N.D. Ohio (Federal)
IN	County of LaPorte	*LaPorte County v. Purdue Pharma L.P., et al.*	1:18-op-45280	N.D. Ohio (Federal)
IN	County of Lawrence	*Lawrence County v. Purdue Pharma L.P., et al.*	1:18-op-46188	N.D. Ohio (Federal)
IN	County of Madison	*City of Alexandria, City of Elwood and Madison County v. Purdue Pharma L.P., et al.*	1:18-op-45151	N.D. Ohio (Federal)
IN	County of Marion	*City of Indianapolis and Marion County v. Purdue Pharma L.P., et al.*	1:17-op-45091	N.D. Ohio (Federal)
IN	County of Marshall	*Marshall County v. Purdue Pharma L.P., et al.*	1:18-op-45157	N.D. Ohio (Federal)
IN	County of Monroe	*City of Bloomington and Monroe County v. Purdue Pharma L.P., et al.*	1:18-op-45235	N.D. Ohio (Federal)
IN	County of Morgan	*Morgan County v. Purdue Pharma L.P., et al.*	1:18-op-45828	N.D. Ohio (Federal)
IN	County of Orange	*Orange County, Indiana v. Purdue Pharma L.P., et al.*	1:19-op-45356	N.D. Ohio (Federal)
IN	County of Porter	*Porter County v. Purdue Pharma L.P., et al.*	1:19-op-45074	N.D. Ohio (Federal)
IN	County of Pulaski	*Pulaski County v. Purdue Pharma L.P., et al.*	1:18-op-46110	N.D. Ohio (Federal)
IN	County of Ripley	*Ripley County v. Purdue Pharma L.P., et al.*	1:18-op-46155	N.D. Ohio (Federal)
IN	County of St. Joseph	*St. Joseph County v. Purdue Pharma L.P., et al.*	1:18-op-45500	N.D. Ohio (Federal)
IN	County of Starke	*Starke County, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46358	N.D. Ohio (Federal)
IN	County of Tippecanoe	*Tippecanoe County, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45796	N.D. Ohio (Federal)
IN	County of Vanderburgh	*Vanderburgh County v. Purdue Pharma L.P., et al.*	1:18-op-45498	N.D. Ohio (Federal)
IN	County of Vigo	*Vigo County, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45128	N.D. Ohio (Federal)
IN	Fort Wayne Community Schools	*Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan*	1:21-op-45080	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		
IN	Penn-Harris-Madison School Corporation	*Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.*	1:21-op-45080	N.D. Ohio (Federal)
IN	School City of Mishawaka	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		
IN	Scott County (Board of Commissioners)	*Scott County, Indiana, by and through its Board of Commissioners v. Purdue Pharma L.P., et al.*	1:17-op-45094	N.D. Ohio (Federal)
IN	Smith-Green Community Schools	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)
IN	South Bend Community School Corporation	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		
IN	Town of Atlanta	*Town of Atlanta, Indiana v. Cardinal Health, Inc., et al.*	1:18-op-45125	N.D. Ohio (Federal)
IN	Town of Brownstown	*Town of Brownstown, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45666	N.D. Ohio (Federal)
IN	Town of Chandler	*Town of Chandler, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45440	N.D. Ohio (Federal)
IN	Town of Danville	*Town of Danville v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45215	N.D. Ohio (Federal)
IN	Town of Huntington	*Town of Huntington, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46357	N.D. Ohio (Federal)
IN	Town of Mooresville	*Town of Mooresville, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45016	N.D. Ohio (Federal)
IN	Town of Pendleton	*City of Franklin, Town of Pendleton and City of Richmond v. Purdue Pharma L.P., et al.*	1:18-op-46182	N.D. Ohio (Federal)
IN	Town of Plainfield	*Town of Plainfield, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45017	N.D. Ohio (Federal)
IN	Town of Sheridan	*The Town of Sheridan v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45055	N.D. Ohio (Federal)
IN	Town of Upland	*Town of Upland, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46356	N.D. Ohio (Federal)
IN	Town of Zionsville	*Town of Zionsville, Indiana v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45846	N.D. Ohio (Federal)
KS	City of Kansas	*Unified Government of Wyandotte County/Kansas City, Kansas v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45015	N.D. Ohio (Federal)
KS	City of Overland Park	*City of Overland Park, Kansas v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46287	N.D. Ohio (Federal)
KS	County of Bourbon	*Bourbon County, Kansas v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45781	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
KS	County of Cherokee (Board of Commissioners)	*Board of Commissioners of Cherokee County, Kansas v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45452	N.D. Ohio (Federal)
KS	County of Cowley (Board of County Commissioners)	*Board of County Commissioners of the Cowley County, Kansas v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45898	N.D. Ohio (Federal)
KS	County of Crawford (Board of County Commissioners)	*The Board of County Commissioners of the County of Crawford v. Purdue Pharma L.P., et al.*	1:18-op-46108	N.D. Ohio (Federal)
KS	County of Ford (Board of County Commissioners)	*The Board of County Commissioners of the County of Ford, State of Kansas v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45263	N.D. Ohio (Federal)
KS	County of Harvery	*County of Harvery v. Purdue Pharma L.P., et al.*	1:18-op-45848	N.D. Ohio (Federal)
KS	County of Johnson	*Johnson County, Kansas v. Purdue Pharma L.P., et al.*	1:19-op-45443	N.D. Ohio (Federal)
KS	County of Montgomery	*Montgomery County, Kansas v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45780	N.D. Ohio (Federal)
KS	County of Neosho (Board of County Commissioners)	*The Board of County Commissioners of the County of Neosho v. Purdue Pharma L.P., et al.*	1:18-op-46125	N.D. Ohio (Federal)
KS	County of Pratt (Board of Commissioners)	*Board of Commissioners of Pratt County, Kansas v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45451	N.D. Ohio (Federal)
KS	County of Reno	*County of Reno v. Purdue Pharma L.P., et al.*	1:18-op-45718	N.D. Ohio (Federal)
KS	County of Sedgwick (Board of County Commissioners)	*Board of County Commissioners of Sedgwick County, Kansas v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45025	N.D. Ohio (Federal)
KS	County of Shawnee (Board of County Commissioners)	*The Board of County Commissioners of the County of Shawnee, State of Kansas v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45226	N.D. Ohio (Federal)
KS	County of Wyandotte	*Unified Government of Wyandotte County/Kansas City, Kansas v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45015	N.D. Ohio (Federal)
KS	Leavenworth County (Board of Commissioners)	*Board of Commissioners of Leavenworth County, Kansas v. Purdue Pharma L.P., et al.*	1:19-op-45602	N.D. Ohio (Federal)
KY	Board of Education of Breathitt County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of Bullitt County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of Estill County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of Fayette County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of Harrison County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45281	N.D. Ohio (Federal)
KY	Board of Education of Hart County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of Jefferson County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of Johnson County Public School District	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of LaRue County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of Lawrence County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45281	N.D. Ohio (Federal)
KY	Board of Education of Martin County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of Menifee County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of Owsley County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	Board of Education of Wolfe County Public Schools	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
KY	City of Bellefonte	*City of Russell, Kentucky; City of Jenkins, Kentucky; City of Pineville, Kentucky; City of Worthington, Kentucky; City of Vanceburg, Kentucky; City of Greenup, Kentucky; City of South Shore, Kentucky; City of Bellefonte, Kentucky v. Abbott Laboratories, et al.*	1:21-op-45094	N.D. Ohio (Federal)
KY	City of Benham	*City of Benham v. Purdue Pharma L.P., et al.*	1:19-op-45105	N.D. Ohio (Federal)
KY	City of Buckhorn	*City of Buckhorn v. Purdue Pharma L.P., et al.*	1:19-op-45111	N.D. Ohio (Federal)
KY	City of Campbellsville	*City of Campbellsville v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46057	N.D. Ohio (Federal)
KY	City of Columbia	*City of Columbia v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46129	N.D. Ohio (Federal)
KY	City of Covington	*City of Covington, Kentucky v. Purdue Pharma L.P., et al.*	1:18-op-45967	N.D. Ohio (Federal)
KY	City of Florence	*City of Florence v. Purdue Pharma L.P., et al.*	1:19-op-45084	N.D. Ohio (Federal)
KY	City of Grayson	*City of Grayson v. Purdue Pharma L.P., et al.*	1:19-op-45085	N.D. Ohio (Federal)
KY	City of Greenup	*City of Russell, Kentucky; City of Jenkins, Kentucky; City of Pineville, Kentucky; City of Worthington, Kentucky; City of Vanceburg, Kentucky; City of Greenup, Kentucky; City of South Shore, Kentucky; City of Bellefonte, Kentucky v. Abbott Laboratories, et al.*	1:21-op-45094	N.D. Ohio (Federal)
KY	City of Harlan	*City of Harlan v. Purdue Pharma L.P., et al.*	1:19-op-45106	N.D. Ohio (Federal)
KY	City of Henderson	*City of Henderson, Kentucky, on behalf of Themselves v. Purdue Pharma L.P., et al.*	1:20-op-45062	N.D. Ohio (Federal)
KY	City of Hillview	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		/ N.D. Ohio (Federal)
KY	City of Hyden	*City of Hyden v. Purdue Pharma L.P., et al.*	1:19-op-45101	N.D. Ohio (Federal)
KY	City of Inez	*The City of Inez v. Purdue Pharma L.P., et al.*	1:19-op-45499	N.D. Ohio (Federal)
KY	City of Jamestown	*The Fiscal Court Of Russell County, Kentucky and City of Jamestown v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46096	N.D. Ohio (Federal)
KY	City of Jenkins	*City of Russell, Kentucky; City of Jenkins, Kentucky; City of Pineville, Kentucky; City of Worthington, Kentucky; City of Vanceburg, Kentucky; City of Greenup, Kentucky; City of South Shore, Kentucky; City of Bellefonte, Kentucky v. Abbott Laboratories, et al.*	1:21-op-45094	N.D. Ohio (Federal)
KY	City of London	*City of London v. Purdue Pharma L.P., et al.*	1:19-op-45103	N.D. Ohio (Federal)
KY	City of Loyall	*City of Loyall v. Purdue Pharma L.P., et al.*	1:19-op-45107	N.D. Ohio (Federal)
KY	City of Lynch	*City of Lynch v. Purdue Pharma L.P., et al.*	1:19-op-45102	N.D. Ohio (Federal)
KY	City of Manchester	*City of Manchester v. Purdue Pharma L.P., et al.*	1:19-op-45138	N.D. Ohio (Federal)
KY	City of Morehead	*City of Morehead v. Purdue Pharma L.P., et al.*	1:19-op-45104	N.D. Ohio (Federal)
KY	City of Morganfield	*City of Morganfield, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45167	N.D. Ohio (Federal)
KY	City of Mt. Washington	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		(State MDL) / N.D. Ohio (Federal)
KY	City of Murray	*The Fiscal Court of Calloway County Kentucky and City of Murray v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45038	N.D. Ohio (Federal)
KY	City of Owensboro	*City of Owensboro v. Purdue Pharma L.P., et al.*	1:21-op-45076	N.D. Ohio (Federal)
KY	City of Paducah	*The City of Paducah, Kentucky, a Home Rule Class City in the Commonwealth of Kentucky v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45592	N.D. Ohio (Federal)
KY	City of Paintsville	*The City of Paintsville v. Purdue Pharma L.P., et al.*	1:19-op-45559	N.D. Ohio (Federal)
KY	City of Pineville	*City of Russell, Kentucky; City of Jenkins, Kentucky; City of Pineville, Kentucky; City of Worthington, Kentucky; City of Vanceburg, Kentucky; City of Greenup, Kentucky; City of South Shore, Kentucky; City of Bellefonte, Kentucky v. Abbott Laboratories, et al.*	1:21-op-45094	N.D. Ohio (Federal)
KY	City of Pippa Passes	*City of Pippa Passes v. Purdue Pharma L.P., et al.*	1:19-op-45137	N.D. Ohio (Federal)
KY	City of Prestonburg	*The City of Prestonburg v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45294	N.D. Ohio (Federal)
KY	City of Russell	*City of Russell, Kentucky; City of Jenkins, Kentucky; City of Pineville, Kentucky; City of Worthington, Kentucky; City of Vanceburg, Kentucky; City of Greenup, Kentucky; City of South Shore, Kentucky; City of Bellefonte, Kentucky v. Abbott Laboratories, et al.*	1:21-op-45094	N.D. Ohio (Federal)
KY	City of Russell Springs	*City of Russell Springs v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45125	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
KY	City of Shepherdsville	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.*	2020-70878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)
KY	City of South Shore	*City of Russell, Kentucky; City of Jenkins, Kentucky; City of Pineville, Kentucky; City of Worthington, Kentucky; City of Vanceburg, Kentucky; City of Greenup, Kentucky; City of South Shore, Kentucky; City of Bellefonte, Kentucky v. Abbott Laboratories, et al.*	1:21-op-45094	N.D. Ohio (Federal)
KY	City of Vanceburg	*City of Russell, Kentucky; City of Jenkins, Kentucky; City of Pineville, Kentucky; City of Worthington, Kentucky; City of Vanceburg, Kentucky; City of Greenup, Kentucky; City of South Shore, Kentucky; City of Bellefonte, Kentucky v. Abbott Laboratories, et al.*	1:21-op-45094	N.D. Ohio (Federal)
KY	City of Warfield	*The City of Warfield v. Purdue Pharma L.P., et al.*	1:19-op-45787	N.D. Ohio (Federal)
KY	City of West Liberty	*The City of West Liberty v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45329	N.D. Ohio (Federal)
KY	City of Whitesburg	*City of Whitesburg v. Purdue Pharma L.P., et al.*	1:19-op-45218	N.D. Ohio (Federal)
KY	City of Winchester	*City of Winchester v. Purdue Pharma L.P., et al.*	1:18-op-46348	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
KY	City of Worthington	*City of Russell, Kentucky; City of Jenkins, Kentucky; City of Pineville, Kentucky; City of Worthington, Kentucky; City of Vanceburg, Kentucky; City of Greenup, Kentucky; City of South Shore, Kentucky; City of Bellefonte, Kentucky v. Abbott Laboratories, et al.*	1:21-op-45094	N.D. Ohio (Federal)
KY	County of Adair (Fiscal Court)	*The Fiscal Court of Adair County, on behalf of Adair County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45059	N.D. Ohio (Federal)
KY	County of Allen (Fiscal Court)	*The Fiscal Court of Allen County, on behalf of Allen County, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45008	N.D. Ohio (Federal)
KY	County of Anderson (Fiscal Court)	*The Fiscal Court of Anderson County, on behalf of Anderson County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45006	N.D. Ohio (Federal)
KY	County of Ballard	*The County of Ballard, Kentucky v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45593	N.D. Ohio (Federal)
KY	County of Bath (Fiscal Court)	*The Fiscal Court of Bath County, on behalf of Bath Count, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45012	N.D. Ohio (Federal)
KY	County of Bell (Fiscal Court)	*The Fiscal Court of Bell County, on behalf of Bell County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45026	N.D. Ohio (Federal)
KY	County of Boone (Fiscal Court)	*The Fiscal Court of Boone County, on behalf of Boone County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45020	N.D. Ohio (Federal)
KY	County of Bourbon (Fiscal Court)	*The Fiscal Court of Bourbon County, Kentucky v. Purdue Pharma L.P., et al.*	1:18-op-45533	N.D. Ohio (Federal)
KY	County of Boyd (Fiscal Court)	*The Fiscal Court of Boyd County, on behalf of Boyd County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45084	N.D. Ohio (Federal)
KY	County of Boyle (Fiscal Court)	*The Fiscal Court of Boyle County, on behalf of Boyle County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45018	N.D. Ohio (Federal)
KY	County of Bracken (Fiscal Court)	*The Fiscal Court of Bracken County, on behalf of Bracken County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45395	N.D. Ohio (Federal)
KY	County of Breathitt (Fiscal Court)	*The Fiscal Court of Breathitt County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46082	N.D. Ohio (Federal)
KY	County of Breckinridge (Fiscal Court)	*Breckinridge County Fiscal Court, on behalf of Breckinridge County v. AmerisourceBergen, et al. / Hardin County Fiscal Court, on behalf of Hardin*	1:18-op-46273 / 1:20-op-45063	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		County; Breckinridge County Fiscal Court, on behalf of Breckinridge County; Green County Fiscal Court, on behalf of Green County; Meade County Fiscal Court, on behalf of Meade County; Ohio County Fiscal Court, on behalf of Ohio County v. Purdue Pharma L.P., et al.		
KY	County of Bullitt (Fiscal Court)	*The Fiscal Court of Bullitt County, on behalf of Bullitt County, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45009	N.D. Ohio (Federal)
KY	County of Caldwell (Fiscal Court)	*The Fiscal Court of Caldwell County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46001	N.D. Ohio (Federal)
KY	County of Calloway (Fiscal Court)	*The Fiscal Court of Calloway County Kentucky and City of Murray v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45038	N.D. Ohio (Federal)
KY	County of Campbell (Fiscal Court)	*The Fiscal Court of Campbell County, on behalf of Campbell County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45022	N.D. Ohio (Federal)
KY	County of Carlisle (Fiscal Court)	*The Fiscal Court of Carlisle County, on behalf of Carlisle County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45016	N.D. Ohio (Federal)
KY	County of Carter (Fiscal Court)	*The Fiscal Court of Carter County, on behalf of Carter County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45392	N.D. Ohio (Federal)
KY	County of Casey (Fiscal Court)	*The Fiscal Court Of Casey County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45887	N.D. Ohio (Federal)
KY	County of Christian (Fiscal Court)	*The Fiscal Court of Christian County, on behalf of Christian County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45070	N.D. Ohio (Federal)
KY	County of Clark (Fiscal Court)	*The Fiscal Court of Clark County, on behalf of Clark County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45172	N.D. Ohio (Federal)
KY	County of Clay (Fiscal Court)	*The Fiscal Court of Clay County, on behalf of Clay County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45031	N.D. Ohio (Federal)
KY	County of Clinton (Fiscal Court)	*The Fiscal Court of Clinton County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45901	N.D. Ohio (Federal)
KY	County of Cumberland (Fiscal Court)	*The Fiscal Court of Cumberland County, on behalf of Cumberland County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45012	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
KY	County of Daviess (Fiscal Court)	*The Fiscal Court of Daviess County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46171	N.D. Ohio (Federal)
KY	County of Edmonson (Fiscal Court)	*The Fiscal Court of Edmonson County, on behalf of Edmonson County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45084	N.D. Ohio (Federal)
KY	County of Elliott (Fiscal Court)	*The Fiscal Court of Elliott County, on behalf of Elliott County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45393	N.D. Ohio (Federal)
KY	County of Estill (Fiscal Court)	*The Fiscal Court of Estill County, on behalf of Estill County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46126	N.D. Ohio (Federal)
KY	County of Fleming (Fiscal Court)	*The Fiscal Court of Fleming County, on behalf of Fleming County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45019	N.D. Ohio (Federal)
KY	County of Floyd	*The County of Floyd v. Purdue Pharma L.P., et al.*	1:18-op-45369	N.D. Ohio (Federal)
KY	County of Franklin (Fiscal Court)	*The Fiscal Court of Franklin County, on behalf of Franklin County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45007	N.D. Ohio (Federal)
KY	County of Fulton (Fiscal Court)	*The Fiscal Court of Fulton County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45045	N.D. Ohio (Federal)
KY	County of Gallatin (Fiscal Court)	*The Fiscal Court Of Gallatin County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45891	N.D. Ohio (Federal)
KY	County of Garrard (Fiscal Court)	*The Fiscal Court of Garrard County, on behalf of Garrard County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45023	N.D. Ohio (Federal)
KY	County of Grant (Fiscal Court)	*The Fiscal Court of Grant County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45961	N.D. Ohio (Federal)
KY	County of Green (Fiscal Court)	*Green County Fiscal Court, on Behalf of Green County, v. AmerisourceBergen, et al. / Hardin County Fiscal Court, on behalf of Hardin County; Breckinridge County Fiscal Court, on behalf of Breckinridge County; Green County Fiscal Court, on behalf of Green County; Meade County Fiscal Court, on behalf of Meade County; Ohio County Fiscal Court, on behalf of Ohio County v. Purdue Pharma L.P., et al.*	1:18-op-46272 / 1:20-op-45063	N.D. Ohio (Federal)
KY	County of Greenup (Fiscal Court)	*The Fiscal Court of Greenup County, on behalf of Greenup County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45088	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
KY	County of Hancock (Fiscal Court)	*The Fiscal Court of Hancock County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46027	N.D. Ohio (Federal)
KY	County of Harlan (Fiscal Court)	*The Fiscal Court of Harlan County, on behalf of Harlan County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45027	N.D. Ohio (Federal)
KY	County of Harrison (Fiscal Court)	*The Fiscal Court of Harrison County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46030	N.D. Ohio (Federal)
KY	County of Hart (Fiscal Court)	*The Fiscal Court of Hart County, Kentucky v. McKesson Corporation, et al.*	1:19-op-45994	N.D. Ohio (Federal)
KY	County of Henderson (Fiscal Court)	*The Fiscal Court of Henderson County, on behalf of Henderson County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45069	N.D. Ohio (Federal)
KY	County of Henry (Fiscal Court)	*The Fiscal Court of Henry County, on behalf of Henry County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45010	N.D. Ohio (Federal)
KY	County of Hickman (Fiscal Court)	*The Fiscal Court of Hickman County, Kentucky v. Purdue Pharma L.P., et al.*	1:20-op-45254	N.D. Ohio (Federal)
KY	County of Hopkins (Fiscal Court)	*The Fiscal Court of Hopkins County, on behalf of Hopkins County, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45010	N.D. Ohio (Federal)
KY	County of Jessamine (Fiscal Court)	*The Fiscal Court of Jessamine County, on behalf of Jessamine County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45090	N.D. Ohio (Federal)
KY	County of Kenton (Fiscal Court)	*The Fiscal Court of Kenton County, on behalf of Kenton County v. AmerisourceBergen Drug Corporation et al.*	1:17-op-45089	N.D. Ohio (Federal)
KY	County of Knott	*The County of Knott v. Purdue Pharma L.P., et al.*	1:18-op-45370	N.D. Ohio (Federal)
KY	County of Knox (Fiscal Court)	*The Fiscal Court of Knox County, on behalf of Knox County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45028	N.D. Ohio (Federal)
KY	County of LaRue (Fiscal Court)	*The Fiscal Court of LaRue County, Kentucky v. Purdue Pharma L.P., et al.*	1:19-op-45950	N.D. Ohio (Federal)
KY	County of Laurel (Fiscal Court)	*The Fiscal Court of Laurel County, on behalf of Laurel County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45105	N.D. Ohio (Federal)
KY	County of Lawrence	*Lawrence County, Kentucky v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-46184	N.D. Ohio (Federal)
KY	County of Lee (Fiscal Court)	*The Fiscal Court of Lee County, Kentucky v. Purdue Pharma L.P., et al.*	1:18-op-46100	N.D. Ohio (Federal)
KY	County of Leslie (Fiscal Court)	*The Fiscal Court of Leslie County, on behalf of Leslie County, v.*	1:17-op-45029	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		AmerisourceBergen Drug Corporation, et al.		
KY	County of Letcher (Fiscal Court)	*The Fiscal Court of Letcher County, on behalf of Letcher County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46124	N.D. Ohio (Federal)
KY	County of Lewis (Fiscal Court)	*The Fiscal Court of Lewis County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45889	N.D. Ohio (Federal)
KY	County of Lincoln (Fiscal Court)	*The Fiscal Court of Lincoln County, on behalf of Lincoln County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45024	N.D. Ohio (Federal)
KY	County of Logan (Fiscal Court)	*The Fiscal Court of Logan County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45951	N.D. Ohio (Federal)
KY	County of Madison (Fiscal Court)	*The Fiscal Court of Madison County, on behalf of Madison County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45011	N.D. Ohio (Federal)
KY	County of Marshall (Fiscal Court)	*The Fiscal Court of Marshall County, on behalf of Marshall County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45071	N.D. Ohio (Federal)
KY	County of Martin (Fiscal Court)	*The Fiscal Court of Martin County, on behalf of Martin County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45388	N.D. Ohio (Federal)
KY	County of Mason (Fiscal Court)	*The Fiscal Court of Mason County, Kentucky v. Purdue Pharma L.P., et al*	1:19-op-45868	N.D. Ohio (Federal)
KY	County of McCracken	*The County of McCracken, Kentucky v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45611	N.D. Ohio (Federal)
KY	County of McLean (Fiscal Court)	*The Fiscal Court of McLean County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45200	N.D. Ohio (Federal)
KY	County of Meade (Fiscal Court)	*Meade County Fiscal Court, on behalf of Meade County v. AmerisourceBergen, et al. / Hardin County Fiscal Court, on behalf of Hardin County; Breckinridge County Fiscal Court, on behalf of Breckinridge County; Green County Fiscal Court, on behalf of Green County; Meade County Fiscal Court, on behalf of Meade County; Ohio County Fiscal Court, on behalf of Ohio County v. Purdue Pharma L.P., et al.*	1:18-op-46275 / 1:20-op-45063	N.D. Ohio (Federal)
KY	County of Mercer (Fiscal Court)	*The Fiscal Court of Mercer County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45952	N.D. Ohio (Federal)
KY	County of Monroe (Fiscal Court)	*The Fiscal Court of Monroe County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45016	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
KY	County of Montgomery (Fiscal Court)	*The Fiscal Court of Montgomery County, on behalf of Montgomery County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46144	N.D. Ohio (Federal)
KY	County of Morgan (Fiscal Court)	*The Fiscal Court of Morgan County, on behalf of Morgan County v. Purdue Pharma L.P., et al.*	1:19-op-45571	N.D. Ohio (Federal)
KY	County of Muhlenberg (Fiscal Court)	*The Fiscal Court of Muhlenberg County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46053	N.D. Ohio (Federal)
KY	County of Nicholas (Fiscal Court)	*The Fiscal Court of Nicholas County, on behalf of Nicholas County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45025	N.D. Ohio (Federal)
KY	County of Ohio (Fiscal Court)	*Hardin County Fiscal Court, on behalf of Hardin County; Breckinridge County Fiscal Court, on behalf of Breckinridge County; Green County Fiscal Court, on behalf of Green County; Meade County Fiscal Court, on behalf of Meade County; Ohio County Fiscal Court, on behalf of Ohio County v. Purdue Pharma L.P., et al.*	1:20-op-45063	N.D. Ohio (Federal)
KY	County of Oldham (Fiscal Court)	*The Fiscal Court of Oldham County, on behalf of Oldham County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45067	N.D. Ohio (Federal)
KY	County of Owen (Fiscal Court)	*The Fiscal Court of Owen County, Kentucky v. Purdue Pharma L.P., et al.*	1:18-op-45534	N.D. Ohio (Federal)
KY	County of Owsley (Fiscal Court)	*The Fiscal Court of Owsley County on behalf of Owsley County v. AmerisourceBergen Drug Company, et al.*	1:18-op-46235	N.D. Ohio (Federal)
KY	County of Pendleton (Fiscal Court)	*The Fiscal Court of Pendleton County, on behalf of Pendleton County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45021	N.D. Ohio (Federal)
KY	County of Perry (Fiscal Court)	*The Fiscal Court of Perry County, on behalf of Perry County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45110	N.D. Ohio (Federal)
KY	County of Pike	*County of Pike v. Purdue Pharma L.P., et al.*	1:18-op-45368	N.D. Ohio (Federal)
KY	County of Powell (Fiscal Court)	*The Fiscal Court of Powell County, on behalf of Powell County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46145	N.D. Ohio (Federal)
KY	County of Pulaski (Fiscal Court)	*The Fiscal Court of Pulaski County, on behalf of Pulaski County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45109	N.D. Ohio (Federal)
KY	County of Rowan (Fiscal Court)	*The Fiscal Court of Rowan County, on behalf of Rowan County, v.*	1:18-op-45018	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		AmerisourceBergen Drug Corporation, et al.		
KY	County of Russell (Fiscal Court)	*The Fiscal Court of Russell County, Kentucky and City of Jamestown v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46096	N.D. Ohio (Federal)
KY	County of Scott (Fiscal Court)	*The Fiscal Court of Scott County, on behalf of Scott County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45173	N.D. Ohio (Federal)
KY	County of Shelby (Fiscal Court)	*The Fiscal Court of Shelby County, on behalf of Shelby County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45009	N.D. Ohio (Federal)
KY	County of Spencer (Fiscal Court)	*The Fiscal Court of Spencer County, on behalf of Spencer County, v. AmerisourceBergen Drug Corporation, et al. / The Fiscal Court of Spencer County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:17-op-45014 / 1:19-op-46029	N.D. Ohio (Federal)
KY	County of Taylor (Fiscal Court)	*The Fiscal Court of Taylor County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46007	N.D. Ohio (Federal)
KY	County of Todd (Fiscal Court)	*The Fiscal Court of Todd County, Kentucky v. Purdue Pharma L.P., et al.*	1:19-op-45949	N.D. Ohio (Federal)
KY	County of Union (Fiscal Court)	*The Fiscal Court of Union County, on behalf of Union County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45015	N.D. Ohio (Federal)
KY	County of Warren	*Warren County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45075	N.D. Ohio (Federal)
KY	County of Wayne (Fiscal Court)	*Wayne County Fiscal Court v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45389	N.D. Ohio (Federal)
KY	County of Webster (Fiscal Court)	*The Fiscal Court of Webster County, Kentucky v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46098	N.D. Ohio (Federal)
KY	County of Whitley (Fiscal Court)	*The Fiscal Court of Whitley County, on behalf of Whitley County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45030	N.D. Ohio (Federal)
KY	County of Wolfe (Fiscal Court)	*The Fiscal Court of Wolfe County, Kentucky v. Purdue Pharma L.P., et al.*	1:18-op-46099	N.D. Ohio (Federal)
KY	County of Woodford (Fiscal Court)	*The Fiscal Court of Woodford County, on behalf of Woodford County, v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45174	N.D. Ohio (Federal)
KY	Estill County Emergency Medical Services	*Estill County Emergency Medical Services v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46237	N.D. Ohio (Federal)
KY	Kentucky River District Health Department	*Kentucky River District Health Department v. Purdue Pharma L.P., et al.*	1:19-op-45050	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
KY	Lexington-Fayette Urban County Government	*Lexington-Fayette Urban County Government v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45092	N.D. Ohio (Federal)
KY	Louisville/Jefferson County Metro Government	*Louisville/Jefferson County Metro Government v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45013	N.D. Ohio (Federal)
KY	Taylor County Hospital District Health Facilities Corporation	*Bowling Green-Warren County Community Hospital Corporation; The Medical Center at Clinton County, Inc.; The Medical Center at Franklin, Inc.; ARH Tug Valley Health Services, Inc. f/k/a Highlands Hospital Corporation; Baptist Healthcare System, Inc.; Baptist Health Madisonville, Inc.; Grayson County Hospital Foundation, Inc.; The Harrison Memorial Hospital, Inc.; Pikeville Medical Center, Inc.; Saint Elizabeth Medical Center, Inc.; St. Claire Medical Center, Inc.; and Taylor County Hospital District Health Facilities Corporation v. Purdue Pharma L.P., et al.*	1:20-op-45060	N.D. Ohio (Federal)
MA	City of Amesbury	*City of Amesbury v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45678	N.D. Ohio (Federal)
MA	City of Beverly	*City of Beverly v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45219	N.D. Ohio (Federal)
MA	City of Brockton	*City of Brockton v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46089	N.D. Ohio (Federal)
MA	City of Cambridge	*City of Cambridge v. Purdue Pharma L.P., et al.*	19-2854-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	City of Chelsea	*City of Chelsea v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45693	N.D. Ohio (Federal)
MA	City of Chicopee	*City of Chicopee v. Purdue Pharma L.P., et al.*	19-1621-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	City of Easthampton	*City of Easthampton v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45336	N.D. Ohio (Federal)
MA	City of Everett	*City of Everett v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45596	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MA	City of Fall River	*City of Fall River v. Purdue Pharma L.P., et al.*	1:18-op-46285	N.D. Ohio (Federal)
MA	City of Fitchburg	*The City of Fitchburg v. Purdue Pharma L.P., et al.*	1:19-op-45030	N.D. Ohio (Federal)
MA	City of Framingham	*City of Framingham v. Purdue Pharma L.P., et al.*	19-1487-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	City of Gloucester	*City of Gloucester v. Purdue Pharma L.P., et al.*	19-1351-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	City of Greenfield a/k/a Town of Greenfield	*City of Greenfield, aka Town of Greenfield v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45017	N.D. Ohio (Federal)
MA	City of Haverhill	*City of Haverhill v. Purdue Pharma L.P., et al.*	19-1311-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	City of Holyoke	*City of Holyoke v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45694	N.D. Ohio (Federal)
MA	City of Leominster	*City of Leominster v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45710	N.D. Ohio (Federal)
MA	City of Lowell	*City of Lowell v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45514	N.D. Ohio (Federal)
MA	City of Lynn	*City of Lynn v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45789	N.D. Ohio (Federal)
MA	City of Malden	*City of Malden v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45487	N.D. Ohio (Federal)
MA	City of Medford	*The City of Medford v. Purdue Pharma L.P., et al.*	1:19-op-45110	N.D. Ohio (Federal)
MA	City of Melrose	*City of Melrose, Massachusetts v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45951	N.D. Ohio (Federal)
MA	City of Methuen	*City of Methuen, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45106	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MA	City of New Bedford	*City of New Bedford, Massachusetts v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45569	N.D. Ohio (Federal)
MA	City of Newburyport	*City of Newburyport v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45837	N.D. Ohio (Federal)
MA	City of North Adams	*City of North Adams v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45702	N.D. Ohio (Federal)
MA	City of Northampton	*City of Northampton v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45337	N.D. Ohio (Federal)
MA	City of Peabody	*City of Peabody v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45860	N.D. Ohio (Federal)
MA	City of Pittsfield	*City of Pittsfield v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45335	N.D. Ohio (Federal)
MA	City of Quincy	*The City of Quincy v. Purdue Pharma L.P., et al.*	1:19-op-45008	N.D. Ohio (Federal)
MA	City of Revere	*City of Revere, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45155	N.D. Ohio (Federal)
MA	City of Salem	*City of Salem v. Purdue Pharma L.P., et al.*	19-1355-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	City of Somerville	*City of Somerville v. Purdue Pharma L.P., et al.*	1:19-op-45319	N.D. Ohio (Federal)
MA	City of Springfield	*City of Springfield v. Purdue Pharma L.P., et al.*	19-1733-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	City of Woburn	*City of Woburn, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45103	N.D. Ohio (Federal)
MA	City of Worcester	*City of Worcester v. Purdue Pharma L.P., et al*	19-543-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	Town of Acushnet	*Town of Acushnet v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45676	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MA	Town of Agawam	*Town of Agawam v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45792	N.D. Ohio (Federal)
MA	Town of Andover	*Town of Andover v. Purdue Pharma L.P., et al.*	1:19-op-45996	N.D. Ohio (Federal)
MA	Town of Aquinnah	*Town of Aquinnah v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46091	N.D. Ohio (Federal)
MA	Town of Athol	*Town of Athol v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45058	N.D. Ohio (Federal)
MA	Town of Auburn	*Town of Auburn v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45688	N.D. Ohio (Federal)
MA	Town of Ayer	*Town of Ayer, Massachusetts v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45570	N.D. Ohio (Federal)
MA	Town of Barnstable	*Town of Barnstable v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45862	N.D. Ohio (Federal)
MA	Town of Belchertown	*Town of Belchertown v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45905	N.D. Ohio (Federal)
MA	Town of Billerica	*Town of Billerica v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45560	N.D. Ohio (Federal)
MA	Town of Braintree	*Town of Braintree v. Purdue Pharma L.P., et al.*	1:19-op-45673	N.D. Ohio (Federal)
MA	Town of Brewster	*Town of Brewster v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45556	N.D. Ohio (Federal)
MA	Town of Bridgewater	*Town of Bridgewater v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45754	N.D. Ohio (Federal)
MA	Town of Brookline	*Town of Brookline v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45062	N.D. Ohio (Federal)
MA	Town of Canton	*Town of Canton v. Purdue Pharma L.P., et al.*	19-1615-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	Town of Carver	*Town of Carver v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45691	N.D. Ohio (Federal)
MA	Town of Charlton	*Town of Charlton v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45689	N.D. Ohio (Federal)
MA	Town of Chelmsford	*Town of Chelmsford v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45952	N.D. Ohio (Federal)
MA	Town of Clarksburg	*Town of Clarksburg v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45882	N.D. Ohio (Federal)
MA	Town of Clinton	*Town of Clinton, Massachusetts v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46072	N.D. Ohio (Federal)
MA	Town of Danvers	*Town of Danvers v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45760	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MA	Town of Dedham	*Town of Dedham v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45039	N.D. Ohio (Federal)
MA	Town of Dennis	*Town of Dennis v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45124	N.D. Ohio (Federal)
MA	Town of Douglas	*Town of Douglas v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45706	N.D. Ohio (Federal)
MA	Town of Dudley	*Town of Dudley v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45707	N.D. Ohio (Federal)
MA	Town of East Bridgewater	*Town of East Bridgewater v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45721	N.D. Ohio (Federal)
MA	Town of Eastham	*Town of Eastham v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45864	N.D. Ohio (Federal)
MA	Town of Easton	*Town of Easton, Massachusetts v. Purdue Pharma L.P., et al.*	1:19-op-45920	N.D. Ohio (Federal)
MA	Town of Fairhaven	*Town of Fairhaven v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45060	N.D. Ohio (Federal)
MA	Town of Falmouth	*Town of Falmouth v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46095	N.D. Ohio (Federal)
MA	Town of Freetown	*Town of Freetown v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45705	N.D. Ohio (Federal)
MA	Town of Georgetown	*Town of Georgetown v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45879	N.D. Ohio (Federal)
MA	Town of Grafton	*Town of Grafton v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45753	N.D. Ohio (Federal)
MA	Town of Hanson	*Town of Hanson v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45704	N.D. Ohio (Federal)
MA	Town of Holliston	*Town of Holliston, Massachusetts v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45874	N.D. Ohio (Federal)
MA	Town of Hopedale	*Town of Hopedale v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45708	N.D. Ohio (Federal)
MA	Town of Hull	*Town of Hull, Massachusetts v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46172	N.D. Ohio (Federal)
MA	Town of Kingston	*Town of Kingston v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46090	N.D. Ohio (Federal)
MA	Town of Lakeville	*Town of Lakeville v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45743	N.D. Ohio (Federal)
MA	Town of Leicester	*Town of Leicester v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45709	N.D. Ohio (Federal)
MA	Town of Leverett	*Town of Leverett v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45836	N.D. Ohio (Federal)
MA	Town of Longmeadow	*Town of Longmeadow v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46097	N.D. Ohio (Federal)
MA	Town of Ludlow	*Town of Ludlow v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45906	N.D. Ohio (Federal)
MA	Town of Lunenberg	*Town of Lunenberg, Massachusetts v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46156	N.D. Ohio (Federal)
MA	Town of Lynnfield	*Town of Lynnfield v. Purdue Pharma L.P., et al.*	19-1330-BLS2	MDL - In re Opioid

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	Town of Marblehead	*Town of Marblehead v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45791	N.D. Ohio (Federal)
MA	Town of Marshfield	*Town of Marshfield v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45752	N.D. Ohio (Federal)
MA	Town of Mashpee	*Town of Mashpee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45755	N.D. Ohio (Federal)
MA	Town of Mattapoisett	*Town of Mattapoisett v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45890	N.D. Ohio (Federal)
MA	Town of Middleborough	*Town of Middleborough v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46200	N.D. Ohio (Federal)
MA	Town of Milford	*Town of Milford v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45783	N.D. Ohio (Federal)
MA	Town of Millbury	*Town of Millbury v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46123	N.D. Ohio (Federal)
MA	Town of Millis	*Town of Millis, Massachusetts v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45275	N.D. Ohio (Federal)
MA	Town of Nantucket	*Town of Nantucket v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45703	N.D. Ohio (Federal)
MA	Town of Natick	*Town of Natick v. Purdue Pharma L.P., et al.*	19-2002-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	Town of North Andover	*Town of North Andover v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46159	N.D. Ohio (Federal)
MA	Town of North Attleborough	*Town of North Attleborough v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45744	N.D. Ohio (Federal)
MA	Town of North Reading	*Town of North Reading v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45856	N.D. Ohio (Federal)
MA	Town of Northbridge	*Town of Northbridge v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45711	N.D. Ohio (Federal)
MA	Town of Norton	*Town of Norton v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45787	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MA	Town of Norwell	*Town of Norwell v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45815	N.D. Ohio (Federal)
MA	Town of Norwood	*Town of Norwood v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45061	N.D. Ohio (Federal)
MA	Town of Orange	*Town of Orange v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45070	N.D. Ohio (Federal)
MA	Town of Oxford	*Town of Oxford, Massachusetts v. Purdue Pharma L.P., et al.*	1:19-op-45568	N.D. Ohio (Federal)
MA	Town of Palmer	*Town of Palmer v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45812	N.D. Ohio (Federal)
MA	Town of Pembroke	*Town of Pembroke v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45823	N.D. Ohio (Federal)
MA	Town of Plainville	*Town of Plainville v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45808	N.D. Ohio (Federal)
MA	Town of Plymouth	*Town of Plymouth v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45675	N.D. Ohio (Federal)
MA	Town of Provincetown	*Town of Provincetown v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45125	N.D. Ohio (Federal)
MA	Town of Randolph	*Town of Randolph v. Purdue Pharma L.P., et al.*	19-2573-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	Town of Rehoboth	*Town of Rehoboth v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45059	N.D. Ohio (Federal)
MA	Town of Rockland	*Town of Rockland v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45824	N.D. Ohio (Federal)
MA	Town of Salisbury	*Town of Salisbury v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45595	N.D. Ohio (Federal)
MA	Town of Sandwich	*Town of Sandwich v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45891	N.D. Ohio (Federal)
MA	Town of Scituate	*Town of Scituate v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45063	N.D. Ohio (Federal)
MA	Town of Seekonk	*Town of Seekonk v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45881	N.D. Ohio (Federal)
MA	Town of Sheffield	*Town of Sheffield v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46001	N.D. Ohio (Federal)
MA	Town of Shirley	*Town of Shirley v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45880	N.D. Ohio (Federal)
MA	Town of Somerset	*Town of Somerset v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45769	N.D. Ohio (Federal)
MA	Town of South Hadley	*Town of South Hadley v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46000	N.D. Ohio (Federal)
MA	Town of Southbridge	*Town of Southbridge v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45686	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MA	Town of Spencer	*Town of Spencer v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45809	N.D. Ohio (Federal)
MA	Town of Stoneham	*Town of Stoneham v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46164	N.D. Ohio (Federal)
MA	Town of Stoughton	*Town of Stoughton v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45023	N.D. Ohio (Federal)
MA	Town of Sturbridge	*Town of Sturbridge v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45990	N.D. Ohio (Federal)
MA	Town of Sudbury	*Town of Sudbury v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45877	N.D. Ohio (Federal)
MA	Town of Sutton	*Town of Sutton v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45810	N.D. Ohio (Federal)
MA	Town of Swampscott	*Town of Swampscott v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45911	N.D. Ohio (Federal)
MA	Town of Templeton	*Town of Templeton v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45784	N.D. Ohio (Federal)
MA	Town of Tewksbury	*Town of Tewksbury v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45077	N.D. Ohio (Federal)
MA	Town of Truro	*Town of Truro v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45816	N.D. Ohio (Federal)
MA	Town of Tyngsborough	*Town of Tyngsborough v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45770	N.D. Ohio (Federal)
MA	Town of Upton	*Town of Upton v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46160	N.D. Ohio (Federal)
MA	Town of Wakefield	*Town of Wakefield v. Purdue Pharma L.P., et al.*	19-1499-BLS2	MDL - In re Opioid Litigation (MA - Superior Court, County of Suffolk) (State MDL)
MA	Town of Walpole	*Town of Walpole v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46093	N.D. Ohio (Federal)
MA	Town of Ware	*Town of Ware v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45907	N.D. Ohio (Federal)
MA	Town of Warren	*Town of Warren v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45811	N.D. Ohio (Federal)
MA	Town of Watertown	*Town of Watertown v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45674	N.D. Ohio (Federal)
MA	Town of Wellfleet	*Town of Wellfleet, Massachusetts v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45556	N.D. Ohio (Federal)
MA	Town of West Boylston	*Town of West Boylston v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45858	N.D. Ohio (Federal)
MA	Town of West Bridgewater	*Town of West Bridgewater v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46102	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MA	Town of West Springfield	*Town of West Springfield v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45813	N.D. Ohio (Federal)
MA	Town of West Tisbury	*Town of West Tisbury v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45790	N.D. Ohio (Federal)
MA	Town of Westborough	*Town of Westborough v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45859	N.D. Ohio (Federal)
MA	Town of Westford	*Town of Westford v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46007	N.D. Ohio (Federal)
MA	Town of Weymouth	*Town of Weymouth v. Purdue Pharma L.P., et al.*	1:19-op-45672	N.D. Ohio (Federal)
MA	Town of Williamsburg	*Town of Williamsburg v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45883	N.D. Ohio (Federal)
MA	Town of Wilmington	*Town of Wilmington v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46158	N.D. Ohio (Federal)
MA	Town of Winchendon	*Town of Winchendon v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45687	N.D. Ohio (Federal)
MA	Town of Winthrop	*Town of Winthrop v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45814	N.D. Ohio (Federal)
MD	Baltimore City Board of School Commissioners	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
MD	City of Aberdeen	*City of Aberdeen, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45772	N.D. Ohio (Federal)
MD	City of Bel Air	*City of Bel Air, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45669	N.D. Ohio (Federal)
MD	City of Berlin	*City of Berlin, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45676	N.D. Ohio (Federal)
MD	City of Bowie	*Harford County, Caroline County, Garrett County, Frederick County, Talbot County, City of Frederick, The Mayor and Common Council of Westminster, City of Bowie and the Mayor and Council of Rockville, Maryland v. Purdue Pharma L.P., et al.*	1:18-op-45853	N.D. Ohio (Federal)
MD	City of Cambridge	*City of Cambridge, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45611	N.D. Ohio (Federal)
MD	City of Charlestown	*City of Charlestown, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45677	N.D. Ohio (Federal)
MD	City of Cumberland	*City of Cumberland, Maryland v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45624	N.D. Ohio (Federal)
MD	City of Frederick	*Harford County, Caroline County, Garrett County, Frederick County, Talbot County, City of Frederick, The Mayor and Common Council of Westminster, City of Bowie and the Mayor and Council of Rockville, Maryland v. Purdue Pharma L.P., et al.*	1:18-op-45853	N.D. Ohio (Federal)
MD	City of Frostburg	*City of Frostburg v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45617	N.D. Ohio (Federal)
MD	City of Grantsville	*City of Grantsville, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45668	N.D. Ohio (Federal)
MD	City of Hagerstown	*City of Hagerstown, Maryland v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45622	N.D. Ohio (Federal)
MD	City of Havre De Grace	*City of Havre De Grace v. Purdue Pharma L.P., et al.*	1:19-op-45678	N.D. Ohio (Federal)
MD	City of Laurel	*City of Laurel, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45714	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MD	City of Mountain Lake Park	*City of Mountain Lake Park, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45666	N.D. Ohio (Federal)
MD	City of North East	*City of North East, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45670	N.D. Ohio (Federal)
MD	City of Oakland	*City of Oakland, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45916	N.D. Ohio (Federal)
MD	City of Perryville	*City of Perryville, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45679	N.D. Ohio (Federal)
MD	City of Seat Pleasant	*The City of Seat Pleasant, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45288	N.D. Ohio (Federal)
MD	City of Vienna	*City of Vienna, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45680	N.D. Ohio (Federal)
MD	County of Allegany	*Allegany County, Maryland v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45652	N.D. Ohio (Federal)
MD	County of Anne Arundel	*Anne Arundel County, Maryland v. Purdue Pharma L.P., et al.*	C-02-CV-18-000021	MD - Circuit Court for Anne Arundel (State)
MD	County of Baltimore	*Baltimore County v. Purdue Pharma L.P., et al.*	1:18-op-45554	N.D. Ohio (Federal)
MD	County of Calvert (County Commissioners)	*County Commissioners of Calvert v. Purdue Pharma L.P., et al.*	1:19-op-45609	N.D. Ohio (Federal)
MD	County of Caroline	*Harford County, Caroline County, Garrett County, Frederick County, Talbot County, City of Frederick, The Mayor and Common Council of Westminster, City of Bowie and the Mayor and Council of Rockville, Maryland v. Purdue Pharma L.P., et al.*	1:18-op-45853	N.D. Ohio (Federal)
MD	County of Carroll (County Commissioners)	*The County Commissioner of Carroll County v. Purdue Pharma L.P., et al.*	1:20-op-45052	N.D. Ohio (Federal)
MD	County of Cecil	*Cecil County, Maryland, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45100	N.D. Ohio (Federal)
MD	County of Charles (County Commissioners)	*County Commissioners of Charles County v. Purdue Pharma L.P., et al.*	1:19-op-45094	N.D. Ohio (Federal)
MD	County of Dorchester	*Dorchester County, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45610	N.D. Ohio (Federal)
MD	County of Frederick	*Harford County, Caroline County, Garrett County, Frederick County, Talbot County, City of Frederick, The Mayor and Common Council of Westminster, City of Bowie and the Mayor and Council of Rockville, Maryland v. Purdue Pharma L.P., et al.*	1:18-op-45853	N.D. Ohio (Federal)
MD	County of Garrett	*Harford County, Caroline County, Garrett County, Frederick County, Talbot County, City of Frederick, The Mayor and*	1:18-op-45853	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Common Council of Westminster, City of Bowie and the Mayor and Council of Rockville, Maryland v. Purdue Pharma L.P., et al.		
MD	County of Harford	*Harford County, Caroline County, Garrett County, Frederick County, Talbot County, City of Frederick, The Mayor and Common Council of Westminster, City of Bowie and the Mayor and Council of Rockville, Maryland v. Purdue Pharma L.P., et al.*	1:18-op-45853	N.D. Ohio (Federal)
MD	County of Howard	*Howard County, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-46169	N.D. Ohio (Federal)
MD	County of Montgomery	*Montgomery County, Maryland v. Purdue Pharma L.P., et al.*	1:18-op-45212	N.D. Ohio (Federal)
MD	County of Prince George's	*Prince George's County Maryland v. Purdue Pharma L.P., et al.*	1:18-op-45501	N.D. Ohio (Federal)
MD	County of Somerset	*County of Somerset, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45911	N.D. Ohio (Federal)
MD	County of St. Mary's (County Commissioners)	*Commissioners of St. Mary's County, Maryland v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46334	N.D. Ohio (Federal)
MD	County of Talbot	*Harford County, Caroline County, Garrett County, Frederick County, Talbot County, City of Frederick, The Mayor and Common Council of Westminster, City of Bowie and the Mayor and Council of Rockville, Maryland v. Purdue Pharma L.P., et al.*	1:18-op-45853	N.D. Ohio (Federal)
MD	County of Washington (Board of County Commissioners)	*Board of County Commissioners of Washington County, Maryland v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46060	N.D. Ohio (Federal)
MD	County of Wicomico	*County of Wicomico, Maryland v. Purdue Pharma L.P., et al.*	1:19-op-45681	N.D. Ohio (Federal)
MD	Mayor and City Council of Baltimore	*Mayor & City Council of Baltimore v. Purdue Pharma L.P., et al.*	24C18000515	MD - Circuit Court for Baltimore City (State)
MD	Mayor and Common Council of Westminster	*Harford County, Caroline County, Garrett County, Frederick County, Talbot County, City of Frederick, The Mayor and Common Council of Westminster, City of Bowie and the Mayor and Council of Rockville, Maryland v. Purdue Pharma L.P., et al.*	1:18-op-45853	N.D. Ohio (Federal)
MD	Mayor and Council of Rockville	*Harford County, Caroline County, Garrett County, Frederick County, Talbot County, City of Frederick, The Mayor and Common Council of Westminster, City of Bowie and the Mayor and Council of Rockville, Maryland v. Purdue Pharma L.P., et al.*	1:18-op-45853	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MD	Town of Cottage City	*Towns of Cottage City, Forest Heights, North Brentwood and Upper Marlboro v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45235	N.D. Ohio (Federal)
MD	Town of Forest Heights	*Towns of Cottage City, Forest Heights, North Brentwood and Upper Marlboro v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45235	N.D. Ohio (Federal)
MD	Town of North Brentwood	*Towns of Cottage City, Forest Heights, North Brentwood and Upper Marlboro v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45235	N.D. Ohio (Federal)
MD	Town of Upper Marlboro	*Towns of Cottage City, Forest Heights, North Brentwood and Upper Marlboro v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45235	N.D. Ohio (Federal)
ME	Board of Education of Bangor School Department	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Cape Elizabeth School Department	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45281	N.D. Ohio (Federal)
ME	Board of Education of Ellsworth School Department	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine Regional School Unit 10	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine Regional School Unit 13	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine Regional School Unit 25	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine Regional School Unit 26	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45281	N.D. Ohio (Federal)
ME	Board of Education of Maine Regional School Unit 29	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine Regional School Unit 34	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine Regional School Unit 40	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine Regional School Unit 50	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine Regional School Unit 57	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
ME	Board of Education of Maine Regional School Unit 60	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45281	N.D. Ohio (Federal)
ME	Board of Education of Maine Regional School Unit 71	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine Regional School Unit 9	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine School Administrative District 11	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine School Administrative District 15	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine School Administrative District 28 Five Town Central School District	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45281	N.D. Ohio (Federal)
ME	Board of Education of Maine School Administrative District 35	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine School Administrative District 44	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine School Administrative District 53	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine School Administrative District 55	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Maine School Administrative District 6	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45281	N.D. Ohio (Federal)
ME	Board of Education of Maine School	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
	Administrative District 61	*Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*		
ME	Board of Education of Maine School Administrative District 72	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Portland School Department	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of Scarborough School Department	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of South Portland School Department	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	Board of Education of St. George Municipal School District	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45281	N.D. Ohio (Federal)
ME	Board of Education of Waterville School Department	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
ME	City of Auburn	*City of Auburn v. Purdue Pharma L.P., et al.*	1:19-op-45188	N.D. Ohio (Federal)
ME	City of Augusta	*City of Augusta v. Purdue Pharma L.P., et al.*	1:19-op-45182	N.D. Ohio (Federal)
ME	City of Bangor	*City of Bangor v. Purdue Pharma L.P., et al.*	1:18-op-46314	N.D. Ohio (Federal)
ME	City of Biddeford	*City of Biddeford v. Purdue Pharma L.P., et al.*	1:19-op-45258	N.D. Ohio (Federal)
ME	City of Calais	*The City of Calais, Maine v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45051	N.D. Ohio (Federal)
ME	City of Lewiston	*City of Lewiston v. Purdue Pharma L.P., et al.*	1:18-op-46315	N.D. Ohio (Federal)
ME	City of Portland	*City of Portland v. Purdue Pharma L.P., et al.*	1:18-op-46313	N.D. Ohio (Federal)
ME	City of Rockland	*City of Rockland v. Purdue Pharma L.P., et al.*	1:19-op-45823	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
ME	City of Saco	*City of Saco v. Purdue Pharma L.P., et al.*	1:19-op-45310	N.D. Ohio (Federal)
ME	City of Sanford	*City of Sanford v. Purdue Pharma L.P., et al.*	1:19-op-45311	N.D. Ohio (Federal)
ME	City of Waterville	*City of Waterville v. Purdue Pharma L.P., et al.*	1:19-op-45193	N.D. Ohio (Federal)
ME	County of Androscoggin	*Androscoggin County v. Purdue Pharma L.P., et al.*	1:19-op-45205	N.D. Ohio (Federal)
ME	County of Aroostook	*Aroostook County v. Purdue Pharma L.P., et al.*	1:19-op-45183	N.D. Ohio (Federal)
ME	County of Cumberland	*Cumberland County v. Purdue Pharma L.P., et al.*	1:19-op-45259	N.D. Ohio (Federal)
ME	County of Kennebec	*Kennebec County v. Purdue Pharma L.P., et al.*	1:19-op-45257	N.D. Ohio (Federal)
ME	County of Knox	*Knox County, State of Maine v. Purdue Pharma L.P., et al.*	1:19-op-45822	N.D. Ohio (Federal)
ME	County of Lincoln	*Lincoln County v. Purdue Pharma L.P., et al.*	1:19-op-45190	N.D. Ohio (Federal)
ME	County of Penobscot	*Penobscot County v. Purdue Pharma L.P., et al.*	1:19-op-45184	N.D. Ohio (Federal)
ME	County of Sagadahoc	*Sagadahoc County v. Purdue Pharma L.P., et al.*	1:19-op-45189	N.D. Ohio (Federal)
ME	County of Somerset	*Somerset County v. Purdue Pharma L.P., et al.*	1:19-op-45186	N.D. Ohio (Federal)
ME	County of Waldo	*Waldo County v. Purdue Pharma L.P., et al.*	1:19-op-45309	N.D. Ohio (Federal)
ME	County of Washington	*Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45185	N.D. Ohio (Federal)
ME	County of York	*York County v. Purdue Pharma L.P., et al.*	1:19-op-45191	N.D. Ohio (Federal)
MI	Charter Township of Canton	*Charter Township of Canton, City of Livonia, Charter of Township of Northville, City of Romulus, Charter Township of Van Buren, City of Wayne and Charter Township of Huron, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46134	N.D. Ohio (Federal)
MI	Charter Township of Clinton	*Charter Township of Clinton, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46135	N.D. Ohio (Federal)
MI	Charter Township of Harrison	*Charter Township of Harrison v. The Pain Center USA, PLLC, et al.*	1:19-op-45863	N.D. Ohio (Federal)
MI	Charter Township of Huron	*Charter Township of Canton, City of Livonia, Charter of Township of Northville, City of Romulus, Charter Township of Van Buren, City of Wayne and Charter Township of Huron, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46134	N.D. Ohio (Federal)
MI	Charter Township of Northville	*Charter Township of Canton, City of Livonia, Charter of Township of Northville, City of Romulus, Charter Township of Van Buren, City of Wayne and Charter Township of Huron, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46134	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MI	Charter Township of Pittsfield	*Charter Township of Pittsfield, Michigan v. Purdue Pharma L.P., et al.*	1:19-op-45566	N.D. Ohio (Federal)
MI	Charter Township of Van Buren	*Charter Township of Canton, City of Livonia, Charter of Township of Northville, City of Romulus, Charter Township of Van Buren, City of Wayne and Charter Township of Huron, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46134	N.D. Ohio (Federal)
MI	City of Detroit	*City of Detroit, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45084	N.D. Ohio (Federal)
MI	City of East Lansing	*City of East Lansing, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45902	N.D. Ohio (Federal)
MI	City of Escanaba	*City of Escanaba, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45068	N.D. Ohio (Federal)
MI	City of Flint	*City of Flint v. Purdue Pharma L.P., et al.*	1:19-op-45122	N.D. Ohio (Federal)
MI	City of Grand Rapids	*City of Grand Rapids, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45406	N.D. Ohio (Federal)
MI	City of Iron Mountain	*City of Iron Mountain, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45344	N.D. Ohio (Federal)
MI	City of Jackson	*City of Jackson, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45904	N.D. Ohio (Federal)
MI	City of Lansing	*City of Lansing, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45054	N.D. Ohio (Federal)
MI	City of Livonia	*Charter Township of Canton, City of Livonia, Charter of Township of Northville, City of Romulus, Charter Township of Van Buren, City of Wayne and Charter Township of Huron, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46134	N.D. Ohio (Federal)
MI	City of Pontiac	*City of Pontiac, Michigan v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-46183	N.D. Ohio (Federal)
MI	City of Romulus	*Charter Township of Canton, City of Livonia, Charter of Township of Northville, City of Romulus, Charter Township of Van Buren, City of Wayne and Charter Township of Huron, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46134	N.D. Ohio (Federal)
MI	City of Sault Sainte Marie	*City of Sault Sainte Marie, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45928	N.D. Ohio (Federal)
MI	City of Sterling Heights	*City of Sterling Heights v. The Pain Center USA, PLLC, et al.*	1:19-op-45864	N.D. Ohio (Federal)
MI	City of Traverse City	*City of Traverse City, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45901	N.D. Ohio (Federal)
MI	City of Warren	*City of Warren v. The Pain Center USA, PLLC, et al.*	1:19-op-45865	N.D. Ohio (Federal)
MI	City of Wayne	*Charter Township of Canton, City of Livonia, Charter of Township of Northville, City of Romulus, Charter Township of Van Buren, City of Wayne and Charter Township of Huron, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46134	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MI	City of Westland	*City of Westland, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45903	N.D. Ohio (Federal)
MI	Count of Saginaw	*Count of Saginaw, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45082	N.D. Ohio (Federal)
MI	County of Alcona	*County of Alcona, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45340	N.D. Ohio (Federal)
MI	County of Alger	*County of Alger, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45360	N.D. Ohio (Federal)
MI	County of Alpena	*County of Alpena, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45871	N.D. Ohio (Federal)
MI	County of Antrim	*County of Antrim, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45354	N.D. Ohio (Federal)
MI	County of Arenac	*County of Arenac, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45341	N.D. Ohio (Federal)
MI	County of Baraga	*County of Baraga, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45361	N.D. Ohio (Federal)
MI	County of Bay	*The County of Bay, Michigan v. Purdue Pharma L.P., et al.*	1:19-op-45228	N.D. Ohio (Federal)
MI	County of Benzie	*County of Benzie, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45356	N.D. Ohio (Federal)
MI	County of Berrien	*County of Berrien, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45887	N.D. Ohio (Federal)
MI	County of Branch	*Branch County, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46096	N.D. Ohio (Federal)
MI	County of Calhoun	*Calhoun County, Michigan v. Purdue Pharma L.P., et al.*	1:19-op-45560	N.D. Ohio (Federal)
MI	County of Cass	*County of Cass, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45868	N.D. Ohio (Federal)
MI	County of Charlevoix	*County of Charlevoix, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45897	N.D. Ohio (Federal)
MI	County of Cheboygan	*County of Cheboygan v. Purdue Pharma L.P., et al.*	1:19-op-45636	N.D. Ohio (Federal)
MI	County of Chippewa	*County of Chippewa, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45066	N.D. Ohio (Federal)
MI	County of Clinton	*County of Clinton, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45889	N.D. Ohio (Federal)
MI	County of Crawford	*County of Crawford, Michigan, v. Purdue Pharma L.P., et al.*	1:18-op-45105	N.D. Ohio (Federal)
MI	County of Delta	*County of Delta, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45067	N.D. Ohio (Federal)
MI	County of Dickinson	*County of Dickinson, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45342	N.D. Ohio (Federal)
MI	County of Eaton	*County of Eaton, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45971	N.D. Ohio (Federal)
MI	County of Genesee	*County of Genesee, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45083	N.D. Ohio (Federal)
MI	County of Grand Traverse	*County of Grand Traverse, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45056	N.D. Ohio (Federal)
MI	County of Gratiot	*County of Gratiot, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45339	N.D. Ohio (Federal)
MI	County of Hillsdale	*County of Hillsdale, Michigan v. Purdue Pharma L.P., et al*	1:18-op-45355	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MI	County of Houghton	*County of Houghton, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45866	N.D. Ohio (Federal)
MI	County of Ingham	*County of Ingham, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46178	N.D. Ohio (Federal)
MI	County of Ionia	*County of Ionia, Michigan v. Purdue Pharma L.P., et al.*	1:19-op-45261	N.D. Ohio (Federal)
MI	County of Iosco	*County of Iosco, Michigan v. Purdue Pharma L.P., et al*	1:18-op-45343	N.D. Ohio (Federal)
MI	County of Iron	*County of Iron, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45888	N.D. Ohio (Federal)
MI	County of Isabella	*County of Isabella, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45349	N.D. Ohio (Federal)
MI	County of Kalamazoo	*Kalamazoo County, Michigan v. Purdue Pharma L.P., et al.*	1:19-op-45561	N.D. Ohio (Federal)
MI	County of Kent	*County of Kent, Michigan v. Purdue Pharma L.P., et al.*	1:19-op-45000	N.D. Ohio (Federal)
MI	County of Lake	*County of Lake, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45366	N.D. Ohio (Federal)
MI	County of Leelanau	*County of Leelanau, Michigan, v. Purdue Pharma L.P., et al.*	1:18-op-45111	N.D. Ohio (Federal)
MI	County of Lenawee	*County of Lenawee, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45351	N.D. Ohio (Federal)
MI	County of Livingston	*County of Livingston, Michigan v. Purdue Pharma L.P., et al.*	1:19-op-45262	N.D. Ohio (Federal)
MI	County of Luce	*County of Luce, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45362	N.D. Ohio (Federal)
MI	County of Macomb	*Count of Macomb, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45085	N.D. Ohio (Federal)
MI	County of Manistee	*County of Manistee, Michigan, v. Purdue Pharma L.P., et al.*	1:18-op-45113	N.D. Ohio (Federal)
MI	County of Marquette	*County of Marquette, Michigan, v. Purdue Pharma L.P., et al.*	1:18-op-45104	N.D. Ohio (Federal)
MI	County of Mason	*County of Mason, Michigan, v. Purdue Pharma L.P., et al.*	1:18-op-45112	N.D. Ohio (Federal)
MI	County of Monroe	*County of Monroe v. Purdue Pharma L.P., et al.*	1:18-op-45158	N.D. Ohio (Federal)
MI	County of Montcalm	*County of Montcalm, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45865	N.D. Ohio (Federal)
MI	County of Montmorency	*County of Montmorency v. Purdue Pharma L.P., et al.*	1:18-op-45347	N.D. Ohio (Federal)
MI	County of Muskegon	*Muskegon County, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46199	N.D. Ohio (Federal)
MI	County of Newaygo	*County of Newaygo, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-46187	N.D. Ohio (Federal)
MI	County of Oakland	*County of Wayne and County of Oakland v. Purdue Pharma L.P., et al.*	1:17-op-45102	N.D. Ohio (Federal)
MI	County of Oceana	*County of Oceana, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45359	N.D. Ohio (Federal)
MI	County of Ogemaw	*County of Ogemaw, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45348	N.D. Ohio (Federal)
MI	County of Ontonagon	*County of Ontonagon, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45893	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MI	County of Osceola	*County of Osceola, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45357	N.D. Ohio (Federal)
MI	County of Otsego	*County of Otsego, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45345	N.D. Ohio (Federal)
MI	County of Presque Isle	*County of Presque Isle, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45894	N.D. Ohio (Federal)
MI	County of Roscommon	*County of Roscommon, Michigan, v. Purdue Pharma L.P., et al.*	1:18-op-45102	N.D. Ohio (Federal)
MI	County of Sanilac	*County of Sanilac, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45352	N.D. Ohio (Federal)
MI	County of Shiawassee	*County of Shiawassee, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45350	N.D. Ohio (Federal)
MI	County of St. Clair	*County of St. Clair, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45896	N.D. Ohio (Federal)
MI	County of Tuscola	*County of Tuscola v. Purdue Pharma L.P., et al.*	1:18-op-45870	N.D. Ohio (Federal)
MI	County of Washtenaw	*County of Washtenaw, Michigan v. Purdue Pharma L.P., et al.*	1:18-op-45886	N.D. Ohio (Federal)
MI	County of Wayne	*County of Wayne and County of Oakland v. Purdue Pharma L.P., et al.*	1:17-op-45102	N.D. Ohio (Federal)
MI	County of Wexford	*County of Wexford, Michigan v. Purdue Pharma L.P., et al*	1:18-op-45364	N.D. Ohio (Federal)
MI	Detroit Wayne Mental Health Authority	*Detroit Wayne Mental Health Authority v. Purdue Pharma L.P., et al.*	1:18-op-46332	N.D. Ohio (Federal)
MN	Board of Education of Minnetonka School District No. 276	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
MN	City of Coon Rapids	*City of Coon Rapids, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45835	N.D. Ohio (Federal)
MN	City of Duluth	*City of Duluth, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45304	N.D. Ohio (Federal)
MN	City of Minneapolis	*Minneapolis, Minnesota v. Purdue Pharma L.P., et al.*	1:18-op-45850	N.D. Ohio (Federal)
MN	City of North St. Paul	*City of North St. Paul, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-46066	N.D. Ohio (Federal)
MN	City of Proctor	*City of Proctor, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45748	N.D. Ohio (Federal)
MN	City of Rochester	*City of Rochester, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45501	N.D. Ohio (Federal)
MN	City of Saint Paul	*City of Saint Paul, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45424	N.D. Ohio (Federal)
MN	County of Anoka	*County of Anoka, Minnesota v. Purdue Pharma L.P., et al.*	1:18-op-45101	N.D. Ohio (Federal)
MN	County of Beltrami	*Beltrami County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45776	N.D. Ohio (Federal)
MN	County of Big Stone	*Big Stone County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45102	N.D. Ohio (Federal)
MN	County of Carlton	*Carlton County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45608	N.D. Ohio (Federal)
MN	County of Carver	*Carver County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45798	N.D. Ohio (Federal)
MN	County of Dakota	*Dakota County v. Purdue Pharma L.P., et al.*	1:18-op-46112	N.D. Ohio (Federal)
MN	County of Douglas	*Douglas County, Minnesota v. Teva Pharmaceuticals USA, Inc., et al.*	1:18-op-45428	N.D. Ohio (Federal)
MN	County of Freeborn	*Freeborn County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45737	N.D. Ohio (Federal)
MN	County of Hennepin	*Hennepin County, Minnesota v. Purdue Pharma L.P., et al.*	1:18-op-45232	N.D. Ohio (Federal)
MN	County of Itasca	*Itasca County, Minnesota v. Purdue Pharma L.P., et al.*	1:18-op-45958	N.D. Ohio (Federal)
MN	County of McLeod	*McLeod County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45332	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MN	County of Meeker	*Meeker County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45343	N.D. Ohio (Federal)
MN	County of Morrison	*Morrison County, Minnesota v. Purdue Pharma L.P., et al.*	1:18-op-45429	N.D. Ohio (Federal)
MN	County of Mower	*Mower County, Minnesota v. Purdue Pharma L.P., et al.*	1:17-op-45072	N.D. Ohio (Federal)
MN	County of Olmsted	*Olmsted County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45547	N.D. Ohio (Federal)
MN	County of Pine	*Pine County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45738	N.D. Ohio (Federal)
MN	County of Ramsey	*Ramsey County, Minnesota v. Purdue Pharma L.P., et al.*	1:17-op-45073	N.D. Ohio (Federal)
MN	County of Roseau	*Roseau County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45344	N.D. Ohio (Federal)
MN	County of Sibley	*Sibley County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45333	N.D. Ohio (Federal)
MN	County of St. Louis	*St. Louis County, Minnesota v. Purdue Pharma L.P., et al.*	1:18-op-45430	N.D. Ohio (Federal)
MN	County of Steele	*Steele County, Minnesota, Waseca County, Minnesota, Minnesota Prairie Health Alliance v. Purdue Pharma L.P., et al.*	1:19-op-45800	N.D. Ohio (Federal)
MN	County of Waseca	*Steele County, Minnesota, Waseca County, Minnesota, Minnesota Prairie Health Alliance v. Purdue Pharma L.P., et al.*	1:19-op-45800	N.D. Ohio (Federal)
MN	County of Washington	*Washington County, Minnesota v. Purdue Pharma L.P., et al.*	1:17-op-45074	N.D. Ohio (Federal)
MN	County of Winona	*Winona County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45271	N.D. Ohio (Federal)
MN	County of Wright	*Wright County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45661	N.D. Ohio (Federal)
MN	County of Yellow Medicine	*Yellow Medicine County, Minnesota v. Purdue Pharma L.P., et al.*	1:19-op-45358	N.D. Ohio (Federal)
MN	Minnesota Prairie Health Alliance	*Steele County, Minnesota, Waseca County, Minnesota, Minnesota Prairie Health Alliance v. Purdue Pharma L.P., et al.*	1:19-op-45800	N.D. Ohio (Federal)
MO	City of Independence	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	City of Joplin	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve,*	1:19-op-45371	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.		
MO	City of Kansas City	*City of Kansas City, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:18-op-46029	N.D. Ohio (Federal)
MO	City of Sedalia	*The City of Sedalia, Pettis County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45152	N.D. Ohio (Federal)
MO	City of Springfield	*The City of Springfield, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-45899	N.D. Ohio (Federal)
MO	City of St. Joseph	*City of St. Joseph, Missouri v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45798	N.D. Ohio (Federal)
MO	City of St. Louis	*City of St. Louis v. Purdue Pharma L.P., et al.*	1:18-op-46267	N.D. Ohio (Federal)
MO	County of Adair	*Adair County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45297	N.D. Ohio (Federal)
MO	County of Andrew	*Andrew County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45298	N.D. Ohio (Federal)
MO	County of Atchison	*Atchison County, Missouri v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45797	N.D. Ohio (Federal)
MO	County of Audrain	*Audrain County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46265	N.D. Ohio (Federal)
MO	County of Barry	*Barry County v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45016	N.D. Ohio (Federal)
MO	County of Barton	*Barton County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45171	N.D. Ohio (Federal)
MO	County of Boone	*Boone County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45375	N.D. Ohio (Federal)
MO	County of Buchanan	*Buchanan County, Missouri v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45028	N.D. Ohio (Federal)
MO	County of Butler	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Callaway	*Callaway County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45378	N.D. Ohio (Federal)
MO	County of Camden	*Camden County v. Dannie E. Williams, M.D., et al.*	1:20-op-45068	N.D. Ohio (Federal)
MO	County of Cape Girardeau	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas*	1:19-op-45371	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		County and Washington County v. Purdue Pharma L.P., et al.		
MO	County of Cass	*Cass County, Missouri v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45841	N.D. Ohio (Federal)
MO	County of Chariton	*Chariton County, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45790	N.D. Ohio (Federal)
MO	County of Christian	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Clinton	*Clinton County, Missouri v. Purdue Pharma L.P., et al.*	1:20-op-45130	N.D. Ohio (Federal)
MO	County of Cole	*Cole County, Missouri v. Purdue Pharma, Inc., et al.*	1:18-op-46189	N.D. Ohio (Federal)
MO	County of Crawford	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Dade	*Dade County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45224	N.D. Ohio (Federal)
MO	County of DeKalb	*Dekalb County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45299	N.D. Ohio (Federal)
MO	County of Dent	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Douglas	*Douglas County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45386	N.D. Ohio (Federal)
MO	County of Dunklin	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MO	County of Franklin	*Franklin County v. Dannie E. Williams M.D., et al.*	20AB-CC00006	MO - Circuit Court of Franklin County (State)
MO	County of Gasconade	*Gasconade County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46190	N.D. Ohio (Federal)
MO	County of Greene	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Grundy	*Grundy County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45300	N.D. Ohio (Federal)
MO	County of Henry	*Henry County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45135	N.D. Ohio (Federal)
MO	County of Hickory	*Hickory County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45295	N.D. Ohio (Federal)
MO	County of Iron	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Jackson	*Jackson County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-45965	N.D. Ohio (Federal)
MO	County of Jasper	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Jefferson	*Jefferson County v. Dannie E. Williams M.D., et al.*	20JE-CC00029	MO - Circuit Court of Jefferson County (State)
MO	County of Knox	*Knox County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45406	N.D. Ohio (Federal)
MO	County of Lafayette	*Lafayette County, Missouri v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45840	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MO	County of Lawrence	*Lawrence County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45134	N.D. Ohio (Federal)
MO	County of Lewis	*Lewis County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46263	N.D. Ohio (Federal)
MO	County of Lincoln	*Lincoln County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45069	N.D. Ohio (Federal)
MO	County of Livingston	*Livingston County, Missouri v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46168	N.D. Ohio (Federal)
MO	County of Madison	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Maries	*Maries County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46194	N.D. Ohio (Federal)
MO	County of McDonald	*McDonald County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45225	N.D. Ohio (Federal)
MO	County of Miller	*Miller County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45274	N.D. Ohio (Federal)
MO	County of Moniteau	*Moniteau County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46352	N.D. Ohio (Federal)
MO	County of Montgomery	*Montgomery County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46197	N.D. Ohio (Federal)
MO	County of New Madrid	*New Madrid County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45296	N.D. Ohio (Federal)
MO	County of Nodaway	*Nodaway County, Missouri v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45795	N.D. Ohio (Federal)
MO	County of Osage	*Osage County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46191	N.D. Ohio (Federal)
MO	County of Ozark	*Ozark County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46198	N.D. Ohio (Federal)
MO	County of Pemiscot	*Pemiscot County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45733	N.D. Ohio (Federal)
MO	County of Perry	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Pettis	*Pettis County, Missouri v. Purdue Pharma L.P., et al. / The City of Sedalia, Pettis County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45416 / 1:20-op-45152	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MO	County of Phelps	*Phelps County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46195	N.D. Ohio (Federal)
MO	County of Pike	*Pike County, Missouri v. Purdue Pharma L.P., et al.*	1:20-op-45131	N.D. Ohio (Federal)
MO	County of Polk	*Polk County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45082	N.D. Ohio (Federal)
MO	County of Pulaski	*Pulaski County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46192	N.D. Ohio (Federal)
MO	County of Ralls	*Ralls County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45292	N.D. Ohio (Federal)
MO	County of Randolph	*Randolph County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45409	N.D. Ohio (Federal)
MO	County of Ray	*Ray County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45132	N.D. Ohio (Federal)
MO	County of Reynolds	*Reynolds County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46193	N.D. Ohio (Federal)
MO	County of Ripley	*Ripley County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46262	N.D. Ohio (Federal)
MO	County of Schuyler	*Schuyler County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45408	N.D. Ohio (Federal)
MO	County of Scott	*Scott County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46174	N.D. Ohio (Federal)
MO	County of Shannon	*Shannon County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45401	N.D. Ohio (Federal)
MO	County of Shelby	*Shelby County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46264	N.D. Ohio (Federal)
MO	County of St. Charles	*St. Charles County, Missouri v. Purdue Pharma L.P., et al.*	1:18-op-46059	N.D. Ohio (Federal)
MO	County of St. Clair	*St. Clair County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45044	N.D. Ohio (Federal)
MO	County of St. Francois	*St. Francois County v. Purdue Pharma L.P., et al.*	1:19-op-45847	N.D. Ohio (Federal)
MO	County of St. Louis	*St. Louis County v. Purdue Pharma L.P., et al.*	1:17-op-45083	N.D. Ohio (Federal)
MO	County of Ste. Genevieve	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Stone	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MO	County of Taney	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Texas	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Vernon	*Vernon County, Missouri v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45133	N.D. Ohio (Federal)
MO	County of Warren	*Warren County v. Purdue Pharma L.P., et al.*	1:18-op-46196	N.D. Ohio (Federal)
MO	County of Washington	*Butler County, Cape Girardeau County, Christian County, City of Independence, City of Joplin, Crawford County, Dent County, Dunklin County, Greene County, Iron County, Jasper County, Madison County, Perry County, Ste. Genevieve, Stone County, Taney County, Texas County and Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45371	N.D. Ohio (Federal)
MO	County of Webster	*Webster County, Missouri v. Purdue Pharma L.P., et al*	1:18-op-46350	N.D. Ohio (Federal)
MO	County of Worth	*Worth County, Missouri v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45777	N.D. Ohio (Federal)
MO	County of Wright	*Wright County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45383	N.D. Ohio (Federal)
MO	Kinloch Fire Protection District of St. Louis County	*Kinloch Fire Protection District of St. Louis County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45665	N.D. Ohio (Federal)
MO	Northeast Ambulance and Fire Protection District of St. Louis County	*Northeast Ambulance and Fire Protection District of St. Louis County, Missouri v. Purdue Pharma L.P., et al.*	1:19-op-45664	N.D. Ohio (Federal)
MS	City of Amory	*City of Amory, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45549	N.D. Ohio (Federal)
MS	City of Brookhaven	*City of Brookhaven, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46143	N.D. Ohio (Federal)
MS	City of Charleston	*City of Charleston, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45398	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MS	City of Clarksdale	*City of Clarksdale v. Purdue Pharma L.P., et al.*	1:19-op-45620	N.D. Ohio (Federal)
MS	City of Cleveland	*City of Cleveland, Mississippi v. Purdue Pharma L.P., et al*	1:19-op-45879	N.D. Ohio (Federal)
MS	City of Columbia	*City of Columbia, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45048	N.D. Ohio (Federal)
MS	City of Columbus	*City of Columbus, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46286	N.D. Ohio (Federal)
MS	City of Diamondhead	*City of Diamondhead, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45749	N.D. Ohio (Federal)
MS	City of Gautier	*City of Gautier, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45871	N.D. Ohio (Federal)
MS	City of Greenwood	*City of Greenwood v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45950	N.D. Ohio (Federal)
MS	City of Grenada	*City of Grenada v. Purdue Pharma L.P., et al.*	1:19-op-45622	N.D. Ohio (Federal)
MS	City of Gulfport	*The City of Gulfport, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45291	N.D. Ohio (Federal)
MS	City of Hattiesburg	*City of Hattiesburg, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45512	N.D. Ohio (Federal)
MS	City of Holly Springs	*City of Holly Springs v. Johnson & Johnson, et al.*	CV2020-141	MS - Circuit Court of Marshall County (State)
MS	City of Indianola	*City of Indianola v. Purdue Pharma L.P., et al.*	1:19-op-45624	N.D. Ohio (Federal)
MS	City of Iuka	*City of Iuka, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46172	N.D. Ohio (Federal)
MS	City of Jackson	*City of Jackson, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45806	N.D. Ohio (Federal)
MS	City of Jonestown	*City of Jonestown v. Purdue Pharma L.P., et al.*	1:19-op-45623	N.D. Ohio (Federal)
MS	City of Kosciusko	*City of Kosciusko, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45872	N.D. Ohio (Federal)
MS	City of Laurel	*City of Laurel, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46161	N.D. Ohio (Federal)
MS	City of Long Beach	*The City of Long Beach, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45517	N.D. Ohio (Federal)
MS	City of Lumberton	*City of Lumberton, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46236	N.D. Ohio (Federal)
MS	City of Meridian	*City of Meridian, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45969	N.D. Ohio (Federal)
MS	City of Morton	*City of Morton, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45882	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MS	City of Moss Point	*City of Moss Point, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45880	N.D. Ohio (Federal)
MS	City of Mound Bayou	*City of Mound Bayou v. Purdue Pharma L.P., et al.*	1:19-op-45422	N.D. Ohio (Federal)
MS	City of Nettleton	*City of Nettleton, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45151	N.D. Ohio (Federal)
MS	City of New Albany	*City of New Albany, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45949	N.D. Ohio (Federal)
MS	City of Ocean Springs	*City of Ocean Springs, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45878	N.D. Ohio (Federal)
MS	City of Pascagoula	*The City of Pascagoula, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45934	N.D. Ohio (Federal)
MS	City of Philadelphia	*City of Philadelphia, Mississippi v. Purdue Pharma L.P., et al.*	1:18-op-45279	N.D. Ohio (Federal)
MS	City of Quitman	*City of Quitman, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45873	N.D. Ohio (Federal)
MS	City of Shannon	*City of Shannon, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45149	N.D. Ohio (Federal)
MS	City of Starkville	*City of Starkville, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45148	N.D. Ohio (Federal)
MS	City of Tupelo	*City of Tupelo, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45491	N.D. Ohio (Federal)
MS	City of Verona	*City of Verona, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45150	N.D. Ohio (Federal)
MS	City of Vicksburg	*City of Vicksburg, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45881	N.D. Ohio (Federal)
MS	City of Waynesboro	*City of Waynesboro v. AmerisourceBergen Drug Corporation, et al.*	1:21-op-45050	N.D. Ohio (Federal)
MS	City of Webb	*City of Webb, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45015	N.D. Ohio (Federal)
MS	City of Wiggins	*City of Wiggins, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45576	N.D. Ohio (Federal)
MS	County of Adams	*Adams County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45831	N.D. Ohio (Federal)
MS	County of Amite	*Amite County, Mississippi, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45097	N.D. Ohio (Federal)
MS	County of Attala	*Attala County, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45869	N.D. Ohio (Federal)
MS	County of Benton	*Benton County, Mississippi, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45119	N.D. Ohio (Federal)
MS	County of Bolivar	*Bolivar County, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45214	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MS	County of Carroll	*Carroll County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45156	N.D. Ohio (Federal)
MS	County of Chickasaw	*Chickasaw County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45158	N.D. Ohio (Federal)
MS	County of Claiborne	*Claiborne County, Mississippi v. Purdue Pharma L.P., et al.*	1:18-op-45035	N.D. Ohio (Federal)
MS	County of Clarke	*Clarke County, Mississippi v. Purdue Pharma L.P., et al.*	1:18-op-45278	N.D. Ohio (Federal)
MS	County of Covington	*Covington County, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45417	N.D. Ohio (Federal)
MS	County of Desoto	*Desoto County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45551	N.D. Ohio (Federal)
MS	County of Forrest	*Forrest County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45147	N.D. Ohio (Federal)
MS	County of Franklin	*Franklin County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45577	N.D. Ohio (Federal)
MS	County of George	*George County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45157	N.D. Ohio (Federal)
MS	County of Greene	*Greene County, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45965	N.D. Ohio (Federal)
MS	County of Grenada	*County of Grenada v. Purdue Pharma L.P., et al.*	1:18-op-46279	N.D. Ohio (Federal)
MS	County of Hancock	*Hancock County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45762	N.D. Ohio (Federal)
MS	County of Harrison	*Harrison County v. McKesson Corporation, et al.*	1:19-op-45113	N.D. Ohio (Federal)
MS	County of Hinds	*Hinds County, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45190	N.D. Ohio (Federal)
MS	County of Holmes	*Holmes County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45793	N.D. Ohio (Federal)
MS	County of Humphreys	*Humphreys County, Mississippi v. Purdue Pharma L.P., et al.*	1:18-op-45021	N.D. Ohio (Federal)
MS	County of Issaquena	*Issaquena County, Mississippi v. McKesson Corporation, et al.*	1:18-op-45764	N.D. Ohio (Federal)
MS	County of Itawamba	*Itawamba County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45396	N.D. Ohio (Federal)
MS	County of Jackson	*Jackson County, Mississippi v. Purdue Pharma L.P., et al*	1:19-op-45876	N.D. Ohio (Federal)
MS	County of Jefferson	*Jefferson County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45839	N.D. Ohio (Federal)
MS	County of Jefferson Davis	*Jefferson Davis County, Mississippi, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45070	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MS	County of Jones	*Jones County, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45875	N.D. Ohio (Federal)
MS	County of Kemper	*Kemper County, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45870	N.D. Ohio (Federal)
MS	County of LaFayette	*LaFayette County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45341	N.D. Ohio (Federal)
MS	County of Lauderdale	*Lauderdale County, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46060	N.D. Ohio (Federal)
MS	County of Lawrence	*Lawrence County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45036	N.D. Ohio (Federal)
MS	County of Lee	*Lee County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45160	N.D. Ohio (Federal)
MS	County of LeFlore	*LeFlore County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45552	N.D. Ohio (Federal)
MS	County of Lincoln	*Lincoln County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45722	N.D. Ohio (Federal)
MS	County of Madison	*County of Madison, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45106	N.D. Ohio (Federal)
MS	County of Marion	*Marion County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45075	N.D. Ohio (Federal)
MS	County of Marshall	*Marshall County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45397	N.D. Ohio (Federal)
MS	County of Monroe	*Monroe County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46173	N.D. Ohio (Federal)
MS	County of Neshoba	*Neshoba County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45843	N.D. Ohio (Federal)
MS	County of Panola	*Panola County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45154	N.D. Ohio (Federal)
MS	County of Pearl River	*Pearl River County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45548	N.D. Ohio (Federal)
MS	County of Perry	*Perry County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45778	N.D. Ohio (Federal)
MS	County of Prentiss	*Prentiss County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45723	N.D. Ohio (Federal)
MS	County of Scott	*Scott County, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45238	N.D. Ohio (Federal)
MS	County of Stone	*Stone County, Mississippi v. AmerisourceBergen Drug Corporation, et al. / Stone County, Mississippi v. McKesson Corporation, et al.*	1:18-op-45775 / 1:20-op-45168	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
MS	County of Sunflower	*Sunflower County, Mississippi v Purdue Pharma L.P., et al.*	1:18-op-45020	N.D. Ohio (Federal)
MS	County of Tallahatchie	*Tallahatchie County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45399	N.D. Ohio (Federal)
MS	County of Tate	*Tate County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45153	N.D. Ohio (Federal)
MS	County of Tippah	*Tippah County, Mississippi, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45118	N.D. Ohio (Federal)
MS	County of Tishomingo	*Tishomingo County, Mississippi v. Purdue Pharma L.P., et al.*	1:20-op-45039	N.D. Ohio (Federal)
MS	County of Tunica	*Tunica County, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45213	N.D. Ohio (Federal)
MS	County of Union	*Union County, Mississippi, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45120	N.D. Ohio (Federal)
MS	County of Walthall	*Walthall County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45411	N.D. Ohio (Federal)
MS	County of Washington	*Washington County, Mississippi v. Purdue Pharma L.P., et al.*	1:18-op-45022	N.D. Ohio (Federal)
MS	County of Wayne	*Wayne County, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45877	N.D. Ohio (Federal)
MS	County of Yalobusha	*Yalobusha County, Mississippi v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45152	N.D. Ohio (Federal)
MS	Greenwood LeFlore Hospital	*Greenwood LeFlore Hospital v. McKesson Corporation, et al.*	1:18-op-45551	N.D. Ohio (Federal)
MS	Monroe County Healthcare Authority d/b/a Monroe County Hospital	*Southwest Mississippi Regional Medical Center; Infirmary Health Hospitals, Inc.; Monroe County Healthcare Authority d/b/a Monroe County Hospital v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45175	N.D. Ohio (Federal)
MS	Pearl River County Hospital & Nursing Home	*Pearl River County Hospital & Nursing Home v. McKesson Corporation, et al.*	1:19-op-45659	N.D. Ohio (Federal)
MS	Sharkey-Issaquena Community Hospital	*Sharkey-Issaquena Community Hospital v. McKesson Corporation, et al.*	1:18-op-45765	N.D. Ohio (Federal)
MS	South Sunflower County Hospital	*Mississippi Baptist Medical Center Inc.; Baptist Medical Center- Attala, LLC; Baptist Medical Center-Yazoo, Inc.; Baptist Medical Center-Leake, Inc.; Baptist Memorial Hospital- Calhoun, Inc.; Baptist Memorial Hospital -North Mississippi, Inc.; Baptist Memorial Hospital-Golden Triangle, Inc.; Baptist Memorial Hospital-Union County, Inc.; Baptist Memorial Hospital-Booneville, Inc.; Quitman County Hospital, LLC; and*	25CI1:20-cv-00291	MS - Circuit Court of Hinds County (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		South Sunflower County Hospital v. Amneal Pharmaceuticals, LLC, et al.		
MS	Southwest Mississippi Regional Medical Center	*Southwest Mississippi Regional Medical Center; Infirmary Health Hospitals, Inc.; Monroe County Healthcare Authority d/b/a Monroe County Hospital v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45175	N.D. Ohio (Federal)
MS	Town of Arcola	*Town of Arcola v. Purdue Pharma L.P., et al.*	1:19-op-45419	N.D. Ohio (Federal)
MS	Town of Caledonia	*Town of Caledonia v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45057	N.D. Ohio (Federal)
MS	Town of Leakesville	*Town of Leakesville, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45008	N.D. Ohio (Federal)
MS	Town of McLain	*Town of McLain, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45009	N.D. Ohio (Federal)
MS	Town of Shubuta	*Town of Shubuta, Mississippi v. Teva Pharmaceuticals USA, Inc., et al. / Town of Shubuta, Mississippi v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45283 / 1:21-op-45007	N.D. Ohio (Federal)
MS	Town of Summit	*Town of Summit, Mississippi v. Purdue Pharma L.P., et al.*	1:19-op-45418	N.D. Ohio (Federal)
MT	City of Great Falls	*City of Great Falls, County of Anaconda-Deer Lodge, County of Lake and City of Missoula v. Purdue Pharma L.P., et al.*	1:19-op-45083	N.D. Ohio (Federal)
MT	City of Missoula	*City of Great Falls, County of Anaconda-Deer Lodge, County of Lake and City of Missoula v. Purdue Pharma L.P., et al.*	1:19-op-45083	N.D. Ohio (Federal)
MT	County of Anaconda-Deer Lodge	*City of Great Falls, County of Anaconda-Deer Lodge, County of Lake and City of Missoula v. Purdue Pharma L.P., et al.*	1:19-op-45083	N.D. Ohio (Federal)
MT	County of Cascade	*County of Cascade v. Purdue Pharma L.P., et al.*	1:18-op-45033	N.D. Ohio (Federal)
MT	County of Lake	*City of Great Falls, County of Anaconda-Deer Lodge, County of Lake and City of Missoula v. Purdue Pharma L.P., et al.*	1:19-op-45083	N.D. Ohio (Federal)
MT	County of Missoula	*Missoula County v. Purdue Pharma L.P., et al.*	1:19-op-45112	N.D. Ohio (Federal)
NC	City of Canton	*City of Canton, Chatham County, North Carolina v. Purdue Pharma L.P., et al.*	1:19-op-45462	N.D. Ohio (Federal)
NC	City of Fayetteville	*City of Fayetteville v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45726	N.D. Ohio (Federal)
NC	City of Greensboro	*City of Greensboro v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45289	N.D. Ohio (Federal)
NC	City of Henderson	*City of Henderson v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45768	N.D. Ohio (Federal)
NC	City of Hickory	*City of Hickory v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46307	N.D. Ohio (Federal)
NC	City of Jacksonville	*City of Jacksonville v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45115	N.D. Ohio (Federal)
NC	City of Wilmington	*City of Wilmington v. AmerisourceBergen Drug Corporation, et al*	1:18-op-45684	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
NC	City of Winston-Salem	*City of Winston-Salem v. AmerisourceBergen Drug Corporation, et al*	1:18-op-45658	N.D. Ohio (Federal)
NC	County of Alamance	*Alamance County v. Purdue Pharma L.P., et al.*	1:19-op-45615	N.D. Ohio (Federal)
NC	County of Alexander	*Alexander County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46205	N.D. Ohio (Federal)
NC	County of Alleghany	*Alleghany County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46019	N.D. Ohio (Federal)
NC	County of Anson	*Anson County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46364	N.D. Ohio (Federal)
NC	County of Ashe County	*Ashe County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46185	N.D. Ohio (Federal)
NC	County of Beaufort	*Beaufort County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45261	N.D. Ohio (Federal)
NC	County of Bertie	*Bertie County v. Purdue Pharma L.P., et al.*	1:19-op-45759	N.D. Ohio (Federal)
NC	County of Bladen	*Bladen County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45557	N.D. Ohio (Federal)
NC	County of Brunswick	*Brunswick County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45222	N.D. Ohio (Federal)
NC	County of Buncombe	*Buncombe County v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45153	N.D. Ohio (Federal)
NC	County of Burke	*Burke County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45184	N.D. Ohio (Federal)
NC	County of Cabarrus	*Cabarrus County v. Purdue Pharma L.P., et al.*	1:18-op-45747	N.D. Ohio (Federal)
NC	County of Caldwell	*Caldwell County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45263	N.D. Ohio (Federal)
NC	County of Camden	*Camden County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45001	N.D. Ohio (Federal)
NC	County of Carteret	*Carteret County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45587	N.D. Ohio (Federal)
NC	County of Caswell	*Caswell County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45875	N.D. Ohio (Federal)
NC	County of Catawba	*Catawba County, North Carolina, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45145	N.D. Ohio (Federal)
NC	County of Chatham	*City of Canton, Chatham County, North Carolina v. Purdue Pharma L.P., et al.*	1:19-op-45462	N.D. Ohio (Federal)
NC	County of Cherokee	*Cherokee County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45979	N.D. Ohio (Federal)
NC	County of Chowan	*Chowan County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46175	N.D. Ohio (Federal)
NC	County of Cleveland	*Cleveland County v. Purdue Pharma L.P., et al.*	1:18-op-45304	N.D. Ohio (Federal)
NC	County of Columbus	*Columbus County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45847	N.D. Ohio (Federal)
NC	County of Craven	*Craven County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45660	N.D. Ohio (Federal)
NC	County of Cumberland	*Cumberland County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46031	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
NC	County of Currituck	*Currituck County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46174	N.D. Ohio (Federal)
NC	County of Dare	*Dare County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45683	N.D. Ohio (Federal)
NC	County of Davidson	*Davidson County v. Purdue Pharma L.P., et al.*	1:18-op-46330	N.D. Ohio (Federal)
NC	County of Davie	*Davie County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46207	N.D. Ohio (Federal)
NC	County of Duplin	*Duplin County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45040	N.D. Ohio (Federal)
NC	County of Durham	*Durham County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45346	N.D. Ohio (Federal)
NC	County of Forsyth	*Forsyth County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45605	N.D. Ohio (Federal)
NC	County of Franklin	*Franklin County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46216	N.D. Ohio (Federal)
NC	County of Gaston	*Gaston County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45166	N.D. Ohio (Federal)
NC	County of Granville	*Granville County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45342	N.D. Ohio (Federal)
NC	County of Greene	*Greene County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45584	N.D. Ohio (Federal)
NC	County of Guilford	*Guilford County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45340	N.D. Ohio (Federal)
NC	County of Halifax	*Halifax County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45376	N.D. Ohio (Federal)
NC	County of Haywood	*Haywood County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45014	N.D. Ohio (Federal)
NC	County of Iredell	*Iredell County v. Purdue Pharma L.P., et al.*	1:18-op-45774	N.D. Ohio (Federal)
NC	County of Jones	*Jones County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45142	N.D. Ohio (Federal)
NC	County of Lee	*Lee County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45290	N.D. Ohio (Federal)
NC	County of Lenoir	*Lenoir County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45991	N.D. Ohio (Federal)
NC	County of Lincoln	*Lincoln County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45719	N.D. Ohio (Federal)
NC	County of Madison	*Madison County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46067	N.D. Ohio (Federal)
NC	County of Martin	*Martin County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45522	N.D. Ohio (Federal)
NC	County of McDowell	*McDowell County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45524	N.D. Ohio (Federal)
NC	County of Mecklenburg	*Mecklenburg County v. Purdue Pharma L.P., et al.*	1:18-op-45221	N.D. Ohio (Federal)
NC	County of Mitchell	*Mitchell County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45550	N.D. Ohio (Federal)
NC	County of Moore	*Moore County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46028	N.D. Ohio (Federal)
NC	County of New Hanover	*New Hanover County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45006	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
NC	County of Onslow	*Onslow County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45114	N.D. Ohio (Federal)
NC	County of Orange	*Orange County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45308	N.D. Ohio (Federal)
NC	County of Pamlico	*Pamlico County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45049	N.D. Ohio (Federal)
NC	County of Pasquotank	*Pasquotank County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45986	N.D. Ohio (Federal)
NC	County of Person	*Person County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45276	N.D. Ohio (Federal)
NC	County of Pitt	*Pitt County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45208	N.D. Ohio (Federal)
NC	County of Polk	*Polk County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45900	N.D. Ohio (Federal)
NC	County of Randolph	*Randolph County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45275	N.D. Ohio (Federal)
NC	County of Richmond	*Richmond County, North Carolina v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45586	N.D. Ohio (Federal)
NC	County of Robeson	*Robeson County v. Purdue Pharma L.P., et al.*	1:18-op-46141	N.D. Ohio (Federal)
NC	County of Rockingham	*Rockingham County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45015	N.D. Ohio (Federal)
NC	County of Rowan	*Rowan County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45799	N.D. Ohio (Federal)
NC	County of Rutherford	*Rutherford County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45243	N.D. Ohio (Federal)
NC	County of Sampson	*Sampson County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45583	N.D. Ohio (Federal)
NC	County of Scotland	*Scotland County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45336	N.D. Ohio (Federal)
NC	County of Stokes	*Stokes County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45185	N.D. Ohio (Federal)
NC	County of Surry	*Surry County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45086	N.D. Ohio (Federal)
NC	County of Tyrrell	*Tyrrell County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45725	N.D. Ohio (Federal)
NC	County of Vance	*Vance County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45759	N.D. Ohio (Federal)
NC	County of Warren	*Warren County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45536	N.D. Ohio (Federal)
NC	County of Washington	*Washington County v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45002	N.D. Ohio (Federal)
NC	County of Watauga	*Watauga County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45525	N.D. Ohio (Federal)
NC	County of Wayne	*Wayne County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45585	N.D. Ohio (Federal)
NC	County of Wilkes	*Wilkes County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45239	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
NC	County of Yadkin	*Yadkin County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45014	N.D. Ohio (Federal)
NC	County of Yancey	*Yancey County v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46071	N.D. Ohio (Federal)
ND	City of Bismarck	*City of Bismarck v. Purdue Pharma L.P., et al.*	1:19-op-45629	N.D. Ohio (Federal)
ND	City of Devils Lake	*City of Devils Lake v. Purdue Pharma L.P., et al.*	1:19-op-45637	N.D. Ohio (Federal)
ND	City of Fargo	*The City of Fargo v. Purdue Pharma L.P., et al.*	1:19-op-45675	N.D. Ohio (Federal)
ND	City of Grand Forks	*Cass County, North Dakota and City of Grand Forks, North Dakota v. Purdue Pharma L.P., et al.*	1:19-op-45276	N.D. Ohio (Federal)
ND	City of Lisbon	*City of Lisbon v. Purdue Pharma L.P., et al.*	1:19-op-45761	N.D. Ohio (Federal)
ND	County of Barnes	*Barnes County v. Purdue Pharma L.P., et al.*	1:19-op-45640	N.D. Ohio (Federal)
ND	County of Benson	*Benson County v. Purdue Pharma L.P., et al.*	1:19-op-45643	N.D. Ohio (Federal)
ND	County of Burleigh	*Burleigh County v. Purdue Pharma L.P., et al.*	1:19-op-45630	N.D. Ohio (Federal)
ND	County of Cass	*Cass County, North Dakota and City of Grand Forks, North Dakota v. Purdue Pharma L.P., et al.*	1:19-op-45276	N.D. Ohio (Federal)
ND	County of Dickey	*Dickey County v. Purdue Pharma L.P., et al.*	1:19-op-45919	N.D. Ohio (Federal)
ND	County of Dunn	*Dunn County v. Purdue Pharma L.P., et al.*	1:19-op-45631	N.D. Ohio (Federal)
ND	County of Eddy	*Eddy County v. Purdue Pharma L.P., et al.*	1:19-op-45917	N.D. Ohio (Federal)
ND	County of Foster	*Foster County v. Purdue Pharma L.P., et al.*	1:19-op-45918	N.D. Ohio (Federal)
ND	County of Grand Forks	*Grand Forks County v. Purdue Pharma L.P., et al.*	1:19-op-45647	N.D. Ohio (Federal)
ND	County of LaMoure	*LaMoure County v. Purdue Pharma L.P., et al.*	1:19-op-45760	N.D. Ohio (Federal)
ND	County of McKenzie	*McKenzie County v. Purdue Pharma L.P., et al.*	1:19-op-46134	N.D. Ohio (Federal)
ND	County of McLean	*McLean County v. Purdue Pharma L.P., et al.*	1:19-op-45632	N.D. Ohio (Federal)
ND	County of Mercer	*Mercer County v. Purdue Pharma L.P., et al.*	1:19-op-45635	N.D. Ohio (Federal)
ND	County of Mountrail	*Mountrail County v. Purdue Pharma L.P., et al.*	1:19-op-45634	N.D. Ohio (Federal)
ND	County of Pembina	*Pembina County v. Purdue Pharma L.P., et al.*	1:19-op-45674	N.D. Ohio (Federal)
ND	County of Pierce	*Pierce County v. Purdue Pharma L.P., et al.*	1:19-op-45683	N.D. Ohio (Federal)
ND	County of Ramsey	*Ramsey County v. Purdue Pharma L.P., et al.*	1:19-op-45641	N.D. Ohio (Federal)
ND	County of Ransom	*Ransom County v. Purdue Pharma L.P., et al.*	1:19-op-45645	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
ND	County of Richland	*Richland County v. Purdue Pharma L.P., et al.*	1:19-op-45644	N.D. Ohio (Federal)
ND	County of Rolette	*Rolette County v. Purdue Pharma L.P., et al.*	1:19-op-45646	N.D. Ohio (Federal)
ND	County of Sargent	*Sargent County v. Purdue Pharma L.P., et al.*	1:19-op-45642	N.D. Ohio (Federal)
ND	County of Stark	*Stark County v. Purdue Pharma L.P., et al.*	1:19-op-45763	N.D. Ohio (Federal)
ND	County of Towner	*Towner County v. Purdue Pharma L.P., et al.*	1:19-op-45639	N.D. Ohio (Federal)
ND	County of Walsh	*Walsh County v. Purdue Pharma L.P., et al.*	1:19-op-45638	N.D. Ohio (Federal)
ND	County of Ward	*Ward County v. Purdue Pharma L.P., et al.*	1:19-op-45762	N.D. Ohio (Federal)
ND	County of Wells	*Wells County v. Purdue Pharma L.P., et al.*	1:19-op-45682	N.D. Ohio (Federal)
ND	County of Williams	*Williams County v. Purdue Pharma L.P., et al.*	1:19-op-45633	N.D. Ohio (Federal)
NE	City of South Sioux City	*City of South Sioux City, Nebraska v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45553	N.D. Ohio (Federal)
NE	County of Douglas	*County of Douglas v. Purdue Pharma L.P., et al.*	1:19-op-45068	N.D. Ohio (Federal)
NE	County of Keith	*Keith County, Nebraska v. Purdue Pharma L.P., et al.*	1:19-op-45263	N.D. Ohio (Federal)
NE	County of Knox	*County of Knox, State of Nebraska v. McKesson Corporation, et al.*	1:18-op-45555	N.D. Ohio (Federal)
NE	County of Lincoln	*Lincoln County v. Purdue Pharma L.P., et al.*	1:19-op-45099	N.D. Ohio (Federal)
NE	County of Sarpy	*Sarpy County, Nebraska v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46038	N.D. Ohio (Federal)
NH	Board of Education of Goshen School District	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
NH	Board of Education of Kearsarge Regional School Unit - School Administrative Unit 65	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
NH	Board of Education of Lebanon School District	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
NH	Board of Education of Pittsfield School District	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools, District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45281	N.D. Ohio (Federal)
NH	Board of Education of Tamworth School District	*Board of Education of Thornton Township High Schools, District 205, 1 Rochester Public School District, Minnetonka Public School District, Mason County Public Schools, Baltimore City Public Schools, East Aurora Public Schools, District 131, Thornton Fractional High Schools,*	1:20-op-45281	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		District 215, Joliet Public Schools, District 86, Fayette County Public Schools, Larue County Public Schools, Bullitt County Public Schools, Breathitt County Public Schools, Estill County Public Schools, Harrison County Public Schools, Hart County Public Schools, Jefferson County Public Schools, Johnson County Public Schools, Lawrence County Public Schools, Martin County Public Schools, Menifee County Public Schools, Owsley County Public Schools, Wolfe County Public Schools, Bangor School Department, Cape Elizabeth School District, Maine Regional School Unit ("RSU") 10, Maine RSU 13, Maine RSU 25, Maine RSU 26, Maine RSU 29, Maine RSU 34, Maine RSU 40, Maine RSU 50, Maine RSU 57, Maine RSU 60, Maine RSU 71, Maine RSU 9, Maine School Administrative District ("SAD") 11, Maine Sad 15, Maine Sad 28/Five Town Central School District, Maine Sad 35, Maine Sad 44, Maine Sad 53, Maine Sad 55, Maine Sad 6, Maine Sad 61, Maine Sad 72, Portland School District, Scarborough School District, South Portland School District, St. George Municipal School District, Waterville School District, Ellsworth School Department; Goshen School District, Kearsarge RSU School Administrative Unit 65, Lebanon School District, Pittsfield School District, Tamworth School District, on behalf of themselves and others similarly situated v. Teva Pharmaceuticals USA, Inc., et al.		
NH	City of Belmont	*City of Belmont v. Purdue Pharma L.P., et al.*	1:19-op-45707	N.D. Ohio (Federal)
NH	City of Berlin	*Berlin, New Hampshire v. Purdue Pharma L.P., et al.*	1:18-op-46040	N.D. Ohio (Federal)
NH	City of Claremont	*City of Claremont v. Purdue Pharma L.P., et al.*	1:19-op-45690	N.D. Ohio (Federal)
NH	City of Concord	*City of Concord, New Hampshire and City of Dover, New Hampshire v. Purdue Pharma L.P., et al.*	1:18-op-45573	N.D. Ohio (Federal)
NH	City of Dover	*City of Concord, New Hampshire and City of Dover, New Hampshire v. Purdue Pharma L.P., et al.*	1:18-op-45573	N.D. Ohio (Federal)
NH	City of Franklin	*City of Franklin, New Hampshire v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45728	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
NH	City of Keene	*The City of Keene v. Purdue Pharma L.P., et al.*	1:18-op-45511	N.D. Ohio (Federal)
NH	City of Laconia	*City of Laconia, New Hampshire v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45583	N.D. Ohio (Federal)
NH	City of Manchester	*City of Manchester v. Purdue Pharma L.P., et al.*	1:17-op-45163	N.D. Ohio (Federal)
NH	City of Nashua	*The City of Nashua v. Purdue Pharma L.P., et al.*	1:18-op-45062	N.D. Ohio (Federal)
NH	City of Rochester	*City of Rochester, NH and County of Merrimack, NH v. Purdue Pharma L.P., et al.*	1:18-op-46106	N.D. Ohio (Federal)
NH	County of Belknap	*Belknap County v. Purdue Pharma L.P., et al.*	1:19-op-45705	N.D. Ohio (Federal)
NH	County of Carroll	*Carroll County v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46137	N.D. Ohio (Federal)
NH	County of Cheshire	*Cheshire County v. Purdue Pharma L.P., et al.*	1:19-op-45706	N.D. Ohio (Federal)
NH	County of Coos	*Coos County v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46136	N.D. Ohio (Federal)
NH	County of Grafton	*Grafton County v. Purdue Pharma L.P., et al.*	1:19-op-45691	N.D. Ohio (Federal)
NH	County of Hillsborough	*Hillsborough County, New Hampshire v. Purdue Pharma L.P., et al.*	1:18-op-46353	N.D. Ohio (Federal)
NH	County of Merrimack	*City of Rochester, NH and County of Merrimack, NH v. Purdue Pharma L.P., et al.*	1:18-op-46106	N.D. Ohio (Federal)
NH	County of Rockingham	*Rockingham County v. Purdue Pharma L.P., et al.*	1:19-op-45703	N.D. Ohio (Federal)
NH	County of Strafford	*Strafford County v. Purdue Pharma L.P., et al.*	1:19-op-45689	N.D. Ohio (Federal)
NH	County of Sullivan	*Sullivan County v. Purdue Pharma L.P., et al.*	1:19-op-45704	N.D. Ohio (Federal)
NH	Town of Derry	*Town of Derry, New Hampshire v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45582	N.D. Ohio (Federal)
NH	Town of Londonderry	*Town of Londonderry, New Hampshire v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45727	N.D. Ohio (Federal)
NJ	Borough of Paramus	*Borough of Paramus, New Jersey v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46046	N.D. Ohio (Federal)
NJ	Borough of Ridgefield	*The Borough of Ridgefield v. Purdue Pharma L.P., et al.*	1:18-op-46117	N.D. Ohio (Federal)
NJ	City of Bayonne	*City of Bayonne, New Jersey v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46044	N.D. Ohio (Federal)
NJ	City of Clifton	*City of Clifton, New Jersey v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46076	N.D. Ohio (Federal)
NJ	City of Elizabeth	*City of Elizabeth, New Jersey v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46045	N.D. Ohio (Federal)
NJ	City of Newark	*The City of Newark, New Jersey v. Purdue Pharma L.P., et al.*	1:18-op-45761	N.D. Ohio (Federal)
NJ	City of Paterson	*City of Paterson v. Purdue Pharma L.P., et al.*	1:18-op-45371	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
NJ	City of Trenton	*City of Trenton v. Purdue Pharma L.P., et al.*	1:19-op-46158	N.D. Ohio (Federal)
NJ	City of Vineland	*City of Vineland v. Teva Pharmaceutical Industries Ltd., et al.*	CUM-L-000422-22	NJ - Superior Court of Cumberland County (State)
NJ	County of Atlantic	*Atlantic County, New Jersey v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46071	N.D. Ohio (Federal)
NJ	County of Burlington	*County of Burlington, New Jersey v. Purdue Pharma L.P., et al.*	1:19-op-45928	N.D. Ohio (Federal)
NJ	County of Cumberland	*Cumberland County v. Purdue Pharma L.P., et al.*	1:19-op-46016	N.D. Ohio (Federal)
NJ	County of Hudson	*County of Hudson, New Jersey v. Purdue Pharma L.P., et al.*	1:18-op-45937	N.D. Ohio (Federal)
NJ	County of Monmouth	*Monmouth County v. Purdue Pharma L.P., et al.*	1:18-op-46118	N.D. Ohio (Federal)
NJ	County of Ocean	*County of Ocean, New Jersey v. Purdue Pharma L.P., et al.*	1:19-op-46157	N.D. Ohio (Federal)
NJ	County of Union	*Union County v. Purdue Pharma L.P., et al.*	1:19-op-45374	N.D. Ohio (Federal)
NJ	Town of Clinton	*Town of Clinton, New Jersey v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46085	N.D. Ohio (Federal)
NJ	Township of Barnegat	*Township of Barnegat v. Purdue Pharma L.P., et al.*	1:19-op-45925	N.D. Ohio (Federal)
NJ	Township of Bloomfield	*The Township of Bloomfield, New Jersey v. Purdue Pharma L.P., et al.*	1:18-op-45053	N.D. Ohio (Federal)
NJ	Township of Brick	*Township of Brick, New Jersey v. Purdue Pharma L.P., et al.*	1:19-op-45924	N.D. Ohio (Federal)
NJ	Township of Irvington	*Township of Irvington v. Purdue Pharma L.P., et al.*	1:17-op-45156	N.D. Ohio (Federal)
NJ	Township of Saddle Brook	*Township of Saddle Brook, New Jersey v. Purdue Pharma L.P., et al.*	1:19-op-45431	N.D. Ohio (Federal)
NM	City of Alamogordo	*City of Alamogordo, New Mexico v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46067	N.D. Ohio (Federal)
NM	City of Espanola	*City of Espanola, New Mexico v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46142	N.D. Ohio (Federal)
NM	City of Hobbs	*City of Hobbs, New Mexico v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46068	N.D. Ohio (Federal)
NM	City of Las Cruces	*City of Las Cruces v. AmerisourceBergen Drug Corporation, et al.*	1:21-op-45059	N.D. Ohio (Federal)
NM	City of Santa Fe	*City of Santa Fe v. Purdue Pharma L.P., et al.*	D-101-CV-2019-01809	NM - County of Santa Fe, 1st Judicial District (State)
NM	County of Bernalillo (Board of County Commissioners)	*Board of County Commissioners of the County of Bernalillo, New Mexico v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45301	N.D. Ohio (Federal)
NM	County of Catron (Board of County Commissioners)	*Board of County Commissioners of the County of Catron, New Mexico v.*	1:19-op-45320	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		AmerisourceBergen Drug Corporation, et al.		
NM	County of Cibola (Board of County Commissioners)	*Board of County Commissioners of the County of Cibola, New Mexico v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45321	N.D. Ohio (Federal)
NM	County of Colfax (Board of County Commissioners)	*Board of County Commissioners of The County of Colfax v. Allergan plc, et al.*	1:21-op-45055	N.D. Ohio (Federal)
NM	County of Curry (Board of County Commissioners)	*Board of County Commissioners of the County of Curry, New Mexico v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45347	N.D. Ohio (Federal)
NM	County of Dona Ana (Board of County Commissioners)	*Board of County Commissioners of the County of Dona Ana, New Mexico v. AmerisourceBergen Drug Corporation et al.*	1:18-op-46206	N.D. Ohio (Federal)
NM	County of Eddy	*County of Eddy v. Allergan plc, et al.*	1:22-op-45015	N.D. Ohio (Federal)
NM	County of Grant	*Grant County v. Purdue Pharma L.P., et al.*	1:19-op-45108	N.D. Ohio (Federal)
NM	County of Hidalgo (Board of County Commissioners)	*Board Of County Commissioners of The County of Hidalgo, New Mexico v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46069	N.D. Ohio (Federal)
NM	County of Lea (Board of County Commissioners)	*Board of County Commissioners of the County of Lea v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45266	N.D. Ohio (Federal)
NM	County of Lincoln (Board of County Commissioners)	*Board of County Commissioners of the County of Lincoln, New Mexico v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45513	N.D. Ohio (Federal)
NM	County of Luna (Board of County Commissioners)	*Board of County Commissioners of the County of Luna v. Allergan plc, et al.*	1:21-op-45056	N.D. Ohio (Federal)
NM	County of McKinley (Board of County Commissioners)	*Board of County Commissioners of the County of McKinley, New Mexico v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45033	N.D. Ohio (Federal)
NM	County of Mora	*County of Mora v. Purdue Pharma L.P., et al.*	1:17-op-45080	N.D. Ohio (Federal)
NM	County of Otero (Board of County Commissioners)	*Board of County Commissioners of the County of Otero v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45216	N.D. Ohio (Federal)
NM	County of Rio Arriba	*The County of Rio Arriba v. Purdue Pharma L.P., et al.*	1:19-op-45054	N.D. Ohio (Federal)
NM	County of Roosevelt	*The County of Roosevelt v. Purdue Pharma L.P., et al.*	1:18-op-46343	N.D. Ohio (Federal)
NM	County of San Juan	*San Juan County v. Purdue Pharma L.P., et al.*	1:18-op-45829	N.D. Ohio (Federal)
NM	County of San Miguel (Board of County Commissioners)	*Board of County Commissioners for San Miguel County v. Purdue Pharma L.P., et al.*	1:19-op-45354	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
NM	County of Sandoval	*Sandoval County, New Mexico v. Purdue Pharma L.P., et al.*	1:19-op-45421	N.D. Ohio (Federal)
NM	County of Santa Fe (Board of County Commissioners)	*Board of County Commissioners of the County of Santa Fe v. Purdue Pharma L.P., et al.*	1:18-op-45776	N.D. Ohio (Federal)
NM	County of Sierra (Board of County Commissioners)	*Board of County Commissioners of the County of Sierra, New Mexico v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45322	N.D. Ohio (Federal)
NM	County of Socorro (Board of County Commissioners)	*Board of County Commissioners of Socorro, New Mexico v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45323	N.D. Ohio (Federal)
NM	County of Taos (Board of County Commissioners)	*Board of County Commissioners of the County of Taos v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45051	N.D. Ohio (Federal)
NM	County of Torrance (Board of County Commissioners)	*Board of County Commissioners of the County of Torrance v. Allergan plc, et al.*	1:22-op-45004	N.D. Ohio (Federal)
NM	County of Union (Board of County Commissioners)	*Board of County Commissioners of the County of Union v. Allergan plc, et al.*	1:21-op-45057	N.D. Ohio (Federal)
NM	County of Valencia (Board of County Commissioners)	*Board of County Commissioners of the County of Valencia, New Mexico v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45324	N.D. Ohio (Federal)
NV	Central Lyon County Fire Protection District	*Lyon County, The North Lyon County Fire Protection District and the Central Lyon County Fire Protection District v. Teva Pharmaceuticals USA, Inc., et al.*	20-CV-00795	NV - 3rd Judicial District Court, Lyon County (State)
NV	City of Boulder	*Boulder City v. Purdue Pharma L.P., et al.*	1:19-op-45648	N.D. Ohio (Federal)
NV	City of Carson	*Carson City v. Teva Pharmaceuticals USA, Inc., et al.*	20 TRT 000471B	NV - 1st Judicial District Court, Carson City County (State)
NV	City of Ely	*City of Ely v. Teva Pharmaceuticals USA, Inc., et al.*	CV2007077	NV - 7th Judicial District Court, White Pine County (State)
NV	City of Fernley	*The City of Fernley v. Teva Pharmaceuticals USA, Inc., et al.*	20-CV-00796	NV - 3rd Judicial District Court, Lyon County (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
NV	City of Henderson	*City of Henderson v. Purdue Pharma L.P., et al.*	A-19-800695-B	NV - 8th Judicial District Court, Clark County (State)
NV	City of Las Vegas	*City of Las Vegas v. Purdue Pharma L.P., et al.*	A-19-800697-B	NV - 8th Judicial District Court, Clark County (State)
NV	City of Mesquite	*City of Mesquite v. Purdue Pharma L.P., et al.*	1:19-op-45649	N.D. Ohio (Federal)
NV	City of North Las Vegas	*City of North Las Vegas v. Purdue Pharma L.P., et al.*	A-19-800699-B	NV - 8th Judicial District Court, Clark County (State)
NV	City of Sparks	*City of Sparks v. Teva Pharmaceuticals USA, Inc., et al.*	CV20-01152	NV - 2nd Judicial District Court, Washoe County (State)
NV	City of West Wendover	*City of West Wendover v. Teva Pharmaceuticals USA, Inc., et al.*	DC-CV-20-70	NV - 4th Judicial District Court, Elko County (State)
NV	County of Churchill	*Churchill County v. Teva Pharmaceuticals USA, Inc., et al.*	20-100C-0805	NV - 10th Judicial District Court, Churchill County (State)
NV	County of Clark	*Clark County v. Purdue Pharma L.P., et al.*	1:19-op-46168	N.D. Ohio (Federal)
NV	County of Douglas	*Douglas County v. Teva Pharmaceuticals USA, Inc., et al.*	2020 CV 00139	NV - 9th Judicial District Court, Douglas County (State)
NV	County of Esmeralda	*Esmeralda County v. Teva Pharmaceuticals USA, Inc., et al.*	CV20-5117	NV - 5th Judicial District Court,

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Esmeralda County (State)
NV	County of Humboldt	*Humboldt County v. Teva Pharmaceuticals USA, Inc., et al.*	CV2022306	NV - 6th Judicial District Court, Humboldt County (State)
NV	County of Lincoln	*Lincoln County v. Teva Pharmaceuticals USA, Inc., et al.*	CV0702620	NV - 7th Judicial District Court, Lincoln County (State)
NV	County of Lyon	*Lyon County, The North Lyon County Fire Protection District and the Central Lyon County Fire Protection District v. Teva Pharmaceuticals USA, Inc., et al.*	20-CV-00795	NV - 3rd Judicial District Court, Lyon County (State)
NV	County of Mineral	*Mineral County v. Teva Pharmaceuticals USA, Inc., et al.*	21CV-TT12-2020-0104	NV - 11th Judicial District Court, Mineral County (State)
NV	County of Nye	*Nye County, Nevada v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46238	N.D. Ohio (Federal)
NV	County of Washoe	*Washoe County v. Teva Pharmaceuticals USA, Inc., et al.*	CV20-01142	NV - 2nd Judicial District Court, Washoe County (State)
NV	County of White Pine	*White Pine County v. Teva Pharmaceuticals USA, Inc., et al.*	CV2007076	NV - 7th Judicial District Court, White Pine County (State)
NV	North Lyon County Fire Protection District	*Lyon County, The North Lyon County Fire Protection District and the Central Lyon County Fire Protection District v. Teva Pharmaceuticals USA, Inc., et al.*	20-CV-00795	NV - 3rd Judicial District Court, Lyon County (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OH	Board of Education of Boardman Local Schools	*Board of Education of Boardman Local Schools and Board of Education of Liberty Local Schools v. Cephalon, Inc., et al.*	1:22-op-45023-DAP	N.D. Ohio (Federal)
OH	Board of Education of Liberty Local Schools	*Board of Education of Boardman Local Schools and Board of Education of Liberty Local Schools v. Cephalon, Inc., et al.*	1:22-op-45023-DAP	N.D. Ohio (Federal)
OH	City of Ashland	*City of Ashland, Ohio v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46203	N.D. Ohio (Federal)
OH	City of Aurora (Law Director Dean E. DePiero)	*The County of Portage, Ohio; and City of Ravenna, Ohio and City of Kent, Ohio and City of Aurora, Ohio, And The State of Ohio ex rel. Prosecuting Attorney of Portage County, Victor V. Vigluicci; Frank J. Cimino, Law Director, City of Ravenna, Ohio; Hope L. Jones, Law Director, City of Kent, Ohio; and Dean E. Depiero, Law Director, City of Aurora, Ohio v. Purdue Pharma L.P., et al.*	1:18-op-45993	N.D. Ohio (Federal)
OH	City of Barberton	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	City of Broadview Heights	*The City of Broadview Heights v. Purdue Pharma L.P., et al.*	1:18-op-45330	N.D. Ohio (Federal)
OH	City of Brunswick	*The City of Brunswick, Ohio v. Purdue Pharma L.P., et al.*	1:18-op-45199	N.D. Ohio (Federal)
OH	City of Cincinnati	*City of Cincinnati, Ohio v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45041	N.D. Ohio (Federal)
OH	City of Cleveland	*City of Cleveland v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45132	N.D. Ohio (Federal)
OH	City of Columbus	*The City of Columbus v. Purdue Pharma L.P., et al.*	1:18-op-45048	N.D. Ohio (Federal)
OH	City of Cuyahoga Falls	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	City of Dayton	*City of Dayton, Ohio v. Purdue Pharma L.P., et al.*	1:17-op-45032	N.D. Ohio (Federal)
OH	City of East Cleveland	*City of East Cleveland v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45448	N.D. Ohio (Federal)
OH	City of Elyria	*The City of Elyria v. Purdue Pharma L.P., et al.*	1:18-op-45080	N.D. Ohio (Federal)
OH	City of Euclid	*The City of Euclid v. Purdue Pharma L.P., et al.*	1:18-op-46013	N.D. Ohio (Federal)
OH	City of Fairfield	*City of Fairfield, Ohio v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45742	N.D. Ohio (Federal)
OH	City of Fairlawn	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris,*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	City of Findlay	*The City of Findlay v. Purdue Pharma L.P., et al.*	1:18-op-46339	N.D. Ohio (Federal)
OH	City of Fostoria	*City of Fostoria v. Purdue Pharma L.P., et al.*	1:18-op-45433	N.D. Ohio (Federal)
OH	City of Garfield Heights	*The City of Garfield Heights v. Purdue Pharma L.P., et al.*	1:18-op-45999	N.D. Ohio (Federal)
OH	City of Green	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	City of Hamilton	*City of Hamilton, Ohio v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46024	N.D. Ohio (Federal)
OH	City of Huron	*City of Huron v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45431	N.D. Ohio (Federal)
OH	City of Ironton	*City of Ironton, Ohio v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46025	N.D. Ohio (Federal)
OH	City of Kent (Law Director Hope L. Jones)	*The County of Portage, Ohio; and City of Ravenna, Ohio and City of Kent, Ohio and City of Aurora, Ohio, And The State of Ohio ex rel. Prosecuting Attorney of Portage County, Victor V. Vigluicci; Frank J. Cimino, Law Director, City of Ravenna, Ohio; Hope L. Jones, Law Director, City of Kent, Ohio; and Dean E. Depiero, Law Director, City of Aurora, Ohio v. Purdue Pharma L.P., et al.*	1:18-op-45993	N.D. Ohio (Federal)
OH	City of Lakewood	*City of Lakewood, Ohio v. Purdue Pharma L.P., et al.*	1:18-op-45240	N.D. Ohio (Federal)
OH	City of Lebanon	*The City of Lebanon, Ohio v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45163	N.D. Ohio (Federal)
OH	City of Lima	*City of Lima v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45333	N.D. Ohio (Federal)
OH	City of Lorain	*City of Lorain, Ohio v. Purdue Pharma L.P., et al.*	1:17-op-45000	N.D. Ohio (Federal)
OH	City of Lyndhurst	*City of Lyndhurst v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45636	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OH	City of Macedonia	*City of Macedonia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45447	N.D. Ohio (Federal)
OH	City of Mansfield	*City of Mansfield v. Purdue Pharma L.P., et al.*	1:18-op-45380	N.D. Ohio (Federal)
OH	City of Marietta	*Washington County and City of Marietta, Ohio v. Cardinal Health, Inc., et al.*	1:19-op-45230	N.D. Ohio (Federal)
OH	City of Mayfield Heights	*City of Mayfield Heights v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45635	N.D. Ohio (Federal)
OH	City of Middletown	*City of Middletown, Ohio v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46133	N.D. Ohio (Federal)
OH	City of Munroe Falls	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	City of New Franklin	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.*	1:18-op-45767	N.D. Ohio (Federal)
OH	City of North Olmsted	*The City of North Olmsted v. Purdue Pharma L.P., et al.*	1:18-op-46012	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OH	City of North Ridgeville	*The City of North Ridgeville v. Purdue Pharma L.P., et al.*	1:18-op-46015	N.D. Ohio (Federal)
OH	City of North Royalton	*City of North Royalton v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45427	N.D. Ohio (Federal)
OH	City of Norton	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.*	1:18-op-45767	N.D. Ohio (Federal)
OH	City of Norwalk	*City of Norwalk v. Purdue Pharma L.P., et al.*	1:18-op-46351	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OH	City of Olmsted Falls	*The City of Olmsted Falls v. Purdue Pharma L.P., et al.*	1:18-op-46014	N.D. Ohio (Federal)
OH	City of Parma	*City of Parma v. Purdue Pharma L.P., et al.*	1:17-op-45001	N.D. Ohio (Federal)
OH	City of Parma Heights	*The City of Parma Heights v. Purdue Pharma L.P., et al.*	1:18-op-45773	N.D. Ohio (Federal)
OH	City of Portsmouth	*City of Portsmouth v. AmerisourceBergen Drug Corporation et al.*	1:17-op-45042	N.D. Ohio (Federal)
OH	City of Ravenna (Law Director Frank J. Cimino)	*The County of Portage, Ohio; and City of Ravenna, Ohio and City of Kent, Ohio and City of Aurora, Ohio, And The State of Ohio ex rel. Prosecuting Attorney of Portage County, Victor V. Vigluicci; Frank J. Cimino, Law Director, City of Ravenna, Ohio; Hope L. Jones, Law Director, City of Kent, Ohio; and Dean E. Depiero, Law Director, City of Aurora, Ohio v. Purdue Pharma L.P., et al.*	1:18-op-45993	N.D. Ohio (Federal)
OH	City of Sandusky	*City of Sandusky v. Purdue Pharma L.P., et al.*	1:18-op-45788	N.D. Ohio (Federal)
OH	City of Seven Hills	*City of Seven Hills, Ohio v. Purdue Pharma L.P., et al.*	1:19-op-45413	N.D. Ohio (Federal)
OH	City of St. Marys	*City of St. Marys v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45638	N.D. Ohio (Federal)
OH	City of Stow	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	City of Strongsville	*The City of Strongsville v. Purdue Pharma L.P., et al.*	1:18-op-46111	N.D. Ohio (Federal)
OH	City of Tallmadge	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	City of Toledo	*The City of Toledo v. Purdue Pharma L.P., et al.*	1:17-op-45005	N.D. Ohio (Federal)
OH	City of Van Wert	*City of Van Wert v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46345	N.D. Ohio (Federal)
OH	City of Warren	*The City of Warren v. Purdue Pharma L.P., et al*	1:18-op-45434	N.D. Ohio (Federal)
OH	City of Warrensville Heights	*Warrensville Heights, Ohio v. Purdue Pharma L.P., et al.*	1:18-op-46299	N.D. Ohio (Federal)
OH	City of Wickliffe	*City of Wickliffe v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45637	N.D. Ohio (Federal)
OH	City of Youngstown	*City of Youngstown, Ohio v. Purdue Pharma L.P., et al.*	1:19-op-45722	N.D. Ohio (Federal)
OH	County of Adams (Board of County Commissioners)	*Adams County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45042	N.D. Ohio (Federal)
OH	County of Allen (Board of County Commissioners)	*Allen County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45401	N.D. Ohio (Federal)
OH	County of Ashland (Board of County Commissioners)	*Ashland County Board of County Commissioners v. AmerisourceBergen Drug Corporation et al.*	1:18-op-45012	N.D. Ohio (Federal)
OH	County of Ashtabula	*The County of Ashtabula v. Purdue Pharma L.P., et al.*	1:18-op-45050	N.D. Ohio (Federal)
OH	County of Athens (Board of County Commissioners)	*Athens County Board of Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45326	N.D. Ohio (Federal)
OH	County of Auglaize (Board of County Commissioners)	*Auglaize County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45570	N.D. Ohio (Federal)
OH	County of Belmont (Board of County Commissioners)	*Belmont County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45034	N.D. Ohio (Federal)
OH	County of Brown (Board of County Commissioners)	*Brown County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45035	N.D. Ohio (Federal)
OH	County of Butler (Board of County Commissioners)	*Butler County Board of Commissioners v. Purdue Pharma L.P., et al.*	1:18-op-45037	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OH	County of Carroll (Board of County Commissioners)	*Carroll County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46079	N.D. Ohio (Federal)
OH	County of Champaign (Board of County Commissioners)	*Champaign County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45065	N.D. Ohio (Federal)
OH	County of Clermont (Board of County Commissioners)	*Clermont County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45033	N.D. Ohio (Federal)
OH	County of Clinton (Board of County Commissioners)	*Clinton County Board of Commissioners v. Purdue Pharma L.P., et al.*	1:18-op-45060	N.D. Ohio (Federal)
OH	County of Columbiana (Board of County Commissioners)	*Columbiana County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45289	N.D. Ohio (Federal)
OH	County of Coshocton (Board of County Commissioners)	*Coshocton County Board of County Commissioners v. AmerisourceBergen Drug Corporation et al.*	1:18-op-45027	N.D. Ohio (Federal)
OH	County of Crawford (Board of County Commissioners)	*Crawford County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45288	N.D. Ohio (Federal)
OH	County of Darke (Board of County Commissioners)	*Darke County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45046	N.D. Ohio (Federal)
OH	County of Delaware (Board of County Commissioners)	*Delaware County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45266	N.D. Ohio (Federal)
OH	County of Erie (Board of County Commissioners)	*Erie County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45291	N.D. Ohio (Federal)
OH	County of Fairfield (Board of County Commissioners)	*Fairfield County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45038	N.D. Ohio (Federal)
OH	County of Franklin (Board of County Commissioners)	*Franklin County Board of County Commissioners v. AmerisourceBergen Drug Corporation et al.*	1:18-op-45162	N.D. Ohio (Federal)
OH	County of Fulton (Board of County Commissioners)	*Board of Commissioners of Fulton County, Ohio v. Purdue Pharma L.P., et al.*	1:19-op-45440	N.D. Ohio (Federal)
OH	County of Gallia (Board of County Commissioners)	*Gallia County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45043	N.D. Ohio (Federal)
OH	County of Geauga (Board of County Commissioners)	*Geauga County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45256	N.D. Ohio (Federal)
OH	County of Guernsey (Board of County Commissioners)	*Guernsey County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45044	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OH	County of Hamilton (Board of County Commissioners)	*Hamilton County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45272	N.D. Ohio (Federal)
OH	County of Hancock (Board of County Commissioners)	*Hancock County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45572	N.D. Ohio (Federal)
OH	County of Harrison (Board of County Commissioners)	*Harrison County Board of Commissioners v. Purdue Pharma L.P., et al.*	1:18-op-45547	N.D. Ohio (Federal)
OH	County of Hocking (Board of County Commissioners)	*Hocking County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45044	N.D. Ohio (Federal)
OH	County of Huron (Board of County Commissioners)	*Huron County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45292	N.D. Ohio (Federal)
OH	County of Jackson (Board of County Commissioners)	*Jackson County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45037	N.D. Ohio (Federal)
OH	County of Jefferson	*The County of Jefferson v. Purdue Pharma L.P., et al.*	1:18-op-45365	N.D. Ohio (Federal)
OH	County of Knox (Board of County Commissioners)	*Knox County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45665	N.D. Ohio (Federal)
OH	County of Lake	*The County of Lake v. Purdue Pharma L.P., et al.*	1:18-op-45032	N.D. Ohio (Federal)
OH	County of Lawrence (Board of County Commissioners)	*Lawrence County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45045	N.D. Ohio (Federal)
OH	County of Licking (Board of County Commissioners)	*Licking County Board of County Commissioners v AmerisourceBergen Drug Corporation, et al.*	1:18-op-45041	N.D. Ohio (Federal)
OH	County of Logan (Board of County Commissioners)	*Logan County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45047	N.D. Ohio (Federal)
OH	County of Lorain	*The County of Lorain, v. Purdue Pharma L.P., et al.*	1:18-op-45078	N.D. Ohio (Federal)
OH	County of Lucas (Board of County Commissioners)	*Board of Commissioners of Lucas County, Ohio, Mental Health & Recovery Services Board of Lucas County, and Lucas County Children Services Board of Trustees v. Purdue Pharma L.P., et al.*	1:18-op-46177	N.D. Ohio (Federal)
OH	County of Marion (Board of County Commissioners)	*Marion County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45529	N.D. Ohio (Federal)
OH	County of Medina (Prosecuting Attorney S. Forrest Thompson)	*County of Medina, Ohio and The State of Ohio ex rel. Prosecuting Attorney of Medina County, S. Forrest Thompson v. Purdue Pharma L.P., et al.*	1:19-op-45839	N.D. Ohio (Federal)
OH	County of Meigs	*Meigs County, Ohio v. Cardinal Health, Inc., et al.*	1:19-op-45229	N.D. Ohio (Federal)
OH	County of Mercer (Board of County Commissioners)	*Mercer County Board of County Commissioners, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46094	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OH	County of Miami (Board of County Commissioners)	*Board of Miami County Commissioners, on behalf of Miami County, Ohio v. Purdue Pharma L.P., et al.*	1:19-op-45335	N.D. Ohio (Federal)
OH	County of Monroe (Board of County Commissioners)	*Monroe County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45597	N.D. Ohio (Federal)
OH	County of Montgomery (Board of County Commissioners and Prosecuting Attorney Mathias H. Heck, Jr.)	*Montgomery County Board of County Commissioners and State of Ohio ex rel. Mathias H. Heck, Jr., Prosecuting Attorney v. Purdue Pharma L.P., et al.*	1:18-op-46080	N.D. Ohio (Federal)
OH	County of Morrow (Board of County Commissioners)	*Morrow County Board of Commissioners v. Purdue Pharma L.P., et al.*	1:18-op-45059	N.D. Ohio (Federal)
OH	County of Muskingum (Board of County Commissioners)	*Muskingum County Board of County Commissioners, v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45137	N.D. Ohio (Federal)
OH	County of Noble (Board of County Commissioners)	*Noble County, Ohio by the Noble County Commissioners v. Cardinal Health, Inc., et al.*	1:19-op-45096	N.D. Ohio (Federal)
OH	County of Ottawa (Board of County Commissioners)	*Ottawa County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45031	N.D. Ohio (Federal)
OH	County of Perry (Board of County Commissioners)	*Perry County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45245	N.D. Ohio (Federal)
OH	County of Pike (Board of County Commissioners)	*Pike County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45039	N.D. Ohio (Federal)
OH	County of Portage (Board of County Commissioners and County Prosecutor Victor Vigluicci)	*The County of Portage, Ohio; and City of Ravenna, Ohio and City of Kent, Ohio and City of Aurora, Ohio, And The State of Ohio ex rel. Prosecuting Attorney of Portage County, Victor V. Vigluicci; Frank J. Cimino, Law Director, City of Ravenna, Ohio; Hope L. Jones, Law Director, City of Kent, Ohio; and Dean E. Depiero, Law Director, City of Aurora, Ohio v. Purdue Pharma L.P., et al.*	1:18-op-45993	N.D. Ohio (Federal)
OH	County of Ross (Board of County Commissioners)	*Ross County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45040	N.D. Ohio (Federal)
OH	County of Sandusky (Board of County Commissioners)	*Sandusky County Board of Commissioners v. Purdue Pharma L.P., et al.*	1:18-op-45254	N.D. Ohio (Federal)
OH	County of Scioto (Board of County Commissioners)	*Scioto County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45038	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OH	County of Seneca (Board of County Commissioners)	*Seneca County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45290	N.D. Ohio (Federal)
OH	County of Shelby (Board of County Commissioners)	*Shelby County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45668	N.D. Ohio (Federal)
OH	County of Stark (Board of County Commissioners)	*Stark County, Ohio Board of County Commissioners v. Purdue Pharma L.P., et al.*	1:18-op-46340	N.D. Ohio (Federal)
OH	County of Trumball	*The County of Trumball, v. Purdue Pharma L.P., et al.*	1:18-op-45079	N.D. Ohio (Federal)
OH	County of Tuscarawas (Prosecuting Attorney Ryan Styer)	*The County of Tuscarawas; The State of Ohio ex rel. Prosecuting Attorney of Tuscarawas County, Ryan Styer v. Purdue Pharma L.P., et al.*	1:19-op-45098	N.D. Ohio (Federal)
OH	County of Van Wert (Board of County Commissioners)	*Van Wert County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45571	N.D. Ohio (Federal)
OH	County of Vinton (Board of County Commissioners)	*Vinton County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45036	N.D. Ohio (Federal)
OH	County of Washington	*Washington County and City of Marietta, Ohio v. Cardinal Health, Inc., et al.*	1:19-op-45230	N.D. Ohio (Federal)
OH	County of Wayne (Board of County Commissioners)	*Wayne County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45150	N.D. Ohio (Federal)
OH	County of Williams (Board of County Commissioners)	*Williams County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45257	N.D. Ohio (Federal)
OH	County of Wyandot (Board of County Commissioners)	*Wyandot County Board of County Commissioners v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46078	N.D. Ohio (Federal)
OH	Lucas County Children Services Board of Trustees	*Board of Commissioners of Lucas County, Ohio, Mental Health & Recovery Services Board of Lucas County, and Lucas County Children Services Board of Trustees v. Purdue Pharma L.P., et al.*	1:18-op-46177	N.D. Ohio (Federal)
OH	Mental Health and Recovery Services Board of Allen, Auglaize and Hardin Counties	*Mental Health & Recovery Services Board of Allen, Auglaize and Hardin Counties v. Purdue Pharma L.P., et al.*	1:18-op-46344	N.D. Ohio (Federal)
OH	Mental Health and Recovery Services Board of Lucas County	*Board of Commissioners of Lucas County, Ohio, Mental Health & Recovery Services Board of Lucas County, and Lucas County Children Services Board of Trustees v. Purdue Pharma L.P., et al.*	1:18-op-46177	N.D. Ohio (Federal)
OH	Richland County Children's Services	*Richland County Children's Services v. Purdue Pharma L.P., et al.*	1:17-op-45003	N.D. Ohio (Federal)
OH	Township of Boston	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township;*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	Township of Copley	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield;*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	Township of Coventry	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	Township of Painesville	*The Township of Painesville v. Purdue Pharma L.P., et al.*	1:18-op-46035	N.D. Ohio (Federal)
OH	Township of Springfield	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris,*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	Valley Fire District	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	Village of Boston Heights	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township,*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	Village of Brooklyn Heights	*Village of Brooklyn Heights v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45450	N.D. Ohio (Federal)
OH	Village of Clinton	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	Village of Lakemore	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OH	Village of Lexington	*Village of Lexington v. Actavis LLC, et al.*	1:21-op-45109	N.D. Ohio (Federal)
OH	Village of Mogadore	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.*	1:18-op-45767	N.D. Ohio (Federal)
OH	Village of Newburgh Heights	*Village of Newburgh Heights v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45449	N.D. Ohio (Federal)
OH	Village of Peninsula	*The City of Barberton; The Village of Boston Heights; Boston Township; The*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	Village of Richfield	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OH	Village of Silver Lake	*The City of Barberton; The Village of Boston Heights; Boston Township; The Village of Clinton; Copley Township; Coventry Township; The City of Cuyahoga Falls; The City of Fairlawn; The City of Green; The Village of Lakemore; The Village of Mogadore; The City of Munroe Falls; The City of New Franklin; The City of Norton; The Village of Peninsula; The Village of Richfield; The Village of Silver Lake; Springfield Township; The City of Stow; The City of Tallmadge; Summit County Public Health; Valley Fire District; State of Ohio Ex Rel., The Director of Law for The City of Barberton, Lisa Miller, The Director of*	1:18-op-45767	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Law for The City of Tallmadge, Megan Raber; The Law Director for The City of Cuyahoga Falls, Russ Balthis, The Law Director for The City of Fairlawn, Bryan Nace, The Law Director for The City of Green, Interim Law Director Bill Chris, The Law Director for The City of Mogadore, Marshal M. Pitchford, The Law Director for The City of Munroe Falls, Tom Kostoff, The Law Director for The City of New Franklin, Irving B. Sugerman, The Law Director for The City of Norton, Justin Markey; The Law Director for The City of Stow, Amber Zibritosky; The Village Solicitor for The Village of Boston Heights, Marshal Pitchford, The Solicitor for Boston Township, Ed Pullekins, Solicitor for The Village of Clinton, Marshal Pitchford, The Law Director for Copley Township, Irving B. Sugerman, The Law Director for Coventry Township, Irving B. Sugerman, The Solicitor for The Village of Lakemore, Irving B. Sugerman, The Solicitor for The Village of Peninsula, Brad Bryan, The Law Solicitor for The Village of Richfield, William Hanna, The Solicitor The Village of Silver Lake, Bob Heydorn, and The Administrator & Legal Counsel for Springfield Township, Warren Price v. Purdue Pharma L.P., et al.		
OK	City of Ada	*City of Ada v. Purdue Pharma L.P., et al.*	1:19-op-45400	N.D. Ohio (Federal)
OK	City of Altus	*City of Altus v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45046	N.D. Ohio (Federal)
OK	City of Anadarko	*City of Anadarko v. Purdue Pharma L.P., et al.*	1:20-op-45022	N.D. Ohio (Federal)
OK	City of Bethany	*City of Bethany v. Purdue Pharma L.P., et al.*	1:19-op-46148	N.D. Ohio (Federal)
OK	City of Broken Arrow	*City of Broken Arrow v. Purdue Pharma L.P., et al.*	1:19-op-45415	N.D. Ohio (Federal)
OK	City of Edmond	*City of Edmond v. Purdue Pharma L.P., et al.*	1:19-op-45496	N.D. Ohio (Federal)
OK	City of El Reno	*City of El Reno v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45252	N.D. Ohio (Federal)
OK	City of Elk City	*City of Elk City v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45017	N.D. Ohio (Federal)
OK	City of Enid	*City of Enid v. Purdue Pharma L.P., et al.*	1:19-op-45717	N.D. Ohio (Federal)
OK	City of Guthrie	*City of Guthrie v. Purdue Pharma L.P., et al.*	1:19-op-45497	N.D. Ohio (Federal)
OK	City of Jenks	*City of Jenks v. Purdue Pharma L.P., et al.*	1:19-op-45858	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OK	City of Lawton	*City of Lawton v. Purdue Pharma L.P., et al.*	1:19-op-45500	N.D. Ohio (Federal)
OK	City of Midwest City	*City of Midwest City v. Purdue Pharma L.P., et al.*	1:19-op-45709	N.D. Ohio (Federal)
OK	City of Muskogee	*City of Muskogee v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45162	N.D. Ohio (Federal)
OK	City of Mustang	*City of Mustang v. Purdue Pharma L.P., et al.*	1:19-op-45708	N.D. Ohio (Federal)
OK	City of Oklahoma City	*City of Oklahoma City v. Purdue Pharma L.P., et al.*	1:19-op-45498	N.D. Ohio (Federal)
OK	City of Owasso	*City of Owasso v. Purdue Pharma L.P., et al.*	1:19-op-45718	N.D. Ohio (Federal)
OK	City of Ponca City	*City of Ponca City v. Purdue Pharma L.P., et al.*	1:19-op-45495	N.D. Ohio (Federal)
OK	City of Seminole	*City of Seminole v. Purdue Pharma L.P., et al.*	1:20-op-45004	N.D. Ohio (Federal)
OK	City of Shawnee	*City of Shawnee v. Purdue Pharma L.P., et al.*	1:19-op-46155	N.D. Ohio (Federal)
OK	City of Stillwater	*City of Stillwater v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45045	N.D. Ohio (Federal)
OK	City of Tulsa	*City of Tulsa v. Cephalon, Inc., et al.*	1:21-op-45024	N.D. Ohio (Federal)
OK	City of Yukon	*City of Yukon v. Purdue Pharma L.P., et al.*	1:19-op-45716	N.D. Ohio (Federal)
OK	County of Atoka (Board of County Commissioners)	*Board of County Commissioners of Atoka County v. Purdue Pharma L.P., et al.*	1:20-op-45001	N.D. Ohio (Federal)
OK	County of Beckham (Board of County Commissioners)	*Board of County Commissioners of Beckham County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45146	N.D. Ohio (Federal)
OK	County of Caddo (Board of County Commissioners)	*Board of County Commissioners of Caddo County v. Purdue Pharma L.P., et al.*	1:19-op-46156	N.D. Ohio (Federal)
OK	County of Choctaw (Board of County Commissioners)	*Board of County Commissioners of Choctaw County v. Purdue Pharma L.P., et al.*	1:20-op-45257	N.D. Ohio (Federal)
OK	County of Cimarron (Board of County Commissioners)	*Board of County Commissioners of Cimarron County v. Purdue Pharma L.P., et al.*	1:20-op-45021	N.D. Ohio (Federal)
OK	County of Cleveland (Board of County Commissioners)	*The Board of County Commissioners of Cleveland County, State of Oklahoma v. Purdue Pharma L.P., et al.*	1:20-op-45009	N.D. Ohio (Federal)
OK	County of Coal (Board of County Commissioners	*Board of County Commissioners of Coal County v. Purdue Pharma L.P., et al.*	1:20-op-45149	N.D. Ohio (Federal)
OK	County of Comanche (Board of County Commissioners)	*Board of County Commissioners of Comanche County v. Purdue Pharma L.P., et al.*	1:20-op-45180	N.D. Ohio (Federal)
OK	County of Craig (County Commission)	*The County Commission of Craig County, Oklahoma v. Purdue Pharma L.P., et al.*	1:19-op-45652	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OK	County of Creek (Board of County Commissioners)	*Board of County Commissioners of Creek County v. Purdue Pharma L.P., et al.*	1:19-op-45226	N.D. Ohio (Federal)
OK	County of Custer (Board of County Commissioners)	*Board of County Commissioners of Custer County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45182	N.D. Ohio (Federal)
OK	County of Delaware (Board of County Commissioners)	*The Board of County Commissioners of Delaware County, State of Oklahoma v. Purdue Pharma L.P., et al.*	1:18-op-46321	N.D. Ohio (Federal)
OK	County of Dewey (Board of County Commissioners)	*Board of County Commissioners of Dewey County v. Purdue Pharma L.P., et al.*	1:19-op-45801	N.D. Ohio (Federal)
OK	County of Garvin (Board of County Commissioners)	*The Board of County Commissioners of Garvin County, State of Oklahoma v. Purdue Pharma L.P., et al.*	1:18-op-46304	N.D. Ohio (Federal)
OK	County of Grady (Board of County Commissioners)	*Board of County Commissioners of Grady County v. Purdue Pharma L.P., et al.*	1:19-op-46167	N.D. Ohio (Federal)
OK	County of Greer (Board of County Commissioners)	*Board of County Commissioners of Greer County v. Purdue Pharma L.P., et al.*	1:20-op-45256	N.D. Ohio (Federal)
OK	County of Harmon (Board of County Commissioners)	*Board of County Commissioners of Harmon County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45388	N.D. Ohio (Federal)
OK	County of Harper (Board of County Commissioners)	*Board of County Commissioners of Harper County v. Purdue Pharma L.P., et al.*	1:19-op-45757	N.D. Ohio (Federal)
OK	County of Haskell (Board of County Commissioners)	*Board of County Commissioners of Haskell County v. Purdue Pharma L.P., et al.*	1:20-op-45002	N.D. Ohio (Federal)
OK	County of Hughes (Board of County Commissioners)	*Board of County Commissioners of Hughes County v. Purdue Pharma L.P., et al.*	1:20-op-45258	N.D. Ohio (Federal)
OK	County of Jackson (Board of County Commissioners)	*Board of County Commissioners of Jackson County v. Purdue Pharma L.P., et al.*	1:20-op-45126	N.D. Ohio (Federal)
OK	County of Jefferson (Board of County Commissioners)	*Board of County Commissioners of Jefferson County v. Purdue Pharma L.P., et al.*	1:19-op-46170	N.D. Ohio (Federal)
OK	County of Johnston (Board of County Commissioners)	*Board of County Commissioners of Johnston County v. Purdue Pharma L.P., et al.*	1:19-op-45765	N.D. Ohio (Federal)
OK	County of Kay (Board of County Commissioners)	*Board of County Commissioners of Kay County v. Purdue Pharma L.P., et al.*	1:19-op-45989	N.D. Ohio (Federal)
OK	County of Kiowa (Board of County Commissioners)	*Board of County Commissioners of Kiowa County v. Purdue Pharma L.P., et al.*	1:19-op-45755	N.D. Ohio (Federal)
OK	County of Latimer (Board of County Commissioners)	*Board of County Commissioners of Latimer County v. Purdue Pharma L.P., et al.*	1:20-op-45003	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OK	County of Le Flore (Board of County Commissioners)	*Board of County Commissioners of Le Flore County v. Purdue Pharma L.P., et al.*	1:20-op-45067	N.D. Ohio (Federal)
OK	County of Lincoln (Board of County Commissioners)	*Board of County Commissioners of Lincoln County v. Purdue Pharma L.P., et al.*	1:20-op-45128	N.D. Ohio (Federal)
OK	County of Logan (Board of County Commissioners)	*Board of County Commissioners of Logan County v. Purdue Pharma L.P., et al.*	1:20-op-45058	N.D. Ohio (Federal)
OK	County of Love (Board of County Commissioners)	*Board of County Commissioners of Love County v. Purdue Pharma L.P., et al.*	1:20-op-45000	N.D. Ohio (Federal)
OK	County of Major (Board of County Commissioners)	*Board of County Commissioners of Major County v. Purdue Pharma L.P., et al.*	1:19-op-45990	N.D. Ohio (Federal)
OK	County of Mayes (County Commission)	*The County Commission of Mayes County v. Purdue Pharma L.P., et al.*	1:19-op-45227	N.D. Ohio (Federal)
OK	County of McClain (Board of County Commissioners)	*The Board of County Commissioners of McClain County, State of Oklahoma v. Purdue Pharma L.P., et al.*	1:18-op-46303	N.D. Ohio (Federal)
OK	County of McCurtain (Board of County Commissioners)	*Board of County Commissioners of McCurtain County v. Purdue Pharma L.P., et al.*	1:20-op-45259	N.D. Ohio (Federal)
OK	County of Muskogee (Board of County Commissioners)	*Board of County Commissioners of Muskogee County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45155	N.D. Ohio (Federal)
OK	County of Noble (Board of County Commissioners)	*Board of County Commissioners of Noble County v. Purdue Pharma L.P., et al.*	1:20-op-45129	N.D. Ohio (Federal)
OK	County of Nowata (Board of County Commissioners)	*Board of County Commissioners of Nowata County v. Purdue Pharma L.P., et al.*	1:19-op-45225	N.D. Ohio (Federal)
OK	County of Okfuskee (Board of County Commissioners)	*The Board of County Commissioners of Okfuskee County, State of Oklahoma v. Purdue Pharma L.P., et al.*	1:20-op-45005	N.D. Ohio (Federal)
OK	County of Oklahoma (Board of County Commissioners)	*Board of County Commissioners of Oklahoma County v. Purdue Pharma L.P., et al.*	1:20-op-45057	N.D. Ohio (Federal)
OK	County of Okmulgee (County Commission)	*The County Commission of Okmulgee County v. Purdue Pharma L.P., et al.*	1:19-op-45223	N.D. Ohio (Federal)
OK	County of Osage (Board of County Commissioners)	*Board of County Commissioners of Osage County, State of Oklahoma v. Purdue Pharma L.P., et al.*	1:18-op-46322	N.D. Ohio (Federal)
OK	County of Ottawa (Board of County Commissioners)	*The Board of County Commissioners of Ottawa County, State of Oklahoma v. Purdue Pharma L.P., et al.*	1:18-op-46323	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OK	County of Pawnee (Board of County Commissioners)	*The Board of County Commissioners of Pawnee County, State of Oklahoma v. Purdue Pharma L.P., et al.*	1:18-op-46320	N.D. Ohio (Federal)
OK	County of Payne (County Commission)	*The County Commission of Payne County, Oklahoma v. Purdue Pharma L.P., et al.*	1:19-op-45653	N.D. Ohio (Federal)
OK	County of Pittsburg (Board of County Commissioners)	*Board of County Commissioners of Pittsburg County v. Purdue Pharma L.P., et al.*	1:19-op-45711	N.D. Ohio (Federal)
OK	County of Pottawatomie (Board of County Commissioners)	*Board of County Commissioners of Pottawatomie County v. Purdue Pharma L.P., et al.*	1:19-op-45988	N.D. Ohio (Federal)
OK	County of Roger Mills (Board of County Commissioners)	*Board of County Commissioners of Roger Mills County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45183	N.D. Ohio (Federal)
OK	County of Rogers (County Commission)	*The County Commission of Rogers County v. Purdue Pharma L.P., et al.*	1:19-op-45224	N.D. Ohio (Federal)
OK	County of Seminole (Board of County Commissioners)	*The Board of County Commissioners of Seminole County, State of Oklahoma v. Purdue Pharma L.P., et al.*	1:19-op-45260	N.D. Ohio (Federal)
OK	County of Stephens (Board of County Commissioners)	*Board of County Commissioners of Stephens County v. Purdue Pharma L.P., et al.*	1:19-op-45756	N.D. Ohio (Federal)
OK	County of Texas (Board of County Commissioners)	*Board of County Commissioners of Texas County v. Purdue Pharma L.P., et al.*	1:20-op-45061	N.D. Ohio (Federal)
OK	County of Tillman (Board of County Commissioners)	*Board of County Commissioners of Tillman County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45185	N.D. Ohio (Federal)
OK	County of Tulsa (Board of County Commissioners)	*Board of County Commissioners of Tulsa County v. Purdue Pharma L.P., et al.*	1:19-op-45352	N.D. Ohio (Federal)
OK	County of Washington (County Commission)	*The County Commission of Washington County v. Purdue Pharma L.P., et al.*	1:19-op-45222	N.D. Ohio (Federal)
OK	County of Woods (Board of County Commissioners)	*Board of County Commissioners of Woods County v. Purdue Pharma L.P., et al.*	1:19-op-45987	N.D. Ohio (Federal)
OK	County of Woodward (Board of County Commissioners)	*Board of County Commissioners of Woodward County v. Purdue Pharma L.P., et al.*	1:20-op-45141	N.D. Ohio (Federal)
OR	City of Portland	*City of Portland v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45633	N.D. Ohio (Federal)
OR	County of Clackamas	*County of Clackamas, County of Lane, County of Washington v. Purdue Pharma L.P., et al.*	1:18-op-45442	N.D. Ohio (Federal)
OR	County of Coos	*Coos County, Oregon v. Purdue Pharma L.P., et al.*	1:18-op-46300	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
OR	County of Curry	*County of Curry v. Purdue Pharma L.P., et al.*	1:19-op-45512	N.D. Ohio (Federal)
OR	County of Lane	*County of Clackamas, County of Lane, County of Washington v. Purdue Pharma L.P., et al.*	1:18-op-45442	N.D. Ohio (Federal)
OR	County of Multnomah	*County of Multnomah v. Purdue Pharma L.P., et al.*	1:18-op-45377	N.D. Ohio (Federal)
OR	County of Washington	*County of Clackamas, County of Lane, County of Washington v. Purdue Pharma L.P., et al.*	1:18-op-45442	N.D. Ohio (Federal)
PA	Borough of Edwardsville	*Borough of Edwardsville, Pennsylvania v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46176	N.D. Ohio (Federal)
PA	Borough of Exeter	*Borough of Exeter, Pennsylvania v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45019	N.D. Ohio (Federal)
PA	Borough of Forty Fort	*Forty Fort Borough, Pennsylvania v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46177	N.D. Ohio (Federal)
PA	Borough of Kingston	*Kingston Borough, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45585	N.D. Ohio (Federal)
PA	Borough of Morrisville	*Morrisville Borough, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45435	N.D. Ohio (Federal)
PA	Borough of Sugar Notch	*Sugar Notch Borough, Pennsylvania v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45090	N.D. Ohio (Federal)
PA	Borough of Wampum	*Wampum Borough v. Purdue Pharma L.P., et al.*	180701963 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	Borough of West Pittston	*West Pittston, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45997	N.D. Ohio (Federal)
PA	Borough of Wyoming	*Wyoming, Pennsylvania v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45087	N.D. Ohio (Federal)
PA	City of Aliquippa	*City of New Castle, City of Aliquippa and Union Township v. Purdue Pharma L.P., et al.*	1:18-op-45939	N.D. Ohio (Federal)
PA	City of Allentown	*City of Allentown, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45824	N.D. Ohio (Federal)
PA	City of Coatesville	*City of Coatesville, Pennsylvania v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-45396	N.D. Ohio (Federal)
PA	City of Hazelton	*City of Hazelton, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45724	N.D. Ohio (Federal)
PA	City of Lock Haven	*City of Lock Haven v. Purdue Pharma L.P., et al.*	2017-007778 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				County) (State MDL)
PA	City of Nanticoke	*City of Nanticoke, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45081	N.D. Ohio (Federal)
PA	City of New Castle	*City of New Castle, City of Aliquippa and Union Township v. Purdue Pharma L.P., et al.*	1:18-op-45939	N.D. Ohio (Federal)
PA	City of Philadelphia	*City of Philadelphia v. Allergan Limited, et al. / City of Philadelphia v. Allergan plc, et al.*	2021-007975 / 18002718 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	City of Wilkes-Barre	*City of Wilkes-Barre, Pennsylvania v. Purdue Pharma L.P., et al.*	1:18-op-45545	N.D. Ohio (Federal)
PA	County of Adams	*Adams County v. Purdue Pharma L.P., et al.*	1:20-op-45140	N.D. Ohio (Federal)
PA	County of Armstrong	*County of Armstrong v. Purdue Pharma L.P., et al.*	2017-1570-GV / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Beaver	*County of Beaver v. Purdue Pharma L.P., et al.*	11326-2017 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Bedford	*Bedford County v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45184	N.D. Ohio (Federal)
PA	County of Bradford	*County of Bradford v. Purdue Pharma L.P., et al.*	2018 CV 0059 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
PA	County of Bucks	*Bucks County v. Purdue Pharma L.P., et al.*	2018-03144 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Cambria	*County of Cambria v. Purdue Pharma L.P., et al.*	2017-4131 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Carbon	*County of Carbon v. Purdue Pharma L.P., et al.*	2018-000990 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Chester	*Chester County v. Purdue Pharma L.P., et al.*	1:19-op-45233	N.D. Ohio (Federal)
PA	County of Clarion	*County of Clarion v. Purdue Pharma L.P., et al.*	285 CD 2018 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Clinton	*County of Clinton v. Purdue Pharma L.P., et al.*	752-18 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
PA	County of Columbia	*Columbia County v. Purdue Pharma L.P., et al.*	1:17-op-45068	N.D. Ohio (Federal)
PA	County of Cumberland	*County of Cumberland v. Purdue Pharma L.P., et al.*	2018-02147 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Fayette	*County of Fayette v. Purdue Pharma L.P., et al.*	2017-2676 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Franklin	*Franklin County v. Purdue Pharma L.P., et al.*	2019-02445 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Greene	*County of Greene v. Purdue Pharma L.P., et al.*	791-2017 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Huntingdon	*County of Huntingdon v. Purdue Pharma L.P., et al.*	2018-0784 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
PA	County of Indiana	*Indiana County, Pennsylvania v. Purdue Pharma L.P., et al.*	1:18-op-45249	N.D. Ohio (Federal)
PA	County of Lackawanna	*County of Lackawanna v. Purdue Pharma L.P., et al.*	2017 CV 5156 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Lawrence	*County of Lawrence v. Purdue Pharma L.P., et al.*	11180-17 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Lehigh	*Commonwealth of Pennsylvania, The People of Lehigh County, Lehigh County, Pennsylvania v. Purdue Pharma L.P., et al.*	2018-C-716 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Luzerne	*Luzerne County v. Purdue Pharma L.P., et al.*	1:17-op-45100	N.D. Ohio (Federal)
PA	County of Lycoming	*County of Lycoming, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45655	N.D. Ohio (Federal)
PA	County of Mercer	*County of Mercer v. Purdue Pharma L.P., et al.*	2018-1596 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Monroe	*County of Monroe v. Purdue Pharma L.P., et al.*	3972CV18 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Delaware County) (State MDL)
PA	County of Northampton	*The People of Northampton County and Northampton County, Pennsylvania v. Purdue Pharma L.P., et al.*	C48-CV-2017-11557 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Northumberland	*County of Northumberland, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45555	N.D. Ohio (Federal)
PA	County of Washington	*County of Washington v. Purdue Pharma L.P., et al.*	2017-6268 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Westmoreland	*County of Westmoreland v. Purdue Pharma L.P., et al.*	5975-2017 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	County of Wyoming	*Wyoming County, Pennsylvania v. Purdue Pharma L.P., et al.*	1:18-op-45488	N.D. Ohio (Federal)
PA	County of York	*County of York v. Purdue Pharma L.P., et al.*	2017-SU-003372 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	Delaware County	*Delaware County, Pennsylvania v. Purdue Pharma L.P., et al.*	2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Pleas of Delaware County) (State MDL)
PA	District Attorney of Allegheny County (District Attorney Stephen A. Zappala, Jr.)	*Commonwealth of Pennsylvania, acting by and through Allegheny County District Attorney Stephen A. Zappala, Jr. v. Teva Pharmaceuticals USA, Inc., et al.*	21-947 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	District Attorney of Berks County (District Attorney John T. Adams)	*Commonwealth of Pennsylvania, acting by and through John T. Adams, the District Attorney of Berks County v. Purdue Pharma L.P., et al.*	19-18232 / 2017-008095 (coordinated)	PA - Court of Common Pleas of Berks County (State)
PA	District Attorney of Bucks County (District Attorney Matthew D. Weintraub)	*Commonwealth of Pennsylvania, acting by and through Matthew D. Weintraub, the District Attorney of Bucks County v. Teva Pharmaceuticals USA, Inc., et al.*	2020-00639 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	District Attorney of Chester County (District Attorney Deborah S. Ryan)	*Commonwealth of Pennsylvania, acting by and through Deborah S. Ryan, the District Attorney of Chester County v. Teva Pharmaceuticals USA, Inc., et al.*	2020-04553 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	District Attorney of Clearfield County	*District Attorney of Clearfield County v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45022	N.D. Ohio (Federal)
PA	District Attorney of Dauphin County (District Attorney Francis T. Chardo)	*Commonwealth of Pennsylvania, acting by and through Francis T. Chardo, the District Attorney of Dauphin County v. Teva Pharmaceuticals USA, Inc., et al.*	2019-CV-7795 / 2017-008095 (coordinated)	PA - Court of Common Pleas of Dauphin County (State)
PA	District Attorney of Delaware County (District Attorney Jack Stollsteimer)	*Commonwealth of Pennsylvania, acting by and through Jack Stollsteimer, the District Attorney of Delaware County v. Teva Pharmaceuticals USA, Inc., et al.*	CV-2020-002026 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Pleas of Delaware County) (State MDL)
PA	District Attorney of Northampton County (District Attorney Terence P. Houck)	*Commonwealth of Pennsylvania, acting by and through Terence P. Houck, the District Attorney of Northampton County v. Teva Pharmaceuticals USA, Inc., et al.*	C-48-CV-2020-3440 / 2017-008095 (coordinated)	PA - Court of Common Pleas of Northampton County (State)
PA	District Attorney of Philadelphia (District Attorney Lawrence S. Krasner)	*Commonwealth of Pennsylvania, acting by and through Philadelphia District Attorney Lawrence S. Krasner v. Purdue Pharma L.P., et al.*	18005594 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	District Attorney of Westmoreland County (District Attorney John W. Peck)	*Commonwealth of Pennsylvania, acting by and through John W. Peck, the District Attorney of Westmoreland County v. Teva Pharmaceuticals USA, Inc., et al.*	20CI02561 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	Municipality of Norristown	*The Municipality of Norristown and the Township of West Norriton v. Purdue Pharma L.P., et al.*	2019-12178 / 2017-008095 (coordinated)	PA - Court of Common Pleas of Montgomery County (State)
PA	Southeastern Pennsylvania Transportation Authority	*Southeastern Pennsylvania Transportation Authority v. Endo Pharmaceuticals, Inc. et al.*	180302923	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	Township of Bensalem	*Township of Bensalem v. Purdue Pharma L.P., et al.*	2018-03119 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Delaware County) (State MDL)
PA	Township of Bristol	*Bristol Township, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45434	N.D. Ohio (Federal)
PA	Township of Fairview	*Fairview Township, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45355	N.D. Ohio (Federal)
PA	Township of Hanover	*Hanover Township, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45654	N.D. Ohio (Federal)
PA	Township of Lower Makefield	*Lower Makefield Township v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45284	N.D. Ohio (Federal)
PA	Township of Lower Southampton	*Lower Southampton, Pennsylvania v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45181	N.D. Ohio (Federal)
PA	Township of Mahoning	*Mahoning Township v. Purdue Pharma L.P., et al.*	180603466 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	Township of Middletown	*Middletown Township v. Teva Pharmaceuticals USA, Inc., et al.*	1:21-op-45030	N.D. Ohio (Federal)
PA	Township of Newtown	*Newtown Township v. Purdue Pharma L.P., et al.*	2019-03043-0 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	Township of Plains	*Plains Township, Pennsylvania v. Purdue Pharma L.P., et al.*	1:18-op-46215	N.D. Ohio (Federal)
PA	Township of Union	*City of New Castle, City of Aliquippa and Union Township v. Purdue Pharma L.P., et al.*	1:18-op-45939	N.D. Ohio (Federal)
PA	Township of Warminster	*Warminster Township v. Purdue Pharma L.P., et al.*	2019-01469-0 / 2017-008095 (coordinated)	MDL - Pennsylvania Opioid Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	Township of Warrington	*Warrington Township v. Purdue Pharma L.P., et al.*	CV-2019-007269 / 2017-	MDL - Pennsylvania Opioid

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
			008095 (coordinated)	Litigation (PA - Court of Common Pleas of Delaware County) (State MDL)
PA	Township of West Norriton	*The Municipality of Norristown and the Township of West Norriton v. Purdue Pharma L.P., et al.*	2019-12178 / 2017-008095 (coordinated)	PA - Court of Common Pleas of Montgomery County (State)
PA	Township of Wilkes-Barre	*Wilkes-Barre Township, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45325	N.D. Ohio (Federal)
PA	Township of Wright	*Wright Township, Pennsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45574	N.D. Ohio (Federal)
PR	Municipality of Adjuntas	*Municipality of Adjuntas, Puerto Rico v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45245	N.D. Ohio (Federal)
PR	Municipality of Aguada	*Municipality of Aguada, Puerto Rico v. Teva Pharmaceuticals USA, Inc., et al.*	3:22-cv-01532	D. Puerto Rico (Federal)
PR	Municipality of Aguadilla	*Municipality of Aguadilla, Puerto Rico v. Teva Pharmaceuticals USA, Inc., et al.*	3:22-cv-01533	D. Puerto Rico (Federal)
PR	Municipality of Arroyo	*Municipality of Arroyo, Puerto Rico v. Purdue Pharma L.P., et al.*	1:19-op-45817	N.D. Ohio (Federal)
PR	Municipality of Barceloneta	*Municipality of Barceloneta, Puerto Rico v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45267	N.D. Ohio (Federal)
PR	Municipality of Bayamon	*Municipality of Bayamon, Puerto Rico v. Purdue Pharma L.P., et al.*	1:19-op-45818	N.D. Ohio (Federal)
PR	Municipality of Caguas	*Municipality of Caguas, Puerto Rico v. Purdue Pharma L.P., et al.*	1:19-op-45814	N.D. Ohio (Federal)
PR	Municipality of Canovanas	*Municipality of Canovanas, Puerto Rico v. Purdue Pharma L.P., et al.*	1:18-op-46018	N.D. Ohio (Federal)
PR	Municipality of Catano	*Municipality of Catano, Puerto Rico v. Purdue Pharma L.P., et al.*	1:19-op-45816	N.D. Ohio (Federal)
PR	Municipality of Cayey	*Municipality of Sabana Grande and Municipality of Cayey v. Purdue Pharma L.P., et al.*	1:18-op-45197	N.D. Ohio (Federal)
PR	Municipality of Ceiba	*Municipality of Ceiba, Puerto Rico v. Purdue Pharma L.P., et al.*	1:19-op-45819	N.D. Ohio (Federal)
PR	Municipality of Cidra	*Municipality of Cidra, Puerto Rico v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45244	N.D. Ohio (Federal)
PR	Municipality of Coamo	*Municipality of Coamo, Puerto Rico v. Purdue Pharma L.P., et al.*	1:19-op-45820	N.D. Ohio (Federal)
PR	Municipality of Guayanilla	*Municipality of Guayanilla, Puerto Rico v. Purdue Pharma L.P., et al.*	1:18-op-45176	N.D. Ohio (Federal)
PR	Municipality of Isla de Vieques	*Municipality of Isla de Vieques, Puerto Rico v. Purdue Pharma L.P., et al.*	1:19-op-45752	N.D. Ohio (Federal)
PR	Municipality of Juncos	*Municipality of Juncos, Puerto Rico v. Purdue Pharma L.P., et al*	1:18-op-45994	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
PR	Municipality of Loiza	*Municipality of Loiza, Puerto Rico v. Purdue Pharma L.P., et al.*	1:18-op-45177	N.D. Ohio (Federal)
PR	Municipality of Rio Grande	*Municipality of Rio Grande, Puerto Rico v. Purdue Pharma L.P., et al.*	1:18-op-45895	N.D. Ohio (Federal)
PR	Municipality of Sabana Grande	*Municipality of Sabana Grande and Municipality of Cayey v. Purdue Pharma L.P., et al.*	1:18-op-45197	N.D. Ohio (Federal)
PR	Municipality of San Juan	*Municipality of San Juan, of the Commonwealth of Puerto Rico v. Johnson & Johnson, et al.*	1:21-op-45082	N.D. Ohio (Federal)
PR	Municipality of Vega Alta	*Municipality of Vega Alta, Puerto Rico v. Purdue Pharma L.P., et al.*	1:18-op-46011	N.D. Ohio (Federal)
PR	Municipality of Villalba	*Municipality of Villalba, Puerto Rico v. Purdue Pharma L.P., et al.*	1:19-op-45815	N.D. Ohio (Federal)
PR	Municipality of Yabucoa	*Municipality of Yabucoa, Puerto Rico v. Purdue Pharma L.P., et al.*	1:18-op-45731	N.D. Ohio (Federal)
SC	City of Charleston	*City of Charleston v. Purdue Pharma L.P., et al.*	2019-CP-104294 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	City of Chester	*City of Chester, South Carolina v. Purdue Pharma L.P., et al.*	1:19-op-45606	N.D. Ohio (Federal)
SC	City of Columbia	*City of Columbia, South Carolina v. Purdue Pharma L.P., et al*	1:19-op-45979	N.D. Ohio (Federal)
SC	City of Georgetown	*Georgetown City, South Carolina v. Purdue Pharma L.P., et al.*	1:19-op-45613	N.D. Ohio (Federal)
SC	City of Myrtle Beach	*City of Myrtle Beach v. Teva Pharmaceuticals USA, Inc., et al.*	2019-CP-2605556 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	City of North Charleston	*City of North Charleston v. Purdue Pharma L.P., et al.*	2019-CP-103978 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Greenville) (State MDL)
SC	City of Orangeburg	*City of Orangeburg v. Purdue Pharma L.P., et al.*	1:19-op-45607	N.D. Ohio (Federal)
SC	County of Abbeville	*County of Abbeville v. Purdue Pharma L.P., et al.*	2019-CP-0100154 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Aiken	*County of Aiken v. Rite Aid of South Carolina, Inc., et al.*	2019-CP-0201086 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Allendale	*County of Allendale v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-0300125 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Anderson	*County of Anderson v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-04-01108 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Bamberg	*County of Bamberg v. Rite Aid of South Carolina, Inc., et al.*	2018CP0500189 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				(SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Barnwell	*County of Barnwell v. Rite Aid of South Carolina, Inc., et al.*	2018CP0600329 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Beaufort	*County of Beaufort v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-0701245 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Berkeley	*County of Berkeley, South Carolina v. Purdue Pharma L.P., et al.*	1:19-op-45436	N.D. Ohio (Federal)
SC	County of Calhoun	*County of Calhoun v. Rite Aid of South Carolina, Inc., et al.*	2019-CP-0900065 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Charleston	*Charleston County, South Carolina v. Purdue Pharma L.P., et al.*	1:19-op-45803	N.D. Ohio (Federal)
SC	County of Cherokee	*County of Cherokee v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-1100503 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Greenville) (State MDL)
SC	County of Chester	*County of Chester v. Teva Pharmaceuticals USA, Inc., et al.*	2020-CP-1200373 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Chesterfield	*County of Chesterfield v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-1300410 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Clarendon	*County of Clarendon v. Purdue Pharma L.P., et al.*	2019-CP-1400236 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Colleton	*County of Colleton v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-15-00438 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Dillon	*County of Dillon v. Rite Aid of South Carolina, Inc., et al.*	2019CP1700213 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit,

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				County of Greenville) (State MDL)
SC	County of Dorchester	*County of Dorchester v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-1801122 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Edgefield	*County of Edgefield v. Rite Aid of South Carolina, Inc., et al.*	2019-CP-1900120 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Fairfield	*County of Fairfield v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-2000272 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Florence	*County of Florence v. Rite Aid of South Carolina, Inc., et al.*	2019-CP-2101213 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Georgetown	*Georgetown County, South Carolina v. Purdue Pharma L.P., et al.*	1:19-op-45612	N.D. Ohio (Federal)
SC	County of Greenville	*County of Greenville v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-2301294 (master)	MDL - In re South Carolina Opioid

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Greenwood	*County of Greenwood v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-2400775 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Hampton	*County of Hampton v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-2500258 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Horry	*County of Horry v. Rite Aid of South Carolina, Inc., et al.*	2019-CP-2602684 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Jasper	*County of Jasper v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-2700332 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Kershaw	*County of Kershaw v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-2800553 / 2018-	MDL - In re South Carolina

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
			CP-2301294 (master)	Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Lancaster	*County of Lancaster v. Rite Aid of South Carolina, Inc., et al.*	2019CP2900540 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Laurens	*County of Laurens v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-3000606 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Lee	*County of Lee v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-3100207 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Lexington	*County of Lexington v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-3202207 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Marion	*County of Marion v. Rite Aid of South Carolina, Inc., et al.*	2019-CP-3300299 / 2018-	MDL - In re South

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
			CP-2301294 (master)	Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Marlboro	*County of Marlboro v. Teva Pharmaceuticals USA, Inc., et al.*	2020-CP-3400184 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of McCormick	*County of McCormick v. Rite Aid of South Carolina, Inc., et al.*	2019-CP-3500031 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Newberry	*County of Newberry v. Teva Pharmaceuticals USA, Inc., et al.*	2019-CP-3600636 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Oconee	*County of Oconee v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-3700458 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
SC	County of Orangeburg	*County of Orangeburg v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-3800841 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Pickens	*County of Pickens v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-3900675 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Richland	*Richland County, South Carolina v. Purdue Pharma L.P., et al.*	1:19-op-45327	N.D. Ohio (Federal)
SC	County of Saluda	*County of Saluda v. Purdue Pharma L.P., et al.*	2019-CP-4100111 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Spartanburg	*County of Spartanburg v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-4200760 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Sumter	*County of Sumter v. Rite Aid of South Carolina, Inc., et al.*	2019-CP-4300891 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit,

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				County of Greenville) (State MDL)
SC	County of Union	*County of Union v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-4400288 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of Williamsburg	*County of Williamsburg v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-4500276 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	County of York	*County of York v. Rite Aid of South Carolina, Inc., et al.*	2018-CP-4602446 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	Medical University Hospital Authority	*Medical University Hospital Authority, Medical University of South Carolina and University Medical Associates of The Medical University Of South Carolina v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45197	N.D. Ohio (Federal)
SC	Medical University of South Carolina	*Medical University Hospital Authority, Medical University of South Carolina and University Medical Associates of The Medical University Of South Carolina v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45197	N.D. Ohio (Federal)
SC	Town of Mount Pleasant	*Town of Mount Pleasant v. Purdue Pharma L.P., et al.*	2019-CP-104302 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Circuit, County of Greenville) (State MDL)
SC	Town of Summerville	*Town of Summerville v. Purdue Pharma L.P., et al.*	2019-CP-1801602 / 2018-CP-2301294 (master)	MDL - In re South Carolina Opioid Litigation (SC - 13th Judicial Circuit, County of Greenville) (State MDL)
SC	University Medical Associates of the Medical University of South Carolina	*Medical University Hospital Authority, Medical University of South Carolina and University Medical Associates of The Medical University Of South Carolina v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45197	N.D. Ohio (Federal)
TN	City of Clarksville	*The City of Clarksville, Tennessee v. Purdue Pharma L.P., et al.*	1:18-op-45517	N.D. Ohio (Federal)
TN	City of Gatlinburg	*City of Gatlinburg, Tennessee v. Teva Pharmaceutical Industries Ltd., et al.*	1:21-op-45071	N.D. Ohio (Federal)
TN	City of Germantown	*The Cities of Maryville, Pigeon Forge, Ripley and Germantown, Tennessee, and the Town of Decatur, Tennessee v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45199	N.D. Ohio (Federal)
TN	City of Lexington	*Lexington, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45458	N.D. Ohio (Federal)
TN	City of Maryville	*The Cities of Maryville, Pigeon Forge, Ripley and Germantown, Tennessee, and the Town of Decatur, Tennessee v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45199	N.D. Ohio (Federal)
TN	City of Memphis	*City of Memphis v. Purdue Pharma L.P., et al.*	1:19-op-45220	N.D. Ohio (Federal)
TN	City of Millington	*City of Millington, Tennessee v. Purdue Pharma L.P., et al.*	1:19-op-45474	N.D. Ohio (Federal)
TN	City of Pigeon Forge	*The Cities of Maryville, Pigeon Forge, Ripley and Germantown, Tennessee, and the Town of Decatur, Tennessee v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45199	N.D. Ohio (Federal)
TN	City of Ripley	*The Cities of Maryville, Pigeon Forge, Ripley and Germantown, Tennessee, and the Town of Decatur, Tennessee v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45199	N.D. Ohio (Federal)
TN	County of Blount	*Blount County and Jefferson County v. Purdue Pharma L.P., et al.*	1:19-op-45132	N.D. Ohio (Federal)
TN	County of Campbell	*Campbell County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45133	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
TN	County of Cannon	*Cannon County, Tennessee v. Purdue Pharma L.P., et al.*	1:18-op-45924	N.D. Ohio (Federal)
TN	County of Claiborne	*Claiborne County, Tennessee v. Purdue Pharma L.P., et al.*	1:19-op-45658	N.D. Ohio (Federal)
TN	County of Crockett	*Crockett County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45215	N.D. Ohio (Federal)
TN	County of Decatur	*Decatur County, Tennessee v. Purdue Pharma L.P., et al.*	1:19-op-45789	N.D. Ohio (Federal)
TN	County of Fentress	*Fentress County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45419	N.D. Ohio (Federal)
TN	County of Greene	*Greene County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45136	N.D. Ohio (Federal)
TN	County of Hamilton	*Hamilton County, Tennessee v. Purdue Pharma L.P., et al.*	1:18-op-45507	N.D. Ohio (Federal)
TN	County of Hancock	*Hancock County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45153	N.D. Ohio (Federal)
TN	County of Hawkins	*Hawkins County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45299	N.D. Ohio (Federal)
TN	County of Haywood	*Haywood County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45107	N.D. Ohio (Federal)
TN	County of Henderson	*Henderson County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45404	N.D. Ohio (Federal)
TN	County of Jefferson	*Blount County and Jefferson County v. Purdue Pharma L.P., et al.*	1:19-op-45132	N.D. Ohio (Federal)
TN	County of Johnson	*Johnson County, Tennessee v. AmerisourceBergen Drug Corporation et al.*	1:18-op-45164	N.D. Ohio (Federal)
TN	County of Lauderdale	*Lauderdale County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46324	N.D. Ohio (Federal)
TN	County of Madison	*Madison County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45403	N.D. Ohio (Federal)
TN	County of Montgomery	*Montgomery County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45418	N.D. Ohio (Federal)
TN	County of Morgan	*Morgan County v. Purdue Pharma L.P., et al.*	1:19-op-45075	N.D. Ohio (Federal)
TN	County of Obion	*Obion County, Tennessee v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46115	N.D. Ohio (Federal)
TN	County of Overton	*Overton County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45568	N.D. Ohio (Federal)
TN	County of Pickett	*Pickett County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45242	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
TN	County of Rutherford	*Rutherford County, Tennessee v. Purdue Pharma L.P., et al.*	1:18-op-45258	N.D. Ohio (Federal)
TN	County of Scott	*Scott County, Tennessee v. Purdue Pharma L.P., et al.*	1:18-op-45273	N.D. Ohio (Federal)
TN	County of Shelby	*Shelby County Government v. Purdue Pharma L.P., et al.*	CT-004500-17	TN - Circuit Court for Shelby County (State)
TN	County of Smith	*Smith County, Tennessee v. Purdue Pharma L.P., et al.*	1:18-op-45029	N.D. Ohio (Federal)
TN	County of Sumner	*Sumner County, Tennessee v. Purdue Pharma L.P., et al.*	1:18-op-45255	N.D. Ohio (Federal)
TN	County of Washington	*Washington County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46317	N.D. Ohio (Federal)
TN	County of Williamson	*Williamson County, Tennessee v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45134	N.D. Ohio (Federal)
TN	Hamblen County Board of Education	*Hancock County Board of Education and Hamblen County Board of Education v. Cephalon, Inc., et al.*	1:22-op-45027	N.D. Ohio (Federal)
TN	Hancock County Board of Education	*Hancock County Board of Education and Hamblen County Board of Education v. Cephalon, Inc., et al.*	1:22-op-45027	N.D. Ohio (Federal)
TN	Metropolitan Government of Nashville and Davidson County	*Metropolitan Government of Nashville and Davidson County, Tennessee v. Purdue Pharma L.P., et al.*	1:18-op-45088	N.D. Ohio (Federal)
TN	Town of Arlington	*Town of Arlington, Tennessee v. Purdue Pharma L.P., et al.*	1:19-op-45471	N.D. Ohio (Federal)
TN	Town of Centerville	*Town of Centerville, Tennessee v. Purdue Pharma L.P., et al.*	1:19-op-45425	N.D. Ohio (Federal)
TN	Town of Dandridge	*The Town of Dandridge, Tennessee v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45216	N.D. Ohio (Federal)
TN	Town of Decatur	*The Cities of Maryville, Pigeon Forge, Ripley and Germantown, Tennessee, and the Town of Decatur, Tennessee v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45199	N.D. Ohio (Federal)
TX	Bexar County Hospital District d/b/a University Health System	*Bexar County Hospital District d/b/a University Health System v. Teva Pharmaceutical Industries Ltd., et al.*	2020-17501 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	Burleson County Hospital District	*Burleson County Hospital District v. Purdue Pharma L.P., et al.*	29740	TX - 21st Judicial District Court of Burleson

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				County (State)
TX	City of Eagle Pass	*The City of Eagle Pass, Texas v. Purdue Pharma L.P., et al.*	1:18-op-46033	N.D. Ohio (Federal)
TX	City of Houston	*City of Houston, Texas v. Purdue Pharma L.P., et al.*	2019-43219 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	City of Laredo	*The City of Laredo, Texas v. Purdue Pharma L.P., et al.*	1:18-op-46026	N.D. Ohio (Federal)
TX	City of Leon Valley	*City of Leon Valley v. Teva Pharmaceuticals USA, Inc., et al.*	2020-39837 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	City of San Antonio	*City of San Antonio, Texas v. Purdue Pharma L.P., et al.*	1:19-op-45833	N.D. Ohio (Federal)
TX	County of Angelina	*County of Angelina v. Purdue Pharma L.P., et al.*	1:20-op-45053	N.D. Ohio (Federal)
TX	County of Bailey	*County of Bailey, Texas v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45264	N.D. Ohio (Federal)
TX	County of Bastrop	*County of Bastrop v. Teva Pharmaceuticals USA, Inc., et al.*	2020-17434 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Bexar	*County of Bexar v. Purdue Pharma L.P., et al.*	2018-77066 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Bowie	*County of Bowie v. Purdue Pharma L.P., et al.*	1:17-op-45159	N.D. Ohio (Federal)
TX	County of Brazos	*Brazos County v. Purdue Pharma L.P., et al.*	1:18-op-45863	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
TX	County of Brooks	*County of Brooks v. Teva Pharmaceuticals USA, Inc., et al.*	2020-17509 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Caldwell	*County of Caldwell v. Teva Pharmaceuticals USA, Inc., et al.*	2020-17563 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Calhoun	*County of Calhoun v. Teva Pharmaceuticals USA, Inc., et al.*	2020-17536 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Cameron	*County of Cameron v. Purdue Pharma L.P., et al.*	2018-77093 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Camp	*County of Camp v. Purdue Pharma L.P., et al.*	1:18-op-45301	N.D. Ohio (Federal)
TX	County of Castro	*County of Castro, County of Colorado, County of Jefferson, County of Madison, County of Roberts, County of San Saba, County of Shackelford, County of Terrell, Irving Independent School District and Texarkana Independent School District v. AbbVie Inc., et al.*	2020-37584 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Cherokee	*County of Cherokee v. Purdue Pharma L.P., et al.*	1:17-op-45155	N.D. Ohio (Federal)
TX	County of Childress	*County of Childress v. Purdue Pharma L.P., et al.*	1:18-op-45229	N.D. Ohio (Federal)
TX	County of Clay	*County of Clay v. Purdue Pharma L.P., et al.*	1:18-op-45169	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
TX	County of Colorado	*County of Castro, County of Colorado, County of Jefferson, County of Madison, County of Roberts, County of San Saba, County of Shackelford, County of Terrell, Irving Independent School District and Texarkana Independent School District v. AbbVie Inc., et al.*	2020-37584 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Coryell	*County of Coryell v. Purdue Pharma L.P., et al.*	1:22-op-45009	N.D. Ohio (Federal)
TX	County of Dallas	*County of Dallas v. Purdue Pharma L.P., et al.*	2018-77098 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Delta	*County of Delta v. Purdue Pharma L.P., et al.*	2018-77104 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Duval	*County of Duval v. Purdue Pharma L.P., et al.*	2018-87879 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of El Paso	*County of El Paso v. Purdue Pharma L.P., et al.*	2018-76970 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Ellis	*Ellis County v. Purdue Pharma L.P., et al.*	2019-41572 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Harris County) (State MDL)
TX	County of Falls	*County of Falls v. Purdue Pharma L.P., et al.*	2018-77106 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Fort Bend	*County of Fort Bend, Texas v. Purdue Pharma L.P., et al.*	19-DCV-263509	TX - 400th Judicial District Court of Fort Bend County (State)
TX	County of Franklin	*County of Franklin v. Purdue Pharma L.P., et al.*	1:18-op-45302	N.D. Ohio (Federal)
TX	County of Freestone	*County of Freestone v. Purdue Pharma L.P., et al.*	1:19-op-45985	N.D. Ohio (Federal)
TX	County of Galveston	*County of Galveston v. Purdue Pharma L.P., et al.*	1:19-op-45239	N.D. Ohio (Federal)
TX	County of Guadalupe	*County of Guadalupe v. Teva Pharmaceuticals USA, Inc., et al.*	2020-16457 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Harris	*County of Harris v. Purdue Pharma L.P., et al.*	2017-82618 / 2018-63587 (master)	TX - 133rd Judicial District Court of Harris County (State)
TX	County of Harrison	*County of Harrison v. Purdue Pharma L.P., et al. / County of Harrison v. Purdue Pharma L.P., et al.*	1:17-op-45087 / 2018-77108 / 2018-63587 (master)	N.D. Ohio (Federal) / MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Haskell	*County of Haskell v. Purdue Pharma L.P., et al.*	1:18-op-45223	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
TX	County of Hays	*County of Hays v. Teva Pharmaceuticals USA, Inc., et al.*	2020-16529 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Henderson	*County of Henderson v. Purdue Pharma L.P., et al.*	1:19-op-45684	N.D. Ohio (Federal)
TX	County of Hidalgo	*County of Hidalgo v. Purdue Pharma L.P., et al.*	2018-77109 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Hopkins	*County of Hopkins v. Purdue Pharma L.P., et al.*	2018-77111 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Jefferson	*County of Castro, County of Colorado, County of Jefferson, County of Madison, County of Roberts, County of San Saba, County of Shackelford, County of Terrell, Irving Independent School District and Texarkana Independent School District v. AbbVie Inc., et al.*	2020-37584 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Jim Hogg	*County of Jim Hogg v. Purdue Pharma L.P., et al.*	2019-49060 / 2018-63587 (master)	TX - 229th Judicial District Court of Jim Hogg County (State)
TX	County of Jim Wells	*County of Jim Wells v. Purdue Pharma L.P., et al.*	19-06-59579-CV / 2018-63587 (master)	TX - 79th Judicial District Court of Jim Wells County (State)
TX	County of Johnson	*Johnson County v. Purdue Pharma L.P., et al.*	2018-87346 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				(TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Jones	*County of Jones v. Purdue Pharma L.P., et al.*	1:18-op-45139	N.D. Ohio (Federal)
TX	County of Kaufman	*Kaufman County v. Purdue Pharma L.P., et al.*	1:18-op-46081	N.D. Ohio (Federal)
TX	County of Kendall	*County of Kendall v. Purdue Pharma L.P., et al.*	1:22-op-45010	N.D. Ohio (Federal)
TX	County of Kerr	*County of Kerr v. Purdue Pharma L.P., et al.*	2018-77114 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Kinney	*County of Kinney v. Purdue Pharma L.P., et al.*	1:18-op-45241	N.D. Ohio (Federal)
TX	County of Kleberg	*County of Kleberg v. Purdue Pharma L.P., et al.*	2019-49074 / 2018-63587 (master)	TX - 105th Judicial District Court of Kleberg County (State)
TX	County of La Salle	*County of La Salle v. Purdue Pharma L.P., et al.*	1:18-op-45234	N.D. Ohio (Federal)
TX	County of Lamar	*County of Lamar v. Purdue Pharma L.P., et al.*	1:17-op-45162	N.D. Ohio (Federal)
TX	County of Leon	*County of Leon v. Purdue Pharma L.P., et al.*	1:19-op-45240	N.D. Ohio (Federal)
TX	County of Liberty	*County of Liberty v. Purdue Pharma L.P., et al.*	2018-77116 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Lubbock	*County of Lubbock v. Teva Pharmaceuticals USA, Inc., et al.*	2020-16529 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
TX	County of Madison	*County of Castro, County of Colorado, County of Jefferson, County of Madison, County of Roberts, County of San Saba, County of Shackelford, County of Terrell, Irving Independent School District and Texarkana Independent School District v. AbbVie Inc., et al.*	2020-37584 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Maverick	*Maverick County, Texas v. Purdue Pharma L.P., et al. / Maverick County, Texas v. Purdue Pharma L.P., et al.*	2018-77026 / 1:19-op-45426 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)
TX	County of Mitchell	*County of Mitchell v. Purdue Pharma L.P., et al.*	1:18-op-45063	N.D. Ohio (Federal)
TX	County of Montgomery	*County of Montgomery v. Purdue Pharma L.P., et al.*	1:18-op-45030	N.D. Ohio (Federal)
TX	County of Morris	*County of Morris v. Purdue Pharma L.P., et al.*	1:17-op-45086	N.D. Ohio (Federal)
TX	County of Nolan	*County of Nolan v. Purdue Pharma L.P., et al.*	1:18-op-45061	N.D. Ohio (Federal)
TX	County of Nueces	*County of Nueces and Nueces County Hospital District v. Purdue Pharma L.P., et al.*	2018-77083 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Polk	*County of Polk v. Purdue Pharma L.P., et al.*	1:18-op-45077	N.D. Ohio (Federal)
TX	County of Red River	*County of Red River v. Purdue Pharma L.P., et al.*	1:17-op-45160	N.D. Ohio (Federal)
TX	County of Roberts	*County of Castro, County of Colorado, County of Jefferson, County of Madison, County of Roberts, County of San Saba, County of Shackelford, County of Terrell, Irving Independent School District and Texarkana Independent School District v. AbbVie Inc., et al.*	2020-37584 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Rockwall	*Rockwall County v. Purdue Pharma L.P., et al.*	1-19-0503 / 2018-63587 (master)	TX - 439th Judicial District Court

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				of Rockwall County (State)
TX	County of Rusk	*County of Rusk v. Purdue Pharma L.P., et al.*	1:17-op-45154	N.D. Ohio (Federal)
TX	County of San Patricio	*County of San Patricio v. Purdue Pharma L.P., et al.*	2018-77075 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of San Saba	*County of Castro, County of Colorado, County of Jefferson, County of Madison, County of Roberts, County of San Saba, County of Shackelford, County of Terrell, Irving Independent School District and Texarkana Independent School District v. AbbVie Inc., et al.*	2020-37584 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Shackelford	*County of Castro, County of Colorado, County of Jefferson, County of Madison, County of Roberts, County of San Saba, County of Shackelford, County of Terrell, Irving Independent School District and Texarkana Independent School District v. AbbVie Inc., et al.*	2020-37584 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Smith	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al.*	2020-70878 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Stephens	*Stephens County v. Purdue Pharma L.P., et al.*	1:18-op-45804	N.D. Ohio (Federal)
TX	County of Tarrant	*County of Tarrant v. Purdue Pharma L.P., et al.*	1:18-op-45274	N.D. Ohio (Federal)
TX	County of Terrell	*County of Castro, County of Colorado, County of Jefferson, County of Madison, County of Roberts, County of San Saba, County of Shackelford, County of Terrell,*	2020-37584 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Irving Independent School District and Texarkana Independent School District v. AbbVie Inc., et al.		Judicial District of Harris County) (State MDL)
TX	County of Throckmorton	*County of Throckmorton v. Purdue Pharma L.P., et al.*	1:18-op-45141	N.D. Ohio (Federal)
TX	County of Titus	*County of Titus v. Purdue Pharma L.P., et al.*	1:17-op-45161	N.D. Ohio (Federal)
TX	County of Travis	*County of Travis v. Purdue Pharma L.P., et al.*	2018-77144 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Upshur	*County of Upshur v. Purdue Pharma L.P., et al.*	1:17-op-45085	N.D. Ohio (Federal)
TX	County of Uvalde	*County of Uvalde v. Teva Pharmaceuticals USA, Inc., et al.*	2020-16427 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Van Zandt	*County of Van Zandt v. Purdue Pharma L.P., et al.*	2018-77150 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Walker	*County of Walker v. Abbott Laboratories, et al.*	2019-29777 / 2018-63587 (master)	TX - 12th Judicial District Court of Walker County (State)
TX	County of Waller	*County of Waller v. Purdue Pharma L.P., et al.*	2018-77153 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
TX	County of Webb	*County of Webb, Texas v. Purdue Pharma L.P., et al.*	1:18-op-45175	N.D. Ohio (Federal)
TX	County of Wichita	*County of Wichita v. Purdue Pharma L.P., et al.*	1:18-op-45064	N.D. Ohio (Federal)
TX	County of Williamson	*County of Williamson v. Purdue Pharma L.P., et al.*	19-0850-C368 / 2018-63587 (master)	TX - 368th Judicial District Court of Williamson County (State)
TX	County of Wilson	*County of Wilson and Wilson County Memorial Hospital District v. Teva Pharmaceuticals USA, Inc., et al.*	2020-39831 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	County of Zavala	*The County of Zavala, Texas v. Purdue Pharma L.P., et al.*	1:18-op-46036	N.D. Ohio (Federal)
TX	Dallas County Hospital District d/b/a Parkland Health and Hospital System	*Dallas County Hospital District d/b/a Parkland Health & Hospital System; Palo Pinto County Hospital District a/k/a Palo Pinto General Hospital; Guadalupe Valley Hospital a/k/a Guadalupe Regional Medical Center; VHS San Antonio Partners, LLC d/b/a Baptist Medical Center, Mission Trail Baptist Hospital, North Central Baptist Hospital, Northeast Baptist Hospital, and St. Luke's Baptist Hospital; Nacogdoches Medical Center; Resolute Hospital Comp Any, LLC d/b/a Resolute Health; The Hospitals of Providence East Campus; The Hospitals of Providence Memorial Campus; The Hospitals of Providence Sierra Campus; The Hospitals of Providence Transmountain Campus; VHS Brownsville Hospital Company, LLC d/b/a Valley Baptist Medical Center - Brownsville; VHS Harlingen Hospital Company, LLC d/b/a Valley Baptist Medical Center; ARMC, L.P. d/b/a Abilene Regional Medical Center; College Station Hospital, LP; Granbury Hospital Corporation d/b/a Lake Granbury Medical Center; Navarro Hospital, L.P. d/b/a Navarro Regional Hospital; Brownwood Hospital, L.P. d/b/a Brownwood Regional Medical Center; Victoria of Texas, L.P. d/b/a Detar Hospital Navarro and Detar Hospital*	DC-19-18635 / 2018-63587 (master)	TX - 162nd Judicial District Court of Dallas County (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		North; Laredo Texas Hospital Company, L.P. d/b/a Laredo Medical Center; San Angelo Hospital, L.P. d/b/a San Angelo Community Medical Center; Cedar Park Health System, L.P. d/b/a Cedar Park Regional Medical Center; NHCI of Hillsboro, Inc. d/b/a Hill Regional Hospital; Longview Medical Center, L.P. d/b/a Longview Regional Medical Center; and Piney Woods Healthcare System, L.P. d/b/a Woodland Heights Medical Center v. Amneal Pharmaceuticals, LLC, et al.		
TX	Guadalupe Valley Hospital a/k/a Guadalupe Regional Medical Center	*Dallas County Hospital District d/b/a Parkland Health & Hospital System; Palo Pinto County Hospital District a/k/a Palo Pinto General Hospital; Guadalupe Valley Hospital a/k/a Guadalupe Regional Medical Center; VHS San Antonio Partners, LLC d/b/a Baptist Medical Center, Mission Trail Baptist Hospital, North Central Baptist Hospital, Northeast Baptist Hospital, and St. Luke's Baptist Hospital; Nacogdoches Medical Center; Resolute Hospital Comp Any, LLC d/b/a Resolute Health; The Hospitals of Providence East Campus; The Hospitals of Providence Memorial Campus; The Hospitals of Providence Sierra Campus; The Hospitals of Providence Transmountain Campus; VHS Brownsville Hospital Company, LLC d/b/a Valley Baptist Medical Center - Brownsville; VHS Harlingen Hospital Company, LLC d/b/a Valley Baptist Medical Center; ARMC, L.P. d/b/a Abilene Regional Medical Center; College Station Hospital, LP; Granbury Hospital Corporation d/b/a Lake Granbury Medical Center; Navarro Hospital, L.P. d/b/a Navarro Regional Hospital; Brownwood Hospital, L.P. d/b/a Brownwood Regional Medical Center; Victoria of Texas, L.P. d/b/a Detar Hospital Navarro and Detar Hospital North; Laredo Texas Hospital Company, L.P. d/b/a Laredo Medical Center; San Angelo Hospital, L.P. d/b/a San Angelo Community Medical Center; Cedar Park Health System, L.P. d/b/a Cedar Park Regional Medical Center; NHCI of Hillsboro, Inc. d/b/a Hill Regional Hospital; Longview Medical Center, L.P. d/b/a Longview Regional Medical Center; and Piney Woods Healthcare System, L.P.*	DC-19-18635 / 2018-63587 (master)	TX - 162nd Judicial District Court of Dallas County (State)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		d/b/a Woodland Heights Medical Center v. Amneal Pharmaceuticals, LLC, et al.		
TX	Harris County Hospital District d/b/a Harris Health System	*Harris County Hospital District d/b/a Harris Health System v. McKesson Corporation, et al.*	2021-23217 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	Irving Independent School District	*County of Castro, County of Colorado, County of Jefferson, County of Madison, County of Roberts, County of San Saba, County of Shackelford, County of Terrell, Irving Independent School District and Texarkana Independent School District v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.*	2020-37584 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)
TX	Maverick County Hospital District	*Maverick County Hospital District v. Purdue Pharma L.P., et al.*	17-10-34909-MCVAJA	TX - 365th Judicial District Court of Maverick County (State)
TX	Nueces County Hospital District	*County of Nueces and Nueces County Hospital District v. Purdue Pharma L.P., et al.*	2018-77083 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)
TX	Ochiltree County Hospital District	*Ochiltree County Hospital District v. McKesson Corporation, et al.*	1:18-op-45869	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
TX	Palo Pinto County Hospital District a/k/a Palo Pinto General Hospital	*Dallas County Hospital District d/b/a Parkland Health & Hospital System; Palo Pinto County Hospital District a/k/a Palo Pinto General Hospital; Guadalupe Valley Hospital a/k/a Guadalupe Regional Medical Center; VHS San Antonio Partners, LLC d/b/a Baptist Medical Center, Mission Trail Baptist Hospital, North Central Baptist Hospital, Northeast Baptist Hospital, and St. Luke's Baptist Hospital; Nacogdoches Medical Center; Resolute Hospital Comp Any, LLC d/b/a Resolute Health; The Hospitals of Providence East Campus; The Hospitals of Providence Memorial Campus; The Hospitals of Providence Sierra Campus; The Hospitals of Providence Transmountain Campus; VHS Brownsville Hospital Company, LLC d/b/a Valley Baptist Medical Center - Brownsville; VHS Harlingen Hospital Company, LLC d/b/a Valley Baptist Medical Center; ARMC, L.P. d/b/a Abilene Regional Medical Center; College Station Hospital, LP; Granbury Hospital Corporation d/b/a Lake Granbury Medical Center; Navarro Hospital, L.P. d/b/a Navarro Regional Hospital; Brownwood Hospital, L.P. d/b/a Brownwood Regional Medical Center; Victoria of Texas, L.P. d/b/a Detar Hospital Navarro and Detar Hospital North; Laredo Texas Hospital Company, L.P. d/b/a Laredo Medical Center; San Angelo Hospital, L.P. d/b/a San Angelo Community Medical Center; Cedar Park Health System, L.P. d/b/a Cedar Park Regional Medical Center; NHCI of Hillsboro, Inc. d/b/a Hill Regional Hospital; Longview Medical Center, L.P. d/b/a Longview Regional Medical Center; and Piney Woods Healthcare System, L.P. d/b/a Woodland Heights Medical Center v. Amneal Pharmaceuticals, LLC, et al.*	DC-19-18635 / 2018-63587 (master)	TX - 162nd Judicial District Court of Dallas County (State)
TX	Socorro Independent School District	*Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School District, Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City*	202070878 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		of Hillview, KY, City of Shepherdsville, KY, and City of Mt. Washington, KY v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.		/ N.D. Ohio (Federal)
TX	Tarrant County Hospital District d/b/a JPS Health Network	*Tarrant County Hospital District d/b/a JPS Health Network v. McKesson Corporation, et al.*	1:21-op-45077	N.D. Ohio (Federal)
TX	Texarkana Independent School District	*County of Castro, County of Colorado, County of Jefferson, County of Madison, County of Roberts, County of San Saba, County of Shackelford, County of Terrell, Irving Independent School District and Texarkana Independent School District v. AbbVie Inc., et al. / Texarkana Independent School Dist., Irving Independent School District, Socorro Independent School District, Downey Unified School District, Kern High School District, Waukegan Community Unit School District, Bibb County School District, South Bend Community School Corp., Mesa County Valley School District 51, Elk Grove Unified School Dist., Smith-Green Community Schools, School City of Mishawaka, City of Mishawaka, IN, City of Hillview, KY, City of Shepherdsville, KY, City of Mt. Washington, KY, Penn-Harris-Madison School Corp., and Fort Wayne Community Schools v. AbbVie Inc., et al.*	2020-37584 / 2018-63587 (master) / 1:21-op-45080	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris County) (State MDL) / N.D. Ohio (Federal)
TX	Wilson County Memorial Hospital District	*County of Wilson and Wilson County Memorial Hospital District v. Teva Pharmaceuticals USA, Inc., et al.*	2020-39831 / 2018-63587 (master)	MDL - In re Texas Opioid Litigation (TX - 152nd Judicial District of Harris

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				County) (State MDL)
UT	County of Beaver	*Washington County, Kane County, Beaver County and Garfield County, Utah v. Purdue Pharma L.P., et al.*	190500179 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Cache	*Cache County, Utah and Rich County, Utah v. Purdue Pharma L.P., et al.*	190500360 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Carbon	*Carbon County, Utah v. Purdue Pharma L.P., et al.*	1:18-op-46270	N.D. Ohio (Federal)
UT	County of Daggett	*Uintah County, Utah; Duchesne County, Utah; Daggett County, Utah and Tri-County Health Department v. Purdue Pharma L.P., et al.*	190500359 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Davis	*Davis County v. Purdue Pharma L.P., et al.*	180700870 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Duchesne	*Uintah County, Utah; Duchesne County, Utah; Daggett County, Utah and Tri-County Health Department v. Purdue Pharma L.P., et al.*	190500359 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT -

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Summit County, Silver Summit Division) (State MDL)
UT	County of Emery	*Sevier County, Juab County, Emery County, Wayne County and Piute County v. Purdue Pharma L.P., et al.*	190500430 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Garfield	*Washington County, Kane County, Beaver County and Garfield County, Utah v. Purdue Pharma L.P., et al.*	190500361 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Grand	*Grand County v. Purdue Pharma L.P., et al.*	180700040 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Iron	*Iron County v. Purdue Pharma L.P., et al.*	180500149 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Juab	*Sevier County, Juab County, Emery County, Wayne County and Piute County v. Purdue Pharma L.P., et al.*	190500430 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				(UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Kane	*Washington County, Kane County, Beaver County and Garfield County, Utah v. Purdue Pharma L.P., et al.*	190500361 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Millard	*Millard County v. Purdue Pharma L.P., et al.*	180700044 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Piute	*Sevier County, Juab County, Emery County, Wayne County and Piute County v. Purdue Pharma L.P., et al.*	190500430 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Rich	*Cache County, Utah and Rich County, Utah v. Purdue Pharma L.P., et al.*	190500360 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Salt Lake	*Salt Lake County v. Purdue Pharma L.P., et al.*	180902421 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of San Juan	*San Juan County v. Purdue Pharma L.P., et al.*	180700011 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Sanpete	*Sanpete County v. Purdue Pharma L.P., et al.*	180600095 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Sevier	*Sevier County, Juab County, Emery County, Wayne County and Piute County v. Purdue Pharma L.P., et al.*	190500430 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Summit	*Summit County Utah v. Purdue Pharma L.P., et al.*	190500354 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
UT	County of Tooele	*Tooele County, Utah v. Purdue Pharma L.P., et al.*	190500355 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Uintah	*Uintah County, Utah; Duchesne County, Utah; Daggett County, Utah and Tri-County Health Department v. Purdue Pharma L.P., et al.*	190500359 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Utah	*Utah County, Utah v. Purdue Pharma, Inc., et al.*	1:18-op-46184	N.D. Ohio (Federal)
UT	County of Wasatch	*Wasatch County, Utah v. Purdue Pharma L.P., et al.*	190500357 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Washington	*Washington County, Kane County, Beaver County and Garfield County, Utah v. Purdue Pharma L.P., et al.*	190500361 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
UT	County of Wayne	*Sevier County, Juab County, Emery County, Wayne County and Piute County v. Purdue Pharma L.P., et al.*	190500430 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				Summit Division) (State MDL)
UT	County of Weber	*Weber County, Utah v. Purdue Pharma L.P., et al.*	190500358 / 180500119 (coordinated)	MDL - In the Matter of the Utah Opioid Litigation I (UT - Summit County, Silver Summit Division) (State MDL)
VA	City of Alexandria	*City of Alexandria v. Purdue Pharma L.P., et al.*	1:19-op-45246	N.D. Ohio (Federal)
VA	City of Bristol	*City of Bristol, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45719	N.D. Ohio (Federal)
VA	City of Buena Vista	*City of Buena Vista, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45159	N.D. Ohio (Federal)
VA	City of Chesapeake	*City of Chesapeake, Virginia v. Purdue Pharma L.P., et al.,*	1:19-op-45712	N.D. Ohio (Federal)
VA	City of Covington	*City of Covington, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45799	N.D. Ohio (Federal)
VA	City of Danville	*City of Danville, Virginia v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45730	N.D. Ohio (Federal)
VA	City of Emporia	*City of Emporia, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-46850	N.D. Ohio (Federal)
VA	City of Fairfax	*City of Fairfax, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45177	N.D. Ohio (Federal)
VA	City of Fredericksburg	*City of Fredericksburg, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45898	N.D. Ohio (Federal)
VA	City of Galax	*City of Galax, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45243	N.D. Ohio (Federal)
VA	City of Hopewell	*City of Hopewell, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45433	N.D. Ohio (Federal)
VA	City of Lexington	*City of Lexington, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45693	N.D. Ohio (Federal)
VA	City of Martinsville	*City of Martinsville, Virginia v. Purdue Pharma L.P., et al.*	CL18000240	VA - Circuit Court for the City of Martinsville (State)
VA	City of Norfolk	*City of Norfolk, Virginia v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45926	N.D. Ohio (Federal)
VA	City of Norton	*City of Norton, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45249	N.D. Ohio (Federal)
VA	City of Portsmouth	*City of Portsmouth v. Purdue Pharma L.P., et al.*	1:19-op-45856	N.D. Ohio (Federal)
VA	City of Radford	*City of Radford, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-46154	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
VA	City of Richmond	*City of Richmond v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45546	N.D. Ohio (Federal)
VA	City of Roanoke	*City of Roanoke, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45696	N.D. Ohio (Federal)
VA	City of Salem	*City of Salem, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45697	N.D. Ohio (Federal)
VA	City of Virginia Beach	*City of Virginia Beach and Sheriff of the City of Virginia Beach v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46137	N.D. Ohio (Federal)
VA	City of Waynesboro	*The City of Waynesboro, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-46152	N.D. Ohio (Federal)
VA	City of Winchester	*City of Winchester, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45176	N.D. Ohio (Federal)
VA	County of Accomack	*Accomack County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45715	N.D. Ohio (Federal)
VA	County of Alleghany	*Alleghany County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45700	N.D. Ohio (Federal)
VA	County of Amherst	*Amherst County, Virginia v. Purdue Pharma L.P., et al.*	1:20-op-45046	N.D. Ohio (Federal)
VA	County of Arlington (County Board)	*The County Board of Arlington County, Virginia v. Purdue Pharma L.P., et al.*	1:21-op-45078	N.D. Ohio (Federal)
VA	County of Bland	*Bland County, Virginia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46065	N.D. Ohio (Federal)
VA	County of Botetourt	*Botetourt County, Virginia v. Purdue Pharma L.P., et al.*	1:20-op-45064	N.D. Ohio (Federal)
VA	County of Buchanan	*Buchanan County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45253	N.D. Ohio (Federal)
VA	County of Carroll	*Carroll County, Virginia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46068	N.D. Ohio (Federal)
VA	County of Charlotte	*Charlotte County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45851	N.D. Ohio (Federal)
VA	County of Chesterfield	*Chesterfield County, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45173	N.D. Ohio (Federal)
VA	County of Culpeper	*Culpeper County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45849	N.D. Ohio (Federal)
VA	County of Cumberland	*Cumberland County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-46153	N.D. Ohio (Federal)
VA	County of Dickenson	*Dickenson County v. Purdue Pharma L.P., et al.*	1:19-op-45252	N.D. Ohio (Federal)
VA	County of Dinwiddie	*Dinwiddie County, Virginia v. Purdue Pharma L.P., et al.*	1:20-op-45291	N.D. Ohio (Federal)
VA	County of Fairfax (Board of Supervisors)	*Fairfax County, Virginia, by its Board of Supervisors v. Purdue Pharma L.P., et al.*	1:19-op-45766	N.D. Ohio (Federal)
VA	County of Fauquier	*Fauquier County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45686	N.D. Ohio (Federal)
VA	County of Floyd	*Floyd County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45698	N.D. Ohio (Federal)
VA	County of Franklin	*Franklin County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45701	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
VA	County of Frederick	*Frederick County, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45233	N.D. Ohio (Federal)
VA	County of Giles	*Giles County v. Purdue Pharma L.P., et al.*	1:19-op-45236	N.D. Ohio (Federal)
VA	County of Goochland	*Goochland County, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45175	N.D. Ohio (Federal)
VA	County of Grayson	*Grayson County, Virginia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46069	N.D. Ohio (Federal)
VA	County of Greensville	*Greensville County v. Purdue Pharma L.P., et al.*	1:19-op-45848	N.D. Ohio (Federal)
VA	County of Halifax	*Halifax County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45692	N.D. Ohio (Federal)
VA	County of Henrico	*Henrico County, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45172	N.D. Ohio (Federal)
VA	County of Henry	*Henry County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45245	N.D. Ohio (Federal)
VA	County of Isle of Wight	*Isle of Wight County, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45145	N.D. Ohio (Federal)
VA	County of King and Queen	*King and Queen County, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45138	N.D. Ohio (Federal)
VA	County of Lee	*Lee County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45251	N.D. Ohio (Federal)
VA	County of Loudoun	*Loudoun County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45842	N.D. Ohio (Federal)
VA	County of Louisa	*Louisa County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45720	N.D. Ohio (Federal)
VA	County of Madison	*Madison County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45702	N.D. Ohio (Federal)
VA	County of Mecklenburg	*Mecklenburg County, Virginia v. Purdue Pharma L.P., et al.*	1:20-op-45174	N.D. Ohio (Federal)
VA	County of Montgomery	*Montgomery County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45234	N.D. Ohio (Federal)
VA	County of Northampton	*Northampton County, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45144	N.D. Ohio (Federal)
VA	County of Northumberland	*Northumberland County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45688	N.D. Ohio (Federal)
VA	County of Page	*Page County v. Purdue Pharma L.P., et al.*	1:19-op-45275	N.D. Ohio (Federal)
VA	County of Patrick	*Patrick County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-46149	N.D. Ohio (Federal)
VA	County of Pittsylvania	*Pittsylvania v. Purdue Pharma L.P., et al.*	1:19-op-45247	N.D. Ohio (Federal)
VA	County of Prince George	*Prince George County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45929	N.D. Ohio (Federal)
VA	County of Prince William (Board of County Supervisors)	*The Board of County Supervisor of Prince William County v. Purdue Pharma L.P., et al.*	1:19-op-45687	N.D. Ohio (Federal)
VA	County of Pulaski	*Pulaski County, Virginia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46076	N.D. Ohio (Federal)
VA	County of Richmond	*City of Richmond v. AmerisourceBergen Drug Corporation, et al.*	1:19-op-45546	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
VA	County of Roanoke	*Roanoke County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45695	N.D. Ohio (Federal)
VA	County of Rockbridge	*Rockbridge County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45694	N.D. Ohio (Federal)
VA	County of Russell	*Russell County, Virginia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46073	N.D. Ohio (Federal)
VA	County of Scott (Board of Supervisors)	*Scott County Board of Supervisors v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46074	N.D. Ohio (Federal)
VA	County of Shenandoah	*Shenandoah County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-46150	N.D. Ohio (Federal)
VA	County of Smyth	*Smyth County, Virginia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46077	N.D. Ohio (Federal)
VA	County of Stafford	*Stafford County, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45178	N.D. Ohio (Federal)
VA	County of Tazewell	*Tazewell County, Virginia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46167	N.D. Ohio (Federal)
VA	County of Warren	*Westmoreland County, Virginia; Richmond County, Virginia; Warren County, Virginia v. McKesson Corporation, et al.*	1:19-op-45993	N.D. Ohio (Federal)
VA	County of Washington	*Washington County, Virginia v. Purdue Pharma L.P., et al.*	1:19-op-45254	N.D. Ohio (Federal)
VA	County of Westmoreland	*Westmoreland County, Virginia; Richmond County, Virginia; Warren County, Virginia v. McKesson Corporation, et al.*	1:19-op-45993	N.D. Ohio (Federal)
VA	County of Wise (Board of Supervisors)	*Wise County Board of Supervisors v. Purdue Pharma L.P., et al.*	1:19-op-45907	N.D. Ohio (Federal)
VA	County of Wythe	*Wythe County, Virginia v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46072	N.D. Ohio (Federal)
VA	Sheriff of Virginia Beach City	*City of Virginia Beach and Sheriff of the City of Virginia Beach v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-46137	N.D. Ohio (Federal)
VA	Town of Richlands	*The Town of Richlands, Virginia v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45193	N.D. Ohio (Federal)
VT	City of St. Albans	*City of St, Albans, Vermont v. Purdue Pharma L.P., et al.*	1:19-op-45721	N.D. Ohio (Federal)
WA	City of Anacortes	*City of Anacortes and Sedro-Woolley School District v. Purdue Pharma L.P., et al.*	1:19-op-45029	N.D. Ohio (Federal)
WA	City of Bainbridge Island	*City of Bainbridge Island v. Purdue Pharma L.P., et al.*	1:19-op-45981	N.D. Ohio (Federal)
WA	City of Burlington	*Skagit County, City of Mount Vernon, City of Sedro-Woolley, City of Burlington, LA Conner School District and Mount*	1:18-op-45173	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
		Vernon School District v. Purdue Pharma L.P., et al.		
WA	City of Everett	*City of Everett v. Purdue Pharma L.P., et al.*	1:17-op-45046	N.D. Ohio (Federal)
WA	City of Kent	*City of Kent v. Purdue Pharma L.P., et al.*	1:18-op-45590	N.D. Ohio (Federal)
WA	City of Kirkland	*City of Kirkland v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45121	N.D. Ohio (Federal)
WA	City of Lakewood	*City of Lakewood v. Purdue Pharma, Inc., et al.*	1:19-op-45221	N.D. Ohio (Federal)
WA	City of Mount Vernon	*Skagit County, City of Mount Vernon, City of Sedro-Woolley, City of Burlington, LA Conner School District and Mount Vernon School District v. Purdue Pharma L.P., et al.*	1:18-op-45173	N.D. Ohio (Federal)
WA	City of Olympia	*City of Olympia v. Purdue Pharma L.P., et al.*	1:18-op-46021	N.D. Ohio (Federal)
WA	City of Seattle	*City of Seattle v. Purdue Pharma L.P., et al.*	17-2-25504-1SEA	WA - King County Superior Court (State)
WA	City of Sedro-Woolley	*Skagit County, City of Mount Vernon, City of Sedro-Woolley, City of Burlington, LA Conner School District and Mount Vernon School District v. Purdue Pharma L.P., et al.*	1:18-op-45173	N.D. Ohio (Federal)
WA	City of Spokane	*City of Spokane v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46092	N.D. Ohio (Federal)
WA	City of Tacoma	*City of Tacoma v. Purdue Pharma L.P., et al.*	1:17-op-45047	N.D. Ohio (Federal)
WA	City of Vancouver	*City of Vancouver v. Purdue Pharma L.P., et al.*	1:19-op-45908	N.D. Ohio (Federal)
WA	County of Chelan	*Chelan County v. Purdue Pharma L.P., et al.*	1:18-op-46139	N.D. Ohio (Federal)
WA	County of Clallam	*Clallam County v. Purdue Pharma L.P., et al.*	1:18-op-45612	N.D. Ohio (Federal)
WA	County of Clark	*Clark County v. Purdue Pharma L.P., et al.*	1:18-op-45410	N.D. Ohio (Federal)
WA	County of Franklin	*Franklin County v. Purdue Pharma L.P., et al*	1:18-op-45944	N.D. Ohio (Federal)
WA	County of Island	*Island County v. Purdue Pharma L.P., et al.*	1:18-op-45982	N.D. Ohio (Federal)
WA	County of Jefferson	*Jefferson County v. Purdue Pharma, Inc., et al.*	1:18-op-46023	N.D. Ohio (Federal)
WA	County of King	*King County v. Purdue Pharma L.P., et al.*	1:18-op-45231	N.D. Ohio (Federal)
WA	County of Kitsap	*Kitsap County v. Purdue Pharma L.P., et al.*	1:18-op-45956	N.D. Ohio (Federal)
WA	County of Kittitas	*Kittitas County v. Purdue Pharma, Inc., et al.*	1:18-op-46008	N.D. Ohio (Federal)
WA	County of Lewis	*Lewis County, Washington v. Purdue Pharma L.P., et al.*	1:18-op-46301	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
WA	County of Lincoln	*Lincoln County v. Purdue Pharma L.P., et al.*	1:19-op-45962	N.D. Ohio (Federal)
WA	County of Pierce	*Pierce County v. Purdue Pharma L.P., et al*	1:18-op-45195	N.D. Ohio (Federal)
WA	County of San Juan	*San Juan County v. Purdue Pharma L.P., et al.*	1:18-op-46291	N.D. Ohio (Federal)
WA	County of Skagit	*Skagit County, City of Mount Vernon, City of Sedro-Woolley, City of Burlington, LA Conner School District and Mount Vernon School District v. Purdue Pharma L.P., et al.*	1:18-op-45173	N.D. Ohio (Federal)
WA	County of Snohomish	*Snohomish County v. Purdue Pharma L.P., et al.*	1:19-op-45370	N.D. Ohio (Federal)
WA	County of Spokane	*Spokane County v. Purdue Pharma L.P., et al.*	1:18-op-45943	N.D. Ohio (Federal)
WA	County of Thurston	*Thurston County v. Purdue Pharma L.P., et al.*	1:18-op-45409	N.D. Ohio (Federal)
WA	County of Walla Walla	*Walla Walla County v. Purdue Pharma L.P., et al.*	1:18-op-46010	N.D. Ohio (Federal)
WA	County of Whatcom	*Whatcom County v. Purdue Pharma L.P., et al.*	1:18-op-45954	N.D. Ohio (Federal)
WA	County of Whitman	*Whitman County v. Purdue Pharma L.P., et al.*	1:18-op-46009	N.D. Ohio (Federal)
WA	La Conner School District	*Skagit County, City of Mount Vernon, City of Sedro-Woolley, City of Burlington, La Conner School District and Mount Vernon School District v. Purdue Pharma L.P., et al.*	1:18-op-45173	N.D. Ohio (Federal)
WA	Mount Vernon School District	*Skagit County, City of Mount Vernon, City of Sedro-Woolley, City of Burlington, La Conner School District and Mount Vernon School District v. Purdue Pharma L.P., et al.*	1:18-op-45173	N.D. Ohio (Federal)
WA	Sedro-Woolley School District	*City of Anacortes and Sedro-Woolley School District v. Purdue Pharma L.P., et al.*	1:19-op-45029	N.D. Ohio (Federal)
WI	City of Cudahy	*The City of Cudahy v. Actavis Pharma, Inc., et al.*	1:21-op-45097	N.D. Ohio (Federal)
WI	City of Franklin	*The City of Franklin v. Actavis Pharma, Inc., et al.*	1:21-op-45101	N.D. Ohio (Federal)
WI	City of Greenfield	*The City of Greenfield v. Actavis Pharma, Inc., et al.*	1:21-op-45102	N.D. Ohio (Federal)
WI	City of Kenosha	*City of Kenosha, Wisconsin v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45011	N.D. Ohio (Federal)
WI	City of Marinette	*City of Marinette v. Teva Pharmaceuticals USA, Inc., et al.*	1:19-op-46181	N.D. Ohio (Federal)
WI	City of Milwaukee	*City of Milwaukee, Wisconsin v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45044	N.D. Ohio (Federal)
WI	City of Oak Creek	*The City of Oak Creek v. Actavis Pharma, Inc., et al.*	1:21-op-45103	N.D. Ohio (Federal)
WI	City of South Milwaukee	*City of South Milwaukee v. Actavis Pharma, Inc., et al.*	2021CV002934	WI - Circuit Court of Milwaukee

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
				County (State)
WI	City of Superior	*City of Superior v. Purdue Pharma L.P., et al.*	1:19-op-45331	N.D. Ohio (Federal)
WI	City of Wauwatosa	*The City of Wauwatosa v. Actavis Pharma, Inc., et al.*	1:21-op-45104	N.D. Ohio (Federal)
WI	City of West Allis	*The City of West Allis v. Actavis Pharma, Inc., et al.*	1:21-op-45105	N.D. Ohio (Federal)
WI	County of Adams	*Adams County v. Purdue Pharma L.P., et al.*	1:17-op-45093	N.D. Ohio (Federal)
WI	County of Ashland	*Ashland County v. Purdue Pharma L.P., et al.*	1:17-op-45130	N.D. Ohio (Federal)
WI	County of Barron	*Barron County, La Crosse County, Lafayette County and Menominee County v. Purdue Pharma L.P., et al.*	1:18-op-45277	N.D. Ohio (Federal)
WI	County of Bayfield	*Bayfield County v. Purdue Pharma L.P., et al.*	1:17-op-45168	N.D. Ohio (Federal)
WI	County of Brown	*Brown County, Crawford County, Iron County, Juneau County, Kewaunee County, Outagamie County, v. Purdue Pharma L.P., et al.*	1:18-op-45117	N.D. Ohio (Federal)
WI	County of Buffalo	*Buffalo County v. Purdue Pharma L.P., et al.*	1:17-op-45141	N.D. Ohio (Federal)
WI	County of Burnett	*Burnett County v. Purdue Pharma L.P., et al.*	1:17-op-45131	N.D. Ohio (Federal)
WI	County of Calumet	*Calumet County v. Purdue Pharma L.P., et al.*	1:17-op-45142	N.D. Ohio (Federal)
WI	County of Chippewa	*Chippewa County v. Purdue Pharma L.P., et al.*	1:17-op-45132	N.D. Ohio (Federal)
WI	County of Clark	*Clark County v. Purdue Pharma L.P., et al.*	1:17-op-45150	N.D. Ohio (Federal)
WI	County of Columbia	*Columbia County v. Purdue Pharma L.P., et al.*	1:17-op-45118	N.D. Ohio (Federal)
WI	County of Crawford	*Brown County, Crawford County, Iron County, Juneau County, Kewaunee County, Outagamie County, v. Purdue Pharma L.P., et al.*	1:18-op-45117	N.D. Ohio (Federal)
WI	County of Dane	*Dane County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45802	N.D. Ohio (Federal)
WI	County of Dodge	*Dodge County v. Purdue Pharma L.P., et al.*	1:17-op-45143	N.D. Ohio (Federal)
WI	County of Door	*Door County v. Purdue Pharma L.P., et al.*	1:17-op-45104	N.D. Ohio (Federal)
WI	County of Douglas	*Douglas County v. Purdue Pharma L.P., et al.*	1:17-op-45107	N.D. Ohio (Federal)
WI	County of Dunn	*Dunn County v. Purdue Pharma L.P., et al.*	1:17-op-45133	N.D. Ohio (Federal)
WI	County of Eau Claire	*Eau Claire County v. Purdue Pharma L.P., et al.*	1:17-op-45112	N.D. Ohio (Federal)
WI	County of Florence	*Florence County v. Purdue Pharma L.P., et al.*	1:17-op-45125	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
WI	County of Fond du Lac	*Fond du Lac County v. Purdue Pharma L.P., et al.*	1:17-op-45106	N.D. Ohio (Federal)
WI	County of Forest	*Forest County v. Purdue Pharma L.P., et al.*	1:17-op-45134	N.D. Ohio (Federal)
WI	County of Grant	*Grant County v. Purdue Pharma L.P., et al.*	1:17-op-45115	N.D. Ohio (Federal)
WI	County of Green	*Green County v. Purdue Pharma L.P., et al.*	1:17-op-45096	N.D. Ohio (Federal)
WI	County of Green Lake	*Green Lake County, Taylor County and Vilas County v. Purdue Pharma L.P., et al.*	1:18-op-45832	N.D. Ohio (Federal)
WI	County of Iowa	*Iowa County v. Purdue Pharma L.P., et al.*	1:17-op-45099	N.D. Ohio (Federal)
WI	County of Iron	*Brown County, Crawford County, Iron County, Juneau County, Kewaunee County, Outagamie County, v. Purdue Pharma L.P., et al.*	1:18-op-45117	N.D. Ohio (Federal)
WI	County of Jackson	*Jackson County v. Purdue Pharma L.P., et al.*	1:17-op-45121	N.D. Ohio (Federal)
WI	County of Jefferson	*Jefferson County v. Purdue Pharma L.P., et al.*	1:17-op-45122	N.D. Ohio (Federal)
WI	County of Juneau	*Brown County, Crawford County, Iron County, Juneau County, Kewaunee County, Outagamie County, v. Purdue Pharma L.P., et al.*	1:18-op-45117	N.D. Ohio (Federal)
WI	County of Kenosha	*Kenosha County v. Purdue Pharma L.P., et al.*	1:17-op-45144	N.D. Ohio (Federal)
WI	County of Kewaunee	*Brown County, Crawford County, Iron County, Juneau County, Kewaunee County, Outagamie County, v. Purdue Pharma L.P., et al.*	1:18-op-45117	N.D. Ohio (Federal)
WI	County of La Crosse	*Barron County, La Crosse County, Lafayette County and Menominee County v. Purdue Pharma L.P., et al.*	1:18-op-45277	N.D. Ohio (Federal)
WI	County of Lafayette	*Barron County, La Crosse County, Lafayette County and Menominee County v. Purdue Pharma L.P., et al.*	1:18-op-45277	N.D. Ohio (Federal)
WI	County of Langlade	*Langlade County v. Purdue Pharma L.P., et al.*	1:17-op-45124	N.D. Ohio (Federal)
WI	County of Lincoln	*Lincoln County v. Purdue Pharma L.P., et al.*	1:17-op-45167	N.D. Ohio (Federal)
WI	County of Manitowoc	*Manitowoc County v. Purdue Pharma L.P., et al.*	1:17-op-45135	N.D. Ohio (Federal)
WI	County of Marathon	*Marathon County v. Purdue Pharma L.P., et al.*	1:17-op-45095	N.D. Ohio (Federal)
WI	County of Marinette	*Marinette County v. Purdue Pharma L.P., et al.*	1:17-op-45145	N.D. Ohio (Federal)
WI	County of Marquette	*Marquette County v. Purdue Pharma L.P., et al.*	1:17-op-45136	N.D. Ohio (Federal)
WI	County of Menominee	*Barron County, La Crosse County, Lafayette County and Menominee County v. Purdue Pharma L.P., et al.*	1:18-op-45277	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
WI	County of Milwaukee	*Milwaukee County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45402	N.D. Ohio (Federal)
WI	County of Monroe	*Monroe County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45146	N.D. Ohio (Federal)
WI	County of Oconto	*Oconto County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45120	N.D. Ohio (Federal)
WI	County of Oneida	*Oneida County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45129	N.D. Ohio (Federal)
WI	County of Outagamie	*Brown County, Crawford County, Iron County, Juneau County, Kewaunee County, Outagamie County, v. Purdue Pharma L.P., et al.*	1:18-op-45117	N.D. Ohio (Federal)
WI	County of Pierce	*Pierce County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45165	N.D. Ohio (Federal)
WI	County of Price	*Price County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45126	N.D. Ohio (Federal)
WI	County of Rock	*Rock County v. Purdue Pharma L.P., et al.*	1:17-op-45108	N.D. Ohio (Federal)
WI	County of Rusk	*Rusk County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45116	N.D. Ohio (Federal)
WI	County of Sauk	*Sauk County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45098	N.D. Ohio (Federal)
WI	County of Sawyer	*Sawyer County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45137	N.D. Ohio (Federal)
WI	County of Shawano	*Shawano County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45119	N.D. Ohio (Federal)
WI	County of Sheboygan	*Sheboygan County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45128	N.D. Ohio (Federal)
WI	County of St. Croix	*St. Croix County v. Purdue Pharma L.P., et al.*	1:17-op-45147	N.D. Ohio (Federal)
WI	County of Taylor	*Green Lake County, Taylor County and Vilas County v. Purdue Pharma L.P., et al.*	1:18-op-45832	N.D. Ohio (Federal)
WI	County of Trempealeau	*Trempealeau County v. Purdue Pharma L.P., et al.*	1:17-op-45138	N.D. Ohio (Federal)
WI	County of Vernon	*Vernon County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45148	N.D. Ohio (Federal)
WI	County of Vilas	*Green Lake County, Taylor County and Vilas County v. Purdue Pharma L.P., et al.*	1:18-op-45832	N.D. Ohio (Federal)

State	Subdivision/Special District	Case Caption	Case No.	Jurisdiction
WI	County of Walworth	*Walworth County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45988	N.D. Ohio (Federal)
WI	County of Washburn	*Washburn County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45123	N.D. Ohio (Federal)
WI	County of Washington	*Washington County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45114	N.D. Ohio (Federal)
WI	County of Waukesha	*Waukesha County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:18-op-45978	N.D. Ohio (Federal)
WI	County of Waupaca	*Waupaca County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45166	N.D. Ohio (Federal)
WI	County of Waushara	*Waushara County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45139	N.D. Ohio (Federal)
WI	County of Wood	*Wood County, Wisconsin v. AmerisourceBergen Drug Corporation, et al.*	1:17-op-45127	N.D. Ohio (Federal)
WI	Village of Pleasant Prairie	*Village of Pleasant Prairie, Wisconsin v. Teva Pharmaceuticals USA, Inc., et al.*	1:20-op-45010	N.D. Ohio (Federal)
WI	Village of Sturtevant	*The Village of Sturtevant v. Actavis Pharma, Inc. f/k/a Watson Pharma, Inc., et al.*	2021CV000999	WI - Circuit Court of Racine County (State)
WY	City of Casper	*City of Casper, Wyoming v. Purdue Pharma L.P., et al.*	1:19-op-45079	N.D. Ohio (Federal)
WY	City of Cheyenne	*City of Cheyenne v. Purdue Pharma L.P., et al.*	1:19-op-45280	N.D. Ohio (Federal)
WY	City of Green River	*City of Green River, Wyoming v. Purdue Pharma L.P., et al.*	1:19-op-45764	N.D. Ohio (Federal)
WY	City of Riverton	*City of Riverton, Wyoming v. Purdue Pharma L.P., et al.*	1:19-op-45558	N.D. Ohio (Federal)
WY	City of Rock Springs	*City of Rock Springs, Wyoming v. Purdue Pharma L.P., et al.*	1:19-op-45265	N.D. Ohio (Federal)
WY	County of Carbon	*County of Carbon v. Purdue Pharma L.P., et al.*	1:18-op-45625	N.D. Ohio (Federal)
WY	County of Sweetwater	*Sweetwater County, Wyoming v. Purdue Pharma L.P., et al.*	1:19-op-45031	N.D. Ohio (Federal)

EXHIBIT D
[Intentionally Omitted]

EXHIBIT E
List of Opioid Remediation Uses

Schedule A

Core Strategies

Settling States and **Exhibit G** Participants may choose from among the abatement strategies listed in Schedule B. However, priority may be given to the following core abatement strategies ("*Core Strategies*").[1]

A. NALOXONE OR OTHER FDA-APPROVED DRUG TO REVERSE OPIOID OVERDOSES

1. Expand training for first responders, schools, community support groups and families; and

2. Increase distribution to individuals who are uninsured or whose insurance does not cover the needed service.

B. MEDICATION-ASSISTED TREATMENT ("*MAT*") DISTRIBUTION AND OTHER OPIOID-RELATED TREATMENT

1. Increase distribution of MAT to individuals who are uninsured or whose insurance does not cover the needed service;

2. Provide education to school-based and youth-focused programs that discourage or prevent misuse;

3. Provide MAT education and awareness training to healthcare providers, EMTs, law enforcement, and other first responders; and

4. Provide treatment and recovery support services such as residential and inpatient treatment, intensive outpatient treatment, outpatient therapy or counseling, and recovery housing that allow or integrate medication and with other support services.

C. PREGNANT & POSTPARTUM WOMEN

1. Expand Screening, Brief Intervention, and Referral to Treatment ("*SBIRT*") services to non-Medicaid eligible or uninsured pregnant women;

2. Expand comprehensive evidence-based treatment and recovery services, including MAT, for women with co-occurring Opioid Use Disorder ("*OUD*") and other

[1] As used in this Schedule A, words like "expand," "fund," "provide" or the like shall not indicate a preference for new or existing programs.

Substance Use Disorder ("*SUD*")/Mental Health disorders for uninsured individuals for up to 12 months postpartum; and

3. Provide comprehensive wrap-around services to individuals with OUD, including housing, transportation, job placement/training, and childcare.

D. <u>EXPANDING TREATMENT FOR NEONATAL ABSTINENCE SYNDROME ("*NAS*")</u>

1. Expand comprehensive evidence-based and recovery support for NAS babies;

2. Expand services for better continuum of care with infant-need dyad; and

3. Expand long-term treatment and services for medical monitoring of NAS babies and their families.

E. <u>EXPANSION OF WARM HAND-OFF PROGRAMS AND RECOVERY SERVICES</u>

1. Expand services such as navigators and on-call teams to begin MAT in hospital emergency departments;

2. Expand warm hand-off services to transition to recovery services;

3. Broaden scope of recovery services to include co-occurring SUD or mental health conditions;

4. Provide comprehensive wrap-around services to individuals in recovery, including housing, transportation, job placement/training, and childcare; and

5. Hire additional social workers or other behavioral health workers to facilitate expansions above.

F. <u>TREATMENT FOR INCARCERATED POPULATION</u>

1. Provide evidence-based treatment and recovery support, including MAT for persons with OUD and co-occurring SUD/MH disorders within and transitioning out of the criminal justice system; and

2. Increase funding for jails to provide treatment to inmates with OUD.

G. <u>PREVENTION PROGRAMS</u>

1. Funding for media campaigns to prevent opioid use (similar to the FDA's "Real Cost" campaign to prevent youth from misusing tobacco);

2. Funding for evidence-based prevention programs in schools;

3. Funding for medical provider education and outreach regarding best prescribing practices for opioids consistent with CDC guidelines, including providers at hospitals (academic detailing);

4. Funding for community drug disposal programs; and

5. Funding and training for first responders to participate in pre-arrest diversion programs, post-overdose response teams, or similar strategies that connect at-risk individuals to behavioral health services and supports.

H. EXPANDING SYRINGE SERVICE PROGRAMS

1. Provide comprehensive syringe services programs with more wrap-around services, including linkage to OUD treatment, access to sterile syringes and linkage to care and treatment of infectious diseases.

I. EVIDENCE-BASED DATA COLLECTION AND RESEARCH ANALYZING THE EFFECTIVENESS OF THE ABATEMENT STRATEGIES WITHIN THE STATE

Schedule B

Approved Uses

Support treatment of Opioid Use Disorder (OUD) and any co-occurring Substance Use Disorder or Mental Health (SUD/MH) conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

PART ONE: TREATMENT

A. TREAT OPIOID USE DISORDER (OUD)

Support treatment of Opioid Use Disorder ("*OUD*") and any co-occurring Substance Use Disorder or Mental Health ("*SUD/MH*") conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:[2]

1. Expand availability of treatment for OUD and any co-occurring SUD/MH conditions, including all forms of Medication-Assisted Treatment ("*MAT*") approved by the U.S. Food and Drug Administration.

2. Support and reimburse evidence-based services that adhere to the American Society of Addiction Medicine ("*ASAM*") continuum of care for OUD and any co-occurring SUD/MH conditions.

3. Expand telehealth to increase access to treatment for OUD and any co-occurring SUD/MH conditions, including MAT, as well as counseling, psychiatric support, and other treatment and recovery support services.

4. Improve oversight of Opioid Treatment Programs ("*OTPs*") to assure evidence-based or evidence-informed practices such as adequate methadone dosing and low threshold approaches to treatment.

5. Support mobile intervention, treatment, and recovery services, offered by qualified professionals and service providers, such as peer recovery coaches, for persons with OUD and any co-occurring SUD/MH conditions and for persons who have experienced an opioid overdose.

6. Provide treatment of trauma for individuals with OUD (*e.g.*, violence, sexual assault, human trafficking, or adverse childhood experiences) and family members (*e.g.*, surviving family members after an overdose or overdose fatality), and training of health care personnel to identify and address such trauma.

[2] As used in this Schedule B, words like "expand," "fund," "provide" or the like shall not indicate a preference for new or existing programs.

7. Support evidence-based withdrawal management services for people with OUD and any co-occurring mental health conditions.

8. Provide training on MAT for health care providers, first responders, students, or other supporting professionals, such as peer recovery coaches or recovery outreach specialists, including telementoring to assist community-based providers in rural or underserved areas.

9. Support workforce development for addiction professionals who work with persons with OUD and any co-occurring SUD/MH conditions.

10. Offer fellowships for addiction medicine specialists for direct patient care, instructors, and clinical research for treatments.

11. Offer scholarships and supports for behavioral health practitioners or workers involved in addressing OUD and any co-occurring SUD/MH or mental health conditions, including, but not limited to, training, scholarships, fellowships, loan repayment programs, or other incentives for providers to work in rural or underserved areas.

12. Provide funding and training for clinicians to obtain a waiver under the federal Drug Addiction Treatment Act of 2000 ("*DATA 2000*") to prescribe MAT for OUD, and provide technical assistance and professional support to clinicians who have obtained a DATA 2000 waiver.

13. Disseminate web-based training curricula, such as the American Academy of Addiction Psychiatry's Provider Clinical Support Service–Opioids web-based training curriculum and motivational interviewing.

14. Develop and disseminate new curricula, such as the American Academy of Addiction Psychiatry's Provider Clinical Support Service for Medication–Assisted Treatment.

B. SUPPORT PEOPLE IN TREATMENT AND RECOVERY

Support people in recovery from OUD and any co-occurring SUD/MH conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the programs or strategies that:

1. Provide comprehensive wrap-around services to individuals with OUD and any co-occurring SUD/MH conditions, including housing, transportation, education, job placement, job training, or childcare.

2. Provide the full continuum of care of treatment and recovery services for OUD and any co-occurring SUD/MH conditions, including supportive housing, peer support services and counseling, community navigators, case management, and connections to community-based services.

3. Provide counseling, peer-support, recovery case management and residential treatment with access to medications for those who need it to persons with OUD and any co-occurring SUD/MH conditions.

4. Provide access to housing for people with OUD and any co-occurring SUD/MH conditions, including supportive housing, recovery housing, housing assistance programs, training for housing providers, or recovery housing programs that allow or integrate FDA-approved mediation with other support services.

5. Provide community support services, including social and legal services, to assist in deinstitutionalizing persons with OUD and any co-occurring SUD/MH conditions.

6. Support or expand peer-recovery centers, which may include support groups, social events, computer access, or other services for persons with OUD and any co-occurring SUD/MH conditions.

7. Provide or support transportation to treatment or recovery programs or services for persons with OUD and any co-occurring SUD/MH conditions.

8. Provide employment training or educational services for persons in treatment for or recovery from OUD and any co-occurring SUD/MH conditions.

9. Identify successful recovery programs such as physician, pilot, and college recovery programs, and provide support and technical assistance to increase the number and capacity of high-quality programs to help those in recovery.

10. Engage non-profits, faith-based communities, and community coalitions to support people in treatment and recovery and to support family members in their efforts to support the person with OUD in the family.

11. Provide training and development of procedures for government staff to appropriately interact and provide social and other services to individuals with or in recovery from OUD, including reducing stigma.

12. Support stigma reduction efforts regarding treatment and support for persons with OUD, including reducing the stigma on effective treatment.

13. Create or support culturally appropriate services and programs for persons with OUD and any co-occurring SUD/MH conditions, including new Americans.

14. Create and/or support recovery high schools.

15. Hire or train behavioral health workers to provide or expand any of the services or supports listed above.

C. CONNECT PEOPLE WHO NEED HELP TO THE HELP THEY NEED (CONNECTIONS TO CARE)

Provide connections to care for people who have—or are at risk of developing—OUD and any co-occurring SUD/MH conditions through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Ensure that health care providers are screening for OUD and other risk factors and know how to appropriately counsel and treat (or refer if necessary) a patient for OUD treatment.

2. Fund SBIRT programs to reduce the transition from use to disorders, including SBIRT services to pregnant women who are uninsured or not eligible for Medicaid.

3. Provide training and long-term implementation of SBIRT in key systems (health, schools, colleges, criminal justice, and probation), with a focus on youth and young adults when transition from misuse to opioid disorder is common.

4. Purchase automated versions of SBIRT and support ongoing costs of the technology.

5. Expand services such as navigators and on-call teams to begin MAT in hospital emergency departments.

6. Provide training for emergency room personnel treating opioid overdose patients on post-discharge planning, including community referrals for MAT, recovery case management or support services.

7. Support hospital programs that transition persons with OUD and any co-occurring SUD/MH conditions, or persons who have experienced an opioid overdose, into clinically appropriate follow-up care through a bridge clinic or similar approach.

8. Support crisis stabilization centers that serve as an alternative to hospital emergency departments for persons with OUD and any co-occurring SUD/MH conditions or persons that have experienced an opioid overdose.

9. Support the work of Emergency Medical Systems, including peer support specialists, to connect individuals to treatment or other appropriate services following an opioid overdose or other opioid-related adverse event.

10. Provide funding for peer support specialists or recovery coaches in emergency departments, detox facilities, recovery centers, recovery housing, or similar settings; offer services, supports, or connections to care to persons with OUD and any co-occurring SUD/MH conditions or to persons who have experienced an opioid overdose.

11. Expand warm hand-off services to transition to recovery services.

12. Create or support school-based contacts that parents can engage with to seek immediate treatment services for their child; and support prevention, intervention, treatment, and recovery programs focused on young people.

13. Develop and support best practices on addressing OUD in the workplace.

14. Support assistance programs for health care providers with OUD.

15. Engage non-profits and the faith community as a system to support outreach for treatment.

16. Support centralized call centers that provide information and connections to appropriate services and supports for persons with OUD and any co-occurring SUD/MH conditions.

D. ADDRESS THE NEEDS OF CRIMINAL JUSTICE-INVOLVED PERSONS

Address the needs of persons with OUD and any co-occurring SUD/MH conditions who are involved in, are at risk of becoming involved in, or are transitioning out of the criminal justice system through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Support pre-arrest or pre-arraignment diversion and deflection strategies for persons with OUD and any co-occurring SUD/MH conditions, including established strategies such as:

    a. Self-referral strategies such as the Angel Programs or the Police Assisted Addiction Recovery Initiative ("*PAARI*");

    b. Active outreach strategies such as the Drug Abuse Response Team ("*DART*") model;

    c. "Naloxone Plus" strategies, which work to ensure that individuals who have received naloxone to reverse the effects of an overdose are then linked to treatment programs or other appropriate services;

    d. Officer prevention strategies, such as the Law Enforcement Assisted Diversion ("*LEAD*") model;

    e. Officer intervention strategies such as the Leon County, Florida Adult Civil Citation Network or the Chicago Westside Narcotics Diversion to Treatment Initiative; or

    f. Co-responder and/or alternative responder models to address OUD-related 911 calls with greater SUD expertise.

2. Support pre-trial services that connect individuals with OUD and any co-occurring SUD/MH conditions to evidence-informed treatment, including MAT, and related services.

3. Support treatment and recovery courts that provide evidence-based options for persons with OUD and any co-occurring SUD/MH conditions.

4. Provide evidence-informed treatment, including MAT, recovery support, harm reduction, or other appropriate services to individuals with OUD and any co-occurring SUD/MH conditions who are incarcerated in jail or prison.

5. Provide evidence-informed treatment, including MAT, recovery support, harm reduction, or other appropriate services to individuals with OUD and any co-occurring SUD/MH conditions who are leaving jail or prison or have recently left jail or prison, are on probation or parole, are under community corrections supervision, or are in re-entry programs or facilities.

6. Support critical time interventions ("*CTI*"), particularly for individuals living with dual-diagnosis OUD/serious mental illness, and services for individuals who face immediate risks and service needs and risks upon release from correctional settings.

7. Provide training on best practices for addressing the needs of criminal justice-involved persons with OUD and any co-occurring SUD/MH conditions to law enforcement, correctional, or judicial personnel or to providers of treatment, recovery, harm reduction, case management, or other services offered in connection with any of the strategies described in this section.

E. ADDRESS THE NEEDS OF PREGNANT OR PARENTING WOMEN AND THEIR FAMILIES, INCLUDING BABIES WITH NEONATAL ABSTINENCE SYNDROME

Address the needs of pregnant or parenting women with OUD and any co-occurring SUD/MH conditions, and the needs of their families, including babies with neonatal abstinence syndrome ("*NAS*"), through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, those that:

1. Support evidence-based or evidence-informed treatment, including MAT, recovery services and supports, and prevention services for pregnant women—or women who could become pregnant—who have OUD and any co-occurring SUD/MH conditions, and other measures to educate and provide support to families affected by Neonatal Abstinence Syndrome.

2. Expand comprehensive evidence-based treatment and recovery services, including MAT, for uninsured women with OUD and any co-occurring SUD/MH conditions for up to 12 months postpartum.

3. Provide training for obstetricians or other healthcare personnel who work with pregnant women and their families regarding treatment of OUD and any co-occurring SUD/MH conditions.

4. Expand comprehensive evidence-based treatment and recovery support for NAS babies; expand services for better continuum of care with infant-need dyad; and expand long-term treatment and services for medical monitoring of NAS babies and their families.

5. Provide training to health care providers who work with pregnant or parenting women on best practices for compliance with federal requirements that children born with NAS get referred to appropriate services and receive a plan of safe care.

6. Provide child and family supports for parenting women with OUD and any co-occurring SUD/MH conditions.

7. Provide enhanced family support and child care services for parents with OUD and any co-occurring SUD/MH conditions.

8. Provide enhanced support for children and family members suffering trauma as a result of addiction in the family; and offer trauma-informed behavioral health treatment for adverse childhood events.

9. Offer home-based wrap-around services to persons with OUD and any co-occurring SUD/MH conditions, including, but not limited to, parent skills training.

10. Provide support for Children's Services—Fund additional positions and services, including supportive housing and other residential services, relating to children being removed from the home and/or placed in foster care due to custodial opioid use.

PART TWO: PREVENTION

A. PREVENT OVER-PRESCRIBING AND ENSURE APPROPRIATE PRESCRIBING AND DISPENSING OF OPIOIDS

Support efforts to prevent over-prescribing and ensure appropriate prescribing and dispensing of opioids through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Funding medical provider education and outreach regarding best prescribing practices for opioids consistent with the Guidelines for Prescribing Opioids for Chronic Pain from the U.S. Centers for Disease Control and Prevention, including providers at hospitals (academic detailing).

2. Training for health care providers regarding safe and responsible opioid prescribing, dosing, and tapering patients off opioids.

3. Continuing Medical Education (CME) on appropriate prescribing of opioids.

4. Providing Support for non-opioid pain treatment alternatives, including training providers to offer or refer to multi-modal, evidence-informed treatment of pain.

5. Supporting enhancements or improvements to Prescription Drug Monitoring Programs ("*PDMPs*"), including, but not limited to, improvements that:

    a. Increase the number of prescribers using PDMPs;

    b. Improve point-of-care decision-making by increasing the quantity, quality, or format of data available to prescribers using PDMPs, by improving the interface that prescribers use to access PDMP data, or both; or

    c. Enable states to use PDMP data in support of surveillance or intervention strategies, including MAT referrals and follow-up for individuals identified within PDMP data as likely to experience OUD in a manner that complies with all relevant privacy and security laws and rules.

6. Ensuring PDMPs incorporate available overdose/naloxone deployment data, including the United States Department of Transportation's Emergency Medical Technician overdose database in a manner that complies with all relevant privacy and security laws and rules.

7. Increasing electronic prescribing to prevent diversion or forgery.

8. Educating dispensers on appropriate opioid dispensing.

B. PREVENT MISUSE OF OPIOIDS

Support efforts to discourage or prevent misuse of opioids through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Funding media campaigns to prevent opioid misuse.

2. Corrective advertising or affirmative public education campaigns based on evidence.

3. Public education relating to drug disposal.

4. Drug take-back disposal or destruction programs.

5. Funding community anti-drug coalitions that engage in drug prevention efforts.

6. Supporting community coalitions in implementing evidence-informed prevention, such as reduced social access and physical access, stigma reduction—including staffing, educational campaigns, support for people in treatment or recovery, or training of coalitions in evidence-informed implementation, including the Strategic Prevention Framework developed by the U.S. Substance Abuse and Mental Health Services Administration ("*SAMHSA*").

7. Engaging non-profits and faith-based communities as systems to support prevention.

8. Funding evidence-based prevention programs in schools or evidence-informed school and community education programs and campaigns for students, families, school employees, school athletic programs, parent-teacher and student associations, and others.

9. School-based or youth-focused programs or strategies that have demonstrated effectiveness in preventing drug misuse and seem likely to be effective in preventing the uptake and use of opioids.

10. Create or support community-based education or intervention services for families, youth, and adolescents at risk for OUD and any co-occurring SUD/MH conditions.

11. Support evidence-informed programs or curricula to address mental health needs of young people who may be at risk of misusing opioids or other drugs, including emotional modulation and resilience skills.

12. Support greater access to mental health services and supports for young people, including services and supports provided by school nurses, behavioral health workers or other school staff, to address mental health needs in young people that (when not properly addressed) increase the risk of opioid or another drug misuse.

C. PREVENT OVERDOSE DEATHS AND OTHER HARMS (HARM REDUCTION)

Support efforts to prevent or reduce overdose deaths or other opioid-related harms through evidence-based or evidence-informed programs or strategies that may include, but are not limited to, the following:

1. Increased availability and distribution of naloxone and other drugs that treat overdoses for first responders, overdose patients, individuals with OUD and their friends and family members, schools, community navigators and outreach workers, persons being released from jail or prison, or other members of the general public.

2. Public health entities providing free naloxone to anyone in the community.

3. Training and education regarding naloxone and other drugs that treat overdoses for first responders, overdose patients, patients taking opioids, families, schools, community support groups, and other members of the general public.

4. Enabling school nurses and other school staff to respond to opioid overdoses, and provide them with naloxone, training, and support.

5. Expanding, improving, or developing data tracking software and applications for overdoses/naloxone revivals.

6. Public education relating to emergency responses to overdoses.

7. Public education relating to immunity and Good Samaritan laws.

8. Educating first responders regarding the existence and operation of immunity and Good Samaritan laws.

9. Syringe service programs and other evidence-informed programs to reduce harms associated with intravenous drug use, including supplies, staffing, space, peer support services, referrals to treatment, fentanyl checking, connections to care, and the full range of harm reduction and treatment services provided by these programs.

10. Expanding access to testing and treatment for infectious diseases such as HIV and Hepatitis C resulting from intravenous opioid use.

11. Supporting mobile units that offer or provide referrals to harm reduction services, treatment, recovery supports, health care, or other appropriate services to persons that use opioids or persons with OUD and any co-occurring SUD/MH conditions.

12. Providing training in harm reduction strategies to health care providers, students, peer recovery coaches, recovery outreach specialists, or other professionals that provide care to persons who use opioids or persons with OUD and any co-occurring SUD/MH conditions.

13. Supporting screening for fentanyl in routine clinical toxicology testing.

PART THREE: OTHER STRATEGIES

A. FIRST RESPONDERS

In addition to items in section C, D and H relating to first responders, support the following:

1. Education of law enforcement or other first responders regarding appropriate practices and precautions when dealing with fentanyl or other drugs.

2. Provision of wellness and support services for first responders and others who experience secondary trauma associated with opioid-related emergency events.

B. LEADERSHIP, PLANNING AND COORDINATION

Support efforts to provide leadership, planning, coordination, facilitations, training and technical assistance to abate the opioid epidemic through activities, programs, or strategies that may include, but are not limited to, the following:

1. Statewide, regional, local or community regional planning to identify root causes of addiction and overdose, goals for reducing harms related to the opioid epidemic, and areas and populations with the greatest needs for treatment intervention services, and to support training and technical assistance and other strategies to abate the opioid epidemic described in this opioid abatement strategy list.

2. A dashboard to (a) share reports, recommendations, or plans to spend opioid settlement funds; (b) to show how opioid settlement funds have been spent; (c) to report program or strategy outcomes; or (d) to track, share or visualize key opioid- or health-related indicators and supports as identified through collaborative statewide, regional, local or community processes.

3. Invest in infrastructure or staffing at government or not-for-profit agencies to support collaborative, cross-system coordination with the purpose of preventing overprescribing, opioid misuse, or opioid overdoses, treating those with OUD and any co-occurring SUD/MH conditions, supporting them in treatment or recovery, connecting them to care, or implementing other strategies to abate the opioid epidemic described in this opioid abatement strategy list.

4. Provide resources to staff government oversight and management of opioid abatement programs.

C. TRAINING

In addition to the training referred to throughout this document, support training to abate the opioid epidemic through activities, programs, or strategies that may include, but are not limited to, those that:

1. Provide funding for staff training or networking programs and services to improve the capability of government, community, and not-for-profit entities to abate the opioid crisis.

2. Support infrastructure and staffing for collaborative cross-system coordination to prevent opioid misuse, prevent overdoses, and treat those with OUD and any co-occurring SUD/MH conditions, or implement other strategies to abate the opioid epidemic described in this opioid abatement strategy list (*e.g.*, health care, primary care, pharmacies, PDMPs, etc.).

D. RESEARCH

Support opioid abatement research that may include, but is not limited to, the following:

1. Monitoring, surveillance, data collection and evaluation of programs and strategies described in this opioid abatement strategy list.

2. Research non-opioid treatment of chronic pain.

3. Research on improved service delivery for modalities such as SBIRT that demonstrate promising but mixed results in populations vulnerable to opioid use disorders.

4. Research on novel harm reduction and prevention efforts such as the provision of fentanyl test strips.

5. Research on innovative supply-side enforcement efforts such as improved detection of mail-based delivery of synthetic opioids.

6. Expanded research on swift/certain/fair models to reduce and deter opioid misuse within criminal justice populations that build upon promising approaches used to address other substances (*e.g.*, Hawaii HOPE and Dakota 24/7).

7. Epidemiological surveillance of OUD-related behaviors in critical populations, including individuals entering the criminal justice system, including, but not limited to approaches modeled on the Arrestee Drug Abuse Monitoring ("*ADAM*") system.

8. Qualitative and quantitative research regarding public health risks and harm reduction opportunities within illicit drug markets, including surveys of market participants who sell or distribute illicit opioids.

9. Geospatial analysis of access barriers to MAT and their association with treatment engagement and treatment outcomes.

EXHIBIT F-1
List of States and Pre-Credit Overall Allocation Percentages

Alabama	1.5958653635%
Alaska	0.2283101787%
American Samoa	0.0171221696%
Arizona	2.3755949882%
Arkansas	0.9322152924%
California	9.9213830698%
Colorado	1.6616291219%
Connecticut	1.2938102647%
Delaware	0.4420285052%
District of Columbia	0.1799774824%
Florida	7.0259134409%
Georgia	2.7882080114%
Guam	0.0480366565%
Hawaii	0.3246488040%
Idaho	0.4919080117%
Illinois	3.3263363702%
Indiana	2.2168933059%
Iowa	0.7419256132%
Kansas	0.7840793410%
Kentucky	1.9963344879%
Louisiana	1.4650905059%
Maine	0.5293231313%
Maryland	2.1106090494%
Massachusetts	2.3035761083%
Michigan	3.4020234989%
Minnesota	1.2972597706%
Mississippi	0.8624327860%
Missouri	2.0056475170%
Montana	0.3125481816%
N. Mariana Islands	0.0167059202%
Nebraska	0.4171546352%
Nevada	1.2017657135%
New Hampshire	0.5784834777%
New Jersey	2.7551354545%
New Mexico	0.7989379794%
New York	5.3903813405%
North Carolina	3.2502525994%

North Dakota	0.1700251989%
Ohio	4.3567051408%
Oklahoma	1.5322312508%
Oregon	1.3741405009%
Pennsylvania	4.5882419559%
Puerto Rico	0.7101195950%
Rhode Island	0.4465429178%
South Carolina	1.5393083548%
South Dakota	0.1982071487%
Tennessee	2.6881474977%
Texas	6.2932157196%
Utah	1.1466798699%
Vermont	0.2544890561%
Virgin Islands	0.0315673573%
Virginia	2.2801150757%
Washington	2.3189040182%
West Virginia	1.0567416533%
Wisconsin	1.7582560561%
Wyoming	0.1668134842%

EXHIBIT F-2
List of Eligible Settling States and Overall Allocation Percentages

Alabama	1.89200243102%
Alaska	0.27067660158%
American Samoa	0.02029944832%
Arizona	2.81642273552%
Arkansas	1.10520200495%
California	11.44545606988%
Colorado	1.96996965401%
Connecticut	1.53389641887%
Delaware	0.52405361097%
District of Columbia	0.21337503900%
Georgia	3.30560237492%
Guam	0.05695058797%
Hawaii	0.38489232262%
Idaho	0.58318901784%
Illinois	3.94358862758%
Indiana	2.62827154459%
Iowa	0.87960118435%
Kansas	0.92957717690%
Kentucky	2.36678468650%
Maine	0.62754708146%
Maryland	2.50226462938%
Massachusetts	2.73103965821%
Michigan	4.03332065304%
Minnesota	1.53798603302%
Mississippi	1.02247029410%
Missouri	2.37782588971%
Montana	0.37054624593%
N. Mariana Islands	0.01980595749%
Nebraska	0.49456401641%
Nevada	1.42477160259%
New Hampshire	0.68582987703%
New Jersey	3.26639270254%
New Mexico	0.94719306138%
North Carolina	3.85338635698%
North Dakota	0.20157595806%
Ohio	5.16515798008%
Oklahoma	1.81656004174%

Oregon	1.62913315104%
Pennsylvania	5.43965996948%
Puerto Rico	0.84189307619%
South Carolina	1.82495040990%
South Dakota	0.23498749685%
Tennessee	3.18697411246%
Texas	7.46101752221%
Utah	1.35946374363%
Vermont	0.30171336741%
Virgin Islands	0.03742516012%
Virginia	2.70322507443%
Washington	2.74921189468%
Wisconsin	2.08452718413%
Wyoming	0.19776826088%

EXHIBIT G
Subdivisions and Special Districts Eligible to Receive Direct Allocations from the Subdivision Fund and Subdivision Fund Allocation Percentages

The Subdivisions and Special Districts set forth on this **Exhibit G** are eligible to receive direct allocations from the Subdivision Fund, if such Subdivisions and Special Districts are otherwise eligible to receive such funds under this Agreement. By default, the Subdivisions and Special Districts set forth on this **Exhibit G** shall include all Subdivisions and Special Districts set forth on **Exhibit G** of the national opioid settlement agreement dated July 21, 2021 with Janssen Pharmaceuticals, Inc., et al., including all amendments up to the Preliminary Agreement Date of this agreement. A State may elect to add any additional Subdivisions and Special Districts to this **Exhibit G** at any time prior to the Initial Participation Date.

Immediately upon the effectiveness of any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by **subsection VIII.E.3** (or upon the effectiveness of an amendment to any State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by **subsection VIII.E.3**) that addresses allocation from the Subdivision Fund, whether before or after the Initial Participation Date, this **Exhibit G** will automatically be amended to reflect the allocation from the Subdivision Fund pursuant to the State-Subdivision Agreement, Allocation Statute, Statutory Trust, or voluntary redistribution allowed by **subsection VIII.E.3**.

For the avoidance of doubt, inclusion on this **Exhibit G** shall not create any claim for any amount of the Settlement Fund, and no such amounts shall be allocated or distributed to any Subdivision or Special District included herein if such Subdivision or Special District does not otherwise meet all requirements to receive any such funds pursuant to the Agreement.

(List Forthcoming)

EXHIBIT H
[Intentionally Omitted]

EXHIBIT I
Subdivisions with a Population Greater than 10,000[1]

(*See* Distributors' Exhibit I)

[1] Entities denoted with an asterisk (*) are Primary Subdivisions with a population greater than 30,000. All other entities listed have populations greater than 10,000 but less than 30,000.

EXHIBIT J-1
AbbVie Entities

List Of Subsidiaries

The following is a list of subsidiaries of AbbVie Inc. as of December 31, 2021. AbbVie is not a subsidiary of any other corporation.

Domestic Subsidiaries	Incorporation
AbbVie Aviation LLC	Illinois
AbbVie Biopharmaceuticals LLC	Delaware
AbbVie Bioresearch Center Inc.	Delaware
AbbVie Biotech Ventures Inc.	Delaware
AbbVie Biotherapeutics Inc.	Delaware
AbbVie Domestic Holdings Inc.	Delaware
AbbVie Endocrine Inc.	Delaware
AbbVie Endocrinology Inc. (d/b/a Pharmacy Solutions)	Delaware
AbbVie Finance Corporation	Delaware
AbbVie Finance LLC	Delaware
AbbVie Global Inc.	Delaware
AbbVie Global Holdings Inc.	Delaware
AbbVie Holdco Inc.	Delaware
AbbVie Holdings Inc.	Delaware
AbbVie International Inc.	Delaware
AbbVie Investments Inc.	Delaware
AbbVie Pharma Inc.	Delaware
AbbVie Pharmaceuticals LLC	Delaware
AbbVie Products LLC	Georgia

AbbVie Purchasing LLC	Delaware
AbbVie Resources Inc.	Delaware
AbbVie Resources International Inc.	Delaware
AbbVie Respiratory LLC	Delaware
AbbVie Sales Inc.	Delaware
AbbVie Services Inc.	Delaware
AbbVie Stemcentrx LLC	Delaware
AbbVie Subsidiary LLC	Delaware
AbbVie US Holdings LLC	Delaware
AbbVie US LLC	Delaware
AbbVie Ventures LLC	Delaware
Aeropharm Technology, LLC	Delaware
AGN International Inc.	Delaware
AGN Kythera, LP	Delaware
AGN Labs LLC	Delaware
AGN LLC	Delaware
AGN Sundry, LLC	Delaware
Allergan Akarna LLC	Delaware
Allergan Finance, LLC	Nevada
ALLERGAN FINCO 2 INC.	Delaware
ALLERGAN FINCO INC.	Delaware
Allergan GI Corp	Delaware

Allergan GP Holding LLC	Delaware
Allergan Holdco US, Inc.	Delaware
Allergan Holdings B1, Inc.	Delaware
Allergan Holdings, Inc.	Delaware
Allergan, Inc.	Delaware
Allergan Laboratories, LLC	Delaware
Allergan Lending 2 LLC	Delaware
Allergan Lending LLC	Delaware
Allergan Pharma Inc.	Delaware
Allergan Property Holdings, LLC	Delaware
Allergan Puerto Rico Holdings, Inc.	Delaware
Allergan Sales Puerto Rico, Inc.	California
Allergan Sales, LLC (d/b/a Allergan; d/b/a Bioscience Laboratories)	Delaware
Allergan Therapeutics LLC	Delaware
Allergan USA, Inc. (d/b/a Pacificom / Pacific Communications)	Delaware
Allergan W.C. Holding Inc.	Delaware
Anterios, Inc.	Delaware
Aptalis Pharma US, Inc.	Delaware
AqueSys, Inc.	Delaware
BioDisplay Technologies, Inc.	Illinois
Bonti, Inc.	Delaware

Cearna Aesthetics, Inc.	Delaware
Chase Pharmaceuticals Corporation	Delaware
Del Mar Indemnity Company LLC	Hawaii
Durata Holdings, Inc.	Delaware
Durata Therapeutics, Inc.	Delaware
Durata Therapeutics U.S. Limited	Delaware
Eden Biodesign, LLC	Delaware
Envy Medical, Inc.	Delaware
Exemplar Pharma, LLC	Delaware
Foresight Vision5, Inc.	Delaware
Fremont Holding L.L.C.	Delaware
Furiex Pharmaceuticals LLC	Delaware
IEP Pharmaceutical Devices, LLC	Delaware
Keller Medical, Inc.	Delaware
Knoll Pharmaceutical Company	New Jersey
KOS Pharmaceuticals, Inc.	Delaware
Life Properties Inc.	Delaware
LifeCell Corporation	Delaware
MAP Pharmaceuticals, LLC	Delaware
Mavupharma, Inc.	Delaware
MPEX Pharmaceuticals, Inc.	Delaware

Naurex Inc.	Delaware
Oculeve, Inc.	Delaware
Organics L.L.C.	Delaware
Pacific Pharma, Inc.	Delaware
Pharmacyclics LLC	Delaware
Pharmax Holding Limited	Delaware
Repros Therapeutics Inc.	Delaware
Rowell Laboratories, Inc.	Minnesota
RP Merger Sub, Inc.	Delaware
Sapphire Merger Sub, Inc.	Delaware
Silicone Engineering, Inc.	California
Soliton Inc.	Delaware
Suffolk Merger Sub, Inc.	Delaware
TeneoOne, Inc.	Delaware
Tobira Therapeutics, Inc.	Delaware
Topokine Therapeutics, Inc.	Delaware
Transderm, Inc.	Delaware
Unimed Pharmaceuticals, LLC	Delaware
Venice Subsidiary LLC	Delaware
Vicuron Pharmaceuticals LLC	Delaware
Vitae Pharmaceuticals, LLC	Delaware
Warner Chilcott Leasing Equipment Inc.	Delaware

Warner Chilcott Sales (US), LLC	Delaware
Zeltiq A LLC	Delaware
Zeltiq Aesthetics, Inc.	Delaware
Zeltiq International, LLC	Delaware

Foreign Subsidiaries	Incorporation
AbbVie S.A.	Argentina
Allergan Productos Farmaceuticos S.A.	Argentina
Allergan Australia Pty Limited	Australia
Elastagen Pty Ltd	Australia
Kythera Biopharmaceuticals Australia Pty Ltd	Australia
AbbVie Pty Ltd	Australia
AbbVie GmbH	Austria
AbbVie Bahamas Ltd.	Bahamas
AbbVie SA	Belgium
Allergan N.V.	Belgium
Odyssea Pharma SPRL	Belgium
AbbVie Ltd	Bermuda
AbbVie Biotechnology Ltd	Bermuda
AbbVie Finance Limited	Bermuda
AbbVie Global Enterprises Ltd.	Bermuda
AbbVie Holdings Unlimited	Bermuda
Allergan Development Ventures I, LP	Bermuda
Allergan Holdings B Ltd.	Bermuda
Allergan Holdings B2, Ltd.	Bermuda
Kythera Holdings Ltd	Bermuda
Warner Chilcott Holdings Company II, Limited	Bermuda

Warner Chilcott Holdings Company III, Limited	Bermuda
Warner Chilcott Limited	Bermuda
AbbVie d.o.o.	Bosnia
AbbVie Farmacêutica Ltda.	Brazil
Allergan Productos Farmaceuticos Ltda.	Brazil
AbbVie EOOD	Bulgaria
Allergan Bulgaria EOOD	Bulgaria
AbbVie Corporation	Canada
AbbVie Holdings Corporation	Canada
Allergan Inc.	Canada
Aptalis Pharma Canada ULC	Canada (Alberta)
Allergan Holdings C, Ltd.	Cayman Islands
Allergan Overseas Holding	Cayman Islands
Pharmacyclics Cayman Ltd.	Cayman Islands
Stemcentrx Cayman Ltd.	Cayman Islands
AbbVie Productos Farmacéuticos Limitada	Chile
Allergan Laboratorios Limitada	Chile
AbbVie Pharmaceutical Trading (Shanghai) Co., Ltd.	China
Allergan (Chengdu) Medical Aesthetics Clinic Co., Ltd.	China
Allergan Information Consulting (Shanghai) Co., Ltd.	China
Allergan Medical Device (Shanghai) Co., Ltd.	China

AbbVie S.A.S.	Colombia
Allergan de Colombia S.A.	Colombia
Allergan Costa Rica S.R.L.	Costa Rica
AbbVie d.o.o.	Croatia
AbbVie Limited	Cyprus
AbbVie s.r.o.	Czech Republic
Allergan CZ, s.r.o.	Czech Republic
AbbVie A/S	Denmark
Allergan ApS	Denmark
AbbVie, S.R.L.	Dominican Republic
AbbVie L.L.C.	Egypt
AbbVie OÜ	Estonia
AbbVie Oy	Finland
Allergan Finland Oy	Finland
AbbVie SAS	France
Allergan France SAS	France
Allergan Holdings France SAS	France
Allergan Industrie SAS	France
Eurand France S.A.S.	France
Forest Holdings France S.A.S.	France
AbbVie Biotechnology GmbH	Germany
AbbVie Deutschland GmbH & Co. KG	Germany

AbbVie Komplementär GmbH	Germany
AbbVie Pharmaceuticals GmbH	Germany
AbbVie Real Estate Management GmbH	Germany
Allergan GmbH	Germany
AbbVie (Gibraltar) Holdings Limited	Gibraltar
AbbVie (Gibraltar) Limited	Gibraltar
AbbVie Pharmaceuticals Societe Anonyme	Greece
Allergan Hellas Pharmaceuticals S.A.	Greece
AbbVie, Socieded Anonima	Guatemala
AbbVie Limited	Hong Kong
Allergan Hong Kong Limited	Hong Kong
AbbVie Gyogyszerkereskedelmi Korlatolt Felelossegu Tarsasag	Hungary
Allergan Hungary Kft.	Hungary
Allergan Healthcare India Private Limited	India
Allergan India Private Limited*	India
AbbVie International Holdings Unlimited Company	Ireland
AbbVie Ireland Holdings Unlimited Company	Ireland
AbbVie Ireland Unlimited Company	Ireland
AbbVie Limited	Ireland
AbbVie Manufacturing Management Unlimited Company	Ireland

Allergan Botox Unlimited Company (In voluntary liquidation)	Ireland
Allergan Equities Unlimited Company	Ireland
Allergan Furiex Ireland Limited (In voluntary liquidation)	Ireland
Allergan Holdings Unlimited Company	Ireland
Allergan Ireland Holdings Unlimited Company	Ireland
Allergan Ireland Limited	Ireland
Allergan Limited	Ireland
Allergan Pharma Limited	Ireland
Allergan Pharmaceuticals Holdings (Ireland) Unlimited Company (In voluntary liquidation)	Ireland
Allergan Pharmaceuticals International Limited	Ireland
Allergan Pharmaceuticals Ireland Unlimited Company	Ireland
Allergan Services International, Unlimited Company	Ireland
Allergan WC Ireland Holdings Limited	Ireland
Forest Laboratories Ireland Limited	Ireland
Fournier Laboratories Ireland Limited	Ireland
Pharmacyclics (Europe) Limited	Ireland
Tosara Exports Limited (In voluntary liquidation)	Ireland
Warner Chilcott Intermediate (Ireland) ULC	Ireland
Zeltiq Ireland International Holdings Unlimited Company	Ireland
Zeltiq Ireland Unlimited Company	Ireland
AbbVie Biopharmaceuticals Ltd.	Israel

Allergan Israel Ltd.	Israel
Marbelle Threads Ltd.	Israel
AbbVie S.r.l.	Italy
Allergan S.p.A.	Italy
Aptalis Pharma S.r.l.	Italy
AbbVie GK	Japan
Allergan International YK	Japan
Allergan Japan KK	Japan
Allergan K.K.	Japan
Allergan NK	Japan
AbbVie Ltd	Korea, South
Allergan Korea Ltd.	Korea, South
AbbVie SIA	Latvia
AbbVie UAB	Lithuania
Allergan Baltics, UAB	Lithuania
AbbVie Biotherapeutics S.àr.l.	Luxembourg
AbbVie Holdings S.à r.l.	Luxembourg
AbbVie Global S.à r.l.	Luxembourg
Allergan AHI S.à r.l.	Luxembourg
Allergan Capital 2 S.à r.l.	Luxembourg
Allergan Capital S.à r.l.	Luxembourg
Allergan Europe S.à r.l.	Luxembourg

Allergan Finance S.à r.l.	Luxembourg
Allergan Funding SCS	Luxembourg
Allergan Global S.à r.l.	Luxembourg
Allergan Holdings S.à r.l.	Luxembourg
Allergan International Holding S.à r.l.	Luxembourg
Allergan Luxembourg International S.à r.l.	Luxembourg
Allergan WC 1 S.à r.l.	Luxembourg
Allergan WC 2 S.à r.l.	Luxembourg
AbbVie Sdn. Bhd.	Malaysia
Allergan Malaysia Sdn Bhd	Malaysia
Allergan Malta Holding Limited	Malta
Allergan Malta II Limited	Malta
Allergan Malta Limited	Malta
AbbVie Farmacéuticos, S.A. de C.V.	Mexico
Allergan Servicios Profesionales, S. de R.L. de C.V.	Mexico
Allergan, S.A. de C.V.	Mexico
AbbVie B.V.	Netherlands
AbbVie Central Finance B.V.	Netherlands
AbbVie Enterprises B.V.	Netherlands
AbbVie Finance B.V.	Netherlands
AbbVie Ireland NL B.V.	Netherlands

AbbVie Japan Holdings B.V.	Netherlands
AbbVie Logistics B.V.	Netherlands
AbbVie Nederland Holdings B.V.	Netherlands
AbbVie Pharmaceuticals B.V.	Netherlands
AbbVie Research B.V.	Netherlands
AbbVie Venezuela B.V.	Netherlands
AbbVie Venezuela Holdings B.V.	Netherlands
Allergan B.V.	Netherlands
Aptalis Holding B.V.	Netherlands
Aptalis Netherlands B.V.	Netherlands
Forest Finance B.V.	Netherlands
Warner Chilcott Nederland B.V.	Netherlands
AbbVie Limited	New Zealand
Allergan New Zealand Limited	New Zealand
AbbVie AS	Norway
Allergan AS	Norway
AbbVie, S. de R.L.	Panama
Allergan Healthcare Philippines, Inc.	Philippines
AbbVie Polska Sp. z o.o.	Poland
AbbVie Sp. z o.o.	Poland
Allergan Sp. z o.o.	Poland
AbbVie, L.da	Portugal

AbbVie Promoção, L.da	Portugal
AbbVie Corp	Puerto Rico
Knoll LLC	Puerto Rico
AbbVie S.R.L.	Romania
AbbVie Trading S.R.L.	Romania
Allergan S.R.L.	Romania
AbbVie Limited Liability Company	Russia
Allergan C.I.S. S.a.r.l.	Russia
Allergan Saudi Arabia LLC*	Saudi Arabia
Allergan d.o.o. Beograd	Serbia
AbbVie Operations Singapore Pte. Ltd.	Singapore
AbbVie Pte. Ltd.	Singapore
Allergan Singapore Pte. Ltd.	Singapore
AbbVie Holdings s.r.o.	Slovakia
AbbVie s.r.o.	Slovakia
Allergan SK s.r.o.	Slovakia
AbbVie Biofarmacevtska druzba d.o.o.	Slovenia
AbbVie (Pty) Ltd.	South Africa
Allergan Pharmaceuticals (Proprietary) Limited	South Africa
AbbVie Spain, S.L.	Spain
Allergan S.A.	Spain

AbbVie AB	Sweden
Allergan Norden AB	Sweden
AbbVie AG	Switzerland
AbbVie Biopharmaceuticals GmbH	Switzerland
Allergan AG	Switzerland
Pharmacyclics Switzerland GmbH	Switzerland
VarioRaw Percutive S.à r.l.	Switzerland
Warner Chilcott Pharmaceuticals S à rl	Switzerland
Allergan Pharmaceuticals Taiwan Co. Ltd.	Taiwan
AbbVie Ltd.	Thailand
Allergan (Thailand) Limited	Thailand
AbbVie Sarl	Tunisia
AbbVie Tıbbi İlaçlar Sanayi ve Ticaret Limited Şirketi	Turkey
Allergan Ilaclari Ticaret Anonim Sirketi	Turkey
Allergan Ukraine LLC	Ukraine
Allergan Middle East Limited	United Arab Emirates
AbbVie Australasia Holdings Limited	United Kingdom
AbbVie Biotherapeutics Limited	United Kingdom
AbbVie Investments Limited	United Kingdom
AbbVie Ltd	United Kingdom
AbbVie Trustee Company Limited	United Kingdom
AbbVie UK Holdco Limited	United Kingdom

Akarna Therapeutics, Limited	United Kingdom
Allergan Holdco UK Limited	United Kingdom
Allergan Holdings Limited	United Kingdom
Allergan Limited	United Kingdom
Lifecell EMEA Limited (In voluntary liquidation)	United Kingdom
Renable Pharma Ltd.	United Kingdom
Zeltiq Limited (In voluntary liquidation)	United Kingdom
AbbVie S.A.	Uruguay
AbbVie Pharmaceuticals SCA.	Venezuela

* Ownership of such subsidiary is less than 100% by AbbVie or an AbbVie subsidiary

EXHIBIT J-2
Allergan Entities

EX-21.1 10 agn-ex211_448.htm EX-21.1

Exhibit 21.1

Name	Jurisdiction of Incorporation
AGN International Inc.	US - Delaware
AGN Kythera, L.P.	US- Delaware
AGN Labs LLC	US - Delaware
AGN LLC	US - Delaware
AGN Sundry LLC	US - Delaware
Akarna Therapeutics, Limited	UK
Allergan WC 1 S.a r.l.	Luxembourg
Allergan (Chengdu) Medical Aesthetics Clinic Co., Ltd.	China
Allergan (Thailand) Limited	Thailand
Allergan AG	Switzerland
Allergan AHI S.à r.l. Management (DIFC Branch)	UAB
Allergan AHI S.á r.l.	Luxembourg
Allergan AHI S.á r.l., Luxembourg, Zweigniederlassung Zug Branch	Switzerland
Allergan Akarna LLC	US - Delaware
Allergan ApS	Denmark
Allergan AS	Norway
Allergan Australia Pty Limited	Australia
Allergan B.V.	Netherlands, The
Allergan Baltics, UAB	Lithuania
Allergan Baltics, UAB Eesti filiaal	Estonia Branch
Allergan Baltics, UAB Latvijas filias	Latvia
Allergan Biologics Ltd.	UK
Allergan Botox Unlimited Company	Ireland
Allergan Bulgaria EOOD	Bulgaria
Allergan C.I.S. SARL	Russian Federation
Allergan Capital S.à r.l.	Luxembourg
Allergan Capital 2 S.à r.l.	Luxembourg
Allergan Capital 2 Sarl, Luxembourg, Zweigniederlassung, Zug	Switzerland
Allergan Capital S.à r.l., Luxembourg, Zweigniederlassung Zug Branch	Switzerland
Allergan Cayman Islands Irish Branch	Ireland
Allergan Costa Rica S.R.L	Costa Rica
Allergan CZ, s.r.o.	Czech Republic
Allergan d.o.o. Beograd	Serbia
Allergan de Colombia S.A.	Colombia
Allergan de Venezuela, C.A.	Venzuela
Allergan Development Ventures I Ireland Unlimited Company	Ireland
Allergan Development Ventures I LP	Bermuda
Allergan Development Ventures I UK	UK
Allergan Equities Unlimited Company	Ireland
Allergan Europe S.à r.l.	Luxembourg
Allergan Finance S.à r.l.	Luxembourg
Allergan Finance, LLC	US - Nevada
Allergan Finco 2 Inc.	US - Delaware
Allergan Finco Inc.	US - Delaware

Exhibit 21.1

Allergan Finland Oy	Finland
Allergan France SAS	France
Allergan Funding SCS	Luxembourg
Allergan Furiex Ireland Limited	Ireland
Allergan GI Corp.	US - Delaware
Allergan Global S.à r.l.	Luxembourg
Allergan GmbH	Germany
Allergan GP Holding LLC	US- Delaware
Allergan Healthcare India Private Limited	India
Allergan Healthcare Philippines, Inc.	Philippines
Allergan Hellas Pharmaceuticals S.A.	Greece
Allergan Holdco UK Limited	UK
Allergan Holdco US, Inc.	US - Delaware
Allergan Holdings B Ltd.	Bermuda
Allergan Holdings B1, Inc.	US - Delaware
Allergan Holdings B2 Limited	Bermuda
Allergan Holdings C Ltd	Cayman Island
Allergan Holdings France SAS	France
Allergan Holdings Limited	UK
Allergan Holdings S. à r.l.	Luxembourg
Allergan Holdings Unlimited Company	Ireland
Allergan Holdings, Inc.	US - Delaware
Allergan Hong Kong Limited	Hong Kong
Allergan Hungary Kft.	Hungary
Allergan Ilaclari Ticaret A.S.	Turkey
Allergan Inc.	Canada
Allergan India Private Limited	India
Allergan Industrie SAS	France
Allergan Information Consulting (Shanghai) Co., Ltd.	China
Allergan International Holding S.à r.l.	Luxembourg
Allergan International YK	Japan
Allergan Ireland Finance Limited	Ireland
Allergan Ireland Holdings Unlimited Company	Ireland
Allergan Ireland Limited	Ireland
Allergan Israel Limited	Israel
Allergan Japan KK	Japan
Allergan KK	Japan
Allergan Korea Ltd	Korea
Allergan Laboratories, LLC	US - Delaware
Allergan Laboratorios Limitada	Chile
Allergan Lending 2 LLC	US - Delaware
Allergan Lending LLC	US - Delaware
Allergan Limited	UK
Allergan Luxembourg International S.à r.l.	Luxembourg
Allergan Malaysia Sdn. Bhd.	Malaysia

Exhibit 21.1

Allergan Malta Holding Limited	Malta
Allergan Malta II Limited	Malta
Allergan Malta Limited	Malta
Allergan Medical Device (Shanghai) Co., Ltd.	China
Allergan Middle East Limited	United Arab Emirates
Allergan N.V.	Belgium
Allergan New Zealand Ltd.	New Zealand
Allergan NK	Japan
Allergan Norden AB	Sweden
Allergan Norden AB Finnish branch	Finland
Allergan Overseas Holding	Cayman Island
Allergan Pharma Inc.	US - Delaware
Allergan Pharma Limited	Ireland
Allergan Pharmaceuticals (Proprietary) Ltd.	South Africa
Allergan Pharmaceuticals Holdings (Ireland) Unlimited Company	Ireland
Allergan Pharmaceuticals International Limited	Ireland
Allergan Pharmaceuticals International Limited Jordan Office	Jordan
Allergan Pharmaceuticals International Limited Lebanon Office	Lebanon
Allergan Pharmaceuticals Ireland	Ireland
Allergan Pharmaceuticals Taiwan Co. Ltd.	Taiwan
Allergan Productos Farmaceuticos S.A.	Argentina
Allergan Produtos Farmaceuticos Ltda.	Brazil
Allergan Property Holdings, LLC	US - Delaware
Allergan Puerto Rico Holdings, Inc.	US - Delaware
Allergan S.A.	Spain
Allergan S.p.A.	Italy
Allergan Sales Puerto Rico, Inc.	US - California
Allergan Sales, LLC (d/b/a Allergan; d/b/a Bioscience Laboratories)	US - Delaware
Allergan Saudi Arabia LLC	Saudi Arablia
Allergan Scientific Office	Egypt
Allergan Services International Unlimited Company	Ireland
Allergan Servicios Profesionales, S. de R.L. de C.V.	Mexico
Allergan Singapore Pte. Ltd.	Singapore
Allergan Singapore Pte. Ltd. Indonesia Rep Office	Indonesia
Allergan Singapore Pte. Ltd. Vietnam Rep Office	Vietnam
Allergan SK s.r.o.	Slovak Republic
Allergan Sp. z.o.o.	Poland
Allergan S.R.L.	Romania
Allergan Therapeutics LLC	US- Delaware
Allergan UK LLP	UK
Allergan Ukraine, LLC	Ukraine
Allergan USA, Inc. (d/b/a Pacificom / Pacific Communications)	US - Delaware
Allergan W.C. Holding Inc.	US - Delaware
Allergan WC 2 S.a r.l.	Luxembourg
Allergan WC Ireland Holdings Ltd.	Ireland

Exhibit 21.1

Allergan, Inc.	US - Delaware
Allergan, S.A. de C.V.	Mexico
Anterios, Inc.	US - Delaware
Aptalis Holding B.V.	Netherlands, The
Aptalis Netherlands B.V.	Netherlands, The
Aptalis Pharma Canada ULC	Canada
Aptalis Pharma S.r.l.	Italy
Aptalis Pharma UK Limited	UK
Aptalis Pharma US, Inc.	US - Delaware
AqueSys, Inc.	US - Delaware
Bonti, Inc.	US - Delaware
Cearna Aesthetics, Inc	US - Delaware
Chase Pharmaceuticals Corporation	US - Delaware
Collagen Luxembourg SA	Luxembourg
Del Mar Indemnity Company, LLC	US - Hawaii
Durata Holdings, Inc.	US - Delaware
Durata Therapeuctics U.S. Limited	US - Delaware
Durata Therapeutics, Inc.	US - Delaware
Eden Biodesign, LLC	US - Delaware
Elastagen Pty Limited	Australia
Envy Medical, Inc.	US - Delaware
Eurand France S.A.S.	France
Exemplar Pharma LLC	US - Delaware
Forest Finance B.V.	Netherlands, The
Forest Holdings France S. A.S.	France
Forest Laboratories Holdings Limited	Ireland
Forest Laboratories Ireland Ltd	Ireland
ForSight VISION5, Inc.	US - Delaware
Furiex Pharmaceuticals, LLC	US - Delaware
Keller Medical, Inc.	US - Delaware
Kythera Biopharmaceuticals Australia Pty Ltd.	Australia
Kythera Holdings Ltd.	Bermuda
LifeCell Corporation	US - Delaware
LifeCell EMEA Limited	UK
LifeCell EMEA Limited Austria branch	Austria
LifeCell EMEA Limited Italy branch	Italy
LifeCell EMEA Limited Sucursal en Espaňa	Spain
LifeCell EMEA Limited, Zweigniederlassung Zürich	Switzerland
LifeCell Medical Resources Limited in voluntary liquidation	Ireland
MAP Pharmaceuticals LLC	US - Delaware
McGhan Ireland Holdings Ltd.	Ireland
McGahn Limited	Ireland
MPEX Pharmaceuticals, Inc.	US - Delaware
Naurex Inc.	US - Delaware
Northwood Medical Innovation, Ltd.	UK

Exhibit 21.1

Oculeve, Inc.	US - Delaware
Odyssea Pharma SPRL	Belgium
Pacific Pharma, Inc.	US - Delaware
Pharm-Allergan GmbH Austria branch	Austria
Pharmax Holding Limited	US - Delaware
Renable Pharma Limited	UK
Repros Therapeutics Inc,.	US- Delaware
RP Merger Sub, Inc.	US - Delaware
Seabreeze Silicone Unlimited Company	Ireland
Silicone Engineering Inc.	US - California
Tobira Therapeutics, Inc.	US - Delaware
Topokine Therapeutics, Inc.	US - Delaware
Tosara Exports Limited	Ireland
Transderm, Inc.	US - Utah
Varioraw Percutive Sàrl	Switzerland
Vicuron Pharmaceuticals LLC	US - Delaware
Viokace LLC	US - Delaware
Vitae Pharmaceuticals LLC	US - Delaware
Warner Chilcott Holdings Company II, Limited	Bermuda
Warner Chilcott Holdings Company III, Limited	Bermuda
Warner Chilcott Intermediate (Ireland) Limited	Ireland
Warner Chilcott Leasing Equipment Inc.	US - Delaware
Warner Chilcott Limited	Bermuda
Warner Chilcott Nederland B.V.	Netherlands, The
Warner Chilcott Pharmaceuticals S. àr.l.	Switzerland
Warner Chilcott Sales (US), LLC	US - Delaware
ZELTIQ A, LLC	US - Delaware
ZELTIQ Aesthetics, Inc.	US - Delaware
ZELTIQ International, LLC	US - Delaware
ZELTIQ International, LLC - Singapore Branch	Singapore
ZELTIQ Ireland International Holdings UC	Ireland
ZELTIQ Ireland Unlimited Company	Ireland
ZELTIQ Limited	United Kingdom
Zeltiq Limited Spanish branch	Spain
Zenpep LLC	US - Delaware

EXHIBIT J-3
Divested Entities

Schedule 4.6(c) - Transferred Group

Ownership interest of Seller Parent and its Subsidiaries is 100% unless otherwise indicated.

	Company Name	***Jurisdiction of Incorporation***
1.	Warner Chilcott Company, LLC	Puerto Rico
2.	Warner Chilcott (Ireland) Limited	Ireland
3.	Warner Chilcott Finance LLC.	Delaware
4.	Warner Chilcott Australia Pty. Ltd.	Australia
5.	Warner Chilcott Pharmaceuticals B.V.B.A.	Belgium
6.	Warner Chilcott France SAS	France
7.	Warner Chilcott Italy S.r.l.	Italy
8.	Actavis Pharma Iberia S.L. (f/k/a Warner Chilcott Iberia S.L.)	Spain
9.	Robin Hood Holdings Ltd.	Malta
10.	Paomar plc	Cyprus
11.	Actavis Pharma Pty Ltd.	Australia
12.	Makoff R&D Laboratories, Inc.	California
13.	R&D Pharmaceutical, Inc.	California
14.	R&D Ferriecit Capital Resources, Inc.	California
15.	R&D Research & Development Corp.	California
16.	R&D New Media Services, Inc.	California
17.	Royce Laboratories, Inc.	Florida
18.	Royce Research Group, Inc.	Florida
19.	Royce Research & Development Limited Partnership I	Florida
20.	The Rugby Group, Inc.	New York

	Company Name	*Jurisdiction of Incorporation*
21.	Watson Laboratories, Inc. Ohio	New York
22.	Rugby Laboratories, Inc.	New York
23.	Changzhou Siyao Pharmaceuticals Co., Ltd. (25%)	China
24.	Watson Pharmaceuticals (Asia) Ltd.	BVI
25.	WP Holdings, Ltd.	BVI
26.	Watson Pharmaceuticals, China Ltd	BVI
27.	Med All Enterprise Consulting (Shanghai) Co. Ltd.	China
28.	Nicobrand Limited	Northern Ireland
29.	Watson Pharmaceuticals International Ltd.	BVI
30.	Watson Diagnostics, Inc.	Delaware
31.	Actavis Laboratories NY, Inc.	New York
32.	Circa Pharmaceuticals West, Inc.	California
33.	Circa Sub	New York
34.	Andrx LLC	Delaware
35.	Andrx South Carolina I, Inc.	South Carolina
36.	Andrx Pharmaceuticals (Mass), Inc.	Florida
37.	Andrx Pharmaceuticals Equipment #1, LLC	Florida
38.	Andrx Pharmaceuticals (NC) Inc.	Florida
39.	Andrx Pharmaceuticals, (NC) Equipment LLC	Delaware
40.	SR Six, Inc.	Florida
41.	RxAPS, Inc.	Florida
42.	Andrx Pharmaceuticals Sales and Marketing, Inc.	Florida
43.	Actavis Laboratories FL, Inc.	Florida

	Company Name	*Jurisdiction of Incorporation*
44.	Watson Management Corporation	Florida
45.	Watson Therapeutics, Inc.	Florida
46.	Andrx Pharmaceuticals, LLC	Delaware
47.	Andrx Labs LLC	Delaware
48.	Andrx Laboratories (NJ) Inc.	Delaware
49.	Watson Cobalt Holdings, LLC	Delaware
50.	Watson Manufacturing Services, Inc.	Delaware
51.	Natrapac, Inc.	Utah
52.	Coventry Acquisition, LLC	Delaware
53.	Cobalt Laboratories, LLC	Delaware
54.	Watson Pharma Private Ltd.	India
55.	Watson Laboratories, LLC	Delaware
56.	Actavis Puerto Rico Holdings Inc.	Delaware
57.	Actavis US Holding LLC	Delaware
58.	Actavis LLC	Delaware
59.	Actavis South Atlantic LLC	Delaware
60.	Actavis Elizabeth LLC	Delaware
61.	Actavis Kadian LLC	Delaware
62.	Actavis Mid Atlantic LLC	Delaware
63.	Actavis Totowa LLC	Delaware
64.	Actavis Pharmaceuticals NJ, Inc.	Delaware
65.	Watson Laboratories, Inc.	Connecticut
66.	Watson Laboratories, Inc. – Arizona	Delaware

	Company Name	*Jurisdiction of Incorporation*
67.	Schein Bayer Pharmaceutical Services, Inc.	Delaware
68.	Schein Pharmaceutical International, Inc.	Delaware
69.	Schein Pharmaceutical Ltd	Bermuda
70.	Marsam Pharma, LLC	Delaware
71.	MSI, Inc.	Delaware
72.	Actavis Holding 2 Sàrl	Luxembourg
73.	Actavis Services (Asia) Ltd.	Malta
74.	Arrow Laboratories, Ltd.	Malta
75.	Arrow Supplies, Ltd.*	Malta
76.	Marrow Pharmaceuticals Research & Development Co Ltd. (50%)	China
77.	Actavis S.à.r.l.	Luxembourg
78.	“Specifar”	Greece
79.	Alet	Greece
80.	Ascent Pharmahealth Pty Ltd	Australia
81.	Actavis Australia Pty Ltd	Australia
82.	Ascent Australia Pty Ltd	Australia
83.	Actavis Pty Ltd	Australia
84.	Ascent Pharma Pty Ltd.	Australia
85.	Ascent Pharmahealth Asia Pte Ltd	Singapore
86.	Drug Houses of Australia Pte Ltd.	Singapore
87.	Ascent Pharmahealth Hong Kong Ltd.	Hong Kong
88.	Actavis Sdn. Bhd.	Malaysia
89.	Arrow Group ApS	Denmark

	Company Name	*Jurisdiction of Incorporation*
90.	Arrow ApS	Denmark
91.	Makewhey Products Pty. Ltd.**	South Africa
92.	Actavis Holdings South Africa (Pty) Ltd.	South Africa
93.	Actavis Pharma (Pty) Ltd.	South Africa
94.	Actavis (Pty) Ltd.	South Africa
95.	Scriptpharm Marketing (Pty) Ltd	South Africa
96.	Referral-Net (Pty) Ltd.*	South Africa
97.	Spear Pharmaceuticals (Pty) Ltd	South Africa
98.	Pharmascript Pharmaceuticals Ltd. (64.8%)	South Africa
99.	Arrow Pharma Tender (Pty) Ltd.** (65%)	South Africa
100.	Zelphy 1308 (Pty) Ltd.	South Africa
101.	Arrowblue Produtos Farmaceuticos SA	Portugal
102.	Bowmed Ltd	UK
103.	Selamine Ltd.	Ireland
104.	Seeker Investments Ltd.	BVI
105.	SC Pharma (Pty) Ltd. (25%)	Australia
106.	Willow Pharmaceuticals Pty Ltd.	Australia
107.	Medis Pharma Pty Ltd	Australia
108.	Eremad Pty Ltd.	Australia
109.	Arrow Läkemedel AB	Sweden
110.	Arrow Generics Ltd.	UK
111.	Arrow No 7 Ltd	UK
112.	Breath Ltd	UK

	Company Name	*Jurisdiction of Incorporation*
113.	Soosysoo Ltd. (50%)**	BVI
114.	Actavis New Zealand Limited	New Zealand
115.	Watson Laboratories, S. de R.L. de C.V	Mexico
116.	Actavis Pharma Company	Canada
117.	Abri Pharmceuticals Company	Canada
118.	Actavis Pharma Holding 4 ehf. (APH4)	Iceland
119.	Actavis Pharma Holding 5 ehf. (APH5)	Iceland
120.	Actavis Group ehf.	Iceland
121.	Actavis Group PTC ehf.	Iceland
122.	Actavis Dutch Holding BV	Netherlands
123.	LLC Actavis	Russia
124.	Actavis Ilaclari AS #	Turkey
125.	Actavis ehf.	Iceland
126.	Medis ehf.	Iceland
127.	Medis Pharma France SAS	France
128.	Medis-Danmark A/S.*	Denmark
129.	Actavis Ireland Ltd.	Ireland
130.	Actavis Italy S.p.A.	Italy
131.	Actavis Isle of Man Ltd.	Isle of Man
132.	Actavis Nordic A/S	Denmark
133.	Actavis Oy	Finland
134.	UAB Actavis Baltics	Lithuania
135.	Actavis Holding AB	Sweden

	Company Name	*Jurisdiction of Incorporation*
136.	Actavis AB	Sweden
137.	Actavis Holding Germany GmbH	Germany
138.	Medis Pharma GmbH	Germany
139.	Actavis A/S	Denmark
140.	Actavis Norway AS	Norway
141.	Actavis, S. de. R.L. de C.V.	Mexico
142.	Actavis Pharma S. de R.L. de C.V.	Mexico
143.	Actavis Hungary Kft.	Hungary
144.	Arrow Pharm (Malta) Ltd.	Malta
145.	Medis Pharma BV	Netherlands
146.	PharmaPack International B.V.	Netherlands
147.	Actavis Polska Sp. z.o.o.	Poland
148.	Actavis International Ltd.	Malta
149.	Actavis Malta Ltd.	Malta
150.	Actavis Export International Ltd.	Malta
151.	Actavis Ltd. (Note: 1 share owned by Dr. Vella)	Malta
152.	Actavis GmbH	Austria
153.	Actavis Holdings UK Ltd.	UK
154.	Actavis Holdings UK II Ltd.	UK
155.	Actavis UK Ltd.	UK
156.	Warner Chilcott Acquisition Limited	UK
157.	Chilcott UK Limited	Northern Ireland
158.	Warner Chilcott Research Laboratories Ltd.	Northern Ireland

	Company Name	*Jurisdiction of Incorporation*
159.	Warner Chilcott UK Limited	Northern Ireland
160.	Warner Chilcott Pharmaceuticals UK Limited	UK
161.	Millbrook (NI) Limited	Northern Ireland
162.	Auden Mckenzie Holdings Ltd.	UK
163.	Auden Mckenzie (Pharma Division) Ltd.	UK
164.	NRIM Ltd.	UK
165.	Lime Pharma Ltd.	UK
166.	D3 Pharma Ltd. (38%)	UK
167.	Actavis d.o.o. Belgrade	Serbia
168.	Lotus Laboratories Private Ltd.	India
169.	Actavis Ukraine LLC	Ukraine
170.	Zdravlje AD	Serbia
171.	Actavis Switzerland AG	Switzerland
172.	Oncopharma AG	Switzerland
173.	Sindan Pharma SRL	Romania
174.	Actavis SRL	Romania
175.	Actavis CZ a.s.	Czech Republic
176.	Actavis S.r.o.	Slovak Republic
177.	Biovena Pharma Sp. z.o.o.	Poland
178.	Actavis (Cyprus) Ltd.	Cyprus
179.	Actavis Operations EOOD	Bulgaria
180.	Balkanpharma Troyan AD (98.32%)	Bulgaria
181.	Balkanpharma Dupnitsa AD (98.05%)	Bulgaria

	Company Name	*Jurisdiction of Incorporation*
182.	Balkanpharma Security EOOD	Bulgaria
183.	Balkanpharma Healthcare International (Cyprus) Ltd.*	Cyprus
184.	Actavis EAD	Bulgaria
185.	Actavis Istanbul Ilac Sanayive Ticaret Ltd. Sirketi	Turkey
186.	Actavis (MEEA) FZE	UAE
187.	Actavis Farmacêutica Limitada	Brazil
188.	Actavis Holding Asia BV	Netherlands
189.	Actavis Hong Kong Limited	Hong Kong
190.	China Medicinal & Chemical Industrial Development Group Ltd. (10% interest)	Hong Kong
191.	Actavis Pharma Development Centre Private Ltd.	India
192.	Actavis Pharma Private Ltd.	India
193.	PT Actavis Indonesia	Indonesia
194.	Actavis KK	Japan
195.	Actavis (Asia Pacific) Pte. Ltd.	Singapore
196.	Silom Medical Co., Ltd	Thailand
197.	Silom Medical International Co., Ltd.	Thailand
198.	Forest Laboratories UK Ltd.	UK
199.	Pharmax Ltd.	UK
200.	Forest Pharma BV	Netherlands
201.	Forest Laboratories Osterreich GmbH	Austria
202.	Forest Laboratories France S.A.S.	France
203.	Forest Laboratories Deutschland GmbH	Germany

	Company Name	*Jurisdiction of Incorporation*
204.	Forest Laboratories Italy S.r.L.	Italy
205.	Forest Laboratories Spain, SL	Spain
206.	Axcan France (Invest) SAS	France
207.	Aptalis Pharma SAS	France
208.	Forest Tosara Ltd.	Ireland
209.	Actavis Laboratories UT, Inc.	Delaware
210.	Watson Laboratories, Inc.	Nevada
211.	Actavis Pharma, Inc.	Delaware
212.	Arrow International Ltd.	Malta
213.	Allergan UK Group Ltd.	UK
214.	Actavis Finance ehf.	Iceland
215.	Actavis Holdco US, Inc.	Delaware

* In Liquidation ** De-Registered

EXHIBIT K
Subdivision and Special District Settlement Participation Form

Governmental Entity:	State:
Authorized Official:	
Address 1:	
Address 2:	
City, State, Zip:	
Phone:	
Email:	

The governmental entity identified above ("*Governmental Entity*"), in order to obtain and in consideration for the benefits provided to the Governmental Entity pursuant to the Agreement dated November 22, 2022 ("*Allergan Settlement*"), and acting through the undersigned authorized official, hereby elects to participate in the Allergan Settlement, release all Released Claims against all Released Entities, and agrees as follows.

1. The Governmental Entity is aware of and has reviewed the Allergan Settlement, understands that all terms in this Election and Release have the meanings defined therein, and agrees that by this Election, the Governmental Entity elects to participate in the Allergan Settlement as provided therein.

2. Following the execution of this Settlement Participation Form, the Governmental Entity shall comply with Section III.B of the Allergan Settlement regarding Cessation of Litigation Activities.

3. The Governmental Entity shall, within fourteen (14) days of the Reference Date and prior to the filing of the Consent Judgment, file a request to dismiss with prejudice any Released Claims that it has filed. With respect to any Released Claims pending in *In re National Prescription Opiate Litigation*, MDL No. 2804, the Governmental Entity authorizes the MDL Plaintiffs' Executive Committee to execute and file on behalf of the Governmental Entity a Stipulation of Dismissal With Prejudice substantially in the form found at [link to national settlement website page to be provided].

4. The Governmental Entity agrees to the terms of the Allergan Settlement pertaining to Subdivisions and Special Districts as defined therein.

5. By agreeing to the terms of the Allergan Settlement and becoming a Releasor, the Governmental Entity is entitled to the benefits provided therein, including, if applicable, monetary payments beginning after the Effective Date.

6. The Governmental Entity agrees to use any monies it receives through the Allergan Settlement solely for the purposes provided therein.

7. The Governmental Entity submits to the jurisdiction of the court in the Governmental Entity's state where the Consent Judgment is filed for purposes limited to that court's role as provided in, and for resolving disputes to the extent provided in, the Allergan Settlement.

8. The Governmental Entity has the right to enforce the Allergan Settlement as provided therein.

9. The Governmental Entity, as a Participating Subdivision or Participating Special District, hereby becomes a Releasor for all purposes in the Allergan Settlement, including, but not limited to, all provisions of **Section V (Release)**, and along with all departments, agencies, divisions, boards, commissions, Subdivisions, districts, instrumentalities of any kind and attorneys, and any person in their official capacity whether elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, and any other entity identified in the definition of Releasor, provides for a release to the fullest extent of its authority. As a Releasor, the Governmental Entity hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist in bringing, or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the Allergan Settlement are intended to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of the Governmental Entity to release claims. The Allergan Settlement shall be a complete bar to any Released Claim.

10. The Governmental Entity hereby takes on all rights and obligations of a Participating Subdivision or Participating Special District as set forth in the Allergan Settlement.

11. In connection with the releases provided for in the Allergan Settlement, each Governmental Entity expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her, would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Governmental Entity hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would

materially affect the Governmental Entities' decision to participate in the Allergan Settlement.

12. Nothing herein is intended to modify in any way the terms of the Allergan Settlement, to which the Governmental Entity hereby agrees. To the extent this Settlement Participation Form is interpreted differently from the Allergan Settlement in any respect, the Allergan Settlement controls.

I have all necessary power and authorization to execute this Settlement Participation Form on behalf of the Governmental Entity.

Signature: _____

Name: _____

Title: _____

Date: _____

EXHIBIT L
Settlement Fund Administrator

(Plaintiffs to Add)

EXHIBIT M-1
Payment Schedule

EXHIBIT M-1: PAYMENT SCHEDULE

Payment Year	Additional Restitution Amount & All Attorneys' Fees & Costs Funds	Base Payments (45%)	Incentives A, B, & C (maximum) (48%)	Incentive D Part 1 (maximum) (3.5%)	Incentive D Part 2 (maximum) (3.5%)	Total Abatement	Overall Total
Year 1 2023: Effective Date + 30 days	$55,774,789.29	$257,026,678.71	---	---	---	$257,026,678.71	$312,801,468.00
Year 2 July 15, 2024	$55,774,789.29	$113,091,738.63	$143,934,940.08	---	---	$257,026,678.71	$312,801,468.00
Year 3 July 15, 2025	$55,774,789.27	$113,091,738.63	$143,934,940.08	---	---	$257,026,678.71	$312,801,467.98
Year 4 July 15, 2026	$55,774,789.27	$81,605,970.49	$143,934,940.08	$31,485,768.14	---	$257,026,678.71	$312,801,467.98
Year 5 July 15, 2027	---	$81,605,970.50	$143,934,940.08	$31,485,768.14	---	$257,026,678.72	$257,026,678.72
Year 6 July 15, 2028	---	$81,605,970.50	$143,934,940.08	---	$31,485,768.14	$257,026,678.72	$257,026,678.72
Year 7 July 15, 2029	---	$81,605,970.49	$143,934,940.08	---	$31,485,768.15	$257,026,678.72	$257,026,678.72
Total	**$223,099,157.12**	**$809,634,037.95**	**$863,609,640.48**	**$62,971,536.28**	**$62,971,536.29**	**$1,799,186,751.00**	**$2,022,285,908.12**

NOTES:

1. All figures for the base and incentive payments are maximum figures that reflect the following:
   - The credits amount of $350,686,276 for prior settlements, including San Francisco, have already been applied.
   - An assumption that all Eligible States are Settling States.
   - An assumption that all incentives are earned.

2. The Additional Restitution Amount and the state and subdivision fees and costs amounts are broken out into separate columns in Exhibit M-2.

3. Any offsets under Section VII.C for Non-Settling States would be deducted from the base payments and the maximum incentive payments (A, B & C and D) by subtracting from all payments the amount of the payment times the State Allocation Percentage assigned to each Non-Settling State in Exhibit F-2.

EXHIBIT M-2: PAYMENT SCHEDULE FOR FEE FUNDS, COST FUNDS AND ADDITIONAL RESTITUTION
(Breakdown of Second Column in Exhibit M-1)

Payment Year	Attorney Fee and Cost Fund (Subdivisions)	State Cost Fund	State Outside Counsel Fee Fund	Additional Restitution Amount	Total (Shown in Ex. M-1, 2nd Column)
Year 1 2023: Effective Date + 30 days	$46,778,855.53	$3,598,373.50	$2,698,780.13	$2,698,780.13	$55,774,789.29
Year 2 July 15, 2024	$46,778,855.53	---	$4,497,966.88	$4,497,966.88	$55,774,789.29
Year 3 July 15, 2025	$46,778,855.52	---	$4,497,966.88	$4,497,966.87	$55,774,789.27
Year 4 July 15, 2026	$46,778,855.52	---	$4,497,966.87	$4,497,966.88	$55,774,789.27
Total	$187,115,422.10	$3,598,373.50	$16,192,680.76	$16,192,680.76	$223,099,157.12

EXHIBIT N
Additional Restitution Amount Allocation

Alabama	2.3235064275%
American Samoa	0.0249290899%
Arizona	3.4587568289%
Arkansas	1.3572625067%
California	14.4450765453%
Colorado	2.4192554291%
Connecticut	1.8837281232%
District of Columbia	0.2620389205%
Guam	0.0699391581%
Illinois	4.8429924684%
Indiana	3.2276944929%
Iowa	1.0802095029%
Kansas	1.1415833881%
Maine	0.7706700866%
Maryland	3.0729495134%
Massachusetts	3.3539006587%
Michigan	4.9531894399%
Minnesota	1.8887504448%
Missouri	2.9201303591%
Montana	0.4550557494%
N. Mariana Islands	0.0243230499%
Nebraska	0.6073579252%
New Hampshire	0.8422452854%
New Jersey	4.0113502576%
North Carolina	4.7322180042%
North Dakota	0.2475488543%
Oregon	2.0006852452%
Pennsylvania	6.6802688492%
South Carolina	2.2411620291%
Tennessee	3.9138188795%
Texas	9.1626320793%
Utah	1.6695130485%
Vermont	0.3705243381%
Virgin Islands	0.0459606175%
Virginia	3.3197424763%
Washington	3.3762173891%
Wisconsin	2.5599397925%
Wyoming	0.2428727457%

EXHIBIT O
Adoption of a State-Subdivision Agreement

A State-Subdivision Agreement shall be applied if it meets the requirements of **Section VIII** and is approved by the State and by the State's Subdivisions as follows:

1. *Requirements for Approval.* A State-Subdivision Agreement shall be deemed as agreed to when it has been approved by the State and either (a) Subdivisions whose aggregate "Population Percentages," determined as set forth below, total more than sixty percent (60%), or (b) Subdivisions whose aggregate Population Percentages total more than fifty percent (50%) provided that these Participating Subdivisions also represent fifteen percent (15%) or more of the State's counties or parishes (or, in the case of Settling States whose counties and parishes do not function as local governments, 15% of or more of the Settling State's non-county Subdivisions), by number.

2. *Approval Authority.* Approval by the State shall be by the Attorney General. Approval by a Subdivision shall be by the appropriate official or legislative body pursuant to the required procedures for that Subdivision to agree to a legally binding settlement.

3. *Population Percentage Calculation.* For purposes of this **Exhibit O** only, Population Percentages shall be determined as follows: For States with functional counties or parishes[1], the Population Percentage of each county or parish shall be deemed to be equal to (a) (1) two hundred percent (200%) of the population of such county or parish, minus (2) the aggregate population of all Primary Incorporated Municipalities located in such county or parish, divided by (b) two hundred percent (200%) of the State's population. A "Primary Incorporated Municipality" means a city, town, village or other municipality incorporated under applicable state law with a population of at least 25,000 that is not located within another incorporated municipality. The Population Percentage of each Primary Incorporated Municipality shall be equal to its population (including the population of any incorporated or unincorporated municipality located therein) divided by two hundred percent (200%) of the State's population; *provided* that the Population Percentage of a Primary Incorporated Municipality that is not located within a county shall be equal to two hundred percent (200%) of its population (including the population of any incorporated or unincorporated municipality located therein) divided by two hundred percent (200%) of the State's population. For all States that do not have functional counties or parishes, the Population Percentage of each non-county Subdivision

[1] Certain states do not have counties or parishes that have functional governments, including Alaska, Connecticut, Massachusetts, Rhode Island, and Vermont.

(including any incorporated or unincorporated municipality located therein), shall be equal to its population divided by the State's population.

4. *Preexisting Agreements and Statutory Provisions.* A State may include with the notice to its Subdivisions an existing agreement, a proposed agreement, or statutory provisions regarding the distribution and use of settlement funds and have the acceptance of such an agreement or statutory provision be part of the requirements to be an Initial Participating Subdivision.

5. *Revised Agreements.* A State-Subdivision Agreement that has been revised, supplemented, or refined shall be applied if it meets the requirements of **Section VIII** and is approved by the State and by the State's Subdivisions pursuant to the terms above.

EXHIBIT P
Injunctive Relief

I. DEFINITIONS

A. "*Health Care Provider(s)*" means any physician or other health care practitioner who is licensed to provide health care services or to prescribe pharmaceutical medications and any medical facility, practice, hospital, clinic, pharmacy, or any other health facility that provides health care services or prescribes or dispenses pharmaceutical medications.

B. "*In-Kind Support*" means payment or assistance in the form of goods, commodities, services, or anything else of value.

C. "*Lobby*" and "*Lobbying*" shall have the same meaning as "lobbying activities" and "lobbying contacts" under the federal lobbying disclosure act, 2 U.S.C. § 1602 *et seq.*, and any analogous state or local provisions governing the person or entity being lobbied. As used in this document, "Lobby" and "Lobbying" include Lobbying directly or indirectly, through grantees or Third Parties.

D. "*Opioid(s)*" means all naturally occurring, synthetic, or semisynthetic substances that interact with mu-opioid receptors primarily in the central nervous system and have demonstrated addictive properties.

E. "*Opioid-Induced Side Effects Treatment Product(s)*" shall mean any pharmaceutical product that has been approved by the U.S. Food & Drug Administration ("FDA") and expressly indicated for the treatment of a specified "Opioid-induced" side effect (such as Movantik® which is "an opioid antagonist indicated for the treatment of opioid-induced constipation"). The term "Opioid-Induced Side Effects Treatment Product(s)" shall not include pharmaceutical products that may treat medical conditions that may also be side effects of Opioids or Opioid Products or that may treat someone who uses or has a history of using Opioids or Opioid Products and was diagnosed with certain medical conditions (e.g., anxiety, depression, and Hepatitis C), unless the FDA approved indication states that it is approved to treat a specific "Opioid-induced" side effect by expressly referencing that the side effect was caused by an Opioid or Opioid Product (e.g., "Opioid-induced"). Also, by way of example, the term "Opioid-Induced Side Effects Treatment Product(s)" shall not include the following pharmaceutical medications: BOTOX®, CELEXA®, FETIZMA®, HUMIRA®, LEXAPRO®, LINZESS®, NIMBEX®, ORIAHNN®, ORILISSA®, QULIPTA®, RINVOQ®, SAVELLA®, UBRELVY®, ULTANE®, ULTANE NOVAPLUS®, VIBERZI®, or VIEKIRA PAK®.

F. "*Opioid Product(s)*" means all past, current, and future medications containing Opioids approved by the FDA and listed by the U.S. Drug Enforcement Agency ("DEA") as Schedule II, III, or IV drugs pursuant to the federal Controlled

Substances Act (including but not limited to buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, meperidine, methadone, morphine, oxycodone, oxymorphone, tapentadol, and tramadol). The term "Opioid Product(s)" shall not include (1) methadone, buprenorphine, and other substances when used exclusively to treat opioid abuse, addiction, OUD, or overdose; or (2) raw materials, immediate precursors, and/or active pharmaceutical ingredients ("APIs") used in the manufacture or study of Opioids or Opioid Products, but only when such materials, immediate precursors, and/or APIs are sold or marketed exclusively to DEA-licensed manufacturers or DEA-licensed researchers. Also, by way of example, the terms "Opioid(s)" and "Opioid Product(s)" shall not include pharmaceutical medications that may relieve pain but not by interacting with mu-opioid receptors primarily in the central nervous system, such as BOTOX®, CELEXA®, FETIZMA®, HUMIRA®, LEXAPRO®, LINZESS®, NIMBEX®, ORIAHNN®, ORILISSA®, QULIPTA®, RINVOQ®, SAVELLA®, UBRELVY®, ULTANE®, ULTANE NOVAPLUS®, VIBERZI®, or VIEKIRA PAK®.

G. "*OUD*" means opioid use disorder defined in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM–5)*, as updated or amended.

H. "*Settling State*" shall mean each State or United States territory that meets the participation requirements for becoming a Settling State under **Section II** of the Allergan Public Global Settlement Agreement and then participates in the Allergan Public Global Settlement Agreement.

I. *"Promote*," "*Promoting*," "*Promotion*," and "*Promotional*" shall mean dissemination of information or other practices intended or that could reasonably be anticipated to increase the sale, prescription, or utilization of prescription products or that attempt to influence prescribing practices or formulary decisions in the Settling States.

J. "*Third Party(ies)*" means any person or entity other than Allergan or a Releasor.

K. "*Treatment of Pain*" means the provision of therapeutic modalities to alleviate or reduce pain.

L. "*Unbranded Information*" means any information that does not identify a specific branded or generic product.

II. INJUNCTIVE RELIEF

Allergan does not currently manufacture, sell, Promote, or Lobby for any Opioids or Opioid Products. As provided below, Allergan shall not manufacture, sell, Promote, or Lobby for any Opioids or Opioid Products in or for distribution in the Settling States or in a manner that directly affects the Settling States. However, the Parties acknowledge that certain Opioids or Opioid Products sold by Allergan prior to 2021 may still be circulating in the marketplace outside the possession and control of Allergan and the same is not a breach of any terms within this **Exhibit P**. Further, Allergan does not currently manufacture, sell, Promote, or Lobby for any Opioid-Induced Side Effects Treatment Products, and does not have any current intentions to do so in the

future. For the avoidance of doubt, only the Settling States shall have the ability to enforce the terms of this Agreement.

For purposes of this **Exhibit P** only, *Allergan* means Allergan Finance, LLC (f/k/a Actavis, Inc., which, in turn, was f/k/a Watson Pharmaceuticals, Inc.), Allergan Limited (f/k/a Allergan plc which, in turn, was f/k/a Actavis plc), and AbbVie Inc., and each of their respective parents (as applicable), subsidiaries, successors, affiliates, and officers, directors, employees, representatives, and agents under the control of the foregoing.

A. Compliance Duration

1. Unless addressed in Section II.A.2 below, each term of Section II of this **Exhibit P** shall be effective for ten (10) years from the Effective Date and is limited to conduct that involves or affects the Settling States.

2. The provisions of Section II.H.1, Section II.H.2, and Section II.I shall not be subject to any term.

3. Nothing in this **Exhibit P** shall relieve Allergan of its independent obligation to fully comply with the laws of the Settling States before or after expiration of the injunction period specified in this subsection.

B. Ban on Selling and Manufacturing Opioids

1. Allergan shall not manufacture or sell any Opioids or Opioid Products for distribution in the Settling States. Allergan represents that Kadian® and Norco® were voluntarily discontinued by the end of 2020 and that the last inventory shipped will expire on or before June 30, 2023.

C. Ban on Promotion

1. Allergan shall not engage in Promotion of Opioids or Opioid Products, including but not limited to, by:

   a. Employing or contracting with sales representatives, Health Care Providers, any Third Party, or other persons to Promote Opioids or Opioid Products to (i) Health Care Providers, (ii) patients, (iii) third-party payors (e.g., any entity, other than an individual, that pays or reimburses for the dispensing of prescription medicines, including but not limited to manage care organizations and pharmacy benefit managers), or (iv) persons involved in determining formulary access or treatment guidelines to Promote Opioids or Opioid Products;

   b. Using speakers, key opinion leaders, thought leaders, lecturers, and/or speaking events for Promotion of Opioids or Opioid Products;

c. Creating or distributing (directly or indirectly through Third Parties) Promotional materials (such as advertisements) that Promote Opioids or Opioid Products, including but not limited to brochures, newsletters, pamphlets, journals, books, guides, websites or internet advertisements, social media accounts or networks, and providing hyperlinks, engaging in internet search engine optimization, or otherwise directing internet traffic by improving rankings or making content appear among the top results in an internet search or otherwise be more visible or more accessible to the public on the internet to Promote Opioids or Opioid Products; and

d. Disseminating Unbranded Information (such as about a medical condition or disease state) that contains links to branded Promotional information about Opioids or Opioid Products or that generates data that Allergan uses to Promote Opioids or Opioid Products.

2. Allergan shall not engage in the following specific Promotion of Treatment of Pain to Promote Opioids or Opioid Products.

a. Allergan shall not Promote the Treatment of Pain to Promote Opioids, except that Allergan may continue to Promote the Treatment of Pain with non-Opioids.

b. Allergan shall not knowingly Promote the Treatment of Pain to Promote Opioids through Third Parties, except that Allergan may continue to Promote the Treatment of Pain with non-Opioids.

c. Allergan shall not Promote the concept that pain is undertreated to Promote Opioids or Opioid Products.

d. Allergan shall not knowingly Promote the concept that pain is undertreated through Third Parties to Promote Opioids or Opioid Products.

3. Allergan shall not engage in the following specific Promotion of Opioid-Induced Side Effects Treatment Products to Promote Opioids or Opioid Products.

a. Allergan shall not Promote Opioid-Induced Side Effects Treatment Products with or by referring directly to Opioids or Opioid Products (including with Unbranded Information).

b. Allergan shall not knowingly Promote Opioid-Induced Side Effects Treatment Products with or by referring directly to Opioids or Opioid Products through Third Parties.

c. Nothing in this section shall prevent Allergan from conveying the information contained in an FDA-approved label in the course of Promotion of Opioid-Induced Side Effects Treatment Products.

4. Section II.C.1-3 is not intended and shall not be interpreted to prohibit or restrict any and all discussions or references to Opioids or Opioid Products or any Allergan conduct (including Promotion) related to non-Opioid Products (including those that are approved for the Treatment of Pain or Opioid-Induced Side Effects Treatment Products) when doing so is not to Promote Opioids or Opioid Products, including, for example, (a) if certain patient populations, such as those with a history of abuse of Opioids or Opioid Products, are identified as having a higher prevalence of other conditions, such as Hepatitis C, or being appropriate candidates for treatment of those other conditions, (b) if such discussions or references relate to products that may treat medical conditions that may also be side effects of Opioids or Opioid Products (e.g., anxiety, depression, and Hepatitis C), and/or (c) if such discussions or references relate to the Promotion of BOTOX®, CELEXA®, FETIZMA®, HUMIRA®, LEXAPRO®, LINZESS®, NIMBEX®, ORIAHNN®, ORILISSA®, QULIPTA®, RINVOQ®, SAVELLA®, UBRELVY®, ULTANE®, ULTANE NOVAPLUS®, VIBERZI®, or VIEKIRA PAK®.

5. Notwithstanding Sections II.C.1-3 directly above, Allergan may engage in non-Promotional conduct, including but not limited to the following:

a. Maintain a corporate website that includes Opioid Products on company's list of products that contains principally the following content: the FDA-approved package insert, medication guide, and labeling;

b. Maintain a product website for any Opioid Product that contains principally the following content: the FDA-approved package insert, medication guide, and labeling, and a statement directing patients or caregivers to speak with a licensed Health Care Provider;

c. Provide the following factual information about Opioid Products sold by Allergan prior to 2021 which may still be circulating in the marketplace outside the possession and control of Allergan: an Opioid Product's NDC, SKU, or other relevant information such as formulation, package size, dosage, or pricing;

d. Provide or collect information or support the provision or collection of information as expressly required by law or any state or federal government agency with jurisdiction in the Settling State where the information is provided (including but not limited to collecting and/or reporting adverse events related to Opioid Products);

e. Provide the following by mail, electronic mail, on or through Allergan's corporate or product websites, or through other electronic or digital methods: FDA-approved package insert, medication guide, and labeling for Opioid Products, or other prescribing information for Opioid Products that are published or approved by a state or federal government agency with jurisdiction in the Settling State where the information is provided;

f. Provide scientific and/or medical information in response to an unsolicited request by a Health Care Provider consistent with FDA standards, rules, regulations, and/or guidance, including, but not limited to, *Responding to Unsolicited Requests for Off-Label Information About Prescription Drugs and Medical Devices* (Dec. 2011) as updated or amended by the FDA, and Guidance for Industry, *Good Reprint Practices for the Distribution of Medical Journal Articles and Medical or Scientific Reference Publications on Unapproved New Uses of Approved Drugs and Approved or Cleared Medical Devices* (Jan. 2009) as updated or amended by the FDA;

g. Provide a response to any unsolicited question or request from a patient or caregiver, directing the patient or caregiver to the FDA-approved package insert, medication guide, and labeling for Opioid Products, to speak with a licensed Health Care Provider without describing the safety or effectiveness of any Opioid Product or naming any specific Health Care Provider, or to speak with their health insurance carrier regarding coverage of an Opioid Product;

h. Provide Health Care Economic Information, as defined at 21 U.S.C. § 352(a), to a payor, formulary committee, or other similar entity with knowledge and expertise in the area of health care economic analysis consistent with FDA standards, rules, regulations, and/or guidance, including, but not limited to, FDA's Draft Questions and Answers Guidance for Industry and Review Staff, *Drug and Device Manufacturer Communications With Payors, Formulary Committees, and Similar Entities* (Jan. 2018), as updated or amended by the FDA;

i. Conduct or provide financial support or In-Kind Support for bona fide scientific research; and

j. Draft, publish, or provide financial support or In-Kind Support for bona fide scientific publications.

6. To the extent that Allergan engages in conduct permitted by Section II.C.4 and 5 above, Allergan shall do so in a manner that is truthful, non-misleading, accurate, and non-deceptive.

D. No Financial Reward or Discipline Based on Volume of Opioid Product Sales

1. Allergan shall not provide financial incentives to its sales and marketing employees or discipline its sales and marketing employees based upon sales volume or sales quotas for Opioid Products.

2. Allergan shall not offer or pay any remuneration (including any compensation or rebate), directly or indirectly (e.g., through Third Parties), to any person in return for the prescribing, sale, use, or distribution of an Opioid Product (except to the extent a pre-existing contractual or legal requirement exists related to Opioid Products sold by Allergan before 2021).

E. Ban on Funding/Grants to Third Parties

1. Allergan shall not directly or indirectly provide financial support or In-Kind Support to any Third Party regarding conduct that Promotes Opioids or Opioid Products, including educational programs, brochures, newsletters, pamphlets, journals, books, guides, websites, or social media accounts or networks that Promote Opioids or Opioid Products, including Promoting Opioids or Opioid Products through the Promotion of Treatment of Pain, but excluding financial support otherwise required by this **Exhibit P**, a court order, a federal or state agency (e.g., FDA-approved Risk Evaluation and Mitigation Strategy (REMs)), or a federal or state law or regulation.

2. Allergan shall not directly or indirectly provide financial support or In-Kind Support to any Third Party for medical education programs to Promote Opioids or Opioid Products.

3. Allergan shall not create, sponsor, provide financial support or In-Kind Support to, or otherwise operate or control, any medical society or patient advocacy group related to conduct that Promotes Opioids or Opioid Products (including Promoting Opioids or Opioid Products through the Promotion of Treatment of Pain).

4. Allergan shall not provide links to any Third Party website or materials or otherwise distribute materials created by a Third Party for the purpose of Promoting Opioids or Opioid Products (including Promoting Opioids or Opioid Products through the Promotion of Treatment of Pain).

5. Allergan shall not use, assist, or employ any Third Party to engage in any activity that Allergan itself would be prohibited from engaging in pursuant to this **Exhibit P**. To the extent Allergan supports trade groups engaged in Lobbying, Allergan shall notify the trade groups at the time it makes its trade association payments that Allergan's support shall not be used to encourage the use of Opioids or Opioid Products or discourage the use of non-Opioids or Opioid Products for the purpose of indirectly encouraging

the use of Opioids or Opioid Products (but shall not be responsible for how the trade group ultimately uses the support provided because it is outside of Allergan's control).

6. Allergan shall not enter into any contract or agreement with any person or entity or otherwise attempt to influence any person or entity in such a manner that has the purpose or foreseeable effect of limiting the dissemination of information regarding the risks and side effects of using Opioids or Opioid Products.

7. No officer or Vice President-level employee of Allergan may concurrently serve as a director, board member, employee, agent, or officer of any entity that primarily engages in conduct that Promotes Opioids or Opioid Products. Nothing in this provision shall preclude an officer or Vice President-level employee of Allergan from concurrently serving on the board of a hospital.

8. Allergan shall play no role in appointing persons to the board, or hiring persons to the staff, of any Third Party that primarily engages in conduct that Promotes Opioids or Opioid Products. For avoidance of doubt, nothing in this paragraph shall prohibit Allergan from fully and accurately responding to unsolicited requests or inquiries about a person's fitness to serve as an employee or board member at any such Third Party.

F. Lobbying Restrictions

1. Allergan shall not Lobby for the enactment of any federal, state, or local legislative or regulatory provision that:

   a. Encourages or requires Health Care Providers to prescribe Opioids or Opioid Products or sanctions Health Care Providers for failing to prescribe Opioids or failing to treat pain with Opioids;

   b. Has the effect of limiting access to any non-Opioid alternative pain treatments; or

   c. Pertains to the classification of any Opioid or Opioid Product as a scheduled drug under the Controlled Substances Act.

2. Allergan shall not Lobby against the enactment of any federal, state, or local legislative or regulatory provision that supports:

   a. The use of non-pharmacologic therapy and/or non-Opioid pharmacologic therapy to treat chronic pain over or instead of Opioids or Opioid Products, including but not limited to Third Party payment or reimbursement for such therapies;

b. The use and/or prescription of immediate release Opioids or Opioid Products instead of extended-release Opioids or Opioid Products when an Opioid or Opioid Product is initiated, including but not limited to Third Party reimbursement or payment for such prescriptions;

c. The prescribing of the lowest effective dose of an Opioid or Opioid Product, including but not limited to Third Party reimbursement or payment for such prescriptions;

d. The limitation of initial prescriptions of Opioids or Opioid Products to treat acute pain;

e. The prescribing and other means of distribution of naloxone to minimize the risk of overdose, including but not limited to Third Party reimbursement or payment for naloxone;

f. The use of urine testing before starting use of Opioids or Opioid Products and annual urine testing when Opioids or Opioid Products are prescribed, including but not limited to Third Party reimbursement or payment for such testing;

g. Evidence-based treatment (such as using medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for OUD, including but not limited to Third Party reimbursement or payment for such treatment; or

h. The implementation or use of disposal systems when solely related to Opioids or Opioid Products (versus of general applicability to all pharmaceutical medications, for example).

3. Allergan shall not Lobby against the enactment of any federal, state, or local legislative or regulatory provision expanding the operation or use of Prescription Drug Monitoring Programs ("PDMPs"), including but not limited to provisions requiring Health Care Providers to review PDMPs when Opioid Product use is initiated and with every prescription thereafter.

4. Notwithstanding the foregoing restrictions in Sections II.F.1-3, the following conduct is not restricted:

a. Challenging the enforcement or interpretation of (including, but not limited to, suing for declaratory or injunctive relief) any laws, rules, or regulations;

b. Communications by Allergan in response to a law, rule, regulation, or order requiring such communication;

c. Communications by an Allergan representative appearing before a federal or state legislative, administrative, or regulatory body, committee, or subcommittee as a result of a mandatory order or subpoena commanding that person or Allergan's designee to testify;

d. Responding, in a manner consistent with this **Exhibit P**, to an unsolicited request for the input on the passage of legislation or the promulgation of any rule or regulation when such request is submitted in writing specifically to Allergan from a government entity directly involved in the passage of that legislation or promulgation of that rule or regulation; or

e. Lobbying for or against provisions of legislation, rule, or regulation that address subjects other than those identified in Sections II.F.1-3, so long as Allergan does not support specific portions of such legislation, rule, or regulation covered by Section II.F.1 or oppose specific portions of such legislation, rule, or regulation covered by Sections II.F.2-3. Allergan may Lobby for or against any legislation, rule, or regulation that may be covered by Sections II.F.1-3, if such legislation, rule, or regulation has general or specific provisions that affect medications beyond Opioids or Opioid Products, so long as Allergan's intent and purpose of doing so is not to Promote Opioids or Opioid Products.

G. Ban on Prescription Savings Programs

1. Allergan shall not directly or indirectly offer any discounts, coupons, rebates, or other methods which have the effect of reducing or eliminating a patient's co-payments or the cost of prescriptions (e.g., free trial prescriptions) for any Opioid Product (except to the extent a pre-existing contractual or legal requirement exists related to Opioid Products sold by Allergan before 2021).

2. Allergan shall not directly or indirectly provide financial support to any Third Party for discounts, coupons, rebates, or other methods which have the effect of reducing or eliminating a patient's co-payments or the cost of prescriptions (e.g., free trial prescriptions) for any Opioid Product (except to the extent a pre-existing contractual or legal requirement exists related to Opioid Products sold by Allergan before 2021).

3. Allergan shall not directly or indirectly assist patients or Health Care Providers with the claims and/or prior authorization process required for third-party payors to approve payment for any Opioid Product.

4. Allergan may directly or indirectly provide financial support or In-Kind Support for non-Opioids to any Third Party that provides patient assistance

or support services for the purposes of helping patients afford and gain access to the medications prescribed to them.

H. General Terms

1. Allergan shall not make any written or oral statement about Opioids or any Opioid Product that is unfair, false, misleading, deceptive or unconscionable as defined under the law of the Settling States. For purposes of this paragraph, "Opioid Product" shall also include methadone, buprenorphine, and other substances when used exclusively to treat opioid abuse, addiction, or overdose.

2. Allergan shall not represent that Opioids or any Opioid Product(s) have approvals, characteristics, uses, benefits, or qualities that they do not have. For purposes of this paragraph, "Opioid Product" shall also include methadone, buprenorphine, and other substances when used exclusively to treat opioid abuse, addiction, or overdose.

3. This **Exhibit P** shall not be construed or used as a waiver or limitation of any defense otherwise available to Allergan or any Released Entity in any action, and nothing in this **Exhibit P** is intended to or shall be construed to prohibit Allergan or any Released Entity in any way whatsoever from taking legal or factual positions with regard to any Opioid Products in prosecution or defense of litigation or other legal proceedings.

4. Upon the request of the Attorney General of any Settling State, Allergan shall provide the Attorney General with copies of the following, within forty-five (45) days of the request:

    a. Any litigation or civil or criminal law enforcement subpoenas or CID relating to Allergan's Opioid Product(s) that Allergan received after the Effective Date of the Agreement; and

    b. Warning or untitled letters issued by the FDA regarding Allergan's Opioid Product(s) and all correspondence between Allergan and the FDA related to such letters that Allergan received after the Effective Date of the Agreement.

5. Nothing in this **Exhibit P** shall be construed to limit or impair Allergan's ability to:

    a. Communicate its positions and/or respond to media inquiries concerning litigation, investigations, or other proceedings or matters relating to Allergan or its Opioid Products.

    b. Maintain a website explaining its litigation positions and responding to allegations concerning Allergan or its Opioid Products.

I. Compliance with All State Laws and Regulations Relating to the Sale, Promotion, and Distribution of Any Opioid Product

1. Allergan shall comply with all applicable State laws and regulations that relate to the sale, Promotion, distribution, and disposal of Opioids or Opioid Products in the Settling States, provided that nothing in this paragraph requires Allergan to violate federal law or regulations, including but not limited to:

    a. State Controlled Substances Act, including all guidance issued by the applicable state regulator(s);

    b. State Consumer Protection Laws; and

    c. State laws, regulations, and guidelines related to the prescribing, distribution, and disposal of Opioid Products.

J. Clinical Data Transparency

1. Allergan agrees to make available to an independent Third-Party data center or platform owner (e.g., Vivli) anonymized clinical data generated from Allergan-sponsored Phase II-IV interventional clinical studies—regardless of whether that data was submitted to a regulatory authority (e.g., FDA)—for branded opioid drugs that are Opioids or Opioid Products that have received an initial marketing authorization from a regulatory authority to the extent Allergan conducts a reasonable, good faith investigation to locate any such data and it is in Allergan's possession. Anonymized clinical data includes:

    a. Full analyzable data set(s) (including individual participant-level data de-identified);

    b. The clinical study report(s) redacted for commercial or personal identifying information;

    c. The full protocol(s) (including the initial version, final version, and all amendments); and

2. Full statistical analysis plan(s) (including all amendments and documentation for additional work processes); and Dataset Specifications, which describe the available dataset variables (such as age, race, blood pressure, lab values, etc.).

3. The independent Third Party will facilitate the disclosure of such clinical data to qualified researchers with a bona fide scientific research proposal as reviewed and approved by an independent review panel for scientific merit consistent with the panel's assessment criteria and pursuant to an agreed upon data use agreement.

4. Allergan shall not interfere with decisions made by the staff or reviewers associated with the independent Third-Party data center or platform owner.

5. Allergan shall bear all costs for making clinical data available pursuant to Section II.J.1 of this **Exhibit P**.

III. DOCUMENT DISCLOSURE

A. Documents Subject to Public Disclosure

The following documents must be provided to each Settling State and are subject to public disclosure in perpetuity, except for the redactions authorized by section B:

1. All Allergan-produced documents admitted as trial exhibits in *In re Opioid Litigation*, Index No. 400000/2017 (N.Y. Sup. Ct., Suffolk County), *The City and County of San Francisco, California and the People of the State of California, acting by and through San Francisco City Attorney David Chiu v. Purdue Pharma L.P., et al.*, Case No. 3:18-cv-07591 (N.D. Cal.), *The State of West Virginia ex rel. Patrick Morrisey, Attorney General v. Teva Pharmaceutical Industries Ltd., et al.*, Civil Action No. 19-C-104 BNE (W. Va. Cir. Ct., Boone County), or *The People of the State of California, acting by and through Santa Clara County Counsel James R. Williams, Orange County District Attorney Tony Rackauckas, Los Angeles County Counsel Mary C. Wickham, and Oakland City Attorney Barbara J. Parker v. Purdue Pharma L.P., et al.*, Case No. 30-2014-00725287-CU-BT-CXC (Cal. Super. Ct., Orange County), together with complete trial transcripts.

2. All Allergan deposition transcripts, and exhibits from or produced in the matters identified in subsection III.A.1, as well as in *In re Nat'l Prescription Opiate Litig.*, No. 1:17-md-02804 (N.D. Ohio).

3. All summary judgment filings, proposed findings of fact and law, and expert reports relating to the claims against Allergan that were filed in the matters identified in subsections III.A.1 and III.A.2, together with related exhibits.

4. All documents provided under this provision must be provided in an appropriate electronic format with appropriate metadata.

5. In addition, Allergan shall not object to public disclosure of the following documents, without further redaction: Acquired_Actavis_00000001-Acquired_Actavis_02689490.

B. Information That Allergan May Redact

1. The following categories of information are exempt from public disclosure:

a. Information subject to trade secret protection. A "trade secret" is information, including a formula, pattern, compilation, program, device, method, technique or process, that (a) derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure and use; and (b) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy. Even if the information falls within the definition, "trade secret" does not include information reflecting sales or promotional strategies, tactics, targeting, or data, or internal communications related to sales or promotion or information in documents dated more than five (5) years before the disclosure required by this section.

b. Confidential personal information. "Confidential personal information" means individual Social Security or tax identification numbers, personal financial account numbers, passport numbers, driver license numbers, home addresses, home telephone numbers, personal email addresses, and other personally identifiable information protected by law from disclosure. "Confidential personal information" does not include the names of Allergan's officers, directors, employees, consultants, agents, or attorneys or of prescribers or of officials of a government agency.

c. Information that is inappropriate for public disclosure because it is subject to personal privacy interests recognized by law (e.g., HIPAA), or contractual rights of third parties that Allergan may not abrogate.

d. Information regarding Allergan employees' personal matters unrelated to Allergan, including emails produced by Allergan custodians discussing vacation or sick leave, family, or other personal matters.

e. Information that is protected by the attorney–client or attorney work product privilege.

f. Financial documents designated as "Highly Confidential" or "Highly Confidential Information" under Case Management Order No. 2 in *In re Nat'l Prescription Opiate Litig.*, No. 1:17-md-02804 (N.D. Ohio) and produced in response to the April 3, 2019 Ruling Regarding Jurisdictional Discovery on Defendants Allergan, Teva, and Mallinckrodt, including tax returns including all schedules and attachments, policies regarding accounting, and annual reports.

C. Redaction of Documents Containing Protected Information

1. Whenever a document contains information subject to a claim of exemption pursuant to section B, Allergan will provide the document in redacted form. Such redactions must indicate that trade secret and/or private information, as appropriate, has been redacted. Redactions are limited to the minimum redactions possible, consistent with section B.

2. Allergan must provide to each Settling State a log noting each document redacted. The log must also provide fields stating the basis for redacting the document, with sufficient detail to allow an assessment of the merits of the assertion. The log is subject to public disclosure in perpetuity. The log shall be provided by the production deadline.

3. In addition to the redacted documents, Allergan shall, upon any Settling State's request, also produce all documents identified in subsection III.A above in unredacted form to such Settling State at the same time, but only to the extent the document was produced by Allergan in an unredacted form in the underlying litigation, and only for the purpose of permitting a merits assessment and potential challenge of the redaction pursuant to Section IV herein.

D. Public Disclosure Through a Document Repository

1. Each Settling State may publicly disclose all documents covered by this section through a public repository maintained by a governmental, non-profit, or academic institution. Each Settling State may specify the terms of any such repository's use of those documents, including allowing the repository to index and make searchable all documents subject to public disclosure, including the metadata associated with those documents.

E. Timeline for Production

1. Allergan shall produce all documents required by Section A within nine months from the Effective Date.

F. Support Payment

1. Within thirty (30) calendar days of the Effective Date, Allergan will make one-time payments totaling $1,375,000 to the University of California, San Francisco Foundation (UCSF Foundation) and The Johns Hopkins University, to be used to support a public repository of documents subject to this section.

IV. ENFORCEMENT

A. For the purposes of resolving disputes with respect to compliance with **Exhibit P**, should any of the Settling States have reason to believe that Allergan has violated a provision of **Exhibit P**, then such Settling State shall notify Allergan in writing of the specific objection, identify with particularity the provisions of **Exhibit P** that

the practice appears to violate, and give Allergan thirty (30) days to respond to the notification ("Response Period").

B. Upon receipt of written notice from any of the Settling States, Allergan shall provide a written response to the Settling State's notification, containing either a statement explaining why Allergan believes it is in compliance with **Exhibit P**, or a detailed explanation of how the alleged violation occurred and a statement explaining how and when Allergan intends to remedy or has remedied the alleged violation. Allergan may request a reasonable amount of additional time to cure any violation through such remedial measures ("Cure Period") and the Settling State shall not unreasonably withhold approval of such request.

C. The Settling State may not take any action concerning the alleged violation of **Exhibit P** during the Response and Cure Periods. Nothing shall prevent the Settling State from agreeing in writing to provide Allergan with additional time beyond the thirty (30) days to respond to the notice. However, the Settling State may take any action, including, but not limited to legal action to enforce compliance with the Consent Judgment, without delay if the Settling State believes that a threat to the health or safety of the public requires immediate action.

D. The Settling State may bring an action against Allergan to enforce the terms of **Exhibit P**, but only after providing Allergan an opportunity to respond to the notification and, if agreed upon, a period to cure any violation, as described above, or within any other period as agreed to by Allergan and the Settling State.

E. Nothing in this Consent Judgment shall be interpreted to limit any Settling State's Civil Investigative Demand ("CID") or investigative subpoena authority, to the extent such authority exists under applicable state law.

F. Nothing herein shall be construed to exonerate any failure to comply with any provision of **Exhibit P** after the Effective Date, or to compromise the authority of any Settling State to take action for any failure to comply with **Exhibit P**, consistent with this section.

EXHIBIT Q
[Intentionally Omitted]

EXHIBIT R
Agreement on Attorneys' Fees, Costs, and Expenses

This Agreement on Attorneys' Fees, Expenses, and Costs ("Fee Agreement") is entered between Teva, Allergan, and the Plaintiffs' Executive Committee appointed in the multidistrict litigation in the Northern District of Ohio, *In re National Prescription Opiate Litigation*, No. 1:17-md-02804 ("MDL PEC"), in connection with the Teva Global Opioid Settlement Agreement ("Teva Agreement") and the Allergan Public Global Opioid Settlement Agreement ("Allergan Agreement"). This Fee Agreement becomes effective on the Effective Date of the Teva Agreement and Allergan Agreement or the date that the Consent Judgments anticipated under the Teva Agreement and Allergan Agreement become final in 25 Settling States (whichever is later).

I. Definitions

A. This Fee Agreement incorporates all defined terms in the Teva Agreement and Allergan Agreement, unless otherwise defined herein, and shall be interpreted in a manner consistent with the Teva Agreement and Allergan Agreement.

B. *"Allergan."* Allergan Finance, LLC (f/k/a Actavis, Inc., which, in turn, was f/k/a/ Watson Pharmaceuticals, Inc.) and Allergan Limited (f/k/a Allergan plc, which, in turn, was f/k/a Actavis plc). *Allergan* does not include Teva Pharmaceuticals Industries Ltd. (*"Teva Ltd."*), Teva Pharmaceuticals USA, Inc. (*"Teva USA"*), Cephalon, Inc. (*"Cephalon"*), Actavis LLC (f/k/a Actavis Inc.) (*"Actavis LLC"*), Watson Laboratories, Inc. (*"Watson"*), Actavis Pharma, Inc. (f/k/a Watson Pharma, Inc.) (*"Actavis Pharma"*), Actavis Elizabeth LLC (*"Actavis Elizabeth"*), Actavis Kadian LLC (*"Actavis Kadian"*), Actavis Laboratories FL, Inc. (f/k/a Watson Laboratories, Inc. - Florida) (*"Actavis Labs FL"*), Actavis Laboratories UT, Inc. (f/k/a Watson Laboratories, Inc. - Utah) (*"Actavis Labs UT"*), Actavis Mid Atlantic LLC (*"Actavis Mid"*), Actavis South Atlantic LLC (*"Actavis South"*), Actavis Totowa LLC (*"Actavis Totowa"*), or Anda, Inc. (*"Anda"*).

C. "*Applicant*." Any Attorney or MDL Participating Counsel who seeks an award of attorneys' fees from the Attorney Fee Fund pursuant to the procedures established by the MDL Court and the Fee Panel.

D. "*Attorney*." Any of the following retained through a legal contingency fee or hourly fee contract: a solo practitioner, multi-attorney law firm, or other legal representative of a Participating Subdivision or MDL Participating Counsel. This does not include Subdivision in-house attorneys.

E. "*Attorney Fee Fund*." An account consisting of funds allocated to pay attorneys' fees approved pursuant to Section III of this Fee Agreement established by Order of and under the ongoing jurisdiction of the MDL Court, as provided below.

F. "*Common Benefit*." Work performed for the benefit of all Participating Subdivisions or Tribal Nations, including, but not limited to, pretrial matters,

discovery, trial preparation, trial, settlement negotiations, and all other work that advances the interests of the Participating Subdivisions.

G. "*Common Benefit Fund*." The sub fund of the Attorney Fee Fund described in subsection III.E.

H. "*Contingency Fee Fund*." The sub fund of the Attorney Fee Fund described in subsection III.F.

I. "*Cost and Expense Fund Administrator*." The administrator appointed by the MDL Court on August 12, 2021 (MDL Docket No. 3828), to administer the Cost Fund and its sub funds as provided in the Fee Agreement.

J. "*Court Common Benefit Fund*." The Common Benefit Fund established by the MDL Court in its orders of July 22, 2021, MDL Docket No. 3794, and May 9, 2022, MDL Docket No. 4428.

K. "*Fee Entitlement*." Any right, entitlement, or expectation, including but not limited to a fee contract, contingent fee contract, agreement, referral arrangement, co-counsel arrangement, State Back-Stop agreement, or any other arrangement by which counsel could receive compensation or other consideration. For the avoidance of doubt, the scope of Fee Entitlement under subparagraph III.G.3.a does not include any Attorneys' fees associated with representation of a State.

L. "*Fee Panel*." The three-person panel appointed by the MDL Court on August 12, 2021 (MDL Docket No. 3828), to administer and make recommendations for the allocation and distribution of the Attorney Fee Fund and its sub funds as provided in the Fee Agreement.

M. "*Later Litigating State.*" A State that first files a lawsuit bringing a Released Claim against a Released Entity after the Preliminary Agreement Date.

N. "*MDL Court*." United States District Court for the Northern District of Ohio Eastern Division, Case No. 1:17-md-02804, Judge Dan Aaron Polster.

O. "*MDL Direct Cost Fund*." The cost fund described in subparagraph II.A.3.a below.

P. "*MDL Participating Counsel.*" MDL Participating Counsel includes an attorney or firm authorized by MDL 2804 Lead Counsel to perform work for the Common Benefit of Participating Subdivisions. By way of example, it would include insurance counsel and appellant counsel.

Q. "*MDL PEC*." The Plaintiffs' Executive Committee appointed by the MDL Court.

R. "*Non-Participating Litigating Subdivision*." A Litigating Subdivision that is not a Participating Subdivision.

S. "*Non-Participating State.*" A State that is not a Participating State.

T. "*Participating Litigating Subdivision*." A Litigating Subdivision that is also a Participating Subdivision.

U. "*Participation Agreement*." An agreement executed by an Attorney that acknowledges the obligation to pay an appropriate MDL Common Benefit Assessment.

V. "*Qualified Tribal Representation.*" Representation by an attorney of a Participating Tribal Government regarding Released Claims against Released Entities. Such counsel are eligible for Common Benefit Fee consideration. The Teva Tribal Global Settlement and the Allergan Tribal Global Settlement will provide for the contribution to the Common Benefit Fund as determined by the MDL Court.

W. "*Qualifying Representation.*" Legal services provided for representation of the MDL PEC or Participating Litigating Subdivision regarding Released Claims against Released Entities.

X. "*State Back-Stop Agreement*." Any agreement by a Settling State and private counsel for Participating Subdivisions in that State (or legislation enacted in that State) to provide, adjust, or guarantee attorneys' fees and costs, whether from the Attorney Fee Fund or any other source recognized in the agreement or legislation.[1]

Y. *"Subdivision Cost and Expense Fund."* The fund created to pay approved Subdivision and Tribal Nations costs and expenses as set forth in subparagraph II.A.3.b.

Z. *"Teva"* means (i) Teva Pharmaceutical Industries Ltd. and (ii) all of its respective past and present direct or indirect parents, subsidiaries, divisions, affiliates, joint ventures, predecessors, successors, assigns, including but not limited to Teva Pharmaceuticals USA, Inc., the Actavis Generic Entities, and Anda Inc.

II. MDL Direct Cost Fund and Subdivision Cost and Expense Fund ("*Cost Fund*")

A. The total Cost Fund shall be $30 million dollars funded as set forth below.

1. Total cost to be paid by Teva in each of the relevant Payment Years[2] under this Agreement shall be up to the following amounts, subject to the provisions set forth below:

	Cost Fund

[1] Nothing herein shall be understood to indicate approval for additional State Back-Stop Agreements or modifications of existing State Back-Stop Agreements.

[2] Payment Year shall have the same meaning for Teva as set forth in the Teva Agreement and Teva Exhibits M-1 and M-3. Payment Year shall carry the same definition for Allergan as set forth in the Allergan Agreement and Allergan Exhibits M-1 and M-2.

Payment Year 1	$9,000,000.00
Payment Year 2	$9,000,000.00

2. Total cost to be paid by Allergan in each of the relevant Payment Years under this Agreement shall be up to the following amounts, subject to the provisions set forth below:

	Cost Fund
Payment Year 1	$6,000,000.00
Payment Year 2	$6,000,000.00

3. The Cost Fund shall be split into the MDL Direct Cost Fund and the Subdivision Cost and Expense Fund.

   a. The MDL Direct Cost Fund shall be Seven Million Five Hundred Thousand Dollars ($7,500,000), payable 50% in Year One, and 50% in Year Two. The MDL Direct Cost Fund shall make payment without any delay to reimburse the MDL PEC for an agreed-to portion of the expenses incurred, provided the costs have been approved by the Cost and Expense Fund Administrator appointed by the Court. The MDL Direct Cost Fund will be paid directly to the MDL Opiate Capital Account. The Cost and Expense Fund Administrator may include costs incurred by the MDL PEC in furtherance of litigation, mediation, implementation, and management of the Settlements.

   b. The Subdivision Cost and Expense Fund shall be Twenty-Two Million Five Hundred Thousand Dollars ($22,500,000), payable 50% in Year One and 50% in Year Two.

   c. It is the intention of the Parties that the Cost Fund shall be administered by the Cost Fund and Expense Fund Administrator (MDL Docket No. 3828), who will be governed by the provisions of this Agreement and shall design the process and procedures for the allocation of costs pursuant to this Agreement and the MDL Court's Order.

   d. The costs of the Cost and Expense Fund Administrator shall be paid from the Cost Fund and allocated by the Cost and Expense Fund Administrator between the MDL Direct Cost Fund and the

Subdivision Cost and Expense Fund to fairly charge each fund the cost incurred in implementing and supervising the specific fund.

e. The Cost and Expense Fund Administrator shall set the process and procedures for submission of and criteria for applications for payment of Subdivisions' and Tribal Nations' costs and expenses. The Cost and Expense Fund Administrator shall receive and evaluate applications from Participating Litigating Subdivisions and litigating Tribal Nations, whether filed in Federal Court or State Court, to seek reimbursement for eligible costs in pursuit of claims against Allergan or Teva. The process shall require a showing that the costs or expenses sought were reasonably incurred in furtherance of active litigation of a designated state or federal bellwether trial-set case, or Common Benefit. The Cost and Expense Fund Administrator shall require transparency from all applicants as to any other sources for compensating Attorneys for Subdivisions and Tribal Nations for costs incurred. If funds remain after the reimbursement of approved out-of-pocket costs, the Cost and Expense Fund Administrator may consider reasonable and appropriate payment for client time, costs, or expenses incurred by recognized trial bellwether plaintiffs. At the conclusion of the process, any funds not allocated by the Cost and Expense Fund Administrator shall be transferred to the Common Benefit Fund established in this **Exhibit R**.

4. In the event that States and Subdivisions enter into an additional global settlement with a party or parties other than Teva or Allergan that is (a) under the jurisdiction of the MDL Court in MDL No. 2804, (b) creates a separate cost fund, and (c) unless the parties agree to another date, such agreement has an effective date prior to June 30, 2023, the Cost and Expense Fund Administrator shall have the authority to aggregate the Cost Fund with the cost fund created under that global settlement agreement. The Cost and Expense Fund Administrator shall have the authority to address the appropriate procedures and required information to allow the costs to be funded from the appropriate cost fund or shared by two or more cost funds.

III. Attorney Fee Fund

A. An Attorney Fee Fund shall be paid in the following amounts and years:

	Teva Shall Pay	Allergan Shall Pay
Payment Year 1	$ 46,215,837.93	$ 40,778,855.53
Payment Year 2	$ 46,215,837.93	$ 40,778,855.53
Payment Year 3	$ 55,215,837.92	$ 46,778,855.53

Payment Year 4	$ 55,215,837.92	$ 46,778,855.53
Payment Year 5	$ 55,215,837.92	$ 0.00
Payment Year 6	$ 55,215,837.92	$ 0.00

B. The Attorney Fee Fund shall consist of the Contingency Fee Fund and the Common Benefit Fund.

2. It is the intention of the Parties that the Contingency Fee Fund and the Common Benefit Fund shall be administered by the Fee Panel (MDL Docket No. 3828), which will be governed by the provisions of this Fee Agreement and shall design the process and procedures for the allocation of fees pursuant to this Fee Agreement and the MDL Court's Order.

C. The fees to be paid under this Fee Agreement are available for Attorneys engaged in Qualifying Representations and Qualified Tribal Representations only. Fees to be paid under this Fee Agreement are not available prior to the Effective Date of the Teva Agreement and Allergan Agreement or if the Teva Agreement does not proceed past Teva's determination in **subsection XI.A** of the Teva Agreement or if the Allergan Agreement does not proceed past Allergan's determination in **subsection X.A** of the Allergan Agreement. Fees to be paid under this Fee Agreement are not available for representation of States, Non-Participating Subdivisions or Non-Litigating Subdivisions and are not available for representation of private hospitals, third-party payors, NAS claimants, personal injury/wrongful death claimants, or any entity other than Participating Litigating Subdivisions. In addition, fees under this Fee Agreement are not available for representation of any individual or entity in matters other than those claims against Released Entities, but may include a reasonable share of representations that involve development of facts for pursuit of opioid-related claims against multiple defendants in the pharmacy, manufacturing, and distribution chain.

D. *Attorney Fee Fund and Sub Funds.*

1. There shall be a split of the Attorney Fee Fund into the Contingency Fee Fund and the Common Benefit Fund. The split shall be 40% to the Contingency Fee Fund and 60% to the Common Benefit Fund.

2. In no event shall Teva or Allergan be required to pay more into the Attorney Fee Fund in any Payment Year than the maximum amount specified for that Payment Year in subsection III.A., which amounts are reflected in **Exhibit M** to the Teva Agreement and Allergan Agreement. The amounts allocated to the Contingency Fee Fund and the Common Benefit Fund set by the Fee Panel shall be subject to the reductions and offsets set forth below.

3. Awards of fees from the Contingency Fee Fund shall be available to Attorneys with Qualifying Representations of Participating Litigating Subdivisions eligible to receive an allocation under the Teva Agreement and Allergan Agreement, as set forth in **Exhibits F-2** and **G** to the Teva Agreement and **Exhibits F** and **G** to the Allergan Agreement, and shall be made applying the Mathematical Model attached as Exhibit "A" to this Fee Agreement. The collection of the data and calculations for the Mathematical Model has been a cooperative effort among private counsel for a large number of Litigating Subdivisions. The analysis has been spearheaded by Joseph Tann and Andrew Arnold. The Fee Panel is encouraged to continue working with those counsel in application of the Model. The Fee Panel shall oversee the application of the Model and resolve any questions or disputes concerning the eligibility of a Counsel to participate as required in subsection III.G. The Panel is empowered to hear disputes concerning and ensure the accuracy of the mathematical calculation.

4. As to awards from the Contingency Fee Fund, there shall be no right of appeal.

5. Any appeal of an award of the Fee Panel from the Common Benefit Fund will be made to the MDL Court and be reviewed under an abuse of discretion standard.

E. *Common Benefit Fund (60% of the Attorney Fee Fund).*

1. Funds in the Attorney Fee Fund shall be allocated to the Common Benefit Fund according to the schedule set forth below, subject to the adjustments described in paragraph III.E.6. The payments are to be made on the following yearly schedule, subject to the adjustments set forth below:

	Teva Shall Pay	Allergan Shall Pay
Payment Year 1	$ 27,729,502.76	$ 24,467,313.32
Payment Year 2	$ 27,729,502.76	$ 24,467,313.32
Payment Year 3	$ 33,129,502.75	$ 28,067,313.32
Payment Year 4	$ 33,129,502.75	$ 28,067,313.32
Payment Year 5	$ 33,129,502.75	$ 0.00
Payment Year 6	$ 33,129,502.75	$ 0.00

2. The Common Benefit Fund shall be available to compensate Attorneys engaged in Qualifying Representations of Participating Litigating

Subdivisions and Qualified Tribal Representation of Tribal Participating Governments who:

a. have performed work for the Common Benefit of all Participating Subdivisions and/or Tribal Nations consistent with the provisions to the guidelines established by Judge Polster set forth in MDL 2804 and the May 1, 2018 Order, under docket number 358, which is incorporated herein by reference; and

b. satisfy the eligibility criteria set forth in subsection III.G.

3. For purposes of Common Benefit Fund distribution, Attorneys representing Tribal Nations litigating against Teva or Allergan have also reached a settlement for Released Claims with Teva and Allergan. These settlements shall be the subject of separate agreements with Teva and Allergan. Attorneys representing Tribal Nations are eligible for Common Benefit consideration, provided such agreements with Teva and Allergan become effective under their terms. Such Attorneys must meet the eligibility criteria in subsection III.G.

4. For purposes of Common Benefit Fund distribution, MDL Participating Counsel not engaged in Qualifying Representations of Participating Litigating Subdivisions but who performed work for the Common Benefit pursuant to authorization from the MDL Co-Leads and meet the eligibility criteria in subsection III.G shall be eligible.

5. The Common Benefit Fund shall be overseen by the Fee Panel, which shall determine the allocation of funds to eligible Attorneys consistent with this Fee Agreement and the May 1, 2018 Order.

6. In assessing the benefits that an Applicant has conferred to Participating Subdivisions (including non-Litigating Subdivisions) and/or Tribes for purposes of any compensation decision, the Fee Panel shall give significant weight to the extent to which (i) the Applicant and his or her clients have contributed to increasing (or reducing) the Initial Participation in the Teva Agreement or the Allergan Agreement, and (ii) the Applicant and his or her clients have contributed to increasing (or reducing) the amounts achieved under Incentive Payments A-D through participation in the Teva Agreement, including the Teva Tribal Agreement, or the Allergan Agreement, including the Allergan Tribal Agreement. The Fee Panel shall also consider additional fee recoveries the Applicant may potentially obtain, including, but not limited to, from attorney fee funds under other settlement agreements, State Back-Stop Agreements, representations of States or Tribal Nations, representations of other clients in opioids-related matters, or through the representation of Subdivision clients, whether they participated in the Teva Agreement or Allergan Agreement or not. It is the intent of this provision to recognize that the goal of the Teva Agreement

and Allergan Agreement is to provide for maximum participation by the Subdivisions, maximum abatement funding for all Subdivisions nationally, and the maximum peace for Released Entities. Therefore, representing one or more Non-Participating States or Non-Participating Subdivisions does not further the goal of the Teva Agreement or Allergan Agreement, and should not be considered Common Benefit because it does not increase funds available to Participating Subdivisions' abatement programs. Representing one or more Later Litigating States or Later Litigating Subdivisions is antithetical to the Teva Settlement and the Allergan Agreement and detracts from Common Benefit. The Fee Panel shall consider this concept of "common detriment" set forth in this paragraph in all of its decision making with respect to the allocation of the Attorney Fee Fund among Applicants, as well as, in its discretion, any offsets provided to Teva or Allergan as set forth in subsection III.H. The Fee Panel shall consider the totality of the Applicant's Participating Litigating Subdivisions as compared to the Applicant's Non-Participating Litigating Subdivisions; the Parties recognize that, although the goal is for 100% participation, Applicants with a greater number of clients have a greater probability of having one or more Non-Participating Litigating Subdivisions. As used in this paragraph, "client" or "representing" a Subdivision shall include any Litigating Subdivision as to which the Applicant has a Fee Entitlement.

7. As set forth in subsection III.H, the Fee Panel must consider the factors described in paragraph III.E.6 to determine how and whether to reduce the amounts to be paid by Teva or Allergan under this Fee Agreement and to determine how to allocate funds among Applicants. They may also, at their discretion, consider other factors. Any reduction in payment obligation or credit to be given Teva or Allergan in this Fee Agreement shall be applied against the last Payment Year for that defendant and working backwards. Any reduction to an Applicant not credited to Teva or Allergan shall be allocated to attorneys whose Litigating Subdivision clients participated in the settlement by the Initial Participation Date.

8. The MDL PEC will seek, and the Attorneys General for Settling States, Teva, and Allergan, will not oppose, a Common Benefit Fee Order requiring an assessment of 7.5% on the gross recovery (by judgment or settlement) of any Non-Participating Subdivision that is subject to the federal court jurisdiction, represented by a MDL PEC firm, represented by any Attorney receiving fees from the Common Benefit Fund, represented by any Attorney that signed a Participation Agreement or paid in a case otherwise under the jurisdiction of the MDL Court.

9. If Teva and Allergan agree to go forward with their respective Agreements under subsections [XI.A and X.A] of their respective Agreements, they shall pay the full Common Benefit (60%) Fee into the Common Benefit Fund without regard to the number of Settling States or Participating Subdivisions. Should Teva and/or Allergan pay a judgment to, or settle

with, a Non-Participating State or a Non-Participating Litigating Subdivision subsequent to the Reference Date, and such settlement or judgment results in a common benefit fee assessment paid into the Common Benefit Fund or the Court Common Benefit Fund, the following shall apply:

a. Teva or Allergan shall be credited dollar-for-dollar for the amount paid for the fee assessment up to 7.5% of the abatement amount derived from the application of the State Global Allocation Percentage as set forth in **Exhibit F-1** or the abatement amount derived from the application of the Subdivision and Special District Allocation Percentage as set forth in **Exhibit G** that the Non-Participating State or Non-Participating Litigating Subdivision would have received if it had participated in the Settlement Agreement;

b. Except as set forth below in subparagraph III.E.9.c, for any settlement or judgment that meets the requirements of paragraph III.E.9 that exceeds the abatement amount derived from the application of the State Global Allocation Percentage as set forth in **Exhibit F-1** or the abatement amount derived from the application of the Subdivision and Special District Allocation Percentage as set forth in **Exhibit G**, no credits shall be taken against Teva or Allergan's obligation to make payments into the Common Benefit Fund for that portion of the settlement or judgment in excess of the abatement amount derived from the application of the State Global Allocation Percentage as set forth in **Exhibit F-1** or the abatement amount derived from the application of the Subdivision and Special District Allocation Percentage as set forth in **Exhibit G**;

c. For any settlement or judgment that meets the requirements of paragraph III.E.9 that exceeds the abatement amount derived from the application of the State Global Allocation Percentage as set forth in **Exhibit F-1** or the abatement amount derived from the application of the Subdivision and Special District Allocation Percentage as set forth in **Exhibit G** that the Later Litigating State or Later Litigating Subdivision would have received if it had participated in the Settlement Agreement, where the Later Litigating State or Later Litigating Subdivision is represented by any member of the MDL PEC or that member's law firm, Teva or Allergan shall be credited dollar-for-dollar for the full amount of the 7.5% common benefit fee assessment paid into the Common Benefit Fund or the Court Common Benefit Fund;

d. If a credit is made to Allergan or Teva pursuant to subparagraph III.E.9.c., then that amount shall be calculated as a direct reduction to any common benefit fee award made under this Fee Agreement

to the MDL PEC firm(s) that represented the Later Litigating State or Later Litigating Subdivision;

e. Any credits shall be taken first against Teva's or Allergan's payment to the Common Benefit Fund in Teva's or Allergan's respective final Payment Year as set forth in paragraph III.E.1 (for Teva Year 6; for Allergan Year 4), up to the full amount of Teva's or Allergan's final year payment obligation, then from the next-to-final Payment Year's payment obligation, and so on;

f. Teva and Allergan shall not be entitled to any credits against the Common Benefit Fund for settlements or judgments paid after Teva's or Allergan's final fee Payment Year.

F. *Contingency Fee Fund (40% of the Attorney Fee Fund).*

1. Funds from the Attorney Fee Fund shall be allocated to the Contingency Fee Fund on the following yearly schedule, subject to the adjustments set forth below:

	Teva Shall Pay	Allergan Shall Pay
Payment Year 1	$ 18,486,335.17	$ 16,311,542.21
Payment Year 2	$ 18,486,335.17	$ 16,311,542.21
Payment Year 3	$ 22,086,335.17	$ 18,711,542.21
Payment Year 4	$ 22,086,335.17	$ 18,711,542.21
Payment Year 5	$ 22,086,335.17	$ 0.00
Payment Year 6	$ 22,086,335.17	$ 0.00

2. The Contingency Fee Fund shall be available to compensate Attorneys engaged in Qualifying Representations of Participating Litigating Subdivisions that meet the criteria set forth in subsection III.G.

a. The Contingency Fee Fund shall be available to Attorneys who represent Litigating Subdivisions that are Participating Subdivisions, whether their actions are filed in state or federal court, and meet the eligibility criteria of subsection III.G.

b. Participation in the Contingency Fee Fund by counsel that have a case that is not subject to the jurisdiction of the MDL Court shall not create, provide, or waive jurisdiction of the MDL Court over that Litigating Subdivision, that case or Attorneys, other than to oversee

the fairness of the distribution process, and enforcement of this Fee Agreement.

c. Under the terms of the Teva Agreement and Allergan Agreement Litigating Subdivisions must become a Participating Litigating Subdivision under both Agreements to be eligible to participate. Therefore, **Exhibit R** applies jointly to Teva and Allergan with the Attorneys' Fee Fund and MDL Cost Fund to include the combined payment from Teva and Allergan.

3. Teva and/or Allergan shall each be entitled to a pro-rata reduction to their own portion of the Contingency Fee Fund payment(s) in accordance with subsection III.F.4., unless, by the Payment Date for the Initial Year Payment, (i) 41 states are Settling States for Teva or 43 states are Settling States for Allergan, (ii) 98% of all Litigating Subdivisions are Participating Subdivisions and/or Subdivisions Subject to a Bar, Case-Specific Resolution, and, (iii) 97% of all Non-Litigating Subdivisions with Populations over 10,000 as listed in **Exhibit I** are Participating Subdivisions and/or Subdivisions Subject to a Bar, Case-Specific Resolution, in which case no offset shall be applied.

4. If the participation conditions in paragraph III.F.3 are not met, then the amounts owed by Teva and/or Allergan to the Contingency Fee Fund shall be reduced as follows:

a. For Non-Settling States, the Contingency Fee Fund payments shall first be reduced by the amounts identified by the Fee Panel, pursuant to paragraph III.H.7, that would have been owed to counsel for Litigating Subdivisions in Non-Settling States, had those States and those Litigating Subdivisions been Settling States and Participating Subdivisions.

b. Following the calculation in subparagraph III.F.4.a., the Contingency Fee Fund payments shall be reduced to reflect the non-joinder of Litigating Subdivisions in Settling States by subtracting the amounts identified by the Fee Panel, pursuant to paragraph III.H.7, that would have been owed to counsel for Non-Participating Litigating Subdivisions in Settling States had such Litigating Subdivisions been Participating Subdivisions.

5. In the event that after the date of the Settlement Agreement Teva, prior to the Effective Date of the Teva Agreement, or Allergan, prior to the Effective Date of the Allergan Agreement, settles with any Litigating Subdivision that would have been eligible to participate in the defendant's Agreement, and, under such settlement agreement pays attorneys' fees, the Fee Panel shall treat those Litigating Subdivisions as Participating Litigating Subdivisions and, applying the same criteria applicable to all Attorneys for Participating

Litigating Subdivisions, determine what amount they would have been paid from the Contingency Fee Fund if they had become Participating Subdivisions under the Teva Agreement or the Allergan Agreement without such prior settlement. That sum, rather than being paid to the Attorney for the previously settling Litigating Subdivision, shall be credited and/or returned to Teva or Allergan as if determined under (a)(ii) above, except that such credit shall not be greater than the amount paid to the Attorneys under the Litigating Subdivision's prior settlement agreement and credits apply equally over the Fee Payment Years.

6. During the period between the Preliminary Agreement Date and the Effective Date, the MDL PEC, as well as Litigating Subdivisions' Attorneys, shall make best efforts to cease litigation activity against Teva and Allergan, including by jointly seeking stays or severance of claims against Teva and Allergan, where feasible, or postponements if a motion to stay or sever is not feasible or is denied, so long as such actions are not otherwise detrimental to the Litigating Subdivision.

G. *Eligibility.*

1. It is the intention of all parties participating in the Fee Panel process that there should be total transparency to the Fee Panel and to all fund participants. In connection with the process to be developed by the Fee Panel, any and all monies in attorney's fees received or awarded, including prior or future Contingency Fees, Common Benefit Fees, referral fees, expenses paid, promises for payment, or any other Fee Entitlement, to any Applicant in any opioid litigation shall be disclosed to the Fee Panel as a condition of participating in the Attorney Fee Fund and prior to an award from the Fee Panel. Any payment, expectation of payment or perceived entitlement to participate in a State Back-Stop Agreement or any other agreement reached with a Settling State or any Subdivision or any other source regarding payment of fees must be disclosed to the Fee Panel. Similarly, any right to payment from any other fund, for example a fund for payment to lawyers representing Settling States or Tribal Nations or Subdivisions shall be disclosed to the Fee Panel. Because it is anticipated that there will be multiple firms listed on contingent fee agreements with Litigating Subdivisions, the Fee Panel shall establish procedures, with input from Attorneys for Participating Litigating Subdivisions, for who should petition for fees from such groups and to whom the fee shall be paid and thereafter distributed to co-counsel in accordance with applicable agreements. For the avoidance of doubt, all Attorneys that are part of such groups must meet the eligibility criteria in paragraph III.G.3, must be subject to the criteria set forth in subsection III.C, and must be disclosed to the Fee Panel.

2. An Applicant may apply for and recover attorneys' fees from the Common Benefit Fund, the Contingency Fee Fund, and any fund created by a past or

future State Back-Stop Agreement, provided the Applicant satisfies the requirements relevant to each such fund and requirements for disclosure to the Fee Panel.

3. An Attorney may not receive any payment from the Attorney Fee Fund (which includes both the Contingency Fee Fund and the Common Benefit Fund) unless the following eligibility criteria are met and annually certified by the Attorney:

   a. The Attorney must expressly waive the enforcement against the Litigating Subdivision client of all Fee Entitlements (other than under State Back-Stop Agreements) arising out of or related to any or all Qualifying Representations of any Participating Litigating Subdivision prior to applying for attorneys' fees from the Attorney Fee Fund. All applications for attorneys' fees under this Fee Agreement shall include an affirmation by the Attorney of such waiver and notice to the client(s) of such waiver. Such waiver shall not preclude the Attorney from submitting such Fee Entitlements to the Fee Panel as a factor for consideration in allocating payments from the Attorney Fee Fund or in connection with a State Back-Stop Agreement. For the avoidance of doubt, no Attorney may recover fees under this Fee Agreement unless the Attorney expressly agrees not to enforce Fee Entitlements as to each and every Participating Litigating Subdivision represented by that Attorney, but such Attorneys may participate in and receive funds from a State Back-Stop Agreement.

   b. The Attorney must represent that s/he has no present intent to represent or participate in the representation of any Later Litigating Subdivision or Later Litigating State with respect to Released Claims against Released Entities.

   c. The Attorney must represent that s/he has not and will not engage in any advertising or solicitation related to Released Claims against Released Entities where such advertising or solicitation relates to a representation of a Subdivision eligible to be a Participating Subdivision after the Reference Date unless the Attorney is recommending participation in the Agreement.

   d. The Attorney must represent s/he will not charge or accept any referral fees for any Released Claims brought against Released Entities by Later Litigating Subdivisions or Later Litigating States. This representation shall not prohibit Attorneys from receiving allocated shares of any future common benefit assessments arising out of settlements or judgments with Later Litigating Subdivisions or Later Litigating States that are the result of the MDL Court's Common Benefit order.

e. The Attorney may not have and must represent that s/he does not have a Fee Entitlement related to a Later Litigating Subdivision or Later Litigating State, other than a potential Common Benefit Fee.

f. The Attorney must fully disclose the participation, or the anticipation of participation, in any agreement with a Settling State or Participating Subdivision concerning fees arising out of or related to the Teva Agreement or Allergan Agreement, including any fees paid or anticipated to be paid or any State Back-Stop Agreement.

g. The Attorney must identify for the Fee Panel whether s/he utilized state litigation work product or MDL work product, including but not limited to ARCOS data, document repositories, experts developed in the MDL, trial transcripts, or deposition transcripts. The Attorney must identify whether s/he signed the MDL Participation Agreement.

h. Any Attorney who applies for fees from one or both Funds must represent that, having exercised his/her independent judgment, s/he believes the Teva Agreement and the Allergan Agreement to be fair and will make or has made best efforts to recommend both Agreements to his or her Subdivision clients in Settling States. For avoidance of doubt, each Attorney is expected to exercise his or her independent judgment in the best interest of each client individually before determining whether to recommend joining the settlement. All applications for attorneys' fees or costs under this subsection shall include an affirmation by the Attorney in compliance with the foregoing subparagraphs.

4. No Attorney receiving fees under this Fee Agreement may apply for or recover from the Attorney Fee Fund fees arising from representing a Non-Participating Subdivision except Common Benefit Fees as described in paragraph III.E.2. All applications for attorneys' fees under this subsection shall include an affirmation by the Attorney of compliance with this paragraph.

5. An Attorney who has filed an application under this subsection and received an award of attorneys' fees shall provide a certification of compliance with the requirements of this Fee Agreement annually during the years upon which they are still entitled to receive attorneys' fee payments under this Agreement. This certification will be done as directed by the Panel.

6. If, at any time, the Attorney is unable to make the representations set forth in this subsection, such representations become untrue, or the Attorney falsely represents compliance with the eligibility criteria, the Attorney shall cease to be eligible to receive funds from the Attorney Fee Fund until further

review by the Fee Panel of the Attorney's eligibility under and compliance with this subsection.

7. If an Attorney has a Fee Entitlement with a Later Litigating Subdivision or Later Litigating State or otherwise becomes unable to reaffirm compliance with the eligibility criteria set forth above, the Attorney shall notify the Fee Panel. For the avoidance of doubt, any Attorney who undertakes any new representation of, or has a Fee Entitlement with, a Later Litigating Subdivision or Later Litigating State shall be prohibited from receiving any future funds from the Attorney Fee Fund. If an Attorney fails to notify the Fee Panel of such Fee Entitlement with a Later Litigating Subdivision or Later Litigating State, the Attorney shall be required to refund amounts previously paid. The Fee Panel shall notify Teva and Allergan when it receives notification.

8. To the extent an Attorney who has received compensation from the Attorney Fee Fund based on Qualifying Representations of Participating Litigating Subdivisions under the Teva Agreement or the Allergan Agreement, represents a Later Litigating Subdivision or Later Litigating State, such Attorney shall be obligated to refund such amounts received as compensation from the Attorney Fee Fund to Teva or Allergan. Teva, Allergan, or such Attorney may bring any dispute as to whether such Attorney shall be obligated to refund such amounts received from the Attorney Fee Fund to Allergan or Teva to the Fee Panel. Nothing herein shall require a multi-attorney law firm that has received compensation from the Attorney Fee Fund to refund such amounts if an attorney of the firm that is no longer affiliated with such law firm, after such departure, represents a Later Litigating Subdivision or Later Litigating State, provided that (a) neither the law firm nor any of its other attorneys have any contractual or financial arrangement regarding, stand to benefit directly or indirectly from, or directly or indirectly provide financial or other support of any kind to, the former attorney's representation of the Later Litigating Subdivision or Later Litigating State and (b) if the former attorney was a partner or owner of the multi-attorney law firm at the time that the law firm received compensation from the Attorney Fee Fund, the former attorney shall be obligated to refund such amounts as the former attorney earned as a result of the compensation that the law firm received from the Attorney Fee Fund.

9. In the event that an Attorney is deemed ineligible by the Fee Panel (whether based on its initial application or subsequent recertification), the Fee Panel shall provide notice to the Attorney and give the Attorney 30 days to provide additional information such that the Fee Panel could re-consider the Attorney's eligibility.

10. To the extent that an Attorney has a Fee Entitlement with a Participating Subdivision and is authorized to bring Released Claims against Released Entities, but such authorization is, in scope, less broad than the category of

Released Claims set forth in the Teva Agreement or Allergan Agreement, such Attorney may participate fully in both the Contingency Fee Fund and the Common Benefit Fund, without any reduction imposed by the Fee Panel due to the scope of the authorization, so long as the Participating Subdivision fully releases all Released Claims against Released Entities.

11. Attorneys applying to the Attorney Fee Fund knowingly and expressly agree to be bound by the decisions of the Fee Panel, subject to the limited appeal rights set forth in this Fee Agreement, and waive the ability to assert the lack of enforceability of the allocation reached through the procedures outlined herein.

12. Applicants are under an ongoing obligation to inform the Fee Panel in writing of any additional fees earned, expected, or received related to any Opioid litigation throughout the period of the Fee Panel's operation.

H. *Calculation of Amounts Due.*

1. The Fee Panel shall be solely responsible for determining the amount of fees to be paid to each Applicant. None of the Released Entities shall have any responsibility, obligation, or liability of any kind whatsoever with respect to how attorneys' fees are calculated under this subsection, except that the Fee Panel may receive information from Teva or Allergan as to (a) the identity of Participating, Non-Participating, Litigating, Later Litigating, and Non-Litigating Subdivisions; (b) the impact of non-participation by a Litigating Subdivision as is relevant to the Fee Panel's determination in paragraph III.E.6; and (c) such other information as Teva or Allergan may voluntarily elect to provide.

2. The Fee Panel shall establish procedures for making determinations under this Fee Agreement consistent with this Fee Agreement and orders of the MDL Court. Such procedures may include submission of documentary and/or other evidence, interviews with Applicants and/or other counsel (including counsel for Teva and Allergan) that the Fee Panel deems appropriate, and/or other means of creating a record upon which fee awards will be based.

3. In making determinations under this Fee Agreement, the Fee Panel must apply the eligibility criteria set forth in subsection III.G of this Fee Agreement and the criteria set forth in paragraph III.E.2. In addition, the Fee Panel will give consideration in regard to Common Benefit Fund awards to the *Johnson* factors, as well as the following factors (which factors may be applied and given relative weight in the Fee Panel's discretion):

   a. The Applicant's contemporaneously recorded time and labor dedicated to Qualifying Representations along with the Applicant's

financial commitment to such Qualifying Representations. Claimed "time" will not be automatically accepted by the Fee Panel but will be critically reviewed and given substantially more weight and consideration if such time was subject to the audit process described in any Pretrial Order(s) governing the collection of common benefit time;

b. The novelty, time, and complexity of the Qualifying Representations;

c. The skill requisite to perform legal services properly and undesirability of the case;

d. The preclusion of other employment by the Applicant due to time dedicated to Qualifying Representations;

e. The Common Benefit, if any, alleged to have been conferred by the Applicant and whether such Common Benefit work product by that Applicant was used by others in parallel litigations against Released Entities whether within or outside the MDL, provided that any Applicant claiming that s/he substantially benefited cases other than those in which s/he entered an appearance as counsel must substantiate such claims by proffering factual support, such as proper supporting affidavits or other documents as determined by the Fee Panel with input from Attorneys for Participating Litigating Subdivisions;

f. Any "common detriment," as set forth in paragraph III.E.6.

g. Any contingent fee agreement or other Fee Entitlement with Participating Subdivisions, enforcement of which, except for State Back-Stop Agreements, are waived in conjunction with the application, the nature and extent of any work for those Participating Subdivisions, whether such Participating Subdivisions actively litigated and, if so, the nature and procedural history of such case(s);

h. The experience, reputation, and ability of the Applicant;

i. Whether the Applicant's clients brought Released Claims against Released Entities;

j. The status of discovery in cases primarily handled by the Applicant;

k. The nature of any work by the Applicant on "bellwether" cases or cases that were similarly active in litigation;

l. Any pressure points successfully asserted by the Applicant in cases against Teva or Allergan or any risk for Teva or Allergan created by the Applicant in cases against them;

m. Any risk for defendants created by Applicants in cases against Teva or Allergan;

n. Successful and unsuccessful motion practice in cases worked on by the Applicant;

o. The date of filing of any cases filed by the Applicant;

p. Obtaining consolidation of the litigation in the Applicant's jurisdiction;

q. The number and population of entities represented by the Applicant and the fees that would have been awarded under extinguished contingent fee arrangements;

r. Whether the Applicant's clients brought claims against Teva or Allergan;

s. Whether the Applicant has had a leadership role in the litigation, whether in state or federal court;

t. Whether the Applicant has had a leadership role in any negotiations aimed at resolving the litigation;

u. Whether the Applicant's cases have survived motions to dismiss;

v. The extent to which the Applicant contributed to the work product used for the common benefit of opioids litigants, including, without limitation, work on ARCOS data, Prescription Data Monitoring Programs, IQVIA data, depositions, document production and analysis experts, motions, briefs and pleadings, trial preparations, and trials;

w. The extent to which litigation was done prior to and contributed to completion of settlement negotiations, as distinct from litigation that was done litigating after the announcement of the Teva Agreement or Allergan Agreement, such latter litigation both being of less value and potentially resulting a common detriment to the settlement process; and

x. Any other factors that the Fee Panel finds to be appropriate to consider after input from Applicants to the Attorney Fee Fund.

4. In the event that States and Subdivisions enter into an additional global settlement with a party or parties other than Teva or Allergan that is (a) under the jurisdiction of the MDL Court in MDL No. 2804, (b) creates a separate common benefit fund to be administered by the Fee Panel, and (c) unless the parties agree to another date, such agreement has an effective date prior to June 30, 2023, the Fee Panel may:

    a. Consolidate the Common Benefit approval process to include evaluation of all Common Benefit Applications for all settlements entered after November 14, 2022;

    b. Determine the fair and equitable allocation of the Aggregate Common Benefit Fees that come after November 14, 2022;

    c. Give consideration to the amount and timing of each settlement, including the amount and timing of Common Benefit Fees;

    d. The Fee Panel shall abide by the applicable Attorney Fee Agreement in each of the Settlements in Allocating the Common Benefit Fees provided for in the Settlement; and

    e. Be guided in their work by the Orders of the Court related to Fees and Costs.

5. The Fee Panel shall develop procedures for receiving a single application, which may be updated or amended based on new information (such as participation by additional Litigating Subdivisions) from each Applicant seeking compensation from each sub fund of the Attorney Fee Fund pursuant to processes and procedures developed by the Fee Panel, which shall not be inconsistent with this Fee Agreement. Any request for attorneys' fees not included on the single application or through the updating/amendment process designed by the Fee Panel shall be deemed waived. For purposes of transparency and to permit the Fee Panel to conduct its work, the application from each Applicant shall, at a minimum, require each Applicant to:

    a. Identify all Litigating Subdivisions for which s/he is seeking payment from the Attorney Fee Fund;

    b. Identify all Subdivisions in both Settling and Non-Settling States (and, where applicable, Tribal Nations) with respect to which s/he has a Fee Entitlement with respect to Relevant Claims against Released Entities, and identify all co-counsel in such cases;

    c. Identify which of those Subdivisions are Participating Subdivisions and which are not (with similar information for Tribal Nations, where applicable);

d. Specify the specific fund or funds within the Attorney Fee Fund from which the Attorney is seeking compensation;

e. Demonstrate his or her eligibility for compensation from the relevant sub funds within the Attorney Fee Fund pursuant to the criteria set forth for the relevant sub fund;

f. Identify any and all Fee Entitlements from representations of States, Tribal Nations, or other plaintiffs related to Released Claims against Released Entities or in opioids-related matters;

g. Notwithstanding "a-f" above, the Panel may consider a supplemental application if the Applicant shows good cause why circumstances exist that will lead to consideration for additional Common Benefit award. Examples would include, but are not limited to, an Applicant having Non-Participating Litigating Subdivision clients that subsequently become Participating Subdivisions, a Bar Date passes that increases participation or the Participation Tier, or an Allocation Agreement is reached.

6. With respect to the Common Benefit Fund, the Fee Panel shall (subject to any applicable MDL Court Order):

a. Review the applications of all Applicants seeking compensation from the Common Benefit Fund, including determining eligibility for each Applicant as set forth in subsection III.G.

b. Reduce, on an annual basis, Teva's or Allergan's payment obligations, as set forth in paragraph III.E.7. The Panel shall inform Teva or Allergan, and the MDL PEC of all such amounts and adjust payment obligations accordingly.

c. Using criteria set forth in subsections III.E and III.H, allocate amounts from the Common Benefit Fund to eligible Applicants, including payment amounts for each Payment Year. In making such allocations, the Panel shall apply the principles set forth in paragraph III.E.6 and shall allocate any reduction in the payments specified in paragraph III.E.7 to the amounts paid to Applicants with a Common Benefit Fee Entitlement.

7. With respect to the Contingency Fee Fund, the Fee Panel shall:

a. Review the applications of all Attorneys seeking compensation from the Litigating Subdivision Fee Fund, including determining eligibility for each Attorney as set forth in subsection III.G.

b. Apply the Mathematical Model in Exhibit A to this Fee Agreement.

c. Use such allocations to reduce on an annual basis the payment obligations of Teva or Allergan to the Attorney Fee Fund as set forth in paragraph III.F.4, and distributions therefrom, and inform Teva or Allergan and the MDL PEC of all such adjustments.

8. To the extent that there is a dispute about the calculations of the Fee Panel related to the amounts that Teva or Allergan is required to pay (including application of any reductions or offsets under this Fee Agreement), such disputes shall be presented to the Fee Panel and any disputed funds be paid into/held in escrow. The Fee Panel shall resolve such disputes expeditiously, with either Party having the right to seek review from the MDL Court.

9. For purposes of determination of fee or cost awards, allocations, reductions, and possible reversions under this Fee Agreement, unless specified otherwise a Subdivision will be considered a Non-Participating Subdivision if it is not a Participating Subdivision as of the deadline for the application for the fee at issue (or, if the determination does not involve a specific application, the date on which the record for such determination closes).

10. In the event that the Fee Panel, through the use of the Mathematical Model set forth in Exhibit A, allocates funds from the Contingency Fee Fund for an Attorney based on a Qualifying Representation of a Participating Litigating Subdivision and that Subdivision is in a Settling State in which the Consent Judgment has not been approved, such funds shall be placed into escrow until the Consent Judgment is approved, after which time they shall be released.

I. *Miscellaneous.*

1. The Fee Panel shall charge an hourly rate approved by the Court. The Pre-Effective Date costs associated with the Cost and Expense Fund Administrator shall be paid from funds in the Cost Fund. Post-Effective Date, the cost of the Fee Panel shall be charged against the applicable Fee Fund based on allocation by the Fee Panel and shall not be otherwise funded by Teva and Allergan.

2. The MDL PEC shall provide to Teva and Allergan information they have that identifies Attorneys who represent Litigating Subdivisions who are not Participating Subdivisions and who have an obligation to pay a common benefit assessment, either due to the MDL Court's orders or pursuant to a Participation Agreement.

3. Participating Subdivisions agree to instruct their counsel to treat information, work product and expert materials as confidential under Rule 1.6 of the ABA Model Rules of Professional Conduct. Accordingly, an Attorney shall not share information or work product with, or experts or

materials to, non-participants (other than the Attorney's own current clients or their lawyers, consultants, experts or other representatives or agents). However, nothing herein shall prevent MDL Leadership or PEC Counsel from fulfilling their obligations in any MDL and the MDL Court Order.

IV. Miscellaneous

A. *Termination*. If the Teva Agreement or Allergan Agreement does not proceed past the Reference Date, whether because Teva and Allergan do not determine to proceed or for any other reason, this Fee Agreement shall be null and void, neither Teva nor Allergan shall have any obligation to make any payments under this Fee Agreement other than Fee Panel costs advanced, and Teva, Allergan, and the PEC shall take such steps as are necessary to restore the *status quo ante*.

B. *MDL Court Consideration*. This Fee Agreement shall be attached as an exhibit to the Teva Agreement and Allergan Agreement. This Fee Agreement shall also be submitted by Teva, Allergan, and the MDL PEC to the MDL Court for approval pursuant to the motion and order that shall be attached, prior to the Preliminary Agreement Date of the Agreements, as Exhibit B.

1. In the event that the MDL Court, through an order, makes any change to the amounts potentially to be paid by Teva and Allergan under this Fee Agreement, makes any change to the Fee Panel's consideration of the factors set forth in paragraph III.E.6, or any other material change to the draft Order attached as part of Exhibit B or the terms of this Fee Agreement, Teva, Allergan, and the MDL PEC shall meet and confer concerning such changes.

2. If Teva, Allergan, and the MDL PEC are unable to reach agreement and revisions to this Fee Agreement, this Fee Agreement shall be null and void, Teva and Allergan shall have no obligation to make any payments under this Fee Agreement, and Teva, Allergan, and the MDL PEC shall take such steps as are necessary to restore the *status quo ante*.

C. *Amendment*. Once the MDL Court has entered an order implementing this Fee Agreement, this Fee Agreement can only be amended by (1) written agreement of Teva, Allergan, and the MDL PEC and (2) approval by the MDL Court.

D. *Jurisdiction and Enforcement*. The MDL Court shall have exclusive and ongoing jurisdiction over the enforcement and implementation of this Fee Agreement as set forth herein. The MDL PEC shall be the Authorized Party to enforce this Fee Agreement, as to the payment obligations of Teva and Allergan as set forth in this subsection and as to Attorneys making application to the Funds under this Fee Agreement. Solely for purposes of assessing or allocating common benefit fees, the MDL Court will continue to have jurisdiction over the work product developed in the MDL Court by and under the direction of the MDL PEC with respect to claims against Teva or Allergan, including data and documents, depositions, expert

reports, briefs and pleadings; and the MDL Court's protective orders, management orders, and other decisions regarding such discovery and other work product, including but not limited to, conditions on its use, will continue in full force and effect. Nothing in this subsection authorizes the MDL Court to act contrary to this Agreement or provides the MDL Court with jurisdiction over the Teva Agreement or Allergan Agreement.

EXHIBIT S
Agreement on the State Outside Counsel Fee Fund for Manufacturer Settlements

1. **Definitions.**

   a. "Manufacturer" means any of Teva and Allergan, and "Manufacturers" means all of the foregoing.
   b. "Multistate Manufacturer Settlement Agreement" means This Settlement Agreement along with the separate settlement of opioids-related claims among 30 or more states and the other Manufacturer.
   c. "This Settlement Agreement" means the settlement agreement between the Settling States and the Manufacturer to which this Agreement is attached as an Exhibit.
   d. "Settling Manufacturer" means the Manufacturer that is a party to This Settlement Agreement.
   e. "Settling States" has the meaning given such term in the relevant Multistate Manufacturer Settlement Agreement.

2. **Creation of a State Outside Counsel Manufacturers Fee Fund.** The Settling States have agreed to the creation of a state outside counsel fee fund to pay reasonable attorneys' fees of Settling States which have retained outside counsel in connection with litigation against one or more Manufacturers (such fund, the "State Outside Counsel Manufacturers Fee Fund").

3. **State Outside Counsel Manufacturers Fee Fund Administration.** The State Outside Counsel Manufacturers Fee Fund shall be administered separately from any other funds for the payment of attorney's fees or costs in connection with This Settlement Agreement, including any common benefit fund, contingency fee fund for subdivision counsel, state cost fund, or MDL expense fund. If necessary, a committee of Attorneys General shall be convened to oversee the State Outside Counsel Manufacturers Fee Fund (the "Manufacturers Fee Fund Committee"). The Manufacturers Fee Fund Committee shall be appointed by the Settling State Members of the Enforcement Committee and shall be comprised solely of Attorneys General of Settling States that engaged outside counsel to pursue litigation against one or more Manufacturers. The Settlement Fund Administrator (the "Fee Fund Administrator") shall administer the State Outside Counsel Manufacturers Fee Fund according to this Exhibit and, if convened, the guidelines and directives of the Manufacturers Fee Fund Committee.

4. **State Outside Counsel Manufacturers Fee Eligibility.**

   a. To receive any amount from the State Outside Counsel Manufacturers Fee Fund, both of the following must be true:
      1. an outside counsel to a Settling State must have filed and maintained an action in the name of a Settling State or its Attorney General against a Manufacturer in a state or federal court as of November 1, 2022; and
      2. the State must become a Settling State for each Multistate Manufacturer Settlement Agreement for which it is eligible.

b. No Settling State (or its outside counsel) shall receive funds from both the State Outside Counsel Manufacturers Fee Fund and any "Additional Restitution Amount" as may be provided for in This Settlement Agreement.
c. In addition to the eligibility criteria set forth in Paragraph 4.a, above, and for the avoidance of doubt, only Settling States under This Settlement Agreement are eligible to receive any funds paid into the State Outside Counsel Manufacturers Fee Fund as a result of This Settlement Agreement.

5. **State Outside Counsel Manufacturers Fee Fund Amount.** The Settling Manufacturer shall pay funds into the State Outside Counsel Manufacturers Fee Fund in an amount equal to, and on the schedule identified in, **Exhibit M** (the "Contribution"). The Settling Manufacturer's Contribution shall be subject to a reduction as described in Paragraph 8, below.

6. **State Outside Counsel Manufacturers Fee Fund Availability and Calculation of Amount.**

a. The State Outside Counsel Manufacturers Fee Fund shall be available to compensate private outside counsel for Settling State Attorneys General for approved fees arising out of representation of the Settling State pursuant to the schedule attached to this agreement as Schedule I (the "Fee Schedule").
b. The Fee Schedule is intended to reflect the fee calculation in subparagraphs 6.c and d, below (the "Fee Calculation"). Subject to adjustments required by Paragraph 8, below, in the event of any discrepancy between the Fee Schedule and the Fee Calculation, the Fee Schedule shall control. Each Settling State, by becoming a Participating State in This Settlement Agreement, agrees that the Fee Schedule reflects the Fee Calculation and waives any right to contest the accuracy of the Fee Schedule, absent manifest error, the exclusion of a Settling State, or the inclusion of a Non-Settling State. The version of the Fee Schedule reflecting any necessary adjustments shall be the "Final Fee Schedule."
c. Except as provided in Paragraph d, below, fees shall be aggregated across the Multistate Manufacturer Settlement Agreements and be calculated by adding two components: (a) a fixed amount consisting of fifty percent (50%) of the amount of remediation funds allocated to a Settling State and its Subdivisions pursuant to the Multistate Manufacturer Settlement Agreements multiplied by 4.5% (or, if lower, the applicable contingency fee percentage in the Settling State's outside counsel contract); and (b) a proportional percentage of the remaining fee due under that Settling State's contract with its outside counsel assuming that fifty percent (50%) of the Settling State's recovery is allocable to a Settling State (rather than allocable to the Settling State's Participating Subdivisions) so that the fees of all eligible Settling States (minus the fixed amount that would have been allocated to any Non-Settling States had they become Settling States) exhausts the State Outside Counsel Manufacturers Fee Fund. The proportional share percentage will be the same for each Settling State

included in the State Outside Counsel Manufacturers Fee Fund. Except as set forth in Paragraph 6.c, fees shall be split proportionally among each Multistate Manufacturer Settlement Agreement, as set forth on the Fee Schedule.

d. Notwithstanding the foregoing, fees for the State of Oklahoma, if it becomes a Settling State under the Multistate Manufacturer Settlement Agreement with Allergan, shall be limited to Oklahoma's share of the State Outside Counsel Manufacturers Fee Fund derived from Allergan's Contribution. Oklahoma's share of the State Outside Counsel Manufacturers Fee Fund derived from Teva's Contribution shall be reallocated proportionally among the other Settling States eligible to receive payments from the State Outside Counsel Manufacturer Fee Fund.

e. All amounts paid will be less the following:

    1. Any costs or fees of the Fee Fund Administrator. The Fee Schedule reflects a holdback amount of $50,000 for such administrative expenses of the Fee Fund Administrator, the remainder of which shall be disbursed proportionally to States receiving monies from the State Outside Counsel Manufacturers Fee Fund at the conclusion of such administration.

7. **Payment by the Fee Fund Administrator.**

a. The Fee Fund Administrator shall hold the Contribution in escrow until the earlier of (1) both Multistate Manufacturer Settlement Agreements become effective or (2) when instructed by the Settling State Members of the Enforcement Committee.

b. Subject to eligibility pursuant to Paragraph 4, above, a Settling State's outside counsel may receive funds from the State Outside Counsel Manufacturers Fee Fund in the following scenarios ("Payment Scenarios"):

    1. The Settling State's outside counsel agrees that the amount listed for such state on the Final Fee Schedule either satisfies in full or exceeds the amounts owed to all such Settling State's outside counsel and such counsel has provided written notice waiving all entitlement to additional fee in respect of any Multistate Manufacturer Settlement Agreement.
    2. The Settling State and its outside counsel enter into a signed writing establishing the amount owed to the counsel, which includes an agreement on the payment of the amount listed for such state on the Final Fee Schedule and waives any right of the State or its outside counsel to additional amounts from the State Outside Counsel Manufacturers Fee Fund.
    3. A final judgment is entered that is no longer appealable, which judgement adjudicates the amount owed to the Settling State's counsel in respect of This Settlement Agreement and directs the Manufacturers Fee Fund Committee how to pay the amount listed on the Final Fee Schedule for such State.

If no Payment Scenario is applicable with respect to a Settling State, then the Settling State's share shall be placed in an interest-bearing escrow account (less reasonable expenses of the Fee Fund Administrator) and held unless and until a Payment Scenario is applicable.

c. Upon the applicability of a Payment Scenario 1 with respect to a Settling State, the Fee Fund Administrator shall pay that Settling State's outside counsel the amount identified on the Final Fee Schedule for such state or such lesser amount that satisfies the Settling State's obligation to its outside counsel in full. Any remaining allocation to such State shall be paid to the Settling State.

d. Upon the applicability of a Payment Scenario 2 or 3 with respect to a Settling State, the Fee Fund Administrator shall release monies from the State Outside Counsel Manufacturers Fee Fund in either the amount held by the Fee Fund Administrator, if the amount of the agreement or judgment is equal to or more than the amount held, or the amount indicated in the agreement or in the final judgment, if the amount in the agreement or judgment is less than the amount held.

e. Nothing herein, including the amounts listed in Paragraph 5 above or on any Fee Schedule, shall prevent a Settling State from arguing in any proceeding with its outside counsel that (i) its recovery was less than fifty percent (50%) of the recovery in the settlement agreement down to and including fifteen percent (15%) of the total recovery; (ii) any payment should be discounted by an appropriate discount rate commensurate to the risk of the settlement agreement and the timeline that the Settling State is receiving its payments; (iii) the settlement amount should be lower because the amount a Settling State receives was reduced because such Settling State's outside counsel failed to obtain joinder from a Settling State's Subdivision(s) that the outside counsel also represented; or (iv) any limitation placed by the Settling Manufacturer bars payment of a higher fee to outside counsel.

f. In the event the amount due to the Settling State's outside counsel from an escrow account is less than the total amount of funds escrowed on the account of the Settling State, the balance shall be paid to the Settling State. In no event, other than a State becoming a Non-Settling State, shall funds revert to a Manufacturer.

8. **Non-Settling States; Reversion and Redistribution.** Amounts owed by the Settling Manufacturer to the State Outside Counsel Manufacturers Fee Fund shall be reduced by amounts allocated to the fixed amount for such State under This Settlement Agreement in the event that a listed State becomes a Non-Settling State. The payments for the other Settling States reflected in the Fee Schedule shall be adjusted by the Fee Fund Administrator to reflect a recalculated proportional percentage under the Fee Calculation.

9. **Interpretation**.

a. This Agreement shall be an Exhibit to each Multistate Manufacturer Settlement Agreement and shall include the Fee Schedule setting forth the presumptive payment calculations for each eligible Settling State. By joining This Settlement Agreement, each State agrees on the presumptive accuracy of the Fee Schedule, absent manifest error, the inclusion of a Non-Settling State, or the exclusion of a Settling State.

b. It is the intent of all parties that the State Outside Counsel Manufacturers Fee Fund function in a similar manner, with similar calculations and mechanics, as the "State Outside Counsel Fee Fund" established in **Exhibit S** of that certain settlement agreement dated as of July 21, 2021 setting forth the terms of settlement between and among McKesson Corporation, Cardinal Health, Inc., and AmerisourceBergen Corporation, on the one hand, and certain settling states and certain participating subdivisions, on the other hand.

Schedule I

Fee Schedule

State	Total Fee	Allergan Share	Teva Share
Alaska	**$1,252,625.36**	**$424,966.99**	**$827,658.36**
Delaware	**$2,194,254.56**	**$744,425.11**	**$1,449,829.45**
Georgia	**$6,557,324.06**	**$2,224,644.65**	**$4,332,679.41**
Hawaii	**$1,272,349.43**	**$431,658.60**	**$840,690.83**
Idaho	**$1,413,869.58**	**$479,670.88**	**$934,198.70**
Kentucky	**$5,087,998.16**	**$1,726,159.60**	**$3,361,838.56**
Mississippi	**$1,737,202.53**	**$589,365.16**	**$1,147,837.38**
Nevada	**$6,279,564.47**	**$2,130,411.64**	**$4,149,152.83**
New Mexico	**$5,218,189.24**	**$1,770,328.36**	**$3,447,860.88**
Ohio	**$6,831,882.94**	**$2,317,791.78**	**$4,514,091.16**
Oklahoma	**$1,470,349.73**	**$1,470,349.73**	**$-**
Puerto Rico	**$4,823,581.25**	**$1,636,453.24**	**$3,187,128.01**
South Dakota	**$673,251.45**	**$228,408.00**	**$444,843.46**
	Admin Expense	**$18,047.03**	**$31,952.97**
	Holdbacks		
	Total	$16,192,680.76	$28,669,762.00

EXHIBIT T
Agreement on the Joint State Cost Fund

1. **Definitions**.

a. "Opioids Defendant" means Teva, Allergan, or such other defendant in opioids-related litigation that enters into a Multistate Settlement after November 1, 2022, and "Opioids Defendants" means all of the foregoing.

b. "Multistate Settlement" means this Settlement Agreement along with any other settlement of opioids-related claims among 30 or more states and an Opioids Defendant.

c. "Settlement Agreement" means the settlement agreement between the Settling States and the Opioids Defendant to which this Agreement is attached as an Exhibit.

d. "Settling Opioids Defendant" means the Opioids Defendant that is a party to the Settlement Agreement.

e. "Settling States" has the meaning given such term in the Settlement Agreement.

2. **Creation of a State Cost Fund.** The Settling Opioids Defendant and the Settling States agree to the creation of a fund to pay costs and expenses associated with litigation and investigations related to the opioids litigation (such fund, the "State Cost Fund"). The State Cost Fund shall be administered separately from any other funds for the payment of attorneys fees or costs in connection with the Settlement Agreement, including any common benefit fund, contingency fee fund for subdivision counsel, subdivision cost fund, or MDL expense fund. However, the State Cost Fund shall be administered jointly with similar "State Cost Funds" created in other Multistate Settlements after November 1, 2022; any state cost funds jointly administered in this manner shall be referred to as the "Joint State Cost Fund." To the extent permissible and feasible, the Joint State Cost Fund may also be jointly administered with any fund for reimbursement of states' litigation and investigation costs established by a bankruptcy plan, including the Mallinckrodt bankruptcy plan, any plans that may emerge from the bankruptcies of Purdue and Endo, and any similar bankruptcies of opioids defendants. To the extent feasible, the Joint State Cost Fund may also be jointly administered with the State Cost Funds established pursuant to the Distributors Multistate Settlement and the Janssen Multistate Settlement.

3. **State Cost Fund Amount.** The Settling Opioids Defendant shall pay into the State Cost Fund in the amount listed on, and on the schedule set forth in, **Exhibit M** (the "Settling Opioids Defendant's Contribution") for the purpose paying States' costs and expenses associated with to the opioid litigation.

4. **Joint State Cost Fund Committee.** A committee of Attorneys General or their designated representatives (such committee, the "Joint State Cost Fund Committee") shall oversee the Joint State Cost Fund. The committee shall be appointed by the Settling State Members of the Enforcement Committee, who shall aim to (i) have equal representation between states that retained contingency fee outside counsel and states that did not retain contingency fee outside counsel with respect to opioids-related litigation, and (ii) maintain consistency of committee membership across state cost funds that compose the Joint State Cost Fund. The Settling State Members of the Enforcement Committee may by majority vote add to or change the composition of the Joint State Cost Fund Committee.

5. **Joint State Cost Fund Administrator.**

a. The Joint State Cost Fund Committee may select an administrator (the "Joint State Cost Fund Administrator"), who shall administer the Joint State Cost Fund and direct payments to Settling States according to the guidelines and directives of the Joint State Cost Fund Committee. While the expenses of the Joint State Cost Fund Administrator shall be reimbursable pursuant to the principles and guidelines listed below, the Joint State Cost Fund Administrator shall first rely on any separate funds that may be set aside for such purpose in any Multistate Settlement.

b. The Joint State Cost Fund Administrator shall be responsible, under the direction and supervision of the Joint State Cost Fund Committee, for receiving and reviewing applications for reimbursement from the Joint State Cost Fund. This may include the creation of an audit process to ensure the integrity of submissions, as well as reimbursement rules to incentivize accurate submissions.

6. **State Cost Fund Guidelines and Principles.**

a. Monies in the State Cost Fund shall be released without any delay to reimburse Settling States for documented costs incurred or paid in connection with litigation and investigation related to the opioid litigation.

b. In allocating the Joint State Cost Fund, the Joint State Cost Fund Committee shall seek to comply with the following principles:

1. Each State Cost Fund should be used to reimburse costs incurred by States that are Settling States in the Multistate Settlement from which funds are paid. (However, the foregoing sentence does not preclude a Non-Settling State that joins a separate Multistate Settlement from participating in the Joint State Cost Fund with respect to contributions made by other Opioids Defendants.)

2. Funds in any State Cost Fund shall be primarily used to reimburse

costs incurred prior to the date on which the relevant Multistate Settlement was first made available for participation to eligible States. Regardless of other factors considered in prioritizing payments, all costs incurred prior to January 1, 2023, shall be paid before any costs incurred after that date are paid.

3. The Joint State Cost Fund shall prioritize the reimbursement of the following over reimbursement of any State's litigation or investigation costs:

    - the reasonable costs of the Joint State Cost Fund Administrator;

    - repayment of National Association of Attorneys General grants made in connection with opioid investigations and litigation, without regard to when the grants were made;

    - repayment of state-attributable costs of any mediator in connection with negotiations of a Multistate Settlement;

4. The Joint State Cost Fund shall seek to prioritize costs in the following order:

    - litigation-related costs; then

    - investigation-related costs; then

    - settlement and negotiation related costs; then

    - cost shares.

5. Costs incurred by a State's outside counsel that the State is contractually obligated to reimburse shall be treated as costs incurred by a State.

6. As between similar categories of costs (e.g., defendant-specific litigation-related costs), the Joint State Cost Fund shall first reimburse costs incurred by a State's outside counsel that the State is contractually obligated to reimburse out of its recovery, and then reimburse costs directly incurred by States.

7. The Joint State Cost Fund shall be available to reimburse only those costs which have not yet been reimbursed to a State from any other source, including any other fund set aside in a Multistate Settlement or bankruptcy plan for the reimbursement of costs or any individual

state settlements.

8. The Joint State Cost Fund should not reimburse expenses that are expected to be reimbursed from another source, such as a bankruptcy debtor, unless such expected reimbursements do not come to fruition within a reasonable amount of time. This includes cost shares paid by states.

9. When coordinating among different state cost funds that each could be used to reimburse a given expense, the Joint State Cost Fund Committee may set guidelines to equitably distribute reimbursements across all state cost funds in a manner that prioritizes costs unlikely to be otherwise reimbursed to a similarly situated State.

10. The Joint State Cost Fund may deny reimbursement of costs, on either an individual basis or a categorical basis, that a supermajority (75%+) of the Joint State Cost Fund Committee determines to be unreasonable.

11. After all costs identified in the foregoing have been reimbursed, the remaining funds in the Joint State Cost Fund shall be distributed to states in proportion to their allocation of remediation payments in the Mallinckrodt bankruptcy plan. Such distribution shall be treated as a reimbursement for States' unenumerated costs of administering the Multistate Settlements and no subdivision shares shall be carved out of such disbursement, nor shall any attorney's fees be assessed against such distribution (unless individually agreed to by a State).

c. In applying the foregoing principles, the Joint State Cost Fund Committee shall have the discretion to vary their application in order to ensure equity among similarly situated states and to facilitate the ease and speed of administering the Joint State Cost Fund. The Joint State Cost Fund Committee may also apply percentages to approximate costs attributable to a particular Opioids Defendant (or categories of Opioids Defendants) in a manner that seeks to treat similarly situated states equitably.

d. The Joint State Cost Fund Committee shall establish guidelines for the submission and approval of expenses eligible for reimbursement from the Joint State Cost Fund, which guidelines may be coordinated and consolidated with any similar cost funds in other state opioid settlements for purposes of joint administration and efficiency.

e. Unless waived by the Joint State Cost Fund Committee, the Joint State Cost

Fund Administrator shall, in accordance with such guidelines, receive from Settling States records sufficient to demonstrate the incurrence and payment of each expense.

f. Where the Joint State Cost Fund Committee determines by a supermajority vote (75%+) that outside counsel for a Settling State has failed to exercise reasonable diligence in reviewing submitted costs for allowability, and such failure has resulted in the reimbursement of unallowed costs to such outside counsel, the Committee shall have the discretion to reduce or recover payments made to such outside counsel in an amount calculated to incentivize the exercise of reasonable diligence.

7. **State Undertakings.** Each State submitting for reimbursement of costs from the Joint State Cost Fund agrees:

a. to only submit costs allowable under this Joint State Cost Fund Agreement;

b. to provide all back-up documentation that may be requested with respect to any submitted cost and to make itself available for any questions related to such costs;

c. to exercise reasonable diligence to ensure that all submitted costs are allowable under (i) this Joint State Cost Fund Agreement, (ii) the State's contract with its outside counsel, if relevant, (iii) state law, and (iv) the policies and procedures applicable to the State's retention of outside counsel, if relevant; and

d. to promptly return any excess payments made to the State or its outside counsel from the Joint State Cost Fund, including payments made for costs that were reimbursed from another source or are not allowable hereunder.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

New National Opioids Settlements: Teva, Allergan, CVS, Walgreens, and Walmart
Opioids Implementation Administrator
opioidsparticipation@rubris.com

Ontario city, CA
Reference Number: CL-383282

TO LOCAL POLITICAL SUBDIVISIONS AND SPECIAL DISTRICTS:

THIS PACKAGE CONTAINS DOCUMENTATION TO PARTICIPATE IN THE NEW NATIONAL OPIOID SETTLEMENTS. YOU MUST TAKE ACTION IN ORDER TO PARTICIPATE.

Deadline: April 18, 2023

Five new proposed national opioid settlements ("*New National Opioid Settlements*") have been reached with **Teva, Allergan, CVS, Walgreens, and Walmart** ("Settling Defendants"). This *Participation Package* is a follow-up communication to the *Notice of National Opioid Settlements* recently received electronically by your subdivision or special district ("subdivision").

You are receiving this *Participation Package* because California is participating in the following settlements:

- Teva
- Allergan
- CVS
- Walgreens
- Walmart

This electronic envelope includes eleven attachments:

- *Participation Forms* for Teva, Allergan, CVS, Walgreens, and Walmart, including a release of any claims.
- *California State-Subdivision Agreements for Teva, Allergan, CVS, Walgreens, and Walmart.*
- *Side-letter agreement between California and CVS.*

The *Participation Form* and *California Intrastate Allocation Agreement* for each settlement must be executed, without alteration, and submitted on or before April 18, 2023, in order for your subdivision to be considered for initial participation calculations and payment eligibility.

The side-letter agreement between California and CVS modifies the CVS National Settlement's incentive structure for subdivision participation as it applies to California.

Based upon subdivision participation forms received on or before April 18th, the subdivision participation rate will be used to determine whether participation for each deal is sufficient for the settlement to move forward and whether a state earns

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

its maximum potential payment under the settlement. If the settlement moves forward, your release will become effective. If a settlement does not move forward, that release will not become effective.

Any subdivision that does not participate cannot directly share in the settlement funds, even if the subdivision's state is settling and other participating subdivisions are sharing in settlement funds. Any subdivision that does not participate may also reduce the amount of money for programs to remediate the opioid crisis in its state. Please note, a subdivision will not necessarily directly receive settlement funds by participating; decisions on how settlement funds will be allocated within a state are subject to intrastate agreements or state statutes.

You are encouraged to discuss the terms and benefits of the *New National Opioid Settlements* with your city attorney/county counsel, outside counsel representing your city/county on opioid matters, the Attorney General's Office, and other contacts within your state. Many states are implementing and allocating funds for these new settlements the same as they did for the prior opioid settlements with McKesson, Cardinal, Amerisource, and J&J/Janssen, but states may choose to treat these settlements differently.

Information and documents regarding the *New National Opioid Settlements* and how they are being implemented in your state and how funds will be allocated within your state allocation can be found on the national settlement website at https://nationalopioidsettlement.com/ and the California Attorney General's website at https://oag.ca.gov/opioids. These websites will be supplemented as additional documents are created. Please also refer to the Side-Letter Agreement with CVS, which modifies the *CVS National Opioid Settlement.*

How to return signed forms:

There are three methods for returning the executed *Participation Forms* and *California-State Subdivision Agreements ("Subdivision Agreements")* to the Implementation Administrator:

(1) *Electronic Signature via DocuSign*: Executing the *Participation Forms* and the *Subdivision Agreements* electronically through DocuSign will return the signed forms to the Implementation Administrator and associate your forms with your subdivision's records. Electronic signature is the most efficient method for returning *Participation Forms* and *Subdivision Agreements*, allowing for more timely participation and the potential to meet higher settlement payment thresholds, and is therefore strongly encouraged.

(2) *Manual Signature returned via DocuSign*: DocuSign allows forms to be downloaded, signed manually, then uploaded to DocuSign and returned automatically to the Implementation Administrator. Please be sure to complete all fields and note that execution and return of both the *Subdivision Agreement* and the *Participation Form* are required for participation in the corresponding settlement. As with electronic signature, returning manually signed *Participation Forms* and *Subdivision Agreements* via DocuSign will associate your signed forms with your subdivision's records.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

(3) *Manual Signature returned via electronic mail*: If your subdivision is unable to return executed *Participation Forms* and *Subdivision Agreements* using DocuSign, signed *Participation Forms* and *Subdivision Agreements* may be returned via electronic mail to opioidsparticipation@rubris.com. Please include the name, state, and reference ID of your subdivision in the body of the email and use the subject line Settlement Participation Forms – [Subdivision Name, Subdivision State] – [Reference ID]. Note that execution and return of both the Subdivision Agreement and the Participation Form are required for participation in the corresponding settlement.

Detailed instructions on how to sign and return the *Participation Forms* and the *Subdivision Agreements*, including changing the authorized signer, can be found at https://nationalopioidsettlement.com. You may also contact opioidsparticipation@rubris.com.

The sign-on period for subdivisions ends on April 18, 2023.

If you have any questions about executing these forms, please contact your city attorney/county counsel, outside counsel representing your city/county on opioids matters, the Implementation Administrator at opioidsparticipation@rubris.com, or the California Attorney General's Office at opioidsettlement-localgovernment@doj.ca.gov.

Thank you,

National Opioids Settlements Implementation Administrator

The Implementation Administrator is retained to provide the settlement notice required by the respective settlement agreements referenced above and to manage the collection of settlement participation forms for each settlement.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

EXHIBIT K
Subdivision and Special District Settlement Participation Form

Will your subdivision or special district be signing the settlement participation forms for the Allergan and Teva Settlements at this time?

[x] Yes [ ] No

Governmental Entity: Ontario city		State: CA
Authorized Signatory: Scott Ochoa		
Address 1: 303 East B Street		
Address 2:		
City, State, Zip: Ontario	California	91764
Phone: 909 395 2000		
Email: sochoa@ontarioca.gov		

The governmental entity identified above ("*Governmental Entity*"), in order to obtain and in consideration for the benefits provided to the Governmental Entity pursuant to the Agreement dated November 22, 2022 ("*Allergan Settlement*"), and acting through the undersigned authorized official, hereby elects to participate in the Allergan Settlement, release all Released Claims against all Released Entities, and agrees as follows.

1. The Governmental Entity is aware of and has reviewed the Allergan Settlement, understands that all terms in this Election and Release have the meanings defined therein, and agrees that by this Election, the Governmental Entity elects to participate in the Allergan Settlement as provided therein.

2. Following the execution of this Settlement Participation Form, the Governmental Entity shall comply with Section III.B of the Allergan Settlement regarding Cessation of Litigation Activities.

3. The Governmental Entity shall, within fourteen (14) days of the Reference Date and prior to the filing of the Consent Judgment, file a request to dismiss with prejudice any Released Claims that it has filed. With respect to any Released Claims pending in *In re National Prescription Opiate Litigation*, MDL No. 2804, the Governmental Entity authorizes the MDL Plaintiffs' Executive Committee to execute and file on behalf of the Governmental Entity a Stipulation of Dismissal With Prejudice substantially in the form found at https://nationalopioidsettlement.com.

4. The Governmental Entity agrees to the terms of the Allergan Settlement pertaining to Subdivisions and Special Districts as defined therein.

5. By agreeing to the terms of the Allergan Settlement and becoming a Releasor, the Governmental Entity is entitled to the benefits provided therein, including, if applicable, monetary payments beginning after the Effective Date.

6. The Governmental Entity agrees to use any monies it receives through the Allergan Settlement solely for the purposes provided therein.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

7. The Governmental Entity submits to the jurisdiction of the court in the Governmental Entity's state where the Consent Judgment is filed for purposes limited to that court's role as provided in, and for resolving disputes to the extent provided in, the Allergan Settlement.

8. The Governmental Entity has the right to enforce the Allergan Settlement as provided therein.

9. The Governmental Entity, as a Participating Subdivision or Participating Special District, hereby becomes a Releasor for all purposes in the Allergan Settlement, including, but not limited to, all provisions of **Section V (Release)**, and along with all departments, agencies, divisions, boards, commissions, Subdivisions, districts, instrumentalities of any kind and attorneys, and any person in their official capacity whether elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, and any other entity identified in the definition of Releasor, provides for a release to the fullest extent of its authority. As a Releasor, the Governmental Entity hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist in bringing, or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the Allergan Settlement are intended to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of the Governmental Entity to release claims. The Allergan Settlement shall be a complete bar to any Released Claim.

10. The Governmental Entity hereby takes on all rights and obligations of a Participating Subdivision or Participating Special District as set forth in the Allergan Settlement.

11. In connection with the releases provided for in the Allergan Settlement, each Governmental Entity expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her, would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Governmental Entity hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Governmental Entities' decision to participate in the Allergan Settlement.

12. Nothing herein is intended to modify in any way the terms of the Allergan Settlement, to which the Governmental Entity hereby agrees. To the extent this Settlement Participation Form is interpreted differently from the Allergan Settlement in any respect, the Allergan Settlement controls.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

I have all necessary power and authorization to execute this Settlement Participation Form on behalf of the Governmental Entity.

Signature: DocuSigned by: Scott Ochoa 943ADB3C46DD448...

Name: Scott Ochoa

Title: City Manager

Date: 2/28/2023

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Exhibit K
Subdivision and Special District Settlement Participation Form

Governmental Entity: Ontario city		State: CA
Authorized Signatory: Scott Ochoa		
Address 1: 303 East B Street		
Address 2:		
City, State, Zip: Ontario	California	91764
Phone: 909 395 2000		
Email: sochoa@ontarioca.gov		

The governmental entity identified above ("*Governmental Entity*"), in order to obtain and in consideration for the benefits provided to the Governmental Entity pursuant to the Agreement dated November 22, 2022 ("*Teva Settlement*"), and acting through the undersigned authorized official, hereby elects to participate in the Teva Settlement, release all Released Claims against all Released Entities, and agrees as follows.

1. The Governmental Entity is aware of and has reviewed the Teva Settlement, understands that all terms in this Election and Release have the meanings defined therein, and agrees that by this Election, the Governmental Entity elects to participate in the Teva Settlement as provided therein.

2. Following the execution of this Settlement Participation Form, the Governmental Entity shall comply with Section III.B of the Teva Settlement regarding Cessation of Litigation Activities.

3. The Governmental Entity shall, within 14 days of the Reference Date and prior to the filing of the Consent Judgment, file a request to dismiss with prejudice any Released Claims that it has filed. With respect to any Released Claims pending in In re National Prescription Opiate Litigation, MDL No. 2804, the Governmental Entity authorizes the Plaintiffs' Executive Committee to execute and file on behalf of the Governmental Entity a Stipulation of Dismissal With Prejudice substantially in the form found at https://nationalopioidsettlement.com.

4. The Governmental Entity agrees to the terms of the Teva Settlement pertaining to Subdivisions as defined therein.

5. By agreeing to the terms of the Teva Settlement and becoming a Releasor, the Governmental Entity is entitled to the benefits provided therein, including, if applicable, monetary payments beginning after the Effective Date.

6. The Governmental Entity agrees to use any monies it receives through the Teva Settlement solely for the purposes provided therein.

7. The Governmental Entity submits to the jurisdiction of the court in the Governmental Entity's state where the Consent Judgment is filed for purposes limited to that court's role as provided in, and for resolving disputes to the extent provided in, the Teva Settlement.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

8. The Governmental Entity has the right to enforce the Teva Settlement as provided therein.

9. The Governmental Entity, as a Participating Subdivision or Participating Special District, hereby becomes a Releasor for all purposes in the Teva Settlement, including but not limited to all provisions of Section V (Release), and along with all departments, agencies, divisions, boards, commissions, districts, instrumentalities of any kind and attorneys, and any person in their official capacity elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, and any other entity identified in the definition of Releasor, provides for a release to the fullest extent of its authority. As a Releasor, the Governmental Entity hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the Teva Settlement are intended by Released Entitles and the Governmental Entity to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of the Governmental Entity to release claims. The Teva Settlement shall be a complete bar to any Released Claim.

10. The Governmental Entity hereby takes on all rights and obligations of a Participating Subdivision or Participating Special District as set forth in the Teva Settlement.

11. In connection with the releases provided for in the Teva Settlement, each Governmental Entity expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her, would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Governmental Entity hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Governmental Entities' decision to participate in the Teva Settlement.

12. Nothing herein is intended to modify in any way the terms of the Teva Settlement, to which Governmental Entity hereby agrees. To the extent this Election and Release is interpreted differently from the Teva Settlement in any respect, the Teva Settlement controls.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

I have all necessary power and authorization to execute this Election and Release on behalf of the Governmental Entity.

Signature: DocuSigned by: Scott Ochoa 943ADB3C48DD448...

Name: Scott Ochoa

Title: City Manager

Date: 2/28/2023

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

EXHIBIT K

Subdivision Participation and Release Form

Will your subdivision or special district be signing the settlement participation form for the CVS Settlement at this time?

[x] Yes [ ] No

Governmental Entity: Ontario city		State: CA
Authorized Signatory: Scott Ochoa		
Address 1: 303 East B Street		
Address 2:		
City, State, Zip: Ontario	California	91764
Phone: 909 395 2000		
Email: sochoa@ontarioca.gov		

The governmental entity identified above ("*Governmental Entity*"), in order to obtain and in consideration for the benefits provided to the Governmental Entity pursuant to the Settlement Agreement dated December 9, 2022 ("*CVS Settlement*"), and acting through the undersigned authorized official, hereby elects to participate in the CVS Settlement, release all Released Claims against all Released Entities, and agrees as follows.

1. The Governmental Entity is aware of and has reviewed the CVS Settlement, understands that all terms in this Participation and Release Form have the meanings defined therein, and agrees that by executing this Participation and Release Form, the Governmental Entity elects to participate in the CVS Settlement and become a Participating Subdivision as provided therein.

2. The Governmental Entity shall promptly, and in any event no later than 14 days after the Reference Date and prior to the filing of the Consent Judgment, dismiss with prejudice any Released Claims that it has filed. With respect to any Released Claims pending in *In re National Prescription Opiate Litigation*, MDL No. 2804, the Governmental Entity authorizes the Plaintiffs' Executive Committee to execute and file on behalf of the Governmental Entity a Stipulation of Dismissal with Prejudice substantially in the form found at https://nationalopioidsettlement.com.

3. The Governmental Entity agrees to the terms of the CVS Settlement pertaining to Participating Subdivisions as defined therein.

4. By agreeing to the terms of the CVS Settlement and becoming a Releasor, the Governmental Entity is entitled to the benefits provided therein, including, if applicable, monetary payments beginning after the Effective Date.

5. The Governmental Entity agrees to use any monies it receives through the CVS Settlement solely for the purposes provided therein.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

6. The Governmental Entity submits to the jurisdiction of the court in the Governmental Entity's state where the Consent Judgment is filed for purposes limited to that court's role as provided in, and for resolving disputes to the extent provided in, the CVS Settlement. The Governmental Entity likewise agrees to arbitrate before the National Arbitration Panel as provided in, and for resolving disputes to the extent otherwise provided in, the CVS Settlement.

7. The Governmental Entity has the right to enforce the CVS Settlement as provided therein.

8. The Governmental Entity, as a Participating Subdivision, hereby becomes a Releasor for all purposes in the CVS Settlement, including without limitation all provisions of Section XI (Release), and along with all departments, agencies, divisions, boards, commissions, districts, instrumentalities of any kind and attorneys, and any person in their official capacity elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, and any other entity identified in the definition of Releasor, provides for a release to the fullest extent of its authority. As a Releasor, the Governmental Entity hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the CVS Settlement are intended by the Parties to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of the Governmental Entity to release claims. The CVS Settlement shall be a complete bar to any Released Claim.

9. The Governmental Entity hereby takes on all rights and obligations of a Participating Subdivision as set forth in the CVS Settlement.

10. In connection with the releases provided for in the CVS Settlement, each Governmental Entity expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Governmental Entity hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Governmental Entities' decision to participate in the CVS Settlement.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

11. Nothing herein is intended to modify in any way the terms of the CVS Settlement, to which Governmental Entity hereby agrees. To the extent this Participation and Release Form is interpreted differently from the CVS Settlement in any respect, the CVS Settlement controls.

I have all necessary power and authorization to execute this Participation and Release Form on behalf of the Governmental Entity.

Signature: DocuSigned by: Scott Ochoa 943ADB3C46DD448...

Name: Scott Ochoa

Title: City Manager

Date: 2/28/2023

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

EXHIBIT K

Subdivision Participation and Release Form

Will your subdivision or special district be signing the settlement participation form for the Walgreens Settlement at this time?

[x] Yes [ ] No

Governmental Entity: Ontario city		State: CA
Authorized Signatory: Scott Ochoa		
Address 1: 303 East B Street		
Address 2:		
City, State, Zip: Ontario	California	91764
Phone: 909 395 2000		
Email: sochoa@ontarioca.gov		

The governmental entity identified above ("*Governmental Entity*"), in order to obtain and in consideration for the benefits provided to the Governmental Entity pursuant to the Settlement Agreement dated December 9, 2022 ("*Walgreens Settlement*"), and acting through the undersigned authorized official, hereby elects to participate in the Walgreens Settlement, release all Released Claims against all Released Entities, and agrees as follows.

1. The Governmental Entity is aware of and has reviewed the Walgreens Settlement, understands that all terms in this Participation and Release Form have the meanings defined therein, and agrees that by executing this Participation and Release Form, the Governmental Entity elects to participate in the Walgreens Settlement and become a Participating Subdivision as provided therein.

2. The Governmental Entity shall promptly, and in any event no later than 14 days after the Reference Date and prior to the filing of the Consent Judgment, dismiss with prejudice any Released Claims that it has filed. With respect to any Released Claims pending in *In re National Prescription Opiate Litigation*, MDL No. 2804, the Governmental Entity authorizes the Plaintiffs' Executive Committee to execute and file on behalf of the Governmental Entity a Stipulation of Dismissal with Prejudice substantially in the form found at https://nationalopioidsettlement.com.

3. The Governmental Entity agrees to the terms of the Walgreens Settlement pertaining to Participating Subdivisions as defined therein.

4. By agreeing to the terms of the Walgreens Settlement and becoming a Releasor, the Governmental Entity is entitled to the benefits provided therein, including, if applicable, monetary payments beginning after the Effective Date.

5. The Governmental Entity agrees to use any monies it receives through the Walgreens Settlement solely for the purposes provided therein.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

6. The Governmental Entity submits to the jurisdiction of the court in the Governmental Entity's state where the Consent Judgment is filed for purposes limited to that court's role as provided in, and for resolving disputes to the extent provided in, the Walgreens Settlement. The Governmental Entity likewise agrees to arbitrate before the National Arbitration Panel as provided in, and for resolving disputes to the extent otherwise provided in, the Walgreens Settlement.

7. The Governmental Entity has the right to enforce the Walgreens Settlement as provided therein.

8. The Governmental Entity, as a Participating Subdivision, hereby becomes a Releasor for all purposes in the Walgreens Settlement, including without limitation all provisions of Section XI (Release), and along with all departments, agencies, divisions, boards, commissions, districts, instrumentalities of any kind and attorneys, and any person in their official capacity elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, and any other entity identified in the definition of Releasor, provides for a release to the fullest extent of its authority. As a Releasor, the Governmental Entity hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the Walgreens Settlement are intended by the Parties to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of the Governmental Entity to release claims. The Walgreens Settlement shall be a complete bar to any Released Claim.

9. The Governmental Entity hereby takes on all rights and obligations of a Participating Subdivision as set forth in the Walgreens Settlement.

10. In connection with the releases provided for in the Walgreens Settlement, each Governmental Entity expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Governmental Entity hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Governmental Entities' decision to participate in the Walgreens Settlement.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

11. Nothing herein is intended to modify in any way the terms of the Walgreens Settlement, to which Governmental Entity hereby agrees. To the extent this Participation and Release Form is interpreted differently from the Walgreens Settlement in any respect, the Walgreens Settlement controls.

I have all necessary power and authorization to execute this Participation and Release Form on behalf of the Governmental Entity.

Signature: DocuSigned by: Scott Ochoa 943ADB3C46DD448...

Name: Scott Ochoa

Title: City Manager

Date: 2/28/2023

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

EXHIBIT K

Subdivision Participation Form

Will your subdivision or special district be signing the settlement participation form for the Walmart Settlement at this time?

[X] Yes [ ] No

Governmental Entity: Ontario city		State: CA
Authorized Official: Scott Ochoa		
Address 1: 303 East B Street		
Address 2:		
City, State, Zip: Ontario	California	91764
Phone: 909 395 2000		
Email: sochoa@ontarioca.gov		

The governmental entity identified above ("Governmental Entity"), in order to obtain and in consideration for the benefits provided to the Governmental Entity pursuant to the Settlement Agreement dated November 14, 2022 ("Walmart Settlement"), and acting through the undersigned authorized official, hereby elects to participate in the Walmart Settlement, release all Released Claims against all Released Entities, and agrees as follows.

1. The Governmental Entity is aware of and has reviewed the Walmart Settlement, understands that all terms in this Election and Release have the meanings defined therein, and agrees that by this Election, the Governmental Entity elects to participate in the Walmart Settlement and become a Participating Subdivision as provided therein.

2. The Governmental Entity shall promptly, and in any event within 14 days of the Effective Date and prior to the filing of the Consent Judgment, dismiss with prejudice any Released Claims that it has filed. With respect to any Released Claims pending in In re National Prescription Opiate Litigation, MDL No. 2804, the Governmental Entity authorizes the Plaintiffs' Executive Committee to execute and file on behalf of the Governmental Entity a Stipulation of Dismissal With Prejudice substantially in the form found at https://nationalopioidsettlement.com/.

3. The Governmental Entity agrees to the terms of the Walmart Settlement pertaining to Subdivisions as defined therein.

4. By agreeing to the terms of the Walmart Settlement and becoming a Releasor, the Governmental Entity is entitled to the benefits provided therein, including, if applicable, monetary payments beginning after the Effective Date.

5. The Governmental Entity agrees to use any monies it receives through the Walmart Settlement solely for the purposes provided therein.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

6. The Governmental Entity submits to the jurisdiction of the court in the Governmental Entity's state where the Consent Judgment is filed for purposes limited to that court's role as provided in, and for resolving disputes to the extent provided in, the Walmart Settlement.

7. The Governmental Entity has the right to enforce the Walmart Settlement as provided therein.

8. The Governmental Entity, as a Participating Subdivision, hereby becomes a Releasor for all purposes in the Walmart Settlement, including but not limited to all provisions of Section X (Release), and along with all departments, agencies, divisions, boards, commissions, districts, instrumentalities of any kind and attorneys, and any person in their official capacity elected or appointed to serve any of the foregoing and any agency, person, or other entity claiming by or through any of the foregoing, and any other entity identified in the definition of Releasor, provides for a release to the fullest extent of its authority. As a Releasor, the Governmental Entity hereby absolutely, unconditionally, and irrevocably covenants not to bring, file, or claim, or to cause, assist or permit to be brought, filed, or claimed, or to otherwise seek to establish liability for any Released Claims against any Released Entity in any forum whatsoever. The releases provided for in the Walmart Settlement are intended by the Parties to be broad and shall be interpreted so as to give the Released Entities the broadest possible bar against any liability relating in any way to Released Claims and extend to the full extent of the power of the Governmental Entity to release claims. The Walmart Settlement shall be a complete bar to any Released Claim.

9. In connection with the releases provided for in the Walmart Settlement, each Governmental Entity expressly waives, releases, and forever discharges any and all provisions, rights, and benefits conferred by any law of any state or territory of the United States or other jurisdiction, or principle of common law, which is similar, comparable, or equivalent to § 1542 of the California Civil Code, which reads:

> **General Release; extent.** A general release does not extend to claims that the creditor or releasing party does not know or suspect to exist in his or her favor at the time of executing the release that, if known by him or her, would have materially affected his or her settlement with the debtor or released party.

A Releasor may hereafter discover facts other than or different from those which it knows, believes, or assumes to be true with respect to the Released Claims, but each Governmental Entity hereby expressly waives and fully, finally, and forever settles, releases and discharges, upon the Effective Date, any and all Released Claims that may exist as of such date but which Releasors do not know or suspect to exist, whether through ignorance, oversight, error, negligence or through no fault whatsoever, and which, if known, would materially affect the Governmental Entities' decision to participate in the Walmart Settlement.

10. Nothing herein is intended to modify in any way the terms of the Walmart Settlement, to which Governmental Entity hereby agrees. To the extent this Election and Release is interpreted differently from the Walmart Settlement in any respect, the Walmart Settlement controls.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

I have all necessary power and authorization to execute this Election and Release on behalf of the Governmental Entity.

Signature: DocuSigned by: Scott Ochoa 943ADB3C46DD448...

Name: Scott Ochoa

Title: City Manager

Date: 2/28/2023

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Proposed California State-Subdivision Agreement
Regarding Distribution and Use of
Settlement Funds – Allergan Settlement

1. Introduction

Pursuant to the Allergan Settlement Agreement, dated as of November 22, 2022, and any revision thereto (the "Allergan Settlement Agreement"), including Section VIII and Exhibit O, the State of California proposes this agreement (the "CA Allergan Allocation Agreement") to govern the allocation, distribution, and use of Settlement Fund payments made to California pursuant to Sections VI, VII, and VIII of the Allergan Settlement Agreement. For the avoidance of doubt, this agreement does not apply to payments made pursuant to Sections XII or XIII of the Allergan Settlement Agreement.

Pursuant to Exhibit O, Paragraph 4, of the Allergan Settlement Agreement, acceptance of this CA Allergan Allocation Agreement is a requirement to be an Initial Participating Subdivision.[1]

Further, pursuant to Sections X.B and X.C of the Teva Settlement Agreement and Sections IX.B and IX.C of the Allergan Settlement Agreement, eligible Subdivisions must participate in both the Teva Settlement Agreement and Allergan Settlement Agreement, or neither.[2]

2. Definitions

a) *CA Participating Subdivision* means a Participating Subdivision that is also (a) a Plaintiff Subdivision and/or (b) a Subdivision with a population equal to or greater than 10,000. For the avoidance of doubt, eligible CA Participating Subdivisions are those California subdivisions listed in Exhibit C (excluding Litigating Special Districts) and/or Exhibit I to the Allergan Settlement Agreement.

b) *Teva Settlement Agreement* means the Teva Settlement Agreement dated November 22, 2022, and any revision thereto.

c) *CVS Settlement Agreement* means the CVS Settlement Agreement dated December 9, 2022, and any revision thereto as well as any modification thereto entered into by the State of California and CVS.

d) *Distributor Settlement Agreement* means the Distributor Settlement Agreement dated July 21, 2021, and any revision thereto.

e) *Janssen Settlement Agreement* means the Janssen Settlement Agreement dated July 21, 2021, and any revision thereto.

[1] A parallel but separate agreement (the "CA Teva Allocation Agreement") will govern the allocation, distribution, and use of settlement fund payments under the Teva Settlement Agreement.
[2] However, if Teva enters bankruptcy prior to the Effective Date, an eligible Subdivision can choose to only join the Allergan Settlement Agreement.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

f) *Walgreens Settlement Agreement* means the Walgreens Settlement Agreement dated December 9, 2022, and any revision thereto.

g) *Walmart Settlement Agreement* means the Walmart Settlement Agreement dated November 14, 2022, and any revision thereto.

h) *CA Litigating Special District* means a Litigating Special District located in California. CA Litigating Special Districts include Downey Unified School District, Elk Grove Unified School District, Kern High School District, Montezuma Fire Protection District (located in Stockton, California), Santa Barbara San Luis Obispo Regional Health Authority, Inland Empire Health Plan, Health Plan of San Joaquin, San Leandro Unified School District, Pleasant Valley School District Board, and LA Care Health Plan.

i) *Plaintiff Subdivision* means a Subdivision located in California, other than a CA Litigating Special District, that filed a lawsuit, on behalf of the Subdivision and/or through an official of the Subdivision on behalf of the People of the State of California, against one or more Opioid Defendants prior to October 1, 2020.

j) *Opioid Defendant* means any defendant (including but not limited to Teva Pharmaceutical Industries Ltd., Allergan Finance, LLC, Allergan Limited, CVS Health Corporation, CVS Pharmacy, Inc., Walgreen Co., Walmart Inc., Johnson & Johnson, Janssen Pharmaceuticals, Inc., Purdue Pharma L.P., Cardinal Health, Inc., AmerisourceBergen Corporation, and McKesson Corporation) named in a lawsuit seeking damages, abatement, or other remedies related to or caused by the opioid public health crisis in any lawsuit brought by any state or local government on or before October 1, 2020.

3. General Terms

This agreement is subject to the requirements of the Allergan Settlement Agreement, as well as applicable law, and the Allergan Settlement Agreement governs over any inconsistent provision of this CA Allergan Allocation Agreement. Terms used in this CA Allergan Allocation Agreement have the same meaning as in the Allergan Settlement Agreement unless otherwise defined herein.

Pursuant to Section VIII(E)(1) of the Allergan Settlement Agreement, (a) all Settlement Fund payments will be used for Opioid Remediation, except as allowed by Section VIII(C) of the Allergan Settlement Agreement; and (b) at least seventy percent (70%) of Settlement Fund payment amounts will be used solely for future Opioid Remediation.

4. State Allocation

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

The Settlement Fund payments to California,[3] pursuant to the Allergan Settlement Agreement, shall be allocated as follows: 15% to the State Fund; 70% to the Abatement Accounts Fund; and 15% to the Subdivision Fund. For the avoidance of doubt, all funds allocated to California from the Settlement Fund shall be combined pursuant to this CA Allergan Allocation Agreement, and 15% of that total shall be allocated to the State of California (the "State of California Allocation"), 70% to the California Abatement Accounts Fund ("CA Abatement Accounts Fund"), and 15% to the California Subdivision Fund ("CA Subdivision Fund").

A. State of California Allocation

Fifteen percent of the total Settlement Fund payments will be allocated to the State and used by the State for future Opioid Remediation.

B. CA Abatement Accounts Fund

i. Allocation of CA Abatement Accounts Funds

a) Seventy percent of the total Settlement Fund payments will be allocated to the CA Abatement Accounts Fund. The funds in the CA Abatement Accounts Fund will be allocated based on the allocation model developed in connection with the proposed negotiating class in the National Prescription Opiate Litigation (MDL No. 2804), as adjusted to reflect only those cities and counties that are eligible, based on population or litigation status, to become a CA Participating Subdivision. The percentage from the CA Abatement Accounts Fund allocated to each CA Participating Subdivision is set forth in Appendix 1 in the column entitled abatement percentage (the "Local Allocation"). For the avoidance of doubt, CA Litigating Special Districts and California towns, cities, and counties with a population less than 10,000 are not eligible to receive an allocation of CA Abatement Accounts Funds.

b) A CA Participating Subdivision that is a county, or a city and county, will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision, and will receive payments as provided in the Allergan Settlement Agreement.

c) A CA Participating Subdivision that is a city will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision. The Local Allocation share for a city that is a CA Participating Subdivision will be paid to the county in which the city is located, rather than to the city, so long as: (a) the county is a CA Participating Subdivision, and (b) the city has not advised the Settlement Fund Administrator that it requests direct payment at least 60 days prior to a Payment Date. A Local Allocation share allocated to a city but paid to a county is not required to be spent exclusively for abatement activities in that city, but will become part of the county's share of the CA Abatement Accounts Funds, which will be used in accordance with Section 4.B.ii (Use of

[3] For purposes of clarity, use of the term "California" refers to the geographic territory of California and the state and its local governments therein. The term "State" or "State of California" refers to the State of California as a governmental unit.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

CA Abatement Accounts Funds) and reported on in accordance with Section 4.B.iii (CA Abatement Accounts Fund Oversight).

d) A city within a county that is a CA Participating Subdivision may opt in or out of direct payment at any time, and it may also elect direct payment of only a portion of its share, with the remainder going to the county, by providing notice to the Settlement Fund Administrator at least 60 days prior to a Payment Date. For purposes of this CA Allergan Allocation Agreement, the Cities of Los Angeles, Oakland, San Diego, San Jose and Eureka will be deemed to have elected direct payment if they become Participating Subdivisions.

e) The State will receive the Local Allocation share of any payment to the Settlement Fund that is attributable to a county or city that is eligible to become a CA Participating Subdivision, but that has not, as of the date of that payment to the Settlement Fund, become a Participating Subdivision.

f) Funds received by a CA Participating Subdivision, and not expended or encumbered within five years of receipt and in accordance with the Allergan Settlement Agreement and this CA Allergan Allocation Agreement shall be transferred to the State; provided however, that CA Participating Subdivisions have seven years to expend or encumber CA Abatement Accounts Funds designated to support capital outlay projects before they must be transferred to the State. This provision shall not apply to the Cost Reimbursement Funds, which shall be controlled by Appendix 2.

ii. Use of CA Abatement Accounts Funds

a) The CA Abatement Accounts Funds will be used for future Opioid Remediation in one or more of the areas described in the List of Opioid Remediation Uses, which is Exhibit E to the Allergan Settlement Agreement.

b) In addition to this requirement, no less than 50% of the funds received by a CA Participating Subdivision from the Abatement Accounts Fund in each calendar year will be used for one or more of the following High Impact Abatement Activities:

(1) the provision of matching funds or operating costs for substance use disorder facilities within the Behavioral Health Continuum Infrastructure Program;

(2) creating new or expanded Substance Use Disorder ("SUD") treatment infrastructure;

(3) addressing the needs of communities of color and vulnerable populations (including sheltered and unsheltered homeless populations) that are disproportionately impacted by SUD;

(4) diversion of people with SUD from the justice system into treatment, including by providing training and resources to first and early responders (sworn and non-sworn) and implementing best practices for outreach, diversion and deflection, employability, restorative justice, and harm reduction; and/or

(5) interventions to prevent drug addiction in vulnerable youth.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

c) The California Department of Health Care Services ("DHCS") may add to this list (but not delete from it) by designating additional High Impact Abatement Activities. DHCS will make reasonable efforts to consult with stakeholders, including the CA Participating Subdivisions, before adding additional High Impact Abatement Activities to this list.

d) For the avoidance of doubt, and subject to the requirements of the Allergan Settlement Agreement and applicable law, CA Participating Subdivisions may form agreements or ventures, or otherwise work in collaboration with, federal, state, local, tribal or private sector entities in pursuing Opioid Remediation activities funded from the CA Abatement Accounts Fund. Further, provided that all CA Abatement Accounts Funds are used for Opioid Remediation consistent with the Allergan Settlement Agreement and this CA Allergan Allocation Agreement, a county and any cities or towns within the county may agree to reallocate their respective shares of the CA Abatement Accounts Funds among themselves, provided that any direct distribution may only be to a CA Participating Subdivision and any CA Participating Subdivision must agree to their share being reallocated.

iii. CA Abatement Accounts Fund Oversight

a) Pursuant to Section 5 below, CA Participating Subdivisions receiving settlement funds must prepare and file reports annually regarding the use of those funds. DHCS may regularly review the reports prepared by CA Participating Subdivisions about the use of CA Abatement Accounts Funds for compliance with the Allergan Settlement Agreement and this CA Allergan Allocation Agreement.

b) If DHCS determines that a CA Participating Subdivision's use of CA Abatement Accounts Funds is inconsistent with the Allergan Settlement Agreement or this CA Allergan Allocation Agreement, whether through review of reports or information from any other sources, DHCS shall send a request to meet and confer with the CA Participating Subdivision. The parties shall meet and confer in an effort to resolve the concern.

c) If the parties are unable to reach a resolution, DHCS may conduct an audit of the Subdivision's use of the CA Abatement Accounts Funds within one year of the request to meet and confer, unless the parties mutually agree in writing to extend the meet and confer time frame.

d) If the concern still cannot be resolved, the State may bring a motion or action in the court where the State has filed its Consent Judgment to resolve the concern or otherwise

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

enforce the requirements of the Allergan Settlement Agreement or this CA Allergan Allocation Agreement. However, in no case shall any audit be conducted, or motion be brought, as to a specific expenditure of funds, more than five years after the date on which the expenditure of the funds was reported to DHCS, in accordance with this agreement.

e) Notwithstanding the foregoing, this Agreement does not limit the statutory or constitutional authority of any state or local agency or official to conduct audits, investigations, or other oversight activities, or to pursue administrative, civil, or criminal enforcement actions.

C. CA Subdivision Fund

i. Fifteen percent of the total Settlement Fund payments will be allocated to the CA Subdivision Fund. All funds in the CA Subdivision Fund will be allocated among the Plaintiff Subdivisions that are Initial Participating Subdivisions. The funds will be used, subject to any limits imposed by the Allergan Settlement Agreement and this CA Allergan Allocation Agreement, to fund future Opioid Remediation and reimburse past opioid-related expenses, which may include fees and expenses related to litigation, and to pay the reasonable fees and expenses of the Special Master as set forth in Appendix 2.

The CA Subdivision Funds will be allocated as follows:

a) First, funds in the CA Subdivision Fund shall be used to pay the Special Master's reasonable fees and expenses in accordance with the procedures and limitations set forth in Appendix 2 to this document;

b) Second, funds will be allocated to Plaintiff Subdivisions that are Initial Participating Subdivisions that have been awarded Costs, as defined by and in accordance with the procedures and limitations set forth in Appendix 2 to this document.

c) Funds remaining in the CA Subdivision Fund, which shall consist of no less than 50% of the total CA Subdivision Fund received in any year pursuant to Appendix 2, Section 2.c.v, will be distributed to Plaintiff Subdivisions that are Initial Participating Subdivisions, in relative proportion to the Local Allocation. These funds shall be used to fund future opioid-related projects and to reimburse past opioid-related expenses, which may include fees and expenses related to litigation against any Opioid Defendant.

D. Provision for State Back-Stop Agreement

On August 6, 2021, Judge Dan Polster of the U.S. District Court, Northern District of Ohio, Eastern Division, issued an order (ECF Docket Number 3814) ("MDL Fees Order") in the National Prescription Opiate Litigation (MDL No. 2804) "cap[ping] all applicable contingent fee agreements at 15%." Private counsel representing Plaintiff Subdivisions should seek its

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

contingency fees and costs from the Attorney Fee Fund or Cost Funds under the Teva Settlement Agreement and Allergan Settlement Agreement, and, if applicable, the CVS Settlement Agreement, Distributor Settlement Agreement, Janssen Settlement Agreement, Walgreens Settlement Agreement, and Walmart Settlement Agreement.

A Plaintiff Subdivision may separately agree to use its share of the CA Subdivision Fund to pay for fees or costs incurred by its contingency-fee counsel ("State Back-Stop Agreement"), pursuant to Exhibit R, section I(X), of the Allergan Settlement Agreement and the MDL Fees Order, so long as such contingency fees do not exceed a total contingency fee of 15% of the total gross recovery of the Plaintiff Subdivision pursuant to the Allergan Settlement, inclusive of contingency fees from the national Attorney Fee Fund and this State Back-Stop Agreement. Before seeking fees or litigation costs and expenses from a State Back-Stop Agreement, private counsel representing Plaintiff Subdivisions must first seek contingency fees and costs from the Attorney Fee Fund or Cost Funds created under the Allergan Settlement Agreement. Further, private counsel may only seek reimbursement for litigation fees and costs that have not previously been reimbursed through prior settlements or judgments.

To effectuate a State Back-Stop Agreement pursuant to this section, an agreement in the form of Appendix 3 may be entered into by a Plaintiff Subdivision, private counsel, and the California Office of the Attorney General. The California Office of the Attorney General shall, upon the request of a Plaintiff Subdivision, execute any agreement executed by a Plaintiff Subdivision and its private counsel if it is in the form of Appendix 3. The California Office of the Attorney General will also consider requests from Plaintiff Subdivisions to execute and enter into agreements presented in other forms.

For the avoidance of doubt, this agreement does not require a Plaintiff Subdivision to request or enter into a State Back-Stop Agreement, and no State Back-Stop Agreement shall impose any duty or obligation on the State of California or any of its agencies or officers, including without limitation the Attorney General.

5. State and Subdivision Reporting

a) DHCS will prepare an annual written report regarding the State's use of funds from the settlement until those funds are fully expended and for one year thereafter. These reports will be made publicly available on the DHCS web site.

b) Each CA Participating Subdivision that receives payments of funds from the settlement will prepare written reports at least annually regarding the use of those funds, until those funds are fully expended and for one year thereafter. These reports will also include a certification that all funds that the CA Participating Subdivision has received through the settlement have been used in compliance with the Allergan Settlement Agreement and this CA Allergan Allocation Agreement. The report will be in a form reasonably determined by DHCS. Prior to specifying the form of the report DHCS will confer with representatives of the Plaintiff Subdivisions.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

c) The State and all CA Participating Subdivisions receiving CA Abatement Accounts Funds will track all deposits and expenditures. Each such subdivision is responsible solely for the CA Abatement Accounts Funds it receives. A county is not responsible for oversight, reporting, or monitoring of CA Abatement Accounts Funds received by a city within that county that receives direct payment. Unless otherwise exempt, Subdivisions' expenditures and uses of CA Abatement Accounts Funds and other Settlement Funds will be subject to the normal budgetary and expenditure process of the Subdivision.

d) Each Plaintiff Subdivision receiving CA Subdivision Funds will track all deposits and expenditures, as required by the Allergan Settlement Agreement and this CA Allergan Allocation Agreement. Among other things, Plaintiff Subdivisions using monies from the CA Subdivision Fund for purposes that do not qualify as Opioid Remediation must identify and include in their annual report, the amount and how such funds were used, including if used to pay attorneys' fees, investigation costs, or litigation costs. Pursuant to Section VIII(C) of the Allergan Settlement Agreement, such information must also be reported to the Settlement Fund Administrator and Allergan.

e) In each year in which DHCS prepares an annual report DHCS will also host a meeting to discuss the annual report and the Opioid Remediation activities being carried out by the State and Participating Subdivisions.

6. Miscellaneous

a) The State or any CA Participating Subdivision may bring a motion or action in the court where the State has filed its Consent Judgment to enforce the requirements of this CA Allergan Allocation Agreement. Before filing such a motion or action the State will meet and confer with any CA Participating Subdivision that is the subject of the anticipated motion or action, and vice versa.

b) Except as provided in the Allergan Settlement Agreement, this CA Allergan Allocation Agreement is not enforceable by any party other than the State and the CA Participating Subdivisions. It does not confer any rights or remedies upon, and shall not be enforceable by, any third party.

c) Except as provided in the CA Allergan Allocation Agreement, if any provision of this agreement or the application thereof to any person, entity, or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement, or the application of such provision to persons, entities, or circumstances other than those as to which it is invalid or unenforceable, will not be affected thereby, and each other provision of this agreement will be valid and enforceable to the fullest extent permitted by law.

d) Except as provided in the Allergan Settlement Agreement, this agreement shall be governed by and interpreted in accordance with the laws of California.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

The undersigned, Ontario city, ACKNOWLEDGES acceptance of this Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – Allergan Settlement is a requirement to be an Initial Participating Subdivision in the Allergan Settlement and ACCEPTS this Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – Allergan Settlement. EXECUTED on 2/28/2023 .

Signature: DocuSigned by: Scott Ochoa 943ADB3C46DD448...

Name: Scott Ochoa

Title: City Manager

Date: 2/28/2023

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

DISCLAIMER: The allocation percentages herein are estimates only and should not be relied on for decisions regarding legal rights, releases, waivers, or other decisions affecting current or potential legal claims. Percentages shown in the Plaintiff Subdivision Percentage column may change pursuant to Section 4.C. of the California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds—Allergan Settlement, whereas the percentages shown in the Abatement Percentage column should not change. Participating Subdivisions, underlying calculations, and the calculated allocation percentages are subject to change. Regarding the column herein entitled "Abatement Percentage," pursuant to Section 4.B.e., the State of California will receive the Local Allocation share of any payment to the Settlement Fund that is attributable to a county or city that is eligible to become a CA Participating Subdivision, but that has not, as of the date of that payment to the Settlement Fund, become a Participating Subdivision. Regarding the column herein entitled "Plaintiff Subdivision Percentage," payments allocated to a Plaintiff Subdivision, which is not an Initial Participating Subdivision, will be re-allocated among the Plaintiff Subdivisions that are Initial Participating Subdivisions. Regarding the column herein entitled "Abatement Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the California Abatement Account Funds received, pursuant to Section 4.B. Regarding the column herein entitled "Plaintiff Subdivision Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the California Subdivision Funds received, pursuant to Section 4.C. Regarding the column herein entitled "Weighted Allocation Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the combined and weighted allocation of the Abatement Percentage and the Plaintiff Subdivision Percentage.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

			100.000%	100.000%	100.000%
Participating Subdivision Classification	**Participating Subdivision**	**County**	**Abatement Percentage**	**Plaintiff Subdivision Percentage**	**Weighted Allcation Percentage**
County	***Alameda County***	Alameda	2.332%	2.853%	**2.4237952%**
City	Alameda	Alameda	0.069%		**0.0570162%**
City	Albany	Alameda	0.013%		**0.0107768%**
City	Berkeley	Alameda	0.152%		**0.1249656%**
City	Dublin	Alameda	0.033%	0.040%	**0.0338810%**
City	Emeryville	Alameda	0.023%		**0.0185765%**
City	Fremont	Alameda	0.108%		**0.0888576%**
City	Hayward	Alameda	0.117%		**0.0966218%**
City	Livermore	Alameda	0.054%		**0.0446740%**
City	Newark	Alameda	0.026%		**0.0217626%**
City	Oakland	Alameda	0.486%	0.595%	**0.5055601%**
City	Piedmont	Alameda	0.014%		**0.0114064%**
City	Pleasanton	Alameda	0.067%		**0.0554547%**
City	San Leandro	Alameda	0.039%		**0.0321267%**
City	Union City	Alameda	0.043%		**0.0352484%**
County	***Amador County***	Amador	0.226%	0.277%	**0.2349885%**
County	***Butte County***	Butte	1.615%	1.975%	**1.6783178%**
City	Chico	Butte	0.216%	0.264%	**0.2246499%**
City	Oroville	Butte	0.079%		**0.0646595%**
County	***Calaveras County***	Calaveras	0.226%	0.277%	**0.2351644%**
County	***Colusa County***	Colusa	0.059%		**0.0489221%**
County	***Contra Costa County***	Contra Costa	2.102%	2.571%	**2.1844585%**
City	Antioch	Contra Costa	0.037%		**0.0301879%**
City	Brentwood	Contra Costa	0.026%		**0.0215339%**
City	Clayton	Contra Costa	0.002%		**0.0018060%**
City	Concord	Contra Costa	0.055%		**0.0456676%**
City	Danville	Contra Costa	0.010%		**0.0082255%**
City	El Cerrito	Contra Costa	0.023%		**0.0189024%**
City	Hercules	Contra Costa	0.010%		**0.0078273%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Lafayette	Contra Costa	0.006%		**0.0046030%**
City	Martinez	Contra Costa	0.012%		**0.0098593%**
City	Moraga	Contra Costa	0.004%		**0.0031007%**
City	Oakley	Contra Costa	0.010%		**0.0079416%**
City	Orinda	Contra Costa	0.005%		**0.0038157%**
City	Pinole	Contra Costa	0.013%		**0.0110909%**
City	Pittsburg	Contra Costa	0.053%		**0.0436369%**
City	Pleasant Hill	Contra Costa	0.013%		**0.0106309%**
City	Richmond	Contra Costa	0.146%		**0.1201444%**
City	San Pablo	Contra Costa	0.018%		**0.0148843%**
City	San Ramon	Contra Costa	0.021%		**0.0176459%**
City	Walnut Creek	Contra Costa	0.026%		**0.0212132%**
County	***Del Norte County***	Del Norte	0.114%	0.140%	**0.1189608%**
County	***El Dorado County***	El Dorado	0.768%	0.939%	**0.7980034%**
City	Placerville	El Dorado	0.015%		**0.0127642%**
City	South Lake Tahoe	El Dorado	0.081%		**0.0665456%**
County	***Fresno County***	Fresno	1.895%	2.318%	**1.9693410%**
City	Clovis	Fresno	0.065%		**0.0536211%**
City	Coalinga	Fresno	0.012%		**0.0098554%**
City	Fresno	Fresno	0.397%		**0.3270605%**
City	Kerman	Fresno	0.005%		**0.0042534%**
City	Kingsburg	Fresno	0.008%		**0.0066167%**
City	Mendota	Fresno	0.002%		**0.0019387%**
City	Orange Cove	Fresno	0.004%		**0.0035607%**
City	Parlier	Fresno	0.008%		**0.0069755%**
City	Reedley	Fresno	0.012%		**0.0098804%**
City	Sanger	Fresno	0.018%		**0.0146135%**
City	Selma	Fresno	0.015%		**0.0127537%**
County	***Glenn County***	Glenn	0.107%	0.131%	**0.1116978%**
County	***Humboldt County***	Humboldt	1.030%	1.260%	**1.0703185%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Arcata	Humboldt	0.054%		**0.0447660%**
City	Eureka	Humboldt	0.117%	0.143%	**0.1216284%**
City	Fortuna	Humboldt	0.032%		**0.0266837%**
County	***Imperial County***	Imperial	0.258%	0.315%	**0.2679006%**
City	Brawley	Imperial	0.011%		**0.0087986%**
City	Calexico	Imperial	0.019%		**0.0152799%**
City	El Centro	Imperial	0.158%		**0.1302522%**
City	Imperial	Imperial	0.006%		**0.0048791%**
County	***Inyo County***	Inyo	0.073%	0.089%	**0.0754413%**
County	***Kern County***	Kern	2.517%	3.079%	**2.6159145%**
City	Arvin	Kern	0.006%		**0.0046425%**
City	Bakersfield	Kern	0.212%		**0.1747198%**
City	California City	Kern	0.009%		**0.0070820%**
City	Delano	Kern	0.030%		**0.0249316%**
City	McFarland	Kern	0.003%		**0.0025644%**
City	Ridgecrest	Kern	0.015%		**0.0120938%**
City	Shafter	Kern	0.013%		**0.0103417%**
City	Tehachapi	Kern	0.009%		**0.0073580%**
City	Wasco	Kern	0.008%		**0.0069861%**
County	***Kings County***	Kings	0.293%		**0.2413469%**
City	Avenal	Kings	0.007%		**0.0056335%**
City	Corcoran	Kings	0.013%		**0.0107032%**
City	Hanford	Kings	0.027%		**0.0226038%**
City	Lemoore	Kings	0.016%		**0.0131900%**
County	***Lake County***	Lake	0.795%		**0.6545389%**
City	Clearlake	Lake	0.041%	0.050%	**0.0426253%**
City	Lakeport	Lake	0.021%	0.026%	**0.0222964%**
County	***Lassen County***	Lassen	0.319%	0.391%	**0.3320610%**
City	Susanville	Lassen	0.027%		**0.0219295%**
County	***Los Angeles County***	Los Angeles	13.896%	16.999%	**14.4437559%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Agoura Hills	Los Angeles	0.005%		**0.0040024%**
City	Alhambra	Los Angeles	0.042%		**0.0343309%**
City	Arcadia	Los Angeles	0.033%		**0.0267718%**
City	Artesia	Los Angeles	0.001%		**0.0005100%**
City	Azusa	Los Angeles	0.026%		**0.0210857%**
City	Baldwin Park	Los Angeles	0.027%		**0.0218520%**
City	Bell	Los Angeles	0.008%		**0.0068783%**
City	Bellflower	Los Angeles	0.002%		**0.0014485%**
City	Bell Gardens	Los Angeles	0.014%		**0.0114301%**
City	Beverly Hills	Los Angeles	0.065%		**0.0534897%**
City	Burbank	Los Angeles	0.100%		**0.0823132%**
City	Calabasas	Los Angeles	0.006%		**0.0048948%**
City	Carson	Los Angeles	0.019%		**0.0159805%**
City	Cerritos	Los Angeles	0.005%		**0.0039682%**
City	Claremont	Los Angeles	0.010%		**0.0082584%**
City	Commerce	Los Angeles	0.000%		**0.0002971%**
City	Compton	Los Angeles	0.044%		**0.0361882%**
City	Covina	Los Angeles	0.028%		**0.0229127%**
City	Cudahy	Los Angeles	0.001%		**0.0006020%**
City	Culver City	Los Angeles	0.055%		**0.0449894%**
City	Diamond Bar	Los Angeles	0.001%		**0.0006993%**
City	Downey	Los Angeles	0.052%		**0.0429994%**
City	Duarte	Los Angeles	0.003%		**0.0027261%**
City	El Monte	Los Angeles	0.031%	0.038%	**0.0318985%**
City	El Segundo	Los Angeles	0.033%		**0.0268020%**
City	Gardena	Los Angeles	0.034%		**0.0278088%**
City	Glendale	Los Angeles	0.166%		**0.1366586%**
City	Glendora	Los Angeles	0.016%		**0.0134411%**
City	Hawaiian Gardens	Los Angeles	0.005%		**0.0040549%**
City	Hawthorne	Los Angeles	0.050%		**0.0407833%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Hermosa Beach	Los Angeles	0.018%		**0.0145307%**
City	Huntington Park	Los Angeles	0.023%		**0.0190667%**
City	Inglewood	Los Angeles	0.059%		**0.0489195%**
City	La Cañada Flintridge	Los Angeles	0.003%		**0.0025565%**
City	Lakewood	Los Angeles	0.005%		**0.0039971%**
City	La Mirada	Los Angeles	0.010%		**0.0081572%**
City	Lancaster	Los Angeles	0.045%		**0.0369689%**
City	La Puente	Los Angeles	0.002%		**0.0012999%**
City	La Verne	Los Angeles	0.024%		**0.0194190%**
City	Lawndale	Los Angeles	0.002%		**0.0017731%**
City	Lomita	Los Angeles	0.004%		**0.0031940%**
City	Long Beach	Los Angeles	0.439%		**0.3614151%**
City	Los Angeles	Los Angeles	2.715%	3.321%	**2.8218811%**
City	Lynwood	Los Angeles	0.016%		**0.0134345%**
City	Malibu	Los Angeles	0.002%		**0.0019269%**
City	Manhattan Beach	Los Angeles	0.032%		**0.0260686%**
City	Maywood	Los Angeles	0.004%		**0.0035528%**
City	Monrovia	Los Angeles	0.031%		**0.0254455%**
City	Montebello	Los Angeles	0.030%		**0.0250670%**
City	Monterey Park	Los Angeles	0.031%		**0.0256677%**
City	Norwalk	Los Angeles	0.031%		**0.0258228%**
City	Palmdale	Los Angeles	0.046%		**0.0375827%**
City	Palos Verdes Estates	Los Angeles	0.006%		**0.0053102%**
City	Paramount	Los Angeles	0.011%		**0.0091483%**
City	Pasadena	Los Angeles	0.146%		**0.1200524%**
City	Pico Rivera	Los Angeles	0.022%		**0.0183333%**
City	Pomona	Los Angeles	0.111%		**0.0911933%**
City	Rancho Palos Verdes	Los Angeles	0.002%		**0.0012645%**
City	Redondo Beach	Los Angeles	0.062%		**0.0506992%**
City	Rosemead	Los Angeles	0.003%		**0.0028260%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	San Dimas	Los Angeles	0.003%		**0.0022016%**
City	San Fernando	Los Angeles	0.013%		**0.0104837%**
City	San Gabriel	Los Angeles	0.018%		**0.0147726%**
City	San Marino	Los Angeles	0.009%		**0.0073791%**
City	Santa Clarita	Los Angeles	0.022%		**0.0178167%**
City	Santa Fe Springs	Los Angeles	0.031%		**0.0257531%**
City	Santa Monica	Los Angeles	0.158%		**0.1298513%**
City	Sierra Madre	Los Angeles	0.006%		**0.0048646%**
City	Signal Hill	Los Angeles	0.010%		**0.0084884%**
City	South El Monte	Los Angeles	0.005%		**0.0039603%**
City	South Gate	Los Angeles	0.020%		**0.0166272%**
City	South Pasadena	Los Angeles	0.012%		**0.0095334%**
City	Temple City	Los Angeles	0.005%		**0.0039498%**
City	Torrance	Los Angeles	0.112%		**0.0919820%**
City	Walnut	Los Angeles	0.006%		**0.0047305%**
City	West Covina	Los Angeles	0.049%		**0.0404521%**
City	West Hollywood	Los Angeles	0.013%		**0.0108517%**
City	Whittier	Los Angeles	0.032%		**0.0260581%**
County	***Madera County***	Madera	0.349%	0.427%	**0.3630669%**
City	Chowchilla	Madera	0.012%		**0.0097332%**
City	Madera	Madera	0.039%		**0.0318441%**
County	***Marin County***	Marin	0.564%	0.690%	**0.5861325%**
City	Larkspur	Marin	0.015%		**0.0124697%**
City	Mill Valley	Marin	0.020%		**0.0168401%**
City	Novato	Marin	0.028%		**0.0229824%**
City	San Anselmo	Marin	0.009%		**0.0078062%**
City	San Rafael	Marin	0.089%		**0.0729823%**
County	***Mariposa County***	Mariposa	0.084%	0.103%	**0.0876131%**
County	***Mendocino County***	Mendocino	0.439%	0.536%	**0.4558394%**
City	Ukiah	Mendocino	0.039%		**0.0317153%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
County	***Merced County***	Merced	0.551%	0.674%	**0.5724262%**
City	Atwater	Merced	0.024%		**0.0195846%**
City	Livingston	Merced	0.006%		**0.0045873%**
City	Los Banos	Merced	0.020%		**0.0165142%**
City	Merced	Merced	0.061%		**0.0500762%**
County	***Modoc County***	Modoc	0.065%	0.080%	**0.0678250%**
County	***Mono County***	Mono	0.023%	0.029%	**0.0242606%**
County	***Monterey County***	Monterey	0.908%	1.111%	**0.9437083%**
City	Greenfield	Monterey	0.006%		**0.0050552%**
City	King City	Monterey	0.005%		**0.0037355%**
City	Marina	Monterey	0.017%		**0.0144098%**
City	Monterey	Monterey	0.041%		**0.0336540%**
City	Pacific Grove	Monterey	0.009%		**0.0074842%**
City	Salinas	Monterey	0.094%		**0.0776576%**
City	Seaside	Monterey	0.023%		**0.0191772%**
City	Soledad	Monterey	0.007%		**0.0060870%**
County	***Napa County***	Napa	0.288%	0.352%	**0.2994325%**
City	American Canyon	Napa	0.017%		**0.0136869%**
City	Napa	Napa	0.078%		**0.0642783%**
County	***Nevada County***	Nevada	0.441%	0.539%	**0.4579827%**
City	Grass Valley	Nevada	0.024%		**0.0197805%**
City	Truckee	Nevada	0.003%		**0.0023843%**
County	***Orange County***	Orange	4.364%	5.339%	**4.5363576%**
City	Aliso Viejo	Orange	0.014%		**0.0113841%**
City	Anaheim	Orange	0.554%	0.678%	**0.5759282%**
City	Brea	Orange	0.086%		**0.0708897%**
City	Buena Park	Orange	0.087%		**0.0714352%**
City	Costa Mesa	Orange	0.124%	0.152%	**0.1288366%**
City	Cypress	Orange	0.033%		**0.0271937%**
City	Dana Point	Orange	0.001%		**0.0005560%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Fountain Valley	Orange	0.055%		**0.0455980%**
City	Fullerton	Orange	0.137%	0.168%	**0.1425744%**
City	Garden Grove	Orange	0.213%		**0.1752482%**
City	Huntington Beach	Orange	0.247%	0.302%	**0.2568420%**
City	Irvine	Orange	0.139%	0.170%	**0.1442350%**
City	Laguna Beach	Orange	0.047%	0.058%	**0.0493043%**
City	Laguna Hills	Orange	0.014%		**0.0115457%**
City	Laguna Niguel	Orange	0.001%		**0.0007071%**
City	Laguna Woods	Orange	0.001%		**0.0006546%**
City	La Habra	Orange	0.060%	0.073%	**0.0621049%**
City	Lake Forest	Orange	0.012%		**0.0101249%**
City	La Palma	Orange	0.012%		**0.0095439%**
City	Los Alamitos	Orange	0.008%		**0.0069190%**
City	Mission Viejo	Orange	0.014%		**0.0117560%**
City	Newport Beach	Orange	0.179%		**0.1470134%**
City	Orange	Orange	0.150%		**0.1231320%**
City	Placentia	Orange	0.029%	0.035%	**0.0298912%**
City	Rancho Santa Margarita	Orange	0.001%		**0.0006296%**
City	San Clemente	Orange	0.008%	0.010%	**0.0086083%**
City	San Juan Capistrano	Orange	0.008%		**0.0065510%**
City	Santa Ana	Orange	0.502%	0.614%	**0.5213866%**
City	Seal Beach	Orange	0.020%		**0.0165891%**
City	Stanton	Orange	0.035%		**0.0291955%**
City	Tustin	Orange	0.073%		**0.0600341%**
City	Westminster	Orange	0.104%	0.127%	**0.1082721%**
City	Yorba Linda	Orange	0.044%		**0.0362223%**
County	***Placer County***	Placer	1.045%	1.278%	**1.0861002%**
City	Auburn	Placer	0.017%		**0.0141114%**
City	Lincoln	Placer	0.031%		**0.0255599%**
City	Rocklin	Placer	0.076%		**0.0625485%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Roseville	Placer	0.196%		**0.1616559%**
County	***Plumas County***	Plumas	0.205%	0.251%	**0.2128729%**
County	***Riverside County***	Riverside	4.534%	5.547%	**4.7128296%**
City	Banning	Riverside	0.017%		**0.0143848%**
City	Beaumont	Riverside	0.021%		**0.0171135%**
City	Blythe	Riverside	0.012%		**0.0096714%**
City	Canyon Lake	Riverside	0.000%		**0.0001761%**
City	Cathedral City	Riverside	0.067%		**0.0553614%**
City	Coachella	Riverside	0.021%		**0.0173054%**
City	Corona	Riverside	0.147%		**0.1207083%**
City	Desert Hot Springs	Riverside	0.024%		**0.0200433%**
City	Eastvale	Riverside	0.000%		**0.0002747%**
City	Hemet	Riverside	0.051%		**0.0421792%**
City	Indio	Riverside	0.056%		**0.0457794%**
City	Jurupa Valley	Riverside	0.001%		**0.0008991%**
City	Lake Elsinore	Riverside	0.021%		**0.0172949%**
City	La Quinta	Riverside	0.063%		**0.0516732%**
City	Menifee	Riverside	0.032%		**0.0260909%**
City	Moreno Valley	Riverside	0.137%		**0.1130348%**
City	Murrieta	Riverside	0.048%	0.059%	**0.0497423%**
City	Norco	Riverside	0.016%		**0.0134542%**
City	Palm Desert	Riverside	0.083%		**0.0682465%**
City	Palm Springs	Riverside	0.076%		**0.0629862%**
City	Perris	Riverside	0.009%		**0.0076774%**
City	Rancho Mirage	Riverside	0.052%		**0.0431098%**
City	Riverside	Riverside	0.268%		**0.2206279%**
City	San Jacinto	Riverside	0.010%		**0.0085936%**
City	Temecula	Riverside	0.022%		**0.0180086%**
City	Wildomar	Riverside	0.008%		**0.0062500%**
County	***Sacramento County***	Sacramento	3.797%	4.645%	**3.9465887%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Citrus Heights	Sacramento	0.057%		**0.0465312%**
City	Elk Grove	Sacramento	0.130%		**0.1066994%**
City	Folsom	Sacramento	0.108%		**0.0890850%**
City	Galt	Sacramento	0.017%		**0.0143704%**
City	Rancho Cordova	Sacramento	0.008%		**0.0067679%**
City	Sacramento	Sacramento	0.721%	0.882%	**0.7496530%**
County	***San Benito County***	San Benito	0.106%	0.130%	**0.1101417%**
City	Hollister	San Benito	0.027%		**0.0225355%**
County	***San Bernardino County***	San Bernardino	3.259%	3.987%	**3.3878124%**
City	Adelanto	San Bernardino	0.008%		**0.0066640%**
City	Apple Valley	San Bernardino	0.025%		**0.0207360%**
City	Barstow	San Bernardino	0.015%		**0.0122056%**
City	Chino	San Bernardino	0.064%		**0.0525893%**
City	Chino Hills	San Bernardino	0.001%		**0.0006388%**
City	Colton	San Bernardino	0.031%		**0.0253443%**
City	Fontana	San Bernardino	0.112%		**0.0920543%**
City	Grand Terrace	San Bernardino	0.006%		**0.0051051%**
City	Hesperia	San Bernardino	0.035%		**0.0291522%**
City	Highland	San Bernardino	0.004%		**0.0029061%**
City	Loma Linda	San Bernardino	0.009%		**0.0071188%**
City	Montclair	San Bernardino	0.039%		**0.0322108%**
City	Ontario	San Bernardino	0.179%		**0.1472934%**
City	Rancho Cucamonga	San Bernardino	0.084%		**0.0689431%**
City	Redlands	San Bernardino	0.057%		**0.0469150%**
City	Rialto	San Bernardino	0.073%		**0.0603206%**
City	San Bernardino	San Bernardino	0.178%		**0.1461880%**
City	Twentynine Palms	San Bernardino	0.002%		**0.0012605%**
City	Upland	San Bernardino	0.052%		**0.0424460%**
City	Victorville	San Bernardino	0.033%		**0.0269400%**
City	Yucaipa	San Bernardino	0.016%		**0.0128772%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Yucca Valley	San Bernardino	0.003%		**0.0021228%**
County	***San Diego County***	San Diego	5.706%	6.980%	**5.9309748%**
City	Carlsbad	San Diego	0.128%		**0.1050485%**
City	Chula Vista	San Diego	0.189%	0.231%	**0.1961456%**
City	Coronado	San Diego	0.044%		**0.0359095%**
City	El Cajon	San Diego	0.113%		**0.0933582%**
City	Encinitas	San Diego	0.061%	0.074%	**0.0630289%**
City	Escondido	San Diego	0.145%		**0.1192204%**
City	Imperial Beach	San Diego	0.014%		**0.0118283%**
City	La Mesa	San Diego	0.055%	0.068%	**0.0575593%**
City	Lemon Grove	San Diego	0.022%		**0.0183911%**
City	National City	San Diego	0.080%		**0.0656808%**
City	Oceanside	San Diego	0.213%		**0.1753428%**
City	Poway	San Diego	0.062%		**0.0511040%**
City	San Diego	San Diego	1.975%	2.416%	**2.0531169%**
City	San Marcos	San Diego	0.089%		**0.0733897%**
City	Santee	San Diego	0.033%		**0.0268401%**
City	Solana Beach	San Diego	0.017%		**0.0138564%**
City	Vista	San Diego	0.052%		**0.0425144%**
Consolidated	***San Francisco***	San Francisco	3.026%	3.702%	**3.1457169%**
County	***San Joaquin County***	San Joaquin	1.680%	2.055%	**1.7460399%**
City	Lathrop	San Joaquin	0.009%		**0.0075394%**
City	Lodi	San Joaquin	0.053%		**0.0439484%**
City	Manteca	San Joaquin	0.054%		**0.0443454%**
City	Ripon	San Joaquin	0.013%		**0.0104219%**
City	Stockton	San Joaquin	0.313%	0.383%	**0.3256176%**
City	Tracy	San Joaquin	0.084%		**0.0692047%**
County	***San Luis Obispo County***	San Luis Obispo	0.816%	0.999%	**0.8484126%**
City	Arroyo Grande	San Luis Obispo	0.024%		**0.0199053%**
City	Atascadero	San Luis Obispo	0.029%		**0.0240680%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	El Paso de Robles (Paso Robles)	San Luis Obispo	0.043%		**0.0353456%**
City	Grover Beach	San Luis Obispo	0.017%		**0.0137881%**
City	Morro Bay	San Luis Obispo	0.020%		**0.0160922%**
City	San Luis Obispo	San Luis Obispo	0.077%		**0.0637841%**
County	***San Mateo County***	San Mateo	1.074%	1.313%	**1.1159599%**
City	Belmont	San Mateo	0.021%		**0.0169860%**
City	Burlingame	San Mateo	0.019%		**0.0152537%**
City	Daly City	San Mateo	0.044%		**0.0363880%**
City	East Palo Alto	San Mateo	0.013%		**0.0103982%**
City	Foster City	San Mateo	0.020%		**0.0166101%**
City	Half Moon Bay	San Mateo	0.004%		**0.0031638%**
City	Hillsborough	San Mateo	0.013%		**0.0110029%**
City	Menlo Park	San Mateo	0.015%		**0.0126209%**
City	Millbrae	San Mateo	0.013%		**0.0105836%**
City	Pacifica	San Mateo	0.016%		**0.0130625%**
City	Redwood City	San Mateo	0.056%		**0.0463511%**
City	San Bruno	San Mateo	0.021%		**0.0172161%**
City	San Carlos	San Mateo	0.013%		**0.0108885%**
City	San Mateo	San Mateo	0.052%		**0.0425841%**
City	South San Francisco	San Mateo	0.043%		**0.0353943%**
County	***Santa Barbara County***	Santa Barbara	1.132%	1.385%	**1.1768968%**
City	Carpinteria	Santa Barbara	0.001%		**0.0008938%**
City	Goleta	Santa Barbara	0.004%		**0.0028969%**
City	Lompoc	Santa Barbara	0.047%		**0.0389379%**
City	Santa Barbara	Santa Barbara	0.122%		**0.1004559%**
City	Santa Maria	Santa Barbara	0.058%		**0.0479179%**
County	***Santa Clara County***	Santa Clara	2.404%	2.941%	**2.4987553%**
City	Campbell	Santa Clara	0.014%		**0.0112566%**
City	Cupertino	Santa Clara	0.008%		**0.0066824%**
City	Gilroy	Santa Clara	0.025%		**0.0202891%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Los Altos	Santa Clara	0.013%		**0.0103338%**
City	Los Gatos	Santa Clara	0.013%		**0.0103220%**
City	Milpitas	Santa Clara	0.036%		**0.0298120%**
City	Morgan Hill	Santa Clara	0.015%		**0.0124619%**
City	Mountain View	Santa Clara	0.041%		**0.0334608%**
City	Palo Alto	Santa Clara	0.039%		**0.0323080%**
City	San Jose	Santa Clara	0.294%	0.360%	**0.3054960%**
City	Santa Clara	Santa Clara	0.067%		**0.0549723%**
City	Saratoga	Santa Clara	0.004%		**0.0034161%**
City	Sunnyvale	Santa Clara	0.053%		**0.0434069%**
County	***Santa Cruz County***	Santa Cruz	0.783%	0.957%	**0.8135396%**
City	Capitola	Santa Cruz	0.020%		**0.0168191%**
City	Santa Cruz	Santa Cruz	0.143%		**0.1180348%**
City	Scotts Valley	Santa Cruz	0.015%		**0.0126525%**
City	Watsonville	Santa Cruz	0.063%		**0.0520136%**
County	***Shasta County***	Shasta	1.095%	1.339%	**1.1380191%**
City	Anderson	Shasta	0.024%		**0.0198896%**
City	Redding	Shasta	0.284%		**0.2334841%**
City	Shasta Lake	Shasta	0.004%		**0.0031993%**
County	***Siskiyou County***	Siskiyou	0.228%	0.279%	**0.2373393%**
County	***Solano County***	Solano	0.760%		**0.6260795%**
City	Benicia	Solano	0.031%		**0.0253903%**
City	Dixon	Solano	0.016%		**0.0130849%**
City	Fairfield	Solano	0.109%		**0.0897317%**
City	Suisun City	Solano	0.021%		**0.0176183%**
City	Vacaville	Solano	0.119%		**0.0976497%**
City	Vallejo	Solano	0.167%		**0.1373644%**
County	***Sonoma County***	Sonoma	1.218%	1.490%	**1.2661290%**
City	Healdsburg	Sonoma	0.032%		**0.0266929%**
City	Petaluma	Sonoma	0.081%		**0.0667507%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Rohnert Park	Sonoma	0.041%		**0.0340759%**
City	Santa Rosa	Sonoma	0.184%		**0.1519070%**
City	Sonoma	Sonoma	0.022%		**0.0183438%**
City	Windsor	Sonoma	0.016%		**0.0129298%**
County	***Stanislaus County***	Stanislaus	1.722%		**1.4182273%**
City	Ceres	Stanislaus	0.041%		**0.0340260%**
City	Modesto	Stanislaus	0.217%		**0.1788759%**
City	Newman	Stanislaus	0.006%		**0.0046964%**
City	Oakdale	Stanislaus	0.018%		**0.0145531%**
City	Patterson	Stanislaus	0.015%		**0.0126590%**
City	Riverbank	Stanislaus	0.010%		**0.0085699%**
City	Turlock	Stanislaus	0.065%		**0.0531966%**
County	***Sutter County***	Sutter	0.306%	0.374%	**0.3179548%**
City	Yuba City	Sutter	0.074%		**0.0606242%**
County	***Tehama County***	Tehama	0.213%	0.261%	**0.2216654%**
City	Red Bluff	Tehama	0.014%		**0.0117771%**
County	***Trinity County***	Trinity	0.082%	0.101%	**0.0855476%**
County	***Tulare County***	Tulare	0.809%	0.990%	**0.8410949%**
City	Dinuba	Tulare	0.014%		**0.0116929%**
City	Exeter	Tulare	0.004%		**0.0032479%**
City	Farmersville	Tulare	0.003%		**0.0027879%**
City	Lindsay	Tulare	0.007%		**0.0057111%**
City	Porterville	Tulare	0.021%		**0.0171845%**
City	Tulare	Tulare	0.037%		**0.0302273%**
City	Visalia	Tulare	0.066%		**0.0545872%**
County	***Tuolumne County***	Tuolumne	0.486%	0.594%	**0.5047621%**
County	***Ventura County***	Ventura	2.192%	2.681%	**2.2781201%**
City	Camarillo	Ventura	0.002%		**0.0012815%**
City	Fillmore	Ventura	0.002%		**0.0020294%**
City	Moorpark	Ventura	0.008%		**0.0067337%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Oxnard	Ventura	0.156%	0.190%	**0.1617338%**
City	Port Hueneme	Ventura	0.021%		**0.0174145%**
City	San Buenaventura (Ventura)	Ventura	0.085%		**0.0702181%**
City	Santa Paula	Ventura	0.014%		**0.0119072%**
City	Simi Valley	Ventura	0.065%		**0.0533043%**
City	Thousand Oaks	Ventura	0.022%		**0.0179902%**
County	***Yolo County***	Yolo	0.357%	0.437%	**0.3713319%**
City	Davis	Yolo	0.055%		**0.0451747%**
City	West Sacramento	Yolo	0.066%		**0.0544321%**
City	Woodland	Yolo	0.058%		**0.0477904%**
County	***Yuba County***	Yuba	0.214%	0.262%	**0.2225679%**
City	Marysville	Yuba	0.014%		**0.0112079%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 2

Cost Reimbursement Procedure

1. Additional defined terms:

a) *Costs* means the reasonable amounts paid for the attorney and other City Attorney and County Counsel staff time for individuals employed by a Plaintiff Subdivision at the contractual rate, inclusive of benefits and overhead, together with amounts paid for court reporters, experts, copying, electronic research, travel, vendors, and the like, which were not previously reimbursed and which were paid or incurred (i) prior to December 31, 2022 in litigation against any Opioid Defendant and/or (ii) in negotiating and drafting any CA Allocation Agreement(s) concerning a settlement with any Opioid Defendant(s). *Costs* does not include attorneys' fees, costs, or expenses incurred by private contingency fee counsel. No part of the CA Abatement Accounts Fund will be used to reimburse Costs.

b) *First Claims Date* means October 1, 2023 or when all applications for reimbursement of Costs, in whole or in part, from funds available under Section XIV and Exhibit R of the Teva Settlement Agreement, Section XIII and Exhibit R of the Allergan Settlement Agreement, Section X and Exhibit R of the Distributor Settlement Agreement, Section XI and Exhibit R of the Janssen Settlement Agreement, Section X and Exhibit R of the CVS Settlement Agreement, Section IX and Exhibit R of the Walgreens Settlement Agreement, or Section IX and Exhibit R of the Walmart Settlement Agreement, have been finally determined under the provisions of those agreements, whichever comes first.

c) *Special Master* means a retired judicial officer or former public lawyer, not presently employed or retained by a Plaintiff Subdivision, who will aggregate, review, and determine the reasonable Costs to be awarded to each Plaintiff Subdivision that submits a claim for reimbursement of Costs. The Special Master will be selected by a majority vote of the votes cast by Plaintiff Subdivisions, with each such subdivision having one vote.

d) *Plaintiff Subdivision Committee* means the committee of Plaintiff Subdivisions that will review and approve the invoices submitted by the Special Master reflecting his or her reasonable time and expenses.

2. Cost Reimbursement to Plaintiff Subdivision

a) Purpose. Substantial resources have been expended to hold Opioid Defendants accountable for creating and profiting from the opioid crisis, and this effort has been a significant catalyst in creating National Opioid Settlements with various manufacturers, distributors, and chain pharmacies.

b) Claims Procedure.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

i. If a Plaintiff Subdivision is eligible to seek reimbursement of Costs, in whole or in part, from funds available under Section XIV and Exhibit R of the Teva Settlement Agreement, Section XIII and Exhibit R of the Allergan Settlement Agreement, Section X and Exhibit R of the CVS Settlement Agreement, Section IX and Exhibit R of the Walgreens Settlement Agreement, Section IX and Exhibit R of the Walmart Settlement Agreement, Section X or Exhibit R of the Distributor Settlement Agreement, or Section XI or Exhibit R of the Janssen Settlement Agreement, it must first make a timely application for reimbursement from such funds. To allow sufficient time for determination of those applications, no claim for Costs to the CA Subdivision Fund under this Agreement may be made before the First Claims Date.

ii. A Plaintiff Subdivision that wishes to be reimbursed from the CA Subdivision Fund must submit a claim to the Special Master no later than forty-five (45) days after the First Claims Date. The Special Master will then compile and redistribute the aggregated claim totals for each Plaintiff Subdivision via email to representatives of all the Plaintiff Subdivisions. A claim for attorney and staff time must list, for each attorney or staff member included in the claim, the following information: name, title, total hours claimed, hourly rate (including, if sought, benefits and share of overhead), and narrative summarizing the general nature of the work performed by the attorney or staff member. For reimbursement of "hard" costs, the subdivision may aggregate across a category (e.g., total for travel costs). It is the intention of the Plaintiff Subdivisions that submission of documents related to reimbursement of Costs does not waive any attorney-client privilege or exemptions to the California Public Records Act.

iii. The Special Master may request, at his or her sole option, additional documents or details to assist in the final award of Costs.

iv. The Special Master will review claims for reasonableness and will notify each Plaintiff Subdivision of the final determination of its claim, and will provide a list of all final awards to all Plaintiff Subdivisions by email or, upon request, via First Class U.S. Mail. Any Plaintiff Subdivision may ask the Special Master to reconsider any final award within twenty-one (21) days. The Special Master will make a final determination on any such reconsideration request within thirty (30) days of receipt.

v. Any decision of the Special Master is final and binding, and will be considered under the California Arbitration Act, Code of Civil Procedure section 1280 et seq. as a final arbitration award. Nothing in this agreement is intended to expand the scope of judicial review of the final award for errors of fact or law, and the Parties agree that they may only seek to vacate the award if clear and convincing evidence demonstrates one of the factors set forth in Code of Civil Procedure, section 1286.2, subdivision (a). Plaintiff Subdivisions will have fourteen (14) days after all final awards are made, together with any final determination of a request for reconsideration, to seek review in the Superior Court of California, pursuant to Code of Civil Procedure, section 1285, where the State has filed its Consent Judgment.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

vi. The Special Master will prepare a report of Costs that includes his or her fees and expenses at least ninety (90) days before the Payment Date for each Annual Payment. The Special Master's preparation of a report of Costs does not discharge a Plaintiff Subdivision's reporting requirement under Section VIII.C of the Allergan Settlement Agreement.

vii. A member of the Plaintiff Subdivision Committee, which is a CA Participating Subdivision, will submit to the Settlement Fund Administrator and Allergan a report of the fees and expenses incurred by the Special Master pursuant to Section VIII.C of the Allergan Settlement Agreement.

c) Claims Priority and Limitation.

i. The Special Master will submit invoices for compensation of reasonable fees and expenses to the Plaintiff Subdivision Committee no later than ninety (90) days prior to the Payment Date for each Annual Payment. The Plaintiff Subdivision Committee will promptly review and, if reasonable, approve the Special Master's invoice for compensation. The Plaintiff Subdivision Committee will submit approved invoices to the Settlement Fund Administrator for payment. The Special Master's approved invoices have priority and will be paid first from the CA Subdivision Fund before any award of Costs, subject to the limitation in Section 2.c.v below.

ii. Final Awards of Costs that do not exceed seventy-five thousand dollars ($75,000.00) will be paid next in priority after the Special Master's approved invoices.

iii. Final Awards of Costs in excess of seventy-five thousand dollars ($75,000.00) will be paid proportionally from the funds remaining in that year's Annual Payment.

iv. Any claim for Costs that is not paid in full will be allocated against the next year's distribution from the CA Subdivision Fund, until all approved claims for Costs are paid in full.

v. In no event will more than 50% of the total CA Subdivision Fund received in any year be used to pay Costs or the Special Master's approved invoices.

vi. In no event shall more than $28 million of the total CA Subdivision Funds paid pursuant to the Teva Settlement Agreement, Allergan Settlement Agreement, Distributor Settlement Agreement, CVS Settlement Agreement, Janssen Settlement Agreement, Walgreens Settlement Agreement, and the Walmart Settlement Agreement be used to pay Costs.

d) Collateral Source Payments and Third-Party Settlement.

i. In the event a Plaintiff Subdivision is awarded compensation, in whole or in part, by any source of funds created as a result of litigation against an Opioid Defendant for its reasonable Costs, it will reduce its claim for Costs from the CA Subdivision Fund by that amount. If a Plaintiff Subdivision has already received a final award of Costs from the CA Subdivision Fund, it will repay the fund up to the prior award

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

of Costs via a payment to the Settlement Fund Administrator or notify the Settlement Fund Administrator that its allocation from the next and subsequent Annual Payments should be reduced accordingly. If the Plaintiff Subdivision is repaying any prior award of Costs, that repayment will occur as soon as is feasible after the Plaintiff Subdivision's receipt of Cost funds from the collateral source, but no more than 90 days after its receipt from the collateral source. The Settlement Fund Administrator will add any repaid Costs to the CA Subdivision Fund. Any Plaintiff Subdivision that has submitted for reimbursement to any national fund and has not received a final determination by the First Claims Date may request that the settlement administrator withhold some or all of its payment from the CA Subdivision Fund in order to avoid repayment.

ii. In the event a Plaintiff Subdivision reaches a monetary settlement or compromise against any Opioid Defendant outside of the National Opioid Settlement, the monetary portion of such settlement, net of fees paid to outside contingency fee counsel and of funds earmarked strictly for abatement, will be credited against its Costs and the subdivision will be ineligible to recover those credited Costs from the CA Subdivision Fund. Plaintiff Subdivisions negotiating monetary settlements or compromises against any Opioid Defendant outside of the National Opioid Settlement will negotiate for funds to repay any Costs it previously received from the CA Subdivision Fund or for Costs it otherwise might be eligible to claim from the CA Subdivision Fund. If such a settlement is paid after all final approved claims for Costs by all Plaintiff Subdivisions are satisfied in full, the settling subdivision will reimburse the CA Subdivision Fund in that amount by making payment to the Settlement Fund Administrator to add to the CA Subdivision Fund in a manner consistent with the repayments described in section 2.d.i above.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 3

CALIFORNIA-SUBDIVISION BACKSTOP AGREEMENT

On August 6, 2021, Judge Polster of the US District Court for the Northern District of Ohio issued an Order (the Order), docket number 3814, in In Re National Prescription Opiate Litigation, MDL 2804, addressing contingent attorney fee contracts between political subdivisions eligible to participate in the Allergan Settlement and their counsel.

In light of the Order, and at the request of [SUBDIVISION], the [SUBDIVISION], its counsel [COUNSEL], and the California Attorney General, on behalf of the State of California, are entering into this California-Subdivision Backstop Agreement (Backstop Agreement).

[SUBDIVISION] and [COUNSEL] intend this Backstop Agreement to constitute a State Back-Stop Agreement as that term is used in the Order and in Exhibit R (Agreement on Attorneys' Fees, Costs, and Expenses) of the Allergan Settlement Agreement.

Pursuant to this Backstop Agreement, [SUBDIVISION] may, subject to the limitations of the Allergan Settlement Agreement and CA Allergan Allocation Agreement, as well as any other limitations imposed by law, use funds that it receives from the Allergan Settlement CA Subdivision Fund to pay a contingent fee to [COUNSEL]. Any such payment from [SUBDIVISION] to [COUNSEL], together with any contingency fees that [COUNSEL] may receive from the national Attorney Fee Fund, will not exceed a total contingency fee of [PERCENTAGE NOT TO EXCEED 15%] of the total gross recovery of [SUBDIVISION] from the Allergan Settlement.

[COUNSEL] certify that they first sought fees and costs from the Attorney Fee Fund created under the Allergan Settlement Agreement before seeking or accepting payment under this backstop agreement. [COUNSEL] further certify that they are not seeking and will not accept payment under this backstop agreement of any litigation fees or costs that have been reimbursed through prior settlements or judgments.

The Attorney General is executing this agreement solely because the definition of "State Back-Stop Agreement" in Exhibit R of the Allergan Settlement Agreement requires such agreements to be between "a Settling State" and private counsel for a participating subdivision. Neither the California Attorney General nor the State of California have any obligations under this Backstop Agreement, and this Backstop Agreement does not require the payment of any state funds to [SUBDIVISION], [COUNSEL], or any other party.

[DATE]	[SUBDIVISION SIGNATURE BLOCK]
[DATE]	[COUNSEL SIGNATURE BLOCK]
[DATE]	[ATTORNEY GENERAL SIGNATURE BLOCK]

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – Teva Settlement

1. Introduction

Pursuant to the Teva Settlement Agreement, dated as of November 22, 2022, and any revision thereto (the "Teva Settlement Agreement"), including Section VIII and Exhibit O, the State of California proposes this agreement (the "CA Teva Allocation Agreement") to govern the allocation, distribution, and use of Settlement Fund payments made to California pursuant to Sections VI, VII, and VIII of the Teva Settlement Agreement. For the avoidance of doubt, this agreement does not apply to payments made pursuant to Sections IX, XIII, or XIV of the Teva Settlement Agreement.

Pursuant to Exhibit O, Paragraph 4, of the Teva Settlement Agreement, acceptance of this CA Teva Allocation Agreement is a requirement to be an Initial Participating Subdivision.[1]

Further, pursuant to Sections X.B and X.C of the Teva Settlement Agreement and Sections IX.B and IX.C of the Allergan Settlement Agreement, eligible Subdivisions must participate in both the Teva Settlement Agreement and Allergan Settlement Agreement, or neither.

2. Definitions

a) *CA Participating Subdivision* means a Participating Subdivision that is also (a) a Plaintiff Subdivision and/or (b) a Subdivision with a population equal to or greater than 10,000. For the avoidance of doubt, eligible CA Participating Subdivisions are those California subdivisions listed in Exhibit C (excluding Litigating Special Districts) and/or Exhibit I to the Teva Settlement Agreement.

b) *Allergan Settlement Agreement* means the Allergan Settlement Agreement dated November 22, 2022, and any revision thereto.

c) *CVS Settlement Agreement* means the CVS Settlement Agreement dated December 9, 2022, and any revision thereto as well as any modification thereto entered into by the State of California and CVS.

d) *Distributor Settlement Agreement* means the Distributor Settlement Agreement dated July 21, 2021, and any revision thereto.

e) *Janssen Settlement Agreement* means the Janssen Settlement Agreement dated July 21, 2021, and any revision thereto.

f) *Walgreens Settlement Agreement* means the Walgreens Settlement Agreement dated December 9, 2022, and any revision thereto.

[1] A parallel but separate agreement (the "CA Allergan Allocation Agreement") will govern the allocation, distribution, and use of settlement fund payments under the Allergan Settlement Agreement.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

g) *Walmart Settlement Agreement* means the Walmart Settlement Agreement dated November 14, 2022, and any revision thereto.

h) *CA Litigating Special District* means a Litigating Special District located in California. CA Litigating Special Districts include Downey Unified School District, Elk Grove Unified School District, Kern High School District, Montezuma Fire Protection District (located in Stockton, California), Santa Barbara San Luis Obispo Regional Health Authority, Inland Empire Health Plan, Health Plan of San Joaquin, San Leandro Unified School District, Pleasant Valley School District Board, and LA Care Health Plan.

i) *Plaintiff Subdivision* means a Subdivision located in California, other than a CA Litigating Special District, that filed a lawsuit, on behalf of the Subdivision and/or through an official of the Subdivision on behalf of the People of the State of California, against one or more Opioid Defendants prior to October 1, 2020.

j) *Opioid Defendant* means any defendant (including but not limited to Teva Pharmaceutical Industries Ltd., Allergan Finance, LLC, Allergan Limited, CVS Health Corporation, CVS Pharmacy, Inc., Walgreen Co., Walmart Inc., Johnson & Johnson, Janssen Pharmaceuticals, Inc., Purdue Pharma L.P., Cardinal Health, Inc., AmerisourceBergen Corporation, and McKesson Corporation) named in a lawsuit seeking damages, abatement, or other remedies related to or caused by the opioid public health crisis in any lawsuit brought by any state or local government on or before October 1, 2020.

3. General Terms

This agreement is subject to the requirements of the Teva Settlement Agreement, as well as applicable law, and the Teva Settlement Agreement governs over any inconsistent provision of this CA Teva Allocation Agreement. Terms used in this CA Teva Allocation Agreement have the same meaning as in the Teva Settlement Agreement unless otherwise defined herein.

Pursuant to Section VIII(E)(1) of the Teva Settlement Agreement, (a) all Settlement Fund payments will be used for Opioid Remediation, except as allowed by Section VIII(C) of the Teva Settlement Agreement; and (b) at least seventy percent (70%) of Settlement Fund payment amounts will be used solely for future Opioid Remediation.

4. State Allocation

The Settlement Fund payments to California,[2] pursuant to the Teva Settlement Agreement, shall be allocated as follows: 15% to the State Fund; 70% to the Abatement Accounts Fund; and 15% to the Subdivision Fund. For the avoidance of doubt, all funds allocated to California from the

[2] For purposes of clarity, use of the term "California" refers to the geographic territory of California and the state and its local governments therein. The term "State" or "State of California" refers to the State of California as a governmental unit.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Settlement Fund shall be combined pursuant to this CA Teva Allocation Agreement, and 15% of that total shall be allocated to the State of California (the "State of California Allocation"), 70% to the California Abatement Accounts Fund ("CA Abatement Accounts Fund"), and 15% to the California Subdivision Fund ("CA Subdivision Fund").

A. State of California Allocation

Fifteen percent of the total Settlement Fund payments will be allocated to the State and used by the State for future Opioid Remediation.

B. CA Abatement Accounts Fund

i. Allocation of CA Abatement Accounts Funds

a) Seventy percent of the total Settlement Fund payments will be allocated to the CA Abatement Accounts Fund. The funds in the CA Abatement Accounts Fund will be allocated based on the allocation model developed in connection with the proposed negotiating class in the National Prescription Opiate Litigation (MDL No. 2804), as adjusted to reflect only those cities and counties that are eligible, based on population or litigation status, to become a CA Participating Subdivision. The percentage from the CA Abatement Accounts Fund allocated to each CA Participating Subdivision is set forth in Appendix 1 in the column entitled abatement percentage (the "Local Allocation"). For the avoidance of doubt, CA Litigating Special Districts and California towns, cities, and counties with a population less than 10,000 are not eligible to receive an allocation of CA Abatement Accounts Funds.

b) A CA Participating Subdivision that is a county, or a city and county, will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision, and will receive payments as provided in the Teva Settlement Agreement.

c) A CA Participating Subdivision that is a city will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision. The Local Allocation share for a city that is a CA Participating Subdivision will be paid to the county in which the city is located, rather than to the city, so long as: (a) the county is a CA Participating Subdivision, and (b) the city has not advised the Settlement Fund Administrator that it requests direct payment at least 60 days prior to a Payment Date. A Local Allocation share allocated to a city but paid to a county is not required to be spent exclusively for abatement activities in that city, but will become part of the county's share of the CA Abatement Accounts Funds, which will be used in accordance with Section 4.B.ii (Use of CA Abatement Accounts Funds) and reported on in accordance with Section 4.B.iii (CA Abatement Accounts Fund Oversight).

d) A city within a county that is a CA Participating Subdivision may opt in or out of direct payment at any time, and it may also elect direct payment of only a portion of its share, with the remainder going to the county, by providing notice to the Settlement Fund Administrator at least 60 days prior to a Payment Date. For purposes of this CA Teva

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Allocation Agreement, the Cities of Los Angeles, Oakland, San Diego, San Jose and Eureka will be deemed to have elected direct payment if they become Participating Subdivisions.

e) The State will receive the Local Allocation share of any payment to the Settlement Fund that is attributable to a county or city that is eligible to become a CA Participating Subdivision, but that has not, as of the date of that payment to the Settlement Fund, become a Participating Subdivision.

f) Funds received by a CA Participating Subdivision, and not expended or encumbered within five years of receipt and in accordance with the Teva Settlement Agreement and this CA Teva Allocation Agreement shall be transferred to the State; provided however, that CA Participating Subdivisions have seven years to expend or encumber CA Abatement Accounts Funds designated to support capital outlay projects before they must be transferred to the State. This provision shall not apply to the Cost Reimbursement Funds, which shall be controlled by Appendix 2.

ii. Use of CA Abatement Accounts Funds

a) The CA Abatement Accounts Funds will be used for future Opioid Remediation in one or more of the areas described in the List of Opioid Remediation Uses, which is Exhibit E to the Teva Settlement Agreement.

b) In addition to this requirement, no less than 50% of the funds received by a CA Participating Subdivision from the Abatement Accounts Fund in each calendar year will be used for one or more of the following High Impact Abatement Activities:

(1) the provision of matching funds or operating costs for substance use disorder facilities within the Behavioral Health Continuum Infrastructure Program;

(2) creating new or expanded Substance Use Disorder ("SUD") treatment infrastructure;

(3) addressing the needs of communities of color and vulnerable populations (including sheltered and unsheltered homeless populations) that are disproportionately impacted by SUD;

(4) diversion of people with SUD from the justice system into treatment, including by providing training and resources to first and early responders (sworn and non-sworn) and implementing best practices for outreach, diversion and deflection, employability, restorative justice, and harm reduction; and/or

(5) interventions to prevent drug addiction in vulnerable youth.

c) The California Department of Health Care Services ("DHCS") may add to this list (but not delete from it) by designating additional High Impact Abatement Activities. DHCS will make reasonable efforts to consult with stakeholders, including the CA Participating Subdivisions, before adding additional High Impact Abatement Activities to this list.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

d) For the avoidance of doubt, and subject to the requirements of the Teva Settlement Agreement and applicable law, CA Participating Subdivisions may form agreements or ventures, or otherwise work in collaboration with, federal, state, local, tribal or private sector entities in pursuing Opioid Remediation activities funded from the CA Abatement Accounts Fund. Further, provided that all CA Abatement Accounts Funds are used for Opioid Remediation consistent with the Teva Settlement Agreement and this CA Teva Allocation Agreement, a county and any cities or towns within the county may agree to reallocate their respective shares of the CA Abatement Accounts Funds among themselves, provided that any direct distribution may only be to a CA Participating Subdivision and any CA Participating Subdivision must agree to their share being reallocated.

iii. CA Abatement Accounts Fund Oversight

a) Pursuant to Section 5 below, CA Participating Subdivisions receiving settlement funds must prepare and file reports annually regarding the use of those funds. DHCS may regularly review the reports prepared by CA Participating Subdivisions about the use of CA Abatement Accounts Funds for compliance with the Teva Settlement Agreement and this CA Teva Allocation Agreement.

b) If DHCS determines that a CA Participating Subdivision's use of CA Abatement Accounts Funds is inconsistent with the Teva Settlement Agreement or this CA Teva Allocation Agreement, whether through review of reports or information from any other sources, DHCS shall send a request to meet and confer with the CA Participating Subdivision. The parties shall meet and confer in an effort to resolve the concern.

c) If the parties are unable to reach a resolution, DHCS may conduct an audit of the Subdivision's use of the CA Abatement Accounts Funds within one year of the request to meet and confer, unless the parties mutually agree in writing to extend the meet and confer time frame.

d) If the concern still cannot be resolved, the State may bring a motion or action in the court where the State has filed its Consent Judgment to resolve the concern or otherwise enforce the requirements of the Teva Settlement Agreement or this CA Teva Allocation Agreement. However, in no case shall any audit be conducted, or motion be brought, as to a specific expenditure of funds, more than five years after the date on which the expenditure of the funds was reported to DHCS, in accordance with this agreement.

e) Notwithstanding the foregoing, this Agreement does not limit the statutory or constitutional authority of any state or local agency or official to conduct audits, 6 investigations, or other oversight activities, or to pursue administrative, civil, or criminal enforcement actions.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

C. CA Subdivision Fund

i. Fifteen percent of the total Settlement Fund payments will be allocated to the CA Subdivision Fund. All funds in the CA Subdivision Fund will be allocated among the Plaintiff Subdivisions that are Initial Participating Subdivisions. The funds will be used, subject to any limits imposed by the Teva Settlement Agreement and this CA Teva Allocation Agreement, to fund future Opioid Remediation and reimburse past opioid-related expenses, which may include fees and expenses related to litigation, and to pay the reasonable fees and expenses of the Special Master as set forth in Appendix 2.

The CA Subdivision Funds will be allocated as follows:

a) First, funds in the CA Subdivision Fund shall be used to pay the Special Master's reasonable fees and expenses in accordance with the procedures and limitations set forth in Appendix 2 to this document;

b) Second, funds will be allocated to Plaintiff Subdivisions that are Initial Participating Subdivisions that have been awarded Costs, as defined by and in accordance with the procedures and limitations set forth in Appendix 2 to this document.

c) Funds remaining in the CA Subdivision Fund, which shall consist of no less than 50% of the total CA Subdivision Fund received in any year pursuant to Appendix 2, Section 2.c.v, will be distributed to Plaintiff Subdivisions that are Initial Participating Subdivisions, in relative proportion to the Local Allocation. These funds shall be used to fund future opioid-related projects and to reimburse past opioid-related expenses, which may include fees and expenses related to litigation against any Opioid Defendant.

D. Provision for State Back-Stop Agreement

On August 6, 2021, Judge Dan Polster of the U.S. District Court, Northern District of Ohio, Eastern Division, issued an order (ECF Docket Number 3814) ("MDL Fees Order") in the National Prescription Opiate Litigation (MDL No. 2804) "cap[ping] all applicable contingent fee agreements at 15%." Private counsel representing Plaintiff Subdivisions should seek its contingency fees and costs from the Attorney Fee Fund or Cost Funds under the Teva Settlement Agreement and Allergan Settlement Agreement, and, if applicable, the CVS Settlement Agreement, Distributor Settlement Agreement, Janssen Settlement Agreement, Walgreens Settlement Agreement, and Walmart Settlement Agreement.

A Plaintiff Subdivision may separately agree to use its share of the CA Subdivision Fund to pay for fees or costs incurred by its contingency-fee counsel ("State Back-Stop Agreement"), pursuant to Exhibit R, section I(X), of the Teva Settlement Agreement and the MDL Fees Order,

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

so long as such contingency fees do not exceed a total contingency fee of 15% of the total gross recovery of the Plaintiff Subdivision pursuant to the Teva Settlement, inclusive of contingency fees from the national Attorney Fee Fund and this State Back-Stop Agreement. Before seeking fees or litigation costs and expenses from a State Back-Stop Agreement, private counsel representing Plaintiff Subdivisions must first seek contingency fees and costs from the Attorney Fee Fund or Cost Funds created under the Teva Settlement Agreement. Further, private counsel may only seek reimbursement for litigation fees and costs that have not previously been reimbursed through prior settlements or judgments.

To effectuate a State Back-Stop Agreement pursuant to this section, an agreement in the form of Appendix 3 may be entered into by a Plaintiff Subdivision, private counsel, and the California Office of the Attorney General. The California Office of the Attorney General shall, upon the request of a Plaintiff Subdivision, execute any agreement executed by a Plaintiff Subdivision and its private counsel if it is in the form of Appendix 3. The California Office of the Attorney General will also consider requests from Plaintiff Subdivisions to execute and enter into agreements presented in other forms.

For the avoidance of doubt, this agreement does not require a Plaintiff Subdivision to request or enter into a State Back-Stop Agreement, and no State Back-Stop Agreement shall impose any duty or obligation on the State of California or any of its agencies or officers, including without limitation the Attorney General.

5. State and Subdivision Reporting

a) DHCS will prepare an annual written report regarding the State's use of funds from the settlement until those funds are fully expended and for one year thereafter. These reports will be made publicly available on the DHCS web site.

b) Each CA Participating Subdivision that receives payments of funds from the settlement will prepare written reports at least annually regarding the use of those funds, until those funds are fully expended and for one year thereafter. These reports will also include a certification that all funds that the CA Participating Subdivision has received through the settlement have been used in compliance with the Teva Settlement Agreement and this CA Teva Allocation Agreement. The report will be in a form reasonably determined by DHCS. Prior to specifying the form of the report DHCS will confer with representatives of the Plaintiff Subdivisions.

c) The State and all CA Participating Subdivisions receiving CA Abatement Accounts Funds will track all deposits and expenditures. Each such subdivision is responsible solely for the CA Abatement Accounts Funds it receives. A county is not responsible for oversight, reporting, or monitoring of CA Abatement Accounts Funds received by a city within that county that receives direct payment. Unless otherwise exempt, Subdivisions' expenditures and uses of CA Abatement Accounts Funds and other Settlement Funds will be subject to the normal budgetary and expenditure process of the Subdivision.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

d) Each Plaintiff Subdivision receiving CA Subdivision Funds will track all deposits and expenditures, as required by the Teva Settlement Agreement and this CA Teva Allocation Agreement. Among other things, Plaintiff Subdivisions using monies from the CA Subdivision Fund for purposes that do not qualify as Opioid Remediation must identify and include in their annual report, the amount and how such funds were used, including if used to pay attorneys' fees, investigation costs, or litigation costs. Pursuant to Section VIII(C) of the Teva Settlement Agreement, such information must also be reported to the Settlement Fund Administrator and Teva.

e) In each year in which DHCS prepares an annual report DHCS will also host a meeting to discuss the annual report and the Opioid Remediation activities being carried out by the State and Participating Subdivisions.

6. Miscellaneous

a) The State or any CA Participating Subdivision may bring a motion or action in the court where the State has filed its Consent Judgment to enforce the requirements of this CA Teva Allocation Agreement. Before filing such a motion or action the State will meet and confer with any CA Participating Subdivision that is the subject of the anticipated motion or action, and vice versa.

b) Except as provided in the Teva Settlement Agreement, this CA Teva Allocation Agreement is not enforceable by any party other than the State and the CA Participating Subdivisions. It does not confer any rights or remedies upon, and shall not be enforceable by, any third party.

c) Except as provided in the CA Teva Allocation Agreement, if any provision of this agreement or the application thereof to any person, entity, or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement, or the application of such provision to persons, entities, or circumstances other than those as to which it is invalid or unenforceable, will not be affected thereby, and each other provision of this agreement will be valid and enforceable to the fullest extent permitted by law.

a) Except as provided in the Teva Settlement Agreement, this agreement shall be governed by and interpreted in accordance with the laws of California.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

The undersigned, Ontario city, ACKNOWLEDGES acceptance of this Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – Teva Settlement is a requirement to be an Initial Participating Subdivision in the Teva Settlement and ACCEPTS this Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – Teva Settlement. EXECUTED on 2/28/2023 .

Signature: DocuSigned by: Scott Ochoa 943ADB3C46DD448...

Name: Scott Ochoa

Title: City Manager

Date: 2/28/2023

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

DISCLAIMER: The allocation percentages herein are estimates only and should not be relied on for decisions regarding legal rights, releases, waivers, or other decisions affecting current or potential legal claims. Percentages shown in the Plaintiff Subdivision Percentage column may change pursuant to Section 4.C. of the California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds—Teva Settlement, whereas the percentages shown in the Abatement Percentage column should not change. Participating Subdivisions, underlying calculations, and the calculated allocation percentages are subject to change. Regarding the column herein entitled "Abatement Percentage," pursuant to Section 4.B.e., the State of California will receive the Local Allocation share of any payment to the Settlement Fund that is attributable to a county or city that is eligible to become a CA Participating Subdivision, but that has not, as of the date of that payment to the Settlement Fund, become a Participating Subdivision. Regarding the column herein entitled "Plaintiff Subdivision Percentage," payments allocated to a Plaintiff Subdivision, which is not an Initial Participating Subdivision, will be re-allocated among the Plaintiff Subdivisions that are Initial Participating Subdivisions. Regarding the column herein entitled "Abatement Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the California Abatement Account Funds received, pursuant to Section 4.B. Regarding the column herein entitled "Plaintiff Subdivision Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the California Subdivision Funds received, pursuant to Section 4.C. Regarding the column herein entitled "Weighted Allocation Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the combined and weighted allocation of the Abatement Percentage and the Plaintiff Subdivision Percentage.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

			100.000%	100.000%	100.000%
Participating Subdivision Classification	**Participating Subdivision**	**County**	**Abatement Percentage**	**Plaintiff Subdivision Percentage**	**Weighted Allcation Percentage**
County	***Alameda County***	Alameda	2.332%	2.853%	**2.4237952%**
City	Alameda	Alameda	0.069%		**0.0570162%**
City	Albany	Alameda	0.013%		**0.0107768%**
City	Berkeley	Alameda	0.152%		**0.1249656%**
City	Dublin	Alameda	0.033%	0.040%	**0.0338810%**
City	Emeryville	Alameda	0.023%		**0.0185765%**
City	Fremont	Alameda	0.108%		**0.0888576%**
City	Hayward	Alameda	0.117%		**0.0966218%**
City	Livermore	Alameda	0.054%		**0.0446740%**
City	Newark	Alameda	0.026%		**0.0217626%**
City	Oakland	Alameda	0.486%	0.595%	**0.5055601%**
City	Piedmont	Alameda	0.014%		**0.0114064%**
City	Pleasanton	Alameda	0.067%		**0.0554547%**
City	San Leandro	Alameda	0.039%		**0.0321267%**
City	Union City	Alameda	0.043%		**0.0352484%**
County	***Amador County***	Amador	0.226%	0.277%	**0.2349885%**
County	***Butte County***	Butte	1.615%	1.975%	**1.6783178%**
City	Chico	Butte	0.216%	0.264%	**0.2246499%**
City	Oroville	Butte	0.079%		**0.0646595%**
County	***Calaveras County***	Calaveras	0.226%	0.277%	**0.2351644%**
County	***Colusa County***	Colusa	0.059%		**0.0489221%**
County	***Contra Costa County***	Contra Costa	2.102%	2.571%	**2.1844585%**
City	Antioch	Contra Costa	0.037%		**0.0301879%**
City	Brentwood	Contra Costa	0.026%		**0.0215339%**
City	Clayton	Contra Costa	0.002%		**0.0018060%**
City	Concord	Contra Costa	0.055%		**0.0456676%**
City	Danville	Contra Costa	0.010%		**0.0082255%**
City	El Cerrito	Contra Costa	0.023%		**0.0189024%**
City	Hercules	Contra Costa	0.010%		**0.0078273%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Lafayette	Contra Costa	0.006%		**0.0046030%**
City	Martinez	Contra Costa	0.012%		**0.0098593%**
City	Moraga	Contra Costa	0.004%		**0.0031007%**
City	Oakley	Contra Costa	0.010%		**0.0079416%**
City	Orinda	Contra Costa	0.005%		**0.0038157%**
City	Pinole	Contra Costa	0.013%		**0.0110909%**
City	Pittsburg	Contra Costa	0.053%		**0.0436369%**
City	Pleasant Hill	Contra Costa	0.013%		**0.0106309%**
City	Richmond	Contra Costa	0.146%		**0.1201444%**
City	San Pablo	Contra Costa	0.018%		**0.0148843%**
City	San Ramon	Contra Costa	0.021%		**0.0176459%**
City	Walnut Creek	Contra Costa	0.026%		**0.0212132%**
County	***Del Norte County***	Del Norte	0.114%	0.140%	**0.1189608%**
County	***El Dorado County***	El Dorado	0.768%	0.939%	**0.7980034%**
City	Placerville	El Dorado	0.015%		**0.0127642%**
City	South Lake Tahoe	El Dorado	0.081%		**0.0665456%**
County	***Fresno County***	Fresno	1.895%	2.318%	**1.9693410%**
City	Clovis	Fresno	0.065%		**0.0536211%**
City	Coalinga	Fresno	0.012%		**0.0098554%**
City	Fresno	Fresno	0.397%		**0.3270605%**
City	Kerman	Fresno	0.005%		**0.0042534%**
City	Kingsburg	Fresno	0.008%		**0.0066167%**
City	Mendota	Fresno	0.002%		**0.0019387%**
City	Orange Cove	Fresno	0.004%		**0.0035607%**
City	Parlier	Fresno	0.008%		**0.0069755%**
City	Reedley	Fresno	0.012%		**0.0098804%**
City	Sanger	Fresno	0.018%		**0.0146135%**
City	Selma	Fresno	0.015%		**0.0127537%**
County	***Glenn County***	Glenn	0.107%	0.131%	**0.1116978%**
County	***Humboldt County***	Humboldt	1.030%	1.260%	**1.0703185%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Arcata	Humboldt	0.054%		**0.0447660%**
City	Eureka	Humboldt	0.117%	0.143%	**0.1216284%**
City	Fortuna	Humboldt	0.032%		**0.0266837%**
County	***Imperial County***	Imperial	0.258%	0.315%	**0.2679006%**
City	Brawley	Imperial	0.011%		**0.0087986%**
City	Calexico	Imperial	0.019%		**0.0152799%**
City	El Centro	Imperial	0.158%		**0.1302522%**
City	Imperial	Imperial	0.006%		**0.0048791%**
County	***Inyo County***	Inyo	0.073%	0.089%	**0.0754413%**
County	***Kern County***	Kern	2.517%	3.079%	**2.6159145%**
City	Arvin	Kern	0.006%		**0.0046425%**
City	Bakersfield	Kern	0.212%		**0.1747198%**
City	California City	Kern	0.009%		**0.0070820%**
City	Delano	Kern	0.030%		**0.0249316%**
City	McFarland	Kern	0.003%		**0.0025644%**
City	Ridgecrest	Kern	0.015%		**0.0120938%**
City	Shafter	Kern	0.013%		**0.0103417%**
City	Tehachapi	Kern	0.009%		**0.0073580%**
City	Wasco	Kern	0.008%		**0.0069861%**
County	***Kings County***	Kings	0.293%		**0.2413469%**
City	Avenal	Kings	0.007%		**0.0056335%**
City	Corcoran	Kings	0.013%		**0.0107032%**
City	Hanford	Kings	0.027%		**0.0226038%**
City	Lemoore	Kings	0.016%		**0.0131900%**
County	***Lake County***	Lake	0.795%		**0.6545389%**
City	Clearlake	Lake	0.041%	0.050%	**0.0426253%**
City	Lakeport	Lake	0.021%	0.026%	**0.0222964%**
County	***Lassen County***	Lassen	0.319%	0.391%	**0.3320610%**
City	Susanville	Lassen	0.027%		**0.0219295%**
County	***Los Angeles County***	Los Angeles	13.896%	16.999%	**14.4437559%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Agoura Hills	Los Angeles	0.005%		**0.0040024%**
City	Alhambra	Los Angeles	0.042%		**0.0343309%**
City	Arcadia	Los Angeles	0.033%		**0.0267718%**
City	Artesia	Los Angeles	0.001%		**0.0005100%**
City	Azusa	Los Angeles	0.026%		**0.0210857%**
City	Baldwin Park	Los Angeles	0.027%		**0.0218520%**
City	Bell	Los Angeles	0.008%		**0.0068783%**
City	Bellflower	Los Angeles	0.002%		**0.0014485%**
City	Bell Gardens	Los Angeles	0.014%		**0.0114301%**
City	Beverly Hills	Los Angeles	0.065%		**0.0534897%**
City	Burbank	Los Angeles	0.100%		**0.0823132%**
City	Calabasas	Los Angeles	0.006%		**0.0048948%**
City	Carson	Los Angeles	0.019%		**0.0159805%**
City	Cerritos	Los Angeles	0.005%		**0.0039682%**
City	Claremont	Los Angeles	0.010%		**0.0082584%**
City	Commerce	Los Angeles	0.000%		**0.0002971%**
City	Compton	Los Angeles	0.044%		**0.0361882%**
City	Covina	Los Angeles	0.028%		**0.0229127%**
City	Cudahy	Los Angeles	0.001%		**0.0006020%**
City	Culver City	Los Angeles	0.055%		**0.0449894%**
City	Diamond Bar	Los Angeles	0.001%		**0.0006993%**
City	Downey	Los Angeles	0.052%		**0.0429994%**
City	Duarte	Los Angeles	0.003%		**0.0027261%**
City	El Monte	Los Angeles	0.031%	0.038%	**0.0318985%**
City	El Segundo	Los Angeles	0.033%		**0.0268020%**
City	Gardena	Los Angeles	0.034%		**0.0278088%**
City	Glendale	Los Angeles	0.166%		**0.1366586%**
City	Glendora	Los Angeles	0.016%		**0.0134411%**
City	Hawaiian Gardens	Los Angeles	0.005%		**0.0040549%**
City	Hawthorne	Los Angeles	0.050%		**0.0407833%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Hermosa Beach	Los Angeles	0.018%		**0.0145307%**
City	Huntington Park	Los Angeles	0.023%		**0.0190667%**
City	Inglewood	Los Angeles	0.059%		**0.0489195%**
City	La Cañada Flintridge	Los Angeles	0.003%		**0.0025565%**
City	Lakewood	Los Angeles	0.005%		**0.0039971%**
City	La Mirada	Los Angeles	0.010%		**0.0081572%**
City	Lancaster	Los Angeles	0.045%		**0.0369689%**
City	La Puente	Los Angeles	0.002%		**0.0012999%**
City	La Verne	Los Angeles	0.024%		**0.0194190%**
City	Lawndale	Los Angeles	0.002%		**0.0017731%**
City	Lomita	Los Angeles	0.004%		**0.0031940%**
City	Long Beach	Los Angeles	0.439%		**0.3614151%**
City	Los Angeles	Los Angeles	2.715%	3.321%	**2.8218811%**
City	Lynwood	Los Angeles	0.016%		**0.0134345%**
City	Malibu	Los Angeles	0.002%		**0.0019269%**
City	Manhattan Beach	Los Angeles	0.032%		**0.0260686%**
City	Maywood	Los Angeles	0.004%		**0.0035528%**
City	Monrovia	Los Angeles	0.031%		**0.0254455%**
City	Montebello	Los Angeles	0.030%		**0.0250670%**
City	Monterey Park	Los Angeles	0.031%		**0.0256677%**
City	Norwalk	Los Angeles	0.031%		**0.0258228%**
City	Palmdale	Los Angeles	0.046%		**0.0375827%**
City	Palos Verdes Estates	Los Angeles	0.006%		**0.0053102%**
City	Paramount	Los Angeles	0.011%		**0.0091483%**
City	Pasadena	Los Angeles	0.146%		**0.1200524%**
City	Pico Rivera	Los Angeles	0.022%		**0.0183333%**
City	Pomona	Los Angeles	0.111%		**0.0911933%**
City	Rancho Palos Verdes	Los Angeles	0.002%		**0.0012645%**
City	Redondo Beach	Los Angeles	0.062%		**0.0506992%**
City	Rosemead	Los Angeles	0.003%		**0.0028260%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	San Dimas	Los Angeles	0.003%		**0.0022016%**
City	San Fernando	Los Angeles	0.013%		**0.0104837%**
City	San Gabriel	Los Angeles	0.018%		**0.0147726%**
City	San Marino	Los Angeles	0.009%		**0.0073791%**
City	Santa Clarita	Los Angeles	0.022%		**0.0178167%**
City	Santa Fe Springs	Los Angeles	0.031%		**0.0257531%**
City	Santa Monica	Los Angeles	0.158%		**0.1298513%**
City	Sierra Madre	Los Angeles	0.006%		**0.0048646%**
City	Signal Hill	Los Angeles	0.010%		**0.0084884%**
City	South El Monte	Los Angeles	0.005%		**0.0039603%**
City	South Gate	Los Angeles	0.020%		**0.0166272%**
City	South Pasadena	Los Angeles	0.012%		**0.0095334%**
City	Temple City	Los Angeles	0.005%		**0.0039498%**
City	Torrance	Los Angeles	0.112%		**0.0919820%**
City	Walnut	Los Angeles	0.006%		**0.0047305%**
City	West Covina	Los Angeles	0.049%		**0.0404521%**
City	West Hollywood	Los Angeles	0.013%		**0.0108517%**
City	Whittier	Los Angeles	0.032%		**0.0260581%**
County	***Madera County***	Madera	0.349%	0.427%	**0.3630669%**
City	Chowchilla	Madera	0.012%		**0.0097332%**
City	Madera	Madera	0.039%		**0.0318441%**
County	***Marin County***	Marin	0.564%	0.690%	**0.5861325%**
City	Larkspur	Marin	0.015%		**0.0124697%**
City	Mill Valley	Marin	0.020%		**0.0168401%**
City	Novato	Marin	0.028%		**0.0229824%**
City	San Anselmo	Marin	0.009%		**0.0078062%**
City	San Rafael	Marin	0.089%		**0.0729823%**
County	***Mariposa County***	Mariposa	0.084%	0.103%	**0.0876131%**
County	***Mendocino County***	Mendocino	0.439%	0.536%	**0.4558394%**
City	Ukiah	Mendocino	0.039%		**0.0317153%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
County	***Merced County***	Merced	0.551%	0.674%	**0.5724262%**
City	Atwater	Merced	0.024%		**0.0195846%**
City	Livingston	Merced	0.006%		**0.0045873%**
City	Los Banos	Merced	0.020%		**0.0165142%**
City	Merced	Merced	0.061%		**0.0500762%**
County	***Modoc County***	Modoc	0.065%	0.080%	**0.0678250%**
County	***Mono County***	Mono	0.023%	0.029%	**0.0242606%**
County	***Monterey County***	Monterey	0.908%	1.111%	**0.9437083%**
City	Greenfield	Monterey	0.006%		**0.0050552%**
City	King City	Monterey	0.005%		**0.0037355%**
City	Marina	Monterey	0.017%		**0.0144098%**
City	Monterey	Monterey	0.041%		**0.0336540%**
City	Pacific Grove	Monterey	0.009%		**0.0074842%**
City	Salinas	Monterey	0.094%		**0.0776576%**
City	Seaside	Monterey	0.023%		**0.0191772%**
City	Soledad	Monterey	0.007%		**0.0060870%**
County	***Napa County***	Napa	0.288%	0.352%	**0.2994325%**
City	American Canyon	Napa	0.017%		**0.0136869%**
City	Napa	Napa	0.078%		**0.0642783%**
County	***Nevada County***	Nevada	0.441%	0.539%	**0.4579827%**
City	Grass Valley	Nevada	0.024%		**0.0197805%**
City	Truckee	Nevada	0.003%		**0.0023843%**
County	***Orange County***	Orange	4.364%	5.339%	**4.5363576%**
City	Aliso Viejo	Orange	0.014%		**0.0113841%**
City	Anaheim	Orange	0.554%	0.678%	**0.5759282%**
City	Brea	Orange	0.086%		**0.0708897%**
City	Buena Park	Orange	0.087%		**0.0714352%**
City	Costa Mesa	Orange	0.124%	0.152%	**0.1288366%**
City	Cypress	Orange	0.033%		**0.0271937%**
City	Dana Point	Orange	0.001%		**0.0005560%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Fountain Valley	Orange	0.055%		**0.0455980%**
City	Fullerton	Orange	0.137%	0.168%	**0.1425744%**
City	Garden Grove	Orange	0.213%		**0.1752482%**
City	Huntington Beach	Orange	0.247%	0.302%	**0.2568420%**
City	Irvine	Orange	0.139%	0.170%	**0.1442350%**
City	Laguna Beach	Orange	0.047%	0.058%	**0.0493043%**
City	Laguna Hills	Orange	0.014%		**0.0115457%**
City	Laguna Niguel	Orange	0.001%		**0.0007071%**
City	Laguna Woods	Orange	0.001%		**0.0006546%**
City	La Habra	Orange	0.060%	0.073%	**0.0621049%**
City	Lake Forest	Orange	0.012%		**0.0101249%**
City	La Palma	Orange	0.012%		**0.0095439%**
City	Los Alamitos	Orange	0.008%		**0.0069190%**
City	Mission Viejo	Orange	0.014%		**0.0117560%**
City	Newport Beach	Orange	0.179%		**0.1470134%**
City	Orange	Orange	0.150%		**0.1231320%**
City	Placentia	Orange	0.029%	0.035%	**0.0298912%**
City	Rancho Santa Margarita	Orange	0.001%		**0.0006296%**
City	San Clemente	Orange	0.008%	0.010%	**0.0086083%**
City	San Juan Capistrano	Orange	0.008%		**0.0065510%**
City	Santa Ana	Orange	0.502%	0.614%	**0.5213866%**
City	Seal Beach	Orange	0.020%		**0.0165891%**
City	Stanton	Orange	0.035%		**0.0291955%**
City	Tustin	Orange	0.073%		**0.0600341%**
City	Westminster	Orange	0.104%	0.127%	**0.1082721%**
City	Yorba Linda	Orange	0.044%		**0.0362223%**
County	***Placer County***	Placer	1.045%	1.278%	**1.0861002%**
City	Auburn	Placer	0.017%		**0.0141114%**
City	Lincoln	Placer	0.031%		**0.0255599%**
City	Rocklin	Placer	0.076%		**0.0625485%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Roseville	Placer	0.196%		**0.1616559%**
County	***Plumas County***	Plumas	0.205%	0.251%	**0.2128729%**
County	***Riverside County***	Riverside	4.534%	5.547%	**4.7128296%**
City	Banning	Riverside	0.017%		**0.0143848%**
City	Beaumont	Riverside	0.021%		**0.0171135%**
City	Blythe	Riverside	0.012%		**0.0096714%**
City	Canyon Lake	Riverside	0.000%		**0.0001761%**
City	Cathedral City	Riverside	0.067%		**0.0553614%**
City	Coachella	Riverside	0.021%		**0.0173054%**
City	Corona	Riverside	0.147%		**0.1207083%**
City	Desert Hot Springs	Riverside	0.024%		**0.0200433%**
City	Eastvale	Riverside	0.000%		**0.0002747%**
City	Hemet	Riverside	0.051%		**0.0421792%**
City	Indio	Riverside	0.056%		**0.0457794%**
City	Jurupa Valley	Riverside	0.001%		**0.0008991%**
City	Lake Elsinore	Riverside	0.021%		**0.0172949%**
City	La Quinta	Riverside	0.063%		**0.0516732%**
City	Menifee	Riverside	0.032%		**0.0260909%**
City	Moreno Valley	Riverside	0.137%		**0.1130348%**
City	Murrieta	Riverside	0.048%	0.059%	**0.0497423%**
City	Norco	Riverside	0.016%		**0.0134542%**
City	Palm Desert	Riverside	0.083%		**0.0682465%**
City	Palm Springs	Riverside	0.076%		**0.0629862%**
City	Perris	Riverside	0.009%		**0.0076774%**
City	Rancho Mirage	Riverside	0.052%		**0.0431098%**
City	Riverside	Riverside	0.268%		**0.2206279%**
City	San Jacinto	Riverside	0.010%		**0.0085936%**
City	Temecula	Riverside	0.022%		**0.0180086%**
City	Wildomar	Riverside	0.008%		**0.0062500%**
County	***Sacramento County***	Sacramento	3.797%	4.645%	**3.9465887%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Citrus Heights	Sacramento	0.057%		**0.0465312%**
City	Elk Grove	Sacramento	0.130%		**0.1066994%**
City	Folsom	Sacramento	0.108%		**0.0890850%**
City	Galt	Sacramento	0.017%		**0.0143704%**
City	Rancho Cordova	Sacramento	0.008%		**0.0067679%**
City	Sacramento	Sacramento	0.721%	0.882%	**0.7496530%**
County	***San Benito County***	San Benito	0.106%	0.130%	**0.1101417%**
City	Hollister	San Benito	0.027%		**0.0225355%**
County	***San Bernardino County***	San Bernardino	3.259%	3.987%	**3.3878124%**
City	Adelanto	San Bernardino	0.008%		**0.0066640%**
City	Apple Valley	San Bernardino	0.025%		**0.0207360%**
City	Barstow	San Bernardino	0.015%		**0.0122056%**
City	Chino	San Bernardino	0.064%		**0.0525893%**
City	Chino Hills	San Bernardino	0.001%		**0.0006388%**
City	Colton	San Bernardino	0.031%		**0.0253443%**
City	Fontana	San Bernardino	0.112%		**0.0920543%**
City	Grand Terrace	San Bernardino	0.006%		**0.0051051%**
City	Hesperia	San Bernardino	0.035%		**0.0291522%**
City	Highland	San Bernardino	0.004%		**0.0029061%**
City	Loma Linda	San Bernardino	0.009%		**0.0071188%**
City	Montclair	San Bernardino	0.039%		**0.0322108%**
City	Ontario	San Bernardino	0.179%		**0.1472934%**
City	Rancho Cucamonga	San Bernardino	0.084%		**0.0689431%**
City	Redlands	San Bernardino	0.057%		**0.0469150%**
City	Rialto	San Bernardino	0.073%		**0.0603206%**
City	San Bernardino	San Bernardino	0.178%		**0.1461880%**
City	Twentynine Palms	San Bernardino	0.002%		**0.0012605%**
City	Upland	San Bernardino	0.052%		**0.0424460%**
City	Victorville	San Bernardino	0.033%		**0.0269400%**
City	Yucaipa	San Bernardino	0.016%		**0.0128772%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Yucca Valley	San Bernardino	0.003%		**0.0021228%**
County	***San Diego County***	San Diego	5.706%	6.980%	**5.9309748%**
City	Carlsbad	San Diego	0.128%		**0.1050485%**
City	Chula Vista	San Diego	0.189%	0.231%	**0.1961456%**
City	Coronado	San Diego	0.044%		**0.0359095%**
City	El Cajon	San Diego	0.113%		**0.0933582%**
City	Encinitas	San Diego	0.061%	0.074%	**0.0630289%**
City	Escondido	San Diego	0.145%		**0.1192204%**
City	Imperial Beach	San Diego	0.014%		**0.0118283%**
City	La Mesa	San Diego	0.055%	0.068%	**0.0575593%**
City	Lemon Grove	San Diego	0.022%		**0.0183911%**
City	National City	San Diego	0.080%		**0.0656808%**
City	Oceanside	San Diego	0.213%		**0.1753428%**
City	Poway	San Diego	0.062%		**0.0511040%**
City	San Diego	San Diego	1.975%	2.416%	**2.0531169%**
City	San Marcos	San Diego	0.089%		**0.0733897%**
City	Santee	San Diego	0.033%		**0.0268401%**
City	Solana Beach	San Diego	0.017%		**0.0138564%**
City	Vista	San Diego	0.052%		**0.0425144%**
Consolidated	***San Francisco***	San Francisco	3.026%	3.702%	**3.1457169%**
County	***San Joaquin County***	San Joaquin	1.680%	2.055%	**1.7460399%**
City	Lathrop	San Joaquin	0.009%		**0.0075394%**
City	Lodi	San Joaquin	0.053%		**0.0439484%**
City	Manteca	San Joaquin	0.054%		**0.0443454%**
City	Ripon	San Joaquin	0.013%		**0.0104219%**
City	Stockton	San Joaquin	0.313%	0.383%	**0.3256176%**
City	Tracy	San Joaquin	0.084%		**0.0692047%**
County	***San Luis Obispo County***	San Luis Obispo	0.816%	0.999%	**0.8484126%**
City	Arroyo Grande	San Luis Obispo	0.024%		**0.0199053%**
City	Atascadero	San Luis Obispo	0.029%		**0.0240680%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	El Paso de Robles (Paso Robles)	San Luis Obispo	0.043%		**0.0353456%**
City	Grover Beach	San Luis Obispo	0.017%		**0.0137881%**
City	Morro Bay	San Luis Obispo	0.020%		**0.0160922%**
City	San Luis Obispo	San Luis Obispo	0.077%		**0.0637841%**
County	***San Mateo County***	San Mateo	1.074%	1.313%	**1.1159599%**
City	Belmont	San Mateo	0.021%		**0.0169860%**
City	Burlingame	San Mateo	0.019%		**0.0152537%**
City	Daly City	San Mateo	0.044%		**0.0363880%**
City	East Palo Alto	San Mateo	0.013%		**0.0103982%**
City	Foster City	San Mateo	0.020%		**0.0166101%**
City	Half Moon Bay	San Mateo	0.004%		**0.0031638%**
City	Hillsborough	San Mateo	0.013%		**0.0110029%**
City	Menlo Park	San Mateo	0.015%		**0.0126209%**
City	Millbrae	San Mateo	0.013%		**0.0105836%**
City	Pacifica	San Mateo	0.016%		**0.0130625%**
City	Redwood City	San Mateo	0.056%		**0.0463511%**
City	San Bruno	San Mateo	0.021%		**0.0172161%**
City	San Carlos	San Mateo	0.013%		**0.0108885%**
City	San Mateo	San Mateo	0.052%		**0.0425841%**
City	South San Francisco	San Mateo	0.043%		**0.0353943%**
County	***Santa Barbara County***	Santa Barbara	1.132%	1.385%	**1.1768968%**
City	Carpinteria	Santa Barbara	0.001%		**0.0008938%**
City	Goleta	Santa Barbara	0.004%		**0.0028969%**
City	Lompoc	Santa Barbara	0.047%		**0.0389379%**
City	Santa Barbara	Santa Barbara	0.122%		**0.1004559%**
City	Santa Maria	Santa Barbara	0.058%		**0.0479179%**
County	***Santa Clara County***	Santa Clara	2.404%	2.941%	**2.4987553%**
City	Campbell	Santa Clara	0.014%		**0.0112566%**
City	Cupertino	Santa Clara	0.008%		**0.0066824%**
City	Gilroy	Santa Clara	0.025%		**0.0202891%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Los Altos	Santa Clara	0.013%		**0.0103338%**
City	Los Gatos	Santa Clara	0.013%		**0.0103220%**
City	Milpitas	Santa Clara	0.036%		**0.0298120%**
City	Morgan Hill	Santa Clara	0.015%		**0.0124619%**
City	Mountain View	Santa Clara	0.041%		**0.0334608%**
City	Palo Alto	Santa Clara	0.039%		**0.0323080%**
City	San Jose	Santa Clara	0.294%	0.360%	**0.3054960%**
City	Santa Clara	Santa Clara	0.067%		**0.0549723%**
City	Saratoga	Santa Clara	0.004%		**0.0034161%**
City	Sunnyvale	Santa Clara	0.053%		**0.0434069%**
County	***Santa Cruz County***	Santa Cruz	0.783%	0.957%	**0.8135396%**
City	Capitola	Santa Cruz	0.020%		**0.0168191%**
City	Santa Cruz	Santa Cruz	0.143%		**0.1180348%**
City	Scotts Valley	Santa Cruz	0.015%		**0.0126525%**
City	Watsonville	Santa Cruz	0.063%		**0.0520136%**
County	***Shasta County***	Shasta	1.095%	1.339%	**1.1380191%**
City	Anderson	Shasta	0.024%		**0.0198896%**
City	Redding	Shasta	0.284%		**0.2334841%**
City	Shasta Lake	Shasta	0.004%		**0.0031993%**
County	***Siskiyou County***	Siskiyou	0.228%	0.279%	**0.2373393%**
County	***Solano County***	Solano	0.760%		**0.6260795%**
City	Benicia	Solano	0.031%		**0.0253903%**
City	Dixon	Solano	0.016%		**0.0130849%**
City	Fairfield	Solano	0.109%		**0.0897317%**
City	Suisun City	Solano	0.021%		**0.0176183%**
City	Vacaville	Solano	0.119%		**0.0976497%**
City	Vallejo	Solano	0.167%		**0.1373644%**
County	***Sonoma County***	Sonoma	1.218%	1.490%	**1.2661290%**
City	Healdsburg	Sonoma	0.032%		**0.0266929%**
City	Petaluma	Sonoma	0.081%		**0.0667507%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Rohnert Park	Sonoma	0.041%		**0.0340759%**
City	Santa Rosa	Sonoma	0.184%		**0.1519070%**
City	Sonoma	Sonoma	0.022%		**0.0183438%**
City	Windsor	Sonoma	0.016%		**0.0129298%**
County	***Stanislaus County***	Stanislaus	1.722%		**1.4182273%**
City	Ceres	Stanislaus	0.041%		**0.0340260%**
City	Modesto	Stanislaus	0.217%		**0.1788759%**
City	Newman	Stanislaus	0.006%		**0.0046964%**
City	Oakdale	Stanislaus	0.018%		**0.0145531%**
City	Patterson	Stanislaus	0.015%		**0.0126590%**
City	Riverbank	Stanislaus	0.010%		**0.0085699%**
City	Turlock	Stanislaus	0.065%		**0.0531966%**
County	***Sutter County***	Sutter	0.306%	0.374%	**0.3179548%**
City	Yuba City	Sutter	0.074%		**0.0606242%**
County	***Tehama County***	Tehama	0.213%	0.261%	**0.2216654%**
City	Red Bluff	Tehama	0.014%		**0.0117771%**
County	***Trinity County***	Trinity	0.082%	0.101%	**0.0855476%**
County	***Tulare County***	Tulare	0.809%	0.990%	**0.8410949%**
City	Dinuba	Tulare	0.014%		**0.0116929%**
City	Exeter	Tulare	0.004%		**0.0032479%**
City	Farmersville	Tulare	0.003%		**0.0027879%**
City	Lindsay	Tulare	0.007%		**0.0057111%**
City	Porterville	Tulare	0.021%		**0.0171845%**
City	Tulare	Tulare	0.037%		**0.0302273%**
City	Visalia	Tulare	0.066%		**0.0545872%**
County	***Tuolumne County***	Tuolumne	0.486%	0.594%	**0.5047621%**
County	***Ventura County***	Ventura	2.192%	2.681%	**2.2781201%**
City	Camarillo	Ventura	0.002%		**0.0012815%**
City	Fillmore	Ventura	0.002%		**0.0020294%**
City	Moorpark	Ventura	0.008%		**0.0067337%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Oxnard	Ventura	0.156%	0.190%	**0.1617338%**
City	Port Hueneme	Ventura	0.021%		**0.0174145%**
City	San Buenaventura (Ventura)	Ventura	0.085%		**0.0702181%**
City	Santa Paula	Ventura	0.014%		**0.0119072%**
City	Simi Valley	Ventura	0.065%		**0.0533043%**
City	Thousand Oaks	Ventura	0.022%		**0.0179902%**
County	***Yolo County***	Yolo	0.357%	0.437%	**0.3713319%**
City	Davis	Yolo	0.055%		**0.0451747%**
City	West Sacramento	Yolo	0.066%		**0.0544321%**
City	Woodland	Yolo	0.058%		**0.0477904%**
County	***Yuba County***	Yuba	0.214%	0.262%	**0.2225679%**
City	Marysville	Yuba	0.014%		**0.0112079%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 2

Cost Reimbursement Procedure

1. Additional defined terms:

a) *Costs* means the reasonable amounts paid for the attorney and other City Attorney and County Counsel staff time for individuals employed by a Plaintiff Subdivision at the contractual rate, inclusive of benefits and overhead, together with amounts paid for court reporters, experts, copying, electronic research, travel, vendors, and the like, which were not previously reimbursed and which were paid or incurred (i) prior to December 31, 2022 in litigation against any Opioid Defendant and/or (ii) in negotiating and drafting any CA Allocation Agreement(s) concerning a settlement with any Opioid Defendant(s). *Costs* does not include attorneys' fees, costs, or expenses incurred by private contingency fee counsel. No part of the CA Abatement Accounts Fund will be used to reimburse Costs.

b) *First Claims Date* means October 1, 2023 or when all applications for reimbursement of Costs, in whole or in part, from funds available under Section XIV and Exhibit R of the Teva Settlement Agreement, Section XIII and Exhibit R of the Allergan Settlement Agreement, Section X and Exhibit R of the Distributor Settlement Agreement, Section XI and Exhibit R of the Janssen Settlement Agreement, Section X and Exhibit R of the CVS Settlement Agreement, Section IX and Exhibit R of the Walgreens Settlement Agreement, or Section IX and Exhibit R of the Walmart Settlement Agreement, have been finally determined under the provisions of those agreements, whichever comes first.

c) *Special Master* means a retired judicial officer or former public lawyer, not presently employed or retained by a Plaintiff Subdivision, who will aggregate, review, and determine the reasonable Costs to be awarded to each Plaintiff Subdivision that submits a claim for reimbursement of Costs. The Special Master will be selected by a majority vote of the votes cast by Plaintiff Subdivisions, with each such subdivision having one vote.

d) *Plaintiff Subdivision Committee* means the committee of Plaintiff Subdivisions that will review and approve the invoices submitted by the Special Master reflecting his or her reasonable time and expenses.

2. Cost Reimbursement to Plaintiff Subdivision

a) Purpose. Substantial resources have been expended to hold Opioid Defendants accountable for creating and profiting from the opioid crisis, and this effort has been a significant catalyst in creating National Opioid Settlements with various manufacturers, distributors, and chain pharmacies.

b) Claims Procedure.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

i. If a Plaintiff Subdivision is eligible to seek reimbursement of Costs, in whole or in part, from funds available under Section XIV and Exhibit R of the Teva Settlement Agreement, Section XIII and Exhibit R of the Allergan Settlement Agreement, Section X and Exhibit R of the CVS Settlement Agreement, Section IX and Exhibit R of the Walgreens Settlement Agreement, Section IX and Exhibit R of the Walmart Settlement Agreement, Section X or Exhibit R of the Distributor Settlement Agreement, or Section XI or Exhibit R of the Janssen Settlement Agreement, it must first make a timely application for reimbursement from such funds. To allow sufficient time for determination of those applications, no claim for Costs to the CA Subdivision Fund under this Agreement may be made before the First Claims Date.

ii. A Plaintiff Subdivision that wishes to be reimbursed from the CA Subdivision Fund must submit a claim to the Special Master no later than forty-five (45) days after the First Claims Date. The Special Master will then compile and redistribute the aggregated claim totals for each Plaintiff Subdivision via email to representatives of all the Plaintiff Subdivisions. A claim for attorney and staff time must list, for each attorney or staff member included in the claim, the following information: name, title, total hours claimed, hourly rate (including, if sought, benefits and share of overhead), and narrative summarizing the general nature of the work performed by the attorney or staff member. For reimbursement of "hard" costs, the subdivision may aggregate across a category (e.g., total for travel costs). It is the intention of the Plaintiff Subdivisions that submission of documents related to reimbursement of Costs does not waive any attorney-client privilege or exemptions to the California Public Records Act.

iii. The Special Master may request, at his or her sole option, additional documents or details to assist in the final award of Costs.

iv. The Special Master will review claims for reasonableness and will notify each Plaintiff Subdivision of the final determination of its claim, and will provide a list of all final awards to all Plaintiff Subdivisions by email or, upon request, via First Class U.S. Mail. Any Plaintiff Subdivision may ask the Special Master to reconsider any final award within twenty-one (21) days. The Special Master will make a final determination on any such reconsideration request within thirty (30) days of receipt.

v. Any decision of the Special Master is final and binding, and will be considered under the California Arbitration Act, Code of Civil Procedure section 1280 et seq. as a final arbitration award. Nothing in this agreement is intended to expand the scope of judicial review of the final award for errors of fact or law, and the Parties agree that they may only seek to vacate the award if clear and convincing evidence demonstrates one of the factors set forth in Code of Civil Procedure, section 1286.2, subdivision (a). Plaintiff Subdivisions will have fourteen (14) days after all final awards are made, together with any final determination of a request for reconsideration, to seek review in the Superior Court of California, pursuant to Code of Civil Procedure, section 1285, where the State has filed its Consent Judgment.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

vi. The Special Master will prepare a report of Costs that includes his or her fees and expenses at least ninety (90) days before the Payment Date for each Annual Payment. The Special Master's preparation of a report of Costs does not discharge a Plaintiff Subdivision's reporting requirement under Section VIII.C of the Teva Settlement Agreement.

vii. A member of the Plaintiff Subdivision Committee, which is a CA Participating Subdivision, will submit to the Settlement Fund Administrator and Teva a report of the fees and expenses incurred by the Special Master pursuant to Section VIII.C of the Teva Settlement Agreement.

c) Claims Priority and Limitation.

i. The Special Master will submit invoices for compensation of reasonable fees and expenses to the Plaintiff Subdivision Committee no later than ninety (90) days prior to the Payment Date for each Annual Payment. The Plaintiff Subdivision Committee will promptly review and, if reasonable, approve the Special Master's invoice for compensation. The Plaintiff Subdivision Committee will submit approved invoices to the Settlement Fund Administrator for payment. The Special Master's approved invoices have priority and will be paid first from the CA Subdivision Fund before any award of Costs, subject to the limitation in Section 2.c.v below.

ii. Final Awards of Costs that do not exceed seventy-five thousand dollars ($75,000.00) will be paid next in priority after the Special Master's approved invoices.

iii. Final Awards of Costs in excess of seventy-five thousand dollars ($75,000.00) will be paid proportionally from the funds remaining in that year's Annual Payment.

iv. Any claim for Costs that is not paid in full will be allocated against the next year's distribution from the CA Subdivision Fund, until all approved claims for Costs are paid in full.

v. In no event will more than 50% of the total CA Subdivision Fund received in any year be used to pay Costs or the Special Master's approved invoices.

vi. In no event shall more than $28 million of the total CA Subdivision Funds paid pursuant to the Teva Settlement Agreement, Allergan Settlement Agreement, Distributor Settlement Agreement, CVS Settlement Agreement, Janssen Settlement Agreement, Walgreens Settlement Agreement, and the Walmart Settlement Agreement be used to pay Costs.

d) Collateral Source Payments and Third-Party Settlement.

i. In the event a Plaintiff Subdivision is awarded compensation, in whole or in part, by any source of funds created as a result of litigation against an Opioid Defendant for 4 its reasonable Costs, it will reduce its claim for Costs from the CA Subdivision Fund by that amount. If a Plaintiff Subdivision has already received a

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

final award of Costs from the CA Subdivision Fund, it will repay the fund up to the prior award of Costs via a payment to the Settlement Fund Administrator or notify the Settlement Fund Administrator that its allocation from the next and subsequent Annual Payments should be reduced accordingly. If the Plaintiff Subdivision is repaying any prior award of Costs, that repayment will occur as soon as is feasible after the Plaintiff Subdivision's receipt of Cost funds from the collateral source, but no more than 90 days after its receipt from the collateral source. The Settlement Fund Administrator will add any repaid Costs to the CA Subdivision Fund. Any Plaintiff Subdivision that has submitted for reimbursement to any national fund and has not received a final determination by the First Claims Date may request that the settlement administrator withhold some or all of its payment from the CA Subdivision Fund in order to avoid repayment.

ii. In the event a Plaintiff Subdivision reaches a monetary settlement or compromise against any Opioid Defendant outside of the National Opioid Settlement, the monetary portion of such settlement, net of fees paid to outside contingency fee counsel and of funds earmarked strictly for abatement, will be credited against its Costs and the subdivision will be ineligible to recover those credited Costs from the CA Subdivision Fund. Plaintiff Subdivisions negotiating monetary settlements or compromises against any Opioid Defendant outside of the National Opioid Settlement will negotiate for funds to repay any Costs it previously received from the CA Subdivision Fund or for Costs it otherwise might be eligible to claim from the CA Subdivision Fund. If such a settlement is paid after all final approved claims for Costs by all Plaintiff Subdivisions are satisfied in full, the settling subdivision will reimburse the CA Subdivision Fund in that amount by making payment to the Settlement Fund Administrator to add to the CA Subdivision Fund in a manner consistent with the repayments described in section 2.d.i above.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 3

CALIFORNIA-SUBDIVISION BACKSTOP AGREEMENT

On August 6, 2021, Judge Polster of the US District Court for the Northern District of Ohio issued an Order (the Order), docket number 3814, in In Re National Prescription Opiate Litigation, MDL 2804, addressing contingent attorney fee contracts between political subdivisions eligible to participate in the Teva Settlement and their counsel.

In light of the Order, and at the request of [SUBDIVISION], the [SUBDIVISION], its counsel [COUNSEL], and the California Attorney General, on behalf of the State of California, are entering into this California-Subdivision Backstop Agreement (Backstop Agreement).

[SUBDIVISION] and [COUNSEL] intend this Backstop Agreement to constitute a State Back-Stop Agreement as that term is used in the Order and in Exhibit R (Agreement on Attorneys' Fees, Costs, and Expenses) of the Teva Settlement Agreement.

Pursuant to this Backstop Agreement, [SUBDIVISION] may, subject to the limitations of the Teva Settlement Agreement and CA Teva Allocation Agreement, as well as any other limitations imposed by law, use funds that it receives from the Teva Settlement CA Subdivision Fund to pay a contingent fee to [COUNSEL]. Any such payment from [SUBDIVISION] to [COUNSEL], together with any contingency fees that [COUNSEL] may receive from the national Attorney Fee Fund, will not exceed a total contingency fee of [PERCENTAGE NOT TO EXCEED 15%] of the total gross recovery of [SUBDIVISION] from the Teva Settlement.

[COUNSEL] certify that they first sought fees and costs from the Attorney Fee Fund created under the Teva Settlement Agreement before seeking or accepting payment under this backstop agreement. [COUNSEL] further certify that they are not seeking and will not accept payment under this backstop agreement of any litigation fees or costs that have been reimbursed through prior settlements or judgments.

The Attorney General is executing this agreement solely because the definition of "State Back-Stop Agreement" in Exhibit R of the Teva Settlement Agreement requires such agreements to be between "a Settling State" and private counsel for a participating subdivision. Neither the California Attorney General nor the State of California have any obligations under this Backstop Agreement, and this Backstop Agreement does not require the payment of any state funds to [SUBDIVISION], [COUNSEL], or any other party.

[DATE]	[SUBDIVISION SIGNATURE BLOCK]
[DATE]	[COUNSEL SIGNATURE BLOCK]
[DATE]	[ATTORNEY GENERAL SIGNATURE BLOCK]

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Proposed California State-Subdivision Agreement
Regarding Distribution and Use of
Settlement Funds – Walgreens Settlement

1. Introduction

Pursuant to the Walgreens Settlement Agreement, dated as of December 9, 2022, and any revision thereto (the "Walgreens Settlement Agreement"), including Section V and Exhibit O, the State of California proposes this agreement (the "CA Walgreens Allocation Agreement") to govern the allocation, distribution, and use of Settlement Fund payments made to California pursuant to Sections IV and V of the Walgreens Settlement Agreement. For the avoidance of doubt, this agreement does not apply to payments made pursuant to Section IX of the Walgreens Settlement Agreement.

Pursuant to Exhibit O, Paragraph 4, of the Walgreens Settlement Agreement, acceptance of this CA Walgreens Allocation Agreement is a requirement to be an Initial Participating Subdivision.

2. Definitions

a) *CA Participating Subdivision* means a Participating Subdivision that is also (a) a Plaintiff Subdivision and/or (b) a Primary Subdivision with a population equal to or greater than 10,000. For the avoidance of doubt, eligible CA Participating Subdivisions are those California subdivisions listed in Exhibit C (excluding Litigating Special Districts) and/or Exhibit I to the Walgreens Settlement Agreement.

b) *Allergan Settlement Agreement* means the Allergan Settlement Agreement dated November 22, 2022, and any revision thereto.

c) *CVS Settlement Agreement* means the CVS Settlement Agreement dated December 9, 2022, and any revision thereto as well as any modification thereto entered into by the State of California and CVS.

d) *Distributor Settlement Agreement* means the Distributor Settlement Agreement dated July 21, 2021, and any revision thereto.

e) *Janssen Settlement Agreement* means the Janssen Settlement Agreement dated July 21, 2021, and any revision thereto.

f) *Teva Settlement Agreement* means the Teva Settlement Agreement dated November 22, 2022, and any revision thereto.

g) *Walmart Settlement Agreement* means the Walmart Settlement Agreement dated November 14, 2022, and any revision thereto.

h) *CA Litigating Special District* means a Litigating Special District located in California. CA Litigating Special Districts include Downey Unified School District, Elk Grove Unified School District, Kern High School District, Montezuma Fire Protection District (located in Stockton, California), Santa Barbara San Luis Obispo Regional Health Authority, Inland Empire Health Plan, Health Plan of San Joaquin, San Leandro Unified School District,

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Pleasant Valley School District Board, and LA Care Health Plan.

i) *Plaintiff Subdivision* means a Subdivision located in California, other than a CA Litigating Special District, that filed a lawsuit, on behalf of the Subdivision and/or through an official of the Subdivision on behalf of the People of the State of California, against one or more Opioid Defendants prior to October 1, 2020.

j) *Opioid Defendant* means any defendant (including but not limited to Walgreen Co., Teva Pharmaceutical Industries Ltd., Allergan Finance, LLC, Allergan Limited, CVS Health Corporation, CVS Pharmacy, Inc., Walmart Inc., Johnson & Johnson, Janssen Pharmaceuticals, Inc., Purdue Pharma L.P., Cardinal Health, Inc., AmerisourceBergen Corporation, and McKesson Corporation) named in a lawsuit seeking damages, abatement, or other remedies related to or caused by the opioid public health crisis in any lawsuit brought by any state or local government on or before October 1, 2020.

3. General Terms

This agreement is subject to the requirements of the Walgreens Settlement Agreement, as well as applicable law, and the Walgreens Settlement Agreement governs over any inconsistent provision of this CA Walgreens Allocation Agreement. Terms used in this CA Walgreens Allocation Agreement have the same meaning as in the Walgreens Settlement Agreement unless otherwise defined herein.

Pursuant to Section V(D)(1) of the Walgreens Settlement Agreement, (a) all Settlement Fund payments will be used for Opioid Remediation, except as allowed by Section V(B)(2) of the Walgreens Settlement Agreement; and (b) at least seventy percent (70%) of Settlement Fund payment amounts will be used solely for future Opioid Remediation.

4. State Allocation

The Settlement Fund payments to California,[1] pursuant to the Walgreens Settlement Agreement, shall be allocated as follows: 15% to the State Fund; 70% to the Abatement Accounts Fund; and 15% to the Subdivision Fund. For the avoidance of doubt, all funds allocated to California from the Settlement Fund shall be combined pursuant to this CA Walgreens Allocation Agreement, and 15% of that total shall be allocated to the State of California (the "State of California Allocation"), 70% to the California Abatement Accounts Fund ("CA Abatement Accounts Fund"), and 15% to the California Subdivision Fund ("CA Subdivision Fund").

[1] For purposes of clarity, use of the term "California" refers to the geographic territory of California and the state and its local governments therein. The term "State" or "State of California" refers to the State of California as a governmental unit.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

A. State of California Allocation

Fifteen percent of the total Settlement Fund payments will be allocated to the State and used by the State for future Opioid Remediation.

B. CA Abatement Accounts Fund

i. Allocation of CA Abatement Accounts Funds

a) Seventy percent of the total Settlement Fund payments will be allocated to the CA Abatement Accounts Fund. The funds in the CA Abatement Accounts Fund will be allocated based on the allocation model developed in connection with the proposed negotiating class in the National Prescription Opiate Litigation (MDL No. 2804), as adjusted to reflect only those cities and counties that are eligible, based on population or litigation status, to become a CA Participating Subdivision. The percentage from the CA Abatement Accounts Fund allocated to each CA Participating Subdivision is set forth in Appendix 1 in the column entitled abatement percentage (the "Local Allocation"). For the avoidance of doubt, CA Litigating Special Districts and California towns, cities, and counties with a population less than 10,000 are not eligible to receive an allocation of CA Abatement Accounts Funds.

b) A CA Participating Subdivision that is a county, or a city and county, will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision, and will receive payments as provided in the Walgreens Settlement Agreement.

c) A CA Participating Subdivision that is a city will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision. The Local Allocation share for a city that is a CA Participating Subdivision will be paid to the county in which the city is located, rather than to the city, so long as: (a) the county is a CA Participating Subdivision, and (b) the city has not advised the Settlement Fund Administrator that it requests direct payment at least 60 days prior to a Payment Date. A Local Allocation share allocated to a city but paid to a county is not required to be spent exclusively for abatement activities in that city, but will become part of the county's share of the CA Abatement Accounts Funds, which will be used in accordance with Section 4.B.ii (Use of CA Abatement Accounts Funds) and reported on in accordance with Section 4.B.iii (CA Abatement Accounts Fund Oversight).

d) A city within a county that is a CA Participating Subdivision may opt in or out of direct payment at any time, and it may also elect direct payment of only a portion of its share, with the remainder going to the county, by providing notice to the Settlement Fund Administrator at least 60 days prior to a Payment Date. For purposes of this CA Walgreens Allocation Agreement, the Cities of Los Angeles, Oakland, San Diego, San Jose and Eureka will be deemed to have elected direct payment if they become Participating Subdivisions.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

e) The State will receive the Local Allocation share of any payment to the Settlement Fund that is attributable to a county or city that is eligible to become a CA Participating Subdivision, but that has not, as of the date of that payment to the Settlement Fund, become a Participating Subdivision.

f) Funds received by a CA Participating Subdivision, and not expended or encumbered within five years of receipt and in accordance with the Walgreens Settlement Agreement and this CA Walgreens Allocation Agreement shall be transferred to the State; provided however, that CA Participating Subdivisions have seven years to expend or encumber CA Abatement Accounts Funds designated to support capital outlay projects before they must be transferred to the State. This provision shall not apply to the Cost Reimbursement Funds, which shall be controlled by Appendix 2.

ii. Use of CA Abatement Accounts Funds

a) The CA Abatement Accounts Funds will be used for future Opioid Remediation in one or more of the areas described in the List of Opioid Remediation Uses, which is Exhibit E to the Walgreens Settlement Agreement.

b) In addition to this requirement, no less than 50% of the funds received by a CA Participating Subdivision from the Abatement Accounts Fund in each calendar year will be used for one or more of the following High Impact Abatement Activities:

(1) the provision of matching funds or operating costs for substance use disorder facilities within the Behavioral Health Continuum Infrastructure Program;

(2) creating new or expanded Substance Use Disorder ("SUD") treatment infrastructure;

(3) addressing the needs of communities of color and vulnerable populations (including sheltered and unsheltered homeless populations) that are disproportionately impacted by SUD;

(4) diversion of people with SUD from the justice system into treatment, including by providing training and resources to first and early responders (sworn and non-sworn) and implementing best practices for outreach, diversion and deflection, employability, restorative justice, and harm reduction; and/or

(5) interventions to prevent drug addiction in vulnerable youth.

c) The California Department of Health Care Services ("DHCS") may add to this list (but not delete from it) by designating additional High Impact Abatement Activities. DHCS will make reasonable efforts to consult with stakeholders, including the CA Participating Subdivisions, before adding additional High Impact Abatement Activities to this list.

d) For the avoidance of doubt, and subject to the requirements of the Walgreens Settlement Agreement and applicable law, CA Participating Subdivisions may form agreements or

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

ventures, or otherwise work in collaboration with, federal, state, local, tribal or private sector entities in pursuing Opioid Remediation activities funded from the CA Abatement Accounts Fund. Further, provided that all CA Abatement Accounts Funds are used for Opioid Remediation consistent with the Walgreens Settlement Agreement and this CA Walgreens Allocation Agreement, a county and any cities or towns within the county may agree to reallocate their respective shares of the CA Abatement Accounts Funds among themselves, provided that any direct distribution may only be to a CA Participating Subdivision and any CA Participating Subdivision must agree to their share being reallocated.

iii. CA Abatement Accounts Fund Oversight

a) Pursuant to Section 5 below, CA Participating Subdivisions receiving settlement funds must prepare and file reports annually regarding the use of those funds. DHCS may regularly review the reports prepared by CA Participating Subdivisions about the use of CA Abatement Accounts Funds for compliance with the Walgreens Settlement Agreement and this CA Walgreens Allocation Agreement.

b) If DHCS determines that a CA Participating Subdivision's use of CA Abatement Accounts Funds is inconsistent with the Walgreens Settlement Agreement or this CA Walgreens Allocation Agreement, whether through review of reports or information from any other sources, DHCS shall send a request to meet and confer with the CA Participating Subdivision. The parties shall meet and confer in an effort to resolve the concern.

c) If the parties are unable to reach a resolution, DHCS may conduct an audit of the Subdivision's use of the CA Abatement Accounts Funds within one year of the request to meet and confer, unless the parties mutually agree in writing to extend the meet and confer time frame.

d) If the concern still cannot be resolved, the State may bring a motion or action in the court where the State has filed its Consent Judgment to resolve the concern or otherwise enforce the requirements of the Walgreens Settlement Agreement or this CA Walgreens Allocation Agreement. However, in no case shall any audit be conducted, or motion be brought, as to a specific expenditure of funds, more than five years after the date on which the expenditure of the funds was reported to DHCS, in accordance with this agreement.

e) Notwithstanding the foregoing, this Agreement does not limit the statutory or constitutional authority of any state or local agency or official to conduct audits, investigations, or other oversight activities, or to pursue administrative, civil, or criminal enforcement actions.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

C. CA Subdivision Fund

i. Fifteen percent of the total Settlement Fund payments will be allocated to the CA Subdivision Fund. All funds in the CA Subdivision Fund will be allocated among the Plaintiff Subdivisions that are Initial Participating Subdivisions. The funds will be used, subject to any limits imposed by the Walgreens Settlement Agreement and this CA Walgreens Allocation Agreement, to fund future Opioid Remediation and reimburse past opioid-related expenses, which may include fees and expenses related to litigation, and to pay the reasonable fees and expenses of the Special Master as set forth in Appendix 2.

The CA Subdivision Funds will be allocated as follows:

a) First, funds in the CA Subdivision Fund shall be used to pay the Special Master's reasonable fees and expenses in accordance with the procedures and limitations set forth in Appendix 2 to this document;

b) Second, funds will be allocated to Plaintiff Subdivisions that are Initial Participating Subdivisions that have been awarded Costs, as defined by and in accordance with the procedures and limitations set forth in Appendix 2 to this document.

c) Funds remaining in the CA Subdivision Fund, which shall consist of no less than 50% of the total CA Subdivision Fund received in any year pursuant to Appendix 2, Section 2.c.v, will be distributed to Plaintiff Subdivisions that are Initial Participating Subdivisions, in relative proportion to the Local Allocation. These funds shall be used to fund future opioid-related projects and to reimburse past opioid-related expenses, which may include fees and expenses related to litigation against any Opioid Defendant.

D. Provision for State Back-Stop Agreement

On August 6, 2021, Judge Dan Polster of the U.S. District Court, Northern District of Ohio, Eastern Division, issued an order (ECF Docket Number 3814) ("MDL Fees Order") in the National Prescription Opiate Litigation (MDL No. 2804) "cap[ping] all applicable contingent fee agreements at 15%." Private counsel representing Plaintiff Subdivisions should seek its contingency fees and costs from the Attorney Fee Fund or Cost Funds under the Walgreens Settlement Agreement, and, if applicable, the Teva Settlement Agreement, Allergan Settlement Agreement, CVS Settlement Agreement, Distributor Settlement Agreement, Janssen Settlement Agreement, and Walmart Settlement Agreement.

A Plaintiff Subdivision may separately agree to use its share of the CA Subdivision Fund to pay for fees or costs incurred by its contingency-fee counsel ("State Back-Stop Agreement"), pursuant to Exhibit R, section I(Y), of the Walgreens Settlement Agreement and the MDL Fees Order, so long as such contingency fees do not exceed a total contingency fee of 15% of the total gross recovery of the Plaintiff Subdivision pursuant to the Walgreens Settlement, inclusive of contingency fees from the national Attorney Fee Fund and this State Back-Stop Agreement. Before seeking fees or litigation costs and expenses from a State Back-Stop Agreement, private counsel representing Plaintiff Subdivisions must first seek contingency fees and costs from the Attorney Fee Fund or Cost Funds created under the Walgreens Settlement Agreement. Further,

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

private counsel may only seek reimbursement for litigation fees and costs that have not previously been reimbursed through prior settlements or judgments.

To effectuate a State Back-Stop Agreement pursuant to this section, an agreement in the form of Appendix 3 may be entered into by a Plaintiff Subdivision, private counsel, and the California Office of the Attorney General. The California Office of the Attorney General shall, upon the request of a Plaintiff Subdivision, execute any agreement executed by a Plaintiff Subdivision and its private counsel if it is in the form of Appendix 3. The California Office of the Attorney General will also consider requests from Plaintiff Subdivisions to execute and enter into agreements presented in other forms.

For the avoidance of doubt, this agreement does not require a Plaintiff Subdivision to request or enter into a State Back-Stop Agreement, and no State Back-Stop Agreement shall impose any duty or obligation on the State of California or any of its agencies or officers, including without limitation the Attorney General.

5. State and Subdivision Reporting

a) DHCS will prepare an annual written report regarding the State's use of funds from the settlement until those funds are fully expended and for one year thereafter. These reports will be made publicly available on the DHCS web site.

b) Each CA Participating Subdivision that receives payments of funds from the settlement will prepare written reports at least annually regarding the use of those funds, until those funds are fully expended and for one year thereafter. These reports will also include a certification that all funds that the CA Participating Subdivision has received through the settlement have been used in compliance with the Walgreens Settlement Agreement and this CA Walgreens Allocation Agreement. The report will be in a form reasonably determined by DHCS. Prior to specifying the form of the report DHCS will confer with representatives of the Plaintiff Subdivisions.

c) The State and all CA Participating Subdivisions receiving CA Abatement Accounts Funds will track all deposits and expenditures. Each such subdivision is responsible solely for the CA Abatement Accounts Funds it receives. A county is not responsible for oversight, reporting, or monitoring of CA Abatement Accounts Funds received by a city within that county that receives direct payment. Unless otherwise exempt, Subdivisions' expenditures and uses of CA Abatement Accounts Funds and other Settlement Funds will be subject to the normal budgetary and expenditure process of the Subdivision.

d) Each Plaintiff Subdivision receiving CA Subdivision Funds will track all deposits and expenditures, as required by the Walgreens Settlement Agreement and this CA Walgreens Allocation Agreement. Among other things, Plaintiff Subdivisions using monies from the CA Subdivision Fund for purposes that do not qualify as Opioid Remediation must identify and include in their annual report, the amount and how such funds were used, including if used to pay attorneys' fees, investigation costs, or litigation costs. Pursuant to Section V(B)(2) of the Walgreens Settlement Agreement, such information must also be reported to the Settlement Fund Administrator and Walgreens.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

e) In each year in which DHCS prepares an annual report DHCS will also host a meeting to discuss the annual report and the Opioid Remediation activities being carried out by the State and Participating Subdivisions.

6. Miscellaneous

a) The State or any CA Participating Subdivision may bring a motion or action in the court where the State has filed its Consent Judgment to enforce the requirements of this CA Walgreens Allocation Agreement. Before filing such a motion or action the State will meet and confer with any CA Participating Subdivision that is the subject of the anticipated motion or action, and vice versa.

b) Except as provided in the Walgreens Settlement Agreement, this CA Walgreens Allocation Agreement is not enforceable by any party other than the State and the CA Participating Subdivisions. It does not confer any rights or remedies upon, and shall not be enforceable by, any third party.

c) Except as provided in the CA Walgreens Allocation Agreement, if any provision of this agreement or the application thereof to any person, entity, or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement, or the application of such provision to persons, entities, or circumstances other than those as to which it is invalid or unenforceable, will not be affected thereby, and each other provision of this agreement will be valid and enforceable to the fullest extent permitted by law.

d) Except as provided in the Walgreens Settlement Agreement, this agreement shall be governed by and interpreted in accordance with the laws of California.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

The undersigned, Ontario city, ACKNOWLEDGES acceptance of this Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – Walgreens Settlement is a requirement to be an Initial Participating Subdivision in the Walgreens Settlement and ACCEPTS this Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – Walgreens Settlement. EXECUTED on 2/28/2023.

Signature: DocuSigned by: Scott Ochoa 943ADB3C46DD448...

Name: Scott Ochoa

Title: City Manager

Date: 2/28/2023

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

DISCLAIMER: The allocation percentages herein are estimates only and should not be relied on for decisions regarding legal rights, releases, waivers, or other decisions affecting current or potential legal claims. Percentages shown in the Plaintiff Subdivision Percentage column may change pursuant to Section 4.C. of the California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds—Walgreens Settlement, whereas the percentages shown in the Abatement Percentage column should not change. Participating Subdivisions, underlying calculations, and the calculated allocation percentages are subject to change. Regarding the column herein entitled "Abatement Percentage," pursuant to Section 4.B.e., the State of California will receive the Local Allocation share of any payment to the Settlement Fund that is attributable to a county or city that is eligible to become a CA Participating Subdivision, but that has not, as of the date of that payment to the Settlement Fund, become a Participating Subdivision. Regarding the column herein entitled "Plaintiff Subdivision Percentage," payments allocated to a Plaintiff Subdivision, which is not an Initial Participating Subdivision, will be re-allocated among the Plaintiff Subdivisions that are Initial Participating Subdivisions. Regarding the column herein entitled "Abatement Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the California Abatement Account Funds received, pursuant to Section 4.B. Regarding the column herein entitled "Plaintiff Subdivision Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the California Subdivision Funds received, pursuant to Section 4.C. Regarding the column herein entitled "Weighted Allocation Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the combined and weighted allocation of the Abatement Percentage and the Plaintiff Subdivision Percentage.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

			100.000%	100.000%	100.000%
Participating Subdivision Classification	**Participating Subdivision**	**County**	**Abatement Percentage**	**Plaintiff Subdivision Percentage**	**Weighted Allcation Percentage**
County	***Alameda County***	Alameda	2.332%	2.853%	**2.4237952%**
City	Alameda	Alameda	0.069%		**0.0570162%**
City	Albany	Alameda	0.013%		**0.0107768%**
City	Berkeley	Alameda	0.152%		**0.1249656%**
City	Dublin	Alameda	0.033%	0.040%	**0.0338810%**
City	Emeryville	Alameda	0.023%		**0.0185765%**
City	Fremont	Alameda	0.108%		**0.0888576%**
City	Hayward	Alameda	0.117%		**0.0966218%**
City	Livermore	Alameda	0.054%		**0.0446740%**
City	Newark	Alameda	0.026%		**0.0217626%**
City	Oakland	Alameda	0.486%	0.595%	**0.5055601%**
City	Piedmont	Alameda	0.014%		**0.0114064%**
City	Pleasanton	Alameda	0.067%		**0.0554547%**
City	San Leandro	Alameda	0.039%		**0.0321267%**
City	Union City	Alameda	0.043%		**0.0352484%**
County	***Amador County***	Amador	0.226%	0.277%	**0.2349885%**
County	***Butte County***	Butte	1.615%	1.975%	**1.6783178%**
City	Chico	Butte	0.216%	0.264%	**0.2246499%**
City	Oroville	Butte	0.079%		**0.0646595%**
County	***Calaveras County***	Calaveras	0.226%	0.277%	**0.2351644%**
County	***Colusa County***	Colusa	0.059%		**0.0489221%**
County	***Contra Costa County***	Contra Costa	2.102%	2.571%	**2.1844585%**
City	Antioch	Contra Costa	0.037%		**0.0301879%**
City	Brentwood	Contra Costa	0.026%		**0.0215339%**
City	Clayton	Contra Costa	0.002%		**0.0018060%**
City	Concord	Contra Costa	0.055%		**0.0456676%**
City	Danville	Contra Costa	0.010%		**0.0082255%**
City	El Cerrito	Contra Costa	0.023%		**0.0189024%**
City	Hercules	Contra Costa	0.010%		**0.0078273%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Lafayette	Contra Costa	0.006%		**0.0046030%**
City	Martinez	Contra Costa	0.012%		**0.0098593%**
City	Moraga	Contra Costa	0.004%		**0.0031007%**
City	Oakley	Contra Costa	0.010%		**0.0079416%**
City	Orinda	Contra Costa	0.005%		**0.0038157%**
City	Pinole	Contra Costa	0.013%		**0.0110909%**
City	Pittsburg	Contra Costa	0.053%		**0.0436369%**
City	Pleasant Hill	Contra Costa	0.013%		**0.0106309%**
City	Richmond	Contra Costa	0.146%		**0.1201444%**
City	San Pablo	Contra Costa	0.018%		**0.0148843%**
City	San Ramon	Contra Costa	0.021%		**0.0176459%**
City	Walnut Creek	Contra Costa	0.026%		**0.0212132%**
County	***Del Norte County***	Del Norte	0.114%	0.140%	**0.1189608%**
County	***El Dorado County***	El Dorado	0.768%	0.939%	**0.7980034%**
City	Placerville	El Dorado	0.015%		**0.0127642%**
City	South Lake Tahoe	El Dorado	0.081%		**0.0665456%**
County	***Fresno County***	Fresno	1.895%	2.318%	**1.9693410%**
City	Clovis	Fresno	0.065%		**0.0536211%**
City	Coalinga	Fresno	0.012%		**0.0098554%**
City	Fresno	Fresno	0.397%		**0.3270605%**
City	Kerman	Fresno	0.005%		**0.0042534%**
City	Kingsburg	Fresno	0.008%		**0.0066167%**
City	Mendota	Fresno	0.002%		**0.0019387%**
City	Orange Cove	Fresno	0.004%		**0.0035607%**
City	Parlier	Fresno	0.008%		**0.0069755%**
City	Reedley	Fresno	0.012%		**0.0098804%**
City	Sanger	Fresno	0.018%		**0.0146135%**
City	Selma	Fresno	0.015%		**0.0127537%**
County	***Glenn County***	Glenn	0.107%	0.131%	**0.1116978%**
County	***Humboldt County***	Humboldt	1.030%	1.260%	**1.0703185%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Arcata	Humboldt	0.054%		**0.0447660%**
City	Eureka	Humboldt	0.117%	0.143%	**0.1216284%**
City	Fortuna	Humboldt	0.032%		**0.0266837%**
County	***Imperial County***	Imperial	0.258%	0.315%	**0.2679006%**
City	Brawley	Imperial	0.011%		**0.0087986%**
City	Calexico	Imperial	0.019%		**0.0152799%**
City	El Centro	Imperial	0.158%		**0.1302522%**
City	Imperial	Imperial	0.006%		**0.0048791%**
County	***Inyo County***	Inyo	0.073%	0.089%	**0.0754413%**
County	***Kern County***	Kern	2.517%	3.079%	**2.6159145%**
City	Arvin	Kern	0.006%		**0.0046425%**
City	Bakersfield	Kern	0.212%		**0.1747198%**
City	California City	Kern	0.009%		**0.0070820%**
City	Delano	Kern	0.030%		**0.0249316%**
City	McFarland	Kern	0.003%		**0.0025644%**
City	Ridgecrest	Kern	0.015%		**0.0120938%**
City	Shafter	Kern	0.013%		**0.0103417%**
City	Tehachapi	Kern	0.009%		**0.0073580%**
City	Wasco	Kern	0.008%		**0.0069861%**
County	***Kings County***	Kings	0.293%		**0.2413469%**
City	Avenal	Kings	0.007%		**0.0056335%**
City	Corcoran	Kings	0.013%		**0.0107032%**
City	Hanford	Kings	0.027%		**0.0226038%**
City	Lemoore	Kings	0.016%		**0.0131900%**
County	***Lake County***	Lake	0.795%		**0.6545389%**
City	Clearlake	Lake	0.041%	0.050%	**0.0426253%**
City	Lakeport	Lake	0.021%	0.026%	**0.0222964%**
County	***Lassen County***	Lassen	0.319%	0.391%	**0.3320610%**
City	Susanville	Lassen	0.027%		**0.0219295%**
County	***Los Angeles County***	Los Angeles	13.896%	16.999%	**14.4437559%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Agoura Hills	Los Angeles	0.005%		**0.0040024%**
City	Alhambra	Los Angeles	0.042%		**0.0343309%**
City	Arcadia	Los Angeles	0.033%		**0.0267718%**
City	Artesia	Los Angeles	0.001%		**0.0005100%**
City	Azusa	Los Angeles	0.026%		**0.0210857%**
City	Baldwin Park	Los Angeles	0.027%		**0.0218520%**
City	Bell	Los Angeles	0.008%		**0.0068783%**
City	Bellflower	Los Angeles	0.002%		**0.0014485%**
City	Bell Gardens	Los Angeles	0.014%		**0.0114301%**
City	Beverly Hills	Los Angeles	0.065%		**0.0534897%**
City	Burbank	Los Angeles	0.100%		**0.0823132%**
City	Calabasas	Los Angeles	0.006%		**0.0048948%**
City	Carson	Los Angeles	0.019%		**0.0159805%**
City	Cerritos	Los Angeles	0.005%		**0.0039682%**
City	Claremont	Los Angeles	0.010%		**0.0082584%**
City	Commerce	Los Angeles	0.000%		**0.0002971%**
City	Compton	Los Angeles	0.044%		**0.0361882%**
City	Covina	Los Angeles	0.028%		**0.0229127%**
City	Cudahy	Los Angeles	0.001%		**0.0006020%**
City	Culver City	Los Angeles	0.055%		**0.0449894%**
City	Diamond Bar	Los Angeles	0.001%		**0.0006993%**
City	Downey	Los Angeles	0.052%		**0.0429994%**
City	Duarte	Los Angeles	0.003%		**0.0027261%**
City	El Monte	Los Angeles	0.031%	0.038%	**0.0318985%**
City	El Segundo	Los Angeles	0.033%		**0.0268020%**
City	Gardena	Los Angeles	0.034%		**0.0278088%**
City	Glendale	Los Angeles	0.166%		**0.1366586%**
City	Glendora	Los Angeles	0.016%		**0.0134411%**
City	Hawaiian Gardens	Los Angeles	0.005%		**0.0040549%**
City	Hawthorne	Los Angeles	0.050%		**0.0407833%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Hermosa Beach	Los Angeles	0.018%		**0.0145307%**
City	Huntington Park	Los Angeles	0.023%		**0.0190667%**
City	Inglewood	Los Angeles	0.059%		**0.0489195%**
City	La Cañada Flintridge	Los Angeles	0.003%		**0.0025565%**
City	Lakewood	Los Angeles	0.005%		**0.0039971%**
City	La Mirada	Los Angeles	0.010%		**0.0081572%**
City	Lancaster	Los Angeles	0.045%		**0.0369689%**
City	La Puente	Los Angeles	0.002%		**0.0012999%**
City	La Verne	Los Angeles	0.024%		**0.0194190%**
City	Lawndale	Los Angeles	0.002%		**0.0017731%**
City	Lomita	Los Angeles	0.004%		**0.0031940%**
City	Long Beach	Los Angeles	0.439%		**0.3614151%**
City	Los Angeles	Los Angeles	2.715%	3.321%	**2.8218811%**
City	Lynwood	Los Angeles	0.016%		**0.0134345%**
City	Malibu	Los Angeles	0.002%		**0.0019269%**
City	Manhattan Beach	Los Angeles	0.032%		**0.0260686%**
City	Maywood	Los Angeles	0.004%		**0.0035528%**
City	Monrovia	Los Angeles	0.031%		**0.0254455%**
City	Montebello	Los Angeles	0.030%		**0.0250670%**
City	Monterey Park	Los Angeles	0.031%		**0.0256677%**
City	Norwalk	Los Angeles	0.031%		**0.0258228%**
City	Palmdale	Los Angeles	0.046%		**0.0375827%**
City	Palos Verdes Estates	Los Angeles	0.006%		**0.0053102%**
City	Paramount	Los Angeles	0.011%		**0.0091483%**
City	Pasadena	Los Angeles	0.146%		**0.1200524%**
City	Pico Rivera	Los Angeles	0.022%		**0.0183333%**
City	Pomona	Los Angeles	0.111%		**0.0911933%**
City	Rancho Palos Verdes	Los Angeles	0.002%		**0.0012645%**
City	Redondo Beach	Los Angeles	0.062%		**0.0506992%**
City	Rosemead	Los Angeles	0.003%		**0.0028260%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	San Dimas	Los Angeles	0.003%		**0.0022016%**
City	San Fernando	Los Angeles	0.013%		**0.0104837%**
City	San Gabriel	Los Angeles	0.018%		**0.0147726%**
City	San Marino	Los Angeles	0.009%		**0.0073791%**
City	Santa Clarita	Los Angeles	0.022%		**0.0178167%**
City	Santa Fe Springs	Los Angeles	0.031%		**0.0257531%**
City	Santa Monica	Los Angeles	0.158%		**0.1298513%**
City	Sierra Madre	Los Angeles	0.006%		**0.0048646%**
City	Signal Hill	Los Angeles	0.010%		**0.0084884%**
City	South El Monte	Los Angeles	0.005%		**0.0039603%**
City	South Gate	Los Angeles	0.020%		**0.0166272%**
City	South Pasadena	Los Angeles	0.012%		**0.0095334%**
City	Temple City	Los Angeles	0.005%		**0.0039498%**
City	Torrance	Los Angeles	0.112%		**0.0919820%**
City	Walnut	Los Angeles	0.006%		**0.0047305%**
City	West Covina	Los Angeles	0.049%		**0.0404521%**
City	West Hollywood	Los Angeles	0.013%		**0.0108517%**
City	Whittier	Los Angeles	0.032%		**0.0260581%**
County	***Madera County***	Madera	0.349%	0.427%	**0.3630669%**
City	Chowchilla	Madera	0.012%		**0.0097332%**
City	Madera	Madera	0.039%		**0.0318441%**
County	***Marin County***	Marin	0.564%	0.690%	**0.5861325%**
City	Larkspur	Marin	0.015%		**0.0124697%**
City	Mill Valley	Marin	0.020%		**0.0168401%**
City	Novato	Marin	0.028%		**0.0229824%**
City	San Anselmo	Marin	0.009%		**0.0078062%**
City	San Rafael	Marin	0.089%		**0.0729823%**
County	***Mariposa County***	Mariposa	0.084%	0.103%	**0.0876131%**
County	***Mendocino County***	Mendocino	0.439%	0.536%	**0.4558394%**
City	Ukiah	Mendocino	0.039%		**0.0317153%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
County	***Merced County***	Merced	0.551%	0.674%	**0.5724262%**
City	Atwater	Merced	0.024%		**0.0195846%**
City	Livingston	Merced	0.006%		**0.0045873%**
City	Los Banos	Merced	0.020%		**0.0165142%**
City	Merced	Merced	0.061%		**0.0500762%**
County	***Modoc County***	Modoc	0.065%	0.080%	**0.0678250%**
County	***Mono County***	Mono	0.023%	0.029%	**0.0242606%**
County	***Monterey County***	Monterey	0.908%	1.111%	**0.9437083%**
City	Greenfield	Monterey	0.006%		**0.0050552%**
City	King City	Monterey	0.005%		**0.0037355%**
City	Marina	Monterey	0.017%		**0.0144098%**
City	Monterey	Monterey	0.041%		**0.0336540%**
City	Pacific Grove	Monterey	0.009%		**0.0074842%**
City	Salinas	Monterey	0.094%		**0.0776576%**
City	Seaside	Monterey	0.023%		**0.0191772%**
City	Soledad	Monterey	0.007%		**0.0060870%**
County	***Napa County***	Napa	0.288%	0.352%	**0.2994325%**
City	American Canyon	Napa	0.017%		**0.0136869%**
City	Napa	Napa	0.078%		**0.0642783%**
County	***Nevada County***	Nevada	0.441%	0.539%	**0.4579827%**
City	Grass Valley	Nevada	0.024%		**0.0197805%**
City	Truckee	Nevada	0.003%		**0.0023843%**
County	***Orange County***	Orange	4.364%	5.339%	**4.5363576%**
City	Aliso Viejo	Orange	0.014%		**0.0113841%**
City	Anaheim	Orange	0.554%	0.678%	**0.5759282%**
City	Brea	Orange	0.086%		**0.0708897%**
City	Buena Park	Orange	0.087%		**0.0714352%**
City	Costa Mesa	Orange	0.124%	0.152%	**0.1288366%**
City	Cypress	Orange	0.033%		**0.0271937%**
City	Dana Point	Orange	0.001%		**0.0005560%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Fountain Valley	Orange	0.055%		**0.0455980%**
City	Fullerton	Orange	0.137%	0.168%	**0.1425744%**
City	Garden Grove	Orange	0.213%		**0.1752482%**
City	Huntington Beach	Orange	0.247%	0.302%	**0.2568420%**
City	Irvine	Orange	0.139%	0.170%	**0.1442350%**
City	Laguna Beach	Orange	0.047%	0.058%	**0.0493043%**
City	Laguna Hills	Orange	0.014%		**0.0115457%**
City	Laguna Niguel	Orange	0.001%		**0.0007071%**
City	Laguna Woods	Orange	0.001%		**0.0006546%**
City	La Habra	Orange	0.060%	0.073%	**0.0621049%**
City	Lake Forest	Orange	0.012%		**0.0101249%**
City	La Palma	Orange	0.012%		**0.0095439%**
City	Los Alamitos	Orange	0.008%		**0.0069190%**
City	Mission Viejo	Orange	0.014%		**0.0117560%**
City	Newport Beach	Orange	0.179%		**0.1470134%**
City	Orange	Orange	0.150%		**0.1231320%**
City	Placentia	Orange	0.029%	0.035%	**0.0298912%**
City	Rancho Santa Margarita	Orange	0.001%		**0.0006296%**
City	San Clemente	Orange	0.008%	0.010%	**0.0086083%**
City	San Juan Capistrano	Orange	0.008%		**0.0065510%**
City	Santa Ana	Orange	0.502%	0.614%	**0.5213866%**
City	Seal Beach	Orange	0.020%		**0.0165891%**
City	Stanton	Orange	0.035%		**0.0291955%**
City	Tustin	Orange	0.073%		**0.0600341%**
City	Westminster	Orange	0.104%	0.127%	**0.1082721%**
City	Yorba Linda	Orange	0.044%		**0.0362223%**
County	***Placer County***	Placer	1.045%	1.278%	**1.0861002%**
City	Auburn	Placer	0.017%		**0.0141114%**
City	Lincoln	Placer	0.031%		**0.0255599%**
City	Rocklin	Placer	0.076%		**0.0625485%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Roseville	Placer	0.196%		**0.1616559%**
County	***Plumas County***	Plumas	0.205%	0.251%	**0.2128729%**
County	***Riverside County***	Riverside	4.534%	5.547%	**4.7128296%**
City	Banning	Riverside	0.017%		**0.0143848%**
City	Beaumont	Riverside	0.021%		**0.0171135%**
City	Blythe	Riverside	0.012%		**0.0096714%**
City	Canyon Lake	Riverside	0.000%		**0.0001761%**
City	Cathedral City	Riverside	0.067%		**0.0553614%**
City	Coachella	Riverside	0.021%		**0.0173054%**
City	Corona	Riverside	0.147%		**0.1207083%**
City	Desert Hot Springs	Riverside	0.024%		**0.0200433%**
City	Eastvale	Riverside	0.000%		**0.0002747%**
City	Hemet	Riverside	0.051%		**0.0421792%**
City	Indio	Riverside	0.056%		**0.0457794%**
City	Jurupa Valley	Riverside	0.001%		**0.0008991%**
City	Lake Elsinore	Riverside	0.021%		**0.0172949%**
City	La Quinta	Riverside	0.063%		**0.0516732%**
City	Menifee	Riverside	0.032%		**0.0260909%**
City	Moreno Valley	Riverside	0.137%		**0.1130348%**
City	Murrieta	Riverside	0.048%	0.059%	**0.0497423%**
City	Norco	Riverside	0.016%		**0.0134542%**
City	Palm Desert	Riverside	0.083%		**0.0682465%**
City	Palm Springs	Riverside	0.076%		**0.0629862%**
City	Perris	Riverside	0.009%		**0.0076774%**
City	Rancho Mirage	Riverside	0.052%		**0.0431098%**
City	Riverside	Riverside	0.268%		**0.2206279%**
City	San Jacinto	Riverside	0.010%		**0.0085936%**
City	Temecula	Riverside	0.022%		**0.0180086%**
City	Wildomar	Riverside	0.008%		**0.0062500%**
County	***Sacramento County***	Sacramento	3.797%	4.645%	**3.9465887%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Citrus Heights	Sacramento	0.057%		**0.0465312%**
City	Elk Grove	Sacramento	0.130%		**0.1066994%**
City	Folsom	Sacramento	0.108%		**0.0890850%**
City	Galt	Sacramento	0.017%		**0.0143704%**
City	Rancho Cordova	Sacramento	0.008%		**0.0067679%**
City	Sacramento	Sacramento	0.721%	0.882%	**0.7496530%**
County	***San Benito County***	San Benito	0.106%	0.130%	**0.1101417%**
City	Hollister	San Benito	0.027%		**0.0225355%**
County	***San Bernardino County***	San Bernardino	3.259%	3.987%	**3.3878124%**
City	Adelanto	San Bernardino	0.008%		**0.0066640%**
City	Apple Valley	San Bernardino	0.025%		**0.0207360%**
City	Barstow	San Bernardino	0.015%		**0.0122056%**
City	Chino	San Bernardino	0.064%		**0.0525893%**
City	Chino Hills	San Bernardino	0.001%		**0.0006388%**
City	Colton	San Bernardino	0.031%		**0.0253443%**
City	Fontana	San Bernardino	0.112%		**0.0920543%**
City	Grand Terrace	San Bernardino	0.006%		**0.0051051%**
City	Hesperia	San Bernardino	0.035%		**0.0291522%**
City	Highland	San Bernardino	0.004%		**0.0029061%**
City	Loma Linda	San Bernardino	0.009%		**0.0071188%**
City	Montclair	San Bernardino	0.039%		**0.0322108%**
City	Ontario	San Bernardino	0.179%		**0.1472934%**
City	Rancho Cucamonga	San Bernardino	0.084%		**0.0689431%**
City	Redlands	San Bernardino	0.057%		**0.0469150%**
City	Rialto	San Bernardino	0.073%		**0.0603206%**
City	San Bernardino	San Bernardino	0.178%		**0.1461880%**
City	Twentynine Palms	San Bernardino	0.002%		**0.0012605%**
City	Upland	San Bernardino	0.052%		**0.0424460%**
City	Victorville	San Bernardino	0.033%		**0.0269400%**
City	Yucaipa	San Bernardino	0.016%		**0.0128772%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Yucca Valley	San Bernardino	0.003%		**0.0021228%**
County	***San Diego County***	San Diego	5.706%	6.980%	**5.9309748%**
City	Carlsbad	San Diego	0.128%		**0.1050485%**
City	Chula Vista	San Diego	0.189%	0.231%	**0.1961456%**
City	Coronado	San Diego	0.044%		**0.0359095%**
City	El Cajon	San Diego	0.113%		**0.0933582%**
City	Encinitas	San Diego	0.061%	0.074%	**0.0630289%**
City	Escondido	San Diego	0.145%		**0.1192204%**
City	Imperial Beach	San Diego	0.014%		**0.0118283%**
City	La Mesa	San Diego	0.055%	0.068%	**0.0575593%**
City	Lemon Grove	San Diego	0.022%		**0.0183911%**
City	National City	San Diego	0.080%		**0.0656808%**
City	Oceanside	San Diego	0.213%		**0.1753428%**
City	Poway	San Diego	0.062%		**0.0511040%**
City	San Diego	San Diego	1.975%	2.416%	**2.0531169%**
City	San Marcos	San Diego	0.089%		**0.0733897%**
City	Santee	San Diego	0.033%		**0.0268401%**
City	Solana Beach	San Diego	0.017%		**0.0138564%**
City	Vista	San Diego	0.052%		**0.0425144%**
Consolidated	***San Francisco***	San Francisco	3.026%	3.702%	**3.1457169%**
County	***San Joaquin County***	San Joaquin	1.680%	2.055%	**1.7460399%**
City	Lathrop	San Joaquin	0.009%		**0.0075394%**
City	Lodi	San Joaquin	0.053%		**0.0439484%**
City	Manteca	San Joaquin	0.054%		**0.0443454%**
City	Ripon	San Joaquin	0.013%		**0.0104219%**
City	Stockton	San Joaquin	0.313%	0.383%	**0.3256176%**
City	Tracy	San Joaquin	0.084%		**0.0692047%**
County	***San Luis Obispo County***	San Luis Obispo	0.816%	0.999%	**0.8484126%**
City	Arroyo Grande	San Luis Obispo	0.024%		**0.0199053%**
City	Atascadero	San Luis Obispo	0.029%		**0.0240680%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	El Paso de Robles (Paso Robles)	San Luis Obispo	0.043%		**0.0353456%**
City	Grover Beach	San Luis Obispo	0.017%		**0.0137881%**
City	Morro Bay	San Luis Obispo	0.020%		**0.0160922%**
City	San Luis Obispo	San Luis Obispo	0.077%		**0.0637841%**
County	***San Mateo County***	San Mateo	1.074%	1.313%	**1.1159599%**
City	Belmont	San Mateo	0.021%		**0.0169860%**
City	Burlingame	San Mateo	0.019%		**0.0152537%**
City	Daly City	San Mateo	0.044%		**0.0363880%**
City	East Palo Alto	San Mateo	0.013%		**0.0103982%**
City	Foster City	San Mateo	0.020%		**0.0166101%**
City	Half Moon Bay	San Mateo	0.004%		**0.0031638%**
City	Hillsborough	San Mateo	0.013%		**0.0110029%**
City	Menlo Park	San Mateo	0.015%		**0.0126209%**
City	Millbrae	San Mateo	0.013%		**0.0105836%**
City	Pacifica	San Mateo	0.016%		**0.0130625%**
City	Redwood City	San Mateo	0.056%		**0.0463511%**
City	San Bruno	San Mateo	0.021%		**0.0172161%**
City	San Carlos	San Mateo	0.013%		**0.0108885%**
City	San Mateo	San Mateo	0.052%		**0.0425841%**
City	South San Francisco	San Mateo	0.043%		**0.0353943%**
County	***Santa Barbara County***	Santa Barbara	1.132%	1.385%	**1.1768968%**
City	Carpinteria	Santa Barbara	0.001%		**0.0008938%**
City	Goleta	Santa Barbara	0.004%		**0.0028969%**
City	Lompoc	Santa Barbara	0.047%		**0.0389379%**
City	Santa Barbara	Santa Barbara	0.122%		**0.1004559%**
City	Santa Maria	Santa Barbara	0.058%		**0.0479179%**
County	***Santa Clara County***	Santa Clara	2.404%	2.941%	**2.4987553%**
City	Campbell	Santa Clara	0.014%		**0.0112566%**
City	Cupertino	Santa Clara	0.008%		**0.0066824%**
City	Gilroy	Santa Clara	0.025%		**0.0202891%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Los Altos	Santa Clara	0.013%		**0.0103338%**
City	Los Gatos	Santa Clara	0.013%		**0.0103220%**
City	Milpitas	Santa Clara	0.036%		**0.0298120%**
City	Morgan Hill	Santa Clara	0.015%		**0.0124619%**
City	Mountain View	Santa Clara	0.041%		**0.0334608%**
City	Palo Alto	Santa Clara	0.039%		**0.0323080%**
City	San Jose	Santa Clara	0.294%	0.360%	**0.3054960%**
City	Santa Clara	Santa Clara	0.067%		**0.0549723%**
City	Saratoga	Santa Clara	0.004%		**0.0034161%**
City	Sunnyvale	Santa Clara	0.053%		**0.0434069%**
County	***Santa Cruz County***	Santa Cruz	0.783%	0.957%	**0.8135396%**
City	Capitola	Santa Cruz	0.020%		**0.0168191%**
City	Santa Cruz	Santa Cruz	0.143%		**0.1180348%**
City	Scotts Valley	Santa Cruz	0.015%		**0.0126525%**
City	Watsonville	Santa Cruz	0.063%		**0.0520136%**
County	***Shasta County***	Shasta	1.095%	1.339%	**1.1380191%**
City	Anderson	Shasta	0.024%		**0.0198896%**
City	Redding	Shasta	0.284%		**0.2334841%**
City	Shasta Lake	Shasta	0.004%		**0.0031993%**
County	***Siskiyou County***	Siskiyou	0.228%	0.279%	**0.2373393%**
County	***Solano County***	Solano	0.760%		**0.6260795%**
City	Benicia	Solano	0.031%		**0.0253903%**
City	Dixon	Solano	0.016%		**0.0130849%**
City	Fairfield	Solano	0.109%		**0.0897317%**
City	Suisun City	Solano	0.021%		**0.0176183%**
City	Vacaville	Solano	0.119%		**0.0976497%**
City	Vallejo	Solano	0.167%		**0.1373644%**
County	***Sonoma County***	Sonoma	1.218%	1.490%	**1.2661290%**
City	Healdsburg	Sonoma	0.032%		**0.0266929%**
City	Petaluma	Sonoma	0.081%		**0.0667507%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Rohnert Park	Sonoma	0.041%		**0.0340759%**
City	Santa Rosa	Sonoma	0.184%		**0.1519070%**
City	Sonoma	Sonoma	0.022%		**0.0183438%**
City	Windsor	Sonoma	0.016%		**0.0129298%**
County	***Stanislaus County***	Stanislaus	1.722%		**1.4182273%**
City	Ceres	Stanislaus	0.041%		**0.0340260%**
City	Modesto	Stanislaus	0.217%		**0.1788759%**
City	Newman	Stanislaus	0.006%		**0.0046964%**
City	Oakdale	Stanislaus	0.018%		**0.0145531%**
City	Patterson	Stanislaus	0.015%		**0.0126590%**
City	Riverbank	Stanislaus	0.010%		**0.0085699%**
City	Turlock	Stanislaus	0.065%		**0.0531966%**
County	***Sutter County***	Sutter	0.306%	0.374%	**0.3179548%**
City	Yuba City	Sutter	0.074%		**0.0606242%**
County	***Tehama County***	Tehama	0.213%	0.261%	**0.2216654%**
City	Red Bluff	Tehama	0.014%		**0.0117771%**
County	***Trinity County***	Trinity	0.082%	0.101%	**0.0855476%**
County	***Tulare County***	Tulare	0.809%	0.990%	**0.8410949%**
City	Dinuba	Tulare	0.014%		**0.0116929%**
City	Exeter	Tulare	0.004%		**0.0032479%**
City	Farmersville	Tulare	0.003%		**0.0027879%**
City	Lindsay	Tulare	0.007%		**0.0057111%**
City	Porterville	Tulare	0.021%		**0.0171845%**
City	Tulare	Tulare	0.037%		**0.0302273%**
City	Visalia	Tulare	0.066%		**0.0545872%**
County	***Tuolumne County***	Tuolumne	0.486%	0.594%	**0.5047621%**
County	***Ventura County***	Ventura	2.192%	2.681%	**2.2781201%**
City	Camarillo	Ventura	0.002%		**0.0012815%**
City	Fillmore	Ventura	0.002%		**0.0020294%**
City	Moorpark	Ventura	0.008%		**0.0067337%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Oxnard	Ventura	0.156%	0.190%	**0.1617338%**
City	Port Hueneme	Ventura	0.021%		**0.0174145%**
City	San Buenaventura (Ventura)	Ventura	0.085%		**0.0702181%**
City	Santa Paula	Ventura	0.014%		**0.0119072%**
City	Simi Valley	Ventura	0.065%		**0.0533043%**
City	Thousand Oaks	Ventura	0.022%		**0.0179902%**
County	***Yolo County***	Yolo	0.357%	0.437%	**0.3713319%**
City	Davis	Yolo	0.055%		**0.0451747%**
City	West Sacramento	Yolo	0.066%		**0.0544321%**
City	Woodland	Yolo	0.058%		**0.0477904%**
County	***Yuba County***	Yuba	0.214%	0.262%	**0.2225679%**
City	Marysville	Yuba	0.014%		**0.0112079%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 2

Cost Reimbursement Procedure

1. Additional defined terms:

a) *Costs* means the reasonable amounts paid for the attorney and other City Attorney and County Counsel staff time for individuals employed by a Plaintiff Subdivision at the contractual rate, inclusive of benefits and overhead, together with amounts paid for court reporters, experts, copying, electronic research, travel, vendors, and the like, which were not previously reimbursed and which were paid or incurred (i) prior to December 31, 2022 in litigation against any Opioid Defendant and/or (ii) in negotiating and drafting any CA Allocation Agreement(s) concerning a settlement with any Opioid Defendant(s). *Costs* does not include attorneys' fees, costs, or expenses incurred by private contingency fee counsel. No part of the CA Abatement Accounts Fund will be used to reimburse Costs.

b) *First Claims Date* means October 1, 2023 or when all applications for reimbursement of Costs, in whole or in part, from funds available under Section IX and Exhibit R of the Walgreens Settlement Agreement, Section XIV and Exhibit R of the Teva Settlement Agreement, Section XIII and Exhibit R of the Allergan Settlement Agreement, Section X and Exhibit R of the Distributor Settlement Agreement, Section XI and Exhibit R of the Janssen Settlement Agreement, Section X and Exhibit R of the CVS Settlement Agreement, or Section IX and Exhibit R of the Walmart Settlement Agreement, have been finally determined under the provisions of those agreements, whichever comes first.

c) *Special Master* means a retired judicial officer or former public lawyer, not presently employed or retained by a Plaintiff Subdivision, who will aggregate, review, and determine the reasonable Costs to be awarded to each Plaintiff Subdivision that submits a claim for reimbursement of Costs. The Special Master will be selected by a majority vote of the votes cast by Plaintiff Subdivisions, with each such subdivision having one vote.

d) *Plaintiff Subdivision Committee* means the committee of Plaintiff Subdivisions that will review and approve the invoices submitted by the Special Master reflecting his or her reasonable time and expenses.

2. Cost Reimbursement to Plaintiff Subdivision

a) Purpose. Substantial resources have been expended to hold Opioid Defendants accountable for creating and profiting from the opioid crisis, and this effort has been a significant catalyst in creating National Opioid Settlements with various manufacturers, distributors, and chain pharmacies.

b) Claims Procedure.

i. If a Plaintiff Subdivision is eligible to seek reimbursement of Costs, in whole or in part, from funds available under Section IX and Exhibit R of the Walgreens

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Settlement Agreement, Section XIV and Exhibit R of the Teva Settlement Agreement, Section XIII and Exhibit R of the Allergan Settlement Agreement, Section X and Exhibit R of the CVS Settlement Agreement, Section IX and Exhibit R of the Walmart Settlement Agreement, Section X or Exhibit R of the Distributor Settlement Agreement, or Section XI or Exhibit R of the Janssen Settlement Agreement, it must first make a timely application for reimbursement from such funds. To allow sufficient time for determination of those applications, no claim for Costs to the CA Subdivision Fund under this Agreement may be made before the First Claims Date.

ii. A Plaintiff Subdivision that wishes to be reimbursed from the CA Subdivision Fund must submit a claim to the Special Master no later than forty-five (45) days after the First Claims Date. The Special Master will then compile and redistribute the aggregated claim totals for each Plaintiff Subdivision via email to representatives of all the Plaintiff Subdivisions. A claim for attorney and staff time must list, for each attorney or staff member included in the claim, the following information: name, title, total hours claimed, hourly rate (including, if sought, benefits and share of overhead), and narrative summarizing the general nature of the work performed by the attorney or staff member. For reimbursement of "hard" costs, the subdivision may aggregate across a category (e.g., total for travel costs). It is the intention of the Plaintiff Subdivisions that submission of documents related to reimbursement of Costs does not waive any attorney-client privilege or exemptions to the California Public Records Act.

iii. The Special Master may request, at his or her sole option, additional documents or details to assist in the final award of Costs.

iv. The Special Master will review claims for reasonableness and will notify each Plaintiff Subdivision of the final determination of its claim, and will provide a list of all final awards to all Plaintiff Subdivisions by email or, upon request, via First Class U.S. Mail. Any Plaintiff Subdivision may ask the Special Master to reconsider any final award within twenty-one (21) days. The Special Master will make a final determination on any such reconsideration request within thirty (30) days of receipt.

v. Any decision of the Special Master is final and binding, and will be considered under the California Arbitration Act, Code of Civil Procedure section 1280 et seq. as a final arbitration award. Nothing in this agreement is intended to expand the scope of judicial review of the final award for errors of fact or law, and the Parties agree that they may only seek to vacate the award if clear and convincing evidence demonstrates one of the factors set forth in Code of Civil Procedure, section 1286.2, subdivision (a). Plaintiff Subdivisions will have fourteen (14) days after all final awards are made, together with any final determination of a request for

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

reconsideration, to seek review in the Superior Court of California, pursuant to Code of Civil Procedure, section 1285, where the State has filed its Consent Judgment.

vi. The Special Master will prepare a report of Costs that includes his or her fees and expenses at least ninety (90) days before the Payment Date for each Annual Payment. The Special Master's preparation of a report of Costs does not discharge a Plaintiff Subdivision's reporting requirement under Section V(B)(2) of the Walgreens Settlement Agreement.

vii. A member of the Plaintiff Subdivision Committee, which is a CA Participating Subdivision, will submit to the Settlement Fund Administrator and Walgreens a report of the fees and expenses incurred by the Special Master pursuant to Section V(B)(2) of the Walgreens Settlement Agreement.

c) Claims Priority and Limitation.

i. The Special Master will submit invoices for compensation of reasonable fees and expenses to the Plaintiff Subdivision Committee no later than ninety (90) days prior to the Payment Date for each Annual Payment. The Plaintiff Subdivision Committee will promptly review and, if reasonable, approve the Special Master's invoice for compensation. The Plaintiff Subdivision Committee will submit approved invoices to the Settlement Fund Administrator for payment. The Special Master's approved invoices have priority and will be paid first from the CA Subdivision Fund before any award of Costs, subject to the limitation in Section 2.c.v below.

ii. Final Awards of Costs that do not exceed seventy-five thousand dollars ($75,000.00) will be paid next in priority after the Special Master's approved invoices.

iii. Final Awards of Costs in excess of seventy-five thousand dollars ($75,000.00) will be paid proportionally from the funds remaining in that year's Annual Payment.

iv. Any claim for Costs that is not paid in full will be allocated against the next year's distribution from the CA Subdivision Fund, until all approved claims for Costs are paid in full.

v. In no event will more than 50% of the total CA Subdivision Fund received in any year be used to pay Costs or the Special Master's approved invoices.

vi. In no event shall more than $28 million of the total CA Subdivision Funds paid pursuant to the Walgreens Settlement Agreement, Teva Settlement Agreement, Allergan Settlement Agreement, Distributor Settlement Agreement, CVS Settlement Agreement, Janssen Settlement Agreement, and the Walmart Settlement Agreement be used to pay Costs.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

d) Collateral Source Payments and Third-Party Settlement.

i. In the event a Plaintiff Subdivision is awarded compensation, in whole or in part, by any source of funds created as a result of litigation against an Opioid Defendant for its reasonable Costs, it will reduce its claim for Costs from the CA Subdivision Fund by that amount. If a Plaintiff Subdivision has already received a final award of Costs from the CA Subdivision Fund, it will repay the fund up to the prior award of Costs via a payment to the Settlement Fund Administrator or notify the Settlement Fund Administrator that its allocation from the next and subsequent Annual Payments should be reduced accordingly. If the Plaintiff Subdivision is repaying any prior award of Costs, that repayment will occur as soon as is feasible after the Plaintiff Subdivision's receipt of Cost funds from the collateral source, but no more than 90 days after its receipt from the collateral source. The Settlement Fund Administrator will add any repaid Costs to the CA Subdivision Fund. Any Plaintiff Subdivision that has submitted for reimbursement to any national fund and has not received a final determination by the First Claims Date may request that the settlement administrator withhold some or all of its payment from the CA Subdivision Fund in order to avoid repayment.

ii. In the event a Plaintiff Subdivision reaches a monetary settlement or compromise against any Opioid Defendant outside of the National Opioid Settlement, the monetary portion of such settlement, net of fees paid to outside contingency fee counsel and of funds earmarked strictly for abatement, will be credited against its Costs and the subdivision will be ineligible to recover those credited Costs from the CA Subdivision Fund. Plaintiff Subdivisions negotiating monetary settlements or compromises against any Opioid Defendant outside of the National Opioid Settlement will negotiate for funds to repay any Costs it previously received from the CA Subdivision Fund or for Costs it otherwise might be eligible to claim from the CA Subdivision Fund. If such a settlement is paid after all final approved claims for Costs by all Plaintiff Subdivisions are satisfied in full, the settling subdivision will reimburse the CA Subdivision Fund in that amount by making payment to the Settlement Fund Administrator to add to the CA Subdivision Fund in a manner consistent with the repayments described in section 2.d.i above.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 3

CALIFORNIA-SUBDIVISION BACKSTOP AGREEMENT

On August 6, 2021, Judge Polster of the US District Court for the Northern District of Ohio issued an Order (the Order), docket number 3814, in In Re National Prescription Opiate Litigation, MDL 2804, addressing contingent attorney fee contracts between political subdivisions eligible to participate in the Walgreens Settlement and their counsel.

In light of the Order, and at the request of [SUBDIVISION], the [SUBDIVISION], its counsel [COUNSEL], and the California Attorney General, on behalf of the State of California, are entering into this California-Subdivision Backstop Agreement (Backstop Agreement).

[SUBDIVISION] and [COUNSEL] intend this Backstop Agreement to constitute a State Back-Stop Agreement as that term is used in the Order and in Exhibit R (Agreement on Attorneys' Fees, Costs, and Expenses) of the Walgreens Settlement Agreement.

Pursuant to this Backstop Agreement, [SUBDIVISION] may, subject to the limitations of the Walgreens Settlement Agreement and CA Walgreens Allocation Agreement, as well as any other limitations imposed by law, use funds that it receives from the Walgreens Settlement CA Subdivision Fund to pay a contingent fee to [COUNSEL]. Any such payment from [SUBDIVISION] to [COUNSEL], together with any contingency fees that [COUNSEL] may receive from the national Attorney Fee Fund, will not exceed a total contingency fee of [PERCENTAGE NOT TO EXCEED 15%] of the total gross recovery of [SUBDIVISION] from the Walgreens Settlement.

[COUNSEL] certify that they first sought fees and costs from the Attorney Fee Fund created under the Walgreens Settlement Agreement before seeking or accepting payment under this backstop agreement. [COUNSEL] further certify that they are not seeking and will not accept payment under this backstop agreement of any litigation fees or costs that have been reimbursed through prior settlements or judgments.

The Attorney General is executing this agreement solely because the definition of "State Back-Stop Agreement" in Exhibit R of the Walgreens Settlement Agreement requires such agreements to be between "a Settling State" and private counsel for a participating subdivision. Neither the California Attorney General nor the State of California have any obligations under this Backstop Agreement, and this Backstop Agreement does not require the payment of any state funds to [SUBDIVISION], [COUNSEL], or any other party.

[DATE]	[SUBDIVISION SIGNATURE BLOCK]
[DATE]	[COUNSEL SIGNATURE BLOCK]
[DATE]	[ATTORNEY GENERAL SIGNATURE BLOCK]

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Proposed California State-Subdivision Agreement
Regarding Distribution and Use of
Settlement Funds – Walmart Settlement

1. Introduction

Pursuant to the Walmart Settlement Agreement, dated as of November 14, 2022, and any revision thereto (the "Walmart Settlement Agreement"), including Section V and Exhibit O, the State of California proposes this agreement (the "CA Walmart Allocation Agreement") to govern the allocation, distribution, and use of Settlement Fund payments made to California pursuant to Sections IV and V of the Walmart Settlement Agreement. For the avoidance of doubt, this agreement does not apply to payments made pursuant to Sections VIII or IX of the Walmart Settlement Agreement.

Pursuant to Exhibit O, Paragraph 4, of the Walmart Settlement Agreement, acceptance of this CA Walmart Allocation Agreement is a requirement to be a Participating Subdivision.

2. Definitions

a) *CA Participating Subdivision* means a Participating Subdivision that is also (a) a Plaintiff Subdivision and/or (b) a Primary Subdivision with a population equal to or greater than 10,000. For the avoidance of doubt, eligible CA Participating Subdivisions are those California subdivisions listed in Exhibit C (excluding Litigating Special Districts) and/or Exhibit I to the Walmart Settlement Agreement.

b) *Allergan Settlement Agreement* means the Allergan Settlement Agreement dated November 22, 2022, and any revision thereto.

c) *CVS Settlement Agreement* means the CVS Settlement Agreement dated December 9, 2022, and any revision thereto as well as any modification thereto entered into by the State of California and CVS.

d) *Distributor Settlement Agreement* means the Distributor Settlement Agreement dated July 21, 2021, and any revision thereto.

e) *Janssen Settlement Agreement* means the Janssen Settlement Agreement dated July 21, 2021, and any revision thereto.

f) *Teva Settlement Agreement* means the Teva Settlement Agreement dated November 22, 2022, and any revision thereto.

g) *Walgreens Settlement Agreement* means the Walgreens Settlement Agreement dated December 9, 2022, and any revision thereto.

h) *CA Litigating Special District* means a Litigating Special District located in California. CA Litigating Special Districts include Downey Unified School District, Elk Grove Unified School District, Kern High School District, Montezuma Fire Protection District (located in Stockton, California), Santa Barbara San Luis Obispo Regional Health Authority, Inland Empire Health Plan, Health Plan of San Joaquin, San Leandro Unified School District, Pleasant Valley School District Board, and LA Care Health Plan.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

i) *Plaintiff Subdivision* means a Subdivision located in California, other than a CA Litigating Special District, that filed a lawsuit, on behalf of the Subdivision and/or through an official of the Subdivision on behalf of the People of the State of California, against one or more Opioid Defendants prior to October 1, 2020.

j) *Opioid Defendant* means any defendant (including but not limited to Teva Pharmaceutical Industries Ltd., Allergan Finance, LLC, Allergan Limited, CVS Health Corporation, CVS Pharmacy, Inc., Walgreen Co., Walmart Inc., Johnson & Johnson, Janssen Pharmaceuticals, Inc., Purdue Pharma L.P., Cardinal Health, Inc., AmerisourceBergen Corporation, and McKesson Corporation) named in a lawsuit seeking damages, abatement, or other remedies related to or caused by the opioid public health crisis in any lawsuit brought by any state or local government on or before October 1, 2020.

3. General Terms

This agreement is subject to the requirements of the Walmart Settlement Agreement, as well as applicable law, and the Walmart Settlement Agreement governs over any inconsistent provision of this CA Walmart Allocation Agreement. Terms used in this CA Walmart Allocation Agreement have the same meaning as in the Walmart Settlement Agreement unless otherwise defined herein.

Pursuant to Section V(D)(1) of the Walmart Settlement Agreement, (a) all Settlement Fund payments will be used for Opioid Remediation, except as allowed by Section V(B)(2) of the Walmart Settlement Agreement; and (b) at least seventy percent (70%) of Settlement Fund payment amounts will be used solely for future Opioid Remediation.

4. State Allocation

The Settlement Fund payments to California,[1] pursuant to the Walmart Settlement Agreement, shall be allocated as follows: 15% to the State Fund; 70% to the Abatement Accounts Fund; and 15% to the Subdivision Fund. For the avoidance of doubt, all funds allocated to California from the Settlement Fund shall be combined pursuant to this CA Walmart Allocation Agreement, and 15% of that total shall be allocated to the State of California (the "State of California Allocation"), 70% to the California Abatement Accounts Fund ("CA Abatement Accounts Fund"), and 15% to the California Subdivision Fund ("CA Subdivision Fund").

[1] For purposes of clarity, use of the term "California" refers to the geographic territory of California and the state and its local governments therein. The term "State" or "State of California" refers to the State of California as a governmental unit.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

A. State of California Allocation

Fifteen percent of the total Settlement Fund payments will be allocated to the State and used by the State for future Opioid Remediation.

B. CA Abatement Accounts Fund

i. Allocation of CA Abatement Accounts Funds

a) Seventy percent of the total Settlement Fund payments will be allocated to the CA Abatement Accounts Fund. The funds in the CA Abatement Accounts Fund will be allocated based on the allocation model developed in connection with the proposed negotiating class in the National Prescription Opiate Litigation (MDL No. 2804), as adjusted to reflect only those cities and counties that are eligible, based on population or litigation status, to become a CA Participating Subdivision. The percentage from the CA Abatement Accounts Fund allocated to each CA Participating Subdivision is set forth in Appendix 1 in the column entitled abatement percentage (the "Local Allocation"). For the avoidance of doubt, CA Litigating Special Districts and California towns, cities, and counties with a population less than 10,000 are not eligible to receive an allocation of CA Abatement Accounts Funds.

b) A CA Participating Subdivision that is a county, or a city and county, will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision, and will receive payments as provided in the Walmart Settlement Agreement.

c) A CA Participating Subdivision that is a city will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision. The Local Allocation share for a city that is a CA Participating Subdivision will be paid to the county in which the city is located, rather than to the city, so long as: (a) the county is a CA Participating Subdivision, and (b) the city has not advised the Settlement Fund Administrator that it requests direct payment at least 60 days prior to a Payment Date. A Local Allocation share allocated to a city but paid to a county is not required to be spent exclusively for abatement activities in that city, but will become part of the county's share of the CA Abatement Accounts Funds, which will be used in accordance with Section 4.B.ii (Use of CA Abatement Accounts Funds) and reported on in accordance with Section 4.B.iii (CA Abatement Accounts Fund Oversight).

d) A city within a county that is a CA Participating Subdivision may opt in or out of direct payment at any time, and it may also elect direct payment of only a portion of its share, with the remainder going to the county, by providing notice to the Settlement Fund Administrator at least 60 days prior to a Payment Date. For purposes of this CA Walmart Allocation Agreement, the Cities of Los Angeles, Oakland, San Diego, San Jose and Eureka will be deemed to have elected direct payment if they become Participating Subdivisions.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

e) The State will receive the Local Allocation share of any payment to the Settlement Fund that is attributable to a county or city that is eligible to become a CA Participating Subdivision, but that has not, as of the date of that payment to the Settlement Fund, become a Participating Subdivision.

f) Funds received by a CA Participating Subdivision, and not expended or encumbered within five years of receipt and in accordance with the Walmart Settlement Agreement and this CA Walmart Allocation Agreement shall be transferred to the State; provided however, that CA Participating Subdivisions have seven years to expend or encumber CA Abatement Accounts Funds designated to support capital outlay projects before they must be transferred to the State. This provision shall not apply to the Cost Reimbursement Funds, which shall be controlled by Appendix 2.

ii. Use of CA Abatement Accounts Funds

a) The CA Abatement Accounts Funds will be used for future Opioid Remediation in one or more of the areas described in the List of Opioid Remediation Uses, which is Exhibit E to the Walmart Settlement Agreement.

b) In addition to this requirement, no less than 50% of the funds received by a CA Participating Subdivision from the Abatement Accounts Fund in each calendar year will be used for one or more of the following High Impact Abatement Activities:

(1) the provision of matching funds or operating costs for substance use disorder facilities within the Behavioral Health Continuum Infrastructure Program;

(2) creating new or expanded Substance Use Disorder ("SUD") treatment infrastructure;

(3) addressing the needs of communities of color and vulnerable populations (including sheltered and unsheltered homeless populations) that are disproportionately impacted by SUD;

(4) diversion of people with SUD from the justice system into treatment, including by providing training and resources to first and early responders (sworn and non-sworn) and implementing best practices for outreach, diversion and deflection, employability, restorative justice, and harm reduction; and/or

(5) interventions to prevent drug addiction in vulnerable youth.

c) The California Department of Health Care Services ("DHCS") may add to this list (but not delete from it) by designating additional High Impact Abatement Activities. DHCS will make reasonable efforts to consult with stakeholders, including the CA Participating Subdivisions, before adding additional High Impact Abatement Activities to this list.

d) For the avoidance of doubt, and subject to the requirements of the Walmart Settlement Agreement and applicable law, CA Participating Subdivisions may form agreements or ventures, or otherwise work in collaboration with, federal, state, local, tribal or private sector entities in pursuing Opioid Remediation activities funded from the CA Abatement

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Accounts Fund. Further, provided that all CA Abatement Accounts Funds are used for Opioid Remediation consistent with the Walmart Settlement Agreement and this CA Walmart Allocation Agreement, a county and any cities or towns within the county may agree to reallocate their respective shares of the CA Abatement Accounts Funds among themselves, provided that any direct distribution may only be to a CA Participating Subdivision and any CA Participating Subdivision must agree to their share being reallocated.

iii. CA Abatement Accounts Fund Oversight

a) Pursuant to Section 5 below, CA Participating Subdivisions receiving settlement funds must prepare and file reports annually regarding the use of those funds. DHCS may regularly review the reports prepared by CA Participating Subdivisions about the use of CA Abatement Accounts Funds for compliance with the Walmart Settlement Agreement and this CA Walmart Allocation Agreement.

b) If DHCS determines that a CA Participating Subdivision's use of CA Abatement Accounts Funds is inconsistent with the Walmart Settlement Agreement or this CA Walmart Allocation Agreement, whether through review of reports or information from any other sources, DHCS shall send a request to meet and confer with the CA Participating Subdivision. The parties shall meet and confer in an effort to resolve the concern.

c) If the parties are unable to reach a resolution, DHCS may conduct an audit of the Subdivision's use of the CA Abatement Accounts Funds within one year of the request to meet and confer, unless the parties mutually agree in writing to extend the meet and confer time frame.

d) If the concern still cannot be resolved, the State may bring a motion or action in the court where the State has filed its Consent Judgment to resolve the concern or otherwise enforce the requirements of the Walmart Settlement Agreement or this CA Walmart Allocation Agreement. However, in no case shall any audit be conducted, or motion be brought, as to a specific expenditure of funds, more than five years after the date on which the expenditure of the funds was reported to DHCS, in accordance with this agreement.

e) Notwithstanding the foregoing, this Agreement does not limit the statutory or constitutional authority of any state or local agency or official to conduct audits, investigations, or other oversight activities, or to pursue administrative, civil, or criminal enforcement actions.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

C. CA Subdivision Fund

i. Fifteen percent of the total Settlement Fund payments will be allocated to the CA Subdivision Fund. All funds in the CA Subdivision Fund will be allocated among the Plaintiff Subdivisions that are Participating Subdivisions. The funds will be used, subject to any limits imposed by the Walmart Settlement Agreement and this CA Walmart Allocation Agreement, to fund future Opioid Remediation and reimburse past opioid-related expenses, which may include fees and expenses related to litigation, and to pay the reasonable fees and expenses of the Special Master as set forth in Appendix 2.

The CA Subdivision Funds will be allocated as follows:

a) First, funds in the CA Subdivision Fund shall be used to pay the Special Master's reasonable fees and expenses in accordance with the procedures and limitations set forth in Appendix 2 to this document;

b) Second, funds will be allocated to Plaintiff Subdivisions that are Participating Subdivisions that have been awarded Costs, as defined by and in accordance with the procedures and limitations set forth in Appendix 2 to this document.

c) Funds remaining in the CA Subdivision Fund, which shall consist of no less than 50% of the total CA Subdivision Fund received in any year pursuant to Appendix 2, Section 2.c.v, will be distributed to Plaintiff Subdivisions that are Participating Subdivisions, in relative proportion to the Local Allocation. These funds shall be used to fund future opioid-related projects and to reimburse past opioid-related expenses, which may include fees and expenses related to litigation against any Opioid Defendant.

D. Provision for State Back-Stop Agreement

On August 6, 2021, Judge Dan Polster of the U.S. District Court, Northern District of Ohio, Eastern Division, issued an order (ECF Docket Number 3814) ("MDL Fees Order") in the National Prescription Opiate Litigation (MDL No. 2804) "cap[ping] all applicable contingent fee agreements at 15%." Private counsel representing Plaintiff Subdivisions should seek its contingency fees and costs from the Attorney Fee Fund or Cost Funds under the Walmart Settlement Agreement, and, if applicable, the Allergan Settlement Agreement, CVS Settlement Agreement, Distributor Settlement Agreement, Janssen Settlement Agreement, Teva Settlement Agreement, and Walgreens Settlement Agreement.

A Plaintiff Subdivision may separately agree to use its share of the CA Subdivision Fund to pay for fees or costs incurred by its contingency-fee counsel ("State Back-Stop Agreement"), pursuant to Exhibit R, section I(W), of the Walmart Settlement Agreement and the MDL Fees Order, so long as such contingency fees do not exceed a total contingency fee of 15% of the total gross recovery of the Plaintiff Subdivision pursuant to the Walmart Settlement, inclusive of contingency fees from the national Attorney Fee Fund and this State Back-Stop Agreement. Before seeking fees or litigation costs and expenses from a State Back-Stop Agreement, private

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

counsel representing Plaintiff Subdivisions must first seek contingency fees and costs from the Attorney Fee Fund or Cost Funds created under the Walmart Settlement Agreement. Further, private counsel may only seek reimbursement for litigation fees and costs that have not previously been reimbursed through prior settlements or judgments.

To effectuate a State Back-Stop Agreement pursuant to this section, an agreement in the form of Appendix 3 may be entered into by a Plaintiff Subdivision, private counsel, and the California Office of the Attorney General. The California Office of the Attorney General shall, upon the request of a Plaintiff Subdivision, execute any agreement executed by a Plaintiff Subdivision and its private counsel if it is in the form of Appendix 3. The California Office of the Attorney General will also consider requests from Plaintiff Subdivisions to execute and enter into agreements presented in other forms.

For the avoidance of doubt, this agreement does not require a Plaintiff Subdivision to request or enter into a State Back-Stop Agreement, and no State Back-Stop Agreement shall impose any duty or obligation on the State of California or any of its agencies or officers, including without limitation the Attorney General.

5. State and Subdivision Reporting

a) DHCS will prepare an annual written report regarding the State's use of funds from the settlement until those funds are fully expended and for one year thereafter. These reports will be made publicly available on the DHCS web site.

b) Each CA Participating Subdivision that receives payments of funds from the settlement will prepare written reports at least annually regarding the use of those funds, until those funds are fully expended and for one year thereafter. These reports will also include a certification that all funds that the CA Participating Subdivision has received through the settlement have been used in compliance with the Walmart Settlement Agreement and this CA Walmart Allocation Agreement. The report will be in a form reasonably determined by DHCS. Prior to specifying the form of the report DHCS will confer with representatives of the Plaintiff Subdivisions.

c) The State and all CA Participating Subdivisions receiving CA Abatement Accounts Funds will track all deposits and expenditures. Each such subdivision is responsible solely for the CA Abatement Accounts Funds it receives. A county is not responsible for oversight, reporting, or monitoring of CA Abatement Accounts Funds received by a city within that county that receives direct payment. Unless otherwise exempt, Subdivisions' expenditures and uses of CA Abatement Accounts Funds and other Settlement Funds will be subject to the normal budgetary and expenditure process of the Subdivision.

d) Each Plaintiff Subdivision receiving CA Subdivision Funds will track all deposits and expenditures, as required by the Walmart Settlement Agreement and this CA Walmart Allocation Agreement. Among other things, Plaintiff Subdivisions using monies from the CA Subdivision Fund for purposes that do not qualify as Opioid Remediation must identify and include in their annual report, the amount and how such funds were used, including if used to pay attorneys' fees, investigation costs, or litigation costs. Pursuant to Section V(B)(2) of the Walmart Settlement Agreement, such information must also be reported to the Settlement Fund Administrator and Walmart.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

e) In each year in which DHCS prepares an annual report DHCS will also host a meeting to discuss the annual report and the Opioid Remediation activities being carried out by the State and Participating Subdivisions.

6. Miscellaneous

a) The State or any CA Participating Subdivision may bring a motion or action in the court where the State has filed its Consent Judgment to enforce the requirements of this CA Walmart Allocation Agreement. Before filing such a motion or action the State will meet and confer with any CA Participating Subdivision that is the subject of the anticipated motion or action, and vice versa.

b) Except as provided in the Walmart Settlement Agreement, this CA Walmart Allocation Agreement is not enforceable by any party other than the State and the CA Participating Subdivisions. It does not confer any rights or remedies upon, and shall not be enforceable by, any third party.

c) Except as provided in the CA Walmart Allocation Agreement, if any provision of this agreement or the application thereof to any person, entity, or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement, or the application of such provision to persons, entities, or circumstances other than those as to which it is invalid or unenforceable, will not be affected thereby, and each other provision of this agreement will be valid and enforceable to the fullest extent permitted by law.

d) Except as provided in the Walmart Settlement Agreement, this agreement shall be governed by and interpreted in accordance with the laws of California.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

The undersigned, Ontario city, ACKNOWLEDGES acceptance of this Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – Walmart Settlement is a requirement to be an Initial Participating Subdivision in the Walmart Settlement and ACCEPTS this Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – Walmart Settlement. EXECUTED on 2/28/2023 .

Signature: DocuSigned by: Scott Ochoa 943ADB3C46DD448...

Name: Scott Ochoa

Title: City Manager

Date: 2/28/2023

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

DISCLAIMER: The allocation percentages herein are estimates only and should not be relied on for decisions regarding legal rights, releases, waivers, or other decisions affecting current or potential legal claims. Percentages shown in the Plaintiff Subdivision Percentage column may change pursuant to Section 4.C. of the California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds—Walmart Settlement, whereas the percentages shown in the Abatement Percentage column should not change. Participating Subdivisions, underlying calculations, and the calculated allocation percentages are subject to change. Regarding the column herein entitled "Abatement Percentage," pursuant to Section 4.B.e., the State of California will receive the Local Allocation share of any payment to the Settlement Fund that is attributable to a county or city that is eligible to become a CA Participating Subdivision, but that has not, as of the date of that payment to the Settlement Fund, become a Participating Subdivision. Regarding the column herein entitled "Plaintiff Subdivision Percentage," payments allocated to a Plaintiff Subdivision, which is not an Initial Participating Subdivision, will be re-allocated among the Plaintiff Subdivisions that are Initial Participating Subdivisions. Regarding the column herein entitled "Abatement Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the California Abatement Account Funds received, pursuant to Section 4.B. Regarding the column herein entitled "Plaintiff Subdivision Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the California Subdivision Funds received, pursuant to Section 4.C. Regarding the column herein entitled "Weighted Allocation Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the combined and weighted allocation of the Abatement Percentage and the Plaintiff Subdivision Percentage.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

			100.000%	100.000%	100.000%
Participating Subdivision Classification	**Participating Subdivision**	**County**	**Abatement Percentage**	**Plaintiff Subdivision Percentage**	**Weighted Allcation Percentage**
County	***Alameda County***	Alameda	2.332%	2.853%	**2.4237952%**
City	Alameda	Alameda	0.069%		**0.0570162%**
City	Albany	Alameda	0.013%		**0.0107768%**
City	Berkeley	Alameda	0.152%		**0.1249656%**
City	Dublin	Alameda	0.033%	0.040%	**0.0338810%**
City	Emeryville	Alameda	0.023%		**0.0185765%**
City	Fremont	Alameda	0.108%		**0.0888576%**
City	Hayward	Alameda	0.117%		**0.0966218%**
City	Livermore	Alameda	0.054%		**0.0446740%**
City	Newark	Alameda	0.026%		**0.0217626%**
City	Oakland	Alameda	0.486%	0.595%	**0.5055601%**
City	Piedmont	Alameda	0.014%		**0.0114064%**
City	Pleasanton	Alameda	0.067%		**0.0554547%**
City	San Leandro	Alameda	0.039%		**0.0321267%**
City	Union City	Alameda	0.043%		**0.0352484%**
County	***Amador County***	Amador	0.226%	0.277%	**0.2349885%**
County	***Butte County***	Butte	1.615%	1.975%	**1.6783178%**
City	Chico	Butte	0.216%	0.264%	**0.2246499%**
City	Oroville	Butte	0.079%		**0.0646595%**
County	***Calaveras County***	Calaveras	0.226%	0.277%	**0.2351644%**
County	***Colusa County***	Colusa	0.059%		**0.0489221%**
County	***Contra Costa County***	Contra Costa	2.102%	2.571%	**2.1844585%**
City	Antioch	Contra Costa	0.037%		**0.0301879%**
City	Brentwood	Contra Costa	0.026%		**0.0215339%**
City	Clayton	Contra Costa	0.002%		**0.0018060%**
City	Concord	Contra Costa	0.055%		**0.0456676%**
City	Danville	Contra Costa	0.010%		**0.0082255%**
City	El Cerrito	Contra Costa	0.023%		**0.0189024%**
City	Hercules	Contra Costa	0.010%		**0.0078273%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Lafayette	Contra Costa	0.006%		**0.0046030%**
City	Martinez	Contra Costa	0.012%		**0.0098593%**
City	Moraga	Contra Costa	0.004%		**0.0031007%**
City	Oakley	Contra Costa	0.010%		**0.0079416%**
City	Orinda	Contra Costa	0.005%		**0.0038157%**
City	Pinole	Contra Costa	0.013%		**0.0110909%**
City	Pittsburg	Contra Costa	0.053%		**0.0436369%**
City	Pleasant Hill	Contra Costa	0.013%		**0.0106309%**
City	Richmond	Contra Costa	0.146%		**0.1201444%**
City	San Pablo	Contra Costa	0.018%		**0.0148843%**
City	San Ramon	Contra Costa	0.021%		**0.0176459%**
City	Walnut Creek	Contra Costa	0.026%		**0.0212132%**
County	***Del Norte County***	Del Norte	0.114%	0.140%	**0.1189608%**
County	***El Dorado County***	El Dorado	0.768%	0.939%	**0.7980034%**
City	Placerville	El Dorado	0.015%		**0.0127642%**
City	South Lake Tahoe	El Dorado	0.081%		**0.0665456%**
County	***Fresno County***	Fresno	1.895%	2.318%	**1.9693410%**
City	Clovis	Fresno	0.065%		**0.0536211%**
City	Coalinga	Fresno	0.012%		**0.0098554%**
City	Fresno	Fresno	0.397%		**0.3270605%**
City	Kerman	Fresno	0.005%		**0.0042534%**
City	Kingsburg	Fresno	0.008%		**0.0066167%**
City	Mendota	Fresno	0.002%		**0.0019387%**
City	Orange Cove	Fresno	0.004%		**0.0035607%**
City	Parlier	Fresno	0.008%		**0.0069755%**
City	Reedley	Fresno	0.012%		**0.0098804%**
City	Sanger	Fresno	0.018%		**0.0146135%**
City	Selma	Fresno	0.015%		**0.0127537%**
County	***Glenn County***	Glenn	0.107%	0.131%	**0.1116978%**
County	***Humboldt County***	Humboldt	1.030%	1.260%	**1.0703185%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Arcata	Humboldt	0.054%		**0.0447660%**
City	Eureka	Humboldt	0.117%	0.143%	**0.1216284%**
City	Fortuna	Humboldt	0.032%		**0.0266837%**
County	***Imperial County***	Imperial	0.258%	0.315%	**0.2679006%**
City	Brawley	Imperial	0.011%		**0.0087986%**
City	Calexico	Imperial	0.019%		**0.0152799%**
City	El Centro	Imperial	0.158%		**0.1302522%**
City	Imperial	Imperial	0.006%		**0.0048791%**
County	***Inyo County***	Inyo	0.073%	0.089%	**0.0754413%**
County	***Kern County***	Kern	2.517%	3.079%	**2.6159145%**
City	Arvin	Kern	0.006%		**0.0046425%**
City	Bakersfield	Kern	0.212%		**0.1747198%**
City	California City	Kern	0.009%		**0.0070820%**
City	Delano	Kern	0.030%		**0.0249316%**
City	McFarland	Kern	0.003%		**0.0025644%**
City	Ridgecrest	Kern	0.015%		**0.0120938%**
City	Shafter	Kern	0.013%		**0.0103417%**
City	Tehachapi	Kern	0.009%		**0.0073580%**
City	Wasco	Kern	0.008%		**0.0069861%**
County	***Kings County***	Kings	0.293%		**0.2413469%**
City	Avenal	Kings	0.007%		**0.0056335%**
City	Corcoran	Kings	0.013%		**0.0107032%**
City	Hanford	Kings	0.027%		**0.0226038%**
City	Lemoore	Kings	0.016%		**0.0131900%**
County	***Lake County***	Lake	0.795%		**0.6545389%**
City	Clearlake	Lake	0.041%	0.050%	**0.0426253%**
City	Lakeport	Lake	0.021%	0.026%	**0.0222964%**
County	***Lassen County***	Lassen	0.319%	0.391%	**0.3320610%**
City	Susanville	Lassen	0.027%		**0.0219295%**
County	***Los Angeles County***	Los Angeles	13.896%	16.999%	**14.4437559%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Agoura Hills	Los Angeles	0.005%		**0.0040024%**
City	Alhambra	Los Angeles	0.042%		**0.0343309%**
City	Arcadia	Los Angeles	0.033%		**0.0267718%**
City	Artesia	Los Angeles	0.001%		**0.0005100%**
City	Azusa	Los Angeles	0.026%		**0.0210857%**
City	Baldwin Park	Los Angeles	0.027%		**0.0218520%**
City	Bell	Los Angeles	0.008%		**0.0068783%**
City	Bellflower	Los Angeles	0.002%		**0.0014485%**
City	Bell Gardens	Los Angeles	0.014%		**0.0114301%**
City	Beverly Hills	Los Angeles	0.065%		**0.0534897%**
City	Burbank	Los Angeles	0.100%		**0.0823132%**
City	Calabasas	Los Angeles	0.006%		**0.0048948%**
City	Carson	Los Angeles	0.019%		**0.0159805%**
City	Cerritos	Los Angeles	0.005%		**0.0039682%**
City	Claremont	Los Angeles	0.010%		**0.0082584%**
City	Commerce	Los Angeles	0.000%		**0.0002971%**
City	Compton	Los Angeles	0.044%		**0.0361882%**
City	Covina	Los Angeles	0.028%		**0.0229127%**
City	Cudahy	Los Angeles	0.001%		**0.0006020%**
City	Culver City	Los Angeles	0.055%		**0.0449894%**
City	Diamond Bar	Los Angeles	0.001%		**0.0006993%**
City	Downey	Los Angeles	0.052%		**0.0429994%**
City	Duarte	Los Angeles	0.003%		**0.0027261%**
City	El Monte	Los Angeles	0.031%	0.038%	**0.0318985%**
City	El Segundo	Los Angeles	0.033%		**0.0268020%**
City	Gardena	Los Angeles	0.034%		**0.0278088%**
City	Glendale	Los Angeles	0.166%		**0.1366586%**
City	Glendora	Los Angeles	0.016%		**0.0134411%**
City	Hawaiian Gardens	Los Angeles	0.005%		**0.0040549%**
City	Hawthorne	Los Angeles	0.050%		**0.0407833%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Hermosa Beach	Los Angeles	0.018%		**0.0145307%**
City	Huntington Park	Los Angeles	0.023%		**0.0190667%**
City	Inglewood	Los Angeles	0.059%		**0.0489195%**
City	La Cañada Flintridge	Los Angeles	0.003%		**0.0025565%**
City	Lakewood	Los Angeles	0.005%		**0.0039971%**
City	La Mirada	Los Angeles	0.010%		**0.0081572%**
City	Lancaster	Los Angeles	0.045%		**0.0369689%**
City	La Puente	Los Angeles	0.002%		**0.0012999%**
City	La Verne	Los Angeles	0.024%		**0.0194190%**
City	Lawndale	Los Angeles	0.002%		**0.0017731%**
City	Lomita	Los Angeles	0.004%		**0.0031940%**
City	Long Beach	Los Angeles	0.439%		**0.3614151%**
City	Los Angeles	Los Angeles	2.715%	3.321%	**2.8218811%**
City	Lynwood	Los Angeles	0.016%		**0.0134345%**
City	Malibu	Los Angeles	0.002%		**0.0019269%**
City	Manhattan Beach	Los Angeles	0.032%		**0.0260686%**
City	Maywood	Los Angeles	0.004%		**0.0035528%**
City	Monrovia	Los Angeles	0.031%		**0.0254455%**
City	Montebello	Los Angeles	0.030%		**0.0250670%**
City	Monterey Park	Los Angeles	0.031%		**0.0256677%**
City	Norwalk	Los Angeles	0.031%		**0.0258228%**
City	Palmdale	Los Angeles	0.046%		**0.0375827%**
City	Palos Verdes Estates	Los Angeles	0.006%		**0.0053102%**
City	Paramount	Los Angeles	0.011%		**0.0091483%**
City	Pasadena	Los Angeles	0.146%		**0.1200524%**
City	Pico Rivera	Los Angeles	0.022%		**0.0183333%**
City	Pomona	Los Angeles	0.111%		**0.0911933%**
City	Rancho Palos Verdes	Los Angeles	0.002%		**0.0012645%**
City	Redondo Beach	Los Angeles	0.062%		**0.0506992%**
City	Rosemead	Los Angeles	0.003%		**0.0028260%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	San Dimas	Los Angeles	0.003%		**0.0022016%**
City	San Fernando	Los Angeles	0.013%		**0.0104837%**
City	San Gabriel	Los Angeles	0.018%		**0.0147726%**
City	San Marino	Los Angeles	0.009%		**0.0073791%**
City	Santa Clarita	Los Angeles	0.022%		**0.0178167%**
City	Santa Fe Springs	Los Angeles	0.031%		**0.0257531%**
City	Santa Monica	Los Angeles	0.158%		**0.1298513%**
City	Sierra Madre	Los Angeles	0.006%		**0.0048646%**
City	Signal Hill	Los Angeles	0.010%		**0.0084884%**
City	South El Monte	Los Angeles	0.005%		**0.0039603%**
City	South Gate	Los Angeles	0.020%		**0.0166272%**
City	South Pasadena	Los Angeles	0.012%		**0.0095334%**
City	Temple City	Los Angeles	0.005%		**0.0039498%**
City	Torrance	Los Angeles	0.112%		**0.0919820%**
City	Walnut	Los Angeles	0.006%		**0.0047305%**
City	West Covina	Los Angeles	0.049%		**0.0404521%**
City	West Hollywood	Los Angeles	0.013%		**0.0108517%**
City	Whittier	Los Angeles	0.032%		**0.0260581%**
County	***Madera County***	Madera	0.349%	0.427%	**0.3630669%**
City	Chowchilla	Madera	0.012%		**0.0097332%**
City	Madera	Madera	0.039%		**0.0318441%**
County	***Marin County***	Marin	0.564%	0.690%	**0.5861325%**
City	Larkspur	Marin	0.015%		**0.0124697%**
City	Mill Valley	Marin	0.020%		**0.0168401%**
City	Novato	Marin	0.028%		**0.0229824%**
City	San Anselmo	Marin	0.009%		**0.0078062%**
City	San Rafael	Marin	0.089%		**0.0729823%**
County	***Mariposa County***	Mariposa	0.084%	0.103%	**0.0876131%**
County	***Mendocino County***	Mendocino	0.439%	0.536%	**0.4558394%**
City	Ukiah	Mendocino	0.039%		**0.0317153%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
County	***Merced County***	Merced	0.551%	0.674%	**0.5724262%**
City	Atwater	Merced	0.024%		**0.0195846%**
City	Livingston	Merced	0.006%		**0.0045873%**
City	Los Banos	Merced	0.020%		**0.0165142%**
City	Merced	Merced	0.061%		**0.0500762%**
County	***Modoc County***	Modoc	0.065%	0.080%	**0.0678250%**
County	***Mono County***	Mono	0.023%	0.029%	**0.0242606%**
County	***Monterey County***	Monterey	0.908%	1.111%	**0.9437083%**
City	Greenfield	Monterey	0.006%		**0.0050552%**
City	King City	Monterey	0.005%		**0.0037355%**
City	Marina	Monterey	0.017%		**0.0144098%**
City	Monterey	Monterey	0.041%		**0.0336540%**
City	Pacific Grove	Monterey	0.009%		**0.0074842%**
City	Salinas	Monterey	0.094%		**0.0776576%**
City	Seaside	Monterey	0.023%		**0.0191772%**
City	Soledad	Monterey	0.007%		**0.0060870%**
County	***Napa County***	Napa	0.288%	0.352%	**0.2994325%**
City	American Canyon	Napa	0.017%		**0.0136869%**
City	Napa	Napa	0.078%		**0.0642783%**
County	***Nevada County***	Nevada	0.441%	0.539%	**0.4579827%**
City	Grass Valley	Nevada	0.024%		**0.0197805%**
City	Truckee	Nevada	0.003%		**0.0023843%**
County	***Orange County***	Orange	4.364%	5.339%	**4.5363576%**
City	Aliso Viejo	Orange	0.014%		**0.0113841%**
City	Anaheim	Orange	0.554%	0.678%	**0.5759282%**
City	Brea	Orange	0.086%		**0.0708897%**
City	Buena Park	Orange	0.087%		**0.0714352%**
City	Costa Mesa	Orange	0.124%	0.152%	**0.1288366%**
City	Cypress	Orange	0.033%		**0.0271937%**
City	Dana Point	Orange	0.001%		**0.0005560%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Fountain Valley	Orange	0.055%		**0.0455980%**
City	Fullerton	Orange	0.137%	0.168%	**0.1425744%**
City	Garden Grove	Orange	0.213%		**0.1752482%**
City	Huntington Beach	Orange	0.247%	0.302%	**0.2568420%**
City	Irvine	Orange	0.139%	0.170%	**0.1442350%**
City	Laguna Beach	Orange	0.047%	0.058%	**0.0493043%**
City	Laguna Hills	Orange	0.014%		**0.0115457%**
City	Laguna Niguel	Orange	0.001%		**0.0007071%**
City	Laguna Woods	Orange	0.001%		**0.0006546%**
City	La Habra	Orange	0.060%	0.073%	**0.0621049%**
City	Lake Forest	Orange	0.012%		**0.0101249%**
City	La Palma	Orange	0.012%		**0.0095439%**
City	Los Alamitos	Orange	0.008%		**0.0069190%**
City	Mission Viejo	Orange	0.014%		**0.0117560%**
City	Newport Beach	Orange	0.179%		**0.1470134%**
City	Orange	Orange	0.150%		**0.1231320%**
City	Placentia	Orange	0.029%	0.035%	**0.0298912%**
City	Rancho Santa Margarita	Orange	0.001%		**0.0006296%**
City	San Clemente	Orange	0.008%	0.010%	**0.0086083%**
City	San Juan Capistrano	Orange	0.008%		**0.0065510%**
City	Santa Ana	Orange	0.502%	0.614%	**0.5213866%**
City	Seal Beach	Orange	0.020%		**0.0165891%**
City	Stanton	Orange	0.035%		**0.0291955%**
City	Tustin	Orange	0.073%		**0.0600341%**
City	Westminster	Orange	0.104%	0.127%	**0.1082721%**
City	Yorba Linda	Orange	0.044%		**0.0362223%**
County	***Placer County***	Placer	1.045%	1.278%	**1.0861002%**
City	Auburn	Placer	0.017%		**0.0141114%**
City	Lincoln	Placer	0.031%		**0.0255599%**
City	Rocklin	Placer	0.076%		**0.0625485%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Roseville	Placer	0.196%		**0.1616559%**
County	***Plumas County***	Plumas	0.205%	0.251%	**0.2128729%**
County	***Riverside County***	Riverside	4.534%	5.547%	**4.7128296%**
City	Banning	Riverside	0.017%		**0.0143848%**
City	Beaumont	Riverside	0.021%		**0.0171135%**
City	Blythe	Riverside	0.012%		**0.0096714%**
City	Canyon Lake	Riverside	0.000%		**0.0001761%**
City	Cathedral City	Riverside	0.067%		**0.0553614%**
City	Coachella	Riverside	0.021%		**0.0173054%**
City	Corona	Riverside	0.147%		**0.1207083%**
City	Desert Hot Springs	Riverside	0.024%		**0.0200433%**
City	Eastvale	Riverside	0.000%		**0.0002747%**
City	Hemet	Riverside	0.051%		**0.0421792%**
City	Indio	Riverside	0.056%		**0.0457794%**
City	Jurupa Valley	Riverside	0.001%		**0.0008991%**
City	Lake Elsinore	Riverside	0.021%		**0.0172949%**
City	La Quinta	Riverside	0.063%		**0.0516732%**
City	Menifee	Riverside	0.032%		**0.0260909%**
City	Moreno Valley	Riverside	0.137%		**0.1130348%**
City	Murrieta	Riverside	0.048%	0.059%	**0.0497423%**
City	Norco	Riverside	0.016%		**0.0134542%**
City	Palm Desert	Riverside	0.083%		**0.0682465%**
City	Palm Springs	Riverside	0.076%		**0.0629862%**
City	Perris	Riverside	0.009%		**0.0076774%**
City	Rancho Mirage	Riverside	0.052%		**0.0431098%**
City	Riverside	Riverside	0.268%		**0.2206279%**
City	San Jacinto	Riverside	0.010%		**0.0085936%**
City	Temecula	Riverside	0.022%		**0.0180086%**
City	Wildomar	Riverside	0.008%		**0.0062500%**
County	***Sacramento County***	Sacramento	3.797%	4.645%	**3.9465887%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Citrus Heights	Sacramento	0.057%		**0.0465312%**
City	Elk Grove	Sacramento	0.130%		**0.1066994%**
City	Folsom	Sacramento	0.108%		**0.0890850%**
City	Galt	Sacramento	0.017%		**0.0143704%**
City	Rancho Cordova	Sacramento	0.008%		**0.0067679%**
City	Sacramento	Sacramento	0.721%	0.882%	**0.7496530%**
County	***San Benito County***	San Benito	0.106%	0.130%	**0.1101417%**
City	Hollister	San Benito	0.027%		**0.0225355%**
County	***San Bernardino County***	San Bernardino	3.259%	3.987%	**3.3878124%**
City	Adelanto	San Bernardino	0.008%		**0.0066640%**
City	Apple Valley	San Bernardino	0.025%		**0.0207360%**
City	Barstow	San Bernardino	0.015%		**0.0122056%**
City	Chino	San Bernardino	0.064%		**0.0525893%**
City	Chino Hills	San Bernardino	0.001%		**0.0006388%**
City	Colton	San Bernardino	0.031%		**0.0253443%**
City	Fontana	San Bernardino	0.112%		**0.0920543%**
City	Grand Terrace	San Bernardino	0.006%		**0.0051051%**
City	Hesperia	San Bernardino	0.035%		**0.0291522%**
City	Highland	San Bernardino	0.004%		**0.0029061%**
City	Loma Linda	San Bernardino	0.009%		**0.0071188%**
City	Montclair	San Bernardino	0.039%		**0.0322108%**
City	Ontario	San Bernardino	0.179%		**0.1472934%**
City	Rancho Cucamonga	San Bernardino	0.084%		**0.0689431%**
City	Redlands	San Bernardino	0.057%		**0.0469150%**
City	Rialto	San Bernardino	0.073%		**0.0603206%**
City	San Bernardino	San Bernardino	0.178%		**0.1461880%**
City	Twentynine Palms	San Bernardino	0.002%		**0.0012605%**
City	Upland	San Bernardino	0.052%		**0.0424460%**
City	Victorville	San Bernardino	0.033%		**0.0269400%**
City	Yucaipa	San Bernardino	0.016%		**0.0128772%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Yucca Valley	San Bernardino	0.003%		**0.0021228%**
County	***San Diego County***	San Diego	5.706%	6.980%	**5.9309748%**
City	Carlsbad	San Diego	0.128%		**0.1050485%**
City	Chula Vista	San Diego	0.189%	0.231%	**0.1961456%**
City	Coronado	San Diego	0.044%		**0.0359095%**
City	El Cajon	San Diego	0.113%		**0.0933582%**
City	Encinitas	San Diego	0.061%	0.074%	**0.0630289%**
City	Escondido	San Diego	0.145%		**0.1192204%**
City	Imperial Beach	San Diego	0.014%		**0.0118283%**
City	La Mesa	San Diego	0.055%	0.068%	**0.0575593%**
City	Lemon Grove	San Diego	0.022%		**0.0183911%**
City	National City	San Diego	0.080%		**0.0656808%**
City	Oceanside	San Diego	0.213%		**0.1753428%**
City	Poway	San Diego	0.062%		**0.0511040%**
City	San Diego	San Diego	1.975%	2.416%	**2.0531169%**
City	San Marcos	San Diego	0.089%		**0.0733897%**
City	Santee	San Diego	0.033%		**0.0268401%**
City	Solana Beach	San Diego	0.017%		**0.0138564%**
City	Vista	San Diego	0.052%		**0.0425144%**
Consolidated	***San Francisco***	San Francisco	3.026%	3.702%	**3.1457169%**
County	***San Joaquin County***	San Joaquin	1.680%	2.055%	**1.7460399%**
City	Lathrop	San Joaquin	0.009%		**0.0075394%**
City	Lodi	San Joaquin	0.053%		**0.0439484%**
City	Manteca	San Joaquin	0.054%		**0.0443454%**
City	Ripon	San Joaquin	0.013%		**0.0104219%**
City	Stockton	San Joaquin	0.313%	0.383%	**0.3256176%**
City	Tracy	San Joaquin	0.084%		**0.0692047%**
County	***San Luis Obispo County***	San Luis Obispo	0.816%	0.999%	**0.8484126%**
City	Arroyo Grande	San Luis Obispo	0.024%		**0.0199053%**
City	Atascadero	San Luis Obispo	0.029%		**0.0240680%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	El Paso de Robles (Paso Robles)	San Luis Obispo	0.043%		**0.0353456%**
City	Grover Beach	San Luis Obispo	0.017%		**0.0137881%**
City	Morro Bay	San Luis Obispo	0.020%		**0.0160922%**
City	San Luis Obispo	San Luis Obispo	0.077%		**0.0637841%**
County	***San Mateo County***	San Mateo	1.074%	1.313%	**1.1159599%**
City	Belmont	San Mateo	0.021%		**0.0169860%**
City	Burlingame	San Mateo	0.019%		**0.0152537%**
City	Daly City	San Mateo	0.044%		**0.0363880%**
City	East Palo Alto	San Mateo	0.013%		**0.0103982%**
City	Foster City	San Mateo	0.020%		**0.0166101%**
City	Half Moon Bay	San Mateo	0.004%		**0.0031638%**
City	Hillsborough	San Mateo	0.013%		**0.0110029%**
City	Menlo Park	San Mateo	0.015%		**0.0126209%**
City	Millbrae	San Mateo	0.013%		**0.0105836%**
City	Pacifica	San Mateo	0.016%		**0.0130625%**
City	Redwood City	San Mateo	0.056%		**0.0463511%**
City	San Bruno	San Mateo	0.021%		**0.0172161%**
City	San Carlos	San Mateo	0.013%		**0.0108885%**
City	San Mateo	San Mateo	0.052%		**0.0425841%**
City	South San Francisco	San Mateo	0.043%		**0.0353943%**
County	***Santa Barbara County***	Santa Barbara	1.132%	1.385%	**1.1768968%**
City	Carpinteria	Santa Barbara	0.001%		**0.0008938%**
City	Goleta	Santa Barbara	0.004%		**0.0028969%**
City	Lompoc	Santa Barbara	0.047%		**0.0389379%**
City	Santa Barbara	Santa Barbara	0.122%		**0.1004559%**
City	Santa Maria	Santa Barbara	0.058%		**0.0479179%**
County	***Santa Clara County***	Santa Clara	2.404%	2.941%	**2.4987553%**
City	Campbell	Santa Clara	0.014%		**0.0112566%**
City	Cupertino	Santa Clara	0.008%		**0.0066824%**
City	Gilroy	Santa Clara	0.025%		**0.0202891%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Los Altos	Santa Clara	0.013%		**0.0103338%**
City	Los Gatos	Santa Clara	0.013%		**0.0103220%**
City	Milpitas	Santa Clara	0.036%		**0.0298120%**
City	Morgan Hill	Santa Clara	0.015%		**0.0124619%**
City	Mountain View	Santa Clara	0.041%		**0.0334608%**
City	Palo Alto	Santa Clara	0.039%		**0.0323080%**
City	San Jose	Santa Clara	0.294%	0.360%	**0.3054960%**
City	Santa Clara	Santa Clara	0.067%		**0.0549723%**
City	Saratoga	Santa Clara	0.004%		**0.0034161%**
City	Sunnyvale	Santa Clara	0.053%		**0.0434069%**
County	***Santa Cruz County***	Santa Cruz	0.783%	0.957%	**0.8135396%**
City	Capitola	Santa Cruz	0.020%		**0.0168191%**
City	Santa Cruz	Santa Cruz	0.143%		**0.1180348%**
City	Scotts Valley	Santa Cruz	0.015%		**0.0126525%**
City	Watsonville	Santa Cruz	0.063%		**0.0520136%**
County	***Shasta County***	Shasta	1.095%	1.339%	**1.1380191%**
City	Anderson	Shasta	0.024%		**0.0198896%**
City	Redding	Shasta	0.284%		**0.2334841%**
City	Shasta Lake	Shasta	0.004%		**0.0031993%**
County	***Siskiyou County***	Siskiyou	0.228%	0.279%	**0.2373393%**
County	***Solano County***	Solano	0.760%		**0.6260795%**
City	Benicia	Solano	0.031%		**0.0253903%**
City	Dixon	Solano	0.016%		**0.0130849%**
City	Fairfield	Solano	0.109%		**0.0897317%**
City	Suisun City	Solano	0.021%		**0.0176183%**
City	Vacaville	Solano	0.119%		**0.0976497%**
City	Vallejo	Solano	0.167%		**0.1373644%**
County	***Sonoma County***	Sonoma	1.218%	1.490%	**1.2661290%**
City	Healdsburg	Sonoma	0.032%		**0.0266929%**
City	Petaluma	Sonoma	0.081%		**0.0667507%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Rohnert Park	Sonoma	0.041%		**0.0340759%**
City	Santa Rosa	Sonoma	0.184%		**0.1519070%**
City	Sonoma	Sonoma	0.022%		**0.0183438%**
City	Windsor	Sonoma	0.016%		**0.0129298%**
County	***Stanislaus County***	Stanislaus	1.722%		**1.4182273%**
City	Ceres	Stanislaus	0.041%		**0.0340260%**
City	Modesto	Stanislaus	0.217%		**0.1788759%**
City	Newman	Stanislaus	0.006%		**0.0046964%**
City	Oakdale	Stanislaus	0.018%		**0.0145531%**
City	Patterson	Stanislaus	0.015%		**0.0126590%**
City	Riverbank	Stanislaus	0.010%		**0.0085699%**
City	Turlock	Stanislaus	0.065%		**0.0531966%**
County	***Sutter County***	Sutter	0.306%	0.374%	**0.3179548%**
City	Yuba City	Sutter	0.074%		**0.0606242%**
County	***Tehama County***	Tehama	0.213%	0.261%	**0.2216654%**
City	Red Bluff	Tehama	0.014%		**0.0117771%**
County	***Trinity County***	Trinity	0.082%	0.101%	**0.0855476%**
County	***Tulare County***	Tulare	0.809%	0.990%	**0.8410949%**
City	Dinuba	Tulare	0.014%		**0.0116929%**
City	Exeter	Tulare	0.004%		**0.0032479%**
City	Farmersville	Tulare	0.003%		**0.0027879%**
City	Lindsay	Tulare	0.007%		**0.0057111%**
City	Porterville	Tulare	0.021%		**0.0171845%**
City	Tulare	Tulare	0.037%		**0.0302273%**
City	Visalia	Tulare	0.066%		**0.0545872%**
County	***Tuolumne County***	Tuolumne	0.486%	0.594%	**0.5047621%**
County	***Ventura County***	Ventura	2.192%	2.681%	**2.2781201%**
City	Camarillo	Ventura	0.002%		**0.0012815%**
City	Fillmore	Ventura	0.002%		**0.0020294%**
City	Moorpark	Ventura	0.008%		**0.0067337%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Oxnard	Ventura	0.156%	0.190%	**0.1617338%**
City	Port Hueneme	Ventura	0.021%		**0.0174145%**
City	San Buenaventura (Ventura)	Ventura	0.085%		**0.0702181%**
City	Santa Paula	Ventura	0.014%		**0.0119072%**
City	Simi Valley	Ventura	0.065%		**0.0533043%**
City	Thousand Oaks	Ventura	0.022%		**0.0179902%**
County	***Yolo County***	Yolo	0.357%	0.437%	**0.3713319%**
City	Davis	Yolo	0.055%		**0.0451747%**
City	West Sacramento	Yolo	0.066%		**0.0544321%**
City	Woodland	Yolo	0.058%		**0.0477904%**
County	***Yuba County***	Yuba	0.214%	0.262%	**0.2225679%**
City	Marysville	Yuba	0.014%		**0.0112079%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 2

Cost Reimbursement Procedure

1. Additional defined terms:

a) *Costs* means the reasonable amounts paid for the attorney and other City Attorney and County Counsel staff time for individuals employed by a Plaintiff Subdivision at the contractual rate, inclusive of benefits and overhead, together with amounts paid for court reporters, experts, copying, electronic research, travel, vendors, and the like, which were not previously reimbursed and which were paid or incurred (i) prior to December 31, 2022 in litigation against any Opioid Defendant and/or (ii) in negotiating and drafting any CA Allocation Agreement(s) concerning a settlement with any Opioid Defendant(s). *Costs* does not include attorneys' fees, costs, or expenses incurred by private contingency fee counsel. No part of the CA Abatement Accounts Fund will be used to reimburse Costs.

b) *First Claims Date* means October 1, 2023 or when all applications for reimbursement of Costs, in whole or in part, from funds available under Section IX and Exhibit R of the Walmart Settlement Agreement, Section XIV and Exhibit R of the Teva Settlement Agreement, Section XIII and Exhibit R of the Allergan Settlement Agreement, Section X and Exhibit R of the Distributor Settlement Agreement, Section XI and Exhibit R of the Janssen Settlement Agreement, Section X and Exhibit R of the CVS Settlement Agreement, or Section IX and Exhibit R of the Walgreens Settlement Agreement, have been finally determined under the provisions of those agreements, whichever comes first.

c) *Special Master* means a retired judicial officer or former public lawyer, not presently employed or retained by a Plaintiff Subdivision, who will aggregate, review, and determine the reasonable Costs to be awarded to each Plaintiff Subdivision that submits a claim for reimbursement of Costs. The Special Master will be selected by a majority vote of the votes cast by Plaintiff Subdivisions, with each such subdivision having one vote.

d) *Plaintiff Subdivision Committee* means the committee of Plaintiff Subdivisions that will review and approve the invoices submitted by the Special Master reflecting his or her reasonable time and expenses.

2. Cost Reimbursement to Plaintiff Subdivision

a) Purpose. Substantial resources have been expended to hold Opioid Defendants accountable for creating and profiting from the opioid crisis, and this effort has been a significant catalyst in creating National Opioid Settlements with various manufacturers, distributors, and chain pharmacies.

b) Claims Procedure.

i. If a Plaintiff Subdivision is eligible to seek reimbursement of Costs, in whole or in

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

part, from funds available under Section IX and Exhibit R of the Walmart Settlement Agreement, Section XIV and Exhibit R of the Teva Settlement Agreement, Section XIII and Exhibit R of the Allergan Settlement Agreement, Section X and Exhibit R of the CVS Settlement Agreement, Section IX and Exhibit R of the Walgreens Settlement Agreement, Section X or Exhibit R of the Distributor Settlement Agreement, or Section XI or Exhibit R of the Janssen Settlement Agreement, it must first make a timely application for reimbursement from such funds. To allow sufficient time for determination of those applications, no claim for Costs to the CA Subdivision Fund under this Agreement may be made before the First Claims Date.

ii. A Plaintiff Subdivision that wishes to be reimbursed from the CA Subdivision Fund must submit a claim to the Special Master no later than forty-five (45) days after the First Claims Date. The Special Master will then compile and redistribute the aggregated claim totals for each Plaintiff Subdivision via email to representatives of all the Plaintiff Subdivisions. A claim for attorney and staff time must list, for each attorney or staff member included in the claim, the following information: name, title, total hours claimed, hourly rate (including, if sought, benefits and share of overhead), and narrative summarizing the general nature of the work performed by the attorney or staff member. For reimbursement of "hard" costs, the subdivision may aggregate across a category (e.g., total for travel costs). It is the intention of the Plaintiff Subdivisions that submission of documents related to reimbursement of Costs does not waive any attorney-client privilege or exemptions to the California Public Records Act.

iii. The Special Master may request, at his or her sole option, additional documents or details to assist in the final award of Costs.

iv. The Special Master will review claims for reasonableness and will notify each Plaintiff Subdivision of the final determination of its claim, and will provide a list of all final awards to all Plaintiff Subdivisions by email or, upon request, via First Class U.S. Mail. Any Plaintiff Subdivision may ask the Special Master to reconsider any final award within twenty-one (21) days. The Special Master will make a final determination on any such reconsideration request within thirty (30) days of receipt.

v. Any decision of the Special Master is final and binding, and will be considered under the California Arbitration Act, Code of Civil Procedure section 1280 et seq. as a final arbitration award. Nothing in this agreement is intended to expand the scope of judicial review of the final award for errors of fact or law, and the Parties agree that they may only seek to vacate the award if clear and convincing evidence demonstrates one of the factors set forth in Code of Civil Procedure, section 1286.2, subdivision (a). Plaintiff Subdivisions will have fourteen (14) days after all final awards are made, together with any final determination of a request for

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

reconsideration, to seek review in the Superior Court of California, pursuant to Code of Civil Procedure, section 1285, where the State has filed its Consent Judgment.

vi. The Special Master will prepare a report of Costs that includes his or her fees and expenses at least ninety (90) days before the Payment Date for each Annual Payment. The Special Master's preparation of a report of Costs does not discharge a Plaintiff Subdivision's reporting requirement under Section V(B)(2) of the Walmart Settlement Agreement.

vii. A member of the Plaintiff Subdivision Committee, which is a CA Participating Subdivision, will submit to the Settlement Fund Administrator and Walmart a report of the fees and expenses incurred by the Special Master pursuant to Section V(B)(2) of the Walmart Settlement Agreement.

c) Claims Priority and Limitation.

i. The Special Master will submit invoices for compensation of reasonable fees and expenses to the Plaintiff Subdivision Committee no later than ninety (90) days prior to the Payment Date for each Annual Payment. The Plaintiff Subdivision Committee will promptly review and, if reasonable, approve the Special Master's invoice for compensation. The Plaintiff Subdivision Committee will submit approved invoices to the Settlement Fund Administrator for payment. The Special Master's approved invoices have priority and will be paid first from the CA Subdivision Fund before any award of Costs, subject to the limitation in Section 2.c.v below.

ii. Final Awards of Costs that do not exceed seventy-five thousand dollars ($75,000.00) will be paid next in priority after the Special Master's approved invoices.

iii. Final Awards of Costs in excess of seventy-five thousand dollars ($75,000.00) will be paid proportionally from the funds remaining in that year's Annual Payment.

iv. Any claim for Costs that is not paid in full will be allocated against the next year's distribution from the CA Subdivision Fund, until all approved claims for Costs are paid in full.

v. In no event will more than 50% of the total CA Subdivision Fund received in any year be used to pay Costs or the Special Master's approved invoices.

vi. In no event shall more than $28 million of the total CA Subdivision Funds paid pursuant to the Walmart Settlement Agreement, Teva Settlement Agreement, Allergan Settlement Agreement, Distributor Settlement Agreement, CVS Settlement Agreement, Janssen Settlement Agreement, and the Walgreens Settlement Agreement be used to pay Costs.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

d) Collateral Source Payments and Third-Party Settlement.

i. In the event a Plaintiff Subdivision is awarded compensation, in whole or in part, by any source of funds created as a result of litigation against an Opioid Defendant for its reasonable Costs, it will reduce its claim for Costs from the CA Subdivision Fund by that amount. If a Plaintiff Subdivision has already received a final award of Costs from the CA Subdivision Fund, it will repay the fund up to the prior award of Costs via a payment to the Settlement Fund Administrator or notify the Settlement Fund Administrator that its allocation from the next and subsequent Annual Payments should be reduced accordingly. If the Plaintiff Subdivision is repaying any prior award of Costs, that repayment will occur as soon as is feasible after the Plaintiff Subdivision's receipt of Cost funds from the collateral source, but no more than 90 days after its receipt from the collateral source. The Settlement Fund Administrator will add any repaid Costs to the CA Subdivision Fund. Any Plaintiff Subdivision that has submitted for reimbursement to any national fund and has not received a final determination by the First Claims Date may request that the settlement administrator withhold some or all of its payment from the CA Subdivision Fund in order to avoid repayment.

ii. In the event a Plaintiff Subdivision reaches a monetary settlement or compromise against any Opioid Defendant outside of the National Opioid Settlement, the monetary portion of such settlement, net of fees paid to outside contingency fee counsel and of funds earmarked strictly for abatement, will be credited against its Costs and the subdivision will be ineligible to recover those credited Costs from the CA Subdivision Fund. Plaintiff Subdivisions negotiating monetary settlements or compromises against any Opioid Defendant outside of the National Opioid Settlement will negotiate for funds to repay any Costs it previously received from the CA Subdivision Fund or for Costs it otherwise might be eligible to claim from the CA Subdivision Fund. If such a settlement is paid after all final approved claims for Costs by all Plaintiff Subdivisions are satisfied in full, the settling subdivision will reimburse the CA Subdivision Fund in that amount by making payment to the Settlement Fund Administrator to add to the CA Subdivision Fund in a manner consistent with the repayments described in section 2.d.i above.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 3

CALIFORNIA-SUBDIVISION BACKSTOP AGREEMENT

On August 6, 2021, Judge Polster of the US District Court for the Northern District of Ohio issued an Order (the Order), docket number 3814, in In Re National Prescription Opiate Litigation, MDL 2804, addressing contingent attorney fee contracts between political subdivisions eligible to participate in the Walmart Settlement and their counsel.

In light of the Order, and at the request of [SUBDIVISION], the [SUBDIVISION], its counsel [COUNSEL], and the California Attorney General, on behalf of the State of California, are entering into this California-Subdivision Backstop Agreement (Backstop Agreement).

[SUBDIVISION] and [COUNSEL] intend this Backstop Agreement to constitute a State Back-Stop Agreement as that term is used in the Order and in Exhibit R (Agreement on Attorneys' Fees, Costs, and Expenses) of the Walmart Settlement Agreement.

Pursuant to this Backstop Agreement, [SUBDIVISION] may, subject to the limitations of the Walmart Settlement Agreement and CA Walmart Allocation Agreement, as well as any other limitations imposed by law, use funds that it receives from the Walmart Settlement CA Subdivision Fund to pay a contingent fee to [COUNSEL]. Any such payment from [SUBDIVISION] to [COUNSEL], together with any contingency fees that [COUNSEL] may receive from the national Attorney Fee Fund, will not exceed a total contingency fee of [PERCENTAGE NOT TO EXCEED 15%] of the total gross recovery of [SUBDIVISION] from the Walmart Settlement.

[COUNSEL] certify that they first sought fees and costs from the Attorney Fee Fund created under the Walmart Settlement Agreement before seeking or accepting payment under this backstop agreement. [COUNSEL] further certify that they are not seeking and will not accept payment under this backstop agreement of any litigation fees or costs that have been reimbursed through prior settlements or judgments.

The Attorney General is executing this agreement solely because the definition of "State Back-Stop Agreement" in Exhibit R of the Walmart Settlement Agreement requires such agreements to be between "a Settling State" and private counsel for a participating subdivision. Neither the California Attorney General nor the State of California have any obligations under this Backstop Agreement, and this Backstop Agreement does not require the payment of any state funds to [SUBDIVISION], [COUNSEL], or any other party.

[DATE]	[SUBDIVISION SIGNATURE BLOCK]
[DATE]	[COUNSEL SIGNATURE BLOCK]
[DATE]	[ATTORNEY GENERAL SIGNATURE BLOCK]

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – CVS Settlement

1. Introduction

Pursuant to the CVS Settlement Agreement, dated as of December 9, 2022, and any revision thereto as well as any modification thereto entered into by the State of California and CVS (the "CVS Settlement Agreement"), including Section V and Exhibit O, the State of California proposes this agreement (the "CA CVS Allocation Agreement") to govern the allocation, distribution, and use of Settlement Fund payments made to California pursuant to Sections IV and V of the CVS Settlement Agreement. For the avoidance of doubt, this agreement does not apply to payments made pursuant to Sections IX or X of the CVS Settlement Agreement.

Pursuant to Exhibit O, Paragraph 4, of the CVS Settlement Agreement, acceptance of this CA CVS Allocation Agreement is a requirement to be an Initial Participating Subdivision.

2. Definitions

a) *CA Participating Subdivision* means a Participating Subdivision that is also (a) a Plaintiff Subdivision and/or (b) a Primary Subdivision with a population equal to or greater than 10,000. For the avoidance of doubt, eligible CA Participating Subdivisions are those California subdivisions listed in Exhibit C (excluding Litigating Special Districts) and/or Exhibit I to the CVS Settlement Agreement.

b) *Allergan Settlement Agreement* means the Allergan Settlement Agreement dated November 22, 2022, and any revision thereto.

c) *Distributor Settlement Agreement* means the Distributor Settlement Agreement dated July 21, 2021, and any revision thereto.

d) *Janssen Settlement Agreement* means the Janssen Settlement Agreement dated July 21, 2021, and any revision thereto.

e) *Teva Settlement Agreement* means the Teva Settlement Agreement dated November 22, 2022, and any revision thereto.

f) *Walgreens Settlement Agreement* means the Walgreens Settlement Agreement dated December 9, 2022, and any revision thereto.

g) *Walmart Settlement Agreement* means the Walmart Settlement Agreement dated November 14, 2022, and any revision thereto.

h) *CA Litigating Special District* means a Litigating Special District located in California. CA Litigating Special Districts include Downey Unified School District, Elk Grove Unified School District, Kern High School District, Montezuma Fire Protection District (located in Stockton, California), Santa Barbara San Luis Obispo Regional Health Authority, Inland Empire Health Plan, Health Plan of San Joaquin, San Leandro Unified School District, Pleasant Valley School District Board, and LA Care Health Plan.

i) *Plaintiff Subdivision* means a Subdivision located in California, other than a CA

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Litigating Special District, that filed a lawsuit, on behalf of the Subdivision and/or through an official of the Subdivision on behalf of the People of the State of California, against one or more Opioid Defendants prior to October 1, 2020.

j) *Opioid Defendant* means any defendant (including but not limited to Teva Pharmaceutical Industries Ltd., Allergan Finance, LLC, Allergan Limited, CVS Health Corporation, CVS Pharmacy, Inc., Walgreen Co., Walmart Inc., Johnson & Johnson, Janssen Pharmaceuticals, Inc., Purdue Pharma L.P., Cardinal Health, Inc., AmerisourceBergen Corporation, and McKesson Corporation) named in a lawsuit seeking damages, abatement, or other remedies related to or caused by the opioid public health crisis in any lawsuit brought by any state or local government on or before October 1, 2020.

3. General Terms

This agreement is subject to the requirements of the CVS Settlement Agreement, as well as applicable law, and the CVS Settlement Agreement governs over any inconsistent provision of this CA CVS Allocation Agreement. Terms used in this CA CVS Allocation Agreement have the same meaning as in the CVS Settlement Agreement unless otherwise defined herein.

Pursuant to Section V(E)(1) of the CVS Settlement Agreement, (a) all Settlement Fund payments will be used for Opioid Remediation, except as allowed by Section V(B)(2) of the CVS Settlement Agreement; and (b) at least seventy percent (70%) of Settlement Fund payment amounts will be used solely for future Opioid Remediation.

4. State Allocation

The Settlement Fund payments to California,[1] pursuant to the CVS Settlement Agreement, shall be allocated as follows: 15% to the State Fund; 70% to the Abatement Accounts Fund; and 15% to the Subdivision Fund. For the avoidance of doubt, all funds allocated to California from the Settlement Fund shall be combined pursuant to this CA CVS Allocation Agreement, and 15% of that total shall be allocated to the State of California (the "State of California Allocation"), 70% to the California Abatement Accounts Fund ("CA Abatement Accounts Fund"), and 15% to the California Subdivision Fund ("CA Subdivision Fund").

[1] For purposes of clarity, use of the term "California" refers to the geographic territory of California and the state and its local governments therein. The term "State" or "State of California" refers to the State of California as a governmental unit.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

A. State of California Allocation

Fifteen percent of the total Settlement Fund payments will be allocated to the State and used by the State for future Opioid Remediation.

B. CA Abatement Accounts Fund

i. Allocation of CA Abatement Accounts Funds

a) Seventy percent of the total Settlement Fund payments will be allocated to the CA Abatement Accounts Fund. The funds in the CA Abatement Accounts Fund will be allocated based on the allocation model developed in connection with the proposed negotiating class in the National Prescription Opiate Litigation (MDL No. 2804), as adjusted to reflect only those cities and counties that are eligible, based on population or litigation status, to become a CA Participating Subdivision. The percentage from the CA Abatement Accounts Fund allocated to each CA Participating Subdivision is set forth in Appendix 1 in the column entitled abatement percentage (the "Local Allocation"). For the avoidance of doubt, CA Litigating Special Districts and California towns, cities, and counties with a population less than 10,000 are not eligible to receive an allocation of CA Abatement Accounts Funds.

b) A CA Participating Subdivision that is a county, or a city and county, will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision, and will receive payments as provided in the CVS Settlement Agreement.

c) A CA Participating Subdivision that is a city will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision. The Local Allocation share for a city that is a CA Participating Subdivision will be paid to the county in which the city is located, rather than to the city, so long as: (a) the county is a CA Participating Subdivision, and (b) the city has not advised the Settlement Fund Administrator that it requests direct payment at least 60 days prior to a Payment Date. A Local Allocation share allocated to a city but paid to a county is not required to be spent exclusively for abatement activities in that city, but will become part of the county's share of the CA Abatement Accounts Funds, which will be used in accordance with Section 4.B.ii (Use of CA Abatement Accounts Funds) and reported on in accordance with Section 4.B.iii (CA Abatement Accounts Fund Oversight).

d) A city within a county that is a CA Participating Subdivision may opt in or out of direct payment at any time, and it may also elect direct payment of only a portion of its share, with the remainder going to the county, by providing notice to the Settlement Fund Administrator at least 60 days prior to a Payment Date. For purposes of this CA CVS Allocation Agreement, the Cities of Los Angeles, Oakland, San Diego, San Jose and Eureka will be deemed to have elected direct payment if they become Participating Subdivisions.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

e) The State will receive the Local Allocation share of any payment to the Settlement Fund that is attributable to a county or city that is eligible to become a CA Participating Subdivision, but that has not, as of the date of that payment to the Settlement Fund, become a Participating Subdivision.

f) Funds received by a CA Participating Subdivision, and not expended or encumbered within five years of receipt and in accordance with the CVS Settlement Agreement and this CA CVS Allocation Agreement shall be transferred to the State; provided however, that CA Participating Subdivisions have seven years to expend or encumber CA Abatement Accounts Funds designated to support capital outlay projects before they must be transferred to the State. This provision shall not apply to the Cost Reimbursement Funds, which shall be controlled by Appendix 2.

ii. Use of CA Abatement Accounts Funds

a) The CA Abatement Accounts Funds will be used for future Opioid Remediation in one or more of the areas described in the List of Opioid Remediation Uses, which is Exhibit E to the CVS Settlement Agreement.

b) In addition to this requirement, no less than 50% of the funds received by a CA Participating Subdivision from the Abatement Accounts Fund in each calendar year will be used for one or more of the following High Impact Abatement Activities:

(1) the provision of matching funds or operating costs for substance use disorder facilities within the Behavioral Health Continuum Infrastructure Program;

(2) creating new or expanded Substance Use Disorder ("SUD") treatment infrastructure;

(3) addressing the needs of communities of color and vulnerable populations (including sheltered and unsheltered homeless populations) that are disproportionately impacted by SUD;

(4) diversion of people with SUD from the justice system into treatment, including by providing training and resources to first and early responders (sworn and non-sworn) and implementing best practices for outreach, diversion and deflection, employability, restorative justice, and harm reduction; and/or

(5) interventions to prevent drug addiction in vulnerable youth.

c) The California Department of Health Care Services ("DHCS") may add to this list (but not delete from it) by designating additional High Impact Abatement Activities. DHCS will make reasonable efforts to consult with stakeholders, including the CA Participating Subdivisions, before adding additional High Impact Abatement Activities to this list.

d) For the avoidance of doubt, and subject to the requirements of the CVS Settlement Agreement and applicable law, CA Participating Subdivisions may form agreements or

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

ventures, or otherwise work in collaboration with, federal, state, local, tribal or private sector entities in pursuing Opioid Remediation activities funded from the CA Abatement Accounts Fund. Further, provided that all CA Abatement Accounts Funds are used for Opioid Remediation consistent with the CVS Settlement Agreement and this CA CVS Allocation Agreement, a county and any cities or towns within the county may agree to reallocate their respective shares of the CA Abatement Accounts Funds among themselves, provided that any direct distribution may only be to a CA Participating Subdivision and any CA Participating Subdivision must agree to their share being reallocated.

iii. CA Abatement Accounts Fund Oversight

a) Pursuant to Section 5 below, CA Participating Subdivisions receiving settlement funds must prepare and file reports annually regarding the use of those funds. DHCS may regularly review the reports prepared by CA Participating Subdivisions about the use of CA Abatement Accounts Funds for compliance with the CVS Settlement Agreement and this CA CVS Allocation Agreement.

b) If DHCS determines that a CA Participating Subdivision's use of CA Abatement Accounts Funds is inconsistent with the CVS Settlement Agreement or this CA CVS Allocation Agreement, whether through review of reports or information from any other sources, DHCS shall send a request to meet and confer with the CA Participating Subdivision. The parties shall meet and confer in an effort to resolve the concern.

c) If the parties are unable to reach a resolution, DHCS may conduct an audit of the Subdivision's use of the CA Abatement Accounts Funds within one year of the request to meet and confer, unless the parties mutually agree in writing to extend the meet and confer time frame.

d) If the concern still cannot be resolved, the State may bring a motion or action in the court where the State has filed its Consent Judgment to resolve the concern or otherwise enforce the requirements of the CVS Settlement Agreement or this CA CVS Allocation Agreement. However, in no case shall any audit be conducted, or motion be brought, as to a specific expenditure of funds, more than five years after the date on which the expenditure of the funds was reported to DHCS, in accordance with this agreement.

e) Notwithstanding the foregoing, this Agreement does not limit the statutory or constitutional authority of any state or local agency or official to conduct audits, investigations, or other oversight activities, or to pursue administrative, civil, or criminal enforcement actions.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

C. CA Subdivision Fund

i. Fifteen percent of the total Settlement Fund payments will be allocated to the CA Subdivision Fund. All funds in the CA Subdivision Fund will be allocated among the Plaintiff Subdivisions that are Initial Participating Subdivisions. The funds will be used, subject to any limits imposed by the CVS Settlement Agreement and this CA CVS Allocation Agreement, to fund future Opioid Remediation and reimburse past opioid-related expenses, which may include fees and expenses related to litigation, and to pay the reasonable fees and expenses of the Special Master as set forth in Appendix 2.

The CA Subdivision Funds will be allocated as follows:

a) First, funds in the CA Subdivision Fund shall be used to pay the Special Master's reasonable fees and expenses in accordance with the procedures and limitations set forth in Appendix 2 to this document;

b) Second, funds will be allocated to Plaintiff Subdivisions that are Initial Participating Subdivisions that have been awarded Costs, as defined by and in accordance with the procedures and limitations set forth in Appendix 2 to this document.

c) Funds remaining in the CA Subdivision Fund, which shall consist of no less than 50% of the total CA Subdivision Fund received in any year pursuant to Appendix 2, Section 2.c.v, will be distributed to Plaintiff Subdivisions that are Initial Participating Subdivisions, in relative proportion to the Local Allocation. These funds shall be used to fund future opioid-related projects and to reimburse past opioid-related expenses, which may include fees and expenses related to litigation against any Opioid Defendant.

D. Provision for State Back-Stop Agreement

On August 6, 2021, Judge Dan Polster of the U.S. District Court, Northern District of Ohio, Eastern Division, issued an order (ECF Docket Number 3814) ("MDL Fees Order") in the National Prescription Opiate Litigation (MDL No. 2804) "cap[ping] all applicable contingent fee agreements at 15%." Private counsel representing Plaintiff Subdivisions should seek its contingency fees and costs from the Attorney Fee Fund or Cost Funds under the CVS Settlement Agreement, and, if applicable, the Teva Settlement Agreement, Allergan Settlement Agreement, Distributor Settlement Agreement, Janssen Settlement Agreement, Walgreens Settlement Agreement, and Walmart Settlement Agreement.

A Plaintiff Subdivision may separately agree to use its share of the CA Subdivision Fund to pay for fees or costs incurred by its contingency-fee counsel ("State Back-Stop Agreement"), pursuant to Exhibit R, section I(Y), of the CVS Settlement Agreement and the MDL Fees Order, so long as such contingency fees do not exceed a total contingency fee of 15% of the total gross recovery of the Plaintiff Subdivision pursuant to the CVS Settlement, inclusive of contingency fees from the national Attorney Fee Fund and this State Back-Stop Agreement. Before seeking fees or litigation costs and expenses from a State Back-Stop Agreement, private counsel

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

representing Plaintiff Subdivisions must first seek contingency fees and costs from the Attorney Fee Fund or Cost Funds created under the CVS Settlement Agreement. Further, private counsel may only seek reimbursement for litigation fees and costs that have not previously been reimbursed through prior settlements or judgments.

To effectuate a State Back-Stop Agreement pursuant to this section, an agreement in the form of Appendix 3 may be entered into by a Plaintiff Subdivision, private counsel, and the California Office of the Attorney General. The California Office of the Attorney General shall, upon the request of a Plaintiff Subdivision, execute any agreement executed by a Plaintiff Subdivision and its private counsel if it is in the form of Appendix 3. The California Office of the Attorney General will also consider requests from Plaintiff Subdivisions to execute and enter into agreements presented in other forms.

For the avoidance of doubt, this agreement does not require a Plaintiff Subdivision to request or enter into a State Back-Stop Agreement, and no State Back-Stop Agreement shall impose any duty or obligation on the State of California or any of its agencies or officers, including without limitation the Attorney General.

5. State and Subdivision Reporting

a) DHCS will prepare an annual written report regarding the State's use of funds from the settlement until those funds are fully expended and for one year thereafter. These reports will be made publicly available on the DHCS web site.

b) Each CA Participating Subdivision that receives payments of funds from the settlement will prepare written reports at least annually regarding the use of those funds, until those funds are fully expended and for one year thereafter. These reports will also include a certification that all funds that the CA Participating Subdivision has received through the settlement have been used in compliance with the CVS Settlement Agreement and this CA CVS Allocation Agreement. The report will be in a form reasonably determined by DHCS. Prior to specifying the form of the report DHCS will confer with representatives of the Plaintiff Subdivisions.

c) The State and all CA Participating Subdivisions receiving CA Abatement Accounts Funds will track all deposits and expenditures. Each such subdivision is responsible solely for the CA Abatement Accounts Funds it receives. A county is not responsible for oversight, reporting, or monitoring of CA Abatement Accounts Funds received by a city within that county that receives direct payment. Unless otherwise exempt, Subdivisions' expenditures and uses of CA Abatement Accounts Funds and other Settlement Funds will be subject to the normal budgetary and expenditure process of the Subdivision.

d) Each Plaintiff Subdivision receiving CA Subdivision Funds will track all deposits and expenditures, as required by the CVS Settlement Agreement and this CA CVS Allocation Agreement. Among other things, Plaintiff Subdivisions using monies from the CA Subdivision Fund for purposes that do not qualify as Opioid Remediation must identify and include in their annual report, the amount and how such funds were used, including if used to pay attorneys' fees, investigation costs, or litigation costs. Pursuant to Section V(B)(2) of the CVS Settlement Agreement, such information must also be reported to the Settlement Fund Administrator and CVS.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

e) In each year in which DHCS prepares an annual report DHCS will also host a meeting to discuss the annual report and the Opioid Remediation activities being carried out by the State and Participating Subdivisions.

6. Miscellaneous

a) The State or any CA Participating Subdivision may bring a motion or action in the court where the State has filed its Consent Judgment to enforce the requirements of this CA CVS Allocation Agreement. Before filing such a motion or action the State will meet and confer with any CA Participating Subdivision that is the subject of the anticipated motion or action, and vice versa.

b) Except as provided in the CVS Settlement Agreement, this CA CVS Allocation Agreement is not enforceable by any party other than the State and the CA Participating Subdivisions. It does not confer any rights or remedies upon, and shall not be enforceable by, any third party.

c) Except as provided in the CA CVS Allocation Agreement, if any provision of this agreement or the application thereof to any person, entity, or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement, or the application of such provision to persons, entities, or circumstances other than those as to which it is invalid or unenforceable, will not be affected thereby, and each other provision of this agreement will be valid and enforceable to the fullest extent permitted by law.

d) Except as provided in the CVS Settlement Agreement, this agreement shall be governed by and interpreted in accordance with the laws of California.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

The undersigned, Ontario city, ACKNOWLEDGES acceptance of this Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – CVS Settlement is a requirement to be an Initial Participating Subdivision in the CVS Settlement and ACCEPTS this Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds – CVS Settlement. EXECUTED on 2/28/2023.

Signature: DocuSigned by: Scott Ochoa 943ADB3C46DD448...

Name: Scott Ochoa

Title: City Manager

Date: 2/28/2023

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

DISCLAIMER: The allocation percentages herein are estimates only and should not be relied on for decisions regarding legal rights, releases, waivers, or other decisions affecting current or potential legal claims. Percentages shown in the Plaintiff Subdivision Percentage column may change pursuant to Section 4.C. of the California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds—CVS Settlement, whereas the percentages shown in the Abatement Percentage column should not change. Participating Subdivisions, underlying calculations, and the calculated allocation percentages are subject to change. Regarding the column herein entitled "Abatement Percentage," pursuant to Section 4.B.e., the State of California will receive the Local Allocation share of any payment to the Settlement Fund that is attributable to a county or city that is eligible to become a CA Participating Subdivision, but that has not, as of the date of that payment to the Settlement Fund, become a Participating Subdivision. Regarding the column herein entitled "Plaintiff Subdivision Percentage," payments allocated to a Plaintiff Subdivision, which is not an Initial Participating Subdivision, will be re-allocated among the Plaintiff Subdivisions that are Initial Participating Subdivisions. Regarding the column herein entitled "Abatement Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the California Abatement Account Funds received, pursuant to Section 4.B. Regarding the column herein entitled "Plaintiff Subdivision Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the California Subdivision Funds received, pursuant to Section 4.C. Regarding the column herein entitled "Weighted Allocation Percentage," the annotation of "100%" refers to one-hundred percent (100%) of the combined and weighted allocation of the Abatement Percentage and the Plaintiff Subdivision Percentage.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

			100.000%	100.000%	100.000%
Participating Subdivision Classification	**Participating Subdivision**	**County**	**Abatement Percentage**	**Plaintiff Subdivision Percentage**	**Weighted Allcation Percentage**
County	***Alameda County***	Alameda	2.332%	2.853%	**2.4237952%**
City	Alameda	Alameda	0.069%		**0.0570162%**
City	Albany	Alameda	0.013%		**0.0107768%**
City	Berkeley	Alameda	0.152%		**0.1249656%**
City	Dublin	Alameda	0.033%	0.040%	**0.0338810%**
City	Emeryville	Alameda	0.023%		**0.0185765%**
City	Fremont	Alameda	0.108%		**0.0888576%**
City	Hayward	Alameda	0.117%		**0.0966218%**
City	Livermore	Alameda	0.054%		**0.0446740%**
City	Newark	Alameda	0.026%		**0.0217626%**
City	Oakland	Alameda	0.486%	0.595%	**0.5055601%**
City	Piedmont	Alameda	0.014%		**0.0114064%**
City	Pleasanton	Alameda	0.067%		**0.0554547%**
City	San Leandro	Alameda	0.039%		**0.0321267%**
City	Union City	Alameda	0.043%		**0.0352484%**
County	***Amador County***	Amador	0.226%	0.277%	**0.2349885%**
County	***Butte County***	Butte	1.615%	1.975%	**1.6783178%**
City	Chico	Butte	0.216%	0.264%	**0.2246499%**
City	Oroville	Butte	0.079%		**0.0646595%**
County	***Calaveras County***	Calaveras	0.226%	0.277%	**0.2351644%**
County	***Colusa County***	Colusa	0.059%		**0.0489221%**
County	***Contra Costa County***	Contra Costa	2.102%	2.571%	**2.1844585%**
City	Antioch	Contra Costa	0.037%		**0.0301879%**
City	Brentwood	Contra Costa	0.026%		**0.0215339%**
City	Clayton	Contra Costa	0.002%		**0.0018060%**
City	Concord	Contra Costa	0.055%		**0.0456676%**
City	Danville	Contra Costa	0.010%		**0.0082255%**
City	El Cerrito	Contra Costa	0.023%		**0.0189024%**
City	Hercules	Contra Costa	0.010%		**0.0078273%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Lafayette	Contra Costa	0.006%		**0.0046030%**
City	Martinez	Contra Costa	0.012%		**0.0098593%**
City	Moraga	Contra Costa	0.004%		**0.0031007%**
City	Oakley	Contra Costa	0.010%		**0.0079416%**
City	Orinda	Contra Costa	0.005%		**0.0038157%**
City	Pinole	Contra Costa	0.013%		**0.0110909%**
City	Pittsburg	Contra Costa	0.053%		**0.0436369%**
City	Pleasant Hill	Contra Costa	0.013%		**0.0106309%**
City	Richmond	Contra Costa	0.146%		**0.1201444%**
City	San Pablo	Contra Costa	0.018%		**0.0148843%**
City	San Ramon	Contra Costa	0.021%		**0.0176459%**
City	Walnut Creek	Contra Costa	0.026%		**0.0212132%**
County	***Del Norte County***	Del Norte	0.114%	0.140%	**0.1189608%**
County	***El Dorado County***	El Dorado	0.768%	0.939%	**0.7980034%**
City	Placerville	El Dorado	0.015%		**0.0127642%**
City	South Lake Tahoe	El Dorado	0.081%		**0.0665456%**
County	***Fresno County***	Fresno	1.895%	2.318%	**1.9693410%**
City	Clovis	Fresno	0.065%		**0.0536211%**
City	Coalinga	Fresno	0.012%		**0.0098554%**
City	Fresno	Fresno	0.397%		**0.3270605%**
City	Kerman	Fresno	0.005%		**0.0042534%**
City	Kingsburg	Fresno	0.008%		**0.0066167%**
City	Mendota	Fresno	0.002%		**0.0019387%**
City	Orange Cove	Fresno	0.004%		**0.0035607%**
City	Parlier	Fresno	0.008%		**0.0069755%**
City	Reedley	Fresno	0.012%		**0.0098804%**
City	Sanger	Fresno	0.018%		**0.0146135%**
City	Selma	Fresno	0.015%		**0.0127537%**
County	***Glenn County***	Glenn	0.107%	0.131%	**0.1116978%**
County	***Humboldt County***	Humboldt	1.030%	1.260%	**1.0703185%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Arcata	Humboldt	0.054%		**0.0447660%**
City	Eureka	Humboldt	0.117%	0.143%	**0.1216284%**
City	Fortuna	Humboldt	0.032%		**0.0266837%**
County	***Imperial County***	Imperial	0.258%	0.315%	**0.2679006%**
City	Brawley	Imperial	0.011%		**0.0087986%**
City	Calexico	Imperial	0.019%		**0.0152799%**
City	El Centro	Imperial	0.158%		**0.1302522%**
City	Imperial	Imperial	0.006%		**0.0048791%**
County	***Inyo County***	Inyo	0.073%	0.089%	**0.0754413%**
County	***Kern County***	Kern	2.517%	3.079%	**2.6159145%**
City	Arvin	Kern	0.006%		**0.0046425%**
City	Bakersfield	Kern	0.212%		**0.1747198%**
City	California City	Kern	0.009%		**0.0070820%**
City	Delano	Kern	0.030%		**0.0249316%**
City	McFarland	Kern	0.003%		**0.0025644%**
City	Ridgecrest	Kern	0.015%		**0.0120938%**
City	Shafter	Kern	0.013%		**0.0103417%**
City	Tehachapi	Kern	0.009%		**0.0073580%**
City	Wasco	Kern	0.008%		**0.0069861%**
County	***Kings County***	Kings	0.293%		**0.2413469%**
City	Avenal	Kings	0.007%		**0.0056335%**
City	Corcoran	Kings	0.013%		**0.0107032%**
City	Hanford	Kings	0.027%		**0.0226038%**
City	Lemoore	Kings	0.016%		**0.0131900%**
County	***Lake County***	Lake	0.795%		**0.6545389%**
City	Clearlake	Lake	0.041%	0.050%	**0.0426253%**
City	Lakeport	Lake	0.021%	0.026%	**0.0222964%**
County	***Lassen County***	Lassen	0.319%	0.391%	**0.3320610%**
City	Susanville	Lassen	0.027%		**0.0219295%**
County	***Los Angeles County***	Los Angeles	13.896%	16.999%	**14.4437559%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Agoura Hills	Los Angeles	0.005%		**0.0040024%**
City	Alhambra	Los Angeles	0.042%		**0.0343309%**
City	Arcadia	Los Angeles	0.033%		**0.0267718%**
City	Artesia	Los Angeles	0.001%		**0.0005100%**
City	Azusa	Los Angeles	0.026%		**0.0210857%**
City	Baldwin Park	Los Angeles	0.027%		**0.0218520%**
City	Bell	Los Angeles	0.008%		**0.0068783%**
City	Bellflower	Los Angeles	0.002%		**0.0014485%**
City	Bell Gardens	Los Angeles	0.014%		**0.0114301%**
City	Beverly Hills	Los Angeles	0.065%		**0.0534897%**
City	Burbank	Los Angeles	0.100%		**0.0823132%**
City	Calabasas	Los Angeles	0.006%		**0.0048948%**
City	Carson	Los Angeles	0.019%		**0.0159805%**
City	Cerritos	Los Angeles	0.005%		**0.0039682%**
City	Claremont	Los Angeles	0.010%		**0.0082584%**
City	Commerce	Los Angeles	0.000%		**0.0002971%**
City	Compton	Los Angeles	0.044%		**0.0361882%**
City	Covina	Los Angeles	0.028%		**0.0229127%**
City	Cudahy	Los Angeles	0.001%		**0.0006020%**
City	Culver City	Los Angeles	0.055%		**0.0449894%**
City	Diamond Bar	Los Angeles	0.001%		**0.0006993%**
City	Downey	Los Angeles	0.052%		**0.0429994%**
City	Duarte	Los Angeles	0.003%		**0.0027261%**
City	El Monte	Los Angeles	0.031%	0.038%	**0.0318985%**
City	El Segundo	Los Angeles	0.033%		**0.0268020%**
City	Gardena	Los Angeles	0.034%		**0.0278088%**
City	Glendale	Los Angeles	0.166%		**0.1366586%**
City	Glendora	Los Angeles	0.016%		**0.0134411%**
City	Hawaiian Gardens	Los Angeles	0.005%		**0.0040549%**
City	Hawthorne	Los Angeles	0.050%		**0.0407833%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Hermosa Beach	Los Angeles	0.018%		**0.0145307%**
City	Huntington Park	Los Angeles	0.023%		**0.0190667%**
City	Inglewood	Los Angeles	0.059%		**0.0489195%**
City	La Cañada Flintridge	Los Angeles	0.003%		**0.0025565%**
City	Lakewood	Los Angeles	0.005%		**0.0039971%**
City	La Mirada	Los Angeles	0.010%		**0.0081572%**
City	Lancaster	Los Angeles	0.045%		**0.0369689%**
City	La Puente	Los Angeles	0.002%		**0.0012999%**
City	La Verne	Los Angeles	0.024%		**0.0194190%**
City	Lawndale	Los Angeles	0.002%		**0.0017731%**
City	Lomita	Los Angeles	0.004%		**0.0031940%**
City	Long Beach	Los Angeles	0.439%		**0.3614151%**
City	Los Angeles	Los Angeles	2.715%	3.321%	**2.8218811%**
City	Lynwood	Los Angeles	0.016%		**0.0134345%**
City	Malibu	Los Angeles	0.002%		**0.0019269%**
City	Manhattan Beach	Los Angeles	0.032%		**0.0260686%**
City	Maywood	Los Angeles	0.004%		**0.0035528%**
City	Monrovia	Los Angeles	0.031%		**0.0254455%**
City	Montebello	Los Angeles	0.030%		**0.0250670%**
City	Monterey Park	Los Angeles	0.031%		**0.0256677%**
City	Norwalk	Los Angeles	0.031%		**0.0258228%**
City	Palmdale	Los Angeles	0.046%		**0.0375827%**
City	Palos Verdes Estates	Los Angeles	0.006%		**0.0053102%**
City	Paramount	Los Angeles	0.011%		**0.0091483%**
City	Pasadena	Los Angeles	0.146%		**0.1200524%**
City	Pico Rivera	Los Angeles	0.022%		**0.0183333%**
City	Pomona	Los Angeles	0.111%		**0.0911933%**
City	Rancho Palos Verdes	Los Angeles	0.002%		**0.0012645%**
City	Redondo Beach	Los Angeles	0.062%		**0.0506992%**
City	Rosemead	Los Angeles	0.003%		**0.0028260%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	San Dimas	Los Angeles	0.003%		**0.0022016%**
City	San Fernando	Los Angeles	0.013%		**0.0104837%**
City	San Gabriel	Los Angeles	0.018%		**0.0147726%**
City	San Marino	Los Angeles	0.009%		**0.0073791%**
City	Santa Clarita	Los Angeles	0.022%		**0.0178167%**
City	Santa Fe Springs	Los Angeles	0.031%		**0.0257531%**
City	Santa Monica	Los Angeles	0.158%		**0.1298513%**
City	Sierra Madre	Los Angeles	0.006%		**0.0048646%**
City	Signal Hill	Los Angeles	0.010%		**0.0084884%**
City	South El Monte	Los Angeles	0.005%		**0.0039603%**
City	South Gate	Los Angeles	0.020%		**0.0166272%**
City	South Pasadena	Los Angeles	0.012%		**0.0095334%**
City	Temple City	Los Angeles	0.005%		**0.0039498%**
City	Torrance	Los Angeles	0.112%		**0.0919820%**
City	Walnut	Los Angeles	0.006%		**0.0047305%**
City	West Covina	Los Angeles	0.049%		**0.0404521%**
City	West Hollywood	Los Angeles	0.013%		**0.0108517%**
City	Whittier	Los Angeles	0.032%		**0.0260581%**
County	***Madera County***	Madera	0.349%	0.427%	**0.3630669%**
City	Chowchilla	Madera	0.012%		**0.0097332%**
City	Madera	Madera	0.039%		**0.0318441%**
County	***Marin County***	Marin	0.564%	0.690%	**0.5861325%**
City	Larkspur	Marin	0.015%		**0.0124697%**
City	Mill Valley	Marin	0.020%		**0.0168401%**
City	Novato	Marin	0.028%		**0.0229824%**
City	San Anselmo	Marin	0.009%		**0.0078062%**
City	San Rafael	Marin	0.089%		**0.0729823%**
County	***Mariposa County***	Mariposa	0.084%	0.103%	**0.0876131%**
County	***Mendocino County***	Mendocino	0.439%	0.536%	**0.4558394%**
City	Ukiah	Mendocino	0.039%		**0.0317153%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
County	***Merced County***	Merced	0.551%	0.674%	**0.5724262%**
City	Atwater	Merced	0.024%		**0.0195846%**
City	Livingston	Merced	0.006%		**0.0045873%**
City	Los Banos	Merced	0.020%		**0.0165142%**
City	Merced	Merced	0.061%		**0.0500762%**
County	***Modoc County***	Modoc	0.065%	0.080%	**0.0678250%**
County	***Mono County***	Mono	0.023%	0.029%	**0.0242606%**
County	***Monterey County***	Monterey	0.908%	1.111%	**0.9437083%**
City	Greenfield	Monterey	0.006%		**0.0050552%**
City	King City	Monterey	0.005%		**0.0037355%**
City	Marina	Monterey	0.017%		**0.0144098%**
City	Monterey	Monterey	0.041%		**0.0336540%**
City	Pacific Grove	Monterey	0.009%		**0.0074842%**
City	Salinas	Monterey	0.094%		**0.0776576%**
City	Seaside	Monterey	0.023%		**0.0191772%**
City	Soledad	Monterey	0.007%		**0.0060870%**
County	***Napa County***	Napa	0.288%	0.352%	**0.2994325%**
City	American Canyon	Napa	0.017%		**0.0136869%**
City	Napa	Napa	0.078%		**0.0642783%**
County	***Nevada County***	Nevada	0.441%	0.539%	**0.4579827%**
City	Grass Valley	Nevada	0.024%		**0.0197805%**
City	Truckee	Nevada	0.003%		**0.0023843%**
County	***Orange County***	Orange	4.364%	5.339%	**4.5363576%**
City	Aliso Viejo	Orange	0.014%		**0.0113841%**
City	Anaheim	Orange	0.554%	0.678%	**0.5759282%**
City	Brea	Orange	0.086%		**0.0708897%**
City	Buena Park	Orange	0.087%		**0.0714352%**
City	Costa Mesa	Orange	0.124%	0.152%	**0.1288366%**
City	Cypress	Orange	0.033%		**0.0271937%**
City	Dana Point	Orange	0.001%		**0.0005560%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Fountain Valley	Orange	0.055%		**0.0455980%**
City	Fullerton	Orange	0.137%	0.168%	**0.1425744%**
City	Garden Grove	Orange	0.213%		**0.1752482%**
City	Huntington Beach	Orange	0.247%	0.302%	**0.2568420%**
City	Irvine	Orange	0.139%	0.170%	**0.1442350%**
City	Laguna Beach	Orange	0.047%	0.058%	**0.0493043%**
City	Laguna Hills	Orange	0.014%		**0.0115457%**
City	Laguna Niguel	Orange	0.001%		**0.0007071%**
City	Laguna Woods	Orange	0.001%		**0.0006546%**
City	La Habra	Orange	0.060%	0.073%	**0.0621049%**
City	Lake Forest	Orange	0.012%		**0.0101249%**
City	La Palma	Orange	0.012%		**0.0095439%**
City	Los Alamitos	Orange	0.008%		**0.0069190%**
City	Mission Viejo	Orange	0.014%		**0.0117560%**
City	Newport Beach	Orange	0.179%		**0.1470134%**
City	Orange	Orange	0.150%		**0.1231320%**
City	Placentia	Orange	0.029%	0.035%	**0.0298912%**
City	Rancho Santa Margarita	Orange	0.001%		**0.0006296%**
City	San Clemente	Orange	0.008%	0.010%	**0.0086083%**
City	San Juan Capistrano	Orange	0.008%		**0.0065510%**
City	Santa Ana	Orange	0.502%	0.614%	**0.5213866%**
City	Seal Beach	Orange	0.020%		**0.0165891%**
City	Stanton	Orange	0.035%		**0.0291955%**
City	Tustin	Orange	0.073%		**0.0600341%**
City	Westminster	Orange	0.104%	0.127%	**0.1082721%**
City	Yorba Linda	Orange	0.044%		**0.0362223%**
County	***Placer County***	Placer	1.045%	1.278%	**1.0861002%**
City	Auburn	Placer	0.017%		**0.0141114%**
City	Lincoln	Placer	0.031%		**0.0255599%**
City	Rocklin	Placer	0.076%		**0.0625485%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Roseville	Placer	0.196%		**0.1616559%**
County	***Plumas County***	Plumas	0.205%	0.251%	**0.2128729%**
County	***Riverside County***	Riverside	4.534%	5.547%	**4.7128296%**
City	Banning	Riverside	0.017%		**0.0143848%**
City	Beaumont	Riverside	0.021%		**0.0171135%**
City	Blythe	Riverside	0.012%		**0.0096714%**
City	Canyon Lake	Riverside	0.000%		**0.0001761%**
City	Cathedral City	Riverside	0.067%		**0.0553614%**
City	Coachella	Riverside	0.021%		**0.0173054%**
City	Corona	Riverside	0.147%		**0.1207083%**
City	Desert Hot Springs	Riverside	0.024%		**0.0200433%**
City	Eastvale	Riverside	0.000%		**0.0002747%**
City	Hemet	Riverside	0.051%		**0.0421792%**
City	Indio	Riverside	0.056%		**0.0457794%**
City	Jurupa Valley	Riverside	0.001%		**0.0008991%**
City	Lake Elsinore	Riverside	0.021%		**0.0172949%**
City	La Quinta	Riverside	0.063%		**0.0516732%**
City	Menifee	Riverside	0.032%		**0.0260909%**
City	Moreno Valley	Riverside	0.137%		**0.1130348%**
City	Murrieta	Riverside	0.048%	0.059%	**0.0497423%**
City	Norco	Riverside	0.016%		**0.0134542%**
City	Palm Desert	Riverside	0.083%		**0.0682465%**
City	Palm Springs	Riverside	0.076%		**0.0629862%**
City	Perris	Riverside	0.009%		**0.0076774%**
City	Rancho Mirage	Riverside	0.052%		**0.0431098%**
City	Riverside	Riverside	0.268%		**0.2206279%**
City	San Jacinto	Riverside	0.010%		**0.0085936%**
City	Temecula	Riverside	0.022%		**0.0180086%**
City	Wildomar	Riverside	0.008%		**0.0062500%**
County	***Sacramento County***	Sacramento	3.797%	4.645%	**3.9465887%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Citrus Heights	Sacramento	0.057%		**0.0465312%**
City	Elk Grove	Sacramento	0.130%		**0.1066994%**
City	Folsom	Sacramento	0.108%		**0.0890850%**
City	Galt	Sacramento	0.017%		**0.0143704%**
City	Rancho Cordova	Sacramento	0.008%		**0.0067679%**
City	Sacramento	Sacramento	0.721%	0.882%	**0.7496530%**
County	***San Benito County***	San Benito	0.106%	0.130%	**0.1101417%**
City	Hollister	San Benito	0.027%		**0.0225355%**
County	***San Bernardino County***	San Bernardino	3.259%	3.987%	**3.3878124%**
City	Adelanto	San Bernardino	0.008%		**0.0066640%**
City	Apple Valley	San Bernardino	0.025%		**0.0207360%**
City	Barstow	San Bernardino	0.015%		**0.0122056%**
City	Chino	San Bernardino	0.064%		**0.0525893%**
City	Chino Hills	San Bernardino	0.001%		**0.0006388%**
City	Colton	San Bernardino	0.031%		**0.0253443%**
City	Fontana	San Bernardino	0.112%		**0.0920543%**
City	Grand Terrace	San Bernardino	0.006%		**0.0051051%**
City	Hesperia	San Bernardino	0.035%		**0.0291522%**
City	Highland	San Bernardino	0.004%		**0.0029061%**
City	Loma Linda	San Bernardino	0.009%		**0.0071188%**
City	Montclair	San Bernardino	0.039%		**0.0322108%**
City	Ontario	San Bernardino	0.179%		**0.1472934%**
City	Rancho Cucamonga	San Bernardino	0.084%		**0.0689431%**
City	Redlands	San Bernardino	0.057%		**0.0469150%**
City	Rialto	San Bernardino	0.073%		**0.0603206%**
City	San Bernardino	San Bernardino	0.178%		**0.1461880%**
City	Twentynine Palms	San Bernardino	0.002%		**0.0012605%**
City	Upland	San Bernardino	0.052%		**0.0424460%**
City	Victorville	San Bernardino	0.033%		**0.0269400%**
City	Yucaipa	San Bernardino	0.016%		**0.0128772%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Yucca Valley	San Bernardino	0.003%		**0.0021228%**
County	***San Diego County***	San Diego	5.706%	6.980%	**5.9309748%**
City	Carlsbad	San Diego	0.128%		**0.1050485%**
City	Chula Vista	San Diego	0.189%	0.231%	**0.1961456%**
City	Coronado	San Diego	0.044%		**0.0359095%**
City	El Cajon	San Diego	0.113%		**0.0933582%**
City	Encinitas	San Diego	0.061%	0.074%	**0.0630289%**
City	Escondido	San Diego	0.145%		**0.1192204%**
City	Imperial Beach	San Diego	0.014%		**0.0118283%**
City	La Mesa	San Diego	0.055%	0.068%	**0.0575593%**
City	Lemon Grove	San Diego	0.022%		**0.0183911%**
City	National City	San Diego	0.080%		**0.0656808%**
City	Oceanside	San Diego	0.213%		**0.1753428%**
City	Poway	San Diego	0.062%		**0.0511040%**
City	San Diego	San Diego	1.975%	2.416%	**2.0531169%**
City	San Marcos	San Diego	0.089%		**0.0733897%**
City	Santee	San Diego	0.033%		**0.0268401%**
City	Solana Beach	San Diego	0.017%		**0.0138564%**
City	Vista	San Diego	0.052%		**0.0425144%**
Consolidated	***San Francisco***	San Francisco	3.026%	3.702%	**3.1457169%**
County	***San Joaquin County***	San Joaquin	1.680%	2.055%	**1.7460399%**
City	Lathrop	San Joaquin	0.009%		**0.0075394%**
City	Lodi	San Joaquin	0.053%		**0.0439484%**
City	Manteca	San Joaquin	0.054%		**0.0443454%**
City	Ripon	San Joaquin	0.013%		**0.0104219%**
City	Stockton	San Joaquin	0.313%	0.383%	**0.3256176%**
City	Tracy	San Joaquin	0.084%		**0.0692047%**
County	***San Luis Obispo County***	San Luis Obispo	0.816%	0.999%	**0.8484126%**
City	Arroyo Grande	San Luis Obispo	0.024%		**0.0199053%**
City	Atascadero	San Luis Obispo	0.029%		**0.0240680%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	El Paso de Robles (Paso Robles)	San Luis Obispo	0.043%		**0.0353456%**
City	Grover Beach	San Luis Obispo	0.017%		**0.0137881%**
City	Morro Bay	San Luis Obispo	0.020%		**0.0160922%**
City	San Luis Obispo	San Luis Obispo	0.077%		**0.0637841%**
County	***San Mateo County***	San Mateo	1.074%	1.313%	**1.1159599%**
City	Belmont	San Mateo	0.021%		**0.0169860%**
City	Burlingame	San Mateo	0.019%		**0.0152537%**
City	Daly City	San Mateo	0.044%		**0.0363880%**
City	East Palo Alto	San Mateo	0.013%		**0.0103982%**
City	Foster City	San Mateo	0.020%		**0.0166101%**
City	Half Moon Bay	San Mateo	0.004%		**0.0031638%**
City	Hillsborough	San Mateo	0.013%		**0.0110029%**
City	Menlo Park	San Mateo	0.015%		**0.0126209%**
City	Millbrae	San Mateo	0.013%		**0.0105836%**
City	Pacifica	San Mateo	0.016%		**0.0130625%**
City	Redwood City	San Mateo	0.056%		**0.0463511%**
City	San Bruno	San Mateo	0.021%		**0.0172161%**
City	San Carlos	San Mateo	0.013%		**0.0108885%**
City	San Mateo	San Mateo	0.052%		**0.0425841%**
City	South San Francisco	San Mateo	0.043%		**0.0353943%**
County	***Santa Barbara County***	Santa Barbara	1.132%	1.385%	**1.1768968%**
City	Carpinteria	Santa Barbara	0.001%		**0.0008938%**
City	Goleta	Santa Barbara	0.004%		**0.0028969%**
City	Lompoc	Santa Barbara	0.047%		**0.0389379%**
City	Santa Barbara	Santa Barbara	0.122%		**0.1004559%**
City	Santa Maria	Santa Barbara	0.058%		**0.0479179%**
County	***Santa Clara County***	Santa Clara	2.404%	2.941%	**2.4987553%**
City	Campbell	Santa Clara	0.014%		**0.0112566%**
City	Cupertino	Santa Clara	0.008%		**0.0066824%**
City	Gilroy	Santa Clara	0.025%		**0.0202891%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Los Altos	Santa Clara	0.013%		**0.0103338%**
City	Los Gatos	Santa Clara	0.013%		**0.0103220%**
City	Milpitas	Santa Clara	0.036%		**0.0298120%**
City	Morgan Hill	Santa Clara	0.015%		**0.0124619%**
City	Mountain View	Santa Clara	0.041%		**0.0334608%**
City	Palo Alto	Santa Clara	0.039%		**0.0323080%**
City	San Jose	Santa Clara	0.294%	0.360%	**0.3054960%**
City	Santa Clara	Santa Clara	0.067%		**0.0549723%**
City	Saratoga	Santa Clara	0.004%		**0.0034161%**
City	Sunnyvale	Santa Clara	0.053%		**0.0434069%**
County	***Santa Cruz County***	Santa Cruz	0.783%	0.957%	**0.8135396%**
City	Capitola	Santa Cruz	0.020%		**0.0168191%**
City	Santa Cruz	Santa Cruz	0.143%		**0.1180348%**
City	Scotts Valley	Santa Cruz	0.015%		**0.0126525%**
City	Watsonville	Santa Cruz	0.063%		**0.0520136%**
County	***Shasta County***	Shasta	1.095%	1.339%	**1.1380191%**
City	Anderson	Shasta	0.024%		**0.0198896%**
City	Redding	Shasta	0.284%		**0.2334841%**
City	Shasta Lake	Shasta	0.004%		**0.0031993%**
County	***Siskiyou County***	Siskiyou	0.228%	0.279%	**0.2373393%**
County	***Solano County***	Solano	0.760%		**0.6260795%**
City	Benicia	Solano	0.031%		**0.0253903%**
City	Dixon	Solano	0.016%		**0.0130849%**
City	Fairfield	Solano	0.109%		**0.0897317%**
City	Suisun City	Solano	0.021%		**0.0176183%**
City	Vacaville	Solano	0.119%		**0.0976497%**
City	Vallejo	Solano	0.167%		**0.1373644%**
County	***Sonoma County***	Sonoma	1.218%	1.490%	**1.2661290%**
City	Healdsburg	Sonoma	0.032%		**0.0266929%**
City	Petaluma	Sonoma	0.081%		**0.0667507%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Rohnert Park	Sonoma	0.041%		**0.0340759%**
City	Santa Rosa	Sonoma	0.184%		**0.1519070%**
City	Sonoma	Sonoma	0.022%		**0.0183438%**
City	Windsor	Sonoma	0.016%		**0.0129298%**
County	***Stanislaus County***	Stanislaus	1.722%		**1.4182273%**
City	Ceres	Stanislaus	0.041%		**0.0340260%**
City	Modesto	Stanislaus	0.217%		**0.1788759%**
City	Newman	Stanislaus	0.006%		**0.0046964%**
City	Oakdale	Stanislaus	0.018%		**0.0145531%**
City	Patterson	Stanislaus	0.015%		**0.0126590%**
City	Riverbank	Stanislaus	0.010%		**0.0085699%**
City	Turlock	Stanislaus	0.065%		**0.0531966%**
County	***Sutter County***	Sutter	0.306%	0.374%	**0.3179548%**
City	Yuba City	Sutter	0.074%		**0.0606242%**
County	***Tehama County***	Tehama	0.213%	0.261%	**0.2216654%**
City	Red Bluff	Tehama	0.014%		**0.0117771%**
County	***Trinity County***	Trinity	0.082%	0.101%	**0.0855476%**
County	***Tulare County***	Tulare	0.809%	0.990%	**0.8410949%**
City	Dinuba	Tulare	0.014%		**0.0116929%**
City	Exeter	Tulare	0.004%		**0.0032479%**
City	Farmersville	Tulare	0.003%		**0.0027879%**
City	Lindsay	Tulare	0.007%		**0.0057111%**
City	Porterville	Tulare	0.021%		**0.0171845%**
City	Tulare	Tulare	0.037%		**0.0302273%**
City	Visalia	Tulare	0.066%		**0.0545872%**
County	***Tuolumne County***	Tuolumne	0.486%	0.594%	**0.5047621%**
County	***Ventura County***	Ventura	2.192%	2.681%	**2.2781201%**
City	Camarillo	Ventura	0.002%		**0.0012815%**
City	Fillmore	Ventura	0.002%		**0.0020294%**
City	Moorpark	Ventura	0.008%		**0.0067337%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 1

Participating Subdivision Classification	Participating Subdivision	County	Abatement Percentage	Plaintiff Subdivision Percentage	Weighted Allcation Percentage
City	Oxnard	Ventura	0.156%	0.190%	**0.1617338%**
City	Port Hueneme	Ventura	0.021%		**0.0174145%**
City	San Buenaventura (Ventura)	Ventura	0.085%		**0.0702181%**
City	Santa Paula	Ventura	0.014%		**0.0119072%**
City	Simi Valley	Ventura	0.065%		**0.0533043%**
City	Thousand Oaks	Ventura	0.022%		**0.0179902%**
County	***Yolo County***	Yolo	0.357%	0.437%	**0.3713319%**
City	Davis	Yolo	0.055%		**0.0451747%**
City	West Sacramento	Yolo	0.066%		**0.0544321%**
City	Woodland	Yolo	0.058%		**0.0477904%**
County	***Yuba County***	Yuba	0.214%	0.262%	**0.2225679%**
City	Marysville	Yuba	0.014%		**0.0112079%**

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 2

Cost Reimbursement Procedure

1. Additional defined terms:

a) *Costs* means the reasonable amounts paid for the attorney and other City Attorney and County Counsel staff time for individuals employed by a Plaintiff Subdivision at the contractual rate, inclusive of benefits and overhead, together with amounts paid for court reporters, experts, copying, electronic research, travel, vendors, and the like, which were not previously reimbursed and which were paid or incurred (i) prior to December 31, 2022 in litigation against any Opioid Defendant and/or (ii) in negotiating and drafting any CA Allocation Agreement(s) concerning a settlement with any Opioid Defendant(s). *Costs* does not include attorneys' fees, costs, or expenses incurred by private contingency fee counsel. No part of the CA Abatement Accounts Fund will be used to reimburse Costs.

b) *First Claims Date* means October 1, 2023 or when all applications for reimbursement of Costs, in whole or in part, from funds available under Section X and Exhibit R of the CVS Settlement Agreement, Section XIV and Exhibit R of the Teva Settlement Agreement, Section XIII and Exhibit R of the Allergan Settlement Agreement, Section X and Exhibit R of the Distributor Settlement Agreement, Section XI and Exhibit R of the Janssen Settlement Agreement, Section IX and Exhibit R of the Walgreens Settlement Agreement, or Section IX and Exhibit R of the Walmart Settlement Agreement, have been finally determined under the provisions of those agreements, whichever comes first.

c) *Special Master* means a retired judicial officer or former public lawyer, not presently employed or retained by a Plaintiff Subdivision, who will aggregate, review, and determine the reasonable Costs to be awarded to each Plaintiff Subdivision that submits a claim for reimbursement of Costs. The Special Master will be selected by a majority vote of the votes cast by Plaintiff Subdivisions, with each such subdivision having one vote.

d) *Plaintiff Subdivision Committee* means the committee of Plaintiff Subdivisions that will review and approve the invoices submitted by the Special Master reflecting his or her reasonable time and expenses.

2. Cost Reimbursement to Plaintiff Subdivision

a) Purpose. Substantial resources have been expended to hold Opioid Defendants accountable for creating and profiting from the opioid crisis, and this effort has been a significant catalyst in creating National Opioid Settlements with various manufacturers, distributors, and chain pharmacies.

b) Claims Procedure.

i. If a Plaintiff Subdivision is eligible to seek reimbursement of Costs, in whole or in part, from funds available under Section X and Exhibit R of the CVS Settlement

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Agreement, Section XIV and Exhibit R of the Teva Settlement Agreement, Section XIII and Exhibit R of the Allergan Settlement Agreement, Section IX and Exhibit R of the Walgreens Settlement Agreement, Section IX and Exhibit R of the Walmart Settlement Agreement, Section X or Exhibit R of the Distributor Settlement Agreement, or Section XI or Exhibit R of the Janssen Settlement Agreement, it must first make a timely application for reimbursement from such funds. To allow sufficient time for determination of those applications, no claim for Costs to the CA Subdivision Fund under this Agreement may be made before the First Claims Date.

ii. A Plaintiff Subdivision that wishes to be reimbursed from the CA Subdivision Fund must submit a claim to the Special Master no later than forty-five (45) days after the First Claims Date. The Special Master will then compile and redistribute the aggregated claim totals for each Plaintiff Subdivision via email to representatives of all the Plaintiff Subdivisions. A claim for attorney and staff time must list, for each attorney or staff member included in the claim, the following information: name, title, total hours claimed, hourly rate (including, if sought, benefits and share of overhead), and narrative summarizing the general nature of the work performed by the attorney or staff member. For reimbursement of "hard" costs, the subdivision may aggregate across a category (e.g., total for travel costs). It is the intention of the Plaintiff Subdivisions that submission of documents related to reimbursement of Costs does not waive any attorney-client privilege or exemptions to the California Public Records Act.

iii. The Special Master may request, at his or her sole option, additional documents or details to assist in the final award of Costs.

iv. The Special Master will review claims for reasonableness and will notify each Plaintiff Subdivision of the final determination of its claim, and will provide a list of all final awards to all Plaintiff Subdivisions by email or, upon request, via First Class U.S. Mail. Any Plaintiff Subdivision may ask the Special Master to reconsider any final award within twenty-one (21) days. The Special Master will make a final determination on any such reconsideration request within thirty (30) days of receipt.

v. Any decision of the Special Master is final and binding, and will be considered under the California Arbitration Act, Code of Civil Procedure section 1280 et seq. as a final arbitration award. Nothing in this agreement is intended to expand the scope of judicial review of the final award for errors of fact or law, and the Parties agree that they may only seek to vacate the award if clear and convincing evidence demonstrates one of the factors set forth in Code of Civil Procedure, section 1286.2, subdivision (a). Plaintiff Subdivisions will have fourteen (14) days after all final awards are made, together with any final determination of a request for

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

reconsideration, to seek review in the Superior Court of California, pursuant to Code of Civil Procedure, section 1285, where the State has filed its Consent Judgment.

vi. The Special Master will prepare a report of Costs that includes his or her fees and expenses at least ninety (90) days before the Payment Date for each Annual Payment. The Special Master's preparation of a report of Costs does not discharge a Plaintiff Subdivision's reporting requirement under Section V(B)(2) of the CVS Settlement Agreement.

vii. A member of the Plaintiff Subdivision Committee, which is a CA Participating Subdivision, will submit to the Settlement Fund Administrator and CVS a report of the fees and expenses incurred by the Special Master pursuant to Section V(B)(2) of the CVS Settlement Agreement.

c) Claims Priority and Limitation.

i. The Special Master will submit invoices for compensation of reasonable fees and expenses to the Plaintiff Subdivision Committee no later than ninety (90) days prior to the Payment Date for each Annual Payment. The Plaintiff Subdivision Committee will promptly review and, if reasonable, approve the Special Master's invoice for compensation. The Plaintiff Subdivision Committee will submit approved invoices to the Settlement Fund Administrator for payment. The Special Master's approved invoices have priority and will be paid first from the CA Subdivision Fund before any award of Costs, subject to the limitation in Section 2.c.v below.

ii. Final Awards of Costs that do not exceed seventy-five thousand dollars ($75,000.00) will be paid next in priority after the Special Master's approved invoices.

iii. Final Awards of Costs in excess of seventy-five thousand dollars ($75,000.00) will be paid proportionally from the funds remaining in that year's Annual Payment.

iv. Any claim for Costs that is not paid in full will be allocated against the next year's distribution from the CA Subdivision Fund, until all approved claims for Costs are paid in full.

v. In no event will more than 50% of the total CA Subdivision Fund received in any year be used to pay Costs or the Special Master's approved invoices.

vi. In no event shall more than $28 million of the total CA Subdivision Funds paid pursuant to the CVS Settlement Agreement, Teva Settlement Agreement, Allergan Settlement Agreement, Distributor Settlement Agreement, Janssen Settlement Agreement, Walgreens Settlement Agreement, and the Walmart Settlement Agreement be used to pay Costs.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

d) Collateral Source Payments and Third-Party Settlement.

i. In the event a Plaintiff Subdivision is awarded compensation, in whole or in part, by any source of funds created as a result of litigation against an Opioid Defendant for its reasonable Costs, it will reduce its claim for Costs from the CA Subdivision Fund by that amount. If a Plaintiff Subdivision has already received a final award of Costs from the CA Subdivision Fund, it will repay the fund up to the prior award of Costs via a payment to the Settlement Fund Administrator or notify the Settlement Fund Administrator that its allocation from the next and subsequent Annual Payments should be reduced accordingly. If the Plaintiff Subdivision is repaying any prior award of Costs, that repayment will occur as soon as is feasible after the Plaintiff Subdivision's receipt of Cost funds from the collateral source, but no more than 90 days after its receipt from the collateral source. The Settlement Fund Administrator will add any repaid Costs to the CA Subdivision Fund. Any Plaintiff Subdivision that has submitted for reimbursement to any national fund and has not received a final determination by the First Claims Date may request that the settlement administrator withhold some or all of its payment from the CA Subdivision Fund in order to avoid repayment.

ii. In the event a Plaintiff Subdivision reaches a monetary settlement or compromise against any Opioid Defendant outside of the National Opioid Settlement, the monetary portion of such settlement, net of fees paid to outside contingency fee counsel and of funds earmarked strictly for abatement, will be credited against its Costs and the subdivision will be ineligible to recover those credited Costs from the CA Subdivision Fund. Plaintiff Subdivisions negotiating monetary settlements or compromises against any Opioid Defendant outside of the National Opioid Settlement will negotiate for funds to repay any Costs it previously received from the CA Subdivision Fund or for Costs it otherwise might be eligible to claim from the CA Subdivision Fund. If such a settlement is paid after all final approved claims for Costs by all Plaintiff Subdivisions are satisfied in full, the settling subdivision will reimburse the CA Subdivision Fund in that amount by making payment to the Settlement Fund Administrator to add to the CA Subdivision Fund in a manner consistent with the repayments described in section 2.d.i above.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

APPENDIX 3

CALIFORNIA-SUBDIVISION BACKSTOP AGREEMENT

On August 6, 2021, Judge Polster of the US District Court for the Northern District of Ohio issued an Order (the Order), docket number 3814, in In Re National Prescription Opiate Litigation, MDL 2804, addressing contingent attorney fee contracts between political subdivisions eligible to participate in the CVS Settlement and their counsel.

In light of the Order, and at the request of [SUBDIVISION], the [SUBDIVISION], its counsel [COUNSEL], and the California Attorney General, on behalf of the State of California, are entering into this California-Subdivision Backstop Agreement (Backstop Agreement).

[SUBDIVISION] and [COUNSEL] intend this Backstop Agreement to constitute a State Back-Stop Agreement as that term is used in the Order and in Exhibit R (Agreement on Attorneys' Fees, Costs, and Expenses) of the CVS Settlement Agreement.

Pursuant to this Backstop Agreement, [SUBDIVISION] may, subject to the limitations of the CVS Settlement Agreement and CA CVS Allocation Agreement, as well as any other limitations imposed by law, use funds that it receives from the CVS Settlement CA Subdivision Fund to pay a contingent fee to [COUNSEL]. Any such payment from [SUBDIVISION] to [COUNSEL], together with any contingency fees that [COUNSEL] may receive from the national Attorney Fee Fund, will not exceed a total contingency fee of [PERCENTAGE NOT TO EXCEED 15%] of the total gross recovery of [SUBDIVISION] from the CVS Settlement.

[COUNSEL] certify that they first sought fees and costs from the Attorney Fee Fund created under the CVS Settlement Agreement before seeking or accepting payment under this backstop agreement. [COUNSEL] further certify that they are not seeking and will not accept payment under this backstop agreement of any litigation fees or costs that have been reimbursed through prior settlements or judgments.

The Attorney General is executing this agreement solely because the definition of "State Back-Stop Agreement" in Exhibit R of the CVS Settlement Agreement requires such agreements to be between "a Settling State" and private counsel for a participating subdivision. Neither the California Attorney General nor the State of California have any obligations under this Backstop Agreement, and this Backstop Agreement does not require the payment of any state funds to [SUBDIVISION], [COUNSEL], or any other party.

[DATE]	[SUBDIVISION SIGNATURE BLOCK]
[DATE]	[COUNSEL SIGNATURE BLOCK]
[DATE]	[ATTORNEY GENERAL SIGNATURE BLOCK]

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

ZUCKERMAN
SPAEDER

Eric R. Delinsky
PARTNER
Zuckerman Spaeder LLP
edelinsky@zuckerman.com
202-778-1831

January 27, 2023

VIA EMAIL

Renuka R. George, Esq.
Senior Assistant Attorney General
Healthcare Rights and Access, California Department of Justice
Office of Attorney General Rob Bonta
1300 I Street
Sacramento, CA 95814
Email: renuka.george@doj.ca.gov

Re: CVS Opioids Settlement Agreement

Dear Ms. George:

This letter summarizes the agreement reached between CVS and the State of California regarding the multistate CVS Settlement Agreement dated December 9, 2022 regarding opioid claims by states and subdivisions (the "Multistate CVS Settlement Agreement").

CVS Health Corporation and CVS Pharmacy, Inc., and all of their past and present direct and indirect parents and subsidiaries ("CVS"), and the State of California, by and through its Attorney General Rob Bonta, have agreed to the following modifications to the Multistate CVS Settlement Agreement in its application to California. For the avoidance of doubt, the limited modifications set forth below apply only to California and to no other state or territory.

Incentives B and C with 99% C Participation

- At 99 percent participation for both Incentive B and C, Incentive B is to be treated as 100 percent for California, while Incentive C remains at 99. Under this scenario, California would earn 92.6 percent of its maximum remediation share through base payments and Incentive B and Incentive C earnings. This percentage is subject to increases if Incentive D payments are earned.
- At 98 percent participation for Incentive B but 99 percent for Incentive C, Incentive B is to be treated as 99 percent for California, while Incentive C remains the same. Under this scenario, California would earn 91.2 percent of its maximum remediation share through base payments and Incentive B and Incentive C earnings. This percentage is subject to increases if Incentive D payments are earned.
- There are no other changes to Incentives B and/or C in the event of 99% participation for Incentive C.

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

Incentives B and C with 98% C Participation

- At 98 percent participation for both Incentives B and C, Incentive B is to be treated as 99 percent for California. Under this scenario, California would earn 88.4 percent of its maximum remediation share through base payments and Incentive B and Incentive C earnings. This percentage is subject to increases if Incentive D payments are earned.
- There are no other changes to Incentives B and/or C in the event of 98% participation for Incentive C.

There are no other changes to Incentives B and/or C.

Incentive D Modifications

- 100 percent Incentive C participation = 6 percent Incentive D
- 99 percent Incentive C participation = 6 percent Incentive D
- 98 percent Incentive C participation = 7 percent Incentive D
- 97 percent Incentive C participation = 7 percent Incentive D
- 96 percent Incentive C participation = 8 percent Incentive D
- Below 96 percent Incentive C participation = 10 percent Incentive D

These limited California-specific modifications to the application of Incentives B and C were a necessary condition for California's decision to sign-on as a participating state to the Multistate CVS Settlement Agreement. The modifications to Incentives D were a necessary condition for CVS's agreement to the Incentive B and C modifications.

For the avoidance of doubt, all other terms and provisions in the Multistate CVS Settlement Agreement remain the same, including without limitation all participation tiers not specified above, all definitions, all release provisions, the ten-year payment schedule and all other terms and provisions of the payment schedule, and all other terms and provisions.

These terms shall be included in a stipulated judgment to be filed in a Superior Court in the State of California.

Sincerely,

Eric R. Delinsky
Counsel for CVS

DocuSign Envelope ID: 60DF048A-7E19-42B9-BCB2-62CB70F2510E

SO AGREED BY AND ON BEHALF OF THE STATE OF CALFORNIA:

Name: Renuka George
Title: Senior Assistant Attorney General
Date: 1/30/2023

RESOLUTION NO. _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA AUTHORIZING THE CITY MANAGER TO ENTER INTO THE SETTLEMENT AGREEMENTS WITH WALGREENS CO., WALMART, INC., CVS HEALTH CORPORATION/CVS PHARMACY INC., TEVA PHARMACEUTICAL INDUSTRIALS LTD., AND ALLERGAN FINANCE LLC/ALLERGAN LIMITED, AGREE TO THE TERMS OF THE STATE-SUBDIVISION AGREEMENTS, AND AUTHORIZE ENTRY INTO THE STATE-SUBDIVISION AGREEMENTS WITH THE ATTORNEY GENERAL.

WHEREAS, the United States is facing an ongoing public health crisis of opioid abuse, addiction, overdose, and death, forcing the State of California and California counties and cities to spend billions of dollars each year to address the direct consequences of this crisis; and

WHEREAS, pending in the U.S. District Court for the Northern District of Ohio is a multidistrict litigation ("MDL") being pursued by numerous public entity plaintiffs against the manufacturers and distributors of various opioids based on the allegation that the defendants' unlawful conduct caused the opioid epidemic; and

WHEREAS on or about November 14, 2022, a proposed nationwide tentative settlement was reached between the plaintiffs in the MDL and Walmart Inc. ("Walmart"); and

WHEREAS on or about November 22, 2022, a proposed nationwide tentative settlement was reached between the plaintiffs in the MDL and Teva Pharmaceutical Industries Ltd. and all of its respective past and present direct or indirect parents, subsidiaries, divisions, affiliates, joint ventures, predecessors, successors, assigns, including but not limited to Teva Pharmaceuticals USA, Inc., Actavis LLC (f/k/a Actavis Inc.), Actavis Elizabeth LLC, Actavis Kadian LLC, Actavis Pharma, Inc. (f/k/a Watson Pharma, Inc.), Actavis Kadian LLC, Actavis Laboratories UT, Inc. (f/k/a Watson Laboratories, Inc. – Utah), Actavis Mid Atlantic LLC, Actavis Totowa LLC, Actavis Laboratories FL, Inc. (f/k/a Watson Laboratories, Inc. – Florida), Actavis South Atlantic LLC, Warner Chilcott Company LLC, and Watson Laboratories, Inc., and Anda Inc. (collectively, "Teva"); and

WHEREAS on or about November 22, 2022, a proposed nationwide tentative settlement was reached between the plaintiffs in the MDL and Allergan Finance, LLC (f/k/a Actavis, Inc., which in turn was f/k/a Watson Pharmaceutics, Inc.) and Allergan Limited (f/k/a Allergan plc, which, in turn, was f/k/a Actavis plc)(collectively, "Allergan"); and

WHEREAS, on or about December 9, 2022, a proposed nationwide tentative settlement was reached between the plaintiffs in the MDL and CVS Health Corporation and CVS Pharmacy, Inc. and all of their past and present direct and indirect parent and subsidiaries (collectively, "CVS"); and

WHEREAS, on or about December 9, 2022, a proposed nationwide tentative settlement was reached between the plaintiffs in the MDL and Walgreen Co. ("Walgreens"); and

WHEREAS, CVS, Teva, Walgreens, Walmart, and Allergan shall be referred in this Resolution as "Settling Defendants"; and

WHEREAS, as part of the settlements with the Settling Defendants, local subdivisions, including certain cities, that are not plaintiffs in the MDL may participate in the settlements in exchange for a release of the Settling Defendants; and

WHEREAS, copies of the proposed terms of those proposed nationwide settlements have been set forth in the Master Settlement Agreements with the Settling Defendants; and

WHEREAS, copies of the Master Settlement Agreements have been provided to the City Council with this Resolution; and

WHEREAS, the Settlement Agreements provide, among other things, for the payment of a certain sum to settling government entities in California including to the State of California and Participating Subdivisions upon occurrence of certain events as defined in the Settlement Agreements ("California Opioid Funds"); and

WHEREAS, California local governments in the MDL have engaged in extensive discussions with the State Attorney General's Office ("AGO") as to how the California Opioid Funds will be allocated, which has resulted in the Proposed California State-Subdivision Agreements Regarding Distribution and Use of Settlement Funds ("Allocation Agreements") from the settlements with the Settling Defendants; and

WHEREAS, copies of the Allocation Agreements for all of the settlements with the Settling Defendants have been provided with this Resolution; and

WHEREAS, the Allocation Agreements allocate the California Opioid Funds as follows: 15% to the State Fund; 70% to the Abatement Accounts Fund; and 15% to the Subdivision Fund. For the avoidance of doubt, all funds allocated to California from the Settlements shall be combined pursuant to the Allocation Agreements, and 15% of total from each settlement shall be allocated to the State of California (the "State of California Allocation"), 70% to the California Abatement Accounts Fund ("CA Abatement Accounts Fund"), and 15% to the California Subdivision Fund ("CA Subdivision Fund"); and

WHEREAS, under the Master Settlement Agreements, certain local subdivisions that did not file a lawsuit against the Settlement Defendants may qualify to participate in the settlements and obtain funds from the Abatement Account Fund; and

WHEREAS, the City is eligible to participate in the Settlement and become a CA Participating Subdivision; and

WHEREAS, the funds in the CA Abatement Accounts Fund (the 70% allocation) will be allocated based on the allocation model developed in connection with the proposed negotiating class in the National Prescription Opiate Litigation (MDL No. 2804), as adjusted to reflect only those cities and counties that are eligible, based on population or litigation status, to become a CA Participating Subdivision (those above 10,000 in population). The percentage from the CA Abatement Accounts Fund allocated to each CA Participating Subdivision is set forth in Appendix 1 to the Allocation Agreements and provided to the City Council with this Resolution. The City's share of the CA Abatement Accounts Fund will be a product of the total in the CA Abatement Accounts Fund multiplied by the City's percentage set forth in Appendix 1 of the Allocation Agreements (the "Local Allocation"); and

WHEREAS, a CA Participating Subdivision that is a city will be allocated its Local Allocation share as of the date on which it becomes a Participating Subdivision. The Local Allocation share for a city that is a CA Participating Subdivision will be paid to the county in which the city is located, unless the city elects to take a direct election of the settlement funds, so long as: (a) the county is a CA Participating Subdivision, and (b) the city has not advised the Settlement Fund Administrator that it requests direct payment at least 60 days prior to a Payment Date; and

WHEREAS, it the intent of this Resolution is to authorize the City to enter into the Master Settlement Agreements with the Settling Defendants by executing the Participation Agreements and to enter into the Allocation Agreements by executing the signature pages to those agreements.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City Ontario as follows:

SECTION 1. The above recitals are true and correct and are incorporated herein by this reference.

SECTION 2. The City Manager is authorized to settle and release the City's claims against the Settling Defendants in exchange for the consideration set forth in the Settlement Agreements and Allocation Agreements, including taking the following measures:

1. The execution of the Participation Agreements with the Settling Defendants and any and all documents ancillary thereto.

2. The execution of the Proposed California State-Subdivision Agreement Regarding Distribution and Use of Settlement Funds with the Settling Defendants by executing the signature pages to those Allocation Agreements.

3. Notify the Settlement Fund Administrator that the City requests a direct payment under the Allocation Agreements at least 60 days prior to the Payment Date in the Settlement Agreements.

SECTION 3. CEQA. That the City Council finds this Resolution is not subject to the California Environmental Quality Act (CEQA) in that the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty, as in this case, that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

SECTION 4. Severability. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications, and to this end the provisions of this Resolution are declared to be severable.

SECTION 5. Effective Date. This Resolution shall become effective immediately.

The City Clerk of the City of Ontario shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 21st day of March 2023.

PAUL S. LEON, MAYOR

ATTEST:

SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2023-___ was duly passed and adopted by the City Council of the City of Ontario at a regular meeting held March 21, 2023 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2023- duly passed and adopted by the Ontario City Council at a special meeting held March 21, 2023.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Economic Development Prepared By: David Sweeney Staff Member Presenting: Jennifer McLain Hiramoto, Economic Development Director Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 14

SUBJECT: LICENSE AND REIMBURSEMENT AGREEMENT WITH ONTARIO AUTO CENTER DEALERS' ASSOCIATION

RECOMMENDATION: That the City Council authorize Staff to execute a License and Reimbursement Agreement (on file in the Records Management Department) between the City and the Ontario Auto Center Dealers' Association related to upgrades on two digital signs.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Focus Resources in Ontario's Commercial and Residential Neighborhoods

FISCAL IMPACT: The City will pay 50% of the total cost of sign upgrades, which will be a not-to-exceed amount of $640,000. The General Fund appropriations for Economic Development Agency will be included as part of the Mid-Year Budget Update.

BACKGROUND & ANALYSIS: Staff recommends that the City of Ontario ("City") participates in the cost of upgrading two existing freeway reader-boards near the Ontario Auto Center. In 2008, the City and Ontario Auto Center Dealers' Association ("Association") entered into an Agreement to install a new electronic freeway sign located at 1151 Kettering Drive (within the Toyota Dealership) to market vehicles and generate sales for the dealerships. The sign was installed to compliment an existing electronic freeway sign located at I-15 and Jurupa Street. The Agreement also granted the City license to use 10% of the operating time for promotion of civic information for a period of twenty years.

As the Ontario Auto Center displays approach the end of its life cycles, the City and Association propose sharing expenses related to upgrading the signs. The City would reimburse the Association for 50% of the cost, not-to-exceed $640,000. In exchange, the City would be entitled to usage of 15% of sign operating time for a period of ten years, and 20% in times of an emergency. The upgrades will include higher resolution displays, refurbishment of all identification display lighting, and repainting. These upgrades will increase readability, sales, and sales tax revenue for the City. The total cost for the two signs is $1,279,781. The sign at 1151 S. Kettering Drive will cost $829,140 and the sign at I-15 and Jurupa Street will cost $450,641.

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **CONSENT CALENDAR**
Department: Economic Development Prepared By: Charity Hernandez Staff Member Presenting: Jennifer McLain Hiramoto, Economic Development Director Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 15

SUBJECT: A LEASE AGREEMENT BETWEEN THE CITY OF ONTARIO AND GROVE LAND VENTURE, LLC

RECOMMENDATION: That the City Council approve a Lease Agreement (on file in the Records Management Department) between the City of Ontario and Grove Land Venture, LLC for the use of property located on the southeast corner of Bon View and Eucalyptus Avenues for a two-year term with the option to extend one additional year.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Maintain the Current High Level of Public Safety
Operate in a Businesslike Manner
Invest in the Growth and Evolution of the City's Economy

FISCAL IMPACT: The lease rate for the property is proposed at $78,500 annually. The funds have been appropriated in the FY 2022-23 Adopted Budget in the General Fund.

BACKGROUND & ANALYSIS: Due to the ongoing growth of the Ontario Ranch, public services such as Fire Stations are required. As the City works on completing the design, construction, and acquisition of the land for a permanent Fire Station structure, it is necessary to secure the property located at 7721 East Eucalyptus Avenue to accommodate a temporary Fire Station, No. 11.

Staff recommends that the City Council approve the Lease Agreement with Grove Land Venture, LLC for a two-year term with the option to extend one additional year.

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **PUBLIC HEARINGS**
Department: Engineering Prepared By: Miguel Sotomayor Staff Member Presenting: Scott Murphy, Executive Director Community Development Reviewed By: Raymond Lee, Khoi Do Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 16

SUBJECT: **A PUBLIC HEARING TO CONSIDER ADOPTION OF A RESOLUTION TO VACATE FERN AVENUE FROM TRANSIT STREET TO EMPORIA STREET**

RECOMMENDATION: That the City Council adopt a Resolution approving the vacation of Fern Avenue from Transit Street to Emporia Street.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Focus Resources in Ontario's Commercial and Residential Neighborhoods
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

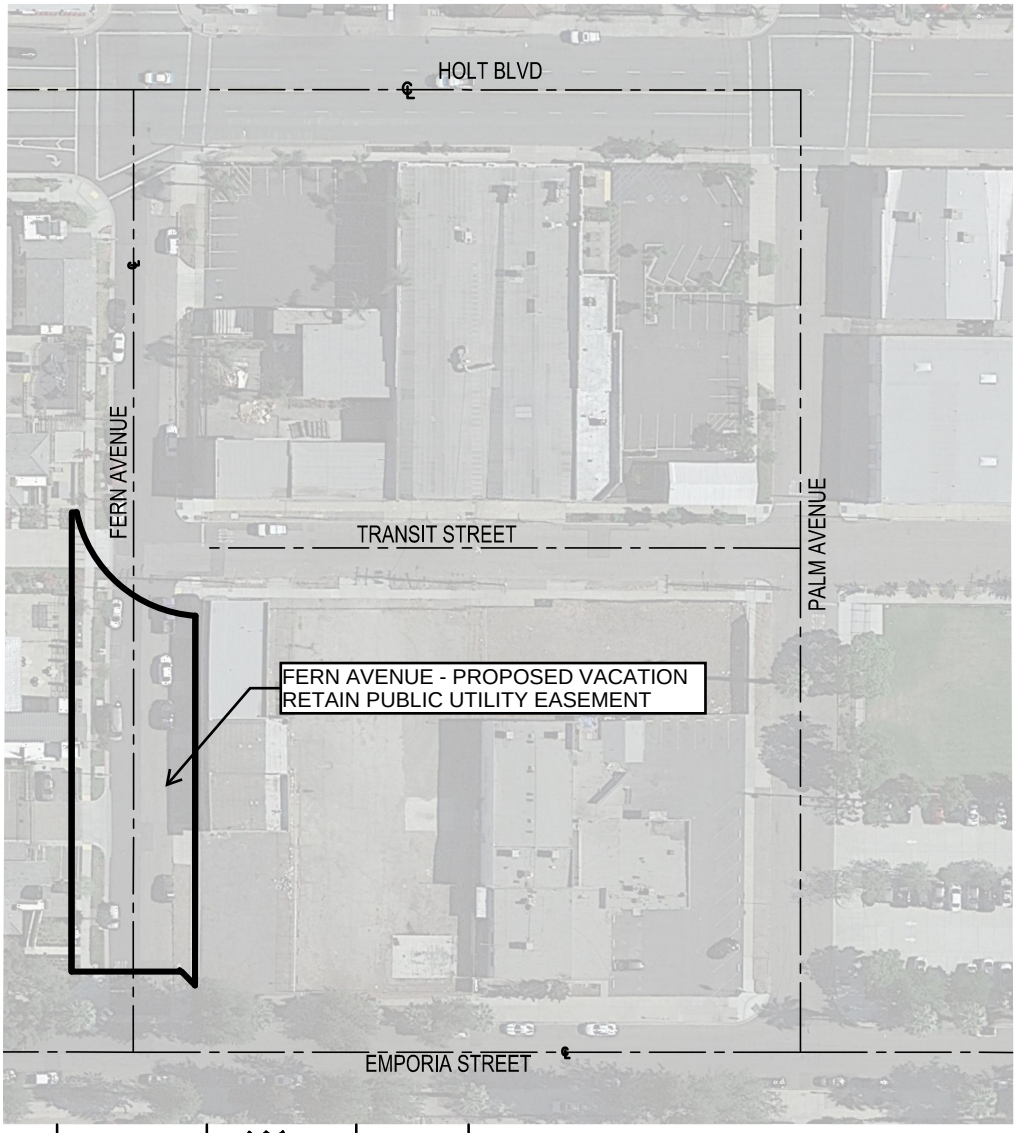
FISCAL IMPACT: There is not a direct fiscal impact associated with this action. The City did not pay for acquiring the subject right-of-way and will not incur any cost for vacating this right-of-way. The applicant has paid the applicable processing fees to defray the City's cost to process this request.

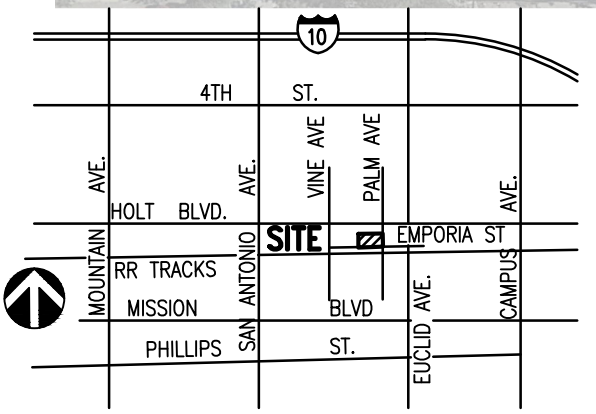
BACKGROUND & ANALYSIS: The applicant, Ontario Emporia Housing II Partners, L.P., has requested that the City vacate Fern Avenue from Transit Street to Emporia Street, as shown on Exhibit A, to facilitate the development of the area. The subject street, neither now nor in the future will be needed for traffic circulation or public necessity and there will be no impact on the Master Plan of Streets and Highways when vacated.

Currently, there are public utilities within the street. However, a Public Utility Easement will be retained over the proposed vacated street.

On February 21, 2023, the City Council, at its regular meeting, adopted a Resolution declaring the City's intent to vacate the subject street as shown on the attached exhibit and setting the date and time for this Public Hearing. Appropriate notice of intention to vacate, as required by law, has been posted as prescribed. Also, an announcement of this March 21, 2023, public hearing was published in the Inland Valley Daily Bulletin prior to this meeting and the full text of said adopted Resolution has been made available to the Records Management Department.

EXHIBIT A





SHEET 1 OF 1	CITY OF ONTARIO ENGINEERING DEPARTMENT	KES TECHNOLOGIES INC CIVIL ENGINEERING LAND PLANNING AND SURVEYING 1 VENTURE STE 130 IRVINE CA, 92618
JOB NO. RELC-020	APPLICANT: RELATED COMPANIES	
BY: DSK		
DATE: 02/01/23	PROJECT: V-308	
SCALE: 1"=100'		

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA ORDERING THE VACATION OF FERN AVENUE FROM TRANSIT STREET TO EMPORIA STREET.

WHEREAS, the City Council of the City of Ontario, California, did on the 21st day of February 2023 adopt a Resolution of Intent, entitled:

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, PERTAINING TO THE VACATION OF FERN AVENUE FROM TRANSIT STREET TO EMPORIA STREET AND TO SET THE DATE, TIME AND PLACE FOR A PUBLIC HEARING; and

WHEREAS, notice of the date, time and place of hearing any and all persons interested in, or objecting to, the proposed vacation has been published and posted in the manner prescribed by law; and

WHEREAS, a hearing on the proposed vacation was duly and regularly held by said City Council at the time and place specified in said Resolution of Intention, and the said Council has determined that said street, as described in said Resolution of Intention, is no longer necessary for present or prospective traffic circulation or public necessity;

NOW, THEREFORE, BE IT HEREBY RESOLVED by the City Council of the City of Ontario, California:

SECTION 1: That pursuant to the provisions of Division 9, Part 3, Chapter 3, Section 8320-8325 of the Streets and Highways Code of the State of California, the following described street is vacated and abandoned, except retaining an easement over the entire area for public utility and drainage purposes: (see Exhibits A and B).

SECTION 2: That title to the above described street shall revert to the owner of the underlying fee title thereof, free from use as a public street, subject to the retention of a public utility easement across the entire vacated area.

SECTION 3: That the City Clerk of the City of Ontario, California, shall cause a copy of this Resolution to be recorded in the office of the County Recorder of San Bernardino County, California.

The City Clerk of the City of Ontario shall certify as to the adoption of this Resolution.

PASSED, APPROVED, AND ADOPTED this 21st day of March 2023.

PAUL S. LEON, MAYOR

ATTEST:

SHEILA MAUTZ, CITY CLERK

APPROVED AS TO LEGAL FORM:

BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. 2023- was duly passed and adopted by the City Council of the City of Ontario at their regular meeting held March 21, 2023 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

The foregoing is the original of Resolution No. 2023- duly passed and adopted by the Ontario City Council at their regular meeting held March 21, 2023.

_____
SHEILA MAUTZ, CITY CLERK

SHEET 1 OF 1

EXHIBIT "A"

LEGAL DESCRIPTION

THAT PORTION OF FERN AVENUE AS SHOWN ON THE MAP OF THE TOWN OF ONTARIO, IN THE CITY OF ONTARIO, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AS PER PLAT RECORDED IN BOOK 9 PAGE 43 OF MAPS, RECORDS OF SAID COUNTY, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH CORNER OF THE SOUTHEAST DEDICATION OF PUBLIC STREET, RIGHT OF WAY AND UTILITY EASEMENT AS SHOWN ON PARCEL MAP NO. 19302 AS RECORDED IN PARCEL MAP BOOK 251, PAGES 44 THROUGH 48, INCLUSIVE;
THENCE NORTH 00°01'26" EAST 245.44 FEET ALONG THE EAST LINE OF PARCEL 1 OF SAID PARCEL MAP;
THENCE LEAVING SAID EAST LINE, NORTH 89°12'57" EAST 2.50 FEET TO THE BEGINNING OF A NON-TANGENT 69.50' RADIUS CURVE, CONCAVE NORTHEASTERLY, TO WHICH BEGINNING OF CURVE A RADIAL BEARS SOUTH 78°21'12" WEST, SAID CURVE BEING THE WESTERLY, NORTHWESTERLY, AND NORTHERLY CONTINUATION OF THE SOUTHERLY BOUNDARY OF THE NORTHWEST DEDICATION OF PUBLIC STREET RIGHT OF WAY AND UTILITY EASEMENT AS SHOWN ON PARCEL MAP NO. 20339, AS RECORDED IN PARCEL MAP BOOK _____, PAGES ___ THROUGH ___, INCLUSIVE;
THENCE SOUTHEASTERLY 90.45 FEET ALONG THE ARC OF SAID CURVE THROUGH A DELTA OF 73°34'02" TO THE SOUTHWEST CORNER OF SAID NORTHWEST DEDICATION;
THENCE SOUTH 00°01'26" WEST 197.44 FEET ALONG THE WEST LINE OF PARCEL 1 OF SAID PARCEL MAP NO. 20339 TO THE NORTH CORNER OF THE SOUTHWEST DEDICATION OF PUBLIC STREET RIGHT OF WAY AND UTILITY EASEMENT AS SHOWN ON SAID PARCEL MAP;
THENCE LEAVING SAID WEST LINE NORTH 44°44'46" WEST 10.33 FEET, ALONG THE NORTHWESTERLY PROLONGATION OF THE NORTHEAST LINE OF SAID SOUTHWEST DEDICATION;
THENCE SOUTH 89°57'16" WEST 58.73 TO THE POINT OF BEGINNING.

CONTAINING 13,655 SQUARE FEET OR 0.313 ACRES MORE OR LESS

ALL AS SHOWN ON EXHIBIT "B" ATTACHED HERETO AN BY THIS REFERENCE MADE A PART HEREOF.

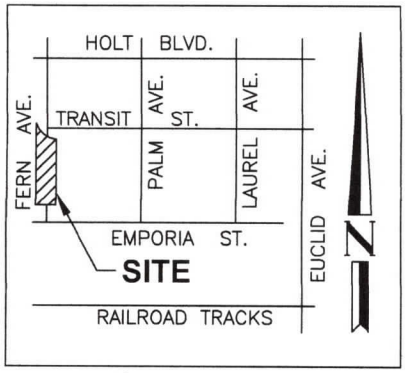
THIS DESCRIPTION WAS PREPARED UNDER BY ME OR UNDER MY DIRECTION AND IS IN CONFORMANCE WITH THE LAND SURVEYOR'S ACT.

2-07-23

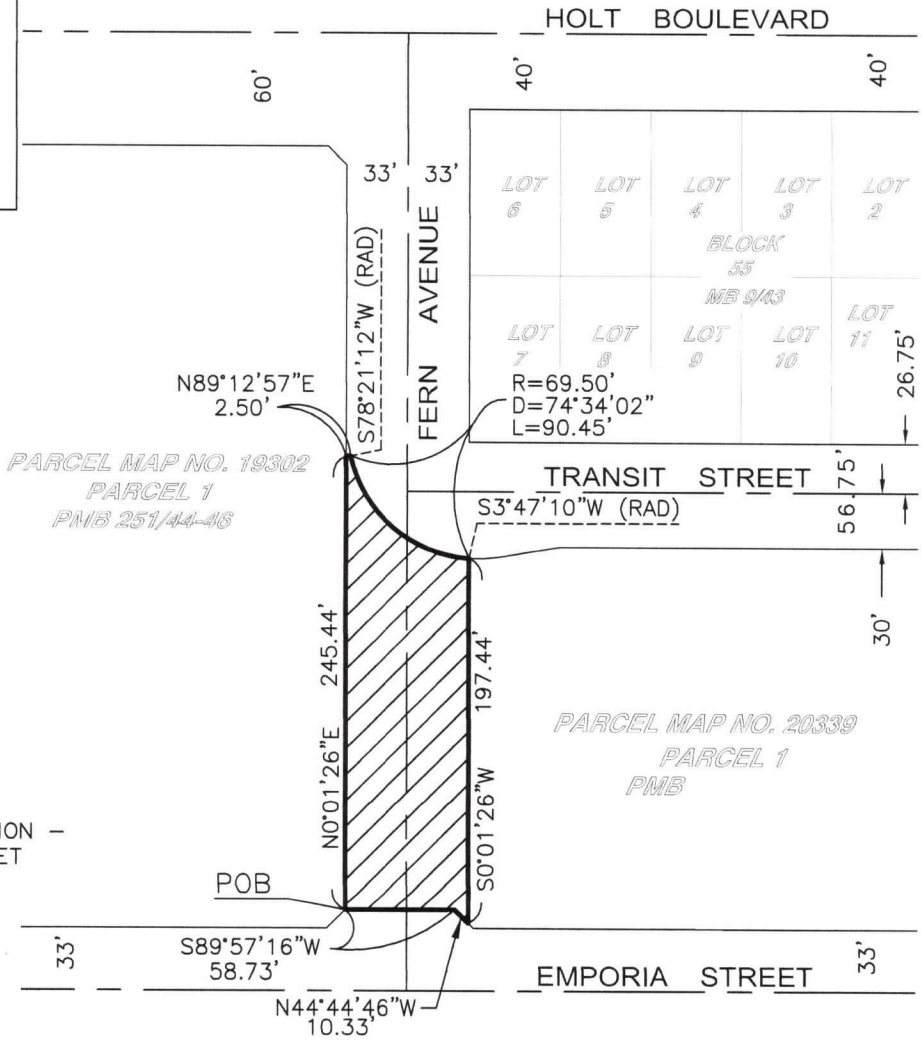
TY E. THOMAS L.S. 9309 DATE

EXHIBIT "B"

PLAT



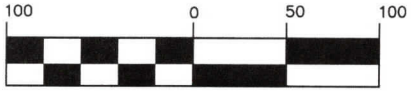
VICINITY MAP
(NOT TO SCALE)

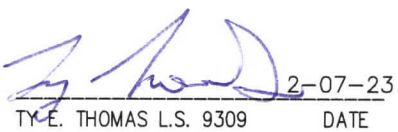


LEGEND

POB = POINT OF BEGINNING
(RAD) = RADIAL BEARING
PMB = PARCEL MAP BOOK
MB = MAP BOOK
▨ = AREA OF DESCRIPTION – 13,655 SQUARE FEET

NORTH
GRAPHIC SCALE
1" = 100'





2-07-23
TY E. THOMAS L.S. 9309 DATE

PREPARED BY:

T&M SURVEYING
531 E. TRENTON AVE.
ORANGE, CA.
O-714-912-4042 C-714-906-8771
WWW.TNMSURVEYING.COM

JN: -1495 ONTARIO
CHECKED TET
SHEET 1 OF 1

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **PUBLIC HEARINGS**
Department: Planning Prepared By: Elly Antuna Staff Member Presenting: Scott Murphy, Executive Director Community Development Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 17

SUBJECT: **A PUBLIC HEARING TO CONSIDER FILE NO. PUD22-003, A PLANNED UNIT DEVELOPMENT ON 0.11-ACRE OF LAND LOCATED AT 213 NORTH FERN AVENUE**

RECOMMENDATION: That the City Council introduce and waive further reading of an Ordinance approving File No. PUD22-003, the Fern Townhomes Planned Unit Development, establishing development standards, design guidelines, and infrastructure requirements to facilitate a residential development at 213 North Fern Avenue.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Focus Resources in Ontario's Commercial and Residential Neighborhoods

FISCAL IMPACT: There is not a direct fiscal impact associated with this action. The proposed Fern Townhomes Planned Unit Development (PUD) establishes development standards and guidelines to facilitate the development of residential units. Implementation of the PUD would result in an increase in property taxes from future residential development and the one-time payment to the City of plan check fees and development impact fees.

BACKGROUND & ANALYSIS: On April 20, 2022, HDC Construction, Inc. filed a PUD application (File No. PUD22-003), concurrently with a Tentative Parcel Map (File No. PMTT22-015) and Development Plan (File No. PDEV22-024) applications to facilitate construction of 3 townhome units.

The Project site is comprised of 0.11-acres of land located at the southwest corner of Fern Avenue and a public alley, at 213 North Fern Avenue, within LUA-3 (Holt Boulevard) of the MU-1 (Downtown Mixed Use) zoning district. The site is located within a well-established mixed-use neighborhood with multiple-family residential to the north and west, single-family residential to the south, and commercial uses, including a parking lot and a church, to the east. The surrounding area was one of the first to be developed in the city, with the earliest residences constructed during the early 1900s and 1920s with some multiple-family residential developed in 1960. Existing residential buildings are one and two-stories and constructed in a variety of architectural styles, including Victorian and Craftsman Bungalow.

The Policy Plan specifies that the Downtown Mixed-Use Area is to be implemented through the approval of an Area Plan or Planned Unit Development prior to the development of properties. In compliance with this requirement, the Applicant has submitted the Fern Townhomes Planned Unit Development (included as Attachment A to the Ordinance), which is consistent with this vision, goals, and policies of the Policy Plan.

A Planned Unit Development is comparable to a Specific Plan in that it establishes development regulations that are unique to a specific area. However, it is unlike a Specific Plan in that a Planned Unit Development is typically intended to apply to a single development project or several interrelated development projects that function together as a single, comprehensive project.

Key components of the Fern Townhomes Planned Unit Development include the following:

- Land Use and Development Regulations — The MU-1 (Downtown Mixed Use) zoning district allows for residential development at a density of 25.1 to 75 dwelling units per acre. Consistent with the MU-1 zoning district and in keeping with the context of the existing neighborhood, the Fern Townhomes PUD allows for development of 3 to 7 dwelling units, with a maximum building height of 35 feet or 2 stories. The minimum building setback proposed along Fern Avenue is 7 feet and 5 feet for porches, patio coves and other architectural projections. Interior and rear property line setbacks are 5 feet, and the garage entry setback from the alley is 6 feet.
- Landscaping — A conceptual landscape plan has been submitted with the Development Plan for construction of the Project site. The PUD provides a planting palette comprised of "California friendly" planting materials that are compatible with the overall architectural style established by the PUD. The PUD also requires the landscaping and irrigation to comply with AB 1881 and all other laws and regulations related to planting materials.
- Parking and Circulation — The PUD utilizes a combination of on-site and on-street parking to provide an adequate parking supply to meet the anticipated parking demand for the Project. All resident parking will be provided on-site, while guest parking spaces will be provided on-street. The Project site is located within a mixed-use area where on-street parking is available along the project frontage and on surrounding blocks.
- Access to Mass Transit — An existing bus stop is located on the northwest corner of Holt Boulevard and Vine Avenue for Omnitrans routes 61. Additionally, the future West Valley Connector Bus Rapid Transit (BRT) line is proposed along Holt Boulevard.
- Architectural Character — The PUD architectural style and design is a modern interpretation of the Mediterranean style. The design will provide low pitched, gabled roofs covered with clay tile, shallow eaves, rough sawn beams, and a roof well for mechanical equipment. The townhome unit with street frontage will have a covered porch. The garage doors along the alley will have beam accents in the overhang above.

On February 28, 2023, the Planning Commission conducted a public hearing to consider the project and concluded the hearing on that date. After considering all public testimony on the application, the Planning Commission voted (6-0) to approve a resolution recommending that the City Council approve the Fern Townhomes Planned Unit Development.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan. On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

ENVIRONMENTAL REVIEW: The Project is exempt from the requirements of the California Environmental Quality Act (CEQA) and the guidelines promulgated thereunder, pursuant to Section 15061(b)(3) of the CEQA Guidelines, in that the activity is covered by the “common sense exemption” (also known as the “general rule exemption”) that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ONTARIO, CALIFORNIA, APPROVING FILE NO. PUD22-003, A PLANNED UNIT DEVELOPMENT TO ESTABLISH DEVELOPMENT STANDARDS, DESIGN GUIDELINES, AND INFRASTRUCTURE REQUIREMENTS FOR PROPERTY LOCATED AT 213 NORTH FERN AVENUE, WITHIN LUA-3 (HOLT BOULEVARD) OF THE MU-1 (DOWNTOWN MIXED USE) ZONING DISTRICT, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1048-572-06.

WHEREAS, HDC Construction, Inc. ("Applicant") has filed an Application for the approval of a Planned Unit Development, File No. PUD22-003, as described in the title of this Ordinance (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 0.11-acre of land generally located at the southwest corner of Fern Avenue and a public alley, at 213 North Fern Avenue, within LUA-3 (Holt Boulevard) of the MU-1 (Downtown Mixed Use) zoning district, and is presently vacant; and

WHEREAS, properties surrounding the Project Site are located within LUA-3 (Holt Boulevard) of the MU-1 (Downtown Mixed Use) zoning district. The properties north and west of the Project site are developed with multiple-family dwellings. The property to the east is developed with a parking lot. The property to the south is developed with single-family dwellings; and

WHEREAS, on April 20, 2022, the Applicant submitted a Planned Unit Development (File No. PUD22-003) in conjunction with Tentative Parcel Map No. 20554 (File No. PMTT22-015), to subdivide the Project site into a single lot for condominium purposes, and a Development Plan (File No. PDEV22-024) to construct 3 attached townhome units at a density of 27.3 dwelling units per acre; and

WHEREAS, the Project site is located within the Downtown Mixed Use District of the Policy Plan (general plan). The Policy Plan specifies that the Downtown Mixed Use District is to be implemented through the approval of an Area Plan or Planned Unit Development (“PUD”) prior to the development of properties within the District. In compliance with this requirement, the Applicant has submitted the Fern Townhomes Planned Unit Development (included as Attachment “A” of this Resolution), which is consistent with this vision, and goals and policies of the Policy Plan; and

WHEREAS, the specific purpose of the Planned Unit Development is to secure a fuller realization of the Policy Plan than would otherwise result from the strict application of present zoning district regulations, and to promote high standards in urban design; encourage the development of exceptionally high quality, mixed-use, high intensity projects, while establishing regulations and standards for uses with unique regulatory and design needs; and, ensure harmonious relationships with surrounding land uses; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA"); and

WHEREAS, the Project is exempt from CEQA as the activity is covered by the commonsense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA (CEQA Guidelines Section 15061(b)(3)); and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the City Council the responsibility and authority to review and act on the subject Application; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan ("ONT ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 28, 2023, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date, voting to issue Resolution No. PC23-009, recommending the City Council approve the Application; and

WHEREAS, on March 21, 2023, the City Council of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND ORDAINED by the City Council of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making body for the Project, the City Council has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the City Council, the City Council finds as follows:

(1) The administrative record has been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(2) The Project is exempt from the requirements of the California Environmental Quality Act (CEQA) and the guidelines promulgated thereunder, pursuant to Section 15061(b)(3) of the CEQA Guidelines, in that the activity is covered by the "common sense exemption" (also known as the "general rule exemption") that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA; and

(3) The determination of CEQA exemption reflects the independent judgment of the City Council.

SECTION 2: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

(1) On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the City Council has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the City Council, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 3: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the City Council during the above-referenced hearing, and upon the specific findings set forth in Section 1 and 2, above, the City Council hereby concludes as follows:

(1) ***The proposed Planned Unit Development is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan.*** The Project is consistent with Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan. Section 1.1, The Ontario Plan Objectives of the Planned Unit Development, describes the manner in which the Planned Unit Development complies with the Policy Plan goals and policies.

(2) ***The proposed Planned Unit Development, would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.*** The City Council has required certain safeguards, and has required certain changes, which have been established to ensure that: [i] the purposes of the Planned Unit Development are maintained; [ii] the project will not endanger the public health, safety or general welfare; [iii] the project will not result in any significant environmental impacts; [iv] the project will be in harmony with the area in which it is located; and [v] the project will be in full conformity with the Vision, City Council Priorities and Policy Plan components of The Ontario Plan.

(3) ***In the case of an application affecting specific property(ies), the proposed Planned Unit Development, will not adversely affect the harmonious relationship with adjacent properties and land uses.*** The Planned Unit Development area is situated in Ontario's downtown and is adjacent to residential and commercial land uses and development. The surrounding development supports the objective of the Planned Unit Development to further commercial and residential mixed-use development. The Project will not affect the harmonious relationship with adjacent properties and land use.

(4) ***In the case of an application affecting specific property(ies), the subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.*** In preparing the proposed Planned Unit Development, a thorough review and analysis of the proposed Project and the subject site's physical suitability for the Project was completed, including analysis of the project size, shape, intensity of development, building height, building setbacks, site access, site landscaping and drainage, fences and walls, vehicle circulation, pedestrian connections, availability of mass transit, necessary street dedication and easements, public right-of-way improvements, availability of utilities and other infrastructure needs, off-street parking and circulation, building orientation and streetscapes, architectural character, building materials and color, and site signage. Based upon this review and analysis, the subject site has been deemed physically suitable, including but not limited to parcel size, shape, access, and availability of utilities, for the proposed Planned Unit Development and the proposed development.

(5) ***The proposed Planned Unit Development is superior to that which could be obtained through the application of the Development Code or a specific plan.*** The Planned Unit Development will establish minimum building setbacks, parking and open space requirements, allow on-street parking, and establish a planting palette. These standards in the Planned Unit Development will facilitate the development of 3 attached single-family dwellings, related parking facilities and private and common open space areas. The proposed Planned Unit Development will allow for subsequent development that is superior to that which could be obtained through the application of the Development Code by itself.

SECTION 4: ***City Council Action.*** Based upon the findings and conclusions set forth in Sections 1 through 3, above, the City Council hereby APPROVES the herein described Planned Unit Development, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 5: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 6: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 7: ***Severability.*** If any section, sentence, clause or phrase of this Ordinance or the application thereof to any entity, person or circumstance is held for any reason to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect other provisions or applications of this Ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this Ordinance are severable. The People of the City of Ontario hereby declare that they would have adopted this Ordinance and each section, sentence, clause or phrase thereof, irrespective of the fact that any one or more section, subsections, sentences, clauses or phrases be declared invalid or unconstitutional.

SECTION 8: ***Effective Date.*** This Ordinance shall become effective 30 days following its adoption.

SECTION 9: ***Publication and Posting.*** The Mayor shall sign this Ordinance and the City Clerk shall certify as to the adoption and shall cause a summary thereof to be published at least once, in a newspaper of general circulation in the City of Ontario, California within 15 days following the adoption. The City Clerk shall post a certified copy of this ordinance, including the vote for and against the same, in the Office of the City Clerk, in accordance with Government Code Section 36933.

PASSED, APPROVED, AND ADOPTED this 23st day of March 2023.

_____
PAUL S. LEON, MAYOR

ATTEST:

_____
SHEILA MAUTZ, CITY CLERK

APPROVED AS TO FORM:

_____
BEST BEST & KRIEGER LLP
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, SHEILA MAUTZ, City Clerk of the City of Ontario, DO HEREBY CERTIFY that foregoing Ordinance No. ____ was duly introduced at a regular meeting of the City Council of the City of Ontario held _____and adopted at the regular meeting held March 21, 2023 by the following roll call vote, to wit:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. _____ duly passed and adopted by the Ontario City Council at their regular meeting held _____ and that Summaries of the Ordinance were published on _____ and _____, in the Inland Valley Daily Bulletin newspaper.

_____
SHEILA MAUTZ, CITY CLERK

(SEAL)

ATTACHMENT A:

File No. PUD22-003,
Fern Townhomes Planned Unit Development

(Document follows this page)

CITY OF ONTARIO PLANNING DEPARTMENT

PLANNING COMMISSION AGENDA REPORT

February 28, 2023

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

FILE NOS: PUD22-003, PMTT22-015 and PDEV22-024

SUBJECT: A public hearing to consider: [1] a Planned Unit Development (File No. PUD22-003) to establish development standards, design guidelines, and infrastructure requirements for the Project site; [2] Tentative Parcel Map No. 20554 (File No. PMTT22-015), subdividing an 0.11-acre Project site into a single lot for condominium purposes; and [3] a Development Plan (File No. PDEV22-024) for the construction of three townhomes, all located at 213 North Fern Avenue, within LUA-3 (Holt Boulevard) of the MU-1 (Downtown Mixed Use) zoning district; (APN: 1048-572-06) **submitted by HDC Construction, Inc.**

PROPERTY OWNER: HDC Construction, Inc.

RECOMMENDED ACTION: That the Planning Commission consider and adopt the following:

(1) A resolution recommending that the City Council approve a Planned Unit Development (File No. PUD22-003), pursuant to facts and reasons contained in the staff report and attached resolution as "Attachment A."

(2) Resolutions approving the Tentative Parcel Map No. 20554 (File No. PMTT22-015), and Development Plan (File No. PDEV22-024), pursuant to the facts and reasons contained in the staff report and attached resolutions, and subject to the conditions of approval appended to the attached resolutions as "Attachment A."

PROJECT SETTING: The Project site is comprised of 0.11-acre of land located at the southwest corner of Fern Avenue and a public alley, at 213 North Fern Avenue (see Figure 1: Project Location Map, right), within LUA-3 (Holt Boulevard) of the MU-1 (Downtown Mixed Use) zoning district. The site was originally part of a larger residential property in the early 1900s. During the 1920s, the site was

Figure 1: Project Location

Case Planner:	Elly Antuna
Planning Director Approval:	
Submittal Date:	April 20, 2022

Hearing Body	*Date*	*Decision*	*Action*
DAB	02/22/23	Approval	Recommend
PC	02/28/23	Approval	Final / Recommend
CC	3/21/23 (PUD)		Final

developed with a single-family residence and detached garage that were demolished in 1963 and replaced with a commercial building. The commercial building was demolished in 2005 and the site is currently vacant. The site is located within a well-established mixed-use neighborhood, with multiple-family residential to the north and west, single-family residential to the south, and commercial uses, including a parking lot and a church, to the east. The surrounding area was one of the first to be developed in the city, with the earliest residences constructed during the early 1900s and most of the residential development occurring during the 1920s, and some multiple-family residential developing in 1960. Existing residential buildings are one and two-stories and constructed in a variety of architectural styles including Victorian and Craftsman Bungalow. The existing surrounding land uses, zoning, and Policy Plan (general plan) designations are summarized in the "Surrounding Zoning & Land Uses" table located in the Technical Appendix of this report.

PROJECT ANALYSIS:

(1) Background — The Project site is located within the MU-1/LUA-3 (Downtown Mixed Use/Holt Boulevard) zoning district, requiring the preparation and approval of a Planned Unit Development (PUD) to establish development standards, design guidelines, and infrastructure requirements for the site. On April 20, 2022, the Applicant filed a PUD application (File No. PUD22-003), concurrently with a Tentative Parcel Map (File No. PMTT22-015) and Development Plan (File No. PDEV22-024) applications. Final approval of the Tentative Parcel Map and Development Plan is contingent upon the City Council adoption of the PUD for the Project site.

The Project site is located within the Center City Redevelopment Project Area, established in 1983. And while the redevelopment practice was eliminated by the State, the Center City Redevelopment Project Area Plan is still in effect and encourages the development of a high intensity, multi-use central business district. In addition, The Ontario Plan contains goals and policies for the City's original downtown and the Downtown Mixed Use District, which further support the goals of the Center City Redevelopment Project Area Plan. The Center City Redevelopment Project Area Plan envisions revitalization of the City's downtown area, in part, by infusing high-density residential and mixed-use developments into the downtown core. The Ontario Plan ("TOP") furthers this vision and is intended to create an intensive mixture of retail, office, and residential uses in a pedestrian friendly atmosphere, ensure the historic character of the district is enhanced, and concentrate the most intense/dense development along Euclid Avenue and Holt Boulevard. Furthermore, The Ontario Plan specifies a residential density range of 25 to 75 units per acre and a maximum floor area ratio of 2.0 for commercial office and retail developments within the Downtown Mixed Use District.

(2) Planned Unit Development (File No. PUD22-003) –

(a) Land Use and Development Regulations — The MU-1 (Downtown Mixed Use) zoning district allows for residential development at a density of 25.1 to 75 dwelling

units per acre. Consistent with the MU-1 zoning district and in keeping with the context of the existing neighborhood, the Fern Townhomes PUD allows for development of 3 to 7 dwelling units, with a maximum building height of 35 feet or 2 stories. The minimum building setback proposed along Fern Avenue is 7 feet and 5 feet for porches, patio coves and other architectural projections. Interior and rear property line setbacks are 5 feet, and the garage entry setback from the alley is 6 feet.

(b) Landscaping — A conceptual landscape plan has been submitted with the Development Plan for construction of the Project site. The PUD provides a planting palette comprised of "California friendly" planting materials that are compatible with the overall architectural style established by the PUD. The PUD also requires the landscaping and irrigation to comply with AB 1881, and all other laws and regulations related to planting materials.

(c) Parking and Circulation — The PUD utilizes a combination of on-site and on-street parking to provide an adequate parking supply to meet the anticipated parking demand for the Project. All resident parking will be provided on site, while guest parking spaces will be provided on-street. The Project site is located within a mixed-use area where on-street parking is available along the project frontage and on surrounding blocks.

(d) Access to Mass Transit — An existing bus stop is located on the northwest corner of Holt Boulevard and Vine Avenue for Omnitrans routes 61. Additionally, the future West Valley Connector Bus Rapid Transit (BRT) line is proposed along Holt Boulevard.

(e) Architectural Character — The PUD architectural style and design is a modern interpretation of the Mediterranean style. The design will provide low pitched, gabled roofs covered with clay tile, shallow eaves rough sawn beams, and a roof well for mechanical equipment. The unit with street frontage will have a covered porch. The garage doors will have beam accents in the overhang above.

(3) Tentative Parcel Map No. 20554 (File No. PMTT22-015) — Proposed Tentative Parcel Map No. 20554 will subdivide the Project site into one lot for condominium purposes, to facilitate the construction and possible future sale of three attached townhouse units. The Departmental Conditions of Approval for the Tentative Parcel Map require Covenants, Conditions, and Restrictions ("CC&R's") to be recorded with the Final Parcel Map, which will establish the rules, regulations, rights, and responsibilities of the property owner's association and townhouse unit owners.

(4) Development Plan (File No. PDEV22-024)

(a) Site Design/Building Layout — The Project proposes the development of three attached townhome units, at a density of 27.27 dwelling units per acre. The alley-loaded two-story building is positioned in an east-west configuration, designed with garage access off the alley. The 2-story building will have an overall height of 26 feet. Unit

A, at the east end of the building, has been designed with the front entry facing Fern Avenue. Units B and C have access from the south side of the building, along a landscaped pedestrian pathway. The units range from 1,406 square feet to 1,430 square feet in area and contain 3 bedrooms and 3 bathrooms. The first-floor plan consists of a 2-car garage, laundry room, one bedroom, and one bathroom. Two bedrooms, 2 bathrooms, a private balcony, kitchen, and main living area are on the second floor. North facing private balconies are located over the garages. Each unit contains a trash enclosure with a decorative iron gate and direct access to the alley.

(b) Site Access/Circulation — Vehicular access to the site is provided by means of a 20-foot-wide alley to the north, extending west from Fern Avenue and aligning with Vesta Street further west. Pedestrian access to the site is taken from Fern Avenue via a 5-foot-wide paved pathway along the southern portion of the Project site.

(c) Parking — Consistent with the PUD, the Project utilizes a combination of on-site and adjacent on-street parking. All required resident parking will be provided on-site within the enclosed garages, while required guest parking will be on-street. The existing street grid pattern allows for maximum opportunity of on-street parking that can be shared by guests of the site and the surrounding area. There are approximately 12 on-street parking spaces located on Fern Avenue, adjacent to the site. Based on the available street parking and provided on-site parking, there is sufficient parking available to support the proposed development. As demonstrated in the Parking Summary table below, the Project provides the required number of parking spaces.

Type of Use	***Parking Ratio***	***Spaces Required***	***Spaces Provided***
Two or more Bedroom Unit	2.0 parking spaces per unit (at least one covered)	6	6
Guest	1 parking space per 5 units	1	1
TOTAL		**7**	**7**

(d) Architecture — The architectural style proposed for the Project is a modern Mediterranean style that is exemplified by the use of a combination of hipped and gable clay tile roofs, smooth stucco siding, arched openings, recessed windows and doors, decorative iron work, and wood trim details. Hung style windows are placed in a single or double pattern throughout the Project. Building projections on the east elevation and a one-story covered entryway enhance the street-facing east elevation. Second story, cantilevered projections on the remaining elevations are enhanced with windows, recessed niches, decorative brackets, and ironwork.

(e) Landscaping — Perimeter landscaping is provided in the front, side, and rear yards. The Conceptual Landscape Plan has been designed to utilize California native trees and drought tolerant planting materials. Planters and pocket vines provide additional landscaping throughout the Project site. The parkway along the Project frontage will be landscaped with a new street tree (Island Oak) and groundcover.

(f) Open Space – Private open space is provided by second floor balconies in each residential unit. Balconies are 30 square feet each and are a minimum of 5 feet in any direction. The required common open area is dispersed throughout the Project site in the form of passive landscaped areas.

(g) Utilities (drainage, sewer) — Public utilities (water and sewer) are available to serve the Project. Furthermore, the Applicant has submitted a Preliminary Water Quality Management Plan ("PWQMP"), which establishes the Project's compliance with storm water discharge/water quality requirements. The PWQMP includes site design measures that capture runoff and pollutant transport by minimizing impervious surfaces and maximizes low impact development ("LID") best management practices ("BMPs"), such as retention and infiltration, biotreatment, and evapotranspiration. The PWQMP proposes the use of a dry well as storm water retention. Any overflow drainage will be conveyed to the public street by way of parkway drains and culverts.

PUBLIC NOTIFICATION: The subject application was advertised as a public hearing in at least one newspaper of general circulation in the City of Ontario (the Inland Valley Daily Bulletin newspaper). In addition, notices were mailed to all owners of real property located within a minimum of 300 feet of the exterior boundaries of the property that is the subject of the hearing, as shown on the records of the County Assessor.

CORRESPONDENCE: As of the preparation of this Decision, Planning Department staff has not received any written or verbal communications from the owners or occupants of properties surrounding the Project site or from the public in general, regarding the subject application.

AGENCY/DEPARTMENT REVIEWS: Each City agency/department has been provided the opportunity to review and comment on the subject application and recommend conditions of approval to be imposed upon the application. At the time of the Resolution preparation, recommended conditions of approval were provided and are appended to the attached Resolutions as "Attachment A."

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending and decision-making body for the Project, the Planning Commission has reviewed and considered the facts and information contained

in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (general plan), and City Council Priorities components of The Ontario Plan ("TOP"). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) City Council Goals.

- Operate in a Businesslike Manner
- Focus Resources in Ontario's Commercial and Residential Neighborhoods

(2) Vision.

Distinctive Development:

- Commercial and Residential Development

➢ Development quality that is broadly recognized as distinctive and not exclusively tied to the general suburban character typical of much of Southern California.

(3) Governance.

Decision Making:

- Goal G1: Sustained decision-making that consistently moves Ontario towards its Vision by using The Ontario Plan as a framework for assessing choices.

➢ G 1-2. Long-term Benefit. We require decisions to demonstrate and document how they add value to the community and support the Ontario Vision.

(4) Policy Plan (General Plan)

Land Use Element:

- Goal LU-1 Balance: A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

  - LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

  - LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

- Goal LU-2 Compatibility: Compatibility between a wide range of uses and a resultant urban patterns and forms.

  - LU-2.6 Infrastructure Compatibility. We require infrastructure to be aesthetically pleasing and in context with the community character.

Housing Element:

- Goal H-2 Housing Supply & Diversity: Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

  - H-2.5 Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices, and other best practices.

- Goal H-5 Special Needs: A full range of housing types and community services that meet the special housing needs for all individuals and families in Ontario, regardless of income level, age, or other status.

  - H-5.2 Family Housing. We support the development of larger rental apartments that are appropriate for families with children, including, as feasible, the provision of services, recreation, and other amenities.

Community Economics Element:

- Goal CE-1 Complete Community: A complete community that provides for all incomes and stages of life.

  - CE-1.6 Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every

stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.

- Goal CE-2 Placemaking: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.

  - CE-2.1 Development Projects. We require new development and redevelopment to create unique, high-quality places that add value to the community.

  - CE-2.2 Development Review. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.

  - CE-2.4 Protection of Investment. We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.

  - CE-2.5 Private Maintenance. We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values.

Safety Element:

- Goal S-1 Seismic & Geologic Hazards: Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.

  - S-1.1 Implementation of Regulations and Standards. We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.

Community Design Element:

- Goal CD-1 Image & Identity: A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

  - CD-1.1 City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

  - CD-1.2 Growth Areas. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new

development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.

- CD-1.3 Existing Neighborhoods. We require the existing character of viable residential and non-residential neighborhoods be preserved, protected, and enhanced.

- Goal CD-2 Design Quality: A high level of design quality resulting in neighborhoods, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

- CD-2.1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through:

  - Building volume, massing, and height to provide context-appropriate scale and proportion;
  - A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and
  - Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.

- CD-2.2 Neighborhood Design. We create distinct residential neighborhoods that promote a sense of community and identity by emphasizing access, connectivity, livability, and social interaction through such elements as:

  - A pattern of smaller, walkable blocks that promote activity, safety, and access to nearby amenities and services;
  - Varied parcel sizes and lot configurations to accommodate a diversity of housing types;
  - Traffic calming measures to slow traffic and promote walkability while maintaining acceptable traffic flows and emergency evacuation access;
  - Floor plans that encourage views onto the street and de-emphasize the visual and physical dominance of garages (introducing the front porch as the "outdoor living room"), as appropriate; and
  - Landscaped parkways, with sidewalks separated from the curb and designed to maximize safety, comfort, and aesthetics for all users.

- CD-2.7 Sustainability. We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.

- CD-2.8 Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways,

corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.

- CD-2.9 Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.

- CD-2.10 Parking Areas. We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include:

  - Surface parking: Shade trees, pervious surfaces, urban run-off capture and infiltration, and pedestrian paths to guide users through the parking field;
  - Structured parking: facade articulation, screening, appropriate lighting, and landscaping; and
  - Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.

- CD-2.13 Entitlement Process. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.

▪ Goal CD-3 Urban, Mixed Use, and Transit-Oriented Place Types: Vibrant urban environments that are organized around intense buildings, pedestrian and transit areas, public plazas, and linkages between and within developments that are conveniently located, visually appealing and safe during all hours.

- CD-3.4 Context-Aware and Appropriate Design. We require appropriate building and site design that complements existing development, respects the intent and identity of the Place Type, and provides appropriate transitions and connections between adjacent uses to ensure compatibility of scale, maintain an appropriate level of privacy for each use, and minimize potential conflicts.

- CD-3.5 Active Frontages. We create lively pedestrian streetscapes by requiring primary building, business, and residential entrances, outdoor dining, and storefronts be located on ground floors adjacent to sidewalks or public spaces and designed to maximize safety, comfort, aesthetics, and the intended functionality (as defined by the Place Type).

- Goal CD-5 Protection of Investment: A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.

  - CD-5.1 Maintenance of Buildings and Property. We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.

  - CD-5.2 Maintenance of Infrastructure. We require the continual maintenance of infrastructure.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

ENVIRONMENTAL REVIEW: The Project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Section 15332 (Class 32, In-fill Development Projects) of the CEQA Guidelines, and meets all of the following conditions: (a) the proposed Project is consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations; (b) the proposed development occurs within city limits and the area being developed is 0.11-acre, less than the maximum 5-acre threshold, and is substantially surrounded by urban land uses; (c) the Project site has no value as habitat for endangered, rare, or threatened species; (d) approval of the Project would not result in any significant effects relating to traffic, noise, air quality, or water quality; and (e) the site is adequately served by all required utilities and public services.

TECHNICAL APPENDIX:

Surrounding Zoning and Land Use:

	Existing Land Use	***Policy Plan Designation***	***Zoning Designation***
Site	Vacant	Mixed Use	LUA-3 (Holt Boulevard District)/ MU-1 (Downtown Mixed Use)
North	Multiple-Family Residential	Mixed Use	LUA-3 (Holt Boulevard District)/ MU-1 (Downtown Mixed Use)
South	Single-Family Residential	Mixed Use	LUA-3 (Holt Boulevard District)/ MU-1 (Downtown Mixed Use)
East	Parking Lot/Multiple-Family Residential	Mixed Use	LUA-3 (Holt Boulevard District)/ MU-1 (Downtown Mixed Use)
West	Multiple-Family Residential	Mixed Use	LUA-3 (Holt Boulevard District)/ MU-1 (Downtown Mixed Use)

General Site & Building Statistics

Item	***Required Min./Max.***	***Provided (Ranges)***	***Meets Y/N***
Project area (in acres):	N/A	0.11	Y
Maximum project density (dwelling units/ac):	25 to 75 DU/AC	27	Y
Maximum coverage (in %):	N/A	72%	N/A
Minimum lot size (in SF):	N/A	4,792 SF	N/A
Minimum lot depth (in FT):	N/A	70 FT	N/A
Minimum lot width (in FT):	N/A	45 FT	N/A
Front yard setback (in FT):	7 FT	7 FT	Y
Side yard setback (in FT):	5 FT	5 FT	Y
Rear yard setback (in FT):	5 FT	5 FT	Y
Alley setback-Garage entry (in FT):	6 FT	6 FT	Y
Maximum height (in FT):	35 FT	26 FT	Y
Parking – resident:	6	6	Y
Parking – guest:	1	1	Y
Open space – private:	30 SF/unit	30 SF/unit	Y

Dwelling Unit Count:

Item	*Required Min./Max.*	*Provided (Ranges)*	*Meets Y/N*
Total no. of units	3-7	3	Y
Total no. of buildings	N/A	1	N/A
No. units per building	N/A	3	N/A

Dwelling Unit Statistics:

Unit Count	*Unit Size (in SF)*	*No. Bedrooms*	*No. Bathrooms*	*No. Stories*	*Private Open Space (in FT)*
3	1,406 – 1,430 SF	3	3	2	30 SF

Exhibit A: PROJECT LOCATION MAP

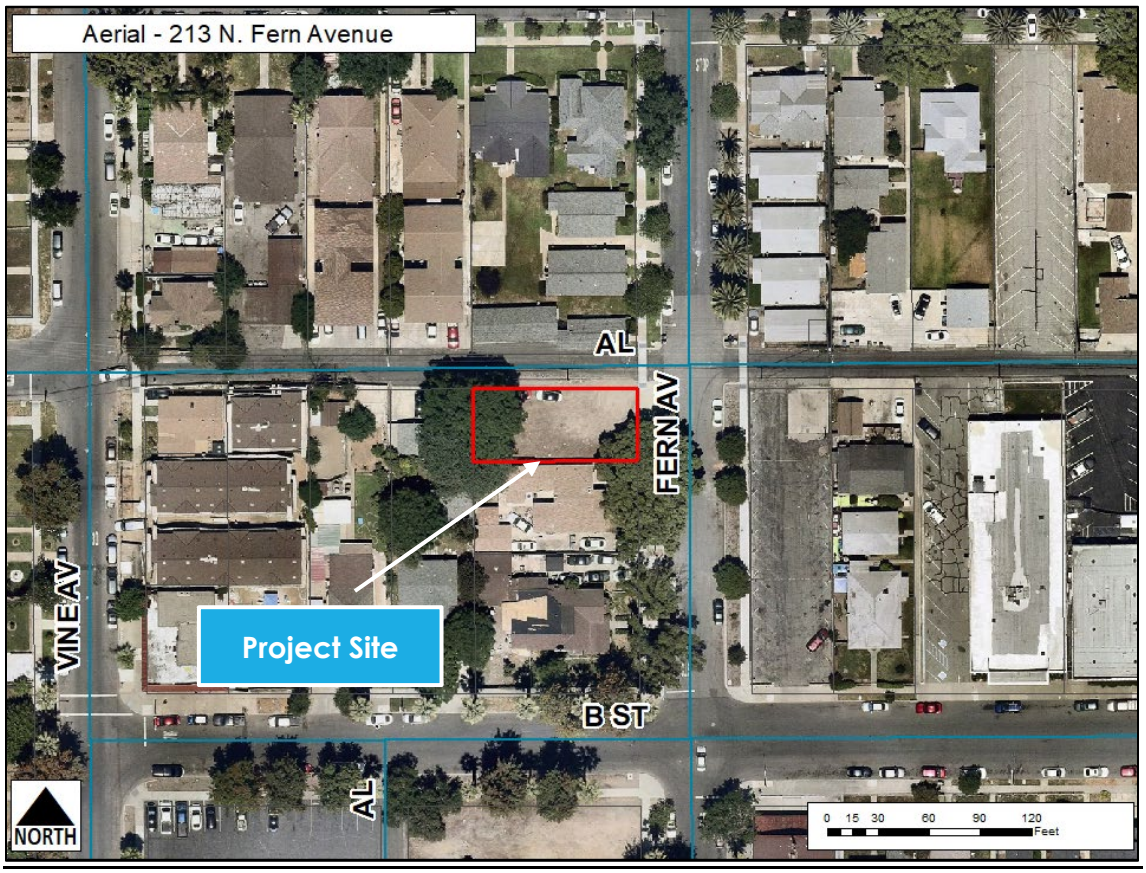


Exhibit B: SITE PLAN

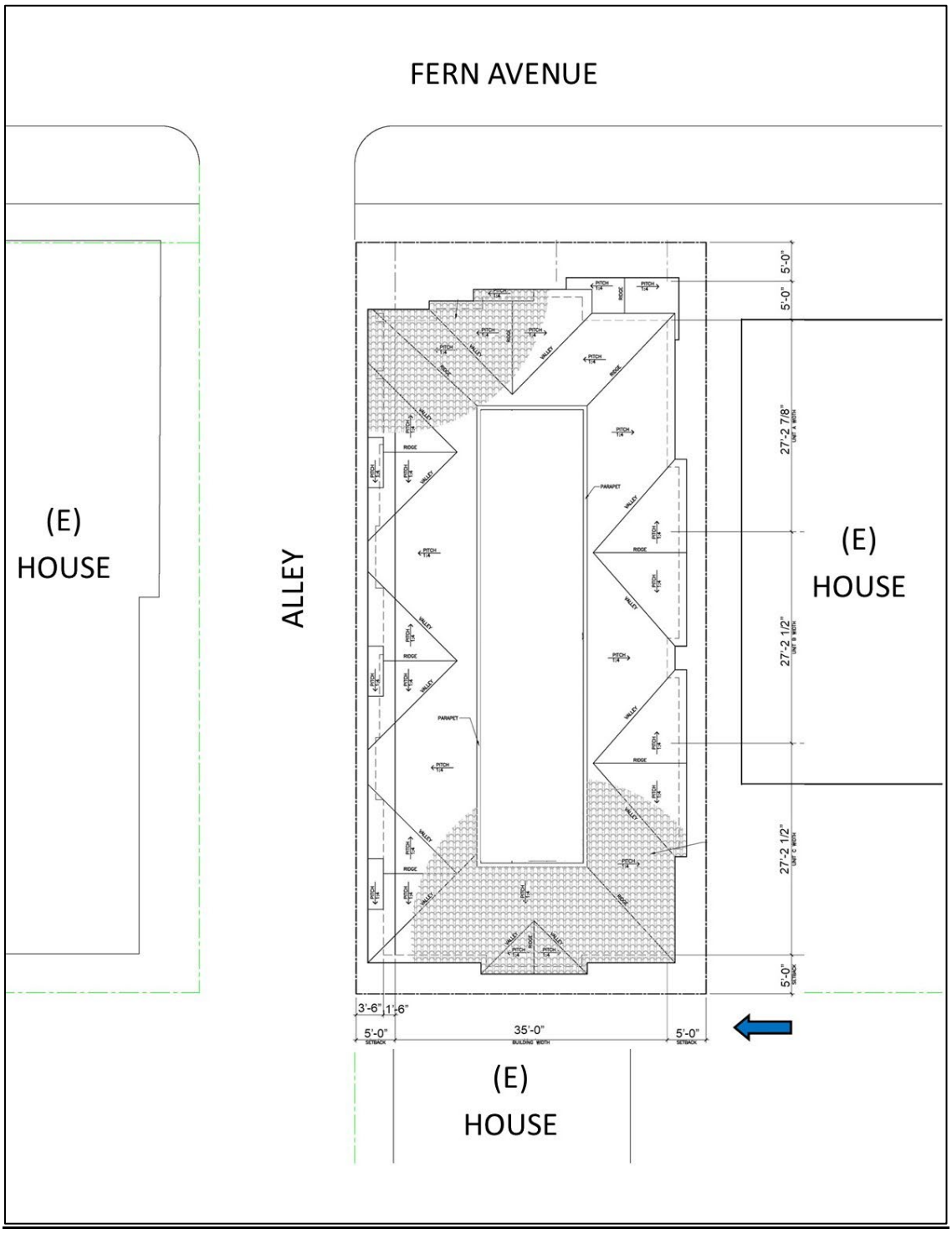


Exhibit C: FLOOR PLAN

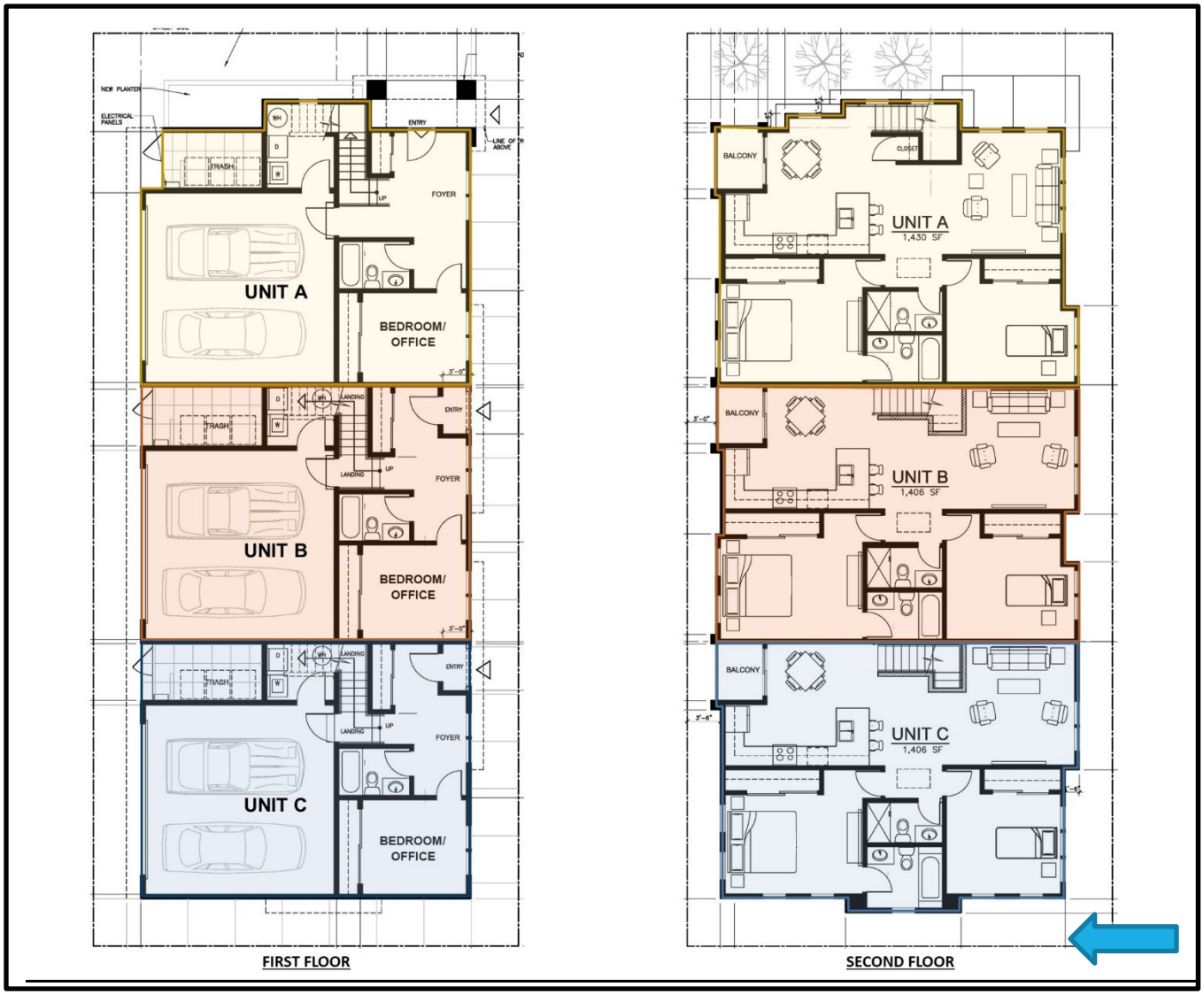


Exhibit D: EXTERIOR ELEVATIONS

Exhibit E: SITE PHOTOS

Project Site – View looking southwest

Adjacent Alley – Project Site to the left

Exhibit E: SITE PHOTOS

Fern Avenue – Northeast of Project Site

Northwest of Project Site - Adjacent Multiple-Family

RESOLUTION NO. PC23-009

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO, CALIFORNIA, RECOMMENDING THAT THE CITY COUNCIL APPROVE FILE NO. PUD22-003, A PLANNED UNIT DEVELOPMENT TO ESTABLISH DEVELOPMENT STANDARDS, DESIGN GUIDELINES, AND INFRASTRUCTURE REQUIREMENTS FOR PROPERTY LOCATED AT 213 NORTH FERN AVENUE, WITHIN THE LUA-3 (HOLT BOULEVARD) DISTRICT OF THE MU-1 (DOWNTOWN MIXED USE) ZONING DISTRICT, AND MAKING FINDINGS IN SUPPORT THEREOF—APN: 1048-572-06

WHEREAS, HDC Construction, Inc. ("Applicant") has filed an Application for the approval of a Planned Unit Development, File No. PUD22-003, as described in the title of this Resolution (hereinafter referred to as "Application" or "Project"); and

WHEREAS, the Application applies to 0.11-acre of land generally located at the southwest corner of Fern Avenue and a public alley, at 213 North Fern Avenue, within LUA-3 (Holt Boulevard) of the MU-1 (Downtown Mixed Use) zoning district, and is presently vacant; and

WHEREAS, properties surrounding the Project Site are located within LUA-3 (Holt Boulevard) of the MU-1 (Downtown Mixed Use) zoning district. The properties north and west of the Project site are developed with multiple-family dwellings. The property to the east is developed with a parking lot. The property to the south is developed with single-family dwellings; and

WHEREAS, on April 20, 2022, the Applicant submitted a Planned Unit Development (File No. PUD22-003) in conjunction with Tentative Parcel Map No. 20554 (File No. PMTT22-015), to subdivide the Project site into a single lot for condominium purposes, and a Development Plan (File No. PDEV22-024) to construct 3 attached townhome units at a density of 27.3 dwelling units per acre; and

WHEREAS, the Project site is located within the Downtown Mixed Use District of the Policy Plan (general plan). The Policy Plan specifies that the Downtown Mixed Use District is to be implemented through the approval of an Area Plan or Planned Unit Development (“PUD”) prior to the development of properties within the District. In compliance with this requirement, the Applicant has submitted the Fern Townhomes Planned Unit Development (included as Attachment “A” of this Resolution), which is consistent with this vision, and goals and policies of the Policy Plan; and

WHEREAS, the specific purpose of the Planned Unit Development is to secure a fuller realization of the Policy Plan than would otherwise result from the strict application of present zoning district regulations, and to promote high standards in urban design; encourage the development of exceptionally high quality, mixed-use, high intensity

projects, while establishing regulations and standards for uses with unique regulatory and design needs; and, ensure harmonious relationships with surrounding land uses; and

WHEREAS, the Application is a project pursuant to the California Environmental Quality Act, commencing with Public Resources Code Section 21000 (hereinafter referred to as "CEQA"); and

WHEREAS, the Project is exempt from CEQA as the activity is covered by the common sense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA pursuant to Section 15061(b)(3) of the CEQA Guidelines; and

WHEREAS, Ontario Development Code Table 2.02-1 (Review Matrix) grants the Planning Commission the responsibility and authority to review and make recommendation to the City Council on the subject Application; and

WHEREAS, the Project has been reviewed for consistency with the Housing Element of the Policy Plan component of The Ontario Plan, as State Housing Element law (as prescribed in Government Code Sections 65580 through 65589.8) requires that development projects must be consistent with the Housing Element, if upon consideration of all its aspects, it is found to further the purposes, principals, goals, and policies of the Housing Element; and

WHEREAS, the Project is located within the Airport Influence Area of Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and is subject to, and must be consistent with, the policies and criteria set forth in the Ontario International Airport Land Use Compatibility Plan (hereinafter referred to as "ALUCP"), which applies only to jurisdictions within San Bernardino County, and addresses the noise, safety, airspace protection, and overflight impacts of current and future airport activity; and

WHEREAS, City of Ontario Development Code Division 2.03 (Public Hearings) prescribes the manner in which public notification shall be provided and hearing procedures to be followed, and all such notifications and procedures have been completed; and

WHEREAS, on February 28, 2023, the Planning Commission of the City of Ontario conducted a hearing to consider the Project, and concluded said hearing on that date; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the recommending authority for the Project, the Planning Commission has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The administrative record has been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(2) The Project is exempt from the requirements of the California Environmental Quality Act (CEQA) and the guidelines promulgated thereunder, pursuant to Section 15061(b)(3) of the CEQA Guidelines, in that the activity is covered by the "common sense exemption" (also known as the "general rule exemption") that CEQA applies only to projects that have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA; and

(3) The determination of CEQA exemption reflects the independent judgment of the Planning Commission.

SECTION 2: ***Housing Element Compliance.*** Pursuant to the requirements of California Government Code Chapter 3, Article 10.6, commencing with Section 65580, as the recommending authority for the Project, the Planning Commission finds that based on the facts and information contained in the Application and supporting documentation, at the time of Project implementation, the project is consistent with the Housing Element of the Policy Plan (General Plan) component of The Ontario Plan, as the project site is not one of the properties in the Housing Element Sites Inventory contained in Tables B-1 and B-2 of the Housing Element Technical Report.

SECTION 3: ***Airport Land Use Compatibility Plan ("ALUCP") Compliance.*** The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan.

On April 19, 2011, the City Council of the City of Ontario approved and adopted the Ontario International Airport Land use Compatibility Plan, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of

San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the recommending body for the Project, the Planning Commission has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP; and

SECTION 4: ***Concluding Facts and Reasons.*** Based upon the substantial evidence presented to the Planning Commission during the above-referenced hearing, and upon the specific findings set forth in Sections 1 through 3, above, the Planning Commission hereby concludes as follows:

(1) ***The proposed Planned Unit Development is consistent with the goals, policies, plans and exhibits of the Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan.*** The Project is consistent with Vision, Policy Plan (General Plan), and City Council Priorities components of The Ontario Plan. Section 1.1, The Ontario Plan Objectives of the Planned Unit Development, describes the manner in which the Planned Unit Development complies with the Policy Plan goals and policies.

(2) ***The proposed Planned Unit Development, would not be detrimental to the public interest, health, safety, convenience, or general welfare of the City.*** The Planning Commission has required certain safeguards, and has required certain changes, which have been established to ensure that: [i] the purposes of the Planned Unit Development are maintained; [ii] the project will not endanger the public health, safety or general welfare; [iii] the project will not result in any significant environmental impacts; [iv] the project will be in harmony with the area in which it is located; and [v] the project will be in full conformity with the Vision, City Council Priorities and Policy Plan components of The Ontario Plan.

(3) ***In the case of an application affecting specific property(ies), the proposed Planned Unit Development, will not adversely affect the harmonious relationship with adjacent properties and land uses.*** The Planned Unit Development area is situated in Ontario's downtown and is adjacent to residential and commercial land uses and development. The surrounding development supports the objective of the Planned Unit Development to further commercial and residential mixed-use development.

The Project will not affect the harmonious relationship with adjacent properties and land use.

(4) ***In the case of an application affecting specific property(ies), the subject site is physically suitable, including, but not limited to, parcel size, shape, access, and availability of utilities, for the request and anticipated development.*** In preparing the proposed Planned Unit Development, a thorough review and analysis of the proposed Project and the subject site's physical suitability for the Project was completed, including analysis of the project size, shape, intensity of development, building height, building setbacks, site access, site landscaping and drainage, fences and walls, vehicle circulation, pedestrian connections, availability of mass transit, necessary street dedication and easements, public right-of-way improvements, availability of utilities and other infrastructure needs, off-street parking and circulation, building orientation and streetscapes, architectural character, building materials and color, and site signage. Based upon this review and analysis, the subject site has been deemed physically suitable, including but not limited to parcel size, shape, access, and availability of utilities, for the proposed Planned Unit Development and the proposed development.

(5) ***The proposed Planned Unit Development is superior to that which could be obtained through the application of the Development Code or a specific plan.*** The Planned Unit Development will establish minimum building setbacks, parking and open space requirements, allow on-street parking, and establish a planting palette. These standards in the Planned Unit Development will facilitate the development of 3 attached single-family dwellings, related parking facilities and private and common open space areas. The proposed Planned Unit Development will allow for subsequent development that is superior to that which could be obtained through the application of the Development Code by itself.

SECTION 5: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in Sections 1 through 4, above, the Planning Commission hereby RECOMMENDS THE CITY COUNCIL APPROVES the herein described Application, subject to each and every condition set forth in the Department reports attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 6: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 7: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located

at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 8: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

- - - - - - - - - - - - - -

The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 28th day of February, 2023, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nancy DeDiemar
Planning Commission Chairperson

ATTEST:

Rudy Zeledon
Planning Director and
Secretary to the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC23-009, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on February 28, 2023, by the following roll call vote, to wit:

AYES: Anderson, Dean, DeDiemar, Gage, Lampkin, Ricci

NOES: None

ABSENT: None

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

File No. PUD22-003
Fern Townhomes Planned Unit Development

Planned Unit Development

Fern Townhomes Ontario, California

[THIS PAGE INTENTIONALLY LEFT BLANK]

TABLE OF CONTENTS

1. INTRODUCTION 5

Figure 1-1: Project Location Map 6

Figure 1-2: Site Plan 7

2. OBJECTIVES 9

The Ontario Plan 9

2.1 Land Use Element Goals and Policies 9

2.2 Housing Element Goals and Policies 10

2.3 Community Design Element Goals and Policies 11

2.4 Fern Townhomes Objectives 12

Figure 2-1: Downtown Land Use District Map 13

3. LAND USE PLAN 15

3.1 Land Use Plan / Allowable Uses 15

Figure 3-1: Land Use District Map [Exhibit LU-1 Land Use Plan of TOP] 15

3.2 Residential Use 16

3.3 Permitted Uses List 16

4. DEVELOPMENT REGULATIONS 18

4.1 Residential Density. 18

4.2 Project Density 18

4.3 Building Height 18

4.4 Building Setbacks 19

Table 4-1: Minimum Building Setbacks 19

4.5 Access 20

4.6 Open Space 20

4.7 Private Space 20

4.8 Common Open Space 21

4.9 Site Landscaping 21

4.10 Screening 22

Figure 4-10: Landscape Planting Legend 23

5. PARKING AND CIRCULATION 25

5.1 Site Accessibility 25

5.2 Vehicle Circulation 25

5.3 Pedestrian Circulation 25

5.4 Access to Mass Transit 25

Figure 5-1: Access to Mass Transit Map 26

5.5 Public Right of Way Improvements 26

5.6 Infrastructure 27

5.7 Parking Onsite Parking Requirements 27

Table 5-1: Minimum Parking Requirements 28

6. DESIGN GUIDELINES 30

6.1 Building Orientation and Streetscapes 30

6.2 Architectural Character 30

6.3 Architectural Details 30

6.4 Materials and Colors 30

6.5 On-Site Lighting 31

6.6 Signage 31

6.7 On-Site Improvements 31

7. ADMINISTRATION 33

7.1 Items Not Addressed in PUD 33

7.2 Development Plan Applications 33

7.3 Administrative Exceptions 33

1. INTRODUCTION

This document is intended to function as a set of planning and design principles, development regulations and performance standards to guide and govern the development of an infill area of approximately 0.11 – acres of land, which is currently vacant, within a developed area. The development is comprised of a single vacant lot surrounded by existing residences. The lot is at the corner of North Fern Avenue (to the East) and West Vesta Street (existing Alley to the North). Access is available through the existing alley known as West Vesta Street (see Figure 1.1 Project Location Map).

The project site is located within The Ontario Plan Downtown Mixed Use Land Use District and the MU-1 (Downtown Mixed Use) zoning district which requires the establishment of a Planned Unit Development (PUD) prior to development. The Planned Unit Development (PUD) is set forth in the Ontario Development code section 4.01.030 (Planned Unit Development (PUD) and Amendments). Upon approval, this PUD will establish the land use and development standards for this particular project site. The Fern Townhome Planned Unit Development (PUD) will provide development standards unless otherwise defined herein, definitions and interpretations contained in the Development code shall apply.

City staff and private developers shall rely on this PUD to determine whether precise plans for development will be adequate and will meet the City's land use and design objectives.

Figure 1-1: Project Location Map

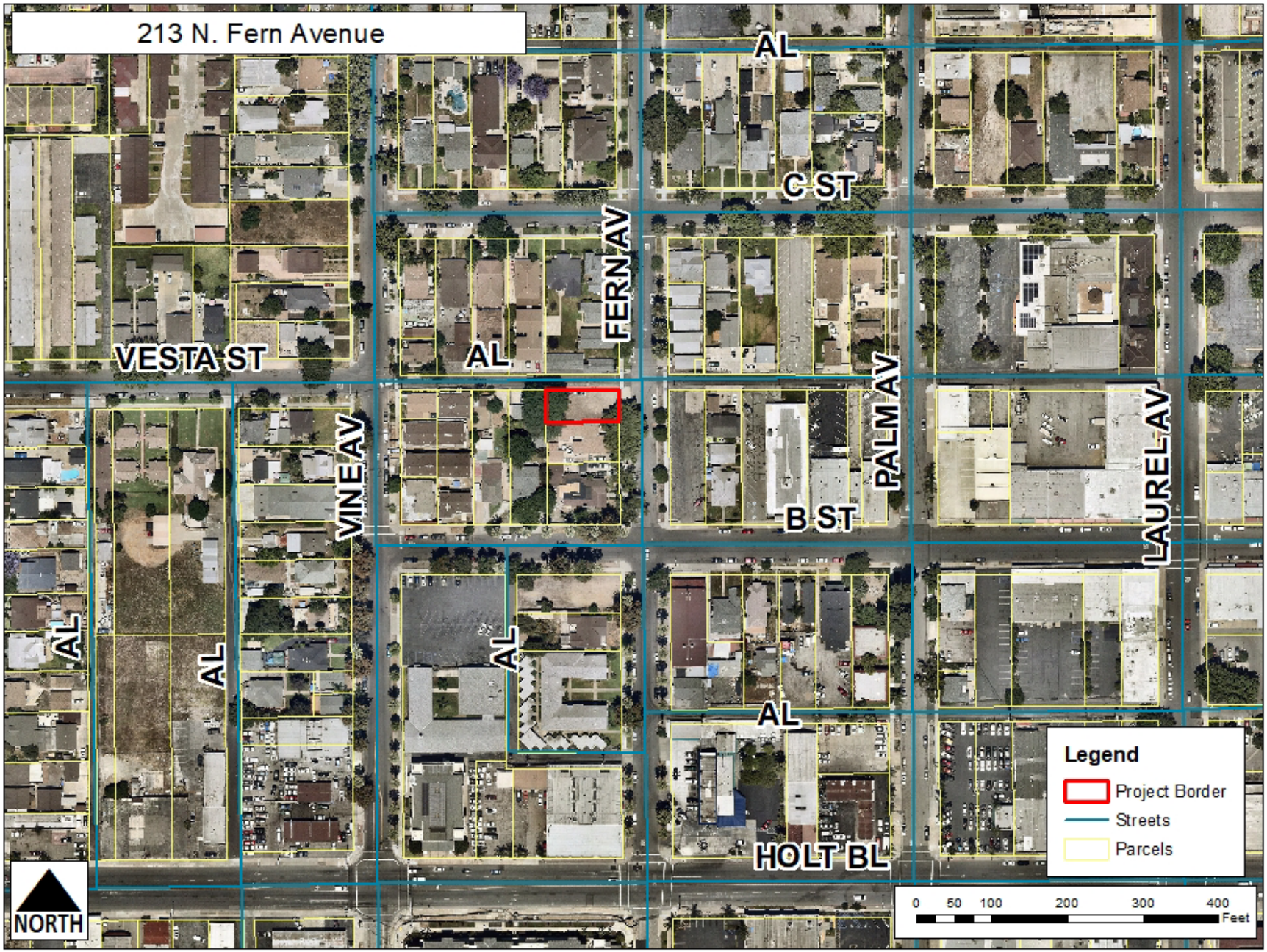
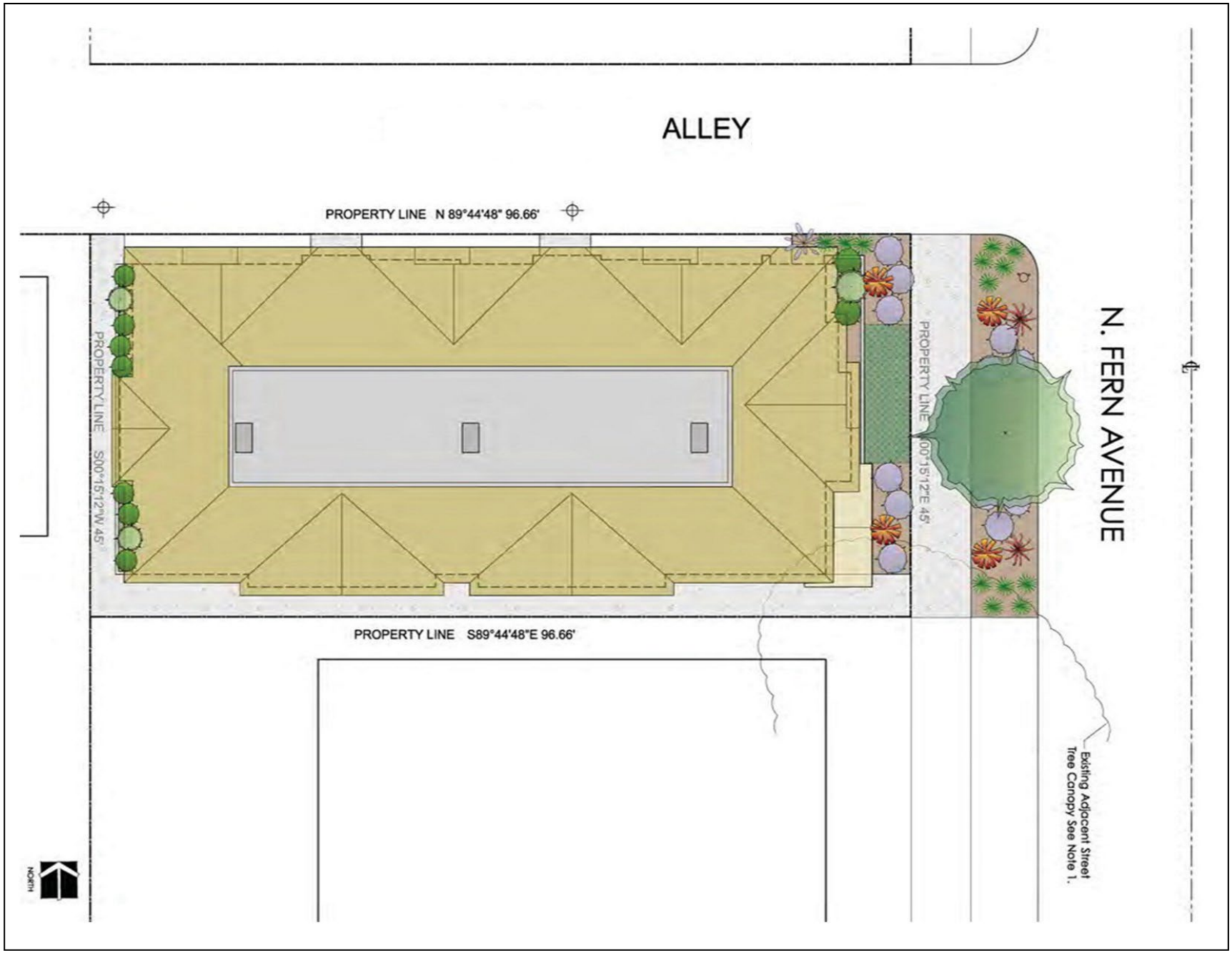


Figure 1-2: Site Plan



[THIS PAGE INTENTIONALLY LEFT BLANK]

2. OBJECTIVES

The Ontario Plan, which includes the City's General Plan (Policy Plan), designates the project area as part of the Downtown Mixed Use District (see Figure 2-1: Downtown Land Use District Map). The Downtown Mixed Use District designation requires approval of a Planned Unit Development (PUD) to develop the property. Additionally, the designation specifies a residential density range of 25.1-75 units per acre and a maximum floor area ratio (FAR) of 2.0 for office and retail uses if required.

The Ontario Plan goals and policies furthered by this Planned Unit Development are as follows:

2.1. Land Use Element Goals and Policies

i. LU1 – Balance. A community that has a spectrum of housing types and price ranges that match the jobs in the city and that make it possible for people to live and work in Ontario and maintain a quality of life.

   a. LU1-1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, and foster the development of transit.

      - The PUD supports the goal by providing housing in the downtown core to maximize infrastructure and foster the development of transit.

ii. LU2 – Compatibility. Compatibility between a wide range of uses and resultant urban patterns and forms.

   a. LU2-2 Buffers. We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur. Additional mitigation is required when new uses could negatively impact environmental justice areas.

      - The PUD takes into consideration the existing uses on the surrounding properties and provides privacy buffers with decorative masonry walls, landscaping and setbacks.

iii. LU3 – Flexibility. Staff, regulations and processes that support and allow flexible response to conditions and circumstances in order to achieve the Vision.

   a. LU3-1 Development Standards. We maintain clear development standards which allow flexibility to achieve our Vision.

      - The PUD implements the flexibility anticipated by city development standards.

2.2. Housing Use Element Goals and Policies

i. H1 – Neighborhoods and Housing. Stable neighborhoods of quality housing, ample community services and public facilities, well-maintained infrastructure, and public safety that foster a positive sense of identity.

   a. H1-4 Historical Preservation. We support the preservation and enhancement of residential structures, properties, street designs, lot configurations, and other reminders of Ontario's past that are considered to be local historical or cultural resources.

      - The PUD is located within the Residential District of Downtown Ontario. The PUD will ensure the architectural enhancements complement the existing historic housing surrounding the project.

ii. H2 – Housing Supply and Diversity. Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

   a. H2-5 Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices and other best practices.

      - The PUD is located within the Residential District of Downtown Ontario. The PUD will ensure the architectural enhancements complement the existing historic setting of the project location.

   b. H2-6 Infill Development. We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.

      - The PUD implements higher density residential development within the downtown core to support nearby businesses and assist in area revitalization.

2.3. Community Design Element Goals and Policies

i. CD1 – Image and Identity. A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

   a. CD1-1 City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

      - The PUD supports the policy goal by incorporating a diverse urban housing type into the downtown core.

   b. CD1-2 Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.

      - The PUD is located within the Residential District of Downtown Ontario. The PUD will ensure the architectural enhancements complement the existing historic setting of the project location.

ii. CD2 – Design Quality. A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

   a. CD2-1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through:

      - Building volume, massing, and height to provide context-appropriate scale and proportion;

      - A true architectural style which is carried out in plan, section and elevation through all aspects of the building and site design and appropriate for its setting; and

      - Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.

      - The PUD will ensure that architectural features and finishes which convey a particular style will be implemented to complement the existing historic setting of the project location.

2.4. Fern Townhomes Objectives

This Planned Unit Development provides guidelines for development of the project area. The following objectives are intended to provide a general framework for establishing development standards to ensure proper development of the project area.

i. Develop high quality, housing.

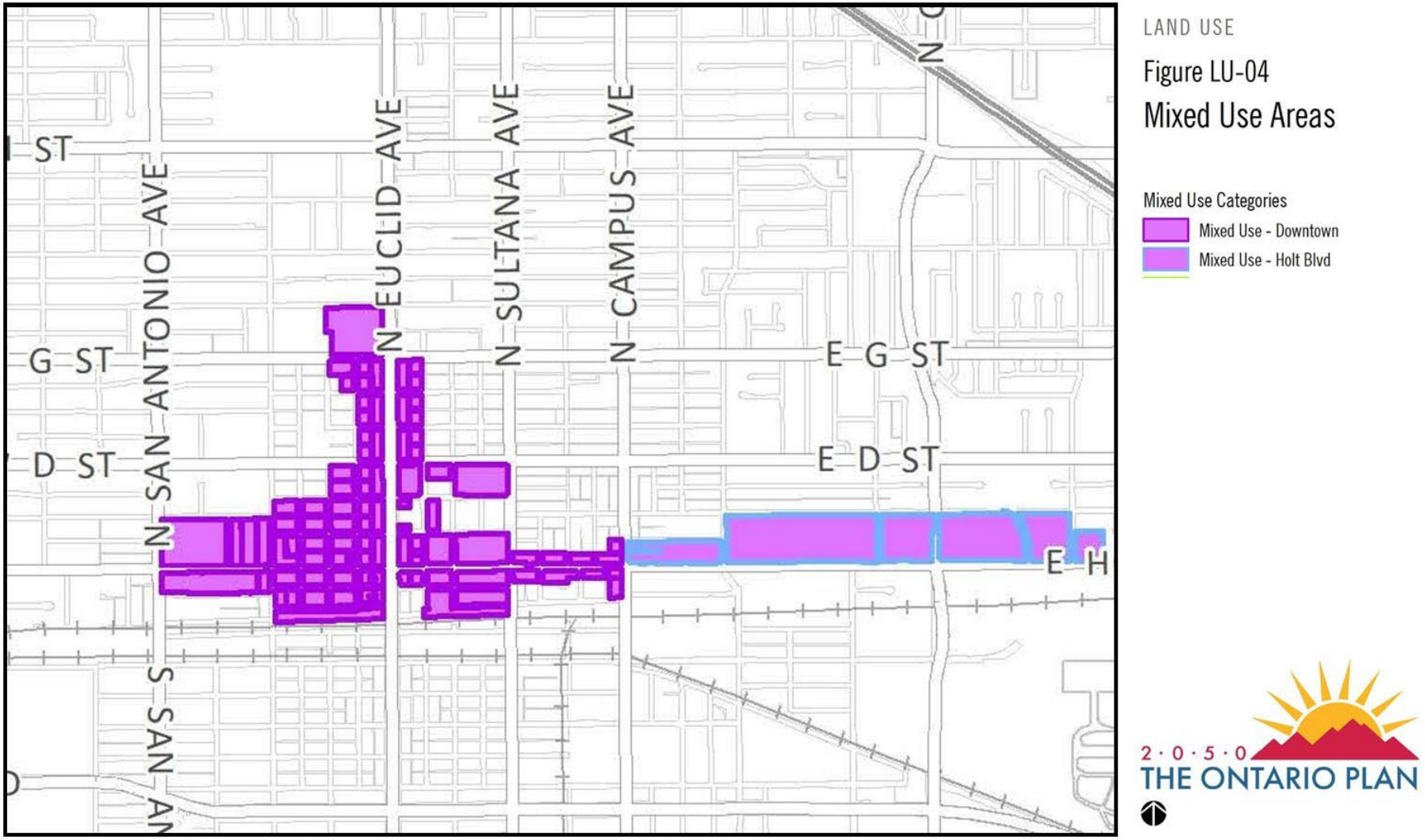
ii. Establish appropriate relationships among new residential neighborhoods as well as with adjacent land use.

iii. Provide new housing designed for families with children.

iv. Provide area of private and passive open space with each unit to include private balconies and attractive entries.

v. Provide flexible spaces at ground level which can be used as a Home Office or additional living space.

Figure 2-1: Downtown Growth Area Map



[THIS PAGE INTENTIONALLY LEFT BLANK]

3. LAND USE PLAN

3.1. Land Use Plan /Allowable Uses

The Project site is located within the Downtown Mixed Use Area Policy Plan (General Plan) land use district, and the MU-1 (Downtown Mixed-Use) zoning district, which implements the Downtown Mixed Use area. The MU-1 zoning district was established to accommodate and intensive mixture of vertical and horizontal retail and office uses at a development intensity of up to 2.0 FAR, and residential uses at a density of 25 to 75 dwelling units per acre. Development projects within the MU-1 zoning district are intended to maintain a pedestrian friendly atmosphere, while at the same time enhancing the historic character of the area.

Consistent with the intent of the Downtown Mixed Use Area and the MU-1 zoning district, the project site is designated Multiple Family Residential (MFR) land use designation. Exhibit 3.1 MU-1 (Mixed Use Downtown) depicts the Planned Unit Development boundary and zoning designation.

Figure 3-1: MU-1 (Mixed Use Downtown) District Map

3.2. Residential Use

The project site is envisioned to be developed with three attached housing units. All units will be two story with two car parking garages below and the living areas on upper/second level. A landscape buffer with trees and a planter is provided along Fern Avenue. Units will be accessed via a new paved walkway. All units will have private balconies.

3.3. Permitted Uses List

The Permitted Land uses within the 213 N. Fern Avenue Planned Unit Development (PUD) are as follows:

i. Multiple family residential dwellings

ii. Motor vehicle parking ancillary to multiple family housing developments

iii. Temporary uses as permitted within the residential districts of the City of Ontario Development Code subject to an Administrative Permit.

iv. Other land use compatible with multiple family residential development projects, as determined by the Zoning Administrator.

Uses may be prohibited through rental contracts and agreements as provided by the owner and project management, unless prohibited by Federal, State or local laws.

[THIS PAGE INTENTIONALLY LEFT BLANK]

4. DEVELOPMENT REGULATIONS

4.1. Residential Density

Residential density shall be 25.1 to 70 dwelling units per acre.

4.2. Project Density

This particular combined infill project site consists of 0.09 acres of land. This zone density will require a minimum of (3) dwellings and a maximum of (7) dwellings.

4.3. Building Height

No structure shall exceed 35 feet in height, except that the maximum height may be exceeded by roof mounted equipment, architectural projections, chimneys, elevator towers, parapet walls and any other roof top structures by up to 10% of the allowed building height. No rooftop equipment shall be visible from anywhere on the project site, public streets or adjacent properties, and shall be fully screened with appropriate architectural parapet walls or appropriate roof treatments. Roof mounted equipment shall not exceed the height of the structures and appurtenances used to screen the equipment.

i. No roof mounted equipment proposed. All HVAC units shall be placed within the attic space of the proposed roof structure, and condenser units shall be ground-mounted and properly screened.

4.4. Building Setbacks

Table 4-1: Minimum Building Setbacks

Minimum Setbacks:	Distance
From North Fern Avenue (East):	
▪ Building	7 FT
▪ Porches, Patio Covers, and Similar Architectural Projections**	5 FT
From Vesta Street/Alley (North)	
▪ Building	5 FT
▪ Garage Entry	6 FT
From Interior Property Line (South):	
▪ Building	5 FT
From Rear Property Line (West):	
▪ Building	5 FT
▪ Porches, Patio Covers, and Similar Architectural Projections**	5 FT
2nd story Architectural Projections and Balconies	**3 FT**

**No projection may encroach into any necessary easements

i. All setbacks shall be measured from the property lines. Placement of buildings, structures, fences, walls, utility facilities, yards etc. will be based on the street's rights of way and the property line dimensions. Allowable encroachments in yards include (maximum 6'-0" high) property line fences and gates, landscaping, paving and public utilities.

4.5. Access

Project vehicular access is from the northernly alley. Pedestrian access is from Fern Avenue.

4.6. Open Space

Open space shall be provided for the passive and the active recreation opportunities within the project site. Two types of open space are required, private and common open space. These open space areas are for the use of the on-site residents and their guests. Required street setback areas are not counted towards the common open space requirements.

4.7. Private Open Space

Private open space shall be provided for each residential unit in order to provide private outdoor areas which can be enjoyed for the exclusive use by the occupant of the residential unit and their guests. Types of areas considered private open space include balconies, decks and patios and enclosed yard areas.

Private open spaces are achieved with second floor balconies in each residential unit and shall have direct access from each residential unit. Residential units shall have a minimum size of private open space pursuant to Section 6.01.010.E (Open Space Requirements for Single-Family Small Lot Subdivisions, and Multiple-Family and Mixed-Use Development Projects) of the Ontario Development Code. The space may be provided in multiple areas (e.g. balconies, covered porches, a yard and a patio, etc.), a s long as the total area of the spaces meets the minimum private open space requirement of 30 square feet for the unit. The minimum dimension for private open space shall be no less than 5 feet in any direction. Balconies shall be a minimum dimension of 5’-0” x 6’-0”.

4.8. Common Open Space

Common Open Space shall be provided to allow for both passive and active types of recreation, along with the site landscape amenities. Common open space is achieved along the landscape buffer along Fern Avenue. These areas are for use by project residents and their guests. The Project site is located in an urbanized downtown area which provides access to many shared amenities including a public park (Ontario Town Square) within a quarter mile of the site.

Landscaping

4.9. Site Landscaping

A conceptual landscape plan shall be submitted with each Development Plan within the 213 N. Fern Avenue PUD area. The plan shall specify all landscape and hardscape elements for the development plan site. Detailed Landscape and Irrigation plans shall be required prior to the issuance of building permits.

The detailed plans shall show location of ground mounted utility boxes and equipment, along with the methods of screening for these items from the public right of way and adjacent residences where possible (see Figure 4-1: Conceptual Landscape Planting Legend).

The Landscape and irrigation plan shall be designed with water conservation in mind, utilizing "California friendly" species and drought tolerant planting materials. The landscaping and irrigation shall comply with AB 1881, and all other laws and regulations related to planting materials.

Compliance with State and Federal Laws

a. Provide landscaping and an irrigation system, which promotes the conservation of water as required by the Water Conservation in Landscaping Act of 2006 (AB 1881), commencing with the California Government Code Section 65591.

4.10. Screening

i. General Requirements

a. All roof and ground mounted mechanical equipment shall be screened pursuant to the requirements of the Ontario Development Code.

b. Screening shall include plant and building materials compatible with the project design so it is well integrated and hidden within the project area.

c. Building and plant materials used for screening shall be compatible with the architectural style and planting palette used on the project area.

d. All ground level screening shall comply with the requirements of the Ontario Development Code Section 6.02.030 (Protection of Intersection Visibility).

ii. Fences, Walls, and Hedges

Fences, walls and hedges shall comply with Section 6.02.030 (Protection of Intersection visibility) of the Ontario Development Code, Engineering Department corner sight distance standards, and all other applicable city standards. Fences and wall shall be made of decorative materials that are compatible with, or enhance the overall architectural character of the project. All fences, walls and hedges shall be in scale with the development, and shall be used for screening, site enhancement, and creating a safer living environment for residents and their guests. All decorative walls, monuments, and/or other similar features, shall not encroach in to the public street right of way.

Figure 4-10: Landscape Planting Legend

PROPOSED PLANT PALLET

INTERIOR VALLEY

DRY INTERIOR CALIFORNIA
DROUGHT TOLERANT PLANTINGS

SYMBOL	BOTANICAL NAME COMMON NAME	PLANT TYPE	QTY/CONTAINER SIZE
	RHAPHIOLEPIS UMBELLATA MINOR DWARF WHITE HAWTHORNE	MEDIUM SHRUB	(7) 5 GALLON
	CORDYLINE 'SENSATION' RED CORDYLINE	MEDIUM SHRUB	(2) 5 GALLON
	BULBINE FRUTESCENS ORANGE STALKED BULBINE	LOW SHRUB	(4) 1 GALLON
	LONICERA SEMPERVIRENS CORAL HONEYSUCKLE	GROUND COVER 30" o.c.	(12) 1 GALLON
	NANDINA DOMESTICA DOMESTIC BAMBOO	VERTICAL SHRUB	(5) 5 GALLON
	KURAPIA	ORNAMENTAL GRASS	(10) 1 GALLON
	CISTUS SALVIIFOLIUS WHITE ROCKROSE	LAWN SUBSTITUTES 30" o.c.	1 GALLON 36" o.c.
	HARDENBERGIA VIOLACEA HAPPY WANDERER	VINE	(1) 5 GALLON

PROPOSED TREE LIST

INTERIOR VALLEY

DRY COASTAL CALIFORNIA
DROUGHT TOLERANT PLANTINGS

SYMBOL	BOTANICAL NAME COMMON NAME	PLANT TYPE	CONTAINER SIZE
	QUERCUS TOMENTELLA ISLAND OAK	30' - 40'	36" BOX

[THIS PAGE INTENTIONALLY LEFT BLANK]

5. PARKING AND CIRCULATION

5.1. Site Accessibility

The site shall be designed to promote safety for residents by only allowing limited vehicular and pedestrian access into and across the site. This can be achieved through building orientation and placement, and use of proper fences and gates to limit access to residents and their guests.

5.2. Vehicle Circulation

The project site shall be designed with parking access to the individual garages from alley, and shall provide all guest parking outside of development (on or off site) to ensure accessibility. Location of drive aisles and entries shall be approved ty the City Engineer. Vehicular circulation shall be designed in a way that promotes pedestrian safety and proper access to the parking garage areas.

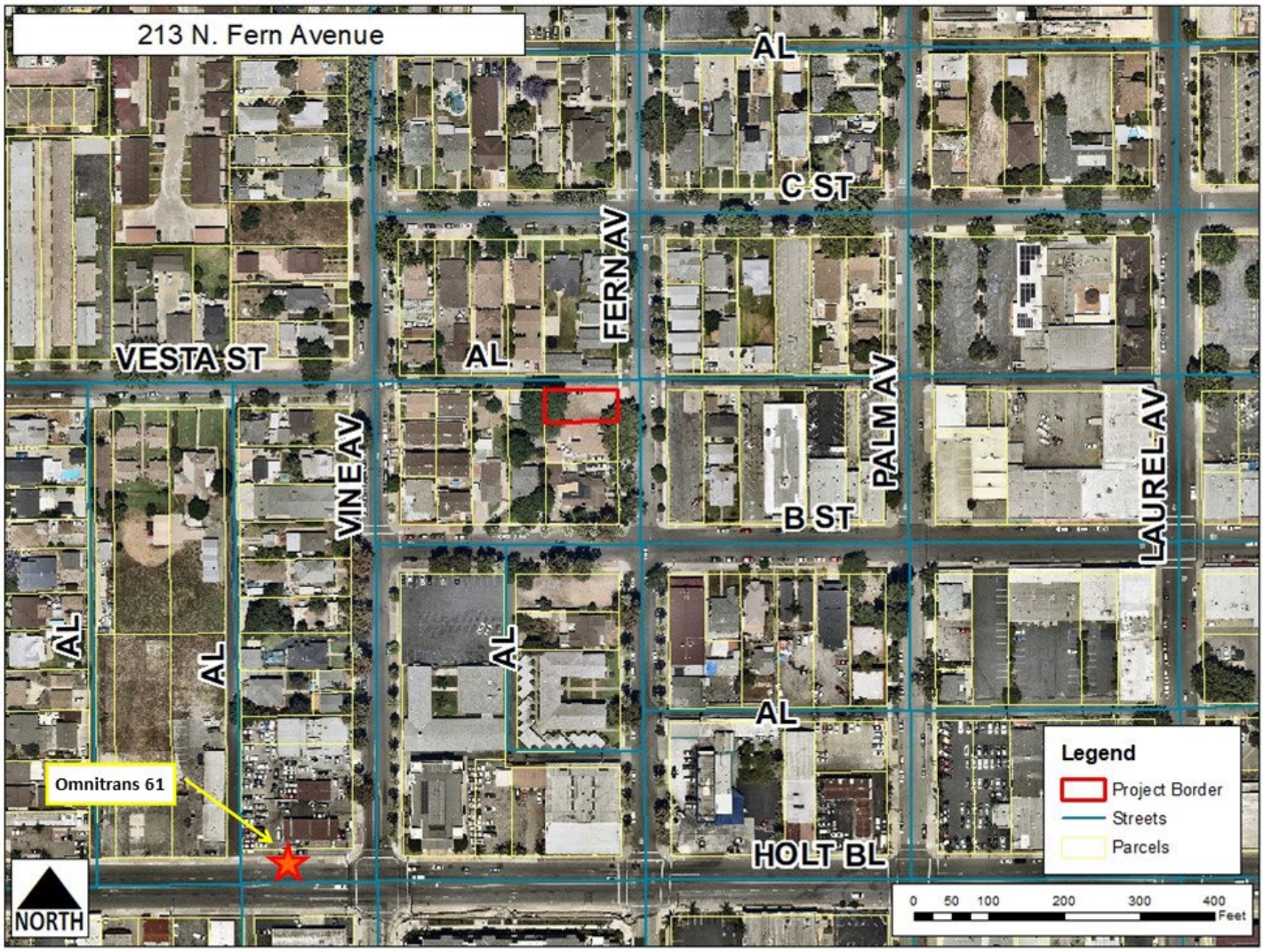
5.3. Pedestrian Circulation

Site design must provide for safe pedestrian circulation across the project site by separating the pedestrian areas from the vehicular access. This includes, but is not limited to, accessibility from the parking motor court to garages area to unit entries, site amenities, and perimeter sidewalk areas. Fencing and gates may be used to limit public access to resident-only areas.

5.4. Access to Mass Transit

Proposed Development Project within the PUD area should encourage the use of the existing bus stops by providing pedestrian connections to westbound line [Omnitrans 61] with a bus stop located on the northwest corner of Holt Boulevard and Vine Avenue (see Figure 5-1: Access to Mass Transit).

Figure 5-1: Access to Mass Transit



5.5. Public Right-of-Way Improvements

i. The public right-of-way shall be improved with each proposed development. The public right-of-way improvements required are to include, but are not limited to the following: street pavement, curb & gutter, parkway landscaping, parkway irrigation, public sidewalk, traffic signing, striping and fiber optic infrastructure. The extent of the required improvements shall be determined for each development plan. At a minimum the improvements shall incorporate all items along the street frontages of the properties to be developed with proper transitioning if the entire block frontage is not being installed with a particular development. Improvements along the street frontage for the entire block may be required at the time of development plan review.

5.6. Infrastructure

Water service will be provided from the existing water infrastructure in Fern Avenue, and sewer connections will be made to the existing sewer infrastructure in the alley. A dry well, as storm water detention, will be constructed on site for on-site storm water drainage and storm water runoff. The drywell shall be maintained by the property owner. In addition, there is a master-planned storm drain fronting the property based on the City's Master Plan of drainage.

5.7. Parking Requirements

i. On-Site Parking Requirements

The number of parking spaces provided is based on the number of bedrooms contained within each of the dwelling units proposed, and is subject to the following requirements.

a. All required resident parking spaces shall be provided on-site, except fractional spaces may be provided off-site;

b. Resident parking shall be provided in 2 car enclosed garages.

c. Each dwelling unit is intended for occupancy by one family only, regardless of bedroom size (s) provided in a particular unit. Parking for dwellings shall be provided on-site, pursuant to the requirements of Table 5-1: Minimum Parking Requirements below, except that guest parking may be provided on-street, pursuant to Section 5.7.ii (On-Street Parking) of this Planned Unit Development (PUD).

Table 5-1: Minimum Parking Requirements

Use	Parking Spaces Required
Multiple-Family Dwellings:	
• One-Bedroom Unit	1.75 parking spaces per unit (at least one space shall be in a garage or carport)
• Two or more Bedroom Unit	2.0 parking spaces per unit (at least one space shall be in a garage or carport)
Guest Parking	1 Space per 5 dwellings

ii. On-street Parking Requirements

On-street parking may be utilized to satisfy guest parking requirements, subject to the following conditions:

a. On-street parking may be used to satisfy guest parking requirements only, and shall not be used for required resident parking.

b. On-street parking shall only be counted along the public streets surrounding the project site, on the side of the street adjoining the project, excluding the alley to the north of the site (West Vesta Street).

c. On-street parallel parking spaces shall be calculated by the length of unobstructed curb adjacent to the project site.

iii. Parking Standards

All parking space size and location requirements shall conform to the standards set forth in Section 6.03.045 (Off-Street Parking Standards) of the Ontario Development Code.

[THIS PAGE INTENTIONALLY LEFT BLANK]

6. DESIGN GUIDELINES

6.1. Building Orientation and Streetscapes

Building orientation shall be designed to minimize noise impacts, aide in providing site safety, create proper accessibility to unit entries and parking garage areas. Maximize views from each of the residential units. Design should be done in a way to maximize each unit's ability to provide private and open space while prioritizing privacy for all tenants.

6.2. Architectural Character

The PUD Architectural style and design is a modern interpretation of the "Mediterranean" style. The design will provide gabled roofs, with clay tile eaves. lower roof pitch (3:12), rough sawn beams, and a roof well for mechanical equipment. The unit with street frontage will have a covered porch. The garage doors will have beam accents in the overhang above.

6.3. Architectural Details

The new building designed for this PUD, shall be consistent in design and detail with style throughout the project. Architectural details should complement and enhance openings and accentuate overall design of the buildings. Detailing can be achieved through the use of multi planes and recessed materials to create interesting exterior elevations.

6.4. Materials and Color

Materials and color scheme shall be compatible with, and complementary to the overall style of the development project. New Multiplex on the site will utilize light colors, pop outs and recesses to break up the building planes. Dark colored doors, trim, window casings, and sills will define openings and entries with black wrought iron accents at doors, eaves, gates and balconies. All colors shall be complementary to the architectural style and utilize primarily earth tones. Materials specified will be a combination of smooth troweled stucco plaster and rough sawn exposed wood beams. A Mediterranean architectural style clay tile roof shall be used for the roof covering.

6.5. On-Site Lighting

i. Decorative light fixtures attached to the buildings shall be compatible with the architectural style of the buildings, shall be provided for this development.

ii. All other on-site lighting shall meet development standard of the Ontario Development Code.

6.6. Signage

Signs within the project area shall comply with the Division 8.01 (Sign Regulations) of the Ontario Development code.

6.7. Off Site Improvements

All off-site improvements shall be installed in accordance with the City standards, and to the satisfaction of the City Engineering department.

[THIS PAGE INTENTIONALLY LEFT BLANK]

7. ADMINISTRATION

7.1. Items Not Addressed in PUD

Any terms, requirements, or regulations not addressed within this PLANNED UNIT DEVELOPMENT document shall be governed by the City of Ontario Development Code, the regulations of the General Mixed Use zones and City Standards.

7.2. Development Applications

Development Plan approval, pursuant to the requirements of Ontario Development Code Section 4.02.025 (Development Plans), shall be required for the physical alteration of a lot, the construction of a building, or the addition or significant alteration of an existing building. A Development Plan application shall be submitted to the Planning Department on a City application form pursuant to the requirements of Ontario Development Code Division 2.02 (Application Filing and Processing), commencing with Subsection B (Discretionary Permits and Actions) of Section 2.02.015 (Application Processing Procedures).

7.3. Administrative Exceptions

Deviation from the development standards set forth in this document may be granted up to a maximum of 10 percent by the Zoning Administrator. Any deviation that is greater than 10 percent shall require variance approval.

[THIS PAGE INTENTIONALLY LEFT BLANK]

Planned Unit Development

Fern Townhomes Ontario, California

[THIS PAGE INTENTIONALLY LEFT BLANK]

TABLE OF CONTENTS

1. INTRODUCTION 5

Figure 1-1: Project Location Map 6

Figure 1-2: Site Plan 7

2. OBJECTIVES 9

The Ontario Plan 9

2.1 Land Use Element Goals and Policies 9

2.2 Housing Element Goals and Policies 10

2.3 Community Design Element Goals and Policies 11

2.4 Fern Townhomes Objectives 12

Figure 2-1: Downtown Land Use District Map 13

3. LAND USE PLAN 15

3.1 Land Use Plan / Allowable Uses 15

Figure 3-1: Land Use District Map [Exhibit LU-1 Land Use Plan of TOP] 15

3.2 Residential Use 16

3.3 Permitted Uses List 16

4. DEVELOPMENT REGULATIONS 18

4.1 Residential Density. 18

4.2 Project Density 18

4.3 Building Height 18

4.4 Building Setbacks 19

Table 4-1: Minimum Building Setbacks 19

4.5 Access 20

4.6 Open Space 20

4.7 Private Space 20

4.8 Common Open Space 21

4.9 Site Landscaping 21

4.10 Screening 22

Figure 4-10: Landscape Planting Legend 23

5. PARKING AND CIRCULATION 25

5.1 Site Accessibility 25

5.2 Vehicle Circulation 25

5.3 Pedestrian Circulation 25

5.4 Access to Mass Transit 25

Figure 5-1: Access to Mass Transit Map 26

5.5 Public Right of Way Improvements 26

5.6 Infrastructure 27

5.7 Parking Onsite Parking Requirements 27

Table 5-1: Minimum Parking Requirements 28

6. DESIGN GUIDELINES 30

6.1 Building Orientation and Streetscapes 30

6.2 Architectural Character 30

6.3 Architectural Details 30

6.4 Materials and Colors 30

6.5 On-Site Lighting 31

6.6 Signage 31

6.7 On-Site Improvements 31

7. ADMINISTRATION 33

7.1 Items Not Addressed in PUD 33

7.2 Development Plan Applications 33

7.3 Administrative Exceptions 33

1. INTRODUCTION

This document is intended to function as a set of planning and design principles, development regulations and performance standards to guide and govern the development of an infill area of approximately 0.11 – acres of land, which is currently vacant, within a developed area. The development is comprised of a single vacant lot surrounded by existing residences. The lot is at the corner of North Fern Avenue (to the East) and West Vesta Street (existing Alley to the North). Access is available through the existing alley known as West Vesta Street (see Figure 1.1 Project Location Map).

The project site is located within The Ontario Plan Downtown Mixed Use Land Use District and the MU-1 (Downtown Mixed Use) zoning district which requires the establishment of a Planned Unit Development (PUD) prior to development. The Planned Unit Development (PUD) is set forth in the Ontario Development code section 4.01.030 (Planned Unit Development (PUD) and Amendments). Upon approval, this PUD will establish the land use and development standards for this particular project site. The Fern Townhome Planned Unit Development (PUD) will provide development standards unless otherwise defined herein, definitions and interpretations contained in the Development code shall apply.

City staff and private developers shall rely on this PUD to determine whether precise plans for development will be adequate and will meet the City's land use and design objectives.

Figure 1-1: Project Location Map

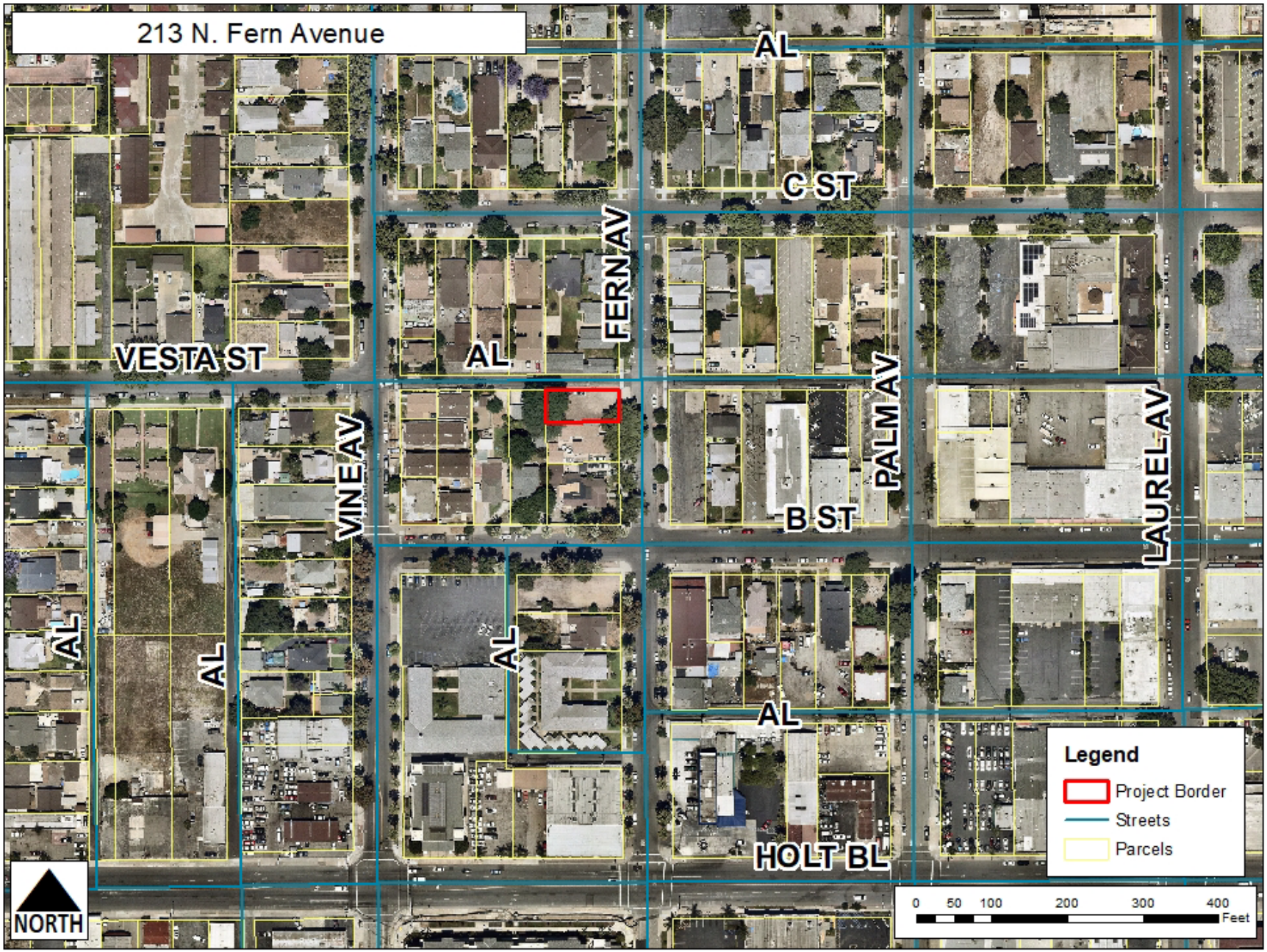
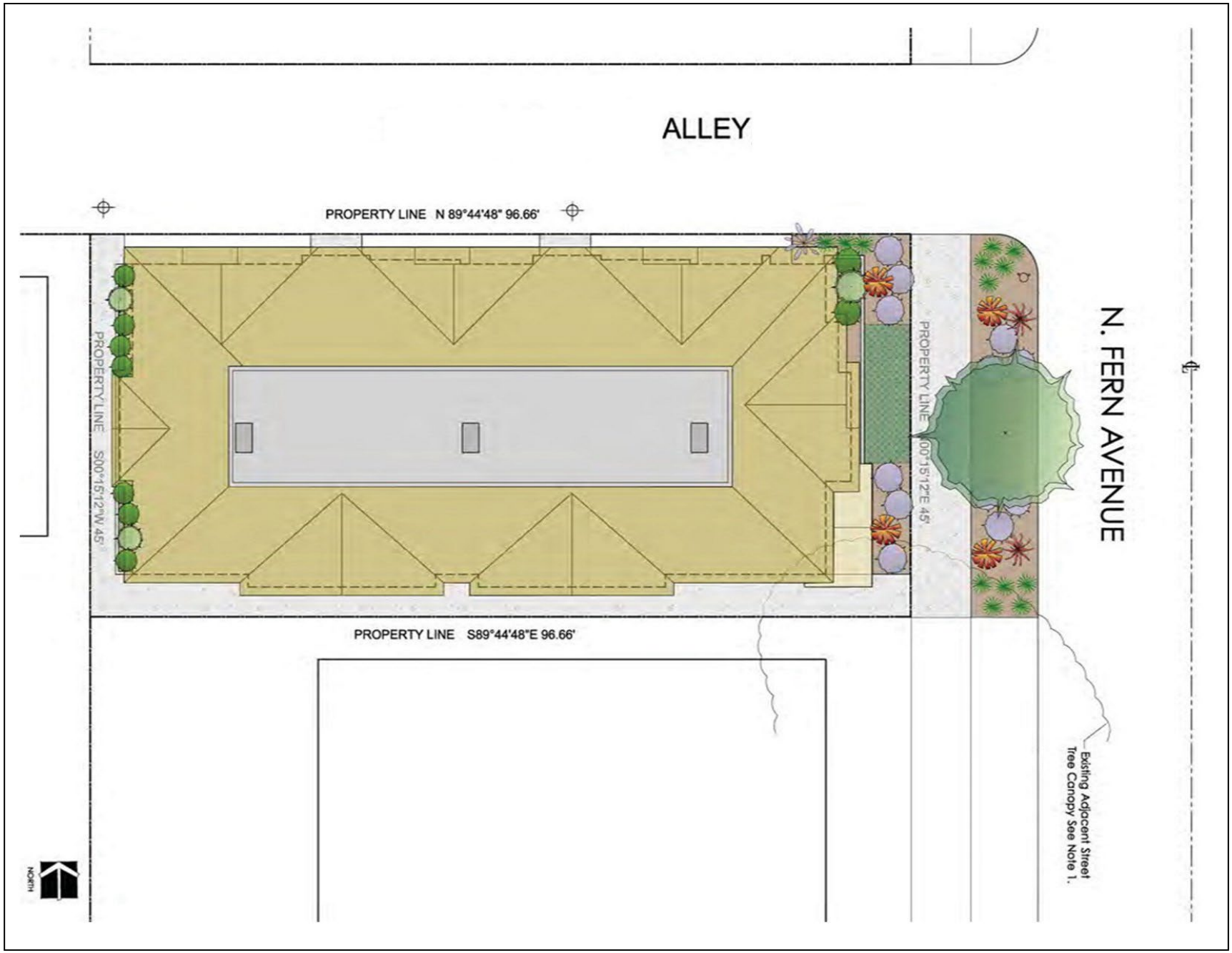


Figure 1-2: Site Plan



[THIS PAGE INTENTIONALLY LEFT BLANK]

2. OBJECTIVES

The Ontario Plan, which includes the City's General Plan (Policy Plan), designates the project area as part of the Downtown Mixed Use District (see Figure 2-1: Downtown Land Use District Map). The Downtown Mixed Use District designation requires approval of a Planned Unit Development (PUD) to develop the property. Additionally, the designation specifies a residential density range of 25.1-75 units per acre and a maximum floor area ratio (FAR) of 2.0 for office and retail uses if required.

The Ontario Plan goals and policies furthered by this Planned Unit Development are as follows:

2.1. Land Use Element Goals and Policies

i. LU1 – Balance. A community that has a spectrum of housing types and price ranges that match the jobs in the city and that make it possible for people to live and work in Ontario and maintain a quality of life.

   a. LU1-1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, and foster the development of transit.

      - The PUD supports the goal by providing housing in the downtown core to maximize infrastructure and foster the development of transit.

ii. LU2 – Compatibility. Compatibility between a wide range of uses and resultant urban patterns and forms.

   a. LU2-2 Buffers. We require new uses to provide mitigation or buffers between existing uses where potential adverse impacts could occur. Additional mitigation is required when new uses could negatively impact environmental justice areas.

      - The PUD takes into consideration the existing uses on the surrounding properties and provides privacy buffers with decorative masonry walls, landscaping and setbacks.

iii. LU3 – Flexibility. Staff, regulations and processes that support and allow flexible response to conditions and circumstances in order to achieve the Vision.

   a. LU3-1 Development Standards. We maintain clear development standards which allow flexibility to achieve our Vision.

      - The PUD implements the flexibility anticipated by city development standards.

2.2. Housing Use Element Goals and Policies

i. H1 – Neighborhoods and Housing. Stable neighborhoods of quality housing, ample community services and public facilities, well-maintained infrastructure, and public safety that foster a positive sense of identity.

   a. H1-4 Historical Preservation. We support the preservation and enhancement of residential structures, properties, street designs, lot configurations, and other reminders of Ontario's past that are considered to be local historical or cultural resources.

      - The PUD is located within the Residential District of Downtown Ontario. The PUD will ensure the architectural enhancements complement the existing historic housing surrounding the project.

ii. H2 – Housing Supply and Diversity. Diversity of types of quality housing that are affordable to a range of household income levels, accommodate changing demographics, and support and reinforce the economic sustainability of Ontario.

   a. H2-5 Housing Design. We require architectural excellence through adherence to City design guidelines, thoughtful site planning, environmentally sustainable practices and other best practices.

      - The PUD is located within the Residential District of Downtown Ontario. The PUD will ensure the architectural enhancements complement the existing historic setting of the project location.

   b. H2-6 Infill Development. We support the revitalization of neighborhoods through the construction of higher-density residential developments on underutilized residential and commercial sites.

      - The PUD implements higher density residential development within the downtown core to support nearby businesses and assist in area revitalization.

2.3. Community Design Element Goals and Policies

i. CD1 – Image and Identity. A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

   a. CD1-1 City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

      - The PUD supports the policy goal by incorporating a diverse urban housing type into the downtown core.

   b. CD1-2 Place Types. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.

      - The PUD is located within the Residential District of Downtown Ontario. The PUD will ensure the architectural enhancements complement the existing historic setting of the project location.

ii. CD2 – Design Quality. A high level of design quality resulting in neighborhoods, commercial areas, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

   a. CD2-1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through:

      - Building volume, massing, and height to provide context-appropriate scale and proportion;

      - A true architectural style which is carried out in plan, section and elevation through all aspects of the building and site design and appropriate for its setting; and

      - Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.

      - The PUD will ensure that architectural features and finishes which convey a particular style will be implemented to complement the existing historic setting of the project location.

2.4. Fern Townhomes Objectives

This Planned Unit Development provides guidelines for development of the project area. The following objectives are intended to provide a general framework for establishing development standards to ensure proper development of the project area.

i. Develop high quality, housing.

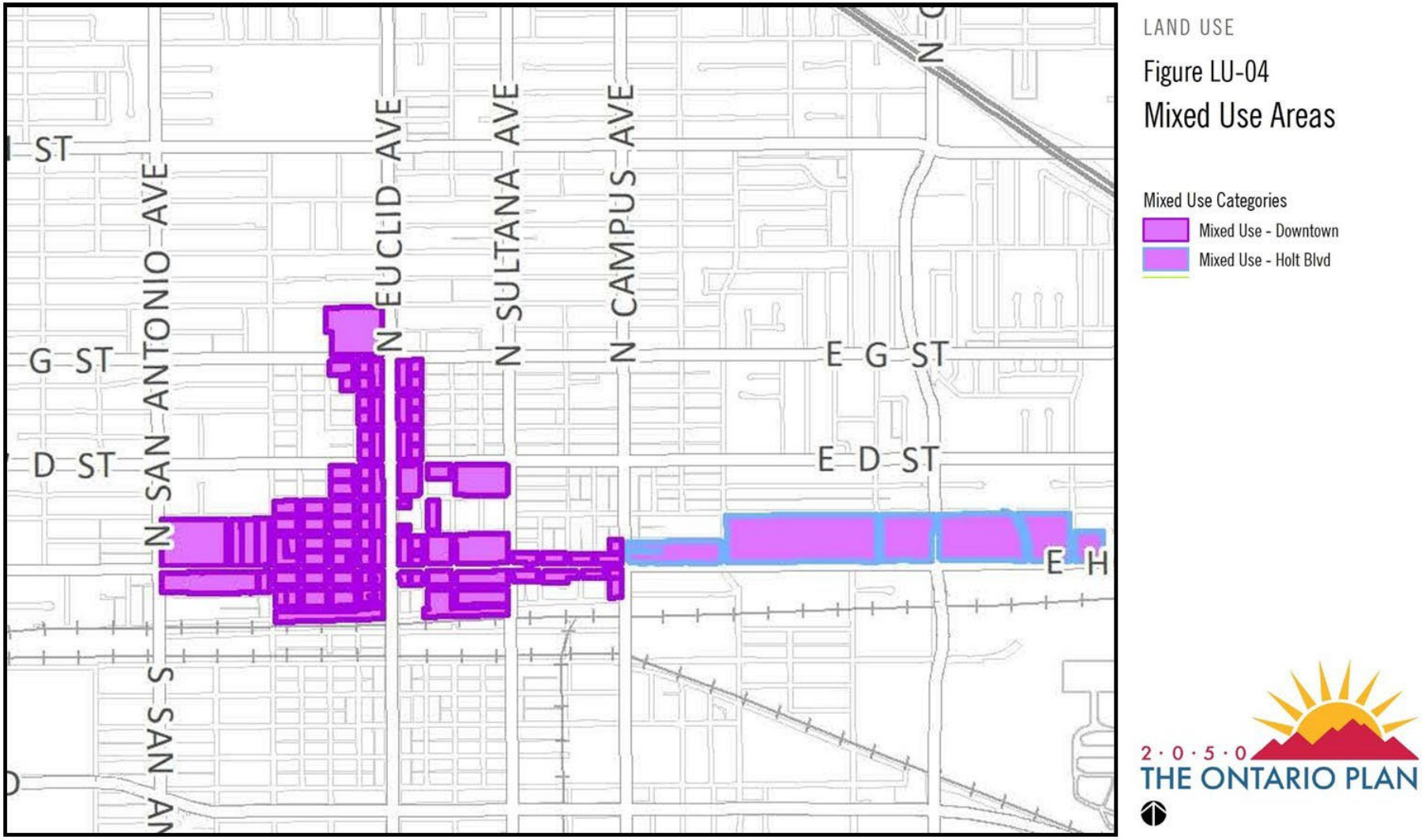
ii. Establish appropriate relationships among new residential neighborhoods as well as with adjacent land use.

iii. Provide new housing designed for families with children.

iv. Provide area of private and passive open space with each unit to include private balconies and attractive entries.

v. Provide flexible spaces at ground level which can be used as a Home Office or additional living space.

Figure 2-1: Downtown Growth Area Map



[THIS PAGE INTENTIONALLY LEFT BLANK]

3. LAND USE PLAN

3.1. Land Use Plan /Allowable Uses

The Project site is located within the Downtown Mixed Use Area Policy Plan (General Plan) land use district, and the MU-1 (Downtown Mixed-Use) zoning district, which implements the Downtown Mixed Use area. The MU-1 zoning district was established to accommodate and intensive mixture of vertical and horizontal retail and office uses at a development intensity of up to 2.0 FAR, and residential uses at a density of 25 to 75 dwelling units per acre. Development projects within the MU-1 zoning district are intended to maintain a pedestrian friendly atmosphere, while at the same time enhancing the historic character of the area.

Consistent with the intent of the Downtown Mixed Use Area and the MU-1 zoning district, the project site is designated Multiple Family Residential (MFR) land use designation. Exhibit 3.1 MU-1 (Mixed Use Downtown) depicts the Planned Unit Development boundary and zoning designation.

Figure 3-1: MU-1 (Mixed Use Downtown) District Map

3.2. Residential Use

The project site is envisioned to be developed with three attached housing units. All units will be two story with two car parking garages below and the living areas on upper/second level. A landscape buffer with trees and a planter is provided along Fern Avenue. Units will be accessed via a new paved walkway. All units will have private balconies.

3.3. Permitted Uses List

The Permitted Land uses within the 213 N. Fern Avenue Planned Unit Development (PUD) are as follows:

i. Multiple family residential dwellings

ii. Motor vehicle parking ancillary to multiple family housing developments

iii. Temporary uses as permitted within the residential districts of the City of Ontario Development Code subject to an Administrative Permit.

iv. Other land use compatible with multiple family residential development projects, as determined by the Zoning Administrator.

Uses may be prohibited through rental contracts and agreements as provided by the owner and project management, unless prohibited by Federal, State or local laws.

[THIS PAGE INTENTIONALLY LEFT BLANK]

4. DEVELOPMENT REGULATIONS

4.1. Residential Density

Residential density shall be 25.1 to 70 dwelling units per acre.

4.2. Project Density

This particular combined infill project site consists of 0.09 acres of land. This zone density will require a minimum of (3) dwellings and a maximum of (7) dwellings.

4.3. Building Height

No structure shall exceed 35 feet in height, except that the maximum height may be exceeded by roof mounted equipment, architectural projections, chimneys, elevator towers, parapet walls and any other roof top structures by up to 10% of the allowed building height. No rooftop equipment shall be visible from anywhere on the project site, public streets or adjacent properties, and shall be fully screened with appropriate architectural parapet walls or appropriate roof treatments. Roof mounted equipment shall not exceed the height of the structures and appurtenances used to screen the equipment.

i. No roof mounted equipment proposed. All HVAC units shall be placed within the attic space of the proposed roof structure, and condenser units shall be ground-mounted and properly screened.

4.4. Building Setbacks

Table 4-1: Minimum Building Setbacks

Minimum Setbacks:	Distance
From North Fern Avenue (East):	
▪ Building	7 FT
▪ Porches, Patio Covers, and Similar Architectural Projections**	5 FT
From Vesta Street/Alley (North)	
▪ Building	5 FT
▪ Garage Entry	6 FT
From Interior Property Line (South):	
▪ Building	5 FT
From Rear Property Line (West):	
▪ Building	5 FT
▪ Porches, Patio Covers, and Similar Architectural Projections**	5 FT
2nd story Architectural Projections and Balconies	**3 FT**

**No projection may encroach into any necessary easements

i. All setbacks shall be measured from the property lines. Placement of buildings, structures, fences, walls, utility facilities, yards etc. will be based on the street's rights of way and the property line dimensions. Allowable encroachments in yards include (maximum 6'-0" high) property line fences and gates, landscaping, paving and public utilities.

4.5. Access

Project vehicular access is from the northernly alley. Pedestrian access is from Fern Avenue.

4.6. Open Space

Open space shall be provided for the passive and the active recreation opportunities within the project site. Two types of open space are required, private and common open space. These open space areas are for the use of the on-site residents and their guests. Required street setback areas are not counted towards the common open space requirements.

4.7. Private Open Space

Private open space shall be provided for each residential unit in order to provide private outdoor areas which can be enjoyed for the exclusive use by the occupant of the residential unit and their guests. Types of areas considered private open space include balconies, decks and patios and enclosed yard areas.

Private open spaces are achieved with second floor balconies in each residential unit and shall have direct access from each residential unit. Residential units shall have a minimum size of private open space pursuant to Section 6.01.010.E (Open Space Requirements for Single-Family Small Lot Subdivisions, and Multiple-Family and Mixed-Use Development Projects) of the Ontario Development Code. The space may be provided in multiple areas (e.g. balconies, covered porches, a yard and a patio, etc.), a s long as the total area of the spaces meets the minimum private open space requirement of 30 square feet for the unit. The minimum dimension for private open space shall be no less than 5 feet in any direction. Balconies shall be a minimum dimension of 5’-0” x 6’-0”.

4.8. Common Open Space

Common Open Space shall be provided to allow for both passive and active types of recreation, along with the site landscape amenities. Common open space is achieved along the landscape buffer along Fern Avenue. These areas are for use by project residents and their guests. The Project site is located in an urbanized downtown area which provides access to many shared amenities including a public park (Ontario Town Square) within a quarter mile of the site.

Landscaping

4.9. Site Landscaping

A conceptual landscape plan shall be submitted with each Development Plan within the 213 N. Fern Avenue PUD area. The plan shall specify all landscape and hardscape elements for the development plan site. Detailed Landscape and Irrigation plans shall be required prior to the issuance of building permits.

The detailed plans shall show location of ground mounted utility boxes and equipment, along with the methods of screening for these items from the public right of way and adjacent residences where possible (see Figure 4-1: Conceptual Landscape Planting Legend).

The Landscape and irrigation plan shall be designed with water conservation in mind, utilizing "California friendly" species and drought tolerant planting materials. The landscaping and irrigation shall comply with AB 1881, and all other laws and regulations related to planting materials.

Compliance with State and Federal Laws

a. Provide landscaping and an irrigation system, which promotes the conservation of water as required by the Water Conservation in Landscaping Act of 2006 (AB 1881), commencing with the California Government Code Section 65591.

4.10. Screening

i. General Requirements

a. All roof and ground mounted mechanical equipment shall be screened pursuant to the requirements of the Ontario Development Code.

b. Screening shall include plant and building materials compatible with the project design so it is well integrated and hidden within the project area.

c. Building and plant materials used for screening shall be compatible with the architectural style and planting palette used on the project area.

d. All ground level screening shall comply with the requirements of the Ontario Development Code Section 6.02.030 (Protection of Intersection Visibility).

ii. Fences, Walls, and Hedges

Fences, walls and hedges shall comply with Section 6.02.030 (Protection of Intersection visibility) of the Ontario Development Code, Engineering Department corner sight distance standards, and all other applicable city standards. Fences and wall shall be made of decorative materials that are compatible with, or enhance the overall architectural character of the project. All fences, walls and hedges shall be in scale with the development, and shall be used for screening, site enhancement, and creating a safer living environment for residents and their guests. All decorative walls, monuments, and/or other similar features, shall not encroach in to the public street right of way.

Figure 4-10: Landscape Planting Legend

PROPOSED PLANT PALLET

INTERIOR VALLEY

DRY INTERIOR CALIFORNIA
DROUGHT TOLERANT PLANTINGS

SYMBOL	BOTANICAL NAME COMMON NAME	PLANT TYPE	QTY/CONTAINER SIZE
	RHAPHIOLEPIS UMBELLATA MINOR DWARF WHITE HAWTHORNE	MEDIUM SHRUB	(7) 5 GALLON
	CORDYLINE 'SENSATION' RED CORDYLINE	MEDIUM SHRUB	(2) 5 GALLON
	BULBINE FRUTESCENS ORANGE STALKED BULBINE	LOW SHRUB	(4) 1 GALLON
	LONICERA SEMPERVIRENS CORAL HONEYSUCKLE	GROUND COVER 30" o.c.	(12) 1 GALLON
	NANDINA DOMESTICA DOMESTIC BAMBOO	VERTICAL SHRUB	(5) 5 GALLON
	KURAPIA	ORNAMENTAL GRASS	(10) 1 GALLON
	CISTUS SALVIIFOLIUS WHITE ROCKROSE	LAWN SUBSTITUTES 30" o.c.	1 GALLON 36" o.c.
	HARDENBERGIA VIOLACEA HAPPY WANDERER	VINE	(1) 5 GALLON

PROPOSED TREE LIST

INTERIOR VALLEY

DRY COASTAL CALIFORNIA
DROUGHT TOLERANT PLANTINGS

SYMBOL	BOTANICAL NAME COMMON NAME	PLANT TYPE	CONTAINER SIZE
	QUERCUS TOMENTELLA ISLAND OAK	30' - 40'	36" BOX

[THIS PAGE INTENTIONALLY LEFT BLANK]

5. PARKING AND CIRCULATION

5.1. Site Accessibility

The site shall be designed to promote safety for residents by only allowing limited vehicular and pedestrian access into and across the site. This can be achieved through building orientation and placement, and use of proper fences and gates to limit access to residents and their guests.

5.2. Vehicle Circulation

The project site shall be designed with parking access to the individual garages from alley, and shall provide all guest parking outside of development (on or off site) to ensure accessibility. Location of drive aisles and entries shall be approved ty the City Engineer. Vehicular circulation shall be designed in a way that promotes pedestrian safety and proper access to the parking garage areas.

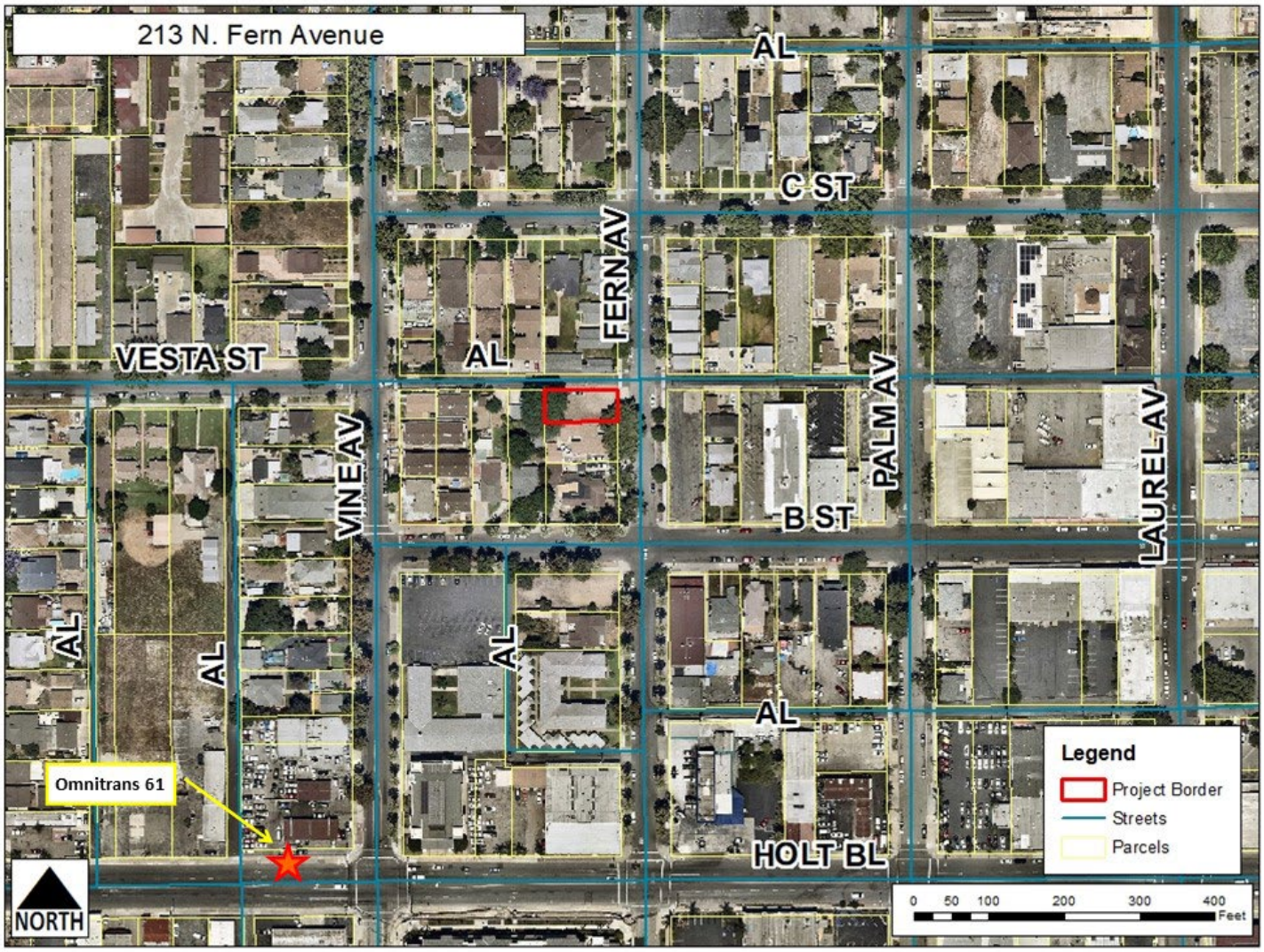
5.3. Pedestrian Circulation

Site design must provide for safe pedestrian circulation across the project site by separating the pedestrian areas from the vehicular access. This includes, but is not limited to, accessibility from the parking motor court to garages area to unit entries, site amenities, and perimeter sidewalk areas. Fencing and gates may be used to limit public access to resident-only areas.

5.4. Access to Mass Transit

Proposed Development Project within the PUD area should encourage the use of the existing bus stops by providing pedestrian connections to westbound line [Omnitrans 61] with a bus stop located on the northwest corner of Holt Boulevard and Vine Avenue (see Figure 5-1: Access to Mass Transit).

Figure 5-1: Access to Mass Transit



5.5. Public Right-of-Way Improvements

i. The public right-of-way shall be improved with each proposed development. The public right-of-way improvements required are to include, but are not limited to the following: street pavement, curb & gutter, parkway landscaping, parkway irrigation, public sidewalk, traffic signing, striping and fiber optic infrastructure. The extent of the required improvements shall be determined for each development plan. At a minimum the improvements shall incorporate all items along the street frontages of the properties to be developed with proper transitioning if the entire block frontage is not being installed with a particular development. Improvements along the street frontage for the entire block may be required at the time of development plan review.

5.6. Infrastructure

Water service will be provided from the existing water infrastructure in Fern Avenue, and sewer connections will be made to the existing sewer infrastructure in the alley. A dry well, as storm water detention, will be constructed on site for on-site storm water drainage and storm water runoff. The drywell shall be maintained by the property owner. In addition, there is a master-planned storm drain fronting the property based on the City's Master Plan of drainage.

5.7. Parking Requirements

i. On-Site Parking Requirements

The number of parking spaces provided is based on the number of bedrooms contained within each of the dwelling units proposed, and is subject to the following requirements.

a. All required resident parking spaces shall be provided on-site, except fractional spaces may be provided off-site;

b. Resident parking shall be provided in 2 car enclosed garages.

c. Each dwelling unit is intended for occupancy by one family only, regardless of bedroom size (s) provided in a particular unit. Parking for dwellings shall be provided on-site, pursuant to the requirements of Table 5-1: Minimum Parking Requirements below, except that guest parking may be provided on-street, pursuant to Section 5.7.ii (On-Street Parking) of this Planned Unit Development (PUD).

Table 5-1: Minimum Parking Requirements

Use	Parking Spaces Required
Multiple-Family Dwellings:	
• One-Bedroom Unit	1.75 parking spaces per unit (at least one space shall be in a garage or carport)
• Two or more Bedroom Unit	2.0 parking spaces per unit (at least one space shall be in a garage or carport)
Guest Parking	1 Space per 5 dwellings

ii. On-street Parking Requirements

On-street parking may be utilized to satisfy guest parking requirements, subject to the following conditions:

a. On-street parking may be used to satisfy guest parking requirements only, and shall not be used for required resident parking.

b. On-street parking shall only be counted along the public streets surrounding the project site, on the side of the street adjoining the project, excluding the alley to the north of the site (West Vesta Street).

c. On-street parallel parking spaces shall be calculated by the length of unobstructed curb adjacent to the project site.

iii. Parking Standards

All parking space size and location requirements shall conform to the standards set forth in Section 6.03.045 (Off-Street Parking Standards) of the Ontario Development Code.

[THIS PAGE INTENTIONALLY LEFT BLANK]

6. DESIGN GUIDELINES

6.1. Building Orientation and Streetscapes

Building orientation shall be designed to minimize noise impacts, aide in providing site safety, create proper accessibility to unit entries and parking garage areas. Maximize views from each of the residential units. Design should be done in a way to maximize each unit's ability to provide private and open space while prioritizing privacy for all tenants.

6.2. Architectural Character

The PUD Architectural style and design is a modern interpretation of the "Mediterranean" style. The design will provide gabled roofs, with clay tile eaves. lower roof pitch (3:12), rough sawn beams, and a roof well for mechanical equipment. The unit with street frontage will have a covered porch. The garage doors will have beam accents in the overhang above.

6.3. Architectural Details

The new building designed for this PUD, shall be consistent in design and detail with style throughout the project. Architectural details should complement and enhance openings and accentuate overall design of the buildings. Detailing can be achieved through the use of multi planes and recessed materials to create interesting exterior elevations.

6.4. Materials and Color

Materials and color scheme shall be compatible with, and complementary to the overall style of the development project. New Multiplex on the site will utilize light colors, pop outs and recesses to break up the building planes. Dark colored doors, trim, window casings, and sills will define openings and entries with black wrought iron accents at doors, eaves, gates and balconies. All colors shall be complementary to the architectural style and utilize primarily earth tones. Materials specified will be a combination of smooth troweled stucco plaster and rough sawn exposed wood beams. A Mediterranean architectural style clay tile roof shall be used for the roof covering.

6.5. On-Site Lighting

i. Decorative light fixtures attached to the buildings shall be compatible with the architectural style of the buildings, shall be provided for this development.

ii. All other on-site lighting shall meet development standard of the Ontario Development Code.

6.6. Signage

Signs within the project area shall comply with the Division 8.01 (Sign Regulations) of the Ontario Development code.

6.7. Off Site Improvements

All off-site improvements shall be installed in accordance with the City standards, and to the satisfaction of the City Engineering department.

[THIS PAGE INTENTIONALLY LEFT BLANK]

7. ADMINISTRATION

7.1. Items Not Addressed in PUD

Any terms, requirements, or regulations not addressed within this PLANNED UNIT DEVELOPMENT document shall be governed by the City of Ontario Development Code, the regulations of the General Mixed Use zones and City Standards.

7.2. Development Applications

Development Plan approval, pursuant to the requirements of Ontario Development Code Section 4.02.025 (Development Plans), shall be required for the physical alteration of a lot, the construction of a building, or the addition or significant alteration of an existing building. A Development Plan application shall be submitted to the Planning Department on a City application form pursuant to the requirements of Ontario Development Code Division 2.02 (Application Filing and Processing), commencing with Subsection B (Discretionary Permits and Actions) of Section 2.02.015 (Application Processing Procedures).

7.3. Administrative Exceptions

Deviation from the development standards set forth in this document may be granted up to a maximum of 10 percent by the Zoning Administrator. Any deviation that is greater than 10 percent shall require variance approval.

[THIS PAGE INTENTIONALLY LEFT BLANK]

CITY OF ONTARIO *Agenda Report* **March 21, 2023**	**SECTION:** **PUBLIC HEARINGS**
Department: Planning Prepared By: Edmelynne V Hutter Staff Member Presenting: Scott Murphy, Executive Director Community Development Approved By:	Submitted To: Council/OHA Approved: _____ Continued To: _____ Denied: _____ Item No: 18

SUBJECT: **A PUBLIC HEARING TO CONSIDER AN APPEAL OF THE PLANNING COMMISSION'S DECISION TO APPROVE THE USE OF AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT (STATE CLEARINGHOUSE NO. 2021070364) AND A DEVELOPMENT PLAN (FILE NO. PDEV21-047) TO CONSTRUCT NINE INDUSTRIAL BUILDINGS TOTALING 4,263,454 SQUARE FEET ON 216.36 GROSS ACRES (196.83 NET ACRES) OF LAND LOCATED EAST OF HAVEN AVENUE, WEST OF DOUBLEDAY AND DUPONT AVENUES, NORTH OF JURUPA STREET AND SOUTH OF AIRPORT DRIVE**

RECOMMENDATION: That the City Council consider and adopt a Resolution upholding the Planning Commission's approval of the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) and Development Plan (File No. PDEV21-047) and deny the appeal.

THE FOLLOWING COUNCIL GOALS ARE BEING ACHIEVED:
Invest in the Growth and Evolution of the City's Economy
Operate in a Businesslike Manner
Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

FISCAL IMPACT: The proposed Development Plan will facilitate the development of nine industrial buildings totaling 4,263,454 square feet. This will result in a one-time payment to the City for permitting and plan check fees, development impact fees, as well as increase in on-going property tax revenue for the City.

BACKGROUND & ANALYSIS: On December 15, 2021, the Applicant, McDonald Property Group, submitted a Development Plan (PDEV21-047) application requesting approval to develop 216.36 gross acres (196.83 net acres) of land with nine industrial buildings totaling 4,263,454 square feet. The project is located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, within the Light Industrial land use district of the California Commerce Center Specific Plan, hereinafter referred to as "Project" or "Application". The full project description is provided in the January 24, 2023, Planning Commission Agenda Report for the Project

(See Attachment B).

On January 4, 2023, the Development Advisory Board conducted a hearing to consider the Application and recommended that the Planning Commission approve the Project subject to conditions. On January 24, 2023, the Planning Commission conducted a public hearing to consider the Application and the Development Advisory Board's recommendation. Following a presentation of Staff's findings and after receipt of all public correspondence and testimony, the Planning Commission considered the Project and unanimously voted (4-0) to adopt Resolution Nos. PC23-007 and PC23-008, approving the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearing House No. 2021070364) and the Development Plan, respectively.

APPEAL: On February 3, 2023, an appeal, hereinafter referred to as "Appeal", was submitted by the following organizations: Pomona Valley Audubon Society – Suzanne Thompson; Center for Biological Diversity – Hallie Kutak; Endangered Habitat League – Dan Silver; and Los Angeles Audubon Society – Travis Longcore, hereinafter referred to as "Appellant". The Appellant is appealing the Planning Commission's decision to approve the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report and approval of File No. PDEV21-047. A copy of the Appeal application and Appellant statement is included as Exhibit 1 of this report. The Appellant includes three points as the basis of the Appeal, which are summarized below:

Appeal Basis #1: The Appeal states that there was an abuse of discretion in that the individuals from the public were allotted three minutes to speak, and the Project applicant requested additional time, and was allowed additional time and that other individuals from the public were also allotted three minutes to speak but were not offered more time.

Appeal Basis #2: The Appeal states that the decision was not supported by the record in that there were misstatements of fact regarding Burrowing Owls present on the Project site and provides the following counter arguments: [a] Burrowing Owls do not live in storm drains; [b] the Project site is appropriate habitat for the owls; [c] other conditions such as events, police motorcycle training, semi-truck driver training, car shows, photo shoots, and spraying along Carnegie Avenue are the cause of the owls' decline; [d] owls are not a risk to airplane bird strikes, and that the Ontario International Airport should have a large raptor control program; [e] owls can be translocated as close as 10.5 miles away, which can help genetic diversity among owls in the area; and [f] pending litigation with OIAA needs to be settled before the City can approve the Project.

Appeal Basis #3: The Appeal states that there is inadequate accounting for greenhouse gas emissions and pollution and that The Ontario Plan 2050 Certified Environmental Impact Report does not adequately account for cumulative impacts of warehouse infrastructure, biodiversity loss, and loss of bio-productive land, and impacts the Project would have as a warehouse development.

Requested Relief: The Appellant is requesting relief as follows: [1] revoke the approval of PDEV21-047; [2] produce and circulate an EIR specific to this project; [3] and to ensure that the City Council is the final body to approve the Project.

RESPONSE TO THE APPEAL: The City and Applicant have reviewed the Appeal and responses are provided in the discussion below and in the Exhibits to this report.

Response to Appeal Basis #1: Appellant alleges that applicant Bruce McDonald was given additional time to speak after his time expired, while other speakers were given only three minutes, and, as such, the Planning Commission did not provide the public with a fair and reasonable opportunity to be heard. Appellant's allegations are legally incorrect and do not amount to an abuse of discretion. The Appellant states that the applicant "Bruce McDonald, was given a three-minute time frame for his remarks. He ran out of time, asked the chair for more time, and was granted additional time approximately double to what he had been allotted." A review of a video of the January 24, 2023, Planning Commission meeting (available online at ontarioca.gov under: Agendas, Planning Commission, January 4, 2023) confirms that, after receiving a presentation by staff on Public Hearing Item D, PDEV21-047, the Chair of the Planning Commission called on the Applicant, Mr. McDonald, to make the Applicant's presentation (applicant presentations always proceed public comments in support or in opposition to the project under consideration at a public hearing held by the PC). He made his timed presentation and then asked the Chairperson for additional time to speak, however, the video confirms that he ultimately spoke only for five (5) minutes. Five (5) minutes is the amount of time the Planning Commission's Rules and Procedures D.6(f) grants an applicant to speak at a public hearing and was granted additional time. Even if Appellant believes Mr. MacDonald should only have spoken for 3 minutes, a 5-minute presentation is consistent with the Planning Commission's Rules and Procedures, and, further, Per Chaffee v San Francisco Public Library Comm'n (2005) 134 Cal.App.4th 109, 115, the Chair of the Planning Commission may exercise reasonable discretion in departing from the normal time limits allocated to speakers. In addition, separate from his presentation, Mr. McDonald answered multiple questions posed by multiple members of the Commission. Mr. McDonald, as the applicant, also presented a timed rebuttal presentation at the end of the public hearing and then, separate from his rebuttal, answered multiple questions posed by multiple members of the Commission. Per Ribakoff v. City of Long Beach (2018) 27 Cal.App.5th 150, 172, the Planning Commission may impose time limits on each member of general public but is not required to impose time limits on comments by Commission members and invited speakers. As such, the Planning Commission was not required to limit the amount of time given to the Commission members in asking their questions of Mr. McDonald.

Appellant also alleges that the public expected to have five minutes each for comments "based on the meeting agenda and the Ontario Planning Commission Rules and Procedures" and that limiting the public's comments to three minutes while allowing Mr. McDonald additional time violated the Brown Act. Appellant is incorrect. The January 24, 2023, Agenda states, with regard to Public Hearings: "Members of the public will then be allowed five (5) minutes each to speak, unless there are a number of person's wishing to speak and then the Chairperson will allow only three (3) minutes, to accommodate for more persons." Per Chaffee v San Francisco Public Library Comm'n (2005) 134 Cal.App.4th 109, 115, the Chair of the Planning Commission may exercise reasonable discretion in departing from the normal time limits allocated to public speakers. Here the Agenda contained multiple substantive items and the meeting was over four hours long, making the Chair's decision to restrict speaking time, an action which the public was apprised by Agenda could happen, entirely reasonable.

Response to Appeal Basis #2: The Appeal states that the decision was not supported by the record in that there were misstatements of fact regarding Burrowing Owls present on the Project site. The Appeal provides counter arguments including: a) Burrowing Owls do not live in storm drains; b) the Project site is appropriate habitat for the owls however; c) other conditions such as events, police motorcycle training, semi-truck driver training, car shows, photo shoots, and spraying along Carnegie Avenue are the cause of the owls' decline; d) owls are not a risk to airplane bird strikes, and that the Ontario International Airport should have a large raptor control program; e) owls can be translocated at close as 10.5 miles away, which can help genetic diversity among owls in the area; and f) there is a pending lawsuit that could affect the Project and could put the City of Ontario at legal risk if the Project is approved. The following discussion addresses each sub-item above.

Response to Appeal Basis #2a, 2b, 2e: ELMT Consulting, the Applicant's biologist consultant, prepared a response to the Appellant's assertion that Burrowing Owls do not live in storm drains, that the Project site is appropriate habitat for Burrowing Owls, and that owls can be translocated closer to the Project site. The response from ELMT refutes the assertions and includes photographs showing evidence of owls in and around the storm drain inlet pipe including owl pellets, whitewash and use of a perch installed next to the inlet pipe. In addition, ELMT states that the Project site, as a habitat, would not be able to support owls in perpetuity because the Project site is surrounded by development and is essentially an island of undeveloped land. Other translocation efforts in the region, where the designated habitat is surrounded by development, were ultimately unsuccessful because the owls did not have the ability to safely disperse away from and into these areas, and that the same situation will likely present itself in this Project site.

The supporting studies conclude that the most appropriate solution to this safety issue is to relocate the owl from the project site to a safer site in some other location. The Burrowing Owl Relocation Plan ("Relocation Plan") prepared for the HUB OIA Project outlines a way to successfully achieve such relocation. The Appellant also provides erroneous information on the current and historic state of owls in the City, and more importantly, on the project site. The analysis included in the Addendum and TOP EIR adequately addresses the project's potential impact on owls. As explained therein, the applicant will comply with the City's existing regulations and TOP policies through implementation of a Relocation Plan, which is based on the most recent site-specific technical studies. Compliance with these requirements will ensure potential impacts to owls are less than significant. The Appellant's claims to the contrary are thus hyperbolic and inaccurate.

Response to Appeal Basis #2c: Regarding the Appellant's claim about events and activities taking place at the Project site, the City has not approved Temporary Use Permits for temporary events at the Project site. In regard to the Appellant's statement that pesticide was being sprayed on burrow openings, in 2020 the City was made aware of the observed activity and investigated. It was determined that the activity observed was a City contractor conducting weed abatement activities and was spraying adjacent to the street curb within the public right-of-way and the contractor was instructed to avoid spraying along those streets.

Response to Appeal Basis #2d: The Appeal stated that Burrowing Owls are not a danger to aircraft. However, the Federal Aviation Administration National Wildlife Strike Database documents 17 strike incidents that involve Burrowing Owls. The Wildlife Strike Database includes information and incidents of bird strikes reported by pilots, and/or discovery of remains or partial remains during

aircraft inspections and runway inspections. Burrowing Owl bird strikes do occur at Ontario International Airport and risks to aircraft and risks to the owls exist. The Federal Aviation Administration issued Advisory Circular No. 150-5200-33C, which states in Section 2.8.4 that "Other Hazardous Wildlife Attractants. Other land uses (e.g., conservation easements, parks, wildlife management areas) or activities not addressed in this AC may have the potential to attract hazardous wildlife. Regardless of the source of the attraction, when hazardous wildlife is noted on a public-use airport, each certificate holder must take prompt remedial action(s) to protect aviation safety and all non-certified airports should take prompt remedial action(s) to protect aviation safety."

On behalf of the Applicant, Mead & Hunt, Inc. prepared a response, dated February 21, 2023, addressing the Appellant's claim that the wildlife hazard information included in the January 4, 2023, Planning Commission Agenda Report made misstatements about Burrowing Owls and the hazards they pose for aircraft. The Mead & Hunt response provides and reiterates that Federal Aviation Administration data shows that 410 incidents nationwide involve Burrow Owl strikes, with 17 occurring at Ontario International Airport. The response goes on to explain that, as required, the Ontario International Airport Authority has prepared and maintains an FAA-approved Wildlife Hazard Management Plan to address raptors and other species identified as posing a hazard to aircraft. The Wildlife Hazard Management Plan includes responsibilities, policies and procedures to identify and abate wildlife hazards within the airfield and wildlife attractants in the surrounding area. In other words, the Ontario International Airport Authority, in compliance with the Federal Aviation Administration requirements, has a Wildlife Hazard Management Plan in place that includes raptor control.

Response to Appeal Basis #2f: The City is not involved in any litigation over the property and/or the Project. Rather, Inland Valley Advocates filed a legal challenge against OIAA and CanAm Ontario, LLC (an affiliate of McDonald). The City was not named in the lawsuit.

Response to Appeal Basis #3: The Appeal objects to the analysis of greenhouse gas emissions and pollution in the TOP 2050 EIR and to the "lack of attention to the Project's cumulative impacts as they relate to noise pollution, air quality, and truck trips." The City Council certified TOP EIR (SCH # 2021070364) which analyzed the direct and physical changes in the environment that would be caused by implementation of TOP; focusing on changes to land use associated with the buildout of the proposed land use plan, and impacts resultant of population and employment growth in the City. The project proposes land uses consistent with TOP 2050. The significant unavoidable adverse impacts that were identified in TOP EIR included: agriculture resources, air quality, cultural resources, greenhouse gas (GHG) emissions, noise and transportation/traffic.

To the extent that Appellants restate their objections to the TOP 2050 EIR, such objections are not appropriately before the City Council in this Appeal as the TOP 2050 EIR has been certified, the TOP 2050 approved, and those actions are now final and beyond challenge. Accordingly, the only question that may be considered by the City when evaluating the Project is whether one of the three exceptions triggering the need for a subsequent or supplemental EIR in CEQA Guidelines 15164 and 15162 exists.

Based on the conclusions of the previously certified TOP EIR, the analysis in the Project Addendum, CEQA and the CEQA Guidelines, including Sections 15164 and 15162, the Project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary, nor is there a need for additional mitigation with implementation of the number of conditions of approval required by the City based on the results of the site-specific technical studies for burrowing owl and airport safety.

The Appeal provides no substantial evidence that the Project's impacts (whether project-level or cumulative) as to any environmental topic analyzed in the Addendum will result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR, nor any substantial evidence that any changes or additions to TOP EIR analyses are necessary, nor a need for additional mitigation.

The Project will be subject to all applicable mitigation measures adopted by the City with regard to the TOP 2050 EIR, including a number of conditions of approval required by the City per the TOP 2050 EIR and based on the results of the site-specific technical studies for burrowing owl and airport safety.

City of Ontario
Planning Department
303 East B Street
Ontario, California 91764
Phone: 909.395.2036
Fax: 909.395.2420

Appeal Application Form

Instructions:

1. *Pursuant to Ontario Development Code Division 2.04 (Appeals), any person having legal standing may appeal and action or decision to the Appeal Authority, including but not limited to an applicant, resident, business owner, or any person owning real property within the City, that is aggrieved by an interpretation, action, or decision made by any City agency or department, or by an Approving Authority.*

2. *Within 10 days following the action or decision being appealed, an appeal request must be filed with the Planning Department on an Appeal Application Form, along with the required filing fees. The appeal request must include a statement identifying the specific action or decision that is being appealed, the specific grounds for the appeal, and the relief requested from the Appeal Authority.*

3. *An appeal of an action or decision made by an Approving Authority following a hearing, is limited to those matters raised during the hearing and contained in an appeal statement. The Appeal Authority cannot consider any matter that was not raised during the hearing before the Approving Authority and contained in the appeal statement.*

4. *The Appeal Authority that will hear the appeal request is limited to taking testimony and making its decision based solely on the specific grounds specified by the appellant in the Appeal Application Form, insofar as they make an adequate claim pursuant to Ontario Development Code Section 2.04.010. When the decision of an Approving Authority is appealed, you are limited to raising only those issues you or someone else raised during the hearing before the Approving Authority and stated in the Appeal Application Form.*

GENERAL INFORMATION (PRINT OR TYPE) See attachment for further appellants.

Appellant: Pomona Valley Audubon Society
Address: 2058 N. Mills PMB426
Claremont CA 91711
Phone: 909-767-9079 Email: pomonavalleyaudubon@gmail.com

Appellant's Representative: Chatten-Brown, Carstens, & Minteer
Address: 2200 CA-1
Hermosa Beach CA 90254
Phone: 310-798-2402 Email: dpc@cbcearthlaw.com

(For staff use only)
File No(s): PDEV21-047
Date: 2/3/23
Rec'd by: AA
Fees Paid: $1,506.30
☐ *Cash* ☐ *Check (#* _____)
☑ *Credit Card*
Receipt No.: 334042

SUBJECT OF APPEAL

This application is hereby filed pursuant to Ontario Development Code Division 2.04 (Appeals), appealing a decision or action of the following Authority:

☐ Department/Agency Head ☐ Development Advisory Board ☐ Zoning Administrator
☐ Historic Preservation Subcommittee ☐ Historic Preservation Commission ☒ Planning Commission

Project File No(s).: PDEV21-047 Date of Action/Decision: 1/24/23
The application being appealed requests the following *(attach additional sheets as necessary)*: See attached

List the specific action(s) or decision(s) that is/are being appealed (attach additional sheets as necessary): See attachment

APPEAL STATEMENT

Please check the box that best describes your reason(s) for the appeal:

- ☐ Abuse of discretion.
- ☐ Decision was not supported by the record.
- ☒ Abuse of discretion and decision was not supported by the record.

State the specific grounds for the appeal and the relief requested (please be specific and attach additional sheets if necessary): See attachment

APPEAL APPLICATION CERTIFICATION

I, the undersigned, hereby certify that the statements and information provided in this **Appeal Application Form,** and in any attached exhibits, present the data and information required for this application to the best of my ability, and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

Date: 2/3/23 Signature: Suzanne Thompson

Name (print or type): Suzanne Thompson

Appellants: Pomona Valley Audubon Society, Center for Biological Diversity, Endangered Habitat League, Los Angeles Audubon Society

Center for Biological Diversity-- Hallie Kutak hkutak@biologicaldiversity.org

Endangered Habitat League—Dan Silver dsilverla@me.com 213-804-2750, 8424 Santa Monica Blvd., Suite A 592, Los Angeles, CA 90069-4267

Los Angeles Audubon Society—Travis Longcore travislongcore@laaudubon.org , (323) 876-0202, 3791 Wade St, Los Angeles, CA 90066

Appellant's Representative: Chatten-Brown, Carstens, and Minteer

SUBJECT OF APPEAL

Planning Commission

Project File No.: PDEV21-047 Date of Decision: January 24, 2023

The application being appealed requests the following: That the approval of PDEV21-04 be revoked and that an EIR be produced that is specific to this project and that explores project alternatives. We believe the City of Ontario is at legal risk for not having a project-specific EIR. We further request that the City Council be asked to vote and make the final decision on this project.

The specific actions or decisions that are being appealed are the Planning Commission approval of the project, the lack of an EIR for this particular project, and that the Planning Commission is the final body for approval.

APPEAL STATEMENT

Reasons for the appeal: Abuse of discretion and the decision was not supported by the record.

The specific grounds for the appeal include:

ABUSE OF DISCRETION

There is no specific case law that supports a finding in either direction regarding the length of time a project applicant may speak compared to the community during a public hearing. The determination of how much time should be allotted to each speaker is generally within the discretion of the local government agency conducting the hearing. However, the agency must ensure that all speakers are given a fair and reasonable opportunity to be heard and that the hearing is conducted in a manner that is consistent with the principles of due process. This did not occur.

At the Planning Commission meeting, the applicant, Bruce MacDonald, was given a three-minute time frame for his remarks. He ran out of time, asked the chair for more time, and was granted additional time approximately double to what he had been allotted. In contrast, the individuals making public comments who had expected to have five minutes for comments based on the meeting agenda and the Ontario Planning Commission Rules and Procedures were cut off

in the middle of their comments after three minutes and not offered more time. Thus, the applicant was allowed to present all his comments, but the public in opposition was not. This is an abuse of discretion and a violation of the Brown Act. It resulted in the inability of citizens to counter the misstatements of fact put on the record by the applicant's consultants. These could not be addressed in written comments before the meeting because some of these misstatements of fact came up at the meeting. There was not time in the meeting to give an adequate correction to the misstatements which then influenced the decision of the commission. The amount of information given to the Commission as well as to the public was restricted.

THE DECISION WAS NOT SUPPORTED BY THE RECORD

The decision was not supported by the record because of the many misstatements of fact made by the applicant's consultants which were then repeated by some of the Commissioners.

Misstatements of fact presented at the meeting include:

The owls were living in storm drains. Burrowing owls do not live in storm drains. The owls sometimes perch within metal water drainage structures so that they can be protected from raptors and see the field. They do not create burrows in storm drains or live there.

The area is not suited for burrowing owls. Most likely, the owls have lived successfully in this field for hundreds of years—including in all the years the airport has been in existence. Dr. Daniel Guthrie, a biologist and Burrowing Owl expert, surveyed these fields in 2017 and found eleven, thriving, active burrows. For years, the fields have provided excellent habitat for the owls. See the Appendix for his survey report.

The conditions in the fields are suited for Burrowing Owls, but compromises to the population have occurred because the city allows events, police motorcycle training, semi-truck driver training, car shows, photo shoots in the fields, and spraying into the burrows along Carnegie. The burrowing owl population is declining not because the landscape is unsuitable, but because of the activities that the City of Ontario has approved or hired, despite the knowledge that this is habitat for a California species of special concern. For example, there is evidence that owls abandoned their nests or removed dead chicks after a pesticide company hired by the City of Ontario sprayed burrow openings with pesticides. If this land were managed for the owls' benefit, the owls would thrive there.

The owls are a risk to aviation. From FAA birdstrike data, Burrowing Owls are not a danger to avian from bird strikes. There is no evidence in that data record from 2008 to 2021 of a Burrowing Owl causing damage to an aircraft at Ontario Airport. https://wildlife.faa.gov/search

Burrowing Owls will not be an attractor for large raptors if an airport has a good large raptor control program. Large raptors exist near all airports globally and every airport should have a good raptor control strategy. Evidently the Ontario International Airport does not have adequate raptor control because they allow tall poles which are an attractant to hawks throughout the proposed project land. See the picture of large hawks on those poles along Carnegie Avenue in the Appendix. Even if conserved, it would be unlikely for burrowing owls to increase the raptor population by much because of its population size relative to other animals such as squirrels,

rabbits, rats, mice, and other rodents. Some of these are prey for the owls as well as the raptors, and in that sense burrowing owls can actually help decrease some rodents that attract raptors.

The FAA disallows conservation of burrowing owls. Airports across the country offer some of the best burrowing owl habitat, with successful conservation programs. The idea that the FAA does not allow this kind of conservation is patently false. Burrowing owls are able to thrive in airport and airport adjacent areas, making this habitat suitable for burrowing owls,

Biodiversity can be exported; the owls should be moved 30-40 miles away. The decision to support this project was made based on a misunderstanding of what it means to protect biodiversity. Exporting biodiversity – in this case represented by the BUOW – will not maintain genetic diversity or local populations within the Ontario area that are critical to the health and wellbeing of this increasingly rare species in this area. The documents associated with this decision fail to adequately analyze the "off-site in Ontario" option.

Furthermore, owls do not have to be translocated 30-40 miles away. They could be moved to a closer location, which would be a better result to maintain Ontario's biodiversity. The applicants' consultants mistakenly stated that Burrowing Owls need to be translocated 30-40 miles from their original site. According to research by the San Diego Zoo Wildlife Alliance researchers who are widely recognized as the experts on Burrowing Owls, translocation needs to be a minimum of about 10.5 miles for best success (Personal communication from SDZoo Burrowing Owl expert to Suzanne Thompson). See Appendix.

Thus the owls could be translocated within or very near to Ontario. Failure to fully explore a closer option for translocation is an omission that compromises biodiversity within the City of Ontario.

The pending lawsuit is not a risk to this decision or to the City of Ontario. If the airport devised a plan that is being challenged by the lawsuit with the airport on this same project, this needs to be settled before the city of Ontario can approve the plan. Otherwise, the city is approving a plan that may change, get thrown out, or otherwise place the city at legal risk. The City Attorney at the Planning Commission meeting shifted his answer to the question asked by a commissioner, and skewed the answer to one that did not address the complexity of legal risk to the City of Ontario:

2:15:45 – Commissioner D'Andre Lampkin's question: "In regards to the statement made by attorney Helen Macky, I just want to see if we can get clarification or assess the veracity of her statement with the city attorney regarding any liability for the city of Ontario."

2:16:12 – City attorney responds with a question: "Commissioner, are you trying to get clarification on whether or not the city is involved in the lawsuit?"

2:16:16 – Commissioner D'Andre Lampkin: "Correct."

2:16:18 – City attorney responds: "I can confirm that is not the case. We are not involved."

This is an inadequate response to the initial question asked by Commissioner Lampkin. We restate our opinion here that the City of Ontario may be at legal risk in moving this project

forward while a lawsuit is pending on this same project, even if the City is not involved in that lawsuit.

OTHER BASES FOR APPEAL

Public Resources Code. Appeal is pursuant to Public Resources Code section 21151 subdivision (C).

Warehouses and Cumulative Impact. We incorporate all our previous objections to the inadequate accounting for greenhouse gas emissions and pollution.

Lack of attention to noise pollution, air quality, and truck trips are a continual problem for this project. Neither the addendum nor the TOP 2050 address emissions in an appropriately cumulative manner. We challenge the City of Ontario to think about planning in a different way due to the growing severity of climate crisis:

According to Gernot Stoeglehner (2020), "Environmental problems like climate change, loss of bioproductive land or biodiversity are very likely to become the main drivers for environmental protection, as they will be crucial for human survivability in the 21st century. They are extremely difficult to address in planning and assessment processes, as (1) they are caused by the normal functioning of society and economy, (2) are highly complex and often global, (3) have unclear cause-effect relations with a multitude of origins so that responsibilities remain unclear, but also the effects of mitigation or compensation measures, (4) have long distances or timeframes between cause and effect. (5) Classical means of environmental protection fail, as single measures do not show overall positive effects and the behavioral change of single actors does not solve the problem on a larger, or even global scale (Jänicke and Jörgens 2004)."

"Each project as such may not significantly contribute to the environmental problem, e.g. climate change, but the multitude of (small) projects and planning actions has considerable effects. That means for instance, that assessment methods developed for the project scale are not sufficient, as they are designed to answer assessment questions related to a single case."

We find that the general planning document—TOP 2050—and the specific project does not adequately account for cumulative impacts of warehouse infrastructure, biodiversity loss, and loss of bio-productive land.

The TOP 2050 (Ontario's General Plan with the referenced EIR) is proposed to be the certified EIR for this project. However, this certified EIR does not account for an Initial Study, environmental impact analysis of project specific elements, or public cited weaknesses and associated critiques in the form of previous opposition letters and speaker oral communications. You must take into account these issues or create and circulate an independent EIR for this project. The arguments at the Planning Commission meeting and in response to comments detailing that this is an inappropriate attack are false. By your own process and decisionmaking, TOP 2050's EIR and the EIR for this project are the same. We elaborate further below. Case law supports these claims as noted in our previous objection letter.

Furthermore, the Planning Commission staff proposes that the TOP 2050 SEIR with an addendum is the certified EIR for this project. However, the TOP 2050 SEIR only mentions "warehouse" in a single generalized statement, lacks specific details and, as such, a full EIR needs to be conducted for this specific project (PDEV21-047), to address the weaknesses and associated critiques in the form of previous opposition letters and public comments.

Problems with using an Addendum instead of EIR. There were several statements at the meeting that our critiques are an inappropriate attack on the TOP 2050. We have argued above that the deficiencies within the EIR for the TOP 2050 are relevant in terms of deficiencies that cover this project also. As we have stated, an EIR is mandatory in this case. If there had been an EIR instead of an addendum, some of the omissions and misstatements we address in the documents could have been addressed earlier.

The construction of this project is a topic of controversy as defined by CEQA. CEQA mandates that within projects containing a topic of controvery, an EIR must be circulated when an otherwise might not be. In this case, there are two topics of controversy— warehouse development and the relocation of the burrowing owls. Both now how have longstanding histories of debate within the city of Ontario.

REQUESTED RELIEF

The requested relief is to revoke the approval of PDEV21-047, to produce and circulate an EIR specific to this project, and to ensure that the City Council of Ontario is the final body to approve this project rather than the Planning Commission.

APPENDIX TO APPEAL APPLICATION FORM

1-Dr. Guthrie's 2018 monitoring report.

2-Pesticide spraying into burrows on Carnegie.

3-Large raptors on tall poles along Carnegie.

4-Personal communication from San Diego Zoo Wildlife Alliance expert

SEE PICTURES BELOW

1-Dr. Guthrie's 2017 owl survey of project fields

Imagery ©2017 County of San Bernardino, DigitalGlobe, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2017 1000 ft
Google

C 34° 03' 7" x 117 34' 19"

D 34° 03' 9" x 117° 34' 13"

E 34' 03' 12" x 117° 34' 13"

F 34' 03 17" x 117° 34' 13"

G 34° 03' 24" x 117° 34' 12"

H 34° 03' 30 x 117 34' 12"

I 34 03 22 x 117 34 9

J 34 03 22 x 117 34 6

K 34° 3' 13" x 117° 33' 57"

L 34° 03' 8" x 117° 33' 56"

M 34° 03' 4" 117° 33' 55"

2-Pesticide spraying into burrows on Carnegie.

3-Large raptors on tall poles along Carnegie.

5-Personal communication from San Diego Zoo Wildlife Alliance BUOW expert

To: Suzanne C. Thompson

Tue 12/13/2022 11:42 AM

Hi Suzanne,
Based on our study, we found higher settlement for owls translocated more than 17.5 km (~11 miles). Translocation distance was a secondary driver of settlement, with the presence of cues (either conspecifics or playback/artificial whitewash) being the primary driver. The details can be found in the following sources, but let me know if you have any further questions.

Animal Conservation publication (Animal Conservation - 2022 - Hennessy - Release strategies and ecological factors influence mitigation translocation.pdf) – settlement and dispersal section of results on pages 618-619
https://sandiegozoo.box.com/s/r377vfrf9qsre0llry5oku7sseb6evg6

"When cues were present, settlement was 100% (n = 6) for translocation distances >17.5 km compared to80% settlement (n = 5) for translocation distances <17.5 km."

CEC final report – dispersal distance/settlement results on page 23
https://sandiegozoo.box.com/s/ljs5ugxc4s664zk06rpj1honl9i7zr63

"For settlement within the active translocation group, both cues and translocation distance were significant predictors (n=20, p<0.01, R2=0.57). Classification and regression tree analysis shows that the presence of cues was the primary effect (cues present were associated with increased settlement within 650 meters). There is also a secondary effect of translocation distance in addition to the presence of cues, in that BUOW that were translocated a distance greater than 17.5 km were more likely to settle."

RECEIPT

CITY OF ONTARIO
REVENUE DEPARTMENT
303 E. B STREET
(909) 395-2050
ONTARIO, CA 91764

Application: PDEV21-047
Application Type: Planning/PLANNING/PLANNING/DEVELOPMENT PLAN
Address: 0 E JURUPA ST, ONTARIO, CA 91761

Receipt No. 000000334842

Payment Method	Ref Number	Amount Paid	Payment Date	Cash Drawer ID	Received	Comments
Credit	AB-20230203-6.1	$1,506.30	02/03/2023			

Owner Info.: ONTARIO INTERNATIONAL AIRPORT AUTHOR
303 E B ST
ONTARIO, CA 91764

Work Description: A Development Plan to construct nine industrial buildings totaling 4,281,128 square feet on 196.89 acres of land generally located east of Haven Avenue, west of Doubleday Avenue and Dupont Avenue, north of Jurupa Street and south of Airport Drive, within the IL (Light Industrial) land use district of the California Commerce Center Specific Plan (APNs: 0211-222-47, 0211-222-48, 0211-222-52, 0211-222-53, 0211-222-54, 0211-222-55, 0211-222-56, 0211-232-04, 0211-232-05, 0211-232-06, 0211-232-07, 211-232-011, 0211-232-12, 0211-232-13, 0211-232-14, 0211-232-15, 0211-232-16, 0211-232-17, 0211-232-18, 0211-232-19, 0211-232-20, 0211-232-44, 0211-232-45, and 0211-232-46).

Allen Matkins

Allen Matkins Leck Gamble Mallory & Natsis LLP
Attorneys at Law
865 South Figueroa Street, Suite 2800 | Los Angeles, CA 90017-2543
Telephone: 213.622.5555 | Facsimile: 213.620.8816
www.allenmatkins.com

Heather S. Riley
File Number: 391180.00001/4873-9335-9953.1

Via Electronic Mail

February 28, 2023

Paul S. Leon, Mayor
Debra Porada, Mayor Pro Tem
Alan D. Wapner, Council Member
Jim W. Bowman, Council Member
Ruben Valencia, Council Member
City of Ontario, City Council
Ontario City Hall
303 East "B" Street
Ontario, CA 91764

Re: March 21, 2023 City Council Hearing
The HUB at Ontario International Airport
Appeal of File No. PDEV21-047

Dear Mayor Leon, Mayor Pro Tem Porada and Council Members Wapner, Bowman and Valencia:

This letter is submitted on behalf of McDonald Property Group (McDonald), the applicant of the HUB at Ontario International Airport (Project). As you are aware, the City of Ontario (City) Planning Commission unanimously approved the Project on January 24, 2023, and an appeal of that decision was submitted on February 3, 2023 (Appeal).

The Appeal raises a number of arguments in opposition to the Project. The abuse of discretion claims are best addressed by City staff so those are not addressed in this correspondence. Instead, this letter focuses on the substantive issues raised by the appellants, all of which were properly rejected by the Planning Commission. We urge you to do the same for the reasons outlined below.

The Appeal claims that a number of misstatements were made at Planning Commission regarding the burrowing owls that currently inhabit the Project site. Those arguments, which address the occupancy of a site adjacent to the Ontario International Airport and McDonald's proposed relocation plans, were soundly rejected by the Planning Commission. That decision was based on a lengthy discussion at the January 24, 2023 hearing, as well as the following correspondence:

- January 18, 2023 letter from Allen Matkins regarding the Coalition for Biological Diversity comment letter, a copy of which is attached hereto as Exhibit A;

- January 18, 2023 letter from Allen Matkins regarding the coalition comment letter, a copy of which is attached hereto as Exhibit B;

- January 18, 2023 memo from MIG Riverside, a copy of which is attached hereto as Exhibit C;

- January 18, 2023 letter from Ontario International Airport Authority (OIAA), a copy of which is attached hereto as Exhibit D;

- January 18, 2023 comments from ELMT Consulting, a copy of which is attached hereto as Exhibit E; and

- January 18, 2023 letter from Mead & Hunt , a copy of which is attached hereto as Exhibit F.

Further support for the Planning Commission's decision can be found in the attached comments provided by ELMT Consulting (Exhibit G), Mead & Hunt (Exhibit H) and Urban Crossroads (Exhibit I), which were prepared in response to the claims made in the Appeal.

As *repeatedly* explained in the above documents, the Project site cannot continue to support burrowing owls; the owls must be removed to a distant location; airport operations have been and will be negatively impacted by the owls' ongoing presence; the Project's potential environmental impacts were properly analyzed in an Addendum to The Ontario Plan (TOP) 2050 Environmental Impact Report (EIR); the statute of limitations for challenges to TOP EIR has long passed; and, most importantly, the Project will *not* result in new or more severe significant and unmitigated impacts than those disclosed in TOP EIR. Appellants consistently ignore these facts and simply restate the same invalid arguments. The record undoubtedly supports the Planning Commission's unanimous decision.

Finally, the day of the Planning Commission hearing, a coalition of opponents argued – for the very first time – that "the City of Ontario is in the midst of a lawsuit regarding the same property and project" and therefore, "proceeding with the project before the lawsuit is resolved could put the Commission and/or the City of Ontario at risk of legal action." Appellants are absolutely mistaken – the City is not a party to any such litigation and the obliquely referenced lawsuit does not have an effect on this entitlement process.

First, the City is not involved in any litigation over the property and/or the Project. Rather, Inland Valley Advocates filed a legal challenge against OIAA and CanAm Ontario, LLC (an affiliate of McDonald). As can be seen in the Verified First Amended Complaint, a copy of which is attached hereto as Exhibit J, the City was *not* named in the lawsuit.

Second, the litigation alleged a violation of the California Environmental Quality Act (CEQA) when the OIAA adopted a resolution, a copy of which is attached hereto as Exhibit K, that authorized a Development and Entitlement Agreement (Agreement) on December 23, 2021. The Agreement allowed CanAm the authority to submit an application to the City seeking entitlements for a proposed warehouse development on the Project site. Only *after* (1) the City's approval process was complete, (2) all necessary CEQA review was conducted by the City, and (3) all other agency approvals were received, would the OIAA consider executing a ground lease for the Project site. This litigation does *not* have any effect on the City's pending process; in fact, the exact opposite is true – the OIAA cannot and will not move forward with a ground lease unless or until the City and other interested agencies approve the Project. As such, appellants' claims are erroneous and should be rejected out of hand.

In sum, we request that you disregard appellants' inaccurate and inapplicable claims, deny the Appeal and uphold the Planning Commission's decision. McDonald and its consultant teams will be present at the appeal hearing should additional questions arise. We thank you in advance for your consideration and look forward to being development of the site in the near future.

Very truly yours,

Heather S. Riley

HSR:ptl

cc: Sheila Mautz, City Clerk

EXHIBIT A

Allen Matkins

Allen Matkins Leck Gamble Mallory & Natsis LLP
Attorneys at Law
One America Plaza
600 West Broadway, 27th Floor | San Diego, CA 92101-0903
Telephone: 619.233.1155 | Facsimile: 619.233.1158
www.allenmatkins.com

Heather S. Riley
E-mail: hriley@allenmatkins.com
Direct Dial: 619.235.1564 File Number: 391180.00001/4854-6956-1929.2

Via Electronic Mail

January 18, 2023

Jim Willoughby, Chairperson
Nancy DeDiemar, Vice Chairperson
Guadalupe Anderson
Ken Dean
Rick Gage
D'Andre Lampkin
Nicola Ricci
City of Ontario, Planning Commission
Ontario City Hall
303 East "B" Street
Ontario, CA 91764

Re: January 24, 2023 Planning Commission Hearing
The HUB at Ontario International Airport
Environmental Assessment and Development Plan Review
(File No. PDEV21-047)

Honorable Chairperson Willoughby and Members of the Planning Commission:

This letter is submitted on behalf of McDonald Property Group (McDonald), the applicant of the HUB at Ontario International Airport (Project), in response to the January 3, 2023 letter of the Center for Biological Diversity (CBD Letter). The CBD Letter was submitted to the City of Ontario (City) the morning of the Development Advisory Board (DAB) hearing on the Project.

The CBD Letter displays a marked misunderstanding of planning and zoning law, as well as the California Environmental Quality Act (CEQA). The Ontario Plan 2050 (TOP), which constitutes the City's General Plan, considered full buildout of the City, including development of the exact proposed industrial uses on the Project site. The associated CEQA analysis addressed all potential impacts associated with buildout. There can be no question that the Project, which is proposed on an industrial designated site, was explicitly contemplated in TOP, and thus, the Project was adequately analyzed in the environmental impact report (EIR) certified for TOP.

Consistent with CEQA, the Addendum to the Ontario Plan Environmental Impact Report (Addendum) prepared for the Project determines – based on the information included within the text and its appendices – that the Project will *not* result in any new or more severe significant impacts than were previously analyzed in TOP EIR. Nothing more is required by CEQA, despite the CBD's Letter's erroneous claims to the contrary.

With regard to the Project's potential biological impacts, the Addendum includes a complete review. As explained therein, the Project will comply with the City's existing regulations and TOP policies through implementation of a Burrowing Owl Relocation Plan, which was prepared based on the most recent site-specific technical studies, copies of which are included in Appendix B to the Addendum. Compliance with these requirements will ensure potential impacts to owls are less than significant.

Moreover, the Addendum includes an extensive Project-specific air quality analysis, which was completely ignored by the commenter. As explained therein:

> A detailed air quality assessment (AQ Study) of the proposed project was conducted by Urban Crossroads in February 2022, to identify project-specific air pollutant impacts and recommend additional mitigation if necessary (i.e., other than those applicable measures already identified in TOP EIR). The AQ Study (Appendix A) determined the project would not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable federal or state ambient air quality [threshold] because the project is consistent with the existing Industrial designation in the CCC SP. (Addendum, p. 34.)

Similarly, the Addendum includes a thorough analysis of the Project's potential impacts on nearby sensitive receptors, which was also overlooked by the CBD Letter. (*See*, Addendum, p. 39.) If CBD disagreed with TOP EIR's certified air quality analysis, it was required to raise those concerns at the time the plan was approved in August of 2022. Since the Project would not result in any new or more significant air quality impacts than those analyzed in TOP EIR, no further analysis and/or mitigation is required at this time.

In light of the above responses, coupled with the information submitted by biological, aviation and air quality experts, the CBD Letter should be rejected. We therefore respectfully request that the Planning Commission approve the Addendum and the Development Plan, File No. PDEV21-047. McDonald and its consultant team will be present should questions arise during the Planning Commission hearing. We thank you in advance for your consideration.

Very truly yours,

Heather S. Riley

HSR:ptl

cc: Scott Ochoa, City Manager
Rudy Zeladon, Planning Director
Edmelynne Hutter, Senior Planner

EXHIBIT B

Allen Matkins

Allen Matkins Leck Gamble Mallory & Natsis LLP
Attorneys at Law
One America Plaza
600 West Broadway, 27th Floor | San Diego, CA 92101-0903
Telephone: 619.233.1155 | Facsimile: 619.233.1158
www.allenmatkins.com

Heather S. Riley
E-mail: hriley@allenmatkins.com
Direct Dial: 619.235.1564 File Number: . /0.0

Via Electronic Mail

January 18, 2023

Jim Willoughby, Chairperson
Nancy DeDiemar, Vice Chairperson
Guadalupe Anderson
Ken Dean
Rick Gage
D'Andre Lampkin
Nicola Ricci
City of Ontario, Planning Commission
Ontario City Hall
303 East "B" Street
Ontario, CA 91764

Re: January 24, 2023 Planning Commission Hearing
The HUB at Ontario International Airport
Environmental Assessment and Development Plan Review
(File No. PDEV21-047)

Honorable Chairperson Willoughby and Members of the Planning Commission:

This letter is submitted on behalf of McDonald Property Group (McDonald), the applicant of the HUB at Ontario International Airport (Project), in response to the January 4, 2023 letter submitted by a coalition of entities, including among others, the Robert Redford Conservancy for Southern California Sustainability and the Pomona Valley Audubon Society (Coalition Letter). The Coalition Letter was submitted to the City of Ontario (City) the morning of the Development Advisory Board (DAB) hearing on the Project.

At the outset, it is important to note that comments regarding the adequacy of the environmental impact report (EIR) prepared for The Ontario Plan 2050 (TOP) are untimely and irrelevant. If the authors of the Coalition Letter disagreed with the City's overall planning decisions, those concerns needed to be raised prior to August 16, 2022, the date the City Council certified that analysis. Opponents cannot use this Project to collaterally attack TOP EIR – they are five months too late. Moreover, any letters that were submitted to the City as part of TOP process cannot be relied upon at this time – those unknown claims are immaterial to the current discussion.

The Coalition Letter raises a number of arguments about the adequacy of the Addendum to The Ontario Plan Environmental Impact Report (Addendum) prepared for the Project. The majority of the claims are conclusory in nature and a number are flat out wrong. For instance, the California Environmental Quality Act (CEQA) does not limit the type of document that can be prepared on the basis of so-called "topics of controversy." The Coalition Letter completely misstates CEQA on that point.

Similarly, the City is not relying on a CEQA exemption to approve the Project. Addendums, which are allowed under CEQA Guidelines section 15164, are totally unrelated to any statutory and/or categorical exemptions permitted under other provisions of CEQA and/or the CEQA Guidelines.

Likewise, the CEQA cases obliquely referenced in the Coalition Letter are inapplicable. Merely noting caselaw without including an actual citation is improper, particularly where, as here, the case names and/or years are wrong in every instance. Even if we grant the Coalition Letter authors the benefit of the doubt, none of the closest approximations of potentially referenced cases involve an addendum and therefore, none apply to the current situation.

The Coalition Letter also presents a disingenuous and absolutely wrong argument when it claims that "piggy backing" on the environmental review completed for a General Plan limits the ability of the City's elected officials to review individual land use decisions. There can be no question that the City Council fully understood that it was approving buildout of the City under TOP, it is indisputable that this Project is consistent with the goals and vision of that Citywide planning document and therefore, the potential environmental impacts of the Project were fully analyzed in TOP EIR. Consistent with the requirements of CEQA, the Addendum documents those facts and demonstrates that the Project will not result in any new or more severe impacts.

If an interested party disagrees with the Addendum's conclusions and/or this Planning Commission's ultimate decision on the Project, those individuals have the ability to file an administrative appeal. In that instance, the City Council will indeed have the opportunity to weigh in on this specific Project.

As for the public's involvement in the democratic process, numerous opportunities to weigh in on this Project have and will continue to occur, including the DAB hearing, this Planning Commission and, as noted, in the event of an appeal, City Council. In fact, robust public participation is already evidenced by the submission of numerous comment letters to the DAB.

Next, the Coalition Letter presents inaccurate information on the current status of regional warehouse development and onsite burrowing owls. As to the WAREHOUSE CITY tool mentioned in the Coalition Letter, the website includes a number of caveats and is "based on best

available information."[1] To that point, the mapping tool was *not* generated based on site specific data; instead general data was accumulated based on parcel size, use codes and land use categories to calculate a "best guess" situation that has an admitted "number of limitations."[2] The usefulness of the tool is therefore severely limited.

With regard to the burrowing owl, the Coalition Letter does not take into account the recent focused studies that were conducted for the Project site.[3] Nor does the letter consider the fact that the Project site is located immediately adjacent to the Ontario International Airport (OIA) and within Safety Zone 1 (Runway Protection Zone), Safety Zone 2 (Inner Approach/Departure Zone) and Safety Zone 3 (Inner Turning Zone). The studies, combined with the information contained in the attached June 13, 2022 letter from the Ontario International Airport Authority to the Pomona Valley Audubon Society (an author of the Coalition Letter), demonstrate that the owls must be relocated to another, safer site.

Furthermore, contrary to the claims made in the Coalition Letter, the analysis included in the Addendum and TOP EIR adequately address the Project's potential impact on owls. As explained therein, McDonald will comply with the City's existing regulations and TOP policies through implementation of a Burrowing Owl Relocation Program, which was developed based on site-specific technical studies. Compliance with these requirements will ensure potential impacts to burrowing owl are less than significant.

The Coalition Letter presents information claiming that ongoing OIA operations will result in increased greenhouse gas (GHG) emission impacts. Those claims are irrelevant to the current analysis, which considers the Project's potential impact on the environment. Even if the claims were appropriate, and they are not, the City previously considered cumulative GHG emissions impacts. Notably, TOP EIR concluded that full buildout, which includes this Project, would result in significant direct and cumulative GHG emission impacts. Thus a Statement of Overriding Considerations (SOC) was approved by the City Council when TOP EIR was certified.[4]

In fact, McDonald will implement a number of project design features to reduce GHG emissions as outlined in the City's GHG Reduction Measures Screening Threshold Table, attached to the Addendum as Appendix A-2. The Coalition Letter ignores this information, which is clearly stated in the Addendum, and decries the City's failure to consider cumulative impacts "at a broader scale." Full buildout of the City is the absolute broadest scale possible for the analysis of potential

---

1 https://www.pitzer.edu/redfordconservancy/mapping-data-visualization/

2 https://radicalresearch.shinyapps.io/WarehouseCITY/

3 Copies of these studies are included in Appendix B to the Addendum.

4 The Coalition Letter claims that the Project itself will result in significant and unmitigated impacts. *That is simply not true*. Buildout would cause significant and unmitigated Citywide impacts and therefore, the City Council adopted a SOC when TOP EIR was certified.

GHG impacts. Nothing more is required by CEQA, despite the Coalition Letter's erroneous claims to the contrary.

Similarly, general comments on industrial development as a whole are irrelevant to this current CEQA process. The authors of the Coalition Letter may disapprove of the City's planning efforts, but that disapproval is *not* a valid criticism of this Addendum. And, in any event, the Addendum includes an evaluation of all of the Project's potential environmental impacts, including noise, air quality and transportation. Vague and unsupported complaints about impacts allegedly associated with warehouse development must therefore be rejected.

Finally, complaints about the timing of the release of Project documents are misplaced. The City complied with all applicable state and local requirements, and even if the City erred – which it did not – there was no prejudice. The Coalition Letter and many others were submitted, considered and rejected by the DAB.

As can be seen, the Coalition Letter presents a host of misinformation. When viewed in the proper context, and in light of the information submitted by biological, aviation and other subject-matter experts, the Coalition Letter should be dismissed out of hand.

We therefore respectfully request that the Planning Commission approve the Addendum and the Development Plan, File No. PDEV21-047. McDonald and its consultant team will be present should questions arise during the Planning Commission hearing. We thank you in advance for your consideration.

Very truly yours,

Heather S. Riley

HSR:ptl
Attachment

cc: Scott Ochoa, City Manager
Rudy Zeladon, Planning Director
Edmelynne Hutter, Senior Planner

ONTARIO
INTERNATIONAL AIRPORT
So Cal. So Easy.

Ontario International Airport Administration Offices

1923 E. Avion Street, Ontario, CA 91761

ALAN D. WAPNER President
RONALD O. LOVERIDGE Vice President
JIM W. BOWMAN Secretary
CURT HAGMAN Commissioner
JULIA GOUW Commissioner

ATIF J. ELKADI Chief Executive Officer
LORI D. BALLANCE General Counsel
JOHN M. SCHUBERT Treasurer

June 13, 2022

Ms. Suzanne Thompson, Chair
Pomona Valley Audubon Society, Burrowing Owl Conservation Committee
2058 N Mills PMB #426
Claremont, CA 91711
sthompson@pomona.edu

Ms. Thompson,

Thank you for your proposal for a burrowing owl (BUOW) preserve at the Ontario International Airport ("ONT") on the "boot" property east of Haven Avenue.

In December 2021, Ontario International Airport Authority ("OIAA") Board deemed this land as surplus development airport land. The development of this land would allow the OIAA to obtain vital revenue sources to expand and grow ONT for the public benefit of the region, and to enhance the financial sustainability of ONT consistent with Federal Aviation Administration (FAA) policies and requirements.

Also in December 2021, the OIAA entered into a binding development entitlement agreement, which requires CanAm Ontario, LLC (Developer) to pursue and obtain all required zoning and California Environmental Quality Act (CEQA) reviews and approvals from the City of Ontario for a potential industrial development on the entire "boot" property. Subject to terms and conditions of the development agreement being satisfied and contingent on the results of the CEQA and zoning reviews for the land, the OIAA is contractually obligated to enter into a future 55-year commitment to ground lease securing the entire property for industrial development. Under proposed development plans, no part of this property is set aside for habitat preservation.

For decades the land has been zoned industrial under the California Commerce Center Specific Plan and has been covered by the California Environmental Quality Act (CEQA) approved Ontario Plan EIR. The Ontario Plan EIR fully analyzed biological impacts and requires habitat mitigation for the potential development of the land. CEQA permits active relocation of the owls to viable sites, subject to approval from United States Fish & Wildlife Services (USFW) and the California Department of Fish & Wildlife (CDFW). Per requirements, the Developer

is conducting seasonal focused owl protocol studies that will be completed in July 2022 and has identified existing nearby established conservation sites which will provide a superior life for these owls, subject to the City's concurrence under the pending CEQA review process. Occupancy of owls at or near the airport is not a viable location for any sustainable success of the owls. Such occupancy would be inconsistent with the FAA-approved Wildlife Hazard Management Plan for ONT, which is required by federal regulations. The owls are living in a flight path, pose a threat to aircraft operations, and are being threatened by urbanization, public harassment, and predators such as the red-tailed hawk.

The burrowing owl population at ONT continues to struggle, and since 2008 there have been sixteen (16) identified and reported bird strikes at ONT involving burrowing owls. Both the FAA and the OIAA have gone on record stating bird strikes present a continued danger to the public safety of commercial aircraft flights. The OIAA therefore does not support any enhancement of bird population on airport property.

This is first and foremost a safety issue, both for commercial flights and passengers, but also for the owls and red-tail hawks that prey upon them. Not only does the presence of birds near an airport pose a serious safety risk, but the owls are also becoming human-adapted due to their proximity to humans and development. We know this relocation would be better from a public safety perspective. In addition, the OIAA understands that expert burrowing owl biologists maintain that when relocated to a suitable conservation site, the owl population will have a higher probability of success.

As a result, and for the reasons we have outlined above, the OIAA is unable to execute this proposed concept and cannot support your proposal for a BUOW preserve within the ONT flight path and the California Commerce Center Specific Plan, and specifically within the proposed development site. We look forward to continuing a dialogue with the Pomona Audubon Society as it relates any approved BUOW relocation plans.

Sincerely,

Atif Elkadi
CEO, Ontario International Airport Authority

cc: Michelle R. Brantley, Chief Capital Development Officer
Elisa J. Grey, Director of Commercial Real Estate
Greg Devereaux, Director of Development

EXHIBIT C

memo riverside

to Rudy Zeledon, Planning Director

from Kent Norton, AICP, REPA, MIG Riverside

re The HUB at Ontario International Airport Project

date January 18, 2023

On January 3-4, 2023 a group of environmental organizations and 44 individuals submitted comment letters or emails on Environmental Assessment and Development Plan PDEV21-047 under consideration by the City's Development Advisory Board (DAB) on January 4. The development under consideration is referred to as the HUB at Ontario International Airport (HUB OIA Project) The following addresses the various comments and issues raised in those letters. The letters are also attached to this memo for reference. This information is provided to the Planning Commission for its deliberation on this project.

LETTER 1: JOINT ENVIRONMENTAL ORGANIZATIONS LETTER/SUSAN PHILLPS ET AL

Comment 1 (Pages 1-4). Their first major issue was the proposed use of an Addendum to The Ontario Plan (TOP) Environmental Impact Report (EIR) (Addendum) as the California Environmental Quality Act (CEQA) documentation for the proposed HUB OIA Project.

The commenter also refers to the City relying on a CEQA exemption. That is not the case here and such comments misstate the applicable law. An addendum, which is allowed under CEQA Guidelines section 15164, is totally unrelated to any statutory and/or categorical exemptions allowed under other provisions of CEQA and the CEQA Guidelines.

The commenter does not acknowledge that an addendum can be the appropriate CEQA compliance document for a project that is consistent with the General Plan and zoning when it can be demonstrated a project will not result in new or more significant impacts that those that were already examined in the EIR for which the addendum is prepared. The Addendum does just that.

In this case, the use of an addendum is appropriate as the HUB OIA Project is consistent with TOP land use designations and City zoning, therefore the potential impacts of the HUB OIA Project have been accounted for in TOP EIR.

In addition, general comments on industrial development in the City as a whole are irrelevant to this current CEQA process. Furthermore, the Addendum includes an evaluation of all of the project's potential environmental impacts, including noise, air quality and transportation. Vague and unsupported complaints about impacts allegedly associated with warehouse development in general are simply incorrect.

Comment 2 (Page 3). The commenter expresses concern that the project has "topics of controversy" and so a separate EIR should be prepared. The commenter states…."If a topic of controversy exists regarding a proposed project, this can counter the use of a CEQA Determination Motion." However, the commenter is citing CEQA incorrectly. CEQA Guidelines Section 15064(f)(4) states…"The existence of public controversy over the environmental effects of a project will not require preparation of an EIR if there is no substantial evidence before the agency that the project may have a significant effect on the environment." The key determinate is providing substantial evidence that there will be no significant impacts. In this case, the Addendum prepared for the HUB OIA Project provides substantial evidence, supported by information from TOP and TOP EIR, and a number of technical studies cited in the Addendum, to demonstrate the HUB OIA Project will not have new or more significant impacts on the environment that were not already evaluated in TOP EIR. This includes several studies on burrowing owl (owl) as well as air quality and health risk impacts of the project.

Comment 3 (Page 4). The commenter states…"There are significant impacts that can and should be mitigated but have not been properly considered. The City may not adopt a statement of overriding consideration to approve a project where feasible, less environmentally damaging alternatives exist and feasible mitigation measures have not been considered or adopted." The commenter also argues the City must "deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects." This comment fails to acknowledge the provision in CEQA for a lead agency to adopt a Statement of Overriding Considerations (SOC) if the benefits of a project or plan outweigh the identified significant impacts. In this case the City Council adopted an SOC for TOP EIR.

The comment fails to acknowledge the City Council already adopted a Statement of Overriding Considerations when it approved TOP, and the proposed HUB OIA Project is consistent with TOP land use designation for the site.

In addition, the comments on the adequacy of TOP EIR are untimely and irrelevant. If these groups disapproved of that document, they were required to raise those issues when the matter was before the City Council. Opponents cannot use this project to attack the certified TOP 2050 EIR now. Criticisms on the City's overall planning efforts are misplaced in the current context of a single project, one which has long been planned and allowed on this project site (i.e., CCCSP and TOP). Further, unnamed comment letters supposedly submitted regarding TOP 2050 EIR are immaterial, particularly when they are not provided to the City at this time.

Comment 4 (Page 5). The commenter argues that development of the HUB OIA Project will have irreparable impacts on the owl. The commenter argues that the project site is a critical part of the owl's habitat in the region and the Federal Aviation Administration (FAA) actually encourages wildlife like the owl to co-exist on airport properties.

However, the various technical studies[1] on the owl and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe

[1] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

(i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[2] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[1] conclude that the most appropriate solution to this safety issue is to relocate the owl from the project site to a safer site in some other location. The Burrowing Owl Relocation Plan (Relocation Plan) prepared for the HUB OIA Project outlines a way to successfully achieve such relocation (see Appendix B).

The commenter also provides erroneous information on the current and historic state of owls in the City, and more importantly, on the project site. The analysis included in the Addendum and TOP EIR

[2] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

adequately addresses the project's potential impact on owls. As explained therein, the applicant will comply with the City's existing regulations and TOP policies through implementation of a Relocation Plan, which is based on the most recent site-specific technical studies. Compliance with these requirements will ensure potential impacts to owls are less than significant. Opponents' claims to the contrary are thus hyperbolic and inaccurate.

Comment 5 (Pages 5-7). The commenter next argues the project will have cumulative impacts related to air quality, greenhouse gas (GHG) emissions, and habitat loss.

The commenter fails to acknowledge TOP EIR did examine these cumulative issues at City buildout, and the HUB OIA Project is consistent with TOP. Therefore, potential cumulative air quality, GHG, and habitat impacts of this project have already been addressed in TOP EIR and a SOC was adopted by the City Council as allowed under CEQA.

In addition, the information provided regarding ongoing airport operations and the allegedly resulting GHG impacts is irrelevant to the current analysis, which considers a single project's potential impacts on the environment. TOP EIR concluded that buildout of the City, including this project, would result in significant direct and *cumulative* GHG emission impacts and thus, a SOC was approved by the City Council. The project site was analyzed in TOP EIR as an industrial site and the applicant will implement a number of project design features to reduce GHG emissions as outlined in the City's GHG Reduction Measures Screening Threshold Table, attached to the Addendum as Appendix A-2. Opponents ignore this information, which is clearly stated in the Addendum, and decry the City's failure to consider cumulative impacts "at a broader scale." Full buildout of the City is the absolute broadest scale possible for the analysis of potential GHG impacts. Opponents may dislike the City's GHG analysis, but it does not diminish the fact that the analysis demanded by opponents was completed and TOP 2050 EIR was certified without challenge.

Comment 6 (Pages 7-9). The commenter states, within evidentiary support, that TOP EIR mitigation for owl impacts has not been successful (i.e., collection of new development fees to purchase habitat). Regardless, however, a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is inapplicable. The Relocation Plan, which will be overseen by the California Department of Fish and Wildlife (CDFW), will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

In fact, no evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[3] prepared by qualified professionals (see Appendix B), the Relocation Plan is the most appropriate way to provide for the

[3] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 1 Summary. These responses, TOP, TOP EIR, the Addendum, and the various supporting technical studies[1], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 2: ANA RODRIGUEZ

Comment 1 (Email Page 1). The commenter makes a number of claims about owls relative to the HUB OIA Project. The commenter argues that owls are being "driven out of the City" and that a 90-acre preserve on the project site is needed to protect the owls.

The various technical studies[4] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. The supporting studies[3] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[3] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 2 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[3], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

[4] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

LETTER 3: BARBARA BARTON

Comment 1 (Email Page 1). The commenter makes a number of claims about owls relative to the HUB OIA Project. The commenter argues that owls are being "driven out of the City" and that a 90-acre preserve on the project site is needed to protect the owls.

The various technical studies[5] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[6] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA.

---

[5] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[6] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[4] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[4] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 3 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[7], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 4: HALLIE KUTAK, CENTER FOR BIOLOGICAL DIVERSITY

Comment 1 (Page 1). The commenter objects to the proposed use of an addendum as the CEQA documentation for the proposed HUB OIA Project.

The commenter does not acknowledge that an addendum can be the appropriate CEQA compliance document for a project that is consistent with the General Plan and zoning when it can be demonstrated a project will not result in new or more significant impacts that those that were already examined in the EIR for which the addendum is prepared. The Addendum does just that.

In this case, the use of an addendum is appropriate as the HUB OIA Project is consistent with TOP land use designations and City zoning, therefore the potential impacts of the HUB OIA Project have been accounted for in TOP EIR.

Comment 2 (Page 2). The commenter argues that the HUB OIA Project is not within the scope of TOP EIR, will have more severe significant impacts, and will require additional mitigation not found in TOP EIR. Their conclusion is a separate project-level EIR must be prepared for this project.

[7] Addendum Appendices A through G

As noted above, the commenter fails to recognize that an addendum can be the appropriate CEQA compliance document for a project that is consistent with the General Plan and zoning when it can be demonstrated a project will not result in new or more significant impacts that those that were already examined in the EIR for which an addendum is prepared. The Addendum does just that.

In this case, the use of an addendum is appropriate as the HUB OIA Project is consistent with TOP land use designations and City zoning, therefore the potential impacts of the HUB OIA Project have been accounted for in TOP EIR.

In addition, the Addendum and the various supporting technical studies[8] provide substantial evidence that the HUB OIA Project will not result in new or more severe significant impacts on the owls than those identified in TOP EIR, the Relocation Plan is consistent with TOP EIR mitigation, and the Addendum satisfies the intent and requirements of CEQA.

Comment 3 (Page 3). The commenter states the Addendum did not evaluate air quality impacts and health risks of the HUB OIA Project.

The Addendum states the following regarding Air Quality Significance Threshold 3.a, Conflict with or obstruct implementation of the applicable air quality plan:

The proposed project is consistent with TOP land use designations upon which the AQMP is based. Furthermore, the project is consistent with the City's participation in the AQMP and will not conflict with or obstruct implementation of the plan. The project will be required to implement TOP EIR Mitigation Measures AQ 3-1, 3-2, and 3-3 which include fugitive dust control measures pursuant to SCAQMD's Rule 403, use of Tier 3 construction equipment, proper service and maintenance of construction equipment, limiting nonessential idling of construction equipment, use of Super-Compliant volatile organic compounds (VOC) paints for coating and architectural surfaces, providing non-vehicular access options, and calculate and reduce any significant health risks from future development on nearby sensitive receptors (MM 3-1 through 3-3, respectively). The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. The following measures from TOP EIR are applicable to the proposed project:

***AQ 3-1:** Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of*

[8] Addendum Appendices A through G

significance, the City of Ontario Building Department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:

- *Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as:*
- − *Requiring use of nontoxic soil stabilizers to reduce wind erosion.*
- − *Applying water every four hours to active soil disturbing activities.*
- − *Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.*
- *Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits.*
- *Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards*
- *Limiting nonessential idling of construction equipment to no more than five consecutive minutes.*
- *Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/SuperCompliant_AIM.pdf. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.* (Addendum, pp. 32-33.)

The Addendum then determines the HUB OIA Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard. (Addendum, pp 34-35.) That section provides a complete assessment of the air quality impacts of the HUB OIA Project relative to the South Coast Air Quality Management District's regional significance thresholds for criteria pollutants and recommends implementation of TOP EIR Mitigation Measures AQ 3-1 through AQ 3-3.

The Addendum also states… "*A detailed air quality assessment (AQ Study) of the proposed project was conducted by Urban Crossroads in February 2022, to identify project-specific air pollutant impacts and recommend additional mitigation if necessary (i.e., other than those applicable measures already identified in TOP EIR). The AQ Study (Appendix A) determined the project will not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable federal or state ambient air quality because the project is consistent with the existing Industrial designation in the CCC SP."* (Addendum, p. 34.) It should also be noted the Addendum provides the full text of TOP EIR Mitigation Measures AQ 3-1 through 3-3 and explains how the project would implement them to address potential air quality impacts.

In addition, the Addendum concludes the project would not expose sensitive receptors to substantial pollutant concentrations and therefore, it would not result in any new impacts beyond those identified in TOP EIR. Thus, no project specific mitigation was required for sensitive receptors. In sum, the HUB OIA Project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary and no project specific mitigation is required.

Therefore, the commenter is incorrect as the Addendum did fully evaluate potential air quality impacts of the HUB OIA Project at a project level.

LETTER 5: JOEL HUSCHLE

Comment 1 (Email Page 1). The commenter makes a number of claims about owls relative to the HUB OIA Project. The commenter argues that owls are being "driven out of the City" and that a 90-acre preserve on the project site is needed to protect the owls.

The various technical studies[9] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[10] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.

[9] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[10] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).

o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[7] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[7] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 5 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[11], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 6: KIMBERLY DILLBECK

Comment 1 (Email Page 1). The commenter makes a number of claims about owls relative to the HUB OIA Project. The commenter argues that owls are being "driven out of the City" and that a 90-acre preserve on the project site is needed to protect the owls.

[11] Addendum Appendices A through G

The various technical studies[8] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[12] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[8] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not

[12] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[8] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 6 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[13], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 7: MARCYN CLEMENTS

Comment 1 (Email Pages 1-2). The commenter makes a number of claims about owls relative to the HUB OIA Project. The commenter argues that owls are being "driven out of the City" and that a 90-acre preserve on the project site is needed to protect the owls.

The various technical studies[14] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[15] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of

---

13 Addendum Appendices A through G

14 Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

15 USDA WS APHIS WMP Website
https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[16] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[11] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 7 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[17], provide substantial evidence that the HUB OIA Project will not have any new or

[16] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[17] Addendum Appendices A through G

more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 8: PAUL ROMERO/JESSICA GARCIACANO

Comment 1 (Email Pages 1-2). The commenter makes a number of comments about burrowing owl (owl) relative to the HUB OIA site and project. The commenter expresses concern about the collection of development fees to help protect the owl but is not aware if those funds have been used to protect owl habitat. The commenter states that land should be preserved in the City to protect the owl.

The various technical studies[18] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[19] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

---

[18] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[19] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[13] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specifically for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[13] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum. **Letter 8 Summary.** This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[20], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 9: SUZANNE THOMPSON, POMONA VALLEY AUDUBON SOCIETY, BURROWING OWL COMMITTEE

Comment 1 (Email Pages 1-3). The commenter makes a number of comments about burrowing owl (owl) relative to the HUB OIA site and project. The commenter argues that this development will have irreparable impacts on the owl. The commenter argues that the project site is a critical part of owl habitat in the region and the FAA actually encourages wildlife like the owl to co-exist on airport properties. The commenter also states TOP EIR mitigation for owl impacts has not been successful (i.e., collection of new development fees to purchase habitat).

The various technical studies[21] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents

[20] Addendum Appendices A through G

[21] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[22] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."
The supporting studies[15] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl

[22] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[23] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 9 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[24], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 10: TRUDE HURD

Comment 1 (Page 1). The commenter laments the loss of owl habitat over the years throughout the region, and claims it would be appropriate for an owl preserve on the HUB OIA Project site.

The commenter is incorrect that the HUB OIA Project site is "perfect for a burrowing owl preserve." The various technical studies[25] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[26] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

---

[23] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[24] Addendum Appendices A through G

[25] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[26] USDA WS APHIS WMP Website
https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.

o Active Dispersal — Scaring and hazing wildlife away from airport environments.

o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).

o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[18] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[18] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 10 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[27], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

[27] Addendum Appendices A through G

LETTER 11: DAN SILVER, ENDANGERED HABITATS LEAGUE

Comment 1 (Email Page 1). The commenter argues that owl relocation does not work and the HUB OIA Project site should include an owl preserve.

The commenter is incorrect that the HUB OIA Project site is "perfect for a burrowing owl preserve." The various technical studies[28] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[29] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA.

---

[28] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[29] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[30] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

LETTER 12: SETH THOMPSON

Comment 1 (Email Page 1). The commenter suggests TOP EIR is a "flawed document".

Comments on the adequacy of TOP 2050 EIR are untimely and irrelevant. Objections to that document were required to be raised when the matter was before the City Council. Opponents cannot now use the current project to attack the certified TOP EIR. Moreover, criticism of the City's overall planning efforts are misplaced in the current context of a single project, one which has long been planned and allowed on the project site (i.e., CCCSP and TOP).

Comment 2 (Email Page 1). The commenter states TOP Addendum for the HUB OIA Project relies on an owl mitigation plan that has already failed but does not elaborate on the nature of the failure. The commenter also states…"there is incontrovertible scientific evidence that even the best translocation efforts result in high mortality." However, the commenter does not provide any documentation to support that statement.

The various technical studies[31] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

---

[30] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[31] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[32] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[22] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

---

[32] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

Comment 3 (Email Page 1). The commenter states, without evidentiary support, that owls that…"survive the trauma of translocation represent a loss of distinct biodiversity" and that "loss of the Ontario Airport owls will have damaging effects on Chino Burrowing Owls and cascading negative effects on the few indigenous Burrowing Owls in the Pomona Valley."

The various technical studies[33] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[34] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA.

---

[33] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[34] USDA WS APHIS WMP Website
https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[23] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. . If the owls were to remain on the project site, raptors will continue to hunt the owls by perching on the large buildings and trees in the surrounding area. There is no indication that relocation of the owls to an appropriate site in the area would result in significant impacts to the biodiversity or genetic pool for owls in the Pomona Valley.

Comment 4 (Email Page 1). The commenter argued there was insufficient time to respond to the project documents over the holidays.

The HUB OIA Project has been in process for some time. The City properly noticed the January 4, 2023 Development Advisory Board hearing per California Government Code Sections 54950-54963 (Ralph M. Brown Act) and the Ontario Municipal Code (OMC) Titles 1 and 2 (General Provisions and Administration). Regarding this noticing, a number of individuals and entities – including this one – were able to provide comments prior to the start of the meeting. Regardless, the HUB OIA Project requires Planning Commission approval and all interested parties will have an opportunity to provide written and/or oral comments at that time.

Letter 12 Summary. These responses, TOP, TOP EIR, the Addendum, and the various supporting technical studies[35] provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 13: NATASHA WALTON, INLAND VALLEY ADVOCATES FOR THE ENVIRONMENT (IVAE)

Comment 1 (Email Page 1). The commenter questioned reliance on TOP EIR but did not acknowledge that an EIR Addendum can be the appropriate CEQA compliance document for a project that is consistent with the General Plan and zoning designations when it can be demonstrated the Pa project will not result in new or more have significant impacts that those that were not already examined in the EIR for which the Addendum is prepared. The Addendum does just that. In this case, the use of an TOP Addendum is appropriate as the HUB OIA Project is consistent with TOP land use designations and City zoning designations, therefore the cumulative potential impacts of the HUB OIA Project have been accounted for in TOP EIR.

[35] Addendum Appendices A through G

For additional information, see separate responses in letters from Allen Matkins regarding comments in the “Coalition Letter” and the “Center for Biological Diversity (CBD) Letter”.

Comment 2 (Email Page 1). The commenter argued the HUB OIA Project did not conduct a proper noise study involving airport noise. However, the commenter failed to note the Addendum clearly evaluated both Project-related and Airport-related noise impacts. Page 71 of the Addendum states…

> TOP EIR found stationary and transportation noise impacts of future development under TOP to be less than significant with implementation of Safety Element Policy S-4.1, Noise Mitigation, which utilizes the City’s Noise Ordinance, building codes, and subdivision and development code regulations to reduce noise from future development projects (SEIR p. 5.13-32).
>
> The project site was previously analyzed by TOP EIR as supporting industrial uses and the project will not expose people to or generate noise levels in excess of the standards established in TOP EIR (Section 5.12). The project site is surrounded on the north, east, and south sides by industrial or commercial/office uses, and to the west by the OIA. The I-10 is just north of the site, the I-15 is just east of the site, and the site is within the OIA’s Safety Zones. The issue of the project’s consistency with the ALUCP is addressed in Section 9, *Hazards and Hazardous Materials* (airport-related hazards) and potential noise impacts are addressed in detail in Section 9.3e. As discussed therein PDF/COA included in the Mead & Hunt airport study (Appendix E) have been incorporated into the project.

Both the Addendum and the Mead & Hunt report on airport safety included analyses of airport noise impacts.

Comment 3 (Email Pages 1-2). The remaining comments were regarding burrowing owl and are similar to those raised in Letters 14 through 44 below.

NOTE: The following 31 letters make essentially the same comments so they are addressed with one response after the list of commenters:

LETTER 14: DAVE MACIAS
LETTER 15: DEENA LIGORRIA
LETTER 16: GLORIA KARIMI
LETTER 17: GUS OCON
LETTER 18: JACOB LIGORRIA
LETTER 19: LAURA JAOUI
LETTER 20: LORI GALLOWAY
LETTER 21: MADELINE ALLINDER
LETTER 22: MARCYN DEL CLEMENTS
LETTER 23: MARIA BENNETT
LETTER 24: MARTINA EBERT
LETTER 25: MYRIAM RODRIGUEZ
LETTER 26: PATRICIA ANIS
LETTER 27: PATRICIA GLEESON
LETTER 28: RACHAEL INNES
LETTER 29: REBECA BYERLEY
LETTER 30: ROBERT HOLCOMB
LETTER 31: SCOTT MARNOY
LETTER 32: ALAN DAVIS
LETTER 33: SHEA MILLAN
LETTER 34: SIDNEY SILLIMAN
LETTER 35: ANDY GEORGES
LETTER 36: JIMMY+APRIL CHERTKOW
LETTER 37: PAM NELSON
LETTER 38: CAREN HANSON
LETTER 39: JOEL HUSCHLE
LETTER 40: JAZMYN RIVERA
LETTER 41: JEFF STROGEN
LETTER 42: KELLY COYNE
LETTER 43: ERIK KNUTZEN
LETTER 44: SHARI WASSON

Comment 1 (Email Page 1). The commenters argue that owl relocation does not work and the HUB OIA Project site should include an owl preserve.

The HUB OIA Project site is not an appropriate location for an owl preserve. The various technical studies[36] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[37] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

---

[36] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[37] USDA WS APHIS WMP Website
https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

The supporting studies[25] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

EXHIBIT D

ONTARIO
INTERNATIONAL AIRPORT
So Cal. So Easy.

Ontario International Airport Administration Offices

1923 E. Avion Street, Ontario, CA 91761

ALAN D. WAPNER President
RONALD O. LOVERIDGE Vice President
JIM W. BOWMAN Secretary
CURT HAGMAN Commissioner
JULIA GOUW Commissioner

ATIF J. ELKADI Chief Executive Officer
LORI D. BALLANCE General Counsel
JOHN M. SCHUBERT Treasurer

January 18, 2023

Mr. Rudy Zeledon
Planning Director
City of Ontario
303 East B Street
Ontario, CA 91764

Sent Via Email to rzeledon@ontarioca.gov

RE: Ontario International Airport Authority's Information About Burrowing Owls at Ontario International Airport; City of Ontario Development Plan PDEV21-047.

Dear Mr. Zeledon:

The Ontario International Airport Authority (OIAA) submits this letter regarding proposed development plan PDEV21-047 on about 198 acres of real property owned by the OIAA east of Haven Avenue. We are informed that some have suggested that burrowing owls (BUOW) should be preserved on the property. But, as explained below, the presence of BUOWs at Ontario International Airport (ONT) continues to present a safety threat to the traveling public and to aircraft operations. Their presence at the Airport is also inconsistent with Federal Aviation Administration (FAA) regulations and a mandated Wildlife Hazard Management Plan (WHMP) for ONT.

In June 2022 the OIAA wrote to the Pomona Valley Audubon Society explaining that the group's proposed BUOW preserve concept for the 198 acres of OIAA property east of Haven Avenue, or anywhere else at ONT, was not feasible due to substantial safety concerns. A copy of that letter is attached. The OIAA's position about the safety threat posed by BUOWs at ONT stated in that letter remains the same today.

In addition, the presence of BUOWs at ONT is one wildlife hazard that the OIAA is required to abate under federal regulations. (14 Code of Federal Regulations § 139.337.) Those regulations require the OIAA, as part of ONT's certification with the FAA, to "alleviate or eliminate wildlife hazards to air carrier operations." The OIAA has prepared, and the FAA has approved, a required WHMP for ONT to comply with federal regulations.

The ONT WHMP specifically identifies the BUOW as a wildlife hazard to Airport operations that must be addressed, along with other hazards, under the Plan. Contents and requirements of the WHMP include:

- Identification of birds as the "greatest threat to aviation at ONT" and a determination that "birds are generally considered the most hazardous form of wildlife at ONT."

- An obligation by OIAA to "actively reduce attractive wildlife habitat" at ONT, and to reduce wildlife that attracts predators. (Red tail hawks, another wildlife hazard identified in the WHMP, are predators of BOUWs.)

- Prioritization of wildlife population management and habitat modifications efforts at ONT.

- Use of OIAA resources and trained personnel to implement the many wildlife hazard abatement procedures listed in the WHMP.

- Coordination by a Wildlife Hazard Working Group, made up of staff from the FAA, U.S. Department of Agriculture Wildlife Services, Air Traffic Control Tower, and OIAA, to implement a range of wildlife control procedures and projects at ONT.

Consequently, based on express federal regulations, and the requirements of the FAA-mandated and approved WHMP, suggestions about using the 198 acres of real property owned by the OIAA east of Haven Avenue as a BUOW preserve are not feasible and must be rejected.

Please contact me if you have any questions about this letter.

Sincerely,

Atif Elkadi
Chief Executive Officer

cc: Elisa Grey, OIAA Chief Revenue Management Officer

Appendix A

OIAA Correspondence to Pomona Valley Audubon Society, June 13, 2022.
2 pages.

ONTARIO
INTERNATIONAL AIRPORT
So Cal. So Easy.

Ontario International Airport Administration Offices

1923 E. Avion Street, Ontario, CA 91761

ALAN D. WAPNER President
RONALD O. LOVERIDGE Vice President
JIM W. BOWMAN Secretary
CURT HAGMAN Commissioner
JULIA GOUW Commissioner
ATIF J. ELKADI Chief Executive Officer
LORI D. BALLANCE General Counsel
JOHN M. SCHUBERT Treasurer

June 13, 2022

Ms. Suzanne Thompson, Chair
Pomona Valley Audubon Society, Burrowing Owl Conservation Committee
2058 N Mills PMB #426
Claremont, CA 91711
sthompson@pomona.edu

COPY

Ms. Thompson,

Thank you for your proposal for a burrowing owl (BUOW) preserve at the Ontario International Airport ("ONT") on the "boot" property east of Haven Avenue.

In December 2021, Ontario International Airport Authority ("OIAA") Board deemed this land as surplus development airport land. The development of this land would allow the OIAA to obtain vital revenue sources to expand and grow ONT for the public benefit of the region, and to enhance the financial sustainability of ONT consistent with Federal Aviation Administration (FAA) policies and requirements.

Also in December 2021, the OIAA entered into a binding development entitlement agreement, which requires CanAm Ontario, LLC (Developer) to pursue and obtain all required zoning and California Environmental Quality Act (CEQA) reviews and approvals from the City of Ontario for a potential industrial development on the entire "boot" property. Subject to terms and conditions of the development agreement being satisfied and contingent on the results of the CEQA and zoning reviews for the land, the OIAA is contractually obligated to enter into a future 55-year commitment to ground lease securing the entire property for industrial development. Under proposed development plans, no part of this property is set aside for habitat preservation.

For decades the land has been zoned industrial under the California Commerce Center Specific Plan and has been covered by the California Environmental Quality Act (CEQA) approved Ontario Plan EIR. The Ontario Plan EIR fully analyzed biological impacts and requires habitat mitigation for the potential development of the land. CEQA permits active relocation of the owls to viable sites, subject to approval from United States Fish & Wildlife Services (USFW) and the California Department of Fish & Wildlife (CDFW). Per requirements, the Developer

is conducting seasonal focused owl protocol studies that will be completed in July 2022 and has identified existing nearby established conservation sites which will provide a superior life for these owls, subject to the City's concurrence under the pending CEQA review process. Occupancy of owls at or near the airport is not a viable location for any sustainable success of the owls. Such occupancy would be inconsistent with the FAA-approved Wildlife Hazard Management Plan for ONT, which is required by federal regulations. The owls are living in a flight path, pose a threat to aircraft operations, and are being threatened by urbanization, public harassment, and predators such as the red-tailed hawk.

The burrowing owl population at ONT continues to struggle, and since 2008 there have been sixteen (16) identified and reported bird strikes at ONT involving burrowing owls. Both the FAA and the OIAA have gone on record stating bird strikes present a continued danger to the public safety of commercial aircraft flights. The OIAA therefore does not support any enhancement of bird population on airport property.

This is first and foremost a safety issue, both for commercial flights and passengers, but also for the owls and red-tail hawks that prey upon them. Not only does the presence of birds near an airport pose a serious safety risk, but the owls are also becoming human-adapted due to their proximity to humans and development. We know this relocation would be better from a public safety perspective. In addition, the OIAA understands that expert burrowing owl biologists maintain that when relocated to a suitable conservation site, the owl population will have a higher probability of success.

As a result, and for the reasons we have outlined above, the OIAA is unable to execute this proposed concept and cannot support your proposal for a BUOW preserve within the ONT flight path and the California Commerce Center Specific Plan, and specifically within the proposed development site. We look forward to continuing a dialogue with the Pomona Audubon Society as it relates any approved BUOW relocation plans.

Sincerely,

Atif Elkadi
CEO, Ontario International Airport Authority

cc: Michelle R. Brantley, Chief Capital Development Officer
Elisa J. Grey, Director of Commercial Real Estate
Greg Devereaux, Director of Development

EXHIBIT E

January 18, 2023

SUBJECT: Response to Comments – Group Letter dated January 4, 2023, challenging the HUB at Ontario International Airport.

1. The Ontario Plan mitigation that started around 2007 has been collecting fees from developers to mitigate the loss of large sections of habitat. The City has been working with the Inland Empire Resources Conservation District (IERCD) and Dan Silver to allocate the collected funds towards preserving lands around the Prado Basin.

2. The Ontario HUB is one of the last remaining sites undeveloped in this region. There is currently an insufficient quantity of owls to maintain a healthy population capable of persisting overtime. Single large mitigation sites can be subject to stochastic events (fire, disease, vandalism, predators, feral cats/dogs, etc.) that can lead to the loss of remnant populations. Several mitigation sites that are connected through greenbelts or areas allowing safe travel is necessary for dispersal between mitigation sites.

   Regarding the Hub property, the owls will not persist here forever even if the site was preserved and undeveloped. There are many reasons which demonstrate that owls will not persist in the subject site in perpetuity, despite if a monitoring and management program was established. Preservation of this subject site will not adequately support a population of owls.

   The owl populations at the Seal Beach naval weapons station and the Orange County fairgrounds and many other similar locations all met the same fate. They were surrounded by urbanization and development and after several years the populations were extirpated. Development brings increased risk of mortality (predators, vehicle strikes, loss of foraging habitats, vandalism, etc.). Eventually these island patches of fragmented habitats supporting owls will blink out. They won't support owls in perpetuity as supported by these similar situations at the OC fair grounds and Seal Beach (and many other locations). The ability to safely disperse away from and into these island patches are critical for a regional population but as this area loses more habitat and dispersal becomes more difficult (increases risk of mortality), then it's more likely owls will be extirpated. Preservation of portion of the property would not result in long term owl occupation either.

3. Prior to the 1980's southwestern San Bernardino supported a robust breeding BUOW population with hundreds of pairs from the base of the San Bernardino Mountains south to the Prado Basin. After decades of development pressure and the complete absence of meaningful mitigation, only a few remaining breeding pairs and winter migrants are known to persist. The remaining highly fragmented landscape which lacks suitable, large, protected sites with connectivity to and between extant breeding sites creates a bottleneck and prevents the existence of a healthy source population.

With the continued development pressure and lack of adequate mitigation required by the resource agencies, the BUOW population in this region is tenuous at best and will likely never recover from what was once a robust breeding source population (Kidd et al. 2003, 2007).

A current review of BUOWs previously reported near the Ontario Airport includes 45 records from 1989-2017. These 45 records are located within seven nearby 7.5min USGS quads (Ontario, Prado, Corona North, Fontana, Cucamonga Peak and Mt. Blady) and Guasti quad where the airport is located (CNDDB 2020). The nearest owl locations reported south of the airport were evicted approximately ten years ago during development of industrial warehouses. Mitigation included the installation of artificial burrows in a barrow pit on the west side of the nearby retired landfill and the owls were evicted from their burrows prior to grading. Owls are no longer known to occupy this site south of the airport. The existence of two (2) breeding owl pairs, currently surveyed by the 2022 Helix report, which are located at the subject OIAA property along the east side of Haven Avenue are included in the list of 45 owl records. Several reported owls north of Interstate 10 that are located west and north of Ontario Mills Mall are some of the only possible extant owls near the airport. All of these owls are surrounded by development and located on small, highly fragmented sites that will not provide long-term conservation value for the owl due to future development and predation pressure to name a few.

Further, the sites chosen for relocation are preserved sites and will be connected to large open areas that support existing burrowing owl populations, that are already in conserved areas, allowing increased survivability and genetic diversity to avoid inbreeding.

4. The Conclusions and Management Implications section of the study "Release Strategies and Ecological Factors Influence Mitigation Translocation Outcomes for Burrowing Owls: A Comparative Evaluation" (S.M. Hennessey, et. al.) states the following:

> "Even if there is a survival penalty associated with translocation, it is important for managers and regulatory agencies to consider that translocation may achieve conservation goals better than displacement. The long-term value of translocation exceeds that of displacement when there are plausible projections of increasing future threats on the unprotected landscape around displacement sites. As the pace of development continues without any apparent de-escalation, wildlife such as BUOW experience 'serial eviction' as one habitat patch after another is lost to infrastructure expansion. Under these circumstances, it may be wise to consider translocation to protected areas that can manage these threats, conduct restoration activities to enhance habitat suitability, and include extra management support following release."

Except for the undeveloped interstitial areas associated with the Ontario International Airport runway to the west of the project site, the project site is almost entirely surrounded by existing development (industrial buildings) to the north, east and south. In accordance with the 2012 CDFW Staff Report on Burrowing Owls, BUOW burrow exclusion and closure is employed only where there are adjacent natural burrows and non-impacted sufficient habitat for BUOW to occupy with permanent protection mechanism in place. Since the project site is surrounded by development on

three of its boundaries, BUOW burrow exclusion and closure would likely result in BUOW moving from The HUB @ ONT project site to the Ontario International Airport runway, which would put the BUOW at risk of creating additional bird strike hazards with aircraft.

The presence of BUOWs at ONT is one wildlife hazard that the OIAA is required to abate under federal regulations (14 Code of Federal Regulations §139.337). These regulations require the OIAA, as part of ONT's certification with FAA, to "alleviate or eliminate wildlife hazards to air carrier operations." The ONT WHMP identifies BUOW as a wildlife hazard to airport operations that must be addressed, along with other hazards, under the WHMP.

While the subject site is zoned for industrial uses, the change of use incorporating the creation of a burrowing owl preserve site on airport property east of Haven Street would directly conflict with FAA regulations and guidance associated with the safety of aircraft operations and the use airport property. The following regulations and FAA guidance would apply to the proposed establishment of burrowing owl preserve on airport property:

- Title 14 of the Code of Federal Regulations, Part 139.339, *Wildlife Hazard Management*
- FAA Advisory Circular 150/5200-33, *Wildlife Hazard Attractants on and Near Airports*
- FAA Grant Assurances
- CertAlert 06-07, Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports Each item and its applicability to the proposed preserve is discussed in the following paragraphs.

Numerous avian bird strikes have been reported on the Ontario International Airport, including various strikes from BUOW. Due to the Federal Aviation Administration (FAA) regulations for avian bird strikes, flight safety, and USDA depredation permits in situ, onsite conservation of this subject site is not feasible. Translocation is needed for the long-term survival of the BUOWs on The HUB @ ONT project site.

USDA (Animal Plant Health Inspection Service; APHIS) is hired by OIAA to reduce strike hazards caused by various wildlife species. Per FAA rules and regulations, OIAA can't engage in restoration, mitigation or any actions that increase wildlife hazards within zones at and around an FAA certified airport. Any airport can lose their FAA certificate and funding if they are found to be out of compliance with this rule. Any mitigation efforts within 10,000 feet of the airport (the project site is located well within 10,000 feet of the airport) would be considered out of compliance and would likely result in wasted efforts as APHIS has the authority to haze, evict or lethally remove any hazardous wildlife.

Installing artificial burrows and/or encouraging owls to inhabit lands on or directly adjacent to the OIAA property violates FAA rules and is not a viable strategy because of the expected increased presence of other larger hazardous birds (e.g. red-tailed hawks, golden eagles, ferruginous hawks, red-shouldered hawks, Cooper's hawks, turkey vultures, and common ravens) who would attempt to predate or scavenge owls, squirrels or rabbits that would likely use the artificial burrows. Hawks

and vultures are those struck by aircraft at the highest rates and those known to cause the most damage per strike. These species are often involved in aircraft strikes while they are hover hunting or circling over the approach or departure ends of the airport within the glide slopes. Bird strikes in these situations (landing and take-off) are the most dangerous and can lead to catastrophic events that can kill hundreds of passengers and crew on jetliners.

Evicting the owls along Haven Avenue outside the airfield could result in owls moving to areas within the airfield, making a more hazardous situation. Owls are often found seeking refuge very close to taxiways and runways under lights, signs and other man-made structures that support refuge and areas for squirrels to create burrows. Many burrowing owls that are struck at airports are those crossing runways as aircraft are departing and arriving. This will generally not lead to a catastrophic accident however even small birds like burrowing owls are capable of causing tens of thousands of dollars in damage to aircraft per event.

Further, relocating or encouraging owls to reside on a commercial airfield would violate FAA rules, will result in APHIS having to remove the owls in the future, and creates potential liability for the resource agencies or biologists promoting the in-situ conservation of owls at or near an airport.

In summary, the act of attempting to conduct any form of “mitigation” including in situ or eviction on or directly adjacent to the airfield is not supported by the FAA, APHIS, or past direction from CDFW Headquarters. The best approach for owl mitigation at and adjacent to OIAA property should involve active relocation. This will better ensure for safe flight operations and compliance with FAA regulations while also attempting to provide the owls with a greater chance of survival and future breeding attempts.

Sincerely,

Travis McGill, ELMT Consulting

EXHIBIT F

January 18, 2023 sent via email

Rudy Zeledon
Planning Director, City of Ontario
303 East B Street
Ontario, CA 91764
Phone: 909-395-2036

RE: EIR for Proposed Development at the Ontario Airport

Dear Rudy:

Mead & Hunt, Inc. (Mead & Hunt) offers the following responses to comments received in association with proposed development of "The Hub," a proposed logistics/warehousing project at the Ontario International Airport (ONT). The following comment responses pertain to FAA wildlife hazard management regulations and guidance as well as policies set forth in the Airport Land Use Compatibility Plan (ALUCP) for the Ontario Airport. The same or similar comments are grouped to avoid duplication, and commentors are identified in association with each comment.

COMMENT TOPIC NO. 1

Burrowing Owls Are Not a Hazard to Aviation

Comment 1a: Contrary to statements in the Helix Environmental report, Burrowing Owls are not a hazard to aviation. They are small birds that fly close to the ground and do not fly in flocks. According to the FAA bird strike data, there were 21 reports of airstrikes involving these owls since 2008. Eight turned out to be other wildlife species or the species were unknown; for eleven a carcass or wing was found but no airstrike was reported by pilots; and two involved a Burrowing Owl strike but no damage was reported. In all these years there we no instances of a Burrowing Owl causing damage to a plane. If Burrowing Owls that live right next to the runways are not a threat to aviation, how much less a threat are the owls that live east of Haven.

Another argument is that Burrowing Owl attract larger raptors that might cause damage to a plane. This problem can be addressed through a raptor control problem, something that all airports need to have in place, whether or not they have Burrowing Owls near their property. Many other airports protect plans [sic] from large raptors using control strategies that do not kill or harm or trap the raptors.

Finally, none of the Helix Environmental statements that the FAA will not allow mitigation for Burrowing Owls near an airport are backed up with reference to FAA regulations or communications. If you look at the FAA regulations that discuss Wildlife Hazards, you will find that Burrowing Owls are not mentioned. If Burrowing Owls are NOT a hazard to aviation, the owl mitigation can be done on the boot property.

Commentors: Suzanne C. Thompson, Chair, Pomona Valley Audubon Society Burrowing Owl Committee (Letter submitted by email on January 4, 2023).

Susan A. Phillips, Director, Robert Redford Conservancy for Southern California and Sustainability Professor of Environmental Analysis, Pitzer College, with B. Elliott, D. Silver, C. Schlotterbeck, K. Floyd, S. Sheakley, A. Gonzolez, C. R. Smith, R. Bekendam, L. S. Dieter, and A. J. Noriega (Letter submitted by email on January 4, 2023)

RESPONSE TO COMMENT TOPIC NO. 1

A recent review of Wildlife strike records in the FAA's National Wildlife Strike Database (NWSD) indicate that burrowing owls have been associated with recorded wildlife strikes at U.S. airports since 1992. The NWSD identifies a total of 407 strikes associated with the Burrowing Owl, with 23 strikes (5.6 percent of the total strikes) occurring in 2022. Five burrowing owl strikes resulted in minor or minor/uncertain damage to the following commercial service aircraft: Boeing 727-200, Boing 737-700, Boeing 737-800, and McDonnell Douglas MD80. A 2015 strike with a commercially operated Cessna LC-41 resulted in substantial aircraft damage, which is defined as damage or structural failure which adversely affects the structure strength, performance or flight characteristics of the aircraft and would normally require major repair or replacement of the affected component.[1]

The recent FAA/USDA publication *Wildlife Strikes to Civil Aircraft, 1990 to 2021* analyzes and interprets NWSD strike records. The analysis of NWSD records indicates that approximately 71 percent of all strikes from 1990 to 2021 occurred at elevations below 500 feet above ground level (AGL), with many occurring while aircraft were on the ground. The number of strikes above 500 feet AGL declined by 32 percent for each 1,000-foot gain in height for commercial transport aircraft and by 43 percent for general aviation aircraft. Strikes that occur on the ground or at low altitudes may cause comparatively less damage to aircraft than strikes that occur at higher elevations, but they occur more frequently and cause a negative effect on flight, such as an aborted takeoff, engine shutdown, precautionary landing, or other negative effect because they occur during sensitive takeoff and landing cycles.[2] As indicated by this data, the conclusion that burrowing owls do not fly high enough to cause bird strikes is incorrect.

Both civil and military aviation agencies understand that the burrowing owl poses direct hazards to aircraft operations, and the burrowing owl has been the subject of research. A 2018 article published in the Journal of Raptor Research entitled "Assessing Owl Collisions with U.S. Civil and U.S. Air Force Aircraft" considered the FAA NWSD, and the U.S. Air Force's Birdstrike Database identified 2,531 strikes that involved at least 20 species of owls. A total of 192 of the strikes (7.8 percent) were associated with burrowing owls. Among the conclusions drawn in the report:

- Owl strikes typically occurred within the airfield environment itself.
- Of the strikes associated with owls, 86 percent occurred when the aircraft was at or below 30 feet AGL.
- Owl strikes with US civil and USAF aircraft are a common event during flight operations within the USA and throughout the world.[3]

[1] FAA National Wildlife Strike Database. 2023. Database search for strikes associated with Burrowing Owl. Accessed January 2023. Available at: https://wildlife.faa.gov/search

[2] FAA and USDA. 2022. Wildlife Strikes to Civil Aircraft in the United States, 1990-2021. Available at: https://www.faa.gov/sites/faa.gov/files/2022-07/Wildlife-Strike-Report-1990-2021.pdf

[3] Journal of Raptor Research. 2018. Assessing Owl Collisions with U.S. Civil and U.S. Air Force Aircraft. Vol. 52 (3): 2820290. Available at: https://bioone.org/journals/journal-of-raptor-research/volume-52/issue-3/JRR-17-64.1/Assessing-Owl-Collisions-with-US-Civil-and-US-Air-Force/10.3356/JRR-17-64.1.full

The FAA and USDA have considered burrowing owls as both a direct and indirect hazard to aircraft operations, as the burrowing owl can be prey for other hazardous species. Burrowing owls are opportunists who often use abandoned ground squirrel burrows for nesting. The combined presence of ground squirrels and the small owls attracts birds of prey such as red-tailed and Swainson's hawks, which are large enough to cause damage to aircraft. Burrowing owls were determined to pose a sufficient hazard at Naval Air Station Lemoore to cause the U.S. Navy and U.S. Fish and Wildlife to relocate the population to a remote area of the 19,000-acre installation.[4] Vultures, hawks, and other raptors are routinely addressed in the integrated wildlife hazard management plans prepared by civil airports.

The response to comment Topic No. 2 identifies FAA regulations and guidance that would conflict with the establishment of a burrowing owl preserve on airport property east of Haven Avenue.

COMMENT TOPIC NO. 2

Suggested Creation of a 90-acre Burrowing Owl Preserve on Airport Property

Comment 2a: More than 30 comments refer to the land that OIAA owns east of Haven Avenue and suggest that the creation of a "90-acre burrowing owl preserve on the site that is properly endowed and well managed will help keep the remaining Ontario owls safe…."

Commentors: G. Sidney Silliman (email dated January 3, 202), Lori Galloway (email dated January 1, 2023), Laura Jaoui (email dated January 2, 2023), Shea Millan (email dated January 2, 2023), Dave Macias, (email dated January 2, 2023), Gus Ocon (email dated January 2, 2023), Jacob Ligorria (email dated January 2, 2023), Maria Holcomb (email dated January 3, 2023), Miriam Rodriguez (email dated January 2, 2023), Patty Anis (email dated January2, 2023), Patricia Gleason (email dated January 2, 2023), Rachel Innes (Email dated January 1, 2023), Deena Ligorria (email dated January 2, 2023), Rebecca Byerley (email dated January 2, 2023), Andy Georges (email dated January 2, 2023), Alan Davis (email dated January 2, 2023); Madeline Allinder (email dated January 2, 2023), Maria Bennett (email dated January 1, 2023), Martina Ebert, Ph.D (email dated January 3, 2023), Dan Silver (email dated January 2, 2023), Scott Marnoy, MD (email dated January 2, 2023), Robert Holcomb (email dated January 1, 2023), Pamela Nelson (email dated January 4, 2023), Barbara Barton (email dated January 3, 2023), Caren Hanson (email dated January 4, 2023), Joel Huschle (email dated January 4, 2023), Jazmyn Rivera (email dated January 4, 2022), Jeff Strogen (email dated January 4, 2023), Kelly Coyne (email dated January 4, 2023), Ana Rodriguez (email dated January 3, 2023), Erik Knutzen (email dated January 4, 2023), Kimberly Dillbeck (email dated January 3, 2023), Marcyn Del Clements (email dated January 4, 2023), April D. Chertkow (email dated January 4, 2023),

Comment 2b: I support the proposed 90-acre Burrowing Owl Reserve at that site. Please do not destroy one of the last remnants of Burrowing Owl habitat in our valley**.**

Commentor: Scott Marnoy, MD, email dated January 2, 2023.

Comment 2c: I implore the City to ensure that if this project moves forward, requires the project developer to conserve land, forever to protect burrowing owl within the City of Ontario.

[4] Hendron. 2017, Solving the unsolvable:wise conservation solution protects owls and aviators at NAS Lemoore. Available at: https://www.fws.gov/story/2021-06/solving-unsolvable

Commentor: Paul Romario (email dated January 4, 2023) – PDF P. 34

Comment 2d: This bird is an important part of the natural heritage of Ontario and the Inland Valley. The vestigial habitat and owl population are true treasures that the City and Airport have the unique opportunity to capitalize on and share with not just the local community, but with travelers near and far. Instead of allowing the land to be developed, this land should be set aside for preservation of the burrowing owl. In doing so, the City and Airport will be taking a leadership role in helping conserve the burrowing owl….

Commentor: Shari Wasson, Certified California Naturalist and Co-Founder of Inland Valley Advocates for the Environment (IVAE)

Comment 2e: The burrowing owl is perhaps the signature species that makes Ontario unique—so signature, in fact, that the entire airport could be named after and themed as the Burrowing Owl Ontario Airport. Conserving this sensitive species—that has long been on the cusp of endangered species status—would position Ontario as a leader in innovative conservation strategies. This would open opportunities for the city to develop ecotourism opportunities, interpretive displays, artwork, and educational stations within the airport to celebrate the local owl population. Including the Burrowing Owl habitat east of the Airport could be part of the Airport's plan for greening and electrification.

…The benefits of having burrowing owls on airport land include their role as natural pest controllers and their potential to attract ecotourism.

Commentor: Susan A. Phillips, *et al.* (Letter submitted by email dated January 4, 2023.)

Comment 2f: The Federal Aviation Administration (FAA) does not list the burrowing owl as a species that poses danger to aircraft. In fact, the FAA actively promotes the conservation of burrowing owls and other wildlife at airports through its Airport Wildlife Hazard Management Program. This program provides guidance and resources for airport operators to develop and implement effective wildlife hazard management strategies that prioritize safety, while also promoting the conservation of wildlife on and around airport property (Federal Aviation Administration, 2019). The FAA also recognizes the important of conserving wildlife at airports, and takes steps to ensure that safety is prioritized while also promoting the conservation of species like the burrowing owl (Federal Aviation Administration. (2019). AIrport wildlife hazard management. Retrieved from https://www.faa.gov /airports_safety/wildlife. U.S. Fish and wildlife Service (2020, and Burrowing owl (*Athene cunicularia*). Retrieved https://fws.gov.southeasxt/wildlife/bird.burrowing-owl/).

Commentor: Susan A. Phillips *et al.* (Letter submitted by email dated January 4, 2023.)

Comment 2g: Please find a way to keep Airport Burrowing Owls in Ontario with a professionally managed and properly endowed preserve for the owls on site or nearby.

Commentor: Susan A. Phillips et al. (Letter submitted by email dated January 4, 2023.)

Comment 2h: Surely the best use for this property is to become a Burrowing Owl preserve.

Commentor: Trude Hurde (letter dated January 2, 2023)

RESPONSE TO COMMENT TOPIC NO. 2

The creation of a burrowing owl preserve site on airport property east of Haven Street would directly conflict with FAA regulations and guidance associated with the safety of aircraft operations and the use airport property. The following regulations and FAA guidance would apply to the proposed establishment of burrowing owl preserve on airport property:

- Title 14 of the Code of Federal Regulations, Part 139.339, *Wildlife Hazard Management*
- FAA Advisory Circular 150/5200-33, *Wildlife Hazard Attractants on and Near Airports*
- FAA Grant Assurances
- CertAlert 06-07, Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports

Each item and its applicability to the proposed preserve is discussed in the following paragraphs.

Title 14 of the Code of Federal Regulations Part 139.337, Wildlife Hazard Management

The Ontario International Airport (ONT) holds an operating certificate from the FAA in accordance with Title 14 Part 193, "Airport Certification." As a certificated airport, the City, as the Airport Operator, must meet the requirements of Title 14 of the Code of Federal Regulations Part 139.337, *Wildlife Hazard Management* (14 CFR Part 139.337). As stated in the regulation, "The operator of certificated airport, must take immediate action to alleviate wildlife hazards whenever they are detected (14 CFR 139.337, (a))." In this context, a wildlife hazard refers to the potential to cause a damaging aircraft collision with wildlife on or near an airport. Wildlife poses a direct threat when it has the potential be involved in a collision or "strike" with aircraft. Wildlife poses an indirect threat when it causes damage to aircraft or aviation facilities, such as nesting in aircraft or navigational equipment, chewing through wires, or by attracting other wildlife that could pose a direct hazard, such as wildlife that may attracts predators, such as raptors, coyote, etc.

A certificate holder must formulate an implement a wildlife hazard management plan when the FAA Administrator determines that one is needed based on the results of Wildlife Hazard Assessment (14 CFR 139.337 (e)). The City of Ontario has developed an FAA-approved WHMP as requested by the FAA Administrator. FAA regulations at 14 CFR Part 139.337 also refers to other FAA resources that are acceptable for managing wildlife at airports. Paragraph (g) states that "FAA Advisory Circulars contain methods and procedures for wildlife hazard management at airports that are acceptable to the Administrator."

FAA AC 150/5200-33C, Wildlife Hazard Attractants On and Near Airports

Available at: https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5200-33C.pdf

The FAA issues several Advisory Circulars (ACs) and CertAlerts to help airport operators address specific issues associated with airport operations and management. AC 150/5200-33C provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports, and the FAA recommends the guidance for airports that receive funding under Federal grant assistance programs,

including the Airport Improvement Program, and the 39 grant assurances (obligations) associated with the receipt of federal funds, specifically FAA grant assurance nos. 9 and 34.
The FAA also recommends the AC 150/5200-33C for land-use planners and developers of projects, facilities, and activities on or near airports. The proposed creation of a burrowing owl preserve on Airport-owned property would conflict with key recommendation identified in the AC 150/5200-33C:

- **Maintaining an appropriate environment for safe and efficient aircraft operations.** As identified in AC 150/5200-33C, "Airport operators should maintain an appropriate environment for the safe and efficient operation of aircraft, which entails mitigating wildlife strike hazards by fencing, modifying the landscape in order to deter wildlife, or by hazing or removing wildlife hazards to aircraft from congregating at airports" (paragraph 1.1.1).

  Burrowing owls are known to pose direct and indirect strike hazards to aircraft operations – burrowing owls have been struck at ONT and other airports – and they can pose indirect hazards as they can attract other hazardous wildlife, including predators such as coyote and raptors. Contrary to the AC, creating a burrowing owl preserve would attract potentially hazardous wildlife rather than deter wildlife from congregating on airports.

- **Minimum Separation criteria for land use practices that attract hazardous wildlife to the airport vicinity.** Chapter 1 of AC 150/5200-33C identifies minimum separation distances between aircraft movement areas and land use practices that attract hazardous wildlife. As stated in paragraph 1.1.3, "FAA criteria include land uses that cause movement of hazardous wildlife onto, into, or across an airport's approach or departure airspace or aircraft movement areas."

  For airports that support turbine-powered aircraft (i.e., jets), the FAA recommends maintaining a separation of 10,000 feet "between the closest point of the airport's aircraft operation area and the hazardous wildlife attractant" (paragraph 1.3). To protect approach, departure, and circling airspace, "the FAA recommends a distance of 5 miles between closest point of the airport's aircraft operations area and the hazardous wildlife attractant" (paragraph 1.4).

  As measured using aerial photography, the east side of Haven Avenue is less than 2,100 feet from aircraft pavements associated with Runways 26L and 26R and is directly beneath the approach/departure airspace; therefore, the creation of a wildlife preserve at this location would conflict with FAA guidance set forth in the AC.

- **Land Uses that attract hazardous wildlife.** Chapter 2 of AC 150/5200-33C discusses land use practices that have the potential to attract hazardous wildlife and threaten aviation safety (paragraph 2.1.2). Among the land uses identified are mitigation banks and other land uses including conservation easements, parks, wildlife management areas, and other activities that may have the potential to attract hazardous wildlife.

  The AC states, "Regardless of the source of the attraction, when hazardous wildlife is noted on a public use airport, each certificate holder must take prompt remedial action(s) to protect aviation safety" (paragraph 2.8.4).

  Section 2.9 specifically refers to habitat for state and federally listed species on airports. The AC notes that airports provide an artificial environment that may vary from surrounding native landscapes, and some wildlife species may be attracted to the airport in higher numbers because the airport may offer features the species prefer, including state and federally listed species and species of concern.

The guidance clearly states:

> "Airport operators should exercise caution in adopting new management techniques because they may increase wildlife hazards and be inconsistent with safe airport operations. Managing the on-airport environment to facilitate or encourage the presence of hazardous wildlife species can create conditions that are incompatible with, or pose a threat to, aviation safety" (paragraph 2.9.1.1).

In referring to state listed species and species of concern, the FAA acknowledges that not all species of concern pose a direct threat to aviation safety, but "may pose and indirect threat and be hazardous because they attract other species or support prey species attractive to other species that are directly hazardous" (paragraph 2.9.1.2).

FAA Grant Assurances (Obligations)

When airport owners or sponsors, such as the City, accept funds from FAA-administered airport financial assistance programs, they must agree to certain obligations or assurances that require the recipients to maintain and operate their facilities safely and efficiently and in accordance with specified conditions.

Table 1 identifies specific Airport Improvement Program (AIP) grant assurances that are applicable to wildlife hazard management and the creation of a burrowing owl preserve on airport property.

Table 1: Grant Assurances Applicable to Wildlife Hazard Management

Grant Assurance No. / Title	Description and Applicability
GA 19 Operation and Maintenance	**Description** The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state, and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes" (paragraph a). **Applicability** The creation of a burrowing owl preserve would create a hazardous wildlife attractant on airport property, which conflicts with the requirement to operate the airport at all times in a safe and serviceable condition.
GA 20 Hazard Removal and Mitigation	**Description** It will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards. **Applicability** The creation of a wildlife preserve for the burrowing owl would create a hazardous wildlife attractant beneath terminal airspace. Such action would conflict with the terms of the grant assurance, which require the airport operator to adequately clear and protect the terminal airspace.

GA 21 Compatible Land Use	**Description** It will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. **Applicability** The proposed burrowing owl preserve would be located on airport property and within the Airport Influence Area for ONT as designated by the adopted Airport Land Use Compatibility Plan (ALUCP). The development of wildlife preserve is considered an incompatible use within the context of ALUCP policies, the purpose of which is to restrict the use of land in the airport vicinity to activities and purposes that are compatible with normal operations. The proposed preserve would conflict with the ALUCP and the grant assurance.
Source: AIP Grant Assurances for Airport Sponsors. 2022. Accessed January 2022. Available at: https://www.faa.gov/sites/faa.gov/files/airports/new_england/airport_compliance/assurances-airport-sponsors-2022-05.pdf	

CertAlert 06-07, Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports

CertAlerts provide the FAA Airports Safety and Operations Division with additional guidance about Part 139 Airport Certification and related issues. Cert Alert 06-07 describes procedures for responding to requests by state wildlife agencies to facilitate and encourage habitat for state-listed species or species of special concern that occur on airports and may pose a threat to aviation safety. Some of the guidance set forth in this CertAlert is reiterated in AC 150/5200-33C. The CertAlert states:

> Airport operators must decline to adopt habitat management techniques that jeopardize aviation safety. Adopting such techniques could place them in violation of their obligations and subject to an FAA enforcement action and possible civil penalties under 49 U.S.C. §44706, as implemented by 14 CFR § 139.337. In particular, an airport operator that has received federal grant-in-aid assistance is obligated through its grant assurances to maintain compatible land uses. Failure to do so may lead to noncompliance with its grant obligations. Further, airports that serve commercial air carriers are required to be certificated under 49 U.S.C. §44706, as implemented by 14 CFR Part 139. Title 14 CFR § 139.337(a) requires airport operators holding a Part 139 certificate to "take immediate action to alleviate wildlife hazards whenever they are detected."

Although the proposal to create a burrowing owl preserve was not issued by a state agency, the burrowing owl is a state species of concern. The CertAlert is clear in that airport operators should not manage airport property for the preservation of state list species/species of concern based on their potential to attract potentially hazardous wildlife and pose conflicts with FAA regulations, grant assurances, and guidance.

COMMENT TOPIC NO. 3

Undeveloped Airport Safety Zones

Two comment letters indicated that the creation of a burrowing owl preserve would maintain the project area as "undeveloped safety zones for the airport" and that these "undeveloped areas provide emergency landing zones for aircraft, if needed."

Commenters: Natasha Walton, Planning Director, Inland Valley Advocates for the Environment (IVAE) (January 4, 2023); Trude Hurd, Lake Forest, CA (January 2, 2023)

RESPONSE TO COMMENT TOPIC NO. 3

While having undeveloped land around airports is desirable, designating open land as a wildlife preserve conflicts with federal, state, and local airport land use compatibility guidance due to wildlife hazard concerns (as noted in the above sections). For the purposes of "The Hub" project, buildings and other structures were sited in a manner that keep the following critical aeronautical areas clear of obstructions:

- **Runway Protection Zone (RPZ)**

  Trapezoidal in shape, centered about the extended runway centerline, and typically located off each runway end. The full standards and dimensions for RPZs are in FAA Advisory Circular 150/5300-13, *Airport Design*. The purpose of the RPZ is to enhance the protection of people and property on the ground by clearing RPZ areas (and keeping them clear) of objects and activities that would impact the safety of people and property on the ground.

- **Safety Zones**

  The ONT safety zones are established in the Ontario International Airport Land Use Compatibility Plan (ALUCP), which was adopted by the City of Ontario (the City) in 2011 and amended in July 2018.

  The ONT safety zones are based upon the generic safety zones provided in the California Airport Land Use Planning Handbook (January 2011) and published by the California Department of Transportation (Caltrans), Division of Aeronautics. Safety Zone 1 is adjusted to match the ONT RPZs. The intent of the safety compatibility policies is to minimize the risks associated with an off-airport aircraft accident or emergency landing. The policies focus on reducing the potential consequences of such events when they occur.

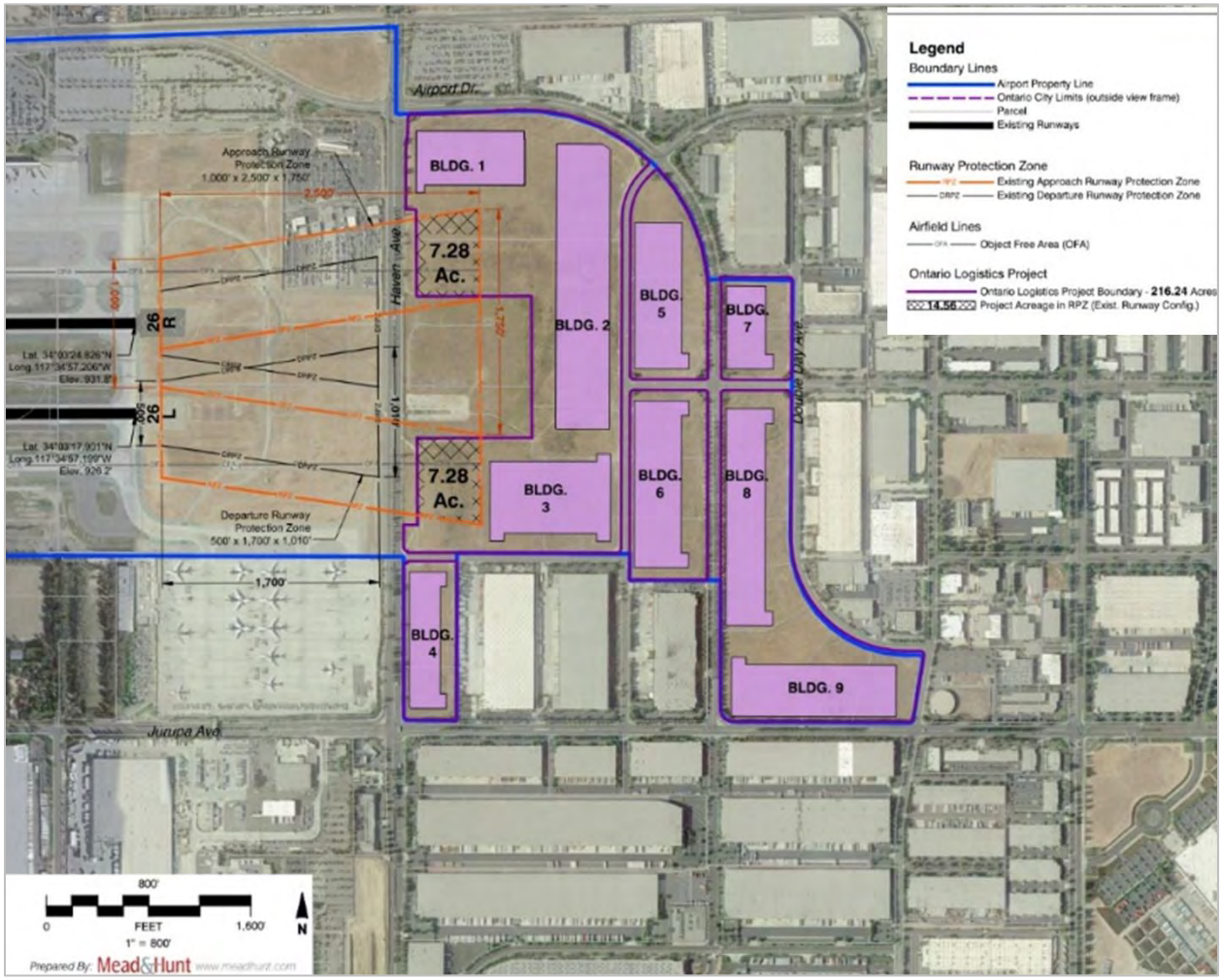
- **Airspace Surfaces**

  Three-dimensional airspace areas that surround a runway and are used by the FAA through Title 14, Code of Federal Regulations (CFR), Part 77, *Safe, Efficient Use, and Preservation of National Airspace,* to evaluate whether a structure or vegetation is or could be a hazard to air navigation. The dimensions of the ONT imaginary surfaces are based upon individual runway characteristics.

Runway Protection Zone (RPZ)

As shown in **Exhibit 1**, approximately 14.56 acres of the project site fall within the Runway Protection Zones (RPZs) for Runways 26L and 26R. The proposed site plan keeps this zone clear of future structures and parking lots. As such, no compatibility conflicts exist in the RPZs, which is the most restrictive of all the safety zones.

Exhibit 1: Runway Protection Zones

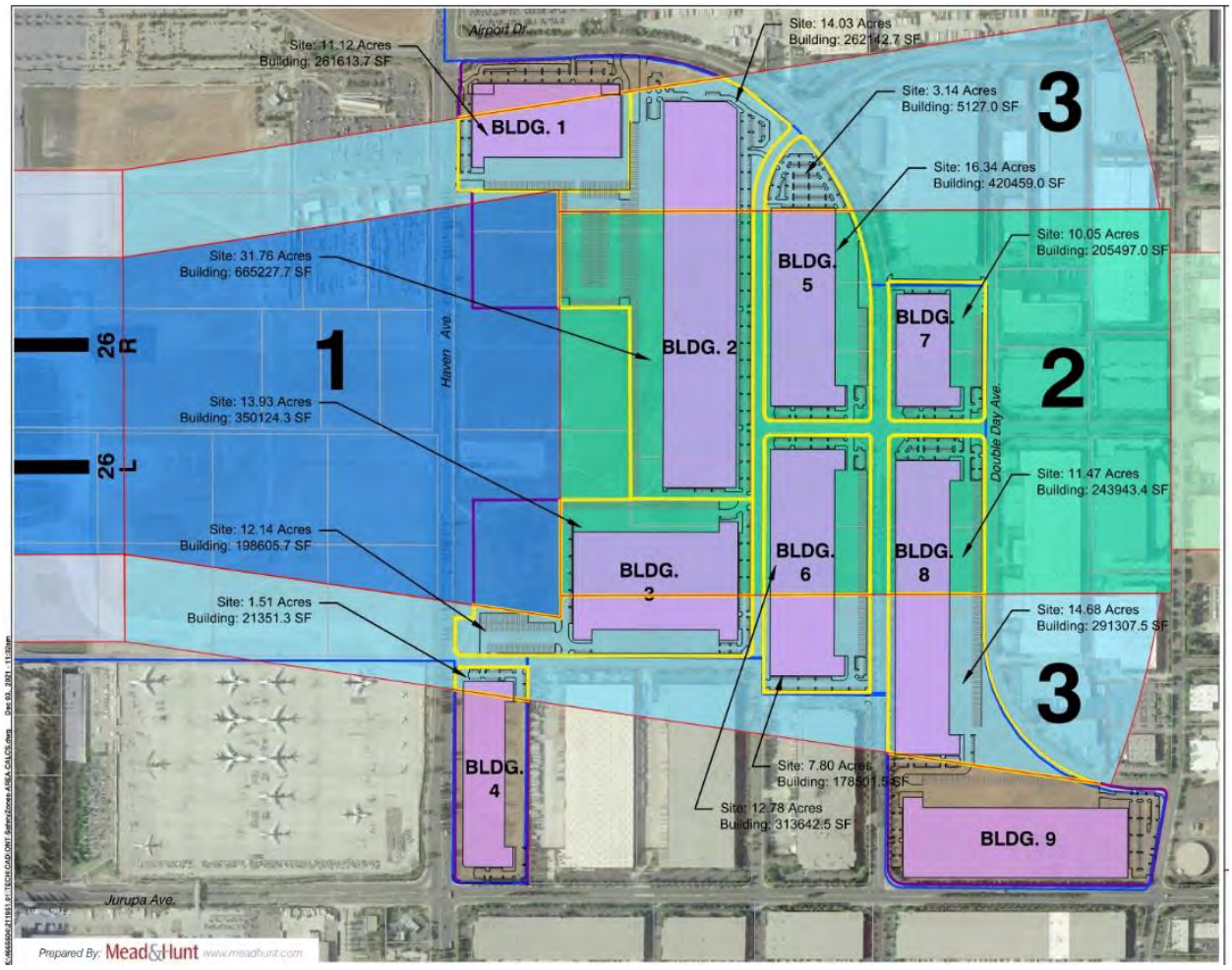


Safety Zones

The ONT ALUCP establishes intensity limits for nonresidential uses (i.e., maximum number of people per acre) and other safety considerations within each of the five safety zones established for ONT. As shown in **Exhibit 2**, the project site spans Safety Zones 1, 2, and 3.

As noted above, Safety Zone 1 is clear of structures and satisfies ALUCP safety criteria. For Safety Zones 2 and 3, the individual proposed building sites are subject to the ALUCP usage intensity (people per acre) limits for each zone. The City of Ontario controls the ultimate determination of compliance with the ALUCP intensity criteria, and those determinations will occur when a potential tenant(s) is identified for each building and a specific land use is proposed. The intensity limits for each building will be incorporated into the tenant lease agreement. As such, no compatibility conflicts exist in Safety Zones 2 and 3.

Exhibit 2: Safety Zones

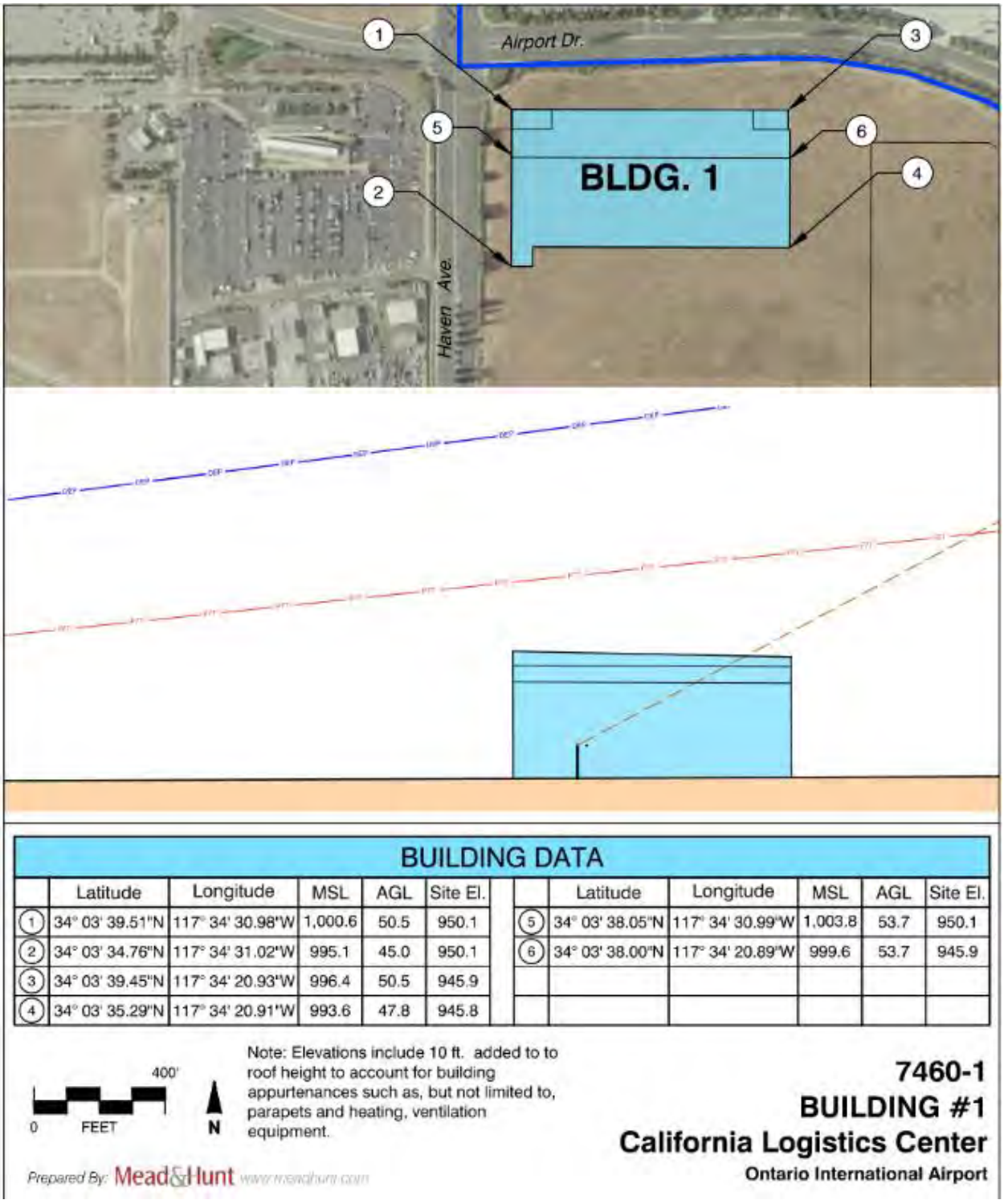


Airspace Surfaces

Airspace protection compatibility policies seek to prevent the creation of land use features that can pose hazards to the airspace required by aircraft in flight and have the potential for causing an aircraft accident. The project has been conceptually designed to keep all future structures below the Part 77 obstruction surfaces; therefore, the project does not pose any air space hazards.

Additionally, FAA Form 7460-1 has been submitted to the FAA for an aeronautical study for all nine buildings in The Hub (see **Exhibit 3** for an example). The FAA has issued "Final Determination" letters for each of the nine project buildings in 2022. None of the buildings were determined to be a hazard to air navigation subject to the conditions stipulated.

Exhibit 3: The Hub



BUILDING DATA

	Latitude	Longitude	MSL	AGL	Site El.		Latitude	Longitude	MSL	AGL	Site El.
1	34° 03' 39.51"N	117° 34' 30.98"W	1,000.6	50.5	950.1	5	34° 03' 38.05"N	117° 34' 30.99"W	1,003.8	53.7	950.1
2	34° 03' 34.76"N	117° 34' 31.02"W	995.1	45.0	950.1	6	34° 03' 38.00"N	117° 34' 20.89"W	999.6	53.7	945.9
3	34° 03' 39.45"N	117° 34' 20.93"W	996.4	50.5	945.9						
4	34° 03' 35.29"N	117° 34' 20.91"W	993.6	47.8	945.8						

400'
0 FEET
N

Note: Elevations include 10 ft. added to to roof height to account for building appurtenances such as, but not limited to, parapets and heating, ventilation equipment.

Prepared By: Mead & Hunt www.meadhunt.com

7460-1
BUILDING #1
California Logistics Center
Ontario International Airport

CONCLUSIONS

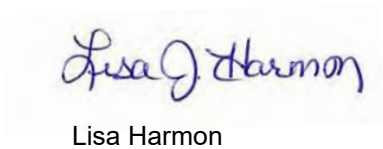
The creation of a burrowing owl preserve would create an incompatible land use that conflicts with Chapter 2 of FAA AC150/5200-33C; it would create habitat for a species that has caused both direct and indirect threats to aircraft operations. Although the FAA supports efforts to protect threatened and endangered species and must review proposed projects for the consistency with the Endangered Species Act, the FAA cannot do so to the detriment of safe aircraft operations. As stated in the AC, "Requests to enhance or create habitat for threatened and endangered species often conflict with the safety of the traveling public and may place the protected species at risk of mortality by aircraft collisions. The FAA does not support the creation, conservation, or enhancement of habitat or refuges to attract endangered species on airports" (paragraph 2.9.2.1).

The FAA's continuing mission is to provide the safest, most efficient aerospace system in the world, and the safety of aviators and the traveling public must remain paramount. FAA regulations pertaining to hazardous wildlife seek to prevent the development of new wildlife hazard attractants within specified separation distances to protect the traveling public; however, the FAA supports conservation and seeks to avoid and minimize effects to protected species. The FAA complies with the National Environmental Policy Act for proposed airport actions, and it does not oppose the creation, mitigation, or conservation of areas that are constructed outside of the separation distances identified in AC 150/5200-33.

Mead & Hunt appreciates this opportunity to review the comments received on The Hub, a proposed logistics project on Ontario International Airport. Please do not hesitate to contact Lisa Harmon by email (lisa.harmon@meadhunt.com) should you have comments on the material discussed in this letter.

Sincerely,

MEAD & HUNT, Inc.



Lisa Harmon
Aviation/Environmental Planner

Rick Jones
FAA Qualified Airport Wildlife Biologist.

Attachment: Annotated CEQA Comments

ATTACHMENT
Annotated CEQA Comments

Comments Received on The Hub at the Ontario International Airport (ONT)

From: Seth Thompson
To: Planning Director
Subject: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 10:34:01 AM

The multi page document supporting this agenda item includes several misstatements of fact and references to a flawed earlier document, all purporting to support the notion that there are no potential environmental harms flowing form the proposed development scheme. This is clearly not the case:

- the document relies on a mitigation plan for Burrowing Owls that has already failed;
- there is incontrovertible scientific evidence that even the best translocation efforts result in high mortality;
- those owls who survive the trauma of translocation represent a loss of distinct biodiversity;
- loss of the Ontario Airport owls will have damaging effects on Chino Burrowing Owls and cascading negative effects on the few indigenous Burrowing Owls in the Pomona Valley.

Dumping a massive document supporting one agenda item in the middle of a holiday week end and poses an almost insurmountable obstacle for advisory board members who want to conscientiously weigh the interests of OIAA, the local communities, and the broader good of the region.

If I were a member of the board, I'd want to say, "whoa, let's give this proposal the time and attention it deserves and table this agenda item." I encourage you to do the same.

From: Seth Thompson
To: Planning Director
Subject: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 10:46:08 AM

The multi page document supporting this agenda item includes several misstatements of fact and references to a flawed earlier document, all purporting to support the notion that there are no potential environmental harms flowing from the proposed development scheme.

But this bald statement requires you to ignore the dismal failure of the much hyped translocation scheme in the City of Ontario and the best available science on Burrowing Owl population dynamics.

The timing of filling this document in the middle of a holiday weekend almost guarantees that the members of the advisory board will not have time to thoughtfully review it and make a prudent recommendation.

The members of the advisory board and the larger community deserve better. Please table this item until you have had a chance to give it the skeptical scrutiny it deserves.

From: G. Sidney Silliman
To: Planning Director
Subject: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Tuesday, January 3, 2023 9:53:22 AM

To: Ontario Development Advisory Board
Subject: Agenda Item B at the January 4 2023 Development Advisory Board Meeting

Burrowing Owls, a California species of special concern, were once numerous in Ontario and Chino and on the land of what is now the Ontario Airport. Widespread development has resulted in a significant decrease in their numbers as little was done to ensure the survival of these unique birds. Today, we need to protect the remaining land where the Owls nest and raise their young.

There are at least four (4) significant and negative environmental effects of the proposed plan. These have not been considered or mitigated for. These are: (1) the plan proposes using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality; (2) loss of distinct biodiversity for the translocated owls; (3) negative effects on the Chino Burrowing Owls; and (4) overall higher mortality of translocated owls. In short, contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the Owls. Please do not destroy it with more warehouses! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario Owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Sidney Silliman
550 Mayflower Rd
Claremont, CA 91711
gssilliman@cpp.edu

From: Lori Galloway
To: Planning Director
Subject: Agenda Item B at the January 4,2023 Development Advisory Board Meeting
Date: Sunday, January 1, 2023 8:15:24 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for.
These are: using a mitigation plan for Burrowing Owls that has already **failed** and **will result in high mortality**, **loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls**. Contrary to the proposed Development Advisory Board decision, the project will have a **significant negative effect** on Burrowing Owls, a ***state species of special concern.***

The land that OIAA owns east of Haven Avenue is a ***primary*** nesting site for the owls. ***Please do not destroy it so more warehouses can be added to Ontario!*** A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy. Comment 2a

Lori Galloway

From:	Laura Jaoui
To:	Planning Director
Subject:	Agenda Item B for Jan. 4, 2023 Development Advisory Board Meeting
Date:	Monday, January 2, 2023 10:21:29 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a.

Sincerely, Laura Jaoui, 842 Harrison Ave., Claremont, CA 91711

From: Shea Millan
To: Planning Director
Subject: Agenda Item B, 01/04/2023 Development Advisory Board Meeting Comment
Date: Monday, January 2, 2023 4:22:54 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Thank you,
Shea Millan
Vice Chair
Sierra Club Santa Margarita Group

From: dtmacias@aim.com
To: Planning Director
Subject: Agenda Item B
Date: Monday, January 2, 2023 7:08:20 PM

Agenda item: For Agenda Item B at the January 4, 2023, Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls' nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Sincerely,
Dave Macias

From:	ad6eg@charter.net
To:	Planning Director
Subject:	Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date:	Monday, January 2, 2023 5:27:14 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Sincerely,

Gus Ocon

From: Jacob Ligorria
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 6:02:25 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Sincerely,
Jacob Ligorria (College biology student and seabird researcher)

From: Marcia Holcomb
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Tuesday, January 3, 2023 1:03:53 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

MARCIA HOLCOMB

From: Myriam Rodriguez
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 6:39:13 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Sincerely,
Myriam Rodriguez

From:	Patty Anis
To:	Planning Director
Subject:	Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date:	Monday, January 2, 2023 5:59:19 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Thank you for your consideration.

Sincerely,

Patricia A. Anis
Pomona Valley Audubon Society
Pattyanis@gmail.com

From:	patricia gleeson
To:	Planning Director
Subject:	Agenda Item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date:	Monday, January 2, 2023 9:24:28 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Please protect Burrowing Owls in our area. These small, sandy colored owls with long, slender legs and bright yellow eyes are a state species of special concern and also a local concern due to development which threatens their habitat. Unlike other owls, Burrowing Owls are active in the daytime. They live and hunt on the ground, and people can see how special they are in the full light of the sun. In the past Burrowing Owls were once abundant in Ontario and Chino, but many of these owls have been driven out of the area due to widespread development that did not protect the land where these beautiful owls nest and raise their young. They are worth saving and safeguarding.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for the consideration of these owls. The mitigation plan for the Burrowing Owls has already failed and will result in a high mortality, and there is a loss of distinct biodiversity for the translocated owls. There is also a damaging effect on Chino Burrowing Owls and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board Decision, the project will have a significant negative effect on Burrowing Owls which are already a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy their habitat so that more warehouses can be added to Ontario. A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat, and schoolchildren, families and each one of us can study and enjoy the beauty of our local Burrowing Owls in the future.

Comment 2a

Please help the species to survive in our area by protecting Burrowing Owls and their nesting site east of Haven Avenue.

Thank you.

Sincerely yours,

Patricia Gleeson

12380 Magnolia Ave.

Chino, CA 91710

portkee@yahoo.com

(909)573-7629

From:	Rachael Innes
To:	Planning Director
Subject:	Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date:	Sunday, January 1, 2023 10:01:11 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Thank you,

Rachael Innes

From: Deena Ligorria
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 6:11:18 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Sincerely,
Deena Ligorria

From: rebeca byerley
To: Planning Director
Subject: Burrowing owl at the Ontario airport
Date: Monday, January 2, 2023 9:31:20 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owl's nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Thank You,
Rebeca Byerley
626 498-3668

From: Andy Georges
To: Planning Director
Subject: Burrowing Owls
Date: Monday, January 2, 2023 2:19:20 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposedplan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Regards,
Andy Georges

Sent from my iPhone

From: glok01
To: Planning Director
Subject: Burrowing Owls
Date: Sunday, January 1, 2023 2:02:08 PM

Regarding:

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls have been in this area for years, this is their home. Do we really need more development???

Please find another location for development, protecting the remaining land where the owls nest and raise their young is crucial to their survival.

Thank you,
Gloria Karimi

From: chaldavis@aol.com
To: Planning Director
Subject: Comments for 1/4/23 Agenda Item B
Date: Monday, January 2, 2023 2:10:15 PM

Agenda item:
For Agenda Item B at the January 4, 2023
Development Advisory Board Meeting

To the Ontario Development Advisory Board,

For the past six years, I have been involved in efforts to monitor the numbers of burrowing owls in our area. At one time there were many native burrowing owls in southern California but heavy development has driven them close to elimination. Several small groups of them are still nesting in the Ontario and Chino areas and need to be protected by preserving the areas where they live and nest.

I understand that the Development Advisory Board is considering developments that will seriously endanger or eliminate these burrowing owl populations. There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is an important nesting site for these owls. Please do not destroy it so more warehouses can be added to Ontario. A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy. They are an important part of a healthy environment that we all need to live in.

Comment 2a

Sincerely,
Alan Davis

From: Madeline w Allinder
To: Planning Director
Subject: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Sunday, January 1, 2023 6:12:28 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Madeline Allinder

Sent from my iPhone

From:	Maria B
To:	Planning Director
Subject:	For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting, re Burrowing Owls
Date:	Sunday, January 1, 2023 2:06:42 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young. The burrowing owl group formerly located at the Chino Airport in 2021, did not return in 2022, due to construction and other issues.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Thank you,
Maria Bennett

From:	Martina Ebert
To:	Planning Director
Subject:	For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting: Preserve the Habitat of Local Burrowing Owls
Date:	Tuesday, January 3, 2023 1:43:51 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Sincerely,

Martina Ebert, Ph.D.
356 Duchesne Court
Claremont, CA 91711
(909) 213-2243
Martina.Ebert@pomona.edu

From: Dan Silver
To: Planning Director
Subject: January 4, 2023, Item B, Development Advisory Board Meeting
Date: Monday, January 2, 2023 10:58:52 AM

January 2, 2023

Ontario Development Advisory Board
City of Ontario
planningdirector@ontarioca.gov

RE: January 4, 2023, Item B, Development Advisory Board Meeting

Dear Members of the Board:

Endangered Habitats League (EHL) objects to plans to displace Burrowing Owls from the project site. For your reference, EHL is a Southern California regional conservation group.

Burrowing Owls were once numerous in Ontario and Chino but are in sharp decline due to development that has not been planned to be compatible with owl survival. The property owned by OIAA east of Haven Avenue is a primary nesting site for the owls. The proposed translocation plan for the owls is inadequate, leaving unmitigated significant impacts that require an EIR. The proposed scheme does not have a track record of long term success and will cause mortality. It will also result in genetic depletion of remaining owls in the area. Rather, commercial development should be sited on a small footprint, leaving a viable, managed owl preserve. Compatibly of owls with airport operations has been achieved elsewhere.

We urge you to step back and consider other options for this highly sensitive and depleted species.

Sincerely,
Dan Silver

Dan Silver, Executive Director
Endangered Habitats League
8424 Santa Monica Blvd., Suite A 592
Los Angeles, CA 90069-4267

213-804-2750
dsilverla@me.com
https://ehleague.org [ehleague.org]

From: Scott Marnoy
To: Planning Director
Subject: Proposed Development East of Haven Ave.
Date: Monday, January 2, 2023 11:22:58 AM

Ontario Development Advisory Board

Dear Sirs: This is to voice my opposition to the planned destruction of the Burrowing Owl habitat located east of the airport. Burrowing Owls are a state Species of Special Concern and the proposed translocation of these owls is risky and its success is unproven. As an alternative, I support the proposed 90 acre Burrowing Owl Preserve at that site. Please do not destroy one of the last remnants of Burrowing Owl habitat in our valley.

Comment 2b

Sincerely,
Scott Marnoy, MD
Claremont, CA

From:	robert holcomb
To:	Planning Director
Subject:	Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date:	Sunday, January 1, 2023 9:34:44 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area by widespread development that did not protect them. This mistake must not be made again. We need to protect the remaining land where the owls nest and raise their young.

There are significant negative environmental impacts of the proposed plan that have not been considered or for which adequate mitigation actions have not been identified. Those mitigation actions currently being proposed for Burrowing Owls ARE CLEARLY INADEQUATE, have FAILED in the past, and will result in HIGH MORTALITY and LOSS OF DISTINCT BIODIVERSiTY for the translocated population,

The proposed Development Advisory Board decision fails to recognize that the project, as proposed, will have a significant negative effect on Burrowing Owls, a state species of special concern. The land that OIAA owns east of Haven Avenue is one of a VERY SMALL number of primary nesting sites for the owls. These owls are a public and a community resource, and this critical nesting area must not be destroyed for the financial gain of a few or short-sighted revenue increases. Once lost, this public resource cannot be restored.

A reasonable accommodation needs to be adopted. A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live and breed in their native habitat. Schoolchildren, families, and all of us can enjoy having our owls nearby to study and enjoy.

Comment 2a

Robert J. Holcomb

From: Jimmy Chertkow
To: Planning Director
Subject: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Wednesday, January 4, 2023 10:46:36 AM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

James Chertkow

From:	Suzanne C. Thompson
To:	Planning Director
Subject:	Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date:	Wednesday, January 4, 2023 9:35:12 AM

CITY OF ONTARIO DEVELOPMENT ADVISORY BOARD MEETING SUBMITTED COMMENTS
1/4/23

Re: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

Burrowing Owls were once numerous in Ontario and Chino but due to widespread development that did not protect biological resources, the owls are fast disappearing. We need action now to protect Burrowing Owl habitat and allow these little birds to continue to live on in Ontario as they have for hundreds of years. The presence of a thriving population of Burrowing Owls in Ontario is a biological asset for the community and a chance for children and all of us to see the owls close by in their native habitat. The people of Ontario need protection for their native species, not more warehouses.

There are at least four significant negative effects on the environment that will be caused by and not mitigated by the current plan.

One, it is shocking that the DAB is suggesting that the Ontario Plan mitigation for Burrowing Owls was in any way successful and that it is an approach to be used for the owls east of Haven Avenue. The Ontario Plan mitigation started around 2007 and I assume it is continuing. From 2007 on, the City of Ontario collected fees from developers to mitigate the loss of large sections of habitat. The idea was that the funds would be used to purchase mitigation land. I don't know how much has been paid by developers but as of a few years ago, it was about $14 million. **None** of that has been spent for mitigation. Probably 100s of BUOWs were evicted from their homes and no mitigation land was purchased that they could go to. Please don't tell us that now 15 years after the first evictions that the city is trying to find a land trust to establish a mitigation site. That doesn't repair the damage done by years of evicting owls without a mitigation site.

Two, another significant negative effect of translocating owls to sites far from their native land is the loss of distinct biodiversity. Kelly Barr, Kristin Ruegg and others have found genetically distinct populations of Burrowing Owls that are a distance apart even within California (Alvarado, Bossu et al., 2022). Translocating owls 30 to 40 miles from their natal site risks mixing the distinct groups. Possible advantages of the genetic differences that might increase survivability in a particular location would be lost to the owls.

Three, Burrowing Owls need to have other sites nearby within the usual range of juvenile dispersion (from .5 to 13 miles) so young adult owls can avoid inbreeding (Rosenberg, Gervais, & Trulio, 2007). The East of Haven Ontario Burrowing Owls are an average of 7 to 8 miles from several Burrowing Owl nesting sites in the Chino area. Thus, the Airport area owls make it possible for a healthy exchange of young adults finding mates between the two sites. Loss of the East of Haven site could seriously undermine the viability of what are now healthy populations of Burrowing Owls in Chino, contributing to the loss of all Burrowing Owls from the Pomona Valley.

Four, mitigation translocation for burrowing owls is an option that suits the preferences of land developers, but it does not provide a superior life for the owls. In fact, owls that are translocated from their home habitat are subject to higher mortality than those who are protected on site or nearby (Hennessey et al., 2022). The removal of all the OIA owls will be a significant blow to the possibility of success of owls in the area.

Contrary to the DAB analysis, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

In fact, the Helix Environmental Biological Resources report also states that leaving Burrowing Owls on site is the best option for the owls. Unfortunately, the report goes on to reject that option for invalid reasons such as the mistaken notion that Burrowing Owls are a hazard to aviation. Contrary to the statements in the Helix Environmental report, Burrowing Owls are not a hazard to aviation. They are small birds that fly close to the ground and do not fly in flocks. According to the FAA bird strike data, there were 21 reports of airstrikes involving these owls at OIA since 2008. Eight turned out to be other wildlife or the species were unknown; for eleven a carcass or wing was found but no airstrike was reported by pilots; and two involved a Burrowing Owl strike but no damage was reported. In all these years, there were **no instances** of a Burrowing Owl causing damage to a plane. If Burrowing Owls that live right next to the runways are not a threat to aviation, how much less a threat are the owls that live east of Haven.

Comment 1a

Another argument is that Burrowing Owl attract larger raptors that might cause damage to a plane. This problem can be addressed through a raptor control program, something that all airports need to have in place, whether or not they have Burrowing Owls near their property. Many other airports protect plans from large raptors using control strategies that do not kill or harm or trap the raptors.

Finally, none of the Helix Environmental statements that the FAA will not allow mitigation for Burrowing Owls near an airport are backed up with reference to FAA regulations or communications. If you look at the FAA regulations that discuss Wildlife Hazards, you will find that Burrowing Owls are not mentioned. If Burrowing Owls are NOT a hazard to aviation, then owl mitigation can be done on the boot property.

It is not too late to do the right thing and find a way to keep the Ontario Airport Burrowing Owls in the Ontario area with a professionally managed and properly endowed preserve for the owls on site.

We incorporate by reference the objections stated in the Redford Conservancy group opposition letter and additional opposition letters related to the January 4, 2023 hearing of this matter. While one or more of these letters may be withdrawn, the objections stated in the letters are valid and we incorporate them as if fully stated herein.

Sincerely,
Suzanne Thompson
Chair, Pomona Valley Audubon Society Burrowing Owl Committee

References

Alvarado AH, Bossu CM, Harrigan RJ, Bay RA, Nelson ARP, Smith TB, and KC Ruegg. (2022). Genotype-environment associations across spatial scales reveal the importance of

putative adaptive genetic variation in divergence. Evolutionary Applications 00: 1-18.

Hennessey, S.M., et al. (2022). Release strategies and ecological factors influence mitigation translocation outcomes for burrowing owls: a comparative evaluation. *Animal Conservation*.

Rosenberg, D.K., L. A. Trulio, D. Catlin, D. Chromczack, J. A. Gervais, N. Ronan, and K. A. Haley. 2007. The ecology of the Burrowing Owl in California. Unpublished report to Bureau of Land Management.

From:	Pam Nelson
To:	Planning Director
Cc:	Pam Nelson
Subject:	agenda item B: comment, burrowing owls and warehouse advisory board
Date:	Wednesday, January 4, 2023 11:22:32 AM

Please many negative environmental effects for the warehouse development considered today. Burrowing owl habitat is one of them. Burrowing owls were once numerous throughout S. California and especially in Ontario and Chino. They are now a State species of concern. Development of all types have not been kind to this wildlife species since they live best on the same type of land that humans like to develop.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Thank you,
Pam Nelson
chair, Santa Margarita Group/Sierra Club
(commenting as an individual, not representing the Club)

From:	Barbara Barton
To:	Planning Director
Subject:	Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting. PUBLIC COMMENTS FROM FRIENDS OF THE BUOWS
Date:	Tuesday, January 3, 2023 5:42:53 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Barbara A. Barton

Sent from my iPad

From: C Hanson
To: Planning Director
Subject: Burrowing Owl Habitat threat
Date: Wednesday, January 4, 2023 11:46:58 AM

Please many negative environmental effects for the warehouse development considered today. Burrowing owl habitat is one of them. Burrowing owls were once numerous throughout S. California and especially in Ontario and Chino. They are now a State species of concern. Development of all types have not been kind to this wildlife species since they live best on the same type of land that humans like to develop.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Caren Hanson
Project Manager of Butterfly Gardens for the Sierra Club Santa Margarita Group
carenhansonb17@gmail.com

From: Joel Huschle
To: Planning Director
Subject: Burrowing Owl Protections
Date: Wednesday, January 4, 2023 8:50:32 AM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Thank you,

Joel Huschle

From: Jessica Garciacano
To: Planning Director
Subject: Development Plan PDEV21-047 Environmental Assessment and Addendum Approval
Date: Wednesday, January 4, 2023 9:34:22 AM

Thank you for the opportunity to comment on the Development Plan PDEV21-047 Environmental Assessment and Addendum Approval on today's agenda for the City of Ontario Development Advisory Board. I am not available to attend today's meeting but would like to voice my concern for approval. I have lived in Ontario my entire life as well as my parents and children. I am very concerned regarding the proposed development and actions taken towards the burrowing owl population on-site. This burrowing owl population has garnered world-wide attention and has enthralled the public.

I am aware that the CIty of Ontario has collected fees from development, particularly within the Ontario Ranch Specific Plan in response to burrowing owl mitigation, but I am not aware, and the addendum also refers that these moneys have not been used to purchase and conserve burrowing owl mitigation. This deferment of mitigation is irresponsible and harms the burrowing owl population in the City of Ontario. There needs to be transparency on how these fees will be utilized for mitigating impacts. The City of Ontario as a lead agency, needs to be responsible and move forward with fulfilling its obligations, as well as consider the cumulative impacts from this deferment.

This may be one of the last successfully reproducing populations of burrowing owl in the City of Ontario. They have in recent years observed having up to 9 chicks, in one burrow! I implore the City to ensure that if this project moves forward, and the owls are moved, the City requires the project developer to conserve land, forever to protect burrowing owl within the City of Ontario. We should not subject these owls to move without permanent conservation. The fees are not acceptable in this case. These owls need land and without compensatory mitigation of habitat, the impacts to this project are significant under CEQA as they will have a substantial effect either directly or through habitat modifications on a special status species.

Comment 2d

Sincerely,

Paul Romero
Ontario, CA 91762

From: Jazmyn Rivera
To: Planning Director
Subject: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Wednesday, January 4, 2023 11:04:53 AM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not beenconsidered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schools, children, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

From:	Jeff Strogen
To:	Planning Director
Subject:	For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date:	Wednesday, January 4, 2023 10:23:51 AM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Sincerely,

Jeff Strogen

From:	kelly coyne
To:	Planning Director
Subject:	For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date:	Wednesday, January 4, 2023 11:06:19 AM

To the Ontario Development Advisory Board,

Re: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

I agree with and support the following statement:

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

thank you,

Kelly Coyne

From: Ana Rodriguez
To: Planning Director
Subject: Fwd: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Tuesday, January 3, 2023 5:45:51 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Sincerely,
Ana Rodriguez

From: Erik Knutzen
To: Planning Director
Subject: Fwd: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Wednesday, January 4, 2023 11:28:16 AM

To the Ontario Development Advisory Board,

Re: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

I agree with and support the following statement:

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

thank you,

Erik Knutzen

January 3, 2023

Sent via email

Development Advisory Board, PlanningCounter@ontarioca.gov
Rudy Zeledon, Chairman, Planning Department, rzeledon@ontarioca.gov
James Caro, Building Department, jcaro@ontarioca.gov
Elda Zavala, Community Improvement, ezavala@ontarioca.gov
Charity Hernandez, Economic Development Agency, chernandez@ontarioca.gov
Khoi Do, Engineering Department, kdo@ontarioca.gov
Paul Ehrman, Fire Department, pehrman@ontarioca.gov
Christy Stevens, Municipal Utilities Company, cstevens@ontarioca.gov
Tony Galban, Police Department, tgalban@ontarioca.gov

Re: Development Plan (File No. PDEV21-047) - Agenda Item B

Dear Development Advisory Board:

These comments are submitted on behalf of the Center for Biological Diversity (the "Center") regarding the City of Ontario Development Advisory Board's January 4, 2023 consideration of Development Plan (File No. PDEV21-047) ("Project") to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 197.74 acres. As explained in greater detail below, there is substantial evidence indicating that the Project will have additional or more severe environmental effects on burrowing owls, air quality, cumulative impacts, and other adverse effects, than were analyzed in the City's 2050 Ontario General Plan. There also is substantial evidence that the Project will require additional or different alternatives or mitigation measures than were specifically analyzed and included in the 2022 Supplemental Programmatic Environmental Impact Report (PEIR). Moreover, there is no substantial evidence to support the City's contrary conclusions. Thus, the City is required to prepare a project-specific subsequent environmental impact report (EIR) that analyzes the site-specific effects of the Project in detail and includes additional alternatives to and mitigation measures for this project

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in the City of Ontario and San Bernardino County.

I. THE PROJECT IS NOT WITHIN THE SCOPE OF THE SEIR AND THERE IS A FAIR ARGUMENT THE PROJECT WILL CAUSE MORE SEVERE SIGNIFICANT EFFECTS AND REQUIRE ADDITIONAL MITIGATION MEASURES THAT WERE NOT ADDRESSED IN THE SEIR

The City must prepare a subsequent project-specific EIR analyzing the site- and project-specific impacts of the current version of the Project, including analysis of alternatives to, and additional mitigation measures for, the project as required by CEQA. The Supplemental Programmatic Environmental Impact Report (PEIR) for the 2050 General Plan did not disclose sufficient baseline data, nor did it analyze, or include sufficient alternatives to or mitigation measures for, the site- and project-specific impacts of the Project, and therefore the Project is not within the scope of the PEIR.

Under CEQA, a lead agency must analyze any subsequent site-specific project that is proceeding under an approved PEIR to determine whether the subsequent project is "consistent with" and "within the scope of the project or program covered by" the previously-certified PEIR, and if it will have one or more additional or more severe significant effects or require additional mitigation measures that were not analyzed in the prior PEIR. Pub. Res. Code, § 21094(b)-(c); 14 Cal. Code Regs. § 15168(c)(2), (c)(5). When a lead agency has prepared a prior PEIR, "the question for a court reviewing an agency's decision not to use a tiered EIR for a later project is one of law." *Committee for Reevaluation of the T-Line Loop v. San Francisco Muni. Transp. Agency* (2016) 6 Cal.App.5th 1237, 1252 (2016); *Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, 1164.

The case law makes clear that a project is "consistent with" and "within the scope of" the prior EIR if it is essentially part of the same project analyzed in the PEIR and that project was specifically identified, analyzed and discussed at a site-specific level of detail in the PEIR. (See, e.g., *Sierra Club v. County of Sonoma*, 6 Cal. App. 4th 1307, 1319-21 (1992); *Friends of Mammoth v. Town of Mammoth Lakes*, 82 Cal. App. 4th 511, 528-29 (2000); *Natural Resources Defense Council, Inc. v. City of Los Angeles*, 103 Cal. App. 4th 268, 281-85 (2002); *American Canyon Community v. City of American Canyon*, 145 Cal. App. 4th 1062, 1072-73 (2006); *Center for Sierra Nevada Conservation v. County of El Dorado*, 202 Cal. App. 4th 1156, 1172-73, 1175-77 (2012); *Sierra Club v. County of San Diego*, 231 Cal. App. 4th at 1174-76.)

All of these cases also hold that a project is not "consistent with" or "within the scope of" a PEIR if that previous environmental document did not contemplate or analyze the site- and project-specific effects of the subsequent project and those effects are not otherwise covered in the PEIR. *Id.*; cf. *Latinos Unidos de Napa v. City of Napa*, 221 Cal. App. 4th 192, 202-03 (2013) (revisions to housing element of general plan was within the scope of a prior PEIR for a general plan.

Here, the Project is not consistent with or within the scope of the PEIR because it was not specifically identified, analyzed or discussed in the PEIR, and the PEIR did not address the site- and project-specific impacts of this project. The PEIR merely discussed the impacts generally of an industrial land use category, which includes any "variety of industrial uses, including

warehousing/distribution." (Addendum, p. 11.) The PEIR discussed development in general and established a general mitigation program for such projects, and did not discuss projects at a project-specific level of detail.

The Project's environmental documents do not fill this analytic gap because they are too vague and general and do not contain any meaningful site-specific analysis of the precise nature or extent of the impacts of this project, or include any additional mitigation measures for these effects. For example, neither the Project, nor the PEIR, disclose existing baseline conditions for the burrowing owl, or the suitability of the habitat to support burrowing owl. The EA mentions that burrowing owl surveys were "completed in 2019, 2020 and a 2022 protocol study was conducted to determine the current number of burrowing owls on site." (Addendum, p. 11.) But nowhere were the results of these surveys *disclosed* to the public, or discussed in the Addendum.[1] Absent that information, the Addendum fails to meet CEQA's core informational purpose and deprives the Addendum of the necessary evidence supporting how the PEIR's mitigation measures will be adequate to mitigate these effects for this large project. Id. These errors pervade the addendum, which also fails to provide basic explanations of how the PEIR's air quality mitigation measures will prevent operational impacts to air quality in the region, both at an individual project and cumulative level.

Similarly, the Addendum lacks a site-specific discussion of how this Project may impact air quality and neighboring sensitive receptors. (Addendum, p. 33 [stating that the PEIR does not analyze the project's air quality impacts.]) The Addendum recognizes the PEIR did not "make a specific conclusion regarding the significance of project-related air pollutant emissions compared to any significance thresholds" and instead recommended a potential menu of mitigation measures to address project impacts. (Addendum, p. 33.) The Addendum then concludes the Project will have less-than-significant air quality impacts because the Project would not result in new impacts *"other than those previously considered or addressed in the [PEIR]*." (*Id.*) Under the Addendum's own admission, the PEIR did not address project-specific air quality impacts. The Addendum also lacks any discussion of how the PEIR's three mitigation measures will be adequate to mitigate the effects of this particular Project. The Addendum's conclusory statement is unsupported by evidence or analysis and simply does not meet CEQA"s muster.

For these reasons, the Project is not within the scope of the PEIR, and a fair argument can be made, based on substantial evidence, that the Project will have site-specific impacts and require additional mitigation measures that were not analyzed and included in that PEIR. Therefore, the City is obligated to prepare a subsequent EIR for this project analyzing these impacts in detail.

II. CONCLUSION

Thank you for the opportunity to submit comments on the Development Plan (File No. PDEV21-047). Due to the shortcomings described above, the City must prepare a project-specific

[1] The Addendum also relies on these surveys to conclude that the preparation of a site-specific EIR is not required. (Addendum, p. 11.) Absent disclosure of this information, the Addendum simply has no basis by which to conclude that an EIR is not warranted.

subsequent environmental impact report (EIR) that analyzes the site-specific effects of the Project in detail and includes additional alternatives to and mitigation measures for this project.

Given the possibility that the Center will be required to pursue legal remedies in order to ensure that the City complies with its legal obligations including those arising under CEQA, we note the City's statutory duty to maintain and preserve all documents and communications that may constitute part of the "administrative record" of this proceeding. (§ 21167.6(e); *Golden Door Properties, LLC v. Superior Court* (2020) 53 Cal.App.5th 733.) The administrative record encompasses any and all documents and communications that relate to any and all actions taken by the City with respect to the Project, and includes "pretty much everything that ever came near a proposed [project] or [] the agency's compliance with CEQA . . . ." (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further includes all correspondence, emails, and text messages sent to or received by the City's representatives or employees that relate to the Project, including any correspondence, emails, and text messages sent between the City's representatives or employees and the Project applicant's representatives or employees. Maintenance and preservation of the administrative record requires that, *inter alia*, the City (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

Please add the Center to your notice list for all future updates to the Project and do not hesitate to contact the Center with any questions at the number or email listed below.

Sincerely,

Hallie Kutak
Staff Attorney | Senior Conservation Advocate
Center for Biological Diversity
1212 Broadway, Suite #800
Oakland, CA 94612
Tel: (510) 844-7117
hkutak@biologicaldiversity.org

From:	NATASHA WALTON
To:	Planning Director
Subject:	Please Vote to Deny Recommendation of the January 4, 2023, Ontario DAB Meeting Agenda Item B
Date:	Wednesday, January 4, 2023 12:28:39 PM

Dear City of Ontario Development Advisory Board:

We, Inland Valley Advocates for the Environment (IVAE), ask that you **recommend denial of the January 4, 2023, agenda item** B to the Ontario Planning Commission regarding the (1) "CEQA [California Environmental Quality Act] Determination Motion to recommend Approval / Denial of an Addendum to a previously approved EIR [Environmental Impact Report]," and (2) "File No. PDEV21-047 (Development Plan) Motion to recommend Approval/Denial." The Development Plan (File No. PDEV21-047) is to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 197.74 acres of land generally located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, within the IL (Light Industrial) land use district of the California Commerce Center Specific Plan.

One of the main reasons why we ask you to deny recommendation of agenda item B is because **we disagree with the City of Ontario's CEQA determination for the Development Plan** (p30 of 404 pp in the 1/4/2022 meeting agenda). This determination is that "although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required." We argue that the environmental impacts of the proposed project (including significant ones) have not been adequately analyzed and presented under the August 2022 Ontario Plan 2050 Supplemental EIR, and the public and public agency review of these potential impacts does not exist. These environmental impacts include, but are not limited to, the direct, indirect and cumulative impacts of this project on greenhouse gas emissions, transportation/traffic, agricultural resources, hazards and hazardous materials, air quality, noise, and biological resources. Thus, a higher level document consisting of a CEQA Environmental Impact Report should be completed to allow further study and public review of this project under CEQA. Examples of inadequate analyses and conclusions include the following:

- No field studies of current noise levels have been conducted at the proposed project to help determine the expected level of noise at the project site which is located within two miles of a public international airport.
- The proposed project would have a significant negative effect on burrowing owls and this effect cannot be mitigated by a proposed relocation plan; regardless of the addendum's conclusions, the previously approved EIR did not include, address, or evaluate the potential significant effects of warehouse developments on wildlife such as the burrowing owl. In addition, no documented concurrence has been received from the California Department of Fish and Wildlife that the proposed project with a burrowing owl relocation plan would have a less than significant impact on the local burrowing owl (a special-status species) population, as well as on the population of burrowing owls that would be receiving the relocated owls.

Another major reason to deny recommendation of agenda item B is so that **we may preserve the safety and quality of life of our community and our local wildlife**; the proposed project area should include an alternative project that would protect the project area as a nature preserve and not be developed for any kind of industrial facility. Such a nature preserve would not only preserve the area as undeveloped safety zones for the airport, but it could even draw in the world to visit our special wildlife residents like the burrowing owl which lives and nests annually on this land.

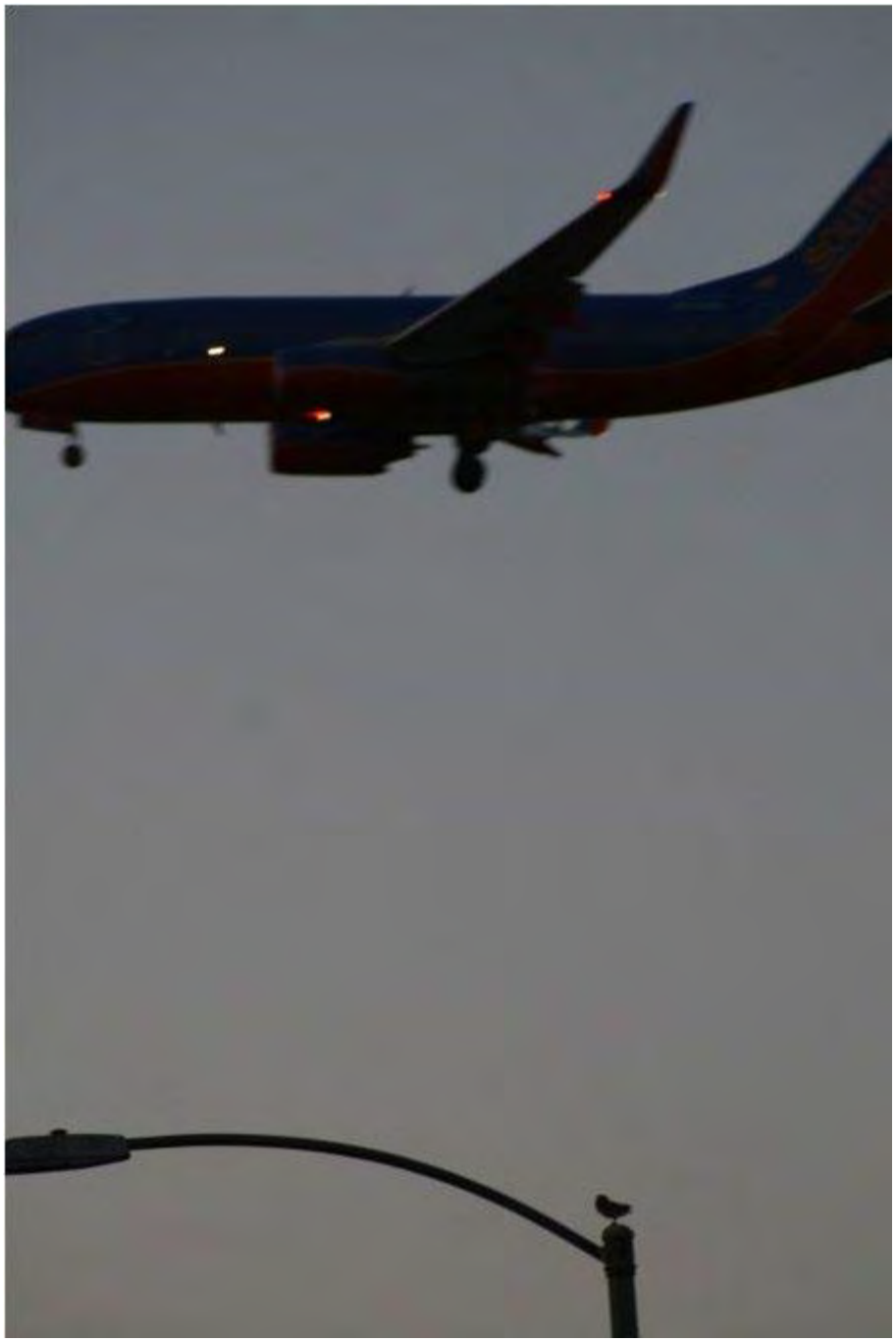
Please see the link below discussing how people are fighting to save our native wildlife, like burrowing owls, in California. We ask that you do the same and resist the urge to develop our precious open spaces into yet more ugly and unnecessary warehouses.

https://urbanbird.org/victory-for-southern-california-burrowing-owls/ [na01.safelinks.protection.outlook.com]

We have attached a photo that very few airports can boast about being able to capture – a burrowing owl perching on a light post as a commercial jetliner lands. You have the opportunity to make Ontario Airport special and not just another eyesore among the clutter of urban banality. Once again, please recommend denial on agenda item B.

Sincerely,

Natasha Walton, M.S.
Cofounder of IVAE and Wildlife Biologist



From: kimberlyfour
To: Planning Director
Subject: Public comment regarding Agenda Item B
Date: Tuesday, January 3, 2023 7:37:47 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development. Time and time again, the owls were driven out with no successful intervention to relocate them to a suitable habitat even though great amounts of mitigation money was collected. We need to protect the remaining land where the owls nest and raise their young and we need to change the practices that have resulted in the huge population drop that has occurred in the last 30 years.

There are significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Comment 2a

Thank you,
Kimberly Dillbeck

From: Marcyn Clements
To: Planning Director
Subject: SAVE the Burrowing Owl Habitat @ the Airport!
Date: Wednesday, January 4, 2023 8:20:45 AM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Dear Sirs,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing

Comment 2a

Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely and most empassionately,

Marcyn Del Clements

From:	schwassa@aol.com
To:	Planning Director
Subject:	Save the Burrowing Owls!
Date:	Wednesday, January 4, 2023 10:53:02 AM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young before it is too late.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a **significant negative effect on Burrowing Owls, a state species of special concern.**

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Do not destroy it to build more warehouses in a city that is already littered with them! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Save our future and do the right thing. Value life over money and greed.

Comment 2a

Have a conscience and do the RIGHT thing. Save the Burrowing Owls for future generations and lead by example.

Sincerely,
April D. Chertkow

From: Shari Wasson
To: Planning Director
Subject: Shari Wasson, Public Comment, Please Vote to Deny Agenda Item B
Date: Wednesday, January 4, 2023 12:28:33 PM

Dear City of Ontario Development Advisory Board:

I ask that you **recommend denial of the January 4, 2023, agenda item B** to the Ontario Planning Commission regarding the (1) "CEQA [California Environmental Quality Act] Determination Motion to recommend Approval / Denial of an Addendum to a previously approved EIR," and (2) "File No. PDEV21-047 (Development Plan) Motion to recommend Approval/Denial." The Development Plan (File No. PDEV21-047) is to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 197.74 acres of land generally located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, within the IL (Light Industrial) land use district of the California Commerce Center Specific Plan.

As a long-time resident of the Inland Valley and community member who values our native wildlife, I am greatly concerned about the proposed development plan and the devastating consequences it will have for Ontario's remaining burrowing owl population.

This unique little bird, which was once considered common and abundant, is now designated as a species of special concern by California Department of Fish and Wildlife (CDFW). Habitat loss due to development has been one of the strongest driving forces behind this. Due to the high levels of development that the Inland Valley has seen in the last several decades, the roughly 200 acres that the City of Ontario and Ontario International Airport are planning to develop with yet more warehouses is now one of the last remaining parcels of burrowing owl habitat in Ontario.

This bird is an important part of the natural heritage of Ontario and the Inland Valley. This vestigial habitat and owl population are true treasures that the City and Airport have the unique opportunity to capitalize on and share with not just the local community, but with travelers from both near

Comment 2d.

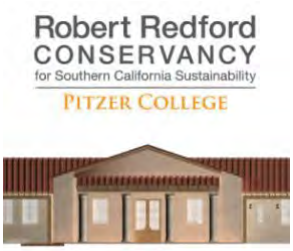
and far. Instead of allowing the land to be developed, this land should be set aside for preservation of the burrowing owl. In doing so, the City and Airport will be taking a leadership role in helping conserve the burrowing owl, which is, after all, a fellow partner in flight. Such a stance will brand the City of Ontario and the Ontario International Airport as ecologically minded entities that are invested in the wellbeing of the environment and the natural resources native to the area. Public relations centered on this can help increase City and Airport patronage, lead to partnerships with schools and other educational institutions, and set a model for other cities and businesses to follow. Partnering with the burrowing owl can help make the City of Ontario into an ecological destination.

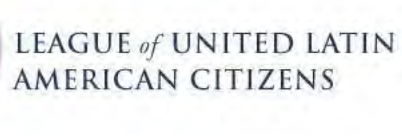
I further recommend you deny agenda item B based on the City's inadequate CEQA determination for this Development Plan. Please see Natasha Walton's emailed public comment for details regarding this matter.

Sincerely,

Shari Wasson
Certified California Naturalist
Co-founder of Inland Valley Advocates for the Environment (IVAE)

Sent from Outlook [aka.ms]





January 4, 2023

CITY OF ONTARIO DEVELOPMENT ADVISORY BOARD MEETING
1/4/23

Re: Agenda Item B at the January 4, 2023
Development Advisory Board Meeting

Agenda Item B Summary: ENVIRONMENTAL ASSESSMENT AND DEVELOPMENT PLAN REVIEW FOR FILE NO. PDEV21-047: A public hearing to consider a Development Plan (File No. PDEV21-047) to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 197.74 acres of land generally located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, within the IL (Light Industrial) land use district of the California Commerce Center Specific Plan. An Addendum to The Ontario Plan 2050 Environmental Impact Report (State Clearinghouse No. 2021070364), which was certified by the City Council on August 16, 2022, was prepared. This application introduces no new significant environmental impacts. The proposed project is located within the Airport Influence Area of Ontario International Airport and was evaluated and found to be consistent with the policies and criteria of the Ontario International Airport Land Use Compatibility Plan; (APNs: 0211-222-47, 0211-222-48, 0211-222-52, 0211-222-53, 0211-222-54, 0211-222-55, 0211-222-56, 0211-232-04, 0211-232-05, 0211-232-06, 0211-232-07, 211-232-011, 0211-232-12, 0211-232-13, 0211-232-14, 0211-232-15, 0211-232-16, 0211-232-17, 0211-232-18, 0211-232-19, 0211-232-20, 0211-232-44, 0211-232-45, and 0211-232-46) submitted by McDonald Property Group. Planning Commission action is required. 1. CEQA Determination Motion to recommend Approval / Denial of an Addendum to a previously approved EIR 2. File No. PDEV21-047 (Development Plan) Motion to recommend Approval/Denial

Dear City of Ontario Development Advisory Board:

We write to oppose the Development Plan (File No. PDEV21-047) to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 197.74 acres of land generally located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, within the IL (Light Industrial) land use district of the California Commerce Center Specific Plan.

First, we oppose the use of a CEQA Determination Motion to streamline this project's approval process. The proposed land uses are environmentally detrimental and introduce significant environmental impacts. To avoid creating an individualized EIR in this case—especially due to the wholesale habitat destruction of the increasingly rare burrowing owl community—is arguable in court. Burrowing owl considerations were not adequately addressed in TOP 2050, as well as within the documents associated with this agenda item. In addition, since TOP 2050, new data have come forward through the recently released and updated Warehouse CITY tool, which allows municipalities to calculate their cumulative warehouse impact.

Case law supports countering a city's ability to utilize a CEQA Determination Motion in certain cases. In Friends of the East Sacramento Grid v. City of Sacramento (2017), the court found that the city's approval of an addendum to a previously approved EIR was improper because the addendum did not adequately address the potential environmental impacts of the proposed project. The court stated that "the addendum must address new information that was not considered in the original EIR and must explain why the new information does not require any changes to the EIR's conclusions or mitigation measures."

Additional environmental case law counters a city's ability to utilize a CEQA Determination Motion, including but not limited to:

1. Save Tara v. City of West Hollywood (2002): In this case, the California Court of Appeals ruled that the city of West Hollywood violated CEQA when it failed to consider the impacts of a proposed development on a historic site. The court held that the city's reliance on a CEQA Determination Motion to approve the project was not sufficient, as the motion did not adequately address the potential impacts on the historic site.

2. Santa Monica Mountains Conservancy v. City of Malibu (2000): In this case, the California Court of Appeals ruled that the city of Malibu violated CEQA when it approved a development project without adequately analyzing the potential impacts on the environment. The court held that the city's reliance on a CEQA Determination Motion to approve the project was not sufficient, as the motion did not adequately address the potential environmental impacts.

3. Friends of the Eel River v. Sonoma County Water Agency (1999): In this case, the California Court of Appeals ruled that the Sonoma County Water Agency violated CEQA when it approved a water project without adequately analyzing the potential impacts on the environment. The court held that the agency's reliance on a CEQA Determination Motion to approve the project was not sufficient, as the motion did not adequately address the potential environmental impacts.

In this case, the use of a CEQA Determination Motion is subject to legal challenge because the addendum to the TOP 2050 does not adequately address the potential environmental impacts. This includes lack of substantive analysis regarding environmental impacts, and the interrelationship between cumulative impact and the incremental impact of the project—issues that were already weak within Ontario's TOP 2050 and to which some of the signatories objected to at that time. In addition are erroneous conclusions

regarding the FAA's stance on the burrowing owl and legitimacy of considering burrowing owl habitat conservation within the Ontario Airport Sphere of Influence, which we outline below.

We also hereby incorporate previous opposition letters to TOP 2050. Opposition letters to a previously approved general plan may be used to oppose a land use plan in which a CEQA Determination motion is used. In the case of Friends of the Eel River v. North Coast Railroad Authority (2005), the court considered opposition letters and other evidence submitted by environmental groups who were challenging a land use plan that included the construction of a railroad. The court found that the opposition letters and other evidence were relevant and could be considered in determining whether the land use plan complied with CEQA.

In addition, loss of Burrowing Owl Habitat and Warehouses can be considered CEQA Topics of Controversy, which limits a city's ability to utilize a CEQA Determination Motion.

Under the California Environmental Quality Act (CEQA), a "topic of controversy" is defined as an issue that has been the subject of public disagreement or debate. This might include issues related to the environmental impacts of a proposed project, or the need for the project in the first place.

This land use decision involves two topics of controversy within the City of Ontario. The first is the eviction of burrowing owls and destruction of their historic habitat, which has been debated for years and which has included media coverage, litigation, and promised mitigation. The second is continued warehouse construction in Ontario, which has been the subject of recent controversy, lawsuits, and media coverage.

CEQA Determination Motions are used by public agencies to determine whether a project is exempt from CEQA review, or if an environmental impact report (EIR) is required. If a topic of controversy exists regarding a proposed project, this can counter the use of a CEQA Determination Motion.

For example, if a public agency is considering a proposed project that would have significant environmental impacts—in this case the building of a warehouse, generation of additional pollution and GHGs, and loss of habitat for a sensitive species—and there is significant public disagreement or debate over whether the project should be allowed to proceed, it can be considered a topic of controversy. In this case, the use of a CEQA Determination Motion to exempt the project from CEQA review is inappropriate because the topic of controversy requires public input and further environmental analysis and consideration through the CEQA process.

Piggy backing specific land use decisions on a general plan update such as TOP 2050 can also limit the ability of elected officials to make decisions on individual land use issues. The general plan may be adopted by a city council or planning commission, but individual land use decisions may be made by a different body or process. This can lead to a disconnect between the overall vision and goals of the general plan and the specific land use decisions being made, potentially undermining democratic involvement in the decision-making process.

In addition, the idea that an EIR is unnecessary due to the passage of TOP 2050 does not support the democratic spirit of municipal decision-making in which public voice is considered. TOP 2050 was an overwhelming process that took place when the Ontario residents were also embroiled in the historic redistricting process. The use of a CEQA determination can compromise democratic involvement in municipal decision making in a few ways. First, it may not allow for adequate public input and participation. The general plan update process may not be as well-publicized as a standalone land use decision, leading to less public awareness and engagement—and certainly less engagement in a decision based on over 3000 pages of materials made public at one of the busiest times of the year—and released

on a federal holiday (Jan 1, with many offices closed on Jan 2) when people are most distracted. This left even less time than the three days typically accorded for review in the City of Ontario. Additionally, the approval process approached in this way will not provide the same opportunities for public comment and participation as a standalone land use decision.

There are significant impacts that can and should be mitigated but have not been properly considered. The City may not adopt a statement of overriding consideration to approve a project where feasible, less environmentally damaging alternatives exist and feasible mitigation measures have not been considered or adopted.

We recommend that the DAB not forward this to the Planning Commission without insisting that appropriate environmental review and associated public comment process are adopted, and that feasible alternatives, including alternative project plans, are considered.

The "policy of the state" reflected in the California Environmental Quality Act is that projects with significant environmental impacts *may not* be approved "if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects . . ." (Pub. Resources Code § 21002.) More specifically, CEQA states:

> Pursuant to the policy stated in Sections 21002 and 21002.1, no public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out
> unless …:
>
> (a). . . (3) Specific economic, legal, social, technological, or other considerations . . . make infeasible the mitigation measures or alternatives identified in the environmental impact report. (Pub. Resources Code § 21081.)
>
> It is settled law that:
>
> CEQA contains *substantive* provisions with which agencies must comply. The most important ... is the provision requiring agencies to deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects.
>
> (*Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41, italics added.) Indeed, in a case decided on July 7, 2006, a court analyzed the "substantive mandate" of CEQA, then set aside a college campus master plan project because there was not substantial evidence to support a college district's findings of economic and legal infeasibility of mitigation. (*County of San Diego v. Grossmont-Cuyamaca Community College* (2006) –Cal. App.--, slip opinion, pp. 18-29.)
>
> "Feasible" is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Pub. Resources Code § 21061.1.) The definition *does not* require the agreement of the project applicant. "Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves *whenever* it is feasible to do so." (*Lincoln Place Tenants Ass'n v. City of Los Angeles* (2005) 130 Cal.App.4th 1491, 1508, emphasis added.)

This project has impacts that can and must be mitigated due to burrowing owl habitat destruction, GHG emissions, emission of pollutants, and increased truck traffic. These are inappropriately labeled as

unavoidable, but they in fact may be avoided by properly adopting mitigation measures and alternatives to the existing plan.

Given the points above, we call for this item to be halted until the DAB can guarantee the City's ability to take into account community voice, conduct environmental impact review of loss of habitat and plans for mitigation, and consider significant harms to communities that reside in proximity of the project.

Burrowing Owls were once numerous in Ontario and Chino but due to widespread development that did not protect biological resources, the owls are fast disappearing. We need action now to protect Burrowing Owl habitat and allow these little birds to continue to live on in Ontario as they have for hundreds of years. The presence of a thriving population of Burrowing Owls in Ontario is a biological asset for the community and a chance for children and all of us to see the owls close by in their native habitat. The people of Ontario need protection for their native species, not more warehouses. Wouldn't it be better if Ontario children could tell the story of how their city protected this vulnerable species?

The burrowing owl is perhaps the signature species that makes Ontario unique—so signature, in fact, that the entire airport could be named after and themed as the Burrowing Owl Ontario Airport. Conserving this important sensitive species—that has long been on the cusp of endangered species status—would position Ontario as a leader in innovative conservation strategies. This would open opportunities for the city to develop ecotourism opportunities, interpretive, interactive displays, artwork, and educational stations within the airport to celebrate the local owl population. Including the Burrowing Owl habitat east of the Airport could be part of the Aiport's plan for greening and electrification.

Comment 2e

Some counterbalance to the overwhelming focus on industrial development is needed if the city plans to live up to its carbon and green promises in the TOP 2050, its prior promises of Burrowing Owl mitigation, its motto of a balanced city, and to prepare itself for a climate-compromised future. You simply can't have it both ways. Preservation of burrowing owl habitat would do wonders for Ontario's reputation as a green city. Destruction of habitat would simply further Ontario's reputation as being hungry for warehouses at all costs.

Cumulative Impact—Air Quality and Habitat Loss

According to the Ontario International Airport's 2019 Environmental Management Plan, the airport generated approximately **79,000 metric tons of greenhouse gas emissions from cargo and passenger aircraft in 2018**. This accounted for approximately 76% of the airport's total greenhouse gas emissions for that year. The majority of these emissions were from jet fuel consumption during aircraft takeoff and landing operations. The airport plans to implement various initiatives to reduce its greenhouse gas emissions, including the use of alternative fuels, electrification, and the implementation of energy-efficient technologies. However, the significant increase in air travel in recent years has led to an overall increase in greenhouse gas emissions from the airport (Ontario International Airport, 2019).

According to the Ontario International Airport Expansion Project Environmental Impact Report, the expansion of logistics operations at the airport is expected to result in an **increase in greenhouse gas emissions of approximately 36,000 metric tons of carbon dioxide equivalent per year.** This increase is primarily due to increased air traffic and vehicle activity associated with the expansion, as well as the energy consumption of the expanded facilities. The EIR states that these emissions will be offset through the implementation of various mitigation measures, including the use of renewable energy sources and the implementation of energy efficiency measures (Ontario International Airport Expansion Project Environmental Impact Report, 2018). Despite efforts to green the Airport, flights will continue to be dirty, thus expanding GHG heavy infrastructure into the future.

According to researchers such as B. O'Neill and L. Bunting, industrial warehouses contribute significantly to greenhouse gas emissions and are a major contributor to climate change. The transportation of goods to and from warehouses requires a significant amount of energy, resulting in high levels of pollution and negative impacts on environmental and human health.

We request that the City of Ontario consider both the cumulative impact of all Ontario warehouses and their relationship to the incremental impact of the project, as outlined below, and as per CEQA requirements, in the most robust way possible.

In general, Environmental Impact Reports (EIR) prepared under the California Environmental Quality Act (CEQA) have not sufficiently analyzed the cumulative impacts that continued industrial development have on the health of Inland residents. The IE has been and continues to remain on the EPA's Nonattainment status for air quality (PM and Ozone). Municipal leaders choose to allow developers to perpetuate the nonattainment status despite the rules of the Clean Air Act 42U.S.C 7401 et seq, which requires them to mitigate projects to achieve attainment status. Developers have chosen to ignore the cumulative impacts of all warehouses in the region. Developers and municipal leaders accept language of "significant and unavoidable impacts," with little regard for alternative plans. Instead, they focus on the incremental impact a specific project has towards increasing "severe and extreme" nonattainment status or increased cancer risk. In other words, because our air quality is already in the worst possible condition, a little more won't hurt.

According to State CEQA Guidelines Section 15355, projects must analyze cumulative impacts at a broader scale, in addition to individual impacts—in other words, they must consider the result of past, present, and future projects. This project and TOP 2050 have failed to consider the cumulative pollution burden of past, current, and future projects and the inequitable zoning that has resulted in historical conditions of environmental injustice. Garcia et. al. conclude that, when viewed together with past, current, and future projects, "a project's contribution may be **individually and incrementally insignificant but would make a considerable contribution to the overall cumulative impact and be cumulatively significant when combined with existing conditions.** The existing, often hazardous, environmental conditions in DACs must be taken into account when evaluating cumulative pollution burden impacts."

The focus on industrial development has also led to cumulative habitat loss within the City of Ontario for burrowing owls. Industrial development also often comes at the expense of other types of development, such as affordable housing or green spaces, leading to negative impacts on the overall livability of a city. According to SCAG's recent Economic Analysis, continued investment in logistics in the Inland Empire may not be good for the economy because it can lead to a reliance on low-wage, low-skill jobs and a lack of diversification in the economy. Logistics jobs tend to be lower paying and have less room for advancement compared to other industries, which can lead to a stagnant or declining wage growth for workers. Additionally, reliance on logistics can make the region vulnerable to economic downturns or shifts in global trade patterns, as the Inland Empire is heavily dependent on the logistics industry. Diversifying the economy and investing in other industries can help to create more sustainable, higher paying jobs and reduce the risk of economic instability.

The global supply chain is becoming increasingly unstable due to factors such as trade tensions and natural disasters, leading to uncertainty and risk for investors in industrial warehouses. Authors such as J. Glaser and J. Rabin have argued that the proliferation of industrial warehouses in cities has negative consequences for local communities. These warehouses often bring with them noise and air pollution, as well as traffic congestion, which can disrupt the quality of life for residents. Right now, due to problems at the Ports of LA and Long Beach, goods are being increasingly re-routed to East Coast or Gulf Coast

ports. The current and future precarity of global logistics does not justify building more warehouses in Ontario; in fact, the opposite is true. Alternative plans must be considered.

Importance of Biodiversity for Local Municipalities

Biodiversity helps to maintain the integrity and stability of ecosystems. Different species interact with one another in complex ways, and the loss of one species can affect the populations of other species. There is a growing body of evidence that suggests that maintaining biodiversity is important for local municipalities. For example, a study by Daily et al. (1997) found that areas with high levels of biodiversity had more stable and productive ecosystems, which provided a range of benefits to local communities. Another study by Balmford et al. (2002) found that the loss of biodiversity was associated with a decline in the provision of ecosystem services, such as the regulation of water quality and the control of pests and diseases.

There is intrinsic value for a municipality to maintain a species such as the burrowing owl nearing endangered status. The burrowing owl is an excellent animal protagonist that is well known across the country. The reputation of the City of Ontario is at risk if its leaders choose to green light yet another warehouse—far from an endangered species in this neck of the woods—instead of doing all it can to protect this cute, puffy feathered, vulnerable, unique creature and longtime friend to Ontario schoolchildren.

Burrowing owls are a sensitive species that are at risk of extinction due to habitat loss and human disturbance (US Fish and Wildlife Service, 2020). Protecting this species is important for maintaining biodiversity and the overall health of the ecosystem. The benefits of having burrowing owls on airport land include their role as natural pest controllers and their potential to attract ecotourism.

Comment 2e - cont.

According to the U.S. Fish and Wildlife Service, there are currently 12 airports in the United States that have implemented burrowing owl habitat conservation programs (U.S. Fish and Wildlife Service, 2020). These programs aim to protect and enhance the habitat of the burrowing owl, a species that is classified as threatened in some states and endangered in others (U.S. Fish and Wildlife Service, 2020).

The Federal Aviation Administration (FAA) does not list the burrowing owl as a species that poses a danger to aircraft. In fact, the FAA actively promotes the conservation of burrowing owls and other wildlife at airports through its Airport Wildlife Hazard Management program (Federal Aviation Administration, 2019). This program provides guidance and resources for airport operators to develop and implement effective wildlife management strategies that prioritize safety, while also promoting the conservation of wildlife on and around airport property (Federal Aviation Administration, 2019). The FAA also recognizes the importance of conserving wildlife at airports, and takes steps to ensure that safety is prioritized while also promoting the conservation of species like the burrowing owl (Federal Aviation Administration. (2019). Airport wildlife hazard management. Retrieved from https://www.faa.gov/airports/airport_safety/wildlife/ U.S. Fish and Wildlife Service (2020), and Burrowing owl (Athene cunicularia). Retrieved https://www.fws.gov/southeast/wildlife/bird/burrowing-owl/).

Comment 2f.

There are at least four significant negative effects on the environment that will be caused by and not mitigated by the current plan.

The Ontario Plan mitigation for Burrowing Owls has not been successful and is not an approach to be used for the owls east of Haven Avenue. The Ontario Plan mitigation started around 2007. From 2007 on, the City of Ontario collected fees from developers to mitigate the loss of large sections of habitat. The idea was that the funds would be used to purchase mitigation land.

The City has a mitigation program in place to compensate for BUOW impacts in the former Annexation Area 163. This property would contribute substantially success of that program. None of the money that the City has collected in mitigation fees has been spent for Burrowing Owl mitigation. It is particularly troubling that this project to destroy further habitat is being done based on similar promises that have had so many years for lack of follow through.

Two, another significant negative effect of translocating owls to sites far from their native land is the loss of distinct biodiversity. Kelly Barr, Kristin Ruegg and others have found genetically distinct populations of Burrowing Owls that are a distance apart even within California (Alvarado, Bossu et al., 2022). Translocating owls 30 to 40 miles from their natal site risks mixing the distinct groups. Possible advantages of the genetic differences that might increase survivability in a particular location would be lost to the owls.

Three, Burrowing Owls need to have other sites nearby within the usual range of juvenile dispersion (from .5 to 13 miles) so young adult owls can avoid inbreeding (Rosenberg, Gervais, & Trulio, 2007). The East of Haven Ontario Burrowing Owls are an average of 7 to 8 miles from several Burrowing Owl nesting sites in the Chino area. Thus, the Airport area owls make it possible for a healthy exchange of young adults finding mates between the two sites. Loss of the East of Haven site could seriously undermine the viability of what are now healthy populations of Burrowing Owls in Chino, contributing to the loss of all Burrowing Owls from the Pomona Valley.

Four, mitigation translocation for burrowing owls is an option that suits the preferences of land developers, but it does not provide a superior life for the owls. In fact, owls that are translocated from their home habitat are subject to higher mortality than those who are protected on site or nearby (Hennessey et al., 2022). The removal of all the OIA owls will be a significant blow to the possibility of success of owls in the area.

Contrary to the conclusion of the analysis of the DAB decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

In fact, Helix Environmental's Biological Resources report also states that leaving Burrowing Owls on site is the best option for the owls. Unfortunately, the report goes on to reject that option for invalid reasons such as the mistaken notion that Burrowing Owls are a hazard to aviation.

Contrary to the statements in the Helix Environmental report, Burrowing Owls are not a hazard to aviation. They are small birds that fly close to the ground and do not fly in flocks. According to the FAA birdstrike data, there were 21 reports of airstrikes involving these owls at OIA since 2008. Eight turned out to be other wildlife or the species were unknown; for eleven a carcass or wing was found but no airstrike was reported by pilots; and two involved a Burrowing Owl strike but no damage was reported. In all these years, there were **no instances** of a Burrowing Owl causing damage to a plane. If Burrowing Owls that live right next to the runways are not a threat to aviation, how much less a threat are the owls that live east of Haven.

Another argument is that Burrowing Owl attract larger raptors that might cause damage to a plane. This problem can be addressed through a raptor control program, something that all airports need to have in place, whether or not they have Burrowing Owls near their property. Many other airports protect plans from large raptors using control strategies that do not kill or harm or trap the raptors.

Finally, none of the Helix Environmental statements that the FAA will not allow mitigation for Burrowing Owls near an airport are backed up with reference to FAA regulations or communications. If

you look at the FAA regulations that discuss Wildlife Hazards, you will find that Burrowing Owls are not mentioned. If Burrowing Owls are NOT a hazard to aviation, then owl mitigation can be done on the boot property.

Please find a way to keep Airport Burrowing Owls in Ontario with a professionally managed and properly endowed preserve for the owls on site or nearby. Please also consider whether this is the time to continue to expand warehouse infrastructure, as it is encroaching nearer to residential communities at a time when we have very little or no time to reverse the negative effects of climate change, rather than enhance them, as this plan is doing. Do this for our children, grandchildren, schoolchildren, and all the residents of Ontario who care about their environment and who want to make Ontario the special place we all know it can be.

Comment 2g.

Sincerely,

Susan A. Phillips, Director
Robert Redford Conservancy for Southern California Sustainability
Professor of Environmental Analysis, Pitzer College

Brian Elliott, Conservation Director
Pomona Valley Audubon Society

Dan Silver, Executive Director
Endangered Habitats League

Claire Schlotterbeck, Executive Director
Hills For Everyone

Kim Floyd, Conservation Chair
Sierra Club San Gorgonio Chapter

Susan Sheakley, Chair, Conservation Committee
Sea and Sage Audubon Society

Ana Gonzalez
Executive Director, Center for Community Action and Environmental Justice

Cynthia Robin Smith, Chair
Diamond Bar - Pomona Valley Sierra Club Task Force, Angeles Chapter

Randy Bekendam, Executive Director
Southern California Agricultural Land Foundation

Lois Sicking Dieter
Inland Valley Advocates for the Environment

Anthony J. Noriega
Director, District 5 League of United Latin American Citizens
LULAC de Inland Empire

Citizen Letter Addressing Agenda Item B for the January 4, 2023 Development Advisory Board Meeting

January 2, 2023

Dear Ontario Development Advisory Board,

Fifty years ago while growing up in Los Angeles County, I enjoyed watching Burrowing Owls in the fields behind my childhood home. Sadly, this species has been in sharp decline ever since and is now a California Species of Special Concern. It is even being considered for listing under the California Endangered Species Act. So it is with great surprise that I read that the city of Ontario is considering developing one of its primary nesting sites!

It is prudent for cities to keep open land surrounding airports. Undeveloped areas provide emergency landing zones for aircraft if needed. This area is perfect for Burrowing Owls which already call it home. This owl flies low over the ground during the day while hunting large insects and small rodents, thus posing no danger to descending aircraft. In fact, there have been no documented plane strikes by Burrowing Owls so this grassland is safe for birds and people.

During the six years that I have visited this nest site, I have noticed a crowd of wildlife photographers standing respectfully along the edges of the S. Haven Avenue (north of E. Jurupa Street) when these owls are nesting. Many people travel long distances to get their photos, and spend money in Ontario during their visit which helps benefit the city.

Surely the best use for this property is to become a **Burrowing Owl preserve**. The local community can come visit and learn about the biology and interesting adaptations of their feathered neighbor. Children can study Burrowing Owls in school just like Orange County school children learn about the threatened Western Snowy Plover along their coastline.

Comment 2h.

As a reminder, these birds are state protected and cannot be harmed in any way. Trapping and moving them is not feasible and has resulted in high mortality. As a biologist, I am opposed to this devastating failed plan. Ontario's plans for these protected birds and their nest site need to be carefully reviewed so there are NO negative impacts. This is the lawful and right thing to do.

Thank you for listening to a nearby resident who enjoys the Burrowing Owls of Ontario.

Trude Hurd
Lake Forest, CA

Photographs of Burrowing Owls, a California Species of Special Concern,
at nest site next to Ontario Airport, southern California, by Trude Hurd

Burrowing Owls at nest burrow 2022

Burrowing Owls in habitat next to airport

Burrowing Owls, five, at nest burrow 2018

Burrowing Owl hunting over grassland 2018

Wildlife photographers enjoying the owls

Burrowing Owls at nest burrow 2019

EXHIBIT G

SUBJECT: **Appeal - Response to Comments**

1. Burrowing owls will use storm drains, concrete rubble piles, open pipes, rolled up carpets, etc. for shelter and roosting. The burrowing owls used the onsite storm drains (or the risers on-site) as a burrow. Please see photos below from the focused surveys that show the burrowing owls utilizing these as a sentinel burrow and as a main burrow. The amount of pellets and whitewash in and around the riser shows that the owls were not just using the riser to escape predators. Further, one of the photos includes a perch that photographers installed and shows the owls were using that riser as part of their burrow complex or at least as an active burrow.

2. The Ontario HUB was one of the last remaining sites undeveloped in the region this would leave a lack of owls in the region necessary to maintain a healthy population capable of persisting overtime. Single large mitigation sites can be subject to stochastic events (fire, disease, vandalism, etc.) that can lead to the loss of remnant populations. Several mitigation sites that are connected through greenbelts or areas allowing safe travel is necessary for dispersal between mitigation sites.

   Regarding the Hub property, the owls will not persist here forever even if the site was protected (not developed). There are many reasons why owls will not persist here in perpetuity even if you try to manage for them. Saving one property will not adequately support a population of owls.

   The owl populations at naval weapons station seal beach and the Orange County fairgrounds and many other similar locations all met the same fate. They were surrounded by development and after several years the populations were extirpated. All of the development bring increased risk of mortality (predators, vehicle strikes, loss of foraging habitats etc.). eventually these island patches of fragmented habitats supporting owls will blink out. They won't support owls in perpetuity as supported by these similar situations at the OC fair grounds and seal beach (and many other locations). The ability to safely disperse away from and into these island patches are critical for a regional population but as this area loses more habitat and dispersal becomes more difficult (increases risk of mortality) then it's more likely owls will be extirpated. Saving part of the property would not result in long term owl occupation either.

3. Except for the undeveloped interstitial areas associated with the Ontario International Airport runway to the west of the project site, the project site is almost entirely surrounded by existing development (industrial buildings) to the north, east and south.

   Prior to the 1980's southwestern San Bernardino supported a robust breeding BUOW population with hundreds of pairs from the base of the San Bernardino Mountains south to the Prado Basin. After decades of development pressure and the complete absence of meaningful mitigation, only a few remaining breeding pairs and winter migrants are known to persist. The remaining highly fragmented landscape which lacks suitable, large, protected sites with connectivity to and between extant breeding sites creates a bottleneck and prevents the existence of a healthy source population. With the continued development pressure and lack of adequate mitigation required by the resource agencies, the BUOW population in this region is tenuous at best and will likely never recover from what was once a robust breeding source population (Kidd et al. 2003, 2007).

   A current review of BUOWs previously reported near the Ontario Airport includes 45 records from 1989-2017. These 45 records are located within seven nearby 7.5min USGS quads (Ontario, Prado, Corona North, Fontana, Cucamonga Peak and Mt. Blady) and Guasti quad where the airport is located (CNDDB 2020). The nearest owl locations reported south of the airport were evicted approximately ten years ago during development of industrial warehouses. Mitigation included the installation of artificial burrows in a barrow pit on the west side of the nearby retired landfill and the owls were evicted from their burrows prior to grading. Owls are no longer known to occupy this site south of the airport. The subject owls on the OIAA property along the east side of Haven Avenue are included in the list of 45 owl records. Several reported owls north of Interstate 10 that

are located west and north of Ontario Mills Mall are some of the only possible extant owls near the airport. All of these owls are surrounded by development and located on small, highly fragmented sites that don't provide long-term conservation value for the owl due to future development and predation pressure to name a few.

Anthropogenic disturbances associated with photographers that are putting up "perching" posts for the burrowing owls to capture a portfolio worthy photograph of the owls has also lead to the becoming more acclimated to human presence.

4. The presence of BUOWs at ONT is one wildlife hazard that the OIAA is required to abate under federal regulations (14 Code of Federal Regulations §139.337). These regulations require the OIAA, as part of ONT's certification with FAA, to "alleviate or eliminate wildlife hazards to air carrier operations." The ONT WHMP identifies BUOW as a wildlife hazard to airport operations that must be addressed, along with other hazards, under the WHMP.

   Numerous avian bird strikes have been reported on the Ontario International Airport, including various strikes from BUOW. Installing artificial burrows and/or encouraging owls to inhabit lands on or directly adjacent to the OIAA property violates FAA rules and is not a viable strategy because of the expected increased presence of other larger hazardous birds (e.g. red-tailed hawks, golden eagles, ferruginous hawks, red-shouldered hawks, Cooper's hawks, turkey vultures, and common ravens) who would attempt to predate or scavenge owls, squirrels or rabbits that would likely use the artificial burrows. Hawks and vultures are those struck by aircraft at the highest rates and those known to cause the most damage per strike. These species are often involved in aircraft strikes while they are hover hunting or circling over the approach or departure ends of the airport within the glide slopes. Bird strikes in these situations (landing and take-off) are the most dangerous and can lead to catastrophic events that can kill hundreds of passengers and crew on jetliners.

   Evicting the owls along Haven Avenue outside the airfield could result in owls moving to areas within the airfield, making a more hazardous situation. Owls are often found seeking refuge very close to taxiways and runways under lights, signs and other man-made structures that support refuge and areas for squirrels to create burrows. Many burrowing owls that are struck at airports are those crossing runways as aircraft are departing and arriving. This will generally not lead to a catastrophic accident however even small birds like burrowing owls are capable of causing tens of thousands of dollars in damage to aircraft per event.

   Further, relocating or encouraging owls to reside on a commercial airfield would violate FAA rules, will result in APHIS having to remove the owls in the future, and creates potential liability for the resource agencies or biologists promoting the in-situ conservation of owls at or near an airport.

   In summary, the act of attempting to conduct any form of "mitigation" including in situ or eviction on or directly adjacent to the airfield is not supported by the FAA, APHIS, or past direction from CDFW Headquarters. The best approach for owl mitigation at and adjacent to OIAA property should involve active relocation. This will better ensure for safe flight operations and compliance with FAA regulations while also attempting to provide the owls with a greater chance of survival

and future breeding attempts.

5. As noted above, the project site is almost completely surrounded by existing development. Translocating the owls to an area already under conservation that is surrounded by conserved land will provide greater biodiversity to the regional population of burrowing owls. The small, fragmented project site does not support as high of a level of biodiversity as the translocation site would.

6. The email correspondence provided in the comment states, "Based on our study, we found higher settlement for owls translocated more than 17.5km (~11 miles). Translocation distance was a secondary driver of settlement, with the presence of cues (i.e., conspecifics or playback/artificial whitewash) being the primary driver."

   The comment states that owls should be relocated a **minimum** of 10.5 miles away, while the correspondence email says that burrowing owls had a higher settlement when they were translocated more than 11 miles The statement in the comment letter is contradictory to what was provided by the San Diego Zoo, that states that burrowing owls that were translocated a distance greater than 17.5km were more likely to settle.

EXHIBIT H

February 21, 2023 ***Sent via email***

Rudy Zeledon
Planning Director, City of Ontario
303 East B Street
Ontario, CA 91764

Subject: Response to Comments Received from the Pamona Valley Audubon Society on proposed project "The Hub" at Ontario International Airport dated February 3, 2023

Dear Rudy:

Mead & Hunt, Inc. (Mead & Hunt) offers the following responses to comments received from the Pamona Valley Audubon Society (Audubon) on February 3, 2023, in association with "The Hub," a proposed logistics/warehousing project at the Ontario International Airport (ONT). In the Audubon's letter of February 2, 2023, Audubon alleges that the decision made by the Planning Commission to approve the proposed project "was not supported by the record because of the many misstatements of fact made by the applicant's consultants which were then repeated by some of the Commissioners." Three of Audubon's comments identifying alleged "misstatements of fact" are addressed below and discussed within the context of applicable FAA regulations and guidance pertaining to aviation and wildlife hazard management.

ALLEGED MISSTATEMENT NO. 1

> The owls are a risk to aviation. From FAA birdstrike data, Burrowing Owls are not a danger to avian [sic] from bird strikes. There is no evidence in that data record from 2008 to 2021 of a Burrowing Owl causing damage to an aircraft at Ontario Airport. https://wildlife.faa.gov/search

Response No. 1

The FAA database contains records of more than 400 strikes with burrowing owls, and some have resulted in damage. Burrowing owls present a direct hazard as they can strike aircraft, and they present an indirect hazard because they can attract other species that are known to pose hazards, such as larger raptors.

National Wildlife Strike Database

The Federal Aviation Administration (FAA) publishes regulation and guidance pertaining to the presence of wildlife hazard management at commercial service airports and general aviation airports, and it maintains a database of known wildlife strike records from 1990 to the present. Burrowing owls have been associated with documented wildlife strikes at U.S. airports since 1992. A review of the FAA National Wildlife Strike Database (NWSD) conducted on February 19, 2023, identified a total of 410 documented strikes associated with the burrowing owl, 17 of which occurred at ONT.[1]

[1] Federal Aviation Administration. 2023. National Wildlife Strike Database. Available at: https://wildlife.faa.gov/search

The NWSD includes records of damaging strikes with burrowing owls: Four strikes resulted in minor or uncertain damage to the following commercial-service aircraft: Boeing 727-200, Boeing 737-700, Boeing 737-800, and McDonnell Douglas MD 83. A 2015 strike with a commercially operated Flexjet Cessna LC-41 resulted in substantial aircraft damage. Strikes with burrowing owls have occurred recently, as 26 of the documented strikes recorded at airports nationwide occurred during 2022. Evidence of burrowing owl strikes indicate that owl mortality occurs in every instance.

Academic Research on Hazards Posed by Burrowing Owls

Raptors, including burrowing owls, have been the subject of research associated with known wildlife strikes. A 2018 article published in the Journal of Raptor Research entitled "Assessing Owl Collisions with U.S. Civil and U.S. Air Force Aircraft" considered the FAA NWSD and the U.S. Air Force's Birdstrike Database, which together characterized 2,531 owl strikes involving at least 20 species.[2] A total of 192 strikes were associated with burrowing owls (7.8 percent). Among the conclusions drawn in the report:

- Owl strikes typically occurred within the airfield environment itself.
- Eighty-six percent of the strikes associated with owls occurred when the aircraft was at or below 30 meters above ground level (AGL).
- Owl strikes with US civil and USAF aircraft are a common event during flight operations within the USA and throughout the world.

ALLEGED MISSTATEMENT NO. 2

> Burrowing Owls will not be an attractor for large raptors if an airport has a good large raptor control program. Large raptors exist near all airports globally and every airport should have a good raptor control strategy. Evidently the Ontario International Airport does not have adequate raptor control because they allow tall poles which are an attractant to hawks throughout the proposed project land.

Response No. 2

The Airport prepared and maintains an FAA-approved Wildlife Hazard Management Plan (WHMP) to address raptors and other species identified as posing a hazard to aircraft.

The Ontario International Airport Authority (OIAA), in cooperation with the United States Department of Agriculture, Wildlife Services (USDA-WS), prepared a Wildlife Hazard Management Plan (WHMP) in 2015 in accordance with FAA regulations set forth in Title 14 of the Code of Federal Regulations (CFR) Part 139.337, "Wildlife Hazard Management." The WHMP addresses the responsibilities, policies, and procedures necessary to reduce wildlife hazards at ONT and places emphasis on identification and abatement of wildlife hazards within the airfield. Wildlife attractants (e.g., lakes, ponds, landfills, etc.) within 5 miles of the airfield are also addressed as they could potentially attract wildlife in a manner that could jeopardize the safety of air traffic operating into and out of ONT.

[2] Journal of Raptor Research. 2018. Assessing Owl Collisions with U.S. Civil and U.S. Air Force Aircraft. Vol. 52 (3): 2820290. Available at: https://bioone.org/journals/journal-of-raptor-research/volume-52/issue-3/JRR-17-64.1/Assessing-Owl-Collisions-with-US-Civil-and-US-Air-Force/10.3356/JRR-17-64.1.full

The proposed actions outlined in the WHMP would involve application of the most appropriate, effective, and biologically sound wildlife control methods available. This approach, known as Integrated Wildlife Damage Management, includes both habitat management and direct control of the species generally considered the most hazardous. The WHMP examines resolutions to detect and alleviate wildlife hazards that threaten human health and safety or aircraft operations operating out of ONT, including raptors. The WHMP was reviewed and approved by the FAA, and it is incorporated in the airport's Airport Certification Manual and subject to annual FAA inspection.

ALLEGED MISSTATEMENT NO. 3

> The FAA disallows conservation of burrowing owls. Airports across the country offer some of the best burrowing owl habitat, with successful conservation programs. The idea that the FAA does not allow this kind of conservation is patently false. Burrowing owls are able to thrive in airport and airport adjacent areas, making this habitat suitable for burrowing owls,

Response No. 3

The conservation of burrowing owls on airport property directly conflicts with Federal Aviation regulations and guidance associated with the safety of aircraft operations and the use airport property. Such regulation and guidance includes:

- Title 14 of the Code of Federal Regulations, Part 139.339, "Wildlife Hazard Management."
- FAA Advisory Circular 150/5200-33, "Wildlife Hazard Attractants on and Near Airports."
- FAA Grant Assurances, specifically assurance nos. 19, 20, and 21.
- Certalert 06-07, Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports.

Each item and its applicability to the proposed preserve is discussed in the following paragraphs.

Title 14 of the Code of Federal Regulations Part 139.337, "Wildlife Hazard Management"[3]

ONT holds an operating certificate from the FAA in accordance with Title 14 Part 193, "Airport Certification." As a certificated airport, the City, as the Airport Operator, must meet the requirements of Title 14 of the Code of Federal Regulations Part 139.337, "Wildlife Hazard Management" (14 CFR Part 139.337). As stated in the regulation, "The operator of certificated airport must take immediate action to alleviate wildlife hazards whenever they are detected" (14 CFR 139.337, (a)). In this context, a wildlife hazard refers to the potential to cause a damaging aircraft collision with wildlife on or near the airport. Wildlife poses a direct threat when it has the potential to be involved in a collision or "strike" with aircraft. Wildlife poses an indirect threat when it causes damage to aircraft and/or aviation facilities, such as nesting in aircraft or navigational equipment, chewing through wires, or by attracting other wildlife that could pose a direct hazard (e.g., wildlife that may attract predators such as raptors, coyote, etc.).

[3] Available at: https://www.ecfr.gov/current/title-14/chapter-I/subchapter-G/part-139/subpart-D/section-139.337

A certificate holder must formulate and implement a WHMP when the FAA Administrator determines that one is needed based on the results of a Wildlife Hazard Assessment (14 CFR 139.337 (e)). The City of Ontario has developed an FAA-approved WHMP as requested by the FAA Administrator.

FAA regulations at 14 CFR Part 139.337 also refers to other FAA resources that are acceptable for managing wildlife at airports. Paragraph (g) states that "FAA Advisory Circulars contain methods and procedures for wildlife hazard management at airports that are acceptable to the Administrator."

FAA AC 150/5200-33C, Wildlife Hazard Attractants On and Near Airports[4]

The FAA issues several Advisory Circulars (ACs) and Certalerts to help airport operators address specific issues associated with airport operations and management. AC 150/5200-33C provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports, and the FAA recommends that the guidance be implemented at airports that receive funding under federal grant assistance programs, including the Airport Improvement Program. The FAA also recommends the AC for land-use planners and developers of projects, facilities, and activities on or near airports.

The proposed conservation of burrowing owls on airport-owned property would conflict with key recommendations identified in the AC below.

Maintaining an appropriate environment for safe and efficient aircraft operations.

As identified in AC, "Airport operators should maintain an appropriate environment for the safe and efficient operation of aircraft, which entails mitigating wildlife strike hazards by fencing, modifying the landscape in order to deter wildlife, or by hazing or removing wildlife hazards to aircraft from congregating at airports" (paragraph 1.1.1).

Burrowing owls are known to pose direct and indirect strike hazards to aircraft operations – burrowing owls have been struck at ONT and other airports and they can pose indirect hazards because they can attract other hazardous wildlife, including predators such as coyotes and raptors. Providing burrowing owl conservation on airport property is contrary to the AC, as it would continue to attract potentially hazardous wildlife rather than deter wildlife from the airport.

Minimum separation criteria for land use practices that attract hazardous wildlife to the airport vicinity.

Chapter 1 of the AC identifies minimum separation distances between aircraft movement areas and land use practices that attract hazardous wildlife. As stated in paragraph 1.1.3, "FAA criteria include land uses that cause movement of hazardous wildlife onto, into, or across an airport's approach or departure airspace or aircraft movement areas."

For airports that support turbine-powered aircraft (i.e., jets), the FAA recommends maintaining a separation of 10,000 feet "between the closest point of the airport's aircraft operation area and the hazardous wildlife attractant" (paragraph 1.3). To protect approach, departure, and circling airspace, "the FAA recommends a distance of 5 miles between closest point of the airport's aircraft operations area and the hazardous wildlife attractant" (paragraph 1.4).

[4] Available at: https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5200-33C.pdf

As measured using aerial photography, the east side of Haven Avenue is less than 2,100 feet from aircraft pavements associated with Runways 26L and 26R, and it is directly beneath the approach/departure airspace. The creation of a wildlife preserve at this location would conflict with FAA guidance set forth in the AC.

Land Uses that attract hazardous wildlife.

Chapter 2 of the AC discusses land use practices that have the potential to attract hazardous wildlife and threaten aviation safety (paragraph 2.1.2). Among the land uses identified are mitigation banks and other land uses that include conservation easements, parks, wildlife management areas, and other activities that may have the potential to attract hazardous wildlife. The AC states, "Regardless of the source of the attraction, when hazardous wildlife is noted on a public use airport, each certificate holder must take prompt remedial action(s) to protect aviation safety" (paragraph 2.8.4). Section 2.9 specifically refers to habitat for state and federally listed species on airports. The AC notes that airports provide an artificial environment that may vary from surrounding native landscapes, and some wildlife species may be attracted to the airport in higher numbers because the airport may offer features the species prefer, including state and federally listed species and species of concern. The guidance clearly states, "Airport operators should exercise caution in adopting new management techniques because they may increase wildlife hazards and be inconsistent with safe airport operations. Managing the on-airport environment to facilitate or encourage the presence of hazardous wildlife species can create conditions that are incompatible with, or pose a threat to, aviation safety" (paragraph 2.9.1.1).

In referring to state-listed species and species of concern, the FAA acknowledges that not all species of concern pose a direct threat to aviation safety, but "may pose and indirect threat and be hazardous because they attract other species or support prey species attractive to other species that are directly hazardous" (paragraph 2.9.1.2).

FAA Grant Assurances (Obligations)

When airport owners or sponsors, such as the City, accept funds from FAA-administered airport financial assistance programs, they must agree to certain obligations or assurances that require the recipients to maintain and operate their facilities safely and efficiently and in accordance with specified conditions.

Table 1 identifies specific Airport Improvement Program (AIP) grant assurances that are applicable to wildlife hazard management and the creation of a burrowing owl preserve on airport property.

Table 1. Grant Assurances Applicable to Wildlife Hazard Management

Grant Assurance No./Title	Description and Applicability
19. Operation and Maintenance	**Description** The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state, and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes" (paragraph a). **Applicability** The creation of a burrowing owl preserve would create a hazardous wildlife attractant on airport property, which conflicts with the requirement to operate the airport at all times in a safe and serviceable condition.
20. Hazard Removal and Mitigation	**Description** The airport will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards. **Applicability** The creation of a wildlife preserve for the burrowing owl would create a hazardous wildlife attractant beneath terminal airspace. Such action would conflict with the terms of the grant assurance, which require the airport operator to adequately clear and protect the terminal airspace.
21. Compatible Land Use	**Description** The airport will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. **Applicability** The proposed burrowing owl preserve would be located on airport property and within the Airport Influence Area for ONT as designated by the adopted Airport Land Use Compatibility Plan (ALUCP). The development of a wildlife preserve is considered an incompatible use within the context of ALUCP policies, the purpose of which is to restrict the use of land in the airport vicinity to activities and purposes that are compatible with normal operations, The proposed preserve would conflict with the ALUCP and the grant assurance.
Source: AIP Grant Assurances for Airport Sponsors. 2022. Accessed January 19, 2023. Available at: https://www.faa.gov/sites/faa.gov/files/airports/new_england/airport_compliance/assurances-airport-sponsors-2022-05.pdf	

Certalert 06-07, Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports

Certalerts provide the FAA Airports Safety and Operations Division with additional guidance about Part 139 Airport Certification and related issues. Cert Alert 06-07 describes procedures for responding to requests by state wildlife agencies to facilitate and encourage habitat for state-listed species or species of special concern that occur on airports and may pose a threat to aviation safety. Some of the guidance set forth in this Certalert is reiterated in AC 150/5200-33C. The Certalert states:

> Airport operators must decline to adopt habitat management techniques that jeopardize aviation safety. Adopting such techniques could place them in violation of their obligations and subject to an FAA enforcement action and possible civil penalties under 49 U.S.C. §44706, as implemented by 14 CFR § 139.337. In particular, an airport operator that has received federal grant-in-aid assistance is obligated through its grant assurances to maintain compatible land uses. Failure to do so may lead to noncompliance with its grant obligations. Further, airports that serve commercial air carriers are required to be certificated under 49 U.S.C. §44706, as implemented by 14 CFR Part 139. Title 14 CFR § 139.337(a) requires airport operators holding a Part 139 certificate to "take immediate action to alleviate wildlife hazards whenever they are detected."

Although the proposal to create a burrowing owl preserve was not issued by a state agency, the burrowing owl is a state species of concern. The Certalert is clear in that airport operators should not manage airport property for the preservation of state list species/species of concern based on their potential to attract potentially hazardous wildlife and pose conflicts with FAA regulations, grant assurances, and guidance.

CONCLUSIONS

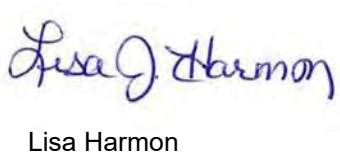
The conservation of burrowing owls, which have been involved in more than 400 wildlife strikes at airports nationwide, including 17 strikes at ONT, is an incompatible land use that conflicts with Chapter 2 of FAA AC 150/5200-33C. Burrowing owl conservation on airport property would create habitat for a species that has caused both direct and indirect threats to aircraft operations.

Although the FAA supports efforts to protect threatened and endangered species and must review proposed projects for the consistency with the Endangered Species Act, the FAA cannot do so to the detriment of safe aircraft operations. As stated in the AC, "Requests to enhance or create habitat for threatened and endangered species often conflict with the safety of the traveling public and may place the protected species at risk of mortality by aircraft collisions. The FAA does not support the creation, conservation or enhancement of habitat or refuges to attract endangered species on airports" (paragraph 2.9.2.1).

The FAA's continuing mission is to provide the safest, most efficient aerospace system in the world. As such, the safety of aviators and the traveling public must remain paramount. FAA regulations pertaining to hazardous wildlife seek to prevent the development of new wildlife hazard attractants within specified separation distances to protect the traveling public; however, the FAA supports conservation and seeks to avoid and minimize effects to protected species. The FAA requires compliance with the National Environmental Policy Act for proposed airport projects, and it does not oppose the creation mitigation or conservation areas that are constructed outside of the separation distances identified in AC 150/5200-33.

Mead & Hunt appreciates this opportunity to review the comments received on The Hub, a proposed logistics project on Ontario International Airport. Please do not hesitate to contact Lisa Harmon by email (lisa.harmon@meadhunt.com) should you have comments on the material discussed in this letter.

Sincerely



Lisa Harmon
Aviation/Environmental Planner

Rick Jones
FAA Qualified Airport Wildlife Biologist.

EXHIBIT I

MEMORANDUM

URBAN | CROSSROADS

DATE: February 21, 2023
TO: Heather Riley, Allen Matkins
FROM: Haseeb Qureshi, Urban Crossroads, Inc.
JOB NO: 14274-05 RTC

CALIFORNIA LOGISTICS CENTER RESPONSE TO COMMENTS

Urban Crossroads, Inc. is pleased to submit the following responses to comments received on the proposed California Logistics Center development (**Project**), which is located at the southeast corner of Haven Avenue and Airport Drive in the City of Ontario.

RESPONSE

The commenter's claims that there is an inadequate accounting for greenhouse gas emissions and pollution, a lack of attention to noise, air quality, and truck trips and that both the addendum and the TOP 2050 do not address emissions in an appropriately cumulative manner are unfounded.

As previously noted in the findings of the TOP 2050 EIR:

"The SoCAB are designated nonattainment for O3, PM2.5, PM10, and lead (SoCAB: Los Angeles County only) under the California and/or National AAQS. Construction of cumulative projects would further degrade the regional and local air quality. Air quality would be temporarily impacted during construction activities. Implementation of mitigation measures for related projects would reduce cumulative impacts. Mitigation Measure 3-1 would reduce impacts associated with consistency with the South Coast AQMD. However, project-related construction emissions could still potentially exceed the South Coast AQMD significance thresholds on a project and cumulative basis. Consequently, the ***Proposed Project's contribution to cumulative air quality impacts would be cumulatively considerable*** *and would therefore be significant."*

And

"For operational air quality emissions, any project that does not exceed or can be mitigated to less than the daily regional threshold values are not considered by South Coast AQMD to be a substantial source of air pollution and does not add significantly to a cumulative impact. Mitigation Measures 3-2 and new Mitigation Measure AQ-1 would reduce impacts associated with consistency with the South Coast AQMD. Nevertheless, operation of the Proposed Project would result in emissions in excess of the South Coast AQMD regional emissions thresholds for

long-term operation. Additionally, development under TOP 2050 would generate TACs that could contribute to elevated levels of risk. Therefore, the ***Proposed Project's air pollutant emissions would be cumulatively considerable*** *and therefore significant."*

As noted, the TOP 2050 EIR acknowledged a significant and unavoidable impact with respect to air quality.

If you have any questions or comments, I can be reached at hqureshi@urbanxroads.com.

EXHIBIT J

BRIGGS LAW CORPORATION [FILE: 2097.01]
Cory J. Briggs (SBN 176284)
Janna M. Ferraro (SBN 328921)
99 East "C" Street, Suite 111
Upland, CA 91786
Telephone: 909-949-7115

Attorneys for Plaintiff and Petitioner Inland Valley Advocates for the Environment

SUPERIOR COURT OF THE STATE OF CALIFORNIA

COUNTY OF SAN BERNARDINO – CENTRAL DIVISION

INLAND VALLEY ADVOCATES FOR THE ENVIRONMENT, Plaintiff and Petitioner, vs. ONTARIO INTERNATIONAL AIRPORT AUTHORITY; and DOES 1 through 100, Defendants and Respondents. CANAM ONTARIO, LLC; and DOES 101 through 1,000, Defendants and Real Parties in Interest.	Case no. CIVSB2201937 **VERIFIED FIRST AMENDED COMPLAINT FOR DECLARATORY RELIEF AND PETITION FOR WRIT OF MANDATE UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND OTHER LAWS** Action Filed: January 21, 2022 Department: S23 (Hon. Donald R. Alvarez)

Plaintiff and Petitioner INLAND VALLEY ADVOCATES FOR THE ENVIRONMENT ("Petitioner") alleges as follows:

Parties

1. Petitioner is a non-profit organization formed and operating under the laws of the State of California. At least one of Petitioner's members resides near the Ontario International Airport and has an interest in, among other things, ensuring compliance with environmental laws and protecting the airport-influenced region's environment and quality of life.

2. Defendant and Respondent ONTARIO INTERNATIONAL AIRPORT AUTHORITY ("OIAA") is a "public agency" under Public Resources Code Section 21063 and a "lead agency" under

Public Resources Code Section 21067. As a "public agency" and a "lead agency," OIAA is required to comply with California Environmental Quality Act ("CEQA"), Public Resources Code Section 21000 *et seq*. Defendant and Real Party in Interest CANAM ONTARIO, LLC ("CANAM"), is a business entity with some cognizable interest in the subject matter of this lawsuit.

3. The true names and capacities of the Defendants/Respondents/Real Parties in Interest identified as DOES 1 through 1,000 are unknown to Petitioner, who will seek the Court's permission to amend this pleading in order to allege the true names and capacities as soon as they are ascertained. Petitioner is informed and believes and on that basis alleges that each of the fictitiously named DOES 1 through 100 has jurisdiction by law over one or more aspects of the proposed project that is the subject of this proceeding and DOES 101 through 1,000 has some other cognizable interest in the subject matter of this lawsuit.

Background Information

4. On or about December 23, 2021, OIAA's governing board adopted a resolution approving a Development and Entitlement Agreement (the "DEA") and a Ground Lease with CANAM (collectively, the "Project"). The DEA and the Ground Lease separately and together constitute a "project" under Public Resources Code Sections 21065(a) and 21080.

5. Prior to adopting the resolution approving the Project, OIAA did not make a determination that the Project is exempt from environmental review under CEQA and did not perform any environmental review under CEQA. Petitioner opposes the Project based on CITY's failure to subject the Project to CEQA.

Notice Requirements and Time Limitations

6. This lawsuit is being commenced not more than 35 days after the notice described in Public Resources Code Section 21167(d) was filed with the county clerk (if such a notice was filed).

7. Petitioner has caused a Notice of Commencement of Action to be served on Defendants/Respondents, as required by Public Resources Code Section 21167.5. A true and correct copy of the Notice of Commencement of Action is attached to this pleading as Exhibit "A."

8. Petitioner will have caused a copy of this pleading to be served on the Attorney General not more than 10 days after the commencement of this lawsuit, as required by Public Resources Code Section 21167.7 and Code of Civil Procedure Section 388.

Jurisdiction and Exhaustion of Administrative Remedies

9. Petitioner seeks review by and relief from this Court under Public Resources Code Sections 21168 and/or 21168.5, as applicable, and Code of Civil Procedure Sections 526a, 1060 *et seq.*, and 1084 *et seq.*, among other provisions of law.

10. Petitioner exhausted administrative remedies to the extent required by law. At least one of the persons who opposed the Project and submitted public comments in opposition to the Project at the public meeting held by OIAA on December 23, 2021, is a member of Petitioner, which was formed after the December 23 meeting as authorized by Public Resources Code Section 21177(c). Alternatively and additionally, neither Public Resources Code Section 21177(a)-(b) nor any other exhaustion-of-remedies requirement may be applied to Petitioner.

11. Defendants/Respondents' conduct in approving the Project without complying with CEQA and other applicable laws constitutes a prejudicial abuse of discretion because, as alleged in this pleading, they failed to proceed in a manner required by law.

12. Petitioner has no plain, speedy, and adequate remedy in the ordinary course of law, since its members and other members of the public will suffer irreparable harm as a result of Defendants/Respondents' violations of CEQA and other applicable laws. Defendants/Respondents' approval of the Project also rests on their failure to satisfy a clear, present, ministerial duty to act in accordance with the applicable laws. Even when Defendants/Respondents are permitted or required by law to exercise their discretion in approving projects under those laws, they remain under a clear, present, ministerial duty to exercise their discretion within the limits of and in a manner consistent with those laws. Defendants/Respondents have had and continue to have the capacity and ability to approve the Project within the time limits of and in a manner consistent with those laws, but Defendants/Respondents have failed and refused to do so and have exercised their discretion beyond the limits of and in a manner that is not consistent with those laws.

13. Petitioner has a beneficial right and interest in Defendants/Respondents' fulfillment of all their legal duties, as alleged in this pleading.

FIRST CAUSE OF ACTION:
Illegal Approval of Project
(Against All Defendants/Respondents/Real Parties in Interest)

14. Paragraphs 1 through 13 are fully incorporated into this paragraph.

15. The Project does not comply with all applicable laws. By way of example and not limitation (including alternative theories of liability):

A. The Project violates CEQA. In particular:

i. CEQA applies to every discretionary project proposed to be carried out or approved by a public agency, unless the project is exempt from CEQA. Generally speaking, the public agency must review the potentially significant environmental impacts of every discretionary project subject to CEQA review that the agency proposes to carry out or approve. Such review involves determining whether the proposal is exempt, should be the subject of a negative declaration, or should be the subject of an environmental impact report.

ii. The use of a CEQA exemption is inappropriate when a project may have significant environmental impacts or when there are potentially significant environmental impacts due to unusual circumstances.

iii. The Project constitutes a "project" under CEQA because its approval involved the exercise of discretion and has the potential to cause significant direct, indirect, or cumulative adverse impacts (if not all such impacts) on the environment, including but not limited to parking and traffic problems, noise problems, and biological/wildlife impacts.

iv. These significant direct, indirect, or cumulative adverse environmental impacts give rise to Defendants/Respondents' legal obligation to subject the Project to CEQA review.

v. Defendants/Respondents' refusal to apply CEQA to the Project and subject it to environmental review constitutes a violation of CEQA.

vi. As a result of Defendants/Respondents' violation of CEQA, Petitioner has been harmed insofar as Petitioner, its members, other members of the public, and the responsible decision-makers were not fully informed about the potential adverse environmental impacts of the

Project, and insofar as Petitioner, its members, and other members of the public did not have an opportunity to participate meaningfully in the analysis of such impacts prior to approval of the Project.

16. There is currently a dispute between Petitioner and Defendants/Respondents over the Project's legal force and effect. Petitioner contends that the Project has no legal force or effect because it violates CEQA and/or one or more other applicable laws. Defendants/Respondents dispute Petitioner's contention. The parties therefore require a judicial determination of the Project's legal force and effect (if any).

Prayer

FOR ALL THESE REASONS, Petitioner respectfully prays for the following relief against Defendants/Respondents (and any and all other parties who may oppose Petitioner in this lawsuit):

A. A judgment or other appropriate order determining or declaring that Defendants/Respondents failed to fully comply with CEQA and/or one or more other applicable laws as they relate to the Project and that there must be full compliance therewith before final approval and implementation of the Project may occur;

B. A judgment or other appropriate order determining or declaring that Defendants/Respondents failed to comply with CEQA and/or one or more other applicable laws as they relate to the Project and that its approval and implementation was illegal in at least some respect, rendering the approval and implementation null and void;

C. Injunctive relief prohibiting Defendants/Respondents (and any and all persons acting at the request of, in concert with, or for the benefit of one or more of them) from taking any action on any aspect of, in furtherance of, or otherwise based on the Project unless and until Defendants/Respondents comply with CEQA and all other applicable laws, as determined by the Court;

D. Any and all other relief that may be authorized by CEQA or other applicable laws, or any combination of them, but is not explicitly or specifically requested elsewhere in this Prayer;

E. Any and all legal fees and other expenses incurred by Petitioner in connection with this proceeding, including but not limited to reasonable attorney fees as authorized by the Code of Civil Procedure; and

F. Any and all further relief that this Court may deem appropriate.

Date: May 23, 2022.

Respectfully submitted,

BRIGGS LAW CORPORATION

By: Cory J. Briggs
Cory J. Briggs

Attorneys for Plaintiff and Petitioner Inland Valley Advocates for the Environment

FIRST AMENDED
COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF AND PETITION FOR WRIT OF MANDATE UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND OTHER LAWS

Exhibit "A"

BRIGGS
LAW CORPORATION

99 East "C" Street, Suite 111
Upland, CA 91786
T: 909-949-7115
F: 909-949-7121

BLC File(s): 2097.01

20 January 2022

Mark Thorpe, CEO
Alan Wapner, President
Ontario International Airport Authority
1923 East Avion Street
Ontario, CA 91761

Via E-mail to mthorpe@flyontario.com
Via E-mail to awapner@ontarioca.gov

Re: Notice of Commencement of Action

Dear Messrs. Thorpe and Wapner:

I represent Inland Valley Advocates for the Environment and am sending this Notice of Commencement of Action on my client's behalf.

Please be advised that an action is to be commenced by my client in San Bernardino County Superior Court against your agency. The action will challenge your agency's approval of the subject matter of Item 7 on the Ontario International Airport Authority governing board's agenda for December 23, 2021 (contracts with CanAm Ontario, LLC) on the grounds that the approval violated the California Environmental Quality Act (PUB. RES. CODE § 21000 *et seq.*). The action may also challenge your agency's approval of item based on one or more violations of other laws.

If you have any questions, please feel free to contact me.

Sincerely,

BRIGGS LAW CORPORATION

Cory J. Briggs

cc: ngonzaga@flyontario.com

Cory Briggs

From: Alan Wapner <AWapner@ontarioca.gov>
To: Cory Briggs
Sent: Thursday, January 20, 2022 3:46 PM
Subject: Read: Notice of Commencement of Action

Your message

To: Alan Wapner
Subject: Notice of Commencement of Action
Sent: Thursday, January 20, 2022 2:55:27 PM (UTC-08:00) Pacific Time (US & Canada)

was read on Thursday, January 20, 2022 3:46:09 PM (UTC-08:00) Pacific Time (US & Canada).

Cory Briggs

From: Tovar, Renee <RMontes@flyontario.com> on behalf of Thorpe, Mark <MTHORPE@flyontario.com>
To: Cory Briggs
Sent: Thursday, January 20, 2022 3:03 PM
Subject: Read: Notice of Commencement of Action

Your message

To: Thorpe, Mark
Subject: Notice of Commencement of Action
Sent: Thursday, January 20, 2022 2:55:27 PM (UTC-08:00) Pacific Time (US & Canada)

was read on Thursday, January 20, 2022 3:02:24 PM (UTC-08:00) Pacific Time (US & Canada).

Cory Briggs

From: Microsoft Outlook
To: 'mthorpe@flyontario.com'; 'ngonzaga@flyontario.com'
Sent: Thursday, January 20, 2022 2:56 PM
Subject: Relayed: Notice of Commencement of Action

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

'mthorpe@flyontario.com' (mthorpe@flyontario.com)

'ngonzaga@flyontario.com' (ngonzaga@flyontario.com)

Notice of
Commencemen...

Subject: Notice of Commencement of Action

Cory Briggs

From: Microsoft Outlook
To: 'awapner@ontarioca.gov'
Sent: Thursday, January 20, 2022 2:56 PM
Subject: Relayed: Notice of Commencement of Action

Delivery to these recipients or groups is complete, but no delivery notification was sent by the destination server:

'awapner@ontarioca.gov' (awapner@ontarioca.gov)

Notice of Commencemen...

Subject: Notice of Commencement of Action

PROOF OF SERVICE

NTY OF

f _____

arty to the within action; my business address is, ____

_____

_, I served the foregoing document described as ____

_____

_____

_____ on _____

nclosed in scaled envelopes addressed as stated on the

e copy thereof enclosed in sealed envelopes addressed

e in the mail at _____

postage thereon fully prepaid.

familiar" with the firm's practice of collection and proc

PROOF OF SERVICE

1. My name is Ruth Flores. I am over the age of eighteen. I am employed in the State of California, County of San Bernardino.

2. My ✓ business ___ residence address is Briggs Law Corporation, 99 East "C" Street, Suite 111, Upland, CA 91786.

3. On May 23, 2022, I served ___ an original copy ✓ a true and correct copy of the following documents: VERIFIED FIRST AMENDED COMPLAINT FOR DECLARATORY RELIEF AND PETITION FOR WRIT OF MANDATE UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT AND OTHER LAWS

4. I served the documents on the person(s) identified on the attached mailing/service list as follows:

___ ***by personal service.*** I personally delivered the documents to the person(s) at the address(es) indicated on the list.

✓ ***by U.S. mail.*** I sealed the documents in an envelope or package addressed to the person(s) at the address(es) indicated on the list, with first-class postage fully prepaid, and then I

___ deposited the envelope/package with the U.S. Postal Service

✓ placed the envelope/package in a box for outgoing mail in accordance with my office's ordinary practices for collecting and processing outgoing mail, with which I am readily familiar. On the same day that mail is placed in the box for outgoing mail, it is deposited in the ordinary course of business with the U.S. Postal Service.

I am a resident of or employed in the county where the mailing occurred. The mailing occurred in the city of Upland, California.

___ ***by overnight delivery.*** I sealed the documents in an envelope/package provided by an overnight-delivery service and addressed to the person(s) at the address(es) indicated on the list, and then I placed the envelope/package for collection and overnight delivery in the service's box regularly utilized for receiving items for overnight delivery or at the service's office where such items are accepted for overnight delivery.

___ ***by facsimile transmission.*** Based on an agreement of the parties or a court order, I sent the documents to the person(s) at the fax number(s) shown on the list. Afterward, the fax machine from which the documents were sent reported that they were sent successfully.

___ ***by e-mail delivery.*** Based on an agreement of the parties or a court order, I sent the documents to the person(s) at the e-mail address(es) shown on the list. I did not receive, within a reasonable period of time afterward, any electronic message or other indication that the transmission was unsuccessful.

I declare under penalty of perjury under the laws ___ of the United States ✓ of the State of California that the foregoing is true and correct.

Date: May 23, 2022

Signature: Ruth Flores

SERVICE LIST

Inland Valley Advocates etc. v. Ontario International Airport Authority
San Bernardino County Superior Court Case No. CIVSB2201937

Kevin P. Sullivan
Kimberly A. Foy
Gatzke Dillon & Ballance LLP
2762 Gateway Road
Carlsbad, California 92009
Telephone: (760) 431-9501
Facsimile: (760) 431-9512
ksullivan@gdandb.com
kfoy@gdandb.com

Attorneys for Defendant,
Ontario International Airport Authority

EXHIBIT K

RESOLUTION NO. 2021-22

A RESOLUTION OF THE ONTARIO INTERNATIONAL AIRPORT AUTHORITY TO APPROVE AND ADOPT FINDINGS, INCLUDING AS TO "EXEMPT SURPLUS PROPERTY", REGARDING THE DISPOSITION OF CERTAIN AIRPORT REAL PROPERTY, AND TO APPROVE AND AUTHORIZE THE CHIEF EXECUTIVE OFFICER (CEO), OR THE CEO'S DESIGNEE, TO EXECUTE NECESSARY DOCUMENTATION FOR A DEVELOPMENT AND ENTITLEMENT AGREEMENT AND A LONG-TERM GROUND LEASE FOR SUCH AIRPORT REAL PROPERTY WITH CANAM ONTARIO, LLC.

WHEREAS, the Ontario International Airport Authority (OIAA or Authority) was established under a Joint Exercise of Powers Agreement between the City of Ontario and the County of San Bernardino pursuant to the Joint Exercise of Powers Act of the State of California, for the purpose of operating, maintaining, managing, developing, and marketing the Ontario International Airport (Airport) and related Airport facilities;

WHEREAS, the Authority owns approximately 197 acres on the eastern end of the Airport, east of Haven Road, north of Jurupa Avenue, and south of Airport Drive, which include Assessor's Parcel Numbers 0211-232-44-0-000, 0211-232-45-0-000, 0211-232-46-0-000, 0211-222-47-0-000, 0211-222-48-0-000, 0211-222-52-0-000 AND 0211-222-53-0-000, 0211-222-54-0-000, 0211-222-55-0-000, 0211-232-11-0-000, 0211-232-12-0-000, 0211-232-13-0-000, 0211-232-14, 0211-232-15-0-000, 0211-232-16-0-000, 0211-232-17-0-000, 0211-232-18-0-000, 0211-232-19-0-000, 0211-232-20-000, 0211-232-04-0-000, 0211-232-05-0-000, 0211-232-06-0-000, 0211-232-07-0-000, and 0211-222-56-0-000 (collectively the Property). The Property is surrounded by industrial buildings and land uses to the north, east, and south;

WHEREAS, in 2020, the Authority discussed with the Federal Aviation Administration (FAA) whether the possible lease and use of the Property for industrial logistics development related to the warehousing and distribution of goods and products would be subject to federal jurisdiction and approval. On November 23, 2020, the FAA issued to OIAA a letter under Section 163 of the FAA Reauthorization Act of 2018 regarding a portion of the Property. On January 21, 2021, the FAA issued to OIAA another letter under Section 163 of the Act regarding the remaining portions of the Property. Collectively, the two FAA letters stated that the proposed use of the Property for industrial logistics development related to the warehousing and distribution of goods and products would (1) create revenue to help fund Airport operating costs and (2) not adversely impact aircraft operations at the Airport. The FAA therefore determined it lacked authority to approve or disapprove any potential lease and development of the Property;

WHEREAS, the Property has been vacant and unused for decades. OIAA has determined that the Property is not suited for land uses for typical Authority or Airport aeronautical purposes, such as for runways, taxiways, terminals, hangars, and similar Airport facilities because the Property is physically separated and removed from the balance of the Airport by Haven Avenue, which runs along or near the entire western limits of the Property. Accordingly, the Property is not required for other Authority purposes, and pursuant to Government Code section 37395, can be leased for up to 55 years;

WHEREAS, between April and June 2020, OIAA commissioned three (3) separate and independent appraisals of the Property for the purpose of determining fair market value related to a sale or long-term lease of the Property;

WHEREAS, in February 2021, CBRE, Inc. (CBRE), on behalf of the OIAA, initiated an Offering of Memorandum for the proposed leasing and development of the Property. The Offering of Memorandum was distributed to CBRE's bidder list, which included more than 4,800 potential bidders nationwide. The first round offers received on April 9, 2021, included seventeen (17) responsive bidders. The second round of offers received on April 26, 2021, included twelve (12) responsive bidders. The final round of offers received on May 12, 2021, included five (5) responsive bidders. After the final round of offers/bids on June 23, 2021, the OIAA selection committee held interviews to understand bidders' proposals related to development process, timing, due diligence and environmental analysis, as well as a further analysis of their proposed ground lease offerings. After interviews, USAA Real Estate Company (later CanAm Ontario, LLC) was the final selected responsive bidder as the company was determined to have presented the best proposal for a long-term lease of the Property based on the bidding process, which proposal exceeded the determinations of fair market value in the appraisals for the Property discussed above. OIAA staff presented this determination and report on the bid process to the OIAA Commission in July 2021 and thereafter moved forward with negotiating lease and development terms relating to the Property;

WHEREAS, CanAm Ontario, LLC (CanAm) proposes a long-term Ground Lease for the Property for industrial logistics development related to the warehousing and distribution of goods and products (the Project), which use is generally complimentary with Airport operations. As detailed in the Agenda Report on the proposed Development and Entitlement Agreement and Ground Lease between OIAA and CanAm to be considered at the OIAA Commission's December 23, 2021, Regular public meeting, operations and uses on the Property under the proposed Ground Lease would involve significant improvements to the Property (subject to all environmental reviews and approvals), and significant rental revenues paid to OIAA over the 55-year term of the Ground Lease;

WHEREAS, operations under the proposed Project and Ground Lease will be also consistent with supply chain improvements that are encouraged in Governor Newsom's Executive Order N-19-21 regarding supply chain issues, which Order recognized that "the movement of goods and health of supply and distribution chains across California is a matter of vital statewide importance ...."

WHEREAS, given the unique circumstances that the Property is non-aeronautical lands of the Airport, the City of Ontario will be (i) the lead agency for purposes of compliance by the Project with the California Environmental Quality Act (CEQA), Public Resources Code § 21000 *et seq.*, and (ii) the zoning approval authority relating to the Property and the Project. Before approval by OIAA of any Ground Lease for the Property, or the allowance of any development activity on the Property related to the Project, CanAm shall be required to obtain all applicable land use, zoning, and CEQA reviews, approvals, and certifications for the Project (collectively "Government Approvals"), and shall implement any requirements under such Governmental Approvals, including, without limitation, any mitigation measures required as a result of compliance with CEQA;

WHEREAS, the Offering Memorandum and related request for proposals or bids process for the long-term Ground Lease and development of the Property summarized above confirmed that the proposed Ground Lease with CanAm will provide OIAA with fair market value for lease of the Property;

WHEREAS, certain State-imposed laws and regulations restrict and prevent use of the

Property for residential purposes and for some, but not all, non-residential uses, due to safety concerns and high noise levels;

WHEREAS, certain FAA-imposed regulations restrict and prevent use of the Property for residential purposes and for some, but not all, non-residential uses, due to safety concerns and high noise levels;

WHEREAS, such State and FAA laws and regulations justify a determination and finding by OIAA under Government Code section 54221(f)(1)(G) that the Property is "exempt surplus property" where housing would be prohibited;

WHEREAS, the OIAA Commission has reviewed and considered all materials identified and referred to in this Resolution, as well as all materials and documents discussed in and attached to the Agenda Report for this matter; and

WHEREAS, on December 20, 2021, the Authority provided notice of the Regular OIAA Commission meeting, which includes consideration of this matter, scheduled for December 23, 2021, in accordance with the Ralph M. Brown Act, Government Code § 54950, *et seq.*, and provided notice to Douglas Carstens, Esq.:

NOW, THEREFORE, BE IT RESOLVED by the OIAA Commission as follows:

SECTION 1. FINDINGS.

All Whereas clauses or Recitals in this Resolution above are incorporated by reference into these Findings.

Further, the OIAA Commission, in light of the whole record before it including, but not limited to (1) the Agenda Report, including attachments to the Report, for this matter, and (2) other substantial evidence within the record and/or provided at this December 23, 2021 Regular public meeting (all of which administrative record materials for this matter are incorporated by reference into this Resolution No. 2021-____), finds and determines as follows:

1. **The Property is not required for other Authority purposes, and pursuant to Government Code section 37395, can be leased for up to 55 years.**

   The Property has been vacant and unused for decades. OIAA has determined that the Property is not suited for land uses for typical Authority or Airport aeronautical purposes, such as for runways, taxiways, terminals, hangars, and similar Airport facilities because the Property is physically separated and removed from the balance of the Airport by Haven Avenue, which runs along or near the entire western limits of the Property. Accordingly, the Property is not required for other Authority purposes, and pursuant to Government Code section 37395, can be leased for up to 55 years.

2. **State Law and the Ontario International Airport Land Use Compatibility Plan Establish Legal Restrictions that Prohibit Residential Housing on the Property.**

   A. State Law Requires an Airport Land Use Compatibility Plan for the Airport

   The California State Aeronautics Act (Public Utilities Code section 21670 *et seq.*) requires each airport to adopt an Airport Land Use Compatibility Plan and requires

affected agencies to adopt land use designations consistent with the terms therein. (Pub. Util. Code, §§ 21674, 21675, 21676, 21676.5.) The intent of the Legislature under the Aeronautics Act is to "discourage incompatible land uses near existing airports." (*Id.* at § 21674.7.)

The Ontario International Airport Land Use Compatibility Plan, amended July 2018 (linked at https://www.ontarioca.gov/planning/ont-iac at Compatibility Plan, and incorporated in its entirety into this Resolution No. 2021-___), limits certain land uses near the airport based on state and FAA requirements. (Compatibility Plan, pp. 1-1, 1-2; see also Compatibility Plan, Appendix A, State Laws and Appendix B, Federal Aviation Regulations.) The Airport Compatibility Plan was created by the City of Ontario in coordination with the County of San Bernardino and other affected agencies, such as Riverside County and Los Angeles County. (*Id.* at pp. 1-3 through 1-4.) The policies set forth in the Compatibility Plan that limit land uses are requirements for surrounding jurisdictions, such as OIAA. (*Id.* at p. 2-4; see also Exhibit 2A: Affected Jurisdictions.) Affected agencies must modify, if necessary, any zoning and land use regulations to ensure they are consistent with the land use policies set forth in the Compatibility Plan. (*Id.* at p. 2-6; Gov. Code, § 65302.3; Pub. Util. Code, § 21676 [local agencies must comply with land use compatibility plans].)

B. State-Mandated Safety Policies in the Airport Land Use Compatibility Plan Prohibit Residential Housing and Uses on the Property.

The Airport Compatibility Plan required under State law adopts safety compatibility policies to minimize risks associated with off-airport accidents or emergency landings. More safety restrictions are set on residential land uses because residential uses warrant a greater degree of protection. (Compatibility Plan, p. 2-14.)

The Compatibility Plan creates five safety zones. (Compatibility Plan, p. 2-15.) "Residential development **is incompatible within all Safety Zones** (1 through 5)." (*Id.* at p. 2-15; *see* pp. 2-34 and 2-41.) "New mixed-use developments **will locate the residential component outside of all safety zones.**" (*Id.* at pp. 2-15; *see* p. 2-41.)

The Property is located within Safety Zones 1, 2, and 3 in the Compatibility Plan. (*See* Safety Zone Map Exhibit 1-8, attached to this Resolution as **Exhibit 1**; *see also* Appendix I, at I-13.) Residential development is therefore prohibited under State law for the Property under the Compatibility Plan's Safety Policies.

C. State-Mandated Noise Policies in the Airport Land Use Compatibility Plan Prohibit Residential Housing and Uses on the Property

The Airport Compatibility Plan also establishes noise polices based on state regulations, guidelines, and the California Airport Land Use Planning Handbook. (*Id.* at p. 2-21.) The purpose of the noise policies is to "avoid the establishment of noise-sensitive land uses in the portions of the [Ontario International Airport] that are exposed to significant levels of aircraft noise." (*Id.* at p. 2-19.)

Residential uses are incompatible with airport land areas with noise exposure CNEL 70 dB and above. (*Id.* at Tables 2-3 at p. 2-47.) Noise Policy SP3 states: "Residential infill development **should not be allowed in areas exposed to exterior noise levels equal to or greater than CNEL 70 dB.**" (*Id.* at p. 2-34.)

The Property is located directly below the flight path for the Airport. (Compatibility Plan, Modeled Flight Routes, Exhibit 1-13.) The Property is within the high noise impact zones of CNEL 70-75 dB and CNEL 75+ dB. (*See* Compatibility Plan, p. 1-10; Noise Map Exhibit 1-9, which Map is attached to this Resolution as **Exhibit 2**; *see also* Appendix I, at I-5.) Thus, residential development is not allowed on the Property under the Compatibility Plan's noise policies. (Noise Map Exhibit 1-9; *see also* Appendix I, at I-6 [map of areas with residential land use designation, do not include the Property, or anywhere near the Property].

3. **Federal Regulations Prohibit Residential Uses and Housing on the Property.**

FAA regulations require OIAA to "take appropriate action . . . to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations." (49 U.S.C. § 47107(a)(10); see also FAA Order 5190.6B, (linked at: FAA Order 5190.6B Change 1, Airport Compliance Manual, 22 November 2021 and incorporated in its entirety into this Resolution No. 2021-___.) This is considered a "federal obligation to ensure compatible land use." (FAA Order 5190.6B, p. 20-2.)

"Incompatible land use at or near airports may result in the creation of hazards to air navigation and reductions in airport utility resulting from obstructions to flight paths or noise-related incompatible land uses resulting from residential construction too close to the airport." (*Id.* at p. 20-1.) "Residential housing and other land uses near airports must remain compatible with airports and the airport approach/departure corridors." (*Id.* at p. 20-1.) **"Restricting residential development near the airport is essential in order to avoid noise-related problems."** (*Id.* at p. 20-2.)

FAA Order 5190.6B also states, **"The general rule on residential use of land on or near airport property is that it is incompatible with airport operations because of the impact of aircraft noise and, in some cases, for reasons of safety, depending on the location of the property."** (*Id.* at p. 20-5.)

In sum, FAA Order 5190.6B mandates that OIAA ensures compatible land uses with land on or immediately surrounding the Airport, and that it therefore restrict residential housing on the Property, which is located directly below the flight path for the Airport and is within areas affected by high noise levels.

4. **The Property is Exempt Surplus Property under Government Code Section 54221(f)(1)(G).**

The State and federal laws and regulations discussed and referenced in Sections 2 and 3 (Findings) of this Resolution above warrant, justify, and result in a determination and finding by OIAA under Government Code section 54221(f)(1)(G) that the Property is "exempt surplus property" where housing would be prohibited from being developed.

The Property is suitable for use and development of industrial uses regarding the Project consistent with the Airport Compatibility Plan.

5. **The Long-Term Ground Lease of the Property will Produce and Provide Fair Market Value to the Authority.**

   OIAA's Offering Memorandum, through CBRE, and the related request for proposals or bids process for the long-term ground lease and development of the Property summarized above confirmed that the proposed Ground Lease with CanAm Ontario, LLC, will provide OIAA with fair market value for lease of the Property. The proposed Ground Lease between OIAA and CanAm will provide lease rentals and revenues for the Property that exceed the determinations of fair market value for the Property contained in the three (3) separate appraisals for the Property discussed above.

6. **The Proposed Development and Use of the Property Under the Ground Lease Will be Consistent with Vital State Objectives Regarding the Movement of Goods and Health of Supply and Distribution Chains Across California.**

   The proposed Project would utilize the Property for industrial logistics development related to the warehousing and distribution of goods and products. Operations under the proposed Project and Ground Lease will therefore be consistent with supply chain improvements that are encouraged in Governor Newsom's Executive Order N-19-21 regarding supply chain issues, which Order recognized that "the movement of goods and health of supply and distribution chains across California is a matter of vital statewide importance ...."

SECTION 2. OIAA COMMISSION ACTIONS:

1. Approval of Findings: The OIAA Commission approves and adopts the Findings set forth in Section 1 of this Resolution above.

2. Approval of the Development and Entitlement Agreement with CanAm Ontario, LLC: The OIAA Commission approves the Development and Entitlement Agreement (DEA) between CanAm Ontario, LLC, and OIAA included as Attachment A to the Agenda Report for this matter, and authorizes the OIAA's Chief Executive Officer (CEO), or the CEO's designee, to execute all documents related to the DEA.

3. Approval of the Ground Lease with CanAm Ontario, LLC: The OIAA Commission approves the Ground Lease between CanAm Ontario, LLC, and OIAA included as Attachment B to the Agenda Report for this matter, and, subject to satisfaction of each of the conditions stated and contained in Sections 2.2(a)(1), 2.3(d), 2.7, 4.1(f), and 4.1(g) of the DEA, authorizes the OIAA's Chief Executive Officer (CEO), or the CEO's designee, to execute all documents related to the Ground Lease.

PASSED, APPROVED, AND ADOPTED this 23rd day of December 2021.

ALAN D. WAPNER, OIAA PRESIDENT

ATTEST:

NATALIE GONZAGA, ASSISTANT SECRETARY

APPROVED AS TO LEGAL FORM:

LORI D. BALLANCE, GENERAL COUNSEL

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Natalie Gonzaga, Commission Clerk of the Ontario International Airport Authority, DO HEREBY CERTIFY that foregoing Resolution No. 2021-22 was duly passed and adopted by the Commission of the Ontario International Airport Authority at their Regular meeting held December 23, 2021 by the following roll call vote, to wit:

AYES:	COMMISSIONERS:	HAGMAN, BOWMAN, LOVERIDGE, PRESIDENT WAPNER
NOES:	COMMISSIONERS:	NONE
ABSENT:	COMMISSIONERS:	GOUW

ngonzaga
NATALIE GONZAGA, ASSISTANT SECRETARY

(SEAL)

The foregoing is the original of Resolution No. 2021-22 duly passed and adopted by the Commission of the Ontario International Airport Authority at their Regular meeting held December 23, 2021.

ngonzaga
NATALIE GONZAGA, ASSISTANT SECRETARY

(SEAL)

EXHIBIT 1
OIAA RESOLUTION NO. 2021-__
(SAFETY ZONES MAP)

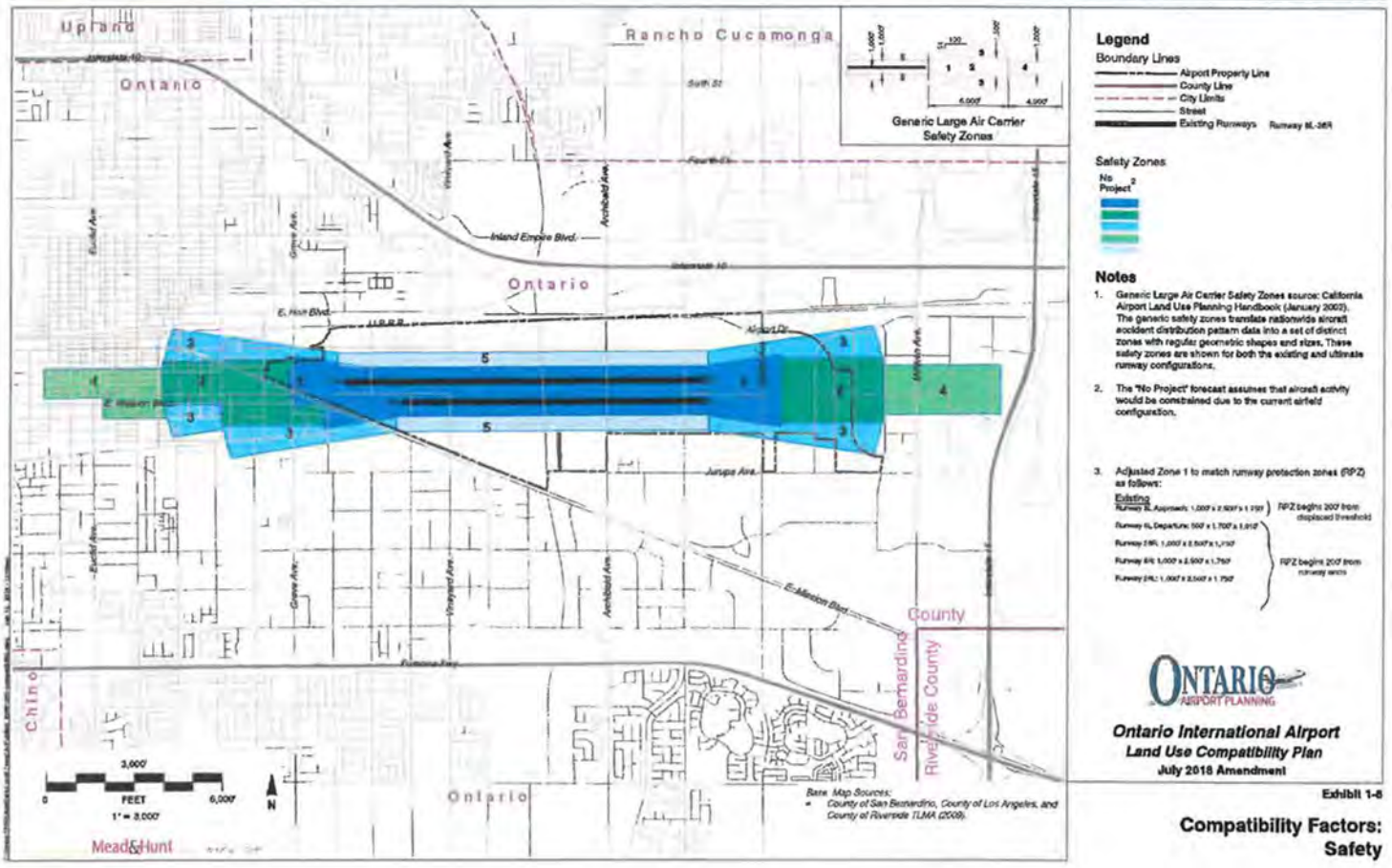
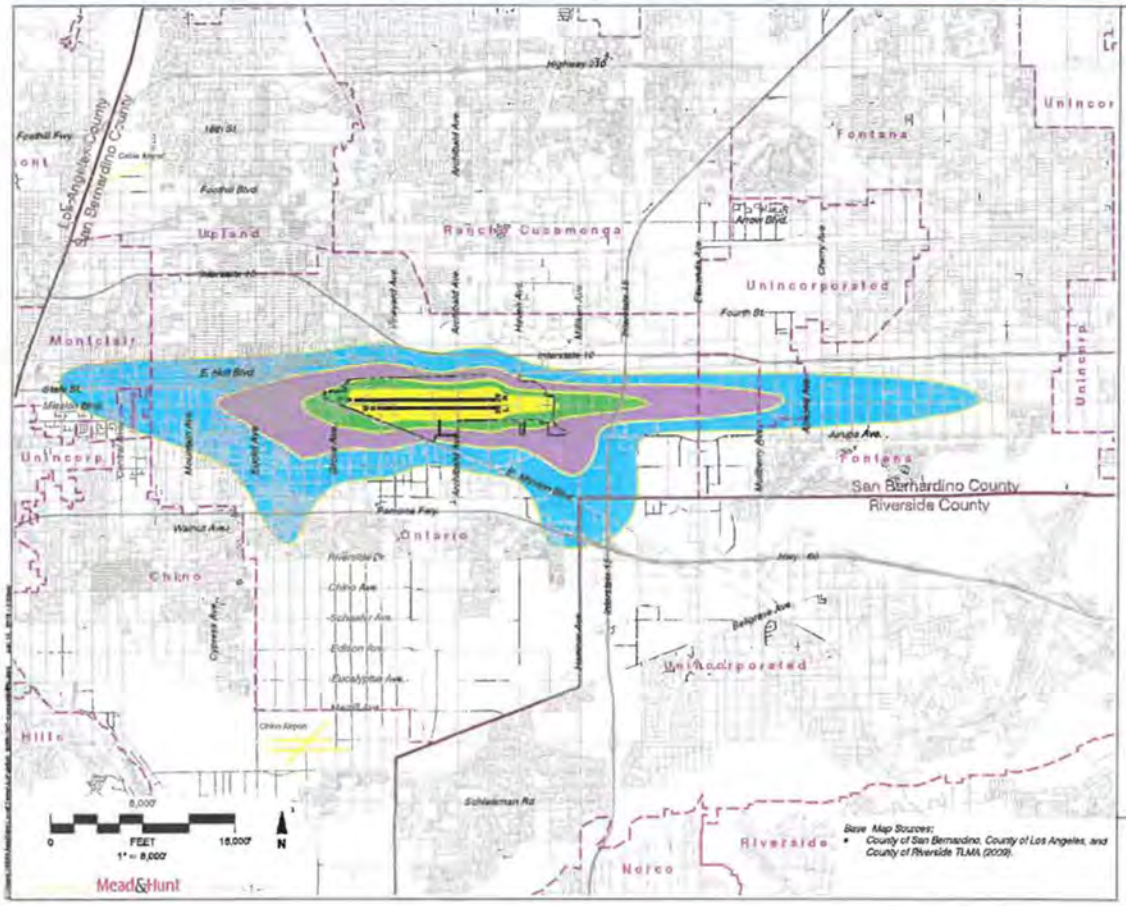

Upland
Ontario
Rancho Cucamonga
Inland Empire Blvd.
E. Holt Blvd.
Airport Dr.
E. Mission Blvd.
Jurupa Ave.
Archibald Ave.
Grove Ave.
Vineyard Ave.
Haven Ave.
Milliken Ave.
Chino
San Bernardino County
Riverside County
Generic Large Air Carrier Safety Zones
Legend
Boundary Lines
Airport Property Line
County Line
City Limits
Street
Existing Runways
Safety Zones
No Project
Notes
1. Generic Large Air Carrier Safety Zones source: California Airport Land Use Planning Handbook (January 2002). The generic safety zones translate nationwide aircraft accident distribution pattern data into a set of distinct zones with regular geometric shapes and sizes. These safety zones are shown for both the existing and ultimate runway configurations.
2. The "No Project" forecast assumes that aircraft activity would be constrained due to the current airfield configuration.
3. Adjusted Zone 1 to match runway protection zones (RPZ) as follows:
Existing
RPZ begins 200' from displaced threshold
RPZ begins 200' from runway ends
3,000'
0
FEET
6,000'
1" = 3,000'
N
Base Map Sources:
County of San Bernardino, County of Los Angeles, and County of Riverside TLMA (2009).
Mead & Hunt
ONTARIO AIRPORT PLANNING
Ontario International Airport
Land Use Compatibility Plan
July 2018 Amendment
Exhibit 1-6
Compatibility Factors: Safety

EXHIBIT 2
OIAA RESOLUTION NO. 2021-__
(NOISE IMPACT ZONES MAP)



ONTARIO AIRPORT PLANNING

Ontario International Airport
Land Use Compatibility Plan
July 2018 Amendment

Exhibit 1-9

Compatibility Factors: Noise

MEMORANDUM

URBAN | CROSSROADS

DATE: February 21, 2023
TO: Heather Riley, Allen Matkins
FROM: Haseeb Qureshi, Urban Crossroads, Inc.
JOB NO: 14274-05 RTC

CALIFORNIA LOGISTICS CENTER RESPONSE TO COMMENTS

Urban Crossroads, Inc. is pleased to submit the following responses to comments received on the proposed California Logistics Center development (**Project**), which is located at the southeast corner of Haven Avenue and Airport Drive in the City of Ontario.

RESPONSE

The commenter's claims that there is an inadequate accounting for greenhouse gas emissions and pollution, a lack of attention to noise, air quality, and truck trips and that both the addendum and the TOP 2050 do not address emissions in an appropriately cumulative manner are unfounded.

As previously noted in the findings of the TOP 2050 EIR:

"The SoCAB are designated nonattainment for O3, PM2.5, PM10, and lead (SoCAB: Los Angeles County only) under the California and/or National AAQS. Construction of cumulative projects would further degrade the regional and local air quality. Air quality would be temporarily impacted during construction activities. Implementation of mitigation measures for related projects would reduce cumulative impacts. Mitigation Measure 3-1 would reduce impacts associated with consistency with the South Coast AQMD. However, project-related construction emissions could still potentially exceed the South Coast AQMD significance thresholds on a project and cumulative basis. Consequently, the ***Proposed Project's contribution to cumulative air quality impacts would be cumulatively considerable*** *and would therefore be significant."*

And

"For operational air quality emissions, any project that does not exceed or can be mitigated to less than the daily regional threshold values are not considered by South Coast AQMD to be a substantial source of air pollution and does not add significantly to a cumulative impact. Mitigation Measures 3-2 and new Mitigation Measure AQ-1 would reduce impacts associated with consistency with the South Coast AQMD. Nevertheless, operation of the Proposed Project would result in emissions in excess of the South Coast AQMD regional emissions thresholds for

long-term operation. Additionally, development under TOP 2050 would generate TACs that could contribute to elevated levels of risk. Therefore, the ***Proposed Project's air pollutant emissions would be cumulatively considerable*** *and therefore significant."*

As noted, the TOP 2050 EIR acknowledged a significant and unavoidable impact with respect to air quality.

If you have any questions or comments, I can be reached at hqureshi@urbanxroads.com.

SUBJECT: **Appeal - Response to Comments**

1. Burrowing owls will use storm drains, concrete rubble piles, open pipes, rolled up carpets, etc. for shelter and roosting. The burrowing owls used the onsite storm drains (or the risers on-site) as a burrow. Please see photos below from the focused surveys that show the burrowing owls utilizing these as a sentinel burrow and as a main burrow. The amount of pellets and whitewash in and around the riser shows that the owls were not just using the riser to escape predators. Further, one of the photos includes a perch that photographers installed and shows the owls were using that riser as part of their burrow complex or at least as an active burrow.

2. The Ontario HUB was one of the last remaining sites undeveloped in the region this would leave a lack of owls in the region necessary to maintain a healthy population capable of persisting overtime. Single large mitigation sites can be subject to stochastic events (fire, disease, vandalism, etc.) that can lead to the loss of remnant populations. Several mitigation sites that are connected through greenbelts or areas allowing safe travel is necessary for dispersal between mitigation sites.

   Regarding the Hub property, the owls will not persist here forever even if the site was protected (not developed). There are many reasons why owls will not persist here in perpetuity even if you try to manage for them. Saving one property will not adequately support a population of owls.

   The owl populations at naval weapons station seal beach and the Orange County fairgrounds and many other similar locations all met the same fate. They were surrounded by development and after several years the populations were extirpated. All of the development bring increased risk of mortality (predators, vehicle strikes, loss of foraging habitats etc.). eventually these island patches of fragmented habitats supporting owls will blink out. They won't support owls in perpetuity as supported by these similar situations at the OC fair grounds and seal beach (and many other locations). The ability to safely disperse away from and into these island patches are critical for a regional population but as this area loses more habitat and dispersal becomes more difficult (increases risk of mortality) then it's more likely owls will be extirpated. Saving part of the property would not result in long term owl occupation either.

3. Except for the undeveloped interstitial areas associated with the Ontario International Airport runway to the west of the project site, the project site is almost entirely surrounded by existing development (industrial buildings) to the north, east and south.

   Prior to the 1980's southwestern San Bernardino supported a robust breeding BUOW population with hundreds of pairs from the base of the San Bernardino Mountains south to the Prado Basin. After decades of development pressure and the complete absence of meaningful mitigation, only a few remaining breeding pairs and winter migrants are known to persist. The remaining highly fragmented landscape which lacks suitable, large, protected sites with connectivity to and between extant breeding sites creates a bottleneck and prevents the existence of a healthy source population. With the continued development pressure and lack of adequate mitigation required by the resource agencies, the BUOW population in this region is tenuous at best and will likely never recover from what was once a robust breeding source population (Kidd et al. 2003, 2007).

   A current review of BUOWs previously reported near the Ontario Airport includes 45 records from 1989-2017. These 45 records are located within seven nearby 7.5min USGS quads (Ontario, Prado, Corona North, Fontana, Cucamonga Peak and Mt. Blady) and Guasti quad where the airport is located (CNDDB 2020). The nearest owl locations reported south of the airport were evicted approximately ten years ago during development of industrial warehouses. Mitigation included the installation of artificial burrows in a barrow pit on the west side of the nearby retired landfill and the owls were evicted from their burrows prior to grading. Owls are no longer known to occupy this site south of the airport. The subject owls on the OIAA property along the east side of Haven Avenue are included in the list of 45 owl records. Several reported owls north of Interstate 10 that

are located west and north of Ontario Mills Mall are some of the only possible extant owls near the airport. All of these owls are surrounded by development and located on small, highly fragmented sites that don't provide long-term conservation value for the owl due to future development and predation pressure to name a few.

Anthropogenic disturbances associated with photographers that are putting up "perching" posts for the burrowing owls to capture a portfolio worthy photograph of the owls has also lead to the owls becoming more acclimated to human presence.

4. The presence of BUOWs at ONT is one wildlife hazard that the OIAA is required to abate under federal regulations (14 Code of Federal Regulations §139.337). These regulations require the OIAA, as part of ONT's certification with FAA, to "alleviate or eliminate wildlife hazards to air carrier operations." The ONT WHMP identifies BUOW as a wildlife hazard to airport operations that must be addressed, along with other hazards, under the WHMP.

   Numerous avian bird strikes have been reported on the Ontario International Airport, including various strikes from BUOW. Installing artificial burrows and/or encouraging owls to inhabit lands on or directly adjacent to the OIAA property violates FAA rules and is not a viable strategy because of the expected increased presence of other larger hazardous birds (e.g. red-tailed hawks, golden eagles, ferruginous hawks, red-shouldered hawks, Cooper's hawks, turkey vultures, and common ravens) who would attempt to predate or scavenge owls, squirrels or rabbits that would likely use the artificial burrows. Hawks and vultures are those struck by aircraft at the highest rates and those known to cause the most damage per strike. These species are often involved in aircraft strikes while they are hover hunting or circling over the approach or departure ends of the airport within the glide slopes. Bird strikes in these situations (landing and take-off) are the most dangerous and can lead to catastrophic events that can kill hundreds of passengers and crew on jetliners.

   Evicting the owls along Haven Avenue outside the airfield could result in owls moving to areas within the airfield, making a more hazardous situation. Owls are often found seeking refuge very close to taxiways and runways under lights, signs and other man-made structures that support refuge and areas for squirrels to create burrows. Many burrowing owls that are struck at airports are those crossing runways as aircraft are departing and arriving. This will generally not lead to a catastrophic accident however even small birds like burrowing owls are capable of causing tens of thousands of dollars in damage to aircraft per event.

   Further, relocating or encouraging owls to reside on a commercial airfield would violate FAA rules, will result in APHIS having to remove the owls in the future, and creates potential liability for the resource agencies or biologists promoting the in-situ conservation of owls at or near an airport.

   In summary, the act of attempting to conduct any form of "mitigation" including in situ or eviction on or directly adjacent to the airfield is not supported by the FAA, APHIS, or past direction from CDFW Headquarters. The best approach for owl mitigation at and adjacent to OIAA property should involve active relocation. This will better ensure for safe flight operations and compliance with FAA regulations while also attempting to provide the owls with a greater chance of survival

and future breeding attempts.

5. As noted above, the project site is almost completely surrounded by existing development. Translocating the owls to an area already under conservation that is surrounded by conserved land will provide greater biodiversity to the regional population of burrowing owls. The small, fragmented project site does not support as high of a level of biodiversity as the translocation site would.

6. The email correspondence provided in the comment states, "Based on our study, we found higher settlement for owls translocated more than 17.5km (~11 miles). Translocation distance was a secondary driver of settlement, with the presence of cues (i.e., conspecifics or playback/artificial whitewash) being the primary driver."

   The comment states that owls should be relocated a **minimum** of 10.5 miles away, while the correspondence email says that burrowing owls had a higher settlement when they were translocated more than 11 miles. The statement in the comment letter is contradictory to what was provided by the San Diego Zoo, that states that burrowing owls that were translocated a distance greater than 17.5km were more likely to settle.

February 21, 2023 ***Sent via email***

Rudy Zeledon
Planning Director, City of Ontario
303 East B Street
Ontario, CA 91764

Subject: Response to Comments Received from the Pamona Valley Audubon Society on proposed project "The Hub" at Ontario International Airport dated February 3, 2023

Dear Rudy:

Mead & Hunt, Inc. (Mead & Hunt) offers the following responses to comments received from the Pamona Valley Audubon Society (Audubon) on February 3, 2023, in association with "The Hub," a proposed logistics/warehousing project at the Ontario International Airport (ONT). In the Audubon's letter of February 2, 2023, Audubon alleges that the decision made by the Planning Commission to approve the proposed project "was not supported by the record because of the many misstatements of fact made by the applicant's consultants which were then repeated by some of the Commissioners." Three of Audubon's comments identifying alleged "misstatements of fact" are addressed below and discussed within the context of applicable FAA regulations and guidance pertaining to aviation and wildlife hazard management.

ALLEGED MISSTATEMENT NO. 1

> The owls are a risk to aviation. From FAA birdstrike data, Burrowing Owls are not a danger to avian [sic] from bird strikes. There is no evidence in that data record from 2008 to 2021 of a Burrowing Owl causing damage to an aircraft at Ontario Airport. https://wildlife.faa.gov/search

Response No. 1

The FAA database contains records of more than 400 strikes with burrowing owls, and some have resulted in damage. Burrowing owls present a direct hazard as they can strike aircraft, and they present an indirect hazard because they can attract other species that are known to pose hazards, such as larger raptors.

National Wildlife Strike Database

The Federal Aviation Administration (FAA) publishes regulation and guidance pertaining to the presence of wildlife hazard management at commercial service airports and general aviation airports, and it maintains a database of known wildlife strike records from 1990 to the present. Burrowing owls have been associated with documented wildlife strikes at U.S. airports since 1992. A review of the FAA National Wildlife Strike Database (NWSD) conducted on February 19, 2023, identified a total of 410 documented strikes associated with the burrowing owl, 17 of which occurred at ONT.[1]

[1] Federal Aviation Administration. 2023. National Wildlife Strike Database. Available at: https://wildlife.faa.gov/search

The NWSD includes records of damaging strikes with burrowing owls: Four strikes resulted in minor or uncertain damage to the following commercial-service aircraft: Boeing 727-200, Boeing 737-700, Boeing 737-800, and McDonnell Douglas MD 83. A 2015 strike with a commercially operated Flexjet Cessna LC-41 resulted in substantial aircraft damage. Strikes with burrowing owls have occurred recently, as 26 of the documented strikes recorded at airports nationwide occurred during 2022. Evidence of burrowing owl strikes indicate that owl mortality occurs in every instance.

Academic Research on Hazards Posed by Burrowing Owls

Raptors, including burrowing owls, have been the subject of research associated with known wildlife strikes. A 2018 article published in the Journal of Raptor Research entitled "Assessing Owl Collisions with U.S. Civil and U.S. Air Force Aircraft" considered the FAA NWSD and the U.S. Air Force's Birdstrike Database, which together characterized 2,531 owl strikes involving at least 20 species.[2] A total of 192 strikes were associated with burrowing owls (7.8 percent). Among the conclusions drawn in the report:

- Owl strikes typically occurred within the airfield environment itself.
- Eighty-six percent of the strikes associated with owls occurred when the aircraft was at or below 30 meters above ground level (AGL).
- Owl strikes with US civil and USAF aircraft are a common event during flight operations within the USA and throughout the world.

ALLEGED MISSTATEMENT NO. 2

> Burrowing Owls will not be an attractor for large raptors if an airport has a good large raptor control program. Large raptors exist near all airports globally and every airport should have a good raptor control strategy. Evidently the Ontario International Airport does not have adequate raptor control because they allow tall poles which are an attractant to hawks throughout the proposed project land.

Response No. 2

The Airport prepared and maintains an FAA-approved Wildlife Hazard Management Plan (WHMP) to address raptors and other species identified as posing a hazard to aircraft.

The Ontario International Airport Authority (OIAA), in cooperation with the United States Department of Agriculture, Wildlife Services (USDA-WS), prepared a Wildlife Hazard Management Plan (WHMP) in 2015 in accordance with FAA regulations set forth in Title 14 of the Code of Federal Regulations (CFR) Part 139.337, "Wildlife Hazard Management." The WHMP addresses the responsibilities, policies, and procedures necessary to reduce wildlife hazards at ONT and places emphasis on identification and abatement of wildlife hazards within the airfield. Wildlife attractants (e.g., lakes, ponds, landfills, etc.) within 5 miles of the airfield are also addressed as they could potentially attract wildlife in a manner that could jeopardize the safety of air traffic operating into and out of ONT.

[2] Journal of Raptor Research. 2018. Assessing Owl Collisions with U.S. Civil and U.S. Air Force Aircraft. Vol. 52 (3): 2820290. Available at: https://bioone.org/journals/journal-of-raptor-research/volume-52/issue-3/JRR-17-64.1/Assessing-Owl-Collisions-with-US-Civil-and-US-Air-Force/10.3356/JRR-17-64.1.full

The proposed actions outlined in the WHMP would involve application of the most appropriate, effective, and biologically sound wildlife control methods available. This approach, known as Integrated Wildlife Damage Management, includes both habitat management and direct control of the species generally considered the most hazardous. The WHMP examines resolutions to detect and alleviate wildlife hazards that threaten human health and safety or aircraft operations operating out of ONT, including raptors. The WHMP was reviewed and approved by the FAA, and it is incorporated in the airport's Airport Certification Manual and subject to annual FAA inspection.

ALLEGED MISSTATEMENT NO. 3

> The FAA disallows conservation of burrowing owls. Airports across the country offer some of the best burrowing owl habitat, with successful conservation programs. The idea that the FAA does not allow this kind of conservation is patently false. Burrowing owls are able to thrive in airport and airport adjacent areas, making this habitat suitable for burrowing owls,

Response No. 3

The conservation of burrowing owls on airport property directly conflicts with Federal Aviation regulations and guidance associated with the safety of aircraft operations and the use airport property. Such regulation and guidance includes:

- Title 14 of the Code of Federal Regulations, Part 139.339, "Wildlife Hazard Management."
- FAA Advisory Circular 150/5200-33, "Wildlife Hazard Attractants on and Near Airports."
- FAA Grant Assurances, specifically assurance nos. 19, 20, and 21.
- Certalert 06-07, Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports.

Each item and its applicability to the proposed preserve is discussed in the following paragraphs.

Title 14 of the Code of Federal Regulations Part 139.337, "Wildlife Hazard Management"[3]

ONT holds an operating certificate from the FAA in accordance with Title 14 Part 193, "Airport Certification." As a certificated airport, the City, as the Airport Operator, must meet the requirements of Title 14 of the Code of Federal Regulations Part 139.337, "Wildlife Hazard Management" (14 CFR Part 139.337). As stated in the regulation, "The operator of certificated airport must take immediate action to alleviate wildlife hazards whenever they are detected" (14 CFR 139.337, (a)). In this context, a wildlife hazard refers to the potential to cause a damaging aircraft collision with wildlife on or near the airport. Wildlife poses a direct threat when it has the potential to be involved in a collision or "strike" with aircraft. Wildlife poses an indirect threat when it causes damage to aircraft and/or aviation facilities, such as nesting in aircraft or navigational equipment, chewing through wires, or by attracting other wildlife that could pose a direct hazard (e.g., wildlife that may attract predators such as raptors, coyote, etc.).

[3] Available at: https://www.ecfr.gov/current/title-14/chapter-I/subchapter-G/part-139/subpart-D/section-139.337

A certificate holder must formulate and implement a WHMP when the FAA Administrator determines that one is needed based on the results of a Wildlife Hazard Assessment (14 CFR 139.337 (e)). The City of Ontario has developed an FAA-approved WHMP as requested by the FAA Administrator.

FAA regulations at 14 CFR Part 139.337 also refers to other FAA resources that are acceptable for managing wildlife at airports. Paragraph (g) states that "FAA Advisory Circulars contain methods and procedures for wildlife hazard management at airports that are acceptable to the Administrator."

FAA AC 150/5200-33C, Wildlife Hazard Attractants On and Near Airports[4]

The FAA issues several Advisory Circulars (ACs) and Certalerts to help airport operators address specific issues associated with airport operations and management. AC 150/5200-33C provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports, and the FAA recommends that the guidance be implemented at airports that receive funding under federal grant assistance programs, including the Airport Improvement Program. The FAA also recommends the AC for land-use planners and developers of projects, facilities, and activities on or near airports.

The proposed conservation of burrowing owls on airport-owned property would conflict with key recommendations identified in the AC below.

Maintaining an appropriate environment for safe and efficient aircraft operations.

As identified in AC, "Airport operators should maintain an appropriate environment for the safe and efficient operation of aircraft, which entails mitigating wildlife strike hazards by fencing, modifying the landscape in order to deter wildlife, or by hazing or removing wildlife hazards to aircraft from congregating at airports" (paragraph 1.1.1).

Burrowing owls are known to pose direct and indirect strike hazards to aircraft operations – burrowing owls have been struck at ONT and other airports and they can pose indirect hazards because they can attract other hazardous wildlife, including predators such as coyotes and raptors. Providing burrowing owl conservation on airport property is contrary to the AC, as it would continue to attract potentially hazardous wildlife rather than deter wildlife from the airport.

Minimum separation criteria for land use practices that attract hazardous wildlife to the airport vicinity.

Chapter 1 of the AC identifies minimum separation distances between aircraft movement areas and land use practices that attract hazardous wildlife. As stated in paragraph 1.1.3, "FAA criteria include land uses that cause movement of hazardous wildlife onto, into, or across an airport's approach or departure airspace or aircraft movement areas."

For airports that support turbine-powered aircraft (i.e., jets), the FAA recommends maintaining a separation of 10,000 feet "between the closest point of the airport's aircraft operation area and the hazardous wildlife attractant" (paragraph 1.3). To protect approach, departure, and circling airspace, "the FAA recommends a distance of 5 miles between closest point of the airport's aircraft operations area and the hazardous wildlife attractant" (paragraph 1.4).

[4] Available at: https://www.faa.gov/documentLibrary/media/Advisory_Circular/150-5200-33C.pdf

As measured using aerial photography, the east side of Haven Avenue is less than 2,100 feet from aircraft pavements associated with Runways 26L and 26R, and it is directly beneath the approach/departure airspace. The creation of a wildlife preserve at this location would conflict with FAA guidance set forth in the AC.

Land Uses that attract hazardous wildlife.

Chapter 2 of the AC discusses land use practices that have the potential to attract hazardous wildlife and threaten aviation safety (paragraph 2.1.2). Among the land uses identified are mitigation banks and other land uses that include conservation easements, parks, wildlife management areas, and other activities that may have the potential to attract hazardous wildlife. The AC states, "Regardless of the source of the attraction, when hazardous wildlife is noted on a public use airport, each certificate holder must take prompt remedial action(s) to protect aviation safety" (paragraph 2.8.4). Section 2.9 specifically refers to habitat for state and federally listed species on airports. The AC notes that airports provide an artificial environment that may vary from surrounding native landscapes, and some wildlife species may be attracted to the airport in higher numbers because the airport may offer features the species prefer, including state and federally listed species and species of concern. The guidance clearly states, "Airport operators should exercise caution in adopting new management techniques because they may increase wildlife hazards and be inconsistent with safe airport operations. Managing the on-airport environment to facilitate or encourage the presence of hazardous wildlife species can create conditions that are incompatible with, or pose a threat to, aviation safety" (paragraph 2.9.1.1).

In referring to state-listed species and species of concern, the FAA acknowledges that not all species of concern pose a direct threat to aviation safety, but "may pose and indirect threat and be hazardous because they attract other species or support prey species attractive to other species that are directly hazardous" (paragraph 2.9.1.2).

FAA Grant Assurances (Obligations)

When airport owners or sponsors, such as the City, accept funds from FAA-administered airport financial assistance programs, they must agree to certain obligations or assurances that require the recipients to maintain and operate their facilities safely and efficiently and in accordance with specified conditions.

Table 1 identifies specific Airport Improvement Program (AIP) grant assurances that are applicable to wildlife hazard management and the creation of a burrowing owl preserve on airport property.

Table 1. Grant Assurances Applicable to Wildlife Hazard Management

Grant Assurance No./Title	Description and Applicability
19. Operation and Maintenance	**Description** The airport and all facilities which are necessary to serve the aeronautical users of the airport, other than facilities owned or controlled by the United States, shall be operated at all times in a safe and serviceable condition and in accordance with the minimum standards as may be required or prescribed by applicable Federal, state, and local agencies for maintenance and operation. It will not cause or permit any activity or action thereon which would interfere with its use for airport purposes" (paragraph a). **Applicability** The creation of a burrowing owl preserve would create a hazardous wildlife attractant on airport property, which conflicts with the requirement to operate the airport at all times in a safe and serviceable condition.
20. Hazard Removal and Mitigation	**Description** The airport will take appropriate action to assure that such terminal airspace as is required to protect instrument and visual operations to the airport (including established minimum flight altitudes) will be adequately cleared and protected by removing, lowering, relocating, marking, or lighting or otherwise mitigating existing airport hazards and by preventing the establishment or creation of future airport hazards. **Applicability** The creation of a wildlife preserve for the burrowing owl would create a hazardous wildlife attractant beneath terminal airspace. Such action would conflict with the terms of the grant assurance, which require the airport operator to adequately clear and protect the terminal airspace.
21. Compatible Land Use	**Description** The airport will take appropriate action, to the extent reasonable, including the adoption of zoning laws, to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations, including landing and takeoff of aircraft. **Applicability** The proposed burrowing owl preserve would be located on airport property and within the Airport Influence Area for ONT as designated by the adopted Airport Land Use Compatibility Plan (ALUCP). The development of a wildlife preserve is considered an incompatible use within the context of ALUCP policies, the purpose of which is to restrict the use of land in the airport vicinity to activities and purposes that are compatible with normal operations, The proposed preserve would conflict with the ALUCP and the grant assurance.
Source: AIP Grant Assurances for Airport Sponsors. 2022. Accessed January 19, 2023. Available at: https://www.faa.gov/sites/faa.gov/files/airports/new_england/airport_compliance/assurances-airport-sponsors-2022-05.pdf	

Certalert 06-07, Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports

Certalerts provide the FAA Airports Safety and Operations Division with additional guidance about Part 139 Airport Certification and related issues. Cert Alert 06-07 describes procedures for responding to requests by state wildlife agencies to facilitate and encourage habitat for state-listed species or species of special concern that occur on airports and may pose a threat to aviation safety. Some of the guidance set forth in this Certalert is reiterated in AC 150/5200-33C. The Certalert states:

> Airport operators must decline to adopt habitat management techniques that jeopardize aviation safety. Adopting such techniques could place them in violation of their obligations and subject to an FAA enforcement action and possible civil penalties under 49 U.S.C. §44706, as implemented by 14 CFR § 139.337. In particular, an airport operator that has received federal grant-in-aid assistance is obligated through its grant assurances to maintain compatible land uses. Failure to do so may lead to noncompliance with its grant obligations. Further, airports that serve commercial air carriers are required to be certificated under 49 U.S.C. §44706, as implemented by 14 CFR Part 139. Title 14 CFR § 139.337(a) requires airport operators holding a Part 139 certificate to "take immediate action to alleviate wildlife hazards whenever they are detected."

Although the proposal to create a burrowing owl preserve was not issued by a state agency, the burrowing owl is a state species of concern. The Certalert is clear in that airport operators should not manage airport property for the preservation of state list species/species of concern based on their potential to attract potentially hazardous wildlife and pose conflicts with FAA regulations, grant assurances, and guidance.

CONCLUSIONS

The conservation of burrowing owls, which have been involved in more than 400 wildlife strikes at airports nationwide, including 17 strikes at ONT, is an incompatible land use that conflicts with Chapter 2 of FAA AC 150/5200-33C. Burrowing owl conservation on airport property would create habitat for a species that has caused both direct and indirect threats to aircraft operations.

Although the FAA supports efforts to protect threatened and endangered species and must review proposed projects for the consistency with the Endangered Species Act, the FAA cannot do so to the detriment of safe aircraft operations. As stated in the AC, "Requests to enhance or create habitat for threatened and endangered species often conflict with the safety of the traveling public and may place the protected species at risk of mortality by aircraft collisions. The FAA does not support the creation, conservation or enhancement of habitat or refuges to attract endangered species on airports" (paragraph 2.9.2.1).

The FAA's continuing mission is to provide the safest, most efficient aerospace system in the world. As such, the safety of aviators and the traveling public must remain paramount. FAA regulations pertaining to hazardous wildlife seek to prevent the development of new wildlife hazard attractants within specified separation distances to protect the traveling public; however, the FAA supports conservation and seeks to avoid and minimize effects to protected species. The FAA requires compliance with the National Environmental Policy Act for proposed airport projects, and it does not oppose the creation mitigation or conservation areas that are constructed outside of the separation distances identified in AC 150/5200-33.

Mead & Hunt appreciates this opportunity to review the comments received on The Hub, a proposed logistics project on Ontario International Airport. Please do not hesitate to contact Lisa Harmon by email (lisa.harmon@meadhunt.com) should you have comments on the material discussed in this letter.

Sincerely

Lisa Harmon
Aviation/Environmental Planner

Rick Jones
FAA Qualified Airport Wildlife Biologist.

U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: Hazardous Wildlife Attractants on or near Airports

Date: 02/21/2020
Initiated By: AAS-300

AC No: 150/5200-33C
Change:

1 **Purpose.**

This Advisory Circular (AC) provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports. It also discusses airport development projects (including airport construction, expansion, and renovation) affecting aircraft movement near hazardous wildlife attractants. Appendix 1 provides definitions of terms used in this AC.

2 **Cancellation.**

This AC cancels AC 150/5200-33B, *Hazardous Wildlife Attractants on or near Airports*, dated August 28, 2007.

3 **Application.**

The Federal Aviation Administration recommends the guidance in this AC for land uses that have the potential to attract hazardous wildlife on or near public-use airports. This AC does not constitute a regulation, is not mandatory, and is not legally binding in its own right. It will not be relied upon as a separate basis by the FAA for affirmative enforcement action or other administrative penalty. Conformity with this AC is voluntary, and nonconformity will not affect rights and obligations under existing statutes and regulations, except as follows:

1. Airports that hold Airport Operating Certificates issued under Title 14, Code of Federal Regulations (CFR), Part 139, Certification of Airports, Subpart D, may use the standards, practices and recommendations contained in this AC as one, but not the only, acceptable means of compliance with the wildlife hazard management requirements of Part 139.
2. The FAA recommends the guidance in this AC for airports that receive funding under Federal grant assistance programs, including the Airport Improvement Program. See Grant Assurance #34.

3. The FAA recommends the guidance in this AC for projects funded by the Passenger Facility Charge program. See PFC Assurance #9.
4. The FAA recommends the guidance in this AC for land-use planners and developers of projects, facilities, and activities on or near airports.

4 Principal Changes.

Changes are marked with vertical bars in the margin. Change in this AC include:

1. Clarification by the FAA that non-certificated airports are recommended to conduct a Wildlife Hazard Assessment (Assessment) or a Wildlife Hazard Site Visit (Site Visit);
2. Table 1, Ranking of Hazardous Species, has been moved to Advisory Circular 150/5200-32, *Reporting Wildlife Aircraft Strikes* (5/31/2013);
3. Consolidation and reorganization of discussion on land uses of concern; and updated procedures for evaluation and mitigation. Discussion addresses off-airport hazardous wildlife attractants, followed by discussion of on-airport attractants. It also clarifies language regarding the applicability of the AC.

5 Background.

1. Information about the risks posed to aircraft by certain wildlife species has increased a great deal in recent years. Improved reporting, studies, documentation, and statistics clearly show that aircraft collisions with birds and other wildlife are a serious economic and public safety problem. While many species of wildlife can pose a risk[1] to aircraft safety, they are not equally hazardous[2]. These hazard rankings can help focus hazardous wildlife management efforts on those species or groups that represent the greatest risk to safe air and ground operations in the airport environment. Used in conjunction with a site-specific Assessment that will determine the relative abundance and use patterns of wildlife species, these rankings combined with a systematic risk analysis can help airport operators better understand the general threat level (and consequences) of certain wildlife species. Also, the rankings can assist with the creation of a "high risk" list of hazardous species that warrant immediate attention.
2. Most public-use airports have large tracts of open, undeveloped land that provide added margins of safety and noise mitigation. These areas can also present potential hazards to aviation if they encourage wildlife to enter an airport's approach or departure airspace or aircraft operations area. Constructed or natural areas— such as

[1] Risk is the relationship between the severity and probability of a threat. It is the product of hazard level and abundance in the critical airspace, and is thus defined as the probability of a damaging strike with a given species.
[2] Hazardous wildlife are species of wildlife (birds, mammals, reptiles), including feral and domesticated animals, not under control that may pose a direct hazard to aviation (i.e., strike risk to aircraft) or an indirect hazard such as an attractant to other wildlife that pose a strike hazard or are causing structural damage to airport facilities (e.g., burrowing, nesting, perching).

poorly drained locations, detention/retention ponds, roosting habitats on buildings, landscaping, odor-causing rotting organic matter (putrescible waste) disposal operations, wastewater treatment plants, agricultural or aquaculture activities, surface mining, wetlands, or some conservation-based land uses — can provide wildlife with ideal locations for feeding, loafing, reproduction, and escape. Even small facilities, such as fast food restaurants, taxicab staging areas, rental car facilities, aircraft viewing areas, and public parks, can produce substantial attractions for hazardous wildlife.

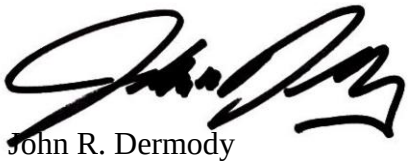
3. During the past century, wildlife-aircraft strikes have resulted in the loss of hundreds of lives worldwide, as well as billions of dollars in aircraft damage. Hazardous wildlife attractants on and near airports can jeopardize future airport expansion, making proper community land-use planning essential. This AC provides airport operators and those parties with whom they cooperate with the guidance they need to assess and address potentially hazardous wildlife attractants when locating new facilities and implementing certain land-use practices on or near public-use airports.

6 Memorandum of Agreement Between Federal Resource Agencies.

The FAA, the U.S. Air Force, the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the U.S. Department of Agriculture - Wildlife Services signed a Memorandum of Agreement (MOA) to acknowledge their respective missions in protecting aviation from wildlife hazards. Through the MOA, the agencies established procedures necessary to coordinate their missions to address more effectively existing and future environmental conditions contributing to collisions between wildlife and aircraft (wildlife strikes) throughout the United States. These efforts are intended to minimize wildlife risks to aviation and human safety while protecting the Nation’s valuable environmental resources.

7 Feedback on this AC.

If you have suggestions for improving this AC, you may use the Advisory Circular Feedback form at the end of this AC.



John R. Dermody
Director of Airport Safety and Standards

CONTENTS

Paragraph **Page**

Chapter 1. General Separation Criteria for Hazardous Wildlife Attractants on or Near Airports 1-1

1.1 Introduction. 1-1

1.2 Airports Serving Piston-Powered Aircraft. 1-1

1.3 Airports Serving Turbine-Powered Aircraft. 1-2

1.4 Protection of Approach, Departure, and Circling Airspace. 1-2

Chapter 2. Land-Use Practices on or Near Airports that Potentially Attract Hazardous Wildlife 2-1

2.1 General. 2-1

2.2 Waste Disposal Operations. 2-2

2.3 Water Management Facilities. 2-4

2.4 Wetlands. 2-8

2.5 Dredge Spoil Containment Areas. 2-10

2.6 Agricultural Activities. 2-10

2.7 Aquaculture. 2-12

2.8 Golf Courses, Landscaping, Structures and Other Land-Use Considerations. 2-14

2.9 Habitat for State and Federally-Listed Species on Airports. 2-16

2.10 Synergistic Effects of Surrounding Land Uses. 2-17

Chapter 3. Procedures for Wildlife Hazard Management by Operators of Public-Use Airports and Conditions for Non-Certificated Airports to Conduct Wildlife Hazard Assessments and Wildlife Hazard Site Visits 3-1

3.1 Introduction. 3-1

3.2 Coordination with Qualified Airport Wildlife Biologists. 3-1

3.3 Wildlife Hazard Management at Airports: A Manual For Airport Personnel. 3-1

3.4 Wildlife Hazard Site Visits and Wildlife Hazard Assessments. 3-2

3.5 Wildlife Hazard Management Plan. 3-2

3.6 Local Coordination. 3-3

3.7 Operational Notifications of Wildlife Hazards. 3-3

3.8 Federal and State Depredation Permits. 3-4

Chapter 4. Recommended Procedures for the FAA, Airport Operators and Other Government Entities Regarding Off-Airport Attractants 4-1

4.1 FAA Notification and Review of Proposed Land-Use Practice Changes in the Vicinity of Public-Use Airports. 4-1

4.2 Waste Management Facilities. 4-2

4.3 Other Land-Use Practice Changes. 4-3

4.4 Coordination to Prevent Creation of New Off-Airport Hazardous Wildlife Attractants. 4-4

4.5 Coordination on Existing Off-Airport Hazardous Wildlife Attractants. 4-5

4.6 Prompt Remedial Action. 4-5

4.7 FAA Assistance. 4-5

Appendix A. Definitions of Terms Used in this Advisory Circular A-1

Appendix B. Additional Resources B-1

Page Intentionally Blank

CHAPTER 1. GENERAL SEPARATION CRITERIA FOR HAZARDOUS WILDLIFE ATTRACTANTS ON OR NEAR AIRPORTS

1.1 Introduction.

1.1.1 Airport operators should maintain an appropriate environment for the safe and efficient operation of aircraft, which entails mitigating wildlife strike hazards by fencing, modifying the landscape in order to deter wildlife or by hazing or removing wildlife hazardous to aircraft from congregating on airports. When considering proposed land uses, operators and sponsors of airports certificated under Part 139, local planners, and developers must take into account whether the proposed land uses, including new development projects, will increase wildlife hazards. Land-use practices that attract or sustain hazardous wildlife populations on or near airports, specifically those listed in Chapter 2, can significantly increase the potential for wildlife strikes.

1.1.2 The FAA urges regulatory agencies and planning and zoning agencies to evaluate proposed new land uses within the separation criteria and prevent the creation of land uses that attract or sustain hazardous wildlife within the separation distances.

1.1.3 The FAA recommends the use of minimum separation criteria outlined below for land-use practices that attract hazardous wildlife to the vicinity of airports. Please note that FAA criteria include land uses that cause movement of hazardous wildlife onto, into, or across the airport's approach or departure airspace or aircraft operations area. (See the discussion of the synergistic effects of surrounding land uses in Paragraph 2.8 of this AC.). For the purpose of evaluating distance criteria, the delineation of the aircraft operations area may also consider future airport development plans depicted on the Airport Layout Plan (e.g., planned runway extension).

1.1.4 The separation distances are based on (1) flight patterns and performance criteria of piston-powered aircraft and turbine-powered aircraft, (2) the altitude at which most strikes happen (78 percent occur under 1,000 feet and 90 percent occur under 3,000 feet above ground level), and (3) National Transportation Safety Board recommendations.

1.2 Airports Serving Piston-Powered Aircraft.

Airports that do not sell Jet-A fuel normally serve piston-powered aircraft. Notwithstanding more stringent requirements for specific land uses, the FAA recommends a separation distance of 5,000 feet from these airports for any of the hazardous wildlife attractants discussed in Chapter 2 or for new airport development projects meant to accommodate aircraft movement. This distance is to be maintained between the closest point of the airport's aircraft operations area and the hazardous wildlife attractant. Figure 1 depicts an example of the 5,000-foot separation distance measured from the nearest aircraft operations area.

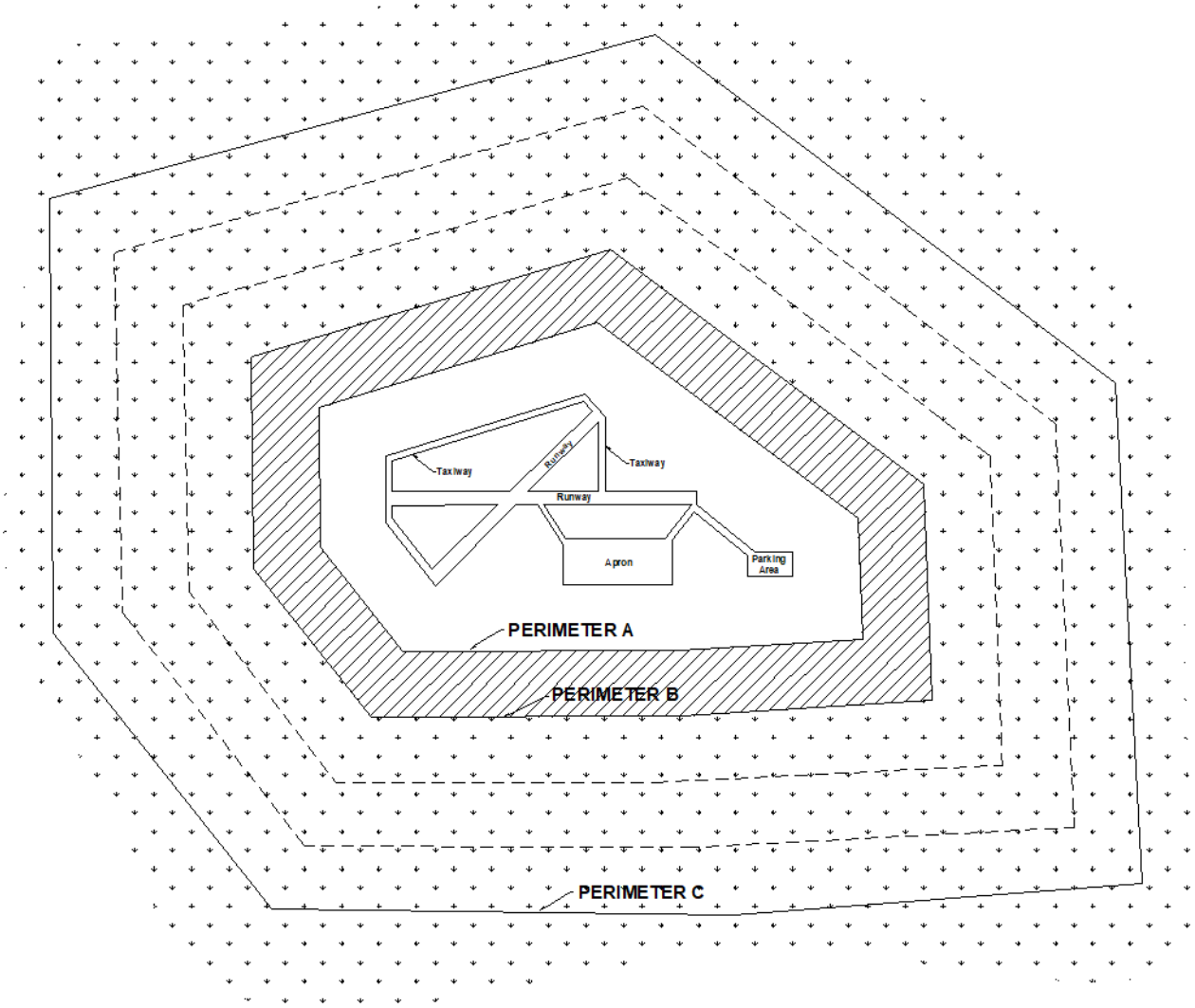
1.3 Airports Serving Turbine-Powered Aircraft.

For airports serving turbine-powered aircraft, the FAA recommends a separation distance of 10,000 feet from these airports for any of the hazardous wildlife attractants discussed in Chapter 2 or for new airport development projects meant to accommodate aircraft movement. This distance is to be maintained between the closest point of the airport's aircraft operations area and the hazardous wildlife attractant. Figure 1 depicts an example of the 10,000-foot separation distance from the nearest aircraft movement areas.

1.4 Protection of Approach, Departure, and Circling Airspace.

For all airports, the FAA recommends a distance of 5 miles between the closest point of the airport's aircraft operations area and the hazardous wildlife attractant. Special attention should be given to hazardous wildlife attractants that could cause hazardous wildlife movement into or across the approach or departure airspace. Figure 1 depicts an example of the 5-mile separation distance measured from the nearest aircraft operations area.

Figure 1. Example of recommended separation distances described in Chapter 1 within which hazardous wildlife attractants should be avoided, eliminated, or mitigated.



PERIMETER A: For airports serving piston-powered aircraft, it is recommended hazardous wildlife attractants be 5,000 feet from the nearest aircraft operations area.

PERIMETER B: For airports serving turbine-powered aircraft, it is recommended hazardous wildlife attractants be 10,000 feet from the nearest aircraft operations area.

PERIMETER C: Recommended for all airports, 5-mile range to protect approach, departure and circling airspace.

Page Intentionally Blank

CHAPTER 2. LAND-USE PRACTICES ON OR NEAR AIRPORTS THAT POTENTIALLY ATTRACT HAZARDOUS WILDLIFE

2.1 General.

2.1.1 Many types of vegetation, habitats and land use practices can provide an attractant to animals that pose a risk to aviation safety. Hazardous wildlife use the natural or artificial habitats on or near an airport for food, water or cover. The wildlife species and the size of the populations attracted to the airport environment vary considerably, depending on several factors, including land-use practices on or near the airport. In addition to the specific considerations outlined below, airport operators should refer to *Wildlife Hazard Management at Airports* manual, prepared by FAA and U.S. Department of Agriculture (USDA) staff. (This manual is available in English, Spanish, and French). This manual, as well as other helpful resources can be viewed and downloaded free of charge from the Wildlife Strike Resources section of the FAA's wildlife hazard mitigation web site: http://www.FAA.gov/airports/airport_safety/wildlife).

2.1.1.1 The USDA / Animal and Plant Health Inspection Service (APHIS) / Wildlife Services developed a new publication series on wildlife damage management and is available online. The Wildlife Damage Management Technical Series highlights wildlife species or groups of wildlife species that cause damage to agriculture, property and natural resources, and/or impact aviation and human health and safety. The publications can be found at: https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/sa_reports/ct_wildlife+damage+management+technical+series.

2.1.1.2 Additional resources have been provided by the USDA / APHIS / Wildlife Services National Wildlife Research Center (NWRC) at: https://www.aphis.usda.gov/aphis/ourfocus/wildlifedamage/programs/nwrc/sa_publications/ct_research_gateway. The NWRC Research Gateway contains research articles, reports, factsheets, technical notes, data and other materials on wildlife hazard mitigation, risk reduction, animal ecology, habitats, and advanced technologies and methodologies.

2.1.2 This section discusses land-use practices having the potential to attract hazardous wildlife and threaten aviation safety. The FAA has determined that the land uses listed below are generally not compatible with safe airport operations when they are located within the separation distances provided in Paragraphs 1.2 through 1.4.

2.1.3 As a reminder, these types of land uses or facilities often require permits from the appropriate permitting agency. The FAA may work with the permitting agency to include conditions for monitoring and mitigation measures, if necessary. Ultimately, the permittee is responsible for compliance to these conditions and the permitting agency is responsible for tracking compliance.

2.2 Waste Disposal Operations.

Municipal solid waste landfills (municipal landfills) are known to attract large numbers of hazardous wildlife, particularly birds. Because of this, these operations, when located within the separations identified in the siting criteria in Paragraphs 1.2 through 1.4, are considered incompatible with safe airport operations.

2.2.1 Siting for New Municipal Solid Waste Landfills Subject to AIR 21.

2.2.1.1 Section 503 of the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (P. L. 106-181) (AIR 21), 49 U.S.C. § 44718(d), prohibits the construction or establishment of a new municipal landfill within 6 miles of certain public-use airports. Before these prohibitions apply, both the airport and the landfill must meet the very specific conditions described below. These restrictions do not apply to airports or landfills located within the state of Alaska.

2.2.1.2 The airport must (1) have received a Federal grant(s) under 49 U.S.C. § 47101, et. seq.; (2) be under control of a public agency; (3) serve some scheduled air carrier operations conducted in aircraft with less than 60 seats; and (4) have total annual enplanements consisting of at least 51 percent of scheduled air carrier enplanements conducted in aircraft with less than 60 passenger seats.

2.2.1.3 The proposed municipal landfill must (1) be within 6 miles of the airport, as measured from airport property line to the landfill property line, and (2) have started construction or establishment on or after April 5, 2001. Section 44718(d) only limits the construction or establishment of some new landfills. It does not limit the expansion, either vertical or horizontal, of existing landfills.

2.2.1.4 Regarding existing municipal landfills and lateral expansions of landfills, 40 CFR § 258.10 requires owners or operators of a landfill units located within the separation distances provided in Paragraphs 1.2 through 1.4 to demonstrate that the unit is designed and operated so that it does not pose a bird hazard to aircraft. To accomplish this, follow the instructions provided in Paragraphs 3.2 and 3.3, document the wildlife monitoring and mitigation procedures that are cooperatively developed, and place this documentation in the operating permit of the facility.

2.2.2 Siting for New Municipal Landfills Not Subject to AIR 21.

If an airport and a municipal landfill do not meet the criteria of § 44718(d), then FAA recommends against locating the landfill within the separation distances identified in Paragraphs 1.2 through 1.4. In determining this distance separation, measurements should be made from the closest point of the airport property boundary to the closest point of the landfill property boundary.

2.2.3 Considerations for Existing Waste Disposal Facilities Within the Limits of Separation Criteria.

The FAA recommends against airport development projects that would increase the number of aircraft operations or accommodate larger or faster aircraft near landfill operations located within the separations identified in Paragraphs 1.2 through 1.4. In addition, in accordance with 40 CFR § 258.10, owners or operators of existing landfill units that are located within the separations listed in Paragraphs 1.2 through 1.4 must demonstrate that the unit is designed and operated so it does not pose a bird hazard to aircraft. (See Paragraph 4.3.2 of this AC for a discussion of this demonstration requirement.)

2.2.4 Enclosed Trash Transfer Stations.

Enclosed waste-handling facilities that receive garbage behind closed doors; process it via compaction, incineration, or similar manner; and remove all residue by enclosed vehicles generally are compatible with safe airport operations, provided they are constructed and operated properly and are not located on airport property or within the Runway Protection Zone. These facilities should not handle or store putrescible waste outside or in a partially enclosed structure accessible to hazardous wildlife. Trash transfer facilities that are open on one or more sides; or store uncovered quantities of municipal solid waste outside, even if only for a short time; or use semi-trailers that leak or have trash clinging to the outside; or do not control odors by ventilation and filtration systems (odor masking is not acceptable) do not meet the FAA's definition of fully enclosed trash transfer stations. The FAA considers fully enclosed waste-handling facilities constructed or operated incorrectly incompatible with safe airport operations if they are located closer than the separation distances specified in Paragraphs 1.2 through 1.4.

2.2.5 Composting Operations on or near Airport Property.

Composting operations that accept only yard waste (e.g., leaves, lawn clippings, or branches) generally do not attract hazardous wildlife. Sewage sludge, woodchips, and similar material are not municipal solid wastes and may be used as compost bulking agents. The compost, however, must never include food or other municipal solid waste. Composting operations should not be located on airport property unless effective, risk-reducing mitigations are in place. Off-airport property composting operations should be located no closer than the greater of the following distances: 1,200 feet from any aircraft operations area or the distance called for by airport design requirements (see AC 150/5300-13, *Airport Design*). This spacing should prevent material, personnel, or equipment from penetrating any Object Free Area, Obstacle Free Zone, Threshold Siting Surface, or Clearway. Airport operators should monitor composting operations located in proximity to the airport to ensure that steam or thermal rise does not adversely affect air traffic.

2.2.6 Underwater Waste Discharges.

The FAA recommends against the underwater discharge of any food waste (e.g., fish processing offal) within the separations identified in Paragraphs 1.2 through 1.4 because it could attract scavenging hazardous wildlife.

2.2.7 Recycling Centers.

Recycling centers that accept previously sorted non-food items, such as glass, newspaper, cardboard, aluminum, electronic, and household wastes such as paint, batteries, and oil, are, in most cases, not attractive to hazardous wildlife and are acceptable.

2.2.8 Construction and Demolition Debris Facilities.

2.2.8.1 Construction and demolition landfills generally do not attract hazardous wildlife and are acceptable if maintained in an orderly manner, admit no putrescible waste, and are not co-located with other waste disposal operations. However, construction and demolition landfills have similar visual and operational characteristics to putrescible waste disposal sites. When co-located with putrescible waste disposal operations, construction and demolition landfills are more likely to attract hazardous wildlife because of the similarities between these disposal facilities.

2.2.8.2 Therefore, a construction and demolition landfill co-located with another waste disposal operation should be located outside of the separations identified in Paragraphs 1.2 through 1.4.

2.2.8.3 Airport operators should be aware that on-site storage of construction and maintenance debris, as well as out-of-service aircraft or aircraft components, may provide an attractant for hazardous species (e.g., nesting or perching locations). The FAA recommends these on-site areas be monitored and/or mitigated, if necessary.

2.2.9 Fly Ash Disposal.

2.2.9.1 The incinerated residue from resource recovery power/heat-generating facilities that are fired by municipal solid waste, coal, or wood is generally not a wildlife attractant because it no longer contains putrescible matter. Landfills accepting only fly ash are generally not considered to be wildlife attractants and are acceptable as long as they admit no putrescible waste of any kind, and are not co-located with other disposal operations that attract hazardous wildlife.

2.2.9.2 Since varying degrees of waste consumption are associated with general incineration (not resource recovery power/heat-generating facilities), the FAA considers the ash from general incinerators a regular waste disposal by-product and, therefore, a hazardous wildlife attractant if disposed of within the separation criteria outlined in Paragraphs 1.2 through 1.4.

2.3 Water Management Facilities.

Drinking water intake and treatment facilities, storm water and wastewater treatment facilities, associated retention and settling ponds, ponds built for recreational use, ponds

and fountains for ornamental purposes, and ponds that result from mining activities often attract large numbers of potentially hazardous wildlife. Development of new open water facilities within the separation criteria identified in Paragraphs 1.2 through 1.4 should be avoided to prevent wildlife attractants. If necessary, land-use developers and airport operators may need to develop management plans, in compliance with local and state regulations, to support the operation of storm water management facilities on or near all public-use airports to ensure a safe airport environment. The FAA recommends these plans be developed in consultation with a Qualified Airport Wildlife Biologist[3], to minimize hazardous wildlife attractants.

2.3.1 Existing Stormwater Management Facilities.

2.3.1.1 On-airport stormwater management facilities allow the quick removal of surface water, including discharges related to aircraft deicing, from impervious surfaces, such as pavement and terminal/hangar building roofs. Existing on-airport detention ponds collect stormwater, protect water quality, and control runoff. Because they slowly release water after storms, they may create standing bodies of water that can attract hazardous wildlife. Where the airport has developed a Wildlife Hazard Management Plan, Part 139 regulations require the immediate correction of any wildlife hazards arising from existing stormwater facilities located on or near airports using appropriate wildlife hazard mitigation techniques. Airport operators should develop measures to minimize hazardous wildlife attraction in consultation with a Qualified Airport Wildlife Biologist.

2.3.1.2 Where possible, airport operators should modify stormwater detention ponds to allow a maximum 48-hour detention period for the design storm. The combination of open water and vegetation is particularly attractive to waterfowl and other hazardous wildlife. Water management facilities holding water longer than 48 hours should be maintained in a manner that keeps them free of both emergent and submergent vegetation. The FAA recommends that airport operators avoid or remove retention ponds and detention ponds featuring dead storage to eliminate standing water. Detention basins should remain totally dry between rainfalls. Where constant flow of water is anticipated through the basin, or where any portion of the basin bottom may remain wet, the detention facility should include a concrete or paved pad and/or ditch/swale in the bottom to prevent vegetation that may provide nesting habitat. Drainage basins with a concrete or paved pad should be maintained to prevent or remove any sediment build-up to prevent vegetation growth.

2.3.1.3 When it is not possible to drain a large detention pond completely, airport operators may use physical barriers, such as bird balls, wire grids, pillows,

[3] See Advisory Circular 150/5200-36, *Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports.*

or netting, to deter birds and other hazardous wildlife. When physical barriers are proposed, airport operators must evaluate their use, effectiveness and maintenance requirements. Airport operators must also ensure physical barriers will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, airport operators must get approval from the appropriate FAA Regional Airports Division Office.

2.3.1.4 The FAA recommends that airport operators encourage off-airport stormwater treatment facility operators to incorporate appropriate wildlife hazard mitigation techniques into stormwater treatment facility operating practices when their facility is located within the separation criteria specified in Paragraphs 1.2 through 1.4.

2.3.2 New Stormwater Management Facilities.

The FAA recommends that storm water management systems located within the separations identified in Paragraphs 1.2 through 1.4 be designed and operated so as not to create above-ground standing water. Stormwater detention ponds should be designed, engineered, constructed, and maintained for a maximum 48–hour detention period after the design storm and to remain completely dry between storms. To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap or concrete lined, narrow, linear-shaped water detention basins. When it is not possible to place these ponds away from an airport's aircraft operations area (but still on airport property), airport operators may use physical barriers, such as bird balls, wire grids, floating covers, vegetation barriers (bottom liners), or netting, to prevent access of hazardous wildlife to open water and minimize aircraft-wildlife interactions. Caution is advised when nets or wire grids are used for deterring birds from attractants. Mesh size should be < 5 cm (2") to avoid entangling and killing birds and should not be made of a monofilament material. Grids installed above and across water to deter hazardous birds (e.g., waterfowl, cormorants, etc.) are different than using a small mesh covering but also provides an effective deterrent. Grid material, size, pattern and height above water may differ on a case-by-case basis. When physical barriers are used, airport operators must evaluate their use and ensure they will not adversely affect water rescue. Before installing any physical barriers over detention ponds on Part 139 airports, a review by a Qualified Airport Wildlife Biologist should be conducted, prior to approval from the appropriate FAA Regional Airports Division Office. All vegetation in or around detention basins that provide food or cover for hazardous wildlife should be eliminated. If soil conditions and other requirements allow, the FAA encourages the use of underground storm water infiltration systems because they are less attractive to wildlife.

2.3.3 Existing Wastewater Treatment Facilities.

2.3.3.1 The FAA recommends that airport operators immediately correct any wildlife hazards arising from existing wastewater treatment facilities located on or near the airport.

2.3.3.2 Where required, a wildlife management plan will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should encourage wastewater treatment facility operators to incorporate measures, developed in consultation with a Qualified Airport Wildlife Biologist, to minimize hazardous wildlife attractants. Airport operators should also encourage those wastewater treatment facility operators to incorporate these mitigation techniques into their standard operating practices. In addition, airport operators should consider the existence of wastewater treatment facilities when evaluating proposed sites for new airport development projects and avoid such sites when practicable.

2.3.4 New Wastewater Treatment Facilities.

The FAA recommends against the construction of new wastewater treatment facilities or associated settling ponds within the separations identified in Paragraphs 1.2 through 1.4. Appendix 1 defines wastewater treatment facility as "any devices and/or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes." The definition includes any pretreatment involving the reduction or elimination of pollutants prior to introducing such pollutants into a treatment facility. When a wastewater treatment facility is proposed within the separation criteria, the airport operator, project proponent, and local jurisdiction should discuss the proposed project location with regard to its location near the airport and the separation distances identified in Paragraphs 1.2 through 1.4. If possible, a more suitable location for the proposed facility should be identified. If no other suitable location exists, FAA recommends that the proposed facility plans be reviewed by a Qualified Airport Wildlife Biologist to identify measures to avoid or reduce the facility's potential to attract hazardous wildlife. If appropriate measures cannot be incorporated to reduce potential wildlife hazards, airport operators should document their opposition in a letter to the local jurisdiction.

2.3.5 Artificial Marshes.

In warmer climates, wastewater treatment facilities sometimes employ artificial marshes and use submergent and emergent aquatic vegetation as natural filters. These artificial marshes may be used by some species of flocking birds, such as blackbirds and waterfowl, for breeding or roosting activities. The FAA recommends against establishing artificial marshes within the separations identified in Paragraphs 1.2 through 1.4.

2.3.6 Wastewater Discharge and Sludge Disposal.

The FAA recommends careful consideration regarding the discharge of wastewater or biosolids (i.e., secondarily treated sewage sludge) on airport property. Such discharges might improve soil moisture and quality on unpaved areas and lead to improved turf growth. Depending on the airfield plant communities and habitats present, this can be an attractive food source for many species of animals or, conversely, could result in limited attractiveness to hazardous wildlife. Also, improved turf requires more frequent mowing and could attract geese. Airports should improve their turf with the goal of a monoculture of turf that is least attractive to wildlife. Wastewater or biosolids

applications might assist in achieving this goal. Caution should be exercised when discharges saturate airfield areas adjacent to paved surfaces. The resultant soft, muddy conditions could restrict or prevent emergency vehicles from reaching accident sites in a timely manner.

2.4 Wetlands.

Wetlands provide a variety of functions and can be regulated by local, state, and Federal laws. Wetlands can be attractive to many types of wildlife, including many which rank high on the list of hazardous wildlife species (Table 1 - AC 150/5200-32). Some types of wetlands are not as attractive to wildlife as others and they should be reviewed on a case-by-case basis to determine the likelihood of proposed wetlands increasing the numbers of hazardous wildlife at the airport. Factors such as size, shape, location, canopy cover and vegetative composition among other things should be considered when determining compatibility.

Note: If questions exist as to whether an area qualifies as a wetland, contact the District Office of the U.S. Army Corps of Engineers, the Natural Resources Conservation Service, or a wetland consultant qualified to delineate wetlands.

2.4.1 Existing Wetlands on or near Airport Property.

If wetlands are located on or near airport property, airport operators should be alert to any wildlife use or habitat changes in these areas that could affect safe aircraft operations. At public-use airports, the FAA recommends immediately correcting, in cooperation with local, state, and Federal regulatory agencies, any wildlife hazards arising from existing wetlands located on or near airports within 5 miles of the aircraft operations area. Where required, a wildlife management plan will outline appropriate wildlife hazard mitigation techniques. Accordingly, airport operators should develop measures to minimize hazardous wildlife attraction in consultation with a FAA Qualified Airport Wildlife Biologist.

2.4.2 New Airport Development.

Whenever possible, the FAA recommends locating new airports using the separations from wetlands identified in Paragraphs 1.2 through 1.4. Where alternative sites are not practicable, or when airport operators are expanding an existing airport into or near wetlands, a Qualified Airport Wildlife Biologist, in coordination with the U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the state wildlife management agency should evaluate the wildlife hazards and prepare a wildlife management plan that indicates methods of minimizing the hazards.

2.4.3 Mitigation for Wetland Impacts from Airport Projects.

Wetland mitigation may be necessary when unavoidable wetland disturbances result from new airport development projects or projects required to correct wildlife hazards from wetlands. Wetland mitigation must be designed so it does not create a wildlife hazard. The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Paragraphs 1.2 through 1.4.

2.4.3.1 **Onsite Mitigation of Wetland Functions.**

Wetland mitigation/conservation easements must not inhibit the airport operator's ability to effectively control hazardous wildlife on or near the mitigation site or effectively maintain other aspects of safe airport operations. Enhancing such mitigation areas to attract hazardous wildlife must be avoided. The FAA will review any onsite mitigation proposals to determine compatibility with safe airport operations and grant assurance compliance. Early coordination with the FAA is encouraged for any proposal to use airport land for wetland mitigation. A Qualified Airport Wildlife Biologist should evaluate any wetland mitigation projects that are needed to protect unique wetland functions and that must be located in the separation criteria in Paragraphs 1.2 through 1.4 before the mitigation is implemented. A wildlife management plan should be developed to reduce the wildlife hazards.

2.4.3.2 **Offsite Mitigation of Wetland Functions.**

2.4.3.2.1 The FAA recommends that wetland mitigation projects that may attract hazardous wildlife be sited outside of the separations identified in Paragraphs 1.2 through 1.4 unless they provide unique functions that must remain onsite (see 2.4.3.1). Agencies that regulate impacts to or around wetlands recognize that it may be necessary to split wetland functions in mitigation schemes. Therefore, regulatory agencies may, under certain circumstances, allow portions of mitigation to take place in different locations.

2.4.3.2.2 The FAA encourages landowners or communities supporting the restoration or enhancement of wetlands to do so only after critically analyzing how those activities would affect aviation safety. To do so, landowners or communities should contact the affected airport sponsor, FAA, and/or a Qualified Airport Wildlife Biologist.

2.4.3.2.3 Those parties should work cooperatively to develop restoration or enhancement plans that would not worsen existing wildlife hazards or create such hazards. See Paragraphs 4.1.1 – 4.1.3 for land-use modifications evaluation criteria.

2.4.3.2.4 If parties develop a mutually acceptable restoration or enhancement plan, the landowner or community proposing the restoration or enhancement must monitor the restored or enhanced site. This monitoring must verify that efforts have not worsened or created hazardous wildlife attraction or activity. If such attraction or activity occurs, the landowner or community should work with the airport sponsor, or a Qualified Airport Wildlife Biologist to reduce the hazard to aviation.

2.4.3.3 **Mitigation Banking.**

Wetland mitigation banking is the creation or restoration of wetlands in order to provide mitigation credits that can be used to offset permitted wetland losses. Mitigation banking benefits wetland resources by providing advance replacement for permitted wetland losses; consolidating small projects into larger, better-designed and managed units; and encouraging integration of wetland mitigation projects with watershed planning. This last benefit is most helpful for airport projects, as wetland impacts mitigated outside of the separations identified in Paragraphs 1.2 through 1.4 can still be located within the same watershed. Wetland mitigation banks meeting the separation criteria offer an ecologically sound approach to mitigation in these situations. Airport operators should work with local watershed management agencies or organizations to develop mitigation banking for wetland impacts on airport property.

2.5 Dredge Spoil Containment Areas.

The FAA recommends against locating dredge spoil containment areas (also known as Confined Disposal Facilities) within the separations identified in Paragraphs 1.2 through 1.4 if the containment area or the spoils contain material that would attract hazardous wildlife. Proposals for new dredge spoil containment areas located within the separation distances should be reviewed on a case-by-case basis to determine the likelihood of resulting in an increase in hazardous wildlife. The FAA recommends that airport sponsors work with a Qualified Airport Wildlife Biologist and/or the FAA to review proposals for dredge spoil containment areas located within separation criteria.

2.6 Agricultural Activities.

Many agricultural crops can attract hazardous wildlife and should not be planted within the separations identified in Paragraphs 1.2 through 1.4. Corn, wheat, and other small grains in particular should be avoided. If the airport has no financial alternative to agricultural crops to produce the income necessary to maintain the viability of the airport, then the airport should consider growing crops that hold little food value for hazardous wildlife, such as grass hay. Attractiveness to hazardous wildlife species during all phases of production, from planting through harvest and fallow periods, should be considered when contemplating the use of airport property for agricultural production. Where agriculture is present, crop residue (e.g., waste grain) should not be left in the field following harvest. Also, airports should consult AC 150/5300-13, *Airport Design,* to ensure that agricultural crops do not create airfield obstructions or other safety hazards. Before planning or initiating any agricultural practices on airport property, operators should get approval from the appropriate FAA regional Airports Division Office and demonstrate that the additional cost of wildlife control and potential accidents is offset by revenue generated by agricultural leases. Annual review of the Airport Certification Manual by the Certification Inspector does not constitute approval and is insufficient to meet this requirement.

2.6.1 Livestock Production.

Confined livestock operations (i.e., feedlots, dairy operations, hog or chicken production facilities, or egg laying operations) often attract flocking birds, such as blackbirds, starlings, or pigeons that pose a hazard to aviation. Therefore, the FAA recommends against such facilities within the separations identified in Paragraphs 1.2 through 1.4. The airport operator should be aware of any wildlife hazards that appear to be attracted to off-site livestock operations and consider working with a Qualified Airport Wildlife Biologist to identify reasonable and feasible measures that may be proposed to landowners to reduce the attractiveness of the site to the potentially hazardous wildlife species.

2.6.1.1 In exceptional circumstances, and following FAA review and approval, livestock may be grazed on airport property as long as they are off the airfield and separated behind fencing where they cannot pose a hazard to aircraft. The livestock should be fed and watered as far away from the airfield and approach/departure space as possible because the feed and water may attract birds. The wildlife management plan should include monitoring and wildlife mitigation for any areas where the livestock and their feed/water is located in case a wildlife hazard is detected. Airports without wildlife management plans should equally consider monitoring and mitigation protocols to identify and address any wildlife hazards associated with livestock and their feeding operations.

2.6.2 Alternative Uses of Agricultural Land.

2.6.2.1 Habitat modification both on and surrounding an airfield is one of the best and most economical long term mitigation strategies to decrease risk that wildlife pose to flight safety. Alternative land uses (e.g., solar and biofuel) at airports could help mitigate many of the challenges for the airport operator, developers, and conservationists. However, careful planning must first determine that proposed alternative energy production at airports does not create wildlife attractants or other hazards.

2.6.2.2 Some airports are surrounded by vast areas of farmed land within the distances specified in Paragraphs 1.2 through 1.4. Seasonal uses of agricultural land for activities such as hunting can create a hazardous wildlife situation. In some areas, farmers will rent their land for hunting purposes. Rice farmers, among others, flood their land to attract waterfowl or for conservation efforts. This is often done during waterfowl hunting season to obtain additional revenue by renting out duck blinds.

2.6.2.3 The waterfowl hunters then use decoys and call in hundreds, if not thousands, of birds, creating a threat to aircraft safety. It is recommended that a Qualified Airport Wildlife Biologist review, in coordination with local farmers and producers, these types of seasonal land uses and incorporate mitigating measures into the wildlife management plan, when possible.

2.7 Aquaculture.

Aquaculture is the breeding, rearing, and harvesting of fish, shellfish, and plants in all types of water environments including ponds, rivers, lakes, and the ocean. Aquaculture is used to produce food fish, sport fish, bait fish, ornamental fish, and to support restoration activities. Aquacultured species are grown in a range of facilities including tanks, cages, ponds, and raceways. When an aquaculture facility is proposed within the separation criteria, the airport operator, project proponent, and local jurisdiction should discuss the proposed project location with regard to its attraction to hazardous species, location near the airport and the separation distances identified in Paragraphs 1.2 through 1.4. If a facility is identified as a possible significant attraction, a more suitable location for the proposed facility should be identified. If no other suitable location exists, it is recommended that the proposed facility plans be reviewed by a Qualified Airport Wildlife Biologist to identify measures to avoid or reduce the facility's potential to attract hazardous wildlife.

2.7.1 Freshwater Aquaculture.

2.7.1.1 Freshwater aquaculture activities (e.g., catfish, tilapia, trout or bass production) are typically conducted outside of fully enclosed buildings in constructed ponds or tanks and are inherently attractive to a wide variety of birds and therefore pose a significant risk to airport safety when within the separation distances specified in Paragraphs 1.2 through 1.4. Freshwater aquaculture should only be considered if extensive mitigation measures have been incorporated to eliminate attraction to hazardous birds. Examples of such mitigation include:

1. Netting or other material to exclude hazardous birds (e.g., eagles, osprey, gulls, cormorants);
2. Acoustic hazing including pyrotechnics, propane cannons, directional sonic/hailing devices and other similar technologies;
3. Feeding procedure cleanliness, exclusion techniques prohibiting birds from perching or accessing food; efficiency of feeding operation procedures that reduce fish food attraction to hazardous birds;
4. Operation procedure efficiency transferring live fish to and from enclosures or removal of dead fish; maintenance and upkeep of facility;
5. Monitoring, mitigation and communication protocols with nearby airports as a proactive safety feature in response to specific hazardous species in the event they are identified at the facility in unacceptable numbers.

2.7.2 Marine Aquaculture.

Marine aquaculture (Mariculture) refers to the culturing of species that live in the ocean. When appropriately managed and mitigated as necessary, mariculture facilities do not pose a significant risk to airport safety.

2.7.2.1 **Finfish Mariculture.**

2.7.2.1.1 U.S. finfish mariculture primarily produces salmon and steelhead trout as well as lesser amounts of cod, moi, yellowtail, barramundi, seabass, and seabream. Maricultures use rigid and non-rigid enclosures (e.g., cages) at the surface or submerged in the water column. These enclosures may be fully enclosed, or be open at the top or covered with netted material to negate losses from depredation by birds or other predators. Different facilities employ different designs and operational protocols.

2.7.2.1.2 While mariculture operations typically do not pose a significant attractant to hazardous birds, design and operational features can be incorporated as permit conditions to mitigate attraction and effectively reduce this risk. Examples of such mitigation include:

1. Fully enclosed cages using netting or other material to exclude hazardous birds (e.g., gulls, cormorants, pelicans) and to insure retention of fish;
2. Submerged enclosures to reduce attraction to hazardous birds;
3. Feed barge cleanliness, exclusion techniques prohibiting birds from perching or accessing food; efficiency of feeding operation procedures that reduce fish food attraction to hazardous birds;
4. Operation procedure efficiency transferring live fish to and from enclosures or removal of dead fish; maintenance and upkeep of facility;
5. Monitoring, mitigation and communication protocols with nearby airports as a proactive safety feature in response to specific hazardous species in the event they are identified at the facility in unacceptable numbers.

2.7.2.2 **Shellfish Mariculture.**

U.S. shellfish mariculture primarily produces oysters, clams, mussels, lobster and shrimp. Shellfish may be grown directly on the bottom, in submerged cages or bags, or on suspended lines. These types of mariculture operations do not typically present a significant attractant to hazardous birds. For those operations that are found to pose a significant risk, design and operation features that diminish possible attraction to hazardous bird species (e.g., reducing areas for perching or feeding) can effectively reduce this risk.

2.7.2.3 **Plant Mariculture.**

2.7.2.3.1 Microalgae, also referred to as phytoplankton, microphytes, or planktonic algae constitute the majority of cultivated algae. Macroalgae, commonly known as seaweed, also have many commercial and industrial uses.

2.7.2.3.2 While few commercial seaweed farms exist, the sector is growing. These types of mariculture operations do not typically present an attractant to hazardous birds.

2.8 Golf Courses, Landscaping, Structures and Other Land-Use Considerations.

2.8.1 Golf Courses.

The large grassy areas and open water found on most golf courses are attractive to hazardous wildlife, particularly Canada geese and some species of gulls. These species can pose a threat to aviation safety. If golf courses are located on or near airport property, airport operators should be alert to any wildlife use or habitat changes in these areas that could affect safe aircraft operations. Accordingly, airport operators should develop, at a minimum, onsite measures to minimize hazardous wildlife attraction in consultation with a Qualified Airport Wildlife Biologist. Existing golf courses located within these separations that have been documented to attract hazardous wildlife are encouraged to develop a program to reduce the attractiveness of the sites to species that are hazardous to aviation safety. The FAA recommends against construction of new golf courses within the separations identified in Paragraphs 1.2 through 1.4 if determined that the new facility would create a significant wildlife hazard attractant by a Qualified Airport Wildlife Biologist. Airport operators should ensure these golf courses are monitored on a continuing basis for the presence of hazardous wildlife. If hazardous wildlife is detected, corrective actions should be immediately implemented.

2.8.2 Landscaping and Landscape Maintenance.

2.8.2.1 Depending on its geographic location, landscaping can attract hazardous wildlife. The FAA recommends that airport operators approach landscaping with caution and confine it to airport areas not associated with aircraft movements. Vegetation that produces seeds, fruits, or berries, or that provides dense roosting or nesting cover should not be used. Airports should develop a landscape plan to include approved and prohibited plants. The landscape plan should consider the watering needs of mature plants. A Qualified Airport Wildlife Biologist should review all landscaping plans. Airport operators should also monitor all landscaped areas on a continuing basis for the presence of hazardous wildlife. If hazardous wildlife is detected, corrective actions should be immediately implemented.

2.8.2.2 Turf grass areas on airports have the potential to be highly attractive to a variety of hazardous wildlife species. Research conducted by the USDA Wildlife Services' National Wildlife Research Center has shown that no one airfield vegetation management regimen will deter all species of hazardous wildlife in all situations. The composition and height of airfield grasslands should be properly managed to reduce their attractiveness to hazardous wildlife. In many situations, an intermediate height, monoculture turf grass might be most favorable. In cooperation with a

Qualified Airport Wildlife Biologist, airport operators should develop airport turf grass management plans on a prescription basis, including cultivar selection during reseeding efforts, that is specific to the airport's geographic location, climatic conditions, and the type of hazardous wildlife likely to frequent the airport.

2.8.2.3 Airport operators should ensure that plant varieties attractive to hazardous wildlife are not used on the airport. Disturbed areas or areas in need of re-vegetating should not be planted with seed mixtures containing millet or any other large-seed producing grass. For airport property already planted with seed mixtures containing millet, rye grass, or other large-seed producing grasses, the FAA recommends disking, plowing, or another suitable agricultural practice to prevent plant maturation and seed head production. Plantings should follow the specific recommendations for grass management and seed and plant selection made by the State University Cooperative Extension Service, the local office of Wildlife Services, or a Qualified Airport Wildlife Biologist. Airport operators should also consider developing and implementing a preferred/prohibited plant species list, reviewed by a Qualified Airport Wildlife Biologist, which has been designed for the geographic location to reduce the attractiveness to hazardous wildlife for landscaping airport property.

2.8.3 Structures.

2.8.3.1 Certain structures attract birds for loafing and nesting. Flat rooftops can be attractive to many species of gulls for nesting, hangars provide roosting / nesting opportunities for rock doves, towers, light posts and navigation aids can provide loafing / hunting perches for raptors and aircraft can provide loafing / nesting sites for European starlings, blackbirds and other species. These structures should be monitored and mitigated, if located on-site. Off-site structural attractions may require additional coordination to effectively mitigate their use by hazardous species.

2.8.3.2 Cellular communications towers are becoming increasingly more attractive to large birds (e.g., osprey, eagles, herons, vultures) for nesting and rearing their young. This problem is a growing concern because once the young fledge from nests built on manmade structures they are more likely to return to these kinds of sites to reproduce in future years.

2.8.4 Other Hazardous Wildlife Attractants.

Other land uses (e.g., conservation easements, parks, wildlife management areas) or activities not addressed in this AC may have the potential to attract hazardous wildlife. Regardless of the source of the attraction, when hazardous wildlife is noted on a public-use airport, each certificate holder must take prompt remedial action(s) to protect aviation safety and all non-certificated airports should take prompt remedial action(s) to protect aviation safety.

2.9 Habitat for State and Federally Listed Species on Airports.

An airport's air operations area is an artificial environment that has been created and maintained for aircraft operations. Because an aircraft operations area can be markedly different from the surrounding native landscapes, it may attract wildlife species that do not normally occur, or that occur only in low numbers in the area. Some of the grassland species attracted to an airport's aircraft operations area are at the edge of their natural ranges, but are attracted to habitat features found in the airport environment. Also, some wildlife species may occur on the airport in higher numbers than occur naturally in the region because the airport offers habitat features the species prefer. Some of these wildlife species are Federal or state-listed threatened and endangered species or have been designated by state resource agencies as species of special concern.

2.9.1 State-Listed Species Habitat Concerns.

2.9.1.1 Many state wildlife agencies have requested that airport operators facilitate and encourage habitat on airports for state-listed threatened and endangered species or species of special concern. Airport operators should exercise caution in adopting new management techniques because they may increase wildlife hazards and be inconsistent with safe airport operations. Managing the on-airport environment to facilitate or encourage the presence of hazardous wildlife species can create conditions that are incompatible with, or pose a threat to, aviation safety.

2.9.1.2 Not all state-listed threatened and endangered species or species of concern pose a direct threat to aviation safety. However, these species may pose an indirect threat and be hazardous because they attract other wildlife species or support prey species attractive to other species that are directly hazardous. Also, the habitat management practices that benefit these state-listed threatened and endangered species and species of special concern may attract other hazardous wildlife species. On-airport habitat and wildlife management practices designed to benefit wildlife that directly or indirectly create safety hazard where none existed before are incompatible with safe airport operations.

2.9.2 Federally Listed Species Habitat Concerns.

2.9.2.1 The FAA supports efforts to protect threatened and endangered species, as a matter of principle and consistent with the Endangered Species Act of 1973. The FAA must balance these requirements with our requirements and mission to maintain a safe and efficient airport system. Requests to enhance or create habitat for threatened and endangered species often conflict with the safety of the traveling public and may place the protected species at risk of mortality by aircraft collisions. The FAA does not support the creation, conservation or enhancement of habitat or refuges to attract endangered species on airports. If endangered species are present on an airport, specific obligations may apply under the Endangered

Species Act, 16 U.S.C. § 1531 et seq. and the airport operator should contact the Airports District Office Environmental Protection Specialist.

2.9.2.2 The designation of critical habitat for listed species under the Endangered Species Act on airport lands may be an incompatible land use in conflict with the intended and dedicated purpose of airport lands and may limit or preclude the ability of the airport to develop new infrastructure and growth capacity to meet future air carrier service demand. In addition, depending on the listed species (primarily but not limited to avian species), the designation of critical habitat within the separation distances provided in paragraphs 1.2 - 1.4 can represent a hazardous wildlife attractant in conflict with 14 CFR Part 139.337.

2.10 Synergistic Effects of Surrounding Land Uses.

There may be circumstances where two or more different land uses would not, by themselves, be considered hazardous wildlife attractants or are located outside of the separations identified in Paragraphs 1.2 through 1.4 but collectively may create a wildlife corridor directly through the airport and/or surrounding airspace. An example involves a lake located outside of the separation criteria on the east side of an airport and a large hayfield on the west side of an airport. These two land uses, taken together, could create a flyway for Canada geese directly across the airspace of the airport. Airport operators must consider the entire surrounding landscape and community when developing the wildlife management plan.

Page Intentionally Blank

CHAPTER 3. PROCEDURES FOR WILDLIFE HAZARD MANAGEMENT BY OPERATORS OF PUBLIC-USE AIRPORTS AND CONDITIONS FOR NON-CERTIFICATED AIRPORTS TO CONDUCT WILDLIFE HAZARD ASSESSMENTS AND WILDLIFE HAZARD SITE VISITS

3.1 Introduction.

In recognition of the increased risk of serious aircraft damage or the loss of human life that can result from a wildlife strike, the FAA recommends all airports conduct a Wildlife Hazard Site Visit or Wildlife Hazard Assessment unless otherwise mandated after an initial triggering events defined in Part 139 Section 139.337. After the airport has completed the site visit or assessment and implemented a wildlife management plan, investigations should be conducted following subsequent triggering events to determine if the original assessment and plan adequately address the situation or if conditions have changed that would warrant an update to the plan. In this section, airports that are certificated under 14 C.F.R. § 139.337 are referred to as "certificated airports" and all others are referred to as "non-certificated airports." When a statement refers to both certificated and non-certificated airports, "airport" or "all airports" is used.

3.2 Coordination with Qualified Airport Wildlife Biologists.

Hazardous wildlife management is a complex discipline and conditions vary widely across the United States. Therefore, only airport wildlife biologists meeting the qualification requirements in Advisory Circular 150/5200-36, *Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports*, can conduct Site Visits and Assessments. Airports must maintain documentation that the Qualified Airport Wildlife Biologist meets the qualification requirements in Advisory Circular 150/5200-36.

3.3 Wildlife Hazard Management at Airports: A Manual For Airport Personnel.

3.3.1 The Wildlife Hazard Management at Airports manual, prepared by FAA and USDA Wildlife Services staff, contains a compilation of information to assist airport personnel in the development, implementation, and evaluation of wildlife management plans at airports. The manual includes specific information on the nature of wildlife strikes, legal authority, regulations, wildlife management techniques, Assessments, Plans, and sources of help and information. The manual is available in three languages: English, Spanish, and French. It can be viewed and downloaded free of charge from the FAA's wildlife hazard mitigation web site: https://www.faa.gov/airports/airport_safety/wildlife. This manual only provides a starting point for addressing wildlife hazard issues at airports. FAA recommends that airports consult with a Qualified Airport Wildlife Biologists to assist with development of a wildlife management plan and the implementation of management actions by airport personnel.

3.3.2 There are many other resources complementary to this manual for use in developing and implementing wildlife management plans. Several are listed in the manual's bibliography or on the FAA Wildlife Mitigation website: https://www.faa.gov/airports/airport_safety/wildlife

3.4 Wildlife Hazard Site Visits and Wildlife Hazard Assessments.

3.4.1 Operators of certificated airports are encouraged to conduct an initial assessment regardless of whether the airport has experienced one of the triggering events. Doing so would allow the airport to take proactive action and mitigate the wildlife risk before experiencing an incident. All other airports are encouraged to conduct an assessment or site visit (as defined in FAA Advisory Circular 150/5200-38) conducted by a Qualified Airport Wildlife Biologist (as defined in FAA Advisory Circular 150/5200-36). Part 139 certificated airports are currently required to ensure that an assessment is conducted consistent with 14 C.F.R. § 139.337.

3.4.2 The intent of a site visit is to provide an abbreviated analysis of an airport's wildlife hazards and to provide timely information that allows the airport to expedite the mitigation of these hazards. The FAA also recommends that airports conduct an assessment or site visit as soon as practicable in order to identify any immediate wildlife hazards and/or mitigation measures.

3.4.3 Non-certificated airports should submit the results of the site visit or assessment to the FAA for review. The FAA will review the submitted site visit or assessment and make a recommendation regarding the development of a wildlife management plan. A wildlife management plan can be developed based on a site visit and will be required if the non-certificated airport is going to request federal grants for the purpose of mitigating wildlife hazards.

3.5 Wildlife Hazard Management Plan.

3.5.1 The FAA will consider the results of the assessment, along with the aeronautical activity at the airport and the views of the airport operator and airport users, in determining whether a wildlife management plan is needed for certificated airports, or recommended for non-certificated airports.

3.5.2 If the FAA determines that a wildlife management plan is needed for a certificated airport, the airport operator must formulate a plan, using the assessment as its basis and submit to the FAA for approval. If the FAA recommends that a non-certificated airport develop a plan, either an assessment or a site visit can be used as the basis for the wildlife management plan. Airports should consult AC 150/5200-38, *Protocol for the Conduct and Review of Wildlife Hazard Site Visits, Wildlife Hazard Assessments, and Wildlife Hazard Management Plans,* for further information on preparation and implementation requirements for their wildlife management plan.

3.5.3 The goal of an airport's wildlife management plan is to minimize the risk to aviation safety, airport structures or equipment, or human health posed by populations of hazardous wildlife on and around the airport. For wildlife management plans to effectively reduce wildlife hazards on and near airports, accurate and consistent wildlife strike reporting is essential. Airports should consult AC 150/5200-32, *Reporting Wildlife Aircraft Strikes,* for further information on responsibilities and recommendations concerning wildlife strikes.

3.5.4 The wildlife management plan must identify hazardous wildlife attractants on or near the airport and the appropriate wildlife management techniques to minimize the wildlife hazard. It must also prioritize the management measures.

3.6 Local Coordination.

The FAA recommends establishing a Wildlife Hazards Working Group to facilitate the communication, cooperation, and coordination of the airport and its surrounding community necessary to ensure the effectiveness of the wildlife management plan. The cooperation of the airport community is essential to prevent incompatible development in the airport vicinity. Whether on or off the airport, input from all involved parties must be considered when a potentially hazardous wildlife attractant is being proposed. Based on available resources, airport operators should undertake public education activities with the local planning agencies because some activities in the vicinity of an airport, while harmless under normal conditions, can attract wildlife and present a danger to aircraft (see Paragraphs 4.5 to 4.8). For example, if public trails are planned near wetlands or in parks adjoining airport property, the public should know that feeding birds and other wildlife in the area may pose a risk to aircraft.

3.7 Operational Notifications of Wildlife Hazards.

3.7.1 Operational notifications include active correspondence addressing wildlife issues on or near an airport, notifications and alerts. If an existing land-use practice creates a wildlife hazard and the land-use practice or wildlife hazard cannot be immediately eliminated, airport operators must issue a Notice to Airmen (NOTAM) and encourage the land owner or manager to take steps to control the wildlife hazard and minimize further attraction. Permanent attractions that cannot be eliminated or mitigated may be noted in the Airport/Facility Directory. NOTAMS and Airport/Facility Directory notifications are not appropriate for short-term or immediate advisories that can be relayed via Pilot Reports, direct air traffic control voice communications, or temporary Automated Terminal Advisory System alerts. Care should be given to avoid the continual broadcast of general warnings for extended periods of time. General warnings such as "birds in the vicinity of the aerodrome" offer little timely information to aid pilots and eventually may be ignored if not updated.

3.7.2 The Automated Terminal Advisory System (ATIS) is a continuous broadcast of recorded aeronautical information for aerodromes and their immediate surroundings. ATIS broadcasts contain essential information, such as current weather information,

active runways, available approaches, wildlife hazards and any other information required by the pilots. They indicate significant (moderate or severe) wildlife activity, as reported by an approved agency that presents temporary hazards on the ATIS broadcast. Pilots take notice of available ATIS broadcasts before contacting the local control unit, which reduces the controllers' workload and relieves frequency congestion. The recording is updated in fixed intervals or when there is a significant change in the information. Although ATIS broadcasts involving wildlife should be timely and specific, pilots do not need to know species-specific information. General descriptive information detailing size and number of animals, locations and timing of occurrence provides useful, actionable information for pilots.

3.7.3 A pilot report (PIREP) is reported by a pilot to indicate encounters of hazardous weather (e.g., icing or turbulence) and hazardous wildlife. Pilot reports are short-lived warnings providing immediate information on pilot observations that are transmitted in real-time to air traffic control. Large animals near active surfaces, soaring vultures and raptors within approach/ departure corridors and waterfowl such as geese feeding in grassy areas next to runways are all examples of pilot reports generated by pilots.

3.8 Federal and State Depredation Permits.

The FAA recommends that airports maintain federal and state depredation permits to allow mitigation and/ or removal of hazardous species. All protected species require special permits for lethal mitigation or capture and relocation procedures. Similarly, endangered or threatened species mitigation also requires special permits. The FAA recommends that airports work closely with a Qualified Airport Wildlife Biologist during the U.S. Fish and Wildlife Service consultation and permitting process. The following Orders can help airports reduce risks from hazardous species by allowing private citizens to control hazardous species off airport properties without the need for a Federal depredation permit.

3.8.1 Standing Depredation Orders.

3.8.1.1 Federal law allows people to protect themselves and their property from damage caused by migratory birds. Provided no effort is made to kill or capture the birds, a depredation permit is not required to merely scare or herd depredating migratory birds other than endangered or threatened species or bald or golden eagles (50 CFR 21.41).

3.8.1.2 In addition, certain species of migratory birds may be mitigated without a federal permit under specific circumstances, many of which relate to agricultural situations. The following Standing Depredation Orders have applicability near airports:

- 50 CFR § 21.49- Control Order for Resident Canada Geese at Airports and Military Airfields.
- 50 CFR § 21.50- Depredation Order for Resident Canada Geese Nests and Eggs.

- 50 CFR § 21.43 - Depredation Order for Blackbirds, Cowbirds, Crows, Grackles, and Magpies.
- 50 CFR § 21.54 - Control Order for Muscovy Ducks in the United States.
- 50 CFR § 21.55 - Control Order for Invasive Migratory Birds in Hawaii.

Page Intentionally Blank

CHAPTER 4. RECOMMENDED PROCEDURES FOR THE FAA, AIRPORT OPERATORS AND OTHER GOVERNMENT ENTITIES REGARDING OFF-AIRPORT ATTRACTANTS

4.1 FAA Notification and Review of Proposed Land-Use Practice Changes in the Vicinity of Public-Use Airports.

4.1.1 For projects that are located within 5 miles of the airport's aircraft operations area, the FAA may review development plans, proposed land-use changes, operational changes, major federal actions or wetland mitigation plans to determine if such changes increase risk to airport safety by attracting hazardous wildlife on and around airports. The FAA is not a permitting agency for land use modifications that occur off airport properties, therefore, such reviews are typically initiated by state or federal permitting agencies seeking FAA input on new or revised permits. Each of the land uses listed in Chapter 2 of this AC has the potential to pose a risk to airport operations when they are located within the separation distances provided in Paragraphs 1.2 through 1.4.

4.1.2 Off-site land use modifications near airports may include an assessment of risk for facilities and land-use changes and, if necessary, mitigation strategies that may reduce risk to an acceptable level. However, the FAA recognizes that individual facilities or land-use modifications may present a range of attractants to different species, resulting in varying levels of risk. Therefore, the FAA considers each proposal on a case-by-case basis.

4.1.3 The FAA analyzes each land-use modification or new facility proposal prior to its establishment or any significant planned changes to design or operations that may increase the risk level. As part of a review, the FAA considers several factors that include, but are not limited to:

1. Type of attractant;
2. Size of attractant;
3. Location/distance of attractant from airport;
4. Design (e.g., construction, material, mitigation techniques employed into design);
5. Operation (e.g., cleanliness, constancy/ volume of use, seasonality, time of day);
6. Monitoring protocols (e.g., frequency, documentation, evaluation, species identification and number thresholds that trigger actions of communication or mitigation, baseline wildlife data);
7. Mitigation protocols (e.g., responsibilities, methods, intensity, pre-determined objectives, documentation, evaluation); and
8. Communication protocols to airport and/ or air traffic control tower;

4.1.4 The review of these factors may result in FAA recommended additions or modifications to a conditional use permit that allows the permitting agency to track compliance with the permittee obligations. Such conditions placed within a permit

may involve a comprehensive outline and recognition of individuals responsible for monitoring, communication, and mitigation measures if certain action thresholds are met. Action thresholds are defined in this instance as those pre-determined parameters (e.g., number, location, behavior, time of day) of specific hazardous species that would trigger a mitigation response. Additionally, baseline data should be used to determine the effect, if any, on wildlife populations at the proposed off-site location and/or at the airport.

4.1.5 Baseline data may need to be collected, depending on the existence of useful data and timeline for site modification. If, after taking into account the factors above, FAA determines that a facility poses a significant risk to airport safety, FAA will object to its establishment or renewal.

4.1.6 For projects that are located within 5 miles of the airport's aircraft operations area, the FAA Airport District Office may review development plans, proposed land-use changes, operational changes, major federal actions or wetland mitigation plans to determine if such changes present potential wildlife hazards to aircraft operations. The FAA considers sensitive airport areas as those that lie under or next to approach or departure airspace. This brief examination should indicate if further investigation is warranted.

4.1.7 Where a Qualified Airport Wildlife Biologist has conducted a further study to evaluate a site's compatibility with airport operations, the FAA may use the study results to make a determination.

4.2 Waste Management Facilities.

4.2.1 Notification of New/Expanded Project Proposal.

4.2.1.1 49 U.S.C. § 44718(d), prohibits the construction or establishment of new municipal landfills within 6 miles of certain public-use airports, when both the airport and the landfill meet specific conditions. See Paragraph 2.2 of this guidance for a more detailed discussion of these restrictions.

4.2.1.2 The Environmental Protection Agency (EPA) requires any landfill operator proposing a new or expanded waste disposal operation within 5 miles of a runway end to notify the appropriate FAA Regional Airports Division Office and the airport operator of the proposal. See 40 CFR § 258, *Criteria for Municipal Solid Waste Landfills,* Section 258.10, *Airport Safety*. The EPA also requires owners or operators of new landfill units, or lateral expansions of existing MSWLF landfill units, that are located within 10,000 feet of any airport runway end used by turbine-powered aircraft, or within 5,000 feet of any airport runway end used only by piston-type aircraft, to demonstrate successfully that such units are not hazards to aircraft. (See 4.3.2 below.)

4.2.1.3 When new or expanded municipal landfills are being proposed near airports, landfill operators must notify the airport operator and the FAA of the proposal as early as possible pursuant to 40 CFR § 258.

4.2.1.4 The FAA discourages the development of waste disposal and other facilities, discussed in Chapter 2, located within the separation criteria specified in Paragraphs 1.2 through 1.4. To show that a waste-handling facility sited within the separations identified in Paragraphs 1.2 through 1.4 does not attract hazardous wildlife and does not threaten aviation, the developer must establish the facility will not handle putrescible material other than that as outlined in 2.2.4. The FAA recommends against any facility other than those outlined in 2.2.4 (enclosed transfer stations). The FAA will use this information to determine if the facility will be a hazard to aviation.

4.3 Other Land-Use Practice Changes.

4.3.1 The FAA encourages operators of public-use airports who become aware of proposed land use practice changes that may attract hazardous wildlife within 5 miles of their airports to notify their assigned Airport Certification Safety Inspector or Airports District Office Program Manager. The FAA also encourages proponents of such land use changes to notify the FAA as early in the planning process as possible. Advanced notice affords the FAA an opportunity (1) to evaluate the effect of a particular land-use change on aviation safety and (2) to support efforts by the airport sponsor to restrict the use of land next to or near the airport to uses that are compatible with the airport.

4.3.2 The airport operator, project proponent, or land-use operator may use FAA Form 7460-1, Notice of Proposed Construction or Alteration, or other suitable documents similar to FAA Form 7460-1 to notify the appropriate FAA Regional Airports Division Office. Project proponents can contact the appropriate FAA Regional Airports Division Office for assistance with the notification process prior to submitting Form 7460-1.

4.3.3 It is helpful if the notification includes a 15-minute quadrangle map of the area identifying the location of the proposed activity. The land-use operator or project proponent should also forward specific details of the proposed land-use change or operational change or expansion. In the case of solid waste landfills, the information should include the type of waste to be handled, how the waste will be processed, and final disposal methods.

4.3.4 Airports that have Received Federal Assistance.

Airports that have received Federal assistance are required under their grant assurances to take appropriate actions to restrict the use of land next to or near the airport to uses that are compatible with normal airport operations. See Grant Assurance 21. The FAA recommends that airport operators oppose off-airport land-use changes or practices, to

the extent practicable, within the separations identified in Paragraphs 1.2 through 1.4, which may attract hazardous wildlife. Failure to do so may lead to noncompliance with applicable grant assurances. The FAA will not approve the placement of airport development projects pertaining to aircraft movement in the vicinity of hazardous wildlife attractants without appropriate mitigating measures. Increasing the intensity of wildlife control efforts is not a substitute for preventing, eliminating or reducing a proposed wildlife hazard. Airport operators should identify hazardous wildlife attractants and any associated wildlife hazards during any planning process for airport development projects.

4.4 Coordination to Prevent Creation of New Off-Airport Hazardous Wildlife Attractants.

Airport operators should work with local and regional planning and zoning boards to be aware of proposed land-use changes, or modification of existing land uses, that could create hazardous wildlife attractants within the separations identified in Paragraphs 1.2 through 1.4. Pay particular attention to proposed land uses involving creation or expansion of wastewater treatment facilities, development of wetland mitigation sites, or development or expansion of dredge spoil containment areas. At the very least, it is recommended that airport operators are on the notification list of the local planning board or equivalent review entity for all communities located within 5 miles of the airport, so they will receive notification of any proposed project and have the opportunity to review it for attractiveness to hazardous wildlife. This may be accomplished through one or more of the following:

4.4.1 Site-specific Criteria.

The airport should establish site-specific criteria for assessment of land uses attractive to hazardous wildlife and locations that would be of concern based on wildlife strikes and on wildlife abundance and activity at the airport and in the local area. These criteria may be more selective, but should not be less restrictive than this guidance.

4.4.2 Outreach.

Airports should actively seek to provide educational information and/ or provide input regarding local development, natural resource modification or wildlife-related concerns that affect wildlife hazards and safe air travel.

4.4.2.1 **External Outreach.**

Airport operators and a Qualified Airport Wildlife Biologist should consider outreach to local planning and zoning organizations on land uses of concern or to local organizations responsible for natural resource management (including wildlife, wetlands, and parks.) Airports should also consider developing and distributing position letters and educational materials on airport-specific concerns regarding wildlife hazards, wildlife activity and attraction. Finally, airports should provide formal comments on local procedures, laws, ordinances, plans, and regulatory actions such as permits related to land uses of concern.

4.4.2.2 **Internal Outreach.**

Airports should consider developing and distributing position letters and educational materials on airport-specific concerns regarding species identification and mitigation procedures, wildlife hazards, wildlife activity and attraction to employees and personnel with access to the aircraft operations area.

4.5 Coordination on Existing Off-Airport Hazardous Wildlife Attractants.

Airports are encouraged to work with landowners and managers to cooperatively develop procedures to monitor and manage hazardous wildlife attraction. If applicable, these procedures may include:

1. Conducting a wildlife hazard site visit by a wildlife biologist meeting the qualification requirements of Advisory Circular 150/5200-36, *Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports*
2. Conducting regular, standardized, wildlife monitoring surveys;[4]
3. Establishing threshold numbers of wildlife which would trigger certain actions and/or communications;
4. Establishment of procedures to deter or remove hazardous wildlife.

4.6 Prompt Remedial Action.

For attractants found on and off airport property, and with landowner or manager cooperation, Part 139 certificated airports must take immediate action in accordance with their Airport Certification Manual and the requirements of Part 139.337, to alleviate wildlife hazards whenever they are detected. It is also recommended that non-certificated airports take immediate action to alleviate wildlife hazards whenever they are detected. In addition, airports should take prompt action to identify the source of attraction and cooperatively develop procedures to mitigate and monitor the attractant. **For Part 139 Certificated airports, immediate actions are required in accordance with 139.337(a).**

4.7 FAA Assistance.

If there is a question on the implementation of any of the guidance in this section, contact the FAA Regional Airports Division for assistance.

[4] Recommended survey protocols can be found in AC 150/5200-38, *Protocol for the Conduct and Review of Wildlife Hazard Site Visits, Wildlife Hazard Assessments, and Wildlife Hazard Management Plans*, and DeVault, T.L., B.F. Blackwell, and J.L. Belant, eds. 2013. *Wildlife in Airport Environments: Preventing Animal–Aircraft Collisions through Science-Based Management.* Johns Hopkins University Press, Baltimore, MD, USA. 181 pp.

4.7.1 Airport Documentation Procedures.

Airports should document on-site and off-site wildlife attractants as part of their "Wildlife Hazard Management Plan Annual Review," "Wildlife Hazard Management Plan Review Following a Triggering Event," and the airport's Continual Monitoring Annual Report (as outlined in FAA Advisory Circular 150/5200-38). As a best management practice, airports may choose to keep a log to track contacts from landowners or managers, permitting agencies, or other entities concerning land uses near the airport.

APPENDIX A. DEFINITIONS OF TERMS USED IN THIS ADVISORY CIRCULAR

A.1 **General.**

This appendix provides definitions of terms used throughout this AC.

1. **Air operations area.** Any area of an airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft. An air operations area includes such paved areas or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiways, or apron.
2. **Airport operator.** The operator (private or public) or sponsor of a public-use airport.
3. **Approach or departure airspace.** The airspace, within 5 statute miles of an airport, through which aircraft move during landing or takeoff.
4. **Bird balls.** High-density plastic floating balls that can be used to cover ponds and prevent birds from using the sites.
5. **Certificate holder.** The holder of an Airport Operating Certificate issued under 14 C.F.R. Part 139.
6. **Construct a new municipal landfill.** To begin to excavate, grade land, or raise structures to prepare a municipal solid waste landfill as permitted by the appropriate regulatory or permitting agency.
7. **Detention ponds.** Storm water management ponds that hold storm water for short periods of time, a few hours to a few days.
8. **Establish a new municipal landfill.** When the first load of putrescible waste is received on-site for placement in a prepared municipal solid waste landfill.
9. **Fly ash.** The fine, sand-like residue resulting from the complete incineration of an organic fuel source. Fly ash typically results from the combustion of coal or waste used to operate a power generating plant.
10. **General aviation aircraft.** Any civil aviation aircraft operating under 14 CFR Part 91.
11. **Hazardous wildlife.** Species of wildlife (birds, mammals, reptiles), including feral and domesticated animals, not under control that may pose a direct hazard to aviation (i.e., strike risk to aircraft) or an indirect hazard such as an attractant to other wildlife that pose a strike hazard or are causing structural damage to airport facilities (e.g., burrowing, nesting, perching).
12. **Municipal Landfill.** A publicly or privately owned discrete area of land or an excavation that receives household waste and that is not a land application unit, surface impoundment, injection well, or waste pile, as those terms are defined under 40 CFR § 257.2. A municipal landfill may receive other types wastes, such as commercial solid waste, non-hazardous sludge, small-quantity generator waste, and

industrial solid waste, as defined under 40 CFR § 258.2. A municipal landfill can consist of either a stand-alone unit or several cells that receive household waste.

13. **New municipal landfill.** A municipal solid waste landfill that was established or constructed after April 5, 2001.
14. **Piston-powered aircraft.** Fixed-wing aircraft powered by piston engines.
15. **Piston-use airport.** Any airport that does not sell Jet-A fuel for fixed-wing turbine-powered aircraft, and primarily serves fixed-wing, piston-powered aircraft. Incidental use of the airport by turbine-powered, fixed-wing aircraft would not affect this designation. However, such aircraft should not be based at the airport.
16. **Public agency.** A state or political subdivision of a state, a tax-supported organization, or an Indian tribe or pueblo (49 U.S.C. § 47102(19)).
17. **Public airport.** An airport used or intended to be used for public purposes that is under the control of a public agency; and of which the area used or intended to be used for landing, taking off, or surface maneuvering of aircraft is publicly owned (49 U.S.C. § 47102(20)).
18. **Public-use airport.** An airport used or intended to be used for public purposes where the area used or intended to be used for landing, taking off, or surface maneuvering of aircraft may be under the control of a public agency or privately owned and used for public purposes (49 U.S.C. § 47102(21)).
19. **Putrescible waste.** Solid waste that contains organic matter capable of being decomposed by micro-organisms and of such a character and proportion as to be capable of attracting or providing food for birds (40 CFR §257.3-8).
20. **Putrescible-waste disposal operation.** Landfills, garbage dumps, underwater waste discharges, or similar facilities where activities include processing, burying, storing, or otherwise disposing of putrescible material, trash, and refuse.
21. **Retention ponds.** Storm water management ponds that hold water for more than 48 hours.
22. **Risk**. Risk is the relationship between the severity and probability of a threat. It is the product of hazard level and abundance in the critical airspace, and is thus defined as the probability of a damaging strike with a given species.
23. **Runway protection zone.** An area off the runway end to enhance the protection of people and property on the ground (see AC 150/5300-13). The dimensions of this zone vary with the airport design, aircraft, type of operation, and visibility minimum.
24. **Scheduled air carrier operation.** Any common carriage passenger-carrying operation for compensation or hire conducted by an air carrier or commercial operator for which the air carrier, commercial operator, or their representative offers in advance the departure location, departure time, and arrival location. It does not include any operation that is conducted as a supplemental operation under 14 CFR Part 119 or as a public charter operation under 14 CFR Part 380 (14 CFR § 119.3).

25. **Sewage sludge.** Any solid, semi-solid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment process; and a material derived from sewage sludge. Sewage does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works. (40 CFR § 257.2)

26. **Sludge.** Any solid, semi-solid, or liquid waste generated form a municipal, commercial or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effect. (40 CFR § 257.2).

27. **Solid waste.** Any garbage, refuse, sludge, from a waste treatment plant, water supply treatment plant or air pollution control facility and other discarded material, including, solid liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under section 402 of the Clean Water Act, or source, special nuclear, or by product material as defined by the Atomic Energy Act of 1954.(40 CFR § 257.2).

28. **Turbine-powered aircraft.** Aircraft powered by turbine engines including turbojets and turboprops but excluding turbo-shaft rotary-wing aircraft.

29. **Turbine-use airport.** Any airport that sells fuel for fixed-wing turbine-powered aircraft.

30. **Wastewater treatment facility.** Any devices and/or systems used to store, treat, recycle, or reclaim municipal sewage or liquid industrial wastes, including publicly owned treatment works, as defined by Section 212 of the Clean Water Act. This definition includes any pretreatment involving the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a publicly owned treatment system. (See 40 CFR § 403.3 (q), (r), & (s)).

31. **Wildlife.** Any wild animal, including without limitation any wild mammal, bird, reptile, fish, amphibian, mollusk, crustacean, arthropod, coelenterate, or other invertebrate, including any part, product, egg, or offspring thereof. 50 CFR § 10.12. As used in this AC, wildlife includes feral animals and domestic animals out of the control of their owners (14 CFR Part 139, Certification of Airports).

32. **Wildlife attractants.** Any human-made structure, land-use practice, or human-made or natural geographic feature that can attract or sustain hazardous wildlife within the landing or departure airspace or the airport's aircraft operations area. These attractants can include architectural features, landscaping, waste disposal sites, wastewater treatment facilities, agricultural or aquaculture activities, surface mining, or wetlands.

33. **Wildlife hazard.** A potential for a damaging aircraft collision with wildlife on or near an airport.

34. **Wildlife strike.** A wildlife strike is deemed to have occurred when:

    a. A strike between wildlife and aircraft has been witnessed;

    b. Evidence or damage from a strike has been identified on an aircraft;

    c. Bird or other wildlife remains, whether in whole or in part, are found:

        i. Within 250 feet of a runway centerline or within 1,000 feet of a runway end unless another reason for the animal's death is identified or suspected, unless another reason for the animal's death is identified or;

        ii. On a taxiway or anywhere else on or off airport that there is reason to believe was the result of a strike with an aircraft.

    d. The presence of birds or other wildlife on or off the airport had a significant negative effect on a flight (i.e., aborted takeoff, aborted landing, high-speed emergency stop, aircraft left pavement area to avoid collision with animal).

APPENDIX B. ADDITIONAL RESOURCES

B.1 Regulations

- 14 CFR § 139.337, *Wildlife Hazard Management*
- 40 CFR § 258, *Criteria for Municipal Solid Waste Landfills*

B.2 Advisory Circulars

- AC 150/5200-32, *Reporting Wildlife Aircraft Strikes*
- AC 150/5200-33, *Hazard Wildlife Attractants on or Near Airports*
- AC 150/5200-34, *Construction or Establishment of New Landfills Near Public Airports*
- AC 150/5200-36, *Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports*
- AC 150/5200-38, *Protocol for the Conduct and Review of Wildlife Hazard Site Visits, Wildlife Hazard Assessments, and Wildlife Hazard Management Plans*
- AC 150/5220-25, *Airport Avian Radar Systems*
- AC 150/5210-24, *Airport Foreign Object Debris (FOD) Management*

B.3 Certification Alerts

- Certalert No. 97-09, *Wildlife Hazard Management Plan Outline* (11/17/1997)
- Certalert No. 98-05, *Grasses Attractive To Hazardous Wildlife* (9/21/1998)
- Certalert No. 06-07, *Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State Listed Threatened and Endangered Species and Species of Special Concern on Airports* (11/21/2006)
- Certalert No. 13-01, *Federal and State Depredation Permit Assistance* (1/30/2013)
- Certalert No.14-01, *Seasonal Mitigation of Hazardous Species at Airports: Attention to Snowy Owls* (2/26/2014)
- Certalert No. 16-03, *Recommended Wildlife Exclusion Fencing* (8/2016)

B.4 Airport Cooperative Research Program Reports

These, and other wildlife / aviation reports, are available from the Transportation Research Board of the National Academies (TRB) at http://www.trb.org/Publications/Publications.aspx.

- ACRP Research Report 198: Wetland Mitigation, Volume 2, A Guidebook for Airports (2019)
- ACRP Synthesis 92: Airport Waste Management and Recycling Practices (2018)
- ACRP Research Report 174: Guidebook and Primer (2018)
- ACRP Report 122: Innovative Airport Responses to Threatened / Endangered Species (2015)
- ACRP Report 125: Balancing Airport Stormwater and Bird Hazard Management (2015)
- ACRP Report 145: Applying an SMS Approach to Wildlife Hazard Management (2015)
- ACRP Synthesis 39 Report: Airport Wildlife Population Management (2013)
- ACRP Synthesis 52 Report: Habitat Management to Deter Wildlife at Airports (2014)
- ACRP Synthesis 23 Report: Bird Harassment, Repellent, and Deterrent Techniques for Use on and Near Airports (2011)
- ACRP Report 32: Guidebook for Addressing Aircraft/Wildlife Hazards at General Aviation Airports (2010)

B.5 Manuals

- Wildlife Hazard Management at Airports - A Manual for Airport Personnel (2005)

B.6 Orders

- 50 CFR § 21.49, Control Order for Resident Canada Geese at Airports and Military Airfields
- 50 CFR § 21.50, Depredation Order for Resident Canada Geese Nests and Eggs
- 50 CFR § 21.43, Depredation Order for Blackbirds, Cowbirds, Crows, Grackles, and Magpies
- 50 CFR § 21.54, Control Order for Muscovy Ducks in the United States
- 50 CFR § 21.55, Control Order for Invasive Migratory Birds in Hawaii

Advisory Circular Feedback

If you find an error in this AC, have recommendations for improving it, or have suggestions for new items/subjects to be added, you may let us know by (1) mailing this form to Manager, Airport Safety and Operations Division, Federal Aviation Administration ATTN: AAS-300, 800 Independence Avenue SW, Washington DC 20591 or (2) faxing it to the attention of AAS-300 at (202) 267-5257.

Subject: AC 150/5200-33C Date: _____

Please check all appropriate line items:

☐ An error (procedural or typographical) has been noted in paragraph _____ on page _____.

☐ Recommend paragraph _____ on page _____ be changed as follows:

_____
_____
_____

☐ In a future change to this AC, please cover the following subject:
(Briefly describe what you want added.)

_____
_____
_____

☐ Other comments:

_____
_____
_____

☐ I would like to discuss the above. Please contact me at (phone number, email address).

Submitted by: _____ Date: _____

CITY OF ONTARIO PLANNING DEPARTMENT

PLANNING COMMISSION AGENDA REPORT

January 24, 2023

303 East B Street, Ontario, California 91764 Phone: 909.395.2036 / Fax: 909.395.2420

FILE NO: PDEV21-047

SUBJECT: A public hearing to consider an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report and a Development Plan (File No. PDEV21-047) to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 216.39 gross acres (196.83 net acres) of land generally located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, within the IL (Light Industrial) land use district of the California Commerce Center Specific Plan (APNs: 0211-222-47, 0211-222-48, 0211-222-52, 0211-222-53, 0211-222-54, 0211-222-55, 0211-222-56, 0211-232-04, 0211-232-05, 0211-232-06, 0211-232-07, 211-232-011, 0211-232-12, 0211-232-13, 0211-232-14, 0211-232-15, 0211-232-16, 0211-232-17, 0211-232-18, 0211-232-19, 0211-232-20, 0211-232-44, 0211-232-45, and 0211-232-46); **submitted by McDonald Property Group.**

PROPERTY OWNER: Ontario International Airport Authority

RECOMMENDED ACTION: That the Planning Commission consider and adopt the following:

(1) The resolution approving the use of an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report; and

(2) The resolution approving the Development Plan, File No. PDEV21-047, pursuant to the facts and reasons contained in the staff report and resolution, and subject to the conditions of approval appended to the attached resolutions as "Attachment A".

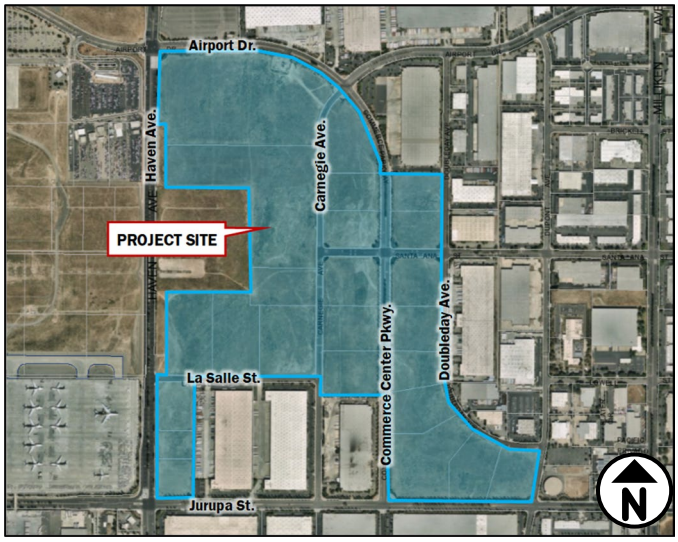


Figure 1: Project Location

PROJECT SETTING: The Project site is comprised of 216.39 gross acres (196.83 net acres) of land located east of Haven Avenue, west of Doubleday and Dupont Avenues,

Case Planner:	Edmelynne V. Hutter
Planning Director Approval:	
Submittal Date:	December 15, 2021

Hearing Body	*Date*	*Decision*	*Action*
DAB	1/4/2023	Approval	Recommend
PC	1/24/2022		Final
CC			

north of Jurupa Street and south of Airport Drive, within the California Commerce Center Specific Plan (see Figure 1: Project Location). The existing site is comprised of 24 vacant lots with the following existing public streets traversing through the Project site: Carnegie Avenue, Commerce Center Parkway, Santa Ana Street, and La Salle Street. The Project site is located east of the Ontario International Airport runway and abuts the airport's runway protection zone. The existing surrounding land uses, zoning, and Policy Plan (general plan) and specific plan land use designations are summarized in the "Surrounding Zoning & Land Uses" table located in the Technical Appendix of this report.

PROJECT ANALYSIS:

(1) Background — The California Commerce Center Specific Plan ("CCCSP") was adopted in May 1983 and established the land use designations, development standards, and design guidelines on approximately 1,400 acres of land, and allows for various land uses such as industrial, office, and commercial. Over the years, multiple specific plan amendments have been adopted to modify specific plan requirements, including land use designations, roadway alignments, development intensities, and development standards.

Previous land use designations for the Project site were Light Industrial, Office, Airport Reservation and Commercial. Previous specific plan amendments have been adopted to reclassify the Project site parcels to the Light Industrial land use designation. Other specific plan amendments include revisions to reflect updated airport clear zone requirements and low employee intensity areas, in response to Ontario International Airport operations and safety requirements.

On January 27, 2010, the Ontario City Council certified The Ontario Plan Environmental Impact Report in conjunction with File No. PGPA06-001 (City Council Resolution No. 2010-006). The Ontario Plan and associated Environmental Impact Report analyzed the Project site and established guidelines for development, including but not limited to general land use (Light Industrial), maximum 0.55 Floor Area Ratio (FAR), and assumed building area (approximately 4,736,449 square feet).

On August 16, 2022, the Ontario City Council certified The Ontario Plan 2050 Update Supplemental Environmental Impact Report in conjunction with File No. PGPA20-002 (City Council Resolution No. 2022-129). The Project site's land use district remained unchanged as part of the Citywide updates.

On December 15, 2021, the Applicant, and their consultant, MIG Inc., submitted a Development Plan to facilitate the development of nine industrial buildings totaling 4,263,454 square feet on the Project site. The Applicant has also submitted Lot Line Adjustment applications to the Engineering Department requesting to realign property boundaries throughout the Project site to accommodate the proposed building layouts.

On January 4, 2023, the Development Advisory Board ("DAB") voted unanimously to recommend approval of the Development Plan application to the Planning Commission. Prior to the DAB meeting, 45 written public comments were received in opposition to the Project, citing concerns about Burrowing Owls and desire to use the property as a Burrowing Owl preserve. During the DAB meeting, four persons from the public spoke in opposition to the project, citing concerns about Burrowing Owls, air quality, and traffic.

(2) Site Design/Building Layout — The Project site consists of nine vacant building sites encompassing 216.39 gross acres (196.83 net acres) of land located east of the Ontario International Airport runway and Haven Avenue. The overall floor area ratio ("FAR") for the Project is 0.50, which complies with the maximum FAR of 0.55 under The Ontario Plan Policy Plan. The associated Lot Line Adjustment applications are currently under review by the Engineering Department. Project approval is contingent on City approval of the associated Lot Line Adjustment applications. The Project site is irregular in shape, with the existing streets dictating the orientation and size of the proposed buildings. For purposes of clarity in this report, the Project site can be portioned into three areas, the West Project Area, Central Project Area, and East Project Area (see Exhibit B, attached).

(a) *West Project Area*. The West Project Area is bounded by Airport Drive, Carnegie Avenue, La Salle Avenue, Jurupa Street, and Haven Avenue. Buildings 1 through 4 are proposed in this portion, ranging from 254,677 square feet to 926,100 square feet in area.

The site for Building 1 is 23.6 acres in size, L-shaped, and is located at the southeast corner of Airport Drive and Haven Avenue. Building 1 is 850 feet wide and 480 feet deep, in an east-west orientation, with the primary office entrance oriented toward Airport Drive. The gross floor area for this building is 359,960 square feet, with a FAR of 0.35. The parking lots are located to the north and west of the building, and the screened truck docks and truck yard are located on the south side of the building.

The site for Building 2 is 40.6 acres in size and generally rectangular in shape, with the north property line flaring wider due to the curve of Airport Drive. Building 2 is 926,100 square feet in size, 2,211 feet wide, and 420 feet deep. The building is placed in a north-south orientation and parallels Carnegie Avenue. The proposed FAR for this building is 0.52. The parking lots are primarily located on the east side of the building, along Carnegie Avenue. The truck yard is located on the west side of the building and screened from street view by the building and 14-foot-high screen walls with view-obstructing gates.

The site for Building 3 is at the northwest corner of Carnegie Avenue and La Salle Street, encompassing 25.4 acres of land, and generally is rectangular in shape with an additional triangular area near the southwest corner of the site. Building 3 is proposed at 547,395 square feet in size, is 560 feet wide, and 945 feet deep, with the primary office area facing Carnegie Avenue. The proposed FAR is 0.50. The passenger vehicle parking lots are located on the east and west sides of the building. The north side of the building

is designed with truck docks and trailer parking, while the south side of the building only has truck docks. The trailer parking is located in the rectangular area on the west and will be screened from street views by 14-foot-high screen walls with view-obstructing gates.

The 11.7-acre site for Building 4 is located at the southeast corner of La Salle Street and Haven Avenue, north of Jurupa Street. Building 4 is 1,062 feet wide and 280 feet deep, 254,677 square feet in area, and positioned in a north-south direction. The proposed FAR is 0.50. The primary office faces La Salle Street with parking lot areas on the north and south sides of the building. The truck yard and trailer parking are located on the east side of the building and is screened from street views by the building and screen walls with view-obstructing gates. The west side of the project site provides a 45-foot building setback, which will be fully landscaped to further enhance the street view of the west building elevation.

(b) *Central Project Area*. The Central Project Area is bounded by Commerce Parkway to the north and east, Carnegie Avenue to the north and west, and an existing industrial land use to the south. The north tip of the central portion is at the southwest corner of the Airport Drive and Carnegie Avenue intersection. Buildings 5 and 6 are proposed in this area, with building areas of 424,550 square feet and 491,110 square feet, respectively.

The site for Building 5 is 19.5 acres in area and located at the northwest corner of Commerce Parkway and Santa Ana Street. Building 5, proposed at 424,550 square feet, has a width of 1,134 feet and depth of 429 feet, and is oriented in a north-south direction, with the primary office located in the northwest corner of the building. The proposed FAR is 0.50. The main parking lot is located on the north end of the Project site, with a smaller parking lot south of the building. The fully screened truck yard with trailer parking is located on the east side, adjacent to Commerce Parkway.

The 20.6-acre site for Building 6 is located at the southwest corner of Santa Ana Street and Commerce Parkway. Building 6, which is 491,110 square feet in area, has dimensions of 1,296 feet wide and 429 feet deep, with the primary office entrance at the southeast corner of the building. The proposed FAR is 0.55. The parking lots are located on the north and south ends of the site, and the truck yard is located on the east side of the building, which is screened from street views by the building and 14-foot-high screen walls. The west elevation of the building is setback 35 feet from Carnegie Avenue, and landscaping will be installed within this setback area to enhance the building's street view from Carnegie Avenue.

(c) *East Project Area*. The East Project Area is bounded by Doubleday Avenue to the east, Jurupa Street to the south, Commerce Way to the west, and existing industrial land use to the north. This eastern area is proposed with Buildings 7, 8, and 9, which range from 204,510 square feet to 534,292 square feet in area. The eastern portion is L-shaped, with Buildings 7 and 8 located between the parallel streets of Doubleday Avenue and

Commerce Parkway, and Building 9 is located along Jurupa Street, between Commerce Parkway and Dupont Avenue.

Building 7, with 204,510 square feet and a proposed FAR of 0.48, is located north of Santa Ana Street and is 643 feet wide by 369 feet deep. The site for Building 7 is 9.7 acres in area. The building is oriented in a north-south direction, with the primary office located at the northwest corner of the building. The passenger vehicle parking lots are located on the south and north sides of the building, and the truck yard is located on the east side, along Doubleday Avenue, and is fully screened from street views by the building and screen walls with view-obstructing gates.

The site for Building 8 is 24.1 acres in area and is located south of Santa Ana Street. The building is 534,292 square feet in area, measures 1,683 feet wide and 370 feet deep, and has a FAR of 0.51. Building 8 is situated in a north-south direction, with passenger vehicle parking lots located on the north and south sides on the building. The primary office is located at the southwest corner of the building. The truck yard and trailer parking are located on the east side of the site and are fully screened by 14-foot-high screen walls with view-obstructing gates.

Building 9 is located along Jurupa Street, between Dupont Avenue and Commerce Way, on 21.7 acres of land. The building is 520,860 square feet in area and has a FAR of 0.55. The site layout provides parking lots on the east and west sides of the building. The truck yard is located on the north side of the building and is fully screened from street views by the building and 14-foot-high screen walls. The proposed primary office is placed at the southeast corner of the building, near the Dupont Avenue and Jurupa Street intersection.

(3) Site Access/Circulation — The Project site will be accessible from existing public streets surrounding and traversing through the Project site, with each building site having at least three ingress/egress points for passenger vehicles and/or trucks. Where possible, shared drive approaches are provided for the building sites, which minimizes the number of drive approaches along any given street. As conditioned, reciprocal parking and circulation access will be available for building sites with shared access.

The Project includes public improvements such as new sidewalks, repair and replace deteriorated pavement, new landscaping, rehabilitated landscaping, and upgraded traffic signals with new cameras.

(4) Parking — The Project has provided off-street parking pursuant to the Warehouse/ Distribution parking standards specified in the Development Code. The number of off-street parking spaces provided for each individual building site meets or exceeds the minimum parking requirement for the proposed buildings. The off-street parking calculations for the Project are summarized in the table below:

Parking Summary

Bldg. No.	Type of Use	Building Area (in SF)	Trailer Parking		Vehicle Spaces	
			Required	Provided	Required	Provided
1	Warehouse / Distribution	359,960	13	305	190	276
2	Warehouse / Distribution	926,100	35	172	473	513
3	Warehouse / Distribution	547,395	24	131	284	284
4	Warehouse / Distribution	254,677	13	14	137	138
5	Warehouse / Distribution	424,550	15	33	222	343
6	Warehouse / Distribution	491,110	18	59	256	256
7	Warehouse / Distribution	204,510	7	28	112	112
8	Warehouse / Distribution	534,292	24	86	277	277
9	Warehouse / Distribution	520,860	16	64	270	270
Parking Totals:		**4,263,454**	**165**	**892**	**2,221**	**2,469**

(5) Architecture — The industrial buildings are proposed in a Contemporary Architectural style. The proposed buildings will be of concrete tilt-up construction with a variety of wall finishes, including monochromatic color blocking, score patterns, inset reveals, and color banding (see Exhibit D: Elevations, attached). Accent materials such as metal awnings, metal canopies, and glazing are applied at the corners of the buildings where offices are proposed and where they are highly visible from public streets.

The proposed architecture also includes angled metal eaves at the office corners. These eaves extend beyond the wall planes to create additional dimension to the office elevations.

An additional and unique feature of the proposed design is the incorporation of translucent acrylic panels with internal lighting, which are strategically placed at the primary office entrance. The design proposes three colors (green/"Turtle", orange/ Butternut" and blue/"Lago"), which will be strategically assigned to the nine buildings. These panels are proposed to be 10 feet wide and reach the full height of the building. When lit, the tower of acrylic panels will present a soft illumination that enhances each building and presents a themed Project-wide design.

The proposed floor plan for each building varies based on each site layout. The buildings are speculative and include basic floor plan components such as future office areas, electrical rooms, and truck docks. Exhibit C, attached, provides an example of a typical floor plan for the Project.

(6) Landscaping — The CCCSP does not specify a minimum landscape coverage percentage; however, developments within CCCSP area are required to provide landscaping within building setback areas, parking lots, and adjacent to buildings.

The street rights-of-way abutting the Project site are currently partially landscaped with shrubs and trees. As proposed and conditioned, the applicant will prepare a landscape plan for plan check that proposes new landscaping, landscape rehabilitation, and protection of existing street trees to the greatest extent possible.

The Project provides substantial landscaping along the perimeters of the Project site and within the required building and parking lot setbacks. The Project also includes right-of-way improvements (street, curb, gutter, sidewalks, and parkway) along the surrounding streets. A typical landscape plan is provided in Exhibit E, attached, showing plant species and planning layout. The proposed on-site and off-site landscape improvements will assist toward creating a walkable, safe area for pedestrians to access the Project site.

(7) Signage — All Project signage is required to comply with sign regulations provided in Ontario Development Code Division 8.1. Prior to the issuance of a Building Permit for the installation of any new on-site signage, the Applicant is required to submit Sign Plans for Planning Department review and approval.

(8) ONT ALUCP — This project is located within the Airport Influence Area of Ontario International Airport ("ONT") and was evaluated and found to be consistent with the policies and criteria of the Ontario International Airport Land Use Compatibility Plan ("ONT ALUCP"). The Project site is located adjacent to and east of the ONT runways and is impacted by height restrictions, Safety Zone 2 (Inner Approach/Departure Zone) and Safety Zone 3 (Inner Turning Zone), as shown in Exhibit G, attached. The allowable building heights range from 30 to 130 feet across the site from west to east. As a result, the project was required to submit their project to FAA for review and received a "Determination of No Hazard to Air Navigation" for all proposed building/structure heights. The project land uses were also restricted only permitting low people intensity uses such as warehouse distribution centers. Special conditions of approval have been placed on the project to conform with OIAA, FAA and City standards, and are attached to this report. Additionally, the project has been conditioned to limit the height of trees to be less than the FAR Part 77 height limits.

(9) Utilities (drainage, sewer) — Public utilities (water and sewer) are available to serve the Project. Furthermore, the Applicant has submitted a Preliminary Water Quality Management Plan ("PWQMP"), which establishes the Project's compliance with storm water discharge/water quality requirements. The PWQMP includes site design measures that capture runoff and pollutant transport by minimizing impervious surfaces and maximizes low impact development ("LID") best management practices ("BMPs"), such as retention and infiltration, biotreatment, and evapotranspiration. The PWQMP proposes the use of underground stormwater drywells in detention areas. Any overflow drainage will be conveyed to the public street by way of parkway drains and culverts.

PUBLIC NOTIFICATION: The subject application was advertised as a public hearing in at least one newspaper of general circulation in the City of Ontario (the Inland Valley Daily Bulletin newspaper). In addition, notices were mailed to all owners of real property

located within a minimum of 300 feet of the exterior boundaries of the property that is the subject of the hearing, as shown on the records of the County Assessor.

CORRESPONDENCE AND PUBLIC COMMENTS: As of the preparation of this report, Planning Department staff received 48 public comment submissions (see Exhibit H, attached). Of the 48, 45 comments were submitted prior to the Development Advisory Board ("DAB") meeting on January 4, 2023, including two submissions from one individual, and three comments were received after the DAB meeting. The comments were in opposition to the project and the majority of the correspondence were regarding concerns for Burrowing Owls on the Project site, stating that the Project site should be used for a Burrowing Owl preserve, there is higher mortality for translocated owls, potential loss of biodiversity with the removal of the owls, and the identified mitigation has failed in previous efforts. One comment discussed the timing of the DAB Agenda Report publication coinciding with the holidays and encouraged postponing the decision to allow more time to consider the project and information. Another comment stated concern about air quality and potential pollution generated by the Project.

The public comments provided during the DAB meeting were consistent with the written comments received.

The Applicant has prepared responses to the written correspondence and public comments received (see Exhibits I and J, attached). In summary, staff concurs with the responses in that:

- TOP 2050 SEIR and proposed Addendum to the SEIR, along with supporting technical studies, provide substantial evidence that the Project will not have any new or more significant impacts than those previously identified in the TOP 2050 SEIR.
- The presence of Burrowing Owls creates a hazard for airport operations. The Relocation Plan prepared for the Project is appropriate and consistent with the TOP 2050 policies.
- According to the Helix Environmental / Kidd Biological, Inc. 2020 report, mitigation options such as "in situ", or conserving owls on the Project site, and eviction of the owls are not supported by California Department of Fish and Wildlife Headquarters, the Federal Aviation Administration, and U.S. Department of Agriculture – Animal and Plant Health Inspection Service. The report concluded that the best approach for owl mitigation is active relocation.
- Impacts on air quality have been addressed in the TOP 2050 SEIR and a Statement of Overriding Consideration has been issued regarding air quality impacts.

In addition, Ontario International Airport Administration office submitted a letter to the City dated January 18, 2023, (see Exhibit K, attached) providing background information regarding Burrowing Owls located on Airport properties. In summary, the letter states that the FAA-approved Wildlife Hazard Management Plan ("WHMP") identifies that Burrowing Owls are a wildlife hazard to Airport operations and must be abated. The letter also states

that creating a Burrowing Owl preserve on the Project site is inconsistent with the WHMP and therefore not feasible.

AGENCY/DEPARTMENT REVIEWS: Each City agency/department has been provided the opportunity to review and comment on the subject application and recommend conditions of approval to be imposed upon the application. At the time of the Decision preparation, recommended conditions of approval were provided and are appended to the attached Resolution as "Attachment B."

AIRPORT LAND USE COMPATIBILITY PLAN (ALUCP) COMPLIANCE: The California State Aeronautics Act (Public Utilities Code Section 21670 et seq.) requires that an Airport Land Use Compatibility Plan be prepared for all public use airports in the State; and requires that local land use plans and individual development proposals must be consistent with the policies set forth in the adopted Airport Land Use Compatibility Plan. On April 19, 2011, the City Council of the City of Ontario approved and adopted the ONT ALUCP, establishing the Airport Influence Area for Ontario International Airport, which encompasses lands within parts of San Bernardino, Riverside, and Los Angeles Counties, and limits future land uses and development within the Airport Influence Area, as they relate to noise, safety, airspace protection, and overflight impacts of current and future airport activity. As the decision-making body for the Project, the Planning Commission Board has reviewed and considered the facts and information contained in the Application and supporting documentation against the ONT ALUCP compatibility factors, including [1] Safety Criteria (ONT ALUCP Table 2-2) and Safety Zones (ONT ALUCP Map 2-2), [2] Noise Criteria (ONT ALUCP Table 2-3) and Noise Impact Zones (ONT ALUCP Map 2-3), [3] Airspace protection Zones (ONT ALUCP Map 2-4), and [4] Overflight Notification Zones (ONT ALUCP Map 2-5). As a result, the Planning Commission, therefore, finds and determines that the Project, when implemented in conjunction with the conditions of approval, will be consistent with the policies and criteria set forth within the ONT ALUCP.

COMPLIANCE WITH THE ONTARIO PLAN: The proposed Project is consistent with the principles, goals and policies contained within the Vision, Governance, Policy Plan (general plan), and City Council Priorities components of The Ontario Plan ("TOP"). More specifically, the goals and policies of TOP that are furthered by the proposed Project are as follows:

(1) City Council Goals.

- Invest in the Growth and Evolution of the City's Economy
- Maintain the Current High Level of Public Safety
- Operate in a Businesslike Manner
- Invest in the City's Infrastructure (Water, Streets, Sewers, Parks, Storm Drains and Public Facilities)

(2) Vision.

Distinctive Development:

- Commercial and Residential Development

  - Development quality that is broadly recognized as distinctive and not exclusively tied to the general suburban character typical of much of Southern California.

(3) Governance.

Decision Making:

- Goal G1: Sustained decision-making that consistently moves Ontario towards its Vision by using The Ontario Plan as a framework for assessing choices.

  - G 1-2. Long-term Benefit. We require decisions to demonstrate and document how they add value to the community and support the Ontario Vision.

(4) Policy Plan (General Plan)

Land Use Element:

- Goal LU-1 Balance: A community that has a spectrum of housing types and price ranges that match the jobs in the City and that make it possible for people to live and work in Ontario and maintain a quality of life.

  - LU-1.1 Strategic Growth. We concentrate growth in strategic locations that help create place and identity, maximize available and planned infrastructure, foster the development of transit, and support the expansion of the active and multimodal transportation networks throughout the City.

  - LU-1.6 Complete Community. We incorporate a variety of land uses and building types in our land use planning efforts that result in a complete community where residents at all stages of life, employers, workers, and visitors have a wide spectrum of choices of where they can live, work, shop and recreate within Ontario.

- Goal LU-2 Compatibility: Compatibility between a wide range of uses and a resultant urban patterns and forms.

  - LU-2.6 Infrastructure Compatibility. We require infrastructure to be aesthetically pleasing and in context with the community character.

Community Economics Element:

- Goal CE-1 Complete Community: A complete community that provides for all incomes and stages of life.

- CE-1.6 Diversity of Housing. We collaborate with residents, housing providers, and the development community to provide housing opportunities for every stage of life; we plan for a variety of housing types and price points to encourage the development of housing supportive of our efforts to attract business in growing sectors of the community while being respectful of existing viable uses.

- Goal CE-2 Placemaking: A City of distinctive neighborhoods, districts, corridors, and centers where people choose to be.

- CE-2.1 Development Projects. We require new development and redevelopment to create unique, high-quality places that add value to the community.

- CE-2.2 Development Review. We require those proposing new development and redevelopment to demonstrate how their projects will create appropriately unique, functional, and sustainable places that will compete well with their competition within the region.

- CE-2.4 Protection of Investment. We require that new development and redevelopment protect existing investment by providing architecture and urban design of equal or greater quality.

- CE-2.5 Private Maintenance. We require adequate maintenance, upkeep, and investment in private property because proper maintenance on private property protects property values.

Safety Element:

- Goal S-1 Seismic & Geologic Hazards: Minimized risk of injury, loss of life, property damage, and economic and social disruption caused by earthquake-induced and other geologic hazards.

- S-1.1 Implementation of Regulations and Standards. We require that all new habitable structures be designed in accordance with the most recent California Building Code adopted by the City, including provisions regarding lateral forces and grading.

Community Design Element:

- Goal CD-1 Image & Identity: A dynamic, progressive city containing distinct and complete places that foster a positive sense of identity and belonging among residents, visitors, and businesses.

- CD-1.1 City Identity. We take actions that are consistent with the City being a leading urban center in Southern California while recognizing, enhancing, and preserving the character of our existing viable neighborhoods.

- CD-1.2 Growth Areas. We establish Place Types in urban, mixed use, and transit-oriented areas to foster the City's identity as a premier community and require new development within each Place Type to incorporate prescribed urban patterns, forms, and placemaking priorities.

- CD-1.3 Existing Neighborhoods. We require the existing character of viable residential and non-residential neighborhoods be preserved, protected, and enhanced.

- Goal CD-2 Design Quality: A high level of design quality resulting in neighborhoods, public spaces, parks, and streetscapes that are attractive, safe, functional, human-scale, and distinct.

- CD-2.1 Quality Building Design and Architecture. We encourage all development projects to convey visual interest and character through:

  - Building volume, massing, and height to provide context-appropriate scale and proportion;
  - A true architectural style which is carried out in plan, section, and elevation through all aspects of the building and site design and appropriate for its setting; and
  - Exterior building materials that are articulated, high quality, durable, and appropriate for the architectural style.

- CD-2.5 *Streetscapes*. We design new and, when necessary, retrofit existing streets to improve walkability, bicycling and transit integration, strengthen connectivity, and enhance community identity through improvements to the public right-of-way such as sidewalks, street trees, parkways, curbs, street lighting and street furniture.

- CD-2.7 Sustainability. We collaborate with the development community to design and build neighborhoods, streetscapes, sites, outdoor spaces, landscaping, and buildings to reduce energy demand through solar orientation, maximum use of natural daylight, passive solar and natural ventilation, building form, mechanical and structural systems, building materials, and construction techniques.

- CD-2.8 Safe Design. We incorporate defensible space design into new and existing developments to ensure the maximum safe travel and visibility on pathways, corridors, and open space and at building entrances and parking areas by avoiding physically and visually isolated spaces, maintaining visibility and accessibility, and using lighting.

- CD-2.9 Landscape Design. We encourage durable, sustainable, and drought-tolerant landscaping materials and designs that enhance the aesthetics of structures, create and define public and private spaces, and provide shade and environmental benefits.

➢ CD-2.10 Parking Areas. We require all development, including single-family residential, to minimize the visual impact of surface, structured, and garage parking areas visible from the public realm in an aesthetically pleasing, safe and environmentally sensitive manner. Examples include:

- Surface parking: Shade trees, pervious surfaces, urban run-off capture and infiltration, and pedestrian paths to guide users through the parking field;
- Structured parking: facade articulation, screening, appropriate lighting, and landscaping; and
- Garage parking: providing access to single-family residential garages through alley access, recessing garages from the frontage to emphasize front doors or active living spaces.

➢ CD-2.11 Entry Statements. We encourage the inclusion of amenities, signage, and landscaping at the entry to neighborhoods, commercial centers, mixed use areas, industrial developments, and public places that reinforce them as uniquely identifiable places.

➢ CD-2.12 Site and Building Signage. We encourage the use of sign programs that utilize complementary materials, colors, and themes. Project signage should be designed to effectively communicate and direct users to various aspects of the development and complement the character of the structures.

➢ CD-2.13 Entitlement Process. We work collaboratively with all stakeholders to ensure a high degree of certainty in the efficient review and timely processing of all development plans and permits.

▪ Goal CD-5 Protection of Investment: A sustained level of maintenance and improvement of properties, buildings, and infrastructure that protects the property values and encourages additional public and private investments.

➢ CD-5.1 Maintenance of Buildings and Property. We require all public and privately-owned buildings and property (including trails and easements) to be properly and consistently maintained.

➢ CD-5.2 Maintenance of Infrastructure. We require the continual maintenance of infrastructure.

HOUSING ELEMENT COMPLIANCE: The Project is consistent with the Housing Element of the Policy Plan (general plan) component of The Ontario Plan, as the Project site is not one of the properties in the Housing Element Sites contained in Tables B-1 and B-2 (Housing Element Sites Inventory) of the Housing Element Technical Report.

ENVIRONMENTAL REVIEW: The Application is a project pursuant to the California Environmental Quality Act (Public Resources Code Section 21000 et seq.) ("CEQA") and

an Initial Study/Addendum has been prepared to determine possible environmental impacts. Although the proposed project could have a significant effect on the environment, because all potentially significant effects have been analyzed adequately in an earlier Certified EIR, and have been avoided or mitigated pursuant to that earlier Certified EIR, including revisions or mitigation measures that are imposed on the proposed project, nothing further is required. The Project will introduce no new significant environmental impacts beyond those previously analyzed in the Certified EIR, and all mitigation measures previously adopted by the Environmental Impact Report, are a condition of project approval and are incorporated in the Initial Study/Addendum (see Attachment A—Initial Study/Addendum to the related resolution).

TECHNICAL APPENDIX:

Surrounding Zoning and Land Use:

	Existing Land Use	***Policy Plan Designation***	***Zoning Designation***	***Specific Plan Land Use***
Site	Vacant	Industrial	California Commerce Center Specific Plan	Light Industrial
North	Light Industrial	Industrial	California Commerce Center Specific Plan	Rail Industrial
South	Light Industrial	Industrial	California Commerce Center Specific Plan	Rail Industrial
East	Light Industrial, Well Site	Industrial	California Commerce Center Specific Plan	Light Industrial, Rail Industrial
West	Airport	Airport, Industrial	Ontario International Airport, United Parcel Service Specific Plan	Airport

General Site & Building Statistics

Item	***Proposed***	***Min./Max. Standard***	***Meets Y/N***
Project Area:	216.39 gross acres (196.83 net acres)	1 acre (Min.)	Y
Lot/Parcel Size:	9.71 acres to 40.64 acres	1 acre (Min.)	Y
Building Area:	204,510 SF to 926,100 SF	N/A	Y
Floor Area Ratio:	0.35 to 0.55 Overall: 0.50	0.55 (Max.)	Y
Building Height:	48 FT	55 FT (Max.) Subject to ALUCP	Y

Exhibit A: PROJECT LOCATION MAP

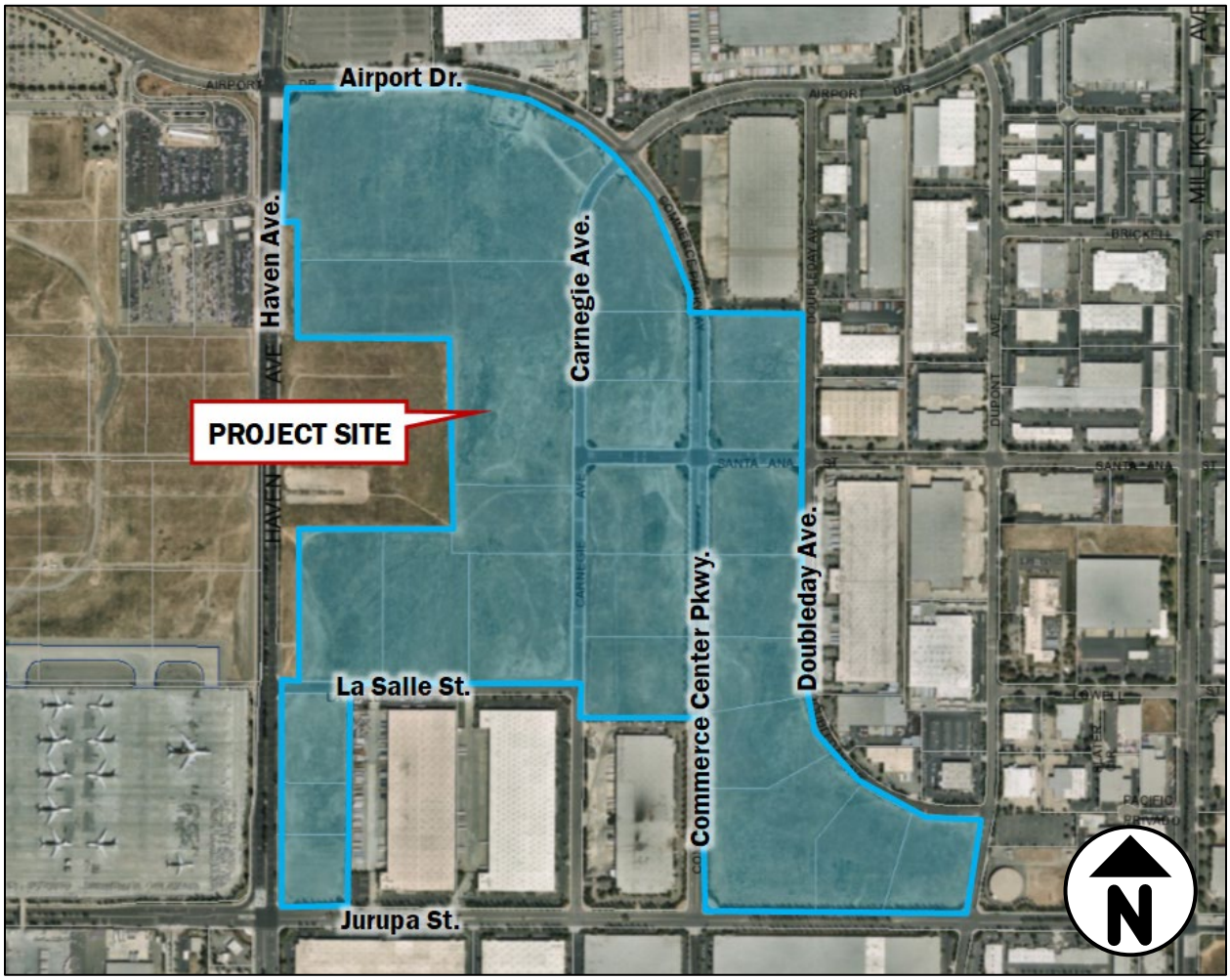


Exhibit B: SITE PLAN

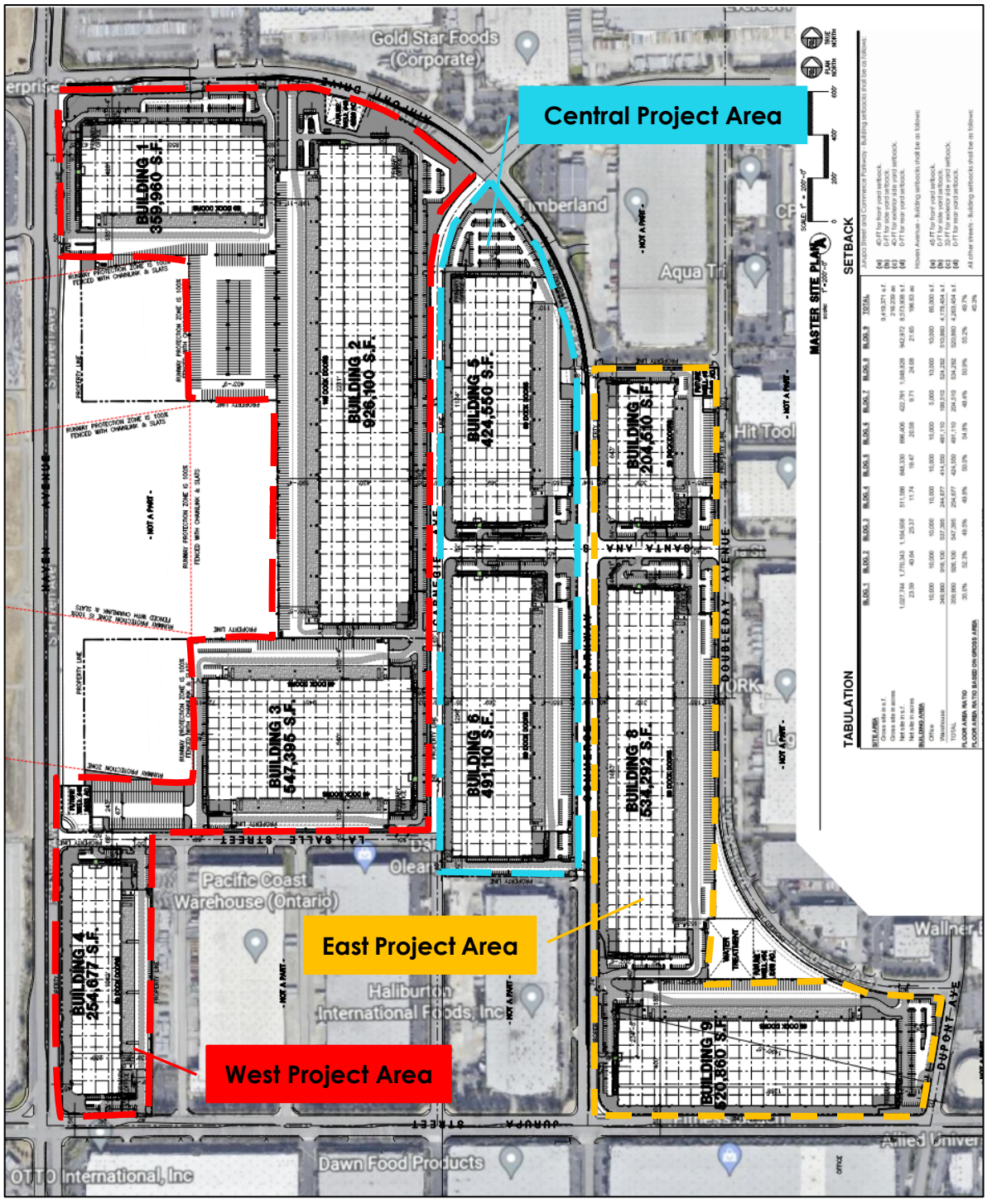
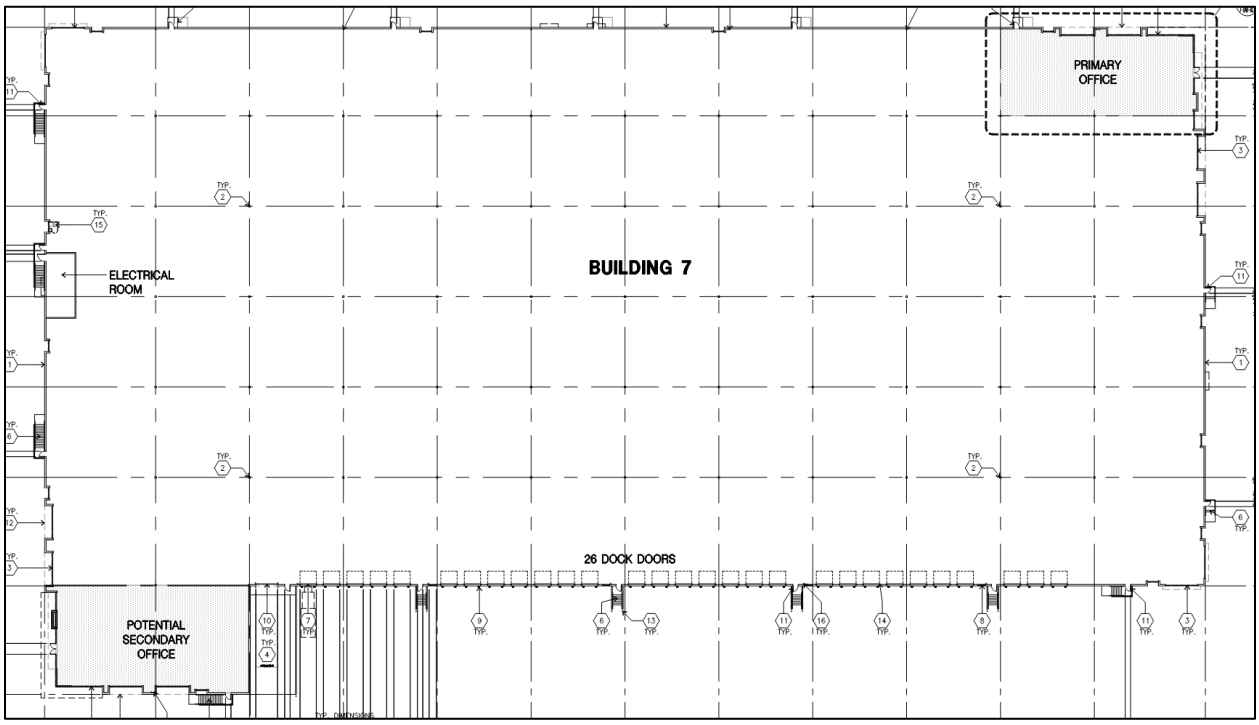


Exhibit C: FLOOR PLAN



Floor Plan Example

Exhibit D: EXTERIOR ELEVATIONS

Building 1

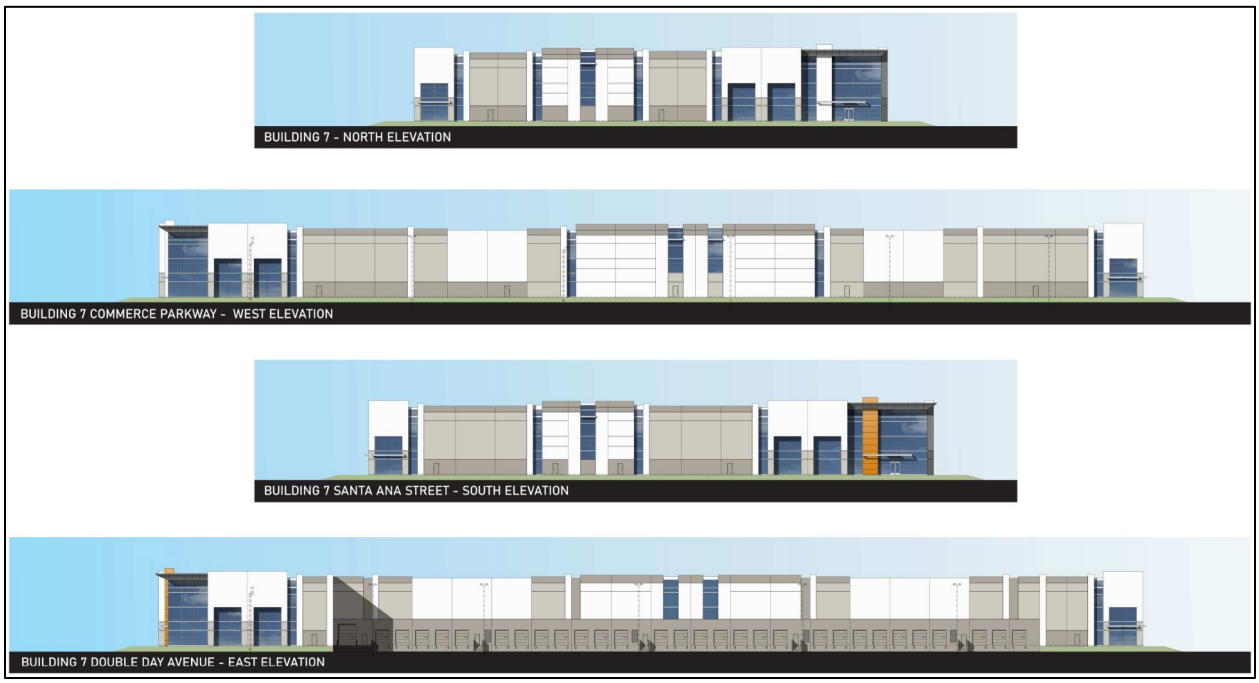
Building 2

Building 3

Building 4

Building 5

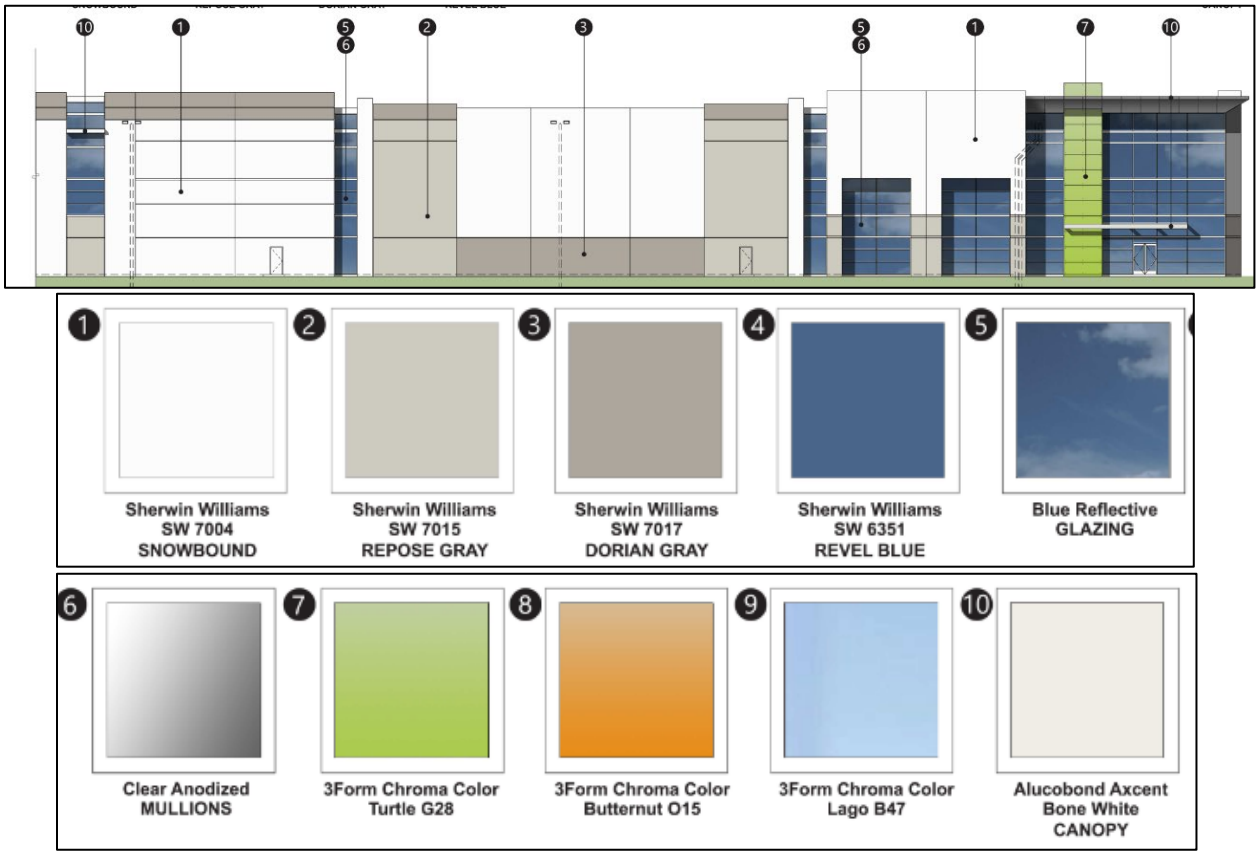
Building 6



Building 7

Building 8

Building 9



Proposed Building Materials

Architectural Rendering – Daytime View

Architectural Rendering – Evening View

Exhibit E: TYPICAL LANDSCAPE PLAN

Exhibit F: SITE PHOTOS

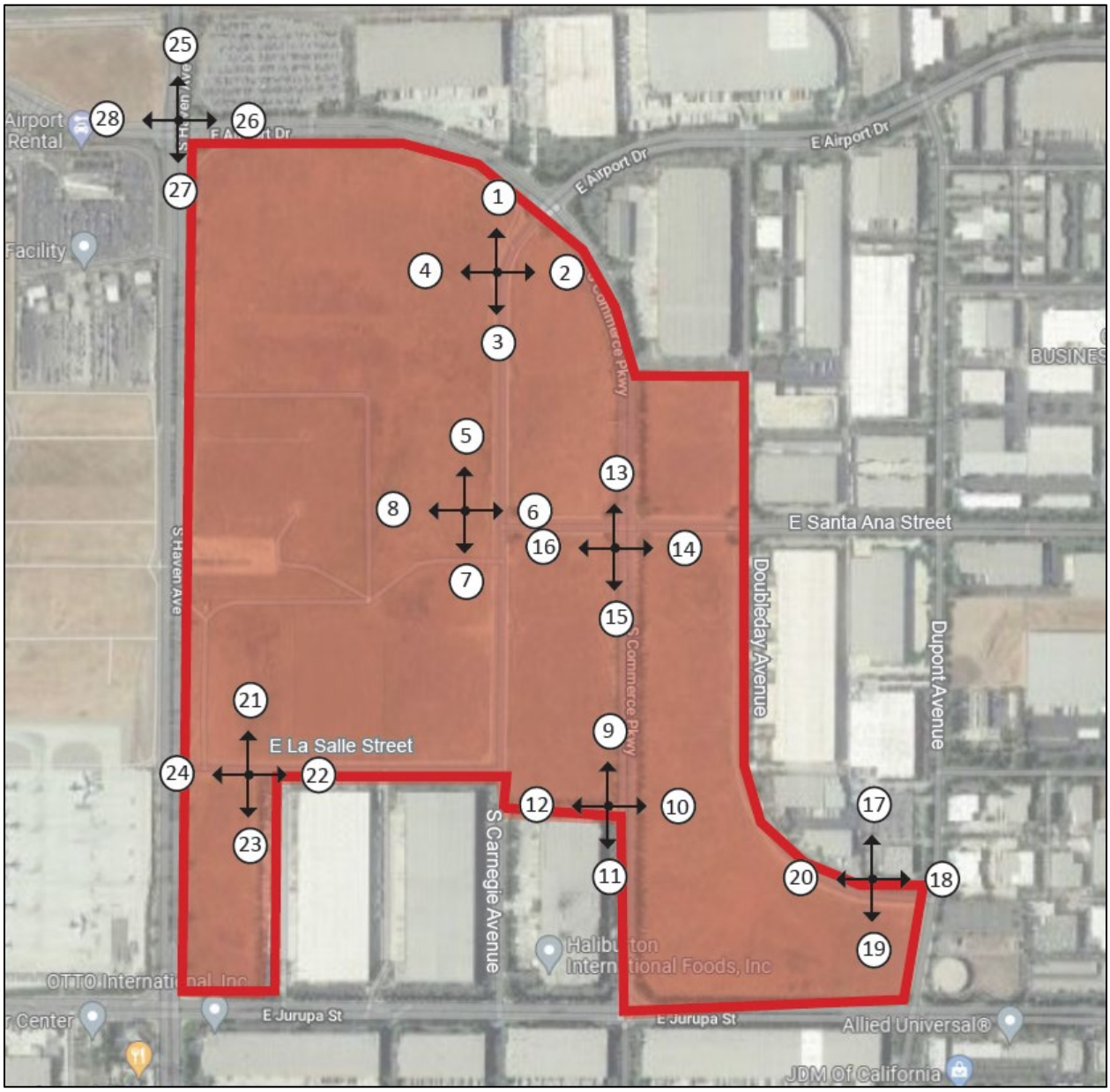
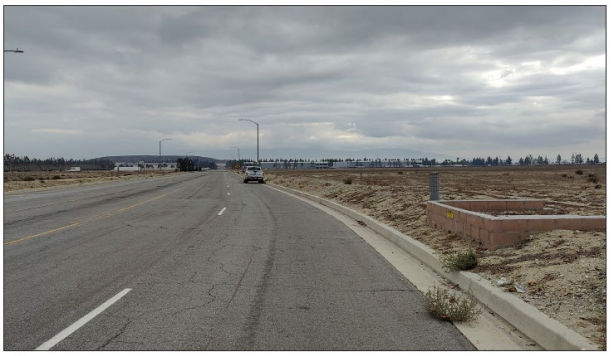


Photo Key Map

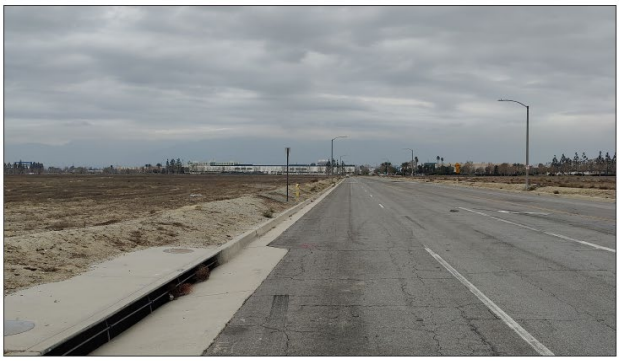
1 Photo looking north along S Carnegie Ave between E Airport Drive and E Santa Ana Street.



3 Photo looking south along S Carnegie Ave between E Airport Drive and E Santa Ana Street.

2 Photo looking east along along S Carnegie Ave between E Airport Drive and E Santa Ana Street.

4 Photo looking west along S Carnegie Ave between E Airport Drive and E Santa Ana Street.

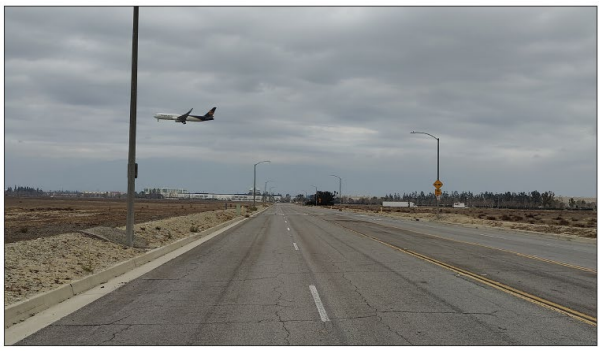


5 Photo looking north from S Carnegie Ave near Santa Ana Street.

7 Photo looking south from S Carnegie Ave near Santa Ana Street.

6 Photo looking east from S Carnegie Ave near Santa Ana Street.

8 Photo looking west from S Carnegie Ave near Santa Ana Street.



9 Photo looking north along S Commerce Way near E La Salle Street.

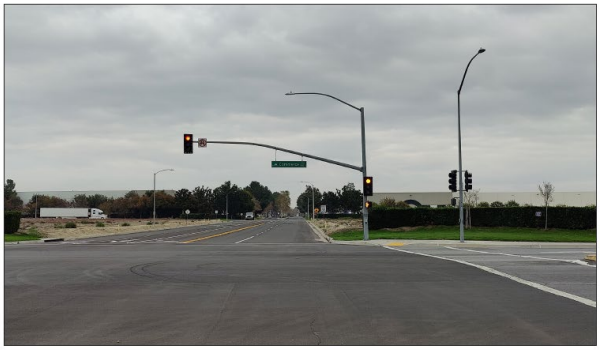
11 Photo looking south along S Commerce Way near E La Salle Street.

10 Photo looking east along S Commerce Way near E La Salle Street.

12 Photo looking west along S Commerce Way near E La Salle Street.

13 Photo looking north from S Commerce Parkway south of E Santa Ana Street.

15 Photo looking south from S Commerce Parkway south of E Santa Ana Street.

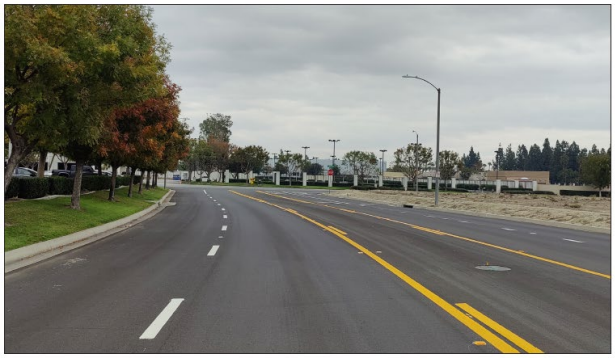


14 Photo looking east from S Commerce Parkway south of E Santa Ana Street.

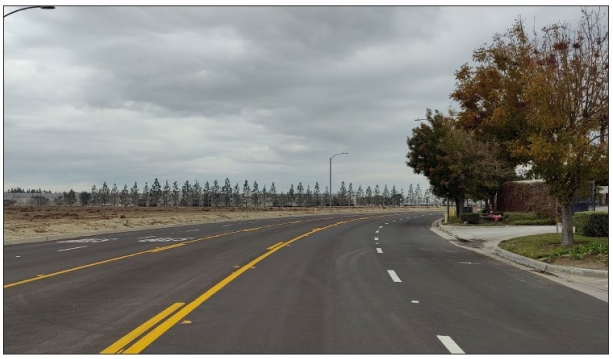
16 Photo looking west from S Commerce Parkway south of E Santa Ana Street.

17 Photo looking north from Doubleday Avenue just west of Dupont Avenue.

19 Photo looking south from Doubleday Avenue just west of Dupont Avenue.



18 Photo looking east from Doubleday Avenue just west of Dupont Avenue.



20 Photo looking west from Doubleday Avenue just west of Dupont Avenue.

21 Photo looking north from E La Salle Street just east of S Haven Avenue.

23 Photo looking south from E La Salle Street just east of S Haven Avenue.

22 Photo looking east from E La Salle Street just east of S Haven Avenue.

24 Photo looking west from E La Salle Street just east of S Haven Avenue.

25 Photo looking north from the cross section of S Haven Avenue and E Airport Drive.

27 Photo looking south from the cross section of S Haven Avenue and E Airport Drive.

26 Photo looking east from the cross section of S Haven Avenue and E Airport Drive.

28 Photo looking west from the cross section of S Haven Avenue and E Airport Drive.

Exhibit G: ONT SAFETY ZONES

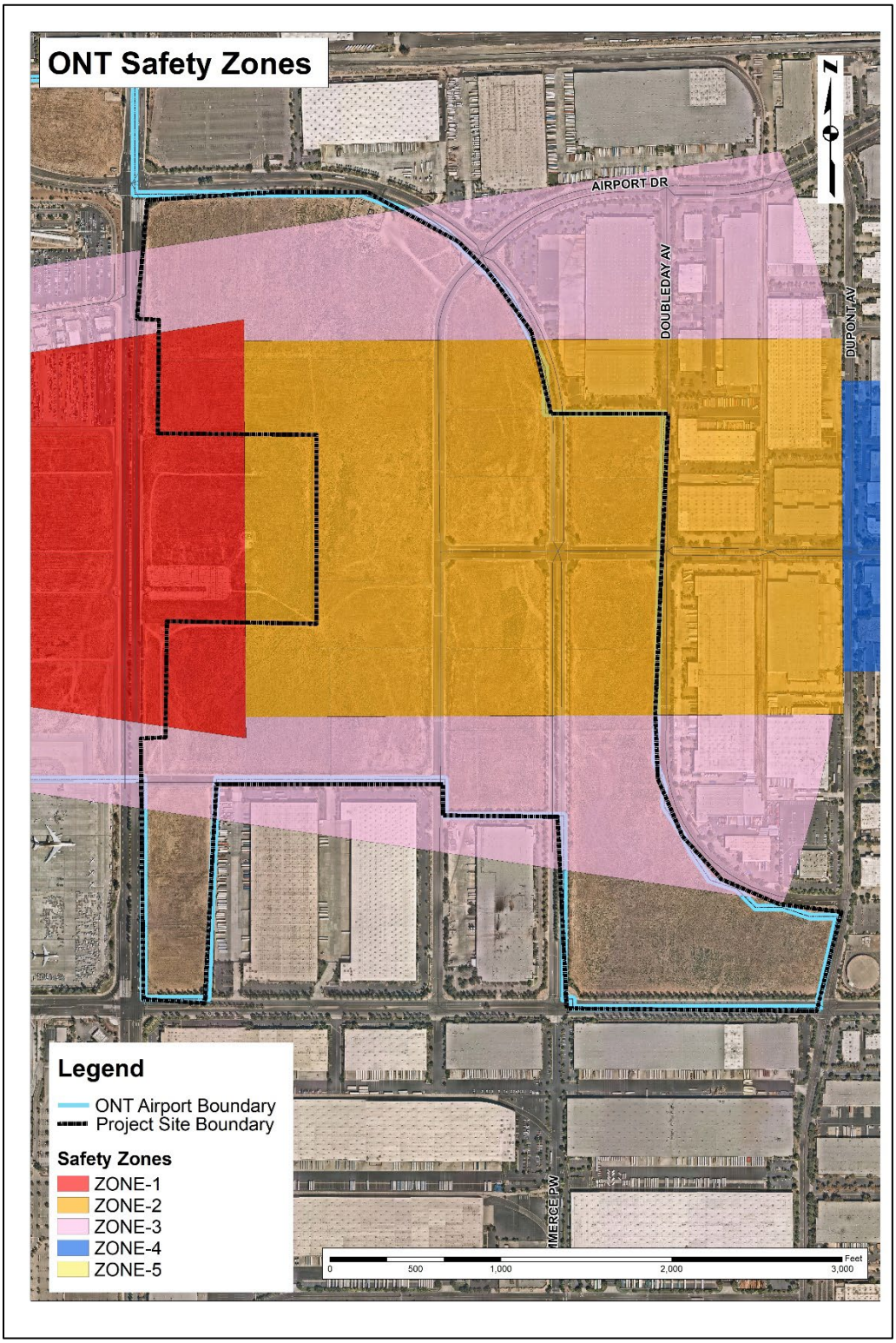
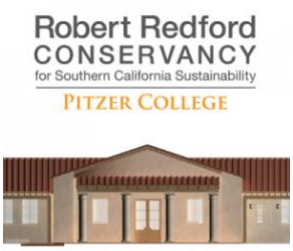
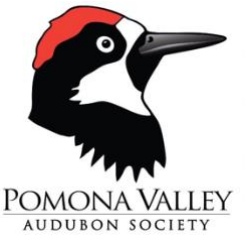


Exhibit H: PUBLIC COMMENTS RECEIVED

(Exhibit follows this page)





January 4, 2023

CITY OF ONTARIO DEVELOPMENT ADVISORY BOARD MEETING
1/4/23

Re: Agenda Item B at the January 4, 2023
Development Advisory Board Meeting

Agenda Item B Summary: ENVIRONMENTAL ASSESSMENT AND DEVELOPMENT PLAN REVIEW FOR FILE NO. PDEV21-047: A public hearing to consider a Development Plan (File No. PDEV21-047) to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 197.74 acres of land generally located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, within the IL (Light Industrial) land use district of the California Commerce Center Specific Plan. An Addendum to The Ontario Plan 2050 Environmental Impact Report (State Clearinghouse No. 2021070364), which was certified by the City Council on August 16, 2022, was prepared. This application introduces no new significant environmental impacts. The proposed project is located within the Airport Influence Area of Ontario International Airport and was evaluated and found to be consistent with the policies and criteria of the Ontario International Airport Land Use Compatibility Plan; (APNs: 0211-222-47, 0211-222-48, 0211-222-52, 0211-222-53, 0211-222-54, 0211-222-55, 0211-222-56, 0211-232-04, 0211-232-05, 0211-232-06, 0211-232-07, 211-232-011, 0211-232-12, 0211-232-13, 0211-232-14, 0211-232-15, 0211-232-16, 0211-232-17, 0211-232-18, 0211-232-19, 0211-232-20, 0211-232-44, 0211-232-45, and 0211-232-46) submitted by McDonald Property Group. Planning Commission action is required. 1. CEQA Determination Motion to recommend Approval / Denial of an Addendum to a previously approved EIR 2. File No. PDEV21-047 (Development Plan) Motion to recommend Approval/Denial

Dear City of Ontario Development Advisory Board:

We write to oppose the Development Plan (File No. PDEV21-047) to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 197.74 acres of land generally located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, within the IL (Light Industrial) land use district of the California Commerce Center Specific Plan.

First, we oppose the use of a CEQA Determination Motion to streamline this project's approval process. The proposed land uses are environmentally detrimental and introduce significant environmental impacts. To avoid creating an individualized EIR in this case—especially due to the wholesale habitat destruction of the increasingly rare burrowing owl community—is arguable in court. Burrowing owl considerations were not adequately addressed in TOP 2050, as well as within the documents associated with this agenda item. In addition, since TOP 2050, new data have come forward through the recently released and updated Warehouse CITY tool, which allows municipalities to calculate their cumulative warehouse impact.

Case law supports countering a city's ability to utilize a CEQA Determination Motion in certain cases. In Friends of the East Sacramento Grid v. City of Sacramento (2017), the court found that the city's approval of an addendum to a previously approved EIR was improper because the addendum did not adequately address the potential environmental impacts of the proposed project. The court stated that "the addendum must address new information that was not considered in the original EIR and must explain why the new information does not require any changes to the EIR's conclusions or mitigation measures."

Additional environmental case law counters a city's ability to utilize a CEQA Determination Motion, including but not limited to:

1. Save Tara v. City of West Hollywood (2002): In this case, the California Court of Appeals ruled that the city of West Hollywood violated CEQA when it failed to consider the impacts of a proposed development on a historic site. The court held that the city's reliance on a CEQA Determination Motion to approve the project was not sufficient, as the motion did not adequately address the potential impacts on the historic site.

2. Santa Monica Mountains Conservancy v. City of Malibu (2000): In this case, the California Court of Appeals ruled that the city of Malibu violated CEQA when it approved a development project without adequately analyzing the potential impacts on the environment. The court held that the city's reliance on a CEQA Determination Motion to approve the project was not sufficient, as the motion did not adequately address the potential environmental impacts.

3. Friends of the Eel River v. Sonoma County Water Agency (1999): In this case, the California Court of Appeals ruled that the Sonoma County Water Agency violated CEQA when it approved a water project without adequately analyzing the potential impacts on the environment. The court held that the agency's reliance on a CEQA Determination Motion to approve the project was not sufficient, as the motion did not adequately address the potential environmental impacts.

In this case, the use of a CEQA Determination Motion is subject to legal challenge because the addendum to the TOP 2050 does not adequately address the potential environmental impacts. This includes lack of substantive analysis regarding environmental impacts, and the interrelationship between cumulative impact and the incremental impact of the project—issues that were already weak within Ontario's TOP 2050 and to which some of the signatories objected to at that time. In addition are erroneous conclusions

regarding the FAA's stance on the burrowing owl and legitimacy of considering burrowing owl habitat conservation within the Ontario Airport Sphere of Influence, which we outline below.

We also hereby incorporate previous opposition letters to TOP 2050. Opposition letters to a previously approved general plan may be used to oppose a land use plan in which a CEQA Determination motion is used. In the case of Friends of the Eel River v. North Coast Railroad Authority (2005), the court considered opposition letters and other evidence submitted by environmental groups who were challenging a land use plan that included the construction of a railroad. The court found that the opposition letters and other evidence were relevant and could be considered in determining whether the land use plan complied with CEQA.

In addition, loss of Burrowing Owl Habitat and Warehouses can be considered CEQA Topics of Controversy, which limits a city's ability to utilize a CEQA Determination Motion.

Under the California Environmental Quality Act (CEQA), a "topic of controversy" is defined as an issue that has been the subject of public disagreement or debate. This might include issues related to the environmental impacts of a proposed project, or the need for the project in the first place.

This land use decision involves two topics of controversy within the City of Ontario. The first is the eviction of burrowing owls and destruction of their historic habitat, which has been debated for years and which has included media coverage, litigation, and promised mitigation. The second is continued warehouse construction in Ontario, which has been the subject of recent controversy, lawsuits, and media coverage.

CEQA Determination Motions are used by public agencies to determine whether a project is exempt from CEQA review, or if an environmental impact report (EIR) is required. If a topic of controversy exists regarding a proposed project, this can counter the use of a CEQA Determination Motion.

For example, if a public agency is considering a proposed project that would have significant environmental impacts—in this case the building of a warehouse, generation of additional pollution and GHGs, and loss of habitat for a sensitive species—and there is significant public disagreement or debate over whether the project should be allowed to proceed, it can be considered a topic of controversy. In this case, the use of a CEQA Determination Motion to exempt the project from CEQA review is inappropriate because the topic of controversy requires public input and further environmental analysis and consideration through the CEQA process.

Piggy backing specific land use decisions on a general plan update such as TOP 2050 can also limit the ability of elected officials to make decisions on individual land use issues. The general plan may be adopted by a city council or planning commission, but individual land use decisions may be made by a different body or process. This can lead to a disconnect between the overall vision and goals of the general plan and the specific land use decisions being made, potentially undermining democratic involvement in the decision-making process.

In addition, the idea that an EIR is unnecessary due to the passage of TOP 2050 does not support the democratic spirit of municipal decision-making in which public voice is considered. TOP 2050 was an overwhelming process that took place when the Ontario residents were also embroiled in the historic redistricting process. The use of a CEQA determination can compromise democratic involvement in municipal decision making in a few ways. First, it may not allow for adequate public input and participation. The general plan update process may not be as well-publicized as a standalone land use decision, leading to less public awareness and engagement—and certainly less engagement in a decision based on over 3000 pages of materials made public at one of the busiest times of the year—and released

on a federal holiday (Jan 1, with many offices closed on Jan 2) when people are most distracted. This left even less time than the three days typically accorded for review in the City of Ontario. Additionally, the approval process approached in this way will not provide the same opportunities for public comment and participation as a standalone land use decision.

There are significant impacts that can and should be mitigated but have not been properly considered. The City may not adopt a statement of overriding consideration to approve a project where feasible, less environmentally damaging alternatives exist and feasible mitigation measures have not been considered or adopted.

We recommend that the DAB not forward this to the Planning Commission without insisting that appropriate environmental review and associated public comment process are adopted, and that feasible alternatives, including alternative project plans, are considered.

The "policy of the state" reflected in the California Environmental Quality Act is that projects with significant environmental impacts *may not* be approved "if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects . . ." (Pub. Resources Code § 21002.) More specifically, CEQA states:

> Pursuant to the policy stated in Sections 21002 and 21002.1, no public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out
> unless …:
>
> (a). . . (3) Specific economic, legal, social, technological, or other considerations . . . make infeasible the mitigation measures or alternatives identified in the environmental impact report. (Pub. Resources Code § 21081.)
>
> It is settled law that:
>
> CEQA contains *substantive* provisions with which agencies must comply. The most important ... is the provision requiring agencies to deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects.
>
> (*Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 30, 41, italics added.) Indeed, in a case decided on July 7, 2006, a court analyzed the "substantive mandate" of CEQA, then set aside a college campus master plan project because there was not substantial evidence to support a college district's findings of economic and legal infeasibility of mitigation. (*County of San Diego v. Grossmont-Cuyamaca Community College* (2006) –Cal. App.--, slip opinion, pp. 18-29.)
>
> "Feasible" is defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (Pub. Resources Code § 21061.1.) The definition *does not* require the agreement of the project applicant. "Each public agency shall mitigate or avoid the significant effects on the environment of projects that it carries out or approves *whenever* it is feasible to do so." (*Lincoln Place Tenants Ass'n v. City of Los Angeles* (2005) 130 Cal.App.4th 1491, 1508, emphasis added.)

This project has impacts that can and must be mitigated due to burrowing owl habitat destruction, GHG emissions, emission of pollutants, and increased truck traffic. These are inappropriately labeled as

unavoidable, but they in fact may be avoided by properly adopting mitigation measures and alternatives to the existing plan.

Given the points above, we call for this item to be halted until the DAB can guarantee the City's ability to take into account community voice, conduct environmental impact review of loss of habitat and plans for mitigation, and consider significant harms to communities that reside in proximity of the project.

Burrowing Owls were once numerous in Ontario and Chino but due to widespread development that did not protect biological resources, the owls are fast disappearing. We need action now to protect Burrowing Owl habitat and allow these little birds to continue to live on in Ontario as they have for hundreds of years. The presence of a thriving population of Burrowing Owls in Ontario is a biological asset for the community and a chance for children and all of us to see the owls close by in their native habitat. The people of Ontario need protection for their native species, not more warehouses. Wouldn't it be better if Ontario children could tell the story of how their city protected this vulnerable species?

The burrowing owl is perhaps the signature species that makes Ontario unique—so signature, in fact, that the entire airport could be named after and themed as the Burrowing Owl Ontario Airport. Conserving this important sensitive species—that has long been on the cusp of endangered species status—would position Ontario as a leader in innovative conservation strategies. This would open opportunities for the city to develop ecotourism opportunities, interpretive, interactive displays, artwork, and educational stations within the airport to celebrate the local owl population. Including the Burrowing Owl habitat east of the Airport could be part of the Aiport's plan for greening and electrification.

Some counterbalance to the overwhelming focus on industrial development is needed if the city plans to live up to its carbon and green promises in the TOP 2050, its prior promises of Burrowing Owl mitigation, its motto of a balanced city, and to prepare itself for a climate-compromised future. You simply can't have it both ways. Preservation of burrowing owl habitat would do wonders for Ontario's reputation as a green city. Destruction of habitat would simply further Ontario's reputation as being hungry for warehouses at all costs.

Cumulative Impact—Air Quality and Habitat Loss

According to the Ontario International Airport's 2019 Environmental Management Plan, the airport generated approximately **79,000 metric tons of greenhouse gas emissions from cargo and passenger aircraft in 2018**. This accounted for approximately 76% of the airport's total greenhouse gas emissions for that year. The majority of these emissions were from jet fuel consumption during aircraft takeoff and landing operations. The airport plans to implement various initiatives to reduce its greenhouse gas emissions, including the use of alternative fuels, electrification, and the implementation of energy-efficient technologies. However, the significant increase in air travel in recent years has led to an overall increase in greenhouse gas emissions from the airport (Ontario International Airport, 2019).

According to the Ontario International Airport Expansion Project Environmental Impact Report, the expansion of logistics operations at the airport is expected to result in an **increase in greenhouse gas emissions of approximately 36,000 metric tons of carbon dioxide equivalent per year.** This increase is primarily due to increased air traffic and vehicle activity associated with the expansion, as well as the energy consumption of the expanded facilities. The EIR states that these emissions will be offset through the implementation of various mitigation measures, including the use of renewable energy sources and the implementation of energy efficiency measures (Ontario International Airport Expansion Project Environmental Impact Report, 2018). Despite efforts to green the Airport, flights will continue to be dirty, thus expanding GHG heavy infrastructure into the future.

According to researchers such as B. O'Neill and L. Bunting, industrial warehouses contribute significantly to greenhouse gas emissions and are a major contributor to climate change. The transportation of goods to and from warehouses requires a significant amount of energy, resulting in high levels of pollution and negative impacts on environmental and human health.

We request that the City of Ontario consider both the cumulative impact of all Ontario warehouses and their relationship to the incremental impact of the project, as outlined below, and as per CEQA requirements, in the most robust way possible.

In general, Environmental Impact Reports (EIR) prepared under the California Environmental Quality Act (CEQA) have not sufficiently analyzed the cumulative impacts that continued industrial development have on the health of Inland residents. The IE has been and continues to remain on the EPA's Nonattainment status for air quality (PM and Ozone). Municipal leaders choose to allow developers to perpetuate the nonattainment status despite the rules of the Clean Air Act 42U.S.C 7401 et seq, which requires them to mitigate projects to achieve attainment status. Developers have chosen to ignore the cumulative impacts of all warehouses in the region. Developers and municipal leaders accept language of "significant and unavoidable impacts," with little regard for alternative plans. Instead, they focus on the incremental impact a specific project has towards increasing "severe and extreme" nonattainment status or increased cancer risk. In other words, because our air quality is already in the worst possible condition, a little more won't hurt.

According to State CEQA Guidelines Section 15355, projects must analyze cumulative impacts at a broader scale, in addition to individual impacts—in other words, they must consider the result of past, present, and future projects. This project and TOP 2050 have failed to consider the cumulative pollution burden of past, current, and future projects and the inequitable zoning that has resulted in historical conditions of environmental injustice. Garcia et. al. conclude that, when viewed together with past, current, and future projects, "a project's contribution may be **individually and incrementally insignificant but would make a considerable contribution to the overall cumulative impact and be cumulatively significant when combined with existing conditions.** The existing, often hazardous, environmental conditions in DACs must be taken into account when evaluating cumulative pollution burden impacts."

The focus on industrial development has also led to cumulative habitat loss within the City of Ontario for burrowing owls. Industrial development also often comes at the expense of other types of development, such as affordable housing or green spaces, leading to negative impacts on the overall livability of a city. According to SCAG's recent Economic Analysis, continued investment in logistics in the Inland Empire may not be good for the economy because it can lead to a reliance on low-wage, low-skill jobs and a lack of diversification in the economy. Logistics jobs tend to be lower paying and have less room for advancement compared to other industries, which can lead to a stagnant or declining wage growth for workers. Additionally, reliance on logistics can make the region vulnerable to economic downturns or shifts in global trade patterns, as the Inland Empire is heavily dependent on the logistics industry. Diversifying the economy and investing in other industries can help to create more sustainable, higher paying jobs and reduce the risk of economic instability.

The global supply chain is becoming increasingly unstable due to factors such as trade tensions and natural disasters, leading to uncertainty and risk for investors in industrial warehouses. Authors such as J. Glaser and J. Rabin have argued that the proliferation of industrial warehouses in cities has negative consequences for local communities. These warehouses often bring with them noise and air pollution, as well as traffic congestion, which can disrupt the quality of life for residents. Right now, due to problems at the Ports of LA and Long Beach, goods are being increasingly re-routed to East Coast or Gulf Coast

ports. The current and future precarity of global logistics does not justify building more warehouses in Ontario; in fact, the opposite is true. Alternative plans must be considered.

Importance of Biodiversity for Local Municipalities

Biodiversity helps to maintain the integrity and stability of ecosystems. Different species interact with one another in complex ways, and the loss of one species can affect the populations of other species. There is a growing body of evidence that suggests that maintaining biodiversity is important for local municipalities. For example, a study by Daily et al. (1997) found that areas with high levels of biodiversity had more stable and productive ecosystems, which provided a range of benefits to local communities. Another study by Balmford et al. (2002) found that the loss of biodiversity was associated with a decline in the provision of ecosystem services, such as the regulation of water quality and the control of pests and diseases.

There is intrinsic value for a municipality to maintain a species such as the burrowing owl nearing endangered status. The burrowing owl is an excellent animal protagonist that is well known across the country. The reputation of the City of Ontario is at risk if its leaders choose to green light yet another warehouse—far from an endangered species in this neck of the woods—instead of doing all it can to protect this cute, puffy feathered, vulnerable, unique creature and longtime friend to Ontario schoolchildren.

Burrowing owls are a sensitive species that are at risk of extinction due to habitat loss and human disturbance (US Fish and Wildlife Service, 2020). Protecting this species is important for maintaining biodiversity and the overall health of the ecosystem. The benefits of having burrowing owls on airport land include their role as natural pest controllers and their potential to attract ecotourism.

According to the U.S. Fish and Wildlife Service, there are currently 12 airports in the United States that have implemented burrowing owl habitat conservation programs (U.S. Fish and Wildlife Service, 2020). These programs aim to protect and enhance the habitat of the burrowing owl, a species that is classified as threatened in some states and endangered in others (U.S. Fish and Wildlife Service, 2020).

The Federal Aviation Administration (FAA) does not list the burrowing owl as a species that poses a danger to aircraft. In fact, the FAA actively promotes the conservation of burrowing owls and other wildlife at airports through its Airport Wildlife Hazard Management program (Federal Aviation Administration, 2019). This program provides guidance and resources for airport operators to develop and implement effective wildlife management strategies that prioritize safety, while also promoting the conservation of wildlife on and around airport property (Federal Aviation Administration, 2019). The FAA also recognizes the importance of conserving wildlife at airports, and takes steps to ensure that safety is prioritized while also promoting the conservation of species like the burrowing owl (Federal Aviation Administration. (2019). Airport wildlife hazard management. Retrieved from https://www.faa.gov/airports/airport_safety/wildlife/ U.S. Fish and Wildlife Service (2020), and Burrowing owl (Athene cunicularia). Retrieved https://www.fws.gov/southeast/wildlife/bird/burrowing-owl/).

There are at least four significant negative effects on the environment that will be caused by and not mitigated by the current plan.

The Ontario Plan mitigation for Burrowing Owls has not been successful and is not an approach to be used for the owls east of Haven Avenue. The Ontario Plan mitigation started around 2007. From 2007 on, the City of Ontario collected fees from developers to mitigate the loss of large sections of habitat. The idea was that the funds would be used to purchase mitigation land.

The City has a mitigation program in place to compensate for BUOW impacts in the former Annexation Area 163. This property would contribute substantially success of that program. None of the money that the City has collected in mitigation fees has been spent for Burrowing Owl mitigation. It is particularly troubling that this project to destroy further habitat is being done based on similar promises that have had so many years for lack of follow through.

Two, another significant negative effect of translocating owls to sites far from their native land is the loss of distinct biodiversity. Kelly Barr, Kristin Ruegg and others have found genetically distinct populations of Burrowing Owls that are a distance apart even within California (Alvarado, Bossu et al., 2022). Translocating owls 30 to 40 miles from their natal site risks mixing the distinct groups. Possible advantages of the genetic differences that might increase survivability in a particular location would be lost to the owls.

Three, Burrowing Owls need to have other sites nearby within the usual range of juvenile dispersion (from .5 to 13 miles) so young adult owls can avoid inbreeding (Rosenberg, Gervais, & Trulio, 2007). The East of Haven Ontario Burrowing Owls are an average of 7 to 8 miles from several Burrowing Owl nesting sites in the Chino area. Thus, the Airport area owls make it possible for a healthy exchange of young adults finding mates between the two sites. Loss of the East of Haven site could seriously undermine the viability of what are now healthy populations of Burrowing Owls in Chino, contributing to the loss of all Burrowing Owls from the Pomona Valley.

Four, mitigation translocation for burrowing owls is an option that suits the preferences of land developers, but it does not provide a superior life for the owls. In fact, owls that are translocated from their home habitat are subject to higher mortality than those who are protected on site or nearby (Hennessey et al., 2022). The removal of all the OIA owls will be a significant blow to the possibility of success of owls in the area.

Contrary to the conclusion of the analysis of the DAB decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

In fact, Helix Environmental's Biological Resources report also states that leaving Burrowing Owls on site is the best option for the owls. Unfortunately, the report goes on to reject that option for invalid reasons such as the mistaken notion that Burrowing Owls are a hazard to aviation.

Contrary to the statements in the Helix Environmental report, Burrowing Owls are not a hazard to aviation. They are small birds that fly close to the ground and do not fly in flocks. According to the FAA birdstrike data, there were 21 reports of airstrikes involving these owls at OIA since 2008. Eight turned out to be other wildlife or the species were unknown; for eleven a carcass or wing was found but no airstrike was reported by pilots; and two involved a Burrowing Owl strike but no damage was reported. In all these years, there were **no instances** of a Burrowing Owl causing damage to a plane. If Burrowing Owls that live right next to the runways are not a threat to aviation, how much less a threat are the owls that live east of Haven.

Another argument is that Burrowing Owl attract larger raptors that might cause damage to a plane. This problem can be addressed through a raptor control program, something that all airports need to have in place, whether or not they have Burrowing Owls near their property. Many other airports protect plans from large raptors using control strategies that do not kill or harm or trap the raptors.

Finally, none of the Helix Environmental statements that the FAA will not allow mitigation for Burrowing Owls near an airport are backed up with reference to FAA regulations or communications. If

you look at the FAA regulations that discuss Wildlife Hazards, you will find that Burrowing Owls are not mentioned. If Burrowing Owls are NOT a hazard to aviation, then owl mitigation can be done on the boot property.

Please find a way to keep Airport Burrowing Owls in Ontario with a professionally managed and properly endowed preserve for the owls on site or nearby. Please also consider whether this is the time to continue to expand warehouse infrastructure, as it is encroaching nearer to residential communities at a time when we have very little or no time to reverse the negative effects of climate change, rather than enhance them, as this plan is doing. Do this for our children, grandchildren, schoolchildren, and all the residents of Ontario who care about their environment and who want to make Ontario the special place we all know it can be.

Sincerely,

Susan A. Phillips, Director
Robert Redford Conservancy for Southern California Sustainability
Professor of Environmental Analysis, Pitzer College

Brian Elliott, Conservation Director
Pomona Valley Audubon Society

Dan Silver, Executive Director
Endangered Habitats League

Claire Schlotterbeck, Executive Director
Hills For Everyone

Kim Floyd, Conservation Chair
Sierra Club San Gorgonio Chapter

Susan Sheakley, Chair, Conservation Committee
Sea and Sage Audubon Society

Ana Gonzalez
Executive Director, Center for Community Action and Environmental Justice

Cynthia Robin Smith, Chair
Diamond Bar - Pomona Valley Sierra Club Task Force, Angeles Chapter

Randy Bekendam, Executive Director
Southern California Agricultural Land Foundation

Lois Sicking Dieter
Inland Valley Advocates for the Environment

Anthony J. Noriega
Director, District 5 League of United Latin American Citizens
LULAC de Inland Empire

From: Ana Rodriguez
To: Planning Director
Subject: Fwd: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Tuesday, January 3, 2023 5:45:51 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely,
Ana Rodriguez

From:	Barbara Barton
To:	Planning Director
Subject:	Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting. PUBLIC COMMENTS FROM FRIENDS OF THE BUOWS
Date:	Tuesday, January 3, 2023 5:42:53 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Barbara A. Barton

Sent from my iPad

CENTER for BIOLOGICAL DIVERSITY Because life is good.

January 3, 2023

Sent via email

Development Advisory Board, PlanningCounter@ontarioca.gov
Rudy Zeledon, Chairman, Planning Department, rzeledon@ontarioca.gov
James Caro, Building Department, jcaro@ontarioca.gov
Elda Zavala, Community Improvement, ezavala@ontarioca.gov
Charity Hernandez, Economic Development Agency, chernandez@ontarioca.gov
Khoi Do, Engineering Department, kdo@ontarioca.gov
Paul Ehrman, Fire Department, pehrman@ontarioca.gov
Christy Stevens, Municipal Utilities Company, cstevens@ontarioca.gov
Tony Galban, Police Department, tgalban@ontarioca.gov

Re: Development Plan (File No. PDEV21-047) - Agenda Item B

Dear Development Advisory Board:

These comments are submitted on behalf of the Center for Biological Diversity (the "Center") regarding the City of Ontario Development Advisory Board's January 4, 2023 consideration of Development Plan (File No. PDEV21-047) ("Project") to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 197.74 acres. As explained in greater detail below, there is substantial evidence indicating that the Project will have additional or more severe environmental effects on burrowing owls, air quality, cumulative impacts, and other adverse effects, than were analyzed in the City's 2050 Ontario General Plan. There also is substantial evidence that the Project will require additional or different alternatives or mitigation measures than were specifically analyzed and included in the 2022 Supplemental Programmatic Environmental Impact Report (PEIR). Moreover, there is no substantial evidence to support the City's contrary conclusions. Thus, the City is required to prepare a project-specific subsequent environmental impact report (EIR) that analyzes the site-specific effects of the Project in detail and includes additional alternatives to and mitigation measures for this project

The Center is a non-profit, public interest environmental organization dedicated to the protection of native species and their habitats through science, policy, and environmental law. The Center has over 1.7 million members and online activists throughout California and the United States. The Center has worked for many years to protect imperiled plants and wildlife, open space, air and water quality, and overall quality of life for people in the City of Ontario and San Bernardino County.

I. THE PROJECT IS NOT WITHIN THE SCOPE OF THE SEIR AND THERE IS A FAIR ARGUMENT THE PROJECT WILL CAUSE MORE SEVERE SIGNIFICANT EFFECTS AND REQUIRE ADDITIONAL MITIGATION MEASURES THAT WERE NOT ADDRESSED IN THE SEIR

The City must prepare a subsequent project-specific EIR analyzing the site- and project-specific impacts of the current version of the Project, including analysis of alternatives to, and additional mitigation measures for, the project as required by CEQA. The Supplemental Programmatic Environmental Impact Report (PEIR) for the 2050 General Plan did not disclose sufficient baseline data, nor did it analyze, or include sufficient alternatives to or mitigation measures for, the site- and project-specific impacts of the Project, and therefore the Project is not within the scope of the PEIR.

Under CEQA, a lead agency must analyze any subsequent site-specific project that is proceeding under an approved PEIR to determine whether the subsequent project is "consistent with" and "within the scope of the project or program covered by" the previously-certified PEIR, and if it will have one or more additional or more severe significant effects or require additional mitigation measures that were not analyzed in the prior PEIR. Pub. Res. Code, § 21094(b)-(c); 14 Cal. Code Regs. § 15168(c)(2), (c)(5). When a lead agency has prepared a prior PEIR, "the question for a court reviewing an agency's decision not to use a tiered EIR for a later project is one of law." *Committee for Reevaluation of the T-Line Loop v. San Francisco Muni. Transp. Agency* (2016) 6 Cal.App.5th 1237, 1252 (2016); *Sierra Club v. County of San Diego* (2014) 231 Cal.App.4th 1152, 1164.

The case law makes clear that a project is "consistent with" and "within the scope of" the prior EIR if it is essentially part of the same project analyzed in the PEIR and that project was specifically identified, analyzed and discussed at a site-specific level of detail in the PEIR. (See, e.g., *Sierra Club v. County of Sonoma*, 6 Cal. App. 4th 1307, 1319-21 (1992); *Friends of Mammoth v. Town of Mammoth Lakes*, 82 Cal. App. 4th 511, 528-29 (2000); *Natural Resources Defense Council, Inc. v. City of Los Angeles*, 103 Cal. App. 4th 268, 281-85 (2002); *American Canyon Community v. City of American Canyon*, 145 Cal. App. 4th 1062, 1072-73 (2006); *Center for Sierra Nevada Conservation v. County of El Dorado*, 202 Cal. App. 4th 1156, 1172-73, 1175-77 (2012); *Sierra Club v. County of San Diego*, 231 Cal. App. 4th at 1174-76.)

All of these cases also hold that a project is not "consistent with" or "within the scope of" a PEIR if that previous environmental document did not contemplate or analyze the site- and project-specific effects of the subsequent project and those effects are not otherwise covered in the PEIR. *Id.*; cf. *Latinos Unidos de Napa v. City of Napa*, 221 Cal. App. 4th 192, 202-03 (2013) (revisions to housing element of general plan was within the scope of a prior PEIR for a general plan.

Here, the Project is not consistent with or within the scope of the PEIR because it was not specifically identified, analyzed or discussed in the PEIR, and the PEIR did not address the site- and project-specific impacts of this project. The PEIR merely discussed the impacts generally of an industrial land use category, which includes any "variety of industrial uses, including

warehousing/distribution." (Addendum, p. 11.) The PEIR discussed development in general and established a general mitigation program for such projects, and did not discuss projects at a project-specific level of detail.

The Project's environmental documents do not fill this analytic gap because they are too vague and general and do not contain any meaningful site-specific analysis of the precise nature or extent of the impacts of this project, or include any additional mitigation measures for these effects. For example, neither the Project, nor the PEIR, disclose existing baseline conditions for the burrowing owl, or the suitability of the habitat to support burrowing owl. The EA mentions that burrowing owl surveys were "completed in 2019, 2020 and a 2022 protocol study was conducted to determine the current number of burrowing owls on site." (Addendum, p. 11.) But nowhere were the results of these surveys *disclosed* to the public, or discussed in the Addendum.[1] Absent that information, the Addendum fails to meet CEQA's core informational purpose and deprives the Addendum of the necessary evidence supporting how the PEIR's mitigation measures will be adequate to mitigate these effects for this large project. Id. These errors pervade the addendum, which also fails to provide basic explanations of how the PEIR's air quality mitigation measures will prevent operational impacts to air quality in the region, both at an individual project and cumulative level.

Similarly, the Addendum lacks a site-specific discussion of how this Project may impact air quality and neighboring sensitive receptors. (Addendum, p. 33 [stating that the PEIR does not analyze the project's air quality impacts.]) The Addendum recognizes the PEIR did not "make a specific conclusion regarding the significance of project-related air pollutant emissions compared to any significance thresholds" and instead recommended a potential menu of mitigation measures to address project impacts. (Addendum, p. 33.) The Addendum then concludes the Project will have less-than-significant air quality impacts because the Project would not result in new impacts *"other than those previously considered or addressed in the [PEIR]*." (*Id.*) Under the Addendum's own admission, the PEIR did not address project-specific air quality impacts. The Addendum also lacks any discussion of how the PEIR's three mitigation measures will be adequate to mitigate the effects of this particular Project. The Addendum's conclusory statement is unsupported by evidence or analysis and simply does not meet CEQA"s muster.

For these reasons, the Project is not within the scope of the PEIR, and a fair argument can be made, based on substantial evidence, that the Project will have site-specific impacts and require additional mitigation measures that were not analyzed and included in that PEIR. Therefore, the City is obligated to prepare a subsequent EIR for this project analyzing these impacts in detail.

II. CONCLUSION

Thank you for the opportunity to submit comments on the Development Plan (File No. PDEV21-047). Due to the shortcomings described above, the City must prepare a project-specific

[1] The Addendum also relies on these surveys to conclude that the preparation of a site-specific EIR is not required. (Addendum, p. 11.) Absent disclosure of this information, the Addendum simply has no basis by which to conclude that an EIR is not warranted.

subsequent environmental impact report (EIR) that analyzes the site-specific effects of the Project in detail and includes additional alternatives to and mitigation measures for this project.

Given the possibility that the Center will be required to pursue legal remedies in order to ensure that the City complies with its legal obligations including those arising under CEQA, we note the City's statutory duty to maintain and preserve all documents and communications that may constitute part of the "administrative record" of this proceeding. (§ 21167.6(e); *Golden Door Properties, LLC v. Superior Court* (2020) 53 Cal.App.5th 733.) The administrative record encompasses any and all documents and communications that relate to any and all actions taken by the City with respect to the Project, and includes "pretty much everything that ever came near a proposed [project] or [] the agency's compliance with CEQA . . . ." (*County of Orange v. Superior Court* (2003) 113 Cal.App.4th 1, 8.) The administrative record further includes all correspondence, emails, and text messages sent to or received by the City's representatives or employees that relate to the Project, including any correspondence, emails, and text messages sent between the City's representatives or employees and the Project applicant's representatives or employees. Maintenance and preservation of the administrative record requires that, *inter alia*, the City (1) suspend all data destruction policies; and (2) preserve all relevant hardware unless an exact replica of each file is made.

Please add the Center to your notice list for all future updates to the Project and do not hesitate to contact the Center with any questions at the number or email listed below.

Sincerely,

Hallie Kutak
Staff Attorney | Senior Conservation Advocate
Center for Biological Diversity
[redacted]
Tel: ([redacted]) [redacted]-[redacted]
[redacted]@[redacted]

From: Joel Huschle
To: Planning Director
Subject: Burrowing Owl Protections
Date: Wednesday, January 4, 2023 8:50:32 AM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Thank you,

Joel Huschle

From: kimberlyfour
To: Planning Director
Subject: Public comment regarding Agenda Item B
Date: Tuesday, January 3, 2023 7:37:47 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development. Time and time again, the owls were driven out with no successful intervention to relocate them to a suitable habitat even though great amounts of mitigation money was collected. We need to protect the remaining land where the owls nest and raise their young and we need to change the practices that have resulted in the huge population drop that has occurred in the last 30 years.

There are significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Thank you,
Kimberly Dillbeck

From: Marcyn Clements
To: Planning Director
Subject: SAVE the Burrowing Owl Habitat @ the Airport!
Date: Wednesday, January 4, 2023 8:20:45 AM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Dear Sirs,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing

Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat.
Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely and most empassionately,

Marcyn Del Clements

From: Jessica Garciacano
To: Planning Director
Subject: Development Plan PDEV21-047 Environmental Assessment and Addendum Approval
Date: Wednesday, January 4, 2023 9:34:22 AM

Thank you for the opportunity to comment on the Development Plan PDEV21-047 Environmental Assessment and Addendum Approval on today's agenda for the City of Ontario Development Advisory Board. I am not available to attend today's meeting but would like to voice my concern for approval. I have lived in Ontario my entire life as well as my parents and children. I am very concerned regarding the proposed development and actions taken towards the burrowing owl population on-site. This burrowing owl population has garnered world-wide attention and has enthralled the public.

I am aware that the CIty of Ontario has collected fees from development, particularly within the Ontario Ranch Specific Plan in response to burrowing owl mitigation, but I am not aware, and the addendum also refers that these moneys have not been used to purchase and conserve burrowing owl mitigation. This deferment of mitigation is irresponsible and harms the burrowing owl population in the City of Ontario. There needs to be transparency on how these fees will be utilized for mitigating impacts. The City of Ontario as a lead agency, needs to be responsible and move forward with fulfilling its obligations, as well as consider the cumulative impacts from this deferment.

This may be one of the last successfully reproducing populations of burrowing owl in the City of Ontario. They have in recent years observed having up to 9 chicks, in one burrow! I implore the City to ensure that if this project moves forward, and the owls are moved, the City requires the project developer to conserve land, forever to protect burrowing owl within the City of Ontario. We should not subject these owls to move without permanent conservation. The fees are not acceptable in this case. These owls need land and without compensatory mitigation of habitat, the impacts to this project are significant under CEQA as they will have a substantial effect either directly or through habitat modifications on a special status species.

Sincerely,

Paul Romero
[redacted]

From: Suzanne C. Thompson
To: Planning Director
Subject: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Wednesday, January 4, 2023 9:35:12 AM

CITY OF ONTARIO DEVELOPMENT ADVISORY BOARD MEETING SUBMITTED COMMENTS
1/4/23

Re: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

Burrowing Owls were once numerous in Ontario and Chino but due to widespread development that did not protect biological resources, the owls are fast disappearing. We need action now to protect Burrowing Owl habitat and allow these little birds to continue to live on in Ontario as they have for hundreds of years. The presence of a thriving population of Burrowing Owls in Ontario is a biological asset for the community and a chance for children and all of us to see the owls close by in their native habitat. The people of Ontario need protection for their native species, not more warehouses.

There are at least four significant negative effects on the environment that will be caused by and not mitigated by the current plan.

One, it is shocking that the DAB is suggesting that the Ontario Plan mitigation for Burrowing Owls was in any way successful and that it is an approach to be used for the owls east of Haven Avenue. The Ontario Plan mitigation started around 2007 and I assume it is continuing. From 2007 on, the City of Ontario collected fees from developers to mitigate the loss of large sections of habitat. The idea was that the funds would be used to purchase mitigation land. I don't know how much has been paid by developers but as of a few years ago, it was about $14 million. **None** of that has been spent for mitigation. Probably 100s of BUOWs were evicted from their homes and no mitigation land was purchased that they could go to. Please don't tell us that now 15 years after the first evictions that the city is trying to find a land trust to establish a mitigation site. That doesn't repair the damage done by years of evicting owls without a mitigation site.

Two, another significant negative effect of translocating owls to sites far from their native land is the loss of distinct biodiversity. Kelly Barr, Kristin Ruegg and others have found genetically distinct populations of Burrowing Owls that are a distance apart even within California (Alvarado, Bossu et al., 2022). Translocating owls 30 to 40 miles from their natal site risks mixing the distinct groups. Possible advantages of the genetic differences that might increase survivability in a particular location would be lost to the owls.

Three, Burrowing Owls need to have other sites nearby within the usual range of juvenile dispersion (from .5 to 13 miles) so young adult owls can avoid inbreeding (Rosenberg, Gervais, & Trulio, 2007). The East of Haven Ontario Burrowing Owls are an average of 7 to 8 miles from several Burrowing Owl nesting sites in the Chino area. Thus, the Airport area owls make it possible for a healthy exchange of young adults finding mates between the two sites. Loss of the East of Haven site could seriously undermine the viability of what are now healthy populations of Burrowing Owls in Chino, contributing to the loss of all Burrowing Owls from the Pomona Valley.

Four, mitigation translocation for burrowing owls is an option that suits the preferences of land developers, but it does not provide a superior life for the owls. In fact, owls that are translocated from their home habitat are subject to higher mortality than those who are protected on site or nearby (Hennessey et al., 2022). The removal of all the OIA owls will be a significant blow to the possibility of success of owls in the area.

Contrary to the DAB analysis, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

In fact, the Helix Environmental Biological Resources report also states that leaving Burrowing Owls on site is the best option for the owls. Unfortunately, the report goes on to reject that option for invalid reasons such as the mistaken notion that Burrowing Owls are a hazard to aviation. Contrary to the statements in the Helix Environmental report, Burrowing Owls are not a hazard to aviation. They are small birds that fly close to the ground and do not fly in flocks. According to the FAA bird strike data, there were 21 reports of airstrikes involving these owls at OIA since 2008. Eight turned out to be other wildlife or the species were unknown; for eleven a carcass or wing was found but no airstrike was reported by pilots; and two involved a Burrowing Owl strike but no damage was reported. In all these years, there were **no instances** of a Burrowing Owl causing damage to a plane. If Burrowing Owls that live right next to the runways are not a threat to aviation, how much less a threat are the owls that live east of Haven.

Another argument is that Burrowing Owl attract larger raptors that might cause damage to a plane. This problem can be addressed through a raptor control program, something that all airports need to have in place, whether or not they have Burrowing Owls near their property. Many other airports protect plans from large raptors using control strategies that do not kill or harm or trap the raptors.

Finally, none of the Helix Environmental statements that the FAA will not allow mitigation for Burrowing Owls near an airport are backed up with reference to FAA regulations or communications. If you look at the FAA regulations that discuss Wildlife Hazards, you will find that Burrowing Owls are not mentioned. If Burrowing Owls are NOT a hazard to aviation, then owl mitigation can be done on the boot property.

It is not too late to do the right thing and find a way to keep the Ontario Airport Burrowing Owls in the Ontario area with a professionally managed and properly endowed preserve for the owls on site.

We incorporate by reference the objections stated in the Redford Conservancy group opposition letter and additional opposition letters related to the January 4, 2023 hearing of this matter. While one or more of these letters may be withdrawn, the objections stated in the letters are valid and we incorporate them as if fully stated herein.

Sincerely,
Suzanne Thompson
Chair, Pomona Valley Audubon Society Burrowing Owl Committee

References

Alvarado AH, Bossu CM, Harrigan RJ, Bay RA, Nelson ARP, Smith TB, and KC Ruegg. (2022). Genotype-environment associations across spatial scales reveal the importance of

putative adaptive genetic variation in divergence. Evolutionary Applications 00: 1-18.

Hennessey, S.M., et al. (2022). Release strategies and ecological factors influence mitigation translocation outcomes for burrowing owls: a comparative evaluation. *Animal Conservation*.

Rosenberg, D.K., L. A. Trulio, D. Catlin, D. Chromczack, J. A. Gervais, N. Ronan, and K. A. Haley. 2007. The ecology of the Burrowing Owl in California. Unpublished report to Bureau of Land Management.

Citizen Letter Addressing Agenda Item B for the January 4, 2023 Development Advisory Board Meeting

January 2, 2023

Dear Ontario Development Advisory Board,

Fifty years ago while growing up in Los Angeles County, I enjoyed watching Burrowing Owls in the fields behind my childhood home. Sadly, this species has been in sharp decline ever since and is now a California Species of Special Concern. It is even being considered for listing under the California Endangered Species Act. So it is with great surprise that I read that the city of Ontario is considering developing one of its primary nesting sites!

It is prudent for cities to keep open land surrounding airports. Undeveloped areas provide emergency landing zones for aircraft if needed. This area is perfect for Burrowing Owls which already call it home. This owl flies low over the ground during the day while hunting large insects and small rodents, thus posing no danger to descending aircraft. In fact, there have been no documented plane strikes by Burrowing Owls so this grassland is safe for birds and people.

During the six years that I have visited this nest site, I have noticed a crowd of wildlife photographers standing respectfully along the edges of the S. Haven Avenue (north of E. Jurupa Street) when these owls are nesting. Many people travel long distances to get their photos, and spend money in Ontario during their visit which helps benefit the city.

Surely the best use for this property is to become a **Burrowing Owl preserve**. The local community can come visit and learn about the biology and interesting adaptations of their feathered neighbor. Children can study Burrowing Owls in school just like Orange County school children learn about the threatened Western Snowy Plover along their coastline.

As a reminder, these birds are state protected and cannot be harmed in any way. Trapping and moving them is not feasible and has resulted in high mortality. As a biologist, I am opposed to this devastating failed plan. Ontario's plans for these protected birds and their nest site need to be carefully reviewed so there are NO negative impacts. This is the lawful and right thing to do.

Thank you for listening to a nearby resident who enjoys the Burrowing Owls of Ontario.

Trude Hurd
Lake Forest, CA

Photographs of Burrowing Owls, a California Species of Special Concern,
at nest site next to Ontario Airport, southern California, by Trude Hurd

Burrowing Owls at nest burrow 2022

Burrowing Owls in habitat next to airport

Burrowing Owls, five, at nest burrow 2018

Burrowing Owl hunting over grassland 2018

Wildlife photographers enjoying the owls

Burrowing Owls at nest burrow 2019

From: Dan Silver
To: Planning Director
Subject: January 4, 2023, Item B, Development Advisory Board Meeting
Date: Monday, January 2, 2023 10:58:52 AM

January 2, 2023

Ontario Development Advisory Board
City of Ontario
planningdirector@ontarioca.gov

RE: January 4, 2023, Item B, Development Advisory Board Meeting

Dear Members of the Board:

Endangered Habitats League (EHL) objects to plans to displace Burrowing Owls from the project site. For your reference, EHL is a Southern California regional conservation group.

Burrowing Owls were once numerous in Ontario and Chino but are in sharp decline due to development that has not been planned to be compatible with owl survival. The property owned by OIAA east of Haven Avenue is a primary nesting site for the owls. The proposed translocation plan for the owls is inadequate, leaving unmitigated significant impacts that require an EIR. The proposed scheme does not have a track record of long term success and will cause mortality. It will also result in genetic depletion of remaining owls in the area. Rather, commercial development should be sited on a small footprint, leaving a viable, managed owl preserve. Compatibly of owls with airport operations has been achieved elsewhere.

We urge you to step back and consider other options for this highly sensitive and depleted species.

Sincerely,
Dan Silver

Dan Silver, Executive Director
Endangered Habitats League
[redacted]
[redacted]@[redacted]
https://ehleague.org [ehleague.org]

From: Seth Thompson
To: Planning Director
Subject: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 10:34:01 AM

The multi page document supporting this agenda item includes several misstatements of fact and references to a flawed earlier document, all purporting to support the notion that there are no potential environmental harms flowing form the proposed development scheme. This is clearly not the case:

- the document relies on a mitigation plan for Burrowing Owls that has already failed;
- there is incontrovertible scientific evidence that even the best translocation efforts result in high mortality;
- those owls who survive the trauma of translocation represent a loss of distinct biodiversity;
- loss of the Ontario Airport owls will have damaging effects on Chino Burrowing Owls and cascading negative effects on the few indigenous Burrowing Owls in the Pomona Valley.

Dumping a massive document supporting one agenda item in the middle of a holiday week end and poses an almost insurmountable obstacle for advisory board members who want to conscientiously weigh the interests of OIAA, the local communities, and the broader good of the region.

If I were a member of the board, I'd want to say, "whoa, let's give this proposal the time and attention it deserves and table this agenda item." I encourage you to do the same.

From: Seth Thompson
To: Planning Director
Subject: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 10:46:08 AM

The multi page document supporting this agenda item includes several misstatements of fact and references to a flawed earlier document, all purporting to support the notion that there are no potential environmental harms flowing from the proposed development scheme.

But this bald statement requires you to ignore the dismal failure of the much hyped translocation scheme in the City of Ontario and the best available science on Burrowing Owl population dynamics.

The timing of filling this document in the middle of a holiday weekend almost guarantees that the members of the advisory board will not have time to thoughtfully review it and make a prudent recommendation.

The members of the advisory board and the larger community deserve better. Please table this item until you have had a chance to give it the skeptical scrutiny it deserves.

From:	NATASHA WALTON
To:	Planning Director
Subject:	Please Vote to Deny Recommendation of the January 4, 2023, Ontario DAB Meeting Agenda Item B
Date:	Wednesday, January 4, 2023 12:28:39 PM

Dear City of Ontario Development Advisory Board:

We, Inland Valley Advocates for the Environment (IVAE), ask that you **recommend denial of the January 4, 2023, agenda item** B to the Ontario Planning Commission regarding the (1) "CEQA [California Environmental Quality Act] Determination Motion to recommend Approval / Denial of an Addendum to a previously approved EIR [Environmental Impact Report]," and (2) "File No. PDEV21-047 (Development Plan) Motion to recommend Approval/Denial." The Development Plan (File No. PDEV21-047) is to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 197.74 acres of land generally located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, within the IL (Light Industrial) land use district of the California Commerce Center Specific Plan.

One of the main reasons why we ask you to deny recommendation of agenda item B is because **we disagree with the City of Ontario's CEQA determination for the Development Plan** (p30 of 404 pp in the 1/4/2022 meeting agenda). This determination is that "although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required." We argue that the environmental impacts of the proposed project (including significant ones) have not been adequately analyzed and presented under the August 2022 Ontario Plan 2050 Supplemental EIR, and the public and public agency review of these potential impacts does not exist. These environmental impacts include, but are not limited to, the direct, indirect and cumulative impacts of this project on greenhouse gas emissions, transportation/traffic, agricultural resources, hazards and hazardous materials, air quality, noise, and biological resources. Thus, a higher level document consisting of a CEQA Environmental Impact Report should be completed to allow further study and public review of this project under CEQA. Examples of inadequate analyses and conclusions include the following:

- No field studies of current noise levels have been conducted at the proposed project to help determine the expected level of noise at the project site which is located within two miles of a public international airport.
- The proposed project would have a significant negative effect on burrowing owls and this effect cannot be mitigated by a proposed relocation plan; regardless of the addendum's conclusions, the previously approved EIR did not include, address, or evaluate the potential significant effects of warehouse developments on wildlife such as the burrowing owl. In addition, no documented concurrence has been received from the California Department of Fish and Wildlife that the proposed project with a burrowing owl relocation plan would have a less than significant impact on the local burrowing owl (a special-status species) population, as well as on the population of burrowing owls that would be receiving the relocated owls.

Another major reason to deny recommendation of agenda item B is so that **we may preserve the safety and quality of life of our community and our local wildlife**; the proposed project area should include an alternative project that would protect the project area as a nature preserve and not be developed for any kind of industrial facility. Such a nature preserve would not only preserve the area as undeveloped safety zones for the airport, but it could even draw in the world to visit our special wildlife residents like the burrowing owl which lives and nests annually on this land.

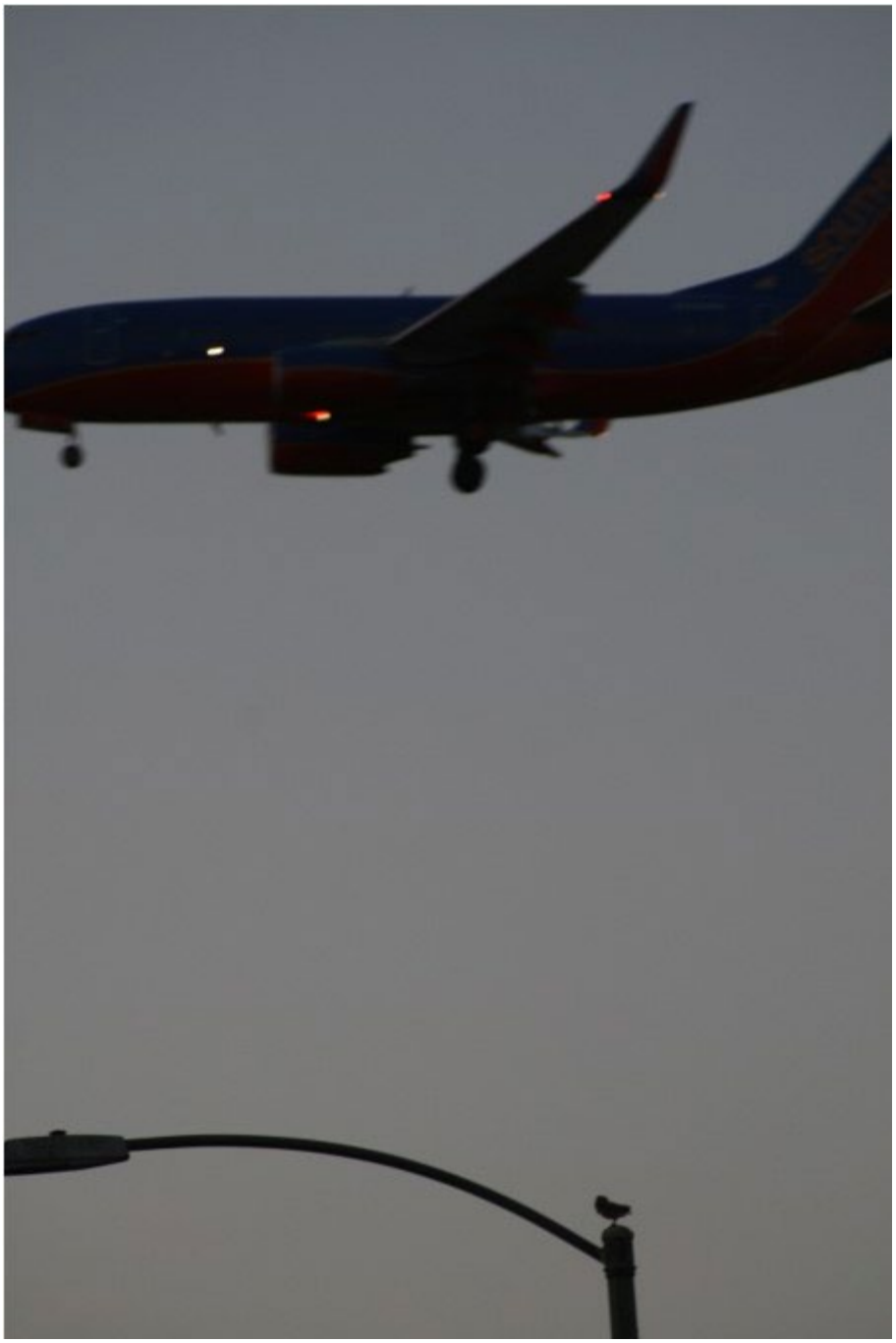
Please see the link below discussing how people are fighting to save our native wildlife, like burrowing owls, in California. We ask that you do the same and resist the urge to develop our precious open spaces into yet more ugly and unnecessary warehouses.

https://urbanbird.org/victory-for-southern-california-burrowing-owls/
[na01.safelinks.protection.outlook.com]

We have attached a photo that very few airports can boast about being able to capture – a burrowing owl perching on a light post as a commercial jetliner lands. You have the opportunity to make Ontario Airport special and not just another eyesore among the clutter of urban banality. Once again, please recommend denial on agenda item B.

Sincerely,

Natasha Walton, M.S.
Cofounder of IVAE and Wildlife Biologist



From: [redacted]@[redacted]
To: Planning Director
Subject: Agenda Item B
Date: Monday, January 2, 2023 7:08:20 PM

Agenda item: For Agenda Item B at the January 4, 2023, Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls' nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely,
Dave Macias

From: Deena Ligorria
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 6:11:18 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely,
Deena Ligorria

From: glok01
To: Planning Director
Subject: Burrowing Owls
Date: Sunday, January 1, 2023 2:02:08 PM

Regarding:

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls have been in this area for years, this is their home. Do we really need more development???

Please find another location for development, protecting the remaining land where the owls nest and raise their young is crucial to their survival.

Thank you,
Gloria Karimi

From: [redacted]@[redacted]
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 5:27:14 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely,

Gus Ocon

From: Jacob Ligorria
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 6:02:25 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely,
Jacob Ligorria (College biology student and seabird researcher)

From: Laura Jaoui
To: Planning Director
Subject: Agenda Item B for Jan. 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 10:21:29 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely, Laura Jaoui, [redacted]

From: Lori Galloway
To: Planning Director
Subject: Agenda Item B at the January 4,2023 Development Advisory Board Meeting
Date: Sunday, January 1, 2023 8:15:24 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for.
These are: using a mitigation plan for Burrowing Owls that has already **failed** and **will result in high mortality**, **loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls**. Contrary to the proposed Development Advisory Board decision, the project will have a **significant negative effect** on Burrowing Owls, a ***state species of special concern.***

The land that OIAA owns east of Haven Avenue is a ***primary*** nesting site for the owls. ***Please do not destroy it so more warehouses can be added to Ontario!*** A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Lori Galloway

From: Madeline w Allinder
To: Planning Director
Subject: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Sunday, January 1, 2023 6:12:28 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Madeline Allinder

Sent from my iPhone

From: Maria B
To: Planning Director
Subject: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting, re Burrowing Owls
Date: Sunday, January 1, 2023 2:06:42 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young. The burrowing owl group formerly located at the Chino Airport in 2021, did not return in 2022, due to construction and other issues.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Thank you,
Maria Bennett

From: Martina Ebert
To: Planning Director
Subject: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting: Preserve the Habitat of Local Burrowing Owls
Date: Tuesday, January 3, 2023 1:43:51 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely,

Martina Ebert, Ph.D.
[redacted]
[redacted]
([redacted]) [redacted]-[redacted]
[redacted]@pomona.edu

From: Myriam Rodriguez
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 6:39:13 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely,
Myriam Rodriguez

From: Patty Anis
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 5:59:19 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Thank you for your consideration.

Sincerely,

Patricia A. Anis
Pomona Valley Audubon Society
[redacted]@[redacted]

From: patricia gleeson
To: Planning Director
Subject: Agenda Item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Monday, January 2, 2023 9:24:28 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Please protect Burrowing Owls in our area. These small, sandy colored owls with long, slender legs and bright yellow eyes are a state species of special concern and also a local concern due to development which threatens their habitat. Unlike other owls, Burrowing Owls are active in the daytime. They live and hunt on the ground, and people can see how special they are in the full light of the sun. In the past Burrowing Owls were once abundant in Ontario and Chino, but many of these owls have been driven out of the area due to widespread development that did not protect the land where these beautiful owls nest and raise their young. They are worth saving and safeguarding.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for the consideration of these owls. The mitigation plan for the Burrowing Owls has already failed and will result in a high mortality, and there is a loss of distinct biodiversity for the translocated owls. There is also a damaging effect on Chino Burrowing Owls and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board Decision, the project will have a significant negative effect on Burrowing Owls which are already a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy their habitat so that more warehouses can be added to Ontario. A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat, and schoolchildren, families and each one of us can study and enjoy the beauty of our local Burrowing Owls in the future.

Please help the species to survive in our area by protecting Burrowing Owls and their nesting site east of Haven Avenue.

Thank you.

Sincerely yours,

Patricia Gleeson

[redacted]

[redacted]

[redacted]@yahoo.com

([redacted])[redacted]-[redacted]

From:	Rachael Innes
To:	Planning Director
Subject:	Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date:	Sunday, January 1, 2023 10:01:11 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Thank you,

Rachael Innes

From: rebeca byerley
To: Planning Director
Subject: Burrowing owl at the Ontario airport
Date: Monday, January 2, 2023 9:31:20 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owl's nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Thank You,
Rebeca Byerley
[redacted]

From:	robert holcomb
To:	Planning Director
Subject:	Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date:	Sunday, January 1, 2023 9:34:44 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area by widespread development that did not protect them. This mistake must not be made again. We need to protect the remaining land where the owls nest and raise their young.

There are significant negative environmental impacts of the proposed plan that have not been considered or for which adequate mitigation actions have not been identified. Those mitigation actions currently being proposed for Burrowing Owls ARE CLEARLY INADEQUATE, have FAILED in the past, and will result in HIGH MORTALITY and LOSS OF DISTINCT BIODIVERSiTY for the translocated population,

The proposed Development Advisory Board decision fails to recognize that the project, as proposed, will have a significant negative effect on Burrowing Owls, a state species of special concern. The land that OIAA owns east of Haven Avenue is one of a VERY SMALL number of primary nesting sites for the owls. These owls are a public and a community resource, and this critical nesting area must not be destroyed for the financial gain of a few or short-sighted revenue increases. Once lost, this public resource cannot be restored.

A reasonable accommodation needs to be adopted. A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live and breed in their native habitat. Schoolchildren, families, and all of us can enjoy having our owls nearby to study and enjoy.

Robert J. Holcomb

From: Marcia Holcomb
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Tuesday, January 3, 2023 1:03:53 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

MARCIA HOLCOMB

From: Scott Marnoy
To: Planning Director
Subject: Proposed Development East of Haven Ave.
Date: Monday, January 2, 2023 11:22:58 AM

Ontario Development Advisory Board

Dear Sirs: This is to voice my opposition to the planned destruction of the Burrowing Owl habitat located east of the airport. Burrowing Owls are a state Species of Special Concern and the proposed translocation of these owls is risky and its success is unproven. As an alternative, I support the proposed 90 acre Burrowing Owl Preserve at that site. Please do not destroy one of the last remnants of Burrowing Owl habitat in our valley.

Sincerely,
Scott Marnoy, MD
[redacted]

From: [redacted]@[redacted]
To: Planning Director
Subject: Comments for 1/4/23 Agenda Item B
Date: Monday, January 2, 2023 2:10:15 PM

Agenda item:
For Agenda Item B at the January 4, 2023
Development Advisory Board Meeting

To the Ontario Development Advisory Board,

For the past six years, I have been involved in efforts to monitor the numbers of burrowing owls in our area. At one time there were many native burrowing owls in southern California but heavy development has driven them close to elimination. Several small groups of them are still nesting in the Ontario and Chino areas and need to be protected by preserving the areas where they live and nest.

I understand that the Development Advisory Board is considering developments that will seriously endanger or eliminate these burrowing owl populations. There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is an important nesting site for these owls. Please do not destroy it so more warehouses can be added to Ontario. A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy. They are an important part of a healthy environment that we all need to live in.

Sincerely,
Alan Davis

From: Shea Millan
To: Planning Director
Subject: Agenda Item B, 01/04/2023 Development Advisory Board Meeting Comment
Date: Monday, January 2, 2023 4:22:54 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Thank you,
Shea Millan
Vice Chair
Sierra Club Santa Margarita Group

From: G. Sidney Silliman
To: Planning Director
Subject: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Tuesday, January 3, 2023 9:53:22 AM

To: Ontario Development Advisory Board
Subject: Agenda Item B at the January 4 2023 Development Advisory Board Meeting

Burrowing Owls, a California species of special concern, were once numerous in Ontario and Chino and on the land of what is now the Ontario Airport. Widespread development has resulted in a significant decrease in their numbers as little was done to ensure the survival of these unique birds. Today, we need to protect the remaining land where the Owls nest and raise their young.

There are at least four (4) significant and negative environmental effects of the proposed plan. These have not been considered or mitigated for. These are: (1) the plan proposes using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality; (2) loss of distinct biodiversity for the translocated owls; (3) negative effects on the Chino Burrowing Owls; and (4) overall higher mortality of translocated owls. In short, contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the Owls. Please do not destroy it with more warehouses! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario Owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sidney Silliman
[redacted]@[redacted]

From: Andy Georges
To: Planning Director
Subject: Burrowing Owls
Date: Monday, January 2, 2023 2:19:20 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposedplan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Regards,
Andy Georges

Sent from my iPhone

From: Jimmy Chertkow
To: Planning Director
Subject: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Wednesday, January 4, 2023 10:46:36 AM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

James Chertkow

From: [redacted]@[redacted]
To: Planning Director
Subject: Save the Burrowing Owls!
Date: Wednesday, January 4, 2023 10:53:02 AM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young before it is too late.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a **significant negative effect on Burrowing Owls, a state species of special concern.**

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Do not destroy it to build more warehouses in a city that is already littered with them! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Save our future and do the right thing. Value life over money and greed.

Have a conscience and do the RIGHT thing. Save the Burrowing Owls for future generations and lead by example.

Sincerely,
April D. Chertkow

From:	Pam Nelson
To:	Planning Director
Cc:	Pam Nelson
Subject:	agenda item B: comment, burrowing owls and warehouse advisory board
Date:	Wednesday, January 4, 2023 11:22:32 AM

Please many negative environmental effects for the warehouse development considered today. Burrowing owl habitat is one of them. Burrowing owls were once numerous throughout S. California and especially in Ontario and Chino. They are now a State species of concern. Development of all types have not been kind to this wildlife species since they live best on the same type of land that humans like to develop.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Thank you,
Pam Nelson
chair, Santa Margarita Group/Sierra Club
(commenting as an individual, not representing the Club)

From: C Hanson
To: Planning Director
Subject: Burrowing Owl Habitat threat
Date: Wednesday, January 4, 2023 11:46:58 AM

Please many negative environmental effects for the warehouse development considered today. Burrowing owl habitat is one of them. Burrowing owls were once numerous throughout S. California and especially in Ontario and Chino. They are now a State species of concern. Development of all types have not been kind to this wildlife species since they live best on the same type of land that humans like to develop.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Caren Hanson
Project Manager of Butterfly Gardens for the Sierra Club Santa Margarita Group
[redacted]@[redacted]

From: Jazmyn Rivera
To: Planning Director
Subject: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Wednesday, January 4, 2023 11:04:53 AM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not beenconsidered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schools, children, families, and all of us can enjoy having the owls nearby to study and enjoy.

From: Jeff Strogen
To: Planning Director
Subject: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Wednesday, January 4, 2023 10:23:51 AM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely,

Jeff Strogen

From: kelly coyne
To: Planning Director
Subject: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Wednesday, January 4, 2023 11:06:19 AM

To the Ontario Development Advisory Board,

Re: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

I agree with and support the following statement:

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

thank you,

Kelly Coyne

From: Erik Knutzen
To: Planning Director
Subject: Fwd: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Wednesday, January 4, 2023 11:28:16 AM

To the Ontario Development Advisory Board,

Re: Agenda Item B at the January 4, 2023 Development Advisory Board Meeting

I agree with and support the following statement:

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

thank you,

Erik Knutzen

From: Shari Wasson
To: Planning Director
Subject: Shari Wasson, Public Comment, Please Vote to Deny Agenda Item B
Date: Wednesday, January 4, 2023 12:28:33 PM

Dear City of Ontario Development Advisory Board:

I ask that you **recommend denial of the January 4, 2023, agenda item B** to the Ontario Planning Commission regarding the (1) "CEQA [California Environmental Quality Act] Determination Motion to recommend Approval / Denial of an Addendum to a previously approved EIR," and (2) "File No. PDEV21-047 (Development Plan) Motion to recommend Approval/Denial." The Development Plan (File No. PDEV21-047) is to construct nine industrial buildings totaling 4,263,454 square feet and associated site improvements on 197.74 acres of land generally located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, within the IL (Light Industrial) land use district of the California Commerce Center Specific Plan.

As a long-time resident of the Inland Valley and community member who values our native wildlife, I am greatly concerned about the proposed development plan and the devastating consequences it will have for Ontario's remaining burrowing owl population.

This unique little bird, which was once considered common and abundant, is now designated as a species of special concern by California Department of Fish and Wildlife (CDFW). Habitat loss due to development has been one of the strongest driving forces behind this. Due to the high levels of development that the Inland Valley has seen in the last several decades, the roughly 200 acres that the City of Ontario and Ontario International Airport are planning to develop with yet more warehouses is now one of the last remaining parcels of burrowing owl habitat in Ontario.

This bird is an important part of the natural heritage of Ontario and the Inland Valley. This vestigial habitat and owl population are true treasures that the City and Airport have the unique opportunity to capitalize on and share with not just the local community, but with travelers from both near

and far. Instead of allowing the land to be developed, this land should be set aside for preservation of the burrowing owl. In doing so, the City and Airport will be taking a leadership role in helping conserve the burrowing owl, which is, after all, a fellow partner in flight. Such a stance will brand the City of Ontario and the Ontario International Airport as ecologically minded entities that are invested in the wellbeing of the environment and the natural resources native to the area. Public relations centered on this can help increase City and Airport patronage, lead to partnerships with schools and other educational institutions, and set a model for other cities and businesses to follow. Partnering with the burrowing owl can help make the City of Ontario into an ecological destination.

I further recommend you deny agenda item B based on the City's inadequate CEQA determination for this Development Plan. Please see Natasha Walton's emailed public comment for details regarding this matter.

Sincerely,

Shari Wasson
Certified California Naturalist
Co-founder of Inland Valley Advocates for the Environment (IVAE)

Sent from Outlook [aka.ms]

From: henry
To: Planning Director
Subject: Warehouse development east of Haven Avenue
Date: Wednesday, January 4, 2023 2:38:10 PM

Planning director,

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Thank you,
Henry Kantrowitz
Concerned Citizen

From: Katie Quint
To: Planning Director
Subject: agenda item B: comment, burrowing owls and warehouse advisory board
Date: Wednesday, January 4, 2023 3:28:42 PM
Attachments: WRI-LOGO.png

Please consider many negative environmental effects for the warehouse development considered today. Burrowing owl habitat is one of them. Burrowing owls were once numerous throughout S. California and especially in Ontario and Chino. They are now a State species of concern. Development of all types have not been kind to this wildlife species since they live best on the same type of land that humans like to develop.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! Consider instead a 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Thank you,

Katie Quint
Research Director
Golden Eagle Specialist

O: [redacted] C: [redacted]
WILDLIFE RESEARCH INSTITUTE, INC
[redacted]

From: Nina Jane Karnovsky
To: Planning Director
Subject: Item for Agenda Item B
Date: Wednesday, January 4, 2023 3:46:39 PM

Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
To the Ontario Development Advisory Board,
Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

Sincerely,

Nina J. Karnovsky, PhD.
Willard George Halstead Zoology Professor
Chair, Dept. of Biology

Pomona College
Department of Biology
[redacted]
office phone: [redacted]
fax:

http://research.pomona.edu/karnolab/ [research.pomona.edu]

From: Marcia Holcomb
To: Planning Director
Subject: Agenda item: For Agenda Item B at the January 4, 2023 Development Advisory Board Meeting
Date: Tuesday, January 3, 2023 1:03:53 PM

To the Ontario Development Advisory Board,

Burrowing Owls were once numerous in Ontario and Chino but have been driven out of the area due to widespread development that did not protect them. We need to protect the remaining land where the owls nest and raise their young.

There are at least four significant negative environmental effects of the proposed plan that have not been considered or mitigated for. These are: using a mitigation plan for Burrowing Owls that has already failed and will result in high mortality, loss of distinct biodiversity for the translocated owls, damaging effects on Chino Burrowing Owls, and overall higher mortality of translocated owls. Contrary to the proposed Development Advisory Board decision, the project will have a significant negative effect on Burrowing Owls, a state species of special concern.

The land that OIAA owns east of Haven Avenue is a primary nesting site for the owls. Please do not destroy it so more warehouses can be added to Ontario! A 90-acre Burrowing Owl preserve on the site that is properly endowed and well-managed will help keep the remaining Ontario owls safe so they can continue to live in their native habitat. Schoolchildren, families, and all of us can enjoy having the owls nearby to study and enjoy.

MARCIA HOLCOMB

Exhibit I: MIG RESPONSE TO COMMENTS

(Exhibit follows this page)

memo riverside

to Rudy Zeledon, Planning Director

from Kent Norton, AICP, REPA, MIG Riverside

re The HUB at Ontario International Airport Project

date January 18, 2023

On January 3-4, 2023 a group of environmental organizations and 46 individuals submitted comment letters or emails on Environmental Assessment and Development Plan PDEV21-047 under consideration by the City's Development Advisory Board (DAB) on January 4. The development under consideration is referred to as the HUB at Ontario International Airport (HUB OIA Project) The following addresses the various comments and issues raised in those letters. The letters are also attached to this memo for reference. This information is provided to the Planning Commission for its deliberation on this project.

LETTER 1: JOINT ENVIRONMENTAL ORGANIZATIONS LETTER/SUSAN PHILLPS ET AL

Comment 1 (Pages 1-4). Their first major issue was the proposed use of an Addendum to The Ontario Plan (TOP) Environmental Impact Report (EIR) (Addendum) as the California Environmental Quality Act (CEQA) documentation for the proposed HUB OIA Project.

The commenter also refers to the City relying on a CEQA exemption. That is not the case here and such comments misstate the applicable law. An addendum, which is allowed under CEQA Guidelines section 15164, is totally unrelated to any statutory and/or categorical exemptions allowed under other provisions of CEQA and the CEQA Guidelines.

The commenter does not acknowledge that an addendum can be the appropriate CEQA compliance document for a project that is consistent with the General Plan and zoning when it can be demonstrated a project will not result in new or more significant impacts that those that were already examined in the EIR for which the addendum is prepared. The Addendum does just that.

In this case, the use of an addendum is appropriate as the HUB OIA Project is consistent with TOP land use designations and City zoning, therefore the potential impacts of the HUB OIA Project have been accounted for in TOP EIR.

In addition, general comments on industrial development in the City as a whole are irrelevant to this current CEQA process. Furthermore, the Addendum includes an evaluation of all of the project's potential environmental impacts, including noise, air quality and transportation. Vague and unsupported complaints about impacts allegedly associated with warehouse development in general are simply incorrect.

Comment 2 (Page 3). The commenter expresses concern that the project has "topics of controversy" and so a separate EIR should be prepared. The commenter states…."If a topic of controversy exists regarding a proposed project, this can counter the use of a CEQA Determination Motion." However, the commenter is citing CEQA incorrectly. CEQA Guidelines Section 15064(f)(4) states…"The existence of public controversy over the environmental effects of a project will not require preparation of an EIR if there is no substantial evidence before the agency that the project may have a significant effect on the environment." The key determinate is providing substantial evidence that there will be no significant impacts. In this case, the Addendum prepared for the HUB OIA Project provides substantial evidence, supported by information from TOP and TOP EIR, and a number of technical studies cited in the Addendum, to demonstrate the HUB OIA Project will not have new or more significant impacts on the environment that were not already evaluated in TOP EIR. This includes several studies on burrowing owl (owl) as well as air quality and health risk impacts of the project.

Comment 3 (Page 4). The commenter states…"There are significant impacts that can and should be mitigated but have not been properly considered. The City may not adopt a statement of overriding consideration to approve a project where feasible, less environmentally damaging alternatives exist and feasible mitigation measures have not been considered or adopted." The commenter also argues the City must "deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects." This comment fails to acknowledge the provision in CEQA for a lead agency to adopt a Statement of Overriding Considerations (SOC) if the benefits of a project or plan outweigh the identified significant impacts. In this case the City Council adopted an SOC for TOP EIR.

The comment fails to acknowledge the City Council already adopted a Statement of Overriding Considerations when it approved TOP, and the proposed HUB OIA Project is consistent with TOP land use designation for the site.

In addition, the comments on the adequacy of TOP EIR are untimely and irrelevant. If these groups disapproved of that document, they were required to raise those issues when the matter was before the City Council. Opponents cannot use this project to attack the certified TOP 2050 EIR now. Criticisms on the City's overall planning efforts are misplaced in the current context of a single project, one which has long been planned and allowed on this project site (i.e., CCCSP and TOP). Further, unnamed comment letters supposedly submitted regarding TOP 2050 EIR are immaterial, particularly when they are not provided to the City at this time.

Comment 4 (Page 5). The commenter argues that development of the HUB OIA Project will have irreparable impacts on the owl. The commenter argues that the project site is a critical part of the owl's habitat in the region and the Federal Aviation Administration (FAA) actually encourages wildlife like the owl to co-exist on airport properties.

However, the various technical studies[1] on the owl and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe

[1] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

(i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[2] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[1] conclude that the most appropriate solution to this safety issue is to relocate the owl from the project site to a safer site in some other location. The Burrowing Owl Relocation Plan (Relocation Plan) prepared for the HUB OIA Project outlines a way to successfully achieve such relocation (see Appendix B).

The commenter also provides erroneous information on the current and historic state of owls in the City, and more importantly, on the project site. The analysis included in the Addendum and TOP EIR

[2] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

adequately addresses the project's potential impact on owls. As explained therein, the applicant will comply with the City's existing regulations and TOP policies through implementation of a Relocation Plan, which is based on the most recent site-specific technical studies. Compliance with these requirements will ensure potential impacts to owls are less than significant. Opponents' claims to the contrary are thus hyperbolic and inaccurate.

Comment 5 (Pages 5-7). The commenter next argues the project will have cumulative impacts related to air quality, greenhouse gas (GHG) emissions, and habitat loss.

The commenter fails to acknowledge TOP EIR did examine these cumulative issues at City buildout, and the HUB OIA Project is consistent with TOP. Therefore, potential cumulative air quality, GHG, and habitat impacts of this project have already been addressed in TOP EIR and a SOC was adopted by the City Council as allowed under CEQA.

In addition, the information provided regarding ongoing airport operations and the allegedly resulting GHG impacts is irrelevant to the current analysis, which considers a single project's potential impacts on the environment. TOP EIR concluded that buildout of the City, including this project, would result in significant direct and *cumulative* GHG emission impacts and thus, a SOC was approved by the City Council. The project site was analyzed in TOP EIR as an industrial site and the applicant will implement a number of project design features to reduce GHG emissions as outlined in the City's GHG Reduction Measures Screening Threshold Table, attached to the Addendum as Appendix A-2. Opponents ignore this information, which is clearly stated in the Addendum, and decry the City's failure to consider cumulative impacts "at a broader scale." Full buildout of the City is the absolute broadest scale possible for the analysis of potential GHG impacts. Opponents may dislike the City's GHG analysis, but it does not diminish the fact that the analysis demanded by opponents was completed and TOP 2050 EIR was certified without challenge.

Comment 6 (Pages 7-9). The commenter states, within evidentiary support, that TOP EIR mitigation for owl impacts has not been successful (i.e., collection of new development fees to purchase habitat). Regardless, however, a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is inapplicable. The Relocation Plan, which will be overseen by the California Department of Fish and Wildlife (CDFW), will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

In fact, no evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[3] prepared by qualified professionals (see Appendix B), the Relocation Plan is the most appropriate way to provide for the

[3] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 1 Summary. These responses, TOP, TOP EIR, the Addendum, and the various supporting technical studies[1], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 2: ANA RODRIGUEZ

Comment 1 (Email Page 1). The commenter makes a number of claims about owls relative to the HUB OIA Project. The commenter argues that owls are being "driven out of the City" and that a 90-acre preserve on the project site is needed to protect the owls.

The various technical studies[4] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. The supporting studies[3] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[3] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 2 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[3], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

[4] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

LETTER 3: BARBARA BARTON

Comment 1 (Email Page 1). The commenter makes a number of claims about owls relative to the HUB OIA Project. The commenter argues that owls are being "driven out of the City" and that a 90-acre preserve on the project site is needed to protect the owls.

The various technical studies[5] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[6] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA.

---

[5] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[6] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[4] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[4] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 3 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[7], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 4: HALLIE KUTAK, CENTER FOR BIOLOGICAL DIVERSITY

Comment 1 (Page 1). The commenter objects to the proposed use of an addendum as the CEQA documentation for the proposed HUB OIA Project.

The commenter does not acknowledge that an addendum can be the appropriate CEQA compliance document for a project that is consistent with the General Plan and zoning when it can be demonstrated a project will not result in new or more significant impacts that those that were already examined in the EIR for which the addendum is prepared. The Addendum does just that.

In this case, the use of an addendum is appropriate as the HUB OIA Project is consistent with TOP land use designations and City zoning, therefore the potential impacts of the HUB OIA Project have been accounted for in TOP EIR.

Comment 2 (Page 2). The commenter argues that the HUB OIA Project is not within the scope of TOP EIR, will have more severe significant impacts, and will require additional mitigation not found in TOP EIR. Their conclusion is a separate project-level EIR must be prepared for this project.

[7] Addendum Appendices A through G

As noted above, the commenter fails to recognize that an addendum can be the appropriate CEQA compliance document for a project that is consistent with the General Plan and zoning when it can be demonstrated a project will not result in new or more significant impacts that those that were already examined in the EIR for which an addendum is prepared. The Addendum does just that.

In this case, the use of an addendum is appropriate as the HUB OIA Project is consistent with TOP land use designations and City zoning, therefore the potential impacts of the HUB OIA Project have been accounted for in TOP EIR.

In addition, the Addendum and the various supporting technical studies[8] provide substantial evidence that the HUB OIA Project will not result in new or more severe significant impacts on the owls than those identified in TOP EIR, the Relocation Plan is consistent with TOP EIR mitigation, and the Addendum satisfies the intent and requirements of CEQA.

Comment 3 (Page 3). The commenter states the Addendum did not evaluate air quality impacts and health risks of the HUB OIA Project.

The Addendum states the following regarding Air Quality Significance Threshold 3.a, Conflict with or obstruct implementation of the applicable air quality plan:

The proposed project is consistent with TOP land use designations upon which the AQMP is based. Furthermore, the project is consistent with the City's participation in the AQMP and will not conflict with or obstruct implementation of the plan. The project will be required to implement TOP EIR Mitigation Measures AQ 3-1, 3-2, and 3-3 which include fugitive dust control measures pursuant to SCAQMD's Rule 403, use of Tier 3 construction equipment, proper service and maintenance of construction equipment, limiting nonessential idling of construction equipment, use of Super-Compliant volatile organic compounds (VOC) paints for coating and architectural surfaces, providing non-vehicular access options, and calculate and reduce any significant health risks from future development on nearby sensitive receptors (MM 3-1 through 3-3, respectively). The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. The following measures from TOP EIR are applicable to the proposed project:

***AQ 3-1:** Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of*

[8] Addendum Appendices A through G

significance, the City of Ontario Building Department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:

- *Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as:*
- − *Requiring use of nontoxic soil stabilizers to reduce wind erosion.*
- − *Applying water every four hours to active soil disturbing activities.*
- − *Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.*
- *Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits.*
- *Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards*
- *Limiting nonessential idling of construction equipment to no more than five consecutive minutes.*
- *Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/SuperCompliant_AIM.pdf. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.* (Addendum, pp. 32-33.)

The Addendum then determines the HUB OIA Project will not result in a cumulatively considerable net increase of any criteria pollutant for which the region is non-attainment under an applicable federal or state ambient air quality standard. (Addendum, pp 34-35.) That section provides a complete assessment of the air quality impacts of the HUB OIA Project relative to the South Coast Air Quality Management District's regional significance thresholds for criteria pollutants and recommends implementation of TOP EIR Mitigation Measures AQ 3-1 through AQ 3-3.

The Addendum also states… "*A detailed air quality assessment (AQ Study) of the proposed project was conducted by Urban Crossroads in February 2022, to identify project-specific air pollutant impacts and recommend additional mitigation if necessary (i.e., other than those applicable measures already identified in TOP EIR). The AQ Study (Appendix A) determined the project will not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable federal or state ambient air quality because the project is consistent with the existing Industrial designation in the CCC SP."* (Addendum, p. 34.) It should also be noted the Addendum provides the full text of TOP EIR Mitigation Measures AQ 3-1 through 3-3 and explains how the project would implement them to address potential air quality impacts.

In addition, the Addendum concludes the project would not expose sensitive receptors to substantial pollutant concentrations and therefore, it would not result in any new impacts beyond those identified in TOP EIR. Thus, no project specific mitigation was required for sensitive receptors. In sum, the HUB OIA Project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary and no project specific mitigation is required.

Therefore, the commenter is incorrect as the Addendum did fully evaluate potential air quality impacts of the HUB OIA Project at a project level.

LETTER 5: JOEL HUSCHLE

Comment 1 (Email Page 1). The commenter makes a number of claims about owls relative to the HUB OIA Project. The commenter argues that owls are being "driven out of the City" and that a 90-acre preserve on the project site is needed to protect the owls.

The various technical studies[9] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[10] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.

[9] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[10] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).

o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[7] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[7] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 5 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[11], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 6: KIMBERLY DILLBECK

Comment 1 (Email Page 1). The commenter makes a number of claims about owls relative to the HUB OIA Project. The commenter argues that owls are being "driven out of the City" and that a 90-acre preserve on the project site is needed to protect the owls.

[11] Addendum Appendices A through G

The various technical studies[8] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[12] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[8] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not

[12] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[8] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 6 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[13], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 7: MARCYN CLEMENTS

Comment 1 (Email Pages 1-2). The commenter makes a number of claims about owls relative to the HUB OIA Project. The commenter argues that owls are being "driven out of the City" and that a 90-acre preserve on the project site is needed to protect the owls.

The various technical studies[14] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[15] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of

[13] Addendum Appendices A through G

[14] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[15] USDA WS APHIS WMP Website
https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.

o Active Dispersal — Scaring and hazing wildlife away from airport environments.

o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).

o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[16] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[11] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 7 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[17], provide substantial evidence that the HUB OIA Project will not have any new or

[16] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[17] Addendum Appendices A through G

more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 8: PAUL ROMERO/JESSICA GARCIACANO

Comment 1 (Email Pages 1-2). The commenter makes a number of comments about burrowing owl (owl) relative to the HUB OIA site and project. The commenter expresses concern about the collection of development fees to help protect the owl but is not aware if those funds have been used to protect owl habitat. The commenter states that land should be preserved in the City to protect the owl.

The various technical studies[18] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[19] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

---

[18] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[19] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[13] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specifically for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[13] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum. **Letter 8 Summary.** This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[20], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 9: SUZANNE THOMPSON, POMONA VALLEY AUDUBON SOCIETY, BURROWING OWL COMMITTEE

Comment 1 (Email Pages 1-3). The commenter makes a number of comments about burrowing owl (owl) relative to the HUB OIA site and project. The commenter argues that this development will have irreparable impacts on the owl. The commenter argues that the project site is a critical part of owl habitat in the region and the FAA actually encourages wildlife like the owl to co-exist on airport properties. The commenter also states TOP EIR mitigation for owl impacts has not been successful (i.e., collection of new development fees to purchase habitat).

The various technical studies[21] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents

[20] Addendum Appendices A through G

[21] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[22] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."
The supporting studies[15] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl

[22] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[23] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 9 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[24], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 10: TRUDE HURD

Comment 1 (Page 1). The commenter laments the loss of owl habitat over the years throughout the region, and claims it would be appropriate for an owl preserve on the HUB OIA Project site.

The commenter is incorrect that the HUB OIA Project site is "perfect for a burrowing owl preserve." The various technical studies[25] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[26] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

---

[23] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[24] Addendum Appendices A through G

[25] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[26] USDA WS APHIS WMP Website
https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.

o Active Dispersal — Scaring and hazing wildlife away from airport environments.

o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).

o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[18] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

Based on information in TOP, TOP EIR, and several technical studies[18] prepared by qualified professionals, the Relocation Plan is the most appropriate way to provide for the long-term survival of the owls consistent with Policies ER5-1 and ER5-2 in TOP, as cited in the Addendum.

Letter 10 Summary. This response, TOP, TOP EIR, the Addendum, and the various supporting technical studies[27], provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

[27] Addendum Appendices A through G

LETTER 11: DAN SILVER, ENDANGERED HABITATS LEAGUE

Comment 1 (Email Page 1). The commenter argues that owl relocation does not work and the HUB OIA Project site should include an owl preserve.

The commenter is incorrect that the HUB OIA Project site is "perfect for a burrowing owl preserve." The various technical studies[28] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[29] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA.

---

[28] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[29] USDA WS APHIS WMP Website
https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[30] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

LETTER 12: SETH THOMPSON

Comment 1 (Email Page 1). The commenter suggests TOP EIR is a "flawed document".

Comments on the adequacy of TOP 2050 EIR are untimely and irrelevant. Objections to that document were required to be raised when the matter was before the City Council. Opponents cannot now use the current project to attack the certified TOP EIR. Moreover, criticism of the City's overall planning efforts are misplaced in the current context of a single project, one which has long been planned and allowed on the project site (i.e., CCCSP and TOP).

Comment 2 (Email Page 1). The commenter states TOP Addendum for the HUB OIA Project relies on an owl mitigation plan that has already failed but does not elaborate on the nature of the failure. The commenter also states…"there is incontrovertible scientific evidence that even the best translocation efforts result in high mortality." However, the commenter does not provide any documentation to support that statement.

The various technical studies[31] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

[30] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[31] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[32] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[22] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

[32] USDA WS APHIS WMP Website https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

Comment 3 (Email Page 1). The commenter states, without evidentiary support, that owls that…"survive the trauma of translocation represent a loss of distinct biodiversity" and that "loss of the Ontario Airport owls will have damaging effects on Chino Burrowing Owls and cascading negative effects on the few indigenous Burrowing Owls in the Pomona Valley."

The various technical studies[33] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[34] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA.

---

[33] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[34] USDA WS APHIS WMP Website
https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[23] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. . If the owls were to remain on the project site, raptors will continue to hunt the owls by perching on the large buildings and trees in the surrounding area. There is no indication that relocation of the owls to an appropriate site in the area would result in significant impacts to the biodiversity or genetic pool for owls in the Pomona Valley.

Comment 4 (Email Page 1). The commenter argued there was insufficient time to respond to the project documents over the holidays.

The HUB OIA Project has been in process for some time. The City properly noticed the January 4, 2023 Development Advisory Board hearing per California Government Code Sections 54950-54963 (Ralph M. Brown Act) and the Ontario Municipal Code (OMC) Titles 1 and 2 (General Provisions and Administration). Regarding this noticing, a number of individuals and entities – including this one – were able to provide comments prior to the start of the meeting. Regardless, the HUB OIA Project requires Planning Commission approval and all interested parties will have an opportunity to provide written and/or oral comments at that time.

Letter 12 Summary. These responses, TOP, TOP EIR, the Addendum, and the various supporting technical studies[35] provide substantial evidence that the HUB OIA Project will not have any new or more significant impacts than those identified in TOP EIR, and therefore, the Addendum satisfies the intent and requirements of CEQA.

LETTER 13: NATASHA WALTON, INLAND VALLEY ADVOCATES FOR THE ENVIRONMENT (IVAE)

Comment 1 (Email Page 1). The commenter questioned reliance on TOP EIR but did not acknowledge that an EIR Addendum can be the appropriate CEQA compliance document for a project that is consistent with the General Plan and zoning designations when it can be demonstrated the Pa project will not result in new or more have significant impacts that those that were not already examined in the EIR for which the Addendum is prepared. The Addendum does just that. In this case, the use of an TOP Addendum is appropriate as the HUB OIA Project is consistent with TOP land use designations and City zoning designations, therefore the cumulative potential impacts of the HUB OIA Project have been accounted for in TOP EIR.

[35] Addendum Appendices A through G

For additional information, see separate responses in letters from Allen Matkins regarding comments in the “Coalition Letter” and the “Center for Biological Diversity (CBD) Letter”.

Comment 2 (Email Page 1). The commenter argued the HUB OIA Project did not conduct a proper noise study involving airport noise. However, the commenter failed to note the Addendum clearly evaluated both Project-related and Airport-related noise impacts. Page 71 of the Addendum states…

> TOP EIR found stationary and transportation noise impacts of future development under TOP to be less than significant with implementation of Safety Element Policy S-4.1, Noise Mitigation, which utilizes the City’s Noise Ordinance, building codes, and subdivision and development code regulations to reduce noise from future development projects (SEIR p. 5.13-32).
>
> The project site was previously analyzed by TOP EIR as supporting industrial uses and the project will not expose people to or generate noise levels in excess of the standards established in TOP EIR (Section 5.12). The project site is surrounded on the north, east, and south sides by industrial or commercial/office uses, and to the west by the OIA. The I-10 is just north of the site, the I-15 is just east of the site, and the site is within the OIA’s Safety Zones. The issue of the project’s consistency with the ALUCP is addressed in Section 9, *Hazards and Hazardous Materials* (airport-related hazards) and potential noise impacts are addressed in detail in Section 9.3e. As discussed therein PDF/COA included in the Mead & Hunt airport study (Appendix E) have been incorporated into the project.

Both the Addendum and the Mead & Hunt report on airport safety included analyses of airport noise impacts.

Comment 3 (Email Pages 1-2). The remaining comments were regarding burrowing owl and are similar to those raised in Letters 14 through 44 below.

NOTE: The following 33 letters make essentially the same comments so they are addressed with one response after the list of commenters:

LETTER 14: DAVE MACIAS
LETTER 15: DEENA LIGORRIA
LETTER 16: GLORIA KARIMI
LETTER 17: GUS OCON
LETTER 18: JACOB LIGORRIA
LETTER 19: LAURA JAOUI
LETTER 20: LORI GALLOWAY
LETTER 21: MADELINE ALLINDER
LETTER 22: MARCYN DEL CLEMENTS
LETTER 23: MARIA BENNETT
LETTER 24: MARTINA EBERT
LETTER 25: MYRIAM RODRIGUEZ
LETTER 26: PATRICIA ANIS
LETTER 27: PATRICIA GLEESON
LETTER 28: RACHAEL INNES
LETTER 29: REBECA BYERLEY
LETTER 30-1: ROBERT HOLCOMB
LETTER 30-2: MARIA HOLCOMB
LETTER 31: SCOTT MARNOY
LETTER 32: ALAN DAVIS
LETTER 33: SHEA MILLAN
LETTER 34: SIDNEY SILLIMAN
LETTER 35: ANDY GEORGES
LETTER 36-1: JIMMY CHERTKOW
LETTER 36-2: APRIL CHERTKOW
LETTER 37: PAM NELSON
LETTER 38: CAREN HANSON
LETTER 39: JOEL HUSCHLE
LETTER 40: JAZMYN RIVERA
LETTER 41: JEFF STROGEN
LETTER 42: KELLY COYNE
LETTER 43: ERIK KNUTZEN
LETTER 44: SHARI WASSON

Comment 1 (Email Page 1). The commenters argue that owl relocation does not work and the HUB OIA Project site should include an owl preserve.

The HUB OIA Project site is not an appropriate location for an owl preserve. The various technical studies[36] on the owls and airport safety clearly demonstrate that the project site (i.e., just east of OIA and under normal landing pattern operations) is absolutely not safe (i.e., harmful) for both airport aircraft and the owls. Owls may not fly high enough to directly cause aircraft accidents as cited by the commenter. However, the presence of owls in this location attracts larger birds of prey into the landing airspace of OIA which does represent a safety hazard both for aircraft damage and potential injury/loss of life for passengers/crew. Without removing the attractor prey species, it is unlikely a raptor management program would be successful over the long-term.

The U.S. Department of Agriculture (USDA) provides Wildlife Services (WS) through its Animal and Plant Health Inspection Service (APHIS) program for airports to help prevent and resolve wildlife conflicts that threaten public health and safety from concentrated populations of birds and other wildlife at or near airports contribute to wildlife strikes. The Airport Wildlife Hazards Program[37] supports an airport when preparing a Wildlife Hazards Management Plan (WMP) to document an airport's wildlife hazards and how the airport plans to address and manage them. It guides operations, defines roles of airport personnel, and details training to reduce risks. A WMP often involves a variety of methods to resolve wildlife conflicts including the following:

- o Habitat Modification — Altering vegetation and water, creating fences and barriers, and other activities to make the airport unattractive to wildlife.
- o Active Dispersal — Scaring and hazing wildlife away from airport environments.
- o Trapping and Relocation — Capturing and moving animals can be used for some species when legally allowed and feasible (e.g., hawks and owls).
- o Lethal Removal —Lethal removal may be used in some situations for the protection of the flying public and crew. Lethal removal is permitted by the U.S. Fish and Wildlife Service and state wildlife agencies under airport depredation permits.

The OIA strives to meet APHIS requirements for wildlife management to minimize risks and hazards to aircraft and their passengers and crews. On February 21, 2021, Michelle Brantley, the Director of Planning for OIA, stated in an email to Suzanne Thompson with the Audubon Society, that "the biologist's assessment [for the HUB project] concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. I did discuss the draft report with the FAA.

---

[36] Addendum Appendix B, BUOW Reports (Helix-Kidd 2020), BUOW site surveys (Helix or Wood 2019-2022), BUOW Relocation Plan (ELMT 2022), and Appendix E, Airport Safety Report (Mead & Hunt 1-2022)

[37] USDA WS APHIS WMP Website
https://www.bing.com/search?q=USDA%20APHIS%20wildlife%20management%20plans%20for%20airports&msbd=%7B%22triggeringMode%22%3A%22Explicit%22%2C%22intent%22%3A%22UserHistory%22%7D&form=BFBBQF&cvid=B43D24A1DAFC42E8B9C5A09CBAE3E636&sp=3&ghc=1

My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport."

The supporting studies[25] conclude that the most appropriate solution to this safety issue is to relocate the owls from the project site to a safer site in some other location. That is why a separate Relocation Plan has been prepared specially for this HUB OIA Project, and thus, a generic in-lieu fee is not applicable. The Relocation Plan, which will be overseen by the CDFW, will govern before, during, and after project implementation to assure successful relocation of the owls from the unsafe project site.

No evidence was presented to show the Relocation Plan would result in alleged impacts, such as loss of biodiversity, avoiding inbreeding of dispersed juveniles, and/or cumulative impacts on owl populations. Moreover, the comments fail to acknowledge any benefits that may accrue from relocating owls from the project site, including survival of owls now and in the future.

From:	Kent Norton
To:	Edmelynne V. Hutter
Cc:	Pam Steele; Rudy Zeledon; John Pierce; Bruce McDonald
Subject:	Re: The HUB - Response comments and letters - email #1
Date:	Wednesday, January 18, 2023 12:54:42 PM
Attachments:	46 Kantrowitz owl email.pdf 45 Karnovsky email.pdf 47 Quint Email.pdf

I have reviewed the three email DAB letters dated 1-4-23 you sent me today. Although we did not receive these with the other 44 email letters, they make the same comments as most of the other email letters we did respond to in our memo dated 1-18-23. They all present arguments regarding burrowing owl that were raised by many other commenters as addressed in our memo. You should consider these three emails added to the "group" of 31 responses presented at the end of our memo (Responses 14-44). If necessary, you can number them Letters 45-47 as attached and provide this email as part of the Administrative Record to the Planning Commission. Thank you...

On Wed, Jan 18, 2023 at 3:05 PM Edmelynne V. Hutter <EHutter@ontarioca.gov> wrote:

> Hi Pam and Kent,
>
> I don't know if these 3 comments were forwarded to you. They were received after the DAB meeting. They are the form letters/emails.
>
> Regards,
>
> **Edmelynne V. Hutter, AICP**
>
> Senior Planner
>
> City of Ontario | Planning Department
> 303 East B Street, Ontario, CA 91764
>
> 909.395.2429 direct
>
> ehutter@ontarioca.gov

--
Kent Norton, AICP, REPA
Senior Project Manager

PLANNING | DESIGN | COMMUNICATIONS | MANAGEMENT | SCIENCE | TECHNOLOGY

1650 Spruce Street, Suite 106
Riverside, California 92507 | USA
o 951-787-9222 ext 8320 cell 909-518-8200
knorton@migcom.com
www.migcom.com [migcom.com]
[facebook.com] [twitter.com] [linkedin.com] [instagram.com]

Former State President of the Association
of Environmental Professionals (AEP)

Because of the Shelter at Home order, we are working from home. Please call my cell phone to reach me. Thanks!

Exhibit J: ELMT CONSULTING RESPONSE TO COMMENTS

(Exhibit follows this page)

January 18, 2023

SUBJECT: Response to Comments – Group Letter dated January 4, 2023, challenging the HUB at Ontario International Airport.

1. The Ontario Plan mitigation that started around 2007 has been collecting fees from developers to mitigate the loss of large sections of habitat. The City has been working with the Inland Empire Resources Conservation District (IERCD) and Dan Silver to allocate the collected funds towards preserving lands around the Prado Basin.

2. The Ontario HUB is one of the last remaining sites undeveloped in this region. There is currently an insufficient quantity of owls to maintain a healthy population capable of persisting overtime. Single large mitigation sites can be subject to stochastic events (fire, disease, vandalism, predators, feral cats/dogs, etc.) that can lead to the loss of remnant populations. Several mitigation sites that are connected through greenbelts or areas allowing safe travel is necessary for dispersal between mitigation sites.

   Regarding the Hub property, the owls will not persist here forever even if the site was preserved and undeveloped. There are many reasons which demonstrate that owls will not persist in the subject site in perpetuity, despite if a monitoring and management program was established. Preservation of this subject site will not adequately support a population of owls.

   The owl populations at the Seal Beach naval weapons station and the Orange County fairgrounds and many other similar locations all met the same fate. They were surrounded by urbanization and development and after several years the populations were extirpated. Development brings increased risk of mortality (predators, vehicle strikes, loss of foraging habitats, vandalism, etc.). Eventually these island patches of fragmented habitats supporting owls will blink out. They won't support owls in perpetuity as supported by these similar situations at the OC fair grounds and Seal Beach (and many other locations). The ability to safely disperse away from and into these island patches are critical for a regional population but as this area loses more habitat and dispersal becomes more difficult (increases risk of mortality), then it's more likely owls will be extirpated. Preservation of portion of the property would not result in long term owl occupation either.

3. Prior to the 1980's southwestern San Bernardino supported a robust breeding BUOW population with hundreds of pairs from the base of the San Bernardino Mountains south to the Prado Basin. After decades of development pressure and the complete absence of meaningful mitigation, only a few remaining breeding pairs and winter migrants are known to persist. The remaining highly fragmented landscape which lacks suitable, large, protected sites with connectivity to and between extant breeding sites creates a bottleneck and prevents the existence of a healthy source population.

With the continued development pressure and lack of adequate mitigation required by the resource agencies, the BUOW population in this region is tenuous at best and will likely never recover from what was once a robust breeding source population (Kidd et al. 2003, 2007).

A current review of BUOWs previously reported near the Ontario Airport includes 45 records from 1989-2017. These 45 records are located within seven nearby 7.5min USGS quads (Ontario, Prado, Corona North, Fontana, Cucamonga Peak and Mt. Blady) and Guasti quad where the airport is located (CNDDB 2020). The nearest owl locations reported south of the airport were evicted approximately ten years ago during development of industrial warehouses. Mitigation included the installation of artificial burrows in a barrow pit on the west side of the nearby retired landfill and the owls were evicted from their burrows prior to grading. Owls are no longer known to occupy this site south of the airport. The existence of two (2) breeding owl pairs, currently surveyed by the 2022 Helix report, which are located at the subject OIAA property along the east side of Haven Avenue are included in the list of 45 owl records. Several reported owls north of Interstate 10 that are located west and north of Ontario Mills Mall are some of the only possible extant owls near the airport. All of these owls are surrounded by development and located on small, highly fragmented sites that will not provide long-term conservation value for the owl due to future development and predation pressure to name a few.

Further, the sites chosen for relocation are preserved sites and will be connected to large open areas that support existing burrowing owl populations, that are already in conserved areas, allowing increased survivability and genetic diversity to avoid inbreeding.

4. The Conclusions and Management Implications section of the study "Release Strategies and Ecological Factors Influence Mitigation Translocation Outcomes for Burrowing Owls: A Comparative Evaluation" (S.M. Hennessey, et. al.) states the following:

> "Even if there is a survival penalty associated with translocation, it is important for managers and regulatory agencies to consider that translocation may achieve conservation goals better than displacement. The long-term value of translocation exceeds that of displacement when there are plausible projections of increasing future threats on the unprotected landscape around displacement sites. As the pace of development continues without any apparent de-escalation, wildlife such as BUOW experience 'serial eviction' as one habitat patch after another is lost to infrastructure expansion. Under these circumstances, it may be wise to consider translocation to protected areas that can manage these threats, conduct restoration activities to enhance habitat suitability, and include extra management support following release."

Except for the undeveloped interstitial areas associated with the Ontario International Airport runway to the west of the project site, the project site is almost entirely surrounded by existing development (industrial buildings) to the north, east and south. In accordance with the 2012 CDFW Staff Report on Burrowing Owls, BUOW burrow exclusion and closure is employed only where there are adjacent natural burrows and non-impacted sufficient habitat for BUOW to occupy with permanent protection mechanism in place. Since the project site is surrounded by development on

three of its boundaries, BUOW burrow exclusion and closure would likely result in BUOW moving from The HUB @ ONT project site to the Ontario International Airport runway, which would put the BUOW at risk of creating additional bird strike hazards with aircraft.

The presence of BUOWs at ONT is one wildlife hazard that the OIAA is required to abate under federal regulations (14 Code of Federal Regulations §139.337). These regulations require the OIAA, as part of ONT's certification with FAA, to "alleviate or eliminate wildlife hazards to air carrier operations." The ONT WHMP identifies BUOW as a wildlife hazard to airport operations that must be addressed, along with other hazards, under the WHMP.

While the subject site is zoned for industrial uses, the change of use incorporating the creation of a burrowing owl preserve site on airport property east of Haven Street would directly conflict with FAA regulations and guidance associated with the safety of aircraft operations and the use airport property. The following regulations and FAA guidance would apply to the proposed establishment of burrowing owl preserve on airport property:

- Title 14 of the Code of Federal Regulations, Part 139.339, *Wildlife Hazard Management*
- FAA Advisory Circular 150/5200-33, *Wildlife Hazard Attractants on and Near Airports*
- FAA Grant Assurances
- CertAlert 06-07, Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State-Listed Threatened and Endangered Species and Species of Special Concern on Airports Each item and its applicability to the proposed preserve is discussed in the following paragraphs.

Numerous avian bird strikes have been reported on the Ontario International Airport, including various strikes from BUOW. Due to the Federal Aviation Administration (FAA) regulations for avian bird strikes, flight safety, and USDA depredation permits in situ, onsite conservation of this subject site is not feasible. Translocation is needed for the long-term survival of the BUOWs on The HUB @ ONT project site.

USDA (Animal Plant Health Inspection Service; APHIS) is hired by OIAA to reduce strike hazards caused by various wildlife species. Per FAA rules and regulations, OIAA can't engage in restoration, mitigation or any actions that increase wildlife hazards within zones at and around an FAA certified airport. Any airport can lose their FAA certificate and funding if they are found to be out of compliance with this rule. Any mitigation efforts within 10,000 feet of the airport (the project site is located well within 10,000 feet of the airport) would be considered out of compliance and would likely result in wasted efforts as APHIS has the authority to haze, evict or lethally remove any hazardous wildlife.

Installing artificial burrows and/or encouraging owls to inhabit lands on or directly adjacent to the OIAA property violates FAA rules and is not a viable strategy because of the expected increased presence of other larger hazardous birds (e.g. red-tailed hawks, golden eagles, ferruginous hawks, red-shouldered hawks, Cooper's hawks, turkey vultures, and common ravens) who would attempt to predate or scavenge owls, squirrels or rabbits that would likely use the artificial burrows. Hawks

and vultures are those struck by aircraft at the highest rates and those known to cause the most damage per strike. These species are often involved in aircraft strikes while they are hover hunting or circling over the approach or departure ends of the airport within the glide slopes. Bird strikes in these situations (landing and take-off) are the most dangerous and can lead to catastrophic events that can kill hundreds of passengers and crew on jetliners.

Evicting the owls along Haven Avenue outside the airfield could result in owls moving to areas within the airfield, making a more hazardous situation. Owls are often found seeking refuge very close to taxiways and runways under lights, signs and other man-made structures that support refuge and areas for squirrels to create burrows. Many burrowing owls that are struck at airports are those crossing runways as aircraft are departing and arriving. This will generally not lead to a catastrophic accident however even small birds like burrowing owls are capable of causing tens of thousands of dollars in damage to aircraft per event.

Further, relocating or encouraging owls to reside on a commercial airfield would violate FAA rules, will result in APHIS having to remove the owls in the future, and creates potential liability for the resource agencies or biologists promoting the in-situ conservation of owls at or near an airport.

In summary, the act of attempting to conduct any form of "mitigation" including in situ or eviction on or directly adjacent to the airfield is not supported by the FAA, APHIS, or past direction from CDFW Headquarters. The best approach for owl mitigation at and adjacent to OIAA property should involve active relocation. This will better ensure for safe flight operations and compliance with FAA regulations while also attempting to provide the owls with a greater chance of survival and future breeding attempts.

Sincerely,

Travis McGill, ELMT Consulting

Exhibit K: OIAA RESPONSE TO COMMENTS

(Exhibit follows this page)

ONTARIO INTERNATIONAL AIRPORT
So Cal. So Easy.

Ontario International Airport Administration Offices

1923 E. Avion Street, Ontario, CA 91761

ALAN D. WAPNER President
RONALD O. LOVERIDGE Vice President
JIM W. BOWMAN Secretary
CURT HAGMAN Commissioner
JULIA GOUW Commissioner

ATIF J. ELKADI Chief Executive Officer
LORI D. BALLANCE General Counsel
JOHN M. SCHUBERT Treasurer

January 18, 2023

Mr. Rudy Zeledon
Planning Director
City of Ontario
303 East B Street
Ontario, CA 91764

Sent Via Email to rzeledon@ontarioca.gov

RE: Ontario International Airport Authority's Information About Burrowing Owls at Ontario International Airport; City of Ontario Development Plan PDEV21-047.

Dear Mr. Zeledon:

The Ontario International Airport Authority (OIAA) submits this letter regarding proposed development plan PDEV21-047 on about 198 acres of real property owned by the OIAA east of Haven Avenue. We are informed that some have suggested that burrowing owls (BUOW) should be preserved on the property. But, as explained below, the presence of BUOWs at Ontario International Airport (ONT) continues to present a safety threat to the traveling public and to aircraft operations. Their presence at the Airport is also inconsistent with Federal Aviation Administration (FAA) regulations and a mandated Wildlife Hazard Management Plan (WHMP) for ONT.

In June 2022 the OIAA wrote to the Pomona Valley Audubon Society explaining that the group's proposed BUOW preserve concept for the 198 acres of OIAA property east of Haven Avenue, or anywhere else at ONT, was not feasible due to substantial safety concerns. A copy of that letter is attached. The OIAA's position about the safety threat posed by BUOWs at ONT stated in that letter remains the same today.

In addition, the presence of BUOWs at ONT is one wildlife hazard that the OIAA is required to abate under federal regulations. (14 Code of Federal Regulations § 139.337.) Those regulations require the OIAA, as part of ONT's certification with the FAA, to "alleviate or eliminate wildlife hazards to air carrier operations." The OIAA has prepared, and the FAA has approved, a required WHMP for ONT to comply with federal regulations.

The ONT WHMP specifically identifies the BUOW as a wildlife hazard to Airport operations that must be addressed, along with other hazards, under the Plan. Contents and requirements of the WHMP include:

- Identification of birds as the "greatest threat to aviation at ONT" and a determination that "birds are generally considered the most hazardous form of wildlife at ONT."

- An obligation by OIAA to "actively reduce attractive wildlife habitat" at ONT, and to reduce wildlife that attracts predators. (Red tail hawks, another wildlife hazard identified in the WHMP, are predators of BOUWs.)

- Prioritization of wildlife population management and habitat modifications efforts at ONT.

- Use of OIAA resources and trained personnel to implement the many wildlife hazard abatement procedures listed in the WHMP.

- Coordination by a Wildlife Hazard Working Group, made up of staff from the FAA, U.S. Department of Agriculture Wildlife Services, Air Traffic Control Tower, and OIAA, to implement a range of wildlife control procedures and projects at ONT.

Consequently, based on express federal regulations, and the requirements of the FAA-mandated and approved WHMP, suggestions about using the 198 acres of real property owned by the OIAA east of Haven Avenue as a BUOW preserve are not feasible and must be rejected.

Please contact me if you have any questions about this letter.

Sincerely,

Atif Elkadi
Chief Executive Officer

cc: Elisa Grey, OIAA Chief Revenue Management Officer

Appendix A

OIAA Correspondence to Pomona Valley Audubon Society, June 13, 2022.
2 pages.

ONTARIO
INTERNATIONAL AIRPORT
So Cal. So Easy.

Ontario International Airport Administration Offices

1923 E. Avion Street, Ontario, CA 91761

ALAN D. WAPNER President
RONALD O. LOVERIDGE Vice President
JIM W. BOWMAN Secretary
CURT HAGMAN Commissioner
JULIA GOUW Commissioner
ATIF J. ELKADI Chief Executive Officer
LORI D. BALLANCE General Counsel
JOHN M. SCHUBERT Treasurer

June 13, 2022

Ms. Suzanne Thompson, Chair
Pomona Valley Audubon Society, Burrowing Owl Conservation Committee
2058 N Mills PMB #426
Claremont, CA 91711
sthompson@pomona.edu

COPY

Ms. Thompson,

Thank you for your proposal for a burrowing owl (BUOW) preserve at the Ontario International Airport ("ONT") on the "boot" property east of Haven Avenue.

In December 2021, Ontario International Airport Authority ("OIAA") Board deemed this land as surplus development airport land. The development of this land would allow the OIAA to obtain vital revenue sources to expand and grow ONT for the public benefit of the region, and to enhance the financial sustainability of ONT consistent with Federal Aviation Administration (FAA) policies and requirements.

Also in December 2021, the OIAA entered into a binding development entitlement agreement, which requires CanAm Ontario, LLC (Developer) to pursue and obtain all required zoning and California Environmental Quality Act (CEQA) reviews and approvals from the City of Ontario for a potential industrial development on the entire "boot" property. Subject to terms and conditions of the development agreement being satisfied and contingent on the results of the CEQA and zoning reviews for the land, the OIAA is contractually obligated to enter into a future 55-year commitment to ground lease securing the entire property for industrial development. Under proposed development plans, no part of this property is set aside for habitat preservation.

For decades the land has been zoned industrial under the California Commerce Center Specific Plan and has been covered by the California Environmental Quality Act (CEQA) approved Ontario Plan EIR. The Ontario Plan EIR fully analyzed biological impacts and requires habitat mitigation for the potential development of the land. CEQA permits active relocation of the owls to viable sites, subject to approval from United States Fish & Wildlife Services (USFW) and the California Department of Fish & Wildlife (CDFW). Per requirements, the Developer

is conducting seasonal focused owl protocol studies that will be completed in July 2022 and has identified existing nearby established conservation sites which will provide a superior life for these owls, subject to the City's concurrence under the pending CEQA review process. Occupancy of owls at or near the airport is not a viable location for any sustainable success of the owls. Such occupancy would be inconsistent with the FAA-approved Wildlife Hazard Management Plan for ONT, which is required by federal regulations. The owls are living in a flight path, pose a threat to aircraft operations, and are being threatened by urbanization, public harassment, and predators such as the red-tailed hawk.

The burrowing owl population at ONT continues to struggle, and since 2008 there have been sixteen (16) identified and reported bird strikes at ONT involving burrowing owls. Both the FAA and the OIAA have gone on record stating bird strikes present a continued danger to the public safety of commercial aircraft flights. The OIAA therefore does not support any enhancement of bird population on airport property.

This is first and foremost a safety issue, both for commercial flights and passengers, but also for the owls and red-tail hawks that prey upon them. Not only does the presence of birds near an airport pose a serious safety risk, but the owls are also becoming human-adapted due to their proximity to humans and development. We know this relocation would be better from a public safety perspective. In addition, the OIAA understands that expert burrowing owl biologists maintain that when relocated to a suitable conservation site, the owl population will have a higher probability of success.

As a result, and for the reasons we have outlined above, the OIAA is unable to execute this proposed concept and cannot support your proposal for a BUOW preserve within the ONT flight path and the California Commerce Center Specific Plan, and specifically within the proposed development site. We look forward to continuing a dialogue with the Pomona Audubon Society as it relates any approved BUOW relocation plans.

Sincerely,

Atif Elkadi
CEO, Ontario International Airport Authority

cc: Michelle R. Brantley, Chief Capital Development Officer
Elisa J. Grey, Director of Commercial Real Estate
Greg Devereaux, Director of Development

RESOLUTION NO. PC23-007

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF ONTARIO APPROVING AN ADDENDUM TO THE ONTARIO PLAN 2050 SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT, PURSUANT TO THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, AS AMENDED, FOR FILE NO PDEV21-047.

WHEREAS, MCDONALD PROPERTY GROUP (hereinafter referred to as "Applicant") has filed an Application for the approval of a Development Plan, File No. PDEV21-047, which consists of nine industrial buildings totaling 4,263,454 square feet and associated improvements on 216.39 gross acres (196.83 net acres) of land generally located east of Haven Avenue, west of Doubleday and Dupont Avenues, north of Jurupa Street and south of Airport Drive, in the City of Ontario, California (hereinafter referred to as "Application" or "Project"); and

WHEREAS, The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364) was certified on August 16, 2022, (hereinafter referred to as "Certified EIR"), in which development and use of the Project site was discussed; and

WHEREAS, the Planning Director of the City of Ontario has prepared and approved for attachment to the certified Environmental Impact Report, an Addendum to the Certified EIR (hereinafter referred to as "EIR Addendum") in accordance with the requirements of the California Environmental Quality Act of 1970, together with State and local guidelines implementing said Act, all as amended to date (collectively referred to as "CEQA"); and

WHEREAS, the EIR Addendum concluded that implementation of the Project could result in a number of significant effects on the environment that were previously analyzed in the Certified EIR, and that the Certified EIR identified mitigation measures that would reduce each of those significant effects to a less-than-significant level; and

WHEREAS, pursuant to State CEQA Guidelines Section 15164(a), a lead agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary to a project, but the preparation of a subsequent or supplemental EIR is not required; and

WHEREAS, the City determined that none of the conditions requiring preparation of a subsequent or supplemental EIR would occur from the Project, and that preparation of an Addendum to the Certified EIR was appropriate; and

WHEREAS, the City of Ontario is the lead agency on the Project, and the Planning Commission is the decision-making authority for the requested approval to construct and otherwise undertake the Project; and

WHEREAS, public comments were received regarding opposition of the Project due to concerns about the Project's impact on Burrowing Owls and air quality; and

WHEREAS, the Applicant has provided responses to each comment; and

WHEREAS, the Planning Commission has reviewed and considered the EIR Addendum for the Project, the public comments received, and the Applicant's responses, has concluded that none of the conditions requiring preparation of a subsequent of supplemental EIR have occurred, and intends to take actions on the Project in compliance with CEQA and state and local guidelines implementing CEQA; and

WHEREAS, the EIR Addendum for the Project are on file in the Planning Department, located at 303 East B Street, Ontario, CA 91764, are available for inspection by any interested person at that location and are, by this reference, incorporated into this Resolution as if fully set forth herein; and

WHEREAS, all legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, IT IS HEREBY FOUND, DETERMINED, AND RESOLVED by the Planning Commission of the City of Ontario, as follows:

SECTION 1: ***Environmental Determination and Findings.*** As the decision-making authority for the Project, the Planning Commission has reviewed and considered the information contained in the administrative record for the Project. Based upon the facts and information contained in the administrative record, including all written and oral evidence presented to the Planning Commission, the Planning Commission finds as follows:

(1) The environmental impacts of this project were reviewed in conjunction with an Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report (State Clearinghouse No. 2021070364), certified by the Ontario City Council on August 16, 2022, in conjunction with File No. PGPA20-002; and

(2) The EIR Addendum and administrative record have been completed in compliance with CEQA, the State CEQA Guidelines, and the City of Ontario Local CEQA Guidelines; and

(3) The City's "Guidelines for the Implementation of the California Environmental Quality Act (CEQA)" provide for the use of a single environmental

assessment in situations where the impacts of subsequent projects are adequately analyzed. This Application introduces no new significant environmental impacts; and

(4) All previously adopted mitigation measures shall be a condition of project approval, as they are applicable to the Project, and are incorporated herein by this reference; and

(5) The EIR Addendum contains a complete and accurate reporting of the environmental impacts associated with the Project, and reflects the independent judgment of the Planning Commission; and

(6) There is no substantial evidence in the administrative record supporting a fair argument that the project may result in significant environmental impacts.

SECTION 2: ***Additional Environmental Review Not Required.*** Based on the Addendum, all related information presented to the Planning Commission, and the specific findings set forth in Section 1, above, the Planning Commission finds that the preparation of a subsequent or supplemental Environmental Impact Report is not required for the Project, as the Project:

(1) Does not constitute substantial changes to the Certified EIR that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and

(2) Does not constitute substantial changes with respect to the circumstances under which the Certified EIR was prepared, that will require major revisions to the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of the previously identified significant effects; and

(3) Does not contain new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the Certified EIR was certified/adopted, that shows any of the following:

(a) The project will have one or more significant effects not discussed in the Certified EIR; or

(b) Significant effects previously examined will be substantially more severe than shown in the Certified EIR; or

(c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt such measures; or

(d) Mitigation measures or alternatives considerably different from those analyzed in the Certified EIR would substantially reduce one or more significant effects on the environment, but which the City declined to adopt.

SECTION 3: ***Planning Commission Action.*** Based upon the findings and conclusions set forth in Sections 1 and 2, above, the Planning Commission hereby finds that based upon the entire record of proceedings before it, and all information received, that there is no substantial evidence that the Project will constitute substantial changes to the Certified EIR, and does hereby approve the EIR Addendum, attached hereto as "Attachment A," and incorporated herein by this reference.

SECTION 4: ***Indemnification.*** The Applicant shall agree to defend, indemnify and hold harmless, the City of Ontario or its agents, officers, and employees from any claim, action or proceeding against the City of Ontario or its agents, officers or employees to attack, set aside, void, or annul this approval. The City of Ontario shall promptly notify the applicant of any such claim, action, or proceeding, and the City of Ontario shall cooperate fully in the defense.

SECTION 5: ***Custodian of Records.*** The documents and materials that constitute the record of proceedings on which these findings have been based are located at the City of Ontario City Hall, 303 East "B" Street, Ontario, California 91764. The custodian for these records is the City Clerk of the City of Ontario.

SECTION 6: ***Certification to Adoption.*** The Secretary shall certify to the adoption of the Resolution.

- - - - - - - - - - - - - -

The Secretary Pro Tempore for the Planning Commission of the City of Ontario shall certify as to the adoption of this Resolution.

I hereby certify that the foregoing Resolution was duly and regularly introduced, passed and adopted by the Planning Commission of the City of Ontario at a regular meeting thereof held on the 24th day of January 2023, and the foregoing is a full, true and correct copy of said Resolution, and has not been amended or repealed.

Nancy DeDiemar
Planning Commission Chairperson

ATTEST:

Rudy Zeledon
Planning Director and
Secretary to the Planning Commission

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Gwen Berendsen, Secretary Pro Tempore of the Planning Commission of the City of Ontario, DO HEREBY CERTIFY that foregoing Resolution No. PC23-007, was duly passed and adopted by the Planning Commission of the City of Ontario at their regular meeting held on January 24, 2023, by the following roll call vote, to wit:

AYES: Dean, DeDiemar, Lampkin, Ricci

NOES: None

ABSENT: Anderson, Gage

ABSTAIN: None

Gwen Berendsen
Secretary Pro Tempore

ATTACHMENT A:

Addendum to The Ontario Plan 2050 Supplemental Environmental Impact Report

(Addendum to follow this page)

City of Ontario
Planning Department
303 East B Street
Ontario, California 91764
Phone: 909.395.2036
Fax: 909.395.2420

California Environmental Quality Act

Addendum to The Ontario Plan Environmental Impact Report

Project Title/File No.: PDEV21-047 — The HUB at Ontario International Airport

Lead Agency: City of Ontario, 303 East "B" Street, Ontario, California 91764, (909) 395-2036

Contact Person: Edmelynne Hutter, Senior Planner, (909) 395-2429

Project Sponsor: McDonald Property Group

Project Location: The project site is located in southwestern San Bernardino County, within the City of Ontario (City) as shown in **Figure 1** below. The City of Ontario is located approximately 40 miles from downtown Los Angeles, 20 miles from downtown San Bernardino, and 30 miles from Orange County. As illustrated in **Figure 2** below, the project site is irregularly shaped and located east of Haven Avenue, north of Jurupa Street, south of Airport Drive, and west of Double Day Avenue and Dupont Avenues within the California Commerce Center at Ontario Specific Plan (CCC SP or Specific Plan). The project is located on 24 parcels encompassing 196.9 acres just east of the Ontario International Airport (OIA). This acreage does not include the City water well easements. The project site includes Assessors' Parcel Numbers 0211-222-47 and -048; 0211-222-52 thru -57; 0211-232-04 thru -07; 0211-232-011 thru -20; and 0211-232-44 thru -046. All full rights-of-way for public streets that are required for this project have been dedicated and granted to the City.

Figure 1: REGIONAL LOCATION MAP

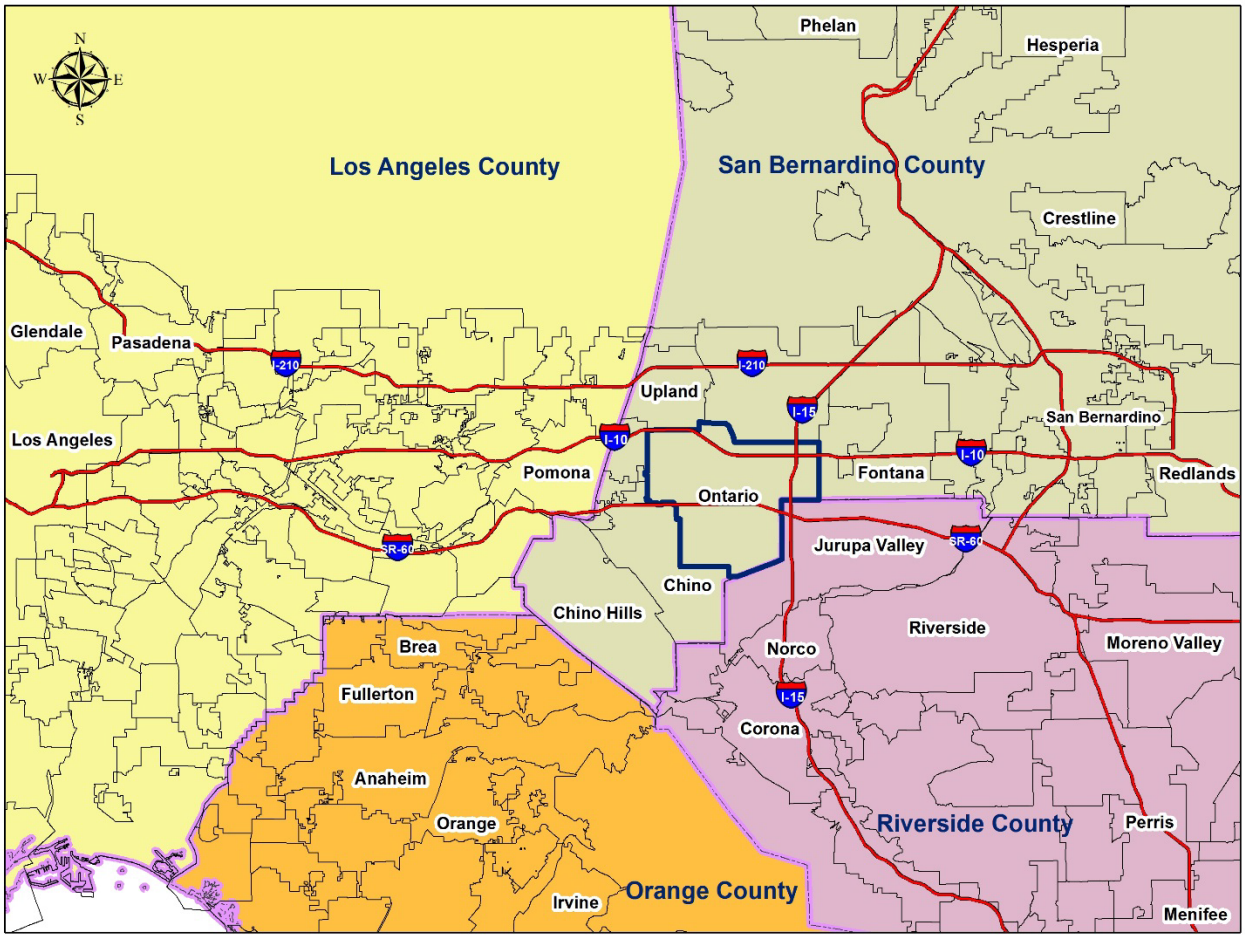


Figure 2: VICINITY MAP

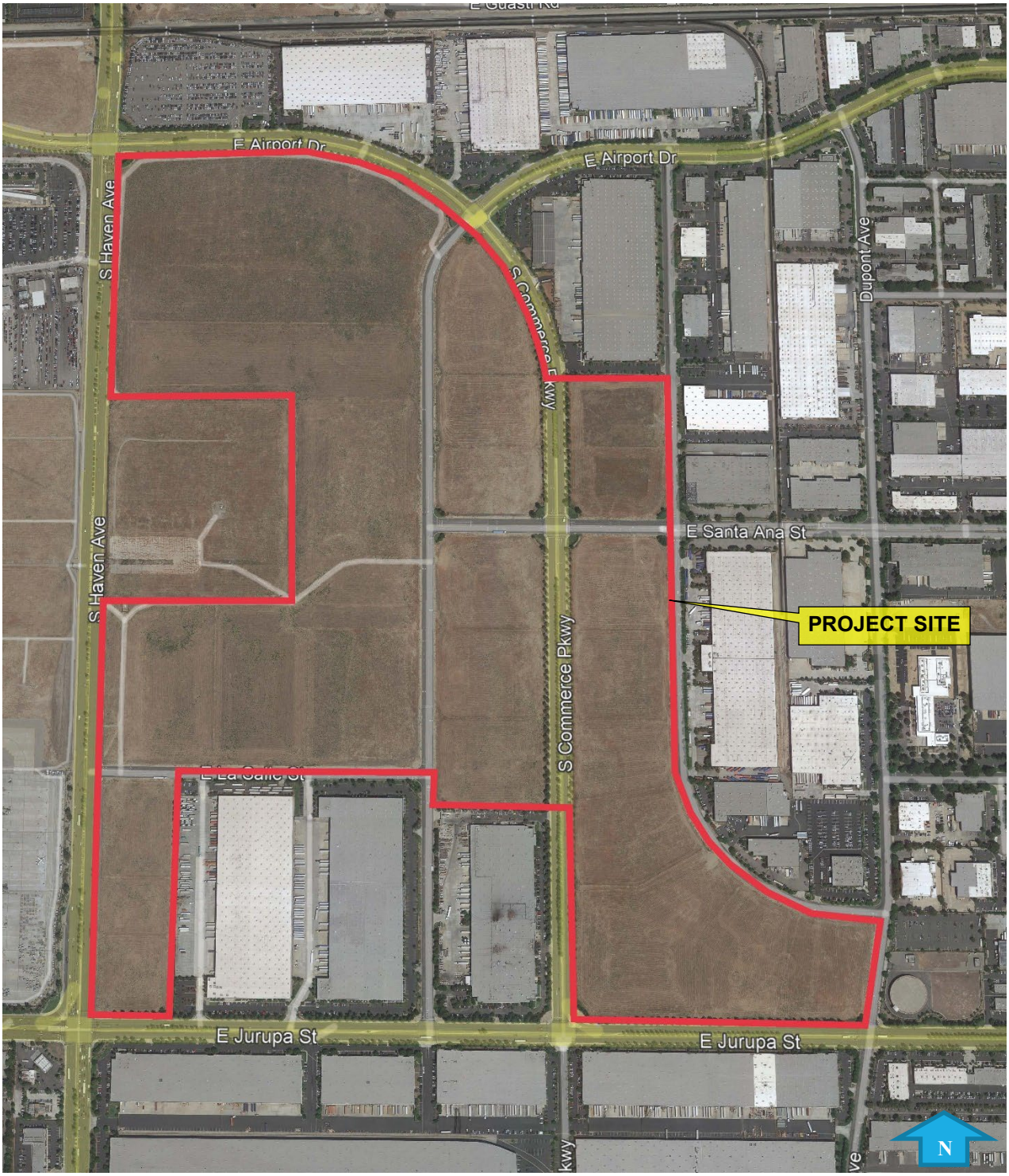
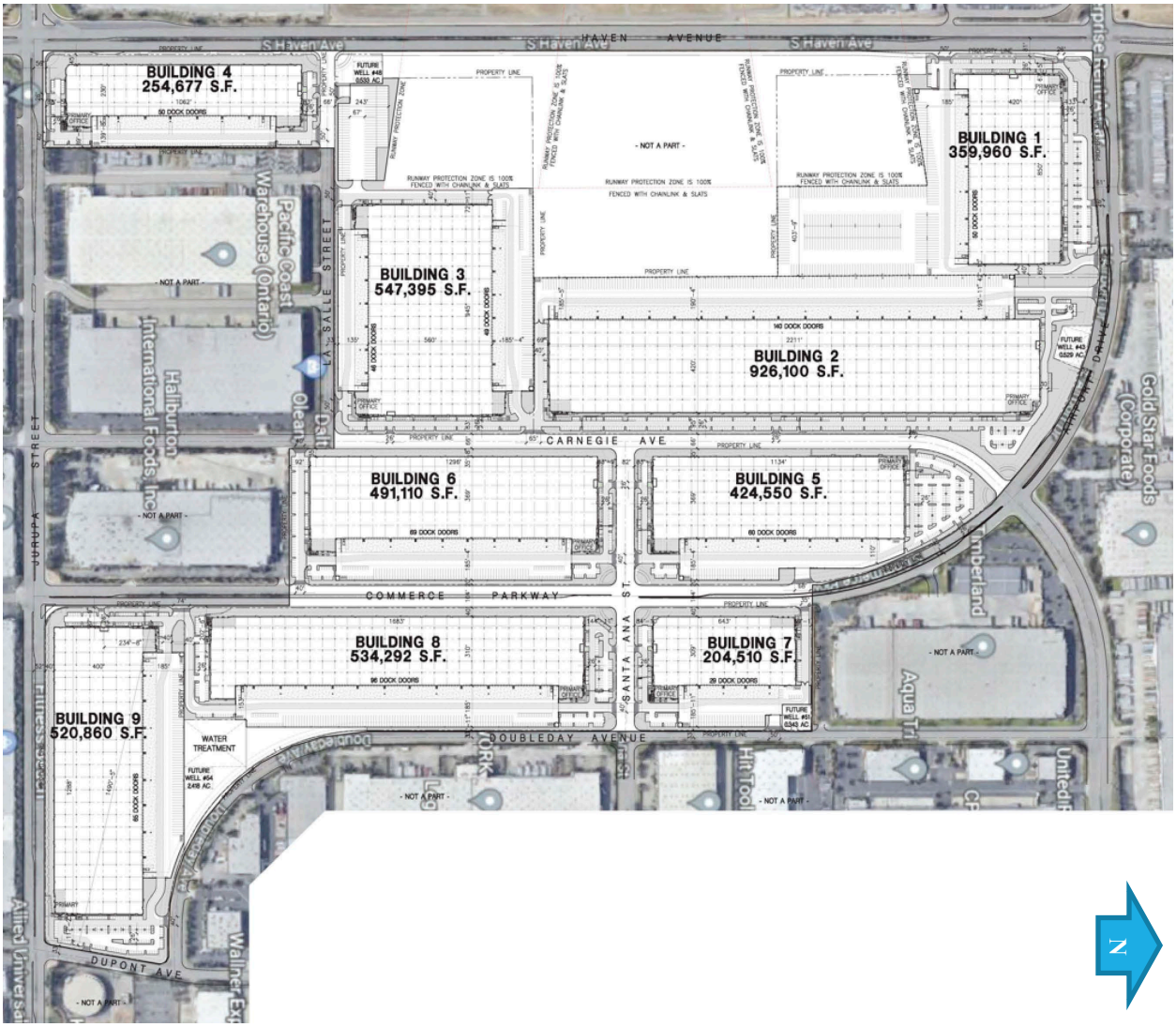


Figure 3: SITE PLAN



General Plan Designation: Existing – Industrial (0.55 FAR)
Proposed – Industrial (0.55 FAR)

Zoning: Existing – California Commerce Center Specific Plan (2591-SP) - Light Industrial
Proposed – California Commerce Center Specific Plan (2591-SP) - Light Industrial

Description of Project: The project proposes to construct nine (9) industrial warehouse buildings in one phase with a total of 4.28 million square feet of building area as shown in **Figure** 3 and consistent with the California Commerce Center Specific Plan (CCCSP). Table 1 shows the building characteristics of the proposed project. The most current Figure LU-01 of The Ontario Plan (TOP) 2050, which is the Land Use Plan of the City's current General Plan (2022), indicates that industrial uses have a maximum Floor Area Ratio (FAR) of 0.55 so the 196.9-acre site would be allowed up to 4,717,330 square feet of industrial uses such as warehousing under TOP. TOP Industrial land use category allows a "variety of light industrial uses, including warehousing/distribution". The project proposes 9.2% less square footage than the maximum allowed under TOP (i.e., project is 90.8% of TOP` maximum). It should be noted the most current version of TOP and its environmental impact report (EIR) are dated August 16, 2022 (State Clearinghouse No. 2021070364).

On August 21, 2018, the City Council amended the CCCSP designations and rezoned the following eight (8) parcels 0211-222-55, 0211-232-45, 0211-232-46, 0211-232-16, 0211-232-17, 0211-232-18, 0211-232-19, and 0211-232-20 on the project site from Commercial and Office to Light Industrial. **Table 1** shows the land uses of the proposed project. At that time the Council also determined the proposed changes were within and consistent with the analysis of TOP EIR certified on January 27, 2010, as the appropriate CEQA compliance for that action.

Table 1: Proposed Project Land Uses

	Site Area		Building Area (Sq. Ft)				Landscaping	
Building[1]	Acres	Sq. Ft.	Office	Warehouse	Total	%	Sq. Ft.	%
1	23.59	1,027,744	10,000	349,960	359,960	35.0	78,119	7.6
2	40.64	1,770,343	10,000	916,099	926,099	52.3	170,377	9.6
3	25.37	1,104,938	10,000	537,395	547,395	49.5	71,488	6.5
4	11.74	511,394	10,000	244,677	254,677	40.8	81,847	16.0
5	19.47	848,330	10,000	414,550	424,550	50.0	112,883	13.3
6	20.58	896,406	10,000	481,110	491,110	54.8	98,719	11.0
7	9.71	422,791	10,000	194,510	204,510	48.4	56,263	13.3
8	24.08	1,048,828	10,000	524,292	534,292	50.9	114,734	10.9
9	21.65	942,972	10,000	510,860	520,860	55.2	112,266	11.9
TOTAL	**196.83**	**8,573,915**	**90,000**	**4,173,453**	**4,263,453**	**49.5**	**896,696**	**10.5**

Source: Development Plan Application, McDonald Property Group December 2022
[1] see **Figure 3** a proposed site plan.

A detailed airport safety assessment was prepared for the project by Mead & Hunt in January 2022 with some of the tabular data updated in December 2022 (M&H 2022, Appendix E). Just west of the project site is a "clear zone," designated for the OIA, which is part of its aircraft landing approach zones for Runways 26R and 26L (Aircraft Safety Zone 2). As shown in **Figure 4**, the project site spans the following Safety Zones: Safety Zone 1, Runway Protection Zone (RPZ); Safety Zone 2, Inner Approach/Departure Zone; and Safety Zone 3, Inner Turning Zone. Although 14.56 acres of the Project site fall within Safety Zone 1, which encompasses the RPZs for Runways 26L and 26R, the proposed site plan (see Figure 3) keeps this zone clear of future structures and parking lots. As such, no compatibility conflicts exist in Safety Zone 1, which is the most restrictive of all the safety zones.

For Safety Zones 2 and 3, the individual proposed building sites are subject to the Airport Land Use Compatibility Plan (ALUCP) usage intensity (people per acre) limits for each zone. In accordance with ALUCP Policy S2, any site that is split by safety zone boundaries is treated as if it were multiple parcels divided at the safety zone boundary. This analysis is based on the most recently approved ALUCP (2018).

Figure 4: ONTARIO AIRPORT SAFETY ZONES

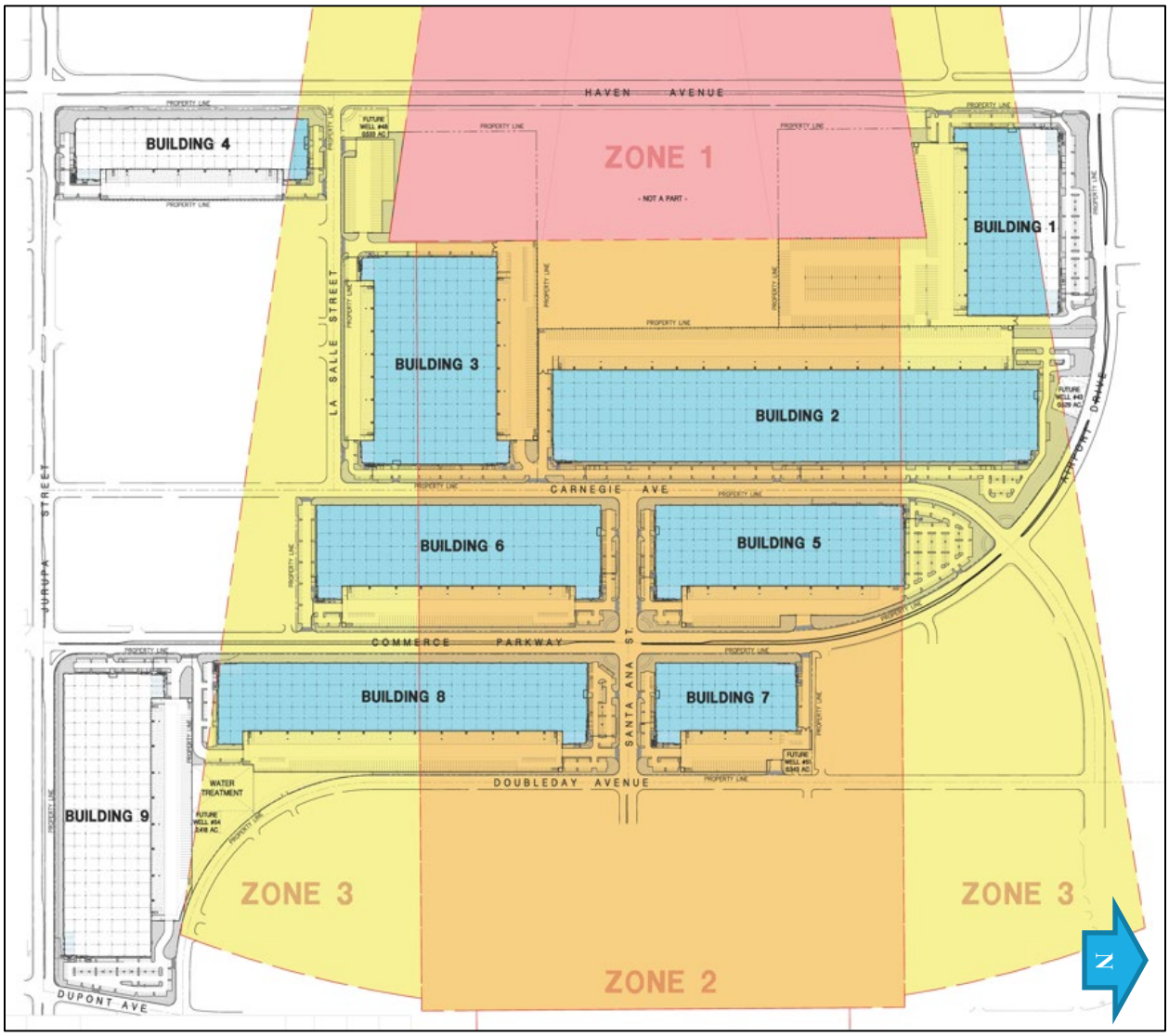


Table 2, Maximum Allowable Occupancy, presents the maximum allowable occupancy (number of people) permitted for each building site based on the ALUCP average intensity limits for Safety Zones 2 and 3. The maximum allowable occupancy is the primary criterion by which to evaluate the compatibility of each lessee's proposed specific use or combination of uses within each building. It should be noted that each building site includes the building itself plus adjacent parking and landscaping areas.

Table 2: Maximum Allowable Occupancy

Building[1] Site/Parcel	Safety Zone 2			Safety Zone 3			Building Site/Parcel Allowable Occupancy[3]
	Intensity Limit[2]	Site (acres)	Allowable Occupancy[3]	Intensity Limit[2]	Site (acres)	Allowable Occupancy[3]	
1	60	5.09	305	100	12.58	1,258	1,563
2	60	26.79	1,607	100	12.87	1,287	2,894
3	60	13.83	830	100	11.54	1,154	1,984
4	60	--	--	100	1.50	150	150

Building[1] Site/Parcel	Safety Zone 2			Safety Zone 3			Building Site/Parcel Allowable Occupancy[3]
	Intensity Limit[2]	Site (acres)	Allowable Occupancy[3]	Intensity Limit[2]	Site (acres)	Allowable Occupancy[3]	
5	60	16.35	981	100	3.12	312	1,293
6	60	12.77	766	100	7.81	781	1,547
7	60	9.71	583	100	--	--	583
8	60	11.46	688	100	11.53	1,153	1,841
9	NA	NA	NA	100	0.09	9	9
TOTAL (1-8)	**60**	**96.0**	**5,760**	**100**	**61.04**	**6,104**	**11,864**

Source: Exhibit 8, M&H 2022 Note: Totals rounded to nearest whole number NA = Not Applicable (see footnote 1)

[1] Portions of Buildings 3, 5-7 are also outside of the Safety Zones, and only the portions inside the Safety Zones are subject to building occupancy limits as shown above. Buildings 4 and 9 are not in Safety Zone 2 so no total building occupancy limits apply.
[2] Intensity limit = people per acre
[3] Allowable occupancy = maximum number of people on each building site

The Land Use Element of TOP 2050 states that all new developments surrounding ONT should be consistent with the adopted ALUCP and should meet standards and recommendations of Part 77 of the FAA, adopted through Ordinance 2758 in the Ontario Municipal Code. A consistency determination analysis for the ONT was prepared by the City and submitted to ONT-IAC and found that TOP 2050 is consistent with ALUCP for ONT (ONT–IAC 2022). Therefore, similar to the proposed project, TOP 2050 is consistent with the ALUCP for ONT because the general land use designations within the airport influence area are the same.

The City controls the ultimate determination of compliance with the ALUCP usage criteria, and those determinations will occur when a potential tenant(s) is identified for each building and a specific land use is proposed. The types of uses allowed with the proposed project include a mix of light industrial or warehouse uses with ancillary office space. According to data in the M&H Report, a high-intensity light industrial use (e.g., food products preparation) is likely to exceed the maximum allowable occupancy limits for Zone 2. Buildings located in Zone 2 are therefore better suited for low intensity light industrial and warehouse uses. Because tenants have not been identified, for purposes of this analysis, the applicant has requested approval of a 24-hour/7 days per week operational schedule to allow for flexibility for future tenants.

Requested Approvals. The project is within the boundaries of the CCCSP for which an EIR was prepared in 1981. The project application includes a Development Plan and an Addendum to the previously certified EIR prepared for TOP, which was Certified by the City Council on August 16, 2022. The EIR Addendum will allow the project to comply with the requirements of the California Environmental Quality Act (CEQA) (see Project Background below). The City's OIA Planning Liaison has shared the proposed Development Plan with OIA and it has been determined to be consistent with the OIA ALUCP.

Architecture. The proposed industrial buildings will include concrete tilt-up walls with painted and scored accents. The design will provide glazing and color variations to ease the length of the buildings. The mixture of varying elevations will utilize a combination of materials and colors. A maximum 14-foot tall concrete tilt-up wall will screen the truck yards and the wall colors will match the paint and color variations of the industrial buildings.

The project includes security and decorative lighting for the new proposed warehouse buildings, parking areas, and access routes consistent with the CCCSP and the City's Development Code. The lighting plan shows that all lighting is shielded and directed toward the ground to the extent necessary to minimize potential impacts with operations at the airport just west of the project site. The City's OIA Planning Liaison has shared the proposed Development Plan, including the proposed lighting, with OIA and it has been determined to be consistent with the OIA ALUCP.

Circulation and Parking. Access to the project will be from the following streets:

- Haven Avenue

- Jurupa Street
- Airport Drive
- Carnegie Avenue
- La Salle Street
- Commerce Parkway
- Doubleday Avenue
- Dupont Avenue
- Santa Ana Street

There are a minimum of two (2) access driveways for each of the buildings in the development. There are also 26-foot wide emergency vehicle access roads provided around the buildings and through the parking areas of the site. The project will provide a total of 2,269 parking spaces (see Table 3).

Landscaping. The project will provide landscaping along all the parkways, on the sides of the buildings except the truck docks/courts, and throughout the automobile parking areas per the requirements of the CCCSP. Landscaping setback requirements vary according to the street on which the building is located as outlined in the CCCSP. The Light Industrial zone does not have a set landscaping percentage requirement, however, the project will provide landscaping areas for each building site as shown previously in Table 1 for an average of 10.5% for the entire proposed project.

Development Standards. The industrial facility will be subject to the most current CCCSP zoning standards for development and design provided in **Table 3**, which demonstrates the project meets or exceeds the required standards. Setbacks vary according to the street on which the building is located.

Table 3: Project Development Standards

Location	Minimum Lot Size	Building Size	Building Height	Auto Parking Requirements	
CCC SP Requirement					
Development Standards for Light Industrial Uses	10,000 sf	See each building size below	55’	Warehouse: 1st 20,000 at 1/1,000 square feet Above 20,000 @1/2,000 square feet *(If office is less than 10% of Gross Floor Area, then no office parking is required)*	
Provided by Project Building/Parcel				**Provided**	**Required**
Building 1	23.6 ac	359,960 sf	48’	276 spaces	190 spaces
Building 2	40.6 ac	926,100 sf	48’	513 spaces	473 spaces
Building 3	25.4 ac	547,395 sf	50’ 6”	284 spaces	284 spaces
Building 4	11.7 ac	254,677 sf	48’	138 spaces	137 spaces
Building 5	19.5 ac	424,550 sf	50’	343 spaces	222 spaces
Building 6	20.6 ac	491,110 sf	50’ 6”	256 spaces	256 spaces
Building 7	9.7 ac	204,510 sf	48’	112 spaces	112 spaces
Building 8	24.1 ac	534,292 sf	50’ 6”	277 spaces	277 spaces
Building 9	21.7 ac	520,860 sf	50’ 6”	270 spaces	270 spaces
Total	**196.8 ac**	**4,263,454 sf**	**Max. 50’ 6”**	**2,469** spaces	**2,221 spaces**

Source: Development Plan Application, McDonald Property Group November 2022
ac = acres sf = square feet

Grading. Per the proposed conceptual grading plan, preparation of the project site will require specialized earthwork for Buildings 1-4 to accommodate the Federal Aviation Administration (FAA) Part 77 and 7460 aviation-related height restrictions. Grading of the site will require approximately 699,626 cubic yards (CY) of cut and 658,489 CY of fill, resulting in the export of 41,137 CY of soil from the site. Assuming 14 CY per load, the exporting of soil will require 2,938 one-way truck trips or 5,876 two-way truck trips which will require approximately 122 days to transport assuming 8 hours per day and 6 days per week. Truck trip lengths are assumed to be 20 miles per trip.

Construction. All construction activities, including site preparation and grading, building construction, paving, and the application of architectural coatings, are expected to take approximately three years (January 2024 to December 2026) and involve a variety of construction equipment as shown in **Table 4**.

Table 4: Construction Equipment

Construction Activity	Equipment	Quantity	Hours/Day
Site Preparation	Crawler Tractors	5	8
	Rubber Tired Dozers	4	8
Grading	Crawler Tractors	3	8
	Excavators	3	8
	Graders	2	8
	Rubber Tired Dozers	2	8
	Scrapers	3	8
Building Construction	Cranes	2	8
	Crawler Tractors	6	8
	Forklifts	6	8
	Generator Sets	2	8
	Welders	2	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coating	Air Compressors	1	8

Source: Urban Crossroads 2022

Project Setting: The project site consists of approximately 196.9 acres of land within eastern Ontario. The site is irregular in shape and is located just east of the OIA and Haven Avenue. The site is currently vacant and relatively flat with elevations ranging from 950 feet above mean sea level (amsl) at the northern end down to 910 feet amsl at the southern end with a gentle slope of 11 percent to the south. Runoff from the site generally flows toward the surrounding roadways. Historically the site was regularly disked for weed abatement and fire protection. However, it has not been cleared in some time now due to the presence of burrowing owl on the site (see below). The site supports some landscaped species around the perimeter and at major road intersections. The vacant conditions of the site currently support a small population of burrowing owl (*Athene cunicularia*) which is a California Species of Special Concern. The site supports no native plant associations of habitat for other listed or otherwise sensitive species of plants or animals.

The only existing onsite improvement is one abandoned water well although there is a former agricultural reservoir offsite just east of Haven Avenue. This structure appears to have been created sometime in the 1940's and was abandoned sometime before 1966 – remnants of it still appear on aerial photographs of the area. The location and extent of these uses are shown in the previous Figure 2. The majority of the project site lies within the OIA Safety Zones 1, 2 and 3 per the OIA ALUCP, as discussed above.

Project Background: The project is part of the CCC SP for which a project-level EIR was prepared and originally certified in November 1981. The CCCSP EIR (City EIR No. 81-4) originally proposed the project site for Industrial/Office uses (50% each) and identified the following environmental impacts with a total of 91 mitigation measures (MMs):

- construction air quality (MMs 1-6);
- operational air quality (7-13 MMs);

- airport noise on the project (14-16 MMs);
- cultural resources (MM 17);
- biological resources (MM 18-20); *[no mitigation for burrowing owl]*
- energy conservation (MMs 21-30);
- hydrology (MMs 31-34);
- land use compatibility (MMs 35-40);
- noise (MMs 41-44);
- seismicity (MMs 45-48);
- soils and geology (MMs 49-51);
- traffic (MMs 52-67); *[only addressed LOS/congestion impacts]*
- visual and aesthetics (MMs 71-73);
- wastewater (MM 74);
- water supply (MMs 75-78);
- utilities (MMs 79-83);
- services (MMs 84-89); and
- fiscal/economics (MMs 90-91).[1]

Due to its age, it should be noted the 1981 EIR did not make any conclusions about the significance of impacts after mitigation, only identifying the potential for impacts and recommending mitigation measures as shown above. Most of the mitigation measures recommended in the original 1981 EIR have been supplanted by regulatory compliance and standard conditions of approval by the City, and some issues like level of service (LOS) for traffic impacts no longer apply to CEQA documents. Typically, a project within a specific plan would be processed as an addendum to the previously certified EIR (i.e., the 1981 CCCSP EIR). However, in this case, the City's TOP and its EIR contain much more current and accurate environmental information about the project site and applicable mitigation as explained below and as summarized in Table A (provided separately).

On August 16, 2022, the Ontario City Council adopted the latest version of TOP, which serves as the City's General Plan under state law and provides a foundation for the City to operate as a municipal corporation that consists of six (6) distinct components: 1) Vision; 2) Governance Manual; 3) Policy Plan; 4) Council Priorities; 5) Implementation; and 6) Tracking and Feedback. The Policy Plan component of TOP meets the functional and legal mandate of a municipal General Plan and contains nine elements; Land Use, Housing, Parks and Recreation, Environmental Resources, Community Economics, Safety, Mobility, Community Design and Social Resources.

The City Council certified TOP EIR (SCH # 2021070364) analyzed the direct and physical changes in the environment that would be caused by implementation of TOP; focusing on changes to land use associated with the buildout of the proposed land use plan, and impacts resultant of population and employment growth in the City. The project proposes land uses consistent with TOP 2050. The significant unavoidable adverse impacts that were identified in TOP EIR included: agriculture resources, air quality, cultural resources, greenhouse gas (GHG) emissions, noise and transportation/traffic.

CEQA requires lead agencies to use the most current and accurate environmental information in analyzing project impacts. Therefore, consistent with the requirements of CEQA, the proposed project and its site have been analyzed relative to current technical studies and TOP EIR. These uses will be consistent with the industrial uses to the north, east, and south of the subject site. In addition, the subject site is located under the landing path of the OIA and this analysis evaluates the project relative to OIA constraints as well.

CEQA Requirements for an Addendum: If changes to a project or its circumstances occur or new information becomes available after adoption of an EIR or negative declaration, the lead agency may: (1) prepare a subsequent EIR if the criteria of CEQA Guidelines Section 15162(a) are met, (2) prepare a subsequent negative declaration, (3) prepare an addendum, or (4) prepare no further documentation (CEQA Guidelines Section 15162(b)). When only minor technical changes or additions to the negative declaration are necessary and none of the conditions described in Section 15162 calling for the preparation of a subsequent EIR or negative declaration have occurred, CEQA allows the lead agency to prepare and

[1] In January 1983, EIR Addendum No. 1 was approved that consolidated this list to 79 MMs and added some regulatory compliance.

adopt an addendum. (CEQA Guidelines Section 15164(b).) Under Section 15162, a subsequent EIR or negative declaration is required only when:

1) Substantial changes are proposed in the project which will require major revisions of the previous negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the negative declaration due to the involvement of any new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the negative declaration was adopted, shows any of the following:

    a) The project will have one or more significant effects not discussed in the previous negative declaration;

    b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

    c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

    d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Thus, if the project does not result in any of the circumstances listed in Section 15162 (i.e., no new or substantially greater significant impacts), the City may adopt an addendum to TOP EIR.

CEQA Analysis: According to CEQA Guidelines Section 15164, an Addendum to a previously certified EIR may be used if some changes or additions are necessary, but none of the conditions described in Section 15162 requiring the preparation of a subsequent negative declaration or EIR have occurred. The CEQA Guidelines require that a brief explanation be provided to support the findings that no subsequent EIR or negative declaration are needed for further discretionary approval. These findings are described below:

1) Required Finding: Substantial changes are not proposed for the project that will require major revisions of the previous EIR due to the involvement of new, significant environmental effects or a substantial increase in the severity of previously identified effects.

Substantial changes are not proposed by the project compared to what is allowed in TOP, and project implementation will not require revisions to TOP EIR. TOP EIR analyzed the direct and physical changes in the environment that would be caused by TOP; focusing on changes to land use associated with the buildout of the proposed land use plan. The site is located within the Light Industrial designated portion of the CCC SP. The project is consistent with the CCC SP requirements for that zone, which permit warehouse/distribution uses. As described in the Specific Plan and, therefore, analyzed in TOP EIR, maximum development of the project site (196.9 acres) would not exceed 4,717,330 square feet of light industrial uses. This is based on Figure LU-01 of the current TOP (Land Use Plan) which indicates that (light) industrial uses have a maximum FAR of 0.55 so the 196.9-acre site would be allowed up to 4,717,330 square feet of industrial uses under TOP. It should be noted the project proposes 9.2% less square footage than the maximum allowed under TOP (i.e., project is 90.8% of TOP maximum). Therefore, the proposed project will result in less development of the site than TOP EIR analyzed at buildout (i.e., 4,281,128 sf vs. 4,717,330 sf). Since the anticipated buildout resulting

from the project will be less than that originally analyzed in TOP EIR, no revisions to TOP EIR are required.

In addition, all previously adopted mitigation measures of TOP EIR are conditions of project approval or mitigation measures and are incorporated herein by reference. This document provides an analysis of the project and verification that the project will not cause any new or more significant environmental impacts.

2) *Required Finding: Substantial changes have not occurred with respect to the circumstances under which the project is undertaken, that would require major revisions of the previous Environmental Impact Report due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.*

Substantial changes have not occurred with respect to the circumstances under which the project was undertaken, that would require major revisions to TOP EIR. TOP EIR evaluated the site as Industrial with a maximum FAR of 0.55 (based on TOP Figure LU-01, Land Use Plan, and TOP EIR Figure 1-3, Proposed Land Use Plan), consistent with the surrounding industrial properties to the north, east, and south. The proposed project is implementing TOP EIR's industrial land use designation for the site and is consistent with the previous 1992 General Plan land use designation of Industrial for the site. Therefore, no proposed changes or revisions to TOP EIR are required. In addition, all previously adopted TOP EIR mitigation measures are incorporated herein by reference (see separate Table A). This document provides an analysis of the project and verification that the project will not cause any new or more significant environmental impacts.

3) Required Finding. No new information has been provided that would indicate that the proposed project would result in one or more significant effects not discussed in the previous EIR.

No new information has been provided that would indicate the proposed project would result in any new significant effects not previously discussed in TOP EIR. TOP EIR evaluated the site as Industrial with a maximum FAR of 0.55 (based on TOP Figure LU-01, Land Use Plan, and TOP EIR Figure 1-3, Proposed Land Use Plan), consistent with the surrounding industrial properties to the north, west, and south. Since adoption of the 1992 General Plan certification and the TOP 2050 EIR, the subject site and surrounding area have been planned for and remained industrial.

Burrowing owl surveys were completed in 2019, 2020 and a 2022 protocol study was conducted to determine the current number of burrowing owls on site. Any owls found onsite will be relocated to a more natural, less urbanized location with no aviation associated hazards in accordance with California Department of Fish and Wildlife (CDFW) protocols. In this regard, the applicant has prepared a Burrowing Owl Relocation Program (BRP) consistent with TOP Environmental Resources Element Policies ER5-1 and ER5-2. Therefore, no proposed changes or revisions to the TOP EIR are required. In addition, all previously adopted mitigation measures are incorporated herein by reference and outlined in Table A. This document provides an analysis of the project and verification that the project will not cause any new or more significant environmental impacts.

Conclusion: TOP EIR, certified by the City Council on August 16, 2022 was prepared as a Program EIR in accordance with CEQA, the CEQA Guidelines section 15121(a), and the City's Rules for the Implementation of CEQA. TOP EIR considered the direct physical changes and reasonably foreseeable indirect physical changes in the environment that would be caused by TOP. Consequently, TOP EIR focused on impacts from changes to land use associated with buildout of the City and impacts from the resulting population and employment growth in the City. The proposed project is consistent and compatible with existing and planned uses in the surrounding area. The amount of development anticipated at project buildout, as shown in **Table 1** above, will be less than the development analyzed in TOP EIR.

Accordingly, and based on the conclusions of the previously certified TOP EIR, the analysis in this document, CEQA and the CEQA Guidelines, including Sections 15164 and 15162, the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary, nor is there a need

for additional mitigation with implementation of the number of conditions of approval required by the City based on the results of the site specific technical studies for burrowing owl and airport safety.

Surrounding Land Uses: The project site is surrounded on the north, east, and west by land uses within the CCCSP (e.g., rail industrial and light industrial) including some vacant land. The OIA and related uses (e.g., parking lots) are just west of the site across Haven Avenue. See **Table 5** for onsite and surrounding land uses and zoning designations. Onsite and surrounding land uses are also shown in the previous Figure 2.

Table 5: Existing Land Uses and Zoning Designations

Location	Existing Land Uses	TOP Designation	Zoning Designation	Specific Plan Land Use
Site:	Vacant	Industrial	California Commerce Center (2591-SP)	Light Industrial
North:	Light Industrial Warehousing and Vacant Land	Industrial	California Commerce Center (2591-SP)	Rail Industrial
South:	Light Industrial Warehousing	Industrial	California Commerce Center (2591-SP)	Rail Industrial
East:	Vacant and Light Industrial Warehousing	Industrial	California Commerce Center (2591-SP)	Rail Industrial and Light Industrial
West:	OIA	Airport	OIA	NA

TOP 2050 IMPLEMENTATION ACTIONS/REGULATORY COMPLIANCE

The following actions will implement various requirements of TOP 2050 to protect environmental resources and City residents from environmental hazards. They are based on recommendations from the various technical studies prepared specifically for the project (see "Additional Studies" listed below). The actions regarding biological resources were prepared to comply with Policies ER5-1 and ER5-2 of the Environmental Resources Element of TOP 2050 as well as comply with applicable federal and state environmental regulations:

BIOLOGICAL RESOURCES

BIO-1: BURROWING OWL RELOCATION PROGRAM (BRP). Prior to the issuance of any grading permit, the developer shall retain a qualified biologist to prepare a Burrowing Owl (BUOW) Relocation Plan for the project site that consists of the following steps:

Focused Survey. A subject site area focused survey is required to identify individual owls and nesting pairs and the burrows they are occupying.

Identify Receiver Site(s). The proiect biologist will identity potential receiver sites that can accommodate relocated birds from the project site and provide long-term habitat for the species. Based on preliminary research, there are three potential options:

Option 1 – Habitat Mitigation (HM) Land. California Department of Fish and Wildlife (CDFW) will allow an applicant to acquire and provide perpetual management of its own HM land or secure an existing conservation easement program in place to provide continued management of relocated Burrowing Owls. For this to occur, CDFW must approve the HM land as appropriate for the defined conservation goals. Several steps are required to accomplish this prior to relocation:

- Obtain CDFW written approval of the HM lands before acquisition.
- Transfer fee title of the HM lands to CDFW or a CDFW approved entity pursuant to terms approved in writing by CDFW.
- If CDFW does not hold fee title to the HM lands, CDFW shall serve as grantee for a Conservation Easement over the property or approve another entity to act as grantee.
- Provide a recent title report, Phase I Environmental Assessment, and other necessary documents.

- Designate both an interim and long-term land manager approved by CDFW. The interim and long-term managers need not be the same.
- Provide for site preparation, including the initial site protection and enhancements.
- Provide for the interim management of the HM land which, in the case of burrowing owls, is a minimum of two years.
- Ensure that the HM lands are perpetually managed, maintained, and monitored by the long-term manager as described in the long-term management plan.
- Provide long-term management funding by establishing a non-wasting endowment or otherwise ensure the perpetual management of the HM lands
- Develop and implement a two-year Habitat Mitigation and Monitoring Plan for preparing the relocation site and for monitoring the BUOW population.
- Ensure funding to cover all aspects of the relocation process.

Option 2 - Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP). Active burrowing owl relocation is a pre-approved activity within the MSHCP. The Riverside Conservation Authority (RCA) manages conservation lands within Riverside County and accepts relocated owls if consistent with the MSHCP and approved by the wildlife agencies. A proposed relocation plan would have to be submitted to the RCA for review and approval by the Joint Project Review Committee (JPR). Both the United States Fish and Wildlife Service (USFWS) and CDFW are members of the JPR. Once the RCA tentatively approves the plan and can identify a receiver site on MSHCP conserved lands, the proposed relocation will be presented to the JPR for a final review and approval. With approval, the owls could be relocated by an authorized biologist according to a CDFW approved relocation plan.

Option 3 – Inland Empire Resource Conservation District (IERCD) Relocation Site and/or In-Lieu Fee. The IERCD manages habitat lands for various species within Riverside County and may have BUOW habitat land available for relocation of project BUOW. If existing easement sites as proposed under the current relocation plan are found to be unsuitable or not approved by CDFW or USFWS, then the applicant may be able to pay an in-lieu fee to help mitigate BUOW impacts of the proposed project. The applicant will continue discussions with the City and IERCD to determine if or what habitat resources are available, or in-lieu fee may be needed to adequately mitigate project impacts to BUOW.

Prepare a Burrowing Owl Relocation Plan. Once a receiver site(s) is chosen, the project biologist would submit the chosen site(s) to appropriate agencies (e.g., USFWS, CDFW) for review and approval. A site-specific relocation plan can then be prepared for review and approval. Upon plan approval, the developer shall establish an escrow account or endowment that guarantees funding for the entire translocation and monitoring effort.

Receiver Site Preparation. The authorized biologist shall supervise installation of cages and/or burrows on the receiver site as necessary. String trimming or minor vegetation modifications may be necessary to effectively install the cages/burrows.

Onsite Trapping. The authorized biologist shall trap owls on the project site as close to egg laying (February - early March) as possible, then release the owls into tracking cages at receiver site. At that time, the owls will be banded for identification and tracking purposes. Occupied burrows on the project site where capture occurred will be excavated to prevent reoccupation. One-way doors may also be installed for 72 hours prior at all other suitable burrows to prevent re-occupation of the project site.

Relocation Monitoring. The transfer of owls from the project site to the receiver site will be supervised by an authorized biologist holding a valid permit for such activities. Owls will be fed and monitored daily at the receiver site until a full clutch of eggs is well into incubation. Cages will then be removed from the receiver site. Game cameras shall be installed to assist future monitoring efforts. Monitoring is to assess site for predators, disturbances, and identify actions to be taken to address potential problems that could impact the success of owl relocation. The project biologist will band young birds and continue to monitor them for success and address any problems related to predators or site disturbance. The receiver site shall be monitored for two (2) years post release of owls on the site to document efficacy of relocation. The biologist shall also conduct habitat modifications and burrow maintenance as needed.

Reporting. The project biologist shall prepare monthly reports from the start of owl relocation for at least twenty-four (24) months and prepare at least two Annual Reports with the second being the final Project Mitigation Report. These monitoring reports shall be sent to the City, USFWS, and CDFW. This measure shall be implemented to the satisfaction of the City Planning Department in consultation with the CDFW and USFWS.

NOTE: In addition to burrowing owl, development of the project site may impact nesting birds in trees adjacent to the site. TOP EIR indicates the City wishes to protect biological resources such as nesting birds which are also protected by state regulations. Therefore, the following site-specific measure, Nesting Bird Survey, implements the goals of TOP to protect such resources:

BIO-2: NESTING BIRD SURVEY. Prior to issuance of a grading permit or if vegetation removal is scheduled during the nesting season (typically February 1 to September 1), then a focused survey for active nests shall be conducted by a qualified biologist (as determined by a combination of academic training and professional experience in biological sciences and related resource management activities) no more than five (5) days prior to the beginning of project-related activities (e.g., excavation, grading and vegetation removal). Surveys shall be conducted in proposed work areas, staging and storage areas, soil, equipment, and material stockpile areas. For passerines and small raptors, surveys shall be conducted within a 250-foot radius surrounding the work area (in non-developed areas and where access is feasible). For larger raptors, such as those from the genus Buteo, the survey area shall encompass a 500-foot radius. Surveys shall be conducted by a qualified biologist during weather conditions suited to maximize the observation of possible nests and shall concentrate on areas of suitable habitat. If a lapse in project-related work of five (5) days or longer occurs, an additional nest survey shall be required before work can be reinitiated. If nests are encountered during any preconstruction survey, a qualified biologist shall determine if it may be feasible for construction to continue as planned without impacting the success of the nest, depending on conditions specific to each nest and the relative location and rate of construction activities. Any nest(s) within the project site shall be monitored by a qualified biologist during active construction if work is occurring directly adjacent to the pre-determined no-work buffer. If the qualified biologist determines construction activities have the potential to adversely affect a nest, the biologist shall immediately inform the construction manager to halt construction activities within a minimum exclusion buffer of 50 feet for songbird nests, and 200 to 500 feet for raptor nests, depending on species and location. Construction activities within the no-work buffer may proceed after a qualified biologist determines the nest is no longer active due to natural causes (e.g., young have fledged, predation, or other non-anthropogenic nest failure).

CULTURAL RESOURCES

CUL-1: **WELLPIPE DOCUMENTATION.** Prior to issuance of a grading permit, the applicant shall retain a qualified archaeologist to adequately document the existing well/pipe using the appropriate Department of Parks and Recreation (DPR) 523 forms. Confirmation of receipt of the documentation by the California Office of Historic Preservation shall be provided prior to the start of grading. This measure shall be implemented to the satisfaction of the City Planning Department.

HAZARDS

NOTE: The following TOP Implementation Actions/Regulatory Compliance are based on the recommendations of the Mead & Hunt report (Appendix E) to comply with the recommendations of TOP EIR Section 5.8, Impact 5.8-3:

HAZ-1: Avigation Easements. Prior to issuance of a Certificate of Occupancy for each building, an avigation easement shall be recorded with the deed to the property. The avigation easement language and conveyances shall be acknowledged in the Ground Lease between the Ontario International Airport Authority (OIAA) and the developer and all future tenant sublease agreements, and Covenants, Conditions & Restrictions (CCRs).

HAZ-2: Building Intensity. Prior to issuance of a Certificate of Occupancy, the developer shall demonstrate to both the OIAA and the City of Ontario that the proposed use of each building complies with the Airport Land Use Compatibility Plan (ALUCP) intensity criteria. Additionally, the Ground Lease between the OIAA and the developer shall require a consistency evaluation at the time a specific use (or re-use) is proposed for each of the nine building sites to ensure long-term compliance with the ALUCP usage intensity

criteria. This measure shall be implemented to the satisfaction of the City Planning Department with OIAA concurrence.

HAZ-3: Part 77 Height Limits. Prior to issuance of a Certificate of Occupancy, the developer shall receive a positive "No Airspace Hazard Determination" determination from the FAA. While the proposed buildings have been confirmed by Mead & Hunt to be designed in compliance with Part 77 height limits, the FAA may find that other aspects of the project be further evaluated and addressed, such as electrical interference with aircraft communications or navigation. This measure shall be implemented to the satisfaction of the City Planning Department in consultation with the FAA and with OIAA concurrence.

HAZ-4: Architectural Design. Prior to issuance of a building permit, the developer shall demonstrate that building plans show structures or architectural features that could provide nesting, shelter, or perching opportunities for raptors and large birds have been designed to reduce the attractiveness of these features through the application of nets, bird spikes, or other deterrents (communication towers, signs, and light standards are examples of structures of this type). This measure shall be implemented to the satisfaction of the City Planning Department with OIAA concurrence.

HAZ-5: Landscaping. Prior to issuance of a building permit, the developer shall demonstrate that landscaping plans preclude the planting of new trees that create a dense and contiguous canopy or plant materials that provide food sources such as fruit, nuts, or berries. The plans shall use only short tree species/varieties to ensure that mature trees will not create an airspace obstruction or hazardous wildlife attractant. This measure shall be implemented to the satisfaction of the City Planning Department with OIAA concurrence.

HAZ-6: Lighting Fixtures. Prior to issuance of a building permit, the developer shall demonstrate that lighting fixtures do not project light directly onto the existing runways or taxiways or into the approach and departure paths for the OIA. Exterior lighting shall incorporate down-shielding to direct light downward and away from the airport approach and departure paths. Lighting shall not imitate airport lighting or impede the ability of pilots to distinguish airport lighting from other lighting (streetlights, signs, etc.), nor create the appearance of oncoming aircraft traffic to pilots landing from or departing toward the east on Runway 26R/L or toward the west on Runways 8R and 8L. Lighting within Airport Safety Zones 1 and 2 shall not be aligned in a linear pattern parallel with the runways (Runway 8R/26L and 8L/26R). This measure shall be implemented to the satisfaction of the City Planning Department with OIAA concurrence.

HAZ-7: Glare Control. Prior to issuance of a building permit, the developer shall demonstrate that buildings do not include glare-producing materials, including but not limited to unpainted metal, white paint/rooftop materials, or highly reflective glass (e.g., mirrored glass). No glare-producing materials shall be used on the exterior of structures located within the airport approach and departure paths or on nearby lands where glare could impair a pilot's vision. This measure shall be implemented to the satisfaction of the City Planning Department with OIAA concurrence.

HAZ-8: Glare Analysis. For any building rooftops on which solar systems are proposed, the developer shall retain a qualified consultant to prepare a glare analysis to alleviate potential visual impacts to OIA operations. The findings of the analysis shall be included in the FAA Form 7460-1 submittal for the solar project. This measure shall be implemented to the satisfaction of the City Planning Department with OIAA concurrence.

HAZ-9: Construction Coordination. Prior to the issuance of a building permit, the developer shall coordinate with the OIAA to develop a project construction schedule to alleviate any potential impacts to airport operations, particularly from cranes (i.e., due to their height and location) as outlined in Exhibit 14 of the Mead & Hunt report (Appendix E). If the project's schedule is aligned with planned runway closures, runway closure timeframes shall be included on the FAA Form 7460-1 submittal for the cranes. This measure shall be implemented to the satisfaction of the City Planning Department with OIAA concurrence.

Other public agencies whose approval is required (e.g., permits, financing approval or participation agreement): CDFW (burrowing owl survey and relocation)

Tribal Consultation: Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? ☐ Yes ☒ No

If “yes”, has consultation begun? ☐ Yes ☐ No ☐ Completed

This document is an Addendum to TOP 2050 EIR which had its own extensive Native American Consultation (NAC) process per SB 18 and AB 52. The proposed Project and its TOP EIR Addendum do not require separate subsequent NAC since the Project is consistent with TOP 2050 and an EIR Addendum is an administrative action, not a legislative action.

Additional Studies: The following additional studies have been or are being prepared in support of the analysis in this document regarding potential environmental impacts of the proposed project. These studies are in the Appendices to this document and include:

- Air Quality and Energy Memorandum, Urban Crossroads, March 15, 2022 (Appendix A)
- GHG Reduction Measures Screening Table for Commercial and Industrial Development, HPA Architects, December 14, 2021 (Appendix A)
- Burrowing Owl at Ontario Airport Study, Helix Env. – Kidd Biological, 2020 (Appendix B)
- Pre-Construction Clearance Survey for Burrowing Owl, Wood Environmental, August 14, 2021 (Appendix B)
- Cultural Resources Survey for Parcel Group 1 Development, Helix Environmental, April 15, 2019 (Appendix C)
- Cultural Resources Survey for Parcel Group 2 Development, Helix Environmental, April 15, 2019 (Appendix C)
- VMT Memorandum, Urban Crossroads, December 8, 2021 (Appendix D)
- Traffic Impact Assessment, Urban Crossroads, January 11, 2022 (Appendix D)
- Ontario Airport Land Use Consistency Report, Mead & Hunt, January 26, 2022 (Appendix E)
- Hydrology Report, Thienes Engineering, December 27, 2021 (Appendix F)
- Preliminary Water Quality Management Plan, Thienes Engineering, October 27, 2022 (Appendix F)
- Water Supply Assessment (WSA) for PDEV21-047 Hub at ONT, Ontario, California, Ontario Municipal Utilities Company, December 2022 (Appendix F)

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture/Forestry Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology / Soils
☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials	☐ Hydrology / Water Quality
☐ Land Use / Planning	☐ Mineral Resources	☐ Noise
☐ Population / Housing	☐ Public Services	☐ Recreation
☐ Transportation	☐ Utilities / Service Systems	☐ Mandatory Findings of Significance
☐ Tribal Cultural Resources	☐ Wildfire	☐ Energy

DETERMINATION *(To be completed by the Lead Agency)*

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☒ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Edmelynne V. Hutter

Signature

December 23, 2022
Date

Edmelynne Hutter, Senior Planner
Printed Name and Title

City of Ontario
For

EVALUATION OF ENVIRONMENTAL IMPACTS

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect is significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from the "Earlier Analyses" Section may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analyses Used. Identify and state where they are available for review. For this project, reference will be made to TOP EIR and the CCC SP EIR as appropriate.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources. A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue should identify:

   a) The significance criteria or threshold, if any, used to evaluate each question; and

   b) The mitigation measure identified, if any, to reduce the impact to less than significance.

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*Impacts Previously Analyzed in TOP FEIR*
1. AESTHETICS. Would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☒
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☐	☒
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	☒
2. AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest protocols adopted by the California Air Resources Board. Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*Impacts Previously Analyzed in TOP FEIR*
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒
3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	☒
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☐	☒
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	☒
d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?	☐	☐	☐	☒
4. BIOLOGICAL RESOURCES. Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*Impacts Previously Analyzed in TOP FEIR*
5. CULTURAL RESOURCES. Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☒	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☐	☐	☒
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	☐	☐	☐	☒
6. ENERGY. Would the project:				
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐
7. GEOLOGY AND SOILS. Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury or death involving:	☐	☐	☐	☒
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii. Strong seismic ground shaking?	☐	☐	☐	☒
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv. Landslides?	☐	☐	☐	☒
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☒
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	☒
d. Be located on expansive soil, as defined in Table 18 1 B of the Uniform Building Code, creating substantial direct or indirect risks to life or property?	☐	☐	☐	☒
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*Impacts Previously Analyzed in TOP FEIR*
8. GREENHOUSE GAS EMISSIONS. Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☐	☒
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☐	☒
9. HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	☒
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	☒
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☒	☐	☐
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒
10. HYDROLOGY AND WATER QUALITY. Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☐	☒
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	☒

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*Impacts Previously Analyzed in TOP FEIR*
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☐	☒
i. result in substantial erosion or siltation on- or off-site;	☐	☐	☐	☒
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☐	☒
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	☒
iv. impede or redirect flood flows?	☐	☐	☐	☒
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒
11. LAND USE AND PLANNING. Would the project:				
a. Physically divide an established community?	☐	☐	☒	☐
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☒	☐	☐
12. MINERAL RESOURCES. Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒
13. NOISE. Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☒	☐	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☒	☐	☐

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*Impacts Previously Analyzed in TOP FEIR*
14. POPULATION AND HOUSING. Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
15. PUBLIC SERVICES. Would the project:				
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	☐	☐	☐	☒
ii. Police protection?	☐	☐	☐	☒
iii. Schools?	☐	☐	☐	☒
iv. Parks?	☐	☐	☐	☒
v. Other public facilities?	☐	☐	☐	☒
16. RECREATION. Would the project:				
a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which have an adverse physical effect on the environment?	☐	☐	☐	☒
17. TRANSPORTATION. Would the project:				
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☒	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	☒
d. Result in inadequate emergency access?	☐	☐	☐	☒

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*Impacts Previously Analyzed in TOP FEIR*
18. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is				
a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☐	☒
b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☐	☒
19. UTILITIES AND SERVICE SYSTEMS. Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	☒
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	☒
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	☒
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☐	☒
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☐	☒
20. WILDFIRES. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐

Issues	*Potentially Significant Impact*	*Less Than Significant with Mitigation*	*Less Than Significant Impact*	*Impacts Previously Analyzed in TOP FEIR*
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐
21. MANDATORY FINDINGS OF SIGNIFICANCE.				
a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	☒
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)	☐	☐	☐	☒
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☒

Note: Authority cited: Public Resources Code sections 21083, 21083.05, 21083.09.

Reference: Gov. Code section 65088.4; Public Resources Code sections 21073, 21074, 21080(c), 21080.1, 21080.3, 21080.3.1, 21080.3.2, 21082.3, 21083, 21083.3, 21083.5, 21084.2, 21084.3, 21093, 21094, 21095 and 21151; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka* (2007) 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th 1099, 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

EXPLANATION OF ISSUES

1. AESTHETICS. Would the project:

a. Have a substantial adverse effect on a scenic vista?

Discussion of Effects: Section VI.M of the CCC SP EIR did not identify any significant visual impacts of the project but did recommend seven (7) mitigation measures for the project related to building appearance and landscaping with implementation of the CCC SP. Those measures are outlined in Table A and are referenced as CCCSP EIR Measures 18, 36, 37, 68, 69, 70, and 73 in the first column of the table.

TOP EIR concludes… "the scale and design of the City under TOP 2050 would not deter views of the San Gabriel Mountains which are the dominant scenic resource in the City of Ontario. Regulations such as the City's Municipal Code and policies *[of TOP]* would ensure that increased development would not impact scenic vistas" (SEIR p. 5.1-5). TOP Policy CD1-5 requires all major north-south streets be designed and redeveloped to feature views of the San Gabriel Mountains.

The project site is located just east of the OIA and includes the following north-south streets, Haven Avenue and South Commerce Way, consistent with the Functional Roadway Classification Plan (Figure M-2) of the Mobility Element within TOP Policy Plan. The CCC SP and surrounding area are planned for industrial and commercial uses. Major land uses in the surrounding area are non-residential (e.g., industrial and commercial). The proposed project will permit warehouse, distribution, assembly, and/or manufacturing similar to uses that already exist in the surrounding area and are consistent with TOP Policy Plan. The new uses are already allowed by TOP and do not obstruct views of the San Gabriel Mountains from onsite or surrounding north-south streets. No adverse impacts are anticipated in relation to the project.

Therefore, the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?

Discussion of Effects: The CCC SP EIR did not identify any scenic resources on the site and did not identify any scenic highways in the area. The EIR concluded the project had no impacts and no mitigation was required.

TOP EIR states…"The Euclid Corridor and the Mission Boulevard Corridor are the primary scenic corridors in Ontario. These are not State-designated scenic highways, and Ontario does not have any State scenic highways through or in the vicinity of the City" (SEIR 5.1-6). The City is served by three freeways: I-10, I-15, and SR-60. I-10 and SR-60 traverse the northern and central portion of the City, respectively, in an east–west direction. I-15 traverses the northeastern portion of the City in a north–south direction. The project site is just south of the I-10 and west of the I-15 freeways. These segments of I-10, I-15, and SR-60 have not been officially designated as scenic highways by the California Department of Transportation (Caltrans) or the City.

The project site is vacant and contains no historic buildings or any scenic resources, nor are there any in the vicinity of the project site. Therefore, it will not result in adverse environmental impacts.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to the EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

Discussion of Effects: Section VI.M of the CCC SP EIR did not identify any significant visual quality or characteristics of the area. Nevertheless, the EIR did recommend seven (7) mitigation measures related to building architecture and landscaping to be consistent with the CCC SP. Those measures are outlined in Table A and are referenced as CCCSP EIR Measures 18, 36, 37, 68, 69, 70, and 73 in the first column of the table.

TOP EIR characterized this area as having existing industrial development and the area contained urban land uses including industrial development planned on and around the project site. TOP EIR concluded that future development in the City, which includes light industrial uses planned on the project site, would not degrade the existing visual character or quality of the site or its surroundings and no mitigation was required (SEIR p. 5.1-7).

TOP EIR also states…"future development under the *[TOP 2050]* would still be required to adhere to the City's Development Code, which includes general development requirements for development density, screening and setback, signing, landscaping, lighting, height limitations, and other aspects related to the aesthetic of the City. Finally…the Development Code is enacted to assist implementation of planning, zoning, development, subdivision, and environmental laws and the TOP and to achieve the proper arrangement of land uses envisioned in TOP. Because it is the overriding planning document for the City, and because it is intended to improve consistency with existing regulations and conditions, the…TOP 2050…would not have a significant impact with respect to being inconsistent with policies or regulations governing scenic quality" (SEIR p. 5-1-7).

The project site is located in an area that is characterized by industrial development and is surrounded by urban land uses. The project is consistent with TOP land uses and zoning so it would not degrade the existing visual character or quality of the site or its surroundings.

The proposed project will be required to comply with the policies of the Community Design Element of TOP Policy Plan and zoning designations on the property, as well as the design requirements of the CCC SP. Therefore, no adverse visual impacts are anticipated, and the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

d. Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

Discussion of Effects: The CCC SP EIR did not address lighting although one (1) of the mitigation measures in Section VI.M stated a unified lighting and signage program should be provided throughout the project.

TOP EIR concluded that new development throughout the City would increase ambient light levels over time as development occurred, but that compliance with Development Code lighting requirements would reduce potential impacts to less than significant levels, and no mitigation was required (SEIR p. 6.1-7).

The project proposes the development of nine light industrial buildings consistent with TOP and CCC SP land use designations. New development will have architectural and security lighting on buildings and in parking lots, and streets that do not yet have street lighting will have new lighting installed. Pursuant to the requirements of the CCC SP and the City's Development Code, onsite lighting will be shielded, diffused or indirect, to avoid glare to onsite users, pedestrians, and motorists. In addition, lighting fixtures will be selected and located to confine the area of illumination to within each building site and minimize light spillage. The OIA has reviewed the project plans and determined they have no concerns regarding lighting.

Site lighting plans will be subject to review by the Planning Department and Police Department prior to issuance of building permits (pursuant to the City's Building Security Ordinance). Therefore, no adverse impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

2. AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to non-agricultural use?

Discussion of Effects: Section VI.K of the CCC SP EIR addresses geology and soils and does indicate the project site is underlain by prime agricultural soils (site previously supported vineyards).

The CCC SP EIR did not identify any significant agricultural resources on the project site although it was prepared prior to the creation of the FMMP website. The EIR indicated the area had been used years ago for agriculture, as had much of the City, but was now transitioning to urban light industrial land uses. No impacts were anticipated, and no mitigation was recommended. The EIR concluded the project will result in the loss of prime agricultural soils but does not recommend any mitigation and does not indicate if this loss is a significant environmental impact of the project.

TOP EIR states that the City is underlain by prime agricultural soils in a number of areas but that the City envisions a natural transition of these lands to suburban and urban uses over time based on market forces and the desires of property owners. The EIR concluded TOP…"would have no direct, indirect, and cumulative impacts relating to conversion of Farmland to non-agricultural use" (SEIR p. 5.2-12). The EIR concluded this because those changes had already been evaluated in the 2010 TOP which represents the baseline condition for the 2050 TOP. TOP EIR did not anticipate these changes to be a significant adverse impact and as a result did not recommend mitigation.

The project site is presently vacant and does not contain any agricultural uses. Further, the site is identified as Urban and Built-up Land on the map prepared by the California Resources Agency as part of the FMMP. Based on the information above, no adverse environmental impacts from the project related to prime farmland are anticipated.

Therefore, the project will have no significant impacts on agricultural resources and no mitigation is required. The project will not result in any new, increased or substantially different impacts other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Discussion of Effects: The CCC SP EIR did not identify any agricultural zoning or current agricultural uses on the project site (i.e., at that time in 1981) although it did indicate the site supported vineyards in the past. The EIR did not indicate if the site was under a Williamson Act (agricultural preserve) contract, and current chain of title reports for the project parcels do not indicate any were or are present on the site now.

TOP EIR indicates that some areas of the City were used for agriculture in the past, including the general project area. However, the City currently has no agricultural land use or zoning designations. Figure 5.2-2 of TOP EIR indicates there are a number of Williamson Act contracts in the City, but they are in the southern portion of the City which also is transitioning to suburban land uses. The project area has been transitioning to urban light industrial land uses for some time, and no Williamson Act contracts are active in

this area at present. In this regard, no significant impacts were anticipated in TOP EIR and no mitigation was recommended.

The project site is not zoned for agricultural use; the site is designated within the CCC SP for light industrial uses which are permitted under TOP. Future development will be consistent with the development standards and land uses allowed under TOP and CCC SP.

Therefore, no impacts to agricultural uses are anticipated, nor will there be any conflict with Williamson Act contracts. The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g)?

Discussion of Effects: The CCC SP EIR did not identify any forest land on the project site. Therefore, there are no impacts and no mitigation is required.

TOP EIR indicated there were no forest resources in the City, so development of planned land uses in the City, including the light industrial uses of the project site, would not result in any impacts related to rezoning of forest or timberland to non-forest use.

The project proposes nine warehouse buildings consistent with the light industrial land uses allowed under TOP and CCC SP. The project would not result in the rezoning of forest land, timberland, or timberland zoned Timberland Production because such land use designations do not exist within the City.

Therefore, no impacts to forest or timberland are anticipated and the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

d. Result in the loss of forest land or conversion of forest land to non-forest use?

Discussion of Effects: The CCC SP EIR did not identify any forest resources on the site.

TOP EIR indicated there were no forest resources in the City, so development of planned land uses, including the light industrial uses of the project site, would not result in any impacts related to the conversion of forest land to non-forest use (SEIR p. 5.2-13).

There is currently no land in the City that qualifies as forest land as defined in Public Resources Code section 12220(g), including the project site. Neither TOP nor the City's Zoning Code provide designations for forest land anywhere in the City.

Therefore, the proposed project would not result in the loss or conversion of forest land. The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

e. Involve other changes in the existing environment, which, due to their location or nature, could individually or cumulatively result in loss of farmland to non-agricultural use or conversion of forest land to non-forest use?

Discussion of Effects: The CCC SP EIR did not identify any agricultural zoning or current agricultural uses on the project site (i.e., in 1981) although it did indicate the site supported vineyards in the past. The CCC SP EIR did not identify any forest resources on the site. The EIR stated the project would remove prime agricultural soils but did not make a conclusion if that impact was significant and did not recommend any mitigation in that regard.

TOP EIR indicated future development would not conflict with agricultural uses and would not result in conversion of farmland to non-agricultural use. It also concluded there is no forest land in Ontario, and therefore the project would not result in conversion of forest land to non-forest use (SEIR p. 5.2-14). TOP

envisions a natural transition of these lands to suburban and urban uses over time based on market forces and the desires of property owners. TOP EIR indicated there were no forest resources in the City, so development of planned land uses, including the light industrial uses of the project site, would not result in any cumulative impacts related to loss of forest land.

Implementation of the project would not result in changes to the existing environment other than those previously addressed in TOP EIR. While conversion of farmland increases the potential for adjacent areas to also be converted from farmland to urban uses, there are no agricultural uses occurring onsite or in the vicinity and the project will not directly or indirectly result in conversion of farmland. No new cumulative impacts beyond those identified in TOP EIR would result from project implementation. As a result, the project will not result in loss of farmland to non-agricultural use.

Additionally, there is currently no land in the City that qualifies as forest land as defined in Public Resources Code Section 12220(g). Neither TOP nor the City's Zoning Code provide designations for forest land.

Based on available data, the proposed project would not result in changes to the existing environment that would affect forest land. There will be no impacts and no mitigation is required. The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

3. AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

a. Conflict with or obstruct implementation of the applicable air quality plan?

Discussion of Effects: Section VI.A of the CCC SP EIR addressed air quality but did not refer to any air quality management plan in place at that time (1981). In addition, the EIR did not make a specific conclusion regarding the significance of project-related air pollutant emissions compared to any significance thresholds from any air quality planning document.

The project site was analyzed in the current (2022) and previous (2010) TOP EIR as industrial land uses surrounded on the north, east, and south by industrial uses and on the west by the OIA. TOP EIR concluded future land uses, including the proposed project, may conflict with or obstruct implementation of the applicable 2016 Air Quality Management Plan (AQMP) issued by the South Coast Air Quality Management District (SCAQMD). TOP EIR concluded that future development and the cumulative air pollutant emissions would exceed the SCAQMD daily thresholds. As noted in the previous TOP EIR (Section 5.3) from 2010, pollutant levels in the City already exceeded Federal and State standards at that time. To reduce pollutant levels, the City is actively participating in efforts to enhance air quality by implementing Control Measures in the AQMP for local jurisdictions within the South Coast Air Basin (SCAB).

TOP EIR in 2022 evaluated the development of 87,620 residential units, 40,356,075 square feet of mixed-use development, 34,934,684 square feet of retail/service uses, 22,116,283 square feet of business park use, 159,998,711 square feet of industrial use, and 257,405,754 square feet of other uses within the area bounded by the current proposed project.

The proposed project is consistent with TOP land use designations upon which the AQMP is based. Furthermore, the project is consistent with the City's participation in the AQMP and will not conflict with or obstruct implementation of the plan. The project will be required to implement TOP EIR Mitigation Measures AQ 3-1, 3-2, and 3-3 which include fugitive dust control measures pursuant to SCAQMD's Rule 403, use of Tier 3 construction equipment, proper service and maintenance of construction equipment, limiting nonessential idling of construction equipment, use of Super-Compliant volatile organic compounds (VOC) paints for coating and architectural surfaces, providing non-vehicular access options, and calculate and reduce any significant health risks from future development on nearby sensitive receptors (MM 3-1 through 3-3, respectively). The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is quired. The following measures from TOP EIR are applicable to the proposed project:

AQ 3-1: Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project construction-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology for assessing air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed the South Coast AQMD–adopted thresholds of significance, the City of Ontario Building Department shall require feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include:

- Require fugitive dust control measures that exceed South Coast Air Quality Management District's Rule 403, such as:
  - Requiring use of nontoxic soil stabilizers to reduce wind erosion.
  - Applying water every four hours to active soil disturbing activities.
  - Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
- Using construction equipment rated by the United States Environmental Protection Agency as having Tier 4 interim or higher exhaust emission limits.
- Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards
- Limiting nonessential idling of construction equipment to no more than five consecutive minutes.
- Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the South Coast Air Quality Management District's website at: http://www.aqmd.gov/prdas/brochures/SuperCompliant_AIM.pdf. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.

AQ 3-2: The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g., sidewalks).

AQ-3-3: Prior to discretionary approval by the City of Ontario for development projects subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects), project applicants shall prepare and submit a technical assessment evaluating potential project operation-phase-related air quality impacts to the City of Ontario Planning Department for review and approval. The evaluation shall be prepared in conformance with South Coast Air Quality Management District (South Coast AQMD) methodology in assessing air quality impacts. If operation-related air pollutants are determined to have the potential to exceed the South Coast AQMD– adopted thresholds of significance, the City of Ontario Planning Department shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during operational activities. The identified measures shall be included as part of the conditions of approval. Possible mitigation measures to reduce long-term emissions could include but are not limited to the following:

- For site-specific development that requires refrigerated vehicles, the construction documents shall demonstrate an adequate number of electrical service connections at loading docks for plug-in of the anticipated number of refrigerated trailers to reduce idling time and emissions.
- Applicants for manufacturing and light industrial uses shall consider energy storage and combined heat and power in appropriate applications to optimize renewable energy generation systems and avoid peak energy use.
- Site-specific developments with truck delivery and loading areas and truck parking spaces shall include signage as a reminder to limit idling of vehicles while parked for loading/unloading in accordance with California Air Resources Board Rule 2845 (13 CCR Chapter 10 sec. 2485).

- Provide changing/shower facilities as specified in Section A5.106.4.3 of CALGreen (Nonresidential Voluntary Measures).
- Provide bicycle parking facilities per Section A4.106.9 of CALGreen (Residential Voluntary Measures).
- Provide preferential parking spaces for low-emitting, fuel-efficient, and carpool/van vehicles per Section A5.106.5.1 of CALGreen (Nonresidential Voluntary Measures).
- Provide facilities to support electric charging stations per Section A5.106.5.3 and Section A5.106.8.2 of CALGreen (Nonresidential Voluntary Measures; Residential Voluntary Measures).
- Applicant-provided appliances shall be Energy Star–certified appliances or appliances of equivalent energy efficiency (e.g., dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star–certified or equivalent appliances shall be verified by the City during plan check.

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Discussion of Effects: Section VI.A of the CCC SP EIR concluded the overall project would emit a substantial amount of air pollutant emissions over the short- and long-term and considered them as a percentage of regional (basin-wide) emissions. The EIR did not make a specific conclusion regarding the significance of project-related air pollutant emissions compared to any significance thresholds, it simply presented the emissions in pounds/day before any of the recommended mitigation measures were applied. The EIR recommended six (6) mitigation measures to help limit short-term emissions during construction and seven (7) measures to help limit long-term emissions. However, the language of the measures was permissive rather than mandatory and all of them have since been incorporated into regulatory compliance and standard conditions of approval by the City (see Table A for CCCSP EIR Measures 1-6 and 7-13, respectively, in column 1 of the table).

TOP EIR concluded that air pollutant emissions from future development within the City consistent with TOP land uses, including the proposed project, would exceed established SCAQMD thresholds. TOP EIR evaluated the development of 87,620 residential units, 40,356,075 square feet of mixed-use development, 34,934,684 square feet of retail/service uses, 22,116,283 square feet of business park use, 159,998,711 square feet of industrial use, and 257,405,754 square feet of other uses within the area bounded by the current proposed project. **Table 6** summarizes the operational air quality emissions that would result from the currently approved land uses on the proposed project site. Table 6 demonstrates that the land uses on the project site under the approved TOP would exceed the SCAQMD regional thresholds of significance for emissions of VOC and NOx while TOP EIR indicates emissions of all land uses would exceed SCAQMD regional thresholds and a statement of overriding considerations was required.

Table 6: Currently Approved Maximum Daily Operation Emissions

Pollutant Characteristics	Emissions (pounds per day)					
	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Transportation Sources	29,625	27,829	222,058	582	4,557	4,512
Area Sources	23,781	3,548	46,604	127	7,019	6,757
Maximum Daily Emissions	53,406	31,367	157,662	709	11,576	11,269
SCAQMD Regional Threshold	55.00	55.00	550.00	150.00	150.00	55.00
Threshold Exceeded?	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**

Source: Table 1, Urban Crossroads, March 2022

Mitigation Measures AQ 3-1, 3-2, and 3-3 as outlined in Section 3.a have already been adopted by the City that would facilitate continued City cooperation with the SCAQMD and Southern California Association of Governments (SCAG) to reduce short-term construction emissions, help promote regional air quality improvement goals and energy conservation design and development techniques, encourage alternative modes of transportation, and implement transportation demand strategies. However, TOP EIR

concluded that air pollutant impacts would be significant even with implementation of the recommended mitigation measures (MM AQ 3-1 through 3-3).

A detailed air quality assessment (*AQ Study*) of the proposed project was conducted by Urban Crossroads in February 2022, to identify project-specific air pollutant impacts and recommend additional mitigation if necessary (i.e., other than those applicable measures already identified in TOP EIR). The *AQ Study* (Appendix A) determined the project will not result in a cumulatively considerable net increase of any criteria pollutant for which the region is in non-attainment under an applicable federal or state ambient air quality because the project is consistent with the existing Industrial designation in the CCC SP.

Construction. Table 7 shows the air pollutants estimated in the *AQ Study* for construction of the proposed project. Table 7 shows that the proposed project's construction-related activity would not exceed the applicable regional significance thresholds and a less than significant impact would occur. No mitigation beyond that identified in TOP EIR would be required.

Table 7: Project Regional Construction Emissions

Pollutant Characteristics	Emissions (pounds per day)					
	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	36.40	84.48	189.09	0.64	56.07	16.50
SCAQMD Regional Threshold	75.00	100.00	550.00	150.00	150.00	55.00
Threshold Exceeded?	No	No	No	No	No	No

Source: Table 2, Urban Crossroads, Feb 2022

Operation. Operational emissions associated with the proposed project are summarized in **Table 8** which indicates Project emissions would exceed the SCAQMD regional thresholds of significance for emissions of VOC and NOx. However, the VOC and NOx exceedances that would occur as a result of the proposed project have already been estimated and considered in TOP EIR (see below).

Table 8: Project Regional Operation Emissions

Pollutant Characteristics	Emissions (pounds per day)					
	VOC	NOx	CO	SO_x	PM_{10}	$PM_{2.5}$
Transportation Sources	28.65	200.90	324.75	1.47	104.22	29.84
Area Sources	100.05	23.79	22,55	0.12	1.33	1.29
Maximum Daily Emissions	128.70	224.69	337.30	1.59	105.55	31.13
SCAQMD Regional Threshold	55.00	55.00	550.00	150.00	150.00	55.00
Threshold Exceeded?	**YES**	**YES**	No	No	No	No

Source: Table 6, Urban Crossroads, Feb 2022

The project will comply with Mitigation Measures AQ 3-1 through 3-3 outlined in TOP FEIR as recommended by the SCAQMD, resulting in project level impacts that are less than significant with mitigation though the overall impact would remain, as discussion in the TOP EIR, significant and unavoidable. The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: Implement Mitigation Measures AQ 3-1, 3-2, and 3-3 as described in Section 3.a above, otherwise, no project specific mitigation is required.

c. Expose sensitive receptors to substantial pollutant concentrations?

Discussion of Effects: Section VI.A of the CCC SP EIR examined potential carbon monoxide hot spots but did not evaluate impacts of any more current localized air pollutants like toxic air contaminants

(TACs) or dust during construction because those requirements and methodologies were not in place at the time that EIR was certified (1981).

TOP EIR concluded that development and operation of new land uses accommodated under TOP 2050 proposed land use plan could generate new sources of localized criteria air pollutant and TACs in the City from area/stationary sources and mobile sources.

The subject site was previously analyzed by TOP EIR as an industrial use and is surrounded on the north, west, and south by industrial uses and on the east by the Interstate 15 Freeway. As discussed in Section 5.3 of TOP EIR, the proposed project is within a non-attainment region of the SCAB. The *AQ Study* included an assessment of potential health risks from the project on nearby sensitive receptors.

Sensitive Receptors. Certain land uses contain persons especially susceptible to air pollutants (children, the elderly, sick persons, etc.). These types of "sensitive" land uses include residences, day care centers, hospitals, etc. and are referred to as sensitive receptors. The *AQ Study* evaluated localized air quality impacts at sensitive receptors nearest the project site. All distances were measured from the project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the project site. The selection of receptor locations was based on Federal Highway Administration (FHWA) guidelines and is consistent with additional guidance provided by the California Department of Transportation (Caltrans) and the Federal Transit Administration (FTA). The locations of the eleven (11) sensitive receptor sites and distances to the various project building sites are shown in **Figure 5**, Sensitive Receptor Locations, and are described below (shortest distance to project building shown in parenthesis):

R1: Location R1 represents the existing residence at 3141 Inland Empire Boulevard. Since there are no private outdoor living areas (backyards) facing the project site, receptor R4 is placed at the residential building façade (3,962 feet).

R2: Location R2 represents the Embassy Suites by Hilton Ontario Airport hotel at 3663 East Guasti Road. Receptor R2 is placed at the building façade (1,421 feet).

R3: Location R3 represents the Rodeway Inn Ontario Mills Mall hotel. Receptor R3 is placed at the building façade (3,272 feet).

R4: Location R4 represents the Ontario Airport Car Rental facility located at Rental Car Road. Receptor R4 is placed at the building façade (195 feet).

R5: Location R5 represents the Biagi Brothers Transportation facility at 3655 East Airport Drive. Receptor R5 is placed at the building façade (172 feet).

R6: Location R6 represents the westernmost building of the Timberland distribution center at 3950 East Airport Drive. Receptor R6 is placed at the building façade (126 feet).

R7: Location R7 represents the easternmost building of the Timberland distribution center at 3950 East Airport Drive. Receptor R7 is placed at the building façade (70 feet).

R8: Location R8 represents the Cubework coworking space building located at 1001 Doubleday Avenue. Receptor R8 is placed at the building façade (104 feet).

R9: Location R9 represents the EaZy BrandZ store located at 4060 East Jurupa Street. Receptor R9 is placed at the building façade (73 feet).

R10: Location R10 represents the Haliburton International Foods, Inc. food products supplier facility located at 3855 East Jurupa Street. Receptor R10 is placed at the building façade (116 feet).

R11: Location R11 represents the Pacific Coast Warehouse facility located at 3601 East Jurupa Street. Receptor R11 is placed at the building façade (85 feet).

The SCAQMD recommends that the nearest sensitive receptor be considered when determining the project's potential to cause an individual or cumulatively significant impact. The nearest land use to the project site where an individual could remain for 24 hours (R2) has been used to determine the worst case localized construction and operational air quality impacts for large and small particulate matter emissions (PM_{10} and $PM_{2.5}$, respectively) since their thresholds are based on a 24-hour averaging time. The LST analysis evaluated potential impacts from construction of each of the proposed warehouse buildings on the various sensitive receptors around the Project site, considering the location of the closest sensitive receptor to each of the building sites (see Figure 5).

Figure 5: SENSITIVE RECEPTOR LOCATIONS

Local Significance Thresholds (LSTs) for Construction. The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute to or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as an indicator of significance in its air quality impact analyses. For analytical purposes, emissions associated with peak site preparation and grading activities are considered for purposes of LSTs since these phases represent the maximum localized emissions that would occur. Any other construction phases of development that overlap would result in lesser emissions and consequently lesser impacts than what is disclosed herein. The SCAMQD's LST Methodology is used to determine localized construction and operational air impacts for emissions of oxides of nitrogen (NOx) and carbon monoxide (CO) because the averaging periods for these pollutants are shorter (8 hours or less) so it is reasonable to assume that an individual could be present adjacent to these sites and be exposed to these pollutants for periods of one to eight hours.

Table 9: LST Construction Impacts

Phase/ Building	Compliance Activity	Emissions (pounds per day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
Site Preparation					
1	Maximum Daily Emissions	7.97	3.48	2.99	1.22
	SCAQMD Localized Threshold	317	3,376	322	170
	Threshold Exceeded?	No	No	No	No
2	Maximum Daily Emissions	13.71	5.99	514	2.10
	SCAQMD Localized Threshold	306	3,376	283	143
	Threshold Exceeded?	No	No	No	No
3	Maximum Daily Emissions	8.54	3.73	3.20	1.30
	SCAQMD Localized Threshold	279	2,224	322	170
	Threshold Exceeded?	No	No	No	No
4	Maximum Daily Emissions	3.96	1.73	1.48	0.61
	SCAQMD Localized Threshold	279	2,413	322	170
	Threshold Exceeded?	No	No	No	No
5	Maximum Daily Emissions	6.57	2.87	2.46	1.00
	SCAQMD Localized Threshold	287	2,601	322	170
	Threshold Exceeded?	No	No	No	No
6	Maximum Daily Emissions	6.94	3.03	2.60	1.06
	SCAQMD Localized Threshold	283	2,507	52	137
	Threshold Exceeded?	No	No	No	No
7	Maximum Daily Emissions	3.27	1.43	1.23	0.50
	SCAQMD Localized Threshold	270	2,193	322	170
	Threshold Exceeded?	No	No	No	No
8	Maximum Daily Emissions	8.12	3.55	3.04	1.24
	SCAQMD Localized Threshold	279	2,413	322	170
	Threshold Exceeded?	No	No	No	No
9	Maximum Daily Emissions	7.30	3.19	2.74	1.12
	SCAQMD Localized Threshold	270	2,193	322	170
	Threshold Exceeded?	No	No	No	No
Grading					
1	Maximum Daily Emissions	8.22	5.35	2.14	0.75
	SCAQMD Localized Threshold	317	3,376	322	170
	Threshold Exceeded?	No	No	No	No
2	Maximum Daily Emissions	14.14	9.20	3.68	1.29
	SCAQMD Localized Threshold	306	3,376	283	143
	Threshold Exceeded?	No	No	No	No
3	Maximum Daily Emissions	8.80	5.73	2.29	0.80
	SCAQMD Localized Threshold	271	2,224	322	170
	Threshold Exceeded?	No	No	No	No
4	Maximum Daily Emissions	4.08	2.66	1.06	0.37
	SCAQMD Localized Threshold	279	2,413	322	170

Phase/ Building	Compliance Activity	Emissions (pounds per day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
	Threshold Exceeded?	No	No	No	No
5	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	6.77 287 No	4.40 2,601 No	1.76 322 No	0.62 170 No
6	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	7.15 283 No	4.65 2,507 No	1.86 52 No	0.65 137 No
7	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	3.37 270 No	2.19 2,193 No	0.88 322 No	0.31 170 No
8	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	8.37 279 No	5.45 2,413 No	2.18 322 No	0.76 170 No
9	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	7.52 270 No	4.89 2,193 No	1.95 322No	0.68 170 No

Source: Table 5, Urban Crossroads, February 2022

Table 9 demonstrates that the proposed project's construction-related activity would not exceed the applicable regional significance thresholds and a less than significant impact would occur. No mitigation beyond that identified in TOP EIR would be required of the project (see AQ 3-1).

LSTs for Operations. Localized operational emissions associated with the proposed project are summarized on **Table 10**, which concludes the proposed project's localized operational-related activity would not exceed the applicable regional significance thresholds and a less than significant impact would occur. No mitigation beyond the required mitigation from TOP EIR would be required (see AQ-2 and AQ-3).

Table 10: LST Operation Impacts

Building	Compliance Activity	Emissions (pounds per day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
1	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	4.06 317 No	4.60 3.376 No	0.79 78 No	0.33 41 No
2	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	6.99 306 No	7.91 3,066 No	1.35 69 No	0.57 35 No
3	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	4.35 271 No	4.92 2,224 No	0.84 78 No	0.36 41 No
4	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	2.02 279 No	2.28 2,413 No	0.39 78 No	0.17 41 No
5	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	3.35 287 No	3.79 2,601 No	0.65 78 No	0.27 41 No
6	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	3.54 283 No	4.00 2,507 No	0.68 78 No	0.29 41 No
7	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	1.67 270 No	1.89 2,193 No	0.32 78 No	0.14 41 No
8	Maximum Daily Emissions SCAQMD Localized Threshold Threshold Exceeded?	4.14 279 No	4.69 2,413 No	0.80 78 No	0.34 41 No
9	Maximum Daily Emissions SCAQMD Localized Threshold	3.72 270	4.21 2,193	0.72 71	0.31 36

Building	Compliance Activity	Emissions (pounds per day)			
		NOx	CO	PM_{10}	$PM_{2.5}$
	Threshold Exceeded?	No	No	No	No

Source: Table 7, Urban Crossroads, February 2022

TOP EIR Mitigation Measure AQ 3-3 requires new development to provide its own air quality studies consistent with SCAQMD and other applicable guidelines to determine specific air quality impacts of a proposed project on a specific site. Future development may be required to implement all feasible mitigation measures such as distance buffers or the installation of high efficiency Minimum Efficiency Reporting Value (MERV) filters, as appropriate, to protect future sensitive receptors from harmful concentrations of air pollutants as a result of proximity to existing air pollution sources. As shown in Tables 9 and 10, the *AQ Study* determined the proposed project would not result in any new impacts beyond those identified in TOP EIR and no project specific mitigation was required for sensitive receptors. The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Discussion of Effects: Section VI.A of the CCC SP EIR addressed air quality but did not evaluate the potential for other emissions or odors to affect humans in the project area. No conclusions were made regarding these impacts and no mitigation was recommended in this regard.

TOP EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to other emissions, such as those leading to odors (SEIR p. 5.3-47). The subject site was previously analyzed by TOP EIR as an industrial use and is surrounded on the north, east, and south by industrial uses and on the west by the OIA. The warehouse-related uses proposed on the project site will not create objectionable odors. Further, the project shall comply with the policies of the Ontario Municipal Code and TOP regarding solid waste storage and disposal which will prevent potential odor impacts. Therefore, no adverse impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

4. BIOLOGICAL RESOURCES. Would the project:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Discussion of Effects: The CCC SP EIR indicated the site was vacant and did not support any listed or otherwise sensitive species of plants or animals at the time the EIR was prepared in 1981. The EIR did not make a firm conclusion that the project would have a significant impact on any biological resources but it did recommend three (3) “permissive” mitigation measures (i.e., actions suggested but not required), which are outlined in Table A.

TOP The EIR concluded that “no sensitive plant species have been observed in Ontario, and the only such species that are considered potentially present in the City have a low potential due to lack of suitable habitat. Therefore, implementation of TOP 2050 would not have substantial adverse impacts on sensitive plant species” (SEIR p. 5.4-30). The project site was previously analyzed by TOP EIR as an industrial use.

According to TOP EIR, the project site is located within an area that has been identified as having the potential to contain species identified as a candidate, sensitive, or special status species in local or

regional plans, policies or regulations or by the CDFW or USFWS. These species include: the DSFLF, coast horned lizard, burrowing owl, and various species of nesting birds protected under the Migratory Bird Treaty Act. The proposed project is consistent with TOP land use designation and zoning classification for the site (industrial warehousing). However, there is a potential for burrowing owl and nesting birds to be on the project site. Based on governmental database information, TOP EIR did not identify a potential for any listed or otherwise sensitive species to be present on the project site.

The following biological studies/surveys, all of which are included in Appendix B of this report, were prepared for the proposed project site:

- *Burrowing Owls at Ontario International Airport, Biology, Status, Regulatory Setting, and Mitigation Options.* Prepared by Helix Environmental/Kidd Biological, Inc. (HE/KB) dated 2020.
- *California Logistics Center, Pre-Construction Clearance Survey for Burrowing Owl and Other Nesting Bird Species.* Prepared by Wood Consulting (WC) dated August 14, 2021.
- *First Year Focused Survey for Delhi Sands Flower-Loving Fly on a 151-Acre OIA Group 1 Properties in Ontario.* Prepared by Osborne Biological Consulting dated October 26, 2019.
- *Second Year Focused Survey for Delhi Sands Flower-Loving Fly on a 151-Acre OIA Group 1 Properties in Ontario.* Prepared by Osborne Biological Consulting (OBC) dated October 7, 2020.
- *Updated Delhi Sands Flower-Loving Fly Survey,* Fall 2022.

The site is currently undeveloped land that is cleared regularly for weed abatement and fire prevention. Due to its vacant condition and surrounding urban land uses, the project site does not contain or support any listed or otherwise sensitive species of plants or animals other than those discussed below. Species of concern that may have the potential to occur on the project site include the Delhi Sands flower-loving fly (DSFLF), Coast Horned Lizard, Burrowing Owl, and various species of nesting birds protected under the Migratory Bird Treaty Act.

Focused onsite surveys were conducted for the DSFLF in 2019-2022. This species is federally listed as endangered and is restricted (endemic) to the Colton Dunes (consisting of Delhi soil series). Delhi soils are fine sandy soils, often wholly or partly sand dunes stabilized by sparse native vegetation. These soils cover approximately 40 square miles in Riverside and San Bernardino Counties, underlying portions of the City and other neighboring cities. By 1997, studies indicated that over 97 percent of the area containing this soil type had been converted to agriculture, developed for urban or commercial uses, or otherwise altered. The DSFLF has never been observed in the City. In the past, this species has been found to inhabit areas with sand dune conditions that are underlain by Delhi Sands soils (NRCS[2] Series DaD2), Onsite surveys conducted over several years (2019-2022) based on the multi-year protocols established by the USFWS have determined the species is “absent from the site” (OBC 2019-2022)(Appendix B).

The Coast horned lizard is found in the surrounding region where physical conditions are present to support it. However, no sand dunes or dune-like conditions are present in this portion of the City or on the project site (per TOP EIR), so this species has a negligible potential to actually occur onsite.

At present the only other significant biological resource identified on the site is the burrowing owl (*Athene cunicularia*). This bird species is very opportunistic and often inhabits disturbed land quickly by taking over existing small mammal burrows. Several biological resource assessments have been prepared for the project site, most focusing on the presence or the extent/distribution of burrowing owl on the site or adjacent land. The Helix report from 2020 indicated the subject owls on the adjacent OIA property along the east side of Haven Avenue are included in the list of 45 documented owl records for the general area. All of these owl locations are surrounded by development and located on small, highly fragmented sites that do not provide long-term conservation value for the owl due to planned future development and predation pressures. The review of occupied owl sites within a few miles of the OIA property does not indicate any known conserved sites managed for owls that appear to provide any long-term conservation value for the species. Some owl pairs and individuals are known to occupy sites nearby, but these sites are also

[2] Natural Resources Conservation Service (NRCS) formerly the Soil Conservation Service (SCS)

surrounded by development and will not provide meaningful long-term contribution to the status of burrowing owls in this region (HE/KB 2020).

Burrowing owl stay close to their burrows and generally close to the ground for foraging or escaping predators. As a result, burrowing owls are seldom struck by aircraft and certainly not at high rates like geese, red-tailed hawks and vultures. Owls utilize burrows previously constructed by small mammals (e.g., squirrels and rabbits) in the vicinity of the airfields. However, populations of burrowing owl do attract other avian predators such as red-shouldered hawks, Cooper's hawks, and turkey vultures. Hawks and vultures are struck by aircraft at the highest rates of avian species and cause the most damage per strike. These species are often involved in aircraft strikes while they are hover hunting or circling over prey species on the ground under approach or departure routes. Bird strikes in these situations (landing and take-off) can lead to catastrophic events and hundreds of bird deaths (HE/KB 2020).

Allowing an owl population to remain within an airport landing and takeoff corridor is ignoring a serious wildlife hazard. Eviction or collapsing burrows in an area to force the owls to move out of the immediate area is a temporary solution that is costly to implement and requires extensive monitoring to ensure burrowing owls do not return to the area. Unfortunately, the owls will move only a short distance away to other open habitats within the airport area and will continue to create bird air strike hazards. Eviction has proven to not be a viable solution, particularly near a major airport. The only viable solutions are active relocation or a direct reduction of the local owl population (HE/KB 2020).

CDFW staff have communicated with burrowing owl researchers and made it very clear not to encourage burrowing owl to reside at or adjacent to commercial or military airfields. Consequences of bird air strikes are too severe and should be avoided. Given the severity of bird air strike incidents, active relocation is the most appropriate technique to conserve breeding pairs (HE/KB 2020).

Based on the presence of the owl in 2019 and 2020 reports, a breeding study starting in March 2022 is being conducted to confirm the continued presence of the species and to determine the number of owls/owl pairs that need to be relocated according to CDFW protocols. Consistent with the TOP 2050 SEIR, the project will comply with existing regulations and TOP 2050 policies through implementation of a Burrowing Owl Relocation Program (BRP), which is based on the most recent site-specific technical studies. Accordingly, compliance with existing plans, laws and regulations will ensure potential impacts to burrowing owl will be less than significant and no mitigation is required.

a Burrowing Owl Relocation Program (BRP) which is based on the most recent site-specific technical studies. With implementation of the BRP, potential impacts to burrowing owl will be less than significant and no mitigation is required.

In addition, implementation of the BRP for burrowing owl will also help reduce potential impacts to nesting birds on the project site due to tree removal. The removal of burrowing owl from the site and preclusion of additional tall trees on or adjacent to the site will help reduce predation by raptors, which utilize these resources, on other nesting birds onsite.

In addition to the four cited biological studies, Mead & Hunt prepared a report on airport safety (M&H 2022, Appendix E) that expressed concern over the mature pine and sycamore trees located adjacent to the site in the public right-of-way. Those trees would likely be removed during project construction. The study indicated these types of trees are known to attract birds of prey (e.g., Red-tailed hawks) for perching while hunting the burrowing owl that reside in and around the OIA. Since these mid-sized raptors increase the potential for a bird-strike incident, the report strongly recommended that only small tree varieties be located onsite that do not provide suitable perching opportunities for hawks.

The TOP 2050 SEIR concluded that, with regulatory compliance and compliance with TOP 2050's policies, there would be no impacts to biological resources, and specifically with regard to burrowing owls. Relative to the discussion of burrowing owl impacts of the Project, it is important to note that TOP Policies ER5-1 and ER5-2 from the Environmental Resources Element state the following:

> **Goal ER-5:** Protected high value habitat and farming and mineral resource extraction activities that are compatible with adjacent development.

Policy ER-5.1: Habitat Conservation Areas. We support the protection of biological resources through the establishment, restoration, and conservation of high-quality habitat areas.

Policy ER-5.2: Entitlement and Permitting Process. We comply with state and federal regulations regarding protected species.

To comply with these policies, the Project applicant will prepare and process a Burrowing Owl Relocation Plan through CDFW and conduct a Nesting Bird Survey prior to grading. These actions will adequately protect burrowing owl and nesting birds from impacts of developing the Project site, as well as protecting owls from ongoing impacts from OIA operations as well as provide them with a long-term safe and viable relocation/habitation site pursuant to state and federal protection species regulations. With regulatory compliance, TOP EIR concluded that future development in the City would not have significant impacts on listed or sensitive species and no mitigation was recommended.

Compliance with existing plans, laws, and regulations, via Implementation of the recommended BRP and nesting bird survey consistent with TOP Policies ER5-1 and ER5-2, will ensure that the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Discussion of Effects: The CCC SP EIR found no riparian or wetland resources on the site so it identified no impacts and did not recommend any mitigation.

TOP EIR indicated development "of new, previously undeveloped areas of the City even though it would result in an increase in land use intensity. Individual projects undergoing environmental review under CEQA would be required to determine whether there is potential habitat on-site for sensitive species. If sensitive species were found on-site, the project proponent would be required to consult with the CDFW regarding impacts to sensitive species and ensuing mitigation" (SEIR p. 5.4-31). The EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to riparian habitat or sensitive natural community. In TOP EIR, the project site was previously analyzed as an industrial use. TOP EIR does not identify any natural drainage features in this portion of the City due to its urbanized condition. With regulatory compliance, the EIR did not recommend any specific mitigation for future development relative to jurisdictional features.

Based on a review of aerial photographs and onsite surveys listed species, the site does not contain any riparian habitat or other sensitive natural community identified by CDFW or USFWS (GoogleEarth, HE/KB 2020). Therefore, no adverse environmental impacts are anticipated. In addition, the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Discussion of Effects: The CCC SP EIR and TOP EIR did not identify any wetland habitat or resources on the project site or in the immediate surrounding area due to its urban condition. The EIR stated TOP "would have a less than significant direct, indirect, and cumulative impacts relating to state or federally protected wetlands. Accordingly, no changes or alterations to the *[TOP 2050]* were required to avoid or substantially lessen any significant environmental impacts under those thresholds" (SEIR p. 5.4-33).

According to aerial photographs, the site is vacant and no drainage areas or wetland habitat are present on the project site (GoogleEarth). Therefore, project implementation would have no impact on these resources. In addition, the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Discussion of Effects: The CCC SP EIR and TOP EIR did not identify any drainages or wetland habitat that could support fish on the project site, and the site is not located within an identified wildlife movement corridor due to its physical condition and development of the surrounding area.

TOP EIR found that no regional wildlife movement corridors have been identified in the City so it did not result in substantial adverse effects to wildlife movement (SEIR p. 5.4-33).

According to aerial photographs, the site is vacant with no drainages or native vegetation present (GoogleEarth). As a result, there are no wildlife corridors connecting this site to other areas. The project site and area may support nesting birds so in order to comply with existing laws, plans, and regulations, the project will conduct a nesting bird survey. With this compliance, a Nesting Bird Survey is recommended and will be conducted to help assure there will be no impacts to migratory birds. With implementation of the nesting bird survey and regulatory compliance, the project will not interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife. The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Discussion of Effects: The CCC SP EIR did not identify any local policies or ordinances relative to biological resources and the project site, so there were no conclusions about impacts, or any mitigation recommended.

TOP EIR indicates the City includes the Ontario Recovery Unit for the DSFLF with 21.7 square miles mainly in the eastern and southwestern portions of the City (i.e., not on or adjacent to the project site), The EIR concluded TOP would not conflict with the requirements of the DSFLF Ontario Recovery Unit (SEIR p. 5.4-34). It should also be noted the project will prepare a BRP and nesting bird survey to comply with the previously cited Policies ER5-1 and ER5-2 from the Environmental Resources Element of TOP 2050.

The City's Development Code requires replacement of trees removed. The species of tree selected for planting must be relatively short at maturity to be consistent with FAA restrictions and so as to not attract raptors to the site which could represent a bird strike hazard to the airport operational areas (i.e., takeoffs and landings).

The project will also conduct a nesting bird survey prior to removal of onsite or site-adjacent trees related to project construction. With implementation of the BRP, nesting bird survey, and limits on future tree plantings, no adverse environmental impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

f. Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?

Discussion of Effects: The CCC SP EIR does not mention any HCPs or NCCPs that apply to the City as none existed at that time. TOP EIR only acknowledges a small portion of the City that contains an HCP for DSFLF but this plan does not apply to the proposed Project, and there are no HCPs or NCCPs to protect biological resources that affect the proposed Project site.

The site is not part of an adopted HCP, NCCP or other approved habitat conservation plan. As a result, no adverse environmental impacts are anticipated. The project will not result in any new, increased

or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation required.

5. CULTURAL RESOURCES. Would the project:

a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

Discussion of Effects: Section VI. C of the CCC SP EIR indicated the region had been inhabited for hundreds of years but a cultural survey of the site found no resources on the site. The CCC SP EIR found no historic resources on the project site but recommended generalized MMs that have since been superseded by standard City conditions of approval as explained in Table A (see CCCSP EIR Measure 17 in column 1 of the table.

TOP EIR concluded that buildout of TOP could result in significant impacts to historical resources or paleontological resources, but Mitigation Measure 5-1 would reduce impacts to less than significant levels (SEIR p. 5.5-23). The project site was previously analyzed by TOP EIR as an industrial use.

The project site is vacant and does not contain any buildings or structures constructed more than 50 years ago and cannot be considered for eligibility for listing in the California Register of Historic Resources. Two cultural resource assessments (CRAs), which are included in Appendix C to this report, were conducted on the project site by Helix Environmental Planning (HEP 2019a, 2019b). According to the CRAs, a Cultural Resources Records Search was conducted on March 7, 2019, at the California Historic Resource Inventory System at the South Central Coastal Information Center (CHRIS-SCCIC). The records search indicated that there are no cultural resources (prehistoric, historic, or built environments) recorded within the project boundaries. A pedestrian survey of the site was conducted by Helix archaeological staff in March 2019.

The records search results identified seven previously recorded cultural resources within one mile of the project area, none of which are located within the project site (**Table 11**, *Local Cultural Resources*). Two of the resources within the search limits, the Guasti (Brookside) Winery and the Church of San Secondo D`Asti, are listed as California Points of Historical Interest (CPHI), and one resource, the Hofer Ranch, is listed on the National Register of Historic Places (NRHP). The Guasti (Brookside) Winery and the Church of San Secondo D`Asti, are located to the northwest of the project area, north of the railroad. The Hofer Ranch is located to the southwest. The pedestrian survey found a possible historic-period well comprised of a metal pipe with no markings in the northwest portion of the survey area. Although the age of the well is unknown, it was observed on the historic aerial photographs of the project area, which was cultivated for agriculture in the early 1900's.

Table 11: Local Cultural Resources

Resource Number (P-36-#)	Resource Number (CA-SBR-#)	Age and Resources Present[1]	Description	Recorder, Date
001963	1963H	Historic Site	Remnants of a homestead/ranch, possibly associated with the Collins family who owned the property in the late 1800s	McKenna, 1987
001964	1964H	Historic Structure	Small shed containing modern pumping equipment	McKenna, 1987
015469	--	Historic Site	Guasti (Brookside) Winery (CPHI # 84)	Hansberger, 1975
015471	--	Historic Site	San Secondo D'Asti Catholic Church (CPHI # 76)	Hansberger, 1975
015990	--	Historic Structures/ Historic District	Guasti Historic District; consists of 51 resources (buildings, houses, etc.) constructed between 1900 and 1946	Warner and Solie, 1985
016249	--	Historic Site	Hofer Ranch (NR #93000596), also known as Ballou Ranch & Ben Haven; farm complex consisting of 15	Hofer and Warner, 1985; Marvin and Goodwin, 2004

			resources (buildings and structures) constructed between 1905 and 1985	
016279	--	Historic Building	Guasti Mansion; constructed in the Italian-Villa architectural style in 1922	Warner and Solie, 1985

Source: Cultural Resources Survey for the Potential Development of Parcel Group 1, Helix Environmental Planning. April 15, 2019.

[1] Previously recorded resources within one mile of the Project site

The CRAs indicate that the presence of a possible historic-age well onsite does not constitute a significant historic resource under CEQA as they are prevalent throughout Southern California and do not convey any historic information about the project area.

The CRA nevertheless recommended the project adequately document the existing well/pipe using the appropriate Department of Parks and Recreation (DPR) 523 forms. This Wellsite Documentation will be completed prior to grading of the project site as outlined previously in TOP Implementation Action CUL-1.

With implementation of the Wellsite Documentation, the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

Discussion of Effects: Section VI. C of the CCC SP EIR indicated the region had been inhabited by Native American tribes but a cultural survey of the site found no archaeological or other cultural resources on the site. Although it is permissive rather than mandatory, one (1) mitigation measure was recommended to reduce impacts as outlined in Table A (see CCCSP EIR Measure 17 in column 1 of the table).

TOP EIR (Section 5.5) indicates no archeological sites or resources have been recorded in the City with the Archeological Information Center at San Bernardino County Museum. The CRAs prepared for the project site included a pedestrian survey, a record search, a Sacred Lands File (SLF) search, and a review of existing documentation for the project site and surrounding area. The Native American Heritage Commission (NAHC) was contacted for a SLF search on April 1, 2019, and a response was received on April 15, 2019, indicating the project site contained no identified archaeological or tribal resources.

The CHRIS-SCCIC records search conducted for the CRA did not identify prehistoric resources within or adjacent to the project boundaries. The NAHC SLF search also did not indicate any archaeological resources or artifacts associated with Tribal Cultural Resources (TCRs) were located within the project site. Table 11 above demonstrates the seven cultural resources found in the surrounding area were historical and not archaeological in nature. The project site has been highly disturbed by modern human activities including agricultural use from the 1940's through the 1960's that could have displaced potential surface and subsurface archaeological resources. Therefore, it is not anticipated the proposed project will impact archaeological or identified TCRs.

While no adverse impacts to archeological resources are anticipated at this site due to its disturbed nature, the project will implement TOP MM CUL 5-2 to ensure that, in the event of unanticipated archeological discoveries, construction activities will not continue or will be moved to other parts of the project site and a qualified archaeologist shall be contacted to determine significance of these resources. If the find is discovered to be historical or unique archaeological resources, as defined in Section 15064.5 of the CEQA Guidelines, avoidance or other appropriate measures shall be implemented. The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. The following mitigation measure from TOP EIR is applicable to the project:

MM CUL 5-2. In areas of documented or inferred archaeological and/or paleontological resource presence, City staff shall require applicants for development permits to provide studies to document the

presence/absence of such resources. On properties where resources are identified, such studies shall provide a detailed mitigation plan, including a monitoring program and recovery and/or in situ preservation plan, based on the recommendations of a qualified cultural preservation expert. The mitigation plan shall include the following requirements:

a) Archaeologists and/or paleontologist shall be retained for the project and will be on call during grading and other significant ground-disturbing activities.

b) Should any cultural resources be discovered, no further grading shall occur in the area of the discovery until the Planning Director or designee is satisfied that adequate provisions are in place to protect these resources.

c) Unanticipated discoveries shall be evaluated for significance by a San Bernardino County Certified Professional Archaeologist/Paleontologist. If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates, and other special studies; submit materials to a museum for permanent curation; and provide a comprehensive final report including catalog with museum numbers.

c. Disturb any human remains, including those interred outside of formal cemeteries?

Discussion of Effects: The CCC SP EIR did not address the issue of human remains but Section VI. C did discuss past habitation by Native American tribes. A cultural survey found no archaeological or other cultural artifacts on the site and did not recommend any mitigation.

TOP EIR states there are known Native American gravesites and cemeteries in the City, but none on or adjacent to the project site. Future development and grading of sensitive areas may disturb human remains, including those outside of formal cemeteries (SEIR p. 5.5-20).

The proposed project is in a general area that has been previously disturbed by human activity. No known religious or sacred sites exist within the project area. Thus, human remains are not expected to be encountered during any construction activities. However, in the unlikely event that human remains are discovered, existing regulations, including Public Resources Code Section 5097.98, would afford protection for human remains discovered during development activities. Per state law, in the event unanticipated discoveries of human remains are identified during excavation, the area shall not be disturbed until any required investigation is completed by the County Coroner and/or Native American consultation has been completed, if deemed applicable.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. The Project shall implement TOP EIR Mitigation Measure 5-2 as outlined above.

6. ENERGY Would the project:

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Discussion of Effects: Section VI.F of the CCC SP EIR evaluated energy "conservation" but just estimated the amount of energy that would be used, in terms of electricity, natural gas, and vehicular fuels, during construction and operation of the project. The EIR did recommend seven (7) mitigation measures to help reduce energy use on the site. Those measures are addressed in Table A (see CCCSP EIR Measures 19, 21-25, and 80 in column 1 of the table). The EIR did not make a specific conclusion as to whether the project would result in significant impacts to energy resources.

Energy was analyzed at a programmatic level in TOP EIR based on the 2019 revisions to the CEQA Guidelines. TOP EIR concluded TOP would not result in wasteful, inefficient, or unnecessary consumption of fuel use during construction or result in new or a substantial increase in magnitude of impacts (SEIR p. 5.6-13).

Implementation of the project would increase the demand for electricity and natural gas at the project site and gasoline consumption in the region during construction and operation. A detailed discussion is provided below.

Electricity

Construction. Temporary electric power would be required for lighting and electronic equipment (e.g., computers) located in trailers used by the construction crew. However, the electricity used for such activities would be temporary and would have a negligible contribution to the project's overall energy consumption. An Energy Assessment (*EA*) prepared for the project by Urban Crossroads in March 2022, a copy of which is included in Appendix A -1 to this report, indicated that construction of warehousing, both cold storage and fulfilment center uses, plus parking, landscaping, and other asphalt surfaces would consume 6,276,680 kilowatt-hours (kWh) of electricity (Table 10, UC 2022).

Operational. The proposed project entails the construction of nine new warehouse buildings, which are consistent with TOP and CCC SP land uses designated for the property. These warehouse uses will be similar in design and operation to existing and planned uses in the surrounding area, and will have similar energy use during operation to existing warehouses in the City. Operation of the project would require electricity for multiple purposes, such as: building heating and cooling, lighting, appliances, and electronics. The EA estimated the operation of stationary equipment as part of the project buildings would consume 34,405,914 kWh per year of electricity and 40,546,270 thousand British thermal units (kBTU) per year (Table 15, UC 2022).

The project will be required to comply with the CALGreen Building Code (CBC) requirements in effect at the time of development. Moreover, the project will implement the GHG Reduction Measures Screening Table 2 for Commercial and Industrial Development (see Appendix A-2 to this report). The project will be responsible for implementing the indicated measures as required by the City's development review process. The Screening Table included energy efficient development measures, indoor space efficiency measures, building efficiency measures, renewable energy measures, and water conservation measures. PDF that would reduce electricity consumption include but are not limited to: greatly enhanced window insulation over CBC limits, an enhanced cool-roof, an improved efficiency heating, ventilation, and air conditioning (HVAC) system, enhanced duct insulation, Energy Star commercial appliances, water efficient landscaping and irrigation systems, and water-efficient toilets and faucets. Although electricity consumption would increase at the site with implementation of the project, the building envelope, HVAC, lighting, and other systems, would be designed to maximize energy performance. With implementation of these various measures, the electricity that would be consumed by the project is not considered to be inefficient or wasteful, and impacts would be less than significant.

Natural Gas

Construction. Natural gas consumption is not anticipated during construction of the project. Fuels used for construction would generally consist of diesel and gasoline, which are discussed in the next subsection. The EA concludes that any amounts of natural gas that may be consumed during project construction would be nominal and would have a negligible contribution to the project's overall energy consumption.

Operational. The proposed project is consistent with TOP and CCC SP. Warehouse uses will be similar in size and appearance to existing and planned uses in the surrounding area and will have similar natural gas use during operation. During operation, the project would require natural gas consumption for various purposes, such as building heating and cooling. The *EA* estimated the operation of stationary equipment as part of the project buildings would consume 40,546,270 thousand British thermal units (kBTU) per year (Table 15, UC 2022).

All future structure developed on the site would be built to the 2016 Title 24 CALGreen efficiency requirements or the code in effect at the time of development. In addition, measures will be applied based on the information contained in the City's GHG checklist (see Appendix A-2). These measures include, but are not limited to: enhanced wall, attic, and window insulation; high efficiency water heater, and optimized building orientation. Although natural gas consumption would increase at the site under implementation of the project, the building envelope, HVAC, lighting, and other systems, would be designed to maximize energy performance. The project would be subject to statewide mandatory energy requirements as outlined in the CALGreen Code. For these reasons, the natural gas that would be consumed by the project is not

considered to be inefficient or wasteful, and impacts would be less than significant.

Diesel and Gasoline Fuel

Construction. Diesel and gasoline fuels, also referred to as petroleum in this subsection, would be consumed throughout construction of the project. Fuel consumed by construction equipment would be the primary energy resource consumed over the course of construction, and vehicle miles traveled (VMT) associated with the transportation of construction materials (e.g., deliveries to the site) and worker trips to and from the site would also result in petroleum consumption. Whereas on-site, heavy-duty construction equipment and delivery trucks would predominantly use diesel fuel, construction workers would generally rely on gasoline-powered vehicles. The *EA* estimated that project construction would consume 335,494 gallons of diesel fuel for offroad vehicles and equipment, 932,311 gallons of gasoline over approximately a four-year period for worker travel to and from the site, and 496,539 gallons of gasoline for vendor trips and hauling (Tables 11-13, UC 2022).

The project will be required to comply with the California Air Resources Board (CARB) Airborne Toxic Control Measures, which restrict heavy-duty diesel vehicle idling to five minutes. Since petroleum use during construction would be temporary and required to conduct development activities, it would not be wasteful or inefficient, and impacts would be less than significant.

Operational. Fuel consumption associated with the project's operational phase would primarily be attributable to workers commuting to and from the project and the operation of large, diesel-powered trucks (e.g., semi-trucks) needed to transport goods. Over the lifetime of the project, the fuel efficiency of the vehicles being used by the employees is expected to increase. As such, the amount of petroleum consumed as a result of vehicular trips to and from the project site during operation is anticipated to decrease over time. The *EA* estimated project-generated traffic would consume a total of 3,107,417 gallons of fuel for all types of vehicles and generate a total of 46,037,767 VMT each year (Table 14, UC 2022, Appendix A-1).

There are numerous regulations in place that require and encourage fuel efficiency. For example, CARB has adopted an approach to passenger vehicles by combining the control of smog-causing pollutants and GHG emissions into a single, coordinated package of standards. The approach also includes efforts to support and accelerate the number of plug-in hybrids and zero emission vehicles (ZEVs) in California. In addition, CARB adopted a regional goal for the SCAG region of reducing per-capita GHG emissions from 2005 levels by 8% in 2020 and 19% in 2035 for light-duty passenger vehicles. Accordingly, operation of the project is expected to decrease the amount of petroleum it consumes in the future due to improvements in state-wide fuel economy over time. Although the project would increase petroleum use in the region during construction and operation, the use would be a small incremental fraction of the statewide use and, due to efficiency increases, would diminish over time. As such, petroleum consumption associated with the project would not be considered to be inefficient or wasteful so its energy-related impacts would be less than significant.

The project will comply with Title 24 and other applicable state energy conservation regulations as recommended in TOP EIR. In November 2014, the City adopted the most current version of the Community Climate Action Plan (CCAP) which includes energy conservation that results from implementation of the recommended GHG reduction measures. To comply with TOP EIR, the project will implement the items outlined in the GHG Reduction Measures Screening Table (see GHG Study, Appendix A). As shown therein, the project garners a total of 103 points, so it is consistent with the City's CCAP, including energy conservation. The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project-specific mitigation is required.

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Discussion of Effects: Section VI.F of the CCC SP EIR evaluated energy "conservation," but just estimated the amount of energy that would be used, in terms of electricity, natural gas, and vehicular fuels, during construction and operation of the project. The EIR did recommend seven (7) mitigation measures to help reduce energy use on the site. Those measures are outlined in Table A (see CCCSP EIR Measures 19, 21-25, and 80 in column 1 of the table). The EIR did not make a specific conclusion as to whether the project would result in significant impacts to energy resources or if it was consistent with energy conservation plans or regulations.

Energy was analyzed at a programmatic level in TOP EIR based on the 2019 revisions to the CEQA Guidelines. The EIR determined TOP would have a less than significant direct, indirect, and cumulative impacts relating to conflict with or obstruction of a state or local plan for renewable energy or energy efficiency (SEIR p. 5.6-14).

The project would not conflict with or obstruct a state or local plan adopted for the purposes of increasing the amount of renewable energy or energy efficiency. The California Title 24 energy efficiency standards for non-residential buildings address electricity and natural gas efficiency in lighting, water, heating, and air conditioning, as well as the effects of the building envelope (e.g., windows, doors, walls and rooves, etc.) on energy consumption. As described above, the project would be required to comply with the Title 24 CALGreen standards current at that time and would implement additional measures as identified in the City's CCAP screening table checklist for industrial projects (Appendix A). Since each new building will comply with applicable State standards and adhere to the City's CCAP, which includes energy reductions measures, the project would not conflict with nor obstruct a state or local plan for renewable energy or energy efficiency.

This impact would be less than significant, and the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary

Mitigation: No project specific mitigation is required.

7. GEOLOGY & SOILS. Would the project:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Discussion of Effects: Section VI.J of the CCC SP EIR does not identify any active faults on or in the vicinity of the project site, although it does discuss regional faults. The EIR concluded the site would be subject to strong groundshaking and recommended three (3) mitigation measures, which are now required as regulatory compliance in Table A (see CCCSP EIR Measures 45-47 in column 1 of the table).

According to TOP EIR, there are no active faults known on the site and the project site is located outside the Fault Rapture Hazard Zone (formerly Alquist-Priolo Zone). TOP EIR (Section 5.7/Figure 5.7-2) identifies eight active or potentially active fault zones near the City. The EIR determined TOP would have a less than significant direct, indirect, and cumulative impacts relating to seismic-related hazards (SEIR p. 5.7-19).

Given that the closest fault zone is located more than eight miles from the project site, fault rupture within the project area is not likely. All development will comply with the CBC seismic design standards to reduce geologic hazard susceptibility. Therefore, no adverse impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

ii. Strong seismic ground shaking?

Discussion of Effects: Section VI.J of the CCC SP EIR indicates the site would be subject to strong groundshaking and recommended three (3) mitigation measures, which are now required as regulatory compliance in Table A (see CCCSP EIR Measures 45-47 in column 1 of the table).

TOP EIR indicates there are no active faults known on the site and the project site is located outside the Fault Rapture Hazard Zone (formerly Alquist-Priolo Zone). TOP EIR (Section 5.7/Figure 5.7-2) identifies eight active or potentially active fault zones near the City. The closest fault zone is located more than eight miles from the Project site.

The proximity of the site to the active faults will result in ground shaking during moderate to severe seismic events. All construction will be in compliance with the CBC, the City Municipal Code (CMC), TOP and all other ordinances adopted by the City related to construction and safety. Therefore, no adverse impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

iii. Seismic-related ground failure, including liquefaction?

Discussion of Effects: Section VI.K of the CCC SP EIR addresses geology and soils but does not identify any specific soil constraints on the site. The EIR made no conclusions regarding ground failure or liquefaction and did not recommend any mitigation measures.

As identified in TOP EIR (Section 5.7), groundwater saturation of sediments is required for earthquake induced liquefaction. In general, groundwater depths shallower than 10 feet to the surface can cause the highest liquefaction susceptibility. TOP EIR indicates that depths to groundwater in the project site vicinity during the winter months is estimated to be over 200 feet below ground surface. Therefore, the liquefaction potential within the project area is minimal. Implementation of TOP strategies in the Safety Element regarding seismic building design, the CBC and the CMC would reduce impacts to a less than significant level.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

iv. Landslides?

Discussion of Effects: Section VI.K of the CCC SP EIR addresses geology and soils but does not identify any specific constraints regarding landslides. The site and surrounding areas are relatively flat and no major slopes are present.

TOP EIR did not identify any significant slopes in the City or the project area, so there were no impacts related to landslides and no mitigation is needed.

The project would not expose people or structures to potential adverse effects, including the risk of loss, injury, or death involving landslides because the relatively flat topography of the project site (less than two percent slope) and the proposed grading plan indicate the chances of landslides onsite would be remote. The project proposes nine new buildings on the site consistent with TOP and CCC SP land use designations.

Therefore, the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Result in substantial soil erosion or the loss of topsoil?

Discussion of Effects: Section VI.K of the CCC SP EIR addresses geology and soils but does not identify any specific erosion impacts. However, it does recommend one (1) permissive mitigation measure requiring an erosion control plan as part of development. That measure is addressed in Table A (see CCCSP EIR Measure 51 in column 1 of the table).

TOP EIR concluded that TOP policies and state regulations would ensure that potential impacts from erosion or the loss of topsoil would be less than significant (SEIR p. 5.7-20).

The project site will not result in significant soil erosion or loss of topsoil because of the previously disturbed nature of the project site, the covering over of the site by mainly impervious surfaces, and implementation of the project-specific Water Quality Management Plan (WQMP), included in Appendix F of this report, for water quality control (including erosion). Grading increases the potential for erosion by

removing protective vegetation, changing natural drainage patterns, and constructing slopes. However, compliance with the CBC and review of grading plans by the City Engineer will ensure no significant impacts will occur. In addition, the City requires an erosion/dust control plan for projects located within this area. Implementation of a Water Quality Management Plan (WQMP) and Best Management Practices (BMPs), consistent with the federal water quality permitting requirements of the National Pollution Discharge Elimination Program (NPDES) program, the Environmental Resource Element of TOP Policy Plan strategies, the CBC, and the CMC, would reduce potential impacts to a less than significant level.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Discussion of Effects: Section VI.K of the CCC SP EIR addresses geology and soils but does not identify the potential for any of these specific constraints. The CCC SP EIR concluded the project would not have any impacts relative to soils or geology but recommended three (3) mitigation measures for these impacts. However, these measures have since been superseded by regulatory compliance and standard conditions of approval by the City as shown in Table A (see CCCSP EIR Measures 49-51 in column 1 of the table).

TOP EIR (Section 5.7) indicates that subsidence is generally associated with large decreases or withdrawals of water from an aquifer. The project would use domestic water supplies and would not withdraw water from the existing aquifer. The EIR states that future projects under TOP could expose structures or persons to potentially significant hazards from lateral spreading, ground subsidence, liquefaction, and compressible soils, However, compliance with the CBC and review of grading plans for individual projects by the City Engineer would ensure no significant impacts would occur (SEIR p. 5.7-21). The City is relatively flat, including the project site, so the risk of landslides is negligible.

The new light industrial buildings would not result in the location of development on a geologic unit or soil that is unstable, or that would become unstable because as previously discussed, the potential for liquefaction and landslides associated with the project is less than significant. Further, implementation of TOP strategies, the CBC and the CMC would reduce impacts to a less than significant level. Therefore, the project would not create greater landslide potential impacts than were identified in TOP EIR.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Discussion of Effects: The CCC SP EIR did not identify any specific soil constraints, including expansive soils, on the project site, so the EIR concluded there were no impacts and no mitigation was required with regulatory compliance (i.e., CBC).

TOP EIR identified limited soil stability impacts of future development if expansive or other soil constraints were present beneath structures. TOP EIR recommended compliance with the CBC and CMC to assure impacts will be less than significant (SEIR p. 5.7-21).

The majority of Ontario, including the project site, is located on alluvial, and in some areas, aeolian (i.e., sandy) soil deposits. These types of soils are not considered to be expansive. In addition, specific soil conditions beneath each proposed building will be verified and addressed by specific foundation design to be confirmed by City Engineering. Therefore, no adverse impacts will occur.

Through the City's development and design review process, the project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

Discussion of Effects: Section VI.N of the CCC SP EIR addresses wastewater and provide information about local sewers but does not mention septic or alternative systems. Two (2) mitigation measures are recommended to have a complete onsite sewer that meets all regulatory requirements as shown in Table A (see CCCSP EIR Measure 74-75 in column 1 of the table) .

TOP EIR states that TOP policies and state regulations would ensure that the potential impacts from geology and soils hazards would be less than significant. Wastewater from Ontario is treated at wastewater treatment facilities owned and operated by the Inland Empire Utilities Agency (IEUA). Use of septic tanks would be limited to existing septic tanks, and new septic tanks would be constricted to areas not in practical proximity to existing sewer mains, dependent on approval by the Santa Ana Regional Water Quality Control Board (RWQCB) on a case-by-case basis (SEIR p. 5.7-22).

The area is served by the local sewer system and the use of alternative systems is not necessary. Future sewer service is based on planned land uses and sizing of pipes and treatment facilities to accommodate planned growth. Since the project is consistent with TOP land use and zoning designations on the site, there will be no significant impacts to the sewage system.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Discussion of Effects: The CCC SP EIR did not evaluate potential impacts to paleontological resources and no mitigation was recommended.

TOP EIR indicates the City is underlain by deposits of Quaternary and Upper-Pleistocene sediments deposited during the Pliocene and early Pleistocene time, Quaternary Older Alluvial sediments may contain significant, nonrenewable, paleontological resources and are, therefore, considered to have high sensitivity at depths of 10 feet or more below ground surface. In addition, TOP EIR (Section 5.5) indicates that only one paleontological resource has been discovered in the City. The project site has surficial sediments composed of younger Quaternary Alluvium, derived as alluvial fan deposits from the San Gabriel Mountains to the north or as dune sands. These deposits typically do not contain significant vertebrate fossils, at least in the uppermost layers, but they may be underlain by older sedimentary materials at estimated depths greater than 10 feet which could contain paleontological resources.

Project grading may exceed 10 feet in depth in some areas so the project will implement TOP EIR Mitigation Measure 5-2, as outlined previously in Section 5, Cultural Resources, as this measure addresses paleontological resources. The measure requires that, in the event unanticipated paleontological resources are identified during excavation, construction activities will not continue or will be moved to other parts of the project site and a qualified paleontologist shall be contacted to determine the significance of these resources. If the find is determined to be significant, avoidance or other appropriate resource protection actions will be taken.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: The project will be required to implement TOP EIR Mitigation Measure 5-2. No project specific mitigation is required.

8. GREENHOUSE GAS EMISSIONS. Would the project:

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Discussion of Effects: In 1981 the State CEQA Checklist (CEQA Guidelines Appendix G) did not require an examination of impacts related to greenhouse gas (GHG) emissions, therefore, that topic was not addressed in the CCC SP EIR.

TOP EIR determined TOP would have a significant direct, indirect, and cumulative impacts relating to the generation of GHG emissions (SEIR p. 5.7-26).

The subject site was previously analyzed by TOP EIR as an industrial use. The impact of buildout of the TOP on the environment due to the emission of GHGs was analyzed in the EIR for the Policy Plan of TOP. According to TOP EIR, this impact would be significant and unavoidable and a statement of overriding considerations was adopted for TOP's significant and unavoidable impacts, including that concerning the emission of GHGs. Developing the site with planned industrial uses on the site will not create significantly greater impacts than were identified in TOP EIR. The project will implement PDF to reduce GHG emissions as outlined in the City's GHG Reduction Measures Screening Threshold Table (see GHG Study, Appendix A-2 dated 12/14/21). This Screening Table provides guidance in measuring the reduction of GHG emissions attributable to certain design and construction measures incorporated into development projects. The analysis, methodology, and significance determination (thresholds) are based upon the City's CCAP, which includes GHG emission inventories (2008 and 2020 forecasts), a year 2020 emission reduction target, the goals and policies to reach the target, together with TOP EIR Addendum prepared for the CCAP.

The Screening Table assigns points for each option incorporated into a project as mitigation or a PDF (collectively referred to as "feature"). The point values correspond to the minimum emissions reduction expected from each feature. The menu of features allows maximum flexibility and options for how development projects can implement the GHG reduction measures. The point levels are based upon improvements compared to 2008 emission levels of efficiency. Projects that garner at least 100 points will be consistent with the reduction quantities anticipated in the City's CCAP. As such, those projects that garner a total of 100 points or greater would not require quantification of project specific GHG emissions. Consistent with the City CEQA Guidelines, and development review process, such projects would be determined to have a less than significant individual and cumulative impact for GHG emissions. As shown in the project GHG Reduction Measures Screening Table (see GHG Study, Appendix A), the project will implement actions to achieve a total of 103 points and thus is consistent with the reduction quantities anticipated in the City's CCAP. Therefore, quantification of project-specific GHG emissions is not required.

Additionally, pursuant to Public Resources Code Section 21083.3, this impact need not be analyzed further, because (1) the proposed project would result in an impact that was previously analyzed in TOP EIR, which was certified by the City; (2) the proposed project would not result in any GHG impacts that were not addressed in TOP EIR; (3) the proposed project is consistent with TOP. The proposed impacts of the project were already analyzed in TOP EIR and the project will be built to current energy efficient standards. Potential impacts of project implementation will be less than significant by compliance with current Title 24 energy efficiency standards of the California Code of Regulations. No changes or additions to TOP EIR analyses are necessary.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary. The PDF outlined above, consistent with the GHG Reduction Measures Screening Threshold Table (see Appendix A-2) adequately address any GHG impacts and there is no need for any project specific mitigation measures.

Mitigation: No project specific mitigation is required.

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Discussion of Effects: In 1981, the State CEQA Checklist (CEQA Guidelines Appendix G) did not require an examination of impacts related to GHG emissions, therefore, that topic was not addressed in the CCC SP EIR.

The EIR determined TOP was consistent with statewide strategies adopted for the purpose of reducing GHG emissions including CARB's Scoping Plan and SCAG's Connect SoCal (SEIR p. 5.8-27). The subject site was previously analyzed by TOP EIR as an industrial use. By implementing TOP EIR Mitigation Measures AQ 3-1 through 3-3 regarding air pollutant emissions, the proposed project is

consistent with TOP Goal ER 4 of improving air quality by, among other things, implementation of Policy ER 4-3, regarding the reduction of GHG emissions in accordance with regional, state and federal regulations. In addition, the proposed project is consistent with the policies outlined in Section 5.6.4 of the EIR for TOP, which aims to reduce the City's contribution of GHG emissions at build-out by implementing energy efficient design, energy efficient irrigation systems, electric vehicle charging stations, and compliance with Title 24 of the California Code of Regulations. Since it achieves at least 100 points using the Screening Table (see GHG Study, Appendix A-2), the project is consistent with the City's CCAP. Therefore, the proposed project does not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing emissions of GHGs.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: Project will implement TOP EIR Mitigation Measures AQ 3-1 through 3-3 but no project specific mitigation is required.

9. HAZARDS & HAZARDOUS MATERIALS. Would the project:

a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?

Discussion of Effects: The CCC SP EIR concluded the project would have no impacts regarding hazards or hazardous materials and did not recommend any mitigation measures.

TOP EIR determined that implementation of the policies in the Safety Element, in addition to existing regulations, would ensure less than significant impacts from transport, use, and/or disposal of hazardous materials. It further concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to transport, use, and disposal of hazardous materials, release of hazardous materials, and emission and handling of hazardous materials, substances, or waste (SEIR p. 5.9-37).

The subject site was previously analyzed by TOP EIR as a light industrial use. The project will not involve the transport, use or disposal of hazardous materials during either construction or project implementation based on the land use restrictions for industrial uses in TOP. Therefore, no adverse impacts are anticipated. However, in the unlikely event of an accident, implementation of the strategies included in TOP regarding emergency services such as police and fire will decrease the potential for health and safety risks from hazardous materials to less than significant levels.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Discussion of Effects: The CCC SP limits the use of flammable, explosive, or other hazardous materials by onsite light industrial uses. In addition, hazardous materials are regulated by a variety of federal and state agencies. Therefore, the CCC SP EIR did not anticipate any significant impacts related to hazardous materials with regulatory compliance, and no mitigation was recommended.

TOP EIR concluded that implementation of the policies in the Safety Element, in addition to existing regulations, would ensure that development under TOP would not exacerbate hazards associated with existing hazardous materials sites (SEIR p. 5.9-39).

The subject site was previously analyzed by TOP EIR as an industrial use. Under the CCC SP, the proposed project would not involve the use of hazardous materials or volatile fuels. In addition, there are no known stationary commercial or industrial land uses within close proximity to the subject site, which use/store hazardous materials to the extent that they would pose a significant hazard to visitors/occupants to the subject site. Therefore, upset conditions resulting in the release of hazardous materials are not anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP FEIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school?

Discussion of Effects: The CCC SP EIR did not evaluate potential impacts of the project from hazardous materials and nearby schools, most likely because there are no schools within a quarter mile of the project site.

TOP EIR concluded that a number of hazardous material facilities were within a quarter mile of various schools in the City and impacts were potentially significant, such that mitigation was recommended. However, the project site is not within a quarter mile of any school sites so there will be no impacts and no mitigation is required relative to TOP EIR analysis.

Under the CCC SP, the project cannot involve the use, emissions or handling of hazardous or acutely hazardous materials, substances or waste. Therefore, no impacts are anticipated. The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Discussion of Effects: This list was not in place when the CCC SP EIR was prepared in 1981. However, there are no Cortese sites on or in the immediate vicinity of the project site (i.e., a quarter-mile radius around the site).

TOP EIR identified that implementation of the policies in the Safety Element in addition to existing regulations ensured that development of TOP would not exacerbate existing hazards associated with existing hazardous materials sites. The EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to location on a site which is included on a list of hazard materials. Accordingly, no changes or alterations to the Proposed Project were required to avoid or substantially lessen any significant environmental impacts under those thresholds. (Draft SEIR pg. 5.9-39)

The project site is not listed on the hazardous materials site compiled pursuant to Government Code Section 65962.5. Therefore, the project would not create a hazard to the public or the environment and no impact is anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

e. For a project located within the safety zone of the airport land use compatibility plan for ONT or Chino Airports, would the project result in a safety hazard for people residing or working in the project area?

Discussion of Effects: Section VI.B of the CCC SP EIR examined potential issues related to hazards from the OIA ("airport expansion") and recommended three (3) mitigation measures, mainly regarding noise, as outlined in Table A (see CCCSP EIR Measures 14-16 in column 1 of the table).

Sections 5.9 (Hazards and Hazardous Materials) and 5.11 (Land Use and Planning) of TOP EIR indicated that with proper land-use planning, aircraft safety risks could be reduced, primarily by avoiding incompatible land uses. The FAA and Caltrans Division of Aeronautics provide guidance for land use safety near airports. With adherence to these guidelines, high concentrations of people are not exposed to potential airplane accidents along runways or near airports while airplanes are departing and arriving. There are also guidelines on the placement of housing, schools, and other sensitive land uses near airports because of the noise pollution caused by airplanes.

The Land Use Element of TOP 2050 states that all new developments surrounding ONT should be consistent with the adopted ALUCP and should meet standards and recommendations of Part 77 of the FAA, adopted through Ordinance 2758 in the Ontario Municipal Code. A consistency determination analysis for the ONT was prepared by the City and submitted to ONT-IAC and found that TOP 2050 is consistent with ALUCP for ONT (ONT–IAC 2022). Similar to the proposed project, TOP 2050 is consistent with the ALUCP for ONT because the general land use designations within the airport influence area are the same.

The EIR concluded TOP would have a less than significant impact associated with consistency with the OIA ALUCP (SEIR p. 5.9-41). The project site is not within the planning area of the Chino Airport.

The proposed project is located within the Airport Influence Area of OIA. The site is located within Airport Safety Zones 1, 2 and 3, and within three Noise Impact Zones of the airport. As a result, an airport safety report was prepared by Mead & Hunt in January 2022 (Appendix E).

Just west of the project site is an airport "clear zone," which is part of its aircraft landing approach zones for Runways 26R and 26L (Aircraft Safety Zone 2). As shown in the previous Figure 4, the OIA and the CCC SP designate the central portion of the Project site as a "low employee intensity area" approximately 1,700 feet wide (850 feet on both sides of Santa Ana Street) to protect the OIA clear zone and landing aircraft.

The basic function of the ALUCP is to promote compatibility between OIA and the land uses that surround it in order to avoid future compatibility conflicts. The ALUCP policies address four types of airport land use concerns:

- Noise – Locations exposed to potentially disruptive levels of aircraft noise.
- Overflights – Locations where aircraft overflights can be intrusive and annoying to many people.
- Safety – Areas where the risk of an aircraft accident poses heightened safety concerns for people and property on the ground.
- Airspace Protection – Places where height and certain other land use characteristics need to be restricted to protect the safe and efficient use of navigable airspace.

Noise. The purpose of noise compatibility policies is to avoid the establishment of noise-sensitive land uses in areas exposed to significant levels of aircraft noise. As shown in **Figure 6, Noise Impacts**, the project site falls within three ALUCP Noise Impact Zones: 65-70 dB Community Noise Equivalent Level (CNEL); 70-75 dB CNEL; and 75-80 dB CNEL. The ALUCP noise criteria indicate that office uses are considered normally incompatible in areas exposed to CNEL 75 dB or greater unless extensive mitigation techniques are applied to make the indoor environment (with windows closed) acceptable for performance of expected activities (i.e., maximum of 50 dB CNEL). In the lower Noise Impact Zones, office spaces are deemed to be conditionally compatible if a maximum interior noise level of CNEL 50 dB is achieved through incorporation of proper sound attenuation design. The requirement also applies to Light Industrial Uses in the 70-80 dB CNEL Noise Impact Zones. Warehousing is deemed to be a compatible use in all three zones.

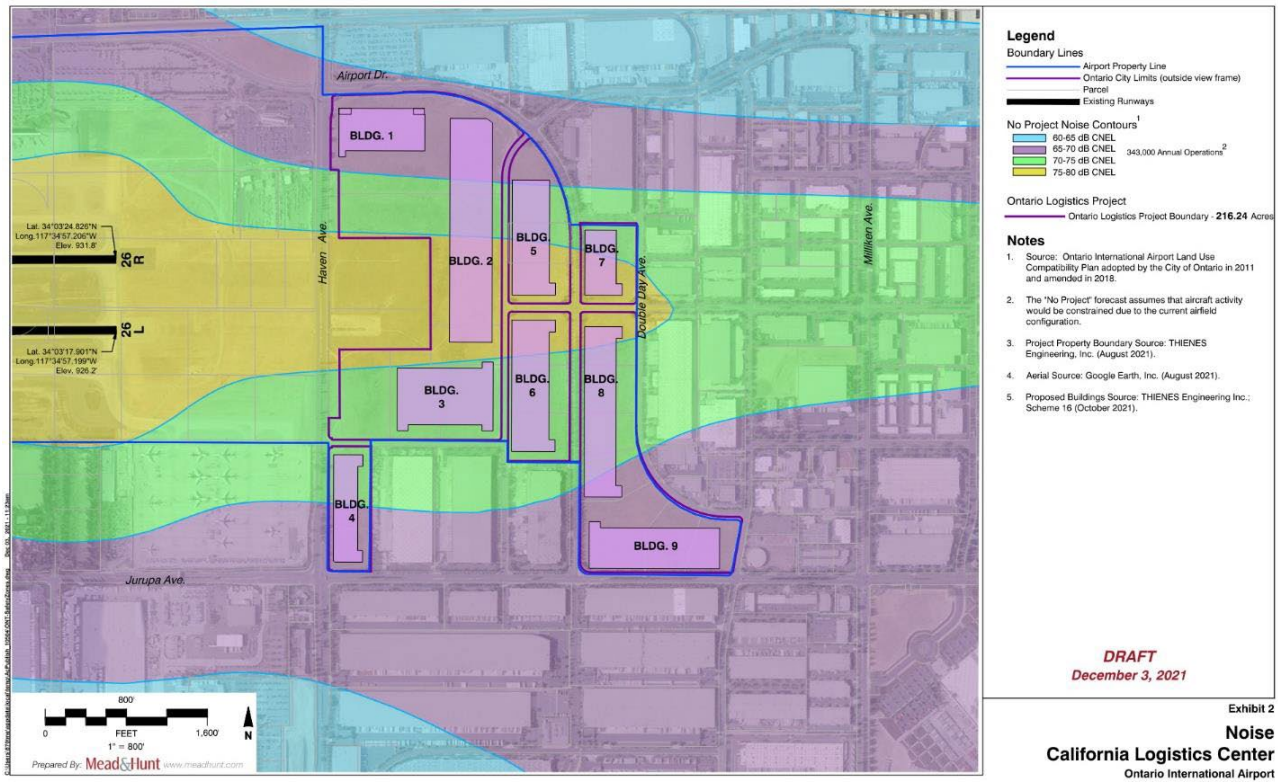
TOP EIR contains Mitigation Measure 12-1 to address noise impacts from future development projects:

12-1. Prior to the issuance of building permits for any project that involves a noise-sensitive use within the 65 dBA CNEL contour along major roadways, freeways, railroads, or the Ontario International Airport, the project property owner/developers shall retain an acoustical engineer to conduct an acoustic analysis and identify, where appropriate, site design features (e.g., setbacks, berms, or sound walls) and/or required building acoustical improvements (e.g., sound transmission class rated windows, doors, and attic baffling), to ensure compliance with the City's Noise Compatibility Criteria and the California State Building Code and California Noise Insulation Standards (Title 24 and 21 of the California Code of Regulations).

To comply with this requirement, the developer retained Mead and Hunt to prepare an airport hazards assessment of the proposed project, including airport-related noise (see Appendix E). The recommended TOP Implementation Actions for noise are tiered off of and directly implement the requirements of TOP EIR Mitigation Measure 12-1 regarding airport noise.

With implementation of TOP Mitigation Measure 12-1 and the two TOP Implementation Actions for noise recommended by the Mead & Hunt study, the project will have less than significant noise impacts on surrounding land uses, consistent with the analysis and conclusions of TOP EIR and supporting project-related studies.

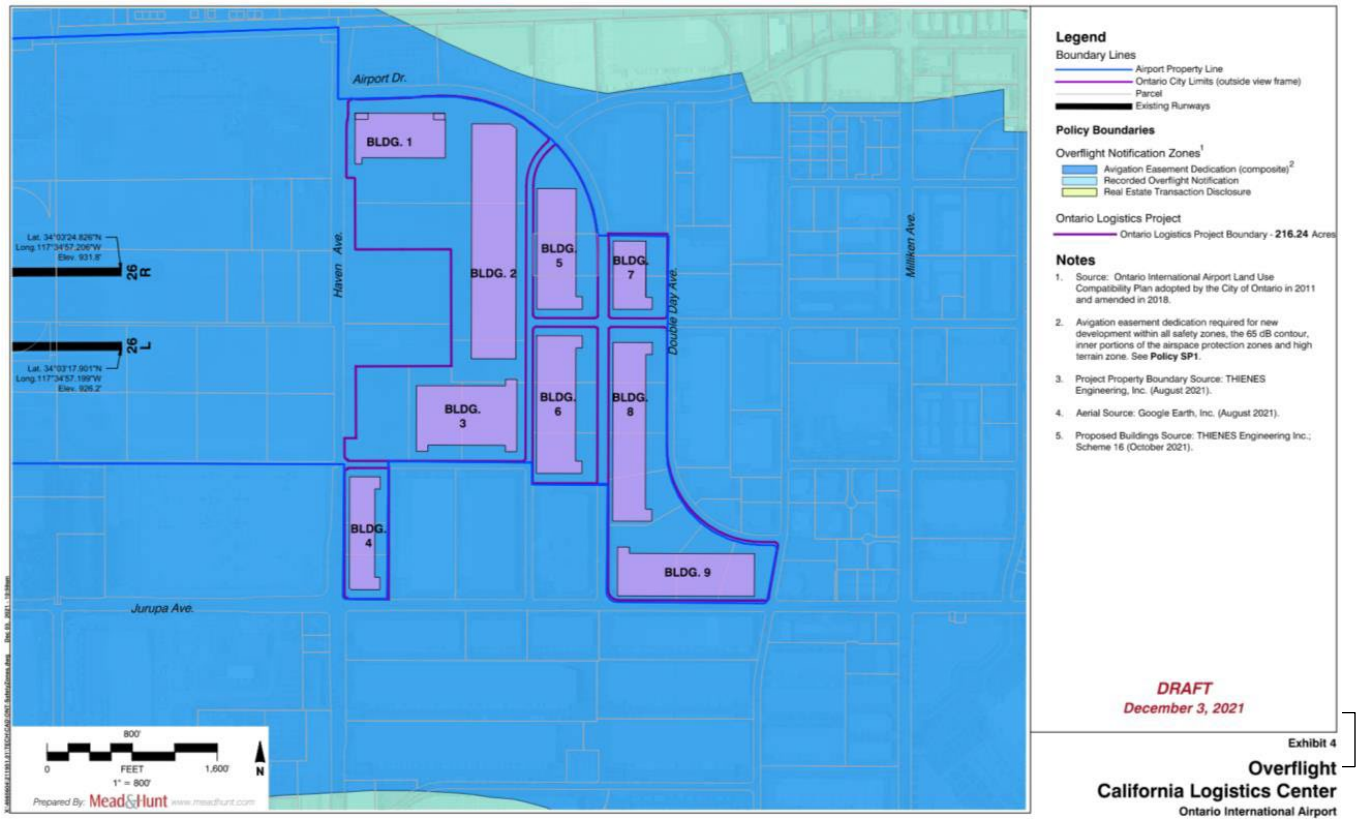
Figure 6: NOISE IMPACTS



Source: Exhibit 2, M&H 2022

Overflights. Noise from individual aircraft operations, especially by comparatively loud aircraft, can be intrusive and annoying in locations beyond the limits of the noise impact zones. The purpose of overflight compatibility policies is to help notify people about the presence of overflights near airports so that they can make more informed decisions regarding acquisition or lease of property in the affected area. As shown in **Figure 7, Overflight Impacts**, the project falls entirely with the Overflight Notification Zone - Avigation Easement Dedication. The ALUCP requires dedication of an avigation easement to the OIA owner/operator prior to commencement of construction as a COA of new development. This requirement is codified in the recommended PDF/COA included in the Mead & Hunt study (Appendix E).

Figure 7: OVERFLIGHT IMPACTS



Source: Exhibit 4, M&H 2022

Safety Zones. The intent of the safety compatibility policies is to minimize the risks associated with an off-airport aircraft accident or emergency landing. The policies focus on reducing the potential consequences of such events when they occur. For most nonresidential development, risk is measured in terms of the usage intensity—the number of people per acre on the site. Local development standards (e.g., floor area ratios, parking requirements) and building code occupancies can be used to calculate nonresidential usage intensities. The ALUCP safety criteria for light industrial, warehouse, and office uses are presented in **Figure 8, ALUCP Safety Criteria**. As shown in **Figure 9, Safety Zones**, the Project site spans the following Safety Zones: Safety Zone 1, RPZ; Safety Zone 2, Inner Approach/Departure Zone; and Safety Zone 3, Inner Turning Zone. Although 14.56 acres of the Project site fall within Safety Zone 1, which encompasses the RPZs for Runways 26L and 26R, the proposed site plan keeps this zone clear of future structures and parking lots. As such, no compatibility conflicts exist in Safety Zone 1, which is the most restrictive of all the safety zones. For Safety Zones 2 and 3, the individual proposed building sites are subject to the ALUCP usage intensity (people per acre) limits for each zone. In accordance with ALUCP Policy S2, any site that is split by safety zone boundaries is treated as if it were multiple parcels divided at the safety zone boundary.

The "maximum allowable occupancy" is the primary criterion by which to evaluate the compatibility of each lessee's proposed specific use or combination of uses within each building (see previous Table 2). The City controls the ultimate determination of compliance with the ALUCP usage criteria, and those determinations will occur when a potential tenant(s) is identified for each building and a specific land use is proposed. The CCC SP includes a mix of light industrial or warehouse uses with ancillary office space. In addition to maximum allowable occupancy, each building has a "theoretical occupancy" which is the calculated total intensity of each building assuming that the building is developed as either a light industrial/office use or warehouse/office use (see previous Table 3). The previous Tables 2 and 3 demonstrate that high-intensity light industrial uses would likely exceed the maximum allowable occupancy limits for Zone 2. Buildings located in Zone 2 are therefore better suited for low intensity light industrial and

warehouse uses. Those limits are codified in the recommended TOP Implementation Actions for noise included in the Mead & Hunt study (Appendix E).

Figure 8: ALUCP SAFETY CRITERIA

Safety Criteria

Legend: Land Use Compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-46 of this table)

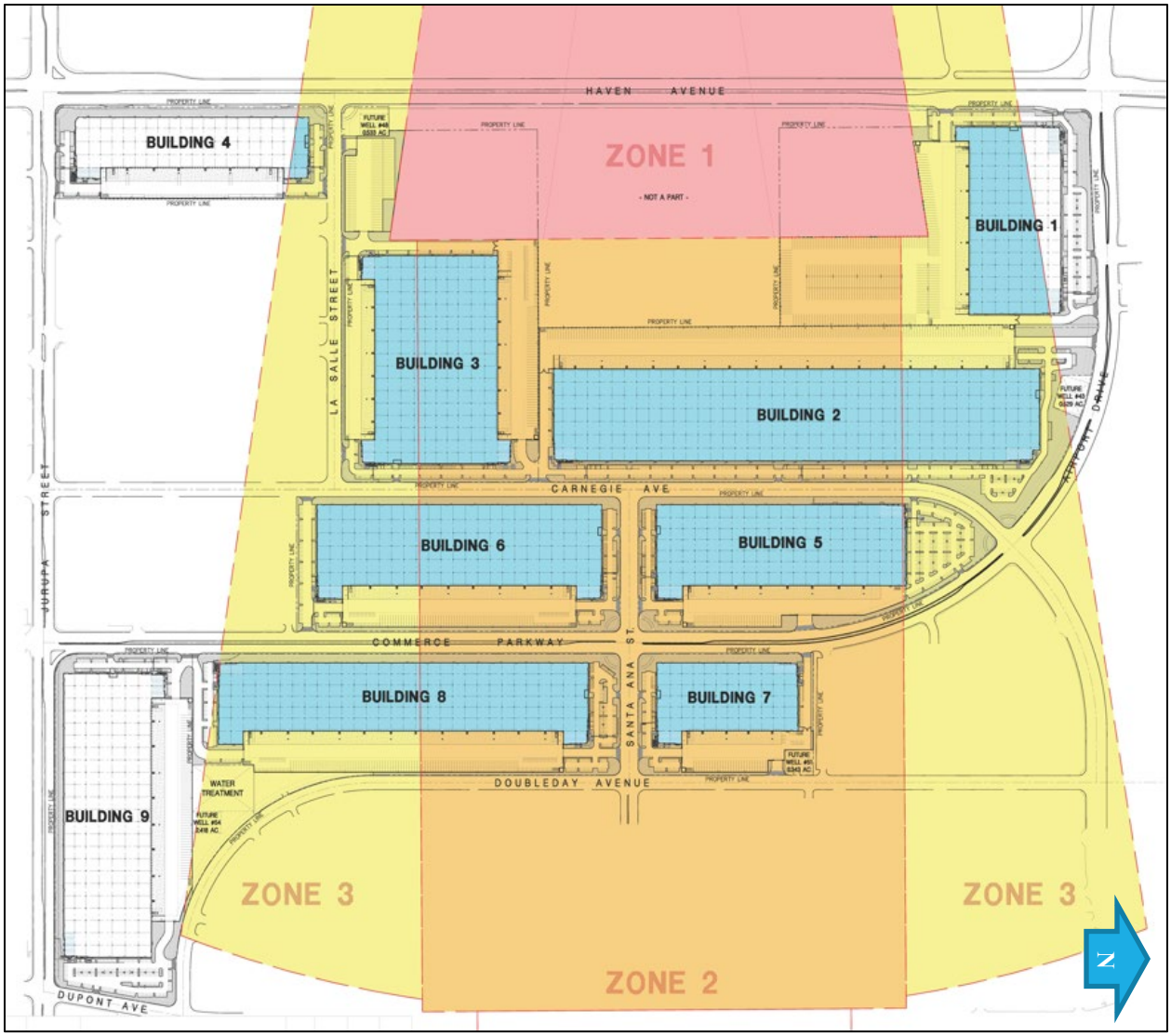
Normally Compatible Land Use	Conditional Land Use (FAR)	Incompatible Land Use

- A yellow cell indicates a use that is conditionally compatible provided it satisfies the maximum intensity limits and/or other listed conditions.
- Numbers in yellow cells indicate the Floor Area Ratio (FAR) limit for the use. The FAR limit is based on the common occupancy load factor [approx. number of square feet per person] indicated for that use. The FAR and/or the common occupancy load factors can be used to calculate the intensity (number of people per acre) of the proposed development (see **Policy S2c**). Up to 10% of the total FAR of a building may be devoted to an ancillary use and excluded from the single-acre intensity calculations, but not the average sitewide intensity limits.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Safety Zone [2] 1	2	3	4	5	Criteria for Conditional Uses *Note: The numbers below indicate zone in which condition applies.*
Max Sitewide Average Intensity (people/acre)	10	60	100	160	160	▪ Nonresidential development must satisfy both forms of intensity limits. ▪ Maximum intensity criteria apply to Normally Compatible as well as Conditional land uses
Max Single-Acre Intensity (people/acre) *applicable to all nonresidential development*	20	120	250	400	400	
Industrial, Manufacturing, and Storage Uses						
Hazardous Materials Production: oil refineries, chemical plants (≥ 6,000 gallons)						
Heavy Industrial						3, 4: Avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Light Industrial, High Intensity: food products preparation, electronic equipment [approx. 200 s.f./person]		0.28	0.46	0.74		2-4: FAR limits as indicated; avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Light Industrial, Low Intensity: machine shops, wood products, auto repair [approx. 350 s.f./person]		0.48	0.80	1.29		2-4: FAR limits as indicated 5: Single story only; max. 10% in mezzanine 2-5: Avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Research & Development [approx. 300 s.f./person]			0.69	1.10		3, 4: FAR limits as indicated; avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Indoor Storage: wholesale sales, warehouses, mini/other indoor storage, barns, greenhouses [approx. 1,000 s.f./person]						2: Single story only; max. 10% in mezzanine

Source: Exhibit 6, M&H 2022

Figure 9: SAFETY ZONES



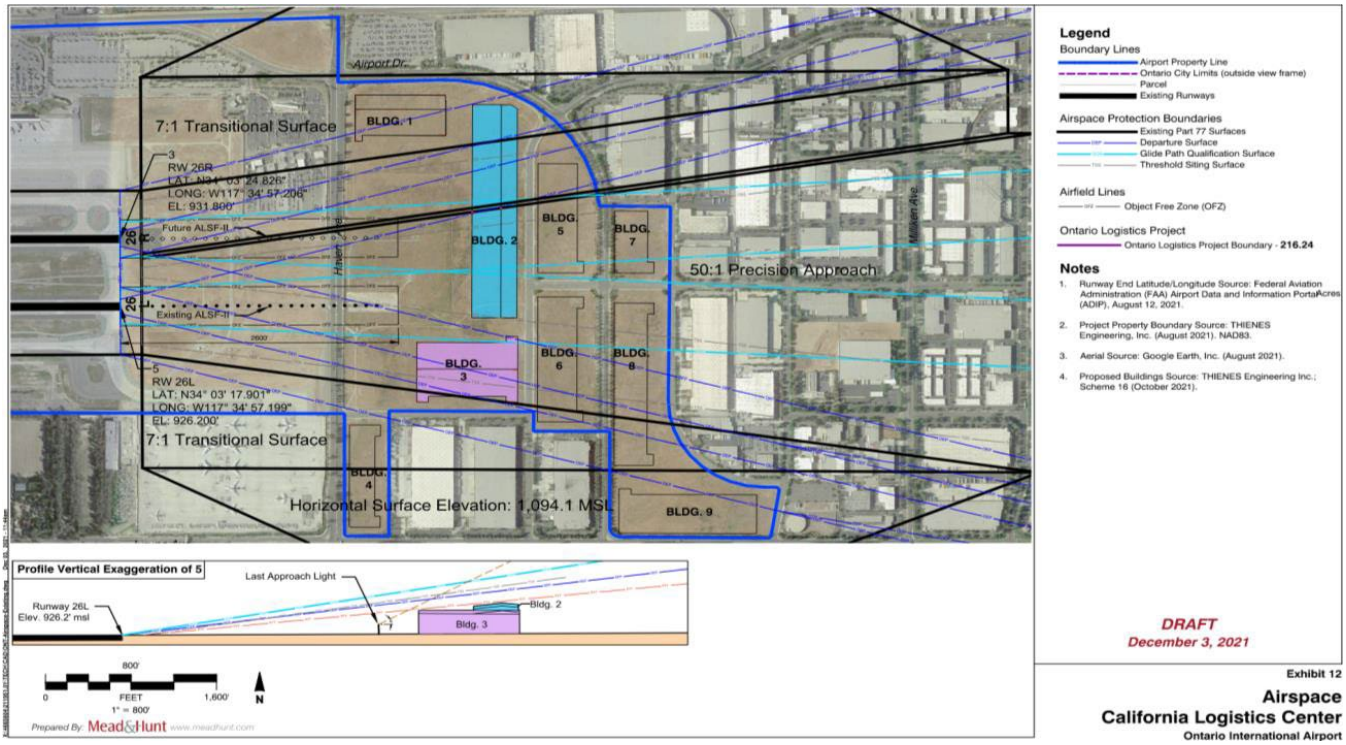
Airspace Protection. Airspace protection compatibility policies seek to prevent the creation of land use features that can pose hazards to the airspace required by aircraft in flight and have the potential for causing an aircraft accident. Categories of hazards to airspace include: physical hazards such as tall structures that may intrude upon protected airspace and land use; and features that have the potential to attract birds or other potentially hazardous wildlife to the airport area. Title 14 of the Code of Federal Regulations (CFR) Part 77 establishes height limits to provide a margin of safety for normal aircraft operations. Objects that exceed the Part 77 height limits constitute airspace obstructions. However, the standards are not absolute and deviation from the CFR Part 77 standards requires the offending objects be evaluated by the FAA and may be considered for marking or lighting application if appropriate.

Figure 10, Airspace Impacts, shows the layout of the proposed buildings at the project site. The heights of the buildings are required to be reported to the FAA by a completed Form 7460-1, *Notice of Proposed Construction or Alteration*. The building elevations are reported as the roof height with 10 feet added to account for building appurtenances such as, but not limited to, parapets and heating ventilation equipment, pursuant to the TOP Implementation Actions for airport hazards outlined in the Mead & Hunt report (Appendix E).

The Mead & Hunt Report (Appendix E) concluded the project has been conceptually designed to keep all future structures below the Part 77 obstruction surfaces and the other FAA clear areas noted in

Figure 10. Additionally, FAA Form 7460-1 has been submitted to the FAA for an aeronautical study for all nine buildings. FAA airspace determinations would have to be received and incorporated as necessary into the project design prior to commencement of construction.

Figure 10: AIRSPACE IMPACTS



Source: Exhibit 12, M&H 2022

To be consistent with TOP and its EIR, it must be demonstrated and assured the proposed project does not conflict with the ALUCP and related safety issues involving OIA. The project must comply with TOP EIR restriction that which states…"before any structure is placed within these areas, a permit is required to ensure that structures do not become a hazard to air navigation and that development is consistent with Part 77" (TOP EIR p. 5.8-27). This compliance requires the project to implement the various TOP Implementation Actions outlined in the project description of this document as part of the City's development review and approval process and ALUCP consistency determination.

The project was evaluated and found to be consistent with the policies and criteria of the ALUCP for OIA which in turn would ensure the project is consistent with TOP and its EIR with implementation of 10 specific actions (see TOP Implementation Actions/Regulatory Compliance in the Project Description). The Mead & Hunt study (Appendix E) recommended the following actions to reduce potential hazard-related impacts of OIA on the project which will be implemented by the project:

1. Regarding overflights, an avigation easement shall be filed with the OIA Authority prior to obtaining a Certificate of Occupancy;
2. Regarding safety, it shall be demonstrated to the OIA Authority and the City that each building meets the ALUCP intensity requirements prior to issuance of a building permit.
3. Regarding airspace, a ground lease agreement will be entered into between the applicant and the City contingent upon a "no airspace hazard determination" by the FAA.
4. Regarding wildlife hazards, buildings shall be designed to eliminate trees and other physical supports for raptors and other large birds.
5. Also regarding wildlife hazards, landscaping plans shall use short tree varieties.
6. Regarding outdoor lighting, the project shall have no lighting directed toward the airport property.

7. Regarding glare, the project shall not utilize any glare-producing materials on buildings within the airport safety zone.
8. Also regarding glare, a glare analysis should be prepared for any rooftop solar systems consistent with FAA glare limitations.
9. Regarding temporary equipment heights, the construction schedule must be coordinated with the OIA Authority to preclude impacts to airport operations by the height/location of cranes.
10. The Mead & Hunt airport safety report made recommendations about onsite surface detention basins. However, only underground retention/detention facilities are proposed as part of this project so there will be no impacts in this regard.

The project site lies outside the boundaries of the Chino Airport Influence Area (i.e., the next closest airport). Therefore, any impacts regarding airport safety and compatibility of that facility will be less than significant. The following TOP Implementation Actions are based on the recommendations of the M&H airport safety report to comply with the recommendations of TOP EIR Section 5.9, Impact 5.9-3. They are described fully in the Project Description portion of this document and summarized by title below:

1: Avigation Easements

2: Building Intensity

3: Part 77 Height Limits

4: Architectural Design

5: Landscaping

6: Lighting Fixtures

7: Glare Control

8: Glare Analysis

9: Construction Coordination

The M&H report concluded the project was consistent with the most current 2018 ALUCP, therefore, potential safety impacts from its proximity to the OIA will be less than significant with implantation of the recommended TOP Implementation Actions outlined in the Project Description. With implementation of the recommended TOP Implementation Actions relative to airport safety, the project will be consistent with the requirements of TOP EIR and will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to the TOP EIR analyses are necessary.

It should be noted the CCC SP EIR concluded the project would have no impacts regarding hazards or noise but did recommend two (2) mitigation measures to address noise impacts from airport operations as shown in Table A (see CCCSP EIR Measures 15 and 16 in column 1 of the table). However, these measures have since been superseded by the City's internal noise standards incorporated into TOP Noise Element.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Discussion of Effects: When the CCC SP EIR was prepared in 1981, the following wildfire-related issues were not part of the State CEQA Checklist so emergency response planning or evacuation routes were not addressed in the CCC SP EIR.

TOPEIR concluded TOP would not interfere with an emergency evacuation plan. According to the Vulnerability Analysis conducted as part of TOP, the threat of flood is the City's greatest hazard as large portions of the City are within the flood zone (i.e., the project site is within the 500-year flood zone). Figure S-10 of TOP indicates that Haven Avenue to the west, Airport Drive to the north, and Jurupa Street to the south are designated evacuation routes in the City. The City's Safety Element, as contained within TOP, includes policies and procedures to be administered in the event of a disaster. TOP seeks interdepartmental and inter-jurisdictional coordination and collaboration to be prepared for, respond to and recover from every day and disaster emergencies. The EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to impairment of or interference with adopted emergency response plans or emergency evacuation plans (SEIR p. 5.9-41).

The project will comply with the requirements of the Ontario Fire Department and all City requirements for fire and other emergency access. Because the project is required to comply with all applicable City codes, any impacts would be reduced to less than significant levels.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?

Discussion of Effects: When the CCC SP EIR was prepared in 1981, wildfire was not a specific issue of the State CEQA Checklist, so emergency response planning or evacuation routes were not addressed in the CCC SP EIR. However, the site is not located in a state responsibility area or lands classified as a very high fire hazard severity zone.

TOP EIR indicates the City would result in less than significant risks from wildfire hazards. The City is outside of the state responsibility area, and California Department of Forestry and Fire Protection (CAL FIRE) has determined that the City contains no areas subject to very high wildfire risk. The EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to wildland fires (SEIR p. 5.9-42). Figure S-04 from TOP indicates the project site is not within any designated wildfire area. Therefore, no impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

10. HYDROLOGY & WATER QUALITY. Would the project:

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Discussion of Effects: Section VI.G of the CCC SP EIR evaluated hydrology and water-related impacts of the project. A project hydrology study was prepared, but the EIR did not present quantified data or analysis of impacts from that report. EIR Exhibit 20 did show the runoff input and output through the proposed storm drain master plan for the project.

Section VI.O of the CCC SP EIR addresses water supply and quality. The EIR evaluates overall water consumption compared to the Water Master Plan Report (EIR was prepared before requirements for Urban Water Management Plans). The discussion about water quality focused on the potable water supply and ways onsite equipment could contaminate drinking water, not regional water quality permitting requirements. The EIR recommended four (4) mitigation measures regarding water and sewer systems not contaminating drinking water supplies (i.e., not control of runoff water quality) as shown in Table A (see CCCSP EIR Measures 50-51 and 74-75 in column 1 of the table).

TOP EIR concluded there would be less than significant impacts related to water quality from development activities associated with future development under TOP. Nearly the entire City is developed, and implementation of TOP would not substantially alter the amount of developed land in the City. TOP EIR would have a less than significant direct, indirect, and cumulative impacts relating to surface or groundwater quality (SEIR p. 5.10-21).

The project site is served by City water and sewer service and will not affect water quality standards or waste discharge requirements. Discharge of storm water pollutants from areas of materials storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing, waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work) areas could result in a temporary increase in the amount of suspended solids, trash and debris, oil and grease, organic compounds, pesticides, nutrients, heavy metals and bacteria pathogens in surface flows during a concurrent storm event, thus resulting in surface water quality impacts. The site is required to comply with the statewide National Pollutant Discharge Elimination System (NPDES) General Industrial Activities

Stormwater Permit, the San Bernardino County Area-Wide Urban Runoff Permit (MS4 permit) and the City Municipal Code (CMC) Title 6, Chapter 6 (Stormwater Drainage System). This compliance would reduce any impacts to below a level of significance.

A Preliminary Water Quality Management Plan (PWQMP) was prepared for the project by Thienes Engineering in December 2021 (TE 2022)(Appendix F), which identifies how the site will comply with storm water discharge and water quality management requirements of the City and the Regional Water Quality Control Board. The PWQMP includes site design measures that capture runoff and pollutant transport by minimizing impervious surfaces and maximizes low impact development (LID) best management practices (BMPs), such as infiltration, biotreatment and evapotranspiration. The PWQMP would include the use of underground stormwater infiltration systems for each of the nine building development sites. There will also be gravity separator devices for pretreatment of sediment, trash/litter, and oil and grease. Any overflow drainage from future development will be conveyed to the public street by way of parkway culverts. The Water Quality Site Map in the PWQMP demonstrates the project will retain/detain a volume of water equal or greater than the design capture volume (DCV) for the entire property (905,754 v. 904,127 cubic feet, respectively) (TE 2022).

The airport safety report (Appendix E) prepared by Mead & Hunt stated that onsite surface stormwater drainage facilities (e.g., bioretention ponds) on the project site need to be designed to provide a 48-hour drawdown following a design storm event (i.e., 24-hour storm). The PWQMP indicates all retention/detention facilities will be underground, which will therefore preclude potential wildlife hazards that could result from surface water features.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Discussion of Effects: Section VI.G of the CCC SP EIR evaluated hydrology and water-related impacts of the project, but did not address groundwater recharge. A project hydrology study was prepared, but the EIR did not present quantified data or analysis of impacts from that report.

Section VI.O of the CCC SP EIR includes one (1) mitigation measure to help protect local groundwater (MM 78 – install recharge/retention basin) as outlined in Table A (see CCCSP EIR Measure 32 in column 1 of the table).

TOP EIR identified less than significant impacts related to groundwater recharge and supply for TOP. At buildout, TOP is forecast to increase residential units by 25,399 and increase nonresidential square footage by 1,092,508 square feet; future development would increase the amount of impermeable surfaces in the City and reduce the amount of permeable surfaces available for groundwater recharge. TOP would have a less than significant direct, indirect, and cumulative impacts relating to impediment of sustainable groundwater management of the basin (SEIR p. 5.10-23).

The subject site was previously analyzed by TOP EIR as an industrial use. No increases in the current amount of water flow to the project site are anticipated, and the proposed project will not deplete groundwater supplies, nor will it interfere with recharge. The water use associated with the proposed use of the property was included in TOP EIR analysis. For development of the site, grading and excavation is expected to be less than 25 feet and would not reach a depth that could affect the existing aquifer, estimated to be over 200 feet below the ground surface. No adverse impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. Result in substantial erosion or siltation on- or off-site;

Discussion of Effects: Section VI.G of the CCC SP EIR evaluated hydrology and water-related impacts of the project but did not address erosion. A project hydrology study was prepared but the EIR but did not present quantified data or analysis of impacts from that report. In addition, Section VI.K of the CCC SP EIR addresses geology and soils. but does not identify any specific erosion impacts. However, it does recommend one (1) mitigation measure requiring an erosion control plan as part of development (see CCCSP EIR Measure 51 in column 1 of Table A)

TOP EIR concluded that implementation of BMPs outlined in SWPPPs, erosion and sediment control plans, WQMPs, and TOP policies would address anticipated erosion and siltation impacts. Therefore, development would not result in substantial erosion or siltation on- or off-site (SEIR p. 5.10-24).

The project Hydro Report and PWQMP (Appendix F) demonstrate that the project will not alter the drainage pattern of the site or area, in a manner that would result in erosion, siltation or flooding on-or-off site, nor will the proposed Project increase the erosion of the subject site or surrounding areas. The existing drainage pattern of the site will not be altered, and it will have no significant impact on downstream hydrology. Stormwater generated by the project will be discharged in compliance with the statewide NPDES General Construction Activities Stormwater Permit and San Bernardino County MS4 permit requirements. With the full implementation of a Storm Water Pollution Prevention Plan (SWPPP) developed in compliance with the General Construction Activities Permit requirements, the BMPs included in the SWPPP, and a stormwater monitoring program, the project's potential impact would be reduced to below a level of significance. No streams or streambeds are present on the site. No changes in erosion off-site are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

ii. Substantially increase the rate or amount of surface runoff water in a manner which would result in flooding on- or off-site;

Discussion of Effects: Section VI.G of the CCC SP EIR evaluated hydrology and water-related impacts of the project, but did not specifically address flooding other than storm drain concerns. A project hydrology study was prepared, but the EIR did not present quantified data or analysis of impacts from that report.

TOP EIR states that the current Flood Insurance Rate Map (FIRM) for the City only shows small portions of the City adjacent to flood control channels, detention basins, and creeks are within the 100-year floodplain. In addition to TOP policies, the CMC, Chapter 13, Flood Damage Prevention Program, requires that a development permit be obtained prior to development in a special flood hazard area to ensure that the site is reasonably safe from flooding and flood hazards. The City requires that all new structures in a special flood hazard area have elevations above the base flood elevation. Therefore, with implementation of existing policies, the potential to impede or redirect flood flows was considered less than significant (SEIR p. 5.10-25).

The Hydro Study concludes the proposed project will not increase the flow velocity or volume of storm water runoff to cause environmental harm from the site and will not create a burden on existing infrastructure. Furthermore, with the implementation of an approved Water Quality Management Plan developed for the site, in compliance with the San Bernardino County MS4 Permit requirements, stormwater runoff volume shall be reduced to below a level of significance.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

Discussion of Effects: Section VI.G of the CCC SP EIR evaluated hydrology and water-related impacts of the project. A project hydrology study was prepared, but the EIR did not present quantified data or analysis of impacts from that report. EIR Exhibit 20 did show the runoff input and output through the proposed storm drain master plan for the project. The EIR recommended four (4) mitigation measures all addressing drainage/storm drain impacts (see CCCSP EIR Measures 31-34 in column 1 of Table A).

TOP EIR indicates there are three major regional drainage channels that convey stormwater runoff from the City's storm drain system—San Antonio Channel, Cucamonga Channel, and Day Creek Channel. There are also several flood retentions and spreading basins in the City that are used to retain flood flows and recharge the Chino Groundwater Basin. Projects considered for approval under TOP would be required to prepare project-specific hydrology and hydraulic studies. The methodology for these studies is provided in the San Bernardino County Hydrology Manual, which describes the approach for estimating stormwater runoff and peak flow rates, for the 100-year storm event (SEIR 5.10-26). In addition, TOP EIR stated TOP would have a less than significant direct, indirect, and cumulative impacts relating to risk of release of pollutants due to project inundation (SEIR p. 5.10-27).

The Hydro Report (Appendix F) demonstrates the project will not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, or create or contribute stormwater runoff pollutants during construction and/or post-construction activity. The stormwater flows will enter existing storm pipes in Jurupa Street and other adjacent improved streets. Pursuant to the requirements of TOP, the City's Development Code, and the San Bernardino County MS4 Permit, individual developments must provide site drainage and PWQMP plans according to guidelines established by the City's Engineering Department. As shown in **Table 12**, Project Runoff Volumes, the project will retain/detain a volume of water equal or greater than the DCV for the entire 196.8-acre property (906,544 v. 1,008,774 cubic feet, respectively) (TE 2022).

Table 12: Project Runoff Volumes

Building/ Drainage Area	SiteArea (Acres)	Design Capture Volume (DCV) (cubic feet/second)	Retention/Detention Volume Provided (cubic feet/second)
1	23.59	113,360	113,818
2	40.64	247,903	248,234
3	25.37	69,399	69,445
4	11.74	48,362	48,540
5	19.47	86,568	86,816
6	20.58	90,195	90,530
7	9.71	42,559	42,723
8	24.08	112,442	112,574
9	21.65	95,757	96,094
Total	**196.83**	**906,544**	**1,008,774**

Source: Hydrology Study and Preliminary Water Quality Management Plan (PWQMP), Thienes Engineering, October 2022a, b

The Hydro Study stated that if master drainage facilities are not in place at the time of project development, then standard engineering practices for controlling post-development runoff may be required, which could include the construction of on-site storm water detention and/or retention/infiltration facilities. This is a temporary engineering contingency if a property were to develop prior to completion of all planned area-wide drainage facilities. However, the area-wide master plan of drainage facilities has already been installed. Therefore, any impacts would be less than significant.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

ii. Impede or redirect flood flows?

Discussion of Effects: Section VI.G of the CCC SP EIR evaluated hydrology and water-related impacts of the project, but did not specifically address flooding other than storm drain concerns. A project

hydrology study was prepared, but the EIR did not present quantified data or analysis of impacts from that report.

TOP EIR states that the current FIRM for the City only shows small portions of the City adjacent to flood control channels, detention basins, and creeks are within the 100-year floodplain. In addition to TOP policies, the CMC, Chapter 13, Flood Damage Prevention Program, requires that a development permit be obtained prior to development in a special flood hazard area to ensure that the site is reasonably safe from flooding and flood hazards. However, Figure S-03 of TOP indicates most of the project site is within the 500-year or 100-year flood plains, so there will be no flooding impacts relative to the 100-year flood zone. Impacts will be less than significant.

Urbanization in the areas surrounding the project site have resulted in increased responsiveness of the basin to rainfall. The increase in impervious surfaces such as roofs, roads, and parking lots has resulted in a decrease in groundwater infiltration and larger storm surges. The project site currently slopes southeast, and the existing drainage pattern is characterized by sheet flows that follow the slope to the northwest. The project site is not impacted by offsite flows. The project site is not located in a Federal Emergency Management Agency (FEMA) Firm Panel designated Flood Zone Risk, and according to the USFWS National Wetlands Inventory (NWI) no wetlands or other ponding features exist on the property. The project will lead to the conversion of permeable surfaces to impermeable surfaces such as parking areas and building foundation areas. The project site would discharge onsite flows into a combination of onsite infiltrations basins and an existing storm drain facility. As such, the proposed project would not impede or redirect flood flows. With adherence to existing federal, state, and local regulation, no changes to the existing flood flows would occur.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

Discussion of Effects: Section VI.G of the CCC SP EIR evaluated hydrology and water-related impacts of the project, but did not specifically address pollutant release. A project hydrology study was prepared, but the EIR did not present quantified data or analysis of impacts from that report.

Figure S-04 of TOP indicates the project site is not within the inundation zones of either the San Antonio Dam to the northwest or overflow of debris basins to the north. Due to its location and surrounding conditions, TOP EIR identified less than significant impacts related to flood hazards, tsunamis, seiches, or dam inundation (SEIR p. 5.10-27).

Impacts associated with flooding are primarily related to the construction or placement of structures in areas prone to flooding including within an unprotected 100-year flood zone, and in areas susceptible to high tides, tsunamis, seiches, mudflows or sea level rise. Specifically, structures placed in flood prone areas, if flooded, would be damaged, and could subject people to injury or death. The National Flood Insurance Act of 1968 requires the identification of floodplain areas and establishment of flood-risk zones within those areas. FEMA administers the programs and coordinates with communities to establish effective floodplain management standards. According to FEMA, the project is not located in a known floodplain as shown in Figure S-04 of TOP. Furthermore, this area is not known to flood and is not typically subjected to flooding. The project site is vacant and regularly maintained for weed abatement so it does not contain any vegetation associated with riparian features. No wetlands have been mapped on the project site according to the NWI. According to the FEMA, the project is not located in an area that is subject to flood hazard, tsunami, or seiche zones. The project site is located over 60 miles east of the Pacific Ocean and is not located in a mapped tsunami zone. Therefore, the project would not have a significant risk of flood hazard, tsunami, seiche zones, release of pollutants due to project inundation.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Discussion of Effects: Section VI.G of the CCC SP EIR evaluated hydrology and water-related impacts of the project, but did not specifically address water quality, permitting, or groundwater management. A project hydrology study was prepared, but the EIR presented no information on water quality or groundwater.

Section VI.O of the CCC SP EIR addresses water supply but does not discuss groundwater conditions or impacts. However, it does recommend two (2) mitigation measures to help protect local groundwater (see CCCSP EIR Measures 32 and 78 in column 1 of Table A).

TOP EIR identified less than significant impacts related to water quality or groundwater issues. The City's groundwater supplies are from the Chino Groundwater Basin, which is adjudicated and managed by the Chino Basin Watermaster. The Chino Basin is exempt from legislative requirements under the Sustainable Groundwater Management Act because it is an adjudicated basin and is not required to prepare a groundwater sustainability plan. TOP EIR concluded TOP would have less than significant direct, indirect, and cumulative impacts relating to a conflict with or obstruction of a water quality control plan or sustainable groundwater management plan (SEIR p. 5-10-27).

The Regional Water Quality Control Board's Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan (i) designates beneficial uses for surface and ground waters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy, and (iii) describes implementation programs to protect all waters in the region. The project would be required to adhere to requirements of the water quality control plan, including all existing regulation and permitting requirements. This would include the incorporation of BMPs to protect water quality during construction and operational periods. The project would be subject to all existing water quality regulations and programs, including all applicable construction permits. Existing TOP policies related to water quality would also be applicable to the project. Implementation of these policies, in conjunction with compliance with existing regulatory programs, would ensure that water quality impacts related to the project would be less than significant.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

It should be noted the CCC SP EIR concluded the project would have impacts regarding hydrology and recommended four (4) mitigation measures most of which have since been superseded by regulatory compliance and standard City conditions of approval (see CCCSP EIR Measures 31-34 in column 1 of Table A.

11. LAND USE & PLANNING. Would the project:

a. Physically divide an established community?

Discussion of Effects: Section VI.H of the CCC SP EIR examined land use impacts, but focused on compatibility with the General Plan, surrounding land uses, and noise compatibility with airport operations to the west. The EIR recommended eight (8) mitigation measures mainly related to airport noise impacts on the project rather than on project-related noise impacts on surrounding land uses (see CCCSP EIR Measures 37-44 in column 1 of Table A).

TOP EIR concluded TOP policies would prevent conflicting land uses and would not divide any established communities. TOP would have less than significant direct, indirect, and cumulative impacts relating to physical division of an established community (SEIR p. 5.11-2).

The project site is located in an area that is currently developed with urban land uses to the north, east, and south, including large warehouses and commercial uses. This project will be of similar design and size to surrounding development. No adverse impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP FEIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Discussion of Effects: Sections VI.A through VI.S in the CCC SP EIR evaluate the project relative to a number of land use planning documents and regulations, including the City General Plan (Land Use Compatibility, Section VI.H) and air quality management planning (Section VI.A), The EIR identified no significant impacts and no mitigation was recommended. However, the EIR also evaluated the project relative to the OIA and recommended three (3) mitigation measures all related to noise impacts from the airport (see CCCSP EIR Measures 38, 39, and 43 in column 1 of Table A).

TOP EIR found that buildout of TOP would not conflict with applicable plans adopted for the purpose of avoiding or mitigating an environmental effect, including SCAG regional plans and policies and the land use compatibility plans for the OIA and the Chino Airport. The project site is just east of the OIA and within its safety and noise impact zones (SEIR p. 5.11-6).

TOP Figure LU-01 (Land Use Plan) indicates that industrial uses have a maximum FAR of 0.55 so the 196.9-acre site would be allowed up to 4,717,330 square feet of industrial uses under TOP. It should be noted the project proposes 9.2% less square footage than the maximum allowed under TOP (i.e., project is 90.8% of TOP maximum). The most recent amendment to the CCC SP was City Council Resolution No.018-126 which was adopted August 21, 2018 and changed the land use designations for the following eight (8) parcels 0211-222-55, 0211-232-45, 0211-232-46, 0211-232-16, 0211-232-17, 0211-232-18, 0211-232-19, and 0211-232-20 on the project site from Commercial and Office to Light Industrial. The previous Table 1 shows the specific sizes of the nine proposed building on the proposed project site. The current Project plan is consistent with the land use designations for the site under the 2022 TOP.

TOP and existing laws and regulations will protect listed and otherwise sensitive biological species including the burrowing owl.

The proposed project does not interfere with any policies or plans established for environmental protection with implementation of a Burrowing Owl Relocation Program (BRP) for the relocation of burrowing owl consistent with CDFW protocols and a nesting bird survey to protect nesting birds per TOP Policies ER5-1 and ER5-2. With implementation of these actions, impacts are less than significant.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

12. MINERAL RESOURCES. Would the project:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

Discussion of Effects: The CCC SP EIR did not examine potential impacts to mineral resources from the project, although it may be because the City's General Plan at that time did not identify any significant mineral resources in the vicinity of the project site.

TOP EIR indicates there are two areas in Ontario that are designated Mineral Resource Zone 2 (MRZ-2) where significant mineral resources are known or are likely. The remainder of the City is designated Mineral Resource Zone 3 (MRZ-3), where the significance of mineral deposits is unknown. Development in an MRZ-3 area would not result in significant impacts because mineral resources of statewide or local importance are not identified on the California Geological Survey's Production-

Consumption maps (SEIR p. 5.12-6). The project site is not within the portions of the City designated as MRZ-2.

The project site is located within a developed area surrounded by urban land uses to the north, east, and south with OIA safety zones to the west. There are no known mineral resources in the area and the site is largely surrounded by developed urban uses. Therefore, no impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP FEIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Discussion of Effects: The CCC SP EIR did not examine potential impacts to mineral resources from the project, although it may be because the City's General Plan at that time did not identify any significant mineral resources in the vicinity of the project site.

TOP EIR indicates there are two areas in Ontario that are designated Mineral Resource Zone 2 (MRZ-2) where significant mineral resources are known or are likely. The remainder of the City is designated Mineral Resource Zone 3 (MRZ-3), where the significance of mineral deposits is unknown. Development in an MRZ-3 area would not result in significant impacts because mineral resources of statewide or local importance are not identified on the California Geological Survey's Production-Consumption maps (SEIR p. 5.12-6). The project site is not within the portions of the City designated as MRZ-2. There are no known mineral resources in the area. No impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

13. NOISE. Would the project result in:

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Discussion of Effects: Section VI.B of the CCC SP EIR concluded future workers of the project would be impacted by airport noise including potential future expansion of OIA. The EIR did not make a specific conclusion regarding the significance of airport noise impacts but recommended three (3) mitigation measures to help limit impacts. However, the language of the measures was permissive rather than mandatory and all of them have since been incorporated into regulatory compliance and standard conditions of approval by the City (see Table A for CCCSP EIR Measures 38, 39, and 43 in column 1).

TOP EIR found stationary and transportation noise impacts of future development under TOP to be less than significant with implementation of Safety Element Policy S-4.1, Noise Mitigation, which utilizes the City's Noise Ordinance, building codes, and subdivision and development code regulations to reduce noise from future development projects (SEIR p. 5.13-32).

The project site was previously analyzed by TOP EIR as supporting industrial uses and the project will not expose people to or generate noise levels in excess of the standards established in TOP EIR (Section 5.12). The project site is surrounded on the north, east, and south sides by industrial or commercial/office uses, and to the west by the OIA. The I-10 is just north of the site, the I-15 is just east of the site, and the site is within the OIA's Safety Zones. The issue of the project's consistency with the ALUCP is addressed in Section 9, *Hazards and Hazardous Materials* (airport-related hazards) and potential noise impacts are addressed in detail in Section 9.3e. As discussed therein various TOP Implementation Actions for noise which are recommended by the Mead & Hunt airport study (Appendix E) will be implemented by the project.

b. Generation of excessive groundborne vibration or groundborne noise levels?

Discussion of Effects: The CCC SP EIR did not evaluate potential impacts related to vibration in relation to the CCC SP project.

The project proposes industrial uses consistent with TOP Policy Plan and the CCC SP at approximately 10 percent less intensity than the maximum allowed under TOP. The site was previously analyzed by the TOP EIR as supporting industrial/warehouse uses. TOP EIR indicates these types of uses do not normally induce significant groundborne vibrations because they do not typically involve equipment or activities which result in large vibrations (e.g., blasting, impact compaction, handling of large boulders, etc.). Therefore, less than significant impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. For a project located within the vicinity of a private airstrip or the noise impact zones of the airport land use compatibility plan for ONT and Chino Airports, would the project expose people residing or working in the project area to excessive noise levels?

Discussion of Effects: The CCC SP EIR identified noise impacts and recommended four (4) mitigation measures mainly related to onsite architectural design to reduce impacts from airport noise on future project workers. These measures have been superseded by regulatory compliance and standard conditions of approval (see CCCSP EIR Measures 38, 39, 41, and 43 in column 1 of Table A).

The Land Use Element of TOP states that all new developments surrounding OIA should be consistent with the adopted ALUCP and should meet standards and recommendations of Part 77 of the FAA, adopted through Ordinance 2758 in the Ontario Municipal Code. A consistency determination analysis for the OIA was prepared by the City and OIA found TOP to be consistent with the ALUCP. Therefore, TOP is consistent with the ALUCP because the general land use designations within the airport influence area are the same (SEIR p. 5.9-41) in both documents. The City's OIA Liaison Planner has stated OIA has reviewed the proposed Development Plan and found the project to be consistent with the OIA ALUCP. Therefore, the project is also consistent with the ALUCP because it is consistent with TOP land use designation for the site.

As discussed in Section 9.e above, the project will implement the TOP Implementation Actions for airport noise recommended in the Mead & Hunt Study (Appendix E). The project site lies outside the boundaries of the Chino Airport Influence Area. Therefore, less than significant impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP FEIR analyses are necessary.

Mitigation: No project specific mitigation is required.

14. POPULATION & HOUSING. Would the project:

a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of road or other infrastructure)?

Discussion of Effects: Section VI.R of the CCC SP EIR addresses socio-economic factors including population and housing. The EIR did not identify any significant impacts or recommend any mitigation for these issues.

TOP EIR identified less than significant impacts associated with population and housing increases. TOP allows the City to accommodate population growth through land use designations, goals, and policies that provide a vision and guide growth in the City (SEIR p. 5.14-11). The project site was previously analyzed by TOP EIR as industrial uses and the proposed project is consistent with the Industrial TOP designation and CCC SP land use plan.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

Discussion of Effects: Section VI.R of the CCC SP EIR addresses socio-economic factors including population and housing. The EIR did not identify any significant impacts or recommend any mitigation for these issues.

The purpose of TOP is to adequately plan and accommodate future growth through the distribution, location, balance, and extent of land uses. Implementation of TOP 2050 would accommodate population growth through land use designations, goals, and policies that provide a vision and guide growth in the City. The EIR concluded TOP would have less than significant direct, indirect, and cumulative impacts relating to displacement of people and housing (SEIR p. 5.14-12). The project site does not contain existing housing, nor is it designated or zoned for residential uses.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

15. PUBLIC SERVICES. Would the project:

c. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

i. Fire protection?

Discussion of Effects: Section VI.Q of the CCC SP EIR addresses public services. The EIR indicates the project will increase the demand for fire protection, but there are a number of City and other fire stations in the area that can provide adequate service. Three (3) mitigation measures were recommended (see CCCSP EIR Measures 84-86 in column 1 of Table A).

TOP EIR determined TOP would result in an increase in development and population, which would result in increased demand on fire protection services. The EIR indicated that existing facilities and services would not be adequate to meet increased demand from growth under TOP. Therefore, the Fire Department was planning on adding facilities and/or services as demand increases. With implementation of TOP policies and Fire Department review of new development, impacts will be less than significant (SEIR p. 5.15-3).

The project site is in a developed area currently served by the Ontario Fire Department. The Project is consistent with TOP land use designations, and TOP EIR states the City will not require the construction of any new fire protection facilities or alteration of any existing facilities or cause a decline in the levels of service, which could cause the need to construct new facilities in this portion of the City. Therefore, no impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

ii. Police protection?

Discussion of Effects: Section VI.Q of the CCC SP EIR addresses public services. The EIR indicates the project will increase the demand for police service, and two (2) mitigation measures were recommended (see CCCSP EIR Measures 87-88 in column 1 of Table A).

TOP EIR determined TOP would result in an increase in development and population, which would result in increased demand on police protection services. The EIR indicated that existing staffing would not be adequate to meet increased demand from growth under TOP. Therefore, the Police

Department is planning on adding facilities and/or services as demand increases. With implementation of TOP policies and Police Department review of new development, impacts will be less than significant (SEIR p. 5.15-7).

The site is in a developed area currently served by the Ontario Police Department. The project will contribute to the incremental need for construction of any new police facilities or alteration of any existing facilities

or cause a decline in the levels of service, which could cause the need to construct new facilities. No impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No site specific mitigation is required.

iii. Schools?

Discussion of Effects: Section VI.Q of the CCC SP EIR addresses public services but did not address schools.

TOP EIR identified impacts to school facilities and services as less than significant upon payment of SB 50 school impact fees (SEIR p. 5.15-14).

The project proposes industrial land uses which are non-residential and do not generate school-aged students that require educational facilities or services. The project will be required to pay school fees as prescribed by state law prior to the issuance of building permits, which is considered adequate mitigation under CEQA. No impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

iv. Parks?

Discussion of Effects: Section VI.Q of the CCC SP EIR addresses public services but did not address parks.

TOP would generate additional residents, increasing the use of existing park and recreational facilities. However, TOP EIR concluded this would not result in a significant impact as long as development of park facilities keeps pace with the anticipated increase in population from buildout (SEIR p. 5-15-14).

The site is in a developed area currently served by the City. The project is industrial and not residential in nature so it will not require the construction of any new park facilities or alteration of any existing facilities or cause a decline in the levels of service, which could cause the need to construct new facilities. No impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

v. Other public facilities?

Discussion of Effects: Section VI.Q of the 1981 CCC SP EIR identified impacts to public services, but did not specifically address other public facilities.

TOP would generate additional residents, increasing the use of existing public facilities (e.g., libraries). TOP EIR identified less than significant impacts to library services and facilities (SEIR p. 5-15-18).

The site is in a developed area currently served by the City. Typically, new public facilities are needed to serve additional population generated by new housing. The project will not generate any new

housing so it will not require the construction of any new public facilities or alteration of any existing facilities or cause a decline in the levels of service, which could cause the need to construct new facilities. No impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

16. RECREATION. Would the project:

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

Discussion of Effects: Section VI.Q of the 1981 CCC SP EIR identified impacts to public services, but did not specifically address parks or recreation.

TOP would generate additional residents, increasing the use of existing park and recreational facilities. However, TOP EIR concluded this would not result in a significant impact as long as development of park facilities keeps pace with the anticipated increase in population from buildout (SEIR p. 5-16-14).

This project is not proposing any new housing that would cause a significant increase in the use of neighborhood parks or other recreational facilities. No impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities that have an adverse physical effect on the environment?

Discussion of Effects: Section VI.Q of the 1981 CCC SP EIR identified impacts to public services but did not specifically address parks or recreation.

TOP would generate additional residents, increasing the use of existing park and recreational facilities. However, TOP EIR concluded this would not result in a significant impact as long as development of park facilities keeps pace with the anticipated increase in population from buildout (SEIR p. 5-16-14).

This project is not proposing any new housing that would require the construction of new or expanded neighborhood parks or other recreational facilities. No impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

17. TRANSPORTATION. Would the project:

a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Discussion of Effects: Section VI.L of the CCC SP EIR identified traffic impacts and recommended sixteen (16) mitigation measures, however, the analysis focused on Level of Service (LOS) or road/intersection congestion. The CCC SP EIR stated the project could generate almost 30,000 new employees in the City and the project could generate approximately 157,100 daily vehicle trips with impacts at 14 local intersections. The EIR recommended mitigation measures mainly included improvements at various local intersections and roadways to lessen vehicular congestion.

TOP EIR found that the recommended TOP circulation plan would comply with adopted policies, plans, and programs for alternative transportation, including SCAG's Connect SoCal (SEIR p. 5.17-23) so impacts would be less than significant.

The subject site was previously analyzed by TOP EIR as supporting industrial uses and is surrounded on the north, east, and south by industrial uses and on the west by the OIA. The project is in an area that is mostly developed with all street improvements existing. A complete Traffic Impact Assessment (TIA) was prepared for the project by Urban Crossroads in January 2022. The TIA was based on 642,368 square feet of high-cube cold storage warehouse use (15%) and 3,640,082 square feet of high-cube fulfillment center warehouse use (85%) with a total building area of 4,282,450 square feet. The TIA indicated the project would generate a total of 7,980 vehicle trips per day with 613 AM peak hour trips and 644 PM peak hour trips, as shown in **Table 13**, Project Trip Generation. The TIA also estimated Passenger Car Equivalent (PCE) traffic based on the various trucks that would serve the project. The PCE trip generation of the project (9,646 trips) is also shown in Table 13.

Table 13: Project Trip Generation

Trip Characteristic	AM Peak Hour			PM Peak Hour			Total Trips
	In	Out	Total	In	Out	Total	
Actual Vehicles	463	102	613	250	394	644	7,980
Passenger Car Equivalents (PCE)	527	230	756	301	441	742	9,646

Source: Tables 4-2 & 4-3, UC 2022. ITE Land Use Code 155 (high cube warehousing) ITE Trip Generation Manual (11th edition, 2021)

The project proposes 8.2% less overall square footage than could be built under TOP and the CCC SP. The project would thus generate approximately 8.2% less traffic compared to what would be allowed under TOP. Therefore, the project would not have any greater traffic-related impacts on streets and intersections than were already analyzed in TOP EIR.

Transit. The project area and the City are served by Omnitrans, a public transit agency serving various jurisdictions in San Bernardino County. Omnitrans currently operates Route 81 adjacent to the site on Haven Avenue. There are existing bus stops located near Haven Avenue at Airport Drive and Jurupa Street, near Milliken Avenue at Santa Ana Street, Lowell Street, and Jurupa Street. Omnitrans regularly reviews and periodically changes routes, stops, etc. to address ridership and community demand needs as well as budget limitations. As part of the City's development review process, the project developer will coordinate with Omnitrans regarding expanded or additional bus service in the project area as needed.

Bicycles. The project site and surrounding area support mainly industrial with some commercial uses, and none of the adjacent streets, regardless of width, currently contain any bicycle lanes. The City's TOP 2050 Trails and Bikeway Systems Map (Figure M-02) shows Haven Avenue west of the site, Airport Drive north of the site, and Jurupa Street south of the site designated as needing study for possible future bike lanes. However, no bicycle lanes are currently planned in the surrounding area due to its anticipated industrial nature.

Sidewalks/Trails. The project site is vacant and the internal streets have no sidewalks at present, although there are sidewalks on both sides of S. Commerce Parkway and E. Jurupa Street. Eventually, as project sites develop, sidewalks will be installed according to the City's adopted cross street section requirements. The City'sTOP 2050 Trails and Bikeway Systems Map shows no trails or other pedestrian-oriented improvements are planned on the project site or in the surrounding area (i.e., half a mile radius).

The project will be developed consistent with the City's adopted plans for non-vehicular improvements as indicated in TOP. The project will install sidewalks on perimeter streets as indicated in the standard City street cross sections, and will install bus stop infrastructure if so directed by Omnitrans during the development review process. The project area is not planned for bicycle lanes or trails due to its industrial nature. Therefore, the project will not conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Impacts will be less than significant.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

Discussion of Effects: In 1981, when the CCC SP EIR was prepared VMT was not identified as an environmental issue under CEQA so the CCC SP EIR did not evaluate VMT.

TOP EIR concludes TOP would result in a significant transportation impact related to VMT mainly due to the increase in population accommodated by TOP. TOP includes goals and policies to offset VMT impacts by creating greater access to transit and enhanced alternative transportation modes. In addition, projects that are calculated to exceed City-wide VMT levels must develop mitigation plans.

The City uses the San Bernardino County Transportation Authority (SBCTA) VMT Screening Tool, which allows users to select an assessor's parcel number (APN) to determine if a project's location meets one or more of the screening thresholds for land use projects identified in the City Guidelines. A project-specific VMT analysis was prepared for the project by Urban Crossroads in December of 2021 based on the adopted City Guidelines (Appendix D-1).

The City Guidelines state that certain projects that meet the following VMT screening criteria may be presumed to result in a less than significant transportation impact:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Type Screening

A land use project needs to meet only one of these screening criteria to have a less than significant impact.

TPA Screening. Projects located within a TPA (i.e., within a half-mile of an existing "major transit stop"[3] or an existing stop along a "high-quality transit corridor"[4] may be presumed to have a less than significant VMT impact. The Screening Tool indicates the project site is not located within a half-mile of an existing major transit stop or along a high-quality transit corridor. Therefore, the TPA screening criteria is not met.

Low VMT Area Screening. As noted in the Technical Advisory, "Residential and office projects that locate in areas with low VMT and that incorporate similar features (density, mix of uses, and transit accessibility) will tend to exhibit similarly low VMT." The City Guidelines state that projects may be presumed to have a less than significant VMT impact if located in an already low VMT generating traffic analysis zones (TAZs) that generates a VMT per service population (SP) that is 15% below County of San Bernardino Baseline VMT per SP. The Screening Tool uses the sub-regional San Bernardino Transportation Analysis Model (SBTAM) to measure VMT performance within individual TAZ's within the region. The Project's physical location based on parcel number is selected in the Screening Tool to determine the TAZ in which the Project will reside. The Project's TAZs VMT per service population was compared to 15% below County of San Bernardino Baseline VMT per SP. The Screening Tool was run for production-attraction (PA) VMT per service population and it was determined that, the project is not located within a low VMT generating zone. Therefore, the low VMT area screening criteria is not met.

Project Type Screening. The City Guidelines indicate that local-serving retail less than 50,000 square feet or other local serving essential services (e.g., day care centers, public schools, medical/dental office buildings, etc.) are presumed to have a less than significant impact absent substantial evidence to the contrary. The project does not contain any local serving uses. Additionally, the City Guidelines state that small projects generating fewer than 110 daily vehicle trips or less may be presumed to have a less than significant impact, subject to discretionary approval by the City. The Project TIA estimated vehicle trips generated by the project's proposed land uses based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021. According to the TIA, the project will generate 7,980 daily vehicle trip-ends per day. Therefore, the project generates daily vehicle trips exceeding the 110 daily vehicle trip threshold and the project type screening threshold is not met.

Based on this analysis, the project is not eligible for screening and a detailed VMT analysis has been performed.

[3] Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.").

[4] Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

VMT Modeling. The City Guidelines identify SBTAM as the appropriate tool for conducting VMT analysis for land use projects in the City, as it considers interaction between different land uses based on socio-economic data, such as population, households, and employment. The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle. SBTAM is also consistent with the model used to develop the City's VMT impact thresholds listed by the City Guidelines. Therefore, the vehicle trips and average daily trip length for project-related vehicle trips are model derived from SBTAM.

City VMT Threshold. The City Guidelines require the use of the VMT per Service Population metric as the appropriate measure in a VMT analysis. The City Guidelines state that "a significant impact would occur if the project VMT per Service Population exceeds the Citywide average for Service Population under General Plan Buildout Conditions." The SBCTA provides VMT calculations for each of its member agencies, including the City's average for Service Population under General Plan Buildout Conditions. Urban Crossroads has obtained this published data from SBCTA, which for the City's General Plan Buildout is 36.2 VMT per SP.

Project Modeling. In order to evaluate project VMT, standard land use information must first be converted into a SBTAM compatible dataset. The SBTAM model utilizes socio-economic data (SED) (e.g., population, households, employment, etc.) instead of land use information for the purposes of vehicle trip estimation. Project land use information such as building square footage must first be converted to SED for input into SBTAM. Adjustments in SED have been made to the appropriate TAZ within the SBTAM model to reflect the Project's proposed land uses (i.e., warehouse). The project would have approximately 3,585 employees at buildout based on the employment density factors identified in the SCAG Employment Density Study (Table II-B, SCAG October 2001).

Project Impacts. Adjustments to employment for the project's TAZ were made to both the SBTAM baseline year (2016) and cumulative year (2040) traffic models. The ability to capture all trips by all trip purposes can be achieved with the SBTAM model by using the Origin-Destination (OD) trip matrices. Using these OD trip matrices, the project generated total VMT was calculated utilizing straight-line interpolation for the baseline (2021) conditions. The total VMT for all scenarios is then normalized by dividing by the project's service population (SP) (e.g., employees). As shown in **Table 14**, Project VMT Impacts, the project Baseline VMT per SP is 32.96 and the project Cumulative VMT per SP is 33.60.

Table 14: Project VMT Impacts

VMT Value	Base Year (2016)	Cumulative Year (2040)	Baseline (2021)
Employment[1]	3,585	3,585	3,585
VMT	117,069	120,453	118,156
VMT / SP	32.66	33.60	32.96
Impact Threshold		36.2	36.2
Percent Change		-7.18%	-8.95%
Potentially Significant? (i.e., Project Exceeds Threshold)		No	No

Source: Tables 2 and 3, Urban Crossroads, December 2021

[1] Since the Project does not have a residential component, the service population consists entirely of employment.

Table 14 compares project-generated VMT per SP in the Baseline and Cumulative Conditions to the City's future Buildout VMT per SP. Table 14 demonstrates that the project would not exceed the City's threshold for either the Baseline or Cumulative project conditions.[5] Therefore, project VMT impacts with respect to CEQA Guidelines Section 15064.3(b) are less than significant.

[5] The City Guidelines state that cumulative impacts on VMT "… metrics such as VMT per capita or VMT per employee, i.e., metrics framed in terms of efficiency (as recommended below for use on residential

Moreover, the project is consistent with TOP's underlying land use assumptions and the project is also considered to have a less than significant cumulative impact as well.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Discussion of Effects: Section VI.L of the CCC SP EIR identified traffic impacts and recommended 28 mitigation measures. At that time, the analysis focused on LOS or road/intersection congestion, but some of the measures addressed unsafe operating conditions mainly due to anticipated intersection congestion from project traffic and transit-related issues. These measures are addressed in CCCSP EIR Measures 7-13, 26-30, and 52-67 in column 1 of Table A.

TOP EIR found that circulation improvements under the recommended TOP circulation plan would be designed to adequately address potential hazardous conditions and potential conflicting uses (SEIR p. 5.17-26) so impacts would be less than significant.

The project is largely surrounded by existing industrial and commercial development and the area is fully improved where adjacent to existing developed uses. All internal streets will be improved with project construction. Most of the roads on or adjacent to the site are or will be linear or curvilinear according to the City's Circulation Element master plan of streets in terms of alignment and cross section. Therefore, the project will not create a substantial increase in hazards due to a design feature. No impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

d. Result in inadequate emergency access?

Discussion of Effects: Section VI.L of the CCC SP EIR identified traffic impacts and recommended sixteen (16) mitigation measures, however, the analysis did not address emergency access.

TOP EIR found that circulation improvements under the recommended TOP circulation plan would be designed to adequately address emergency access (SEIR p. 5.17-26) so impacts would be less than significant.

As shown in Exhibit 2, the project will have standard street alignments and cross sections, which can provide access for all emergency vehicles and will therefore not result in inadequate emergency access. No impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

18. TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a TCR, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

---

and office projects), cannot be summed because they employ a denominator. A project that falls below an efficiency-based threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa. This is similar to the analysis typically conducted for GHG emissions, air quality impacts, and impact that utilize plan compliance as a threshold of significance."

a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

Discussion of Effects: At the time the CCC SP EIR was prepared, the State CEQA Guidelines did not require an evaluation of TCRs. However, Section VI. C of the CCC SP EIR indicated the region had long been inhabited by Native American tribes. A cultural survey of the site found no archaeological or other cultural resources. One (1) mitigation measure was recommended to reduce impacts to archaeological resources (see CCCSP EIR Measure 17 in column 1 of Table A).

The subject site was previously analyzed by TOP EIR as supporting industrial uses and is not listed in the California Register of Historic Resources or local register of historical resources. TOP EIR concluded that with recommended mitigation potential impacts to TCRs were reduced to less than significant levels.

Developing warehouses consistent with TOP and current zoning will not create greater impacts than were identified in TOP EIR. In addition, the SLF Search (commissioned through the NAHC) failed to indicate known TCRs within the project boundaries or within a one-mile radius of the project area.

The project site has been previously disturbed by human activities including agricultural use from the 1940's through the 1960's. The surrounding area is largely developed and supports infrastructure that would have displaced surface and subsurface archaeological resources. Therefore, it is not anticipated the proposed project will impact TCRs or Native American artifacts relating to TCRs. However, to err on the side of caution, the City will apply its standard conditions of approval for inadvertent discovery of archaeological resources and require the developer enter into monitoring agreements with interested tribal groups. With this regulatory compliance, no significant impacts will occur.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No additional project specific mitigation is required. Mitigation Measure CUL 5-2 from TOP EIR shall be implemented.

b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Discussion of Effects: At the time the CCC SP EIR was prepared, the State CEQA Guidelines did not require an evaluation of TCRs. However, Section VI. C of the CCC SP EIR indicated the region had long been inhabited by Native American tribes. A cultural survey of the site found no archaeological or other cultural resources on the site. One (1) mitigation measure was recommended to reduce impacts to archaeological resources (see Table A for CCCSP EIR Measure 17 in column 1 of the table).

TOP EIR (Section 5.5) indicates no archeological sites or resources have been recorded in the City with the Archeological Information Center at San Bernardino County Museum so there were no significant impacts. The CRAs prepared for the project site included a pedestrian survey, a record search, a SLF search, and a review of existing documentation for the project site and surrounding area. The NAHC was contacted for a SLF search on April 1, 2019, and a response was received on April 15, 2019, indicating the project site contained no identified archaeological or tribal resources.

While no adverse impacts to archeological resources are anticipated at this site due to its disturbed nature, the project will implement the TOP Implementation Actions for cultural resources outlined in the Project Description of this document to help assure there will be no impacts to any unknown TCRs which may be present onsite.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. The project will implement TOP Mitigation Measure CUL 502.

19. UTILITIES AND SERVICE SYSTEMS. Would the project:

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

Discussion of Effects: Section VI.N of the CCC SP EIR addresses wastewater and provides information about local sewers. Two (2) mitigation measures are recommended (see CCCSP EIR Measures 74-75 in column 1 of Table A).

Section VI.P of the CCC SP EIR addresses public utilities including electricity, natural gas, telephone, and solid waste disposal. The EIR discusses connection plans but did not evaluate impacts from incremental increased use of the utilities. The EIR recommended five (5) mitigation measures (see CCCSP EIR Measures 74-78 in column 1 of Table A).

TOP EIR stated TOP would result in an overall increase in the number of residential dwelling units and non-residential square footage. To accommodate needed infrastructure expansion and improvements, the City has prepared a Water Master Plan (WMP) and Capital Improvement Program (CIP). The City also requires development impact fees and has construction requirements based on a completed evaluation of existing and projected water demands. The City and the Inland Empire Utility Authority (IEUA) have made plans for infrastructure expansion and improvement. TOP EIR concluded TOP would have less than significant direct, indirect, and cumulative impacts relating to water supply and delivery systems (SEIR p. 5.19-31).

The project is consistent with the land use designation and zoning for the site, and the project is thus consistent with the WMP. In addition, a Water Supply Assessment (WSA) was prepared for the project consistent with SB 600 which concluded there were adequate water supplies, including under drought conditions, to serve buildout of the project. Therefore, the City has sufficient water supplies to serve the project over the 20-year life of the WMP and WSA, including during multiple dry-year scenarios.

The proposed project is served by the City water system and has existing water lines available for connection in Jurupa Street and adequate water supply for the project. The proposed project is served by the City sewer system, which has existing sewer lines available for connection off Jurupa Street. The project's waste will be treated by the IEUA at the RP-1 treatment plant. RP-1 is not at capacity and future development of this project site will not cause RP-1 to exceed capacity. TOP EIR indicates increases in RP capacity in the future will be based on designated TOP land uses, and the Project is consistent with those designations. The project will therefore not require the construction of new unanticipated water or wastewater treatment facilities, or the expansion of existing facilities other than that already identified in TOP and TOP EIR. It should be noted the City does not provide will serve letters as it is both the land use authority and the water purveyor. Water and sewer service for development projects typically require the owner to complete requirements it specifies to provide adequate utility services. As the project goes through the City's development review process, the City will issue conditions of approval that will specify the developer's obligations in order to receive water and sewer service from the City. Less than significant impacts are anticipated.

TOP EIR stated TOP has the potential to increase sewer flows by 2.55 million gallons per day (mgd) within the City and by 166 mgd in the City's growth areas. TOP EIR concluded TOP would generate additional wastewater which would be adequately treated in accordance with the Santa Ana RWQCB and California Department of Public Health requirements (SEIR p. 5.19-11).

The proposed project is served by the City with existing storm drains located in Jurupa Street and other adjacent streets depending on the specific future building. The project is required to meet the requirements of the Ontario Engineering Department regarding the size, location, and connectivity of storm drain facilities. Less than significant impacts are anticipated.

As discussed in Section 6 above, the project will have less than significant impacts with regard to electric power and natural gas. In addition, telecommunication providers increase service and facilities as necessary as area population and land uses expand. Therefore, the project will not have a significant impact on telecommunications facilities.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? In making this determination, the City shall consider whether the project is subject to the water supply assessment requirements of Water Code Section 10910, et seq. (SB 610), and the requirements of Government Code Section 664737 (SB 221).

Discussion of Effects: Section VI.O of the CCC SP EIR addresses water supply. The EIR evaluates overall water consumption compared to the Water Master Plan Report. The EIR recommended four (4) mitigation measures regarding water and sewer systems not contaminating drinking water supplies (see CCCSP EIR Measures 74-78 in column 1 of Table A).

TOP EIR stated TOP would result in an overall increase in the number of residential dwelling units and non-residential square footage. To accommodate needed infrastructure expansion and improvements, the City has prepared a WMP and CIP. The City also requires development impact fees and has construction requirements based on a completed evaluation of existing and projected water demands. The City and the IEUA have made plans for infrastructure expansion and improvement. TOP EIR concluded TOP would have less than significant direct, indirect, and cumulative impacts relating to water supply and delivery systems (SEIR p. 5.19-31).

The project is consistent with the land use designation and zoning for site, and the project is thus consistent with the WMP. In addition, a Water Supply Assessment (WSA) was prepared for the project consistent with SB 600 which concluded there were adequate water supplies, including under drought conditions, to serve buildout of the project. Therefore, the City has sufficient water supplies to serve the project over the 20-year life of the WMP and the WSA, including during multiple dry-year scenarios.

The project site is served by the City water system. It is estimated the project will generate between 3,585 and 4,597 employees[6] who would consume between 537,750 and 689,550 gallons of water[7] per day (maximum 772 acre-feet per year) based on 150 gallons per person per day. Since the project site land uses are consistent with the TOP, there is currently a sufficient water supply available to the City to serve this project as per the findings of the TOP EIR. Less than significant impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Discussion of Effects: Section VI.N of the CCC SP EIR addresses wastewater and provides information about the local sewer system. One (1) mitigation measure is recommended to have a complete onsite sewer that meets all regulatory requirements (see CCCSP EIR Measure 74 in column 1 of Table A).

TOP EIR stated TOP has the potential to increase sewer flows by 2.55 million gallons per day (mgd) within the City and by 166 mgd in the City's growth areas. TOP EIR concluded TOP would generate additional wastewater which would be adequately treated in accordance with the Santa Ana RWQCB and California Department of Public Health requirements (SEIR p. 5.19-11).

It is estimated the project will generate between 3,585 and 4,597 employees[8] who would generate between 268,875 and 344,775 gallons of wastewater[9] per day (maximum 0.34 million gallons per day or MGD) based on 75 gallons per person per day, The project site is served by the City sewer system, which

[6] SCAG employee density data indicates the Project could generate 3,585 employees while the Airport Land Use Consistency Plan data indicates the Project could generate up to 4,597 employees.

[7] 3,585 employees X 150 gallons/day = 537,750 gallons per day and 4,597 employees X 150 gallons/day = 689,550 gallons

[8] SCAG employee density data indicates the Project could generate 3,585 employees while the Airport Land Use Consistency Plan data indicates the Project could generate up to 4,597 employees.

[9] 3,585 employees X 75 gallons/day = 268,875 gallons per day and 4,597 employees X 75 gallons/day = 344,775 gallons

has waste treated by the IEUA at the RP-1 treatment plant. RP-1 is not at capacity and future development of this project site will not cause RP-1 to exceed capacity. In addition, the project site land uses are consistent with TOP and its EIR. Therefore, less than significant impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No proiect specific mitigation is required.

b. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

Discussion of Effects: Section VI.P of the CCC SP EIR addresses utilities including solid waste disposal. The capacity of Milliken Landfill is described, but no information on solid waste regulations or an estimate of additional solid waste generated by the project was provided. No mitigation was proposed.

TOP EIR indicated the City disposes of its solid waste in the Badlands Sanitary Landfill or the El Sobrante Landfill. These landfills currently have a combined excess daily capacity of 7,046 tons/day and have a remaining landfill capacity of 15,750,000 cubic yards for Badlands Sanitary Landfill and 144,000,000 cubic yards for El Sobrante Landfill. Both landfills have closure dates beyond 2050. In addition, state and local regulations and ordinances regarding the recycling of construction debris and organic wastes will further reduce the amount of solid waste transported to these landfills in the future. Therefore, TOP EIR concluded that potential impacts were less than significant with continued compliance with applicable regulations (SEIR p. 5.19-14).

It is estimated the project will generate between 3,585 and 4,597 employees[7] who would generate between 12,189 and 15,630 pounds of waste[10] per day (maximum 7.8 tons per day) based on 3.4 pounds per person per day. Currently, the City contracts with a waste disposal company that transports trash to a landfill with sufficient capacity to handle the City's solid waste disposal. No impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation required.

b. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Discussion of Effects: The CCC SP EIR identified generalized impacts to utilities including solid waste but did not recommend any specific mitigation measures (see CCCSP EIR Measure 83 in column 1 of Table A).

TOP EIR indicated that potential impacts related to solid waste reduction would be less than significant based on compliance with state and local regulations and ordinances regarding the recycling of construction debris and organic wastes will reduce the amount of solid waste transported to the two landfills serving the City in the future. Therefore, continued compliance with the applicable regulations, would ensure future development under TOP would have less than significant impacts (SEIR p. 5.19-16).

City development review regulations will require this project comply with federal, state, and local statues and regulations regarding solid waste. Therefore, no impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

20. WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

[10] 3,585 employees X 3.4 pounds/day = 12,189 pounds per day and 4,597 employees X 3.4 pounds/day = 15,630 pounds/day

Discussion of Effects: When the CCC SP EIR was prepared in 1981, wildfire-related issues were not part of the State CEQA Checklist so the issue was not addressed in the CCC SP EIR.

TOP EIR found that improvements under the recommended TOP circulation plan would be designed to adequately address emergency access. In addition, emergency access is included as part of the City's Design Review process for new development. According to the City's 2018 Local Hazard Mitigation Plan (LHMP), interstate highways would serve as major emergency response and evacuation routes. Additionally, the Fire Department reviews development applications to ensure that adequate emergency accessibility is provided based on local and state guidance. Figure S-10 of the TOP indicates that Haven Avenue to the west, Airport Drive to the north, and Jurupa Street to the south are designated evacuation routes in the City. The EIR concluded TOP would have a less than significant direct, indirect, and cumulative impacts relating to impairment of an adopted emergency response plan or emergency evacuation plan (SEIR p. 5.20-15 and p. 5.17-26).

The project site is not located in or near a state responsibility area, nor is it located in or near lands classified as very high fire hazard severity zones. Therefore, no impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in the Certified TOP FEIR. No changes or additions to TOP FEIR analyses are necessary.

Mitigation: No project specific mitigation is required.

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

Discussion of Effects: When the CCC SP EIR was prepared in 1981, the following wildfire-related issues were not part of the State CEQA Checklist so the issue was not addressed in the CCC SP EIR.

TOP EIR indicated the City is outside of the State Responsibility Area, and contains no areas subject to very high wildfire risk. Therefore, the EIR concluded TOP would result in less-than-significant risks from wildfire hazards (SEIR p. 5.20-16).

The Project site is not located in or near a State Responsibility Area, nor is it located in or near lands classified as very high fire hazard severity zones. Therefore, no impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

Discussion of Effects: When the CCC SP EIR was prepared in 1981, wildfire-related issues were not part of the State CEQA Checklist so the issue was not addressed in the CCC SP EIR.

TOP EIR indicated the City is outside of the State Responsibility Area, and CAL FIRE and contains no areas subject to very high wildfire risk. Therefore, the EIR concluded TOP would result in less-than-significant risks from wildfire hazards (SEIR p. 5.20-16). In addition, the project is in an urbanized area surrounded by developed industrial buildings so no improvements for preventing wildfires are needed either on or adjacent to the site.

The project site is not located in or near a State Responsibility Area nor is it located in or near lands classified as very high fire hazard severity zones. Therefore, no impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Discussion of Effects: The CCC SP EIR did not evaluate wildfire risks because at that time it was not identified as a specific environmental issue in the State CEQA Checklist.

TOP EIR indicated the City is outside of the State Responsibility Area, and CAL FIRE and contains no areas subject to very high wildfire risk. Therefore, the EIR concluded TOP would result in less-than-significant risks from wildfire hazards (SEIR p. 5.20-16). In addition, the project site and surrounding area are flat so there is little risk from flooding or landslides.

The project site is not located in or near a State Responsibility Area, nor is it located in or near lands classified as very high fire hazard severity zones. Therefore, no impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

21. MANDATORY FINDINGS OF SIGNIFICANCE.

a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat or a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Discussion of Effects: The CCC SP EIR did examine potential impacts to biological resources (Section VI.D) and cultural resources (Section VI.C). The EIR indicated the site was vacant and did not support any listed or otherwise sensitive species of plants or animals at the time it was prepared in 1981. The EIR did not make a firm conclusion if the project would have significant impact on any biological resources, but it did recommend three (3) “permissive” mitigation measures (i.e., actions suggested but not required) which are outlined in Table A. Section VI. C of the CCC SP EIR indicated the region had been inhabited by Native American tribes, but a cultural survey of the site found no archaeological or other cultural resources on the site. One (1) mitigation measure was recommended to reduce impacts.

TOP EIR evaluated the potential impacts of future development under TOP and determined impacts related to biological or cultural resources could be reduced to less than significant levels by implementing a number of mitigation measures on sites that contain such resources.

The proposed project does not have the potential to reduce wildlife habitat and threaten a wildlife species with implementation of the recommended Burrowing Owl Relocation Program (BRP) to protect burrowing owl and a nesting bird survey to protect nesting birds to comply with TOP Policies ER5-1 and ER5-2. It will also not threaten any important examples of the major periods of California history or prehistory. In addition, the project will document removal of the historic age well onsite. Therefore, no impacts are anticipated.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project-specific mitigation is required. The project shall implement a Burrowing Owl Relocation Program and a nesting bird survey, as well as documentation of the onsite historic age well.

b. Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?

Discussion of Effects: Section VII of the CCC SP EIR addresses this issue and outlines the potential impacts of the project relative to various environmental issues as outlined in the State CEQA Guidelines at that time. Each analysis section (VI.A through VI.S) also identifies potential short- or long-term impacts but does not address achieving either short- or long-term environmental goals.

The analysis in TOP EIR, as outlined in Sections 1 through 20 of this document, indicate TOP is intended to achieve both the short- and long-term goals of the City in terms of the environment.

The project does not have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals with implementation of the recommended burrowing owl relocation program and the nesting bird survey to comply with TOP Policies ER5-1 and ER5-2.

The project will not result in any new, increased or substantially different impacts other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

c. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current project, and the effects of probable future projects.)

Discussion of Effects: Section IX of the CCC SP EIR addresses potential cumulative impacts of the project. The EIR concluded the project would have cumulative air quality impacts, and all other impacts were either less than significant or could be reduced to less than significant levels by the implementation of the recommended mitigation measures.

TOP EIR concluded that all impacts of TOP could be reduced to less than significant levels with implementation of the recommended mitigation measures except for air quality, historical resources, noise, and transportation. The EIR further concluded TOP would not make a significant contribution to any cumulatively considerable impacts with the recommended mitigation except for air quality.

The project does not have impacts that are cumulatively considerable other than operational VOC and NOx emissions because those impacts exceed the SCAQMD daily thresholds even with mitigation. However, TOP EIR already examined this impact and adopted a Statement of Overriding Considerations for the cumulative air quality impacts of future development under TOP. Since the proposed project is consistent with TOP land use designations for the site, the potential air quality impacts of the project have been previously evaluated in TOP EIR and appropriate mitigation applied (i.e., TOP EIR MM AQ 3-1 through 3-3).

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required. The project shall implement TOP EIR Mitigation Measures AW 3-1 through 3-3.

d. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

Discussion of Effects: Sections VI.A through VI.S of the CCC SP EIR evaluate the various potential impacts of the project, including air quality (VI.A), airport hazards (VI.B), noise (VI.I). The EIR concluded only air quality impacts, in terms of air pollutant emissions and consistency with air quality planning, would remain at significant levels even with the implementation of recommended mitigation.

TOP EIR concluded that all impacts of TOP could be reduced to less than significant levels with implementation of the recommended mitigation measures except for air quality, historical resources, noise, and transportation. The air quality and noise impacts may have direct and/or indirect adverse effects on humans as development occurs in the City under TOP.

With implementation of the recommended TOP Mitigation Measures, compliance with existing laws, plans and regulations, and the various TOP Implementation Actions outlined in the Project Description, the project does not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

The project will not result in any new, increased or substantially different impacts, other than those previously considered and addressed in TOP EIR. No changes or additions to TOP EIR analyses are necessary.

Mitigation: No project specific mitigation is required.

EARLIER ANALYSES

(Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, one or more effects have been adequately analyzed in an earlier EIR or Negative Declaration. Section 15063 (c)(3)(D)):

a) California Commerce Center Specific Plan EIR No. 81-04. ESA 1981

b) The Ontario Plan Final EIR 2022

c) The Ontario Plan 2022

d) City of Ontario Zoning 2021 as amended

e) California Commerce Center Specific Plan Amendment (PSPA18-005) and TOP EIR Addendum, Ontario City Council, August 21, 2018

f) Ontario International Airport Land Use Compatibility Plan 2018

g) Ontario International Airport Land Use Compatibility Plan Negative Declaration (SCH 2011011081)

All documents listed above are on file with the City of Ontario Planning Department, 303 East “B” Street, Ontario, California 91764, (909) 395-2036.

March 15, 2022

Mr. Bruce McDonald
McDonald Property Group
1140 N. Coast Highway
Laguna Beach, CA 92651

SUBJECT: CALIFORNIA LOGISTICS CENTER AIR QUALITY & ENERGY ASSESSMENT MEMORANDUM

Dear Mr. Bruce McDonald:

Urban Crossroads, Inc. is pleased to provide the following Air Quality & Energy Assessment Memorandum for the California Logistics Center Project ("Project"), which is located on the southeast corner of Haven Avenue and East Airport Drive in the City of Ontario, as shown on Exhibit A. Specifically, the following assessment has been prepared in support of the proposed Project CEQA Addendum to determine whether the proposed Project would result in new or substantially different air quality or energy impacts than those considered and addressed in the Ontario Plan Draft Environmental Impact Report SCH No. 2008101140 (referred to as "DEIR") dated April 2009.

PROJECT DESCRIPTION

The DEIR evaluated the development of 87,620 residential dwelling units (du)[1], 40,356,075 square feet (sf) of mixed-use, 34,934,684 sf of retail/service uses, 22,116,283 sf of business park use, 159,998,711 sf of industrial use, 257,405,754 sf of other uses[2] within the area bounded by the proposed Project.

The Project intends to develop 9 industrial warehouse buildings totaling of 4,282,450 square feet (SF). (See Attachment A)

It should be noted that, for the purposes of trip generation evaluation contained within this VMT analysis, the following mix of land uses are proposed to be evaluated for the Project:

- 642,368 sf of high-cube cold storage warehouse use (15% of the total square footage)
- 3,640,082 sf of high-cube fulfillment center warehouse use (85% of the total square footage)
- **Total of 4,282,450 sf**

[1] Residential uses Include 535 du of rural residential use, 32,766 du of low density residential us, 27,207 du of low-medium density residential use, 138,601 du of medium density residential use, and 27,892 du of high-density residential use.
[2] Other uses include open space – non-recreation, open space – recreation, open space – water, public facility, public school, Los Angeles/Ontario International Airport, landfill, railroad, and roadways.

EXHIBIT A: LOCATION MAP

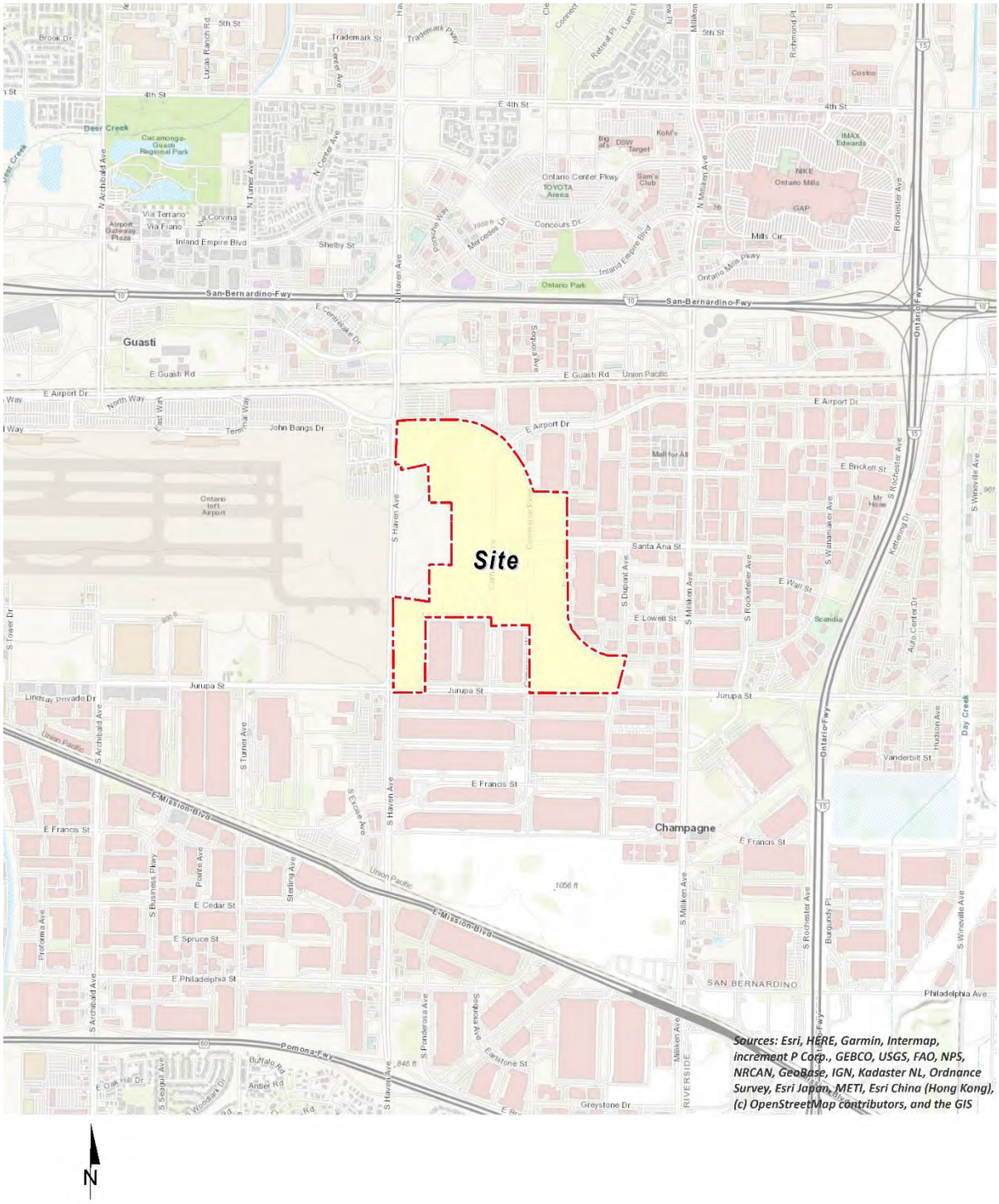
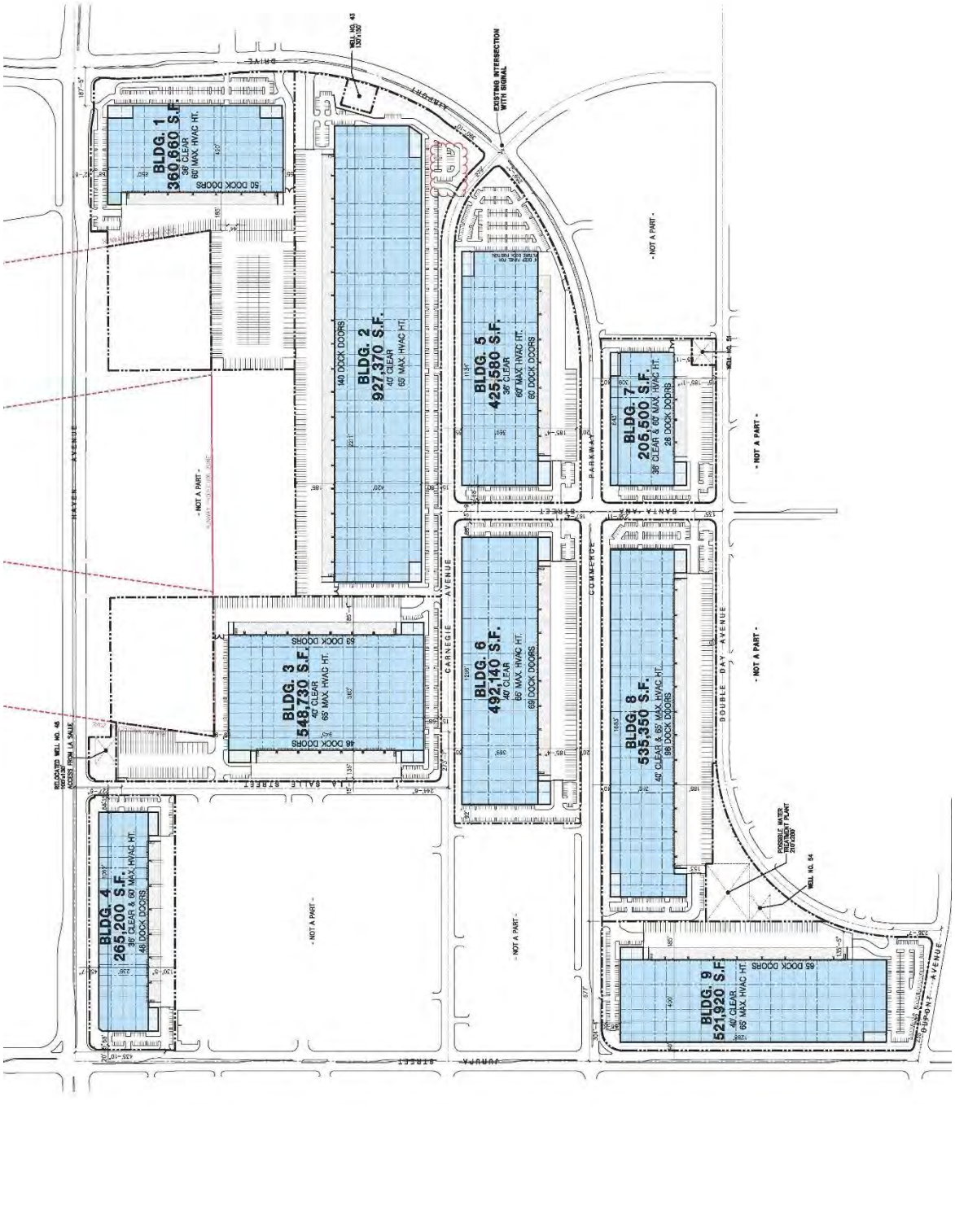


EXHIBIT B: SITE PLAN



DEIR MITIGATION MEASURES

The DEIR included the following mitigation measures. The proposed Project is required to implement the following mitigation measures as follows.

AQ 3-1: The City of Ontario Building Department shall require that all new construction projects incorporate feasible mitigation measures to reduce air quality emissions. Potential measures shall be incorporated as conditions of approval for a project and may include.

- Requiring fugitive dust control measures that exceed South Coast Air Quality Management District's (SCAQMD) Rule 403, such as:
    - Requiring use of nontoxic soil stabilizers to reduce wind erosion.
    - Applying water every four hours to active soil-disturbing activities.
    - Tarping and/or maintaining a minimum of 24 inches of freeboard on trucks hauling dirt, sand, soil, or other loose materials.
    - Using construction equipment rated by the United States Environmental Protection Agency (EPA) as having Tier 3 or higher exhaust emission limits.
    - Ensuring construction equipment is properly serviced and maintained to the manufacturer's standards.
    - Limiting nonessential idling of construction equipment to no more than five consecutive minutes.
    - Using Super-Compliant VOC paints for coating of architectural surfaces whenever possible. A list of Super-Compliant architectural coating manufactures can be found on the SCAQMD's website at: http://www.aqmd.gov/prdas/brochures/Super-Compliant_AIM.pdf.

AQ 3-2: The City of Ontario shall evaluate new development proposals within the City and require all developments to include access or linkages to alternative modes of transportation, such as transit stops, bike paths, and/or pedestrian paths (e.g., sidewalks).

AQ-3-3: The City of Ontario shall evaluate new development proposals within the City for potential incompatibilities with regard to the California Air Resources Board's Air Quality and Land Use Handbook: A Community Health Perspective (April 2005). New development that is inconsistent with the recommended buffer distances shall only be approved if feasible mitigation measures, such as high efficiency Minimum Efficiency Reporting Value filters have been incorporated into the project design to protect future sensitive receptors from harmful concentrations of air pollutants as a result of proximity to existing air pollution sources.

CURRENTLY APPROVED PROJECT EMISSIONS

As previously stated, the DEIR evaluated the development of 87,620 residential du, 40,356,075 sf of mixed-use, 34,934,684 sf of retail/service uses, 22,116,283 sf of business park use, 159,998,711 sf of industrial use, 257,405,754 sf of other uses within the area bounded by the

proposed Project. Table 1 summarize the operational air quality emissions that would result from the currently approved land uses bounded by the proposed Project.

TABLE 1: CURRENTLY APPROVED MAXIMUM DAILY OPERATIONAL AIR QUALITY EMISSIONS SUMMARY

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Transportation Source	29,625	27,819	111,058	582	4,557	4,512
Area Source	23,781	3,548	46,604	127	7,019	6,757
Maximum Daily Emissions	**53,406**	**31,367**	**157,662**	**709**	**11,576**	**11,269**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**

PROPOSED PROJECT EMISSIONS

AIR QUALITY

REGIONAL CONSTRUCTION EMISSIONS

Construction emissions associated with the proposed Project are summarized on Table 2. As shown, the proposed Project's construction-related activity would not exceed the applicable regional significance thresholds and a less than significant impact would occur and no mitigation beyond the required mitigation from the DEIR would be required.

TABLE 2: PROPOSED PROJECT REGIONAL CONSTRUCTION EMISSIONS SUMMARY

Year	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**36.40**	**84.48**	**189.09**	**0.64**	**56.07**	**16.50**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

LOCALIZED CONSTRUCTION EMISSIONS

PROJECT-RELATED RECEPTORS

Receptors in the Project study area are described below and shown on Exhibit C. Localized air quality impacts were evaluated at sensitive receptor land uses nearest the Project site. All distances are measured from the Project site boundary to the outdoor living areas (e.g., backyards) or at the building façade, whichever is closer to the Project site. The selection of receptor locations is based on Federal Highway Administration (FHWA) guidelines and is

consistent with additional guidance provided by Caltrans and the Federal Transit Administration (FTA).

R1: Location R1 represents the existing residence at 3141 Inland Empire Boulevard. Since there are no private outdoor living areas (backyards) facing the Project site, receptor R4 is placed at the residential building façade.

R2: Location R2 represents the Embassy Suites by Hilton Ontario Airport hotel at 3663 East Guasti Road. Receptor R2 is placed at the building façade.

R3: Location R3 represents the Rodeway Inn Ontario Mills Mall hotel. Receptor R3 is placed at the building façade.

R4: Location R4 represents the Ontario Airport Car Rental facility located at Rental Car Road. Receptor R4 is placed at the building façade.

R5: Location R5 represents the Biagi Brothers Transportation facility at 3655 East Airport Drive. Receptor R5 is placed at the building façade.

R6: Location R6 represents the westernmost building of the Timberland distribution center at 3950 East Airport Drive. Receptor R6 is placed at the building façade.

R7: Location R7 represents the easternmost building of the Timberland distribution center at 3950 East Airport Drive. Receptor R7 is placed at the building façade.

R8: Location R8 represents the Cubework coworking space building located at 1001 Doubleday Avenue. Receptor R8 is placed at the building façade.

R9: Location R9 represents the EaZy BrandZ store located at 4060 East Jurupa Street. Receptor R9 is placed at the building façade.

R10: Location R10 represents the Haliburton International Foods, Inc. food products supplier facility located at 3855 East Jurupa Street. Receptor R10 is placed at the building façade.

R11: Location R11 represents the Pacific Coast Warehouse facility located at 3601 East Jurupa Street. Receptor R11 is placed at the building façade.

EXHIBIT 3-A: RECEPTOR LOCATIONS

The SCAQMD recommends that the nearest sensitive receptor be considered when determining the Project's potential to cause an individual a cumulatively significant impact. The nearest land use where an individual could remain for 24 hours to the Project site has been used to determine localized construction and operational air quality impacts for emissions of PM_{10} and $PM_{2.5}$ (since PM_{10} and $PM_{2.5}$ thresholds are based on a 24-hour averaging time). The nearest receptor used for evaluation of localized impacts of PM_{10} and $PM_{2.5}$ relative to each building area is identified in Table 3.

TABLE 3: NEAREST RECEPTOR LOCATIONS FOR EVALUATION OF LOCALIZED PM_{10} AND $PM_{2.5}$

Building Area	Nearest Receptor	Distance (feet)	Distance (meters)
Building 1	R1	3,962	1,208
Building 2	R2	1,431	436
Building 3	R2	4,042	1,232
Building 4	R2	5,008	1,526
Building 5	R2	2,136	651
Building 6	R3	3,478	1,060
Building 7	R3	2,420	738
Building 8	R3	3,272	997
Budling 9	R3	5,161	1,573

Consistent with *LST Methodology*, the nearest industrial/commercial use to the Project site is used to determine construction and operational LST air impacts for emissions of NO_X and CO as the averaging periods for these pollutants are shorter (8 hours or less) and it is reasonable to assumed that an individual could be present at these sites for periods of one to 8 hours. The nearest receptor used for evaluation of localized impacts of NO_X and CO relative to each building area is identified in Table 4.

TABLE 4: NEAREST SENSITIVE RECEPTOR LOCATIONS FOR LOCALIZED NO_X AND CO (1 OF 2)

Building Area	Nearest Receptor	Distance (feet)	Distance (meters)
Building 1	R4	195	59
Building 2	R5	172	52
Building 3	R11	85	26
Building 4	R11	106	32
Building 5	R6	126	38
Building 6	R10	116	35

TABLE 4: NEAREST SENSITIVE RECEPTOR LOCATIONS FOR LOCALIZED NO_X AND CO (2 OF 2)

Building Area	Nearest Receptor	Distance (feet)	Distance (meters)
Building 7	R7	70	21
Building 8	R8	104	32
Budling 9	R9	73	22

It should be noted that the look-up tables only identify thresholds up to a 500-meter distance. As a conservative measure, a 500-meter distance will be used in lieu of distances over 500 meters. Additionally, the *LST Methodology* explicitly states that "*It is possible that a project may have receptors closer than 25 meters. Projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters* (39)." As such a 25-meter receptor distance will be used for evaluation of localized PM_{10}, $PM_{2.5}$, NO_2, and CO.

Pursuant to MM AQ 3-1 of the DEIR, the following analysis is presented to determine if the proposed Project would be required to implement any limitations on grading activity to prevent localized impacts to nearby receptors. The analysis makes use of methodology included in the SCAQMD *Final Localized Significance Threshold Methodology* (LST Methodology) (1). The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the federal and/or state ambient air quality standards (NAAQS/CAAQS). Collectively, these are referred to as Localized Significance Thresholds (LSTs). The SCAQMD established LSTs in response to the SCAQMD Governing Board's Environmental Justice Initiative I-4[3]. LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard at the sensitive receptor. The SCAQMD states that lead agencies can use the LSTs as another indicator of significance in its air quality impact analyses. Table 5 includes a summary of the Project's construction localized emissions compared to the applicable thresholds. For analytical purposes, emissions associated with peak site preparation and grading activities are considered for purposes of LSTs since these phases represents the maximum localized emissions that would occur. Any other construction phases of development that overlap would result in lesser emissions and consequently lesser impacts than what is disclosed herein. Without mitigation, localized construction emissions would not exceed the applicable SCAQMD LSTs for emissions of any criteria pollutant

[3] The purpose of SCAQMD's Environmental Justice program is to ensure that everyone has the right to equal protection from air pollution and fair access to the decision-making process that works to improve the quality of air within their communities. Further, the SCAQMD defines Environmental Justice as "…equitable environmental policymaking and enforcement to protect the health of all residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution."

TABLE 5: PROPOSED PROJECT LOCALIZED CONSTRUCTION EMISSIONS SUMMARY (1 OF 3)

Construction Phase	Year	Emissions (lbs/day)			
		NO_X	CO	PM_{10}	$PM_{2.5}$
Site Preparation	Building 1				
	Maximum Daily Emissions	**7.97**	**3.48**	**2.99**	**1.22**
	SCAQMD Localized Threshold	317	3,376	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 2				
	Maximum Daily Emissions	**13.71**	**5.99**	**5.14**	**2.10**
	SCAQMD Localized Threshold	306	3,376	283	143
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 3				
	Maximum Daily Emissions	**8.54**	**3.73**	**3.20**	**1.30**
	SCAQMD Localized Threshold	271	2,224	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 4				
	Maximum Daily Emissions	**3.96**	**1.73**	**1.48**	**0.61**
	SCAQMD Localized Threshold	279	2,413	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 5				
	Maximum Daily Emissions	**6.57**	**2.87**	**2.46**	**1.00**
	SCAQMD Localized Threshold	287	2,601	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 6				
	Maximum Daily Emissions	**6.94**	**3.03**	**2.60**	**1.06**
	SCAQMD Localized Threshold	283	2,507	52	137
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 7				
	Maximum Daily Emissions	**3.27**	**1.43**	**1.23**	**0.50**
	SCAQMD Localized Threshold	270	2,193	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

TABLE 5: PROPOSED PROJECT LOCALIZED CONSTRUCTION EMISSIONS SUMMARY (2 OF 3)

Construction Phase	Year	Emissions (lbs/day)			
		NO_X	CO	PM_{10}	$PM_{2.5}$
Site Preparation	Building 8				
	Maximum Daily Emissions	**8.12**	**3.55**	**3.04**	**1.24**
	SCAQMD Localized Threshold	279	2,413	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 9				
	Maximum Daily Emissions	**7.30**	**3.19**	**2.74**	**1.12**
	SCAQMD Localized Threshold	270	2,193	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Grading	Building 1				
	Maximum Daily Emissions	**8.22**	**5.35**	**2.14**	**0.75**
	SCAQMD Localized Threshold	317	3,376	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 2				
	Maximum Daily Emissions	**14.14**	**9.20**	**3.67**	**1.29**
	SCAQMD Localized Threshold	306	3,376	283	143
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 3				
	Maximum Daily Emissions	**8.80**	**5.73**	**2.29**	**0.80**
	SCAQMD Localized Threshold	271	2,224	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 4				
	Maximum Daily Emissions	**4.08**	**2.66**	**1.06**	**0.37**
	SCAQMD Localized Threshold	279	2,413	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 5				
	Maximum Daily Emissions	**6.77**	**4.40**	**1.76**	**0.62**
	SCAQMD Localized Threshold	287	2,601	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

TABLE 5: PROPOSED PROJECT LOCALIZED CONSTRUCTION EMISSIONS SUMMARY (3 OF 3)

Construction Phase	Year	Emissions (lbs/day)			
		NO_X	CO	PM_{10}	$PM_{2.5}$
Grading	Building 6				
	Maximum Daily Emissions	**7.15**	**4.65**	**1.86**	**0.65**
	SCAQMD Localized Threshold	283	2,507	52	137
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 7				
	Maximum Daily Emissions	**3.37**	**2.19**	**0.88**	**0.31**
	SCAQMD Localized Threshold	270	2,193	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 8				
	Maximum Daily Emissions	**8.37**	**5.45**	**2.18**	**0.76**
	SCAQMD Localized Threshold	279	2,413	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
	Building 9				
	Maximum Daily Emissions	**7.52**	**4.89**	**1.95**	**0.68**
	SCAQMD Localized Threshold	270	2,193	322	170
	Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

REGIONAL OPERATIONAL EMISSIONS

Regional operational emissions associated with the proposed Project are summarized on Table 6. As shown, during operational activity, Project emissions would exceed the SCAQMD regional thresholds of significance for emissions of VOC and NO_X. The VOC and NOx exceedances that would occur under the proposed Project are considered and addressed within the DEIR.

LOCALIZED OPERATIONAL EMISSIONS

Localized operational emissions associated with the proposed Project are summarized on Table 7. As shown, the proposed Project's localized operational-related activity would not exceed the applicable regional significance thresholds and a less than significant impact would occur and no mitigation beyond the required mitigation from the DEIR would be required.

TABLE 6: PROJECT OPERATIONAL MAXIMUM DAILY OPERATIONAL AIR QUALITY EMISSIONS SUMMARY

Source	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Transportation Source	28.65	200.90	314.75	1.47	104.22	29.84
Area Source	100.05	23.79	22.55	0.12	1.33	1.29
Maximum Daily Emissions	**128.70**	**224.69**	**337.30**	**1.59**	**105.55**	**31.13**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**

TABLE 7: PROJECT OPERATIONAL LOCALIZED SIGNIFICANCE AIR QUALITY EMISSIONS SUMMARY (1 OF 2)

Maximum On-Site Operational Emissions	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Building 1				
Maximum Daily Emissions	**4.06**	**4.60**	**0.79**	**0.33**
SCAQMD Localized Threshold	317	3,376	78	41
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Building 2				
Maximum Daily Emissions	**6.99**	**7.91**	**1.35**	**0.57**
SCAQMD Localized Threshold	306	3,066	69	35
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Building 3				
Maximum Daily Emissions	**4.35**	**4.92**	**0.84**	**0.36**
SCAQMD Localized Threshold	271	2,224	78	41
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Building 4				
Maximum Daily Emissions	**2.02**	**2.28**	**0.39**	**0.17**
SCAQMD Localized Threshold	279	2,413	78	41
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Building 5				
Maximum Daily Emissions	**3.35**	**3.79**	**0.65**	**0.27**
SCAQMD Localized Threshold	287	2,601	78	41

Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

TABLE 7: PROJECT OPERATIONAL LOCALIZED SIGNIFICANCE AIR QUALITY EMISSIONS SUMMARY (2 OF 2)

Maximum On-Site Operational Emissions	Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Building 6				
Maximum Daily Emissions	**3.54**	**4.00**	**0.68**	**0.29**
SCAQMD Localized Threshold	283	2,507	78	41
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Building 7				
Maximum Daily Emissions	**1.67**	**1.89**	**0.32**	**0.14**
SCAQMD Localized Threshold	270	2,193	78	41
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Building 8				
Maximum Daily Emissions	**4.14**	**4.69**	**0.80**	**0.34**
SCAQMD Localized Threshold	279	2,413	78	41
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**
Building 9				
Maximum Daily Emissions	**3.72**	**4.21**	**0.72**	**0.31**
SCAQMD Localized Threshold	270	2,193	71	36
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

AIR QUALITY EMISSIONS COMPARISON

Table 8 compares air quality associated with the Currently Approved Project to the proposed Project. As shown, emissions would result in a decrease of air quality emissions associated with the Project. Notwithstanding, the Project would not result in new or substantively different or substantively increased air quality impacts previously disclosed in the DEIR.

TABLE 8: AIR QUALITY EMISSIONS COMPARISON

Project	Emissions (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Currently Approved Project	53,406	31,367	157,662	709	11,576	11,269

Proposed Project	128.70	224.69	337.30	1.59	105.55	31.13
Variance	***-53,277.30***	***-31,142.31***	***-157,324.70***	***-707.41***	***-11,470.45***	***-11,237.87***

ENERGY ANALYSIS

CONSTRUCTION POWER COSTS

Based on the *2022 National Construction Estimator* (2), the typical power cost per 1,000 square feet of building construction per month is estimated to be $2.41. Table 9 estimates the total power cost of the on-site electricity usage during the construction of the proposed Project to be approximately $826,764.29.

TABLE 9: PROJECT CONSTRUCTION POWER COST

Land Use	Power Cost (per 1,000 SF)	Size (1,000 SF)	Construction Duration (months)	Project Construction Power Cost
High-Cube Cold Storage Warehouse	$2.41	642.368	40	$61,924.23
High-Cube Fulfillment Center Warehouse	$2.41	3,640.083	40	$350,903.95
Parking	$2.41	1,054.353	40	$101,639.63
Landscape	$2.41	1,063.403	40	$102,512.05
Other Asphalt Surfaces	$2.41	2,176.187	40	$209,784.43
			CONSTRUCTION POWER COST	***$826,764.29***

CONSTRUCTION ELECTRICITY USAGE

The SCE's general service rate schedule were used to determine the Project's electrical usage. As of January 1, 2022, Southern California Edison's (SCE) general service rate is $0.13 per kilowatt hours (kWh) of electricity for commercial uses and $0.13 per kWh of electricity for street and area lighting (3), the total electricity usage from on-site Project construction related activities is estimated to be approximately 6,276,680 kWh.

TABLE 10: PROJECT CONSTRUCTION ELECTRICITY USAGE

Land Use	Cost per kWh	Project Construction Electricity Usage (kWh)
High-Cube Cold Storage Warehouse	$0.13	470,120
High-Cube Fulfillment Center Warehouse	$0.13	2,664,014
Parking	$0.13	771,634

Landscape	$0.13	778,257
Other Asphalt Surfaces	$0.13	1,592,654
CONSTRUCTION ELECTRICITY USAGE		***6,276,680***

CONSTRUCTION EQUIPMENT FUEL CONSUMPTION

Fuel consumption estimates are presented in Table 11. The aggregate fuel consumption rate for all equipment is estimated at 18.5 hp-hr-gal., obtained from California Air Resources Board (CARB) 2018 Emissions Factors Tables and cited fuel consumption rate factors presented in Table D-24 of the Moyer guidelines (4). For the purposes of this analysis, the calculations are based on all construction equipment being diesel-powered which is standard practice consistent with industry standards. Diesel fuel would be supplied by existing commercial fuel providers serving the City and region. As presented in Table 11, Project construction activities would consume an estimated 335,494 gallons of diesel fuel.

TABLE 11: CONSTRUCTION EQUIPMENT FUEL CONSUMPTION ESTIMATES

Construction Activity	Duration (Days)	Equipment	HP Rating	Quantity	Usage Hours	Load Factor	HP-hrs/day	Total Fuel Consumption
Site Preparation	60	Crawler Tractors	212	6	8	0.43	4,376	14,191
		Rubber Tired Dozers	247	5	8	0.40	3,952	12,817
Grading	179	Crawler Tractors	212	3	8	0.43	2,188	21,169
		Excavators	158	3	8	0.38	1,441	13,942
		Graders	187	2	8	0.41	1,227	11,869
		Rubber Tired Dozers	247	2	8	0.40	1,581	15,295
		Scrapers	367	3	8	0.48	4,228	40,907
Building Construction	425	Cranes	231	2	8	0.29	1,072	24,623
		Crawler Tractors	212	6	8	0.43	4,376	100,522
		Forklifts	89	6	8	0.20	854	19,628
		Generator Sets	84	2	8	0.74	995	22,848
		Welders	46	2	8	0.45	331	7,609
Paving	220	Pavers	130	2	8	0.42	874	10,389
		Paving Equipment	132	2	8	0.36	760	9,042
		Rollers	80	2	8	0.38	486	5,784
Architectural Coating	300	Air Compressors	78	1	8	0.48	300	4,857
CONSTRUCTION FUEL DEMAND (GALLONS DIESEL FUEL)								***335,494***

CONSTRUCTION WORKER FUEL ESTIMATES

For purposes of analysis, it is assumed that 50% of all worker trips are from light-duty-auto vehicles (LDA), 25% are from light-duty-trucks with a gross vehicle weight rating (GVWR) of less than 6,000 lbs. and equivalent test weight (ETW) of less than or equal to 3,750 lbs (LDT1), and 25% are from light-duty-trucks with a GVWR of less than 6,000 lbs. and ETW between 3,751 lbs. and 5,750 lbs (LDT2). Data regarding Project related construction worker trips were based on CalEEMod 2020.4.0 model defaults utilized within the AQIA. Vehicle fuel efficiencies for LDAs, LDT1s, and LDT2s were estimated using information generated within the 2017 version of the EMFAC developed by the CARB.

Table 12 provides an estimated annual fuel consumption resulting from the Project generated by LDAs, LDT1s, and LDT2s related to construction worker trips. Based on Table 12, it is estimated that 932,311 gallons of fuel will be consumed related to construction worker trips during full construction of the proposed Project.

TABLE 12: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (1 OF 2)

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2023	LDA						
	Site Preparation	60	14	14.7	12,348	30.57	404
	Grading	179	17	14.7	44,732	30.57	1,463
	Building Construction	21	1,801	14.7	555,969	30.57	18,188
	LDT1						
	Site Preparation	60	7	14.7	6,174	24.07	257
	Grading	179	9	14.7	23,682	24.07	984
	Building Construction	21	901	14.7	278,139	24.07	11,556
	LDT2						
	Site Preparation	60	7	14.7	6,174	23.61	261
	Grading	179	9	14.7	23,682	23.61	1,003
	Building Construction	21	901	14.7	278,139	23.61	11,779
2024	LDA						
	Building Construction	262	1,801	14.7	6,936,371	31.36	221,180
	LDT1						
	Building Construction	262	901	14.7	3,470,111	24.91	139,294

TABLE 12: CONSTRUCTION WORKER FUEL CONSUMPTION ESTIMATES (2 OF 2)

Year	Construction Activity	Duration (Days)	Worker Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2024	LDT2						
	Building Construction	262	901	14.7	3,470,111	24.17	143,564
2025	LDA						
	Building Construction	142	1,801	14.7	3,759,407	32.22	116,665
	Paving	119	8	14.7	13,994	32.22	434
	Architectural Coating	199	360	14.7	1,053,108	32.22	32,681
	LDT1						
	Building Construction	142	901	14.7	1,880,747	24.91	75,495
	Paving	119	4	14.7	6,997	24.91	281
	Architectural Coating	199	180	14.7	526,554	24.91	21,136
	LDT2						
	Building Construction	142	901	14.7	1,880,747	24.74	76,017
	Paving	119	4	14.7	6,997	24.74	283
	Architectural Coating	199	180	14.7	526,554	24.74	21,283
2026	LDA						
	Paving	101	8	14.7	11,878	33.01	360
	Architectural Coating	101	360	14.7	534,492	33.01	16,192
	LDT1						
	Paving	101	4	14.7	5,939	25.37	234
	Architectural Coating	101	180	14.7	267,246	25.37	10,533
	LDT2						
	Paving	101	4	14.7	5,939	25.29	235
	Architectural Coating	101	180	14.7	267,246	25.29	10,567
TOTAL CONSTRUCTION WORKER FUEL CONSUMPTION							***932,311***

CONSTRUCTION VENDOR FUEL ESTIMATES

It is assumed that 50% of all vendor trips are from Medium-Heavy-Duty-Trucks (MHDT) and 50% are from Heavy-Heavy-Duty Trucks (HHDT). These assumptions are consistent with the CalEEMod 2020.4.0 defaults utilized within the within the AQIA. Vehicle fuel efficiencies for MHDTs and HHDTs were estimated using information generated within EMFAC2017.

Table 13 shows the estimated fuel economy of MHDTs and HHDTs accessing the Project site. Based on Table 13, fuel consumption from construction trips will total approximately 412,179 gallons.

TABLE 13: CONSTRUCTION VENDOR/HAULING FUEL CONSUMPTION ESTIMATES (1 OF 2)

Year	Construction Activity	Duration (Days)	Vendor/ Hauling Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2023	MHDT						
	Site Preparation	60	36	6.9	14,904	8.30	1,796
	Grading	179	107	6.9	132,156	8.30	15,928
	Building Construction	21	253	6.9	36,660	8.30	4,418
	HHDT (Vendor)						
	Site Preparation	60	36	6.9	14,904	5.94	2,509
	Grading	179	107	6.9	132,156	5.94	22,244
	Building Construction	21	253	6.9	36,660	5.94	6,170
2024	MHDT						
	Building Construction	262	253	6.9	457,373	8.34	54,833
	HHDT (Vendor)						
	Building Construction	262	253	6.9	457,373	6.03	75,909
2025	MHDT						
	Building Construction	142	253	6.9	247,889	8.46	29,310
	Paving	119	131	6.9	107,564	8.46	12,718
	Architectural Coating	199	178	6.9	244,412	8.46	28,898
	HHDT (Vendor)						
	Building Construction	142	253	6.9	247,889	6.13	40,439
	Paving	119	131	6.9	107,564	6.13	17,547
	Architectural Coating	199	178	6.9	244,412	6.13	39,872

TABLE 13: CONSTRUCTION VENDOR/HAULING FUEL CONSUMPTION ESTIMATES (2 OF 2)

Year	Construction Activity	Duration (Days)	Vendor/ Hauling Trips/Day	Trip Length (miles)	VMT	Average Vehicle Fuel Economy (mpg)	Estimated Fuel Consumption (gallons)
2026	MHDT						
	Paving	101	131	6.9	91,294	8.59	10,632
	Architectural Coating	101	178	6.9	124,048	8.59	14,446
	HHDT (Vendor)						
	Paving	101	131	6.9	91,294	6.24	14,630
	Architectural Coating	101	178	6.9	124,048	6.24	19,879
TOTAL CONSTRUCTION VENDOR AND HAULING FUEL CONSUMPTION							***412,179***

TRANSPORTATION ENERGY DEMANDS

Energy that would be consumed by Project-generated traffic is a function of total VMT and estimated vehicle fuel economies of vehicles accessing the Project site. Table 14 presents the estimated annual fuel consumption from project-generated traffic.

TABLE 14: PROJECT-GENERATED TRAFFIC ANNUAL FUEL CONSUMPTION

Vehicle Type	Average Vehicle Fuel Economy (mpg)	Annual VMT	Estimated Annual Fuel Consumption (gallons)
LDA	33.01	17,115,973	518,499
LDT1	25.37	1,773,342	69,891
LDT2	25.29	5,448,785	215,456
MDV	20.66	4,152,430	200,977
MCY	42.30	772,545	18,265
LHDT1	16.62	3,583,017	215,577
LHDT2	15.58	988,725	63,469
MHDT	8.59	3,436,475	400,190
HHDT	6.24	8,766,474	1,404,831
TRUs	-	-	262
TOTAL ANNUAL FUEL CONSUMPTION		***46,037,767***	***3,107,417***

MDV = Medium Duty Trucks; LHDT1 = Light-Duty Trucks (Vehicles under the LHDT1 category have a GVWR of 8,501 to 10,000 lbs.);
LHDT2 = Light-Duty Trucks (Vehicles under the LHDT2 category have a GVWR of 10,001 to 14,000 lbs.)

FACILITY ENERGY DEMANDS

Project building operations and Project site maintenance activities would result in the consumption of natural gas and electricity. Natural gas would be supplied to the Project by Southern California Gas (SoCalGas) and electricity would be supplied to the Project by SCE. Annual natural gas and electricity demands of the Project are summarized in Table 15.

TABLE 15: PROJECT ANNUAL OPERATIONAL NATURAL GAS AND ELECTRICITY DEMAND SUMMARY

Land Use	Natural Gas Demand (kBTU/year)	Electricity Demand (kWh/year)
High-Cube Cold Storage Warehouse	33,229,700	25,591,900
High-Cube Fulfillment Center Warehouse	7,316,570	8,444,990
Parking	0	369,024
Landscape	0	0
Other Asphalt Surfaces	0	0
TOTAL PROJECT ENERGY DEMAND	***40,546,270***	***34,405,914***

Respectfully submitted,

URBAN CROSSROADS, INC.

Haseeb Qureshi,
Principal

REFERENCES

1. **South Coast Air Quality Management District.** *Localized Significance Thresholds Methodology.* s.l. : South Coast Air Quality Managment District, 2003.
2. **Pray, Richard.** *2022 National Construction Estimator.* Carlsbad : Craftsman Book Company, 2022.
3. **Southern California Edison.** Regulatory Information - Rates Pricing. [Online] https://www.sce.com/regulatory/tariff-books/rates-pricing-choices.
4. **California Air Resources Board.** *Methods to Find the Cost-Effectiveness of Funding Air Quality Projects For Evaluating Motor Vehicle Registration Fee Projects And Congestion Mitigation and Air Quality Improvement (CMAQ) Projects, Emission Factor Tables.* 2018.

ATTACHMENT A

PROPOSED PROJECT CALEEMOD CONSTRUCTION AND OPERATIONAL MODEL OUTPUTS

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs)

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	642.37	1000sqft	14.75	642,368.00	0
Unrefrigerated Warehouse-No Rail	3,640.08	1000sqft	83.56	3,640,083.00	0
Other Asphalt Surfaces	2,176.19	1000sqft	49.96	2,176,187.00	0
Parking Lot	3,403.00	Space	24.30	1,054,353.00	0
City Park	24.41	Acre	24.41	1,063,403.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project Area is 196.98 acres

Construction Phase - Construction anticipated to beging January 2023 and end in May 2026

Off-road Equipment - Hours are based on an 8-hour workday

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Off-road Equipment -

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Trips and VMT - CalEEMod only assumes Vendor Trips during Building Construction. The CalEEMod default trips were ratioed between each phase based on the number of days

Grading - Analysis conservatively assumes that up to 25 acres can be disturbed per day

Architectural Coating - MM Impact 5.3.2

Vehicle Trips - Construction run only

Energy Use - Construction run only

Water And Wastewater - Construction run only

Solid Waste - Construction run only

Construction Off-road Equipment Mitigation - Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstructionPhase	NumDays	220.00	300.00
tblConstructionPhase	NumDays	3,100.00	425.00
tblConstructionPhase	NumDays	310.00	179.00
tblConstructionPhase	NumDays	120.00	60.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.37	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	36.52	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	48.51	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.95	0.00
tblEnergyUse	T24E	0.33	0.00
tblEnergyUse	T24NG	3.22	0.00
tblEnergyUse	T24NG	1.98	0.00
tblGrading	AcresOfGrading	1,163.50	4,475.00

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblGrading	AcresOfGrading	330.00	1,500.00
tblLandUse	LandUseSquareFeet	642,370.00	642,368.00
tblLandUse	LandUseSquareFeet	3,640,080.00	3,640,083.00
tblLandUse	LandUseSquareFeet	2,176,190.00	2,176,187.00
tblLandUse	LandUseSquareFeet	1,361,200.00	1,054,353.00
tblLandUse	LandUseSquareFeet	1,063,299.60	1,063,403.00
tblLandUse	LotAcreage	30.63	24.30
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	2.10	0.00
tblSolidWaste	SolidWasteGenerationRate	603.83	0.00
tblSolidWaste	SolidWasteGenerationRate	3,421.68	0.00
tblTripsAndVMT	VendorTripNumber	0.00	71.00
tblTripsAndVMT	VendorTripNumber	0.00	213.00
tblTripsAndVMT	VendorTripNumber	1,406.00	505.00
tblTripsAndVMT	VendorTripNumber	0.00	356.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblTripsAndVMT	VendorTripNumber	0.00	261.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	2.12	0.00
tblVehicleTrips	WD_TR	1.74	0.00
tblWater	IndoorWaterUseRate	148,548,062.50	0.00
tblWater	IndoorWaterUseRate	841,768,500.00	0.00
tblWater	OutdoorWaterUseRate	29,084,059.75	0.00

2.0 Emissions Summary

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	19.7793	78.6207	177.9618	0.5359	57.3908	2.8173	60.2081	19.6279	2.5926	22.2205	0.0000	54,708.8474	54,708.8474	3.7117	2.2966	55,477.0438
2024	18.4765	74.0647	168.0596	0.5242	43.4973	2.3422	45.8394	11.6093	2.1850	13.7943	0.0000	53,788.0707	53,788.0707	3.2545	2.2135	54,529.0602
2025	36.3959	82.3637	189.0905	0.6435	53.8259	2.2416	56.0674	14.4003	2.0978	16.4981	0.0000	66,713.6496	66,713.6496	3.4906	3.2541	67,770.6388
2026	21.2594	32.8914	48.0797	0.1981	12.1684	0.6814	12.8498	3.3170	0.6382	3.9552	0.0000	20,802.7915	20,802.7915	1.1486	1.7983	21,367.4066
Maximum	**36.3959**	**82.3637**	**189.0905**	**0.6435**	**57.3908**	**2.8173**	**60.2081**	**19.6279**	**2.5926**	**22.2205**	**0.0000**	**66,713.6496**	**66,713.6496**	**3.7117**	**3.2541**	**67,770.6388**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	19.7793	78.6207	177.9618	0.5359	43.4973	2.8173	46.0630	11.6093	2.5926	14.0041	0.0000	54,708.8474	54,708.8474	3.7117	2.2966	55,477.0438
2024	18.4765	74.0647	168.0596	0.5242	43.4973	2.3422	45.8394	11.6093	2.1850	13.7943	0.0000	53,788.0707	53,788.0707	3.2545	2.2135	54,529.0602
2025	36.3959	82.3637	189.0905	0.6435	53.8259	2.2416	56.0674	14.4003	2.0978	16.4981	0.0000	66,713.6496	66,713.6496	3.4906	3.2541	67,770.6388
2026	21.2594	32.8914	48.0797	0.1981	12.1684	0.6814	12.8498	3.3170	0.6382	3.9552	0.0000	20,802.7915	20,802.7915	1.1486	1.7983	21,367.4066
Maximum	**36.3959**	**82.3637**	**189.0905**	**0.6435**	**53.8259**	**2.8173**	**56.0674**	**14.4003**	**2.5926**	**16.4981**	**0.0000**	**66,713.6496**	**66,713.6496**	**3.7117**	**3.2541**	**67,770.6388**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**8.33**	**0.00**	**8.08**	**16.38**	**0.00**	**14.55**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	97.2067	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**97.2067**	**9.1200e-003**	**1.0068**	**8.0000e-005**	**0.0000**	**3.5800e-003**	**3.5800e-003**	**0.0000**	**3.5800e-003**	**3.5800e-003**		**2.1636**	**2.1636**	**5.6300e-003**	**0.0000**	**2.3043**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	97.2067	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**97.2067**	**9.1200e-003**	**1.0068**	**8.0000e-005**	**0.0000**	**3.5800e-003**	**3.5800e-003**	**0.0000**	**3.5800e-003**	**3.5800e-003**		**2.1636**	**2.1636**	**5.6300e-003**	**0.0000**	**2.3043**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	3/24/2023	5	60	
2	Grading	Grading	3/25/2023	11/30/2023	5	179	
3	Building Construction	Building Construction	12/1/2023	7/17/2025	5	425	
4	Architectural Coating	Architectural Coating	3/28/2025	5/21/2026	5	300	
5	Paving	Paving	7/18/2025	5/21/2026	5	220	

Acres of Grading (Site Preparation Phase): 1500

Acres of Grading (Grading Phase): 4475

Acres of Paving: 74.26

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 6,423,677; Non-Residential Outdoor: 2,141,226; Striped Parking Area: 193,832 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	6	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	5	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	3	8.00	212	0.43
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	3	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Crawler Tractors	6	8.00	212	0.43
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	11	28.00	71.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	33.00	213.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	3,602.00	505.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	720.00	356.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	261.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					56.6229	0.0000	56.6229	19.4139	0.0000	19.4139			0.0000			0.0000
Off-Road	6.0883	66.3832	28.9937	0.0897		2.7970	2.7970		2.5733	2.5733		8,684.6339	8,684.6339	2.8088		8,754.8536
Total	**6.0883**	**66.3832**	**28.9937**	**0.0897**	**56.6229**	**2.7970**	**59.4200**	**19.4139**	**2.5733**	**21.9871**		**8,684.6339**	**8,684.6339**	**2.8088**		**8,754.8536**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0831	2.4904	1.0450	0.0127	0.4549	0.0187	0.4736	0.1310	0.0179	0.1489		1,362.6191	1,362.6191	0.0356	0.2012	1,423.4734
Worker	0.1095	0.0661	1.0559	2.8000e-003	0.3130	1.5500e-003	0.3145	0.0830	1.4200e-003	0.0844		286.0672	286.0672	6.8300e-003	6.7300e-003	288.2426
Total	**0.1926**	**2.5564**	**2.1009**	**0.0155**	**0.7679**	**0.0203**	**0.7881**	**0.2140**	**0.0193**	**0.2333**		**1,648.6863**	**1,648.6863**	**0.0424**	**0.2080**	**1,711.7160**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					22.0830	0.0000	22.0830	7.5714	0.0000	7.5714			0.0000			0.0000
Off-Road	6.0883	66.3832	28.9937	0.0897		2.7970	2.7970		2.5733	2.5733	0.0000	8,684.6339	8,684.6339	2.8088		8,754.8536
Total	**6.0883**	**66.3832**	**28.9937**	**0.0897**	**22.0830**	**2.7970**	**24.8800**	**7.5714**	**2.5733**	**10.1447**	**0.0000**	**8,684.6339**	**8,684.6339**	**2.8088**		**8,754.8536**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0831	2.4904	1.0450	0.0127	0.4549	0.0187	0.4736	0.1310	0.0179	0.1489		1,362.6191	1,362.6191	0.0356	0.2012	1,423.4734
Worker	0.1095	0.0661	1.0559	2.8000e-003	0.3130	1.5500e-003	0.3145	0.0830	1.4200e-003	0.0844		286.0672	286.0672	6.8300e-003	6.7300e-003	288.2426
Total	**0.1926**	**2.5564**	**2.1009**	**0.0155**	**0.7679**	**0.0203**	**0.7881**	**0.2140**	**0.0193**	**0.2333**		**1,648.6863**	**1,648.6863**	**0.0424**	**0.2080**	**1,711.7160**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					38.5567	0.0000	38.5567	9.4832	0.0000	9.4832			0.0000			0.0000
Off-Road	6.3951	68.4302	44.5133	0.1149		2.7413	2.7413		2.5220	2.5220		11,121.2302	11,121.2302	3.5968		11,211.1510
Total	**6.3951**	**68.4302**	**44.5133**	**0.1149**	**38.5567**	**2.7413**	**41.2980**	**9.4832**	**2.5220**	**12.0052**		**11,121.2302**	**11,121.2302**	**3.5968**		**11,211.1510**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2493	7.4711	3.1350	0.0381	1.3646	0.0561	1.4208	0.3930	0.0537	0.4467		4,087.8572	4,087.8572	0.1068	0.6037	4,270.4203
Worker	0.1290	0.0779	1.2445	3.2900e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		337.1506	337.1506	8.0500e-003	7.9300e-003	339.7145
Total	**0.3784**	**7.5490**	**4.3794**	**0.0414**	**1.7335**	**0.0580**	**1.7915**	**0.4908**	**0.0554**	**0.5462**		**4,425.0079**	**4,425.0079**	**0.1149**	**0.6116**	**4,610.1348**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.0371	0.0000	15.0371	3.6984	0.0000	3.6984			0.0000			0.0000
Off-Road	6.3951	68.4302	44.5133	0.1149		2.7413	2.7413		2.5220	2.5220	0.0000	11,121.2302	11,121.2302	3.5968		11,211.1510
Total	**6.3951**	**68.4302**	**44.5133**	**0.1149**	**15.0371**	**2.7413**	**17.7785**	**3.6984**	**2.5220**	**6.2205**	**0.0000**	**11,121.2302**	**11,121.2302**	**3.5968**		**11,211.1510**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2493	7.4711	3.1350	0.0381	1.3646	0.0561	1.4208	0.3930	0.0537	0.4467		4,087.8572	4,087.8572	0.1068	0.6037	4,270.4203
Worker	0.1290	0.0779	1.2445	3.2900e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		337.1506	337.1506	8.0500e-003	7.9300e-003	339.7145
Total	**0.3784**	**7.5490**	**4.3794**	**0.0414**	**1.7335**	**0.0580**	**1.7915**	**0.4908**	**0.0554**	**0.5462**		**4,425.0079**	**4,425.0079**	**0.1149**	**0.6116**	**4,610.1348**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.1037	52.4088	34.6941	0.0860		2.2337	2.2337		2.0843	2.0843		8,216.4785	8,216.4785	2.2203		8,271.9848
Total	**5.1037**	**52.4088**	**34.6941**	**0.0860**		**2.2337**	**2.2337**		**2.0843**	**2.0843**		**8,216.4785**	**8,216.4785**	**2.2203**		**8,271.9848**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5911	17.7132	7.4327	0.0904	3.2354	0.1331	3.3685	0.9316	0.1273	1.0590		9,691.8681	9,691.8681	0.2533	1.4312	10,124.7053
Worker	14.0845	8.4987	135.8350	0.3596	40.2619	0.1989	40.4608	10.6776	0.1831	10.8607		36,800.5008	36,800.5008	0.8790	0.8654	37,080.3537
Total	**14.6756**	**26.2119**	**143.2677**	**0.4500**	**43.4973**	**0.3320**	**43.8293**	**11.6093**	**0.3104**	**11.9197**		**46,492.3689**	**46,492.3689**	**1.1323**	**2.2966**	**47,205.0590**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.1037	52.4088	34.6941	0.0860		2.2337	2.2337		2.0843	2.0843	0.0000	8,216.4785	8,216.4785	2.2203		8,271.9848
Total	**5.1037**	**52.4088**	**34.6941**	**0.0860**		**2.2337**	**2.2337**		**2.0843**	**2.0843**	**0.0000**	**8,216.4785**	**8,216.4785**	**2.2203**		**8,271.9848**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5911	17.7132	7.4327	0.0904	3.2354	0.1331	3.3685	0.9316	0.1273	1.0590		9,691.8681	9,691.8681	0.2533	1.4312	10,124.7053
Worker	14.0845	8.4987	135.8350	0.3596	40.2619	0.1989	40.4608	10.6776	0.1831	10.8607		36,800.5008	36,800.5008	0.8790	0.8654	37,080.3537
Total	**14.6756**	**26.2119**	**143.2677**	**0.4500**	**43.4973**	**0.3320**	**43.8293**	**11.6093**	**0.3104**	**11.9197**		**46,492.3689**	**46,492.3689**	**1.1323**	**2.2966**	**47,205.0590**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.8149	48.6489	34.2556	0.0860		2.0200	2.0200		1.8837	1.8837		8,218.7297	8,218.7297	2.2137		8,274.0716
Total	**4.8149**	**48.6489**	**34.2556**	**0.0860**		**2.0200**	**2.0200**		**1.8837**	**1.8837**		**8,218.7297**	**8,218.7297**	**2.2137**		**8,274.0716**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5775	17.8708	7.3091	0.0891	3.2354	0.1311	3.3664	0.9316	0.1254	1.0570		9,558.3559	9,558.3559	0.2456	1.4113	9,985.0704
Worker	13.0842	7.5450	126.4948	0.3491	40.2619	0.1911	40.4530	10.6776	0.1759	10.8536		36,010.9851	36,010.9851	0.7952	0.8022	36,269.9182
Total	**13.6616**	**25.4158**	**133.8040**	**0.4382**	**43.4973**	**0.3222**	**43.8195**	**11.6093**	**0.3013**	**11.9106**		**45,569.3410**	**45,569.3410**	**1.0408**	**2.2135**	**46,254.9886**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.8149	48.6489	34.2556	0.0860		2.0200	2.0200		1.8837	1.8837	0.0000	8,218.7297	8,218.7297	2.2137		8,274.0716
Total	**4.8149**	**48.6489**	**34.2556**	**0.0860**		**2.0200**	**2.0200**		**1.8837**	**1.8837**	**0.0000**	**8,218.7297**	**8,218.7297**	**2.2137**		**8,274.0716**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5775	17.8708	7.3091	0.0891	3.2354	0.1311	3.3664	0.9316	0.1254	1.0570		9,558.3559	9,558.3559	0.2456	1.4113	9,985.0704
Worker	13.0842	7.5450	126.4948	0.3491	40.2619	0.1911	40.4530	10.6776	0.1759	10.8536		36,010.9851	36,010.9851	0.7952	0.8022	36,269.9182
Total	**13.6616**	**25.4158**	**133.8040**	**0.4382**	**43.4973**	**0.3222**	**43.8195**	**11.6093**	**0.3013**	**11.9106**		**45,569.3410**	**45,569.3410**	**1.0408**	**2.2135**	**46,254.9886**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.3616	42.4683	33.5203	0.0860		1.7316	1.7316		1.6149	1.6149		8,216.4726	8,216.4726	2.2056		8,271.6136
Total	**4.3616**	**42.4683**	**33.5203**	**0.0860**		**1.7316**	**1.7316**		**1.6149**	**1.6149**		**8,216.4726**	**8,216.4726**	**2.2056**		**8,271.6136**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5664	17.7640	7.1944	0.0874	3.2353	0.1309	3.3662	0.9316	0.1252	1.0568		9,372.5276	9,372.5276	0.2386	1.3831	9,790.6591
Worker	12.1790	6.7350	117.4208	0.3371	40.2619	0.1818	40.4437	10.6776	0.1673	10.8450		35,121.7647	35,121.7647	0.7149	0.7467	35,362.1561
Total	**12.7454**	**24.4990**	**124.6152**	**0.4245**	**43.4972**	**0.3127**	**43.8099**	**11.6093**	**0.2925**	**11.9018**		**44,494.2923**	**44,494.2923**	**0.9534**	**2.1298**	**45,152.8152**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.3616	42.4683	33.5203	0.0860		1.7316	1.7316		1.6149	1.6149	0.0000	8,216.4726	8,216.4726	2.2056		8,271.6136
Total	**4.3616**	**42.4683**	**33.5203**	**0.0860**		**1.7316**	**1.7316**		**1.6149**	**1.6149**	**0.0000**	**8,216.4726**	**8,216.4726**	**2.2056**		**8,271.6136**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5664	17.7640	7.1944	0.0874	3.2353	0.1309	3.3662	0.9316	0.1252	1.0568		9,372.5276	9,372.5276	0.2386	1.3831	9,790.6591
Worker	12.1790	6.7350	117.4208	0.3371	40.2619	0.1818	40.4437	10.6776	0.1673	10.8450		35,121.7647	35,121.7647	0.7149	0.7467	35,362.1561
Total	**12.7454**	**24.4990**	**124.6152**	**0.4245**	**43.4972**	**0.3127**	**43.8099**	**11.6093**	**0.2925**	**11.9018**		**44,494.2923**	**44,494.2923**	**0.9534**	**2.1298**	**45,152.8152**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.2275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687		375.2641	375.2641	0.0205		375.7758
Total	**16.4553**	**1.5273**	**2.4122**	**3.9600e-003**		**0.0687**	**0.0687**		**0.0687**	**0.0687**		**375.2641**	**375.2641**	**0.0205**		**375.7758**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3993	12.5228	5.0717	0.0616	2.2808	0.0923	2.3730	0.6567	0.0883	0.7450		6,607.1680	6,607.1680	0.1682	0.9750	6,901.9300
Worker	2.4345	1.3463	23.4711	0.0674	8.0479	0.0363	8.0842	2.1343	0.0334	2.1678		7,020.4527	7,020.4527	0.1429	0.1493	7,068.5043
Total	**2.8337**	**13.8690**	**28.5428**	**0.1290**	**10.3287**	**0.1286**	**10.4573**	**2.7911**	**0.1217**	**2.9128**		**13,627.6207**	**13,627.6207**	**0.3111**	**1.1243**	**13,970.4343**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.2275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687	0.0000	375.2641	375.2641	0.0205		375.7758
Total	**16.4553**	**1.5273**	**2.4122**	**3.9600e-003**		**0.0687**	**0.0687**		**0.0687**	**0.0687**	**0.0000**	**375.2641**	**375.2641**	**0.0205**		**375.7758**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3993	12.5228	5.0717	0.0616	2.2808	0.0923	2.3730	0.6567	0.0883	0.7450		6,607.1680	6,607.1680	0.1682	0.9750	6,901.9300
Worker	2.4345	1.3463	23.4711	0.0674	8.0479	0.0363	8.0842	2.1343	0.0334	2.1678		7,020.4527	7,020.4527	0.1429	0.1493	7,068.5043
Total	**2.8337**	**13.8690**	**28.5428**	**0.1290**	**10.3287**	**0.1286**	**10.4573**	**2.7911**	**0.1217**	**2.9128**		**13,627.6207**	**13,627.6207**	**0.3111**	**1.1243**	**13,970.4343**

3.5 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.2275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687		375.2641	375.2641	0.0205		375.7758
Total	**16.4553**	**1.5273**	**2.4122**	**3.9600e-003**		**0.0687**	**0.0687**		**0.0687**	**0.0687**		**375.2641**	**375.2641**	**0.0205**		**375.7758**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3923	12.4301	5.0043	0.0604	2.2807	0.0917	2.3725	0.6567	0.0877	0.7445		6,475.8667	6,475.8667	0.1630	0.9551	6,764.5517
Worker	2.2773	1.2138	21.9589	0.0653	8.0479	0.0345	8.0824	2.1343	0.0317	2.1661		6,854.3603	6,854.3603	0.1292	0.1401	6,899.3503
Total	**2.6695**	**13.6440**	**26.9632**	**0.1257**	**10.3286**	**0.1262**	**10.4548**	**2.7911**	**0.1195**	**2.9105**		**13,330.2270**	**13,330.2270**	**0.2923**	**1.0952**	**13,663.9020**

3.5 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.2275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687	0.0000	375.2641	375.2641	0.0205		375.7758
Total	**16.4553**	**1.5273**	**2.4122**	**3.9600e-003**		**0.0687**	**0.0687**		**0.0687**	**0.0687**	**0.0000**	**375.2641**	**375.2641**	**0.0205**		**375.7758**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3923	12.4301	5.0043	0.0604	2.2807	0.0917	2.3725	0.6567	0.0877	0.7445		6,475.8667	6,475.8667	0.1630	0.9551	6,764.5517
Worker	2.2773	1.2138	21.9589	0.0653	8.0479	0.0345	8.0824	2.1343	0.0317	2.1661		6,854.3603	6,854.3603	0.1292	0.1401	6,899.3503
Total	**2.6695**	**13.6440**	**26.9632**	**0.1257**	**10.3286**	**0.1262**	**10.4548**	**2.7911**	**0.1195**	**2.9105**		**13,330.2270**	**13,330.2270**	**0.2923**	**1.0952**	**13,663.9020**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7995**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2927	9.1810	3.7183	0.0452	1.6721	0.0677	1.7398	0.4815	0.0647	0.5462		4,844.0192	4,844.0192	0.1233	0.7148	5,060.1228
Worker	0.0507	0.0281	0.4890	1.4000e-003	0.1677	7.6000e-004	0.1684	0.0445	7.0000e-004	0.0452		146.2594	146.2594	2.9800e-003	3.1100e-003	147.2605
Total	**0.3434**	**9.2091**	**4.2073**	**0.0466**	**1.8398**	**0.0684**	**1.9082**	**0.5260**	**0.0654**	**0.5914**		**4,990.2787**	**4,990.2787**	**0.1263**	**0.7180**	**5,207.3833**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7995**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2927	9.1810	3.7183	0.0452	1.6721	0.0677	1.7398	0.4815	0.0647	0.5462		4,844.0192	4,844.0192	0.1233	0.7148	5,060.1228
Worker	0.0507	0.0281	0.4890	1.4000e-003	0.1677	7.6000e-004	0.1684	0.0445	7.0000e-004	0.0452		146.2594	146.2594	2.9800e-003	3.1100e-003	147.2605
Total	**0.3434**	**9.2091**	**4.2073**	**0.0466**	**1.8398**	**0.0684**	**1.9082**	**0.5260**	**0.0654**	**0.5914**		**4,990.2787**	**4,990.2787**	**0.1263**	**0.7180**	**5,207.3833**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7995**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2876	9.1131	3.6689	0.0443	1.6721	0.0672	1.7394	0.4815	0.0643	0.5458		4,747.7562	4,747.7562	0.1195	0.7002	4,959.4045
Worker	0.0474	0.0253	0.4575	1.3600e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		142.7992	142.7992	2.6900e-003	2.9200e-003	143.7365
Total	**0.3350**	**9.1384**	**4.1264**	**0.0456**	**1.8398**	**0.0680**	**1.9077**	**0.5260**	**0.0650**	**0.5909**		**4,890.5553**	**4,890.5553**	**0.1222**	**0.7031**	**5,103.1410**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7995**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2876	9.1131	3.6689	0.0443	1.6721	0.0672	1.7394	0.4815	0.0643	0.5458		4,747.7562	4,747.7562	0.1195	0.7002	4,959.4045
Worker	0.0474	0.0253	0.4575	1.3600e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		142.7992	142.7992	2.6900e-003	2.9200e-003	143.7365
Total	**0.3350**	**9.1384**	**4.1264**	**0.0456**	**1.8398**	**0.0680**	**1.9077**	**0.5260**	**0.0650**	**0.5909**		**4,890.5553**	**4,890.5553**	**0.1222**	**0.7031**	**5,103.1410**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Other Asphalt Surfaces	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Parking Lot	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Refrigerated Warehouse-No Rail	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Unrefrigerated Warehouse-No Rail	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	97.2067	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043
Unmitigated	97.2067	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.1224					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	85.9916					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0927	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043
Total	**97.2067**	**9.1200e-003**	**1.0068**	**8.0000e-005**		**3.5800e-003**	**3.5800e-003**		**3.5800e-003**	**3.5800e-003**		**2.1636**	**2.1636**	**5.6300e-003**		**2.3043**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.1224					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	85.9916					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0927	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043
Total	**97.2067**	**9.1200e-003**	**1.0068**	**8.0000e-005**		**3.5800e-003**	**3.5800e-003**		**3.5800e-003**	**3.5800e-003**		**2.1636**	**2.1636**	**5.6300e-003**		**2.3043**

7.0 Water Detail

7.1 Mitigation Measures Water

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs)

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	642.37	1000sqft	14.75	642,368.00	0
Unrefrigerated Warehouse-No Rail	3,640.08	1000sqft	83.56	3,640,083.00	0
Other Asphalt Surfaces	2,176.19	1000sqft	49.96	2,176,187.00	0
Parking Lot	3,403.00	Space	24.30	1,054,353.00	0
City Park	24.41	Acre	24.41	1,063,403.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project Area is 196.98 acres

Construction Phase - Construction anticipated to beging January 2023 and end in May 2026

Off-road Equipment - Hours are based on an 8-hour workday

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Off-road Equipment -

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Trips and VMT - CalEEMod only assumes Vendor Trips during Building Construction. The CalEEMod default trips were ratioed between each phase based on the number of days

Grading - Analysis conservatively assumes that up to 25 acres can be disturbed per day

Architectural Coating - MM Impact 5.3.2

Vehicle Trips - Construction run only

Energy Use - Construction run only

Water And Wastewater - Construction run only

Solid Waste - Construction run only

Construction Off-road Equipment Mitigation - Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstructionPhase	NumDays	220.00	300.00
tblConstructionPhase	NumDays	3,100.00	425.00
tblConstructionPhase	NumDays	310.00	179.00
tblConstructionPhase	NumDays	120.00	60.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.37	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	36.52	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	48.51	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.95	0.00
tblEnergyUse	T24E	0.33	0.00
tblEnergyUse	T24NG	3.22	0.00
tblEnergyUse	T24NG	1.98	0.00
tblGrading	AcresOfGrading	1,163.50	4,475.00

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblGrading	AcresOfGrading	330.00	1,500.00
tblLandUse	LandUseSquareFeet	642,370.00	642,368.00
tblLandUse	LandUseSquareFeet	3,640,080.00	3,640,083.00
tblLandUse	LandUseSquareFeet	2,176,190.00	2,176,187.00
tblLandUse	LandUseSquareFeet	1,361,200.00	1,054,353.00
tblLandUse	LandUseSquareFeet	1,063,299.60	1,063,403.00
tblLandUse	LotAcreage	30.63	24.30
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	2.10	0.00
tblSolidWaste	SolidWasteGenerationRate	603.83	0.00
tblSolidWaste	SolidWasteGenerationRate	3,421.68	0.00
tblTripsAndVMT	VendorTripNumber	0.00	71.00
tblTripsAndVMT	VendorTripNumber	0.00	213.00
tblTripsAndVMT	VendorTripNumber	1,406.00	505.00
tblTripsAndVMT	VendorTripNumber	0.00	356.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblTripsAndVMT	VendorTripNumber	0.00	261.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	2.12	0.00
tblVehicleTrips	WD_TR	1.74	0.00
tblWater	IndoorWaterUseRate	148,548,062.50	0.00
tblWater	IndoorWaterUseRate	841,768,500.00	0.00
tblWater	OutdoorWaterUseRate	29,084,059.75	0.00

2.0 Emissions Summary

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	19.2209	80.0544	154.1555	0.5023	57.3908	2.8174	60.2082	19.6279	2.5927	22.2205	0.0000	51,272.1689	51,272.1689	3.7109	2.3289	52,049.9569
2024	17.9859	75.4526	146.0204	0.4917	43.4973	2.3427	45.8400	11.6093	2.1855	13.7948	0.0000	50,432.5952	50,432.5952	3.2550	2.2434	51,182.4954
2025	35.8561	84.4753	164.8238	0.6060	53.8259	2.2424	56.0683	14.4003	2.0986	16.4989	0.0000	62,808.1439	62,808.1439	3.4925	3.2896	63,875.7607
2026	21.1396	34.1662	44.4483	0.1921	12.1684	0.6820	12.8503	3.3170	0.6387	3.9558	0.0000	20,176.8776	20,176.8776	1.1473	1.8079	20,744.3084
Maximum	**35.8561**	**84.4753**	**164.8238**	**0.6060**	**57.3908**	**2.8174**	**60.2082**	**19.6279**	**2.5927**	**22.2205**	**0.0000**	**62,808.1439**	**62,808.1439**	**3.7109**	**3.2896**	**63,875.7607**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	19.2209	80.0544	154.1555	0.5023	43.4973	2.8174	46.0636	11.6093	2.5927	14.0046	0.0000	51,272.1689	51,272.1689	3.7109	2.3289	52,049.9569
2024	17.9859	75.4526	146.0204	0.4917	43.4973	2.3427	45.8400	11.6093	2.1855	13.7948	0.0000	50,432.5951	50,432.5951	3.2550	2.2434	51,182.4954
2025	35.8561	84.4753	164.8238	0.6060	53.8259	2.2424	56.0683	14.4003	2.0986	16.4989	0.0000	62,808.1439	62,808.1439	3.4925	3.2896	63,875.7607
2026	21.1396	34.1662	44.4483	0.1921	12.1684	0.6820	12.8503	3.3170	0.6387	3.9558	0.0000	20,176.8776	20,176.8776	1.1473	1.8079	20,744.3084
Maximum	**35.8561**	**84.4753**	**164.8238**	**0.6060**	**53.8259**	**2.8174**	**56.0683**	**14.4003**	**2.5927**	**16.4989**	**0.0000**	**62,808.1439**	**62,808.1439**	**3.7109**	**3.2896**	**63,875.7607**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**8.33**	**0.00**	**8.08**	**16.38**	**0.00**	**14.55**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	97.2067	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**97.2067**	**9.1200e-003**	**1.0068**	**8.0000e-005**	**0.0000**	**3.5800e-003**	**3.5800e-003**	**0.0000**	**3.5800e-003**	**3.5800e-003**		**2.1636**	**2.1636**	**5.6300e-003**	**0.0000**	**2.3043**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	97.2067	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total	**97.2067**	**9.1200e-003**	**1.0068**	**8.0000e-005**	**0.0000**	**3.5800e-003**	**3.5800e-003**	**0.0000**	**3.5800e-003**	**3.5800e-003**		**2.1636**	**2.1636**	**5.6300e-003**	**0.0000**	**2.3043**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	3/24/2023	5	60	
2	Grading	Grading	3/25/2023	11/30/2023	5	179	
3	Building Construction	Building Construction	12/1/2023	7/17/2025	5	425	
4	Architectural Coating	Architectural Coating	3/28/2025	5/21/2026	5	300	
5	Paving	Paving	7/18/2025	5/21/2026	5	220	

Acres of Grading (Site Preparation Phase): 1500

Acres of Grading (Grading Phase): 4475

Acres of Paving: 74.26

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 6,423,677; Non-Residential Outdoor: 2,141,226; Striped Parking Area: 193,832 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	6	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	5	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	3	8.00	212	0.43
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	3	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Crawler Tractors	6	8.00	212	0.43
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	11	28.00	71.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	33.00	213.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	3,602.00	505.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	720.00	356.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	261.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					56.6229	0.0000	56.6229	19.4139	0.0000	19.4139			0.0000			0.0000
Off-Road	6.0883	66.3832	28.9937	0.0897		2.7970	2.7970		2.5733	2.5733		8,684.6339	8,684.6339	2.8088		8,754.8536
Total	**6.0883**	**66.3832**	**28.9937**	**0.0897**	**56.6229**	**2.7970**	**59.4200**	**19.4139**	**2.5733**	**21.9871**		**8,684.6339**	**8,684.6339**	**2.8088**		**8,754.8536**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0773	2.6305	1.0772	0.0127	0.4549	0.0188	0.4737	0.1310	0.0180	0.1490		1,365.9236	1,365.9236	0.0353	0.2019	1,426.9571
Worker	0.1055	0.0695	0.8691	2.5300e-003	0.3130	1.5500e-003	0.3145	0.0830	1.4200e-003	0.0844		259.1696	259.1696	6.8400e-003	6.9400e-003	261.4097
Total	**0.1828**	**2.6999**	**1.9463**	**0.0153**	**0.7679**	**0.0203**	**0.7882**	**0.2140**	**0.0194**	**0.2334**		**1,625.0932**	**1,625.0932**	**0.0422**	**0.2088**	**1,688.3668**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					22.0830	0.0000	22.0830	7.5714	0.0000	7.5714			0.0000			0.0000
Off-Road	6.0883	66.3832	28.9937	0.0897		2.7970	2.7970		2.5733	2.5733	0.0000	8,684.6339	8,684.6339	2.8088		8,754.8536
Total	**6.0883**	**66.3832**	**28.9937**	**0.0897**	**22.0830**	**2.7970**	**24.8800**	**7.5714**	**2.5733**	**10.1447**	**0.0000**	**8,684.6339**	**8,684.6339**	**2.8088**		**8,754.8536**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0773	2.6305	1.0772	0.0127	0.4549	0.0188	0.4737	0.1310	0.0180	0.1490		1,365.9236	1,365.9236	0.0353	0.2019	1,426.9571
Worker	0.1055	0.0695	0.8691	2.5300e-003	0.3130	1.5500e-003	0.3145	0.0830	1.4200e-003	0.0844		259.1696	259.1696	6.8400e-003	6.9400e-003	261.4097
Total	**0.1828**	**2.6999**	**1.9463**	**0.0153**	**0.7679**	**0.0203**	**0.7882**	**0.2140**	**0.0194**	**0.2334**		**1,625.0932**	**1,625.0932**	**0.0422**	**0.2088**	**1,688.3668**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					38.5567	0.0000	38.5567	9.4832	0.0000	9.4832			0.0000			0.0000
Off-Road	6.3951	68.4302	44.5133	0.1149		2.7413	2.7413		2.5220	2.5220		11,121.2302	11,121.2302	3.5968		11,211.1510
Total	**6.3951**	**68.4302**	**44.5133**	**0.1149**	**38.5567**	**2.7413**	**41.2980**	**9.4832**	**2.5220**	**12.0052**		**11,121.2302**	**11,121.2302**	**3.5968**		**11,211.1510**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2320	7.8914	3.2317	0.0382	1.3646	0.0564	1.4210	0.3930	0.0539	0.4469		4,097.7707	4,097.7707	0.1060	0.6055	4,280.8713
Worker	0.1243	0.0819	1.0243	2.9800e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		305.4499	305.4499	8.0600e-003	8.1800e-003	308.0900
Total	**0.3563**	**7.9733**	**4.2560**	**0.0412**	**1.7335**	**0.0582**	**1.7917**	**0.4908**	**0.0556**	**0.5464**		**4,403.2206**	**4,403.2206**	**0.1141**	**0.6137**	**4,588.9612**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Grading - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					15.0371	0.0000	15.0371	3.6984	0.0000	3.6984			0.0000			0.0000
Off-Road	6.3951	68.4302	44.5133	0.1149		2.7413	2.7413		2.5220	2.5220	0.0000	11,121.2302	11,121.2302	3.5968		11,211.1510
Total	**6.3951**	**68.4302**	**44.5133**	**0.1149**	**15.0371**	**2.7413**	**17.7785**	**3.6984**	**2.5220**	**6.2205**	**0.0000**	**11,121.2302**	**11,121.2302**	**3.5968**		**11,211.1510**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2320	7.8914	3.2317	0.0382	1.3646	0.0564	1.4210	0.3930	0.0539	0.4469		4,097.7707	4,097.7707	0.1060	0.6055	4,280.8713
Worker	0.1243	0.0819	1.0243	2.9800e-003	0.3689	1.8200e-003	0.3707	0.0978	1.6800e-003	0.0995		305.4499	305.4499	8.0600e-003	8.1800e-003	308.0900
Total	**0.3563**	**7.9733**	**4.2560**	**0.0412**	**1.7335**	**0.0582**	**1.7917**	**0.4908**	**0.0556**	**0.5464**		**4,403.2206**	**4,403.2206**	**0.1141**	**0.6137**	**4,588.9612**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.1037	52.4088	34.6941	0.0860		2.2337	2.2337		2.0843	2.0843		8,216.4785	8,216.4785	2.2203		8,271.9848
Total	**5.1037**	**52.4088**	**34.6941**	**0.0860**		**2.2337**	**2.2337**		**2.0843**	**2.0843**		**8,216.4785**	**8,216.4785**	**2.2203**		**8,271.9848**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5499	18.7096	7.6620	0.0906	3.2354	0.1337	3.3691	0.9316	0.1279	1.0595		9,715.3719	9,715.3719	0.2513	1.4357	10,149.4835
Worker	13.5673	8.9360	111.7993	0.3258	40.2619	0.1989	40.4608	10.6776	0.1831	10.8607		33,340.3185	33,340.3185	0.8801	0.8932	33,628.4886
Total	**14.1172**	**27.6456**	**119.4613**	**0.4164**	**43.4973**	**0.3326**	**43.8299**	**11.6093**	**0.3110**	**11.9202**		**43,055.6904**	**43,055.6904**	**1.1314**	**2.3289**	**43,777.9722**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	5.1037	52.4088	34.6941	0.0860		2.2337	2.2337		2.0843	2.0843	0.0000	8,216.4785	8,216.4785	2.2203		8,271.9848
Total	**5.1037**	**52.4088**	**34.6941**	**0.0860**		**2.2337**	**2.2337**		**2.0843**	**2.0843**	**0.0000**	**8,216.4785**	**8,216.4785**	**2.2203**		**8,271.9848**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5499	18.7096	7.6620	0.0906	3.2354	0.1337	3.3691	0.9316	0.1279	1.0595		9,715.3719	9,715.3719	0.2513	1.4357	10,149.4835
Worker	13.5673	8.9360	111.7993	0.3258	40.2619	0.1989	40.4608	10.6776	0.1831	10.8607		33,340.3185	33,340.3185	0.8801	0.8932	33,628.4886
Total	**14.1172**	**27.6456**	**119.4613**	**0.4164**	**43.4973**	**0.3326**	**43.8299**	**11.6093**	**0.3110**	**11.9202**		**43,055.6904**	**43,055.6904**	**1.1314**	**2.3289**	**43,777.9722**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.8149	48.6489	34.2556	0.0860		2.0200	2.0200		1.8837	1.8837		8,218.7297	8,218.7297	2.2137		8,274.0716
Total	**4.8149**	**48.6489**	**34.2556**	**0.0860**		**2.0200**	**2.0200**		**1.8837**	**1.8837**		**8,218.7297**	**8,218.7297**	**2.2137**		**8,274.0716**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5362	18.8738	7.5365	0.0894	3.2354	0.1316	3.3670	0.9316	0.1259	1.0575		9,581.7170	9,581.7170	0.2436	1.4157	10,009.6762
Worker	12.6348	7.9299	104.2283	0.3163	40.2619	0.1911	40.4530	10.6776	0.1759	10.8536		32,632.1485	32,632.1485	0.7978	0.8277	32,898.7476
Total	**13.1710**	**26.8037**	**111.7647**	**0.4057**	**43.4973**	**0.3227**	**43.8200**	**11.6093**	**0.3018**	**11.9111**		**42,213.8654**	**42,213.8654**	**1.0414**	**2.2434**	**42,908.4238**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.8149	48.6489	34.2556	0.0860		2.0200	2.0200		1.8837	1.8837	0.0000	8,218.7297	8,218.7297	2.2137		8,274.0716
Total	**4.8149**	**48.6489**	**34.2556**	**0.0860**		**2.0200**	**2.0200**		**1.8837**	**1.8837**	**0.0000**	**8,218.7297**	**8,218.7297**	**2.2137**		**8,274.0716**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5362	18.8738	7.5365	0.0894	3.2354	0.1316	3.3670	0.9316	0.1259	1.0575		9,581.7170	9,581.7170	0.2436	1.4157	10,009.6762
Worker	12.6348	7.9299	104.2283	0.3163	40.2619	0.1911	40.4530	10.6776	0.1759	10.8536		32,632.1485	32,632.1485	0.7978	0.8277	32,898.7476
Total	**13.1710**	**26.8037**	**111.7647**	**0.4057**	**43.4973**	**0.3227**	**43.8200**	**11.6093**	**0.3018**	**11.9111**		**42,213.8654**	**42,213.8654**	**1.0414**	**2.2434**	**42,908.4238**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.3616	42.4683	33.5203	0.0860		1.7316	1.7316		1.6149	1.6149		8,216.4726	8,216.4726	2.2056		8,271.6136
Total	**4.3616**	**42.4683**	**33.5203**	**0.0860**		**1.7316**	**1.7316**		**1.6149**	**1.6149**		**8,216.4726**	**8,216.4726**	**2.2056**		**8,271.6136**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5250	18.7623	7.4197	0.0876	3.2353	0.1314	3.3667	0.9316	0.1257	1.0573		9,395.6540	9,395.6540	0.2365	1.3874	9,815.0019
Worker	11.7879	7.0763	96.8765	0.3056	40.2619	0.1818	40.4437	10.6776	0.1673	10.8450		31,834.0145	31,834.0145	0.7193	0.7703	32,081.5346
Total	**12.3129**	**25.8387**	**104.2963**	**0.3932**	**43.4972**	**0.3132**	**43.8104**	**11.6093**	**0.2930**	**11.9023**		**41,229.6686**	**41,229.6686**	**0.9558**	**2.1576**	**41,896.5366**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	4.3616	42.4683	33.5203	0.0860		1.7316	1.7316		1.6149	1.6149	0.0000	8,216.4726	8,216.4726	2.2056		8,271.6136
Total	**4.3616**	**42.4683**	**33.5203**	**0.0860**		**1.7316**	**1.7316**		**1.6149**	**1.6149**	**0.0000**	**8,216.4726**	**8,216.4726**	**2.2056**		**8,271.6136**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.5250	18.7623	7.4197	0.0876	3.2353	0.1314	3.3667	0.9316	0.1257	1.0573		9,395.6540	9,395.6540	0.2365	1.3874	9,815.0019
Worker	11.7879	7.0763	96.8765	0.3056	40.2619	0.1818	40.4437	10.6776	0.1673	10.8450		31,834.0145	31,834.0145	0.7193	0.7703	32,081.5346
Total	**12.3129**	**25.8387**	**104.2963**	**0.3932**	**43.4972**	**0.3132**	**43.8104**	**11.6093**	**0.2930**	**11.9023**		**41,229.6686**	**41,229.6686**	**0.9558**	**2.1576**	**41,896.5366**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.2275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687		375.2641	375.2641	0.0205		375.7758
Total	**16.4553**	**1.5273**	**2.4122**	**3.9600e-003**		**0.0687**	**0.0687**		**0.0687**	**0.0687**		**375.2641**	**375.2641**	**0.0205**		**375.7758**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3701	13.2265	5.2305	0.0618	2.2808	0.0926	2.3734	0.6567	0.0886	0.7453		6,623.4710	6,623.4710	0.1667	0.9780	6,919.0905
Worker	2.3563	1.4145	19.3646	0.0611	8.0479	0.0363	8.0842	2.1343	0.0334	2.1678		6,363.2678	6,363.2678	0.1438	0.1540	6,412.7443
Total	**2.7264**	**14.6410**	**24.5951**	**0.1229**	**10.3287**	**0.1290**	**10.4576**	**2.7911**	**0.1220**	**2.9131**		**12,986.7387**	**12,986.7387**	**0.3105**	**1.1320**	**13,331.8348**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.2275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687	0.0000	375.2641	375.2641	0.0205		375.7758
Total	**16.4553**	**1.5273**	**2.4122**	**3.9600e-003**		**0.0687**	**0.0687**		**0.0687**	**0.0687**	**0.0000**	**375.2641**	**375.2641**	**0.0205**		**375.7758**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3701	13.2265	5.2305	0.0618	2.2808	0.0926	2.3734	0.6567	0.0886	0.7453		6,623.4710	6,623.4710	0.1667	0.9780	6,919.0905
Worker	2.3563	1.4145	19.3646	0.0611	8.0479	0.0363	8.0842	2.1343	0.0334	2.1678		6,363.2678	6,363.2678	0.1438	0.1540	6,412.7443
Total	**2.7264**	**14.6410**	**24.5951**	**0.1229**	**10.3287**	**0.1290**	**10.4576**	**2.7911**	**0.1220**	**2.9131**		**12,986.7387**	**12,986.7387**	**0.3105**	**1.1320**	**13,331.8348**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.2275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687		375.2641	375.2641	0.0205		375.7758
Total	**16.4553**	**1.5273**	**2.4122**	**3.9600e-003**		**0.0687**	**0.0687**		**0.0687**	**0.0687**		**375.2641**	**375.2641**	**0.0205**		**375.7758**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3631	13.1297	5.1617	0.0606	2.2807	0.0921	2.3728	0.6567	0.0881	0.7448		6,491.9660	6,491.9660	0.1616	0.9580	6,781.4894
Worker	2.2095	1.2750	18.1344	0.0592	8.0479	0.0345	8.0824	2.1343	0.0317	2.1661		6,213.8870	6,213.8870	0.1304	0.1445	6,260.2120
Total	**2.5726**	**14.4047**	**23.2961**	**0.1197**	**10.3286**	**0.1265**	**10.4552**	**2.7911**	**0.1198**	**2.9109**		**12,705.8530**	**12,705.8530**	**0.2919**	**1.1025**	**13,041.7014**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Architectural Coating - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	16.2275					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2278	1.5273	2.4122	3.9600e-003		0.0687	0.0687		0.0687	0.0687	0.0000	375.2641	375.2641	0.0205		375.7758
Total	**16.4553**	**1.5273**	**2.4122**	**3.9600e-003**		**0.0687**	**0.0687**		**0.0687**	**0.0687**	**0.0000**	**375.2641**	**375.2641**	**0.0205**		**375.7758**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.3631	13.1297	5.1617	0.0606	2.2807	0.0921	2.3728	0.6567	0.0881	0.7448		6,491.9660	6,491.9660	0.1616	0.9580	6,781.4894
Worker	2.2095	1.2750	18.1344	0.0592	8.0479	0.0345	8.0824	2.1343	0.0317	2.1661		6,213.8870	6,213.8870	0.1304	0.1445	6,260.2120
Total	**2.5726**	**14.4047**	**23.2961**	**0.1197**	**10.3286**	**0.1265**	**10.4552**	**2.7911**	**0.1198**	**2.9109**		**12,705.8530**	**12,705.8530**	**0.2919**	**1.1025**	**13,041.7014**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7995**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2713	9.6970	3.8348	0.0453	1.6721	0.0679	1.7400	0.4815	0.0650	0.5465		4,855.9717	4,855.9717	0.1222	0.7170	5,072.7040
Worker	0.0491	0.0295	0.4034	1.2700e-003	0.1677	7.6000e-004	0.1684	0.0445	7.0000e-004	0.0452		132.5681	132.5681	3.0000e-003	3.2100e-003	133.5988
Total	**0.3204**	**9.7264**	**4.2382**	**0.0466**	**1.8398**	**0.0687**	**1.9085**	**0.5260**	**0.0657**	**0.5916**		**4,988.5398**	**4,988.5398**	**0.1252**	**0.7202**	**5,206.3028**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7995**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2713	9.6970	3.8348	0.0453	1.6721	0.0679	1.7400	0.4815	0.0650	0.5465		4,855.9717	4,855.9717	0.1222	0.7170	5,072.7040
Worker	0.0491	0.0295	0.4034	1.2700e-003	0.1677	7.6000e-004	0.1684	0.0445	7.0000e-004	0.0452		132.5681	132.5681	3.0000e-003	3.2100e-003	133.5988
Total	**0.3204**	**9.7264**	**4.2382**	**0.0466**	**1.8398**	**0.0687**	**1.9085**	**0.5260**	**0.0657**	**0.5916**		**4,988.5398**	**4,988.5398**	**0.1252**	**0.7202**	**5,206.3028**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7995**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2662	9.6260	3.7843	0.0444	1.6721	0.0675	1.7396	0.4815	0.0646	0.5461		4,759.5594	4,759.5594	0.1185	0.7024	4,971.8223
Worker	0.0460	0.0266	0.3778	1.2300e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		129.4560	129.4560	2.7200e-003	3.0100e-003	130.4211
Total	**0.3122**	**9.6526**	**4.1621**	**0.0456**	**1.8398**	**0.0682**	**1.9080**	**0.5260**	**0.0652**	**0.5912**		**4,889.0154**	**4,889.0154**	**0.1212**	**0.7054**	**5,102.2434**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.8844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.7995**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.2662	9.6260	3.7843	0.0444	1.6721	0.0675	1.7396	0.4815	0.0646	0.5461		4,759.5594	4,759.5594	0.1185	0.7024	4,971.8223
Worker	0.0460	0.0266	0.3778	1.2300e-003	0.1677	7.2000e-004	0.1684	0.0445	6.6000e-004	0.0451		129.4560	129.4560	2.7200e-003	3.0100e-003	130.4211
Total	**0.3122**	**9.6526**	**4.1621**	**0.0456**	**1.8398**	**0.0682**	**1.9080**	**0.5260**	**0.0652**	**0.5912**		**4,889.0154**	**4,889.0154**	**0.1212**	**0.7054**	**5,102.2434**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Other Asphalt Surfaces	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Parking Lot	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Refrigerated Warehouse-No Rail	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Unrefrigerated Warehouse-No Rail	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	97.2067	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043
Unmitigated	97.2067	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.1224					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	85.9916					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0927	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043
Total	**97.2067**	**9.1200e-003**	**1.0068**	**8.0000e-005**		**3.5800e-003**	**3.5800e-003**		**3.5800e-003**	**3.5800e-003**		**2.1636**	**2.1636**	**5.6300e-003**		**2.3043**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	11.1224					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	85.9916					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0927	9.1200e-003	1.0068	8.0000e-005		3.5800e-003	3.5800e-003		3.5800e-003	3.5800e-003		2.1636	2.1636	5.6300e-003		2.3043
Total	**97.2067**	**9.1200e-003**	**1.0068**	**8.0000e-005**		**3.5800e-003**	**3.5800e-003**		**3.5800e-003**	**3.5800e-003**		**2.1636**	**2.1636**	**5.6300e-003**		**2.3043**

7.0 Water Detail

7.1 Mitigation Measures Water

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs)

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	642.37	1000sqft	14.75	642,368.00	0
Unrefrigerated Warehouse-No Rail	3,640.08	1000sqft	83.56	3,640,083.00	0
Other Asphalt Surfaces	2,176.19	1000sqft	49.96	2,176,187.00	0
Parking Lot	3,403.00	Space	24.30	1,054,353.00	0
City Park	24.41	Acre	24.41	1,063,403.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project Area is 196.98 acres

Construction Phase - Construction anticipated to beging January 2023 and end in May 2026

Off-road Equipment - Hours are based on an 8-hour workday

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Off-road Equipment -

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Off-road Equipment - Equipment adjusted based on the changes made to the number of days for each construction phase

Trips and VMT - CalEEMod only assumes Vendor Trips during Building Construction. The CalEEMod default trips were ratioed between each phase based on the number of days

Grading - Analysis conservatively assumes that up to 25 acres can be disturbed per day

Architectural Coating - MM Impact 5.3.2

Vehicle Trips - Construction run only

Energy Use - Construction run only

Water And Wastewater - Construction run only

Solid Waste - Construction run only

Construction Off-road Equipment Mitigation - Rule 403

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	10.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	10.00
tblConstructionPhase	NumDays	220.00	300.00
tblConstructionPhase	NumDays	3,100.00	425.00
tblConstructionPhase	NumDays	310.00	179.00
tblConstructionPhase	NumDays	120.00	60.00
tblEnergyUse	LightingElect	0.35	0.00
tblEnergyUse	LightingElect	2.37	0.00
tblEnergyUse	LightingElect	1.17	0.00
tblEnergyUse	NT24E	36.52	0.00
tblEnergyUse	NT24E	0.82	0.00
tblEnergyUse	NT24NG	48.51	0.00
tblEnergyUse	NT24NG	0.03	0.00
tblEnergyUse	T24E	0.95	0.00
tblEnergyUse	T24E	0.33	0.00
tblEnergyUse	T24NG	3.22	0.00
tblEnergyUse	T24NG	1.98	0.00
tblGrading	AcresOfGrading	1,163.50	4,475.00

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblGrading	AcresOfGrading	330.00	1,500.00
tblLandUse	LandUseSquareFeet	642,370.00	642,368.00
tblLandUse	LandUseSquareFeet	3,640,080.00	3,640,083.00
tblLandUse	LandUseSquareFeet	2,176,190.00	2,176,187.00
tblLandUse	LandUseSquareFeet	1,361,200.00	1,054,353.00
tblLandUse	LandUseSquareFeet	1,063,299.60	1,063,403.00
tblLandUse	LotAcreage	30.63	24.30
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	6.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	5.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	2.00
tblOffRoadEquipment	UsageHours	6.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblOffRoadEquipment	UsageHours	7.00	8.00
tblSolidWaste	SolidWasteGenerationRate	2.10	0.00
tblSolidWaste	SolidWasteGenerationRate	603.83	0.00
tblSolidWaste	SolidWasteGenerationRate	3,421.68	0.00
tblTripsAndVMT	VendorTripNumber	0.00	71.00
tblTripsAndVMT	VendorTripNumber	0.00	213.00
tblTripsAndVMT	VendorTripNumber	1,406.00	505.00
tblTripsAndVMT	VendorTripNumber	0.00	356.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblTripsAndVMT	VendorTripNumber	0.00	261.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CNW_TTP	41.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	CW_TTP	59.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	DV_TP	5.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00
tblVehicleTrips	PB_TP	3.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	PR_TP	92.00	0.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.12	0.00
tblVehicleTrips	ST_TR	1.74	0.00
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	2.12	0.00
tblVehicleTrips	SU_TR	1.74	0.00
tblVehicleTrips	WD_TR	0.78	0.00
tblVehicleTrips	WD_TR	2.12	0.00
tblVehicleTrips	WD_TR	1.74	0.00
tblWater	IndoorWaterUseRate	148,548,062.50	0.00
tblWater	IndoorWaterUseRate	841,768,500.00	0.00
tblWater	OutdoorWaterUseRate	29,084,059.75	0.00

2.0 Emissions Summary

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.9835	9.7521	6.9678	0.0225	5.7729	0.3620	6.1349	1.6006	0.3336	1.9342	0.0000	2,035.7386	2,035.7386	0.4110	0.0779	2,069.2315
2024	2.2328	9.9243	19.7711	0.0652	5.5910	0.3069	5.8979	1.4945	0.2863	1.7808	0.0000	6,068.6168	6,068.6168	0.3883	0.2696	6,158.6607
2025	3.1389	7.5653	13.9960	0.0513	4.1469	0.1938	4.3407	1.1140	0.1812	1.2952	0.0000	4,829.2041	4,829.2041	0.2798	0.2818	4,920.1733
2026	1.0599	1.7236	2.2824	9.7500e-003	0.6035	0.0344	0.6379	0.1648	0.0322	0.1970	0.0000	929.3451	929.3451	0.0527	0.0829	955.3775
Maximum	**3.1389**	**9.9243**	**19.7711**	**0.0652**	**5.7729**	**0.3620**	**6.1349**	**1.6006**	**0.3336**	**1.9342**	**0.0000**	**6,068.6168**	**6,068.6168**	**0.4110**	**0.2818**	**6,158.6607**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.9835	9.7521	6.9678	0.0225	2.6317	0.3620	2.9937	0.7276	0.3336	1.0612	0.0000	2,035.7372	2,035.7372	0.4110	0.0779	2,069.2300
2024	2.2328	9.9243	19.7711	0.0652	5.5910	0.3069	5.8979	1.4945	0.2863	1.7808	0.0000	6,068.6156	6,068.6156	0.3883	0.2696	6,158.6596
2025	3.1389	7.5653	13.9960	0.0513	4.1469	0.1938	4.3407	1.1140	0.1812	1.2952	0.0000	4,829.2033	4,829.2033	0.2798	0.2818	4,920.1725
2026	1.0599	1.7236	2.2824	9.7500e-003	0.6035	0.0344	0.6379	0.1648	0.0322	0.1970	0.0000	929.3449	929.3449	0.0527	0.0829	955.3773
Maximum	**3.1389**	**9.9243**	**19.7711**	**0.0652**	**5.5910**	**0.3620**	**5.8979**	**1.4945**	**0.3336**	**1.7808**	**0.0000**	**6,068.6156**	**6,068.6156**	**0.4110**	**0.2818**	**6,158.6596**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**19.49**	**0.00**	**18.47**	**19.96**	**0.00**	**16.77**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	1-2-2023	4-1-2023	2.4442	2.4442
2	4-2-2023	7-1-2023	2.6895	2.6895
3	7-2-2023	10-1-2023	2.7192	2.7192
4	10-2-2023	1-1-2024	2.9144	2.9144
5	1-2-2024	4-1-2024	3.0364	3.0364
6	4-2-2024	7-1-2024	3.0076	3.0076
7	7-2-2024	10-1-2024	3.0410	3.0410
8	10-2-2024	1-1-2025	3.0671	3.0671

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

9	**1-2-2025**	**4-1-2025**	2.7941	2.7941
10	**4-2-2025**	**7-1-2025**	3.8597	3.8597
11	**7-2-2025**	**10-1-2025**	2.1616	2.1616
12	**10-2-2025**	**1-1-2026**	1.8325	1.8325
13	**1-2-2026**	**4-1-2026**	1.7773	1.7773
14	**4-2-2026**	**7-1-2026**	0.9670	0.9670
		Highest	3.8597	3.8597

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	17.7349	1.1400e-003	0.1258	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.2454	0.2454	6.4000e-004	0.0000	0.2613
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**17.7349**	**1.1400e-003**	**0.1258**	**1.0000e-005**	**0.0000**	**4.5000e-004**	**4.5000e-004**	**0.0000**	**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.2454**	**0.2454**	**6.4000e-004**	**0.0000**	**0.2613**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	17.7349	1.1400e-003	0.1258	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.2454	0.2454	6.4000e-004	0.0000	0.2613
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**17.7349**	**1.1400e-003**	**0.1258**	**1.0000e-005**	**0.0000**	**4.5000e-004**	**4.5000e-004**	**0.0000**	**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.2454**	**0.2454**	**6.4000e-004**	**0.0000**	**0.2613**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/2/2023	3/24/2023	5	60	
2	Grading	Grading	3/25/2023	11/30/2023	5	179	
3	Building Construction	Building Construction	12/1/2023	7/17/2025	5	425	

4	Architectural Coating	Architectural Coating	3/28/2025	5/21/2026	5	300	
5	Paving	Paving	7/18/2025	5/21/2026	5	220	

Acres of Grading (Site Preparation Phase): 1500

Acres of Grading (Grading Phase): 4475

Acres of Paving: 74.26

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 6,423,677; Non-Residential Outdoor: 2,141,226; Striped Parking Area: 193,832 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Crawler Tractors	6	8.00	212	0.43
Site Preparation	Rubber Tired Dozers	5	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Crawler Tractors	3	8.00	212	0.43
Grading	Excavators	3	8.00	158	0.38
Grading	Graders	2	8.00	187	0.41
Grading	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Scrapers	3	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Cranes	2	8.00	231	0.29
Building Construction	Crawler Tractors	6	8.00	212	0.43
Building Construction	Forklifts	6	8.00	89	0.20
Building Construction	Generator Sets	2	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Building Construction	Welders	2	8.00	46	0.45
Architectural Coating	Air Compressors	1	8.00	78	0.48
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36

Paving	Rollers	2	8.00	80	0.38

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	11	28.00	71.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	13	33.00	213.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	18	3,602.00	505.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	720.00	356.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	261.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.6987	0.0000	1.6987	0.5824	0.0000	0.5824	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1827	1.9915	0.8698	2.6900e-003		0.0839	0.0839		0.0772	0.0772	0.0000	236.3570	236.3570	0.0764	0.0000	238.2681
Total	**0.1827**	**1.9915**	**0.8698**	**2.6900e-003**	**1.6987**	**0.0839**	**1.7826**	**0.5824**	**0.0772**	**0.6596**	**0.0000**	**236.3570**	**236.3570**	**0.0764**	**0.0000**	**238.2681**

3.2 Site Preparation - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4000e-003	0.0786	0.0318	3.8000e-004	0.0134	5.6000e-004	0.0140	3.8800e-003	5.4000e-004	4.4200e-003	0.0000	37.1223	37.1223	9.7000e-004	5.4900e-003	38.7813
Worker	2.9300e-003	2.1800e-003	0.0273	8.0000e-005	9.2100e-003	5.0000e-005	9.2600e-003	2.4500e-003	4.0000e-005	2.4900e-003	0.0000	7.1934	7.1934	1.9000e-004	2.0000e-004	7.2563
Total	**5.3300e-003**	**0.0808**	**0.0591**	**4.6000e-004**	**0.0226**	**6.1000e-004**	**0.0233**	**6.3300e-003**	**5.8000e-004**	**6.9100e-003**	**0.0000**	**44.3157**	**44.3157**	**1.1600e-003**	**5.6900e-003**	**46.0376**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.6625	0.0000	0.6625	0.2271	0.0000	0.2271	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.1827	1.9915	0.8698	2.6900e-003		0.0839	0.0839		0.0772	0.0772	0.0000	236.3567	236.3567	0.0764	0.0000	238.2678
Total	**0.1827**	**1.9915**	**0.8698**	**2.6900e-003**	**0.6625**	**0.0839**	**0.7464**	**0.2271**	**0.0772**	**0.3043**	**0.0000**	**236.3567**	**236.3567**	**0.0764**	**0.0000**	**238.2678**

3.2 Site Preparation - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4000e-003	0.0786	0.0318	3.8000e-004	0.0134	5.6000e-004	0.0140	3.8800e-003	5.4000e-004	4.4200e-003	0.0000	37.1223	37.1223	9.7000e-004	5.4900e-003	38.7813
Worker	2.9300e-003	2.1800e-003	0.0273	8.0000e-005	9.2100e-003	5.0000e-005	9.2600e-003	2.4500e-003	4.0000e-005	2.4900e-003	0.0000	7.1934	7.1934	1.9000e-004	2.0000e-004	7.2563
Total	**5.3300e-003**	**0.0808**	**0.0591**	**4.6000e-004**	**0.0226**	**6.1000e-004**	**0.0233**	**6.3300e-003**	**5.8000e-004**	**6.9100e-003**	**0.0000**	**44.3157**	**44.3157**	**1.1600e-003**	**5.6900e-003**	**46.0376**

3.3 Grading - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					3.4508	0.0000	3.4508	0.8487	0.0000	0.8487	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5724	6.1245	3.9839	0.0103		0.2454	0.2454		0.2257	0.2257	0.0000	902.9664	902.9664	0.2920	0.0000	910.2674
Total	**0.5724**	**6.1245**	**3.9839**	**0.0103**	**3.4508**	**0.2454**	**3.6962**	**0.8487**	**0.2257**	**1.0745**	**0.0000**	**902.9664**	**902.9664**	**0.2920**	**0.0000**	**910.2674**

3.3 Grading - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0215	0.7033	0.2847	3.4100e-003	0.1202	5.0300e-003	0.1253	0.0347	4.8200e-003	0.0395	0.0000	332.2444	332.2444	8.6500e-003	0.0491	347.0923
Worker	0.0103	7.6800e-003	0.0961	2.7000e-004	0.0324	1.6000e-004	0.0326	8.6000e-003	1.5000e-004	8.7500e-003	0.0000	25.2926	25.2926	6.6000e-004	6.9000e-004	25.5137
Total	**0.0318**	**0.7110**	**0.3808**	**3.6800e-003**	**0.1526**	**5.1900e-003**	**0.1578**	**0.0433**	**4.9700e-003**	**0.0483**	**0.0000**	**357.5370**	**357.5370**	**9.3100e-003**	**0.0498**	**372.6060**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					1.3458	0.0000	1.3458	0.3310	0.0000	0.3310	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.5724	6.1245	3.9839	0.0103		0.2454	0.2454		0.2257	0.2257	0.0000	902.9654	902.9654	0.2920	0.0000	910.2663
Total	**0.5724**	**6.1245**	**3.9839**	**0.0103**	**1.3458**	**0.2454**	**1.5912**	**0.3310**	**0.2257**	**0.5567**	**0.0000**	**902.9654**	**902.9654**	**0.2920**	**0.0000**	**910.2663**

3.3 Grading - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0215	0.7033	0.2847	3.4100e-003	0.1202	5.0300e-003	0.1253	0.0347	4.8200e-003	0.0395	0.0000	332.2444	332.2444	8.6500e-003	0.0491	347.0923
Worker	0.0103	7.6800e-003	0.0961	2.7000e-004	0.0324	1.6000e-004	0.0326	8.6000e-003	1.5000e-004	8.7500e-003	0.0000	25.2926	25.2926	6.6000e-004	6.9000e-004	25.5137
Total	**0.0318**	**0.7110**	**0.3808**	**3.6800e-003**	**0.1526**	**5.1900e-003**	**0.1578**	**0.0433**	**4.9700e-003**	**0.0483**	**0.0000**	**357.5370**	**357.5370**	**9.3100e-003**	**0.0498**	**372.6060**

3.4 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0536	0.5503	0.3643	9.0000e-004		0.0235	0.0235		0.0219	0.0219	0.0000	78.2656	78.2656	0.0212	0.0000	78.7943
Total	**0.0536**	**0.5503**	**0.3643**	**9.0000e-004**		**0.0235**	**0.0235**		**0.0219**	**0.0219**	**0.0000**	**78.2656**	**78.2656**	**0.0212**	**0.0000**	**78.7943**

3.4 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9800e-003	0.1956	0.0792	9.5000e-004	0.0334	1.4000e-003	0.0348	9.6500e-003	1.3400e-003	0.0110	0.0000	92.4136	92.4136	2.4100e-003	0.0137	96.5435
Worker	0.1318	0.0984	1.2306	3.4900e-003	0.4147	2.0900e-003	0.4168	0.1101	1.9200e-003	0.1121	0.0000	323.8834	323.8834	8.5000e-003	8.7900e-003	326.7147
Total	**0.1378**	**0.2940**	**1.3098**	**4.4400e-003**	**0.4481**	**3.4900e-003**	**0.4516**	**0.1198**	**3.2600e-003**	**0.1231**	**0.0000**	**416.2970**	**416.2970**	**0.0109**	**0.0225**	**423.2582**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0536	0.5503	0.3643	9.0000e-004		0.0235	0.0235		0.0219	0.0219	0.0000	78.2655	78.2655	0.0212	0.0000	78.7942
Total	**0.0536**	**0.5503**	**0.3643**	**9.0000e-004**		**0.0235**	**0.0235**		**0.0219**	**0.0219**	**0.0000**	**78.2655**	**78.2655**	**0.0212**	**0.0000**	**78.7942**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.9800e-003	0.1956	0.0792	9.5000e-004	0.0334	1.4000e-003	0.0348	9.6500e-003	1.3400e-003	0.0110	0.0000	92.4136	92.4136	2.4100e-003	0.0137	96.5435
Worker	0.1318	0.0984	1.2306	3.4900e-003	0.4147	2.0900e-003	0.4168	0.1101	1.9200e-003	0.1121	0.0000	323.8834	323.8834	8.5000e-003	8.7900e-003	326.7147
Total	**0.1378**	**0.2940**	**1.3098**	**4.4400e-003**	**0.4481**	**3.4900e-003**	**0.4516**	**0.1198**	**3.2600e-003**	**0.1231**	**0.0000**	**416.2970**	**416.2970**	**0.0109**	**0.0225**	**423.2582**

3.4 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.6308	6.3730	4.4875	0.0113		0.2646	0.2646		0.2468	0.2468	0.0000	976.7237	976.7237	0.2631	0.0000	983.3006
Total	**0.6308**	**6.3730**	**4.4875**	**0.0113**		**0.2646**	**0.2646**		**0.2468**	**0.2468**	**0.0000**	**976.7237**	**976.7237**	**0.2631**	**0.0000**	**983.3006**

3.4 Building Construction - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0729	2.4626	0.9718	0.0117	0.4172	0.0172	0.4344	0.1204	0.0165	0.1369	0.0000	1,137.0954	1,137.0954	0.0291	0.1680	1,187.8898
Worker	1.5292	1.0887	14.3118	0.0423	5.1738	0.0250	5.1988	1.3741	0.0231	1.3972	0.0000	3,954.7976	3,954.7976	0.0961	0.1016	3,987.4703
Total	**1.6021**	**3.5513**	**15.2836**	**0.0540**	**5.5910**	**0.0422**	**5.6333**	**1.4945**	**0.0395**	**1.5340**	**0.0000**	**5,091.8931**	**5,091.8931**	**0.1252**	**0.2696**	**5,175.3601**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.6308	6.3730	4.4875	0.0113		0.2646	0.2646		0.2468	0.2468	0.0000	976.7226	976.7226	0.2631	0.0000	983.2994
Total	**0.6308**	**6.3730**	**4.4875**	**0.0113**		**0.2646**	**0.2646**		**0.2468**	**0.2468**	**0.0000**	**976.7226**	**976.7226**	**0.2631**	**0.0000**	**983.2994**

3.4 Building Construction - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0729	2.4626	0.9718	0.0117	0.4172	0.0172	0.4344	0.1204	0.0165	0.1369	0.0000	1,137.0954	1,137.0954	0.0291	0.1680	1,187.8898
Worker	1.5292	1.0887	14.3118	0.0423	5.1738	0.0250	5.1988	1.3741	0.0231	1.3972	0.0000	3,954.7976	3,954.7976	0.0961	0.1016	3,987.4703
Total	**1.6021**	**3.5513**	**15.2836**	**0.0540**	**5.5910**	**0.0422**	**5.6333**	**1.4945**	**0.0395**	**1.5340**	**0.0000**	**5,091.8931**	**5,091.8931**	**0.1252**	**0.2696**	**5,175.3601**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3097	3.0153	2.3799	6.1000e-003		0.1229	0.1229		0.1147	0.1147	0.0000	529.2240	529.2240	0.1421	0.0000	532.7756
Total	**0.3097**	**3.0153**	**2.3799**	**6.1000e-003**		**0.1229**	**0.1229**		**0.1147**	**0.1147**	**0.0000**	**529.2240**	**529.2240**	**0.1421**	**0.0000**	**532.7756**

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0387	1.3266	0.5185	6.2100e-003	0.2261	9.3100e-003	0.2354	0.0653	8.9000e-003	0.0742	0.0000	604.3128	604.3128	0.0153	0.0892	631.2880
Worker	0.7721	0.5264	7.2088	0.0221	2.8041	0.0129	2.8170	0.7447	0.0119	0.7566	0.0000	2,090.9098	2,090.9098	0.0470	0.0512	2,107.3479
Total	**0.8108**	**1.8530**	**7.7273**	**0.0283**	**3.0302**	**0.0222**	**3.0525**	**0.8100**	**0.0208**	**0.8308**	**0.0000**	**2,695.2226**	**2,695.2226**	**0.0623**	**0.1405**	**2,738.6359**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.3097	3.0153	2.3799	6.1000e-003		0.1229	0.1229		0.1147	0.1147	0.0000	529.2233	529.2233	0.1421	0.0000	532.7750
Total	**0.3097**	**3.0153**	**2.3799**	**6.1000e-003**		**0.1229**	**0.1229**		**0.1147**	**0.1147**	**0.0000**	**529.2233**	**529.2233**	**0.1421**	**0.0000**	**532.7750**

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0387	1.3266	0.5185	6.2100e-003	0.2261	9.3100e-003	0.2354	0.0653	8.9000e-003	0.0742	0.0000	604.3128	604.3128	0.0153	0.0892	631.2880
Worker	0.7721	0.5264	7.2088	0.0221	2.8041	0.0129	2.8170	0.7447	0.0119	0.7566	0.0000	2,090.9098	2,090.9098	0.0470	0.0512	2,107.3479
Total	**0.8108**	**1.8530**	**7.7273**	**0.0283**	**3.0302**	**0.0222**	**3.0525**	**0.8100**	**0.0208**	**0.8308**	**0.0000**	**2,695.2226**	**2,695.2226**	**0.0623**	**0.1405**	**2,738.6359**

3.5 Architectural Coating - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.1520	0.2400	3.9000e-004		6.8300e-003	6.8300e-003		6.8300e-003	6.8300e-003	0.0000	33.8732	33.8732	1.8500e-003	0.0000	33.9194
Total	**1.6373**	**0.1520**	**0.2400**	**3.9000e-004**		**6.8300e-003**	**6.8300e-003**		**6.8300e-003**	**6.8300e-003**	**0.0000**	**33.8732**	**33.8732**	**1.8500e-003**	**0.0000**	**33.9194**

3.5 Architectural Coating - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0383	1.3106	0.5122	6.1400e-003	0.2234	9.2000e-003	0.2326	0.0645	8.8000e-003	0.0733	0.0000	597.0149	597.0149	0.0151	0.0882	623.6643
Worker	0.2163	0.1475	2.0194	6.2000e-003	0.7855	3.6200e-003	0.7891	0.2086	3.3300e-003	0.2120	0.0000	585.7183	585.7183	0.0132	0.0144	590.3231
Total	**0.2545**	**1.4580**	**2.5316**	**0.0123**	**1.0089**	**0.0128**	**1.0217**	**0.2731**	**0.0121**	**0.2852**	**0.0000**	**1,182.7332**	**1,182.7332**	**0.0283**	**0.1025**	**1,213.9874**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.6146					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0227	0.1520	0.2400	3.9000e-004		6.8300e-003	6.8300e-003		6.8300e-003	6.8300e-003	0.0000	33.8731	33.8731	1.8500e-003	0.0000	33.9193
Total	**1.6373**	**0.1520**	**0.2400**	**3.9000e-004**		**6.8300e-003**	**6.8300e-003**		**6.8300e-003**	**6.8300e-003**	**0.0000**	**33.8731**	**33.8731**	**1.8500e-003**	**0.0000**	**33.9193**

3.5 Architectural Coating - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0383	1.3106	0.5122	6.1400e-003	0.2234	9.2000e-003	0.2326	0.0645	8.8000e-003	0.0733	0.0000	597.0149	597.0149	0.0151	0.0882	623.6643
Worker	0.2163	0.1475	2.0194	6.2000e-003	0.7855	3.6200e-003	0.7891	0.2086	3.3300e-003	0.2120	0.0000	585.7183	585.7183	0.0132	0.0144	590.3231
Total	**0.2545**	**1.4580**	**2.5316**	**0.0123**	**1.0089**	**0.0128**	**1.0217**	**0.2731**	**0.0121**	**0.2852**	**0.0000**	**1,182.7332**	**1,182.7332**	**0.0283**	**0.1025**	**1,213.9874**

3.5 Architectural Coating - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8195					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.0771	0.1218	2.0000e-004		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	17.1919	17.1919	9.4000e-004	0.0000	17.2154
Total	**0.8310**	**0.0771**	**0.1218**	**2.0000e-004**		**3.4700e-003**	**3.4700e-003**		**3.4700e-003**	**3.4700e-003**	**0.0000**	**17.1919**	**17.1919**	**9.4000e-004**	**0.0000**	**17.2154**

3.5 Architectural Coating - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0191	0.6602	0.2565	3.0500e-003	0.1134	4.6400e-003	0.1180	0.0327	4.4400e-003	0.0372	0.0000	296.9883	296.9883	7.4400e-003	0.0438	310.2348
Worker	0.1028	0.0674	0.9598	3.0500e-003	0.3987	1.7400e-003	0.4004	0.1059	1.6000e-003	0.1075	0.0000	290.2842	290.2842	6.0500e-003	6.8300e-003	292.4721
Total	**0.1219**	**0.7276**	**1.2163**	**6.1000e-003**	**0.5121**	**6.3800e-003**	**0.5184**	**0.1386**	**6.0400e-003**	**0.1447**	**0.0000**	**587.2725**	**587.2725**	**0.0135**	**0.0507**	**602.7069**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.8195					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0115	0.0771	0.1218	2.0000e-004		3.4700e-003	3.4700e-003		3.4700e-003	3.4700e-003	0.0000	17.1919	17.1919	9.4000e-004	0.0000	17.2153
Total	**0.8310**	**0.0771**	**0.1218**	**2.0000e-004**		**3.4700e-003**	**3.4700e-003**		**3.4700e-003**	**3.4700e-003**	**0.0000**	**17.1919**	**17.1919**	**9.4000e-004**	**0.0000**	**17.2153**

3.5 Architectural Coating - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0191	0.6602	0.2565	3.0500e-003	0.1134	4.6400e-003	0.1180	0.0327	4.4400e-003	0.0372	0.0000	296.9883	296.9883	7.4400e-003	0.0438	310.2348
Worker	0.1028	0.0674	0.9598	3.0500e-003	0.3987	1.7400e-003	0.4004	0.1059	1.6000e-003	0.1075	0.0000	290.2842	290.2842	6.0500e-003	6.8300e-003	292.4721
Total	**0.1219**	**0.7276**	**1.2163**	**6.1000e-003**	**0.5121**	**6.3800e-003**	**0.5184**	**0.1386**	**6.0400e-003**	**0.1447**	**0.0000**	**587.2725**	**587.2725**	**0.0135**	**0.0507**	**602.7069**

3.6 Paving - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0545	0.5106	0.8674	1.3600e-003		0.0249	0.0249		0.0229	0.0229	0.0000	119.1146	119.1146	0.0385	0.0000	120.0777
Paving	0.0526					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1071**	**0.5106**	**0.8674**	**1.3600e-003**		**0.0249**	**0.0249**		**0.0229**	**0.0229**	**0.0000**	**119.1146**	**119.1146**	**0.0385**	**0.0000**	**120.0777**

3.6 Paving - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0168	0.5746	0.2246	2.6900e-003	0.0979	4.0300e-003	0.1020	0.0283	3.8600e-003	0.0321	0.0000	261.7397	261.7397	6.6300e-003	0.0387	273.4231
Worker	2.6900e-003	1.8400e-003	0.0252	8.0000e-005	9.7900e-003	5.0000e-005	9.8300e-003	2.6000e-003	4.0000e-005	2.6400e-003	0.0000	7.2970	7.2970	1.6000e-004	1.8000e-004	7.3543
Total	**0.0195**	**0.5764**	**0.2497**	**2.7700e-003**	**0.1077**	**4.0800e-003**	**0.1118**	**0.0309**	**3.9000e-003**	**0.0348**	**0.0000**	**269.0366**	**269.0366**	**6.7900e-003**	**0.0388**	**280.7775**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0545	0.5106	0.8674	1.3600e-003		0.0249	0.0249		0.0229	0.0229	0.0000	119.1144	119.1144	0.0385	0.0000	120.0775
Paving	0.0526					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.1071**	**0.5106**	**0.8674**	**1.3600e-003**		**0.0249**	**0.0249**		**0.0229**	**0.0229**	**0.0000**	**119.1144**	**119.1144**	**0.0385**	**0.0000**	**120.0775**

3.6 Paving - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0168	0.5746	0.2246	2.6900e-003	0.0979	4.0300e-003	0.1020	0.0283	3.8600e-003	0.0321	0.0000	261.7397	261.7397	6.6300e-003	0.0387	273.4231
Worker	2.6900e-003	1.8400e-003	0.0252	8.0000e-005	9.7900e-003	5.0000e-005	9.8300e-003	2.6000e-003	4.0000e-005	2.6400e-003	0.0000	7.2970	7.2970	1.6000e-004	1.8000e-004	7.3543
Total	**0.0195**	**0.5764**	**0.2497**	**2.7700e-003**	**0.1077**	**4.0800e-003**	**0.1118**	**0.0309**	**3.9000e-003**	**0.0348**	**0.0000**	**269.0366**	**269.0366**	**6.7900e-003**	**0.0388**	**280.7775**

3.6 Paving - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0462	0.4334	0.7362	1.1500e-003		0.0211	0.0211		0.0194	0.0194	0.0000	101.0972	101.0972	0.0327	0.0000	101.9147
Paving	0.0447					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0909**	**0.4334**	**0.7362**	**1.1500e-003**		**0.0211**	**0.0211**		**0.0194**	**0.0194**	**0.0000**	**101.0972**	**101.0972**	**0.0327**	**0.0000**	**101.9147**

3.6 Paving - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0140	0.4840	0.1881	2.2400e-003	0.0831	3.4000e-003	0.0865	0.0240	3.2500e-003	0.0272	0.0000	217.7358	217.7358	5.4600e-003	0.0321	227.4474
Worker	2.1400e-003	1.4100e-003	0.0200	6.0000e-005	8.3100e-003	4.0000e-005	8.3400e-003	2.2100e-003	3.0000e-005	2.2400e-003	0.0000	6.0476	6.0476	1.3000e-004	1.4000e-004	6.0932
Total	**0.0161**	**0.4854**	**0.2081**	**2.3000e-003**	**0.0914**	**3.4400e-003**	**0.0949**	**0.0262**	**3.2800e-003**	**0.0295**	**0.0000**	**223.7834**	**223.7834**	**5.5900e-003**	**0.0323**	**233.5406**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0462	0.4334	0.7362	1.1500e-003		0.0211	0.0211		0.0194	0.0194	0.0000	101.0971	101.0971	0.0327	0.0000	101.9145
Paving	0.0447					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0909**	**0.4334**	**0.7362**	**1.1500e-003**		**0.0211**	**0.0211**		**0.0194**	**0.0194**	**0.0000**	**101.0971**	**101.0971**	**0.0327**	**0.0000**	**101.9145**

3.6 Paving - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0140	0.4840	0.1881	2.2400e-003	0.0831	3.4000e-003	0.0865	0.0240	3.2500e-003	0.0272	0.0000	217.7358	217.7358	5.4600e-003	0.0321	227.4474
Worker	2.1400e-003	1.4100e-003	0.0200	6.0000e-005	8.3100e-003	4.0000e-005	8.3400e-003	2.2100e-003	3.0000e-005	2.2400e-003	0.0000	6.0476	6.0476	1.3000e-004	1.4000e-004	6.0932
Total	**0.0161**	**0.4854**	**0.2081**	**2.3000e-003**	**0.0914**	**3.4400e-003**	**0.0949**	**0.0262**	**3.2800e-003**	**0.0295**	**0.0000**	**223.7834**	**223.7834**	**5.5900e-003**	**0.0323**	**233.5406**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	0.00	0.00	0.00		
Unrefrigerated Warehouse-No Rail	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Unrefrigerated Warehouse-No	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Other Asphalt Surfaces	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Parking Lot	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Refrigerated Warehouse-No Rail	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Unrefrigerated Warehouse-No Rail	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	17.7349	1.1400e-003	0.1258	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.2454	0.2454	6.4000e-004	0.0000	0.2613
Unmitigated	17.7349	1.1400e-003	0.1258	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.2454	0.2454	6.4000e-004	0.0000	0.2613

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.0298					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	15.6935					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0116	1.1400e-003	0.1258	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.2454	0.2454	6.4000e-004	0.0000	0.2613
Total	**17.7349**	**1.1400e-003**	**0.1258**	**1.0000e-005**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.2454**	**0.2454**	**6.4000e-004**	**0.0000**	**0.2613**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	2.0298					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	15.6935					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0116	1.1400e-003	0.1258	1.0000e-005		4.5000e-004	4.5000e-004		4.5000e-004	4.5000e-004	0.0000	0.2454	0.2454	6.4000e-004	0.0000	0.2613
Total	**17.7349**	**1.1400e-003**	**0.1258**	**1.0000e-005**		**4.5000e-004**	**4.5000e-004**		**4.5000e-004**	**4.5000e-004**	**0.0000**	**0.2454**	**0.2454**	**6.4000e-004**	**0.0000**	**0.2613**

7.0 Water Detail

7.1 Mitigation Measures Water

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

California Logistics Center (Construction with The Ontario Plan Draft EIR MMs) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Unrefrigerated Warehouse-No Rail	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

California Logistics Center (High-Cube Cold Storage Operations)

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	642.37	1000sqft	14.75	642,368.00	0
User Defined Industrial	642.37	User Defined Unit	0.00	0.00	0
Parking Lot	3,403.00	Space	24.30	1,054,353.00	0
City Park	24.41	Acre	24.41	1,063,403.00	0
Other Asphalt Surfaces	2,176.19	1000sqft	49.96	2,176,187.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project area (without the High-Cube Fulfillment Center component) is 113.42 acres

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics consistent with Traffic analysis. ITE does not provide Weekend Trip Rates for High-Cube Cold Storage use, this analysis conservatively uses Daily Trip Rate.

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Busniess Survey Results (2014)

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	0.00
tblConstructionPhase	PhaseEndDate	10/6/2023	1/1/2023
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.25
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.44
tblFleetMix	LHD2	6.9140e-003	0.00
tblFleetMix	LHD2	6.9140e-003	0.12
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.19
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	UBUS	2.4500e-004	0.00

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	UBUS	2.4500e-004	0.00
tblLandUse	LandUseSquareFeet	1,361,200.00	1,054,353.00
tblLandUse	LandUseSquareFeet	1,063,299.60	1,063,403.00
tblLandUse	LandUseSquareFeet	2,176,190.00	2,176,187.00
tblLandUse	LotAcreage	30.63	24.30
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	16.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.12	1.67
tblVehicleTrips	ST_TR	0.00	0.47
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	2.12	1.67
tblVehicleTrips	SU_TR	0.00	0.47
tblVehicleTrips	WD_TR	0.78	0.00

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	WD_TR	2.12	1.67
tblVehicleTrips	WD_TR	0.00	0.47

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	15.8601	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056
Energy	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672
Mobile	4.8924	36.5879	52.4814	0.2911	20.3216	0.3941	20.7157	5.5895	0.3752	5.9647		30,693.3544	30,693.3544	0.8365	2.8548	31,564.9825
Offroad	1.6088	12.8904	11.9607	0.0508		0.4939	0.4939		0.4544	0.4544	0.0000	4,913.5536	4,913.5536	1.5891		4,953.2821
Total	**23.3431**	**58.4102**	**72.6410**	**0.3955**	**20.3216**	**1.5688**	**21.8904**	**5.5895**	**1.5105**	**7.0999**	**0.0000**	**46,319.0348**	**46,319.0348**	**2.6349**	**3.0511**	**47,294.1374**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	15.8601	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056
Energy	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672
Mobile	4.8924	36.5879	52.4814	0.2911	20.3216	0.3941	20.7157	5.5895	0.3752	5.9647		30,693.3544	30,693.3544	0.8365	2.8548	31,564.9825
Offroad	1.6088	12.8904	11.9607	0.0508		0.4939	0.4939		0.4544	0.4544	0.0000	4,913.5536	4,913.5536	1.5891		4,953.2821
Total	**23.3431**	**58.4102**	**72.6410**	**0.3955**	**20.3216**	**1.5688**	**21.8904**	**5.5895**	**1.5105**	**7.0999**	**0.0000**	**46,319.0348**	**46,319.0348**	**2.6349**	**3.0511**	**47,294.1374**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/1/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Paving: 74.26

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.8924	36.5879	52.4814	0.2911	20.3216	0.3941	20.7157	5.5895	0.3752	5.9647		30,693.3544	30,693.3544	0.8365	2.8548	31,564.9825
Unmitigated	4.8924	36.5879	52.4814	0.2911	20.3216	0.3941	20.7157	5.5895	0.3752	5.9647		30,693.3544	30,693.3544	0.8365	2.8548	31,564.9825

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	1,071.98	1,071.98	1071.98	4,594,219	4,594,219
User Defined Industrial	303.97	303.97	303.97	4,425,782	4,425,782
Total	1,375.95	1,375.95	1,375.95	9,020,001	9,020,001

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Other Asphalt Surfaces	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Parking Lot	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Refrigerated Warehouse-No Rail	0.584900	0.060600	0.186200	0.141900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.026400	0.000000	0.000000
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.438200	0.121000	0.190800	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672
NaturalGas Unmitigated	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	91040.3	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.9818**	**8.9255**	**7.4974**	**0.0536**		**0.6783**	**0.6783**		**0.6783**	**0.6783**		**10,710.6194**	**10,710.6194**	**0.2053**	**0.1964**	**10,774.2672**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	91.0403	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.9818**	**8.9255**	**7.4974**	**0.0536**		**0.6783**	**0.6783**		**0.6783**	**0.6783**		**10,710.6194**	**10,710.6194**	**0.2053**	**0.1964**	**10,774.2672**

6.0 Area Detail

6.1 Mitigation Measures Area

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	15.8601	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056
Unmitigated	15.8601	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.9179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0646	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056
Total	**15.8601**	**6.3600e-003**	**0.7015**	**5.0000e-005**		**2.4900e-003**	**2.4900e-003**		**2.4900e-003**	**2.4900e-003**		**1.5075**	**1.5075**	**3.9200e-003**		**1.6056**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.9179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0646	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056
Total	**15.8601**	**6.3600e-003**	**0.7015**	**5.0000e-005**		**2.4900e-003**	**2.4900e-003**		**2.4900e-003**	**2.4900e-003**		**1.5075**	**1.5075**	**3.9200e-003**		**1.6056**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	16	4.00	365	200	0.37	CNG

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/ Backhoes	1.6088	12.8904	11.9607	0.0508		0.4939	0.4939		0.4544	0.4544	0.0000	4,913.5536	4,913.5536	1.5891		4,953.2821
Total	**1.6088**	**12.8904**	**11.9607**	**0.0508**		**0.4939**	**0.4939**		**0.4544**	**0.4544**	**0.0000**	**4,913.5536**	**4,913.5536**	**1.5891**		**4,953.2821**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

California Logistics Center (High-Cube Cold Storage Operations)

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	642.37	1000sqft	14.75	642,368.00	0
User Defined Industrial	642.37	User Defined Unit	0.00	0.00	0
Parking Lot	3,403.00	Space	24.30	1,054,353.00	0
City Park	24.41	Acre	24.41	1,063,403.00	0
Other Asphalt Surfaces	2,176.19	1000sqft	49.96	2,176,187.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project area (without the High-Cube Fulfillment Center component) is 113.42 acres

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics consistent with Traffic analysis. ITE does not provide Weekend Trip Rates for High-Cube Cold Storage use, this analysis conservatively uses Daily Trip Rate.

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Busniess Survey Results (2014)

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	0.00
tblConstructionPhase	PhaseEndDate	10/6/2023	1/1/2023
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.25
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.44
tblFleetMix	LHD2	6.9140e-003	0.00
tblFleetMix	LHD2	6.9140e-003	0.12
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.19
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	UBUS	2.4500e-004	0.00

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	UBUS	2.4500e-004	0.00
tblLandUse	LandUseSquareFeet	1,361,200.00	1,054,353.00
tblLandUse	LandUseSquareFeet	1,063,299.60	1,063,403.00
tblLandUse	LandUseSquareFeet	2,176,190.00	2,176,187.00
tblLandUse	LotAcreage	30.63	24.30
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	16.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.12	1.67
tblVehicleTrips	ST_TR	0.00	0.47
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	2.12	1.67
tblVehicleTrips	SU_TR	0.00	0.47
tblVehicleTrips	WD_TR	0.78	0.00

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	WD_TR	2.12	1.67
tblVehicleTrips	WD_TR	0.00	0.47

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	15.8601	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056
Energy	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672
Mobile	4.4374	38.4386	47.8226	0.2842	20.3216	0.3942	20.7158	5.5895	0.3754	5.9648		29,962.7340	29,962.7340	0.8425	2.8711	30,839.3749
Offroad	1.6088	12.8904	11.9607	0.0508		0.4939	0.4939		0.4544	0.4544	0.0000	4,913.5536	4,913.5536	1.5891		4,953.2821
Total	**22.8881**	**60.2609**	**67.9822**	**0.3885**	**20.3216**	**1.5689**	**21.8905**	**5.5895**	**1.5106**	**7.1001**	**0.0000**	**45,588.4145**	**45,588.4145**	**2.6409**	**3.0674**	**46,568.5298**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	15.8601	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056
Energy	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672
Mobile	4.4374	38.4386	47.8226	0.2842	20.3216	0.3942	20.7158	5.5895	0.3754	5.9648		29,962.7340	29,962.7340	0.8425	2.8711	30,839.3749
Offroad	1.6088	12.8904	11.9607	0.0508		0.4939	0.4939		0.4544	0.4544	0.0000	4,913.5536	4,913.5536	1.5891		4,953.2821
Total	**22.8881**	**60.2609**	**67.9822**	**0.3885**	**20.3216**	**1.5689**	**21.8905**	**5.5895**	**1.5106**	**7.1001**	**0.0000**	**45,588.4145**	**45,588.4145**	**2.6409**	**3.0674**	**46,568.5298**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/1/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Paving: 74.26

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.4374	38.4386	47.8226	0.2842	20.3216	0.3942	20.7158	5.5895	0.3754	5.9648		29,962.7340	29,962.7340	0.8425	2.8711	30,839.3749
Unmitigated	4.4374	38.4386	47.8226	0.2842	20.3216	0.3942	20.7158	5.5895	0.3754	5.9648		29,962.7340	29,962.7340	0.8425	2.8711	30,839.3749

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	1,071.98	1,071.98	1071.98	4,594,219	4,594,219
User Defined Industrial	303.97	303.97	303.97	4,425,782	4,425,782
Total	1,375.95	1,375.95	1,375.95	9,020,001	9,020,001

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Other Asphalt Surfaces	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Parking Lot	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Refrigerated Warehouse-No Rail	0.584900	0.060600	0.186200	0.141900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.026400	0.000000	0.000000
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.438200	0.121000	0.190800	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672
NaturalGas Unmitigated	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	91040.3	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.9818**	**8.9255**	**7.4974**	**0.0536**		**0.6783**	**0.6783**		**0.6783**	**0.6783**		**10,710.6194**	**10,710.6194**	**0.2053**	**0.1964**	**10,774.2672**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	91.0403	0.9818	8.9255	7.4974	0.0536		0.6783	0.6783		0.6783	0.6783		10,710.6194	10,710.6194	0.2053	0.1964	10,774.2672
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.9818**	**8.9255**	**7.4974**	**0.0536**		**0.6783**	**0.6783**		**0.6783**	**0.6783**		**10,710.6194**	**10,710.6194**	**0.2053**	**0.1964**	**10,774.2672**

6.0 Area Detail

6.1 Mitigation Measures Area

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	15.8601	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056
Unmitigated	15.8601	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.9179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0646	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056
Total	**15.8601**	**6.3600e-003**	**0.7015**	**5.0000e-005**		**2.4900e-003**	**2.4900e-003**		**2.4900e-003**	**2.4900e-003**		**1.5075**	**1.5075**	**3.9200e-003**		**1.6056**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.8776					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	13.9179					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0646	6.3600e-003	0.7015	5.0000e-005		2.4900e-003	2.4900e-003		2.4900e-003	2.4900e-003		1.5075	1.5075	3.9200e-003		1.6056
Total	**15.8601**	**6.3600e-003**	**0.7015**	**5.0000e-005**		**2.4900e-003**	**2.4900e-003**		**2.4900e-003**	**2.4900e-003**		**1.5075**	**1.5075**	**3.9200e-003**		**1.6056**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	16	4.00	365	200	0.37	CNG

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	lb/day										lb/day					
Tractors/Loaders/ Backhoes	1.6088	12.8904	11.9607	0.0508		0.4939	0.4939		0.4544	0.4544	0.0000	4,913.5536	4,913.5536	1.5891		4,953.2821
Total	**1.6088**	**12.8904**	**11.9607**	**0.0508**		**0.4939**	**0.4939**		**0.4544**	**0.4544**	**0.0000**	**4,913.5536**	**4,913.5536**	**1.5891**		**4,953.2821**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

California Logistics Center (High-Cube Cold Storage Operations)

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Refrigerated Warehouse-No Rail	642.37	1000sqft	14.75	642,368.00	0
User Defined Industrial	642.37	User Defined Unit	0.00	0.00	0
Parking Lot	3,403.00	Space	24.30	1,054,353.00	0
City Park	24.41	Acre	24.41	1,063,403.00	0
Other Asphalt Surfaces	2,176.19	1000sqft	49.96	2,176,187.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Total Project area (without the High-Cube Fulfillment Center component) is 113.42 acres

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics consistent with Traffic analysis. ITE does not provide Weekend Trip Rates for High-Cube Cold Storage use, this analysis conservatively uses Daily Trip Rate.

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis

Operational Off-Road Equipment - Based on SCAQMD High Cube Warehouse Truck Trip Study White Paper Summary of Busniess Survey Results (2014)

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	200.00	0.00
tblConstructionPhase	PhaseEndDate	10/6/2023	1/1/2023
tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.25
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.44
tblFleetMix	LHD2	6.9140e-003	0.00
tblFleetMix	LHD2	6.9140e-003	0.12
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.19
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	UBUS	2.4500e-004	0.00

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	UBUS	2.4500e-004	0.00
tblLandUse	LandUseSquareFeet	1,361,200.00	1,054,353.00
tblLandUse	LandUseSquareFeet	1,063,299.60	1,063,403.00
tblLandUse	LandUseSquareFeet	2,176,190.00	2,176,187.00
tblLandUse	LotAcreage	30.63	24.30
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOperationalOffRoadEquipment	OperDaysPerYear	260.00	365.00
tblOperationalOffRoadEquipment	OperFuelType	Diesel	CNG
tblOperationalOffRoadEquipment	OperHorsePower	97.00	200.00
tblOperationalOffRoadEquipment	OperHoursPerDay	8.00	4.00
tblOperationalOffRoadEquipment	OperOffRoadEquipmentNumber	0.00	16.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.96	0.00
tblVehicleTrips	ST_TR	2.12	1.67
tblVehicleTrips	ST_TR	0.00	0.47
tblVehicleTrips	SU_TR	2.19	0.00
tblVehicleTrips	SU_TR	2.12	1.67
tblVehicleTrips	SU_TR	0.00	0.47
tblVehicleTrips	WD_TR	0.78	0.00

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleTrips	WD_TR	2.12	1.67
tblVehicleTrips	WD_TR	0.00	0.47

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.8908	7.9000e-004	0.0877	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	0.1710	0.1710	4.4000e-004	0.0000	0.1821
Energy	0.1792	1.6289	1.3683	9.7700e-003		0.1238	0.1238		0.1238	0.1238	0.0000	6,377.3246	6,377.3246	0.4226	0.0796	6,411.6138
Mobile	0.8048	7.0899	8.9754	0.0519	3.6332	0.0716	3.7048	1.0012	0.0682	1.0695	0.0000	4,963.9196	4,963.9196	0.1399	0.4748	5,108.8917
Offroad	0.2936	2.3525	2.1828	9.2700e-003		0.0901	0.0901		0.0829	0.0829	0.0000	813.4929	813.4929	0.2631	0.0000	820.0704
Waste						0.0000	0.0000		0.0000	0.0000	122.9983	0.0000	122.9983	7.2690	0.0000	304.7231
Water						0.0000	0.0000		0.0000	0.0000	47.1275	400.3342	447.4616	4.8742	0.1184	604.5973
Total	**4.1683**	**11.0721**	**12.6142**	**0.0709**	**3.6332**	**0.2859**	**3.9191**	**1.0012**	**0.2753**	**1.2765**	**170.1258**	**12,555.2423**	**12,725.3680**	**12.9692**	**0.6728**	**13,250.0784**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	2.8908	7.9000e-004	0.0877	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	0.1710	0.1710	4.4000e-004	0.0000	0.1821
Energy	0.1792	1.6289	1.3683	9.7700e-003		0.1238	0.1238		0.1238	0.1238	0.0000	6,377.3246	6,377.3246	0.4226	0.0796	6,411.6138
Mobile	0.8048	7.0899	8.9754	0.0519	3.6332	0.0716	3.7048	1.0012	0.0682	1.0695	0.0000	4,963.9196	4,963.9196	0.1399	0.4748	5,108.8917
Offroad	0.2936	2.3525	2.1828	9.2700e-003		0.0901	0.0901		0.0829	0.0829	0.0000	813.4929	813.4929	0.2631	0.0000	820.0704
Waste						0.0000	0.0000		0.0000	0.0000	122.9983	0.0000	122.9983	7.2690	0.0000	304.7231
Water						0.0000	0.0000		0.0000	0.0000	47.1275	400.3342	447.4616	4.8742	0.1184	604.5973
Total	**4.1683**	**11.0721**	**12.6142**	**0.0709**	**3.6332**	**0.2859**	**3.9191**	**1.0012**	**0.2753**	**1.2765**	**170.1258**	**12,555.2423**	**12,725.3680**	**12.9692**	**0.6728**	**13,250.0784**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/1/2023	5	0	

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 74.26

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.8048	7.0899	8.9754	0.0519	3.6332	0.0716	3.7048	1.0012	0.0682	1.0695	0.0000	4,963.9196	4,963.9196	0.1399	0.4748	5,108.8917
Unmitigated	0.8048	7.0899	8.9754	0.0519	3.6332	0.0716	3.7048	1.0012	0.0682	1.0695	0.0000	4,963.9196	4,963.9196	0.1399	0.4748	5,108.8917

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
City Park	0.00	0.00	0.00		
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Refrigerated Warehouse-No Rail	1,071.98	1,071.98	1071.98	4,594,219	4,594,219
User Defined Industrial	303.97	303.97	303.97	4,425,782	4,425,782
Total	1,375.95	1,375.95	1,375.95	9,020,001	9,020,001

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
City Park	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Refrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
City Park	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Other Asphalt Surfaces	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Parking Lot	0.545300	0.056532	0.173573	0.132281	0.025040	0.006914	0.012148	0.017464	0.000548	0.000245	0.024607	0.000958	0.004391
Refrigerated Warehouse-No Rail	0.584900	0.060600	0.186200	0.141900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.026400	0.000000	0.000000
User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.438200	0.121000	0.190800	0.250000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,604.0614	4,604.0614	0.3886	0.0471	4,627.8130
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	4,604.0614	4,604.0614	0.3886	0.0471	4,627.8130
NaturalGas Mitigated	0.1792	1.6289	1.3683	9.7700e-003		0.1238	0.1238		0.1238	0.1238	0.0000	1,773.2632	1,773.2632	0.0340	0.0325	1,783.8008
NaturalGas Unmitigated	0.1792	1.6289	1.3683	9.7700e-003		0.1238	0.1238		0.1238	0.1238	0.0000	1,773.2632	1,773.2632	0.0340	0.0325	1,783.8008

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	3.32297e+007	0.1792	1.6289	1.3683	9.7700e-003		0.1238	0.1238		0.1238	0.1238	0.0000	1,773.2632	1,773.2632	0.0340	0.0325	1,783.8008
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1792**	**1.6289**	**1.3683**	**9.7700e-003**		**0.1238**	**0.1238**		**0.1238**	**0.1238**	**0.0000**	**1,773.2632**	**1,773.2632**	**0.0340**	**0.0325**	**1,783.8008**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	3.32297e+007	0.1792	1.6289	1.3683	9.7700e-003		0.1238	0.1238		0.1238	0.1238	0.0000	1,773.2632	1,773.2632	0.0340	0.0325	1,783.8008
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.1792**	**1.6289**	**1.3683**	**9.7700e-003**		**0.1238**	**0.1238**		**0.1238**	**0.1238**	**0.0000**	**1,773.2632**	**1,773.2632**	**0.0340**	**0.0325**	**1,783.8008**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	369024	65.4447	5.5200e-003	6.7000e-004	65.7823
Refrigerated Warehouse-No Rail	2.55919e+007	4,538.6167	0.3831	0.0464	4,562.0307
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**4,604.0614**	**0.3886**	**0.0471**	**4,627.8130**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
City Park	0	0.0000	0.0000	0.0000	0.0000
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	369024	65.4447	5.5200e-003	6.7000e-004	65.7823
Refrigerated Warehouse-No Rail	2.55919e+007	4,538.6167	0.3831	0.0464	4,562.0307
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**4,604.0614**	**0.3886**	**0.0471**	**4,627.8130**

6.0 Area Detail

6.1 Mitigation Measures Area

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	2.8908	7.9000e-004	0.0877	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	0.1710	0.1710	4.4000e-004	0.0000	0.1821
Unmitigated	2.8908	7.9000e-004	0.0877	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	0.1710	0.1710	4.4000e-004	0.0000	0.1821

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3427					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.5400					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0700e-003	7.9000e-004	0.0877	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	0.1710	0.1710	4.4000e-004	0.0000	0.1821
Total	**2.8908**	**7.9000e-004**	**0.0877**	**1.0000e-005**		**3.1000e-004**	**3.1000e-004**		**3.1000e-004**	**3.1000e-004**	**0.0000**	**0.1710**	**0.1710**	**4.4000e-004**	**0.0000**	**0.1821**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.3427					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	2.5400					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.0700e-003	7.9000e-004	0.0877	1.0000e-005		3.1000e-004	3.1000e-004		3.1000e-004	3.1000e-004	0.0000	0.1710	0.1710	4.4000e-004	0.0000	0.1821
Total	**2.8908**	**7.9000e-004**	**0.0877**	**1.0000e-005**		**3.1000e-004**	**3.1000e-004**		**3.1000e-004**	**3.1000e-004**	**0.0000**	**0.1710**	**0.1710**	**4.4000e-004**	**0.0000**	**0.1821**

7.0 Water Detail

7.1 Mitigation Measures Water

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	447.4616	4.8742	0.1184	604.5973
Unmitigated	447.4616	4.8742	0.1184	604.5973

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 29.0841	57.3046	4.8400e-003	5.9000e-004	57.6002
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	148.548 / 0	390.1571	4.8694	0.1178	546.9971
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**447.4616**	**4.8742**	**0.1184**	**604.5973**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
City Park	0 / 29.0841	57.3046	4.8400e-003	5.9000e-004	57.6002
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	148.548 / 0	390.1571	4.8694	0.1178	546.9971
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**447.4616**	**4.8742**	**0.1184**	**604.5973**

8.0 Waste Detail

8.1 Mitigation Measures Waste

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	122.9983	7.2690	0.0000	304.7231
Unmitigated	122.9983	7.2690	0.0000	304.7231

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	2.1	0.4263	0.0252	0.0000	1.0561
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	603.83	122.5720	7.2438	0.0000	303.6670
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**122.9983**	**7.2690**	**0.0000**	**304.7231**

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
City Park	2.1	0.4263	0.0252	0.0000	1.0561
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Refrigerated Warehouse-No Rail	603.83	122.5720	7.2438	0.0000	303.6670
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**122.9983**	**7.2690**	**0.0000**	**304.7231**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
Tractors/Loaders/Backhoes	16	4.00	365	200	0.37	CNG

California Logistics Center (High-Cube Cold Storage Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

UnMitigated/Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Equipment Type	tons/yr										MT/yr					
Tractors/Loaders/ Backhoes	0.2936	2.3525	2.1828	9.2700e-003		0.0901	0.0901		0.0829	0.0829	0.0000	813.4929	813.4929	0.2631	0.0000	820.0704
Total	**0.2936**	**2.3525**	**2.1828**	**9.2700e-003**		**0.0901**	**0.0901**		**0.0829**	**0.0829**	**0.0000**	**813.4929**	**813.4929**	**0.2631**	**0.0000**	**820.0704**

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

California Logistics Center (High-Cube Fulfillment Center Operations)

San Bernardino-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	3,640.08	1000sqft	83.56	3,640,083.00	0
User Defined Industrial	3,640.08	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics consistent with Traffic analysis. ITE does not provide Weekend Trip Rates for High-Cube Fulfillment use, this analysis conservatively uses Daily Trip Rate.

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	PhaseEndDate	5/19/2023	1/1/2023

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.62
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.13
tblFleetMix	LHD2	6.9140e-003	0.00
tblFleetMix	LHD2	6.9140e-003	0.04
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	UBUS	2.4500e-004	0.00
tblFleetMix	UBUS	2.4500e-004	0.00
tblLandUse	LandUseSquareFeet	3,640,080.00	3,640,083.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.74	1.58
tblVehicleTrips	ST_TR	0.00	0.23
tblVehicleTrips	SU_TR	1.74	1.58
tblVehicleTrips	SU_TR	0.00	0.23
tblVehicleTrips	WD_TR	1.74	1.58
tblVehicleTrips	WD_TR	0.00	0.23

2.0 Emissions Summary

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	81.3867	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969
Energy	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951
Mobile	22.5582	142.1172	246.8887	1.1767	81.6601	1.6361	83.2962	22.1240	1.5572	23.6812		125,540.3349	125,540.3349	4.7259	12.9404	129,514.7302
Total	**104.1610**	**144.0892**	**249.2809**	**1.1886**	**81.6601**	**1.7881**	**83.4482**	**22.1240**	**1.7092**	**23.8332**		**127,900.2092**	**127,900.2092**	**4.7752**	**12.9837**	**131,888.7222**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	81.3867	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969
Energy	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951
Mobile	22.5582	142.1172	246.8887	1.1767	81.6601	1.6361	83.2962	22.1240	1.5572	23.6812		125,540.3349	125,540.3349	4.7259	12.9404	129,514.7302
Total	**104.1610**	**144.0892**	**249.2809**	**1.1886**	**81.6601**	**1.7881**	**83.4482**	**22.1240**	**1.7092**	**23.8332**		**127,900.2092**	**127,900.2092**	**4.7752**	**12.9837**	**131,888.7222**

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/1/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

4.0 Operational Detail - Mobile

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	22.5582	142.1172	246.8887	1.1767	81.6601	1.6361	83.2962	22.1240	1.5572	23.6812		125,540.3349	125,540.3349	4.7259	12.9404	129,514.7302
Unmitigated	22.5582	142.1172	246.8887	1.1767	81.6601	1.6361	83.2962	22.1240	1.5572	23.6812		125,540.3349	125,540.3349	4.7259	12.9404	129,514.7302

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	5,756.06	5,756.06	5756.06	24,668,857	24,668,857
User Defined Industrial	848.14	848.14	848.14	12,348,909	12,348,909
Total	6,604.20	6,604.20	6,604.20	37,017,766	37,017,766

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.584900	0.060600	0.186200	0.141900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.026400	0.000000	0.000000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.133100	0.036700	0.209900	0.620300	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951
NaturalGas Unmitigated	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	20045.4	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2162**	**1.9652**	**1.6508**	**0.0118**		**0.1494**	**0.1494**		**0.1494**	**0.1494**		**2,358.2810**	**2,358.2810**	**0.0452**	**0.0432**	**2,372.2951**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	20.0454	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2162**	**1.9652**	**1.6508**	**0.0118**		**0.1494**	**0.1494**		**0.1494**	**0.1494**		**2,358.2810**	**2,358.2810**	**0.0452**	**0.0432**	**2,372.2951**

6.0 Area Detail

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	81.3867	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969
Unmitigated	81.3867	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2448					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	72.0736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0683	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969
Total	**81.3867**	**6.7200e-003**	**0.7414**	**6.0000e-005**		**2.6400e-003**	**2.6400e-003**		**2.6400e-003**	**2.6400e-003**		**1.5933**	**1.5933**	**4.1400e-003**		**1.6969**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2448					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	72.0736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0683	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969
Total	**81.3867**	**6.7200e-003**	**0.7414**	**6.0000e-005**		**2.6400e-003**	**2.6400e-003**		**2.6400e-003**	**2.6400e-003**		**1.5933**	**1.5933**	**4.1400e-003**		**1.6969**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

California Logistics Center (High-Cube Fulfillment Center Operations)

San Bernardino-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	3,640.08	1000sqft	83.56	3,640,083.00	0
User Defined Industrial	3,640.08	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics consistent with Traffic analysis. ITE does not provide Weekend Trip Rates for High-Cube Fulfillment use, this analysis conservatively uses Daily Trip Rate.

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	PhaseEndDate	5/19/2023	1/1/2023

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.62
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.13
tblFleetMix	LHD2	6.9140e-003	0.00
tblFleetMix	LHD2	6.9140e-003	0.04
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	UBUS	2.4500e-004	0.00
tblFleetMix	UBUS	2.4500e-004	0.00
tblLandUse	LandUseSquareFeet	3,640,080.00	3,640,083.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.74	1.58
tblVehicleTrips	ST_TR	0.00	0.23
tblVehicleTrips	SU_TR	1.74	1.58
tblVehicleTrips	SU_TR	0.00	0.23
tblVehicleTrips	WD_TR	1.74	1.58
tblVehicleTrips	WD_TR	0.00	0.23

2.0 Emissions Summary

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	81.3867	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969
Energy	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951
Mobile	20.0979	149.5221	222.3718	1.1395	81.6601	1.6371	83.2972	22.1240	1.5581	23.6821		121,628.3245	121,628.3245	4.7606	13.0046	125,622.6949
Total	**101.7008**	**151.4940**	**224.7640**	**1.1514**	**81.6601**	**1.7891**	**83.4492**	**22.1240**	**1.7101**	**23.8341**		**123,988.1987**	**123,988.1987**	**4.8099**	**13.0478**	**127,996.6869**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	81.3867	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969
Energy	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951
Mobile	20.0979	149.5221	222.3718	1.1395	81.6601	1.6371	83.2972	22.1240	1.5581	23.6821		121,628.3245	121,628.3245	4.7606	13.0046	125,622.6949
Total	**101.7008**	**151.4940**	**224.7640**	**1.1514**	**81.6601**	**1.7891**	**83.4492**	**22.1240**	**1.7101**	**23.8341**		**123,988.1987**	**123,988.1987**	**4.8099**	**13.0478**	**127,996.6869**

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/1/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	20.0979	149.5221	222.3718	1.1395	81.6601	1.6371	83.2972	22.1240	1.5581	23.6821		121,628.3245	121,628.3245	4.7606	13.0046	125,622.6949
Unmitigated	20.0979	149.5221	222.3718	1.1395	81.6601	1.6371	83.2972	22.1240	1.5581	23.6821		121,628.3245	121,628.3245	4.7606	13.0046	125,622.6949

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	5,756.06	5,756.06	5756.06	24,668,857	24,668,857
User Defined Industrial	848.14	848.14	848.14	12,348,909	12,348,909
Total	6,604.20	6,604.20	6,604.20	37,017,766	37,017,766

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.584900	0.060600	0.186200	0.141900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.026400	0.000000	0.000000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.133100	0.036700	0.209900	0.620300	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951
NaturalGas Unmitigated	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	20045.4	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2162**	**1.9652**	**1.6508**	**0.0118**		**0.1494**	**0.1494**		**0.1494**	**0.1494**		**2,358.2810**	**2,358.2810**	**0.0452**	**0.0432**	**2,372.2951**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Unrefrigerated Warehouse-No Rail	20.0454	0.2162	1.9652	1.6508	0.0118		0.1494	0.1494		0.1494	0.1494		2,358.2810	2,358.2810	0.0452	0.0432	2,372.2951
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.2162**	**1.9652**	**1.6508**	**0.0118**		**0.1494**	**0.1494**		**0.1494**	**0.1494**		**2,358.2810**	**2,358.2810**	**0.0452**	**0.0432**	**2,372.2951**

6.0 Area Detail

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	81.3867	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969
Unmitigated	81.3867	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2448					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	72.0736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0683	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969
Total	**81.3867**	**6.7200e-003**	**0.7414**	**6.0000e-005**		**2.6400e-003**	**2.6400e-003**		**2.6400e-003**	**2.6400e-003**		**1.5933**	**1.5933**	**4.1400e-003**		**1.6969**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	9.2448					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	72.0736					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	0.0683	6.7200e-003	0.7414	6.0000e-005		2.6400e-003	2.6400e-003		2.6400e-003	2.6400e-003		1.5933	1.5933	4.1400e-003		1.6969
Total	**81.3867**	**6.7200e-003**	**0.7414**	**6.0000e-005**		**2.6400e-003**	**2.6400e-003**		**2.6400e-003**	**2.6400e-003**		**1.5933**	**1.5933**	**4.1400e-003**		**1.6969**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

California Logistics Center (High-Cube Fulfillment Center Operations)

San Bernardino-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Unrefrigerated Warehouse-No Rail	3,640.08	1000sqft	83.56	3,640,083.00	0
User Defined Industrial	3,640.08	User Defined Unit	0.00	0.00	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	32
Climate Zone	10			**Operational Year**	2026
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use -

Construction Phase - Operations run only

Off-road Equipment - Operations run only

Vehicle Trips - Trip characteristics consistent with Traffic analysis. ITE does not provide Weekend Trip Rates for High-Cube Fulfillment use, this analysis conservatively uses Daily Trip Rate.

Fleet Mix - Passenger Car Mix estimated based on the CalEEMod default fleet mix and the ratio of the vehicle classes (LDA, LDT1, LDT2, MDV, & MCY). Truck Mix based on information in the Traffic analysis

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	PhaseEndDate	5/19/2023	1/1/2023

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblFleetMix	HHD	0.02	0.00
tblFleetMix	HHD	0.02	0.62
tblFleetMix	LDA	0.55	0.58
tblFleetMix	LDA	0.55	0.00
tblFleetMix	LDT1	0.06	0.06
tblFleetMix	LDT1	0.06	0.00
tblFleetMix	LDT2	0.17	0.19
tblFleetMix	LDT2	0.17	0.00
tblFleetMix	LHD1	0.03	0.00
tblFleetMix	LHD1	0.03	0.13
tblFleetMix	LHD2	6.9140e-003	0.00
tblFleetMix	LHD2	6.9140e-003	0.04
tblFleetMix	MCY	0.02	0.03
tblFleetMix	MCY	0.02	0.00
tblFleetMix	MDV	0.13	0.14
tblFleetMix	MDV	0.13	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MH	4.3910e-003	0.00
tblFleetMix	MHD	0.01	0.00
tblFleetMix	MHD	0.01	0.21
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	OBUS	5.4800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	SBUS	9.5800e-004	0.00
tblFleetMix	UBUS	2.4500e-004	0.00
tblFleetMix	UBUS	2.4500e-004	0.00
tblLandUse	LandUseSquareFeet	3,640,080.00	3,640,083.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblVehicleTrips	CW_TL	16.60	40.00
tblVehicleTrips	CW_TTP	0.00	100.00
tblVehicleTrips	PR_TP	0.00	100.00
tblVehicleTrips	ST_TR	1.74	1.58
tblVehicleTrips	ST_TR	0.00	0.23
tblVehicleTrips	SU_TR	1.74	1.58
tblVehicleTrips	SU_TR	0.00	0.23
tblVehicleTrips	WD_TR	1.74	1.58
tblVehicleTrips	WD_TR	0.00	0.23

2.0 Emissions Summary

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	14.8492	8.4000e-004	0.0927	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1807	0.1807	4.7000e-004	0.0000	0.1924
Energy	0.0395	0.3587	0.3013	2.1500e-003		0.0273	0.0273		0.0273	0.0273	0.0000	1,888.1217	1,888.1217	0.1339	0.0225	1,898.1682
Mobile	3.6527	27.5229	41.9409	0.2084	14.5940	0.2975	14.8915	3.9607	0.2831	4.2439	0.0000	20,178.9463	20,178.9463	0.7903	2.1500	20,839.3899
Waste						0.0000	0.0000		0.0000	0.0000	694.5701	0.0000	694.5701	41.0479	0.0000	1,720.7681
Water						0.0000	0.0000		0.0000	0.0000	267.0543	1,943.8256	2,210.8799	27.5931	0.6676	3,099.6361
Total	**18.5413**	**27.8824**	**42.3349**	**0.2106**	**14.5940**	**0.3251**	**14.9190**	**3.9607**	**0.3107**	**4.2715**	**961.6244**	**24,011.0742**	**24,972.6987**	**69.5657**	**2.8400**	**27,558.1546**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	14.8492	8.4000e-004	0.0927	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1807	0.1807	4.7000e-004	0.0000	0.1924
Energy	0.0395	0.3587	0.3013	2.1500e-003		0.0273	0.0273		0.0273	0.0273	0.0000	1,888.1217	1,888.1217	0.1339	0.0225	1,898.1682
Mobile	3.6527	27.5229	41.9409	0.2084	14.5940	0.2975	14.8915	3.9607	0.2831	4.2439	0.0000	20,178.9463	20,178.9463	0.7903	2.1500	20,839.3899
Waste						0.0000	0.0000		0.0000	0.0000	694.5701	0.0000	694.5701	41.0479	0.0000	1,720.7681
Water						0.0000	0.0000		0.0000	0.0000	267.0543	1,943.8256	2,210.8799	27.5931	0.6676	3,099.6361
Total	**18.5413**	**27.8824**	**42.3349**	**0.2106**	**14.5940**	**0.3251**	**14.9190**	**3.9607**	**0.3107**	**4.2715**	**961.6244**	**24,011.0742**	**24,972.6987**	**69.5657**	**2.8400**	**27,558.1546**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/2/2023	1/1/2023	5	0	

Acres of Grading (Site Preparation Phase): 0

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Excavators	0	8.00	158	0.38
Demolition	Rubber Tired Dozers	0	8.00	247	0.40

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**	**0.0000**

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	3.6527	27.5229	41.9409	0.2084	14.5940	0.2975	14.8915	3.9607	0.2831	4.2439	0.0000	20,178.9463	20,178.9463	0.7903	2.1500	20,839.3899
Unmitigated	3.6527	27.5229	41.9409	0.2084	14.5940	0.2975	14.8915	3.9607	0.2831	4.2439	0.0000	20,178.9463	20,178.9463	0.7903	2.1500	20,839.3899

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Unrefrigerated Warehouse-No Rail	5,756.06	5,756.06	5756.06	24,668,857	24,668,857
User Defined Industrial	848.14	848.14	848.14	12,348,909	12,348,909
Total	6,604.20	6,604.20	6,604.20	37,017,766	37,017,766

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Unrefrigerated Warehouse-No	16.60	8.40	6.90	59.00	0.00	41.00	92	5	3
User Defined Industrial	40.00	8.40	6.90	100.00	0.00	0.00	100	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Unrefrigerated Warehouse-No Rail	0.584900	0.060600	0.186200	0.141900	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.026400	0.000000	0.000000

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

User Defined Industrial	0.000000	0.000000	0.000000	0.000000	0.133100	0.036700	0.209900	0.620300	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,497.6818	1,497.6818	0.1264	0.0153	1,505.4081
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	1,497.6818	1,497.6818	0.1264	0.0153	1,505.4081
NaturalGas Mitigated	0.0395	0.3587	0.3013	2.1500e-003		0.0273	0.0273		0.0273	0.0273	0.0000	390.4399	390.4399	7.4800e-003	7.1600e-003	392.7601
NaturalGas Unmitigated	0.0395	0.3587	0.3013	2.1500e-003		0.0273	0.0273		0.0273	0.0273	0.0000	390.4399	390.4399	7.4800e-003	7.1600e-003	392.7601

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	7.31657e+006	0.0395	0.3587	0.3013	2.1500e-003		0.0273	0.0273		0.0273	0.0273	0.0000	390.4399	390.4399	7.4800e-003	7.1600e-003	392.7601
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0395**	**0.3587**	**0.3013**	**2.1500e-003**		**0.0273**	**0.0273**		**0.0273**	**0.0273**	**0.0000**	**390.4399**	**390.4399**	**7.4800e-003**	**7.1600e-003**	**392.7601**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Unrefrigerated Warehouse-No Rail	7.31657e+006	0.0395	0.3587	0.3013	2.1500e-003		0.0273	0.0273		0.0273	0.0273	0.0000	390.4399	390.4399	7.4800e-003	7.1600e-003	392.7601
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0395**	**0.3587**	**0.3013**	**2.1500e-003**		**0.0273**	**0.0273**		**0.0273**	**0.0273**	**0.0000**	**390.4399**	**390.4399**	**7.4800e-003**	**7.1600e-003**	**392.7601**

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	8.44499e+006	1,497.6818	0.1264	0.0153	1,505.4081
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**1,497.6818**	**0.1264**	**0.0153**	**1,505.4081**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Unrefrigerated Warehouse-No Rail	8.44499e+006	1,497.6818	0.1264	0.0153	1,505.4081
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**1,497.6818**	**0.1264**	**0.0153**	**1,505.4081**

6.0 Area Detail

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	14.8492	8.4000e-004	0.0927	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1807	0.1807	4.7000e-004	0.0000	0.1924
Unmitigated	14.8492	8.4000e-004	0.0927	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1807	0.1807	4.7000e-004	0.0000	0.1924

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.6872					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	13.1534					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.5300e-003	8.4000e-004	0.0927	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1807	0.1807	4.7000e-004	0.0000	0.1924
Total	**14.8492**	**8.4000e-004**	**0.0927**	**1.0000e-005**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.1807**	**0.1807**	**4.7000e-004**	**0.0000**	**0.1924**

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.6872					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	13.1534					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	8.5300e-003	8.4000e-004	0.0927	1.0000e-005		3.3000e-004	3.3000e-004		3.3000e-004	3.3000e-004	0.0000	0.1807	0.1807	4.7000e-004	0.0000	0.1924
Total	**14.8492**	**8.4000e-004**	**0.0927**	**1.0000e-005**		**3.3000e-004**	**3.3000e-004**		**3.3000e-004**	**3.3000e-004**	**0.0000**	**0.1807**	**0.1807**	**4.7000e-004**	**0.0000**	**0.1924**

7.0 Water Detail

7.1 Mitigation Measures Water

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	2,210.8799	27.5931	0.6676	3,099.6361
Unmitigated	2,210.8799	27.5931	0.6676	3,099.6361

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	841.769 / 0	2,210.8799	27.5931	0.6676	3,099.6361
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**2,210.8799**	**27.5931**	**0.6676**	**3,099.6361**

California Logistics Center (High-Cube Fulfillment Center Operations) - San Bernardino-South Coast County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Unrefrigerated Warehouse-No Rail	841.769 / 0	2,210.8799	27.5931	0.6676	3,099.6361
User Defined Industrial	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**2,210.8799**	**27.5931**	**0.6676**	**3,099.6361**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	694.5701	41.0479	0.0000	1,720.7681
Unmitigated	694.5701	41.0479	0.0000	1,720.7681

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	3421.68	694.5701	41.0479	0.0000	1,720.7681
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**694.5701**	**41.0479**	**0.0000**	**1,720.7681**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Unrefrigerated Warehouse-No Rail	3421.68	694.5701	41.0479	0.0000	1,720.7681
User Defined Industrial	0	0.0000	0.0000	0.0000	0.0000
Total		**694.5701**	**41.0479**	**0.0000**	**1,720.7681**

9.0 Operational Offroad

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

City of Ontario
Planning Department
303 East B Street
Ontario, California 91764
Phone: 909.395.2036
Fax: 909.395.2420

Table 2: Greenhouse Gas Reduction Measures Screening Table for Commercial & Industrial Development

Feature	Description	Assigned Point Values	Project Point Values
Reduction Measure PS E3: Commercial/Industrial Energy Efficiency Development			
Building Envelope			
Insulation	2008 Baseline (walls: R-13; roof/attic: R-30)	0	
	Modestly Enhanced Insulation (walls: R-13; roof/attic: R-38)	15	15
	Enhanced Insulation (rigid wall insulation: R-13; roof/attic: R-38)	18	
	Greatly Enhanced Insulation (spray foam wall insulated walls R-15 or higher, roof/attic R-38 or higher)	20	
	(Applies to conditioned space, only, defined as those areas within the building that have air conditioning and heating)		
Windows	2008 Baseline Windows (0.57 U-factor, 0.4 solar heat gain coefficient (SHGC)	0	
	Modestly Enhanced Window Insulation {0.4 U-Factor, 0.32 SHGC)	7	
	Enhanced Window Insulation {0.32 U-Factor, 0.25 SHGC)	8	8
	Greatly Enhanced Window Insulation {0.28 or less U-Factor, 0.22 or less SHGC)	12	
	(Applies to conditioned space, only, defined as those areas within the building that have air conditioning and heating)		
Cool Roof	Modest Cool Roof (CRRC Rated 0.15 aged solar reflectance, 0.75 thermal emittance)	12	
	Enhanced Cool Roof(CRRC Rated 0.2 aged solar reflectance, 0.75 thermal emittance)	14	
	Greatly Enhanced Cool Roof (CRRC Rated 0.35 aged solar reflectance, 0.75 thermal emittance)	16	
	(Applies to conditioned space, only, defined as those areas within the building that have air conditioning and heating)		
Air Infiltration	Minimizing leaks in the building envelope is as important as the insulation properties of the building. Insulation does not work effectively if there is excess air leakage:		
	▪ Air barrier applied to exterior walls, calking, and visual inspection such as the HERS Verified Quality Insulation Installation (Q11 or equivalent)	12	
	▪ Blower Door HERS Verified Envelope Leakage or equivalent	10	
	▪ *(Applies to conditioned space, only, defined as those areas within the building that have air conditioning and heating)*		
Thermal Storage of Building	Thermal storage Is a design characteristic that helps keep a constant temperature in the building. Common thermal storage devices include strategically placed water filled columns, water storage tanks, and thick masonry walls:		
	▪ Modest Thermal Mass (10% of floor or 10% of walls: 12" or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	4	
	▪ Enhanced Thermal Mass (20% of floor or 20% of walls: 12" or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	6	

Feature	Description	Assigned Point Values	Project Point Values
	▪ Enhanced Thermal Mass (80% of floor or 80% of walls: 12" or more thick exposed concrete or masonry. No permanently installed floor covering such as carpet, linoleum, wood or other insulating materials)	24	
Indoor Space Efficiencies			
Heating/Cooling Distribution System	Minimum Duct Insulation (R-4.2 required)	0	
	Modest Duct insulation (R-6)	8	
	Enhanced Duct Insulation (R-8)	10	
	Distribution loss reduction with inspection (HERS Verified Duct leakage or equivalent)	14	
	(Applies to conditioned space, only, defined as those areas within the building that have air conditioning and heating)		
Space Heating/ Cooling Equipment	2008 Minimum HVAC Efficiency (SEER 13/60% AFUE or 7.7 HSPF}	0	
	Improved Efficiency HVAC (SEER 14/65% AFUE or 8 HSPF)	7	7
	High Efficiency HVAC (SEER 15/72% AFUE or 8.5 HSPF)	8	
	Very High Efficiency HVAC (SEER 16/80% AFUE or 9 HSPF)	12	
	(Applies to conditioned space, only, defined as those areas within the building that have air conditioning and heating)		
Commercial Heat Recovery Systems	Heat recovery strategies employed with commercial laundry, cooking equipment, and other commercial heat sources for reuse in HVAC air intake or other appropriate heat recovery technology. Point values for these types of systems will be determined based upon design and engineering data documenting the energy savings.	TBD	
Water Heaters	2008 Minimum Efficiency (0.57 Energy Factor)	0	
	Improved Efficiency Water Heater (0.675 Energy Factor)	14	
	High Efficiency Water Heater (0.72 Energy Factor)	16	16
	Very High Efficiency Water Heater (0.92 Energy factor)	19	
	Solar Pre-heat System (0.2 Net Solar Fraction)	4	
	Enhanced Solar Pre-heat System (0.35 Net Solar Fraction)	8	
Daylighting	Daylighting is the ability of each room within the building to provide outside light during the day, reducing the need for artificial lighting during daylight hours:		
	▪ All peripheral rooms within the living space have at least one window (required)	1	
	▪ All rooms within the living space have daylight (through use of windows, solar tubes, skylights, etc.)	5	5
	▪ All rooms daylighted	7	
Artificial Lighting	2008 Minimum (required)	0	
	Efficient lights (25% of In-unit fixtures considered high efficacy. High efficacy is defined as 40 lumens/watt for 15 watt or less fixtures; SO lumens/watt for15 to 40 watt fixtures, 60 lumens/watt for fixtures >40watt)	9	9
	High Efficiency lights (50% of in-unit fixtures are high efficacy)	12	
	Very High Efficiency Lights (100% of in-unit fixtures are high efficacy)	14	
Appliances	Energy Star Commercial Refrigerator (new)	4	
	Energy Star Commercial Dish Washer (new)	4	
	Energy Star Commercial Cloths Washing	4	
Miscellaneous Commercial/Industrial Building Efficiencies			

Feature	Description	Assigned Point Values	Project Point Values
Building Placement	North/South alignment of building or other building placement such that the orientation of the buildings optimizes natural heating, cooling, and lighting.	6	
Shading	At least 90% of south-facing glazing will be shaded by vegetation or overhangs at noon on Jun 21st•	6	
Other	This allows innovation by the applicant to provide design features that Increases the energy efficiency of the project not provided In the table. Note that engineering data will be required documenting the energy efficiency of innovative designs and point values given based upon the proven efficiency beyond Title 24 Energy Efficiency Standards.	TBD	
Existing Commercial Building Retrofits	The applicant may wish to provide energy efficiency retrofit projects to existing residential dwelling units to further the point value of their project. Retrofitting existing residential dwelling units within the City is a key reduction measure that is needed to reach the reduction goal. The potential for an applicant to take advantage of this program will be decided on a case by case basis and must have the approval of the Ontario Planning Department. The decision to allow applicants to participate in this program will be evaluated based upon, but not limited to, the following;	TBD	
	▪ Will the energy efficiency retrofit project benefit low income or disadvantaged communities?		
	▪ Does the energy efficiency retrofit project fit within the overall assumptions in reduction measures associated with commercial building energy efficiency retrofits?		
	▪ Does the energy efficiency retrofit project provide co-benefits important to the City?		
	▪ Point value will be determined based upon engineering and design criteria of the energy efficiency retrofit project.		
Reduction Measure PS E4: Commercial/Industrial Renewable Energy			
Photovoltaic	Solar Photovoltaic panels installed on individual homes or in collective neighborhood arrangements, such that the total power provided augments:		
	▪ Solar Ready Roofs (sturdy roof and electric hookups)	2	2
	▪ 10% of the power needs of the project	8	
	▪ 20% of the power needs of the project	14	
	▪ 30% of the power needs of the project	20	
	▪ 40% of the power needs of the project	26	
	▪ 50% of the power needs of the project	32	
	▪ 60% of the power needs of the project	38	
	▪ 70% of the power needs of the project	44	
	▪ 80% of the power needs of the project	50	
	▪ 90% of the power needs of the project	56	
	▪ 100% of the power needs of the project	60	
Wind Turbines	Some areas of the City lend themselves to wind turbine applications. Analysis of the area's capability to support wind turbines should be evaluated prior to choosing this feature.		
	Wind turbines as part of the commercial development, such that the total power provided augments:		
	▪ 10% of the power needs of the project	8	
	▪ 20% of the power needs of the project	14	

Feature	Description	Assigned Point Values	Project Point Values
	▪ 30% of the power needs of the project	20	
	▪ 40% of the power needs of the project	26	
	▪ 50% of the power needs of the project	32	
	▪ 60% of the power needs of the project	38	
	▪ 70% of the power needs of the project	44	
	▪ 80% of the power needs of the project	50	
	▪ 90% of the power needs of the project	56	
	▪ 100% of the power needs of the project	60	
Off-Site Renewable Energy Project	The applicant may submit a proposal to supply an off-site renewable energy renewable project such as renewable energy retrofits of existing commercial/industrial energy project that will help implement reduction measures associated with existing buildings. These off-site renewable energy retrofit project proposals will be determined on a case by case basis, accompanied by a detailed plan documenting the quantity of renewable energy the proposal will generate. Point values will be based upon the energy generated by the proposal.	TBD	
Other Renewable Energy Generation	The applicant may have innovative designs or unique site circumstances (such as geothermal) that allow the project to generate electricity from renewable energy not provided In the table. The ability to supply other renewable energy, and the point values allowed, will be decided based upon engineering data documenting the ability to generate electricity.	TBD	
Reduction Measure PS W2: Commercial/Industrial Water Conservation			
Irrigation and Landscaping			
Water Efficient Landscaping	Eliminate conventional turf from landscaping Only moderate water using plants Only low water using plants Only California Native landscape that requires no, or only supplemental, irrigation.	0 3 4 8	4
Trees	Increase tree planting in parking areas 50% beyond City Code requirements	TBD	
Water Efficient Irrigation Systems	Low precipitation spray heads <. 75"/hour, or drip irrigation Weather based Irrigation control systems combined with drip irrigation (demonstrate 20% reduced water use)	1 5	1
Recycled Water	Recycled connections (purple pipe) to irrigation system on site	5	
Storm Water Reuse Systems	Innovative on-site stormwater collection, filtration and reuse systems are being developed that provide supplemental irrigation water and provide vector control. These systems can greatly reduce the irrigation needs of a project. Point values for these types of systems will be determined based upon design and engineering data documenting the water savings.	TBD	
Potable Water			
Showers	Water Efficient Showerheads (2.0 gpm)	3	
Toilets	Water Efficient Toilets (1.5 gpm)	3	3
Faucets	Water Efficient faucets (1.28 gpm)	3	3
Commercial Dishwashers	Water Efficient Dishwasher (6 gallons per cycle or less)	1	
Commercial Laundry Washers	Water Efficient Washing Machine (Water factor < 5.5)	1	

Feature	Description	Assigned Point Values	Project Point Values
Commercial Water Operations Program	Establish an operational program to reduce water loss from pools, water features, etc., by covering pools, adjusting fountain operational hours, and using water treatment to reduce draw down and replacement *of* water. Point values for these types of plans will be determined based upon design and engineering data documenting the water savings.	TBD	
Reduction Measure PS T1: Land Use Based Trips and VMT Reduction			
Mixed Use	Mixes of land uses that complement one another in a way that reduces the need for vehicle trips can greatly reduce GHG emissions. The point value of mixed use projects will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled	TBD	
Local Retail Near Residential (commercial only projects	Having residential developments within walking and biking distance of local retail helps to reduce vehicle trips and/or vehicle miles traveled. The point value of residential projects in close proximity to local retail will be determined based upon traffic studies that demonstrate trip reductions and/or reductions in vehicle miles traveled	TBD	
Reduction Measure PS T2: Bicycle Master Plan			
Bicycle Infrastructure	Ontario's Bicycle Master Plan is extensive and describes the construction on 11.5 miles of Class I bike paths and 23 miles of Class II and Class Ill bikeways to build upon the current 8 miles of bikeways.	TBD	
	Provide bicycle paths within project boundaries.	TBD	
	Provide bicycle path linkages between residential and other land uses.	2	
	Provide bicycle path linkages between residential and transit.	5	
Reduction Measure PS T3: Neighborhood Electric Vehicle Infrastructure			
Electric Vehicles	Provide public charging station for use by an electric vehicle. *(ten points for each charging station within the facility)*	10	30
Reduction Measure PS T4: Employee Based Trip & VMT Reduction Policy			
Compressed Work Week	Reduce the number of days per week that employees need to be on site will reduce the number of vehicle trips associated with commercial/industrial development. Compressed work week such that full time employees are on site:	TBD	
	▪ 5 days per week		
	▪ 4 days per week on site		
	▪ 3 days per week on site		
Car/Vanpools	Car/vanpool program	TBD	
	Car/vanpool program with preferred parking		
	Car/vanpool with guaranteed ride home program		
	Subsidized employee incentive car/vanpool program		
	Combination of all the above		
Employee Bicycle/Pedestrian Programs	Complete sidewalk to residential within one-half mile	TBD	
	Complete bike path to residential within 3 miles		
	Bike lockers and secure racks		
	Showers and changing facilities		
	Subsidized employee walk/bike program		
Shuttle/Transit Programs	Local transit within one-quarter mile	TBD	
	Light rail transit within one-half mile		

Feature	Description	Assigned Point Values	Project Point Values
	Shuttle service to light rail transit station		
	Guaranteed ride home program		
	Subsidized transit passes		
CRT	Employer based Commute Trip Reduction (CRT). CRTs apply to commercial, offices, or industrial projects that include a reduction of vehicle trip or VMT goal using a variety of employee commutes trip reduction methods. The point value will be determined based upon a TIA that demonstrates the trip/VMT reductions. Suggested point ranges:	TBD	
	▪ Incentive based CRT Programs (1-8 points)		
	▪ Mandatory CRT programs (5-20 points)		
Other Trip Reductions	Other trip or VMT reduction measures not listed above with TIA and/or other traffic data supporting the trip and/or VMT for the project.	TBD	
Total Points Earned by Commercial/Industrial Project:			103

CERTIFICATION

I, the undersigned, hereby certify that the statements and information provided in this **Greenhouse Gas Reduction Measures Screening Table,** and in any attached exhibits, present the data and information required for this application to the best of my ability, and that the facts, statements and information presented are true and correct to the best of my knowledge and belief.

Date: 12/14/2021 Signature: _____

Name (print or type): hoonkeun park

BURROWING OWLS AT ONTARIO INTERNATIONAL AIRPORT (OIA)

Biology, Status, Regulatory Setting, and Mitigation Options

Prepared For:
Helix Environmental
7578 El Cajon Blvd
La Mesa, CA 91942

Contact: Ezekiel Cooley (949) 234-8770

Prepared By:
Kidd Biological, Inc
23046 Ave De La Carlota, Ste 600, PMB 66
Laguna Hills, CA 92653

Contact: Jeff Kidd (949) 636-7769

Contents

Biology 2
History and Current Status of BUOW Population in Inland Empire 3
Regulatory Setting 4
Ontario International Airport Authority (OIAA) / FAA / USDA APHIS 5
Mitigation Options (In Situ, Eviction, Active Relocation) 6
In situ (Avoidance On-Site) 6
Eviction (Passive Relocation) 7
Active Translocation (Relocation) 8
Conclusions 10
Recommendations 10
Option 1. Naval Weapons Station Seal Beach (NWSSB). 10
Option 2. Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP) 11
Literature Cited 12
APPENDIX A – MAPS 15
APPENDIX B - Permits 16

Biology

The burrowing owl is a small, brownish, ground-dwelling bird of prey that inhabits arid, open habitats with short vegetation, bare ground, level to sloping topography, and well-drained soils (Poulin *et al.* 2011, CDFG 2012). Suitable burrowing owl habitat varies widely from naturally occurring habitats to highly disturbed conditions in grasslands, deserts, and human-altered landscapes such as agricultural fields, vacant lots, pastures, fallow fields, road rights-of-way, airports, and golf courses (Klute *et al.* 2003). Throughout the range where burrowing owls are found, tall or dense cover types are generally not suitable as burrowing owl habitat. Visibility at nest sites appears to be an important habitat selection factor and may be an anti-predator behavior (Green and Antony 1989, Ronan 2002).

The primary requirement for suitable habitat is the presence of a suitable burrow (Rosenberg *et al.* 2007). Burrowing owls nest and roost in underground burrows created by burrowing mammals such as California ground squirrels (*Otospermophilus beecheyi*), coyotes (*Canis latrans*), and American badgers (*Taxidea taxus*), (Klute *et al.* 2003, Poulin *et al.* 2011, CDFG 2012). They may also nest and roost in other natural or man-made cavities such as rock piles, pipes, culverts, refuse piles, and artificial burrows. Owls prefer nesting in areas with a high density of suitable burrows which likely provide escape burrows for both adult and young owls (Poulin *et al.* 2011). In general, many burrowing owl adults show strong fidelity from year to year (CDFG 2012). Burrowing owls are semi-colonial and often congregate with other owls in winter and nest in loose colonies. Nest densities vary depending on abundance of suitable burrows and prey.

Burrowing owls are generalists as they feed on spiders and insects (arthropods), small mammals, birds and toads (Poulin *et al.* 2011, Rosenberg *et al.* 2007). Burrowing owls are mostly active during the morning and evening (crepuscular) but they can be found active at all times of the day and night (Poulin *et al.* 2011, Gervais *et al.* 2003). During the nesting season, they typically carry prey back to the nest burrow and drop prey at the apron or cache them in the burrows and tunnels depending on nest chronology (Poulin *et al.* 2011, Rosenberg *et al.* 2007). Distance to suitable foraging habitat is a primary factor in nest habitat selection (Rosenberg and McKelvey 1999, Rosenberg *et al.* 2007).

Current literature suggests, owl home range sizes vary from approximately 0.14 and 4.81 kilometers^2 (0.16 and 1.86 miles^2; mean = 2.41 kilometers^2 [0.93 miles^2]), depending on habitat and region (Poulin *et al.* 2011) and is likely related to food abundance and habitat fragmentation (Gervais *et al.* 2008). During the breeding season, owls generally forage within 2.7 km (1.67 miles) of their nest burrow (Haug and Oliphant 1990, Gervais *et al.* 2003, Rosenberg and Haley 2004). In the southern San Joaquin and Imperial Valleys, owls concentrated 80 percent of foraging within 600 meters (1,968.5 feet) of their nests (Gervais *et al.* 2003, Rosenberg and Haley 2004). In general, during the breeding season most foraging occurs within 250 to 600 m (820 to 1,968.5 feet) of the nest.

Natal dispersal from 17 nestlings recaptured as breeding adults in Western Riverside County ranged from 0.0 km to 5.7 km (J.W. Kidd unpublished). During 2013, Kidd Biological Inc, conducted a relocation for Helix Environmental in Otay Mesa, San Diego County and during the subsequent nesting in 2014, successful inbreeding was confirmed between a female offspring and the adult male (Kidd Biological, Inc 2013, San Diego Zoo pers comm).

Predation is often a limiting factor for burrowing owl populations (Catlin and Rosenberg 2008, Poulin *et al.* 2011). Burrowing owl adults, young, and/or eggs are preyed upon by a variety of avian, mammalian, and reptilian predators in our regions such as prairie falcon (*Falco mexicanus*), peregrine falcon (*Falco peregrinus*), great horned owl (*Bubo virginianus*), barn owl (*Tyto alba*), red-tailed hawk (*Buteo jamaicensis*), Cooper's hawk (*Accipiter cooperii*), American crow (*Corvus brachrhynchos*), common raven (*Corvus corax*), coyote, skunk (*Mephitis* spp.), opossum (*Didelphis virginiana*), gopher snake (*Pituophis catenifer*), and domestic dogs and cats (Ronan 2002, Catlin and Rosenberg 2008, Poulin *et al.* 2011).

Common ravens are known to predate a wide variety of species (Boarman and Heinrich 1999). Ravens were documented predating and harassing burrowing owls actively relocated to the Lake Mathews MSHCP Core Area in 2013 (Kidd Biological, Inc 2013). This behavior has been observed by others conducting burrowing owl relocations (Wildlife Preservation Canada 2013) and noted in other raven predation studies, notably desert tortoise (*Gopherus agassizii*), (Boarman 1992, Boarman 2002).

History and Current Status of BUOW Population in Inland Empire

Prior to the 1980's southwestern San Bernardino supported a robust breeding burrowing owl population with hundreds of pairs from the base of the San Bernardino Mountains south to the Prado Basin. After decades of development pressure and the complete absence of meaningful mitigation, only a few remaining breeding pairs and winter migrants are known to persist. The remaining highly fragmented landscape which lacks suitable large protected sites and critical connectivity to and between extant breeding sites creates a bottleneck and prevents the existence of a healthy source population. With the continued development pressure and lack of adequate mitigation required by the resource agencies, the burrowing owl population in this region is tenuous at best and will likely never recover from what was once a robust breeding source population (Kidd et al. 2003, 2007).

A current review of burrowing owls previously reported near the Ontario Airport includes 45 records from 1989-2017. These 45 records are located within seven nearby 7.5min USGS quads (Ontario, Prado, Corona North, Fontana, Cucamonga Peak and Mt. Blady) and Guasti quad where the airport is located (CNDDB 2020, Appendix A - Maps, Figure 1). The nearest owl locations reported south of the airport were evicted approximately ten years ago during development of industrial warehouses. Mitigation included the installation of artificial burrows in a barrow pit on the west side of the nearby retired landfill and the owls were evicted from

their burrows prior to grading (J. Kidd personal observation). Owls are no longer known to occupy this site south of the airport. The subject owls on the OIAA property along the east side of Haven Avenue are included in the list of 45 owl records. Several reported owls north of Interstate 10 that are located west and north of Ontario Mills Mall are some of the only possible extant owls near the airport. All of these owls are surrounded by development and located on small, highly fragmented sites that don't provide long-term conservation value for the owl due to future development and predation pressure to name a few.

The review of occupied owl sites within a few miles of the airport did not result in any known conserved sites, managed for owls, that appear to provide any long-term conservation value for the species. Some owl pairs and individuals are known to occupy sites nearby but those are surrounded by development and not expected to provide any meaningful long-term contribution to the status of burrowing owls in this region.

Regulatory Setting

The California Environmental Quality Act (hereafter CEQA) requires public agencies in California to analyze and disclose environmental impacts associated with development. CEQA was never intended to function as a habitat protection mechanism. When owl habitat is identified during the CEQA process, mitigation is nearly always proposed while avoidance and leaving owls in situ is rarely, if ever, implemented. Typically, during the CEQA process, lead agencies determine significant impacts can be reduced or avoided by evicting owls out of the way of development, thereby avoiding direct take.

CFGC §3503 protects bird nests and CDFC § 3503.5 protects birds of prey and their nests. Therefore, CEQA and the Fish and Game Code protect owls while they have active nests with eggs or young but do not provide any protections for the owls or their burrows during the non-breeding season even when burrows are occupied for shelter and refuge.

In the early 2000's the Center for Biological Diversity (CBD) wrote and submitted a listing petition for the species with the hopes of preserving more owls through adequate mitigation. Despite the recommendation from CDFW staff and experts all over the state, to list this species as threatened or endangered in California, the CDFW Commission rejected a listing petition for political reasons while completely ignoring the science (Center for Biological Diversity 2003). If the commission would have listed the species, it would have afforded the species adequate protection and likely prevented the near extirpation in this region.

With the failed listing attempt, the burrowing owl remains a California Species of Special Concern (SSC) and little to no mitigation is required for destruction/development of occupied habitat. The CDFW BUOW Staff Report on Mitigation (1995) which was replaced by a newer version in 2012, encouraged mitigation and BMP's, however both documents have weak language, are not enforceable, and have accelerated the decline of the burrowing owl throughout this and many other regions of California (Kidd et al. 2003, 2007). Other regional

owl experts in California documented an "*utter failure of CDFW and the CEQA process to protect owls and their habitats in central California*" (L. Trulio pers comm).

CDFW mitigation requirements in San Bernardino County are weak at best and don't afford the owls any reasonable chance of survival because actions weren't taken early enough by the regulatory agencies. Unfortunately, the CDFW 2012 staff report is still the guiding document for mitigation and again, it provides very little, if any conservation value due to the language or lack thereof.

Ontario International Airport Authority (OIAA) / FAA / USDA APHIS

USDA (APHIS) is hired by OIAA to reduce strike hazards caused by various wildlife species. Per FAA rules and regulations, OIAA can't engage in restoration, mitigation or any actions that increase wildlife hazards within zones at and around an FAA certified airport. Any airport can lose their FAA certificate and funding if they are found to be out of compliance with this rule. Any mitigation efforts within 10,000 feet of the airport would be considered out of compliance and would likely result in wasted efforts as APHIS has the authority to haze, evict or lethally remove any hazardous wildlife.

Burrowing owls are generally not struck by aircraft, at high rates like geese, red-tailed hawks and vultures but they are in fact struck throughout their range at both commercial and military airfields. Importantly, owls utilize burrows that support other fossorial animals (e.g. squirrels and rabbits) that attract other large predators to the airfield.

Installing artificial burrows and/or encouraging owls to inhabit lands on or directly adjacent to the OIAA property violates FAA rules and is not a viable strategy because of the expected increased presence of other larger hazardous birds (e.g. red-tailed hawks, golden eagles, ferruginous hawks, red-shouldered hawks, Cooper's hawks, turkey vultures, and common ravens) who would attempt to predate the owls, squirrels or rabbits that would likely use the artificial burrows. Hawks and vultures are those struck by aircraft at the highest rates and those known to cause the most damage per strike. These species are often involved in aircraft strikes while they are hover hunting or circling over the approach or departure ends of the airport within the glide slopes. Bird strikes in these situations (landing and take-off) are the most dangerous and can lead to catastrophic events that can kill hundreds of passengers and crew on jetliners.

Evicting the owls along Haven Avenue outside the airfield could result in owls moving to areas within the airfield, making a more hazardous situation. Owls are often found seeking refuge very close to taxiways and runways under lights, signs and other man-made structures that support refuge and areas for squirrels to create burrows. Many burrowing owls that are struck at airports are those crossing runways as aircraft are departing and arriving. This will generally not lead to a catastrophic accident however even small birds like burrowing owls are capable of causing tens of thousands of dollars in damage to aircraft per event.

Additionally, CDFW Headquarters has communicated with burrowing owl researchers and made it very clear we are not authorized to encourage burrowing owls to reside at or adjacent to commercial or military airfields whether they follow FAA rules or not. Local CDFW offices should be aware of the FAA rules regarding hazardous wildlife and their own internal guidelines from the Headquarters office.

Relocating or encouraging owls to reside on a commercial airfield would violate FAA rules, will result in APHIS having to remove the owls in the future, and creates huge liability for the resource agencies or biologists promoting the in-situ conservation of owls at or near an airport.

In summary, the act of attempting to conduct any form of "mitigation" including in situ or eviction on or directly adjacent to the airfield is not supported by the FAA, APHIS, or CDFW Headquarters hence this leaves us with Active Relocation as the most appropriate mitigation technique to conserve these breeding pairs.

Mitigation Options (In Situ, Eviction, Active Relocation)

During the CEQA process, a project proponent, should expect to hear three common types of mitigation to avoid impacts to owls. These three types of mitigation are discussed in details in this section below.

In situ (Avoidance On-Site)

Although the most important mitigation option, conserving owls on site (in situ) is rarely ever conducted since it is not required by the resource agencies. Preserving occupied habitats would've been the most effective tool for preserving viable source populations of owls but this was never required through the California Environmental Quality Act (CEQA) process (CDFW Staff Report 1995, 2012). The loss of occupied habitats is directly correlated to the current status of owls throughout southwestern San Bernardino County in which owls have encountered significant declines and are on the verge of extirpation.

During the formation of the nation's first HCP (Orange County NCCP) and largest HCP (Riverside County MSHCP) in southern California, very few burrowing owls were preserved within conservation areas in each of these plan areas. The Orange County NCCP preserved essentially no breeding burrowing owls within their plan area as it focused on grassland and ruderal sites that once supported burrowing owls.

The Riverside County MSHCP did preserve owls within conservations areas assumed under their plan and they have added some occupied lands through the development process however the County is having significant problems achieving their stated species objectives. More than a decade into their plan implementation, Riverside County has not met their owl species objectives and are running out of time to correct their failures.

Many of the remaining occupied sites in Riverside County occur in ruderal habitats surrounded by development which are not worthy of conserving. Additionally, during the development

process, on-site conservation is only required within criteria cells if there are more than three pairs within a proposed project and that rarely ever happens therefore in situ conservation is rare, even under HCP's.

Within the HCP, when conservation in situ is not required, viable or practical, owls can be evicted or relocated to suitable protected lands to support owl conservation efforts and to allow for development.

In summary, burrowing owl populations within southwestern San Bernardino County and southwestern California as a whole are in steep decline and on the verge of extirpation, even in the presence of HCP's, because owls are rarely, if ever, preserved on site.

Avoidance is only required during the nesting season where pairs have active nests (CDFW Code Sections 3503 and 3503.5). Once a nest has failed or fledged their young and the nest is no longer considered active, the site can be destroyed through the CEQA process.

Eviction (Passive Relocation)

Since the mid 1990's CDFW has endorsed eviction as the primary "mitigation" method associated with development projects (CDFW 1995, 2012 Staff Report). Also known as "Passive Relocation", this is the act of evicting burrowing owls from their current burrows, outside the nesting season, in support of proposed project related impacts (Trulio 1995). Eviction typically consists of installing one-way doors at all burrow entrances/exits forcing owls to disperse somewhere offsite so a project can proceed. This requires the owl(s) to flee their home range, avoid predation, and find refuge offsite. This process assumes owls are capable of finding and safely settling on nearby suitable lands. This method also (in theory) pushes owls to the next adjacent suitable vacant land and forces the next development project to assume responsibility for the owls that should've been mitigated for properly the first time.

Unfortunately, this decades long mitigation method endorsed by the California Department of Fish and Wildlife (CDFW 1995 & 2012) has never been found to conserve even a single pair of owls. This method is not supported by research including CDFW's own internal mark/recapture study that was quietly conducted between 2002 and 2003 (CDFW 2005). Their project which was never published, but is available on-line, concluded eviction resulted in mortality and never resulted in an evicted pair breeding the subsequent year, post eviction. Despite the known failures of eviction since 2003, CDFW has continued endorsement of eviction which has little to no conservation value. Kidd et al (2007) concluded the continued endorsement and use of eviction has accelerated the decline of the burrowing owl throughout southwestern California and has contributed to the near extirpation of the owl in southwestern San Bernardino County.

In summary, if eviction was found to be an effective mitigation method, one would assume an owl population would not have fluctuated much between 1995 and 2012. Unfortunately, the owl population in this region has sustained significant losses in this time and it is directly correlated to CDFW's continued endorsement of eviction as a viable mitigation method.

Active Translocation (Relocation)

As defined by Bloom and Kidd (unpublished), Active Translocation, is the act of relocating breeding pairs of owls from areas of impending development, immediately prior to egg laying. The main goal of relocation is to provide at least one more breeding attempt by the adults versus eviction which leads to loss of the pair and has never been known to result in a successful nesting attempt post eviction.

In relocation, owl pairs are captured (Bloom 1987, Bloom et al. 2007) at the development site and placed in hacking cages at a conservation area managed for burrowing owls and fed/monitored daily. Once a clutch of eggs has been laid and incubation is more than 50% complete, the cages are completely removed from the relocation site and the daily feeding events stop. Monitoring is conducted using game cameras and site surveys at rates that only introduce a minimum amount of disturbance. Predator control efforts (e.g. hazing, scent markings) are often required to ensure successful efforts. Adults and young are banded (mark/recapture study) and the site is typically monitored/managed for 2 years post release (USFWS MBTA Permit requirement) to ensure the site is managed properly for owl suitability and to report on efficacy of the relocation effort(s).

The relocated adults are critical to the initial efforts of successfully raising young however the fledged young are the most important birds as they will show site fidelity (philopatry) to the release site where they emerged from their natal burrow. Hence, if the adults disperse away from the conservation area post nesting season, that does not make this effort a failure. The most important owls are the young who will show fidelity to their natal area. In many cases, adults do in fact stay on site or explore the new surroundings post breeding season but the owls often nest on the relocation site in subsequent years.

Since relocated adults may return to the source sites, we encourage moving owls as far as possible, over mountain ranges and across other geographic barriers that might reduce the chances of owls returning. Active Relocation works best when conducted at great distances (>30-40 km) as to help break their homing behavior (Kidd and Bloom unpublished data).

Because relocated adult owls are known to have returned to their source sites following successful breeding at the relocation site, the source site must be made inhospitable to burrowing owls before owls are released from cages at the release site. Wild owls may also inhabit a vacant site where owls were just removed therefore the development site must be made inhospitable to owls immediately following removal of owls from a site.

In these cases, we collapse active burrows immediately following capture and scoping, then install of one-way doors throughout all other suitable burrows on site for a minimum of 72 hours. After 72 hours, we scope burrows to better ensure owls are not present then suitable burrows and all remaining habitat features are eliminated to help prevent re-occupation by other owls between the time we depart and the time when construction begins. If long periods of time are expected or if the site has squirrels, rabbits, dogs and coyotes that can dig holes

quickly, it is recommended that weekly site visits occur to better know new suitable burrows emerge.

We have used this mitigation method on state and federal lands throughout California since 1994 as part of personal research and conservation efforts. Many of the early and recent efforts were requested by or approved by the Ontario CDFW Office. Hence there is a system in place with the regulatory agencies that can authorize relocation within and across jurisdictional boundaries.

Relocation can be successful over time, with the right moving parts and some luck, however it is absolutely more successful than eviction when attempting to preserve breeding pairs from proposed development sites. Relocation is authorized by some HCP's and NCCP's or through Scientific Research Permits issued by the state and federal resource agencies to individuals or research organizations (Appendix B Permits).

Kidd Biological, Inc has conducted burrowing owl active translocations in six California counties (San Diego, Riverside, San Bernardino, Los Angeles, Kings and San Joaquin) where detailed coordination was required between multiple agencies and clients. Again, this form of mitigation is not intended to replace in situ conservation but in situ at airports is not recommended by CDFW Headquarters or supported by FAA guidelines.

In summary, this method of preserving breeding pairs is simply a better option than eviction because relocation offers pairs at least one last breeding attempt, something eviction has never been found to do. Active translocation is not the answer to the catastrophic extirpation of owls throughout southwestern California but this method does provide greater conservation value than eviction does, period.

Below I summarize the relocation process, chronologically.

- Hire permitted expert.
- Investigate potential relocation sites to establish which site(s) are most appropriate.
- Prepare Relocation Plan and submit to resource agencies and others included in the process (e.g. MBTA office, CDFW Headquarters, CDFW Local office, Land Owners).
- Upon approval of plan the proponent will set up an escrow account or endowment that guarantees funding for the entire effort (if needed).
- Cages and burrows are installed at release site. String trimming or minor vegetation modifications may be necessary.
- Owls are trapped at the source site close to egg laying (Feb-early March) and released into hacking cages at relocation site. Owls are banded for ID purposes.
- Occupied burrows at airport where capture occurred are excavated to prevent re-occupation.
- One-way doors are installed for 72 hours prior at all other suitable burrows to prevent re-occupation of site.

- Owls are fed and monitored daily at the release site until a full clutch of eggs is well into incubation. Cages are then removed from the site.
- Game cameras are installed to assist future monitoring efforts.
- Monitoring occurs to assess site for predators, disturbance and actions are taken to address potential problems that could impact results of relocation
- Band young and continue monitoring for success and address any problems related to predators or site disturbance
- Monitor site (staff and game cameras) for 2 yrs post release (USFWS Permit Requirement) to document efficacy of relocation
- Conduct habitat modifications and burrow maintenance as needed.
- Monthly reporting from start of project through 24 months.
- Two Annual Reports with the second being the final Project Report.

Conclusions

The USDA could evict the owls along Haven Avenue but that could lead to a more hazardous situation on the airfield operations area and would contribute to the continued reduction in owls within the region. This would also eliminate your chances for a sound and ethical resolution and positive public relations opportunity that would likely be beneficial to the OIAA.

The best approach for owl mitigation at and adjacent to OIAA property should involve active relocation. This will better ensure for safe flight operations and compliance with FAA regulations while also attempting to provide the owls with a greater chance of survival and future breeding attempts.

Recommendations

Below we provide two of the most logical translocation options.

Option 1. Naval Weapons Station Seal Beach (NWSSB).

This military installation in coastal, northwest Orange County once supported more than 50 pairs of owls (PhD Charles Collins unpublished data) in the 1970s-1980's but the population has been hanging on by a thread for the last two decades. On behalf of Leslie McNair of the CDFW Ontario office, we conducted a few active relocations from the Etiwanda area of San Bernardino County to NWSSB in the mid to late 1990's. Owls were removed from Southern California Edison projects and successfully relocated to NWSSB. These relocation efforts were some of the first owl relocations conducted in California and all of the current methods and permit conditions are based on the methods we developed from these successful relocations.

The NAVY conducts monthly surveys and annual owl banding to document and monitor the extant population. During late 2020 NWSSB installed 50 artificial burrowing owl burrows in a designated owl management area on the north magazine near where the extant population breeds. The base is committed to owl conservation and this site is located approximately 55

kilometers southwest of the source at Ontario International Airport (Appendix A – Maps, Figure 2).

Relocating owls from San Bernardino County to NWSSB is not setting a precedence. NWSSB supports distant, suitable lands, managed for owls and the NAVY is fully committed to owl conservation and will participate in this effort if the resource agencies authorize this as the relocation site.

Relocation could be conducted under Principal Investigator (PI) Jeff Kidd's CDFW and USFWS valid permits that authorize this activity.

Option 2. Western Riverside County Multi-Species Habitat Conservation Plan (MSHCP)

Active relocation is a pre-approved activity within the Western Riverside County MSHCP. The RCA who manages the reserve lands within Riverside County accepts relocated owls. Consultations would be required with regional CDFW, CDFW Headquarters, USFWS MBTA office, possibly the regional USFWS ecological services office, RCA and Riverside County Parks for approvals.

The permitting would likely be conducted under the Riverside County HCP and they would need to hire a permittee who maintains permits to conduct the relocations. This process gets to be more difficult as the county will establish roles for different parts of the relocation and delegate to various entities. Since the County is in charge there is no clear PI and projects tend to fail because of the systems they have in place. The expert owl biologist is generally not in charge of the entire process because the County is using their HCP to assume the lead role.

Nonetheless, there is a pre-approved procedure for relocating owls within and to Riverside County and they (Regional Conservation Authority – RCA) has been accepting owls from San Bernardino therefore moving owls from the OIAA would not be precedence setting.

Riverside County has several possible relocation sites that are suitable for owls. Specific sites would need to be selected through a lengthy process involving multiple agencies that are currently bound by COVID-19 rules that appear to reduce their availability in participating in site visits and meetings necessary for deciding relocation sites under the HCP.

Regardless of these restrictions, a site could be selected eventually and owls could be accepted to Riverside County MSHCP reserve land(s). The site would likely not be managed specifically for owls since the Riverside County preserve lands are multi species reserves that are designed to benefit many species under the plan. This can impact long term efficacy of translocations so future management of any release area needs to be discussed with the agencies prior to accepting a site. The option of relocating owls to western Riverside County is viable but should remain as a second option to NWSSB for many reasons unless the past and current process with the county and related resources agencies is amended significantly to promote quick, successful relocations.

Literature Cited

Barclay, J.H. 2008. A Simple Artificial Burrow Design for Burrowing Owls. Journal of Raptor Research 42(1):53-57.

Bloom, P.H. Capturing and handling raptors. 1987. Pages 99-123 in B.A. Giron Pendleton, B.A. Millsap, K.W. Cline, and D.M. Bird, eds. Raptor Management Techniques Manual. Natl. Wildl. Fed., Washington D.C.

Bloom, P.H., W.S. Clark, and **J.W. Kidd**. 2007. Raptor Capture techniques. Pgs. 193 – 219. *In* D.M. Bird and K.L. Bildstein (*eds*). Raptor research and management techniques. Hancock House, Blaine, WA.

Boarman, W.I. 1992. Problems with Management of a Native Predator on a Threatened Species: Raven Predation on Desert Tortoises. Proceedings of the Fifteenth Vertebrate Pest Conference 1992. Paper 8. Retrieved from: http://digitalcommons.unl.edu/vpc15/8

Boarman, W.I. 2002. Reducing Predation by Common Ravens on Desert Tortoises in the Mojave and Colorado Deserts. Report prepared for U.S. Department of the Interior, Bureau of Land Management, San Diego Field Station, San Diego, California. U.S. Geological Survey, Western Ecological Research Center, Sacramento, California. Dated July 18, 2002.

Boarman, W.I. and B. Heinrich. 1999. Common raven (*Corvus corax*), The Birds of North America Online (A. Poole, Ed.). Ithaca: Cornell Lab of Ornithology. Retrieved from the Birds of North America Online: http://bna.birds.cornell.edu/bna/species/476

[CDFG] California Department of Fish and Game. 1995. Staff Report on Burrowing Owl Mitigation. Unpublished Report. Sacramento, California, USA.

[CDFG] California Department of Fish and Game. Resource Assessment Program. 2005. Burrowing Owl Mitigation and Effectiveness Project. http://dfg.ca.gov/habitats/RAP/default.html

[CDFG] California Department of Fish and Game. 2012. Staff report on burrowing owl mitigation. State of California, Natural Resources Agency. Retrieved from: http://www.dfg.ca.gov/wildlife/nongame/docs/BUOWStaffReport.pdf.

California Natural Diversity Database (CNDDB). 2020. (http://dfg.ca.gov/biogeodata/cnddb/) Sacramento, California, USA.

Catlin, D.H. and D.K. Rosenberg. 2008. Breeding dispersal and nesting behavior of burrowing owls following experimental nest predation. American Midland Naturalist 159(1):1–7.

Gervais, J.A., D.K. Rosenberg, and L.A. Comrack. 2008. Burrowing owl (*Athene cunicularia*). Pages 218–226 *in* W.D. Shuford and T. Gardali (eds.). California bird species of special concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento, California. 450 pp.

Green, R.A., and R.G. Anthony. 1989. Nesting success and habitat relationships of burrowing owls in the Columbia Basin, Oregon. Condor 91:347–354.

Haug, E.A. and L.W. Oliphant. 1990. Movements, activity patterns, and habitat use of burrowing owls in Saskatchewan. Journal of Wildlife Management 54(1):27–35.

Kidd Biological, Inc. 2013. Burrowing Owl Relocation Plan. Unpublished report prepared for KZ DevCo, LP, Irvine, California and Garfield Beach CVS, LLC, La Habra, California. Submitted to the Western Riverside County Regional Conservation Authority. Dated January 31, 2013.

Kidd, J.W., P.H. Bloom, C.W. Barrows, and C.T. Collins. 2007. Status of Burrowing Owls in southwestern California. Pages 76-89 *in* Barclay, J.H. K.W. Hunting, J.L. Lincer, J. Linthicum and T.A. Roberts (eds.), Proceedings of the Burrowing Owl Symposium (November 2003). *Bird Populations Monographs* No. 1. The Institute for Bird Populations and Albion Environmental, Inc.

Klute, D.S., L.W. Ayers, M.T. Green, W.H. Howe, S.L. Jones, J.A. Shaffer, S.R. Sheffield, and T.S. Zimmerman. 2003. Status assessment and conservation plan for the western burrowing owl in the United States. Biological Technical Publication FWS/BTP-R6001-2003. U.S. Department of Interior, Fish and Wildlife Service, Washington, D.C. 120 pp.

Trulio, L. 1995. Passive Relocation: A method to preserve burrowing owls on disturbed sites. Journal of Field Ornithology 66: 99-106.

Poulin, Ray, L. Danielle Todd, E.A. Haug, B.A. Millsap and M.S. Martell. 2011. Burrowing owl (*Athene cunicularia*). The Birds of North America Online (A. Poole, editor). Cornell Lab of Ornithology, Ithaca, New York. Retrieved July 2, 2013, from: http://bna.birds.cornell.edu/bna/species/061.

Ronan, N.A. 2002. Habitat selection, reproductive success, and site fidelity of burrowing owls in a grassland ecosystem. M.S. thesis, Oregon State University, Corvallis, Oregon. 82 pp.

Rosenberg, D.K. and K.S. McKelvey. 1999. Estimation of habitat selection for central-place foraging animals. Journal of Wildlife Management 63(3):1028–1038.

Rosenberg, D.K. and K.L. Haley. 2004. The ecology of burrowing owls in the agroecosystem of the Imperial Valley, California. Pages 120–135 *in* W.D. Shuford and K.C. Molina (editors).

Ecology and Conservation of Birds of the Salton Sink: An Endangered Ecosystem. Studies in Avian Biology 27, University of California Press, Berkeley, California. 169 pp.

Rosenberg, D.K., L.A. Trulio, D. Catlin, D. Chromczack, J.A. Gervais, N. Ronan, and K.L. Haley. 2007. The ecology of the burrowing owl in California. Unpublished report to Bureau of Land Management Available from: http://people.oregonstate.edu/~rosenbed/articles/Ecology%20of%20Burrowing%20Owls%20In%20California%20Final%20Report%20March%202007.pdf.

APPENDIX A – MAPS

Figure 1. OIAA owls and nearest owls recently reported to CNDDB.

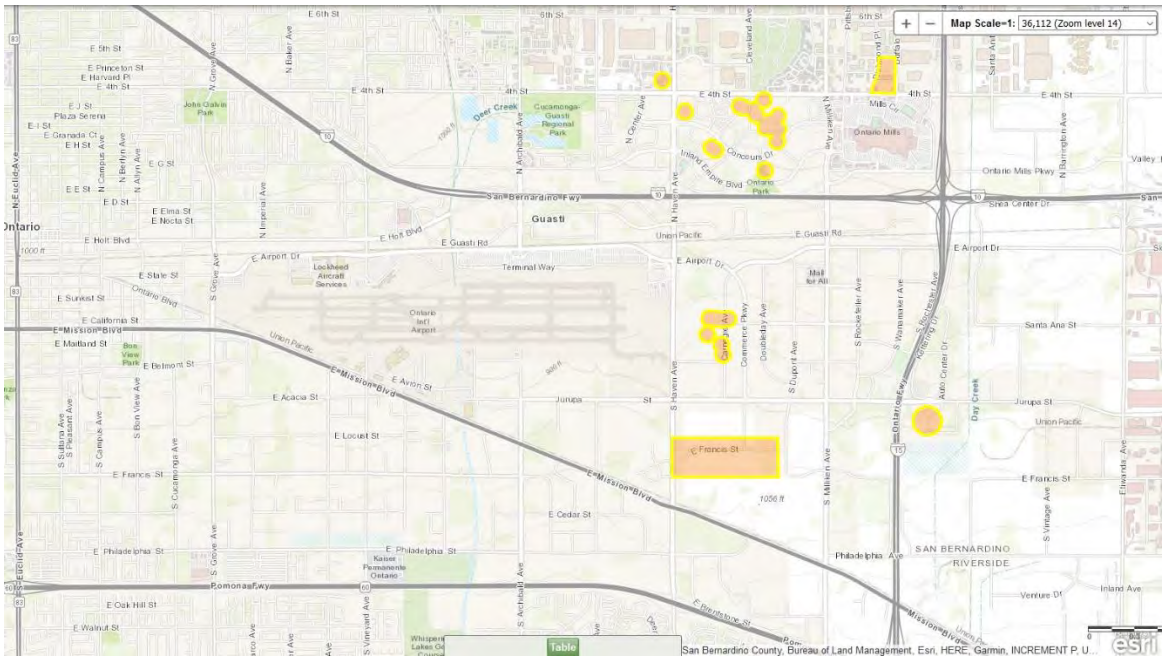


Figure 2. OIAA owls and possible relocation sites

APPENDIX B - Permits

United States Department of the Interior
U.S. GEOLOGICAL SURVEY
PATUXENT WILDLIFE RESEARCH CENTER
BIRD BANDING LABORATORY
12100 BEECH FOREST ROAD STE-4037
LAUREL, MD 20708-4037
301-497-5790

FEDERAL BIRD BANDING PERMIT

Permittee: Personal	Permit Number:	Action:	Action Date:	Issue Date:	Valid Until:
JEFF KIDD	22951	Revise	09/01/2020	02/08/1999	06/30/2022
2911 MERIDIAN CT	Signature of Issuing Official: Thomas J. O'Connell				
ANACORTES, WA 98221	Signature of Permittee:				

Permittee agrees to band in accordance with the general conditions of this permit and with the specific authorization/s listed below:

Permittee is Authorized To Band:

All Raptors Except Eagles
* Threatened and Endangered species are not included in groups unless specified.

American Crow
Common Raven
Golden Eagle
Greater Roadrunner
Loggerhead Shrike

In the States of:

AK * CA * ID * NV * OR * UT * WA *

With Special Authorization to:

Band
Take, possess and transport blood samples-not to exceed 1% body mass
Take, possess and transport feather samples (except eagle flight feathers without USFWS authorization)
Hand capture
Trap at Cavity, Burrow, or Nest Box
Use Bal-chatris
Use Bow nets
Use Dho-gazas
Use Mist nets
Use Net launchers
Use Noose Carpets and Snares
Swedish Goshawk Trap
Use Walk-in traps
Trap

Comments: Use of Verbail Pole Traps, Pit Traps and Harnessed Lures approved.

And Additionally Authorized to Use The Following Auxiliary Marking Authorization/s:

Marker Type	Species	Colors of marker	Locations	Seg #
Plastic Color Leg Band (01A)	Red-shouldered Hawk	Red	Humboldt, CA San Diego, CA Orange, CA	2
	Comments SINGLE WHITE LETTER ON BAND			
Satellite/ Cell/	Cooper's Hawk		CA	3538

Permittee: Personal	Permit Number:	Action:	Action Date:	Issue Date:	Valid Until:
JEFF KIDD	22951	Revise	09/01/2020	02/08/1999	06/30/2022
2911 MERIDIAN CT	Signature of Issuing Official: Thomas J. O'Connell				
ANACORTES, WA 98221	Signature of Permittee:				

Permittee agrees to band in accordance with the general conditions of this permit and with the specific authorization/s listed below:

Marker Type	Species	Colors of marker	Locations	Seg #
GPS Transmitter (back pack) (80B)	Northern Harrier Peregrine Falcon Red-tailed Hawk Short-eared Owl			3

Comments
All bands, auxiliary markers and attachment materials not to exceed 3% total body weight.

Satellite/ Cell/ GPS Transmitter (back pack) (80B)	Peregrine Falcon		Butte, CA Del Norte, CA San Diego, CA Orange, CA Plumas, CA Humboldt, CA	5

Comments
All bands, auxiliary markers and attachment materials not to exceed 3% total body weight.

Satellite/ Cell/ GPS Transmitter (back pack) (80B)	Rough-legged Hawk		AK CA ID NV OR UT WA	6

Comments
All bands, auxiliary markers and attachment materials not to exceed 3% total body weight.

Plastic Color Leg Band (01A)	Rough-legged Hawk	Black	AK CA ID NV OR UT WA	7

Code description(s)
a) 2 char. (100 combos)
1st place: ABCEHSTUXZ;
2nd place: 0123456789;

Comments
A,B,C,E,H,S,T,U,X,Z plus 0 - 9; even numbers on males and odd numbers on females.

Plastic Color Leg	Red-tailed Hawk	Red	Humboldt, CA	

Permittee: Personal	Permit Number:	Action:	Action Date:	Issue Date:	Valid Until:
JEFF KIDD	22951	Revise	09/01/2020	02/08/1999	06/30/2022
2911 MERIDIAN CT	Signature of Issuing Official	Thomas J. O'Connell			
ANACORTES, WA 98221	Signature of Permittee				

Permittee agrees to band in accordance with the general conditions of this permit and with the specific authorization/s listed below:

Marker Type	Species	Colors of marker	Locations	Seg #
Band (01A)			San Diego, CA Orange, CA	8

Code description(s)

a) 2 char. (60 combos)
1st place: ABCDXZ;
2nd place: 0123456789;

Comments
Red plastic bands with white 2-character codes A,B,C,D,X,Z plus 0 through 9

Marker Type	Species	Colors of marker	Locations	Seg #
Plastic Color Leg Band (01A)	Cooper's Hawk Northern Harrier	White	San Diego, CA Orange, CA	9

Comments
Two-digit black numeric codes and 2-character black numeric-alpha codes

Marker Type	Species	Colors of marker	Locations	Seg #
Anodized Color Leg Band (01B)	Peregrine Falcon	Black	Butte, CA Del Norte, CA San Diego, CA Orange, CA Plumas, CA Humboldt, CA	10

Code description(s)

a) 2 upright silver characters over 2 upright silver characters read from left to right. (10 combos)
1st place: 5;
2nd place: 0123456789;
3rd place: A;
4th place: D;

b) 2 upright silver characters over 2 upright silver characters read from left to right. (3 combos)
1st place: 6;
2nd place: 012;
3rd place: A;
4th place: D;

c) 2 upright silver characters over 2 upright silver characters read from left to right. (10 combos)
1st place: 7;
2nd place: 0123456789;
3rd place: A;
4th place: D;

d) 2 upright silver characters over 2 upright silver characters read from left to right. (3 combos)
1st place: 8;
2nd place: 012;
3rd place: A;
4th place: D;

e) 2 upright silver characters over 2 upright silver characters read from left to right. (20 combos)
1st place: 01;
2nd place: 0123456789;
3rd place: A;
4th place: H;

f) 2 upright silver characters over 2 upright silver characters read from left to right. (20 combos)

Permittee: Personal	Permit Number:	Action:	Action Date:	Issue Date:	Valid Until:
JEFF KIDD	22951	Revise	09/01/2020	02/08/1999	06/30/2022
2911 MERIDIAN CT	Signature of Issuing Official	Thomas J. O'Connell			
ANACORTES, WA 98221	Signature of Permittee				

Permittee agrees to band in accordance with the general conditions of this permit and with the specific authorization/s listed below:

Marker Type	Species	Colors of marker	Locations	Seg #

1st place: 23;
2nd place: 0123456789;
3rd place: A;
4th place: H;

Plastic Color Leg Band (01A)	Barn Owl Great Horned Owl	Red	San Diego, CA Orange, CA	11

Comments
Red bands with one or two numbers or letters (see RSHA and RTHA authorization)

Anodized Color Leg Band (01B)	Burrowing Owl	Black/Green	CA	12

Code description(s)

a) 2 upright silver characters over 2 upright silver characters read from left to right. (20 combos)
1st place: 01;
2nd place: 0123456789;
3rd place: A;
4th place: 5;

Anodized Color Leg Band (01B)	Burrowing Owl	Green/Black	CA	13

Code description(s)

a) 2 upright silver characters over 2 upright silver characters read from left to right. (20 combos)
1st place: 01;
2nd place: 0123456789;
3rd place: A;
4th place: 6;

Anodized Color Leg Band (01B)	Burrowing Owl	Green	CA	14

Code description(s)

a) 2 upright silver characters over 2 upright silver characters read from left to right. (100 combos)
1st place: 0123456789;
2nd place: 0123456789;
3rd place: A;
4th place: 5;

Anodized Color	Burrowing Owl	Green	CA	

Permittee: Personal	Permit Number:	Action:	Action Date:	Issue Date:	Valid Until:
JEFF KIDD	22951	Revise	09/01/2020	02/08/1999	06/30/2022
2911 MERIDIAN CT	Signature of Issuing Official: Thomas J. O'Connell				
ANACORTES, WA 98221	Signature of Permittee:				

Permittee agrees to band in accordance with the general conditions of this permit and with the specific authorization/s listed below:

Marker Type	Species	Colors of marker	Locations	Seg #
Leg Band (01B)				15

Code description(s)

a) 2 upright silver characters over 2 upright silver characters read from left to right. (60 combos)
1st place: 012345;
2nd place: 0123456789;
3rd place: B;
4th place: 6;

Marker Type	Species	Colors of marker	Locations	Seg #
Anodized Color Leg Band (01B)	Burrowing Owl	Black	CA	16

Code description(s)

a) 2 upright silver characters over 2 upright silver characters read from left to right. (100 combos)
1st place: 0123456789;
2nd place: 0123456789;
3rd place: A;
4th place: 5;

Marker Type	Species	Colors of marker	Locations	Seg #
Anodized Color Leg Band (01B)	Burrowing Owl	Black	CA	17

Code description(s)

a) 2 upright silver characters over 2 upright silver characters read from left to right. (60 combos)
1st place: 012345;
2nd place: 0123456789;
3rd place: B;
4th place: 6;

Marker Type	Species	Colors of marker	Locations	Seg #
Satellite/ Cell/ GPS Transmitter (back pack) (80B)	Golden Eagle		Orange, CA San Diego, CA Plumas, CA	18

Comments
All bands, auxiliary markers and attachment materials not to exceed 3% total body weight.

Marker Type	Species	Colors of marker	Locations	Seg #
Anodized Color Leg Band (01B)	American Kestrel Barn Owl Burrowing Owl Cooper's Hawk Great Horned Owl Northern Harrier Red-tailed Hawk Short-eared Owl White-tailed Kite	Silver	CA OR	19

Permittee: Personal	Permit Number:	Action:	Action Date:	Issue Date:	Valid Until:
JEFF KIDD	22951	Revise	09/01/2020	02/08/1999	06/30/2022
2911 MERIDIAN CT	Signature of Issuing Official	Thomas J. O'Connell			
ANACORTES, WA 98221	Signature of Permittee				

Permittee agrees to band in accordance with the general conditions of this permit and with the specific authorization/s listed below:

Marker Type	Species	Colors of marker	Locations	Seg #

Comments
Acraft Type 1 bands, silver with black codes A/N or N/A as coordinated by Pagel (23395)

Wing Tag (39A)	Turkey Vulture	Orange	Skagit, WA	20

Code description(s)
a) 2 black char. (609 combos)
1st place: ABCEFGHJKMNPRSTUVWXYZ;
2nd place: 01234578ABCEFGHJKMNPRSTUVWXYZ;

Anodized Color Leg Band (01B)	Rough-legged Hawk	Green	Nome, AK	21

Code description(s)
a) 1 upright silver character over 1 upright silver character. (153 combos)
1st place: ABCDEHKMN;
2nd place: ABCDEHKMNPRSUVWXZ;
Comments
Acraft Bands. Type 2

Satellite/ Cell/ GPS Transmitter (back pack) (80B)	Burrowing Owl		CA	22

Comments
All bands, auxiliary markers and attachment materials not to exceed 5% total body weight. Experimental authorization. Cease use if negative effects.
End of season report required

Plastic Color Leg Band (01A)	Common Raven	White	San Bernardino, CA	23

Code description(s)
a) 1 upright black character over 1 upright black character. (260 combos)
1st place: 0123456789;
2nd place: ABCDEFGHIJKLMNOPQRSTUVWXYZ;

Plastic Color Leg Band (01A)	Common Raven	Red	Skagit, WA	24

Code description(s)
a) 1 upright white character over 1 upright white character. (260 combos)

Permittee: Personal	Permit Number:	Action:	Action Date:	Issue Date:	Valid Until:
JEFF KIDD	22951	Revise	09/01/2020	02/08/1999	06/30/2022
2911 MERIDIAN CT	Signature of Issuing Official	Thomas J. O'Connell			
ANACORTES, WA 98221	Signature of Permittee				

Permittee agrees to band in accordance with the general conditions of this permit and with the specific authorization/s listed below:

Marker Type	Species	Colors of marker	Locations	Seg #

1st place: 0123456789;
2nd place: ABCDEFGHIJKLMNOPQRSTUVWXYZ;

Wing Tag (39A)	Red-tailed Hawk	Yellow	King, WA	25

Code description(s)

a) 2 upright black characters read from left to right. (10 combos)
1st place: K;
2nd place: 0123456789;
b) 2 upright black characters read from left to right. (3 combos)
1st place: L;
2nd place: 012;

Satellite/ Cell/ GPS Transmitter (back pack) (80B)	Red-tailed Hawk	King, WA	26

Comments
GSM transmitter. All bands, auxiliary markers and attachment materials not to exceed 3% total body weight.

Satellite/ Cell/ GPS Transmitter (back pack) (80B)	Common Raven	San Bernardino, CA	27

Comments
GSM-GPS transmitter. All bands, auxiliary markers and attachment materials not to exceed 3% total body weight.

Permittee: Personal	Permit Number:	Action:	Action Date:	Issue Date:	Valid Until:
JEFF KIDD	22951	Revise	09/01/2020	02/08/1999	06/30/2022
2911 MERIDIAN CT	Signature of Issuing Official	Thomas J. O'Connell			
ANACORTES, WA 98221	Signature of Permittee				

Permittee agrees to band in accordance with the general conditions of this permit and with the specific authorization/s listed below:

The following Subpermittee/s are authorized to band under the direction of the above permittee, in accordance with the same general conditions, and the subpermittee specific authorizations listed below:

22951 - C NINA JIMERSON-KIDD 2911 MERIDIAN CT ANACORTES, WA 98221

Is Authorized To Band:

All Raptors Except Eagles
* Threatened and Endangered species are not included in groups unless specified.

American Crow
Common Raven
Greater Roadrunner
Loggerhead Shrike

In the States Of:

CA * ID * NV * OR * UT * WA *

With Special Authorization to:

Band
Auxiliary mark
Use Bal-chatris
Use Mist nets

Comments:

Phai traps and harnessed lures approved

22951 - F PETER BLOOM 13611 HEWES AVENUE SANTA ANA, CA 92705

Is Authorized To Band:

All Raptors Except Eagles
* Threatened and Endangered species are not included in groups unless specified.

American Crow
Common Raven
Greater Roadrunner
Loggerhead Shrike

In the States Of:

CA * ID * NV * OR *

With Special Authorization to:

Band
Auxiliary mark
Take, possess and transport blood samples-not to exceed 1% body mass
Take, possess and transport feather samples
Use Bal-chatris
Use Bow nets
Use Mist nets

Comments:

Verbail Pole Traps, Phai traps, Harnessed Lures approved

Permittee: Personal	Permit Number:	Action:	Action Date:	Issue Date:	Valid Until:
JEFF KIDD	22951	Revise	09/01/2020	02/08/1999	06/30/2022
2911 MERIDIAN CT	Signature of Issuing Official	Thomas J. O'Connell			
ANACORTES, WA 98221	Signature of Permittee				

Permittee agrees to band in accordance with the general conditions of this permit and with the specific authorization/s listed below:

22951 - G SCOTT THOMAS 24911 HAYUCO MISSION VIEJO, CA 92692

Is Authorized To Band:

All Raptors Except Eagles
* Threatened and Endangered species are not included in groups unless specified.

American Crow
Common Raven
Golden Eagle
Greater Roadrunner
Loggerhead Shrike

In the States Of:

CA * ID * NV * OR * UT * WA *

With Special Authorization to:

Band
Auxiliary mark
Take, possess and transport blood samples-not to exceed 1% body mass
Take, possess and transport feather samples (except eagle flight feathers without USFWS authorization)
Use Bal-chatris
Use Bow nets
Use Mist nets

Comments:

Verbail Pole Traps, Phai traps, Harnessed Lures approved

22951 - H MATTHEW BRINKMAN 1092 DYLAN CT #B MCKINLEYVILLE, CA 95519

Is Authorized To Band:

All Raptors Except Eagles
* Threatened and Endangered species are not included in groups unless specified.

In the States Of:

CA *

With Special Authorization to:

Band
Auxiliary mark
Take, possess and transport blood samples-not to exceed 1% body mass
Take, possess and transport feather samples
Use Bal-chatris
Use Bow nets
Use Dho-gazas
Use Noose Carpets and Snares

Comments:

CAN USE VERBAIL POLE TRAPS AND HARNESSED LURES

Permittee: Personal	Permit Number:	Action:	Action Date:	Issue Date:	Valid Until:
JEFF KIDD	22951	Revise	09/01/2020	02/08/1999	06/30/2022
2911 MERIDIAN CT	Signature of Issuing Official	Thomas J. O'Connell			
ANACORTES, WA 98221	Signature of Permittee				

Permittee agrees to band in accordance with the general conditions of this permit and with the specific authorization/s listed below:

22951 - J NEIL PAPROCKI 1467 S ALPOWA ST MOSCOW, ID 83843

Is Authorized To Band:

Rough-legged Hawk

In the States Of:

AK * CA * ID * NV * OR * UT * WA *

With Special Authorization to:

Band
Hand capture
Use Bal-chatris
Use Bow nets
Use Dho-gazas
Use Mist nets

22951 - K COLIN DILLINGHAM 400 FIRST STREET QUINCY, CA 95971

Is Authorized To Band:

All Raptors Except Eagles
* Threatened and Endangered species are not included in groups unless specified.

In the States Of:

CA * NV *

With Special Authorization to:

Band
Auxiliary mark
Use Bal-chatris
Use Bow nets
Use Dho-gazas
Use Mist nets

22951 - L JOHN HART 718 N HUMPHREY'S ST. STE 202 FLAGSTAFF, AZ 86001

Is Authorized To Band:

Common Raven

In the States Of:

CA *

With Special Authorization to:

Band
Auxiliary mark
Hand capture

FEDERAL BIRD BANDING PERMIT

Under the provisions of Regulations issued under the Migratory Bird Treaty Act of July 3, 1918 (40 Stat. 755) as amended, or the Bald Eagle Act of June 8, 1940 (54 Stat. 250) as amended, the person named hereon is authorized to capture, for scientific banding or marking purposes, those migratory birds described hereon and to salvage birds accidentally killed during normal banding activities.

This permit is subject to the terms, exceptions and restrictions expressed herein or on the reverse side hereof and is further subject to any applicable Territorial, State, Tribal or Federal Regulations.

This permit is invalid unless accompanied by any required State permits or licenses.

GENERAL CONDITIONS

1. The Permittee is not authorized to capture or possess migratory birds for any reason other than banding, marking or salvage of banding mortalities for scientific purposes. NOR IS THE PERMITTEE ALLOWED TO HOLD MIGRATORY BIRDS FOR A PERIOD OF MORE THAN 24 HOURS. Live birds shall be released as soon as practical after capture.
2. You may donate dead migratory birds or any parts thereof (except bald eagles and golden eagles, and species listed as threatened and endangered) without additional authorization from the migratory bird permit issuing office to public institutions (as specified in 50 CFR 10.12) or individuals or entities authorized by permit to acquire and possess migratory bird specimens for educational purposes. All dead specimens that you do not transfer to another authorized party must be disposed of by such means as are necessary to ensure that they are not exposed to animals in the wild.
3. You may not salvage and must immediately report to the USFWS Office of Law Enforcement any dead or injured migratory birds that you encounter that appear to have been poisoned, shot, electrocuted, have collided with industrial power generation equipment, or were otherwise killed or injured as the result of potential criminal activity. Please contact BBL for more information.
4. All eagle feathers and/or whole eagle carcasses must be shipped to the National Eagle Repository. Contact: U.S. Fish and Wildlife Service, National Eagle and Wildlife Repository, 5650 Havana St., RMA, Building 128, Commerce City, Colorado 80022, (303) 287-2110.
5. The Permittee shall keep RECORDS accounting for the use of all bands received. Periodic RECORDS COVERING THE USE OF THESE BANDS shall be submitted to the Bird Banding Laboratory in accordance with the instructions received there from. Failure to provide data in accordance with the instructions received from the Bird Banding Laboratory is sufficient justification for the revocation of this permit. The Permittee shall keep records of disposition of salvaged banding mortalities for a period of five years and shall be reported to the Bird Banding Laboratory upon request.
6. The holder of this permit shall not sell, exchange, or transfer bands to unauthorized banders or to the general public. All transfers to authorized banders must be communicated to the Bird Banding Laboratory prior to the transfer of bands. Any unused bands remaining when this permit is voluntarily returned, revoked, or expired must be returned to the Bird Banding Laboratory.
7. The Permittee shall, at all reasonable hours, allow any authorized representative of the U. S. Geological Survey or the U.S. Fish and Wildlife Service to ENTER and INSPECT the premises where operations authorized by this permit are being conducted and shall allow such representative to inspect the records relating to such operations.
8. This permit may be SUSPENDED or REVOKED by the Director of the U.S. Geological Survey or authorized representative, if the Permittee violates any of the provisions in the regulations under which this permit is issued or if the Permittee fails to render promptly any reports required. This permit is, at all times, subject to suspension or revocation at the discretion of the Director or representative.
9. This permit is not transferable and must be in possession of the Permittee when exercising the authorizations granted herein.
10. All traps, nets or other capture devices shall bear a TAG or LABEL showing the name, address and permit number of the Permittee; alternatively the trapping area shall be adequately marked with POSTERS provided by the Bird Banding Laboratory. The Permittee's name, address and permit number shall be legibly displayed on such posters.
11. This permit DOES NOT authorize the capture of any birds on any property, public or private without the CONSENT OF THE OWNER OR CUSTODIAN THEREOF.
12. All Banding under this permit is in accordance with the principles, spirit, and intent of the Animal Welfare Act of 1970 and the most recent revision of The Ornithological Council's Guidelines in the Use of Wild Birds in Research.
13. Unless specifically noted on the reverse, the following ARE NOT AUTHORIZED:

a. The taking of blood or feather sampling from any bird.

b. The use of ANY BAND, clip, paint, dye, signal-sending device or any marking device other than the official numbered leg bands issued by the Bird Banding Laboratory.

c. The use of MIST NETS or other nets for the capturing of birds.

d. The use of TRANQUILIZING DRUGS OR OTHER CHEMICALS for the purpose of capturing birds.

e. Trapping or disturbing the nests or nestlings, for the purpose of banding or marking, of species designated by the Secretary of Interior as "ENDANGERED "or "THREATENED."

f. The handling of any PREVIOUSLY BANDED BIRD in any manner which may bias data on file in the Bird Banding Laboratory which pertain to that bird or which may alter that bird's survival potential, behavior or other normal characteristics. This specifically includes adding markers to or removing markers from previously banded birds.

14. If a bird is found injured, the bander must assess the injury to determine if treatment and rehabilitation would lead to the bird's recovery. If it is likely that treatment will allow the bird to recover from it's injuries, the bander should transport the injured bird to an avian rehabilitation facility. If the bander determines that recovery is not likely given the extent of the injuries, they should euthanize the bird using approved euthanasia procedures. Banders operating under IACUC approval should follow their estabished guidelines regarding the application of euthanasia to bird in distress. Other banders should take the most appropriate course of action under the circumstances and consider euthanasia to avoid prolonged distress on birds.

Form 9-475
(February 2018)

SCIENTIFIC COLLECTING

Permit Number: MB52857C-0
Effective: 12/18/2020 Expires: 03/31/2023

Issuing Office:

Department of the Interior
U.S. FISH AND WILDLIFE SERVICE
Migratory Bird Permit Office
2800 Cottage Way - Room W-2606
Sacramento, CA 95825
Tel: 916-978-6183 Fax: 916-978-6183

SUPERVISORY WILDLIFE BIOLOGIST

Permittee:

JEFF W KIDD
23046 AVENUE DE LA CARLOTA, SUITE 600, PMB 66
LAGUNA HILLS, CA 92653
U.S.A.

Authority: Statutes and Regulations: 16 USC 703-712, 16 USC 668(a); 50 CFR Part 13, 50 CFR 21.23, 50 CFR 22.21.

Location where authorized activity may be conducted:
Activities authorized throughout California. Research activities using a live lure bird are authorized throughout Washington. Specific research activities using a live lure bird in Alaska are specified in permit condition "D" below.
Records are maintained at 2911 Meridian Ct, Anacortes, WA 98221.

Reporting requirements:
ANNUAL REPORT DUE: 01/31
You must submit an annual report to your Regional Migratory Bird Permit Office each year, even if you had no activity. Form at www.fws.gov/forms/3-202-1.pdf.

Authorizations and Conditions:

A. General conditions set out in Subpart B of 50 CFR 13, and specific conditions contained in Federal regulations cited above, are hereby made a part of this permit. All activities authorized herein must be carried out in accord with and for the purposes described in the application submitted. Continued validity, or renewal of this permit is subject to complete and timely compliance with all applicable conditions, including the filing of all required information and reports.

B. The validity of this permit is also conditioned upon strict observance of all applicable foreign, state, local tribal, or other federal law.

C. Valid for use by permittee named above.

D. **Temporal Aspects of Rough-legged Hawk Migration in Western North America**
Project Investigator: Jeff Kidd (Kidd Biological, Inc) and Travis Booms (Alaska Dept of Fish & Game)
Location: Seward Peninsula, along the road system of Nome, Teller, & Council.
Dates: June-July 2019 Only
Authorized Activities: Authorized to bring non-releasable Great-horned Owl or taxidermied Great Horned Owl from California to use as a lure bird for this study. Authorized to trap and release Rough-legged Hawks and attach, via the backpack method, PTT or GSM transmitters (weighing no more than 30 grams) on no more than 21 birds in 2019.

Great Horned Owl, Peregrine Falcon, and Turkey Vulture Lures for Studies Involving Raptor Trapping with a Dho-Gaza Set - All Authorized Locations Excluding Alaska

You and all subpermittees are authorized to transport one (1) live, non-releasable Great Horned Owl; one (1) live Peregrine Falcon; and one (1) live Turkey Vulture to use as lures in capturing and banding other raptors. You are also authorized to transport one (1) live, non-releasable Common Raven to use as a lure in capturing and banding/marking other ravens. The lure birds may be borrowed from an individual/organization permitted to hold non-releasable raptors for educational or scientific purposes (see contact information below). In addition, you are also authorized to possess, transport, and use one (1) taxidermied Great Horned Owl as a lure.

These live birds may be temporarily borrowed from:
Orange County Bird of Prey Center, Special Purpose Possession - Live Permit No. MB753880, as well as other Special Purpose Possession - Live permittees in California and in Washington.

You and your subpermittees are authorized to possess, transport, and use (1) taxidermied Great Horned Owl as a lure in capturing and banding other raptors.

Burrowing Owl Relocation Study

You and your subpermittees are authorized to live-trap and relocate **30 BURROWING OWLS (*Athene cunicularia*) per year, including adults and juveniles** from construction projects or airfields located throughout California. You are authorized to move them to locations agreed upon by the U.S. Fish and Wildlife Service (Service). You are not authorized to relocate Burrowing Owl pairs that have viable eggs or nestlings without additional authorization. Every effort must be made to relocate Burrowing Owls immediately prior to the breeding season to avoid potentially impacting reproductive success. Active translocation must be implemented in such a way to encourage relocated Burrowing Owls to stay at the relocation site. Burrowing Owls are much more likely to stay at the relocation site if they successfully reproduce at the site. For best results and to avoid placing wintering owls in captivity, place the owls in the hacking enclosures when most of the owls formed pairs and begin displaying courtship behavior.

The details of each relocation project must be submitted to our office for prior approval before any owls are moved. A summary of each relocation project must include the following:

1) Location that Burrowing Owls are being removed from;
2) Reason why the Burrowing Owls need to be removed from the site;
3) Number of Burrowing Owls being relocated, including number of pairs and number of singles;
4) Description of methods that will be used to ensure burrows are vacant prior to their collapse (can be supplied by developer);
5) Location and landowner contact information for the release site
6) Description of the release site, including habitat description, presence/absence of ground squirrels, presence/absence of other Burrowing Owls, results of predator survey, results of prey survey, and landowner commitment to maintain artificial burrow systems and manage the land for Burrowing Owls long-term

E. Release Site Requirements:

1) Rodenticides and pesticides must not be applied in or around the vicinity of the release site as long as Burrowing Owls remain at the release site. Burrowing Owls are known to forage up to 600 meters away from their burrow. The use of rodenticides and pesticides has been known to cause secondary poisoning in owls and also can reduce prey populations, which may limit the success of the relocation project.
2) The release site must also be occupied by California ground squirrels or other fossorial mammals that create burrows large enough for Burrowing Owls to utilize. If ground squirrels are not currently present, you may translocate ground squirrels to the release site. If ground squirrel translocation isn't feasible, you must install 50% more artificial burrows than required under Condition H below.
3) Artificial burrows must not be placed in the bottom of a basin, wash, or depression where water can collect and flood burrows. Artificial burrows installed in mounds or levees must be above the flood zone.
4) The release site must consist of open habitat with short or sparse vegetation and an unobstructed view for hundreds of feet in all directions.
5) The release site must have abundant prey within close proximity (within 600 meters) to the burrows available year-round to sustain the owls.

Release Site Recommendations:

1) The Service recommends selecting a release site that minimizes potential human and wildlife conflicts or incompatibility,

including but not limited to human foot and vehicle traffic, predation by cats, loose dogs, and urban-adapted wildlife.
2) The Service recommends selecting a release site where Burrowing Owls are already present to encourage relocated owls to stay.

F. Trapping, Banding, and Monitoring Requirements:
1) Authorized trap methods include bow-trap, Swedish goshawk trap, compartment trap, bal-chatri, noose carpet, and one-way door with box at the burrow.
2) Captured owls must be handled and transported in a manner that minimizes stress.
3) For monitoring purposes, owls must be banded under the authority of a U.S. Geological Survey Bird Banding Lab permit prior to release.

Trapping, Banding, and Monitoring Recommendations:
1) The Service recommends color-banding captured owls to facilitate long-term monitoring. The Service also recommends gathering morphometric data for each owl.

G. Hack Enclosure Requirements: You are authorized to temporarily hold Burrowing Owls in hack enclosures at the release site.
1) You must keep family groups together in order to increase hunting success and protection from predators.
2) You must provide owls with food, water, and an adequate number of artificial burrows for shelter (artificial burrow requirements are described in further detail below) while they are held in the hack enclosure. Food may consist of mice, crickets, chicks, and meal worms.
3) The enclosure must be able to withstand stormy weather. The enclosure must also protect owls from all potential predators, be of sufficient size to enclose the artificial burrow systems, and provide sufficient space for flight (minimum 12' L x 12' W x 6' H). The height of the enclosure should be extended to 8' if there is a possibility that birds may remain in captivity for longer than 30 days to minimize muscle atrophy.
4) You must dismantle the hack enclosure within 30 days of relocation unless you receive approval for an extension from the U.S. Fish and Wildlife Service. Leaving Burrowing Owls in an enclosure for too long at the release site can give them a false sense of security and can be an attraction for predators.
5) You must discontinue feeding immediately after dismantling the enclosures.
6) You must remove enclosures and other human artifacts from the relocation site immediately after dismantling the enclosures.
7) You must camouflage all remote monitoring equipment (cameras) and place equipment as far from the enclosure as practical to avoid attracting predators. Cameras must be placed 1.5 feet or lower from the ground and be covered by a perch deterrent to minimize predator use as a perch.

Hack Enclosure Recommendations:
1) The Service recommends using an enclosure with corners that are as wide-angled as possible to minimize sharp-edge hazards and the risk of injury to owls.
2) Predators can be deterred from digging under the enclosure by installing a few feet of chicken wire or hardware cloth on the ground around the perimeter of the enclosure. Bury the chicken wire or hardware cloth in soil so that predators are unable to determine where the edge of the wire is located.

H. Artificial burrow system (ABS) Requirements:
1) Each relocated Burrowing Owl must be provided with 2-4 burrow chambers at the release site; each relocated owl pair must be provided with a minimum of 4 burrow chambers at the release site.
2) The bottom of the burrow chambers must be a minimum of 4 feet below the soil surface. The top of the burrow chambers must be buried under a minimum of 3 feet of soil.
3) Each ABS must have multiple entrances facing different directions so that owls can easily escape from predators.
4) Each burrow chamber must have at least one entrance tunnel leading to the soil's surface. Tunnels must be at least 8 feet long and constructed of 4-inch corrugated flexible drain pipe. Tunnels should have a slope of 20-45 degrees between the surface and the nest chamber. Each tunnel must have a 90 degree horizontal turn between the entrance and the nest chamber to help prevent predators from entering the chamber. The drain pipe should only protrude a short distance into the burrow chambers to maximize living space for the owls.
7) You must either install a hollow concrete block at each tunnel entrance at the soil surface, or you must slip a 6-inch rigid PVC pipe over each entrance and pile river rock around each entrance for erosion control and protection from predators.

9) You or the responsible landowner must maintain all ABS and surrounding habitat long-term to ensure the site remains suitable for Burrowing Owls. You or the responsible landowner must clean and repair artificial burrows annually. You or the responsible landowner must also manage the vegetation in and around the release site annually to maintain visibility for the owls.

Artificial burrow system (ABS) Recommendations:

1) The Service recommends maximizing the number of artificial burrows at the release site. The Service recommends installing more artificial burrows than required to support local owls that may move into the site, in addition to supporting the relocated owls. The quantity and spacing of occupied burrows and satellite burrows at the capture site will help determine the quantity and spacing of burrows that should be provided at the release site.
2) The Service recommends using either Wild at Heart's ABS design (summarized here) or John H. Barclay's design (Barclay, 2008, J. Raptor Res. 42(1):53-57). A wooden burrow chamber design may be used in lieu of the plastic chamber designs. The minimum ABS requirements described above must be implemented regardless of which ABS design you choose.
3) The following is a Summary of Wild at Heart, An Arizona-Based Raptor Rescue's ABS design (Greg Clark is available for questions about methods; greg@bluetiger.com or 480-595-5047). Over-turned 5-gallon plastic buckets may be used as burrow chambers. Four over-turned buckets may be placed side-by-side in a cluster to serve as burrow chambers for each owl pair. The buckets may either be arranged above ground for a mound ABS or placed inside the bottom of a pit for a subterranean ABS. A 5-inch diameter hole may be cut in the side of each bucket at the bucket opening for connection to a tunnel. Two of the buckets may be inter-connected with flexible tubing to provide owls with an expanded burrow chamber and a second entrance/exit. Poultry cloth (chicken wire) may be placed under burrow chambers to prevent California ground squirrels and pocket gophers from digging up the soil and filling the chambers and tunnels with soil. Poultry cloth may also be installed around burrow entrances to deter large predators from digging up a burrow.
4) The Service recommends installing ABS about 10 feet apart from each other.
5) Maintenance activities may include grazing, mowing with a push mower, mowing with a mechanical mower with low impact tires, or using a weedeater to reduce annual grass height. Maintenance may also include keeping area free of trees and shrubs and habitat modification to increase prey populations.
6) The Service strongly recommends preventing excessive human and human-related disturbance that can result in excessive flushing of Burrowing Owls or damage to their burrows (e.g., walking, jogging, off-road/dirt bike activity, dog-walking). This also includes controlling loose and feral pets that may chase, injure, and prey upon owls.

I. Post-relocation Monitoring Requirements:

1) You must monitor owl activity once per week in the morning and evening immediately following release (satellite telemetry fulfills this requirement). Cameras may be used to monitor activity to minimize disturbance at the release site. Monitoring intensity may vary depending on the season (e.g. less frequent during the non-breeding season). Monitoring must continue through the breeding season at a minimum.

Post-relocation Monitoring Recommendations:

1) The Service recommends continuing to monitor owl activity through the end of the second breeding season after release.

J. Ground Squirrel and Burrowing Owl Management Recommendations:

1) The Service recommends managing the release/relocation site to attract and maintain ground squirrels. Not only do the squirrels construct the natural and complex burrow systems used by the owls during all times of the year, they also serve as predator sentinels and can help reduce undue predation on owls. If ground squirrels are not present, consideration should be given to translocating squirrels to make the site more suitable for burrowing owls. Artificial burrows should not be relied upon as a long-term solution, and as long as artificial burrows are needed, there should be sufficient funding for annual maintenance and repair of the artificial burrow system.

K. You assume all liability and responsibility, including financial costs, for the conduct of any associated activity, i.e., rehabilitation costs.

L. You are authorized to salvage Burrowing Owl carcasses, tissues, feathers, pellets, and non-viable eggs for the purposes of 1) collecting genetic material for DNA sexing, gene sequencing, relatedness/parentage, cell culture, and other genetic analysis; 2) collecting feathers for stable isotope and other molecular analyses; 3) diet analysis of regurgitated pellets; 4) collecting non-viable eggs to determine fertility and/or obtain genetic material, and 5) determining causes of death, if possible. You are authorized to share specimens with collaborators

who are either permitted to possess these specimens or are exempt under 50 CFR 21.12.

M. You are authorized to salvage dead migratory birds (except species listed as threatened or endangered under the Endangered Species Act). Any dead bald eagle or golden eagle salvaged must be reported within 48 hours to the National Eagle Repository at (303) 287-2110 and to the migratory bird permit issuing office at 2800 Cottage Way, W-1916, Sacramento, CA 95825; (916) 978-6183; permitsR8MB@fws.gov. The Repository will provide directions for shipment of these specimens.

For a list of threatened and endangered species in your state, visit the U.S. Fish and Wildlife Service's Threatened and Endangered Species System (TESS) at: http://www.fws.gov/endangered/.

Unused specimens may be donated to the Western Foundation of Vertebrate Zoology or to other permittees or institutions exempt under 50 CFR 21.12.

N. You are authorized to salvage abandoned (unoccupied) migratory bird nests and nonviable eggs outside the nesting season, except for nests and eggs of bald eagles or golden eagles, or species listed as threatened or endangered under the Endangered Species Act.

O. You may not salvage and must immediately report to the USFWS Office of Law Enforcement any dead or injured migratory birds that you encounter that appear to have been poisoned, shot, electrocuted, have collided with industrial power generation equipment, or were otherwise killed or injured as the result of potential criminal activity. See FWS OLE contact information below.

P. A subpermittee is an individual to whom you have provided written authorization to conduct some or all of the permitted activities in your absence. Subpermittees must be at least 18 years of age.

As the permittee, you are legally responsible for ensuring that your subpermittees are in compliance with the terms and conditions of this permit, are qualified to perform these authorized activities and adhere to the terms of your permit. New subpermittees with limited Burrowing Owl relocation experience must receive a minimum of 4 days of training prior to conducting permitted activities independently. You are also responsible for maintaining current records of anyone you have designated as a subpermittee, including copies of letters you have provided to the subpermittees authorizing them to conduct the permitted activities on your behalf.

The following subpermittees are authorized:

In addition, any person who is
(1) employed by or under contract to you for the activities specified in this permit, or
(2) otherwise designated a subpermittee by you in writing, may exercise the authority of this permit.

Q. This permit does NOT authorize trespass and/or take on State and Federal wildlife refuges or Federal reserves, or other public and private property without written permit/permission from landowner or custodian.

R. Any injury to and/or death of a migratory bird or destruction of eggs shall be reported via e-mail to issuing office within forty-eight (48) hours at Jennifer_C_Brown@fws.gov <mailto:Jennifer_C_Brown@fws.gov> or permitsr8mb@fws.gov <mailto:permitsr8mb@fws.gov>.

S. You and any subpermittees must comply with the attached Standard Conditions for Federal Migratory Bird Scientific Collecting Permits. **These standard conditions are a continuation of your permit conditions *and must remain with your permit.***

T. Reporting:
1) A completed Annual Report Form 3-202-1 shall be submitted your Migratory Bird Permit Office (U.S. Fish and Wildlife Service, Migratory Bird Permit Office, 2800 Cottage Way, Room W-2606, Sacramento, CA 95825) by January 31st each year.
2) You shall also provide a written summary report describing results of the translocation efforts (i.e., geographic coordinates of capture site, release site, U.S. Geological Survey band numbers, breeding activity, movements, physical condition of the birds, predation, etc.) with your Annual Report Form.
3) Reporting must be submitted either electronically or in hard copy:
Email: Jennifer_C_Brown@fws.gov <mailto:Jennifer_C_Brown@fws.gov> or permitsr8mb@fws.gov

Permit Number: MB52857C-0
Effective: 12/18/2020 Expires: 03/31/2023

Postal Mail: U.S. Fish and Wildlife Service, Migratory Bird Permit Office, 2800 Cottage Way, Room W-2606, Sacramento, CA 95825

For suspected illegal activity, immediately contact USFWS Office of Law Enforcement at: San Diego, CA (619) 557-5063, Torrance, CA (310) 328-1516, or Sacramento, CA (916) 569-8444

Standard Conditions
Migratory Bird Scientific Collecting Permits
50 CFR 21.23

All of the provisions and conditions of the governing regulations at 50 CFR part 13 and 50 CFR part 21.23 are are conditions of your permit. Failure to comply with the conditions of your permit could be cause for suspension of the permit. The standard conditions below are a continuation of your permit conditions and must remain with your permit. If you have questions regarding these conditions, refer to the regulations or, if necessary, contact your migratory bird permit issuing office. For copies of the regulations and forms, or to obtain contact information for your issuing office, visit: http://www.fws.gov/migratorybirds/mbpermits.html.

1. Live migratory birds you take and retain alive must be released at the capture site unless otherwise authorized on the face of the permit.

2. You must tag each migratory bird specimen you collect or salvage. Each tag must include the information below. The permit number under which the specimen was collected or salvaged must be recorded in the permanent accession record.
   (a) Date and location where the specimen was collected or salvaged, and
   (b) Name of the person who collected or salvaged the specimen.

3. If you encounter a migratory bird with a Federal band issued by the U.S. Geological Survey **Bird Banding Laboratory,** Laurel, MD, report the band number to **1-800-327-BAND (2263) or www.reportband.gov.**

4. Nontoxic shot must be used with the following exceptions:
   (a) You may use lead shot when nontoxic shot is not produced in the small sizes needed to preserve the integrity of the specimens;
   (b) You may use lead shot in habitats where its use is allowed for sport hunting purposes.

5. Unless otherwise authorized on your permit, all migratory game birds taken during open hunting season must be in compliance with all applicable Federal and State hunting regulations.

6. This permit does not authorize the take or live trapping and release of bald eagles or golden eagles or species listed as endangered or threatened.

7. This permit does not authorize the take or release of migratory birds on Federal lands without additional prior written authorization from the applicable Federal agency, or on State lands or other public or private property without prior written permission or permits from landowner or custodian.

8. You may donate dead migratory birds or any parts thereof (except bald eagles and golden eagles, and species listed as threatened and endangered) without additional authorization from the migratory bird permit issuing office to public institutions (as specified in 50 CFR 10.12) or individuals or entities authorized by permit to acquire and possess migratory bird specimens for educational purposes.

   All dead specimens that you do not transfer to another authorized party must be disposed of by such means as are necessary to ensure that they are not exposed to animals in the wild.

   All eagle feathers and/or whole eagle carcasses must be shipped to the National Eagle Repository. Contact: **U.S. Fish and Wildlife Service, National Eagle and Wildlife Repository, RMA, Building 128, 6550 Gateway Rd., Commerce City, Colorado 80022, (303) 287-2110**.

9. A subpermittee is an individual to whom you have provided written authorization to conduct some or all of the permitted activities in your absence. Subpermittees must be at least 18 years of age. As the permittee, you are legally responsible for ensuring that your subpermittees are adequately trained and adhere to the terms of your permit. You are responsible for maintaining current records of who you have designated as a subpermittee, including copies of designation letters you have provided.

10. You and any subpermittees must carry a legible copy of this permit and display it upon request whenever you are exercising its authority. Subpermittees must also carry your written subpermittee designation letter.

11. Your annual report may include final reports, publications, or other documentation describing the results of the project.

12. You must maintain records as required by 50 CFR 13.46 and 50 CFR 21.23(c)(4). All records relating to the permitted activities must be kept at the location identified in writing by you to the migratory bird permit issuing office.

13. Acceptance of this permit authorizes the Fish and Wildlife Service to inspect any wildlife held, and to audit or copy any permits, books, or records required to be kept by the permit and governing regulations.

14. You may not conduct the activities authorized by this permit if doing so would violate the laws of the applicable State, county, municipal or tribal government or any other applicable law.

(SCCL - 12/3/2011)

State of California – Department of Fish and Wildlife
2017 SCIENTIFIC COLLECTING PERMIT APPLICATION
DFW 1379 (REV. 11/02/16) Page 1

CDFW Received SEP – 8 2017 BY LRB

DocID: D-0027455892-2
Trans: 20836553 09/24/19 08:51
Outlet: 310001-001 Fee: $324.75
2018 Scientific Collecting Permit
See permit for validity dates.

DEPARTMENT USE ONLY

THIS PERMIT IS VALID:	PERMANENT ID NUMBER	# OF PI's
FROM 9/25/19 THROUGH 9/25/22	SC- 1408	

SC- 001408

PERMIT, AMENDMENTS AND REPORT OF SPECIMENS CAPTURED OR SALVAGED MUST BE IN IMMEDIATE POSSESSION WHILE COLLECTING. Collecting is not allowed under the authority of a sport fishing license.

☐ **NEW** ■ **RENEWAL** - When renewing, Report of Specimens Collected or Salvaged (DFW 1379a) **MUST BE ATTACHED** or application will be returned.

FEES LISTED BELOW INCLUDE A NONREFUNDABLE APPLICATION FEE AND PERMIT FEE CHECK ALL BOXES THAT APPLY:

■ **INDIVIDUAL OR ENTITY $105.83 APPLICATION FEE** (SUBMIT NOW) *AND* ☐ **$315.75 PERMIT FEE** *(SUBMIT WHEN NOTIFIED)

☐ **PI $105.83 APPLICATION FEE (PER PI)** (SUBMIT NOW) *AND* ☐ **$315.75 PERMIT FEE (PER PI)*** (SUBMIT WHEN NOTIFIED)

☐ **STUDENT - $26.27 APPLICATION FEE** (SUBMIT NOW) *AND* ☐ **$53.05 PERMIT FEE** *(SUBMIT WHEN NOTIFIED)

***DO NOT SUBMIT THE PERMIT FEE NOW - You will be required to submit the permit fee if the permit is approved.**
(Fees include a nonrefundable three percent (3%) application fee, not to exceed $7.50 per item) (Section 700.4, Title 14, California Code of Regulations (CCR)).

BEFORE COMPLETING APPLICATION: Read instructions, permit descriptions, Standard Conditions, and Numbered Authorizations. **Complete all appropriate sections of the application (sponsor's section may be required). Type or print clearly.**

SECTION 1 - INDIVIDUAL PERMITTEE INFORMATION - Complete only if applying as an individual OR student. Provide the following information and attach a statement of qualifications or resume outlining experience with wildlife and activity requested in Section 3.

FIRST NAME	M.I.	LAST NAME	GO ID NUMBER (FROM ALDS ISSUED LICENSE)
Jeff	W	Kidd	1027542821

AFFILIATION	☐ Check here if you want future correspondence mailed to your affiliation	TITLE
Kidd Biological, Inc		Raptor Ecologist

PERMITTEE'S MAILING ADDRESS	DAY TELEPHONE	FAX NUMBER
2911 Meridian Ct	(949) 636-7769	

CITY	STATE	ZIP CODE	E-MAIL ADDRESS
Anacortes	WA	98221-4607	jeff@kiddbioinc.com

HAIR COLOR	EYE COLOR	HEIGHT	WEIGHT	SEX	DATE OF BIRTH
Red	Blu	5'10"	185	■ MALE ☐ FEMALE	05/12/1971

AFFILIATION'S MAILING ADDRESS	CITY	STATE	ZIP CODE
same as above			

SECTION 2 – ENTITY PERMITTEE – Complete only if applying as a qualified entity

Entities include California certified small businesses, aquariums or zoos accredited by the Association of Zoos and Aquariums, museums, California Special Districts, public agencies, non-profit non-governmental organizations, accredited colleges or universities and instructors at accredited colleges or universities. Proof of such status must be provided with a new application. An additional ***permit fee is required for each PI*** *when the permit is ready to be issued.*

ENTITY'S NAME	DAY TELEPHONE	FAX NUMBER

ENTITY'S MAILING ADDRESS	CITY	STATE	ZIP CODE

PRINCIPAL SCIENTIFIC INVESTIGATOR (PI) INFORMATION - Provide the following information and attach a statement of qualifications or resume for the full-time permanent employee responsible for providing adequate supervision and training of the employees and volunteers listed below. **WHAT IS THE TOTAL NUMBER OF PIs PROPOSED FOR THIS SCP?** 1

If you have more than one PI proposed under the entity permit, complete and attach page 5 (make copies if needed). ***The entity shall submit a non-refundable application fee for each PI.***

(1) FIRST NAME	M.I.	LAST NAME	TITLE
Jeff	W	Kidd	Raptor Ecologist

HAIR COLOR	EYE COLOR	HEIGHT	WEIGHT	SEX	DATE OF BIRTH
Red	Blu	5"10"	185	■ MALE ☐ FEMALE	05/12/1971

GO ID NUMBER (FROM ALDS ISSUED LICENSE)	DAY TELEPHONE	E-MAIL ADDRESS
1027542821	(949) 636-7769	jeff@kiddbioinc.com

LIST OF AUTHORIZED INDIVIDUALS: List **ALL** employees or volunteers that will be working under the Principal Scientific Investigator named above. Attach a separate list if needed. An amendment form and fee must be submitted, approved, and returned to you by the Department before you can add or remove employees and volunteers from this list.

FIRST NAME	LAST NAME	DRIVER'S LICENSE OR DMV ID NUMBER	STATE

FOR DEPARTMENT OF FISH AND WILDLIFE USE ONLY

REVIEWED BY/DATE	APPLICATION FEE TRANSACTION #	PERMIT FEE TRANSACTION #	# APPLICATIONS	LRB ROUTED TO/DATE
9-12-2019				1. 2. 3.

State of California – Department of Fish and Wildlife
2017 SCIENTIFIC COLLECTING PERMIT APPLICATION
DFW 1379 (REV. 11/02/16) Page 2

CDFW Received SEP – 8 2017 BY LRB

FIRST NAME	M.I.	LAST NAME OR ENTITY NAME (IF QUALIFIED ENTITY)	PERMANENT ID NUMBER
Jeff	W	Kidd	SC 001408

SECTION 3 – PERMIT INFORMATION

USE OF PERMIT: CHECK ALL APPLICABLE BOXES

■ Biological Consulting (generally, catch and release only) ■ Research ☐ Museum Collection ☐ Biological Collection Service
☐ State, Federal or Other Agency Biologist ☐ Education ☐ Other-

Wildlife and Activity: Reminder - You must provide justification in Section 5 for each wildlife taxa and activity checked here. Check the type of wildlife taxa to be taken **AND** circle the type of activity requested: S=sacrifice; R=capture and release; C=take into captivity; SL=salvage; M=mark.

■ MAMMALS S (R) C (SL) M ☐ FRESHWATER FISHES S R C M
■ BIRDS* *Other activ* S (R) C (SL) (M) ☐ FRESHWATER INVERTEBRATES S R C M
■ REPTILES S (R) C (SL) M ☐ ANADROMOUS FISHES S R C M
■ AMPHIBIANS S (R) C (SL) M ☐ MARINE FISHES S R C SL M
■ VERNAL POOL/TERRESTRIAL INVERTEBRATES S (R) C (SL) M ☐ MARINE AQUATIC PLANTS S C SL
*See Standard Condition "K" ☐ MARINE/TIDAL INVERTEBRATES S R C SL M

Wildlife Branch authorizations and conditions are attached

REVIEWED
By J. Garcia (Wildlife Branch) at 10:23 am, May 30, 2019

CHECK ONE: Other SCP perm S ☐ NO ☐ *(If yes, list the permittees below. Attach separate list if needed.)*

FIRST NAME	LAST NAME	SCIN NUMBER
Nina	Kidd	SC 5472
Scott	Thomas	SC 2721
		SC

SECTION 4 – SPONSOR INFORMATION

Students, teachers and individuals collecting on behalf of an organization must all have one member of the organization sponsor them. Sponsors must fully complete this section of the application. Students must have one faculty member with affiliation to the student's college or university sponsor the student. Elementary and secondary school teachers must be sponsored by their principal. In some other cases, the Department may review an application and determine that a sponsor is needed and will request this information directly from the applicant or organization.

SPONSOR'S FIRST NAME	M.I.	LAST NAME	DAY TELEPHONE
TITLE	ORGANIZATION	E-MAIL ADDRESS	
MAILING ADDRESS	CITY	STATE	ZIP CODE
SPONSOR'S CERTIFICATION/SIGNATURE: I verify the take described in this application is required by this organization			DATE

APPLICATION CERTIFICATION

BY CHECKING ALL BOXES, I HEREBY DECLARE THAT THE FOLLOWING INFORMATION IS PROVIDED IN THE JUSTIFICATION SECTION OF THIS APPLICATION

■ Purpose ■ Species + Numbers to be collected ■ Locations + Timeframes for Collecting ■ Species Disposition
■ Methods/Activity ■ Literature Cited ■ Attached Federal/State Permit(s) (Applicable/Not Applicable – Circle appropriate one)

I understand that if I fail to provide all information, circle items or check the boxes, my permit may be denied. I certify that I have read, understand, and agree to abide by, all conditions of this permit and attachments, the applicable provisions of the FGC, and the regulations promulgated thereto (Title 14, Section 650). I certify that I am not currently under any Fish and Wildlife license or permit revocation or suspension, and that there are no other legal or administrative proceedings pending that would disqualify me from obtaining this permit. I agree that if I make any false statement as to any fact required as a prerequisite to the issuance of this permit, the permit is void and will be surrendered where purchased, and I understand that I may be subject to prosecution pursuant to FGC Section 1054 or to other administrative actions pursuant to Section 746, Title 14, of the CCR.

APPLICANT SIGNATURE	DATE
X Jeff W Kidd	8/25/2017

CDFW Received SEP – 8 2017 BY LRB

FIRST NAME	M.I.	LAST NAME OR ENTITY NAME (If qualified entity)	PERMANENT ID NUMBER
Jeff	W	Kidd	**SC** 001408

SECTION 5 – PERMIT JUSTIFICATION – Required for **ALL** activities.

IS A FEDERAL OR ADDITIONAL STATE PERMIT OR MOU REQUIRED? ■ YES ***(If yes, attach copies.)*** ❑ NO

PROVIDE START AND END DATE AND/OR EXPLAIN SEASONAL REQUIREMENTS FOR YOUR WORK.	START	END
Various start and end dates depending on research and consulting projects.		

REMINDER - You must provide justification here for each wildlife taxa and activity circled in Section 3. Use the space below to summarize your proposed research. Be sure to include each of the following headers in **bold/underlined** and as follows: **purpose** (include scientific or educational need for the requested activity); **methods/techniques** (include equipment/gear) and the reason for using them; **species and numbers to be collected,** if known (include scientific and common names); **collection locations** (include counties and specific locales and reasons for choosing them); and **disposition,** which describes the organism's fate (i.e. sacrifice, catch and release, salvage, captivity). If you propose to collect in a Marine Protected Area (MPA), give the proper name of the MPA and explain (1) Why collection is required within an MPA and provide justification for why it cannot be conducted outside of an MPA; (2) Why the proposed methods are appropriate for this activity; and (3) Describe the frequency of the proposed activity per collecting area. If you are working in areas where special status species (listed, fully protected, or species of special concern) are expected to be incidentally captured, explain why collection is required in these areas, and describe how your methods/techniques and equipment/gear will avoid or minimize take of non-target sensitive species. If requesting marking/tagging, captivity, or sacrifice, specific details as described above must be included for each species and activity requested. **Attach additional pages if needed. Attach complete copies of appropriate federal permits and additional State permits (e.g., Memorandum of Understanding) to avoid delay of processing.**

Capture of raptors in CA is authorized per various federal and state permits.
Purpose is to continue to improve our understanding of raptor philopatry, survivorship, migration, behavior and status of various raptor species. All animals will be released as soon as possible at capture location unless specifically authorized during approved activities including avian predator management and burrowing owl translocations.
Methods include capture with net, hand and traps (Bloom et al. 2007).
Species and Numbers to be collected are detailed in approved MOU's and Federal Permits.
Collection Locations include all locations in CA that are approved per valid MOU's and associated permits.
All activities will be conducted in accordance with valid MOU's whereby I am named as the PI or independent investigator.
All animals found dead will be collected and delivered to CSU - Long Beach of the Western Foundation of Vertebrate Zoology.
Bullfrogs and African clawed frogs may be taken as part of predator management activities related to arroyo toad conservation efforts permitted under Biological Opinions. May be taken with net or hand.
Cowbird chicks and eggs can be removed from nests including California gnatcatchers in accordance with federal permits.
California gnatcatcher, Quino checkspot butterfly and arroyo toad surveys will be conducted per federal permits (TE022230). Arroyo toads may be captured by hand or pitfall traps.

Removal of cowbirds from gnatcatcher nests and activities with Quino checkerspot / Arroyo toad are not authorized by your federal recovery permit.

State of California – Department of Fish and Wildlife
2017 SCIENTIFIC COLLECTING PERMIT APPLICATION
DFW 1379 (REV. 11/02/16) Page 4

CDFW Received SEP – 8 2017 BY LRB

FIRST NAME	M.I.	LAST NAME OR ENTITY NAME (If qualified entity)	PERMANENT ID NUMBER
Jeff	W	Kidd	SC 001408

FOR DEPARTMENT OF FISH AND WILDLIFE USE ONLY

☑ ____ PAGES OF ATTACHMENTS NOTED IN THIS PERMIT SHALL REMAIN WITH THIS PERMIT AT ALL TIMES. CONDITIONS, AUTHORIZATIONS, AND APPROVALS ARE AS FOLLOWS:	ISSUED BY/DATE

Please see attached:

Wildlife Branch authorizations and conditions (12 pages dated August 16, 2019),

List of Authorized Individuals (Attachment 2: 2 pages dated August 16, 2019),

Additional Authorizations and Conditions ("Research on Raptors in California": 7 pages dated August 16, 2019),

Additional Authorizations and Conditions ("Research on Raptors and other Avian Species for the Protection and Recovery of California Least Tern, Western Snowy Plover, and Light-footed Ridgeway's Rail": 10 pages dated August 16, 2019),

Standard Conditions for All SCPs (DFW 1379d; 2 pages dated July 01, 2017), and

Wildlife Authorizations (DFW 1379; 1 page dated October 31, 2017).

DEPARTMENT REVIEWER(S) SIGNATURE		
1. APPROVED By Dylan Wilder at 4:37 pm, Aug 16, 2019	2.	3.

California Department of Fish and Wildlife (Department) - Wildlife Branch
Authorizations and Conditions for Scientific Collecting Permit (SCP)
Jeff W. Kidd
Kidd Biological, Inc.
August 16, 2019

Legacy ID:
SC-001408

APPROVED
By Dylan Wilder at 5:22 pm, Aug 16, 2019

This permit was previously issued on November 18, 2014. The terms and conditions set forth in that permit are hereby superseded by this renewal.

Authorizations and conditions based on your 1-page SCP justification received by the Department on September 8, 2017, on file with the Nongame Wildlife Program (NWP).

Capture and release of terrestrial and vernal pool invertebrates (Wildlife Authorization #4), reptiles, amphibians (Wildlife Authorization #5a), and small mammals (Wildlife Authorization #5b) is authorized in accordance with the additional conditions below.

Sacrifice of American bullfrog (*Lithobates [=Rana] catesbeianus*) and African clawed frog (*Xenopus laevis*) is authorized in accordance with the conditions below.

Take of California gnatcatcher (*Polioptila californica*), Quino checkerspot butterfly (*Euphydryas editha quino*) and Arroyo toad (*Anaxyrus californicus*) (Wildlife Authorization #8) is authorized in accordance with the most current amendment of federal recovery permit TE-022230 and/or an appropriate federal Biological Opinion on which you are named, and in accordance with the additional conditions below. See Condition #2, below.

Sacrifice of Brown-headed cowbird (*Molothrus ater*) is authorized in accordance with the most current amendment of federal permit TE-022230 on which you are named, and in accordance with the additional conditions below.

Take of non-listed raptors, including Northern harrier (*Circus hudsonius*) a California Species of Special Concern, is authorized in accordance with your current federal Bird Banding Lab permit #22951 and the SCP attachment (additional authorizations and conditions) on which you are named (i.e., Principal Investigators: Jeff W. Kidd and Scott E. Thomas, Kidd Biological, Inc.; dated on August 16, 2019 or any later amendments).

In addition to the predator management activities authorized below, ***take*** of Burrowing owl (*Athene cunicularia*) is authorized in accordance with the most current amendment(s) of federal Bird Banding Lab permit #22951 and any relevant federal Migratory Bird permits on which you are named (e.g., MB-52857C, MB-86478B), and in accordance with all burrowing owl SCP Attachment(s) (Additional Authorizations and Conditions) on which you are named (i.e., Principal Investigator: Jeff W. Kidd, Kidd Biological, Inc.), covering research activities in California (capture, band, color-mark, radio-telemetry, relocation, hacking, and nest monitoring, including the use of remote cameras). See Condition #11, below.

For the purpose of conservation and recovery of threatened, endangered, and fully protected species, you are authorized to ***capture, band, auxiliary mark, collect blood and feathers, translocate, and release*** only the authorized hawks, owls, corvids, northern harrier (*Circus hudsonius*), American kestrel (*Falco sparverius*), and Loggerhead shrike (*Lanius ludovicianus*) (Wildlife Authorization #7) in accordance with the SCP attachment (additional authorizations and conditions) on which you are named (i.e., Principal Investigators: Jeff W. Kidd and Scott E. Thomas, Kidd Biological, Inc.; issued on August 16, 2019 or any later amendments), the most current version of federal Bird Banding Lab (BBL) permit #22951 on which you are named, the federal Migratory Bird Permit(s) authorizing this activity, and in accordance with the additional conditions below.

For the purpose of conservation and recovery of threatened, endangered, and fully protected species, you are authorized to ***capture, band, auxiliary mark, translocate, and release*** only the Peregrine falcon (*Falco peregrinus*), in accordance with the Memorandum of Understanding on which you are named (i.e., Principal Investigator: Jeff W. Kidd, Kidd Biological, Inc.; issued on May 21, 2019 or any later amendments), the most current version of federal Bird Banding Lab (BBL) permit #21564 and current federal Migratory Bird Permit(s) authorizing this activity, and in accordance with the additional conditions below.

Take of American peregrine falcon (*Falco peregrinus anatum*) is authorized in accordance with your current federal Bird Banding Lab permit #22951, federal permits on which you are named (MB-184858 and MB67046A), and the Memorandum(s) of Understanding on which you are named (i.e., Principal Investigator: Jeff W. Kidd, Kidd Biological, Inc.; issued on February 27, 2019 or any later amendments).

Take of Golden eagle (*Aquila chrysaetos*) is authorized in accordance with your current federal Bird Banding Lab permit #22951, federal permits on which you are named (MB-184858 and MB-041248), and the Memorandum of Understanding on which you are named (i.e., Principal Investigator: Jeff W. Kidd, Kidd Biological, Inc.; issued on February 27, 2019 or any later amendments).

Salvage of birds and bird parts, and collection of addled eggs and eggshells, (Wildlife Authorization #7) is authorized in accordance with current federal Migratory Bird Permits MB-184858, MB-170628, MB-041248, and MB-67046A, under which you are designated, and in accordance with the additional conditions below.

Salvage of dead reptiles, amphibians, and mammals (Wildlife Authorization #6) is authorized in accordance with the additional conditions below.

You are authorized to ***salvage*** dead Deer (*Odocoileus hemionus*) for use as avian trap bait, in accordance with the conditions below.

Permitted activities are restricted to the following geographic areas in California (additional locations may be authorized, but only as approved in writing by the Department contact(s) listed below):

a. For predator management activities (excluding Burrowing owl research):

Purisima Point (Vandenberg Air Force Base, Santa Barbara County), Monterey Bay (Monterey and Santa Cruz Counties), Naval Air Station North Island, Naval Base Coronado and Marine Corps Base Camp Pendleton (San Diego County), Naval Weapons Station Seal Beach, Huntington Beach State Park (Orange County), Humboldt County, Del Norte County, and Southern California.

b. For Burrowing owl and other wildlife/research activities:

Statewide.

Prior to conducting intrusive nest monitoring, capture, banding, or color-marking at each new study site for the Burrowing owl, you shall receive additional written authorization from Esther Burkett (Esther.Burkett@wildlife.ca.gov) and concurrence from the local Department regional office. A new scientific study proposal and an amendment to your SCP will be required before you may begin any biotelemetry or any new relocation/translocation plan.

c. For salvage of deer for use as avian trap bait:

Statewide; but only at locations described in the salvage conditions below.

Other Permits:
You shall obtain and maintain during the term of this SCP any federal permit(s) and/or other state permit(s) required to conduct the activities authorized herein. Although the provisions of the federal permit(s), other state permit(s) and this SCP may vary, the more restrictive conditions prevail. Copies of your federal permit(s) or other research-related permits (e.g., State Parks, landowner access agreements), and any amendments, shall be provided to the Department contacts (see below), and the names of all authorized sub-permittees shall be provided for the permit(s).

You shall carry all required documents, permits and MOUs, along with your SCP, with you while conducting all authorized activities.

Department Contacts:

The primary Department contact for this terrestrial wildlife permit is the Wildlife Branch SCP coordinator (Justin Garcia, Environmental Scientist, Justin.Garcia@wildlife.ca.gov, 916-323-0644).

The Department contact for all raptors (excluding Burrowing owl) is Carie Battistone, (Carie.Battistone@wildlife.ca.gov); the Department contact for Burrowing owl, California gnatcatcher, corvids and Loggerhead shrike is Esther Burkett (Esther.Burkett@wildlife.ca.gov); for Arroyo toad, American bullfrog and African clawed frog is Laura Patterson (Laura.Patterson@wildlife.ca.gov).

replace cowbird eggs with dummy eggs. You shall place no flagging or other material or device within 10 meters of a gnatcatcher nest. If any injury or mortality occurs, contact Esther Burkett (Esther.Burkett@wildlife.ca.gov).

11. Burrowing Owl

Take of burrowing owl (*Athene cunicularia*) is authorized in accordance with the most current amendment(s) of federal Bird Banding Lab permit #22951 and any relevant federal Migratory Bird permits on which you are named, and in accordance with each separate burrowing owl project and related SCP Attachment(s) (Additional Authorizations and Conditions) on which you are named (e.g., Principal Investigator, Jeff W. Kidd, Kidd Biological, Inc.; August 16, 2019), covering research activities throughout California (e.g., capture, band, color-mark, radio-mark/GPS tag, relocation, translocation, hacking, and nest monitoring, including the use of remote cameras and burrow scopes). An SCP amendment may be required, depending on the complexity of the proposed work, as determined by the Department contact (Esther Burkett; Esther.Burkett@wildlife.ca.gov). Research activities may not commence until approved in writing as outlined below.

At least **45 days** prior to conducting any intrusive nest monitoring (including nest monitoring cameras and burrow scopes), capture, banding, or color-marking at each new study site, you are required to submit a scientific study proposal and you shall not commence activities until you receive additional written authorization from the Department contact, and concurrence from the local Department regional office to assure any mitigation requirements are met. The 45 day period may be modified for time sensitive projects, if feasible, as determined by the Department contact.

Additionally, a scientific study proposal shall be required, and you shall not commence activities until you receive additional written authorization from the Department contact prior to conducting any biotelemetry or any relocation/translocation plan. The study proposal shall be submitted at least **120 days** prior to any capture and marking project involving the relocation/translocation of burrowing owls in order to allow for concurrent approval from the local Department Regional office and to assure any mitigation requirements are met. The 120 day period may be modified for time sensitive projects, if feasible, as determined by the Department contact.

12. Salvage of Wildlife

a. General Salvage Conditions

You may salvage non-migratory birds, mammals, amphibians, and reptiles incidentally killed during permitted activities or encountered dead in the field, as specified below. There is no limit to the number of salvaged wildlife.

Salvaged specimens of CESA-listed, CESA-Candidate, and Fully Protected species require disposition instructions from the Department (contact Esther Burkett, Esther.Burkett@wildlife.ca.gov, 916-531-1594; see also Reporting below). Fresh specimen(s) of these special-status taxa may require necropsy and shall be refrigerated, not frozen, until disposition is finalized. Federally-listed species require authorization and disposition instructions from the U.S. Fish and Wildlife Service (Service). If an eagle carcass or part is located, you shall contact Carie Battistone (Carie.Battistone@wildlife.ca.gov) for special disposition instructions; refer to the federal permits and MOU's on which you are named (see above). After contacting Ms. Burkett within 24 hours of encountering a special-status species, you shall provide a report within ten (10) working days, via email, describing the collection location of the specimen including UTM zone, UTM coordinates and datum, date and time the specimen was encountered, name of observer/collector, and details regarding the specimen including sex, estimated age, condition of carcass, possible or probable cause of death, distance from any road, and any other relevant information or observation notes. Photographs of the specimen and the salvage locale shall also be provided to Ms. Burkett.

You may not salvage bats (Order Chiroptera) or marine mammals unless additionally authorized. Salvage of mountain lions (*Puma concolor*) or their parts is prohibited by law. Black bears (*Ursus americanus*) may not be salvaged without obtaining additional authorization from the Department's regional law enforcement office and the regional wildlife management supervisor. Salvage of other big game species (i.e., feral pig (*Sus scrofa*), deer (*Odocoileus hemionus*), elk (*Cervus elaphus*), pronghorn antelope (*Antilocapra americana*), and bighorn sheep (*Ovis canadensis*)) is not authorized without obtaining additional written approval from the Big Game Program (contact Justin.Garcia@wildlife.ca.gov), except for salvage of Deer carcasses for trap baiting purposes, as conditioned below.

THE HUB @ ONT

CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

Burrowing Owl Relocation Plan

Prepared For:

McDonald Property Group
1140 N Coast Highway
Laguna Beach, CA 92651
Contact: *John Pierce*
949.655.8233

Prepared By:

ELMT Consulting
2201 N Grande Avenue, #10098
Santa Ana, California 92711
Contact: *Travis J. McGill*
714.716.5050

October 2022

THE HUB @ ONT

CITY OF ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

Burrowing Owl Relocation Plan

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.

Travis J. McGill
Director/Biologist

Thomas J. McGill, Ph.D.
Managing Director

October 2022

Table of Contents

Section 1	**Introduction**	**1**
1.1	Project Location and Description	1
1.2	Species Background	1
Section 2	**Regulatory Framework**	**7**
2.1	Migratory Bird Treaty Act	7
2.2	California Fish and Game Code	8
2.3	California Environmental Quality Act	8
Section 3	**Site Conditions**	**9**
3.1	The HUB @ ONT Center Project site	9
Section 4	**Survey Results**	**11**
Section 5	**Relocation Plan**	**14**
5.1	Relocation Sites	15
5.2	Other Relocation sites	17
5.3	Preparation of the Relocation Site	19
5.4	Relocation to the Relocation Site	19
5.5	Post-Release Monitoring	27
5.6	Reporting	28
Section 6	**Conclusion**	**32**
Section 7	**References**	**33**

EXHIBITS

Exhibit 1: Regional Vicinity 4
Exhibit 2: Site Vicinity 5
Exhibit 3: Project Site 6
Exhibit 4: 2022 Burrowing Owl Observations 13
Exhibit 5: Colton Dunes Conservation Bank 30
Exhibit 6: Nuevo Donation Site 31

APPENDIX

Appendix A 2022 Burrowing Owl Survey Report

Section 1 Introduction

This Relocation Plan has been prepared to address the relocation of burrowing owls (*Athene cunicularia*), (BUOW) from The HUB @ ONT Project Site (project site or site), an approximately 197-acre site the Ontario International Airport Authority is leasing for the development of a logistics center, to an approved relocation site (site approved for translocation). The purpose of this relocation plan is to obtain authorization to actively translocate two resident BUOW pairs and evict any possible non-breeding or migratory individuals prior to project related impacts. The number of owls to be translocated may change as the number may be different than what was reported during focued surveys conducted in 2022 (2022 Burrowing Owl Survey Report for The HUB @ ONT (formerlly California Logistics Cetner at Ontario International Airport, HELIX).

All monitoring and relocation efforts will be coordinated and approved by the California Department of Fish and Wildlife (CDFW) local and headquarters offices, the United States Fish and Wildlife Service (USFWS), collectively the Wildlife Agencies, and the Migratory Bird Treaty Act (MBTA) office.

1.1 PROJECT LOCATION AND DESCRIPTION

The approximately 197-acre undeveloped project site is located east of the Ontario International Airport, south of Interstate 10, west of Interstate 15, and north of State Route 60 in the City of Ontario, San Bernardino County, California (Exhibit 1, *Regional Vicinity*). The site is depicted on the *Guasti* quadrangle of the United States Geological Survey's (USGS) 7.5-minute topographic map series within Section 25 of Township 1 South, Range 7 West (Exhibit 2, *Site Vicinity*). Specifically, the project site is bounded by S. Haven Avenue to the west, E. Jurupa Street to the south, E. Airport Drive to the north, and Doubleday Avenue to the east (Exhibit 3, *Project Site*).

The Ontario International Airport Authority (OIAA) is leasing 197 acres of undeveloped land under one of its approach corridors for the development of a logistics center to support the commercial warehouse growth in the region and provide vital revenue to the OIAA. The 197-acre site will be developed as a logistic center consisting of 9 buildings totaling 4,282,450 square feet with associated parking, and landscaping.

1.2 SPECIES BACKGROUND

The BUOW is a small, brownish, ground-dwelling bird of prey that inhabits arid, open habitats with short vegetation, bare ground, level to sloping topography, and well-drained soils (Poulin *et al.* 2011, CDFG 2012). Suitable BUOW habitat varies widely from naturally occurring habitats to highly disturbed conditions in grasslands, deserts, and human-altered landscapes such as agricultural fields, vacant lots, pastures, fallow fields, road rights-of-way, airports, and golf courses (Klute *et al.* 2003). Throughout the range where BUOWs are found, tall or dense cover types are generally not suitable as BUOW habitat. Visibility at nest sites appears to be an important habitat selection factor and may be an anti-predator behavior (Green and Antony 1989, Ronan 2002).

The primary requirement for suitable habitat is the presence of a suitable burrow (Rosenberg *et al.* 2007). BUOWs nest and roost in underground burrows created by burrowing mammals such as California ground squirrels (*Otospermophilus beecheyi*), coyotes (*Canis latrans*), and American badgers (*Taxidea taxus),* (Klute *et al.* 2003, Poulin *et al.* 2011, CDFG 2012). They may also nest and roost in other natural or man-made cavities such as rock piles, pipes, culverts, refuse piles, and artificial burrows. Owls prefer nesting in areas with a high density of suitable burrows which likely provide escape burrows for both adult and young owls (Poulin *et al.* 2011). BUOWs are semi-colonial and often congregate with other owls in winter and nest in loose colonies. Nest densities vary depending on abundance of suitable burrows and prey and reduced predation pressure and site disturbance.

BUOWs are generalists as they feed on spiders and insects (arthropods), small mammals, birds and toads (Poulin *et al.* 2011, Rosenberg *et al.* 2007). BUOWs are mostly active during the morning and evening (crepuscular) but they can be found active at all times of the day and night (Poulin *et al.* 2011, Gervais *et al.* 2003). During the nesting season, they typically carry prey back to the nest burrow and drop prey at the apron or cache them in the burrows and tunnels depending on nest chronology (Poulin *et al.* 2011, Rosenberg *et al.* 2007). Distance to suitable foraging habitat is a primary factor in nest habitat selection (Rosenberg and McKelvey 1999, Rosenberg *et al.* 2007).

Current literature suggests, owl home range sizes vary from approximately 0.14 and 4.81 kilometers^2 (0.16 and 1.86 miles^2; mean = 2.41 kilometers^2 [0.93 miles^2]), depending on habitat and region (Poulin *et al.* 2011) and is likely related to food abundance and habitat fragmentation (Gervais *et al.* 2008). During the breeding season, owls generally forage within 2.7 km (1.67 miles) of their nest burrow (Haug and Oliphant 1990, Gervais *et al.* 2003, Rosenberg and Haley 2004). In the southern San Joaquin and Imperial Valleys, owls concentrated 80 percent of foraging within 600 meters (1,968.5 feet) of their nests (Gervais *et al.* 2003, Rosenberg and Haley 2004). In general, during the breeding season most foraging occurs within 250 to 600 m (820 to 1,968.5 feet) of the nest.

Predation is often a limiting factor for BUOW populations (Catlin and Rosenberg 2008, Poulin *et al.* 2011). BUOW adults, young, and/or eggs are preyed upon by a variety of avian, mammalian, and reptilian predators in our regions such as prairie falcon (*Falco mexicanus*), peregrine falcon (*Falco peregrinus*), great horned owl (*Bubo virginianus*), barn owl (*Tyto alba*), red-tailed hawk (*Buteo jamaicensis*), Cooper's hawk (*Accipiter cooperii*), American crow (*Corvus brachrhynchos*), common raven (*Corvus corax*), coyote, skunk (*Mephitis* spp.), opossum (*Didelphis virginiana*), gopher snake (*Pituophis catenifer*), and domestic dogs and cats (Ronan 2002, Catlin and Rosenberg 2008, Poulin *et al.* 2011).

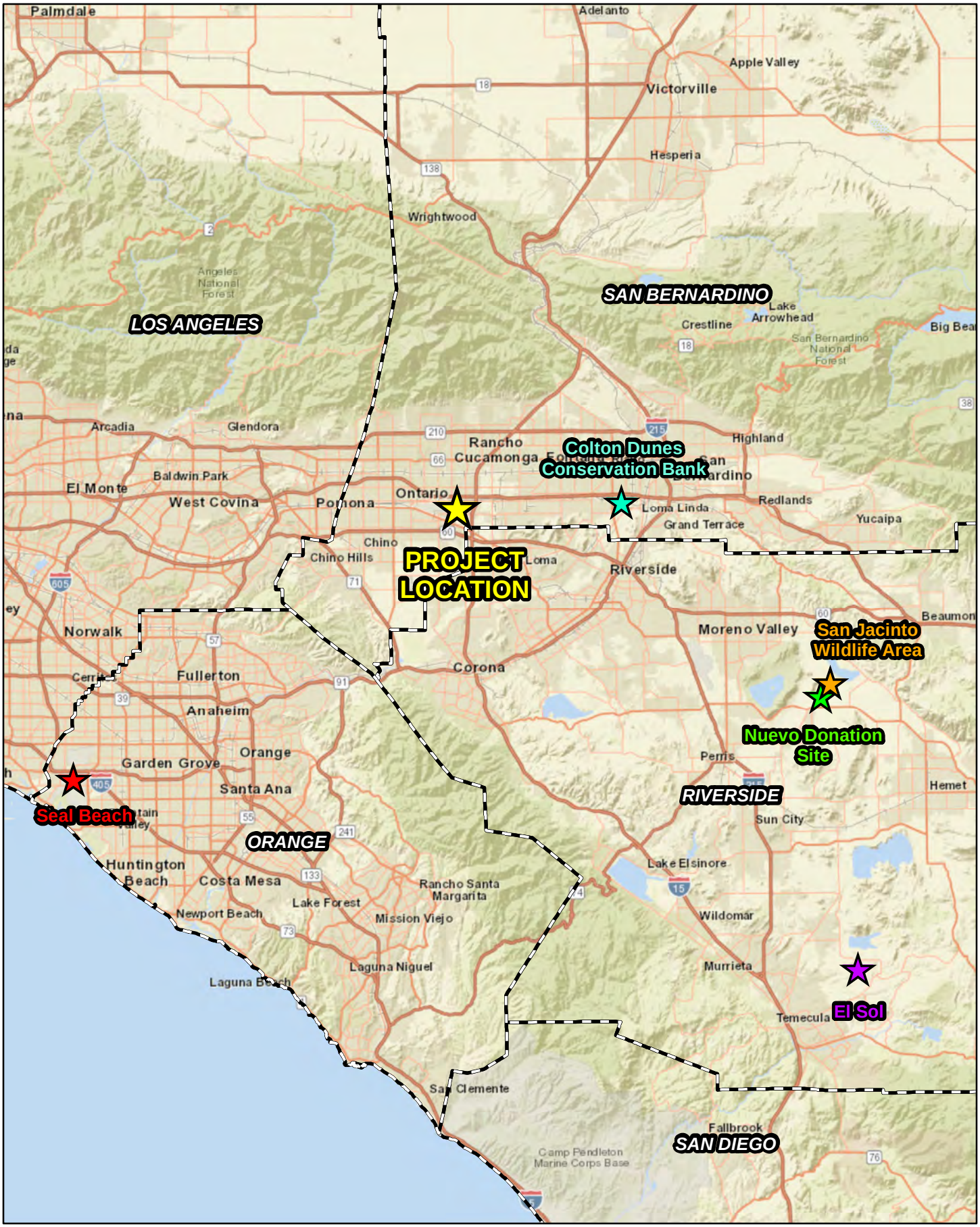
History and Current Status of BUOW Population in Inland Empire

Prior to the 1980's southwestern San Bernardino supported a robust breeding BUOW population with hundreds of pairs from the base of the San Bernardino Mountains south to the Prado Basin. After decades of development pressure and the complete absence of meaningful mitigation, only a few remaining breeding pairs and winter migrants are known to persist. The remaining highly fragmented landscape which lacks suitable, large, protected sites with connectivity to and between extant breeding sites creates a bottleneck and prevents the existence of a healthy source population. With the continued development pressure and lack of adequate mitigation required by the resource agencies, the BUOW

population in this region is tenuous at best and will likely never recover from what was once a robust breeding source population (Kidd et al. 2003, 2007).

A current review of BUOWs previously reported near the Ontario Airport includes 45 records from 1989-2017. These 45 records are located within seven nearby 7.5min USGS quads (Ontario, Prado, Corona North, Fontana, Cucamonga Peak and Mt. Blady) and Guasti quad where the airport is located (CNDDB 2020). The nearest owl locations reported south of the airport were evicted approximately ten years ago during development of industrial warehouses. Mitigation included the installation of artificial burrows in a barrow pit on the west side of the nearby retired landfill and the owls were evicted from their burrows prior to grading. Owls are no longer known to occupy this site south of the airport. The subject owls on the OIAA property along the east side of Haven Avenue are included in the list of 45 owl records. Several reported owls north of Interstate 10 that are located west and north of Ontario Mills Mall are some of the only possible extant owls near the airport. All of these owls are surrounded by development and located on small, highly fragmented sites that don't provide long-term conservation value for the owl due to future development and predation pressure to name a few.

It should further be noted that 3-5 pairs of burrowing owls have been documented west of Haven Avenue with the OIAA property adjacent to the runway that are subject to the United States Department of Agriculture (USDA).



THE HUB @ ONT
BURROWING OWL RELOCATION PLAN

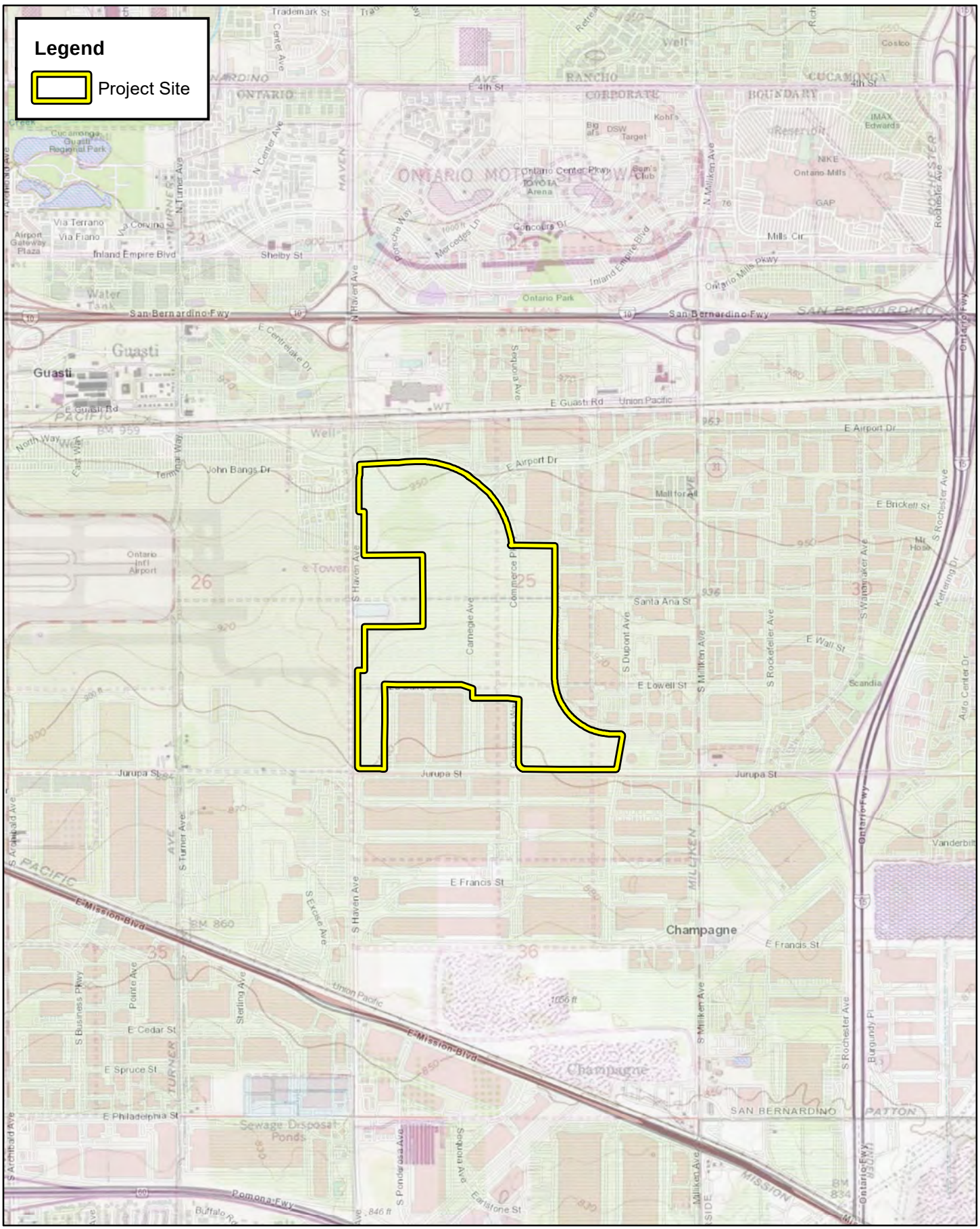
ELMT CONSULTING

0 2.5 5 10
Miles

Source: World Street Map, San Bernardino County

Regional Vicinity

Exhibit 3571



THE HUB @ ONT
BURROWING OWL RELOCATION PLAN

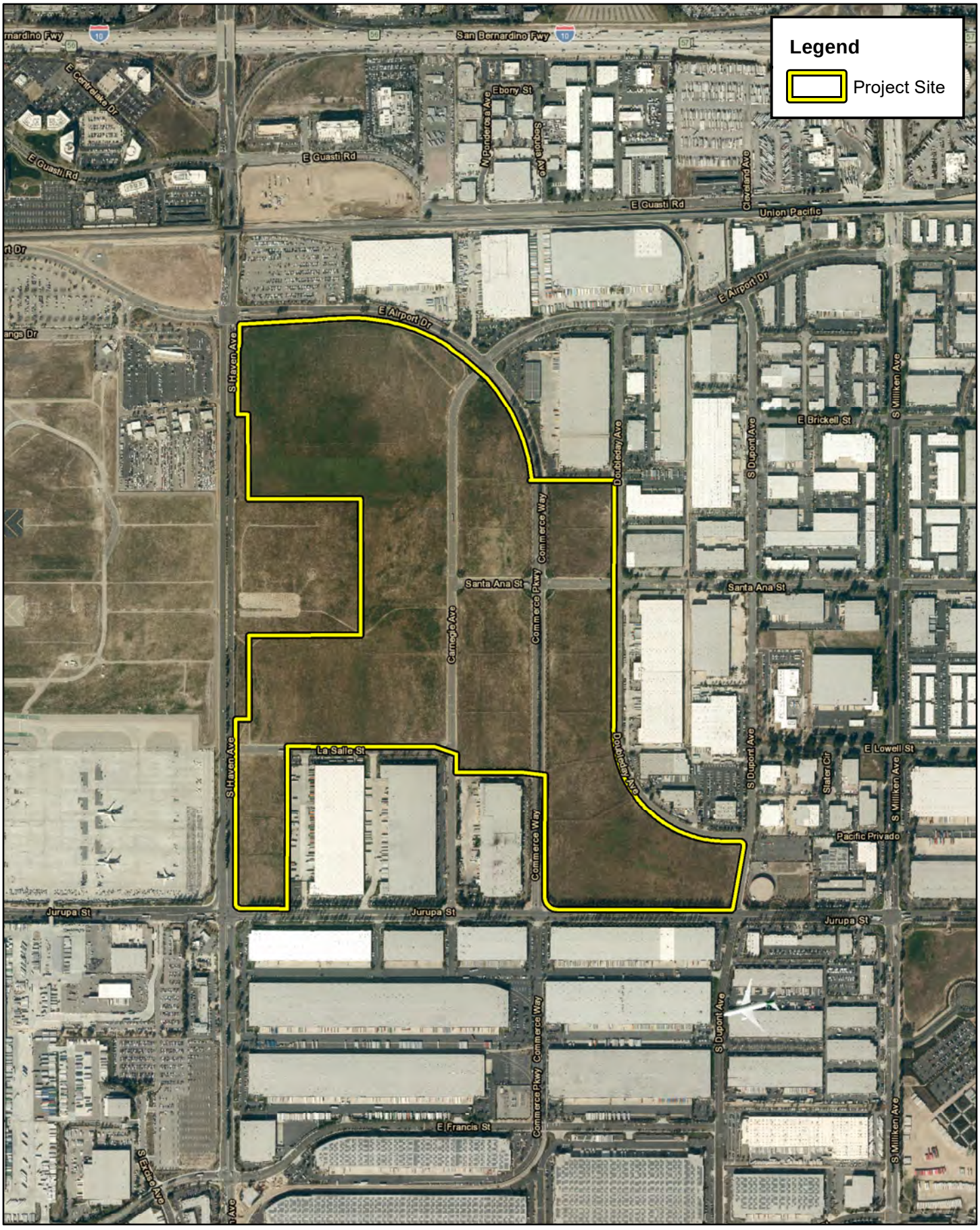
Site Vicinity

ELMT CONSULTING

0 1,000 2,000 4,000 Feet

Source: USA Topographic Map, San Bernardino County

Exhibit 3572



THE HUB @ ONT
BURROWING OWL RELOCATION PLAN

Project Site

ELMT CONSULTING

0 500 1,000 2,000 Feet

Source: ESRI Aerial Imagery, San Bernardino County

Exhibit 3573

Section 2 Regulatory Framework

2.1 MIGRATORY BIRD TREATY ACT

The BUOW is a migratory bird species protected by international treaty under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S. Government Code [USC] 703) of 1918, as amended in 1972, federal law prohibits the taking of migratory birds or their nests or eggs (16 USC 703; 50 CFR 10, 21). The MBTA reflects agreements made between the U.S., England, Mexico, the former Soviet Union, and Japan to protect all of North America's migratory bird populations. Pursuant to the MBTA The statute states:

> *Unless and except as permitted by regulations made as hereinafter provided in this subchapter, it shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill...any migratory bird, any part, nest, or egg of any such bird...included in the terms of the [Migratory Bird] conventions…*

The MBTA covers the taking of any nests or eggs of migratory birds, except as allowed by permit pursuant to 50 CFR, Part 21. Disturbances causing the killing of young by abandonment of eggs or offspring may also be considered "take[1]". It is illegal to collect, possess, and by any means transfer possession of any migratory bird nest.

The MBTA prohibits the destruction of a nest when it contains birds or eggs, and no possession shall occur during the destruction (United States Fish and Wildlife Service, Migratory Bird Permit Memorandum, April 15, 2003). Certain exceptions to this prohibition are included in 50 C.F.R. section 21. Pursuant to CDFW Code section 3513, CDFW enforces the MBTA consistent with rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Treaty Act. An avian nest (i.e., burrows) is no longer protected once it is deemed inactive for nesting by a qualified biologist

In 1972, the MBTA was amended to include protection for migratory birds of prey (e.g., raptors). Six families of raptors occurring in North America were included in the amendment: Accipitridae (kites, hawks, and eagles); Cathartidae (New World vultures); Falconidae (falcons and caracaras); Pandionidae (ospreys); Strigidae (typical owls); and Tytonidae (barn owls). The provisions of the 1972 amendment to the MBTA protects all species and subspecies of the families listed above. The MBTA protects over 800 species including geese, ducks, shorebirds, raptors, songbirds and many relatively common species.

[1] The regulatory definition of take, as defined in Title 50 C.F.R. part 10.12, means to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to hunt, shoot, wound, kill, trap, capture, or collect. Only the verb "collect" applies to nests.

2.2 CALIFORNIA FISH AND GAME CODE

The BUOW is also protected under CDFW Fish and Game Code which prohibit the take, possession, or destruction of birds, their nests or eggs. Fish and Game Code Sections 3503, 3503.5, 3511, and 3513 are applicable to natural resource management. For example, Section 3503 of the Code makes it unlawful to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Further, any birds in the orders Falconiformes or Strigiformes (Birds of Prey, such as hawks, eagles, and owls) are protected under Section 3503.5 of the Fish and Game Code which makes it unlawful to take, possess, or destroy their nest or eggs. A consultation with CDFW may be required prior to the removal of any bird of prey nest that may occur on a project site. Section 3511 of the Fish and Game Code lists fully protected bird species, where the CDFW is unable to authorize the issuance of permits or licenses to take these species. BUOW is not included in protections per Section 3511. Pertinent species that are fully protected by the State include golden eagle (*Aquila chrysaetos*) and white-tailed kite (*Elanus leucurus*). Section 3513 of the Fish and Game Code makes it unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA. This burrowing owl relocation plan has been put together to ensure compliance with Section 3513 and minimize potential take of BUOW.

The BUOW is not listed as endangered or threatened or as a candidate for such a listing under the California Endangered Species Act, nor is it listed for protection under the federal Endangered Species Act.

2.3 CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act (CEQA) provides for the protection of the environment within the State of California by establishing State policy to prevent significant, avoidable damage to the environment through the use of alternatives or mitigation measures for projects. It applies to actions directly undertaken, financed, or permitted by State or local lead agencies. Under CEQA, project impacts to sensitive species and species of special concern, such as the BUOW, must be analyzed and mitigated. The RSP Amendment Recirculated Subsequent EIR, Clearing House No. 2006071021, certified on December 14, 2016 (SEIR) concluded that development of the RSP Amendment Area would significantly adversely impact BUOW, and imposed Mitigation Measure BIO-3 (SEIR pp. 4.3-15 -4.3-16) requiring development of a BUOW relocation plan to mitigate those impacts.

Section 3 Site Conditions

3.1 THE HUB @ ONT CENTER PROJECT SITE

The approximately 197-acre project site consists of disturbed habitat with primarily non-native annuals and grasses, such as *Hordeum* spp. *Bromus* spp., *Malva* spp., and *Sisymbrium* spp. Native *Amsinckia* spp. was also observed throughout the site. Vegetation on the study area is regularly maintained as required for weed abatement. Ornamental landscaping was observed along the periphery of the project site. Soils within the project site solely consist of Delhi fine sand.

The topography of the project site is mostly flat, with elevations ranging from 900 feet (274 meters) above mean sea level (AMSL) near the southeast corner to 942 feet (287 meters) AMSL near the southwest corner. The project site is bounded by Ontario International Airport to the west, and industrial and commercial properties to the north, east, and south.

Except for the undeveloped interstitial areas associated with the Ontario International Airport runway to the west of the project site, the project site is almost entirely surrounded by existing development (industrial buildings) to the north, east and south. In accordance with the 2012 CDFW Staff Report on Burrowing Owls, BUOW burrow exclusion and closure is employed only where there are adjacent natural burrows and non-impacted sufficient habitat for BUOW to occupy with permanent protection mechanism in place. Since the project site is surrounded by development on three of its boundaries, BUOW burrow exclusion and closure would likely result in BUOW moving from The HUB @ ONT project site to the Ontario International Airport runway, which would put the BUOW at risk of creating additional bird strike hazards with aircraft.

Numerous avian bird strikes have been reported on the Ontario International Airport, including various strikes from BUOW. Between 2008 and 2021, approximately sixteen (16) BUOW strikes have been recorded. Due to the Federal Aviation Administration (FAA) regulations for avian bird strikes, flight safety, and USDA depredation permits in situ conservation is not feasible. Translocation is needed for the long-term survival of the BUOWs on The HUB @ ONT project site.

USDA (Animal Plant Health Inspection Service; APHIS) is hired by OIAA to reduce strike hazards caused by various wildlife species. Per FAA rules and regulations, OIAA can't engage in restoration, mitigation or any actions that increase wildlife hazards within zones at and around an FAA certified airport. Any airport can lose their FAA certificate and funding if they are found to be out of compliance with this rule. Any mitigation efforts within 10,000 feet of the airport (the project site is located well within 10,000 feet of the airport) would be considered out of compliance and would likely result in wasted efforts as APHIS has the authority to haze, evict or lethally remove any hazardous wildlife.

Installing artificial burrows and/or encouraging owls to inhabit lands on or directly adjacent to the OIAA property violates FAA rules and is not a viable strategy because of the expected increased presence of other larger hazardous birds (e.g. red-tailed hawks, golden eagles, ferruginous hawks, red-shouldered hawks, Cooper's hawks, turkey vultures, and common ravens) who would attempt to

predate or scavenge owls, squirrels or rabbits that would likely use the artificial burrows. Hawks and vultures are those struck by aircraft at the highest rates and those known to cause the most damage per strike. These species are often involved in aircraft strikes while they are hover hunting or circling over the approach or departure ends of the airport within the glide slopes. Bird strikes in these situations (landing and take-off) are the most dangerous and can lead to catastrophic events that can kill hundreds of passengers and crew on jetliners.

Evicting the owls along Haven Avenue outside the airfield could result in owls moving to areas within the airfield, making a more hazardous situation. Owls are often found seeking refuge very close to taxiways and runways under lights, signs and other man-made structures that support refuge and areas for squirrels to create burrows. Many burrowing owls that are struck at airports are those crossing runways as aircraft are departing and arriving. This will generally not lead to a catastrophic accident however even small birds like burrowing owls are capable of causing tens of thousands of dollars in damage to aircraft per event.

Further, relocating or encouraging owls to reside on a commercial airfield would violate FAA rules, will result in APHIS having to remove the owls in the future, and creates potential liability for the resource agencies or biologists promoting the in-situ conservation of owls at or near an airport.

In summary, the act of attempting to conduct any form of “mitigation” including in situ or eviction on or directly adjacent to the airfield is not supported by the FAA, APHIS, or past direction from CDFW Headquarters. The best approach for owl mitigation at and adjacent to OIAA property should involve active relocation. This will better ensure for safe flight operations and compliance with FAA regulations while also attempting to provide the owls with a greater chance of survival and future breeding attempts.

Section 4 Survey Results

Focused surveys were conducted during the 2022 breeding season within all areas determined to provide suitable habitat. Surveys were at least 3 weeks apart with the first survey conducted on March 3, 2022, and the remaining three surveys were conducted on April 21, 2022, May 18, 2022, and July 8, 2022 (see Appendix A, *2022 Burrowing Owl Survey Report*). Results from the 2022 focused survey can be seen in Exhibit 4, *2022 Burrowing Owl Observations*, and are summarized below.

Two burrows (Nest Nos. 1 and 2), with breeding pairs and juveniles, were detected within the project site. Six alternate burrows (Nos. 1 through 6) were also noted throughout the project site, and these burrows were used by BUOWs for cover.

- Nest No. 1 is an earthen burrow located on the west side of Carnegie Avenue and approximately 900 feet north of E Santa Ana Street. One adult BUOW pair was observed near the burrow entrance during the first survey. Two adult BUOWs and two juvenile BUOWs were noted during the second survey. No BUOWs were noted at this burrow during the first or fourth surveys.

- Nest No. 2 is an earthen burrow located on the west side of Carnegie Avenue and approximately 630 feet north of E Santa Ana Street. One adult BUOW was observed next to an earthen burrow during the second survey. Two adult BUOWs and four BUOW juveniles were observed during the third survey. No BUOWs were observed during the first or fourth surveys.

- Alternative Burrow No. 1 is an earthen burrow located on the west side of Carnegie Avenue and approximately 600 feet south of E Santa Ana Street. One adult BUOW was observed during the second survey. No BUOWs were observed at this burrow during the first, third, or fourth surveys.

- Alternative burrow No. 2 is a vertical corrugated metal pipe storm drain riser located on the east side of Carnegie Avenue and approximately 400 feet north of E Santa Ana Street. One adult BUOW was observed near the storm drain riser during the third survey. No BUOWs were observed at this burrow during the first, second, or fourth surveys.

- Alternative burrow No. 3 is an earthen burrow located approximately 650 feet to the southwest of the intersection of E Airport Drive and Carnegie Avenue. One BUOW individual was observed during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys.

- Alternative burrow No. 4 is a vertical corrugated metal pipe storm drain riser located on the east side of Carnegie Avenue and approximately 840 feet north of E Santa Ana Street. Two BUOW individuals were observed during the fourth survey. Due to the timing of the breeding

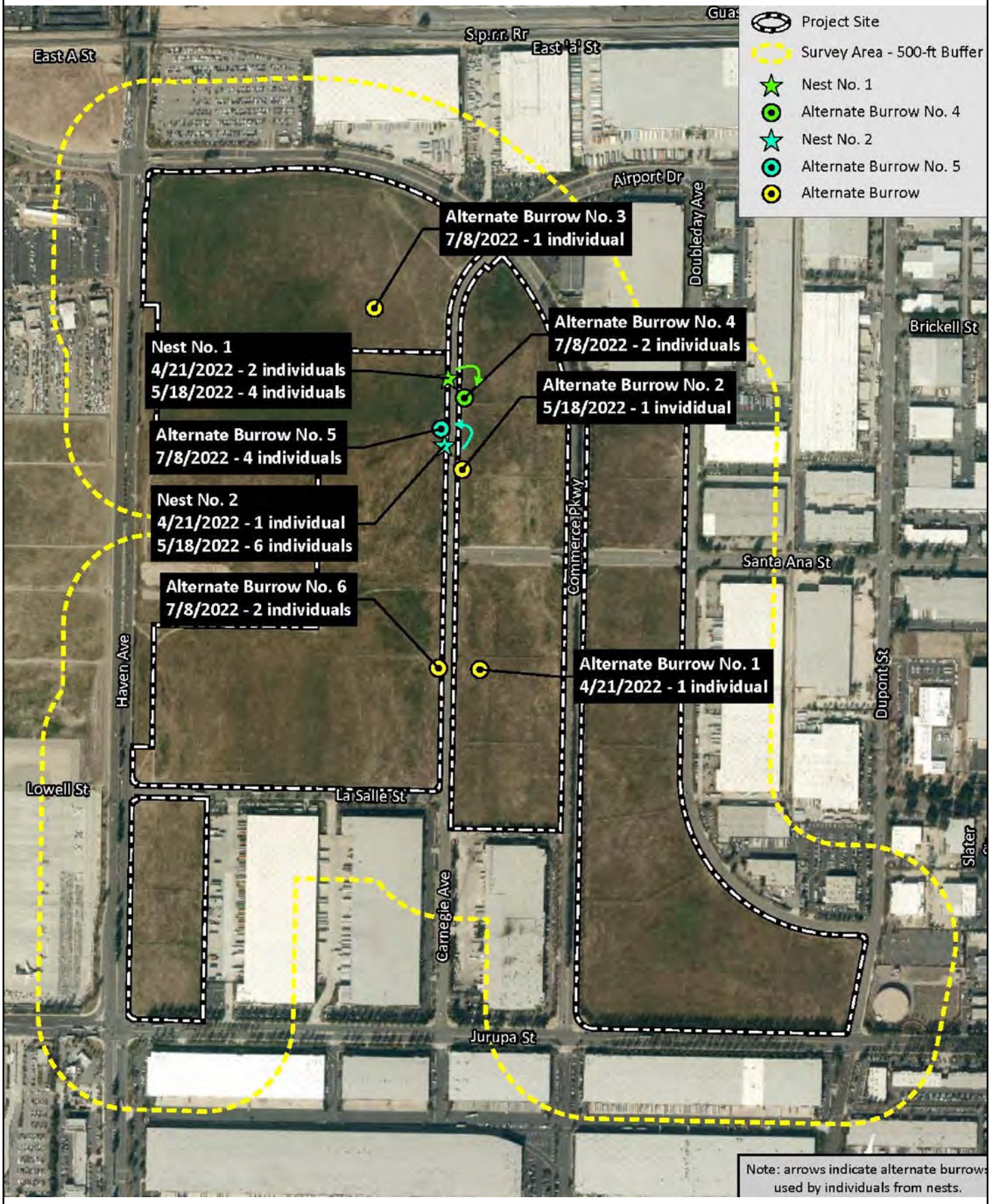
season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys. BUOWs from Nest No. 1 are presumably using this burrow as an alternate burrow based on its proximity to the nest location and observation of individuals flushing from the nest to this burrow.

- Alternative burrow No. 5 is a storm drain riser located on the west side of Carnegie Avenue and approximately 660 feet north of E Santa Ana Street. Four individuals were noted during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys. BUOWs from Nest No. 2 are presumably using this burrow as an alternate burrow based on its proximity to the nest location and observation of individuals flushing from the nest to this burrow.

- Alternative burrow No. 6 is an earthen burrow located on the west side of Carnegie Avenue and approximately 600 feet south of E Santa Ana Avenue. Two BUOW individuals were observed during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys.

Anthropogenic Disturbances

It should be noted that during the focused surveys, and as noted in news articles published online, numerous photographers, bird enthusiasts, and members of the Audubon society routinely gather immediately adjacent to the burrowing owls onsite to obtain close photographs of the burrowing owls. As observed onsite during the focused surveys, these photographers have trespassed to set up artificial perches to obtain "trophy" photographs of the burrowing owls. These anthropogenic disturbances could cause the burrowing owls to flush from their burrows and result in predation and they also leave their human scents which could lead to mammalian predators to the burrows they look at. Further, the routine human interactions with the burrowing owls onsite do not provide long term conservation for the owls onsite. In addition, this harassment of nongame birds could be considered a violation of the California Code of Regulations Title 14 Section 251.1.



THE HUB @ ONT
BURROWING OWL RELOCATION PLAN

ELMT CONSULTING

Not to Scale

2022 Burrowing Owl Observations

Source: HELIX Environmental Planning 2022 Focused Burrowign Owl Survey

Exhibit 3580

Section 5 Relocation Plan

Active relocation is an available method used in certain situations to provide future breeding and dispersal opportunities to owls that are presented with unique challenges including those from pending development, plane strike hazards and those that are predating special-status species. Active relocation typically involves the capture, marking, relocation, maintenance, release and monitoring of owls to preserved lands managed for owls. These sites are generally distant from the capture site and offer ample suitable habitat necessary for increased survivorship and breeding success as well as dispersal opportunities for their young. A relocation plan has 2 main steps: 1) Release Site Selection (5.1 – 5.2); and 2) Translocation Methods (5.3 – 5.6).

Active relocation is a lengthy step by step process that is fully described in the permittee's permits that are obtained on a case-by-case basis. In general, during relocation, owl pairs are captured (Bloom 1987, Bloom et al. 2007) at the development site and placed in hacking cages at an approved relocation site managed for BUOWs. Owls are fed and monitored daily and once a clutch of eggs has been laid and incubation is more than 50% complete, the cages are completely removed from the relocation site and the daily feeding events stop. Monitoring is conducted using game cameras and site surveys at rates that only introduce a minimum amount of disturbance. Predator control efforts (e.g., hazing and scent markings) are often required to ensure successful efforts (e.g. survival, breeding and site fidelity). Adults and young are banded (mark/recapture study) and the site is typically monitored/managed for 2 years post release (USFWS MBTA Permit requirement) to better ensure the site is managed properly for owl suitability and to report on efficacy of the relocation effort(s).

The relocated adults are critical to the initial efforts of successfully raising young however the fledged young are arguably the most important birds as they will show site fidelity (philopatry) to the release site where they emerged from their natal burrow. Hence, if the adults disperse away from the relocation site post nesting season, that does not make this effort a failure. The most important cohort of owls are the young who will show fidelity to their natal area. In many cases, adults do in fact stay on site or explore the new surroundings post breeding season, but the owls often nest on or adjacent to the relocation site in subsequent years.

Active Relocation works best when conducted at distances greater than (>30-40 km) as to help break their homing behavior.

This Active Relocation Plan has been prepared to address the relocation of breeding BUOWs from the proposed The HUB @ ONT site to one the following relocation sites ranked in order of hierarchy based on location (within same County), suitability of the habitat onsite and surrounding area to support a long-term population of burrowing owls, and; 1) Colton Dunes Conservation bank; 2) the Nuevo Donation Site in Riverside County; 3) Other Relocation Sites.

5.1 RELOCATION SITES

Prior to the selection of the following relocation sites, a lengthy, in-depth review of available lands within San Bernardino County and the region was conducted. Currently, San Bernardino County does not support any pre-established conservation areas for BUOW. Therefore, the search for a suitable conservation site included areas, not only in San Bernardino County, but also conservation sites in Riverside County and areas within the region.

Undeveloped areas in Chino/Ontario (near the Chino Preserve and Prado Basin), Green River Golf Course, and areas in the high desert were researched to find a suitable site for long term BUOW conservation. Next, areas already under conservation in San Bernardino County (i.e., Colton Dunes Conservation Bank and Cajon Creek Conservation Bank) that provide areas of open habitat that could be utilized by BUOW were explored. Finally, areas in the region that have already been receiver sites for relocation were looked at in Riverside County and Orange County.

5.1.1 Colton Dunes Conservation Bank

The Colton Dunes Conservation Bank (Bank) is 150 acres of conserved land that was established as a conservation bank in Colton, California, for Delhi Sands Flower-loving Fly (DSF) habitat, but also supports several other sensitive species including Los Angeles Pocket mouse, Cactus Wren, Coastal California Gnatcatcher, and BUOWs. Historically, the site supported active agriculture on the valley floor area of the site, along its eastern boundary. The western portion of the site has a series of gentle sloping hills that overlook the valley floor. With the abandonment of agricultural activities, the valley floor was restored to native coastal sage scrub habitat, while the remainder the of site supports Colton sand dune habitat, an open plant community with low growing and spare vegetative cover, that provides line-of-site opportunities for BUOW. BUOWs have periodically inhabited the Bank, usually observed on the walls of a deep drainage system entering the Bank from the north. A single pair of BUOW were observed within the canyon in 2020 and 2022.

Since the Bank was created specifically for protecting DSF and its habitat in south Colton, an inquiry was made to USFWS regarding the compatibility of DSF and BUOW. BUOW, when present, were found to occupy top of the canyon walls of the drainage entering the Bank from the north and have not occurred in the northeast corner of the Bank and the central portion down to the southern boundary. DSF only emerge during the heat of the day, between 10 am and 2 pm primarily during the month of August, a period of time when owls would be sheltering during the intense summer heat. Given the lack of proximity of the drainage feature from known DSF observations within the Bank and the lack of an overlap in their respective use of the habitat within the Bank, USFWS did not raise concerns regarding the relocation of BUOW into the Bank.

The Bank provides suitable nesting and foraging habitat for BUOW and is protected from trespass and other disturbances. Given the natural occurrence of BUOWs, there appears to be prey available to support the species. However, the Colton Dunes Conservation Bank is the closest potential relocation site to the population of owls on the project site. Further, some additional issues to note are that the Bank will require the installation of approximately 20 artificial burrows which could potentially impact

DSF larvae in the soils (although burrows would be placed in areas that are not know to support DSF), the powerline easements across the site provide perching for raptors that could prey on BUOW, and the potential need for a Streambed Alteration Agreement if the onsite drainage feature were impacted.

Even though the Bank provides suitable habitat for BUOW and is located within San Bernardino County, the proximity of the relocation site to the project site (12 miles/19 kilometers), raptor perching opportunities on the SCE powerlines, and lack of suitable dispersal habitat adjacent to the site (due to existing industrial buildings and mining activities bordering the relocation site) reduces the chance of survivorship for dispersing young and sustaining a long-term population of BUOW.

5.1.2 Nuevo Donation Site

The Nuevo Donation Site is generally located north of the Ramona Expressway, south of Alessandro Boulevard, east of Lake Perris, and west of Gillman Springs Road in the unincorporated community of Lakeview, Riverside County, California. The Conservation Site consists of one parcel (Assessor Parcel Number 425-040-009) which is 83.5 acres in size and abuts the San Jacinto Wildlife Area (SJWA) to the north and west, the San Jacinto River to the north, and Marvin Road to the south (refer to Exhibit 5, *Nuevo Donation Site*). Previous relocation efforts by the San Diego Zoo have occurred on the Nuevo Donation Site, and the Zoo has stated that the Nuevo Donation Site is suitable for future relocations.

The conservation site consists of fallow field that has been subject to a variety of anthropogenic disturbances (i.e., tilling and disking) associated with several decades of agricultural practices. Due to agricultural uses, plant communities that once occurred on the Nuevo Donation Site have been removed resulting in the majority of the site supporting non-native vegetation. Areas immediately to the south and east of the Nuevo Donation Site consist of agricultural land while areas to the north and east consist of vacant public land associated with the SJWA. Historically, the conservation site supported robust floodplain habitat associated with the San Jacinto River, as well as vernal pool habitat associated with on-site alkali/clay soils. The northern 30 acres will be converted back to floodplain habitat.

The Nuevo Donation Site consists of fallow agricultural field and is dominated by a variety of low-growing, early-successional/weedy plant species that provide open foraging habitat for BUOWs. Vegetative cover ranges between 10 and 25%. Several fossorial mammal burrows, including ground squirrel burrows, capable of providing suitable roosting/nesting opportunities for BUOWs are in the northern portions of the conservation site and throughout the surrounding agricultural fields, including along the banks of the San Jacinto River.

It is recommended that additional artificial burrows be installed, and the vegetation onsite be restored and maintained to ensure there is ample open space and cover for BUOWs. The entire site provides either suitable nesting habitat for BUOW or suitable foraging habitat.

The Nuevo Donation Site provides for increased chances of survivorship for dispersing young and for the relocated BUOW adults once the relocation is complete. No other sites in San Bernardino County offer this due to the level of development and highly fragmented landscapes. The Nuevo Donation Site is the number one choice for relocation because the site is part of a large, protected area that is capable of supporting a viable population of owls in the future, and the proximity of the site to San Bernardino

County and the Ontario International Airport (30 miles/47 kilometers from the project site). Further the Nuevo Donation site has already been approved for relocation, does not need a lot of work to enhance, is distant from the project site, but within the same regional population.

As part of the proposed mitigation, the Applicant proposes to translate the BUOW pairs to a relocation site where the BUOW will have increased chances of survival. The Applicant will work with the landowner to accomplish needed tasks that are necessary to make the relocation site more suitable and provide long term conservation for the BUOW. The tasks listed below will be completed as part of the mitigation package for the Nuevo Donation Site to make this site more suitable for the future management of the BUOW at the relocation site

- Install two clusters of 10 artificial burrows (20 total artificial burrows) following the best available methods.
- Provide funding for the County to install 3 strand, no barb wire along the west and east sides of the property.
    - The fence along the western boundary will be located on CDFW lands and increase the size of the protected Nuevo Donation Site by approoimalty 15 acres.
    - No Hunting and No Dog signs will be placed along this fence that runs north south along the east side of the CDFW access road, just east of the Nuevo Donation Site.
- Provide funding necessary for the County to mow the site two times per year for two years.
- Provide funding for a new pipe gate for CDFW/County of Riverside at the southwestern access point.
- Provide funding for large riprap to be placed on either side of the aforementioned gate to help prevent trespassing.
- Provide funding to purchase herbicide to treat patches of tall growing fivehook bassia (*Bassia hyssopifolia*) onsite for two years.
- Conduct success monitoring for three years (1 year more than other projects)
- The project proponents will fund a GPS telemetry study in conjunction with the state and federal permitting agencies. This will be permitted separately.

5.2 OTHER RELOCATION SITES

San Jacinto Wildlife Area

The SJWA was initially created in 1979 by the California Department of Water Resources as mitigation for the State Water Project but has been subsequently expanded to incorporate additional habitat and wildlife species protection. It is located east of Lake Perris in the San Jacinto River Valley and is located immediately north of the Nuevo Donation Site in the unincorporated community of Lakeview, Riverside County, California. The Davis Unit of the SJWA is comprised of 10,483 acres and supports a diverse array of biological resources including wetland habitats, vernal pools, riparian habitats, alkali habitats, waterfowl habitats and upland habitats. SJWA has been managed by CDFW since 2000 and is an important component of two regional conservation programs, the Stephens Kangaroo Rat Habitat Conservation Plan (SKR-HCP) and Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Davis Unit of SJWA is adjacent to and immediately west of the Nuevo Donation Site and includes non-native grassland and upland habitat areas known to support BUOW. BUOWs,

including breeding pairs, have been observed in the SJWA every year since 2006 when routine surveys started to be conducted by CDFW. Portions of the grasslands are routinely mowed and provide foraging and nesting opportunities for BUOWs.

Similar to the Nuevo Donation Site, the SJWA provides for increased chances of survivorship for dispersing young and for the relocated BUOW adults once the relocation is complete. No other sites in San Bernardino County offer this due to the level of development and highly fragmented landscapes. Artificial burrows would be installed, and the vegetation onsite would be restored and maintained to ensure there is ample open space and cover for BUOWs.

El Sol

The El Sol Vineyard Hill area is 400-acre of agricultural farmland that was donated to the Resources Conservation Agency (RCA) in Riverside County in 2007 and is managed by the RCA as part of the Western Riverside County MSHCP as prime burrowiung owl habitat.

El Sol Reserve is located between Lake Skinner and Temecula and consists primarily of gentle, rolling, grassland hills with scattered patches of sage scrub habitat. The grasslands have a mix of native and non-native plant species including *Plantago* sp., *Erodium* sp., *Plagiobothrys* sp., and various other forbs/herbaceous species and annual grasses. The sage scrub habitat is primarily dominated by California buckwheat (*Eriogonum fasciculatum*). Cattle frequently graze the site, as a part of the site management, restricting the vegetation within the grasslands to primarily low growing emergents. Elevations on the site range from approximately 1400 feet to 1550 feet above sea level. Multiple scattered ephemeral drainages are present within the site primarily concentrated in the lower elevations. Small mammal burrows are present throughout the site, while larger burrows, such as those created by California ground squirrel (*Otospermiphilus beecheyi*), are infrequently observed in the site. The locations selected for placement of artificial BUOW burrows to be used as relocation sites for the owls are primarily low growing annual grasslands that slope gently downward to the northwest.

The RCA's El Sol Burrowing Owl Management Site has suitable habitat, artificial burrows, and long-term management support to help sustain BUOWs at the location. Additionally, successful relocations have occurred in the past, resulting in as many as 6 BUOW breeding pairs. There has been as many as ten known owls occupying the site, including three BUOW pairs on the Reserve utilizing approximately 34 artificial burrows on the Property. A new cluster of artificial burrows would be built for receiving the new owls will be about 300 to 500 feet from the closest occupied burrows.

Naval Weapons Station Seal Beach

The U.S. Navy operates a weapons storage and handling facility in Seal Beach, California. The Station support extensive open space with line-of-site opportunities for BUOW. Ground squirrels, which create burrows, are abundant, providing natural burrows for BUOWs. During 2022 fifty artificial burrows were installed within a burrowing owl management area on the north magazine. The relocation area is protected from intrusions and provides abundance prey for owls. The area historically supported a large population of BUOWs. With a commitment to protecting and restoring native habitats and species, the Navy has committed to re-establishing BUOW habitat providing and managing up to 50

owls. Between 1992 and 2006, 63 BUOWs were relocated to Seal Beach. Early relocations originated from Etiwanda on behalf of CDFW. Management of the site is being done in partnership with USFWS, the Audubon Society, and the Friends of Seal Beach. An inquiry at the Station indicates that the BUOW population is below capacity and would be able to accommodate the two pairs of owls from the Ontario Airport Site.

5.3 PREPARATION OF THE RELOCATION SITE

Prior to relocation of BUOWs to the chosen relocation site, several steps may be taken to prepare the site for BUOW occupancy: Soil preparation, site contouring, installation of burrows, revegetation and enhancements:

- If needed, soil preparation includes de-compacting soils by ripping the soils to two directions, first against the overlying contours, and then again with the contour. The ripper blades will be 9 inches part and capable of ripping the soil to a depth of 6 to 10 inches. This will break up areas where the clay soils have clumped due to rough grading, making the soils finer and more suitable for installing burrows and conducive for seed germination.

- Following the ripping of surface soils, if required, artificial burrows will be installed, in a series of mounds and other topographical relief features, providing site with habitat diversity and increasing the carrying capacity of the site.

- Install two clusters of 10 artificial burrows (20 total artificial burrows) following the best available methods. The proposed locations will correspond to the existing location of BUOW colonies at The HUB @ ONT site.

    - Each colony will have a primary burrow enclosure and up to five individual and double burrows. The proposed locations will provide BUOWs immediate foraging habitat in the adjacent vegetated areas, while revegetation/enhancement activities on the relocation site are implemented.

5.4 RELOCATION TO THE RELOCATION SITE

The below methods are typically provided in the CDFW BUOW Amendment and USFWS MBTA permit. The below mentioned methods are those typically requested in the project specific permits and hence these can be modified by the permitting offices as needed. Therefore this plan should not be confused with the project permit or final conditions of approval provided to the permittee (principal investigator – PI)

The BUOWs found within the 197-acre property will be captured and relocated to the chosen relocation site that has been approved by CDFW. In agreement with CDFW, the BUOWs will be captured and released by a permitted biologist with prior experience into a designated conservation area. Trapping methodology is described below in Section 5.6.1. Relocation efforts will provide a more reasonable chance of success for the 2 pairs of BUOWs by reducing potential take and by providing an opportunity for long-term conservation of the BUOWs.

McDonald Property Group has contacted ELMT to prepare this burrowing owl relocation plan and assist with the relocation of the BUOW from the 197-acre project site to the chosen relocation site. ELMT will use an approved burrowing owl biologist authorized by the USFWS Migratory Bird Office (Jennifer Brown) and CDFW Sacramento Office (Esther Burkett) and agreed upon by the local CDFW office (Ontario) and USFWS (Palm Springs office), to live-trap and relocate the BUOWs from the project site to the relocation site.

Following relocation, the relocation site will be monitored as defined below in Section 5.7, which will include site assessment during each visit to ensure the continued integrity of artificial burrow complexes, the success of revegetation efforts, an ongoing evaluation and response to evidence of trespassing and the requirements for predator control. Signage will be installed every 100 feet along the perimeter to minimization trespassing. Enhancements and the installation of burrows will be sited to avoid or minimize the exposure to predators. Artificial or manmade perches within the project site that could be used by raptor species will be removed. If monitoring determines that predators are impacting the onsite BUOW populations, potential remedial actions, e.g., removal of raptor perches, installation of raptor deterrents, and removal of raptors, will be discussed with CDFW.

5.4.1 Authorized Trapping and Banding Methods

To relocate BUOW, the biologist who captures and handles BUOWs (including for translocation purposes) in California must maintain the following three permits authorizing BUOW capture and handling:

1. Scientific Collecting Permit from the USFWS' Division of Migratory Birds (permit office in either Albuquerque or Sacramento) that authorizes BUOW active relocation;
2. Scientific Collecting Permit from CDFW Headquarters in Sacramento, California; and
3. U.S. Geological Survey (USGS) Bird Banding Laboratory (BBL) Banding permit that authorizes the capture and marking of BUOW in Riverside County, California.

Every effort will be made to relocate the BUOWs immediately prior to egg-laying to avoid potentially impacting reproductive success. Furthermore, active translocation should be implemented in such a way as to encourage relocated BUOWs to stay at the relocation site. Focused monitoring of the owls will occur leading up to relocation to ensure they are resident BUOWs and paired. Courtship behaviors will be monitored and noted. If BUOWs are known to be copulating during the relocation approval process the RCA and the Wildlife Agencies will be informed of possible time restraints as BUOWs should only be moved prior to egg-laying. If the PI identifies that there is a high potential for eggs to have been laid after close monitoring of BUOW behavior and camera data, then relocation will no longer be viable until after the nesting season.

The authorized trap methods of the BUOWs include:

1. Bow-trap, Swedish goshawk trap, compartment trap, bal-chatri, noose carpet, and one-way door with box at the burrow.
2. Captured BUOWs must be handled and transported in a manner that minimizes stress.

3. For monitoring purposes, the BUOWs must be banded under the authority of a U.S. Geological Survey Bird Banding Lab permit prior to release.
4. The USFWS recommends color-banding captured owls to facilitate long-term monitoring. The USFWS also recommends gathering morphometric data for each BUOW.

5.4.2 Hack Enclosure and Artificial Burrow Requirements

The authorized hack enclosure requirements and recommendations include:

1. The permittee will keep family groups together for a minimum of 30 days following relocation in order to increase hunting success and protection from predators.
2. The permittee must provide the BUOWs with food, water, and an adequate number of artificial burrows for shelter (artificial burrow requirements are described in further detail below) while they are held in the hack enclosure. Food may consist of mice, crickets, chicks, and meal worms.
3. The enclosure must be able to withstand stormy weather. The enclosure must also protect the BUOWs from all potential predators, be of sufficient size to enclose the artificial burrow systems and provide sufficient space for flight (minimum 12' L x 12' W x 6' H). The height of the enclosure should be extended to 8' if there is a possibility that birds may remain in captivity for longer than 30 days to minimize muscle atrophy.
    - Each Release Enclosure will be 12'x12'x6' (144 sq. ft.) and consists of 12 panels with each panel being 6'x4'. Each is constructed with wood frames (2"x2") and heavy gauge steel wire with 1"x1" mesh. Wire mesh is stapled pneumatically into the wood frame every 6" or as necessary. Panels are connected by 2 lag bolts and additional hardware including door hinges, hasps, and combo locks. The enclosure has a bottom, including welded mesh extending outward from the enclosure no less than 3' to help prevent mammals from digging under and into the cage. A floor made of extra cage panels will also be added to eliminate the possibility of mammals digging into the enclosure. The floor made from additional panels will be covered with soil so the two owls will never encounter or come in contact with the wire. The cage has nylon netting surrounding the outside and top to help prevent avian predators from being able to reach through and grab the owls (Bloom et al. 2003). The release enclosure will be installed prior to the owls being captured.
4. The permittee must dismantle the hack enclosure within 30 days of relocation unless you receive approval for an extension from the USFWS. Leaving BUOWs in an enclosure for too long at the release site can give them a false sense of security and can be an attraction for predators.
5. The permittee must discontinue feeding immediately after dismantling the enclosures.
6. The permittee must remove enclosures and other human artifacts from the relocation site immediately after dismantling the enclosures.
7. The permittee must camouflage all remote monitoring equipment (cameras) and place equipment as far from the enclosure as practical to avoid attracting predators. Cameras must

be placed 1.5 feet or lower from the ground and be covered by a perch deterrent to minimize predator use as a perch.

8. The USFWS recommends using an enclosure with corners that are as wide-angled as possible to minimize sharp-edge hazards and the risk of injury to owls.
9. Predators can be deterred from digging under the enclosure by installing a few feet of chicken wire or hardware cloth on the ground around the perimeter of the enclosure. Bury the chicken wire or hardware cloth in soil so that predators are unable to determine where the edge of the wire is located.

Artificial burrow system requirements include the following:

1. Each relocated BUOW must be provided with 2-4 burrow chambers at the release site; each relocated BUOW pair must be provided with a minimum of 4 burrow chambers at the release site.
2. The bottom of the burrow chambers must be a minimum of 4 feet below the soil surface. The top of the burrow chambers must be buried under a minimum of 3 feet of soil.
3. Each artificial burrow system must have multiple entrances facing different directions so that the BUOWs can easily escape from predators.
4. Each burrow chamber must have at least one entrance tunnel leading to the soil's surface. Tunnels must be at least 8 feet long and constructed of 4-inch corrugated flexible drainpipe. Tunnels should have a slope of 20-45 degrees between the surface and the nest chamber. Each tunnel must have a 90-degree horizontal turn between the entrance and the nest chamber to help prevent predators from entering the chamber. The drainpipe should only protrude a short distance into the burrow chambers to maximize living space for the BUOWs.
5. The permittee must either install a hollow concrete block at each tunnel entrance at the soil surface, or you must slip a 6-inch rigid PVC pipe over each entrance and pile river rock around each entrance for erosion control and protection from predators.
6. The permittee or the responsible landowner must maintain all artificial burrow systems and surrounding habitat long-term to ensure the site remains suitable for BUOWs. The permittee or the responsible landowner must clean and repair artificial burrows annually. The permittee or the responsible landowner must also manage the vegetation in and around the release site annually to maintain visibility for the BUOWs.

Other Artificial Burrow System Recommendations:

1. The USFWS recommends maximizing the number of artificial burrows at the release site. The USFWS recommends installing more artificial burrows than required to support local BUOWs that may move into the site, in addition to supporting the relocated BUOWs. The quantity and spacing of occupied burrows and satellite burrows at the capture site will help determine the quantity and spacing of burrows that should be provided at the release site.
2. The USFWS recommends using either Wild at Heart's artificial burrow system design (summarized here) or John H. Barclay's design (Barclay, 2008, J. Raptor Res. 42(1):53–57). A wooden burrow chamber design may be used in lieu of the plastic chamber designs. The

minimum artificial burrow system requirements described above must be implemented regardless of which artificial burrow system design the Permittee chooses.

3. The following is a Summary of Wild at Heart, An Arizona-Based Raptor Rescue's artificial burrow system design (Greg Clark is available for questions about methods; greg@bluetiger.com or 480-595-5047). Over-turned 5-gallon plastic buckets may be used as burrow chambers. Four over-turned buckets may be placed side-by-side in a cluster to serve as burrow chambers for each owl pair. The buckets may either be arranged above ground for a mound artificial burrow system or placed inside the bottom of a pit for a subterranean artificial burrow system. A 5-inch diameter hole may be cut in the side of each bucket at the bucket opening for connection to a tunnel. Two of the buckets may be inter-connected with flexible tubing to provide owls with an expanded burrow chamber and a second entrance/exit. Poultry cloth (chicken wire) may be placed under burrow chambers to prevent California ground squirrels and pocket gophers from digging up the soil and filling the chambers and tunnels with soil. Poultry cloth may also be installed around burrow entrances to deter large predators from digging up a burrow.
4. The USFWS recommends installing artificial burrow system about 10 feet apart from each other.
5. Maintenance activities may include grazing, mowing with a push mower, mowing with a mechanical mower with low impact tires, or using a weed eater to reduce annual grass height. Maintenance may also include keeping area free of trees and shrubs and habitat modification to increase prey populations.
6. The USFWS strongly recommends preventing excessive human and human-related disturbance that can result in excessive flushing of BUOWs or damage to their burrows (e.g., walking, jogging, off-road/dirt bike activity, dog-walking). This also includes controlling loose and feral pets that may chase, injure, and prey upon owls.

5.4.3 BUOW Capture and Release Activities

Once all owls are translocated away from the project site, all burrows and refugia will be excavated and collapsed following the CDFW (2012) guidelines. The primary occupied burrow(s) will be excavated and collapse at The HUB @ ONT project site prior to leaving the site after trapping.

Occupied burrows where BUOWs were captured will be excavated to prevent re-occupation.

One-way doors are installed for 48-72 hours prior at all other suitable burrows to prevent re-occupation of site.

Grading/disturbance of the site will immediately follow burrow excavation and owl relocation to better prevent occupation by any other BUOWs. The enclosures at the relocation site will not be removed until the project site is cleared and graded therefore the developer should eliminate all suitable BUOW habitat features prior to BUOW release.

After capture, relocation and burrow excavations on The HUB @ ONT project site, a letter report will be submitted to all pertinent parties including the Wildlife Agencies within 72 hours of completion.

The report will include, but not be limited to: capture dates, times, USGS and VID band numbers, and coordinates. Conditions of each bird will be documented including overall health, weight, brood patch, molt, obvious injuries, and presence/absence of ectoparasites. Exact release time and location will also be documented.

While BUOWs are in the release enclosures, qualified staff as named on the List of Authorized Individuals associated with his Scientific Collecting Permit will provide daily feedings of dead house mice (*Mus musculus*) at a rate of one to two (2) mice per owl per day during the captivity period. Water will also be provided in a 24"x12"x4" plastic tub for drinking or bathing. A small rock is placed in the tub to help any small animals exit if they enter the water. When BUOWs are placed into the release enclosures, feeding visits will take place in the afternoons between 1430 and dusk, however, high temperatures greater than 85 degrees Fahrenheit will be avoided and mice won't be delivered until near dusk during those conditions, so mice don't spoil. Feeding events will be conducted in a manner that reduces disturbance to the BUOWs. Feedings are not conducted in the presence of known predators. Any nearby perched avian predators will be "bumped" from their perches and once safe, feeding of the caged owls will take place. Feedings do not require entering the enclosures; however, entry may be required to add water or remove any rotten mice that could attract predators.

During each site visit, the biologist will conduct a rapid evaluation of the release enclosures, visually assess owl health and document problems from trespassers and/or predators (coyotes, weasels, feral dogs, hawks, falcons, and great horned owls). Visits will be conducted as quickly as possible to reduce disturbance to the owls and the entire relocation site. Monitoring forms will have a comments section to address changes in habitat(s), management or any concerns. Additionally, any concerns that may conflict with the success of the relocation will be reported to the RCA and the Wildlife Agencies immediately.

During each visit, authorized individuals will fill out an electronic monitoring form on an application used on smart devices, or will fill out hand written forms. Forms will be used as part of the annual reporting process.

While BUOWs are in the release enclosure, camera traps will be placed approximately 15-30 feet south of the enclosure for a wide angle of the surrounding area and another inside the enclosure. The cameras will generally face north away from the sun resulting in better images. Cameras will be camouflaged, and bird spikes will be attached to camera cases to prevent perching by avian predators. Selected images from wildlife cameras will be provided with the final report. Cameras will be checked no later than every seven days, with every 2-3 days being the preference, in order to detect any significant issues in a timely manner and take effective action. Issues that may affect the survival of the BUOWs and the success of the translocation project will be reported. Significant issues would include any threats to BUOW health (e.g., high infestation of stick-tight fleas; or behavioral abnormalities, e.g., lethargy) or survival that may affect the success of the relocation project. Any issues and corrective actions will also be discussed in the final report.

Enclosures will be removed (and BUOWs will be released) when BUOWs have laid a complete clutch of eggs and are well into the incubation stage. Egg laying dates vary, and some pairs ultimately may

not lay eggs. Therefore, if owls do not appear to be nesting, BUOWs will be released after agency consultation and coordination (CDFW Headquarters and Regional staff and USFWS MBTA office). If nesting is not confirmed within the first 30 days of captivity in the enclosure, all pertinent parties will be notified and will discuss the situation and agree upon a plan. Esther Burkett, CDFW, will be consulted in regard to any caging extension beyond 30 days and if extension is allowed, CDFW shall authorize such via email.

When BUOWs are ready to be released, the enclosure(s) will then be carefully dismantled by two or more people and immediately removed and taken offsite. Adult BUOWs will generally flush down the burrow tunnel when the enclosure is entered by humans, however, if the owls don't flush down the burrow tunnel, they will be captured with a butterfly net and be released down the burrow tunnel at which point a towel will be placed in the burrow entrance to prevent escape. Once the human disturbance is complete and enclosure parts removed, the towel is removed so the owls can emerge safely. This event is timed such that owls emerge as close to dusk as possible so there is less risk of predation by local resident or migrant diurnal predators.

Supplemental Feeding:

Supplemental feeding shall occur in a carefully monitored way during both the acclimation period immediately following enclosure removal and through the fledgling stage, but feeding amount or frequency can be decreased or discontinued, if deemed necessary by the PI, based on camera footage, and observations and careful notes taken by the site monitors. Assessments of supplemental food that remains uneaten at each burrow will be conducted by the authorized individuals, throughout the season. The amount of supplemental food provisioning shall be tailored to the number and life stage of owls at each burrow. The PI can select their own protocol as needed to better suit the unique situation presented by the relocation. Supplemental feeding following hacking enclosure removal will be implemented with triggers based on site conditions, the PI prior data and experience, and additionally considering the feeding protocol and factors identified below:

- Feeding protocol utilized by the San Diego Zoo Institute for Conservation Research in past studies, with the caveats as noted in federal and state scientific collecting permits that feeding quantity and frequency can be adaptively managed depending on the needs of the owls, predator activity, and in keeping with minimizing human disturbance but also maximizing successful breeding and fledging of young.

  San Diego Zoo Institute for Conservation Research feeding protocol used in past studies (*for reference*):

  > Provide food on Mondays (for 2 days [Mon and Tues]), Wednesdays (for 2 days [Wed and Thurs]), and Fridays (for 3 days [Fri, Sat, Sun]), but feeding could possibly occur daily if there are sufficient personnel. One benefit of feeding every other day is reducing the amount of disturbance time. The feeding schedule is provided below with the amounts and frequency of feeding. Begin to wean the owls down 2 weeks after fledging and examine pellet contents throughout the season to keep rough track of wild prey utilized by the owls (i.e. wild prey remains versus white mice). Provide the mice

inside the burrows (chambers, if possible, or a few feet down the tunnels) to minimize attracting predators such as ravens and coyotes. Reduce the amount of mice if the owls are not consuming all of them (aim for 2-3 leftover mice, maximum, at each visit). Remove most of the uneaten mice (the owls do cache food, but aim to reduce the presence of many decayed mice). Guidelines for feeding schedule are noted in the chart below.

Feeding schedule and amount. Assumes 1 mouse ≈ 20 grams.

Stage[1]	Frequency	# of owls	Food[2]
Acclimation period	Once every 2-3 days	2 owls (Pair)	8-12 mice
Post-release to egg hatching	Once every 2-3 days	2 owls (Pair)	8-12 mice
Hatching (2 weeks after hatching)	Once every 2-3 days	2 owls (Pair) + young	8-12 mice + 1 mouse/chick
Banding age (3-4 weeks after hatching)	Once every 2-3 days	2 owls (Pair) + young	8-12 mice + 2-3 mice/chick
Fledging (5-6 weeks after hatching)	Once every 2-3 days	2 owls (Pair) + young	8-12 mice + 2-3 mice/fledge
Post-fledging (mid-July & Aug)	Twice per week	2 owls (Pair) + young	2 mice/owl
Late breeding/Early non-breeding	Once per week	Any number of owls	2 mice/owl where seen

[1]For all stages except Late breeding/Early non-breeding, feeding primarily occurs at nest and/or satellite burrow(s).
[2]Food amounts are calculated as: 2 mice/adult/calendar day and 1 mouse/juvenile/calendar day.

Qualified staff will provide feedings. Based on the PI's experience, a rate of one (1) mouse per owlet every other day is often used as a starting point. The feeding rate will be adjusted as necessary, based on the results of the periodic detailed assessments described below and in consideration of the protocols and factors listed above. For example, if the detailed assessment indicates there is too much food (prey remains are plentiful inside/outside the burrow, then supplemental feeding may be reduced to one (1) mouse per owlet every three days. The supplemental feeding rate would be tapered/reduced until the supplemental feeding is determined no longer necessary and stopped. The duration of supplemental feeding is proposed to occur as needed for up to 30 days post fledging, unless extenuating circumstances exist (e.g. if adults leave the site, etc.) or it is determined necessary to continue for successful rearing of the young and/or survival of the adults. Mice not consumed from the prior feeding will be removed and noted in the daily log (described below).

The frequency of detailed assessments will generally occur once per week but may vary and will be based on the goals of limiting disturbance to the owls, while gaining information often enough to sustain the offspring and encourage adults to remain on the site. The level of disturbance will be gauged by the owls' behavior. Considerations will include but not be limited to the following, as applicable, based on the life stage of the young:

- Examination inside the burrow tunnel and outside the burrow for prey remains. In order to avoid unnecessary disturbance and possible nest abandonment, the nest chamber shall only be examined when necessary, as determined by the PI.

- Observation of patterns in adult male/female foraging and feeding of live prey to the young owlets, and older juveniles in late Summer and early Fall.
- If adult owls abandon the site, supplemental feeding may be needed to sustain the young owls to fledging stage.
- Examination of quantity and size (e.g., small mammals vs. invertebrates) of natural prey remains in the immediate vicinity of the burrow.

Annual and final reports shall contain detailed information on the supplemental feeding effort and recommendations in regard to such for any future translocation efforts. The involved agencies understand that predators (e.g., coyotes, ravens) may be attracted to uneaten supplemental prey remains and could pose a risk to survival of the adults or chicks, in addition to causing owls to abandon the site. The agencies will rely on the monitoring results conveyed by the PI to determine how to proceed as the translocation effort unfolds. Because methods for owl translocation are still being tested and different sites present unique challenges, an adaptive management approach is needed, and close consultation between the PI and the agencies will be required throughout the translocation and monitoring effort.

5.5 POST-RELEASE MONITORING

Monitoring will be conducted through the first three breeding seasons beginning immediately following release. Monitoring will be conducted three times a week during the breeding season and weekly outside the breeding season. Cameras may be used to monitor activity to minimize disturbance at the release site. Monitoring will also include assessing the mitigation area to ensure the continued integrity of artificial burrow complexes, the success of revegetation efforts, effectiveness of control of trespassing, the requirements to control predator. Signage will be installed every 100 feet along the perimeter to minimization trespassing. Fencing may be required if trespassing become a management issue and will be discussed with CDFW prior to actions being taken. Enhancements and the installation of burrows will be sited to avoid or minimize the exposure to predators. Perches within the project site that could be used by raptor species will be removed. If monitoring determines that predators are impacting the onsite BUOW populations, remedial actions such as the installation of deterrents and/or the removal of predator birds, will be discussed with CDFW.

The detailed description of the monitoring efforts are described below that will be followed to better increase the chances of a successful relocation. Monitoring will be conducted by the approved BUOW biologist and qualified personnel.

1. Monitoring events should be conducted every third day post-release for the first 30 days. A simple windshield survey from points where all burrows can be viewed will be adequate unless BUOWs are not observed. Monitoring should take place during periods of BUOW activity (morning or evening) and in the absence of obvious avian predators. If BUOWs are not observed, quick pedestrian surveys of the release area should be conducted. If BUOWs are subsequently detected, the surveys will halt to reduce disturbance.
2. During the post-release monitoring phase, camera traps will be deployed to assist with data collection. This will help determine presence/absence and reduce site disturbance.

3. If BUOWs are present on the release site after 30 days post release, monitoring efforts will continue typically once-twice weekly with camera maintenance while they are present. The frequency of monitoring will be based on BUOW behavior and predator presence. Once a week monitoring is conducted only through fledging and supplemental feeding. Monitoring twice a month is conducted during the non-breeding season (relying on cameras) for most of the information. Monitoring will be less often if owls seem to be disturbed by presence of monitors, and if the site has predators that are following monitors around or attracted to the area (learning routines of feeding for example), then the frequency of site visits may be further reduced.
4. If breeding takes place during 2023, all young will be banded. Any unbanded BUOWs observed within the release area will also be banded (if captured) for monitoring purposes. Capture forms will be including with required reporting.
5. After the 2023 breeding season is complete, the site will continue to be monitored once to twice weekly with monthly camera maintenance and agency submittals will continue through the non-breeding season. The monitoring frequency will depend on number of BUOWs present and as noted above, the level of disturbance to the BUOWs (indicated by the owls' behavior) as well as potential modification to predator behavior/patterns. Each monitoring event will include a rapid assessment of the site as to reduce human activity. Most visits will last only a few minutes and surveys can generally take place from the vehicle. If BUOWs are absent from the site for one month, surveys will be reduced to monthly site visits. However, if the owl numbers decline over the 3-year period, so will the monitoring effort (accordingly). Also, if the PI believes management actions are needed to increase success, the PI we will do so as needed during the appropriate seasons.

During the 2023 breeding season (April-August) additional monitoring will take place to document presence/absence, nesting, and reproduction. Banding will occur for any young produced or new adults to further report on success during years two and three.

Predator Management

The county of riverside will obtain a depredation permit from the USFWS MBTA office and CDFW that allows them and the PI (and his subs) to haze and harass wildlife that are causing impacts to the relocation that would reduce the success of the relocation.

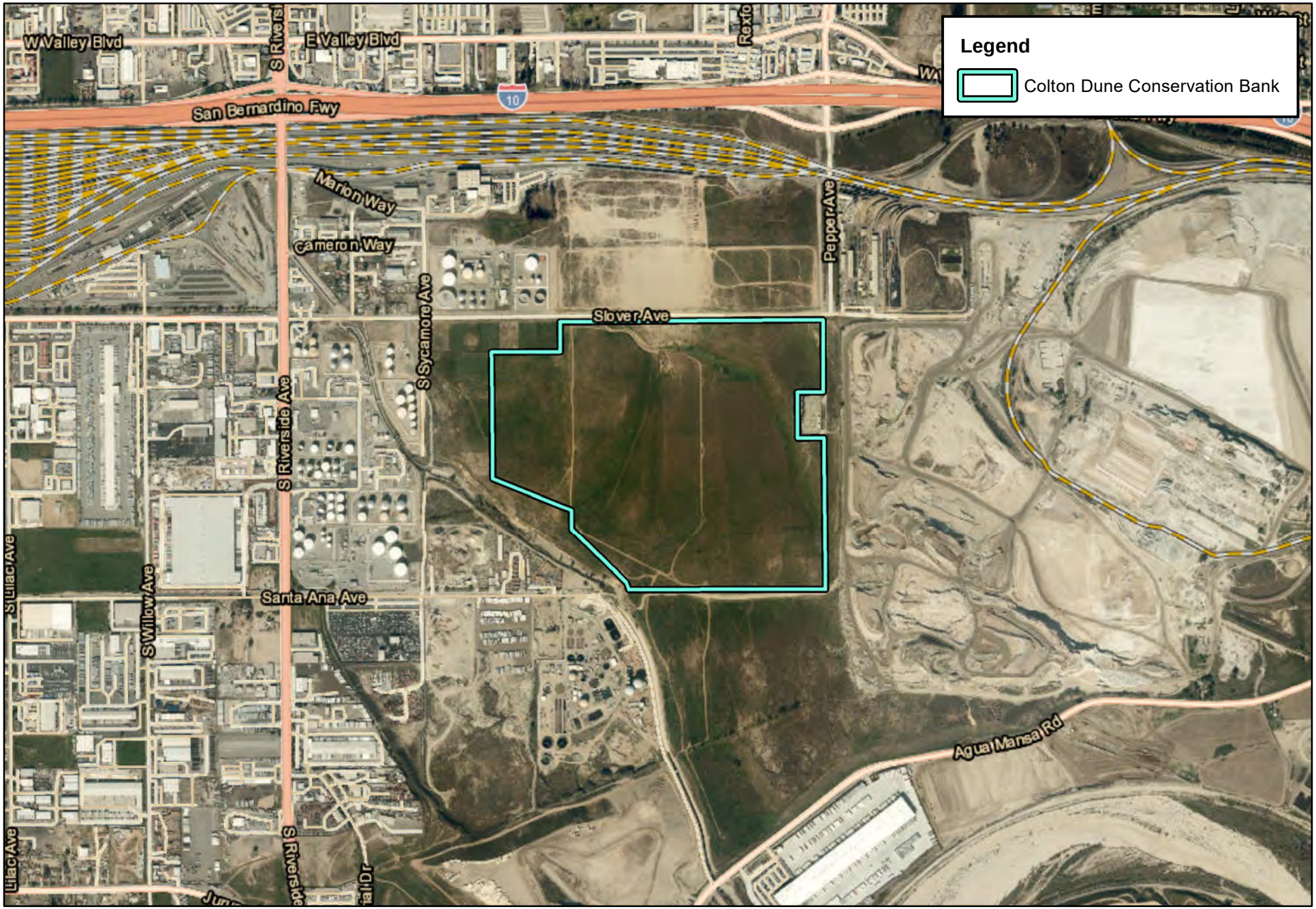
5.6 REPORTING

Three annual reports (and/or when the approved biologist encounters problems) will be submitted to the RCA and Wildlife Agencies through the conclusion of the 2023 nesting season. Memoranda will be prepared for the RCA after relocation efforts as needed. The RCA and County Parks shall be notified within 48 hours if there are problems on the release sites, such as predator risk, trespass, vandalism, other incompatible activities, or other concerns the approved biologist may encounter. Should any one serious injury (compromising survival in the wild) or mortality of burrowing owls or other species occur as a result of the methods, the Wildlife Agencies will be notified by phone within 24 hours, and the injury/mortality event must be described in the annual report. A separate detailed report of the injury/mortality incident, including photographs, must also be sent via email to the Wildlife Agencies within 3 days of the incident (or as detailed in the approved biologist's permits).

A completed Annual Report Form 3-202-1 shall be submitted to the Migratory Bird Permit Office (U.S. Fish and Wildlife Service, Migratory Bird Permit Office, 2800 Cottage Way, Room W-2606, Sacramento, CA 95825) by January 31st each year for two years post-release. Copies of this report will also be submitted to USFWS Palm Springs and CDFW (Sacramento and Ontario). The report shall also provide a written summary describing results of the translocation efforts (i.e., geographic coordinates of capture site, release site, U.S. Geological Survey band numbers, breeding activity, movements, physical condition of the birds, predation, etc.). Upon completion of the project, a final report documenting the overall number of BUOWs relocated (including artificial burrows) and burrows excavated shall be submitted to USFWS, CDFW, and other cooperating agencies.

A comprehensive final report describing the results of the project over the three-year period of work will be prepared summarizing the results of the monitoring and relocation efforts as described in this relocation plan written in scientific format including introduction, methods, results, discussion, recommendations, literature cited, and appendices for monitoring data, photos, and banding forms. This comprehensive report may be combined with the year 2 annual report, if appropriate.

All reporting will follow the terms and conditions of the approved biologist's permits and will be submitted to the respective agencies.



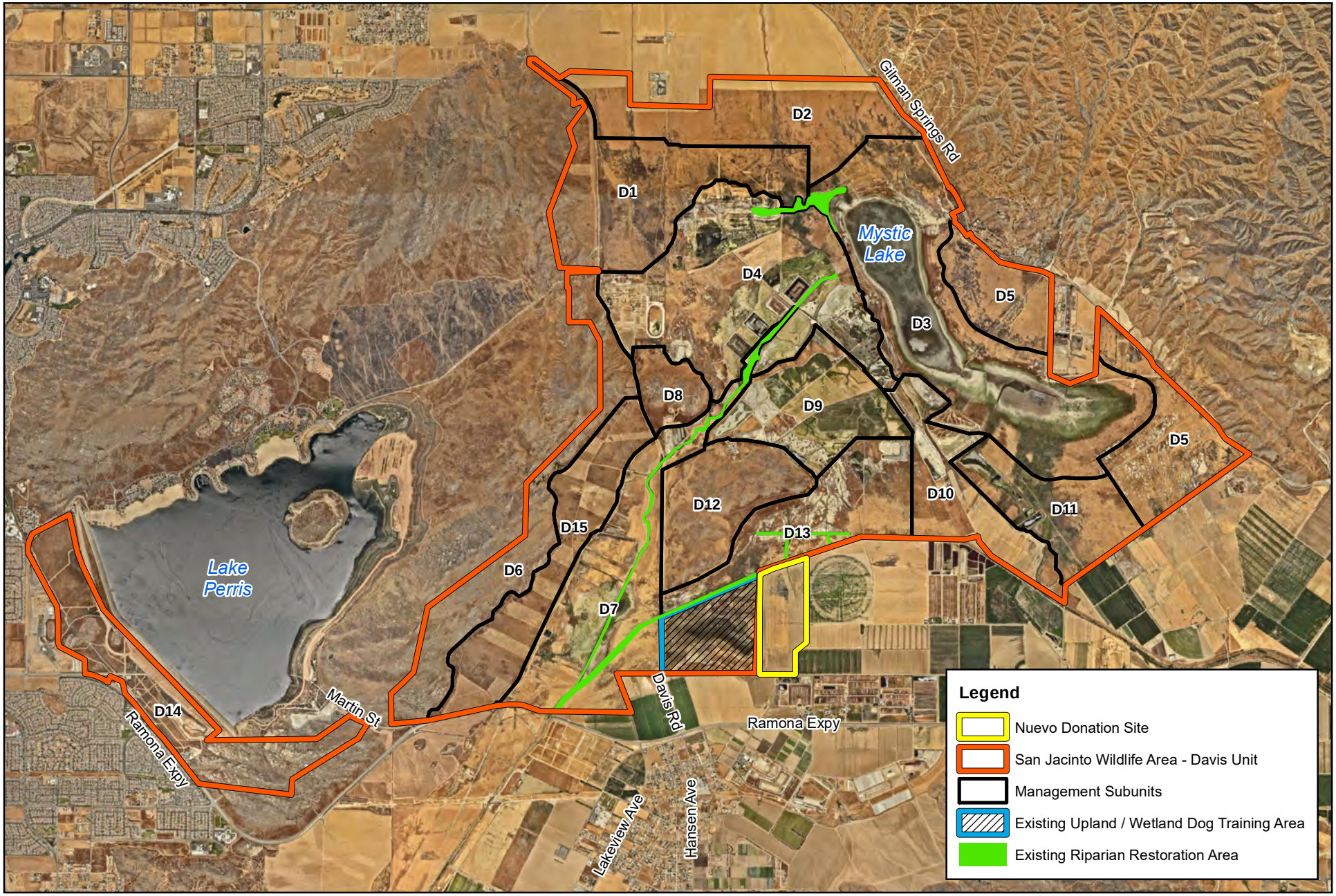
0 500 1,000 2,000 Feet

Source: ESRI Aerial Imagery, San Bernardino County

THE HUB @ ONT
BURROWING OWL RELOCATION PLAN

Colton Dunes Conservation Bank

Exhibit 3597



ELMT CONSULTING

0 0.5 1 2 Miles

Source: Riverside County, NearMaps 2016

THE HUB @ ONT
BURROWING OWL RELOCATION PLAN

Nuevo Donation Site

Exhibit 3598

Section 6 Conclusion

During the 2022 breeding season, two pairs of BUOWs were observed to have successfully breed on the 197-acre The HUB @ ONT site in the eastern flight corridor at the Ontario International Airport. Based on the results of the 2022 breeding season focused surveys, these two pairs of BUOWs will be actively relocated prior to egg laying during the 2023 breeding season (end of February/beginning of March) to a relocation site to allow the two pairs to continue to breed. The vacated project site will subsequently be developed, removing all BUOW habitat.

Based upon an assessment of the available relocation sites presented in Section 5 above, we recommend proceeding with the relocation of the aforementioned BUOWs to the Nuevo Donation Site. The selected relocation site will provide the best long-term solution suitable for propagation and conservation of the BUOWs from eastern flight corridor at the Ontario International Airport.

McDonald Property Group will contract with an approved burrowing owl biologist to conduct the relocation of the BUOWs from The HUB @ ONT project site as approved by CDFW and USFWS MBTA offices.

Section 7 References

Barclay, J.H. 2008. A Simple Artificial Burrow Design for Burrowing Owls. J. Raptor Res. 42 (1): 53-57.

Bloom, P.H. J.W. Kidd, J.W. Johnson, S.H. Weldy, J.R. Bradley, E. Henckel and J Henckel. 2003. *Notes on the effectiveness of burrowing owl translocations in southern California*. California Burrowing Owl Symposium, 11-12 November, Sacramento, CA.

Bloom, P. H, Clark, W.C. and J.W. Kidd. 2007. *Capture Techniques* pages 193-219 in D.M. Bird and K.L. Bildstein, *Raptor Research and Management Techniques*. Raptor Research Foundation.

California Burrowing Owl Consortium, 1993. *Burrowing Owl Survey Protocol and Mitigation Guidelines.* Accessed on the internet at: www.dfg.ca.gov/wildlife/nongame/docs/boconsortium.pdf

California Department of Fish and Wildlife (CDFW). 2012. *Staff Report on Burrowing Owl Mitigation.* State of California Natural Resources Agency Department of Fish and Wildlife. March 7, 2012.

Coulombe, H.N. 1971. *Behavior and population ecology of the burrowing owl* (*Speotyto cunicularia) in the Imperial Valley of California*. Condor 73: 162-176.

Daily Bulletin. https://www.dailybulletin.com/2020/03/25/the-fate-of-burrowing-owls-near-ontario-airport-up-in-the-air/

Haug, E.A., B.A. Millsap, and M.S. Martell. 1993. Burrowing Owl (*Speotyto cunicularia*). In: A. Poole and F. Gill, editors, Birds of North America, No. 61. Philadelphia: The Academy of Natural Science; Washington DC: The American Ornithologists' Union.

Johnson, D.H., Gillis, D.C., Gregg, M.A., Rebholz, J.L., Lincer, J.L., and Belthoff, J.R. 2010. *Users Guide to Installation of Artificial Burrows for Burrowing Owls*. August 19, 2010.

Martin, D.J. 1973. Selected aspects of burrowing owl ecology and behavior. Condor 75:446-456

McDonald, D., N.M. Korfanta, and S.J. Lantz. 2004. *The Burrowing Owl: A Technical Conservation Assessment*. Prepared for the USDA Forest Service, Rocky Mountain Region, and Species Conservation Project. Accessed online at: http://www.fs.fed.us/r2/projects/scp/assessments/burrowingowl.pdf

Ramsen, Jr., J.V. 1978. *Bird Species of Special Concern in California*. Non-game Wildlife Investigations. Wildlife Management Branch Administrative Report No78-1. Report prepared for California Department of Fish and Game.

San Diego Zoo Institute for Conservation Research. Assessing California's Mitigation Guidelines for Burrowing Owls Impacted By Development.

San Diego Zoo Institute for Conservation Research (SDZ ICR). 2017. Burrowing Owl Conservation and Management Plan for San Diego County. San Diego, CA. 85 pp.

S.M. Hennessy et. al. 2020. Release Strategies and Ecological Factors Influence Mitigation Translocation Outcome for Burrowing Owls: a comprehensive evaluation.

Trulio, L.A. 1995. *Passive relocation: a method to preserve burrowing owls on disturbed sites*. J. Field Ornithology. 66:99-106.

Varland, D.E, J.A. Smallwood, L.S. Young, and M.N. Kochert. 2007. *Marking Techniques* pages 221-236 in D.M. Bird and K.L. Bildstein, *Raptor Research and Management Techniques*. Raptor Research Foundation. Hancock House Publishers, Surrey, British Columbia.

Appendix A 2022 Burrowing Owl Survey Report

HELIX Environmental Planning, Inc.
16485 Laguna Canyon Road
Suite 150
Irvine, CA 92618
949.234.8770 tel
619.462.0552 fax
www.helixepi.com

September 1, 2022 03902.00002.001

Mr. John Pierce, Sr. Vice President
McDonald Property Group
1140 North Coast Highway
Laguna Beach, CA 92651

Subject: 2022 Burrowing Owl (*Athene cunicularia*) Survey Report for the California Logistics Center at Ontario International Airport Project

Dear Mr. John Pierce:

This letter presents the results of the 2022 focused burrowing owl (*Athene cunicularia*; BUOW) survey conducted by HELIX Environmental Planning, Inc. (HELIX) for California Logistics Center at Ontario International Airport Project (project). The survey was conducted in accordance with the California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation (formerly California Department of Fish and Game [CDFG] 2012).[1] This letter describes the methods used to perform the survey and the results.

SURVEY RESULTS SUMMARY

Numerous suitable burrow and burrow surrogates were observed throughout the project site. Two burrows (Nest Nos. 1 and 2) with breeding pairs and juveniles were detected. Six additional burrows (Alternate Burrow [AB] Nos. 1 through 6) were also noted, which were used by BUOWS for cover.

PROJECT LOCATION

The project site is generally located 0.7 mile to the west of Interstate (I-) 15 and 3 miles to the south of I-10 in the City of Ontario, San Bernardino County, California (Figure 1, *Regional Location*). It is depicted within Section 25 of Township 1 South, Range 7 West of the U.S. Geological Survey 7.5-minute Guasti quadrangle map (Figure 2, *USGS Topography*). Specifically, the project site is located west and east of S Commerce Parkway and north and south of E Santa Ana Street (Figure 3, *Aerial Photograph*).

[1] California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency. March 7.

PROJECT SITE DESCRIPTION

The approximately 218-acre project site consists of disturbed habitat with primarily non-native annuals and grasses, such as *Hordeum* spp. *Bromus* spp., *Malva* spp., and *Sisymbrium* spp. Native *Amsinckia* spp. was also observed throughout the site. Soils within the project site solely consist of Delhi fine sand.[2] The topography of the project site is mostly flat, with elevations ranging from 900 feet (274 meters) above mean sea level (AMSL) near the southeast corner to 942 feet (287 meters) AMSL near the southwest corner. The project site is bounded by Ontario International Airport to the west, and industrial and commercial properties to the north, east, and south.

Representative photographs of the project site are shown in Attachment A, *Representative Site Photos*.

METHODS

Part I: Habitat Assessment and Focused Burrow Survey

Prior to conducting the habitat assessment, HELIX consulted the California Natural Diversity Database (CNDDB) to determine the nearest BUOW occurrence(s).[3] HELIX biologists John Gardner, Robert Hogenauer, Jessica Lee, and Daniel Torres conducted a habitat assessment on March 3, 2022, to determine whether the project site supports suitable BUOW habitat. A focused burrow survey was conducted concurrently with the habitat assessment. All suitable burrows (i.e., greater than approximately four inches [11 cm] in height and width and greater than approximately 59 inches [50 cm] in depth) and burrow surrogates were recorded using a handheld Global Positioning System (GPS) unit. The habitat assessment and focused burrow survey were conducted concurrently with the first focused survey (see Part II described below). The assessment was conducted on the project site and included an approximately 500-foot (150-m) buffer zone around the periphery of the project site (survey area). Inaccessible areas of the survey area, including private land behind fences, were visually assessed using binoculars. The survey area was slowly walked and assessed for suitable BUOW habitat, including:

- disturbed, low-growing vegetation within grassland and shrublands (less than 30 percent canopy cover);
- gently rolling or level terrain;
- areas with abundant small mammal burrows, especially California ground squirrel (*Otospermophilus beecheyi*) burrows;
- fence posts, rocks, or other low perching locations; and
- artificial structures, such as earthen berms, debris piles, and cement culverts.

[2] Natural Resources Conservation Service. 2022. Web Soil Survey. United States Department of Agriculture (USDA). Retrieved from: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.Aspx. Accessed July 14, 2022.

[3] California Department of Fish and Wildlife. 2022. California Natural Diversity Database and Rarefind. California Department of Fish and Wildlife: Sacramento, California. Retrieved from: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed July 14, 2022.

All potential owl burrows were checked for signs of recent owl occupation. Signs of occupation include:

- pellets/casting (regurgitated fur, bones, and/or insect parts);
- white wash (excrement); and/or
- feathers.

Part II: Focused Burrowing Owl Survey

Because suitable habitat and burrows were observed within the survey area during the habitat assessment, focused BUOW surveys were conducted to determine whether the survey area supports BUOW. The focused surveys consisted of four breeding season surveys performed by Mr. Gardner, Mr. Hogenauer, Ms. Lee, and Mr. Torres, and HELIX Biologists Matthew Dimson and Shawn Carroll between March 3 and July 8, 2022. The surveys were spaced at least three weeks apart, with at least one survey conducted between February 15 and April 15, and the remaining three surveys conducted between April 15 and July 15, with at least one of these surveys occurring after June 15 (Table 1, *Survey Information*).

The biologists walked transects spaced no greater than approximately 65 feet apart (20 meters) to allow for 100 percent visual coverage of all suitable habitat within the survey area. The biologists walked slowly and methodically, closely checking suitable habitat within the survey area for BUOW diagnostic sign (e.g., molted feathers, pellets/castings, or whitewash at or near a burrow entrance) and individual BUOW. If observed, BUOW sign and BUOW observations were recorded with a GPS unit. Inaccessible areas of the survey area were visually assessed using binoculars.

Table 1
SURVEY INFORMATION

Survey Visit	Date	Biologist(s)	Time (Start/Stop)	Weather Conditions (Start/Stop)	Results
1[1]	03/03/22	John Gardner Robert Hogenauer Jessica Lee Daniel Torres	0610/0910	51°F, wind 0-1 mph, 30% clouds 62°F, wind 1-3 mph, 55% clouds	• Suitable BUOW habitat and burrows were identified within the survey area. • No BUOWs were observed during this focused survey.
2	04/21/22	Shawn Carroll Matthew Dimson Jessica Lee Daniel Torres	0630/1000	52°F, wind 0-1 mph, 1% clouds 61°F, wind 3-5 mph, 1% clouds	• Two adult BUOWs were observed near Nest No. 1, which is an earthen burrow located on the west side of Carnegie Avenue and approximately 900 feet north of E Santa Ana Street. • One adult BUOW was observed near Nest No. 2, which is an earthen burrow located on the west side of Carnegie Avenue and approximately 630 feet north of E Santa Ana Street. • One adult BUOW was observed near AB No. 1, which is an earthen burrow located on the west side of Carnegie Avenue and approximately 600 feet south of E Santa Ana Street.

Survey Visit	Date	Biologist(s)	Time (Start/Stop)	Weather Conditions (Start/Stop)	Results
3	05/18/22	Matthew Dimson Shawn Carroll Jessica Lee Daniel Torres	0610/0930	55°F, wind 1-2 mph, 100% clouds 64°F, wind 2-3 mph, 100% clouds	• Two adult BUOWs and two juvenile BUOWs were observed near Nest No. 1. • Two adult BUOWs and four juvenile BUOWs were observed near Nest No. 2 • One adult BUOW was observed near AB No. 2, which is a vertical corrugated metal pipe storm drain riser located on the east side of Carnegie Avenue and approximately 400 feet north of E Santa Ana Street.
4	07/08/22	Shawn Carroll Matthew Dimson John Gardner Daniel Torres	0620/0930	64°F, wind 1-2 mph, 10% clouds 73°F, wind 0-1 mph, 1% clouds	Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted, given juveniles and adults were difficult to differentiate. • One BUOW individual was observed near AB No. 3, which is an earthen burrow located approximately 650 feet to the southwest of the intersection of E Airport Drive and Carnegie Avenue. • Two BUOW individuals were observed near AB No. 4, which is a storm drain riser located on the east side of Carnegie Avenue and approximately 840 feet north of E Santa Ana Street. Individuals from Nest No. 1 are presumably using this burrow as an alternate burrow based on its proximity to the nest location and observation of individuals flushing from the nest to this burrow. [2] • Two BUOW individuals were observed near AB No. 5, which is a storm drain riser located on the west side of Carnegie Avenue and approximately 660 feet north of E Santa Ana Street. Individuals from Nest No. 2 are presumably using this burrow as an alternate burrow based on its proximity to the nest location and observation of individuals flushing from the nest to this burrow. [2] • Two BUOW individuals were observed near AB No. 6, which is an earthen burrow located on the west side of Carnegie Avenue and approximately 600 feet south of E Santa Ana Avenue.

[1] This survey included the habitat assessment and focused burrow survey.
[2] Alternate burrows used by BUOWs associated with Nests No. 1 and 2 are indicated by arrows shown on Figure 5.

RESULTS

CNDDB Record Review

There is a CNDDB record (Occurrence No. 1788) of BUOWs within the survey area, which between one and four breeding pairs were recorded between 2007 and 2013.[4] Four additional populations have been recorded on CNDDB within 1.5 miles of the project site. These CNDDB records are described below:

- CNDDB Occurrence No. 561: A BUOW population was documented within and adjacent to the existing Toyota Arena in the City of Ontario, approximately 0.75 mile north of the project site. Multiple breeding pairs and juveniles were documented at this location between 2002 and 2016, including prior to and after the Toyota Arena was constructed in 2007.
- CNDDB Occurrence No. 636: A BUOW population was recorded north of E 4th Street, east of Richmond Place, south of Mission Park Drive, and west of Buffalo Avenue in the City of Rancho Cucamonga. This population was recorded approximately 1.5 miles northeast of the project site. Nesting BUOWs were observed in 2003. The population is presumed extirpated since the habitat appears to have been developed sometime between 2015 and 2016 based on aerial imagery.[5]
- CNDDB Occurrence No. 664: A BUOW breeding pair and juveniles were documented in 2003 near the intersection of Vanderbilt Street and S Auto Center Drive in the City of Ontario, approximately 0.9 mile southeast of the project site. Based on the record description, these individuals were evicted outside of the nesting season in 2003. The site was developed sometime in 2003 based on aerial imagery.[6] The remaining suitable habitat appears to be present directly to the northwest and south of the developed site.
- CNDDB Occurrence No. 1044: A BUOW population was recorded east of S Haven Avenue, south of E Francis Street, and west of Dupont Avenue in the City of Ontario. This population was recorded approximately 0.3 mile south of the project site. Seven BUOWS were recorded at this location in 2006. This population is presumed extirpated since the habitat appears to have been developed sometime between 2008 and 2009 based on aerial imagery,[7] although remaining suitable habitat appears to be present directly to the south and southeast of the developed site.

Survey Results

Suitable BUOW habitat was observed within the survey area during the habitat assessment conducted on March 3, 2022, including low-growing vegetation within the non-native grassland. Several burrows and burrow surrogates, such as vertical corrugated metal pipe storm drain risers, which could

[4] California Department of Fish and Wildlife. 2022. California Natural Diversity Database and Rarefind. California Department of Fish and Wildlife: Sacramento, California. Retrieved from: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed August 1, 2022.

[5] Google Earth. 2022. Aerial imagery of 34.080104°, -117.551433°. Aerial Imagery from February 9, 2016. Retrieved from: https://earth.google.com/web/. Accessed August 19, 2022.

[6] Google Earth. 2022. Aerial imagery of 34.046098°, -117.545772°. Aerial Imagery from November 30, 2003. Retrieved from: https://earth.google.com/web/. Accessed August 19, 2022.

[7] Google Earth. 2022. Aerial imagery of 34.042164°, -117.571124°. Aerial Imagery from January 31, 2009. Retrieved from: https://earth.google.com/web/. Accessed August 19, 2022.

potentially be used by BUOWs, were observed throughout the survey area (Figure 4, *Suitable Burrows*). Suitable foraging habitat was observed within and adjacent to the survey area.

Two burrows (Nest Nos. 1 and 2), with breeding pairs and juveniles, were detected within the project site (Figure 5, *Nests and Alternate Burrows*). Six alternate burrows, (AB Nos. 1 through 6) were also noted throughout the project site (Figure 5), and these burrows were used by BUOWs for cover. A summary of observations is provided below:

- Nest No. 1 is an earthen burrow located on the west side of Carnegie Avenue and approximately 900 feet north of E Santa Ana Street. One adult BUOW pair was observed near the burrow entrance during the first survey. Two adult BUOWs and two juvenile BUOWs were noted during the second survey. No BUOWs were noted at this burrow during the first or fourth surveys.
- Nest No. 2 is an earthen burrow located on the west side of Carnegie Avenue and approximately 630 feet north of E Santa Ana Street. One adult BUOW was observed next to an earthen burrow during the second survey. Two adult BUOWs and four BUOW juveniles were observed during the third survey. No BUOWs were observed during the first or fourth surveys.
- AB No. 1 is an earthen burrow located on the west side of Carnegie Avenue and approximately 600 feet south of E Santa Ana Street. One adult BUOW was observed during the second survey. No BUOWs were observed at this burrow during the first, third, or fourth surveys.
- AB No. 2 is a vertical corrugated metal pipe storm drain riser located on the east side of Carnegie Avenue and approximately 400 feet north of E Santa Ana Street. One adult BUOW was observed near the storm drain riser during the third survey. No BUOWs were observed at this burrow during the first, second, or fourth surveys.
- AB No. 3 is an earthen burrow located approximately 650 feet to the southwest of the intersection of E Airport Drive and Carnegie Avenue. One BUOW individual was observed during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys.
- AB No. 4 is a vertical corrugated metal pipe storm drain riser located on the east side of Carnegie Avenue and approximately 840 feet north of E Santa Ana Street. Two BUOW individuals were observed during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys. BUOWs from Nest No. 1 are presumably using this burrow as an alternate burrow based on its proximity to the nest location and observation of individuals flushing from the nest to this burrow.
- AB No. 5 is a storm drain riser located on the west side of Carnegie Avenue and approximately 660 feet north of E Santa Ana Street. Four individuals were noted during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys. BUOWs from Nest No. 2 are presumably using this burrow as an alternate burrow based on its proximity to the nest location and observation of individuals flushing from the nest to this burrow.

- AB No. 6 is an earthen burrow located on the west side of Carnegie Avenue and approximately 600 feet south of E Santa Ana Avenue. Two BUOW individuals were observed during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys.

OTHER SITE CONDITIONS

Wildlife photographers were noted in close proximity to Nest No. 1 during the second and third surveys (see Photograph 1 in Attachment A). An unknown person installed a perch consisting of a tree branch outside of Nest Nos. 1 and 2 (see Photographs 1 and 2 in Attachment A). There are numerous suitable raptor perches within and adjacent to the project site, which consists of tall ornamental trees and light poles. Raptors and/or sign of use (e.g., white wash) were observed on multiple suitable perching locations (Figure 6, *Observed Raptor Perches*).

CONCLUSION

Numerous suitable burrow and burrow surrogates were observed throughout the project site (Figure 4). Two burrows (Nest Nos. 1 and 2) with breeding pairs and juveniles were detected (Figure 5). Six alternate burrows (AB Nos. 1 through 6) were also noted (Figure 5), which were used by BUOWs for cover.

A take avoidance (pre-construction) survey is required within 14 days prior to ground disturbance ground-disturbing activities (i.e., earthwork, clearing, and/or grubbing), in accordance with CDFW Staff Report on BUOW Mitigation. If BUOW(s) are observed during the take avoidance survey, a BUOW Exclusion Plan and Mitigation Management Plan must be prepared and coordinated with CDFW prior to ground disturbance.[8]

If you have any questions regarding the information presented in this letter report, please contact Ezekiel Cooley at EzekielC@helixepi.com.

Sincerely,

Ezekiel Cooley
Regulatory Specialist/Biology Project Manager

Jessica Lee
Biologist/Assistant Biology Project Manager

Matthew Dimson
Biologist

Daniel Torres
Biologist

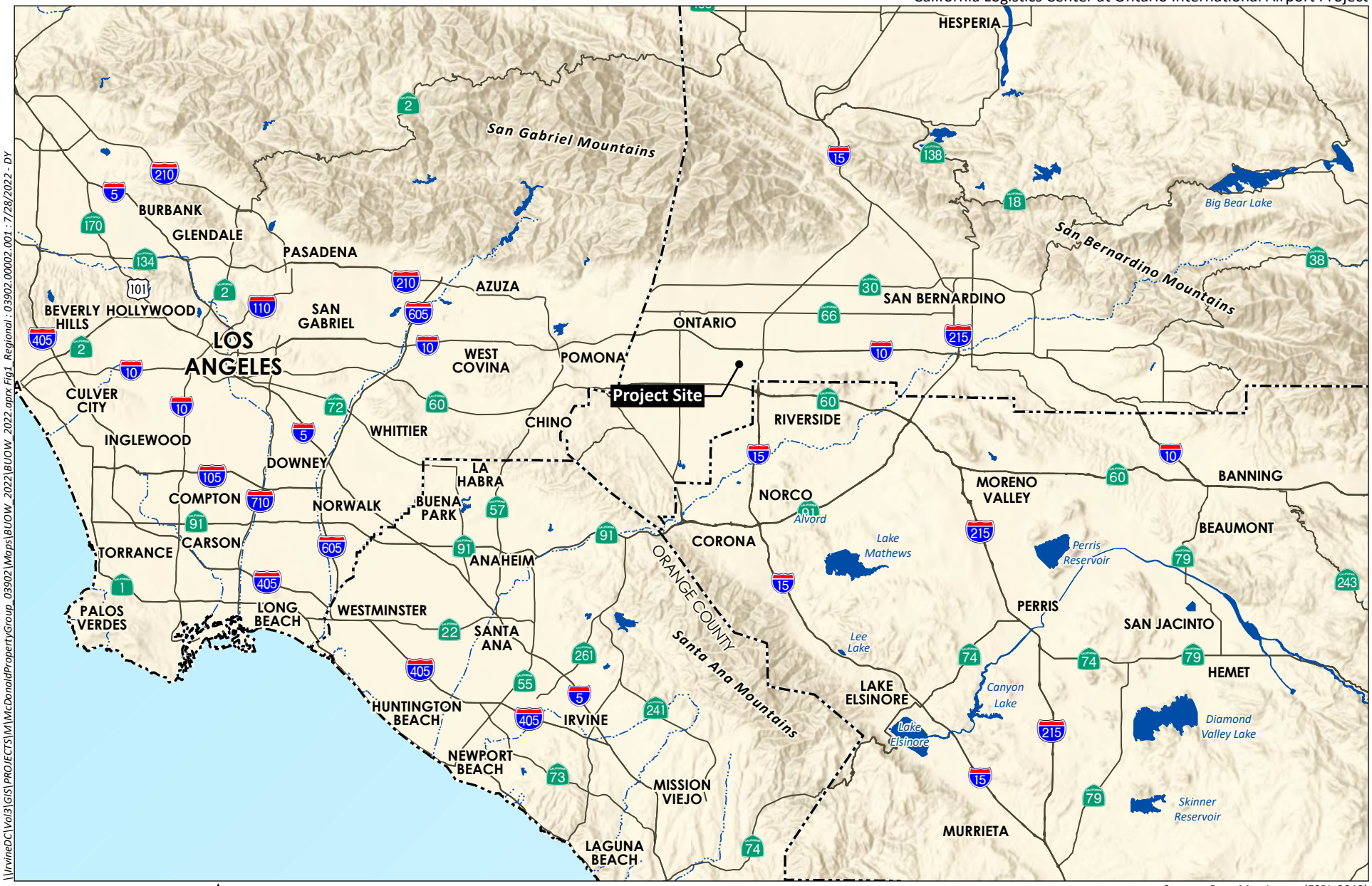
[8] California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency. March 7.

John Gardner
Biologist

Shawn Carroll
Biologist

Enclosures:

Figure 1:	Regional Location
Figure 2:	USGS Topography
Figure 3:	Aerial Photograph
Figure 4:	Suitable Burrows
Figure 5:	Nests and Alternate Burrows
Figure 6:	Observed Raptor Perches
Attachment A:	Representative Site Photos



Source: Base Map Layers (ESRI, 2013)

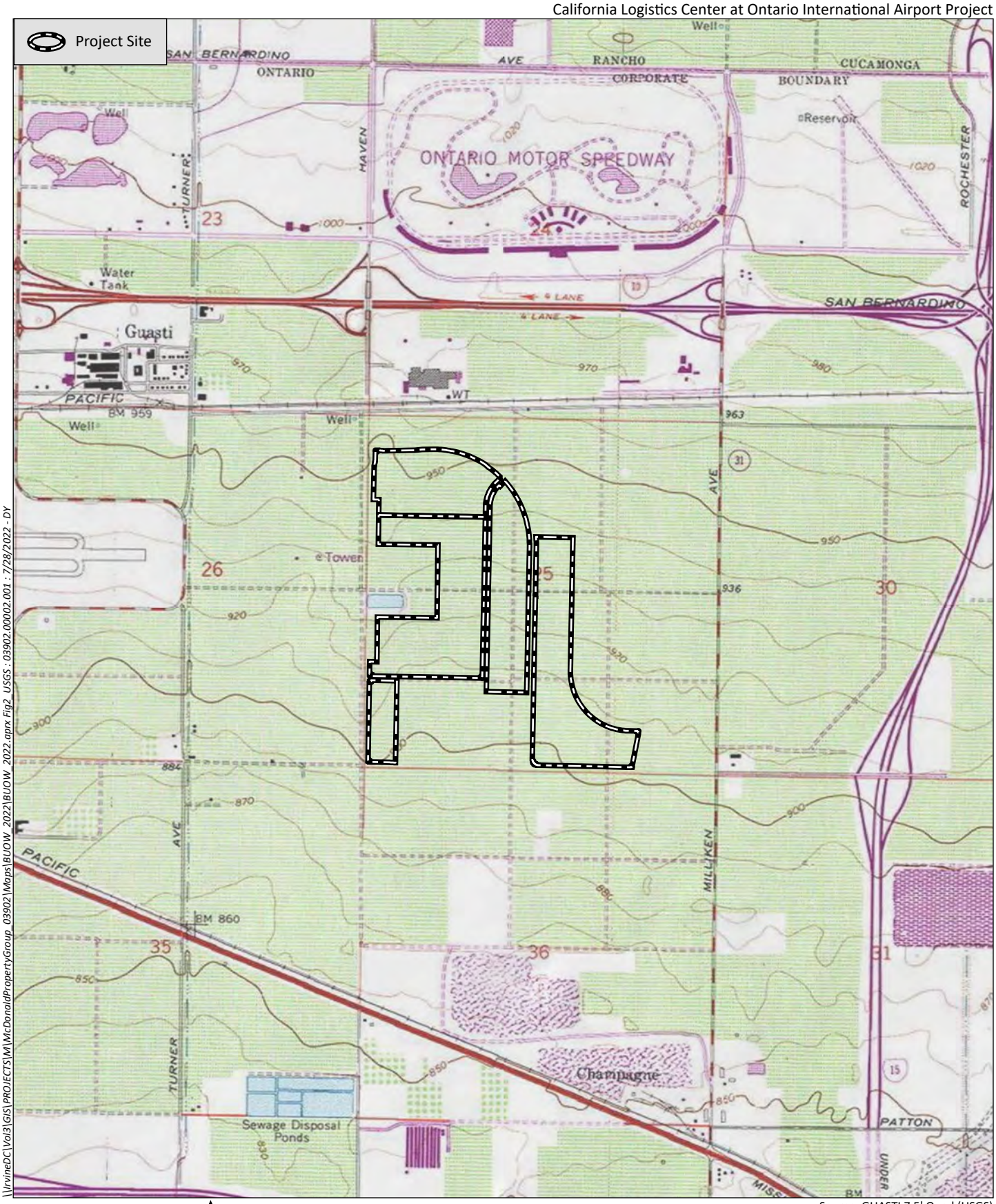
\\IrvineDC\Vol3\GIS\PROJECTS\M\McDonaldPropertyGroup_03902\Maps\BUOW_2022\BUOW_2022.aprx Fig1_Regional : 03902.00002.001 : 7/28/2022 - DY

HELIX Environmental Planning

Regional Location

Figure 1

3611



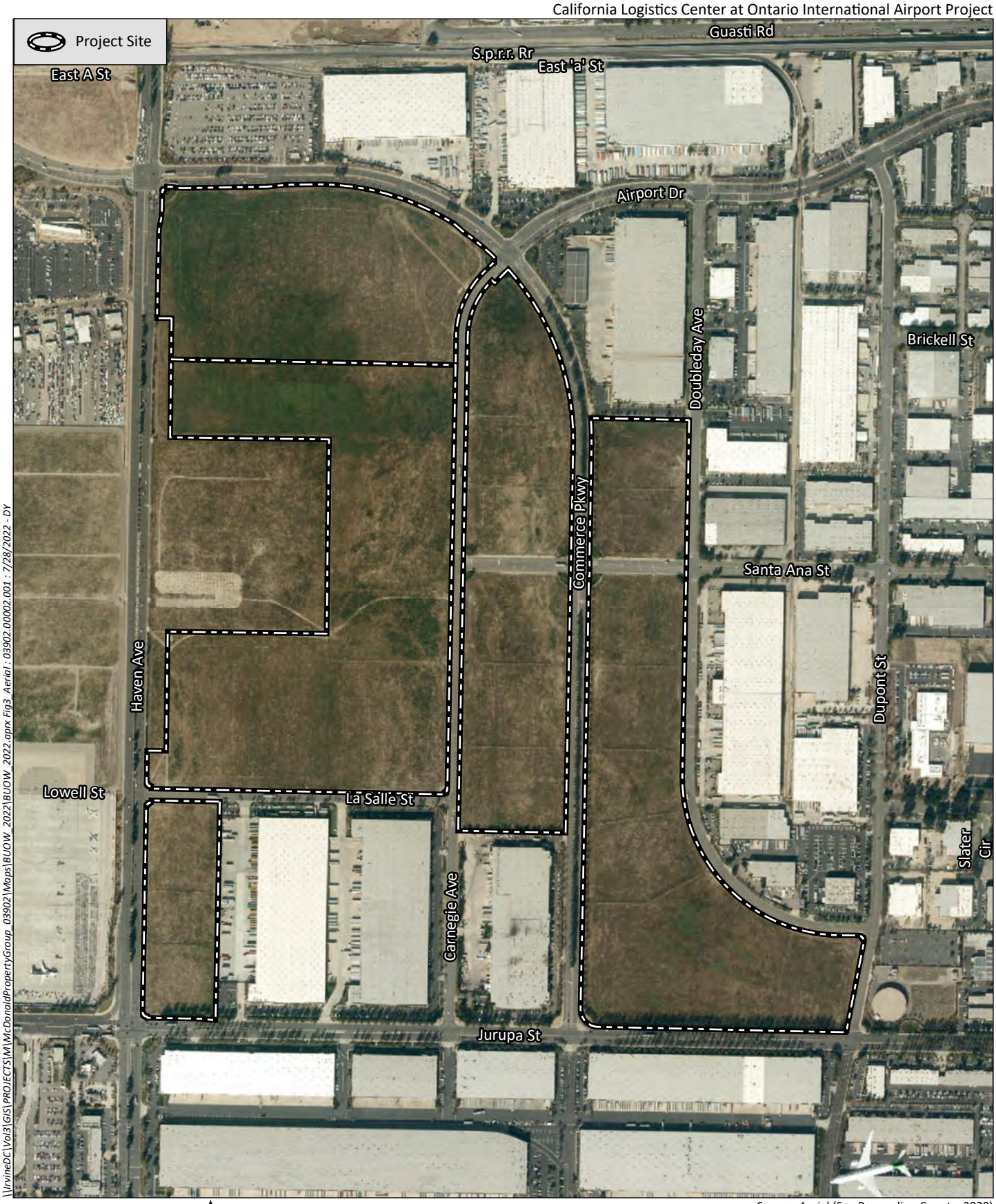
Source: GUASTI 7.5' Quad (USGS)

\\IrvineDC\Vol3\GIS\PROJECTS\M\McDonaldPropertyGroup_03902\Maps\BUOW_2022\BUOW_2022.aprx Fig2_USGS : 03902.00002.001 : 7/28/2022 - DY

HELIX Environmental Planning

USGS Topography

Figure 2

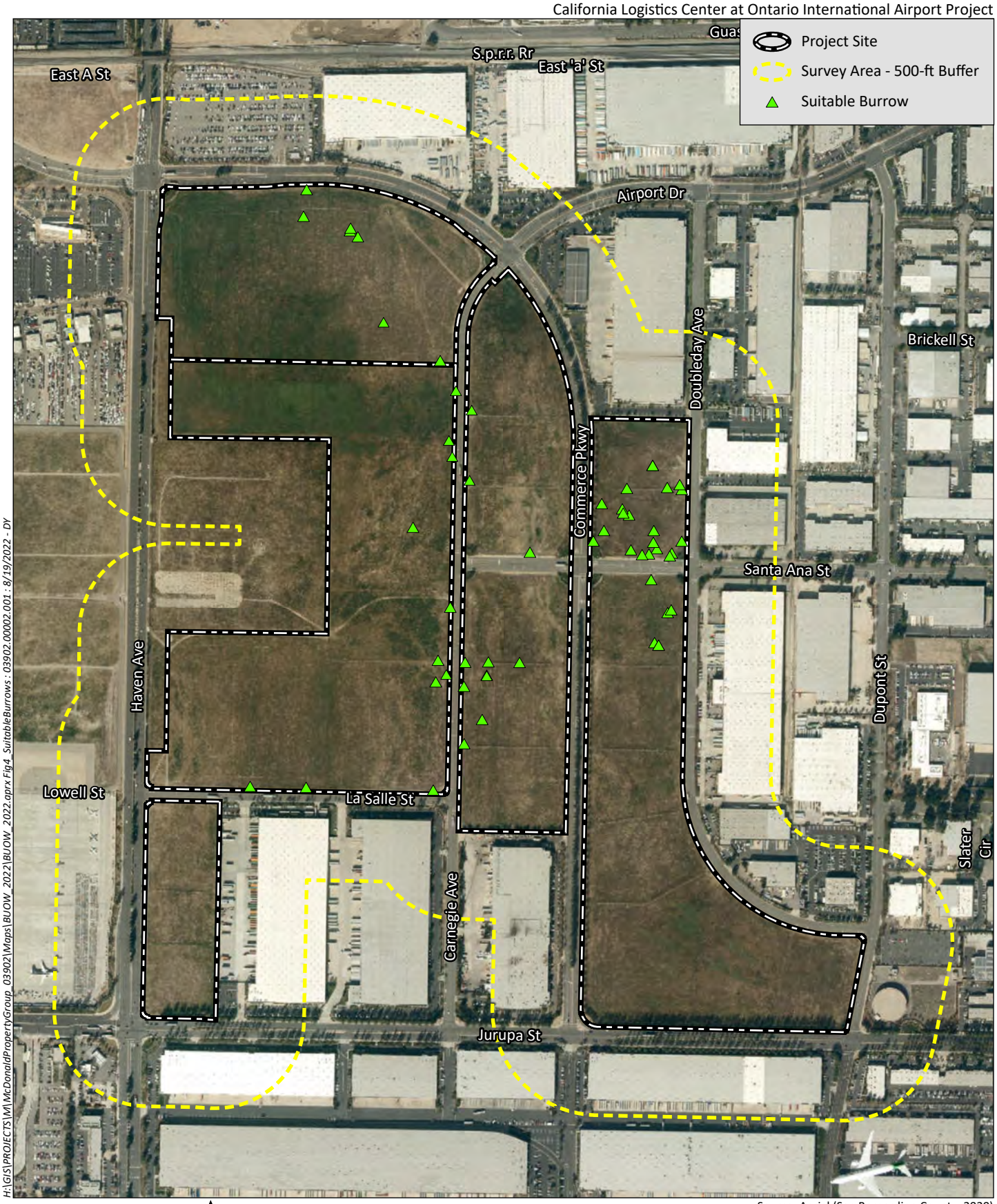


Source: Aerial (San Bernardino County, 2020)

HELIX Environmental Planning

Aerial Photograph

Figure 3



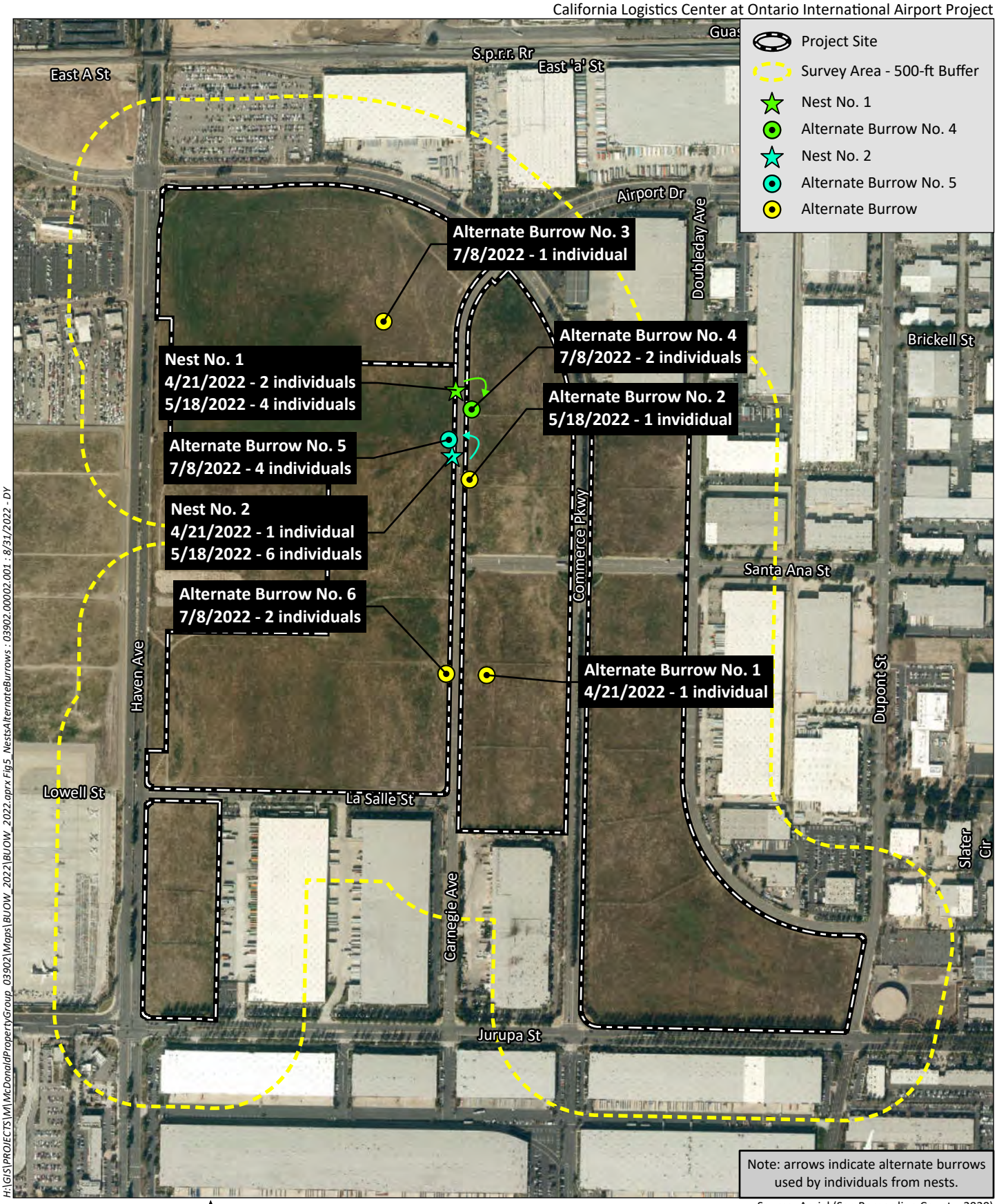
0 750 Feet

Source: Aerial (San Bernardino County, 2020)

HELIX Environmental Planning

Suitable Burrows

Figure 4



Source: Aerial (San Bernardino County, 2020)

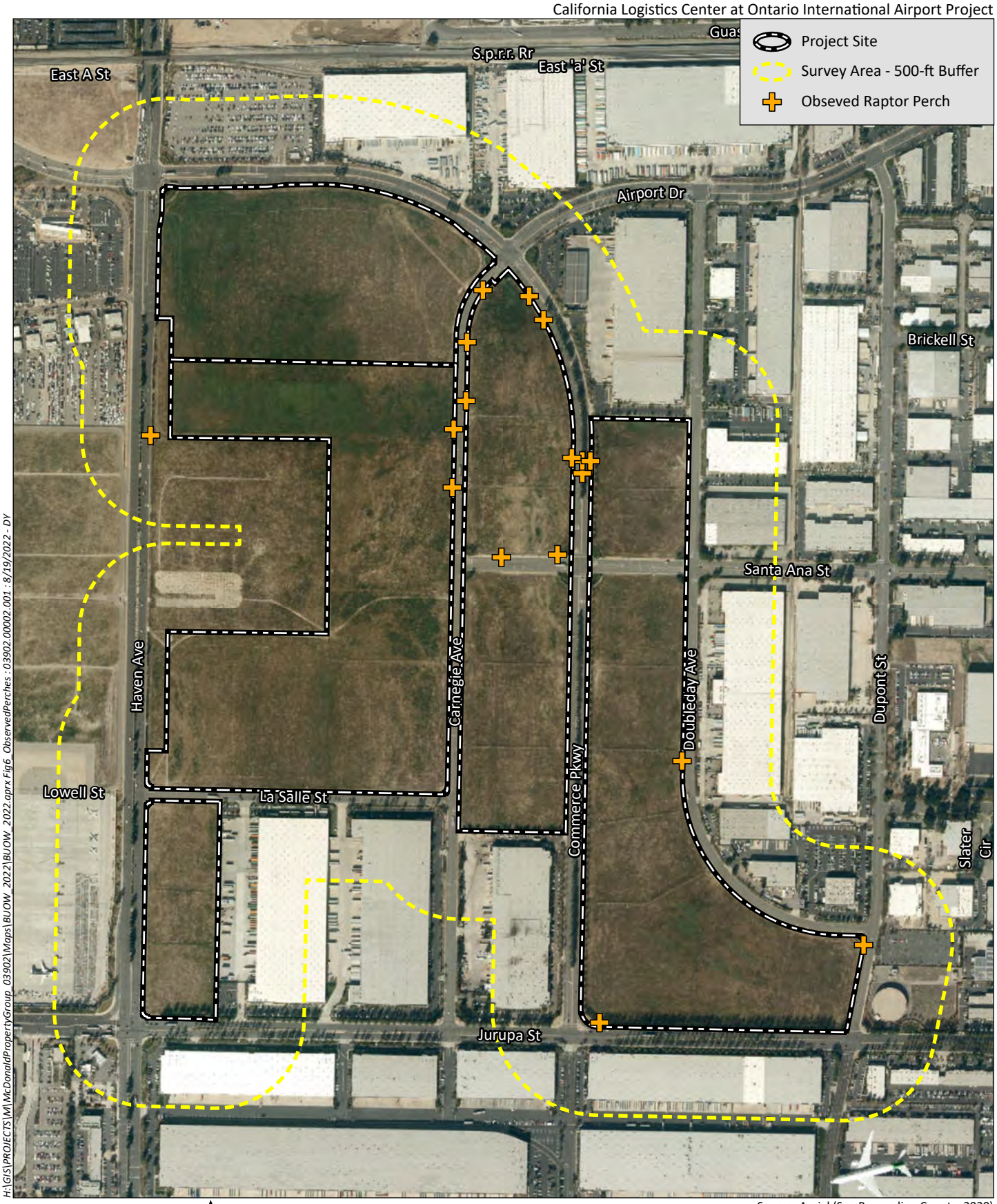
0 750 Feet

H:\GIS\PROJECTS\M\McDonaldPropertyGroup_03902\Maps\BUOW_2022\BUOW_2022.aprx Fig5_NestsAlternateBurrows : 03902.00002.001 : 8/31/2022 - DY

HELIX Environmental Planning

Nests and Alternate Burrows

Figure 5



Source: Aerial (San Bernardino County, 2020)

HELIX Environmental Planning

Observed Raptor Perches

Figure 6

Photograph 1: View of Nest No. 1, facing west. This burrow is an earthen burrow located on the west side of Carnegie Avenue, approximately 900 feet north of E Santa Ana Street. Successful breeding (two juveniles) were documented at this burrow. Photographers were observed near this burrow during the second and third surveys. Photograph taken on April 21, 2022.

Photograph 2: View of Nest No. 2, facing west. This burrow is an earthen burrow located on the west side of Carnegie Avenue, approximately 630 feet north of E Santa Ana Street. Successful breeding (four juveniles) was documented at this burrow. Photograph taken on May 18, 2022.

H:\PROJECTS\M\McDonaldPropertyGroup_03902\00002_OIALogisticsCenterBUOW_Reports\BUOW\Attachment A\Photos

Photograph 3: View of Alternate Burrow No. 4, facing east. This burrow consists of a vertical corrugated metal pipe storm drain riser located and is located on the east side of Carnegie Avenue, approximately 840 feet north of E Santa Ana Street. Photograph taken on May 18, 2022.

Photograph 4: View of Alternate Burrow No. 5, facing west. This burrow consists of a vertical corrugated metal pipe storm drain riser located on the west side of Carnegie Avenue, approximately 660 feet north of E Santa Ana Street. Photograph taken on Photograph taken on July 8, 2022.

From: Brantley, Michelle
To: Suzanne C. Thompson
Subject: RE: Burrowing Owls
Attachments: image002.png
Helix Ont BUOW with Permits_Revised.pdf

Hi Suzanne,

Thanks for your note. I did receive the report yesterday afternoon. I reviewed it today and am attaching it to this email.

The biologist's assessment concludes the only viable alternative is active relocation of the owls more than 10,000 feet away from the airport. As I mentioned to you before, I did discuss the draft report with the FAA. My contacts emphatically agreed with the assessment and reinforced that they would not allow any mitigation within 10,000 feet of the airport. I recognize that this is not the outcome that you and the Audubon Society were hoping for and understand any disappointment you may experience but I wanted to share it with you today.

Michelle Brantley
Director of Planning
Ontario International Airport
M: 909.227.3055 | **O:** 909.544.5255
mbrantley@flyontario.com | @flyONT

From: Suzanne C. Thompson <SCT04747@pomona.edu>
Sent: Monday, February 22, 2021 8:05 AM
To: Brantley, Michelle <MBrantley@flyontario.com>
Subject: Burrowing Owls

Hi Michelle,
A link for an article from the Daily Bulletin is below. It is the story about our work with Burrowing Owls in Chino and a connection between the owls and an astronaut at the International Space Station. It is getting a lot of attention--people love those little owls!

> https://www.dailybulletin.com/2021/02/17/volunteers-send-photos-of-rare-burrowing-owls-to-pomona-born-astronaut-in-space/

We are eager to get the report from the Helix biological consultant on good options for the

Ontario Airport owls (we hope). Do you have an estimate of when we can expect it?

I hope all is well with you.

Best wishes,
Suzanne

HELIX Environmental Planning, Inc.
16485 Laguna Canyon Road
Suite 150
Irvine, CA 2618
949.234.8770 **tel**
619.462.1515 **fax**
www.**helixepi**.com

September 16, 2019 OIA-01

Mr. Keith Owens
Ontario International Airport Authority
1923 E Avion Avenue
Ontario, CA 91761

Subject: 2019 Burrowing Owl Survey Report for Potential Development of Ontario International Airport's Group 1 Parcels (Assessor's Parcel Numbers 0211-222-47, 48, 53, 54; 0211-232-11, 12, 13, 14, 16, 17, 18, 19, 20, 44, 45, 46; 0211-232-52, and 55)

Dear Mr. Owens:

This letter report presents the results of the 2019 focused burrowing owl (*Athene cunicularia*; BUOW) survey conducted by HELIX Environmental Planning, Inc. (HELIX) for the Ontario International Airport's Group 1 Parcels (study area) located in the City of Ontario, San Bernardino County, California. The survey was conducted in accordance with the California Department of Fish and Wildlife (CDFW; previously California Department of Fish and Game [CDFG]) Staff Report on BUOW Mitigation (CDFG 2012). This letter report describes the methods used to perform the survey and the survey results.

STUDY AREA LOCATION

The 151-acre study area is generally located south of the Interstate (I-) 10 and west of I-15 (Figure 1, *Regional Location*). The study area is located within Section 25 of Township 1 South, Range 7 West of the Guasti, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 2, *Vicinity Map*). Specifically, the study area is located to the northeast and southeast of the intersection of E Santa Ana Avenue and South Commerce Parkway; to the southwest and south of the intersection of E Airport Drive and S Carnegie Avenue; and to the southeast of the intersection of S Haven Avenue and E La Salle Street (Figure 3, *Aerial Photograph*). The study area comprises eighteen parcels with Assessor's Parcel Numbers 0211-222-47, 48, 53, 54; 0211-232-11, 12, 13, 14, 16, 17, 18, 19, 20, 44, 45, 46; 0211-232-52, and 55.

STUDY AREA DESCRIPTION

The study area is located directly east of the Ontario International Airport. The study area is dominated by non-native grass species, such as common ripgut grass (*Bromus diandrus*), red brome (*Bromus madritensis* ssp. *rubens*), and slender oat (*Avena barbata*), which are maintained as required for weed

abatement. The topography of the study area is mostly flat with elevations ranging from 900 feet above mean sea level (AMSL) near the southeast corner to 942 feet AMSL near the southwest corner. Immediate surrounding land uses include undeveloped land and the Ontario International Airport to the west and commercial buildings to north, east, and south.

Representative photographs of the study area are shown on Attachment A, *Site Photographs*.

METHODS

The focused BUOW survey was conducted according to the CDFW BUOW survey guidelines (CDFG 2012), which includes Part I Habitat Assessment and Focused Burrow Survey and Part II Focused BUOW Surveys. The CDFW BUOW survey guidelines are described in further detail below.

Part I: Habitat Assessment and Focused Burrow Survey

Prior to conducting the habitat assessment, HELIX consulted the California Natural Diversity Database (CNDDB) to determine the nearest BUOW occurrence(s). A habitat assessment was conducted by HELIX biologists Ezekiel Cooley and Lauren Singleton on November 1, 2018 to determine whether the study area supports suitable BUOW habitat. A focused burrow survey was conducted concurrently with the habitat assessment. All suitable burrows (i.e., greater than 11 centimeters [cm] in height and width and greater than 150 cm in depth) and burrow surrogates were recorded using a handheld Global Positioning System (GPS) unit (Figure 4, *Suitable Burrow and Transect Locations*). The habitat assessment and focused burrow survey were conducted prior to commencement of the BUOW focused surveys. The assessment was conducted on the study area and within a 150-meter (approximately 500-foot) buffer zone around the periphery of the study area (survey area). The survey area was slowly walked and assessed for suitable BUOW habitat, including:

- disturbed low-growing vegetation within grassland and shrublands (less than 30 percent canopy cover);
- gently rolling or level terrain;
- areas with abundant small mammal burrows, especially California ground squirrel (*Otospermophilus beecheyi*) burrows;
- fence posts, rocks, or other low perching locations; and
- man-made structures, such as earthen berms, debris piles, and cement culverts.

All potential burrows were checked for signs of recent owl occupation. Signs of occupation include:

- pellets/casting (regurgitate fur, bones, and/or insect parts);
- white wash (excrement); and/or
- feathers.

Part II: Locating Burrowing Owls

Since suitable habitat and burrows were observed within the survey area during the habitat assessment, focused BUOW surveys were conducted to determine whether the survey area supports BUOW. The focused surveys consisted of four breeding season surveys that were performed by Mr. Cooley and Ms. Singleton and HELIX biologists Matthew Dimson and Daniel Torres between March 20 and June 26,

2019. The surveys were spaced at least three weeks apart, with at least one survey conducted between February 15 and April 15 and three surveys conducted between April 15 and July 15 (Table 1, *Survey Information*)

The biologists walked transects spaced no greater than 20 meters apart (approximately 65 feet) to allow for 100 percent visual coverage of all suitable habitat within the survey area (Figure 4). The biologists walked slowly and methodically, closely checking suitable habitat within the survey area for BUOW diagnostic sign (e.g., molted feathers, pellets/castings, or whitewash at or near a burrow entrance) and individual BUOW. If observed, BUOW sign and BUOW observations were recorded with a GPS unit. Inaccessible areas of the survey area were visually assessed using binoculars.

Table 1
SURVEY INFORMATION

Site Visit	Survey Date	Biologist	Start/Stop Time	Start/Stop Weather Conditions	Survey Results
HA[1]	11/01/18	Ezekiel Cooley Lauren Singleton	0815-1500	63°F, wind 0-1 mph, 15% clouds 84°F, wind 6-8 mph, 80% clouds	Suitable habitat and burrows observed.
1	03/20/19	Ezekiel Cooley Matthew Dimson Lauren Singleton Daniel Torres	0645-0930	54°F, wind 2-3 mph, 100% clouds 56°F, wind 1-2 mph, 90% clouds	• Active Burrow #1: One adult was observed on a berm adjacent to Doubleday Avenue in the eastern portion of the study area, approximately 1,800 feet to the south of its intersection with E Santa Ana Street. The individual was observed perched next to the burrow and pellets and whitewash were observed around the burrow entrance. • Active Burrow #2: One adult was observed in the northwestern portion of the study area, approximately 630 feet to the west of the Commerce Parkway and Carnegie Avenue intersection. The individual was observed in a burrow and pellets were observed around the burrow entrance. • Active Burrow #3: Two adults were observed within the 500-foot buffer adjacent to Carnegie Avenue, approximately 180 feet to the north of the Santa Ana Street and Carnegie Avenue intersection. The pair was observed perched near a burrow with sign, including pellets and whitewash. One of the adults flushed to the east and was observed perched adjacent to a vertical corrugated metal pipe storm drain riser. Sign, including pellets and whitewash, were observed in and around the storm drain riser. • Active Burrow #4: Two adults were observed within the 500-foot buffer adjacent to Carnegie Avenue, approximately 490 feet to the south of the Santa Ana Street and Carnegie Avenue intersection. The pair was observed perched near a burrow with sign, including pellets and whitewash. One of the adults flushed approximately 100 feet to the east and was observed perched adjacent to a storm drain riser. Sign, including pellets and whitewash,

Table 1
SURVEY INFORMATION

Site Visit	Survey Date	Biologist	Start/Stop Time	Start/Stop Weather Conditions	Survey Results
					were observed in and around the storm drain riser.
2	04/23/19	Ezekiel Cooley Matthew Dimson Lauren Singleton Daniel Torres	0600-0900	60°F, wind 0-2 mph, 20% clouds 66°F, wind 0-1 mph, 10% clouds	• Active Burrow #1: One adult was observed perched next to the burrow. • Active Burrow #3: Two adults were perched near the burrow entrance. Both adults flushed to the east and were observed perched adjacent to two different vertical corrugated metal pipe storm drain risers. Sign, including pellets and whitewash, were observed in and around the storm drain risers. • Active Burrow #4: Two adults were perched near the burrow entrance.
3	05/21/19	Ezekiel Cooley Matthew Dimson Lauren Singleton Daniel Torres	0700-0930	55°F, wind 0-1 mph, 95% clouds 57°F, wind 1-2 mph, 85% clouds	• Active Burrow #1: One adult was observed perched next to the burrow. • Active Burrow #3: Two adults were perched near the burrow entrance. Both adults flushed to the east and were observed perched adjacent to two different storm drain risers. • Active Burrow #4: One adult was perched near the burrow entrance. Six juvenile BUOWs were observed in and around the burrow. Another adult was observed adjacent to a burrow approximately 800 feet to the southwest of Active Burrow #4. The adult flushed towards Active Burrow #4.
4	06/26/19	Ezekiel Cooley Matthew Dimson Lauren Singleton Daniel Torres	0600-0830	64°F, wind 1-2 mph, 100% clouds 65°F, wind 1-2 mph, 100% clouds	• Active Burrow #1: One adult was observed perched next to the burrow. • Active Burrow #3: Two adults were perched near the burrow entrance. Both adults flushed to the east and were observed perched adjacent to two different storm drain risers. • Active Burrow #4: Two adults were perched near the burrow entrance. Five juvenile BUOWs were observed in and around the burrow.

[1] Step I Habitat Assessment and Step II (Part A) focused burrow survey.

RESULTS

Suitable BUOW habitat was observed within the survey area during the habitat assessment, including low-growing vegetation within the non-native grassland. Several burrows and burrow surrogates, such as vertical corrugated metal pipe storm drain risers, that could potentially be used by BUOWs were observed within the survey area (Figure 4). Suitable foraging habitat was observed within and adjacent to the survey area. There are CNDDB records of BUOWs within the survey area from 2007 and 2013 (CDFW 2019).

A total of four active burrows were detected within the survey area (Figure 4). Two active burrows were located within the study area (Active Burrow [AB]-1 and AB-2). AB-1 was located adjacent to the eastern boundary of the study area and AB-2 was located in the northwest portion of the study area. Two active burrows were located within the 500-foot buffer, adjacent to the western boundary of the study area (AB-3 and AB-4). A summary of observations is provided below.

AB-1 was located on the study area adjacent to Doubleday Avenue, approximately 1,800 feet to the south of the Doubleday Avenue and E Santa Ana Street intersection. One adult was observed perched next to the burrow during all four surveys. Pellets and whitewash were observed around the burrow entrance.

AB-2 was located in the northern portion of the study area, approximately 630 feet to the west of the Commerce Parkway and Carnegie Avenue intersection. One adult BUOW was observed during the first survey. The individual was observed in AB-2 and pellets were observed around the burrow entrance. No BUOWs were observed at AB-2 during the second, third, or fourth survey.

AB-3 was located within the 500-foot buffer adjacent to Carnegie Avenue, approximately 180 feet to the north of the Santa Ana Street and Carnegie Avenue intersection. Two adults were observed during the first survey. The pair was observed perched near AB-3 with sign, which included pellets and whitewash. One of the adults flushed to the east and was observed perched adjacent to a vertical corrugated metal pipe storm drain riser. Sign was observed in and around the storm drain riser, including pellets and whitewash. The two adults were also observed near AB-3 during the second, third, and fourth survey. During these three surveys, the individuals flushed to the east and were observed perched adjacent to two different storm drain risers.

AB-4 was located within the 500-foot buffer adjacent to Carnegie Avenue, approximately 490 feet to the south of the Santa Ana Street and Carnegie Avenue intersection. Two adults were observed during the first survey. The pair was observed perched near AB-4 with sign, which included pellets and whitewash. One of the adults flushed approximately 100 feet to the east and was observed perched adjacent to a storm drain riser. Sign, including pellets and whitewash, were observed in and around the storm drain riser. The pair was observed near AB-4 during the second survey. During the third survey, one adult was perched near the entrance of AB-4. Six juvenile BUOWs were also observed in and around the burrow. Another adult was observed adjacent to a burrow approximately 800 feet to the southwest of AB-4 and flushed towards AB-4 when approached. During the fourth survey, two adults and five juveniles were perched near AB-4.

The locations of all suitable burrows, BUOW sign, and occupied burrows observed within and adjacent to the study area are shown on Figure 4.

CONCLUSION

A total of four active burrows were detected within the survey area, including two on the study area (AB-1 and AB-2) and two within the 500-foot buffer (AB-3 and AB-4). One adult was observed near AB-1, one adult was observed near AB-2, two adults were observed near AB-3, and two adults and five to six juveniles were observed near AB-4.

A take avoidance (pre-construction) survey is required to be conducted within 14 days prior to ground disturbance in accordance with CDFW Staff Report on BUOW Mitigation (2012). If ground-disturbing activities are delayed more than 14 days after the pre-construction survey has been completed, the study area must be resurveyed.

If you have any questions regarding the information presented in this letter report, please contact Ezekiel Cooley (EzekielC@helixepi.com) or Lauren Singleton (LaurenS@helixepi.com) at (949) 234-8770.

Sincerely,

Ezekiel Cooley
Biologist

Lauren Singleton
Biologist

Daniel Torres
Biologist

Matthew Dimson
Biologist

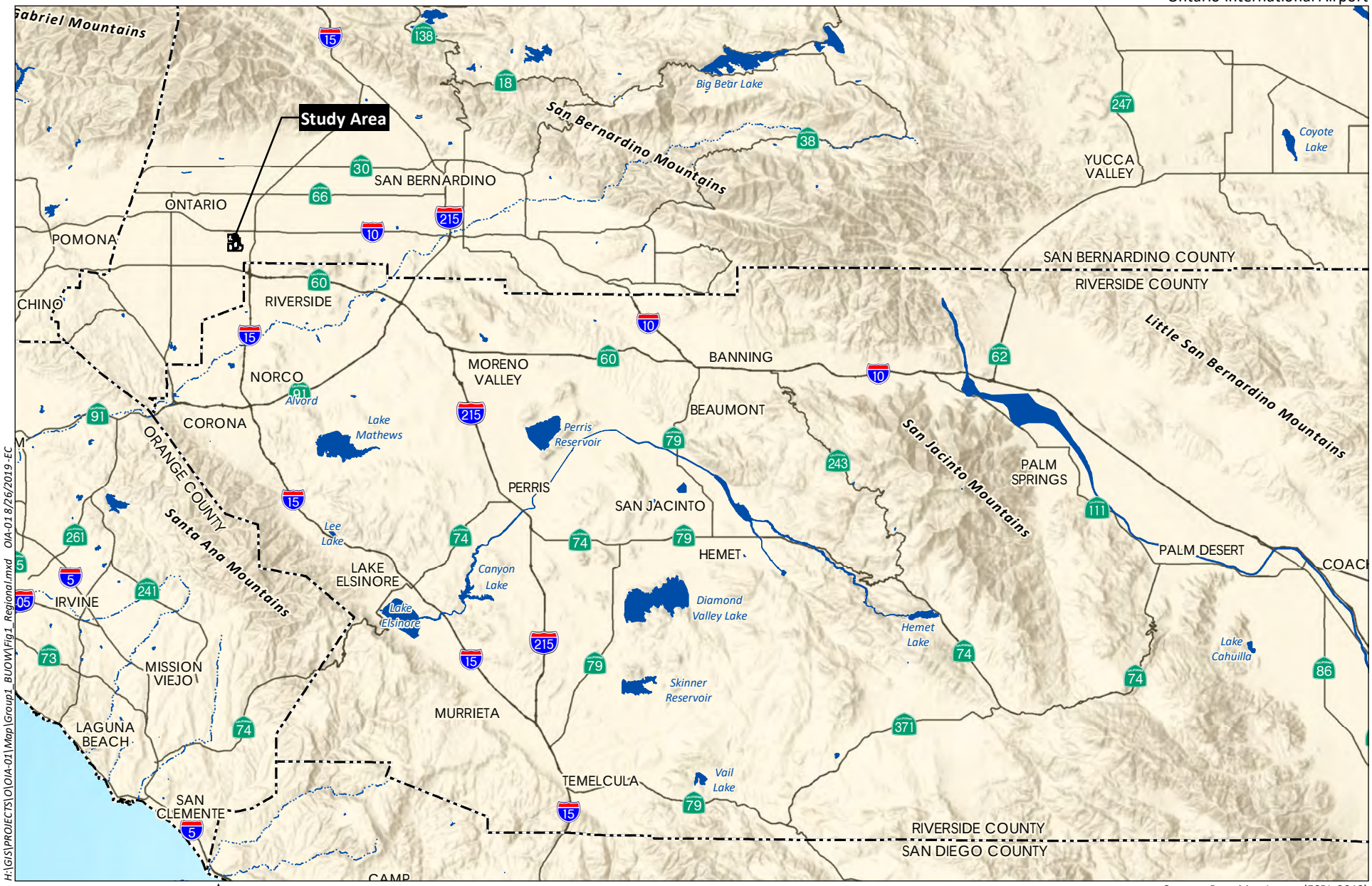
Attachments:

Figure 1: Regional Location
Figure 2: USGS Topography
Figure 3: Aerial Photograph
Figure 4: BUOW Observations and Burrow Locations
Attachment A: Site Photographs

REFERENCES

California Department of Fish and Game. 2012. Staff report on burrowing owl mitigation. State of California Natural Resources Agency. March 7, 2012.

California Department of Fish and Wildlife (CDFW). 2019. California Natural Diversity Database and Rarefind. California Department of Fish and Wildlife: Sacramento, California. Retrieved from: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed July 31, 2019.



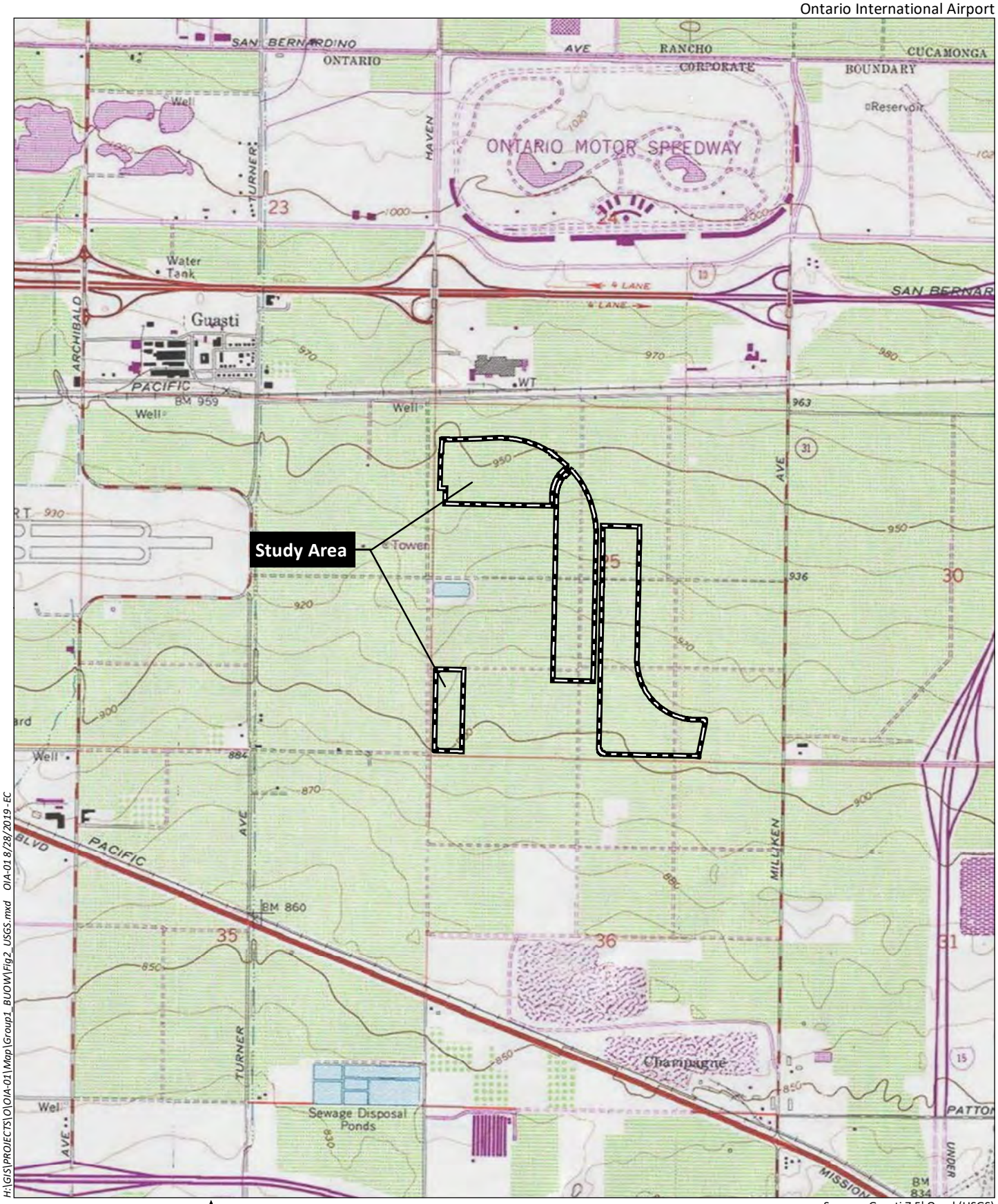
Source: Base Map Layers (ESRI, 2013)

HELIX Environmental Planning

Regional Location

Figure 1

3629



H:\GIS\PROJECTS\OIA\OIA-01\Map\Group1_BUOW\Fig2_USGS.mxd OIA-01 8/28/2019 -EC

0 2,000 Feet

Source: Guasti 7.5' Quad (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2

3630

H:\GIS\PROJECTS\O\OIA-01\Map\Group1_BUOW\Fig3_Aerial.mxd OIA-01 8/26/2019 -EC

0 1,000 Feet

Source: Base Map Layers (Eagle Aerial, 2014)

HELIX Environmental Planning

Aerial Photograph

Figure 3

Survey Areas
- Study Area
- 500-foot Survey Buffer

BUOW Observations
- Suitable Burrow
- BUOW Sign
- Occupied Burrows
- Transect

Guasti Road

Ontario International Airport

Active Burrow #2
03/20/19 - 1 Adult
04/23/19 - Not Detected
05/21/19 - Not Detected
06/26/19 - Not Detected

Active Burrow #3
03/20/19 - 2 Adult
04/23/19 - 2 Adults
05/21/19 - 2 Adults
06/26/19 - 2 Adults

Doubleday Avenue

Santa Ana Street

Active Burrow #4
03/20/19 - 2 Adults
04/23/19 - 2 Adults
05/21/19 - 2 Adults, 6 Juveniles
06/26/19 - 2 Adults, 5 Juveniles

Active Burrow #1
03/20/19 - 1 Adult
04/23/19 - 1 Adult
05/21/19 - 1 Adult
06/26/19 - 1 Adult

Haven Avenue

Carnegie Avenue

Commerce Way

Jurupa Street

H:\GIS\PROJECTS\O\OIA-01\Map\Group1_BUOW\Fig4_BurrowTransect.mxd OIA-01 8/27/2019 -EC

0 550 Feet

Source: Base Map Layers (Digitial Globe, 2018)

HELIX Environmental Planning

Burrow and Transect Locations

Figure 4

3632

Photograph 1: View of the non-native grassland habitat in the eastern portion of survey area, facing west.

Photograph 2: View of the non-native grassland in the northern portion of survey area, facing southeast.

Source: HELIX 2019

H:\GIS\PROJECTS\OIOIA-01\Map\Group1_BUOW\AttA_RepSitePhotos.indd OIA-01 8/15/19 -EC

HELIX Environmental Planning, Inc.
16485 Laguna Canyon Road
Suite 150
Irvine, CA 2618
949.234.8770 **tel**
619.462.1515 **fax**
www.**helixepi**.com

February 11, 2020 OIA-01

Mr. Keith Owens
Ontario International Airport Authority
1923 E Avion Avenue
Ontario, CA 91761

Subject: 2019\2020 non-breeding Burrowing Owl Survey Report for Potential Development of Ontario International Airport's Parcel Study

Dear Mr. Owens:

This letter report presents the results of the 2019 non-breeding season burrowing owl (*Athene cunicularia*; BUOW) survey conducted by HELIX Environmental Planning, Inc. (HELIX) for the Ontario International Airport (study area) located in the City of Ontario, San Bernardino County, California. The survey was conducted in accordance with the California Department of Fish and Wildlife (CDFW; previously California Department of Fish and Game [CDFG]) Staff Report on BUOW Mitigation (CDFG 2012). This letter report describes the methods used to perform the survey and the survey results.

STUDY AREA LOCATION

The 322-acre study area is generally located south of the Interstate (I-) 10 and west of I-15 (Figure 1, *Regional Location*). The study area is located within Section 25 of Township 1 South, Range 7 West of the Guasti, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 2, *Vicinity Map*). Specifically, the study area is located to the northwest of the intersection of S Haven Avenue and Jurupa Street; to the northwest and southwest of the intersection of E Airport Drive and S Haven Avenue; and to the southwest and southeast of the intersection of S Grove Avenue and E Airport Drive (Figure 3, *Aerial Photograph*). The study area comprises approximately 320 acres of suitable burrowing owl habitat.

STUDY AREA DESCRIPTION

The study area is located directly on and surrounding the tarmac of the Ontario International Airport. The study area is dominated by non-native grass species, such as common ripgut grass (*Bromus diandrus*), puncture vine (*Tribulus terestris*), *red* brome (*Bromus madritensis* ssp. *rubens*), and slender oat (*Avena barbata*), which are maintained as required for weed abatement. The topography of the study area is mostly flat with elevations ranging from 902 feet above mean sea level (AMSL) near the southeast corner to 967 feet AMSL near the northeast corner. Immediate surrounding land uses include the commercial buildings to the north, east, south, and west.

METHODS

The focused BUOW survey was conducted according to the CDFW BUOW survey guidelines (CDFG 2012), which includes Part I Habitat Assessment and Focused Burrow Survey and Part II Focused BUOW Surveys. The CDFW BUOW survey guidelines are described in further detail below.

Part I: Habitat Assessment and Focused Burrow Survey

Prior to conducting the habitat assessment, HELIX consulted the California Natural Diversity Database (CNDDB) to determine the nearest BUOW occurrence(s). A habitat assessment was conducted by HELIX biologists Ezekiel Cooley and Lauren Singleton on November 1, 2018 to determine whether the study area supports suitable BUOW habitat. A focused burrow survey was conducted concurrently with the habitat assessment. All suitable burrows (i.e., greater than 11 centimeters [cm] in height and width and greater than 150 cm in depth) and burrow surrogates were recorded using a handheld Global Positioning System (GPS) unit (Figure 4, *Suitable Burrow and Transect Locations*). The habitat assessment and focused burrow survey were conducted prior to commencement of the BUOW focused surveys. The assessment was conducted on the study area and within a 150-meter (approximately 500-foot) buffer zone around the periphery of the study area (survey area). The survey area was slowly walked and assessed for suitable BUOW habitat, including:

- disturbed low-growing vegetation within grassland and shrublands (less than 30 percent canopy cover);
- gently rolling or level terrain;
- areas with abundant small mammal burrows, especially California ground squirrel (*Otospermophilus beecheyi*) burrows;
- fence posts, rocks, or other low perching locations; and
- man-made structures, such as earthen berms, debris piles, and cement culverts.

All potential burrows were checked for signs of recent owl occupation. Signs of occupation include:

- pellets/casting (regurgitate fur, bones, and/or insect parts);
- white wash (excrement); and/or
- feathers.

Part II: Locating Burrowing Owls

Since suitable habitat and burrows were observed within the survey area during the habitat assessment, non-breeding focused BUOW surveys were conducted to determine whether the survey area supports BUOW. The focused surveys consisted of four (4) non-breeding season surveys, spread evenly, throughout the nonbreeding season, that were performed by Mr. Cooley and Ms. Singleton and HELIX biologists Matthew Dimson, Amy Lee, and Daniel Torres between October 8, 2019 and January 14, 2020. (Table 1 *Survey Information*)

The biologists walked transects spaced no greater than 20 meters apart (approximately 65 feet) to allow for 100 percent visual coverage of all suitable habitat within the survey area (Figure 4). The biologists walked slowly and methodically, closely checking suitable habitat within the survey area for BUOW diagnostic sign (e.g., molted feathers, pellets/castings, or whitewash at or near a burrow entrance) and individual BUOW. If observed, BUOW sign and BUOW observations were recorded with a GPS unit. Inaccessible areas of the survey area were visually assessed using binoculars.

Table 1
Survey Information

	Biologist	Start/Stop Time	Start/Stop Weather Conditions	Survey Results
10/08/19	Ezekiel Cooley Lauren Singleton	0715-0900	62°F, wind 0-1 mph, 0% clouds 69°F, wind 1-2 mph, 0% clouds	• Active Burrow #1: One adult was observed next to a grated drain with a burrow located to the west of the drain.
10/11/19	Ezekiel Cooley Lauren Singleton	0710-0900	67°F, wind 4-5 mph, 0% clouds 71°F, wind 4-5 mph, 0% clouds	• Active Burrow #2: One adult was in a cement culvert.
10/15/19	Lauren Singleton Daniel Torres	0710-1000	56°F, wind 3-4 mph, 0% clouds 73°F, wind 1-2 mph, 0% clouds	• No BUOW detected.
11/05/19	Matthew Dimson Lauren Singleton	0715-0945	61°F, wind 0-1 mph, 0% clouds 73°F, wind 0-1 mph, 0% clouds	• No BUOW detected.
11/08/19	Matthew Dimson Lauren Singleton	0730-0915	61°F, wind 2-3 mph, 0% clouds 77°F, wind 2-3 mph, 0% clouds	• Active Burrow #2: One adult was in a cement culvert.
11/12/19	Amy Lee Lauren Singleton	0715-0945	55°F, wind 0-1 mph, 5% clouds 77°F, wind 0-1 mph, 0% clouds	• No BUOW detected.
12/03/19	Matthew Dimson Lauren Singleton	0800-1000	56°F, wind 0-1 mph, 100% clouds 63°F, wind 0-1 mph, 100% clouds	• No BUOW detected.
12/06/19	Matthew Dimson Lauren Singleton	0730-0930	50°F, wind 0-1 mph, 30% clouds 63°F, wind 2-3 mph, 50% clouds	• No BUOW detected.
12/10/19	Matthew Dimson Lauren Singleton	0710-0930	46°F, wind 1-2 mph, 20% clouds 55°F, wind 0-1 mph, 80% clouds	• No BUOW detected.
01/07/20	Ezekiel Cooley Matthew Dimson	0715-0900	46°F, wind 0-1 mph, 15% clouds 55°F, wind 0-1 mph, 20% clouds	• Active Burrow #3: One adult was observed below a grated drain with a burrow located on the south side of the drain.
1/10/20	Ezekiel Cooley Matthew Dimson	0710-0850	43°F, wind 2-3 mph, 100% clouds 50°F, wind 1-2 mph, 100% clouds	• No BUOW detected.
01/14/20	Ezekiel Cooley Matthew Dimson	0700-0900	43°F, wind 0-1 mph, 100% clouds 47°F, wind 0-1 mph, 100% clouds	• No BUOW detected.

RESULTS

Suitable BUOW habitat was observed within the survey area during the habitat assessment, including low-growing vegetation within the non-native grassland. Several burrows and burrow surrogates, such as vertical corrugated metal pipe storm drain risers, that could potentially be used by BUOWs were observed within the survey area (Figure 4). Suitable foraging habitat was observed within and adjacent to the survey area. There are CNDDB records of BUOWs within the survey area from 2007 and 2013 (CDFW 2019).

A total of three active burrows were detected within the survey area (Figure 4). One active burrow was located on the western end of the tarmac (Active Burrow [AB]-1) and two active burrows were located on the northeastern end of the tarmac (Active Burrow [AB]-2 and AB-3). A summary of observations is provided below.

AB-1 was on the study are in the middle of the tarmac between the two runways, approximately 2,100 feet to the northwest of South Vineyard Avenue and Avion Drive intersection. One adult BUOW was observed next to a grated drain with a burrow located to the west of the drain. This adult was only observed once on October 5, 2019 and was not present on subsequent surveys.

AB-2 was located on the eastern portion of the study area, approximately 2,200 feet to the southwest of South Haven Avenue and East Airport Drive. One adult BUOW was observed in a cement culvert on October 11 and November 8, 2019. The BUOW was not present on subsequent surveys.

AB-3 was located on the eastern portion of the study area, approximately 3,000 feet to the southwest of South Haven Avenue and East Airport Drive. One adult was observed below a grated drain with a burrow located on the south side of the drain. This adult was observed only once on January 7, 2020.

The locations of all suitable burrows, BUOW sign, and occupied burrows observed within and adjacent to the study area are shown on Figure 4.

CONCLUSION

A total of three active burrows were detected within the survey area. One adult BUOW was observed at each active burrow: AB-1, AB-2, and AB-3. AB-1 and AB-2 had no adult BUOW present during the final series of surveys.

These surveys are intended to document the non-breeding season activity on the survey area and may not be considered conclusive findings by CDFW even if BUOW are observed. A breeding season focused survey may be required to determine the full extent of use on the survey area.

In addition to breeding season protocol surveys, a take avoidance (pre-construction) survey would also be required and shall be conducted within 14 days prior to ground disturbance in accordance with CDFW Staff Report on BUOW Mitigation (2012). If ground-disturbing activities are delayed more than 14 days after the pre-construction survey has been completed, the study area must be resurveyed.

If you have any questions regarding the information presented in this letter report, please contact Ezekiel Cooley (EzekielC@helixepi.com) or Lauren Singleton (LaurenS@helixepi.com) at (949) 234-8770.

Sincerely,

Ezekiel Cooley
Biologist

Lauren Singleton
Biologist

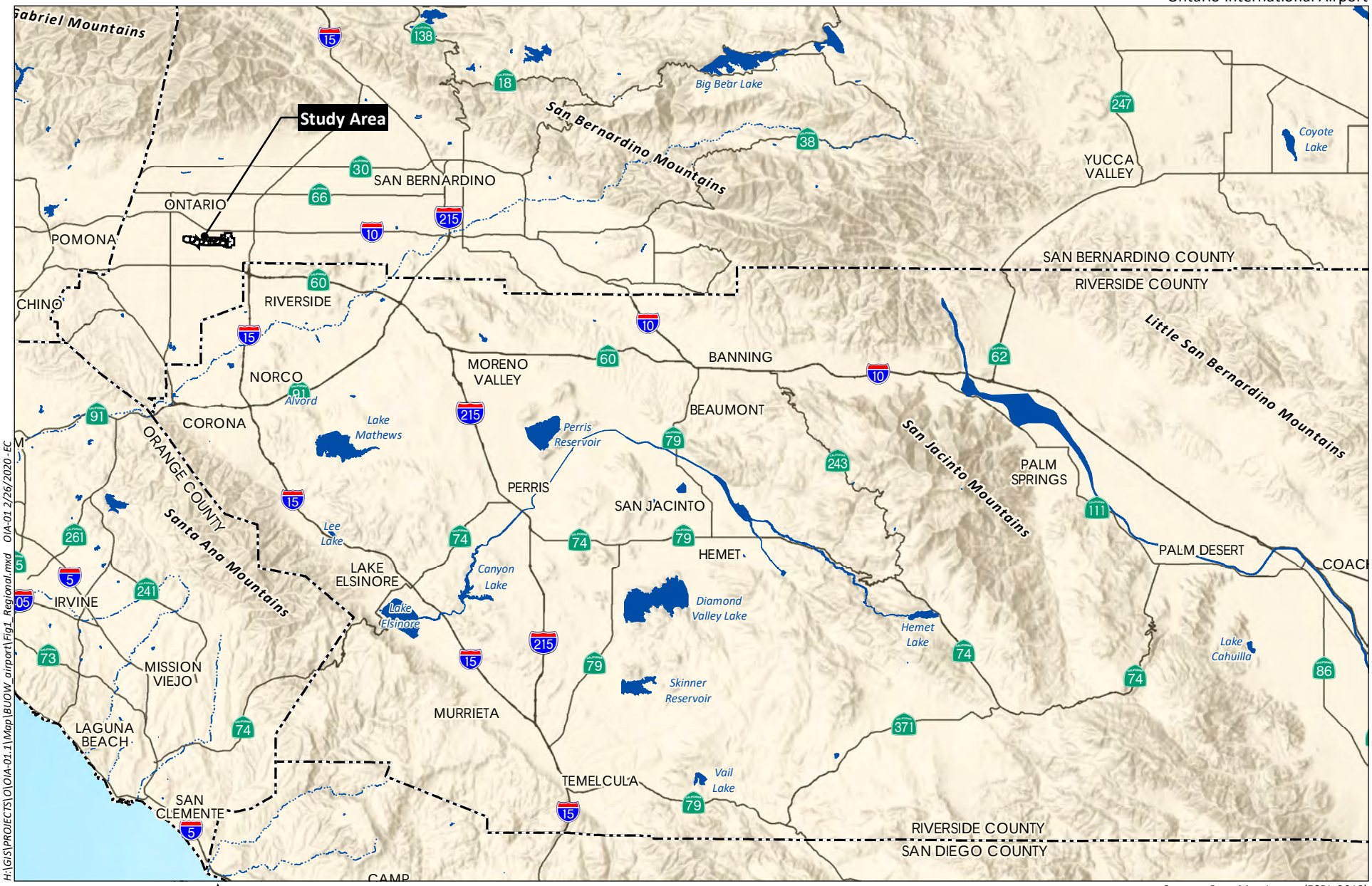
Attachments:

Figure 1: Regional Location
Figure 2: USGS Topography
Figure 3: Aerial Photograph
Figure 4: BUOW Observations and Burrow Locations

REFERENCES

California Department of Fish and Game. 2012. Staff report on burrowing owl mitigation. State of California Natural Resources Agency. March 7, 2012.

California Department of Fish and Wildlife (CDFW). 2019. California Natural Diversity Database and Rarefind. California Department of Fish and Wildlife: Sacramento, California. Retrieved from: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed July 31, 2019.



H:\GIS\PROJECTS\O\OIA-01.1\Map\BUOW_airport\Fig1_Regional.mxd OIA-01 2/26/2020 - EC

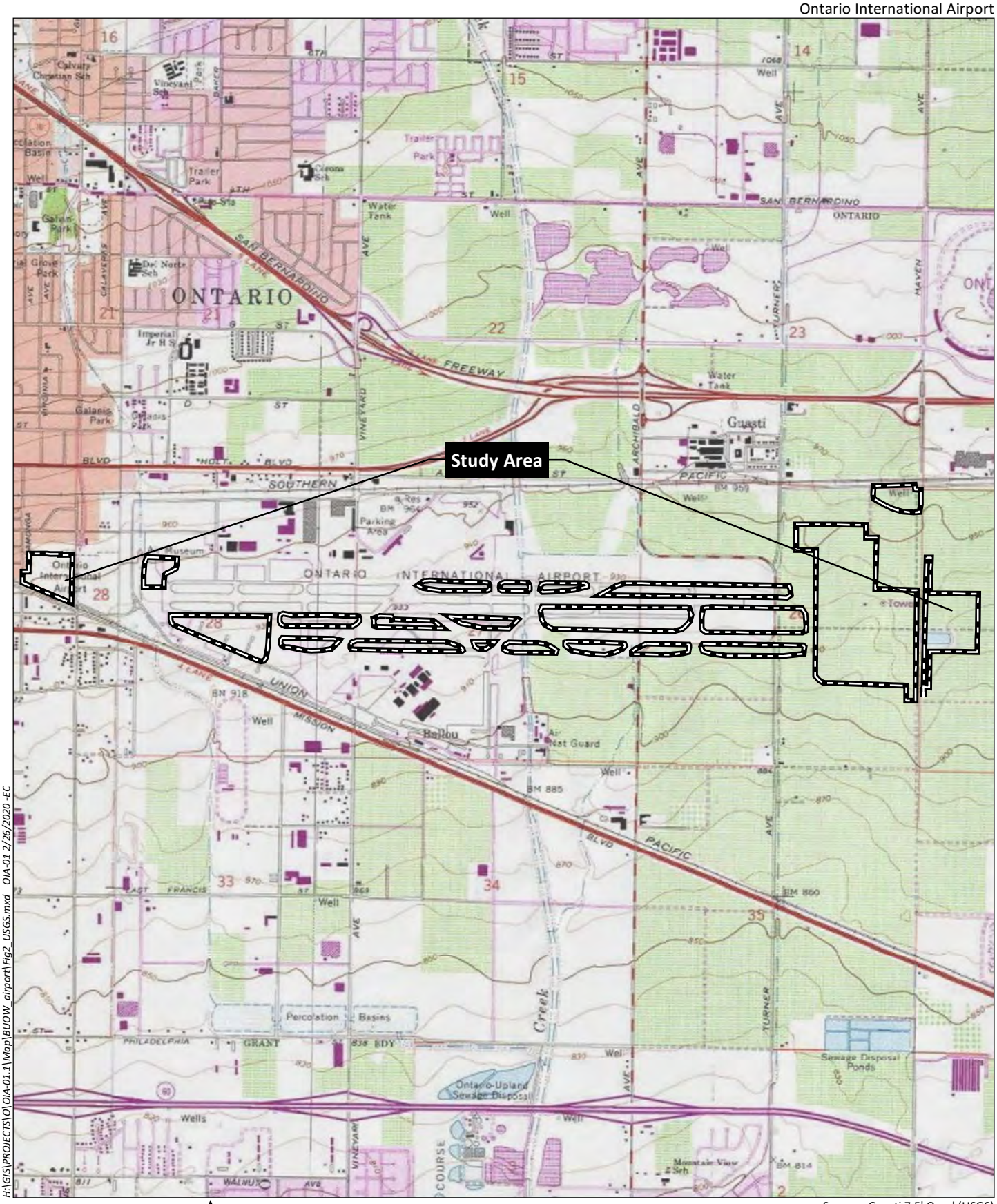
Source: Base Map Layers (ESRI, 2013)

HELIX Environmental Planning

Regional Location

Figure 1

3641



H:\GIS\PROJECTS\O\OIA-01.1\Map\BUOW_airport\Fig2_USGS.mxd OIA-01 2/26/2020 -EC

0 2,000 Feet

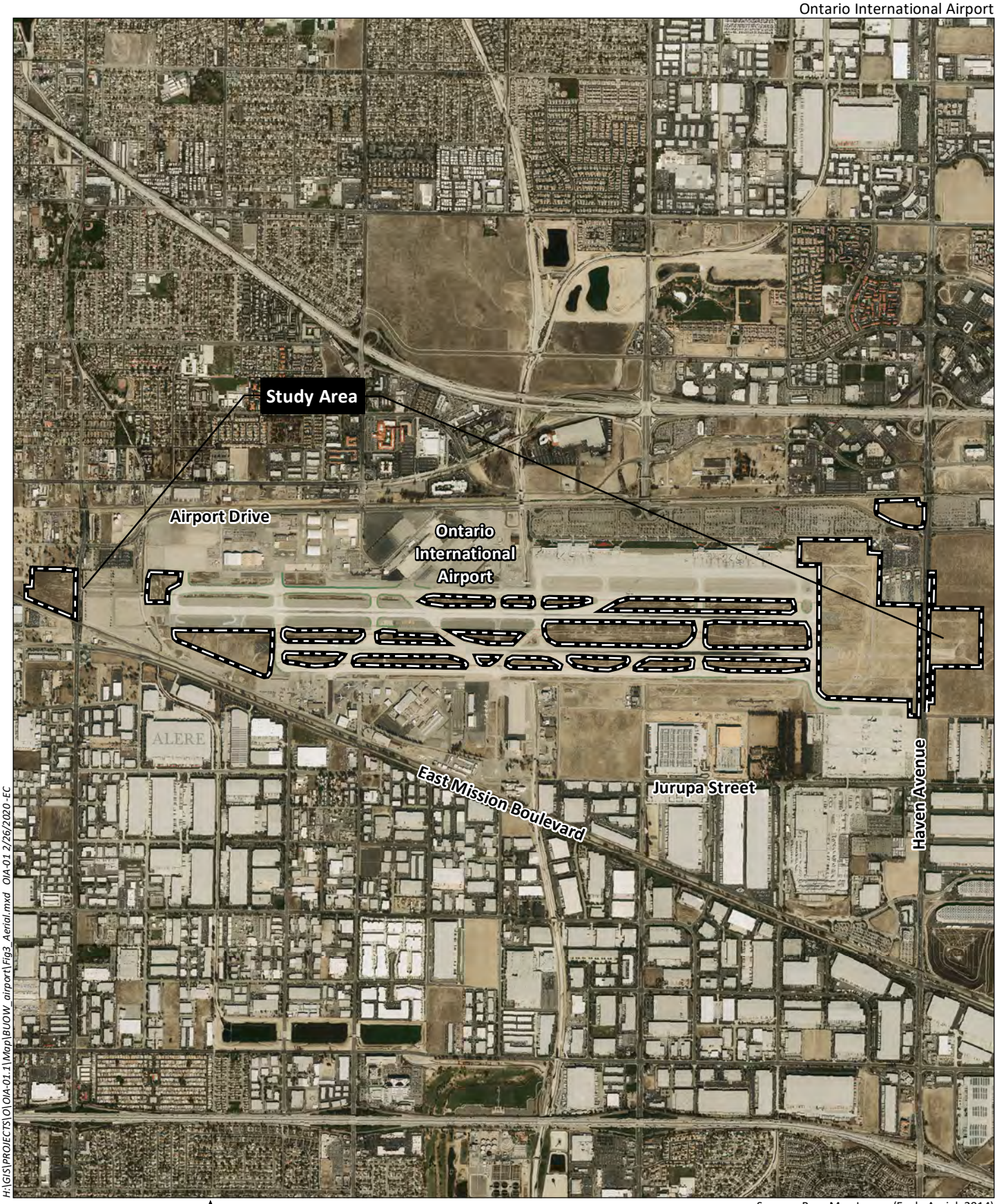
Source: Guasti 7.5' Quad (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2

3642



H:\GIS\PROJECTS\O\OIA-01.1\Map\BUOW_airport\Fig3_Aerial.mxd OIA-01 2/26/2020 EC

0 2,500 Feet

Source: Base Map Layers (Eagle Aerial, 2014)

HELIX Environmental Planning

Aerial Photograph

Figure 3

Ontario International Airport

500-foot Survey Buffer
Survey Areas
2019/2020 Non-Breeding Season BUOW Observations
Suitable Burrows
Transects

AB-1
AB-3
AB-2

Inset Map
0 200 Feet
AB-1
AB-3

Inset Map
0 200 Feet
AB-2

0 1,300 Feet

Source: Aerial (Eagle Aerial, 2014)

H:\GIS\PROJECTS\OIA\OIA-01.1\Mxd\BUOW_airport\Fig4_BUOW_obs.mxd OIA-01 2/26/2020 EC

HELIX Environmental Planning

2019/**2020** Non-Breeding Season BUOW Survey Areas

Figure 4
3644

California Logistics Center
City of Ontario, San Bernardino County, California

Pre-Construction Clearance Survey for Burrowing Owl and other Nesting Bird Species

To **McDonald Property Group**
1140 N. Coast Hwy.
Laguna Beach, CA 92651
Phone: (949) 655-8233
Email: john@mcdonaldpropertygroup.com
Attn: John Pierce

From **Michael Wilcox**

Tel **(909) 369-8060**

Fax **(909) 369-8035**

Date **08/14/2021**

Subject: Pre-Construction Clearance Survey for Burrowing Owl and Other Nesting Birds at 10 Proposed Geotechnical Boring Sites in the City of Ontario, San Bernardino County, California

---

INTRODUCTION

Wood Environment & Infrastructure Solutions, Inc. (Wood) conducted a clearance survey for burrowing owl (*Athene cunicularia*) and other nesting bird species protected by the Migratory Bird Treaty Act (MBTA) at 10 proposed boring sites located within the California Logistics Center in the city of Ontario, San Bernardino County, California (Appendix A, Figure 1). McDonald Property Group proposes to conduct exploratory geotechnical boring at these sites in the immediate future and contracted Wood to conduct the clearance survey to determine if the burrowing owl would potentially be affected by the proposed action.

The 256-acre proposed project is located east of the Ontario International Airport. This area is generally located east of S Haven Avenue, west of Doubleday Avenue, south of E Airport Drive and north of E Jurupa Street (Appendix A, Figure 1). The proposed boring sites are location on Assessor's Parcel Numbers (APN's) 021-123-204-207, 211-220, 244-246 and 021-122-247, 248, 252-257 (Wood 2021).

BACKGROUND

The burrowing owl is a small, tan, short-tailed, ground-dwelling owl that occupies underground burrows. A member of the Strigidae (typical owls family), this species is associated with

grasslands and other arid open terrain, including Sonoran creosote bush scrub, throughout much of the western United States. Burrowing owls are opportunistic in their selection of burrows, typically utilizing the burrows of small mammals (*e.g.*, ground squirrels, kit fox), but also use drainpipes, culverts, and other suitable natural or manmade cavities at or below ground level. In California, the species often occurs in association with colonies of the California ground squirrel (*Otospermophilus beecheyi*), where it makes use of the squirrel's burrows. The entrance of the burrow is often adorned with animal dung, feathers, debris, and other small objects. The species is active both day and night and may be seen perching conspicuously on fence posts or standing at the entrance of their burrows. Due to the characteristic fossorial habits of burrowing owls, nest burrows are a critical component of their habitat.

In Southern California, burrowing owls are not only found in undisturbed natural areas, but also fallow agricultural fields, margins of active agricultural areas, livestock farms, airports, and vacant lots. Despite their apparent tolerance to human activities, burrowing owl populations in California are clearly declining and, if declines continue, the species may qualify for listing under the state and/or federal Endangered Species Acts (CDFG 1995). The declines in burrowing owl populations are attributed to loss and degradation of habitat, to on-going residential and commercial development, and to rodent control programs. The burrowing owl is currently designated a California Species of Concern (CSC) by the California Department of Fish and Wildlife (CDFW 2020), managed as a Bird of Conservation Concern by the United States Fish and Wildlife Service (USFWS), is considered "sensitive" by the U. S. Bureau of Land Management (BLM), and protected by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Sections 3503, 3503.5, 3513, and 3800. Any impacts to burrowing owls and/or their occupied burrows may be considered significant under the MBTA and California Environmental Quality Act (CEQA), requiring specific mitigation often in the form of the purchase, establishment, and management of on- or off-site conservation areas in perpetuity.

The California Burrowing Owl Consortium (CBOC) developed the Burrowing Owl Survey Protocol and Mitigation Guidelines to meet the need of uniform standards when surveying burrowing owl populations and evaluating impacts from development projects (CBOC 1997). In 1995 the CDFG issued the Staff Report on Burrowing Owl Mitigation to all its regional managers to ensure consistency in standards, policies, and regulatory mandates relating to the burrowing owl (CDFG 1995). Due to the continued decline of burrowing owl populations statewide and as an attempt to reverse this trend, the CDFG issued more effective, viable, coordinated and concerted approach to burrowing owl conservation actions with the release of an updated Staff Report on Burrowing Owl Mitigation (CDFG 2012).

METHODS

The clearance survey was conducted on 11 August 2021 by Wood biologists Nathan Moorhatch, Alec Williams and Michael Wilcox. All areas of the Biological Study Area (BSA), which included all proposed boring locations, obvious access/ingress and egress routes and a 500-foot buffer zone area surrounding the bore sites and access routes, were surveyed on-foot utilizing parallel pedestrian belt transects spaced approximately 18 meters (60 feet) apart. Additionally, previously reported/known burrowing owl locations on-site and in immediate vicinity were surveyed. Adjacent off-site areas were surveyed with binoculars for presence of burrowing owls, in accordance with protocol established by the California Burrowing Owl Consortium (1997) and the Staff Report on Burrowing Owl Mitigation (CDFW 2012). Binoculars were used to visually inspect potential perching locations (i.e., rocks, debris, dirt mounds) as well as the entrances to all on-site mammal burrows, debris providing potential shelter (i.e., piles of

concrete slabs, cement drainpipes), search for other bird nests and to identify other bird species observed. Mammal burrows were carefully examined for evidence of burrowing owl occupation (i.e., animal dung, feathers, whitewash, pellets, debris, etc.). Locations with burrowing owls and/or burrows exhibiting burrowing owl sign were marked with a handheld cell phone using the Collector application. Representative photographs were also taken (Appendix B). All wildlife detected was recorded in field notes and is included as Appendix C.

RESULTS

Weather conditions during the survey were conducive for owl activity. Skies were partly cloudy with an estimated 30 to 90% cloud cover. Temperatures were 75 to 92 degrees Fahrenheit. Winds were calm (~0-5 mph).

Multiple burrowing owls were detected in multiple locations during the clearance survey (Appendix A, Figure 1). Some were observed perching on or beneath covered metal manmade structures resembling drainage features (although these features may serve some other purpose), some were observed perching on the ground and one was observed perching on a dead branch apparently staged by burrowing owl watchers/enthusiasts that were present and photographing the owls during the survey. At least 7 cars and at least 7 people were present, taking photographs and watching the owls for several hours during the survey. Biologists spoke with several of these individuals, and they indicated that they have collectively been aware of and monitoring this population for years. Several other staged branches, logs, etc. were observed throughout the area. A gathering of police officers training on motorcycles along one section of one of the roads bisecting the BSA were also aware of the owls and pointed out at least one location where they had just observed an owl to the biologists.

In addition to the live burrowing owls, several burrow locations were also observed exhibiting recent burrowing owl sign (i.e., whitewash, pellets, feathers, tracks and/or burrow adornments) (Appendix A, Figure 3). California ground squirrel burrows suitable for burrowing owls were detected on-site and throughout the adjacent BSA within the buffer zone areas.

More specifically, live burrowing owls and active burrowing owl burrows, including man-made structures currently being utilized by the species, are present in several areas of the site. Environmentally Sensitive Areas (ESAs) 152 meters (500-feet) in diameter from the center of the occupied owl burrows/shelters were established around these areas. Proposed bore sites B3, B6 and B7 are within the established ESAs. Proposed bore sites B1, B2, B4, B5, B7, B8, B9 and B10 are located outside of the established ESAs. While technically outside of the established ESAs, bore sites B2 and B4 are very close to the respective ESA edges.

No other bird nests or bird species displaying nesting behavior were detected. If an active nest belonging to a species protected by the MBTA are observed within the 152-meter (500-foot) buffer zone area of any of the bore sites, adaptive measures will be implemented to avoid impacts to those nests as well.

A total of one reptile, 14 bird species and two mammals were detected (Appendix C).

SUMMARY AND RECOMMENDATIONS

All the proposed bore sites are within suitable habitat for burrowing owl and the area is currently occupied by this declining and protected species. California ground squirrel burrows and man-made structures suitable for burrowing owl use are present throughout the area and within

proximity to each of the proposed bore sites. Live burrowing owls, active burrows and man-made structures currently being utilized by burrowing owls are present within the 150-meter (500-foot) buffer zone area surrounding bore sites B3, B6 and B7. Bore sites B2 and B4, while technically outside of ESAs, are very close to the edges. It should be noted that burrowing owls are highly mobile and may colonize or recolonize currently unused burrows and/or new burrows recently created by California ground squirrels at any time.

For these reasons, the potential for burrowing owls to occur in, or occupy areas where no burrowing owls, or their sign, were observed during the survey is considered high. As a result, biological monitoring of all project-related activities on-site is strongly recommended. Monitors would conduct a pre-construction clearance survey at the bore site(s) proposed to be worked on at that time, their proposed ingress/egress access route(s) and in the immediate vicinity prior to mobilization of equipment and throughout the day to confirm that burrowing owls are not currently present within the 500-foot buffer zone areas around each of the bore sites and to ensure that burrowing owls are not affected by project activities. If those bore sites that are within the 500-foot buffer of an occupied burrow can be moved outside of this buffer area, it would greatly reduce the potential for burrowing owl impacts.

If burrowing owls are determined to be present at a particular bore site, or nearby burrowing owls are observed displaying distress behaviors (i.e., flushing from perches or burrows, excessive bobbing, emitting distress calls, etc.) then actions to avoid disturbing those owls would be implemented immediately. Such actions may include stop work orders at that bore site and/or mobilization to other bore sites where activities would not affect burrowing owls. Use of sound and/or visual barriers may also be an option should the need arise.

Monitors would take daily field notes, or fill out standardized field forms, take photographs of the progress of project activities to document compliance and avoidance of project-related impacts to burrowing owls. A Worker Environmental Awareness Program (WEAP) with emphasis on the burrowing owl and the actions proposed to be implemented to avoid project-related impacts to the species should also be administered to all project personnel prior to the commencement of on-site activities. The WEAP would outline the identification, ecology, and conservation status of the burrowing owl, as well as general and specific impact avoidance measures to be implemented. All personnel would be required to sign a form documenting their attendance and agreement to implement measures to avoid impacting burrowing owls. Anyone that refuses to attend the WEAP, refuses to sign the acknowledgement form and/or implement impact avoidance measures will not be permitted to work on the site.

For work at proposed bore sites B3, B6 and B7, the CDFW should be contacted immediately for additional guidance. This population of burrowing owls is well-known and has a devoted fan club that monitors their activity frequently, perhaps even daily. Any perceived disturbance to these owls will almost certainly result in calls and/or reports to CalTIP, an online mobile phone application, website, and phone number for people to easily and instantly report violations of wildlife laws, catch poachers, etc., to the CDFW. Because of the high profile of this burrowing owl population, the project will very likely be under the microscope of both the public and resource agencies and could potentially end up in the crosshairs of anyone that believes that actions to protect the well-being of these owls aren't being implemented or are inadequate or ineffective. Actions taken, or not taken, during the implementation of on-site project activities could potentially end up in lawsuits and/or negative publicity. Wood strongly recommends that the project proponent involve the CDFW in the planning of project activities and implement the above measures and any others that the CDFW recommends.

CONCLUSIONS

Because burrowing owls occur in the immediate vicinity of the proposed bore sites, actions to avoid potential impacts to this species have been developed specifically for this project and should be implemented for all on-site project-related activities. These actions include: 1) administration of a project-specific WEAP, 2) pre-construction clearance surveys at bore sites, along access routes and the immediate vicinity immediately prior to site mobilization, 3) biological monitoring during all on-site operations resulting in surface disturbance, increased vibrations and/or loud noise, and 4) notification and correspondence with CDFW regarding the proposed project and impact avoidance measures. With implementation of the impact avoidance measures recommended above and the notification, and inclusion of the CDFW for any recommendations that they may have, the proposed geotechnical boring at the project site should be able to be successfully implemented without impacts to the burrowing owls.

Literature Cited

California Bird Records Committee. 2021. Official California Checklist. Accessed online at: http://californiabirds.org/ca_list.asp.

California Burrowing Owl Consortium. 1997. Burrowing Owl Survey Protocol and Mitigation Guidelines. Journal of Raptor Research Report, The Raptor Research Foundation, Inc.

California Department of Fish and Game (CDFG). 1995. Staff report on Burrowing Owl Mitigation. CDFG, Sacramento, CA.

CDFG. 2012. Staff report on Burrowing Owl Mitigation. CDFG, Sacramento, CA.

California Department of Fish and Wildlife (CDFW). 2016. Complete List of Amphibian, Reptile, Bird and Mammal Species in California. Accessed online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=87155&inline

CDFW. 2021. Special Animals List. July. Periodic publication. Sacramento, CA. Online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline.

Wood Environment & Infrastructure Solutions Inc. 2021. Proposal to Provide Biological Assistance for the California Logistics Center Project Located in the City of Ontario, San Bernardino County, California. Unpublished document dates August 4, 2021.

APPENDIX A

Figures

Path: \\sdg1-fs1\gis\3554_NaturalResources\McDonaldProperties_CA_LogisticsCenter\MXD\Review\CA_LogisticsCenter_FieldDataReview.mxd, aaron.johnson, 8/11/2021

Boring Location

Survey Results

- Burrowing Owl
- Burrowing Owl Burrow
- Burrowing Owl Sign
- Environmentally Sensitive Area (ESA)

1 inch = 500 feet

0 500 Feet

FIGURE 1

Field Survey Results
McDonald Properties
CA Logistics Center
Ontario, CA

wood.

Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
Esri, HERE, Garmin, (c) OpenStreetMap contributors

APPENDIX B

Photographs

California Logistics Center, Proposed Geotechnical Boring

PHOTOGRAPHIC LOG

Photo 1: Representative condition of proposed project site and adjacent areas.

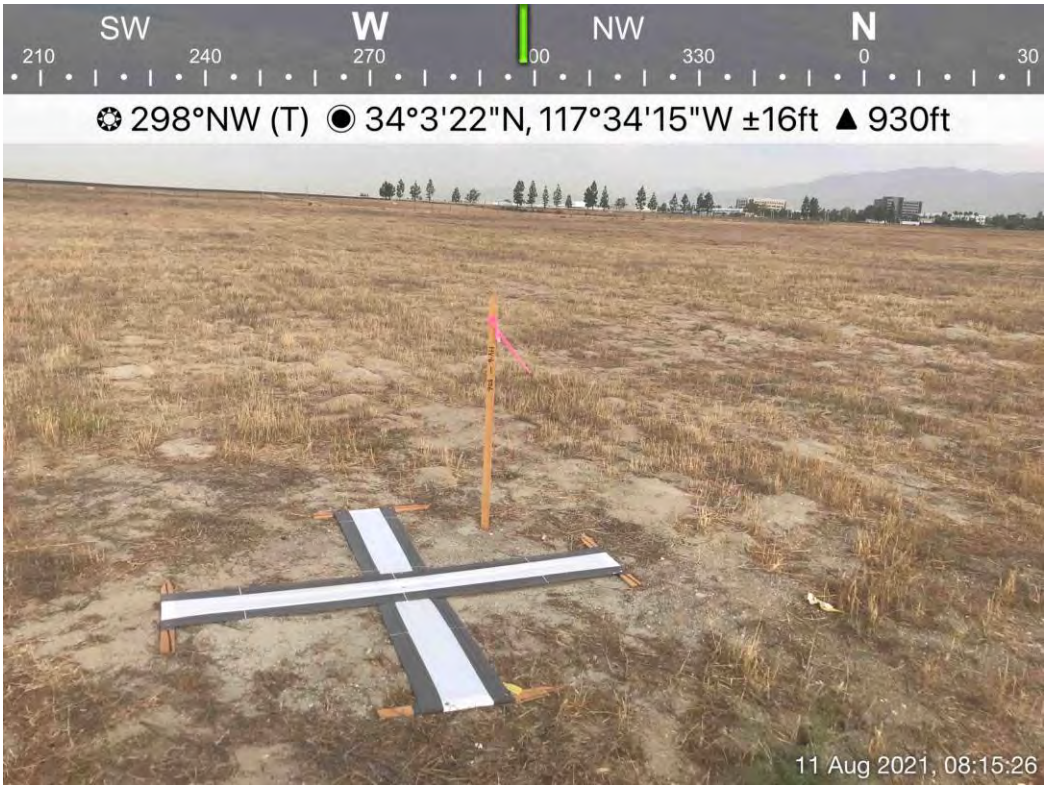


Photo 2: Representative bore site location and adjacent areas.

Photo 3: California ground squirrel burrow with burrowing owl sign (whitewash and pellets).

Photo 4: Man-made structure with recent burrowing owl sign.

Photo 5: Man-made structure with live burrowing owl.

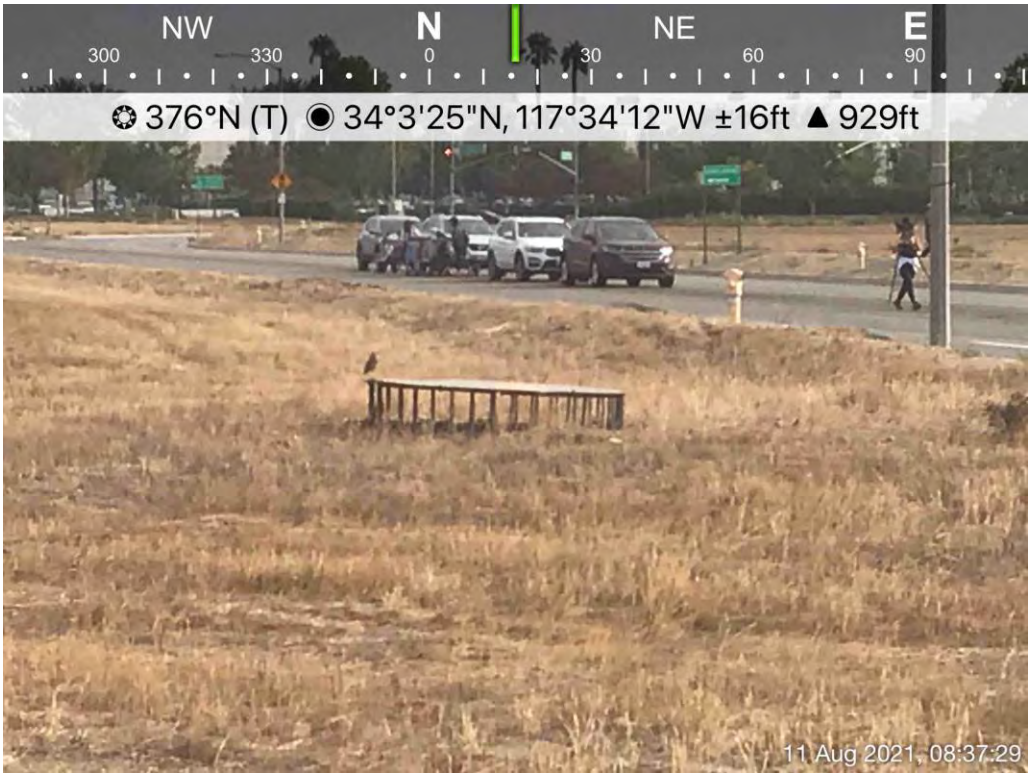


Photo 6: Two burrowing owls perched on man-made structure with burrowing owl enthusiasts/birdwatchers in background.

APPENDIX C

Observed Species List

APPENDIX A
OBSERVED VERTEBRATE SPECIES LIST
California Logistics Center
Proposed Geotechnical Drilling Operations

This list reports only the wildlife observed to on the project site by this study. Other species may have been overlooked or undetectable due to their activity seasons. Unless noted otherwise, nomenclature and systematics follow California Bird Records Committee (2021) for avifauna, and CDFW (2016) for herpetofauna and mammals.

SYMBOLS AND ABBREVIATIONS:

* Nonnative species.
** Sensitive species (see text).

I. VERTEBRATA	**VERTEBRATE WILDLIFE**
HERPETOFAUNA	REPTILES & AMPHIBIANS
Phrynosomatidae	**Spiny Lizards & Relatives**
Uta stansburiana	common side-blotched lizard
AVIFAUNA	BIRDS
Columbidae	**Pigeons and Doves**
Zenaida macroura	mourning dove
Accipitridae	**Hawks, Old World Vultures, Harriers**
Buteo jamaicensis	red-tailed hawk
Tytonidae	**Barn Owls**
*** Athena cunicularia*	western burrowing owl
Falconidae	**Caracaras and Falcons**
Falco sparverius	American kestrel
Tyrannidae	**Tyrant Flycatchers**
Tyrannus verticalis	western kingbird
Corvidae	**Jays, Magpies, and Crows**
Corvus brachyrhynchos	American crow
Corvus corax	common raven

Hirundinidae *Hirundo rustica*	**Swallows** barn swallow
Mimidae *Mimus polyglottos*	**Mockingbirds and Thrashers** northern mockingbird
Sturnidae **Sturnus vulgaris*	**Starlings** European starling
Passeridae **Passer domesticus*	**Old World Sparrows** house sparrow
Fringillidae *Haemorhous mexicanus*	**Fringilline & Cardueline Finches & Allies** house finch
Passerellidae *Chondestes grammacus*	**New World Sparrows** lark sparrow
Icteridae *Sturnella neglecta*	**Blackbirds** western meadowlark
MAMMALIA	MAMMALS
Sciuridae *Otospermophilus beecheyi*	**Squirrels** California ground squirrel
Geomyidae *Thomomys bottae*	**Pocket Gophers** Botta’s pocket gopher

HELIX Environmental Planning, Inc.
16485 Laguna Canyon Road
Suite 150
Irvine, CA 92618
949.234.8770 tel
619.462.0552 fax
www.helixepi.com

September 1, 2022 03902.00002.001

Mr. John Pierce, Sr. Vice President
McDonald Property Group
1140 North Coast Highway
Laguna Beach, CA 92651

Subject: 2022 Burrowing Owl (*Athene cunicularia*) Survey Report for the California Logistics Center at Ontario International Airport Project

Dear Mr. John Pierce:

This letter presents the results of the 2022 focused burrowing owl (*Athene cunicularia*; BUOW) survey conducted by HELIX Environmental Planning, Inc. (HELIX) for California Logistics Center at Ontario International Airport Project (project). The survey was conducted in accordance with the California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation (formerly California Department of Fish and Game [CDFG] 2012).[1] This letter describes the methods used to perform the survey and the results.

SURVEY RESULTS SUMMARY

Numerous suitable burrow and burrow surrogates were observed throughout the project site. Two burrows (Nest Nos. 1 and 2) with breeding pairs and juveniles were detected. Six additional burrows (Alternate Burrow [AB] Nos. 1 through 6) were also noted, which were used by BUOWS for cover.

PROJECT LOCATION

The project site is generally located 0.7 mile to the west of Interstate (I-) 15 and 3 miles to the south of I-10 in the City of Ontario, San Bernardino County, California (Figure 1, *Regional Location*). It is depicted within Section 25 of Township 1 South, Range 7 West of the U.S. Geological Survey 7.5-minute Guasti quadrangle map (Figure 2, *USGS Topography*). Specifically, the project site is located west and east of S Commerce Parkway and north and south of E Santa Ana Street (Figure 3, *Aerial Photograph*).

[1] California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency. March 7.

PROJECT SITE DESCRIPTION

The approximately 218-acre project site consists of disturbed habitat with primarily non-native annuals and grasses, such as *Hordeum* spp. *Bromus* spp., *Malva* spp., and *Sisymbrium* spp. Native *Amsinckia* spp. was also observed throughout the site. Soils within the project site solely consist of Delhi fine sand.[2] The topography of the project site is mostly flat, with elevations ranging from 900 feet (274 meters) above mean sea level (AMSL) near the southeast corner to 942 feet (287 meters) AMSL near the southwest corner. The project site is bounded by Ontario International Airport to the west, and industrial and commercial properties to the north, east, and south.

Representative photographs of the project site are shown in Attachment A, *Representative Site Photos*.

METHODS

Part I: Habitat Assessment and Focused Burrow Survey

Prior to conducting the habitat assessment, HELIX consulted the California Natural Diversity Database (CNDDB) to determine the nearest BUOW occurrence(s).[3] HELIX biologists John Gardner, Robert Hogenauer, Jessica Lee, and Daniel Torres conducted a habitat assessment on March 3, 2022, to determine whether the project site supports suitable BUOW habitat. A focused burrow survey was conducted concurrently with the habitat assessment. All suitable burrows (i.e., greater than approximately four inches [11 cm] in height and width and greater than approximately 59 inches [50 cm] in depth) and burrow surrogates were recorded using a handheld Global Positioning System (GPS) unit. The habitat assessment and focused burrow survey were conducted concurrently with the first focused survey (see Part II described below). The assessment was conducted on the project site and included an approximately 500-foot (150-m) buffer zone around the periphery of the project site (survey area). Inaccessible areas of the survey area, including private land behind fences, were visually assessed using binoculars. The survey area was slowly walked and assessed for suitable BUOW habitat, including:

- disturbed, low-growing vegetation within grassland and shrublands (less than 30 percent canopy cover);
- gently rolling or level terrain;
- areas with abundant small mammal burrows, especially California ground squirrel (*Otospermophilus beecheyi*) burrows;
- fence posts, rocks, or other low perching locations; and
- artificial structures, such as earthen berms, debris piles, and cement culverts.

[2] Natural Resources Conservation Service. 2022. Web Soil Survey. United States Department of Agriculture (USDA). Retrieved from: http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.Aspx. Accessed July 14, 2022.

[3] California Department of Fish and Wildlife. 2022. California Natural Diversity Database and Rarefind. California Department of Fish and Wildlife: Sacramento, California. Retrieved from: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed July 14, 2022.

All potential owl burrows were checked for signs of recent owl occupation. Signs of occupation include:

- pellets/casting (regurgitated fur, bones, and/or insect parts);
- white wash (excrement); and/or
- feathers.

Part II: Focused Burrowing Owl Survey

Because suitable habitat and burrows were observed within the survey area during the habitat assessment, focused BUOW surveys were conducted to determine whether the survey area supports BUOW. The focused surveys consisted of four breeding season surveys performed by Mr. Gardner, Mr. Hogenauer, Ms. Lee, and Mr. Torres, and HELIX Biologists Matthew Dimson and Shawn Carroll between March 3 and July 8, 2022. The surveys were spaced at least three weeks apart, with at least one survey conducted between February 15 and April 15, and the remaining three surveys conducted between April 15 and July 15, with at least one of these surveys occurring after June 15 (Table 1, *Survey Information*).

The biologists walked transects spaced no greater than approximately 65 feet apart (20 meters) to allow for 100 percent visual coverage of all suitable habitat within the survey area. The biologists walked slowly and methodically, closely checking suitable habitat within the survey area for BUOW diagnostic sign (e.g., molted feathers, pellets/castings, or whitewash at or near a burrow entrance) and individual BUOW. If observed, BUOW sign and BUOW observations were recorded with a GPS unit. Inaccessible areas of the survey area were visually assessed using binoculars.

Table 1
SURVEY INFORMATION

Survey Visit	Date	Biologist(s)	Time (Start/Stop)	Weather Conditions (Start/Stop)	Results
1[1]	03/03/22	John Gardner Robert Hogenauer Jessica Lee Daniel Torres	0610/0910	51°F, wind 0-1 mph, 30% clouds 62°F, wind 1-3 mph, 55% clouds	• Suitable BUOW habitat and burrows were identified within the survey area. • No BUOWs were observed during this focused survey.
2	04/21/22	Shawn Carroll Matthew Dimson Jessica Lee Daniel Torres	0630/1000	52°F, wind 0-1 mph, 1% clouds 61°F, wind 3-5 mph, 1% clouds	• Two adult BUOWs were observed near Nest No. 1, which is an earthen burrow located on the west side of Carnegie Avenue and approximately 900 feet north of E Santa Ana Street. • One adult BUOW was observed near Nest No. 2, which is an earthen burrow located on the west side of Carnegie Avenue and approximately 630 feet north of E Santa Ana Street. • One adult BUOW was observed near AB No. 1, which is an earthen burrow located on the west side of Carnegie Avenue and approximately 600 feet south of E Santa Ana Street.

Survey Visit	Date	Biologist(s)	Time (Start/Stop)	Weather Conditions (Start/Stop)	Results
3	05/18/22	Matthew Dimson Shawn Carroll Jessica Lee Daniel Torres	0610/0930	55°F, wind 1-2 mph, 100% clouds 64°F, wind 2-3 mph, 100% clouds	• Two adult BUOWs and two juvenile BUOWs were observed near Nest No. 1. • Two adult BUOWs and four juvenile BUOWs were observed near Nest No. 2 • One adult BUOW was observed near AB No. 2, which is a vertical corrugated metal pipe storm drain riser located on the east side of Carnegie Avenue and approximately 400 feet north of E Santa Ana Street.
4	07/08/22	Shawn Carroll Matthew Dimson John Gardner Daniel Torres	0620/0930	64°F, wind 1-2 mph, 10% clouds 73°F, wind 0-1 mph, 1% clouds	Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted, given juveniles and adults were difficult to differentiate. • One BUOW individual was observed near AB No. 3, which is an earthen burrow located approximately 650 feet to the southwest of the intersection of E Airport Drive and Carnegie Avenue. • Two BUOW individuals were observed near AB No. 4, which is a storm drain riser located on the east side of Carnegie Avenue and approximately 840 feet north of E Santa Ana Street. Individuals from Nest No. 1 are presumably using this burrow as an alternate burrow based on its proximity to the nest location and observation of individuals flushing from the nest to this burrow. [2] • Two BUOW individuals were observed near AB No. 5, which is a storm drain riser located on the west side of Carnegie Avenue and approximately 660 feet north of E Santa Ana Street. Individuals from Nest No. 2 are presumably using this burrow as an alternate burrow based on its proximity to the nest location and observation of individuals flushing from the nest to this burrow. [2] • Two BUOW individuals were observed near AB No. 6, which is an earthen burrow located on the west side of Carnegie Avenue and approximately 600 feet south of E Santa Ana Avenue.

[1] This survey included the habitat assessment and focused burrow survey.
[2] Alternate burrows used by BUOWs associated with Nests No. 1 and 2 are indicated by arrows shown on Figure 5.

RESULTS

CNDDB Record Review

There is a CNDDB record (Occurrence No. 1788) of BUOWs within the survey area, which between one and four breeding pairs were recorded between 2007 and 2013.[4] Four additional populations have been recorded on CNDDB within 1.5 miles of the project site. These CNDDB records are described below:

- CNDDB Occurrence No. 561: A BUOW population was documented within and adjacent to the existing Toyota Arena in the City of Ontario, approximately 0.75 mile north of the project site. Multiple breeding pairs and juveniles were documented at this location between 2002 and 2016, including prior to and after the Toyota Arena was constructed in 2007.
- CNDDB Occurrence No. 636: A BUOW population was recorded north of E 4th Street, east of Richmond Place, south of Mission Park Drive, and west of Buffalo Avenue in the City of Rancho Cucamonga. This population was recorded approximately 1.5 miles northeast of the project site. Nesting BUOWs were observed in 2003. The population is presumed extirpated since the habitat appears to have been developed sometime between 2015 and 2016 based on aerial imagery.[5]
- CNDDB Occurrence No. 664: A BUOW breeding pair and juveniles were documented in 2003 near the intersection of Vanderbilt Street and S Auto Center Drive in the City of Ontario, approximately 0.9 mile southeast of the project site. Based on the record description, these individuals were evicted outside of the nesting season in 2003. The site was developed sometime in 2003 based on aerial imagery.[6] The remaining suitable habitat appears to be present directly to the northwest and south of the developed site.
- CNDDB Occurrence No. 1044: A BUOW population was recorded east of S Haven Avenue, south of E Francis Street, and west of Dupont Avenue in the City of Ontario. This population was recorded approximately 0.3 mile south of the project site. Seven BUOWS were recorded at this location in 2006. This population is presumed extirpated since the habitat appears to have been developed sometime between 2008 and 2009 based on aerial imagery,[7] although remaining suitable habitat appears to be present directly to the south and southeast of the developed site.

Survey Results

Suitable BUOW habitat was observed within the survey area during the habitat assessment conducted on March 3, 2022, including low-growing vegetation within the non-native grassland. Several burrows and burrow surrogates, such as vertical corrugated metal pipe storm drain risers, which could

[4] California Department of Fish and Wildlife. 2022. California Natural Diversity Database and Rarefind. California Department of Fish and Wildlife: Sacramento, California. Retrieved from: https://www.wildlife.ca.gov/Data/CNDDB/Maps-and-Data. Accessed August 1, 2022.

[5] Google Earth. 2022. Aerial imagery of 34.080104°, -117.551433°. Aerial Imagery from February 9, 2016. Retrieved from: https://earth.google.com/web/. Accessed August 19, 2022.

[6] Google Earth. 2022. Aerial imagery of 34.046098°, -117.545772°. Aerial Imagery from November 30, 2003. Retrieved from: https://earth.google.com/web/. Accessed August 19, 2022.

[7] Google Earth. 2022. Aerial imagery of 34.042164°, -117.571124°. Aerial Imagery from January 31, 2009. Retrieved from: https://earth.google.com/web/. Accessed August 19, 2022.

potentially be used by BUOWs, were observed throughout the survey area (Figure 4, *Suitable Burrows*). Suitable foraging habitat was observed within and adjacent to the survey area.

Two burrows (Nest Nos. 1 and 2), with breeding pairs and juveniles, were detected within the project site (Figure 5, *Nests and Alternate Burrows*). Six alternate burrows, (AB Nos. 1 through 6) were also noted throughout the project site (Figure 5), and these burrows were used by BUOWs for cover. A summary of observations is provided below:

- Nest No. 1 is an earthen burrow located on the west side of Carnegie Avenue and approximately 900 feet north of E Santa Ana Street. One adult BUOW pair was observed near the burrow entrance during the first survey. Two adult BUOWs and two juvenile BUOWs were noted during the second survey. No BUOWs were noted at this burrow during the first or fourth surveys.
- Nest No. 2 is an earthen burrow located on the west side of Carnegie Avenue and approximately 630 feet north of E Santa Ana Street. One adult BUOW was observed next to an earthen burrow during the second survey. Two adult BUOWs and four BUOW juveniles were observed during the third survey. No BUOWs were observed during the first or fourth surveys.
- AB No. 1 is an earthen burrow located on the west side of Carnegie Avenue and approximately 600 feet south of E Santa Ana Street. One adult BUOW was observed during the second survey. No BUOWs were observed at this burrow during the first, third, or fourth surveys.
- AB No. 2 is a vertical corrugated metal pipe storm drain riser located on the east side of Carnegie Avenue and approximately 400 feet north of E Santa Ana Street. One adult BUOW was observed near the storm drain riser during the third survey. No BUOWs were observed at this burrow during the first, second, or fourth surveys.
- AB No. 3 is an earthen burrow located approximately 650 feet to the southwest of the intersection of E Airport Drive and Carnegie Avenue. One BUOW individual was observed during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys.
- AB No. 4 is a vertical corrugated metal pipe storm drain riser located on the east side of Carnegie Avenue and approximately 840 feet north of E Santa Ana Street. Two BUOW individuals were observed during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys. BUOWs from Nest No. 1 are presumably using this burrow as an alternate burrow based on its proximity to the nest location and observation of individuals flushing from the nest to this burrow.
- AB No. 5 is a storm drain riser located on the west side of Carnegie Avenue and approximately 660 feet north of E Santa Ana Street. Four individuals were noted during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys. BUOWs from Nest No. 2 are presumably using this burrow as an alternate burrow based on its proximity to the nest location and observation of individuals flushing from the nest to this burrow.

- AB No. 6 is an earthen burrow located on the west side of Carnegie Avenue and approximately 600 feet south of E Santa Ana Avenue. Two BUOW individuals were observed during the fourth survey. Due to the timing of the breeding season and the maturity of the juveniles, only individuals were noted during the fourth survey, given juveniles and adults were difficult to differentiate. No BUOWs were observed at this burrow during the first, second, or third surveys.

OTHER SITE CONDITIONS

Wildlife photographers were noted in close proximity to Nest No. 1 during the second and third surveys (see Photograph 1 in Attachment A). An unknown person installed a perch consisting of a tree branch outside of Nest Nos. 1 and 2 (see Photographs 1 and 2 in Attachment A). There are numerous suitable raptor perches within and adjacent to the project site, which consists of tall ornamental trees and light poles. Raptors and/or sign of use (e.g., white wash) were observed on multiple suitable perching locations (Figure 6, *Observed Raptor Perches*).

CONCLUSION

Numerous suitable burrow and burrow surrogates were observed throughout the project site (Figure 4). Two burrows (Nest Nos. 1 and 2) with breeding pairs and juveniles were detected (Figure 5). Six alternate burrows (AB Nos. 1 through 6) were also noted (Figure 5), which were used by BUOWs for cover.

A take avoidance (pre-construction) survey is required within 14 days prior to ground disturbance ground-disturbing activities (i.e., earthwork, clearing, and/or grubbing), in accordance with CDFW Staff Report on BUOW Mitigation. If BUOW(s) are observed during the take avoidance survey, a BUOW Exclusion Plan and Mitigation Management Plan must be prepared and coordinated with CDFW prior to ground disturbance.[8]

If you have any questions regarding the information presented in this letter report, please contact Ezekiel Cooley at EzekielC@helixepi.com.

Sincerely,

Ezekiel Cooley
Regulatory Specialist/Biology Project Manager

Jessica Lee
Biologist/Assistant Biology Project Manager

Matthew Dimson
Biologist

Daniel Torres
Biologist

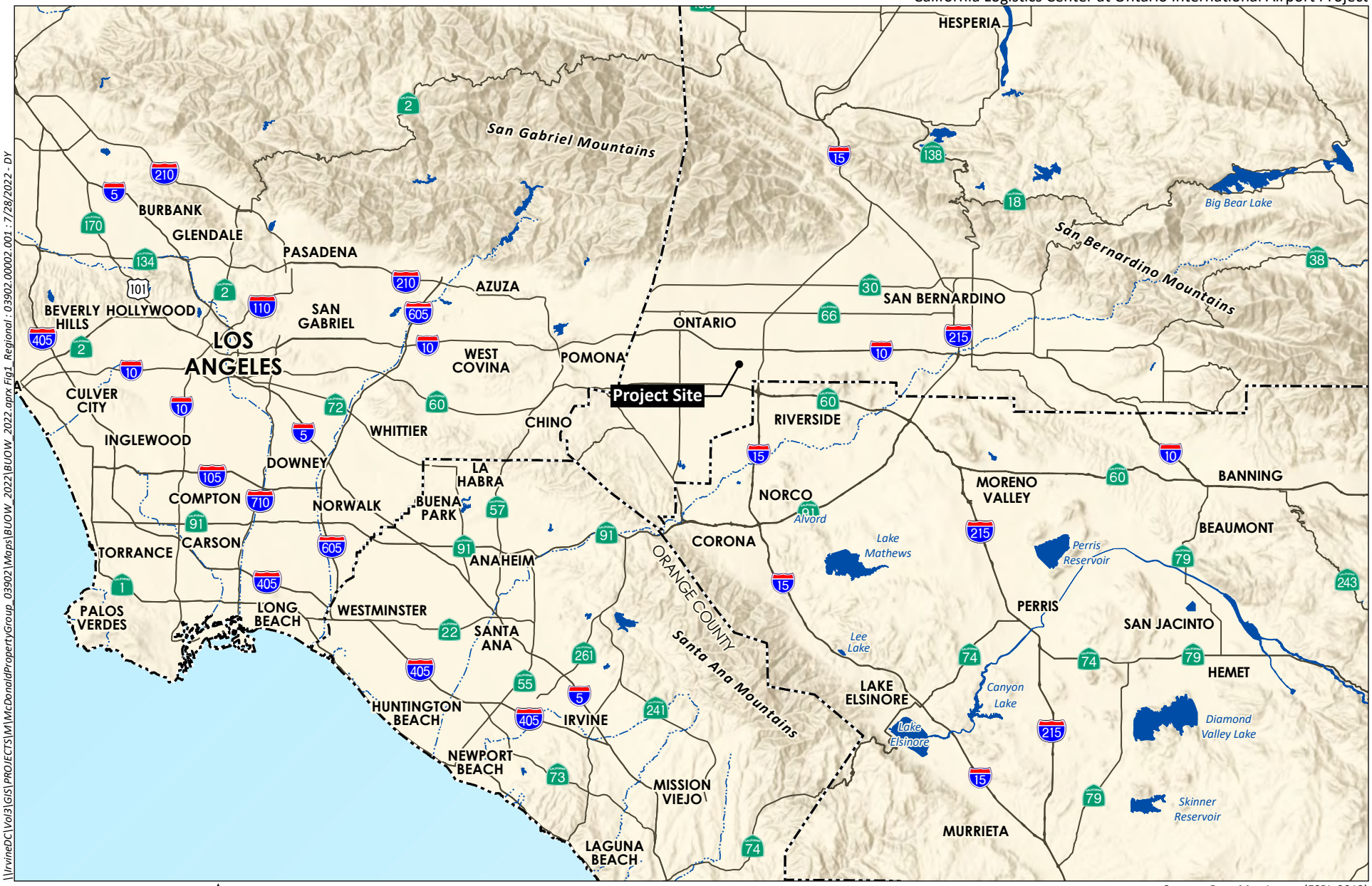
[8] California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. State of California Natural Resource Agency. March 7.

John Gardner
Biologist

Shawn Carroll
Biologist

Enclosures:

Figure 1:	Regional Location
Figure 2:	USGS Topography
Figure 3:	Aerial Photograph
Figure 4:	Suitable Burrows
Figure 5:	Nests and Alternate Burrows
Figure 6:	Observed Raptor Perches
Attachment A:	Representative Site Photos



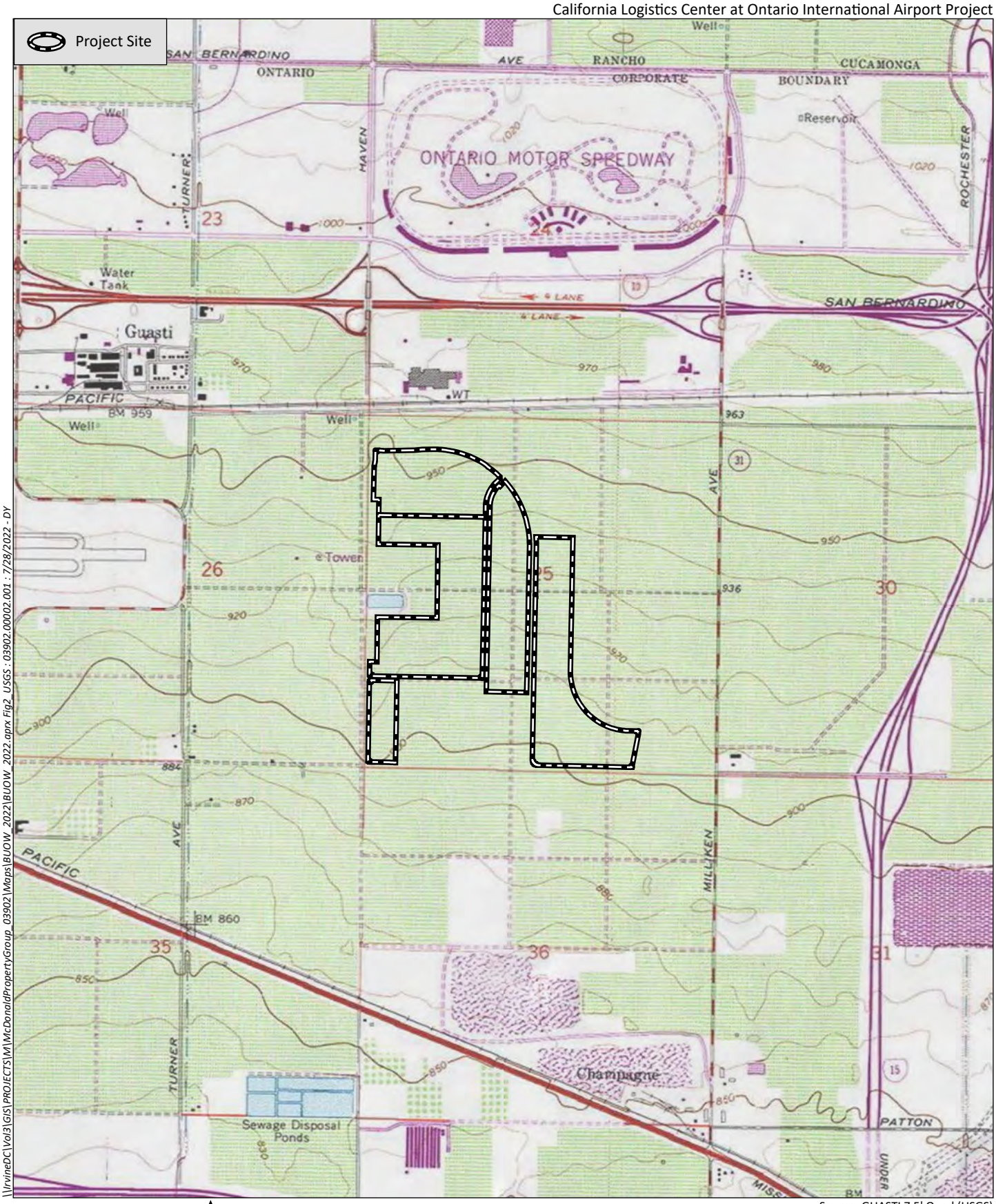
\\IrvineDC\Vol3\GIS\PROJECTS\M\McDonaldPropertyGroup_03902\Maps\BUOW_2022\BUOW_2022.aprx Fig1_Regional : 03902.00002.001 : 7/28/2022 - DY

Source: Base Map Layers (ESRI, 2013)

HELIX Environmental Planning

Regional Location

Figure 1



\\IrvineDC\Vol3\GIS\PROJECTS\M\McDonaldPropertyGroup_03902\Maps\BUOW_2022\BUOW_2022.aprx Fig2_USGS : 03902.00002.001 : 7/28/2022 - DY

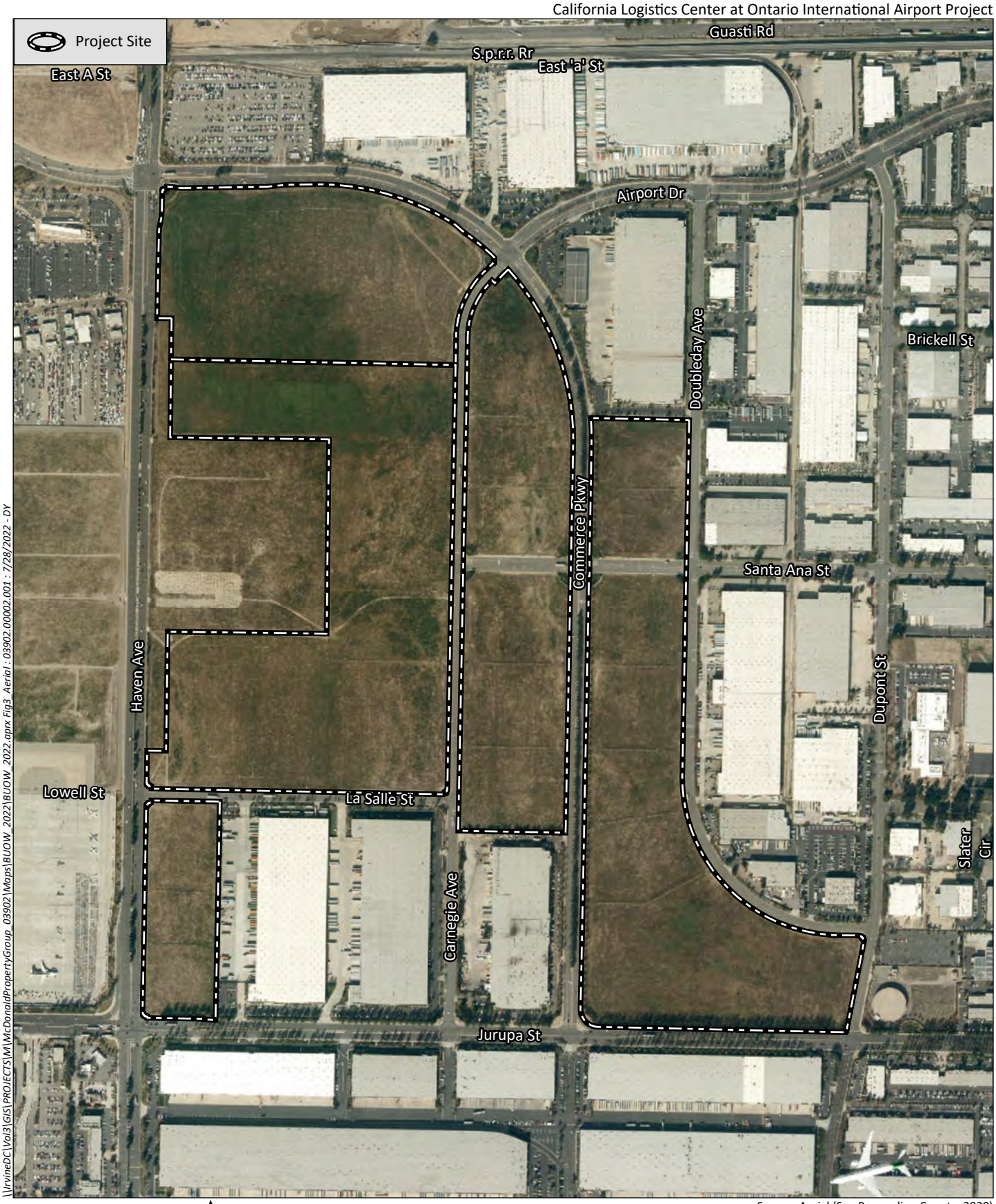
0 2,000 Feet

Source: GUASTI 7.5' Quad (USGS)

HELIX Environmental Planning

USGS Topography

Figure 2



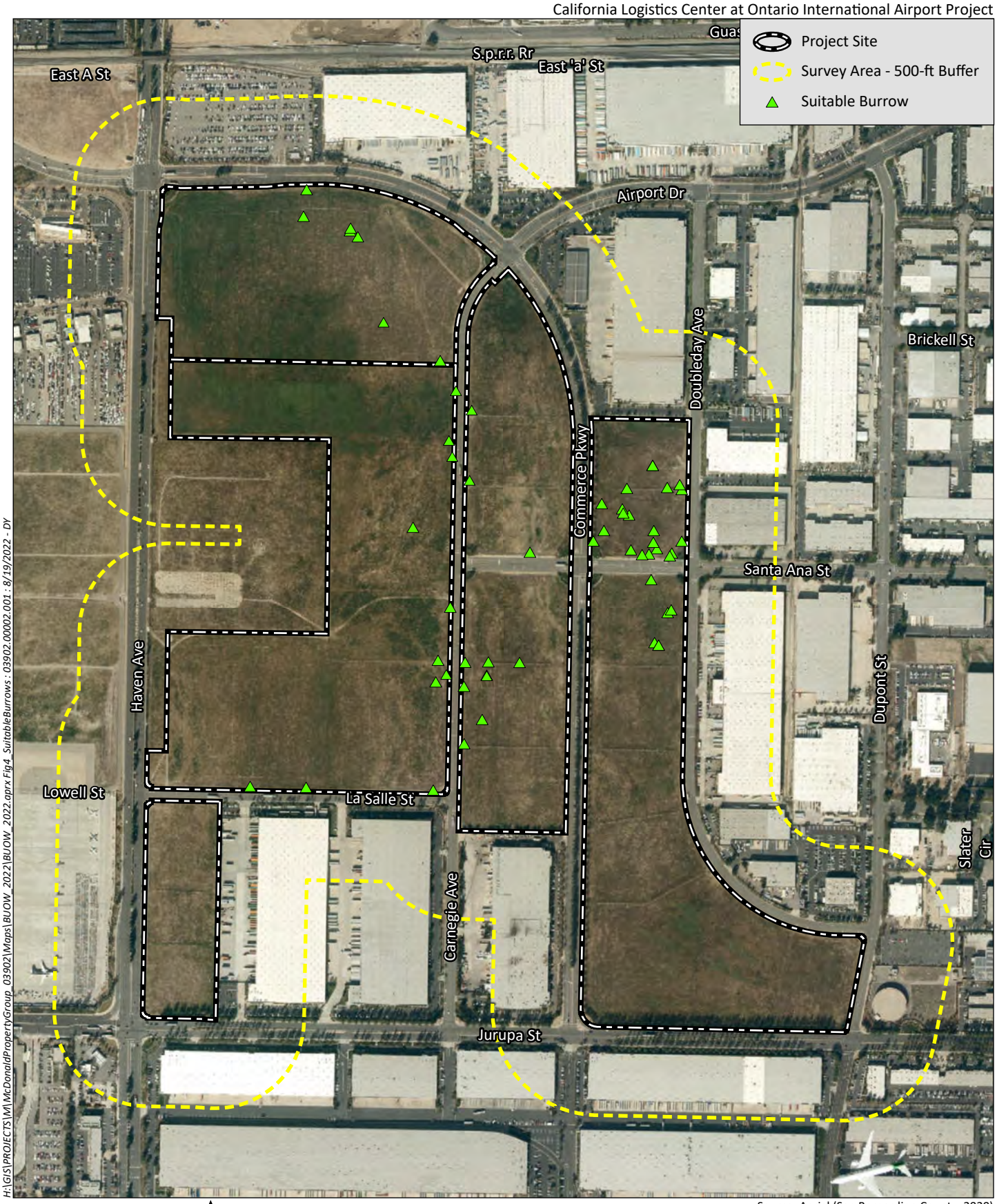
\\IrvineDC\Vol3\GIS\PROJECTS\M\McDonaldPropertyGroup_03902\Maps\BUOW_2022\BUOW_2022.aprx Fig3_Aerial : 03902.00002.001 : 7/28/2022 - DY

Source: Aerial (San Bernardino County, 2020)

HELIX Environmental Planning

Aerial Photograph

Figure 3

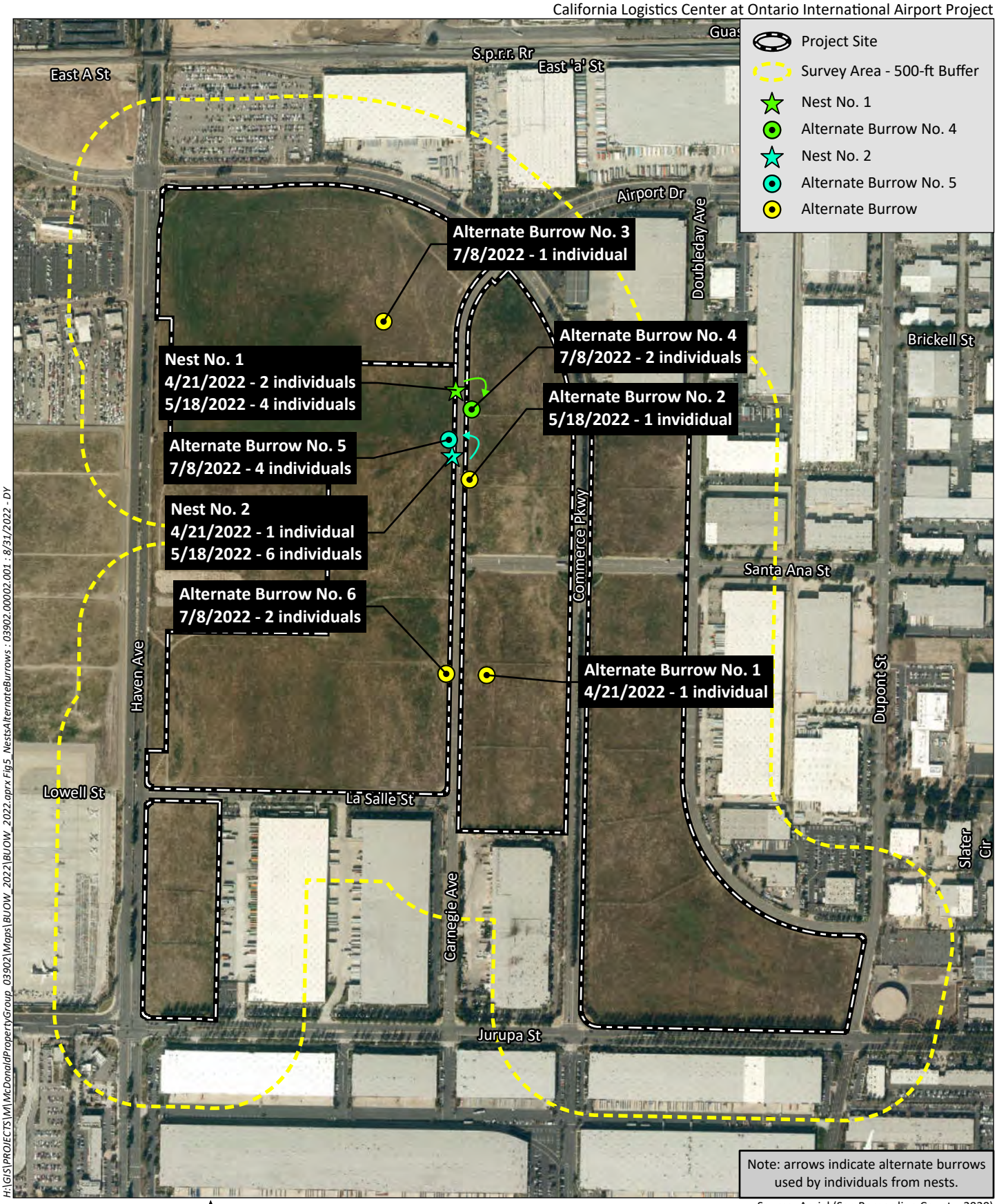


Source: Aerial (San Bernardino County, 2020)

HELIX Environmental Planning

Suitable Burrows

Figure 4



Source: Aerial (San Bernardino County, 2020)

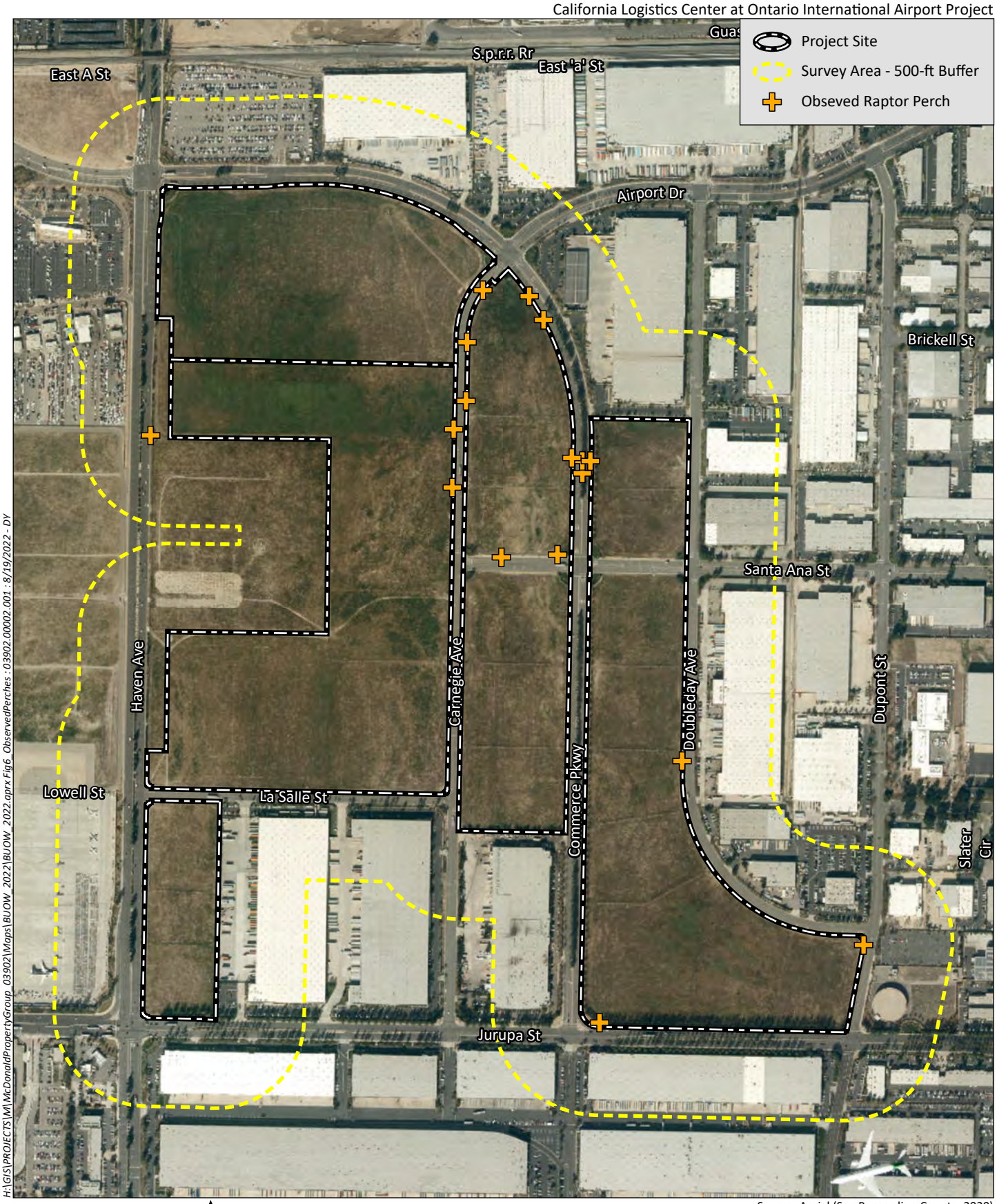
0 750 Feet

H:\GIS\PROJECTS\M\McDonaldPropertyGroup_03902\Maps\BUOW_2022\BUOW_2022.aprx Fig5_NestsAlternateBurrows : 03902.00002.001 : 8/31/2022 - DY

HELIX Environmental Planning

Nests and Alternate Burrows

Figure 5



Source: Aerial (San Bernardino County, 2020)

HELIX Environmental Planning

Observed Raptor Perches

Figure 6

Photograph 1: View of Nest No. 1, facing west. This burrow is an earthen burrow located on the west side of Carnegie Avenue, approximately 900 feet north of E Santa Ana Street. Successful breeding (two juveniles) were documented at this burrow. Photographers were observed near this burrow during the second and third surveys. Photograph taken on April 21, 2022.

Photograph 2: View of Nest No. 2, facing west. This burrow is an earthen burrow located on the west side of Carnegie Avenue, approximately 630 feet north of E Santa Ana Street. Successful breeding (four juveniles) was documented at this burrow. Photograph taken on May 18, 2022.

H:\PROJECTS\M\McDonaldPropertyGroup_03902\00002_OIALogisticsCenterBUOW_Reports\BUOW\Attachment A\Photos

Photograph 3: View of Alternate Burrow No. 4, facing east. This burrow consists of a vertical corrugated metal pipe storm drain riser located and is located on the east side of Carnegie Avenue, approximately 840 feet north of E Santa Ana Street. Photograph taken on May 18, 2022.

Photograph 4: View of Alternate Burrow No. 5, facing west. This burrow consists of a vertical corrugated metal pipe storm drain riser located on the west side of Carnegie Avenue, approximately 660 feet north of E Santa Ana Street. Photograph taken on Photograph taken on July 8, 2022.

FIRST YEAR FOCUSED SURVEY FOR DELHI SANDS FLOWER-LOVING FLY (*Rhaphiomidas terminatus abdominalis*) ON A 151-ACRE ONTARIO INTERNATIONAL AIRPORT AUTHORITY (GROUP 1 PROPERTIES) IN ONTARIO SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:

Ontario International Airport Authority
1923 E. Avion Street
Ontario, CA 91761

Prepared by:

Kendall H. Osborne
Osborne Biological Consulting
6675 Avenue Juan Diaz
Riverside, CA 92509

October 26, 2019

TABLE OF CONTENTS

	Section	Page
SUMMARY		1
INTRODUCTION	1.0	1
NATURAL HISTORY OF THE DSF	2.0	1
METHODOLOGY	3.0	3
DSF Survey Guidelines	3.1	3
Habitat Assessment Methods	3.2	3
Focused Surveys Methods	3.3	4
RESULTS	4.0	7
Habitat Assessment Results	4.1	7
Survey Results	4.2	8
Existing Environment and Community	4.3	8
Adjacent Lands	4.3.1	8
Topography	4.3.2	8
Soils	4.3.3	8
Vegetation	4.3.4	8
Insect Community	4.3.5	9
CONCLUSIONS	5.0	9
REFERENCES	6.0	9
FIGURES	7.0	10
APPENDIX	8.0	17
Appendix A: plant and insect species		17
Table A1. Plant species		17
Table A2. Insect species		18
Appendix B: Correspondence with USFWS		
Field notes		21

FIRST YEAR FOCUSED SURVEY FOR DELHI SANDS FLOWER-LOVING FLY (*Rhaphiomidas terminatus abdominalis*) ON A 151-ACRE ONTARIO INTERNATIONAL AIRPORT AUTHORITY (GROUP 1 PROPERTIES) ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for

Ontario International Airport Authority
1923 E. Avion Street
Ontario, CA 91761

Prepared by

Kendall H. Osborne
Osborne Biological Consulting
6675 Avenue Juan Diaz
Riverside, CA 92509

The undersigned certify this report to be a complete and accurate account of the findings and conclusions of a first year, 2019 focused survey for Delhi Sands Flower-loving Fly (*Rhaphiomidas terminatus abdominalis*) on the 151-acre Ontario International Airport Authority (Group 1) properties, Ontario, San Bernardino, California.

Ken H. Osborne
6675 Avenue Juan Diaz
Riverside, CA 92509

Rick Rogers
8640 Hillrose St.
Apt. I-10
Sunland, CA 91040

David K. Faulkner
2321 Gladwick St.
Rancho Dominguez, CA 90220

Eric Renfro
22909 Pennsylvania Ave.
Torrance, CA 90501

October 26, 2019

SUMMARY

The Ontario International Airport Authority has requested a first year focused survey to assess the presence or absence of Delhi Sands Flower-Loving Fly (DSF, *Rhaphiomidas terminatus abdominalis*) for 151 acres (Group 1, with 143 acres of habitat suitable for DSF) of the Ontario International Airport Northwest Quadrant Demolition project in Ontario, California. To determine presence or absence of DSF on the study area, a series of at least 83 site visits totaling at least 274.56 field hours, were conducted on the survey area from July 1 to September 20, 2019.

A habitat evaluation conducted on March 13, 2019 (Osborne 2019) found all parcels investigated for the project area are mapped with Delhi sands (Woodruff 1980). These parcels all feature soil and ecological conditions *Suitable* for potential DSF. The habitat evaluations determined 143 acres of potential DSF habitat over the study area.

Delhi Sands Flower-Loving Fly was not observed on the Group 1 properties during the course of this first year 2019 field season. One special status animal species, Burrowing Owl (*Athene cunicularia*) was occasionally encountered in the course of this survey.

1.0 INTRODUCTION

This report presents the methods and results of a Delhi Sands Flower-Loving Fly (DSF, *Rhaphiomidas terminatus abdominalis*) focused survey for a 151-acre Group 1 properties, in Ontario, San Bernardino. The DSF was listed as an endangered species by the U.S. Fish and Wildlife Service on September 23, 1993 (USFWS 1993).

The Group 1 properties are located east of Haven Avenue, south of E. Airport Drive, and north of Jurupa Street as shown on the accompanying maps. And can be found on the Guaste, California USGS 7.5-minute quadrangle map, Township 2 South, Range 7 West, in Section 1 (Figures 1 and 2) .

2.0 NATURAL HISTORY OF THE DELHI SANDS FLOWER-LOVING FLY

Delhi Sands Flower-loving fly belongs to a genus of flies (*Rhaphiomidas*) commonly known as flower loving flies. There are more than 30 species of these flies, distributed across the southwestern United States and northern Mexico. These flies are huge by the standards set by most flies – with size among the species ranging from approximately 1.5 centimeters up to 3, and even 4 centimeters, usually gray, tan, rust or yellow in color. All species of *Rhaphiomidas* are associated with rather arid, sandy habitats, with most species living on dune systems of inland desert valleys, rivers, deltas, and beach strands. A few species are found in sandy washes, alluvial benches and remnant glacial moraines. Many species of these flies often hover before flowers in the manner of hummingbirds, using a long, thin, tubular proboscis (mouth-part), with which the flies probe for nectar – hence a traditional name "giant flower-loving flies". Smaller flies of the family Apioceridae, once considered very closely related to *Rhaphiomidas* were formerly called "flower-loving flies".

The DSF is only known to occur in association with Delhi sand deposits, presumably occupied the once extensive dune system of the upper Santa Ana River Valley, including portions of what is now the City of Colton, west through portions of the City of Ontario, and south to the Santa Ana River. Today, DSF exists on only a few disjunct sites (USFWS 1997) within a radius of about eight miles in southwestern San Bernardino and northwestern Riverside Counties (Colton, Rialto, Fontana, and Ontario). More than 95 percent of known DSF habitat was considered eliminated by development, agriculture and other land management practices by 1993 (Smith 1993, USFWS 1996 *in* Kingsley 1996), however, this proportion is now nearer 98 to 99% due to these ongoing processes. Many of the last remaining fragments of DSF habitat are currently under pressure by land management efforts such as heavy disking, irrigation, manure dumping, and gravel dumping. There is presently an estimated 1,200 acres of habitat that can support this species (USFWS 1997), but this estimate likely includes lands needing extensive habitat restoration.

Adult DSF flight period is typically August and September, when individual adults emerge, reproduce and die. The adult life span of an individual DSF lasts for a few days and adults do not live beyond the flight period (Kiyani 1995). Adult DSF are highly mobile, agile fliers. Male DSF are frequently seen flying low through habitat, using apparently random, circuitous paths around and between shrubs in search of females. Such "cruising" behavior often covers areas on the scale of 1000 square meters in the time span of a minute. Alternatively, male DSF are often seen flying about an open patch of ground (ca 100 square meters) such as along a dirt path or dune blow-out area. Here, males may repetitively land and rest on one or another object (such as small dried plants) in the area, and such rests are interrupted by periods of patrolling flight (apparently territorial) about the spot. When alarmed, these insects tend to fly rapidly in more or less a straight line – often covering distances of 100 meters in less than 6 seconds. Adult DSF are known to nectar at flowers of California buckwheat and California croton.

DSF, like other *Rhaphiomidas* species, appears to have an annual life cycle (because of the annual flight). However, it has been widely believed that the underground larval/pupal stage may persist for additional years, depending upon various environmental factors such as annual rainfall, food availability and weather conditions during the flight season (many desert *Rhaphiomidas* species do not appear after a drought year and often, substantial flights occur only sporadically over the years). The biology of *Rhaphiomidas trochilus* is likely informative of *Rhaphiomidas* species in general and DSF in particular. Based on observations of captive *R. trochilus* larvae (Osborne and Ballmer 2014) it is reasonable to conclude that they are mobile opportunistic predators of soft-bodied, sand-inhabiting insects. Larvae from Sand Ridge, Kern County, CA were maintained in captivity for several months, during which they burrowed actively through sand maintained with slight moisture content (similar to the damp sand where they were found). They fed on larvae of a scarab beetle (Scarabaeidae) and an unidentified beefly (Diptera: Bombyliidae), which were also recovered from Sand Ridge, and larvae of paper wasps (*Polistes* sp.) which were removed from their nests and buried in the sand. Captive larvae grew and molted after feeding; but, when not fed for extended periods of time, they molted again – losing weight and size in the process. Some larvae were observed to repeat the growth and "shrinkage" cycle multiple times. One larva survived about 17 months in captivity; because it was captured nine months after the most recent flight season, it was at least two years old at time of death. This larva molted four times while undergoing five cycles of growth and shrinkage driven by variable food availability. Its final dry

weight was slightly smaller than the typical dry weight of an adult male *R. trochilus*. The ability of *R. trochilus* larvae to molt down during times of scarce food resources could allow an extended and indeterminate larval growth period, but with maturation and appearance of adults always during summer months. This may also explain the common observations that populations of various *Rhaphiomidas* species apparently exhibit little or no adult emergence in some years (especially years of below normal precipitation).

The brief adult life span and active mate-locating behavior of DSF males (typical of all *Rhaphiomidas* species) suggests that relatively high population density and/or nearly synchronous adult emergence may be crucial to survival of populations. Protracted *Rhaphiomidas* larval biology and staggered (across years) adult emergence must enhance population momentum and cross generational gene flow, and the requirement of abundant and diverse insect prey on which larvae develop – all explain why DSF populations appear as long-term entities (persisting for decades) associated with ecologically intact dune habitats.

3.0 METHODOLOGY

3.1 DSF Survey Guidelines

Interim General Survey Guidelines for the DSF have been suggested by the USFWS (1996). By following these guidelines, DSF presence or absence survey results may be deemed acceptable to the USFWS (rejection of survey results may result where the guidelines are not followed). The guidelines indicate that focused DSF surveys should be conducted wherever Delhi sands are present within the presumed range of DSF, twice weekly (two days per week) during the single annual flight period (usually from July 1 to September 20). Recent early season DSF discoveries lead the USFWS to recommend a survey season from July 15 to September 20 for 2003 and a survey season from July 1 to September 20 from the year 2004. Weather conditions must be suitable for DSF activity at the times survey work is pursued. The DSF is generally active when daytime temperatures exceed 80 degrees Fahrenheit (°F), but may fly with slightly cooler temperatures in bright sunlight.

3.2 Habitat Assessment Methods

On March 13, 2019, Osborne visited the project area in order to investigate habitat suitability for the DSF. Osborne examined the subject survey area to rate its potential to support DSF. Photographs were taken of the survey area from various perspectives. Habitat suitability for DSF was evaluated using indicators of potential DSF habitat including: presence and abundance of loose, unconsolidated Delhi sands with low organic contamination; degree of habitat disturbance indicated by plant species composition and disposition of soil surface, presence and abundance of native sand associated plants such as *Croton californicus*, *Heterotheca grandiflora, Eriogonum thurberi* and *Eriogonum fasciculatum*. These plants are actually more an indication of relative disturbance regimen – conditions with lesser disturbance being of higher quality for DSF. Presence and abundance of Delhi sands associated insects such as *Apiocera convergens, Apiocera chrysolasia* and (to a lesser extent) *Nemomydas pantherinus*, noted throughout the course of focused surveys, serve as further indicators of DSF habitat quality. Potential DSF habitat has been

further evaluated on the basis of overall insect diversity and abundance, particularly with respect to sand associated predators and parasitoids.

In the course of previous work Osborne (2003, Osborne et al. 2003) developed a means of rating habitat on sites for potential to support DSF, rating areas within any site based on a scale of 1 to 5, with 5 being the best quality and most suitable habitat based on the following scheme:

1. Developed areas, non-Delhi sands soils with high clay, silt, and/or gravel content. Delhi sands extensively and deeply covered by dumping of exotic soils, rubble, trash, manure, or organic debris. *Unsuitable.*

2. Delhi sands are present but the soil characteristics include a predominance of exotic soils such as alluvial materials, or predominance of other foreign contamination as gravels, manure, or organic debris. Severe and frequent disturbance (such as a maintenance yard or high use roadbed). *Very Low Quality.*

3. Moderately contaminated Delhi sands. Delhi sands with moderate to high disturbance (such as annual disking). Sufficient Delhi Sands are present to prevent soil compaction (related to contamination by foreign soils). Some sandy soils exposed on the surface due to fossorial animal activity. *Low Quality.*

4. Abundant clean Delhi Sands with little or no foreign soils (such as alluvial material) present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. May represent high quality habitat with mild or superficial disturbance. *Moderate Quality*

5. Sand dune habitat with clean Delhi Sands. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. Sand associated plant and arthropod species may be abundant. *High Quality*

It should be noted that habitat qualities often vary spatially within a site so that conditions on a site fall within a range of qualities. Further, overall habitat quality is affected by the overall habitat area on a site, such that very small areas diminish the overall habitat value of a site. It is also important to note that suitable habitats, even rated as high quality for DSF, are very rarely actually occupied by DSF. These ratings are more informative on mitigation and conservation measures in the event that DSF is found on any particular site. Use of this habitat rating system is somewhat subjective and best undertaken by a biologist who has extensive experience with *Rhaphiomidas* species. While investigating the survey area, Osborne subjected the site to an analysis of this kind so as to give a general estimate of overall habitat conditions relevant to DSF potential.

3.3 Focused Survey Methods

Each portion of suitable habitat (for DSF) was surveyed on 24 dates, with the overall survey effort involving four biologists conducting at least 83 site visits totaling at least 274.56 field hours, with site visits made from July 1, to September 20, 2019. Focused DSF surveys were conducted by

Kendall H. Osborne, Permit # TE-837760-10, Rick Rogers (under Osborne's permit), David K. Faulkner # TE-838743-6, and Eric S. Renfro # TE-142436-2. Following the USFWS Interim General Survey Guidelines, we surveyed all portions of the survey area at least twice a week, between the hours of 1000 and 1400 (Table 1). Due to the large acreage of the survey area, and four-hour (50 acre limit) of survey effort allowed for any given biologist, the survey area was divided into portions (1A, 1B, and 1C) in order to facilitate survey logistics and scheduling. These portions are noted in Table 1, below, as well as on daily field notes presented in the Appendix. A map was developed showing survey areas (including other surveys for the OIAA) showing acreages and allotted survey times meeting the USFWS protocol (Figure 4). The survey protocol, as set forth in the Interim General Guidelines for the Delhi Sands flower-loving fly survey, is designed to maximize the validity of a presence/absence determination.

Osborne photographed the property from several perspectives to document existing conditions. Notes were taken on vegetative cover and plant species composition, abundance and diversity and species composition of insects and other animals, soil types, degree and nature of disturbance, surface cover, organic content, compaction, current land management practices, existing development, and conditions of surrounding vicinity and proximity of other DSF populations.

Table 1. Dates, personnel, times and conditions for focused DSF survey work.

Date	Portion	Biologist	Hours	Weather Conditions
7/1/2019	1A	R. Rogers	1000-1400	clear, winds 2-5 mph, 90-95° *F.*
7/2/2019	1C	R. Rogers	1000-1325	clear, winds 1-4 mph, 80-90° *F.*
7/2/2019	1B	K. Osborne	1000-1400	clear, winds 2-6 mph, 78-90° *F.*
7/4/2019	1A	E. Renfro	1000-1400	clear, winds 2-4 mph, 78-86 ° *F.*
7/6/2019	1B	E. Renfro	1000-1400	clear, winds 2-5 mph, 73-88° *F.*
7/7/2019	1C	R. Rogers	1000-1325	50% patchy clouds, clearing, winds 1-4 mph, 75-80° *F.*
7/8/2019	1A	K. Osborne	1000-1355	100% overcast to clear, winds 0-3 mph, 70-80° *F.*
7/8/2019	1B	R. Rogers	1000-1400	100% overcast, clearing, winds 0-5 mph, 73-78° *F.*
7/8/2019	1A	E. Renfro	1117-1131	clear, winds 2-4 mph, 80° *F.*
7/9/2019	1C	R. Rogers	1000-1325	5% patchy clouds, clearing, winds 1-4 mph, 80-87° *F.*
7/10/2019	1A	E. Renfro	1000-1332	clear, winds 2-3 mph, 78-84° *F.*
7/11/2019	1A	E. Renfro	1215-1243	clear, winds 2-3 mph, 92-94° *F.*
7/12/2019	1C	E. Renfro	1036-1400	clear, winds 1-4 mph, 89-99° *F.*
7/13/2019	1B	D. Faulkner	1000-1400	clear, winds 1-6 mph, 84-100° *F.*
7/15/2019	1C	E. Renfro	1037-1400	clear, winds 2-4 mph, 88-99 ° *F.*
7/16/2019	1B	E. Renfro	1000-1400	clear, winds 2-6 mph, 86-96° *F.*
7/17/2019	1A	R. Rogers	1000-1400	clear, winds 0-8 mph, 83-94 ° *F.*
7/18/2019	1C	D. Faulkner	1000-1229	clear, winds 1-3 mph, 86-88° *F.*
7/18/2019	1B	R. Rogers	1000-1400	clear, winds 1-8 mph, 81-93° *F.*
7/18/2019	1C	D. Faulkner	1334-1400	clear, winds 5-7 mph, 94° *F.*
7/20/2019	1A	E. Renfro	1000-1400	clear, winds 1 mph, 74-90° *F.*
7/22/2019	1A	R. Rogers	1000-1400	45% - 75% patchy clouds, winds 0-5 mph, 80-94° *F.*
7/22/2019	1A	R. Rogers	1000-1400	75% - 45% patchy clouds, winds 0-5 mph, 80-94° *F.*
7/22/2019	1B	D. Faulkner	1000-1400	80% - 20% patchy clouds, winds 0-3 mph, 84-

				100° *F.*
7/23/2019	1C	R. Rogers	1038-1400	40% - 50% patchy clouds, winds 0-4 mph, 97-100° *F.*
7/24/2019	1A	E. Renfro	1000-1400	clear, winds 1-4 mph, 93-104° *F.*
7/24/2019	1B	R. Rogers	1012-1400	10% - 20% patchy clouds, 0-5 mph, 92-100° *F.*
7/25/2019	1C	E. Renfro	1037-1404	overcast, clearing to 60%, winds 1-4 mph, 85-94° *F.*
7/25/2019	1B	K. Osborne	1158-1210	100% overcast, calm, 87° *F.*
7/30/2019	1A	R. Rogers	1000-1400	5% patchy clouds, winds 0-3 mph, 81-95° *F.*
7/31/2019	1C	R. Rogers	1000-1325	clear, winds 0-3 mph, 83-92° *F.*
7/31/2019	1B	D. Faulkner	1000-1400	clear, winds 1-6 mph, 79-92° *F.*
8/2/2019	1B	E. Renfro	1000-1400	clear, winds 2-4 mph, 82-98° *F.*
8/3/2019	1A	D. Faulkner	1000-1400	0 - 30% patchy clouds, winds 1-8 mph, 87-103° *F.*
8/3/2019	1B	R. Rogers	1000-1400	clear- 5% patchy clouds, winds 0-5 mph, 90-99° *F.*
8/3/2019	1C	E. Renfro	1037-1402	clear, winds 2-5 mph, 87-101° *F.*
8/5/2019	1A	R. Rogers	1000-1400	clear, winds 0-4 mph, 80-88° *F.*
8/6/2019	1B	R. Rogers	1000-1400	20% - 25% patchy clouds, winds 0-3 mph, 86-100° *F.*
8/7/2019	1A (part)	K. Osborne	1030-1215 1220-1245	10% - 15% clouds, winds 0-2 mph, 81-93° *F.*
8/7/2019	1C	R. Rogers	1038-1400	20% - 25% patchy clouds, winds 1-4 mph, 82-84° *F.*
8/9/2019	1A	K. Osborne R. Rogers	1215-1400 1343-1400	clear, winds 0-6 mph, 94-96° *F.*
8/10/2019	1B	K. Osborne	1000-1400	clear, winds 0-4 mph, 79-90° *F.*
8/11/2019	1C	K. Osborne	1035-1400	clear, winds 0-6 mph, 79-87° *F.*
8/12/2019	1A	R. Rogers	1000-1400	clear, winds 0-4 mph, 89-94° *F.*
8/13/2019	1C	R. Rogers	1038-1400	clear, winds 1-5 mph, 92-95° *F.*
8/14/2019	1A	D. Faulkner	1000-1400	clear, winds 0-5 mph, 87-101° *F.*
8/14/2019	1B	R. Rogers	1000-1400	clear, winds 2-4 mph, 84-100° *F.*
8/16/2019	1B	K. Osborne	1120-1220	clear, winds 0-2 mph, 90-95° *F.*
8/17/2019	1C	D. Faulkner	1000-1400	clear, winds 0-4 mph, 75-86° *F.*
8/17/2019	1B (Part)	K. Osborne	1008-1308	clear, winds 0-2 mph, 74-83° *F.*
8/19/2019	1A	R. Rogers	1000-1400	clear, winds 0-5 mph, 82-91° *F.*
8/20/2019	1B	R. Rogers	1000-1400	clear, winds 0-6 mph, 93-100° *F.*
8/20/2019	1C	D. Faulkner	1040-1405	clear, winds 1-3 mph, 87-93° *F.*
8/21/2019	1A	R. Rogers	1000-1400	clear, winds 0-6 mph, 94-98° *F.*
8/22/2019	1C	R. Rogers	1038-1400	clear, winds 1-7 mph, 90-96° *F.*
8/23/2019	1B	D. Faulkner	1000-1400	90% overcast, clearing, winds 0-3 mph, 72-85° *F.*
8/26/2019	1C	R. Rogers	1038-1400	clear, winds 0-5 mph, 95-96° *F.*
8/27/2019	1A	D. Faulkner	1000-1400	clear, winds 2-7 mph, 82-97° *F.*
8/28/2019	1B	R. Rogers	1000-1400	clear, winds 0-7 mph, 90-94° *F.*
8/29/2019	1A	R. Rogers	1000-1400	clear, winds 0-4 mph, 90-95° *F.*
8/30/2019	1C	E. Renfro	1000-1325	clear, winds 1-2 mph, 88-95° *F.*
8/30/2019	1B	D. Faulkner	1000-1400	clear, winds 0-6 mph, 81-96° *F.*
9/2/2019	1C	K. Osborne	1058-1118	5% - 10% patchy clouds, winds 0-2 mph, 85-86° *F.*
9/2/2019	1C	R. Rogers	1135-1400	25% patchy clouds, winds 1-7 mph, 98-99° *F.*
9/3/2019	1A	D. Faulkner	1000-1400	clear, winds 1-8 mph, 90-99° *F.*
9/3/2019	1B	R. Rogers	1000-1400	25% - 45% patchy clouds, winds 1-5 mph, 88-

				92° *F.*
9/3/2019	1A	K. Osborne	1204-1236	clear, winds 2-4 mph, 91-92° *F.*
9/5/2019	1A	R. Rogers	1000-1400	40% - 65% patchy clouds, winds 1-3 mph, 84-92° *F.*
9/6/2019	1B	R. Rogers	1000-1400	clear, winds 0-7 mph, 83-95° *F.*
9/6/2019	1C	D. Faulkner	1035-1400	clear, winds 1-7 mph, 88-97° *F.*
9/10/2019	1B	R. Rogers	1000-1400	50% - 90% patchy clouds, winds 0-5 mph, 70-88° *F.*
9/10/2019	1C	K. Osborne	1035-1400	100% overcast, clearing, winds 0-5 mph, 73-76° *F.*
9/11/2019	1A	R. Rogers	1000-1400	15% patchy clouds, clearing, winds 1-5 mph, 79-83° *F.*
9/13/2019	1B	R. Rogers	1000-1400	clear, winds 0-3 mph, 92-98° *F.*
9/13/2019	1C	D. Faulkner	1035-1400	clear, winds 1-6 mph, 88-100° *F.*
9/15/2019	1A	R. Rogers	1000-1400	90% - 20% patchy clouds, winds 0-3 mph, 78-85° *F.*
9/16/2019	1C	K. Osborne	1050-1400	5% - 10% patchy clouds, winds 0-6 mph, 86-87° *F.*
9/17/2019	1B	R. Rogers	1000-1400	clear, winds 0-4 mph, 82-89° *F.*
9/18/2019	1A	R. Rogers	1000-1400	clear, winds 0-5 mph, 75-85° *F.*
9/18/2019	1C (part)	K. Osborne	1215-1232	clear, calm, 80-81° *F.*
9/19/2019	1B	R. Rogers	1000-1400	clear, winds 1-4 mph, 74-77° *F.*
9/20/2019	1A	R. Rogers	1000-1400	clear, winds 1-4 mph, 74-82° *F.*
9/20/2019	1C	D. Faulkner	1035-1400	clear, winds 1-4 mph, 72-82° *F.*

4.0 RESULTS

4.1 Habitat Assessment Results

Department of Agriculture, Soil Conservation Service map (Woodruff 1980) and associated web based resources (https://casoilresource.lawr.ucdavis.edu/gmap/) show all portions of the project area mapped with Delhi fine sand soils (Figure 3). With the exception of limited street-side areas with exotic landscaped vegetation, and limited marginal portions with graveled drives, the project areas are open fields with vegetation dominated by exotic grasses and forbs (especially *Hordeum*, *Bromus*, *Amsinkia*, *Malva*, and *Sisymbrium*). Plant species associated with sandy soils are present in spare or low abundance, but include *Ambrosia acanthicarpa*, *Eriogonum gracile*, *Camissonia bistorta*, and *Camisonia strigosa*. The project areas appear unchanged since at least 1994 to the present, and have existed as exotic grass/forblands routinely mowed (Google Earth). Delhi sands are sporadically exposed by fossorial animals and paths through the majority of the area, demonstrating the wide distribution of sands across the survey area (as mapped by Woodruff 1980). In all areas investigated, where exotic annual (springtime) vegetation (covering the soil surface) was removed, Delhi sand soils were exposed. These areas constituting the majority of the investigated project areas were rated as *Low* to *Moderate Quality* habitat for DSF and are thus considered as approximately 142.32 acres of *Suitable* habitat for DSF. Street-side exotic landscaping is present in project areas along South Commerce Parkway, and along a southern portion of South Haven Avenue, amounting to an approximate total of 8.66 acres determined to be *Unsuitable* habitat for DSF. An additional 0.02 acres of graveled drive is present along the western edge of the extreme southwestern portion of this project area, also *Unsuitable* for DSF.

During the course of summer surveys, annual vegetation had dried, or been mowed, and abundant gopher activity had exposed the underlying sandy soils. Summertime field observations lead us to upgrade our overall rating of habitat conditions for potential DSF on these lands to include some *Low Quality* habitat but primarily *Moderate* to *High Quality* habitat for DSF.

4.1 Survey Results

Delhi Sands Flower-Loving Fly (DSF, *Rhaphiomidas terminatus abdominalis*) was not observed on the subject site during the course of this survey. One special status animal species, Burrowing Owl (*Athene cunicularia*) was occasionally encountered in the course of this survey. Lists of plants and insects observed during the course of the survey are given in the appendix.

Some of the consulting biologists on this project had concern about the mowing of the survey area late into our season. We are aware that these fields are mowed on a regular basis and have been for at least the last twenty years (Osborne, personal observations). The fields on and around the airport are routinely mowed, often multiple times a year, not only to reduce fuel load, but to deter presence of abundant birds. We understand that an abundance of birds, and particularly large birds such as raptors on airport flight paths, present a hazard to aircraft. This was dramatically demonstrated in January of 2009, when U S Airways flight 1549 ingested a flock of Canada geese and was forced to land without engine power into the Hudson River, miraculously intact. Nevertheless, we all noted the profound and immediate decline in insect abundance following mowing events.

4.3 Existing Environment and Community

4.3.1 Adjacent lands

The survey area is generally bounded on the west by undeveloped lands similar to those on the site, and otherwise generally surrounded (north, east, south) by commercial/industrial development.

4.3.2 Topography

The site is generally flat with elevation on the site ranging from approximately 950 to 900 feet, with the gentle slope diminishing to the south.

4.3.3 Soils

Woodruff (1980) indicated the site to consist of Delhi fine sands. These sands are evident throughout the site.

4.3.4 Vegetation

The survey area is generally characterized as open fields supporting exotic annual vegetation dominated by *Hordeum*, *Bromus*, *Amsinkia*, *Malva*, *Salsola*, *Hirschfeldia*, and *Sisymbrium*. Plant

species commonly associated with Delhi sands and potential DSF habitat are abundant, and include annual bursage (*Ambrosia acanthicarpa*), telegraphweed (*Heterotheca grandiflora*), slender buckwheat (*Eriogonum gracile*), California croton (Croton califonicus), and golden crownbeard (*Verbesina encelioides*). No special status plant species (species of concern) were encountered in the course of this survey.

Figures 5-8 present representative views of the survey site and habitats. Figure 9 provides a key as to where on the site these photographs were taken. Table 1 (Appendix A) provides a list of plant species encountered on the survey site.

4.3.5 Insect Community

During site visits at least 150 insect species (counting only large and conspicuous insects) were observed. The insect community encountered on the survey area was typical of ecological communities occurring on Delhi sands. Insects included Mydidae (*Nemomydas*), Apioceridae, Asilidae, Bombyliidae, Mutilidae, Pompilidae, Mymerliontidae, Crabionidae, and Sphecidae. A list of most insect species observed is presented in the appendix (Table 2, Appendix A).

5.0 CONCLUSIONS

Our single season of survey for DSF does not provide a definitive conclusion as to DSF presence or absence. Due in part to the tendency of DSF to emerge on and off over the years, The USFWS recommends two consecutive years of protocol survey with negative results before making a determination of DSF absence.

6.0 REFERENCES

Hickman, J.C. (ed.). 1993. The Jepson manual: Higher plants of California. University of California Press. Berkeley, California.

Munz, P.A. 1974. A flora of southern California. University of California Press, Berkeley, California.

Osborne, K. H. 2019. Habitat conditions for Delhi Sands Flower-loving Fly on a 151 acre portion (Group 1) of the Ontario International Airport Northwest Quadrant Demolition project, Ontario. Submitted to Helix Environmental Planning, Inc. on behalf of the Ontario International Airport Authority.

Osborne, K. H. 2003. *Delhi Sands Flower-loving fly Habitat Assessment for the Hermosa Cemetery, Colton.* Prepared for Inland Memorial Cremations and Burial. Submitted to the U.S. Fish and Wildlife Service, CA.

Osborne, K. H., G. R. Ballmer, and T. McGill. 2003. *DSF Habitat Assessment for the Proposed Mary Vagle Conservation Area.* Prepared for the City of Fontana. Submitted to the U.S. Fish and Wildlife Service, CA.

Rogers, R. and M. Mattoni. 1993. Observations on the natural history and conservation biology of the giant flower-loving flies, *Rhaphiomidas* (Diptera:Apioceridae). Dipterologial Research 4(1-2):21-34.

U.S. Fish and Wildlife Service. 1993. Endangered and Threatened Wildlife and Plants: Determination of Endangered Status for the Delhi Sands Flower-loving Fly. U.S. Department of Interior. Federal Register, 58 (183): 49881-49887.

U.S. Fish and Wildlife Service. 1996. Delhi Sands Flower-loving Fly Draft Presence/Absence Survey Guidelines. December 30.

U.S. Fish and Wildlife Service. 1997. Delhi sands Flower-loving Fly (*Rhaphiomidas terminatus abdominalis*) Recovery Plan. U.S. Fish and Wildlife Service, Portland, OR. 51 pp.

Woodruff, G. A. 1980. Soil survey of San Bernardino County, southwestern part, California. U.S. Department of Agriculture, Soil Conservation Service.

7.0 FIGURES

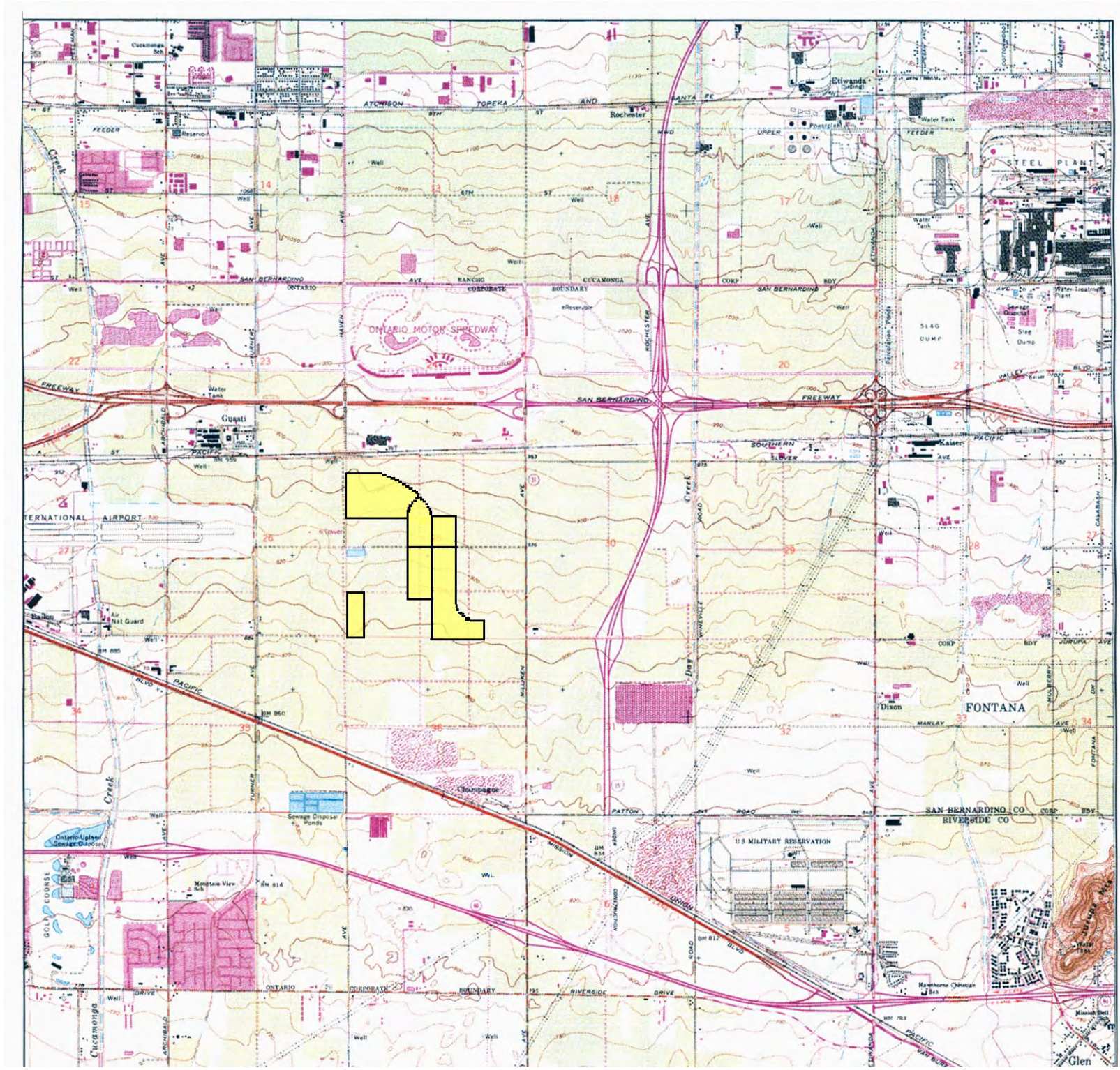


Figure 1. General vicinity of survey area, Guaste, California USGS 7.5" quadrangle at 50%. 151-acre survey area is outlined in black and highlighted in yellow.

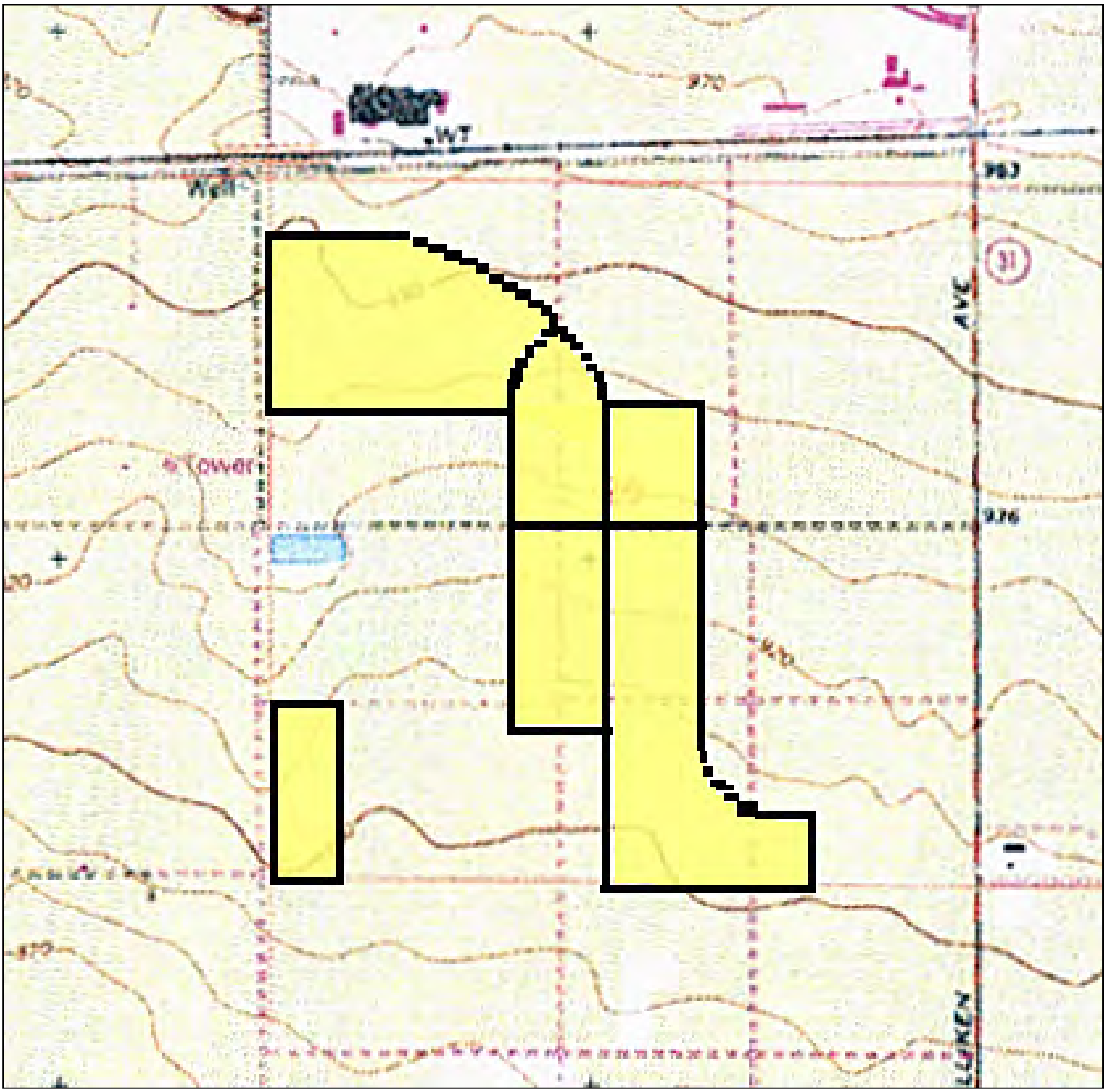


Figure 2. General vicinity of survey area, Guaste, California USGS 7.5" quadrangle at 200%. 151-acre survey area is outlined in black and highlighted in yellow.

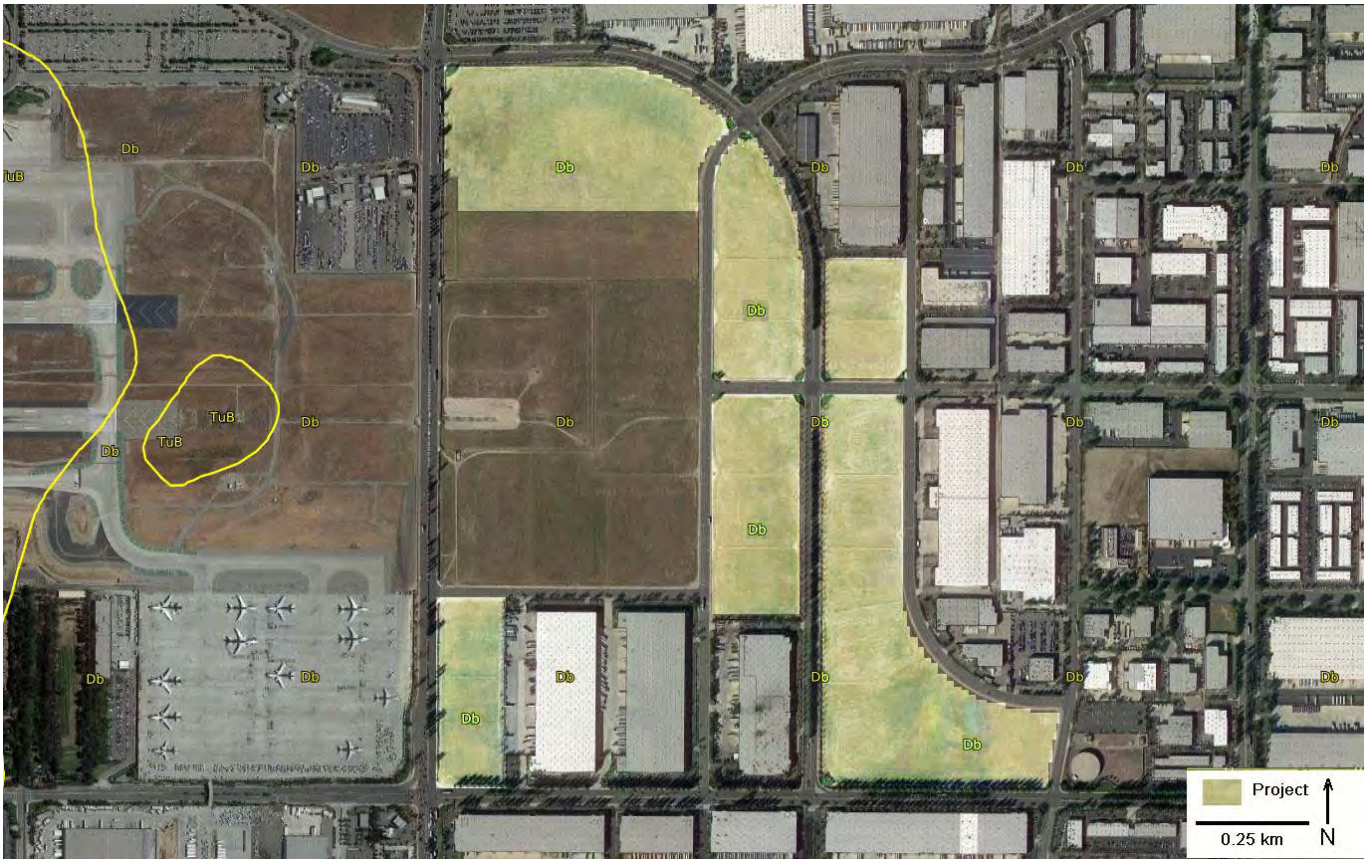


Figure 3. Satellite image of survey area (brightly highlighted) with mapped soil types. Db = Delhi sands.

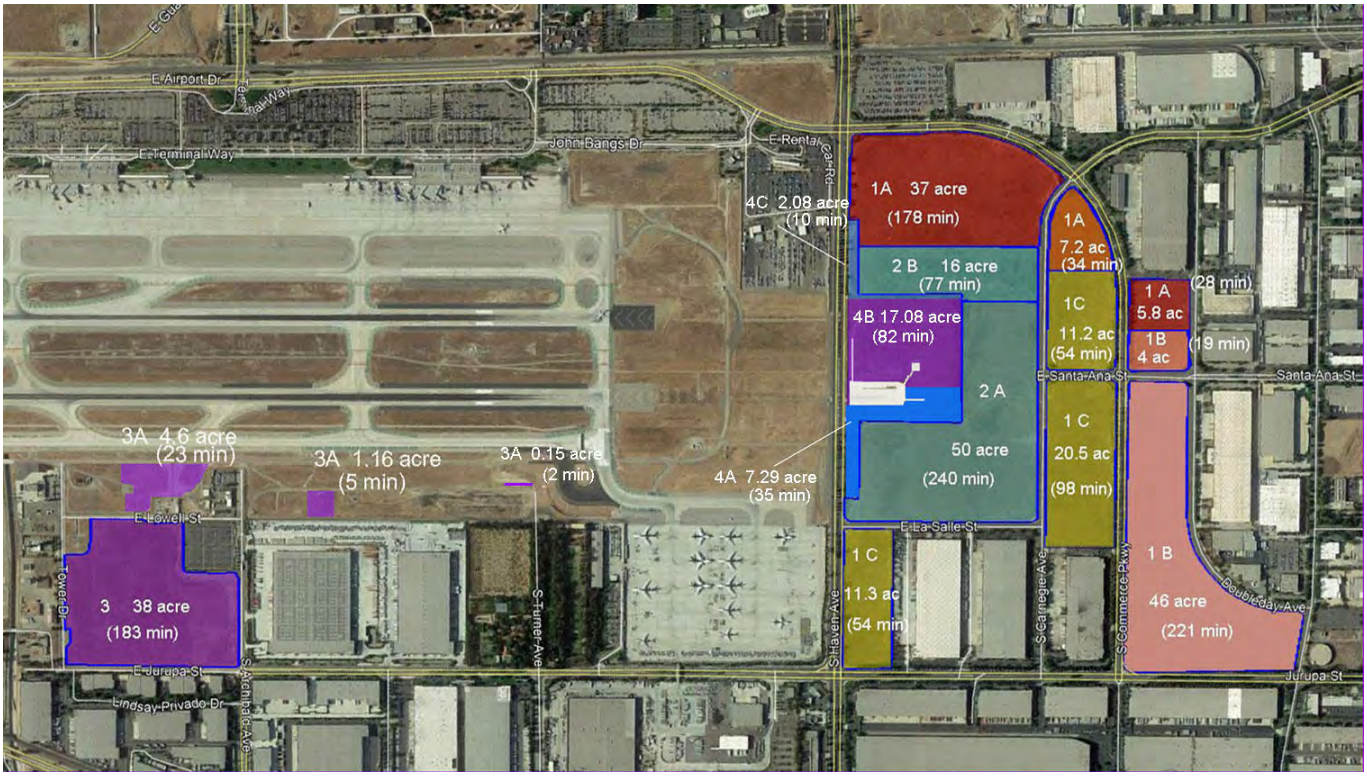


Figure 4. Overview map of all survey areas developed for the OIAA in 2019, used to facilitate logistics and scheduling of surveys, shows relevant acreages and assigned daily survey times (efforts). Airport Group 1 properties (1A, 1B, 1C) for this survey are shaded red, pink, and yellow.

Figure 5. Photograph of the northwestern study area with a view looking across grassy fields toward the northwest.

Figure 6 Photograph of photograph of north central portions of the study area, view looking northwest.

Figure 7. Photograph of habitat conditions on the southwestern portion of the study area. The view looks east across this grassy field.

Figure 8 Photograph of the eastern central portion of the study area, the view looking south southwest from near Santa Ana Street.

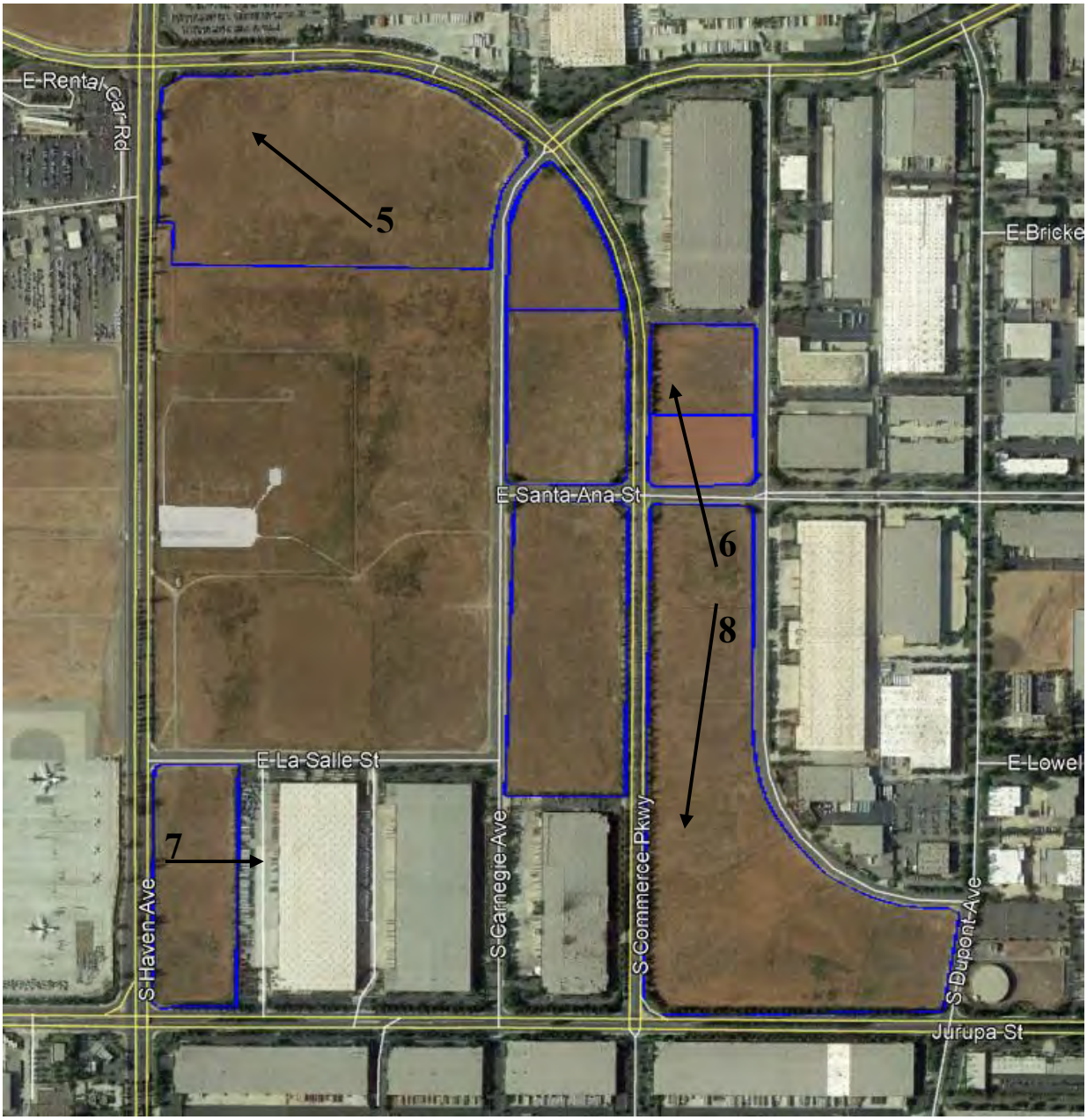


Figure 9. Approximate locations around survey areas (outlined in blue) from which photographs were taken (base of arrows). Arrow indicates the direction a photograph was taken. Numbers next to the arrows indicate figure numbers (Figures 5-8).

8.0 APPENDIX

Appendix A

Table A1. Plant species encountered on the survey area,

FAMILY	Species
ASTERACEAE	
annual bur-weed	*Ambrosia acanthicarpa*
prickly lettuce	*Lactuca serriola*
common sow-thistle	*Sonchus oleraceus*
BORAGINACEAE	
ranchers fiddleneck	*Amsinkia menziesii*
BRASSICACEAE	
shortpod mustard	*Hirschfeldia incana*
London rocket	*Sisymbrium irio*
wild radish	*Raphanus sativus*
CHENOPODIACEAE	
Russian thistle	*Salsola tragus*
GERANIACEAE	
red-stem filaree	*Erodium cicutarium*
CRASULACEAE	
sand pygme-stonecrop	*Crassula connata*
FABACEAE	
Spanish clover	*Lotus purshianus*
MALVACEAE	
cheeseweed	*Malva parviflora*
ONAGRACEAE	
small primrose	*Camissonia micrantha*
strigose sun cup	*Camissonia strigosa*
POLYGONACEAE	
slender buchwheat	*Eriogonum gracile*
URTICACEAE	
orchard nettle	*Urtica urens*
POACEAE	
slender oat	*Avena barbata*
ripgut	*Bromus diandrus*
mouse barley	*Hordeum murinum*
Schismus	*Schismus barbatus*

Table A2. Insects encountered on the survey area.

Order	**Family**	***Genus, species***
Diptera (flies)	Mydidae	*Nemomydas pantherinus*
	Apioceridae	*Apiocera convergens*
	Asilidae	*Efferia albibarbis*
		Mallophora fautrix
		Proctacantha occidentalis
		Saropogon luteus
		Stenopogon brevisculus
		Stenopogon lomae
	Therevidae	*Amnonaios confusus*
	Bombyliidae	*Apheobantus*
		Exoprosopa butleri
		Geron
		Hemipenths inops
		Hemipenths sinuosa
		Heterostylum robustum
		Neodiplocampta mira
		Poecilognathus
		Thyridanthrax atrata
		Thyridanthrax nugator
		Villa lateralis
		Villa molitor
		Aphoebantus
	Syrphidae	*Eristalis stipator*
		Eristalis tenax
		Eristilis arbostrum
		Eristlis aenea
		Eupeodes volucris
		Palparus mexicana
		Paragus sp.
		Syritta pipiens
	Tabanidae	*Tabanus punctifer*
	Tephritidae	*Euaresta bella*
		Tomoplagia obliqua
	Sarcophagidae	*Sarcophaga sp*
	Scenopinidae	*Brevitrichia*
	Tachinidae	*Archytas apicifer*
		Chetogena
		Cylindromyia

Diptera	Tachinidae	*Gymnosoma fuliginosum*
		Microchaetina
		Winthemia
Hymenoptera	Crabronidae	*Bembix comatus*
		Cerceris femurrubrum
		Cerceris sextoides
		Cercerus bicornuta
		Liris
		Microbembix californica
		Oxybelus uniglumis
		Philanthus multimaculatus
		Philanthus ventilabris
		Tachysphex
		Tachytes distincta
	Sphecidae	*Ammophila aberti*
		Ammophila azteca
		Chlorion aerarium
		Diploplectron
		Hoplisoides diversus
		Nysson
		Prionyx parkeri
		Sceliphron caementarium
	Chrysididae	*Hedychrum*
	Mutilidae	*Dasymutilla californica*
		Dasymutilla sackeni
	Pompilidae	*Pepsis thysbe*
	Formicidae	*Pogonomyrmex californicus*
	Vespidae	*Euodynerus annulatum*
		Pterocheilus mirandus
	Andrenidae	*Perdita*
	Apidae	*Anthophora curta*
		Anthophora urbana
		Apis mellifera
		Xylocopa varipuncta
	Halictidae	*Agapostemon texana*
		Halicttus farinosus
		Nomada
	Megachilidae	*Megachile*
	Halictidae	*Lasioglossum*
	Apidae	*Triepeolus*

Hymenoptera	Apidae	*Xeromelecta californica*
	Megachilidae	*Anthidiellum notatum*
	Braconidae	
Lepidoptera	Erebidae	*Estigmene acrea*
	Sphingidae	*Hyles lineata*
		Manduca sexta
	Hesperiidae	*Erynnis funeralis*
		Heliopetes ericitorum
		Hylephila phyleus
		Lerodia eufala
		Pyrgus albescens
	Danaidae	*Danaus gillipus*
		Danaus plexippus
	Nymphalidae	*Agraulis vanillae*
		Junonia coenia
		Vanessa cardui
	Papilionidae	*Papilio rumiko*
		Papilio rutulus
	Pieridae	*Colias eurytheme*
		Nathalis iole
		Pieris rapae
		Pontia protodice
	Lycaenidae	*Brephidium exilis*
		Leptotes marina
		Plebejus acmon
		Strymon melinus
Coleoptera	Chrysomelidae	*Apleurus*
		Coscinoptera aeneipennis
		Lema trilineata
	Coccinellidae	*Coccinella californica*
		Coccinella septempunctata
		Hippodamia convergens
	Scarabaeidae	*Cotinus mutabilis*
	Tenebrionidae	*Eleodes gracilis*
Neuroptera	Chrysidae	*Chrysopa*
	Mymerliontidae	*Brachynemurus*
		Mymerlion
		Scotoleon longipalpis
		Scotoleon nigrilabris
Heteroptera (Auchenorryncha)	Cicadellidae	*Homalodisca lacerta*

Heteroptera (Hemiptera)	Alytidae	*Alydus pilosulus*
		Alydus tomentosus
	Lygaeidae	*Geocoris*
		Lygaeus kalmii
	Nabidae	*Nabis*
	Pentatomidae	*Bagrada hilaris*
		Chlorochroa sayi
	Reduviidae	*Sinea diadema*
		Zelus renardii
	Rhopalidae	*Harmostes*
Mantodea	Gryllidae	*Gryllus*
	Mantidae	*Iris oratoria*
		Litaneutria minor
Orthoptera	Acrididae	*Derotmema saussuraenum*
		Lactista gibbosa
		Psoloessa thamnogaea
		Schistocerca nitens
		Trimerotropis californica
		Trimerotropis fontana
		Trimerotropis pallidipennis
		Conozoa rebellis
	Tettigoniidae	*Scudderia mexicana*
Odonata	Coenagrionidae	*Argia vividus*
	Aeshnidae	*Aeshna multicolor*
		Anax junius
	Libellulidae	*Brechmorhoga mendax*
		Libellula saturata
		Pantala flavescens
		Pantala hymenaea
		Parathemis intensa
		Sympetrum corruptum
		Tramea lacerata
		Tramea onusta

Appendix B

Correspondence with USFWS
Field Notes

SECOND YEAR FOCUSED SURVEY FOR DELHI SANDS FLOWER-LOVING FLY (*Rhaphiomidas terminatus abdominalis*) ON A 151-ACRE ONTARIO INTERNATIONAL AIRPORT AUTHORITY (GROUP 1 PROPERTIES) IN ONTARIO SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for:

Ontario International Airport Authority
1923 E. Avion Street
Ontario, CA 91761

Prepared by:

Kendall H. Osborne
Osborne Biological Consulting
6675 Avenue Juan Diaz
Riverside, CA 92509

October 7, 2020

TABLE OF CONTENTS

	Section	Page
SUMMARY		1
INTRODUCTION	1.0	1
NATURAL HISTORY OF THE DSF	2.0	1
DSF Habitat Characteristics	2.1	3
METHODOLOGY	3.0	4
DSF Survey Guidelines	3.1	4
Habitat Assessment Methods	3.2	4
Focused Surveys Methods	3.3	5
RESULTS	4.0	8
Habitat Assessment Results	4.1	8
Survey Results	4.2	8
Existing Environment and Community	4.3	9
Adjacent Lands	4.3.1	9
Topography	4.3.2	9
Soils	4.3.3	9
Vegetation	4.3.4	9
Insect Community	4.3.5	9
DISCUSSION AND CONCLUSIONS	5.0	10
REFERENCES	6.0	10
FIGURES	7.0	12
APPENDIX	8.0	19
Appendix A: plant and insect species		19
Table A1. Plant species		19
Table A2. Insect species		20
Appendix B: Correspondence with USFWS		24
Field notes		

SECOND YEAR FOCUSED SURVEY FOR DELHI SANDS FLOWER-LOVING FLY (*Rhaphiomidas terminatus abdominalis*) ON A 151-ACRE ONTARIO INTERNATIONAL AIRPORT AUTHORITY (GROUP 1 PROPERTIES) ONTARIO, SAN BERNARDINO COUNTY, CALIFORNIA

Prepared for

Ontario International Airport Authority
1923 E. Avion Street
Ontario, CA 91761

Prepared by

Kendall H. Osborne
Osborne Biological Consulting
6675 Avenue Juan Diaz
Riverside, CA 92509

The undersigned certify this report to be a complete and accurate account of the findings and conclusions of a second year, 2020 focused survey for Delhi Sands Flower-loving Fly (*Rhaphiomidas terminatus abdominalis*) on the 151-acre Ontario International Airport Authority (Group 1) properties, Ontario, San Bernardino, California.

Ken H. Osborne
6675 Avenue Juan Diaz
Riverside, CA 92509

Rick Rogers
8640 Hillrose St.
Apt. I-10
Sunland, CA 91040

David K. Faulkner
2321 Gladwick St.
Rancho Dominguez, CA
90220

Eric Renfro
22909 Pennsylvania Ave.
Torrance, CA 90501

October 7, 2020

SUMMARY

The Ontario International Airport Authority has requested a second year focused survey to assess the presence or absence of Delhi Sands Flower-Loving Fly (DSF, *Rhaphiomidas terminatus abdominalis*) for 151 acres (Group 1, with 143 acres of habitat suitable for DSF) of the Ontario International Airport Northwest Quadrant Demolition project in Ontario, California. To determine presence or absence of DSF on the study area, a series of 82 biologist-site visits totaling 274.27 field hours, were conducted on the survey area from July 1 to September 20, 2020.

A habitat evaluation conducted on March 13, 2019 (Osborne 2019) found all parcels investigated for the project area are mapped with Delhi sands (Woodruff 1980). These parcels all feature soil and ecological conditions *Suitable* for potential DSF. The habitat evaluations determined 143 acres of potential DSF habitat over the study area.

The subject site does not currently support a population of the Delhi Sands Flower-Loving Fly. Delhi Sands Flower-Loving Fly was not observed on the Group 2 properties site during the course of either consecutive years 2019 (Osborne 2019b) or 2020 field seasons.

Two special status animal species were encountered in the course of this survey. Burrowing Owl (*Athene cunicularia*) was regularly encountered on the site. One individual Crotch's bumble bee (*Bombus crotchii*), a California special status animal species (species of concern) was encountered in the course of this survey.

1.0 INTRODUCTION

This report presents the methods and results of a Delhi Sands Flower-Loving Fly (DSF, *Rhaphiomidas terminatus abdominalis*) focused survey for a 151-acre Group 1 properties, in Ontario, San Bernardino. The DSF was listed as an endangered species by the U.S. Fish and Wildlife Service on September 23, 1993 (USFWS 1993).

The Group 1 properties are located east of Haven Avenue, south of E. Airport Drive, and north of Jurupa Street as shown on the accompanying maps. And can be found on the Guaste, California USGS 7.5-minute quadrangle map, Township 2 South, Range 7 West, in Section 1 (Figures 1 and 2) .

2.0 NATURAL HISTORY OF THE DELHI SANDS FLOWER-LOVING FLY

Delhi Sands Flower-loving fly belongs to a genus of flies (*Rhaphiomidas*) commonly known as flower loving flies. There are more than 30 species of these flies, distributed across the southwestern United States and northern Mexico. These flies are huge by the standards set by most flies – with size among the species ranging from approximately 1.5 centimeters up to 3, and even 4 centimeters, usually gray, tan, rust or yellow in color. All species of *Rhaphiomidas* are associated with rather arid, sandy habitats, with most species living on dune systems of inland desert valleys, rivers, deltas, and beach strands. A few species are found in sandy washes, alluvial benches and remnant glacial moraines. Many species of these flies often hover before flowers in

the manner of hummingbirds, using a long, thin, tubular proboscis (mouth-part), with which the flies probe for nectar – hence a traditional name "giant flower-loving flies". Smaller flies of the family Apioceridae, once considered very closely related to *Rhaphiomidas* were formerly called "flower-loving flies".

The DSF is only known to occur in association with Delhi sand deposits, presumably occupied the once extensive dune system of the upper Santa Ana River Valley, including portions of what is now the City of Colton, west through portions of the City of Ontario, and south to the Santa Ana River. Today, DSF exists on only a few disjunct sites (USFWS 1997) within a radius of about eight miles in southwestern San Bernardino and northwestern Riverside Counties (Colton, Rialto, Fontana, and Ontario). More than 95 percent of known DSF habitat was considered eliminated by development, agriculture and other land management practices by 1993 (Smith 1993, USFWS 1996 *in* Kingsley 1996), however, this proportion is now nearer 98 to 99% due to these ongoing processes. Many of the last remaining fragments of DSF habitat are currently under pressure by land management efforts such as heavy disking, irrigation, manure dumping, and gravel dumping. There is presently an estimated 1,200 acres of habitat that can support this species (USFWS 1997), but this estimate likely includes lands needing extensive habitat restoration.

Adult DSF flight period is typically August and September, when individual adults emerge, reproduce and die. The adult life span of an individual DSF lasts for a few days and adults do not live beyond the flight period (Kiyani 1995). Adult DSF are highly mobile, agile fliers. Male DSF are frequently seen flying low through habitat, using apparently random, circuitous paths around and between shrubs in search of females. Such "cruising" behavior often covers areas on the scale of 1000 square meters in the time span of a minute. Alternatively, male DSF are often seen flying about an open patch of ground (ca 100 square meters) such as along a dirt path or dune blow-out area. Here, males may repetitively land and rest on one or another object (such as small dried plants) in the area, and such rests are interrupted by periods of patrolling flight (apparently territorial) about the spot. When alarmed, these insects tend to fly rapidly in more or less a straight line – often covering distances of 100 meters in less than 6 seconds. Adult DSF are known to nectar at flowers of California buckwheat and California croton.

DSF, like other *Rhaphiomidas* species, appears to have an annual life cycle (because of the annual flight). However, it has been widely believed that the underground larval/pupal stage may persist for additional years, depending upon various environmental factors such as annual rainfall, food availability and weather conditions during the flight season (many desert *Rhaphiomidas* species do not appear after a drought year and often, substantial flights occur only sporadically over the years). The biology of *Rhaphiomidas trochilus* is likely informative of *Rhaphiomidas* species in general and DSF in particular. Based on observations of captive *R. trochilus* larvae (Osborne and Ballmer 2014) it is reasonable to conclude that they are mobile opportunistic predators of soft-bodied, sand-inhabiting insects. Larvae from Sand Ridge, Kern County, CA were maintained in captivity for several months, during which they burrowed actively through sand maintained with slight moisture content (similar to the damp sand where they were found). They fed on larvae of a scarab beetle (Scarabaeidae) and an unidentified beefly (Diptera: Bombyliidae), which were also recovered from Sand Ridge, and larvae of paper wasps (*Polistes* sp.) which were removed from their nests and buried in the sand. Captive larvae grew and molted after feeding; but, when not fed

for extended periods of time, they molted again – losing weight and size in the process. Some larvae were observed to repeat the growth and "shrinkage" cycle multiple times. One larva survived about 17 months in captivity; because it was captured nine months after the most recent flight season, it was at least two years old at time of death. This larva molted four times while undergoing five cycles of growth and shrinkage driven by variable food availability. Its final dry weight was slightly smaller than the typical dry weight of an adult male *R. trochilus*. The ability of *R. trochilus* larvae to molt down during times of scarce food resources could allow an extended and indeterminate larval growth period, but with maturation and appearance of adults always during summer months. This may also explain the common observations that populations of various *Rhaphiomidas* species apparently exhibit little or no adult emergence in some years (especially years of below normal precipitation).

The brief adult life span and active mate-locating behavior of DSF males (typical of all *Rhaphiomidas* species) suggests that relatively high population density and/or nearly synchronous adult emergence may be crucial to survival of populations. Protracted *Rhaphiomidas* larval biology and staggered (across years) adult emergence must enhance population momentum and cross generational gene flow, and the requirement of abundant and diverse insect prey on which larvae develop – all explain why DSF populations appear as long-term entities (persisting for decades) associated with ecologically intact dune habitats.

2.1 DSF Habitat Characteristics

DSF is typically found in areas of unconsolidated sandy soils (Delhi series) supporting an open community of native and exotic plant species. Dominant plants are typically California buckwheat (*Eriogonum fasciculatum*), California croton (*Croton californicus*), telegraph weed (*Heterotheca grandiflora*), annual bur ragweed (*Ambrosia acanthicarpa*) and deerweed (*Acmespon scoparius*) but many exotic species often dominate on DSF habitat as well. DSF have been found in habitats that do not support these dominant plant species, and plant species composition is not directly relevant to larval development (due to predatory biology of DSF larvae). Thus, the implication that DSF are reliant on some of these plant species – an idea often repeated in literature and biological reporting – is false. Adult DSF are anecdotally believed to nectar at flowers of California buckwheat and California croton, though such a habitat is rare at best and not yet documented. Many other plant species are common, including Thurber's eriogonum (*Eriogonum thurberi*), autumn vinegar weed (*Lessingia glandulifera*), and sapphire eriastrum (*Eriastrum sapphirinum*). Nonnative plant species also occur in DSF habitat (and incidentally, virtually everywhere). DSF habitat also commonly supports other associated insects such as flies and wasps considered as indicator species – *Apiocera convergens, Apiocera chrysolasia, Ligyra gozophylax*, *Campsomeris tolteca*, *Trielis alcione*, and *Nemomydas pantherinus.* Over 350 insect species have been found on one DSF site, and DSF habitat is typically marked by high abundance and diversity of predatory and parasitic insect groups including many highly specialized families of flies, wasps, bees, beetles, and antlions. The Delhi Sands community is one of California's unique natural communities containing an array of native plants and animals, some of which are found nowhere else. One plant species, Pringle's monardella, (*Monardella pringlei*) is already presumed extinct, as no living individuals have been observed in many years. Several species of insects and some vertebrates, which inhabit the Delhi

Sands dunes system, are as endangered as the DSF, but no one has yet petitioned to have them officially declared Endangered. These include the convergent flower-loving fly *Apiocera convergens*, a newly discovered species of Jerusalem cricket, (*Stenopelmatus* sp.), a new species of camel cricket (*Ceuthophilus* sp.) and an endemic subspecies of butterfly *Apodemia mormo nigrescens* (Emmel and Emmel 1998). The other apiocerid fly (*Apiocera chrysolasia*), although known from approximately six general localities, is only common within the Delhi sands.

3.0 METHODOLOGY

3.1 DSF Survey Guidelines

Interim General Survey Guidelines for the DSF have been suggested by the USFWS (1996). By following these guidelines, DSF presence or absence survey results may be deemed acceptable to the USFWS (rejection of survey results may result where the guidelines are not followed). The guidelines indicate that focused DSF surveys should be conducted wherever Delhi sands are present within the presumed range of DSF, twice weekly (two days per week) during the single annual flight period (usually from July 1 to September 20). Recent early season DSF discoveries lead the USFWS to recommend a survey season from July 15 to September 20 for 2003 and a survey season from July 1 to September 20 from the year 2004. Weather conditions must be suitable for DSF activity at the times survey work is pursued. The DSF is generally active when daytime temperatures exceed 80 degrees Fahrenheit (°*F*), but may fly with slightly cooler temperatures in bright sunlight.

3.2 Habitat Assessment Methods

On March 13, 2019 (Osborne 2019a), Osborne visited the project area in order to investigate habitat suitability for the DSF. Osborne examined the subject survey area to rate its potential to support DSF. Photographs were taken of the survey area from various perspectives. Habitat suitability for DSF was evaluated using indicators of potential DSF habitat including: presence and abundance of loose, unconsolidated Delhi sands with low organic contamination; degree of habitat disturbance indicated by plant species composition and disposition of soil surface, presence and abundance of native sand associated plants such as *Croton californicus*, *Heterotheca grandiflora, Eriogonum thurberi* and *Eriogonum fasciculatum*. These plants are actually more an indication of relative disturbance regimen – conditions with lesser disturbance being of higher quality for DSF. Presence and abundance of Delhi sands associated insects such as *Apiocera convergens, Apiocera chrysolasia* and (to a lesser extent) *Nemomydas pantherinus*, noted throughout the course of focused surveys, serve as further indicators of DSF habitat quality. Potential DSF habitat has been further evaluated on the basis of overall insect diversity and abundance, particularly with respect to sand associated predators and parasitoids.

In the course of previous work Osborne (2003, Osborne et al. 2003) developed a means of rating habitat on sites for potential to support DSF, rating areas within any site based on a scale of 1 to 5, with 5 being the best quality and most suitable habitat based on the following scheme:

1. Developed areas, non-Delhi sands soils with high clay, silt, and/or gravel content. Delhi

sands extensively and deeply covered by dumping of exotic soils, rubble, trash, manure, or organic debris. *Unsuitable.*

2. Delhi sands are present but the soil characteristics include a predominance of exotic soils such as alluvial materials, or predominance of other foreign contamination as gravels, manure, or organic debris. Severe and frequent disturbance (such as a maintenance yard or high use roadbed). *Very Low Quality.*

3. Moderately contaminated Delhi sands. Delhi sands with moderate to high disturbance (such as annual disking). Sufficient Delhi Sands are present to prevent soil compaction (related to contamination by foreign soils). Some sandy soils exposed on the surface due to fossorial animal activity. *Low Quality.*

4. Abundant clean Delhi Sands with little or no foreign soils (such as alluvial material) present. Moderate abundance of exposed sands on the soil surface. Low vegetative cover. Evidence of moderate degree of fossorial animal activity by vertebrates and invertebrates. May represent high quality habitat with mild or superficial disturbance. *Moderate Quality*

5. Sand dune habitat with clean Delhi Sands. High abundance of exposed sands on the soil surface. Low vegetative cover. Evidence (soil surface often gives under foot) of high degree of fossorial animal activity by vertebrates and invertebrates. Sand associated plant and arthropod species may be abundant. *High Quality*

It should be noted that habitat qualities often vary spatially within a site so that conditions on a site fall within a range of qualities. Further, overall habitat quality is affected by the overall habitat area on a site, such that very small areas diminish the overall habitat value of a site. It is also important to note that suitable habitats, even rated as high quality for DSF, are very rarely actually occupied by DSF. These ratings are more informative on mitigation and conservation measures in the event that DSF is found on any particular site. Use of this habitat rating system is somewhat subjective and best undertaken by a biologist who has extensive experience with *Rhaphiomidas* species. While investigating the survey area, Osborne subjected the site to an analysis of this kind so as to give a general estimate of overall habitat conditions relevant to DSF potential.

3.3 Focused Survey Methods

Each portion of suitable habitat (for DSF) was surveyed on 24 dates, with the overall survey effort involving four biologists conducting a series of 82 biologist-site visits totaling 274.27 field hours, with site visits made from July 1, to September 20, 2020. A slight additional rigor was often imparted to the survey effort by virtue gratuitous presence of biologists on the survey areas arriving (as much as an hour) early in order to initiate the protocol surveys promptly at 1000 hours. DSF surveys were conducted by Kendall H. Osborne, Permit # TE-837760-10, Rick Rogers #TE-844645-2, David K. Faulkner # TE-838743-6, and Eric S. Renfro # TE-142436-3. Following the USFWS Interim General Survey Guidelines, we surveyed all portions of the survey area at least twice a week, between the hours of 1000 and 1400 (Table 1). Due to the large acreage of the survey area, and four-hour (50 acre limit) of survey effort allowed for any given biologist, the survey area was divided into portions (1A, 1B, and 1C) in order to facilitate survey

logistics and scheduling. On occasion, survey efforts on these individual portions were dispersed across two dates (noted as "parts") always in keeping with USFWS survey protocol. These portions are noted in Table 1, below, as well as on daily field notes presented in the Appendix. These portions are noted in Table 1, below, as well as on daily field notes presented in the Appendix. A map was developed showing survey areas (including other surveys for the OIAA) showing acreages and allotted survey times meeting the USFWS protocol (Figure 4). The survey protocol, as set forth in the Interim General Guidelines for the Delhi Sands flower-loving fly survey, is designed to maximize the validity of a presence/absence determination.

Osborne photographed the property from several perspectives to document existing conditions. Notes were taken on vegetative cover and plant species composition, abundance and diversity and species composition of insects and other animals, soil types, degree and nature of disturbance, surface cover, organic content, compaction, current land management practices, existing development, and conditions of surrounding vicinity and proximity of other DSF populations.

Table 1. Dates (2020), personnel, times and conditions for focused DSF survey work.

Date	Portion	Hours	Biologist	Weather Conditions
1-Jul	1A (part)	1020-1400	R. Rogers	overcast to clear, winds 0-5 mph, 74-86° *F.*
1-Jul	1C	1000-1325	D. Faulkner	100% overcast clearing, winds 1-3 mph, 67-81° *F.*
2-Jul	1A (part)	1217-1237	K. Osborne	clear, winds 2-4 mph, 75-76° *F.*
2-Jul	1B	1000-1400	R. Rogers	65% patchy clouds to clear, winds 1-2 mph, 76-85° *F.*
3-Jul	1C	1000-1325	E. Renfro	clear, winds 1-2 mph, 79-93° *F.*
4-Jul	1A	1000-1400	E. Renfro	clear, winds 1-8 mph, 84-93° *F.*
6-Jul	1B	1000-1400	D. Faulkner	clear, winds 1-4 mph, 86-101° *F.*
8-Jul	1A	1000-1400	R. Rogers	clear, winds 0-3 mph, 80-94° *F.*
8-Jul	1C	1000-1325	D. Faulkner	clear, winds 1-2 mph, 78-92° *F.*
9-Jul	1B	1000-1400	R. Rogers	clear, winds 0-5 mph, 81-92° *F.*
9-Jul	1C	1148-1202	K. Osborne	clear, calm, 84° *F.*
10-Jul	1C	1000-1325	E. Renfro	clear, winds 1 mph, 85-98° *F.*
12-Jul	1B	1000-1400	E. Renfro	clear, winds 1-2 mph, 90-103° *F.*
12-Jul	1A	1000-1400	D. Faulkner	clear, winds 1-5 mph, 86-102° *F.*
15-Jul	1C	1000-1325	E. Renfro	clear, winds 2-3 mph, 73-89° *F.*
15-Jul	1A	1000-1400	D. Faulkner	clear, winds 1-3 mph, 72-88° *F.*
16-Jul	1B	1000-1400	D. Faulkner	clear, winds 1-6 mph, 72-89° *F.*
17-Jul	1A	1000-1400	R. Rogers	clear, winds 0-4 mph, 78-88° *F.*
17-Jul	1C	1000-1325	D. Faulkner	clear, winds 2-6 mph, 76-87° *F.*
19-Jul	1B	1000-1400	R. Rogers	clear, winds 0-4 mph, 80-92° *F.*
20-Jul	1C	1000-1325	D. Faulkner	overcast to clear, winds 1-3 mph, 67-81° *F.*
22-Jul	1B	1000-1400	E. Renfro	clear, winds 1-2 mph, 73-87° *F.*
22-Jul	1C (part)	1112-1336	K. Osborne	clear, winds 3-4 mph, 75-84° *F.*
23-Jul	1C (part)	1140-1240	K. Osborne	clear, winds 2 mph, 71-76° *F.*
24-Jul	1A	1000-1400	R. Rogers	clear, winds 1-3 mph, 75-81° *F.*
26-Jul	1B	1000-1400	R. Rogers	clear, winds 1-3 mph, 82-100° *F.*
26-Jul	1A	1000-1400	E. Renfro	clear, winds 1-6 mph, 84-95° *F.*
26-Jul	1C	1000-1325	D. Faulkner	clear, winds 1-5 mph, 80-91° *F.*
29-Jul	1C	1000-1325	D. Faulkner	clear, winds 1-5mph, 79-90° *F.*
31-Jul	1A	1000-1400	D. Faulkner	clear, winds 1-7mph, 91-105° *F.*
1-Aug	1B (part)	1015-1215	K. Osborne	clear, winds 2-3 mph, 91-96° *F.*
2-Aug	1C	1000-1325	E. Renfro	clear, winds 1-2 mph, 85-99° *F.*
2-Aug	1B (part)	1010-1210	K. Osborne	clear, winds 0-4 mph, 85-93° *F.*

3-Aug	1A	1000-1400	E. Renfro	clear, winds 2-4 mph, 84-97° *F.*
4-Aug	1B	1000-1400	R. Rogers	clear, winds 1-3 mph, 79-90° *F.*
5-Aug	1C	1035-1400	K. Osborne	clear, winds 4-6 mph, 76-85° *F.*
6-Aug	1B	1000-1400	E. Renfro	clear, winds 1-2 mph, 73-84° *F.*
6-Aug	1A	1000-1400	R. Rogers	60% patchy clouds to clear, winds 0-2 mph, 71-80° *F.*
8-Aug	1B	1000-1400	D. Faulkner	clear/smoky, winds 0-7 mph, 72-90° *F.*
9-Aug	1A	1000-1400	E. Renfro	clear, winds 1-3 mph, 81-93° *F.*
9-Aug	1C (part)	1148-1202	K. Osborne	clear, calm, 84° *F.*
9-Aug	1C (part)	1049-1400	R. Rogers	clear, winds 1-4 mph, 85-89° *F.*
12-Aug	1C	1000-1325	K. Osborne	clear, winds 0-1 mph, 88-97° *F.*
12-Aug	1B	1000-1400	R. Rogers	clear, winds 1-3 mph, 85-94° *F.*
12-Aug	1A	1000-1400	D. Faulkner	clear to 10% patchy, winds 0-7 mph 81-100° *F.*
14-Aug	1B	1000-1400	E. Renfro	clear, winds 1-3 mph, 91-102° *F.*
14-Aug	1A	1000-1400	R. Rogers	10% patchy clouds to clear, winds 0-3 mph, 91-101° *F.*
16-Aug	1C	1000-1325	E. Renfro	clear, winds 1-2 mph, 86-99° *F.*
19-Aug	1B (part)	1125-1225	K. Osborne	clear, winds 0-1 mph, 98-100° *F.*
19-Aug	1C	1000-1325	D. Faulkner	clear/smoky to 70% patchy, winds 0-6 mph, 88-105° *F.*
20-Aug	1A	1000-1400	R. Rogers	clear, winds 1-4 mph, 88-104° *F.*
21-Aug	1B (part)	1000-1300	K. Osborne	clear, winds 0-3 mph, 89-101° *F.*
22-Aug	1C	1000-1325	E. Renfro	clear, winds 2-3 mph, 88-97° *F.*
23-Aug	1B	1000-1400	E. Renfro	clear to patchy clouds, winds 1-2 mph, 82-93° *F.*
24-Aug	1A (part)	1000-1200	R. Rogers	clear, winds 0-4 mph, 88-93° *F.*
25-Aug	1A (part)	1010-1210	R. Rogers	clear, winds 0-3 mph, 85-90° *F.*
26-Aug	1C	1000-1325	K. Osborne	clear/smoky, winds 0-3 mph, 88-98° *F.*
26-Aug	1B	1000-1400	D. Faulkner	clear/smoky, winds 1-7 mph, 84-97° *F.*
27-Aug	1A	1025-1225	R. Rogers	clear, winds 0-3 mph, 85-98° *F.*
28-Aug	1A (part)	1020-1220	R. Rogers	clear, winds 0-2 mph, 89-94° *F.*
29-Aug	1B	1000-1400	E. Renfro	clear, winds 1-2 mph, 78-93° *F.*
30-Aug	1C	1000-1325	E. Renfro	clear, winds 1-2 mph, 74-87° *F.*
31-Aug	1A (part)	1025-1400	R. Rogers	clear, winds 1-3 mph, 85-90° *F.*
1-Sep	1A (part)	1000-1025	K. Osborne	clear, calm, 69-70° *F.*
2-Sep	1C	1000-1325	D. Faulkner	clear/smoky, winds 1-6 mph, 73-88° *F.*
3-Sep	1A	1000-1400	R. Rogers	clear, winds 1-3 mph, 83-90° *F.*
4-Sep	1B	1000-1036	K. Osborne	clear, calm, 88-90° *F.*
4-Sep	1B	1028-1400	E. Renfro	clear, winds 2-3 mph, 87-100° *F.*
4-Sep	1B (part)	1005-1036	K. Osborne	clear, winds 2 mph, 87° *F.*
5-Sep	1C	1000-1325	E. Renfro	clear, winds 1-2 mph, 95-113° *F.*
7-Sep	1A	1000-1400	R. Rogers	clear/smoky, winds 0-5 mph, 84-89° *F.*
7-Sep	1B	1000-1400	D. Faulkner	overcast/smoky, winds 0-9 mph, 88-94° *F.*
9-Sep	1C	1000-1325	D. Faulkner	50% overcast to clear; smoky, winds 3-11 mph, 82-88° *F.*
10-Sep	1A	1000-1400	R. Rogers	overcast/smoky, winds 0-2 mph, 82-90° *F.*
12-Sep	1B	1000-1400	E. Renfro	clear, winds 1-2 mph, 79-92° *F.*
13-Sep	1C	1000-1325	E. Renfro	clear/smoky, winds 1 mph, 78-91° *F.*
14-Sep	1A (part)	1000-1345	R. Rogers	clear/slightly hazy, winds 1-3 mph, 80-88° *F.*
14-Sep	1B	1000-1400	D. Faulkner	overcast/smoky, winds 0-9 mph, 79-93° *F.*
15-Sep	1A (part)	1146-1201	K. Osborne	clear/50% smoky, winds 0-2 mph, 90° *F.*
17-Sep	1A	1000-1400	R. Rogers	20%- 50% patchy clouds, winds 0-3 mph, 87-95° *F.*
17-Sep	1C	1000-1325	D. Faulkner	overcast to 20% patchy clouds; smoky, winds 0-5 mph, 83-97° *F.*
18-Sep	1B	1000-1400	D. Faulkner	clear, up to 25% haze, winds 2-7 mph, 87-102° *F.*
19-Sep	1C	1000-1325	E. Renfro	clear, winds 1-2 mph, 86-97° *F.*
20-Sep	1A	1000-1400	E. Renfro	clear, winds 1-4 mph, 81-93° *F.*
20-Sep	1B	1000-1400	D. Faulkner	clear/hazy, winds 0-3 mph, 81-91° *F.*

4.0 RESULTS

4.1 Habitat Assessment Results

Department of Agriculture, Soil Conservation Service map (Woodruff 1980) and associated web based resources (https://casoilresource.lawr.ucdavis.edu/gmap/) show all portions of the project area mapped with Delhi fine sand soils (Figure 3). With the exception of limited street-side areas with exotic landscaped vegetation, and limited marginal portions with graveled drives, the project areas are open fields with vegetation dominated by exotic grasses and forbs (especially *Hordeum*, *Bromus*, *Amsinkia*, *Malva*, and *Sisymbrium*). Plant species associated with sandy soils are present in spare or low abundance, but include *Ambrosia acanthicarpa*, *Eriogonum gracile*, *Camissonia bistorta*, and *Camisonia strigosa*. The project areas appear unchanged since at least 1994 to the present, and have existed as exotic grass/forblands routinely mowed (Google Earth). Delhi sands are sporadically exposed by fossorial animals and paths through the majority of the area, demonstrating the wide distribution of sands across the survey area (as mapped by Woodruff 1980). In all areas investigated, where exotic annual (springtime) vegetation (covering the soil surface) was removed, Delhi sand soils were exposed. These areas constituting the majority of the investigated project areas were rated as *Low* to *Moderate Quality* habitat for DSF and are thus considered as approximately 142.32 acres of *Suitable* habitat for DSF. Street-side exotic landscaping is present in project areas along South Commerce Parkway, and along a southern portion of South Haven Avenue, amounting to an approximate total of 8.66 acres determined to be *Unsuitable* habitat for DSF. An additional 0.02 acres of graveled drive is present along the western edge of the extreme southwestern portion of this project area, also *Unsuitable* for DSF.

During the course of summer surveys, annual vegetation had dried, or been mowed, and abundant gopher activity had exposed the underlying sandy soils. Summertime field observations lead us to upgrade our overall rating of habitat conditions for potential DSF on these lands to include some *Low Quality* habitat but primarily *Moderate* to *High Quality* habitat for DSF.

4.2 Survey Results

Delhi Sands Flower-Loving Fly (DSF, *Rhaphiomidas terminatus abdominalis*) was not observed on the subject site during the course of this survey. At least one individual Crotch's bumble bee (*Bombus crotchii*), a California special status animal species (species of concern) was encountered in the course of this survey. Lists of plants and insects observed during the course of the survey are given in the appendix.

We noticed an exceptionally sharp decline in insect abundance following the extreme heat wave on and around September 5, 2020, wherein presumably, large numbers of insects which might normally live well into early fall season, were abruptly extinguished. Some of the consulting biologists on this project had concern about the mowing of the survey area late into our season. We are aware that these fields are mowed on a regular basis and have been for at least the last twenty years (Osborne, personal observations). The fields on and around the airport are routinely mowed, often multiple times a year, not only to reduce fuel load, but to deter presence of abundant birds. We understand that an abundance of birds, and particularly large birds such as raptors on airport flight paths, present a hazard to aircraft. This was dramatically demonstrated in January of

2009, when U S Airways flight 1549 ingested a flock of Canada geese and was forced to land without engine power into the Hudson River, miraculously intact. Nevertheless, we all noted the profound and immediate decline in insect abundance following mowing events.

4.3 Existing Environment and Community

4.3.1 Adjacent lands

The survey area is generally bounded on the west by undeveloped lands similar to those on the site, and otherwise generally surrounded (north, east, south) by commercial/industrial development.

4.3.2 Topography

The site is generally flat with elevation on the site ranging from approximately 950 to 900 feet, with the gentle slope diminishing to the south.

4.3.3 Soils

Woodruff (1980) indicated the site to consist of Delhi fine sands. These sands are evident throughout the site.

4.3.4 Vegetation

The survey area is generally characterized as open fields supporting exotic annual vegetation dominated by *Hordeum*, *Bromus*, *Amsinkia*, *Malva*, *Salsola*, *Hirschfeldia*, and *Sisymbrium*. Plant species commonly associated with Delhi sands and potential DSF habitat are abundant, and include annual bursage (*Ambrosia acanthicarpa*), telegraphweed (*Heterotheca grandiflora*), slender buckwheat (*Eriogonum gracile*), California croton (Croton califonicus), and golden crownbeard (*Verbesina encelioides*). No special status plant species (species of concern) were encountered in the course of this survey.

Figures 5-8 present representative views of the survey site and habitats. Figure 9 provides a key as to where on the site these photographs were taken. Table 1 (Appendix A) provides a list of plant species encountered on the survey site.

4.3.5 Insect Community

During site visits (2019 and 2020) at least 179 insect species (counting only large and conspicuous insects) were observed. The insect community encountered on the survey area was typical of ecological communities occurring on Delhi sands. Insects included Mydidae (*Nemomydas*), Apioceridae, Asilidae, Bombyliidae, Mutilidae, Pompilidae, Mymerliontidae, Crabionidae, and Sphecidae. A list of most insect species observed is presented in the appendix (Table 2, Appendix A). Crotch's bumble bee (*Bombus*

crotchii), a California special status animal species (species of concern) was encountered at least once in the course of these surveys (July 1, 2020 by Rogers).

5.0 DISCUSSION AND CONCLUSIONS

Delhi Sands Flower-loving fly is absent from the site. Finding of Delhi sands on the survey site, and the observations (over the years) of Mydidae (*Nemomydas pantherinus*), Apioceridae (*Apiocera convergens*), Asilidae, Bombyliidae, Mutilidae, Pompilidae, Mymerliontidae, Crabionidae, and Sphecidae, along with the overall habitat ratings made for the site have all suggested some degree of habitat suitability and potential for DSF. After the course of two consecutive field seasons of DSF survey with negative results, we conclude that the survey site does not support a population of DSF.

Populations of a number of bumble bee species have been in sharp decline in the western United States over the last decade. Crotch's bumble bee (*Bombus crotchii*), observed at least once in the course of these two years of survey of Group 1 properties (observed multiple times on adjacent lands [Osborne 2020]), is generally distributed through wildlands and rural areas in low to middle elevations of California, and is one of several bumble bee species proposed for listing as a California endangered species.

It is important for any project proponent to understand that if the survey site is not developed before July 1, 2021, that the USFWS policy is to consider the current results (DSF absent the site) to be void as of that date, and thus their recommendation of continued consecutive years of survey until the site is developed. Should the project proponent fail to have the site surveyed for DSF in a subsequent summer season, then USFWS policy has been to require a full repeat of two consecutive years of DSF survey before negative results are again acceptable to them.

6.0 REFERENCES

Cazier, M. A. 1985. A revision of the North American flies belonging to the genus *Rhaphiomidas* (Diptera:Apioceridae). Bulletin of the American Museum of Natural History 182(2):181-263.

Emmel, J. F., and T. C. Emmel. 1998. Two New Geographically Restricted Subspecies of *Apodemia mormo* (Lepidoptera: Riodinidae) from the Vicinity of San Bernardino, California *in* Systematics of Western North American Butterflies. Emmel, T. C., Editor. Mariposa Press, Gainsville, Florida. (67): 795-800.

Environmental Assessment Specialists 2017. Biological Resources Impact Analysis IE24209E, SCE Clover Ontario, San Bernardino County, California. Submitted to T-Mobile West, LLC

Hickman, J.C. (ed.). 1993. The Jepson manual: Higher plants of California. University of California Press. Berkeley, California.

Knecht, A.A. 1971. Soil survey of western Riverside area, California. U.S. Department of Agriculture, Soil Conservation Service.

Kingsley, Kenneth J. 1996. Behavior of the Delhi Sands Flower-Loving Fly (Diptera: Mydidae), a Little Known Endangered Species. Ann. Entomol. Soc. Am. 89(6): 883-891.

Kiyani Environmental Consultants. 1995. Principal Investigator's Annual Report, Delhi Sands Flower-loving fly (*Rhaphiomidas terminatus abdominalis*) Studies at Colton, California. Prepared for San Bernardino County and U.S. Fish and Wildlife Service, Carlsbad, CA. 25+ pp.

Munz, P.A. 1974. A flora of southern California. University of California Press, Berkeley, California.

Osborne, K. H. 2003. *Delhi Sands Flower-loving fly Habitat Assessment for the Hermosa Cemetery, Colton.* Prepared for Inland Memorial Cremations and Burial. Submitted to the U.S. Fish and Wildlife Service, CA.

Osborne, K. H. 2019a. Habitat conditions for Delhi Sands Flower-loving Fly on a 151 acre portion (Group 1) of the Ontario International Airport Northwest Quadrant Demolition project, Ontario. Submitted to Helix Environmental Planning, Inc. on behalf of the Ontario International Airport Authority.

Osborne, K. H. 2019b. First Year Focused Survey for Delhi Sands Flower-loving Fly (*Rhaphiomidas terminatus abdominalis*) on a 151-acre Ontario International Airport Authority (Group 1 Properties) in Ontario, San Bernardino, California. Prepared for the Ontario International Airport Authority. Submitted to USFWS, Carlsbad, October 2019.

Osborne, K. H. 2020. Second Year Focused Survey for Delhi Sands Flower-loving Fly (*Rhaphiomidas terminatus abdominalis*) on a 67-acre Ontario International Airport Authority (Group 2 Properties) in Ontario, San Bernardino, California. Prepared for the Ontario International Airport Authority. Submitted to USFWS, Carlsbad, October 2020.

Osborne, K. H., G. R. Ballmer, and T. McGill. 2003. *DSF Habitat Assessment for the Proposed Mary Vagle Conservation Area.* Prepared for the City of Fontana. Submitted to the U.S. Fish and Wildlife Service, CA.

Osborne, K. H. and G. R. Ballmer. 2014. A Petition to the United States Department of the Interior, Fish and Wildlife Service, for emergency action to list an endangered species pursuant to the conditions and regulations of the Federal Endangered Species Act: For the San Joaquin Valley Giant Flower-loving Fly (*Rhaphiomidas trochilus*). Submitted June, 2014.

Rogers, R. and M. Mattoni. 1993. Observations on the natural history and conservation biology of the giant flower-loving flies, *Rhaphiomidas* (Diptera:Apioceridae). Dipterologial Research 4(1-2):21-34.

U.S. Fish and Wildlife Service. 1993. Endangered and Threatened Wildlife and Plants: Determination of Endangered Status for the Delhi Sands Flower-loving Fly. U.S. Department of Interior. Federal Register, 58 (183): 49881-49887.

U.S. Fish and Wildlife Service. 1996. Delhi Sands Flower-loving Fly Draft Presence/Absence Survey Guidelines. December 30.

U.S. Fish and Wildlife Service. 1997. Delhi sands Flower-loving Fly (*Rhaphiomidas terminatus abdominalis*) Recovery Plan. U.S. Fish and Wildlife Service, Portland, OR. 51 pp.

Woodruff, G. A. 1980. Soil survey of San Bernardino County, southwestern part, California. U.S. Department of Agriculture, Soil Conservation Service.

7.0 FIGURES

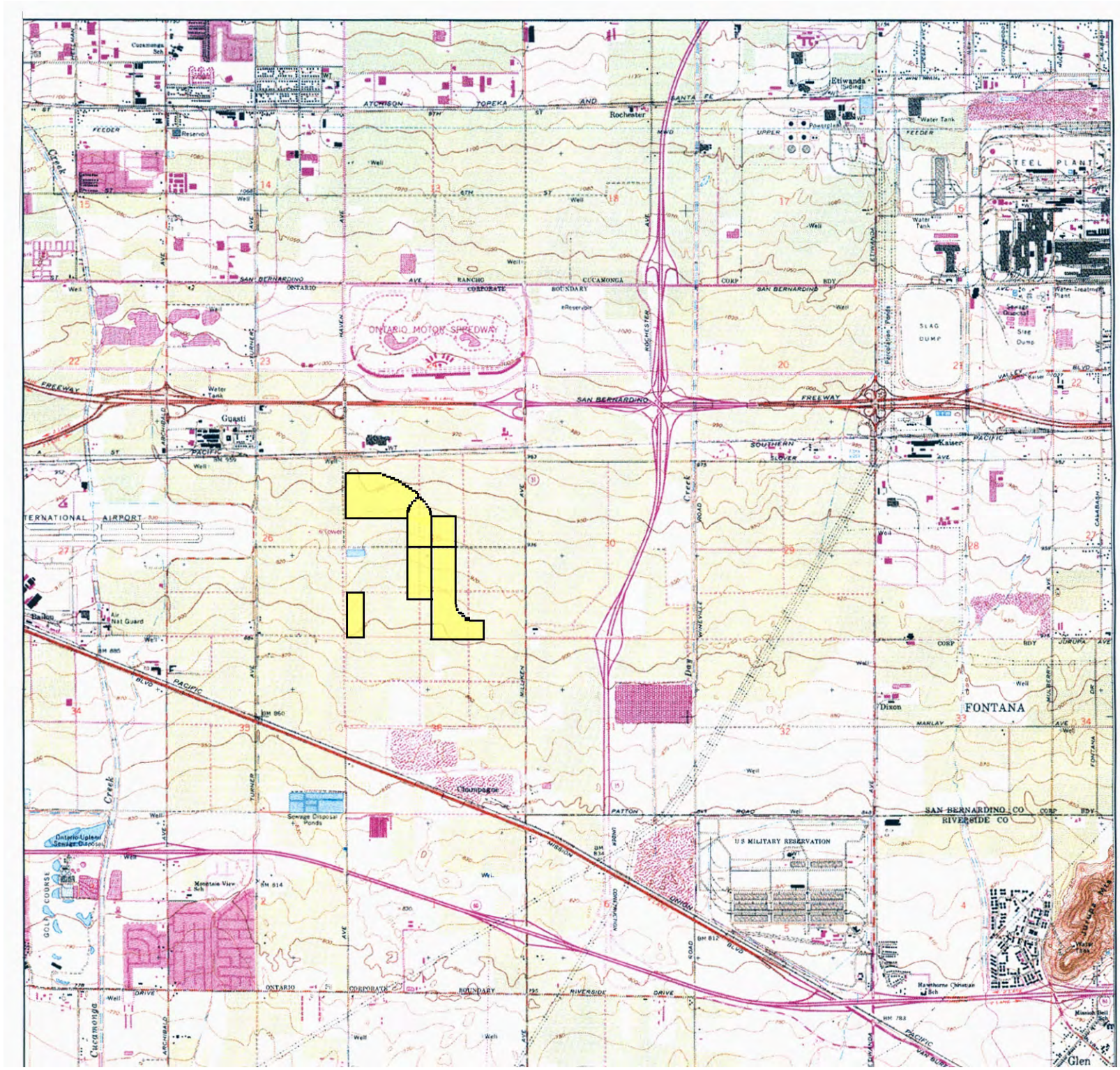


Figure 1. General vicinity of survey area, Guaste, California USGS 7.5" quadrangle at 50%. 151-acre survey area is outlined in black and highlighted in yellow.

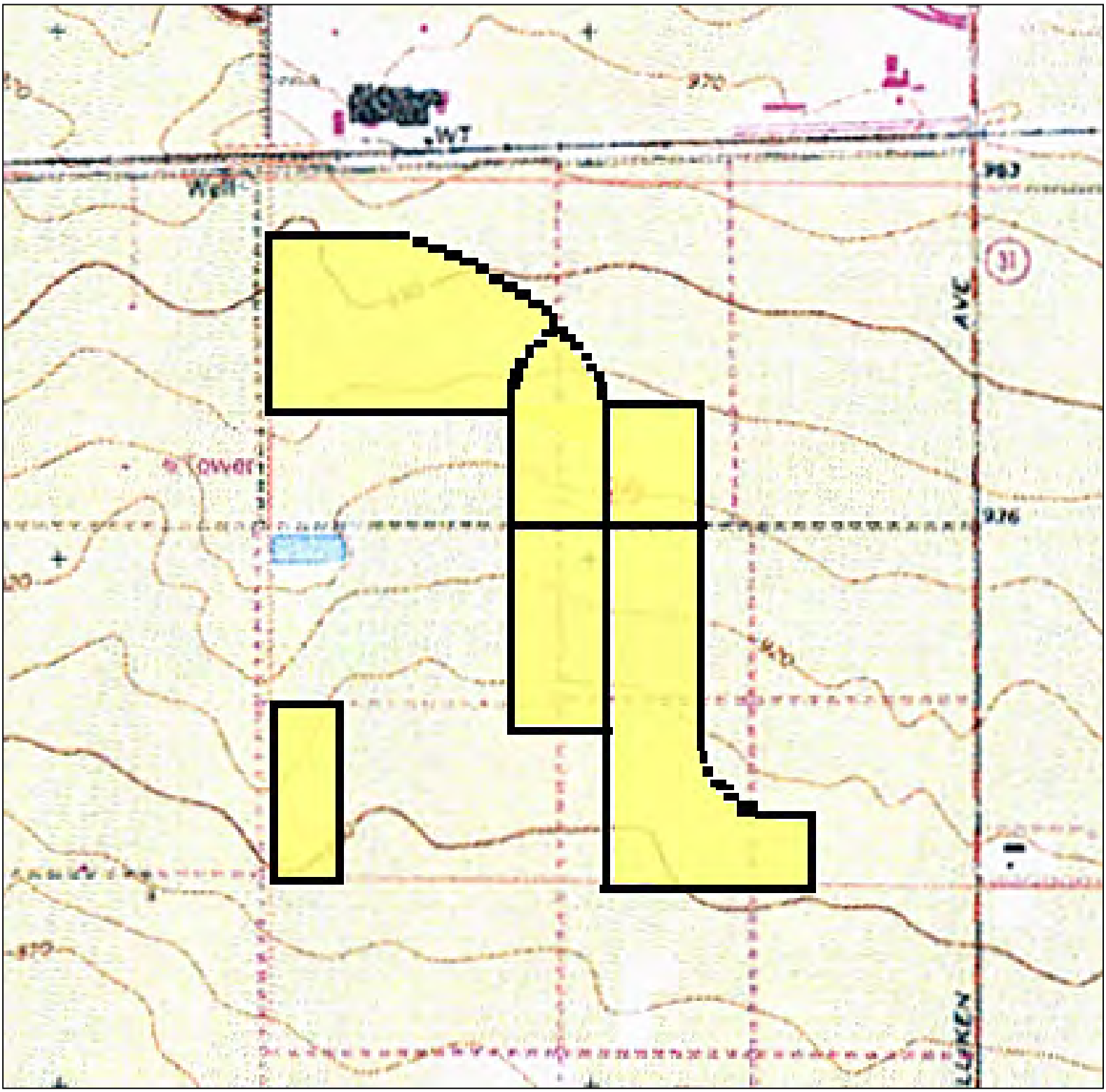


Figure 2. General vicinity of survey area, Guaste, California USGS 7.5" quadrangle at 200%. 151-acre survey area is outlined in black and highlighted in yellow.

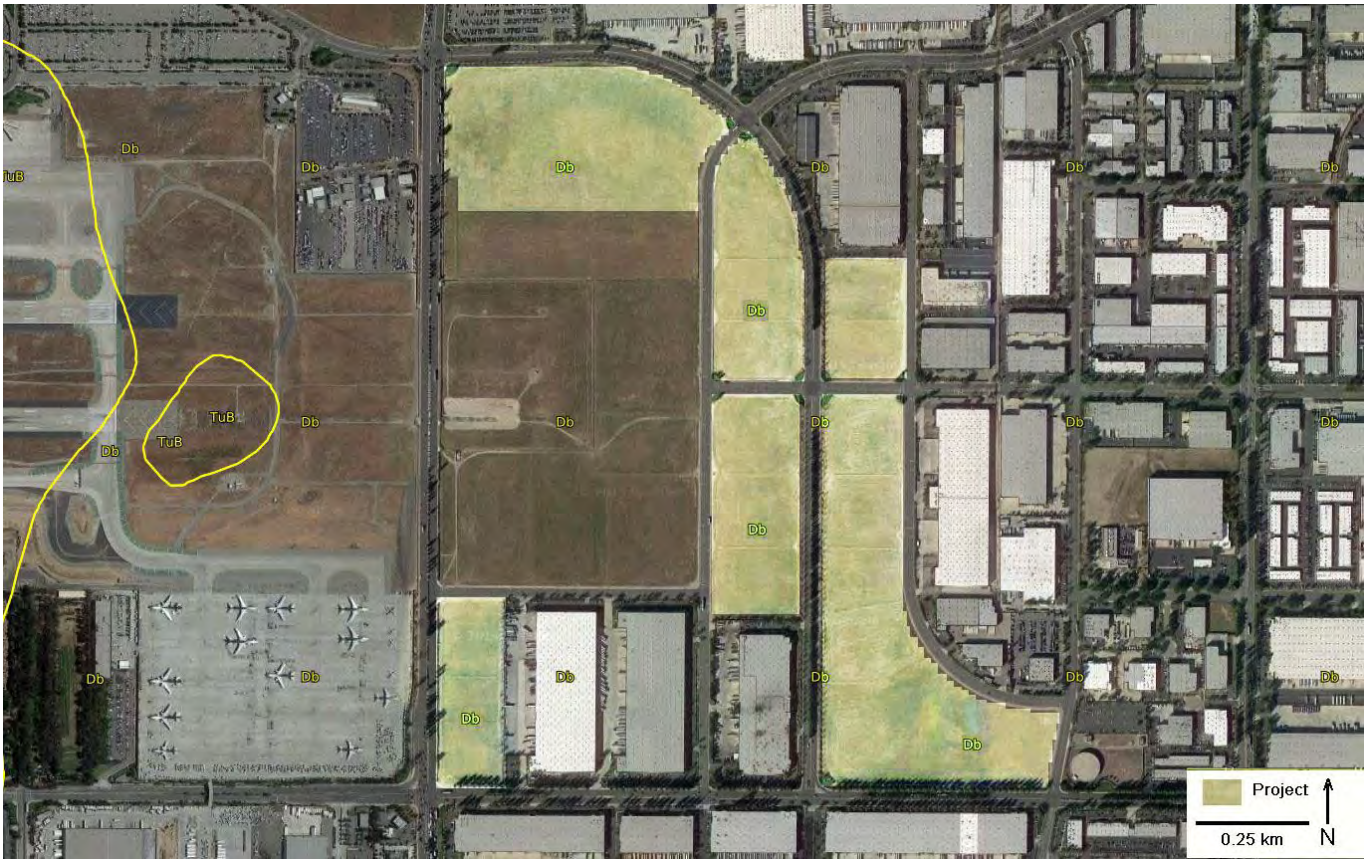


Figure 3. Satellite image of survey area (brightly highlighted) with mapped soil types. Db = Delhi sands.

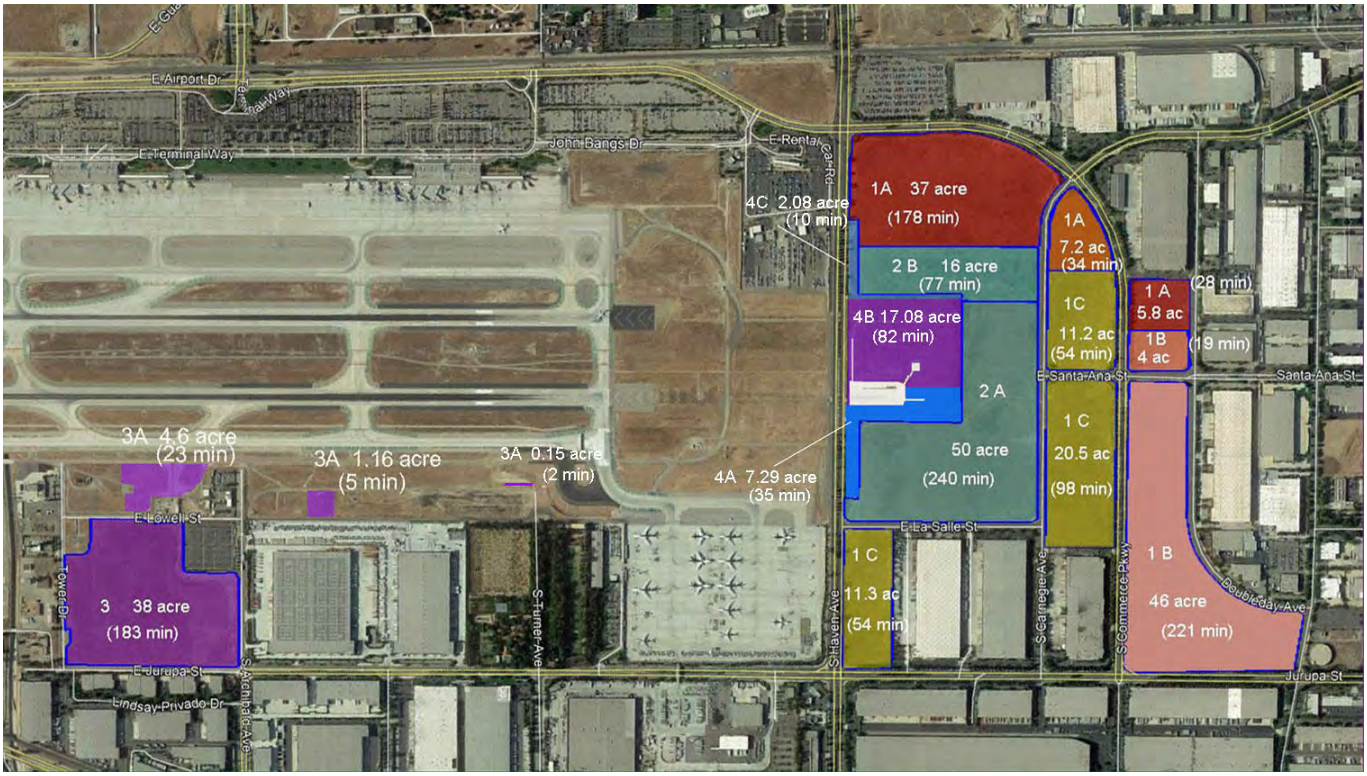


Figure 4. Overview map of all survey areas developed for the OIAA in 2019, used to facilitate logistics and scheduling of surveys, shows relevant acreages and assigned daily survey times (efforts). Airport Group 1 properties (1A, 1B, 1C) for this survey are shaded red, pink, and yellow.

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942
619.462.1515 tel
619.462.0552 fax
www.**helixepi**.com

April 15, 2019

Greg Devereaux
Ontario International Airport Authority
1923 E Avion Avenue
Ontario, CA 91761

OIA-01.17

Subject: Cultural Resources Survey for the Potential Development of Parcel Group 1

Dear Mr. Devereaux:

HELIX Environmental Planning, Inc. (HELIX) was contracted to conduct a cultural resources survey for the Ontario International Airport Authority's (OIAA) potential development (project; Group 1) in the City of Ontario, San Bernardino County, California. HELIX conducted a pedestrian survey, a record search, a Sacred Lands File (SLF) search, and a review of existing documentation for the project. This letter report details the methods and results of the cultural resources survey. One cultural resource, a historic-period well, was observed in the northwest section of the survey area.

PROJECT LOCATION

The approximately 151-acre project area is located within the limits of the City of Ontario, west of Interstate (I-)15 and south of I-10 (Figure 1, *Regional Location*). The project is within Section 25 of Township 1 South, Range 7 West, on the Guasti, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 2, *Vicinity Map*). The Group 1 survey area is comprised of 18 parcels with Assessor's Parcel Numbers (APNs) 0211-222-47, 48, 53, 54; 0211-232-11, 12, 13, 14, 16, 17, 18, 19, 20, 44, 45, 46, 52, and 55.

The Group 1 survey area is located east of South Haven Avenue, south of East Airport Drive, west of Doubleday Avenue, and north of Jurupa Street (Figure 3, *Aerial Photograph*). Elevations range from approximately 899 feet above mean sea level (amsl) in the southern portion of the survey area to 951 feet amsl in the northern portion of the survey area. The Group 1 parcels are vacant; existing Ontario International Airport infrastructure and industrial development surround the survey area.

METHODS

HELIX conducted a record search at the South Central Coastal Information Center (SCCIC) on March 7, 2019. The records search covered a one-mile radius around the Group 1 survey area and included the identification of previously recorded cultural resources and locations and citations for previous cultural resources studies. A review of the California Historical Resources and the state Office of Historic Preservation (OHP) historic properties directories was also conducted.

The Native American Heritage Commission (NAHC) was contacted for a SLF search on April 1, 2019; a response was received on April 15, 2019 and indicated that the results were negative for the project area; no additional outreach to the Native American community was conducted.

Various archival sources, including historic topographic maps and aerial imagery, were consulted, and the existing cultural resources reports, *Historical Architectural and Cultural Resources Inventory Report* (Douglas and Livingstone 2006) and the *Ontario International Airport Historic Context Statement* (Davis and Novell 2017), were reviewed.

RESULTS

Records Search

The records search results identified seven previously recorded cultural resources within one mile of the project area, none of which are located within the Group 1 parcels (Table 1, *Previously Recorded Resources within One Mile of the Group 1 Parcels*). Two of the resources within the search limits, the Guasti (Brookside) Winery and the Church of San Secondo D`Asti, Guasti Church, are listed as California Points of Historical Interest (CPHI), and one resource, the Hofer Ranch, is listed on the National Register of Historic Places (NRHP). The Guasti (Brookside) Winery and the Church of San Secondo D`Asti, Guasti Church are located to the northwest of the project area, north of the railroad. The Hofer Ranch is located to the west, within Section 26.

Table 1
PREVIOUSLY RECORDED RESOURCES WITHIN ONE MILE OF THE GROUP 1 PARCELS

Resource Number (P-36-#)	Resource Number (CA-SBR-#)	Age and Resource Present	Description	Recorder, Date
001963	1963H	Historic Site	Remnants of a homestead/ranch, possibly associated with the Collins family who owned the property in the late 1800s	McKenna, 1987
001964	1964H	Historic Structure	Small shed containing modern pumping equipment	McKenna, 1987
015469	--	Historic Site	Guasti (Brookside) Winery (CPHI # 84)	Hansberger, 1975
015471	--	Historic Site	San Secondo D'Asti Catholic Church (CPHI # 76)	Hansberger, 1975
015990	--	Historic Structures/ Historic District	Guasti Historic District; consists of 51 resources (buildings, houses, etc.) constructed between 1900 and 1946	Warner and Solie, 1985
016249	--	Historic Site	Hofer Ranch (NR #93000596), also known as Ballou Ranch & Ben Haven; farm complex consisting of 15 resources (buildings and structures) constructed between 1905 and 1985	Hofer and Warner, 1985; Marvin and Goodwin, 2004
016279	--	Historic Building	Guasti Mansion; constructed in the Italian-Villa architectural style in 1922	Warner and Solie, 1985

The records search results identified 30 previous cultural resource studies within one mile of the project area, two of which cover or overlap with the project area (Table 2, *Previous Studies within One Mile of the Group 1 Parcels*). The overlapping studies include a cultural resource assessment (SB-01180) and a telecommunications report (SB-04161). The telecommunication study only covered a small portion of the Group 1 survey area. The cultural resources assessment study, however, was for the Ontario Industrial Park and covered the entirety of the project area; presumably this study included a pedestrian field survey.

Table 2
PREVIOUS STUDIES WITHIN ONE MILE OF THE GROUP 1 PARCELS

Report No.	Report Title	Author, Date
SB-01180*	Cultural Resources Assessment of the Ontario Industrial Park, San Bernardino County, California	Smith and Lerch, 1981
SB-01495	Addendum to Class III Cultural Resources Inventory for a Proposed Cal Crust Seismic Testing Route Near Vidal Junction, San Bernardino County, California	Lerch, 1985
SB-01496	Cultural Resource Assessment of a 505-Acre Parcel Near Ontario, San Bernardino County, California	Del Chario and Cottrell, 1985
SB-01721	An Archaeological Report on The Reconnaissance Survey for the United Parcel Service, Air Cargo Facility, Ontario, California	Hatheway and McKenna, 1987
SB-02038	United Parcel Service Air Cargo Facility Project: Archaeological Site Evaluation	Farber, 1989
SB-02118	Cultural Resources Survey: United Parcel Service Proposed Air Cargo Facility, Ontario, San Bernardino County, California	Winter and Mason, 1989
SB-02348	A Comparative Study of Late Paleo-Indian Manifestations in the Western Great Basin	Tuohy, 1974
SB-02795	Cultural Resource Investigation: Cajon Pipeline Project	Hampson, Schmidt, and Schmidt, 1991
SB-02796	Cultural Resources Investigations, Site Inventory and Evaluations, The Cajon Pipeline Corridor, Los Angeles and San Bernardino Counties	McKenna, 1993
SB-02863	Negative Archaeological Survey Report, Provide High Occupancy Vehicle (HOV) Lanes on I-10 Between Mills and I-15	Wlodarski, 1993
SB-03573	Cultural Resource Assessment: Cingular Wireless Facility LA S04-01, San Bernardino County, California	Duke, 2001
SB-03586	Ontario to Colton Pipeline, San Bernardino County, California	Love, 2000
SB-03588	Identification and Evaluation of Historic Property: AT&T Wireless Site PB20002-115, City of Ontario, San Bernardino County, California	Love, 2000
SB-04153	Proposed Wireless Device Monopole & Equipment Cabinet; Lowell Site, 1155 S. Miliken Ave, Ontario, California	Budinger, 2002
SB-04158	Cultural Resource Assessment: AT&T Wireless Facility No. D115, San Bernardino County, California	Duke, 2001
SB-04161*	Proposed Sprint PCS Wireless Telecommunication Facility Project SB40XC701E--California Hardware	Martinez, 2001
SB-04266	CA7124A (Double Day) 1455 Double Day Ave, Ontario, California	McKenna, 2004
SB-04669	Records Search Results and Site Visit for Sprint Telecommunications Facility Candidate SB60XC842D (Perma Industries) 400 South Rockefeller Avenue, Ontario, San Bernardino County, California	Bonner, 2004
SB-04672	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate LSANCA 8113E (Nextel Doubleday), 1455 S. Doubleday Avenue, Ontario, San Bernardino County, California	Bonner and Aislin-Kay, 2005

Table 2 (CON'T)
PREVIOUS STUDIES WITHIN ONE MILE OF THE GROUP 1 PARCELS

Report No.	Report Title	Author, Date
SB-05367	Cultural Resource Assessment: Hofer Ranch Airport Business Park Specific Plan Amendment, City of Ontario, San Bernardino County, California	Marvin and Goodwin, 2004
SB-05483	A Phase I Cultural Resources Investigation for the Bates Specific Plan Project Area on Haven Avenue in the City of Ontario, San Bernardino County, California	McKenna, 2006
SB-05740	Cultural Resource Records Search Results and Site Visit for T -Mobile Telecommunications Facility Candidate IE24077B (Airport Drive), 4000 Airport Drive, Ontario, San Bernardino County, California	Bonner and Aislin-Kay, 2007
SB-06513	A Phase I Cultural Resources Investigation of The GST Fiber Optic Alignment from Ontario, San Bernardino County, to Del Mar, San Diego County, California	McKenna, 2000
SB-06516	Cultural Resource Inventory Report for Williams Communications, Inc., Proposed Fiber Optic System Installation Project, Los Angeles to Riverside, Los Angeles, Riverside and San Bernardino Counties	Ashkar, 1999
SB-06523	Cultural Resources Records Search and Site Visit for AT&T Mobility, LLC Candidate LSANCAD115 (USID 16455), 410 Sequoia Ave, Ontario, San Bernardino County, California	Bonner and Williams, 2009
SB-06525	Cultural Resources Records Search and Site Visit Results for Verizon Wireless Candidate "Ontario Airport", 3601 Jurupa Avenue, Ontario, San Bernardino County, California	Bonner and Said, 2009
SB-06818	Identification and Evaluation of Historic Properties: Chino Desalter Phase 3 Expansion Project, Riverside and San Bernardino Counties, California	Tang, Encarnacion, Ballester, and Shaker, 2010
SB-07147	Cultural Resource Records Search and Site Visit Results for T-Mobile West, LLC Candidate IE 24611C (Milliken-Frances), 1805 South Milliken Avenue, Ontario, San Bernardino County, California	Bonner and Williams, 2012
SB-07196	Record Search Results for the Proposed AT&T Wireless Telecommunications Site LA8113 (Nextel Doubleday) located at 1455 South Doubleday Drive, Ontario, California	Wlodarski, 2012
SB-07756	Update to Historical/Archaeological Resources Survey: Chino Desalter Phase 3 Expansion Project, Riverside and San Bernardino Counties, California	Tang, 2014

**Studies that overlap with the project area*

Other Archival Research

Various archival sources were consulted, including historic topographic maps, aerial imagery (NETR Online 2019), and the Bureau of Land Management (BLM) General Land Office (GLO) Records. The purpose of this research was to identify historic land use in the area.

No land patents are on file with the BLM GLO for Section 25 of Township 1 South, Range 7 West, and neither the 1858 nor the 1865 survey plats show any cultural or environmental data for the section.

No buildings or structures appear within the Group 1 survey area or Section 25 on topographic maps prior to the 1950s. On the Guasti 1953 (1955 edition) 7.5-minute topographic map, a hollow square, possibly indicating a small structure, is observed in the central area of Section 25, within the survey area. In addition, a reservoir located in the northwest quarter of the southwest quarter of Section 25 is

represented on the same topographic map; it is situated outside of the project area and will not be impacted by the potential development of the Group 1 parcels.

The earliest aerial photograph of the Group 1 survey area dates to 1938; it shows open land and agricultural fields within the project area. By 1948, additional agriculture is represented in the area, and the reservoir shown on topographic maps appears, but no buildings or structures exist within the project area. By 1959, additional development, likely related to agriculture, is shown in the area, but outside of the Group 1 parcels. On the 1966 aerial, it appears that the majority of the lands surrounding the project have been left fallow and are still undeveloped. However, an influx of development occurred between 1966 and 1994, when aerial images show the region considerably more populated by buildings and roads; these are situated adjacent to, but outside of, the current project site. The area remains much as shown from 1994 until the final aerial image, dating to 2012.

Survey

A pedestrian survey of the Group 1 parcels was conducted between March 11 and 13, 2019 by HELIX archaeological field director Julie Roy and field archaeologists Ariana Yanez and Kellie Kandybowicz. Stephen Bernal, a Native American monitor with the Gabrieleño Band of Mission Indians - Kizh Nation, assisted in the survey activities. Vegetation consisted of thick native and non-native weeds and flowering plants. Visibility ranged from 30 percent along the edges of the roads to no more than 20 percent away from the roads, with rodent back dirt piles sometimes being the only soils visually inspected. Numerous berms were observed within the survey areas. The berms may involve buried water transmission pipes.

A possible historic-period well comprised of a metal pipe with no markings, was observed in the northwest portion of the survey area. The well has had a metal cap with a lock welded to the top of it, most likely for safety issues (Plate 1). Although the age of the well is unknown, as observed on the historic aerial photographs, the project area has been cultivated since at least 1938 (NETR Online 2019).

Plate 1. Capped well. View to the northeast.

No other cultural resources were observed within the Group 1 parcels during the survey effort. No evidence was observed of the building or structure shown within the project area on the Guasti 1953 (1955 edition) 7.5-minute topographic map.

SUMMARY AND RECOMMENDATIONS

A cultural resources survey of the Group 1 parcels was conducted between March 11 and 13, 2019. One potentially historic resource, a well comprised of a metal pipe, was identified within the project area. Additionally, it must be noted that although no Native American cultural resources have been documented in the NAHC's SLF for the project area, the general area is of importance to the Native American community.

No constraints to the potential development of the Group 1 parcels related to cultural resources are anticipated; however, documentation of the well/pipe on appropriate Department of Parks and Recreation (DPR) 523 forms and completion of a cultural resources technical report addressing both California Environmental Quality Act (CEQA) significance and federal compliance (e.g., Section 106 of the National Historic Preservation Act) are recommended.

If you have any questions, please call Stacie Wilson at (619) 462-1515.

Stacie Wilson, RPA
Senior Archaeologist

Julie Roy
Archaeological Field Director

Attachments:
Figure 1: Regional Location
Figure 2: Vicinity Map
Figure 3: Aerial Photograph

REFERENCES

Davis, Shannon and Marilyn Novell

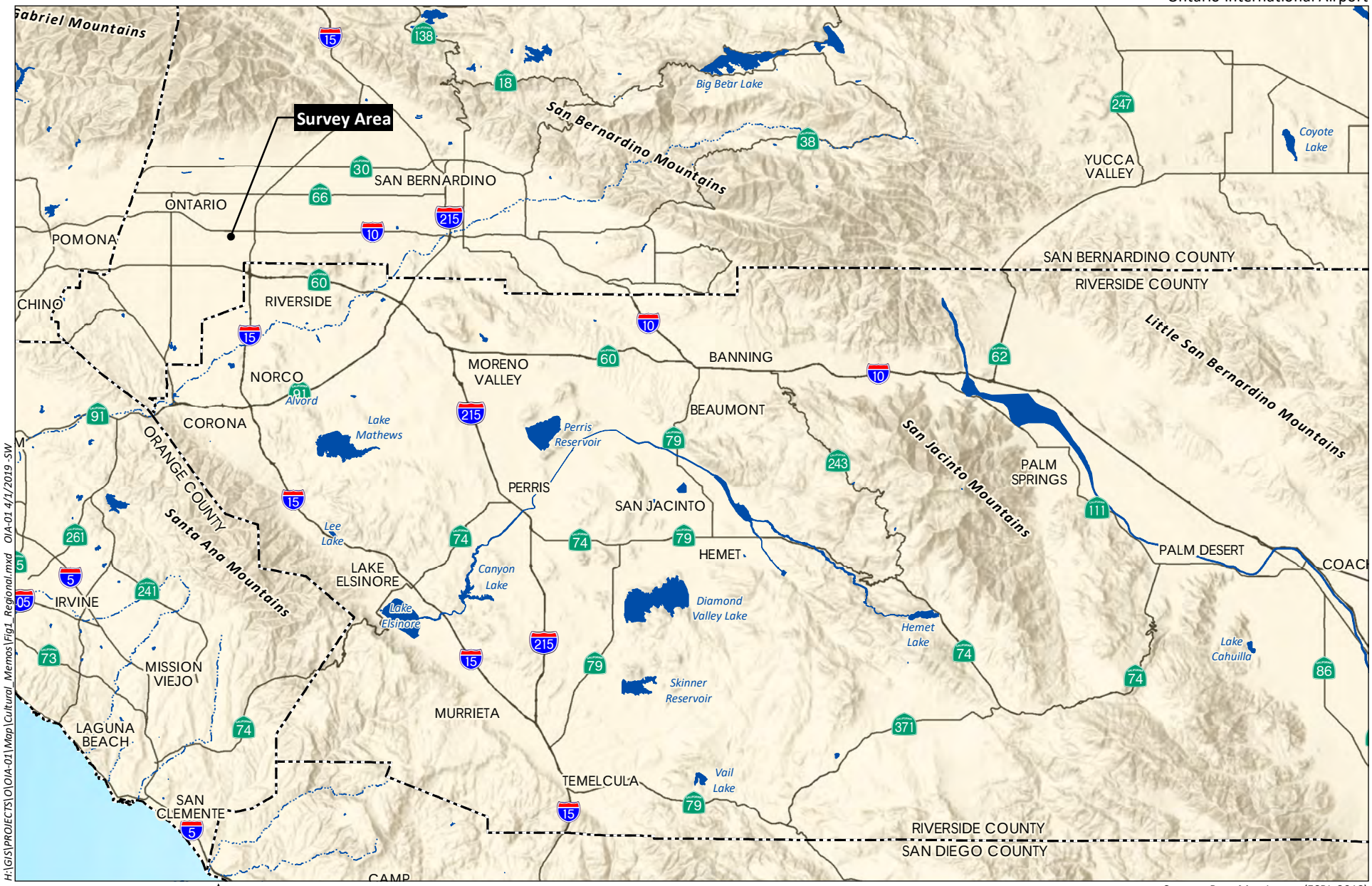
2017 *Ontario International Airport Historic Context Statement*. Prepared for the City of Ontario Planning Department. Prepared by ASM Affiliates, Inc. On file at HELIX.

Douglas, Diane L. and David Livingstone

2006 *Historical Architectural and Cultural Resources Inventory Report. Pacific Gateway Cargo Center Ontario Airport San Bernardino County*, California. Prepared for Aero Ontario RFP, LLC. URS Project No. 29870326.04200. On file at HELIX.

NETR Online

2019 *Historic Aerials*. Nationwide Environmental Title Research, LLC. Electronic document available at: http://www.historicaerials.com, accessed March 2019.



H:\GIS\PROJECTS\O\OIA-01\Map\Cultural Memos\Fig1 Regional.mxd OIA-01 4/1/2019 -SW

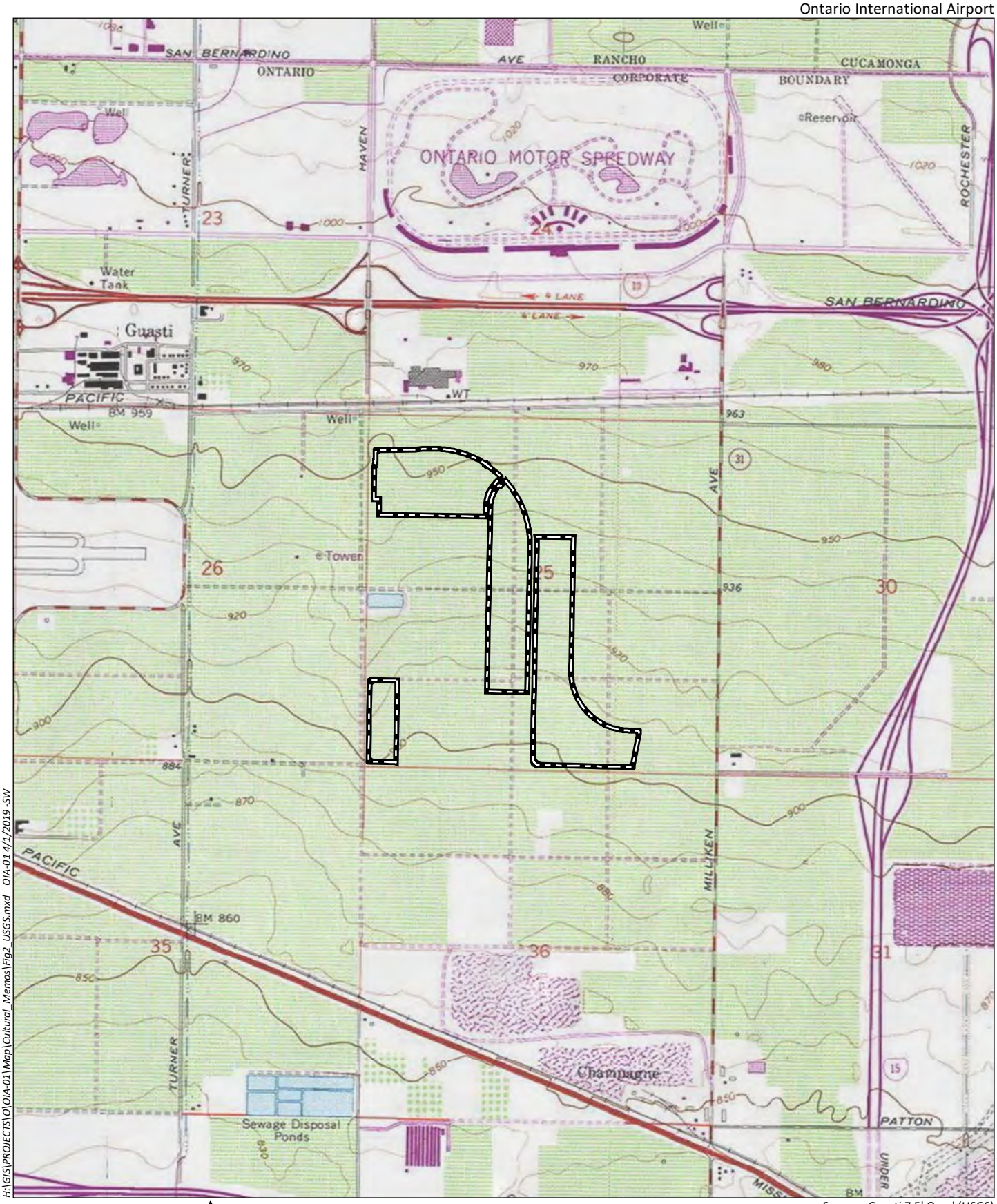
Source: Base Map Layers (ESRI, 2013)

HELIX Environmental Planning

Regional Location

Figure 1

3724



H:\GIS\PROJECTS\O\OIA-01\Map\Cultural_Memos\Fig2_USGS.mxd OIA-01 4/1/2019 -SW

0 2,000 Feet

Source: Guasti 7.5' Quad (USGS)

HELIX Environmental Planning

Vicinity Map

Figure 2

H:\GIS\PROJECTS\O\OIA-01\Map\Cultural_Memos\Fig3_Aerial.mxd OIA-01 4/1/2019 -EC

0 1,000 Feet

Source: Base Map Layers (Eagle Aerial, 2014)

HELIX Environmental Planning

Aerial Photograph

Figure 3

3726

HELIX Environmental Planning, Inc.
7578 El Cajon Boulevard
La Mesa, CA 91942
619.462.1515 tel
619.462.0552 fax
www.**helixepi**.com

April 15, 2019

Greg Devereaux
Ontario International Airport Authority
1923 E Avion Avenue
Ontario, CA 91761

OIA-01.18

Subject: Cultural Resources Survey for the Potential Development of Parcel Group 2

Dear Mr. Devereaux:

HELIX Environmental Planning, Inc. (HELIX) was contracted to conduct a cultural resources survey for the Ontario International Airport Authority's (OIAA) potential development (project; Group 2) in the City of Ontario, San Bernardino County, California. HELIX conducted a pedestrian survey, a record search, a Sacred Lands File (SLF) search, and review of existing documentation for the project. This letter report details the methods and results of the cultural resources survey. No cultural resources were observed during the survey effort

PROJECT LOCATION

The approximately 67-acre project area is located within the limits of the City of Ontario, west of Interstate (I-)15 and south of I-10 (Figure 1, *Regional Location*). The project is within Section 25 of Township 1 South, Range 7 West, on the Guasti, California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle (Figure 2, *Vicinity Map*). The Group 2 survey area is comprised of five parcels with Assessor's Parcel Numbers (APNs) 0211-222-56; 0211-232-04, 05, 06, 07.

The Group 2 survey area is located east of Haven Street, south of East Airport Drive, west of South Carnegie Avenue, and north of La Salle Street (Figure 3, *Aerial Photograph*). Elevations range from approximately 920 feet above mean sea level (amsl) in the southern portion of the survey area to 938 feet amsl in the northern portion of the survey area. The Group 2 parcels are vacant; existing Ontario International Airport infrastructure and industrial development surround the survey area.

METHODS

HELIX conducted a record search at the South Central Coastal Information Center (SCCIC) on March 7, 2019. The records search covered a one-mile radius around the Group 2 survey area and included the identification of previously recorded cultural resources and locations and citations for previous cultural resources studies. A review of the California Historical Resources and the state Office of Historic Preservation (OHP) historic properties directories was also conducted.

The Native American Heritage Commission (NAHC) was contacted for a SLF search on April 1, 2019; a response was received on April 15, 2019 and indicated that the results were negative for the project area; no additional outreach to the Native American community was conducted.

Various archival sources, including historic topographic maps and aerial imagery, were consulted, and the existing cultural resources reports, *Historical Architectural and Cultural Resources Inventory Report* (Douglas and Livingstone 2006) and *Ontario International Airport Historic Context Statement* (Davis and Novell 2017), were reviewed.

RESULTS

Records Search

The records search results identified seven previously recorded cultural resources within one mile of the project area, none of which are located within the Group 2 parcels (Table 1, *Previously Recorded Resources within One Mile of the Group 2 Parcels*). Two of the resources within the search limits, the Guasti (Brookside) Winery and the Church of San Secondo D`Asti, Guasti Church, are listed as California Points of Historical Interest (CPHI), and one resource, the Hofer Ranch, is listed on the National Register of Historic Places (NRHP). The Guasti (Brookside) Winery and the Church of San Secondo D`Asti, Guasti Church are located to the northwest of the project area, north of the railroad. The Hofer Ranch is located to the west, within Section 26.

Table 1
PREVIOUSLY RECORDED RESOURCES WITHIN ONE MILE OF THE GROUP 2 PARCELS

Resource Number (P-36-#)	Resource Number (CA-SBR-#)	Age and Resource Present	Description	Recorder, Date
001963	1963H	Historic Site	Remnants of a homestead/ranch, possibly associated with the Collins family who owned the property in the late 1800s	McKenna, 1987
001964	1964H	Historic Structure	Small shed containing modern pumping equipment	McKenna, 1987
015469	--	Historic Site	Guasti (Brookside) Winery (CPHI # 84)	Hansberger, 1975
015471	--	Historic Site	San Secondo D'Asti Catholic Church (CPHI # 76)	Hansberger, 1975
015990	--	Historic Structures/ Historic District	Guasti Historic District; consists of 51 resources (buildings, houses, etc.) constructed between 1900 and 1946	Warner and Solie, 1985
016249	--	Historic Site	Hofer Ranch (NR #93000596), also known as Ballou Ranch & Ben Haven; farm complex consisting of 15 resources (buildings and structures) constructed between 1905 and 1985	Hofer and Warner, 1985; Marvin and Goodwin, 2004
016279	--	Historic Building	Guasti Mansion; constructed in the Italian-Villa architectural style in 1922	Warner and Solie, 1985

The records search results identified 29 previous cultural resource studies within the record search limits, two of which cover or overlap with the project area (Table 2, *Previous Studies within One Mile of the Group 2 Parcels*). The overlapping studies include a cultural resources assessment (SB-01180) and a telecommunications report (SB-06525). The telecommunication study only covered a small portion of the Group 2 survey area. The cultural resources assessment study, however, was for the Ontario Industrial Park and covered the entirety of the project area; presumably this study included a pedestrian field survey.

Table 2
PREVIOUS STUDIES WITHIN ONE MILE OF THE GROUP 2 PARCELS

Report No.	Report Title	Author, Date
SB-00613	Draft Environmental Impact Report: Milliken Sanitary Landfill	Ultrasystems, Inc., 1978
SB-00644	Archaeological Evaluation of the Proposed Fontana Interceptor	Leonard, 1978
SB-01180*	Cultural Resources Assessment of the Ontario Industrial Park, San Bernardino County, California	Smith and Lerch, 1981
SB-01496	Cultural Resource Assessment of a 505-Acre Parcel Near Ontario, San Bernardino County, California	Del Chario and Cottrell, 1985
SB-01721	An Archaeological Report on The Reconnaissance Survey for the United Parcel Service, Air Cargo Facility, Ontario, California	Hatheway and McKenna, 1987
SB-02038	United Parcel Service Air Cargo Facility Project: Archaeological Site Evaluation	Farber, 1989
SB-02118	Cultural Resources Survey: United Parcel Service Proposed Air Cargo Facility, Ontario, San Bernardino County, California	Winter and Mason, 1989
SB-02194	Amanson Properties: Cultural Resource Investigation	Davis, 1988
SB-02348	A Comparative Study of Late Paleo-Indian Manifestations in the Western Great Basin	Tuohy, 1974
SB-02795	Cultural Resource Investigation: Cajon Pipeline Project	Hampson, Schmidt, and Schmidt, 1991
SB-02796	Cultural Resources Investigations, Site Inventory and Evaluations, The Cajon Pipeline Corridor, Los Angeles and San Bernardino Counties	McKenna, 1993
SB-02863	Negative Archaeological Survey Report, Provide High Occupancy Vehicle (HOV) Lanes on I-10 Between Mills and I-15	Wlodarski, 1993
SB-03573	Cultural Resource Assessment: Cingular Wireless Facility LA S04-01, San Bernardino County, California	Duke, 2001
SB-03574	Cultural Resource Assessment for PBMS Facility CM 392-01, County of San Bernardino, California	Lapin, 2000
SB-03586	Ontario to Colton Pipeline, San Bernardino County, California	Love, 2000
SB-03588	Identification and Evaluation of Historic Property: AT&T Wireless Site PB20002-115, City of Ontario, San Bernardino County, California	Love, 2000
SB-04158	Cultural Resource Assessment: AT&T Wireless Facility No. D115, San Bernardino County, California	Duke, 2001
SB-04161	Proposed Sprint PCS Wireless Telecommunication Facility Project SB40XC701E--California Hardware	Martinez, 2001

Table 2 (CON'T)
PREVIOUS STUDIES WITHIN ONE MILE OF THE GROUP 2 PARCELS

Report No.	Report Title	Author, Date
SB-04669	Records Search Results and Site Visit for Sprint Telecommunications Facility Candidate SB60XC842D (Perma Industries) 400 South Rockefeller Avenue, Ontario, San Bernardino County, California	Bonner, 2004
SB-04672	Cultural Resource Records Search and Site Visit Results for Cingular Telecommunications Facility Candidate LSANCA 8113E (Nextel Doubleday), 1455 S. Doubleday Avenue, Ontario, San Bernardino County, California	Bonner and Aislin-Kay, 2005
SB-05367	Cultural Resource Assessment: Hofer Ranch Airport Business Park Specific Plan Amendment, City of Ontario, San Bernardino County, California	Marvin and Goodwin, 2004
SB-05483	A Phase I Cultural Resources Investigation for the Bates Specific Plan Project Area on Haven Avenue in the City of Ontario, San Bernardino County, California	McKenna, 2006
SB-05740	Cultural Resource Records Search Results and Site Visit for T -Mobile Telecommunications Facility Candidate IE24077B (Airport Drive), 4000 Airport Drive, Ontario, San Bernardino County, California	Bonner and Aislin-Kay, 2007
SB-06513	A Phase I Cultural Resources Investigation of the GST Fiber Optic Alignment from Ontario, San Bernardino County, to Del Mar, San Diego County, California	McKenna, 2000
SB-06516	Cultural Resource Inventory Report for Williams Communications, Inc., Proposed Fiber Optic System Installation Project, Los Angeles to Riverside, Los Angeles, Riverside and San Bernardino Counties	Ashkar, 1999
SB-06523	Cultural Resources Records Search and Site Visit for AT&T Mobility, LLC Candidate LSANCAD115 (USID 16455), 410 Sequoia Ave, Ontario, San Bernardino County, California	Bonner and Williams, 2009
SB-06525*	Cultural Resources Records Search and Site Visit Results for Verizon Wireless Candidate "Ontario Airport", 3601 Jurupa Avenue, Ontario, San Bernardino County, California	Bonner and Said, 2009
SB-07195	Archaeological Sensitivity Assessment, Ontario Airport/Ensite #11890 (122944), 3330 East Francis Street, Ontario, San Bernardino County, California	Perez, 2012
SB-07196	Record Search Results for the Proposed AT&T Wireless Telecommunications Site LA8113 (Nextel Doubleday) located at 1455 South Doubleday Drive, Ontario, California	Wlodarski, 2012

**Studies that overlap with the project area*

Other Archival Research

Various archival sources were consulted, including historic topographic maps, aerial imagery (NETR Online 2019) and the Bureau of Land Management (BLM) General Land Office (GLO) Records. The purpose of this research was to identify historic land use in the area.

No land patents are on file with the BLM GLO for Section 25 of Township 1 South, Range 7 West, and neither the 1858 nor the 1865 survey plats show any cultural or environmental data for the section.

No buildings or structures appear within the Group 2 survey area or Section 25 on topographic maps prior to the 1950s. On the Guasti 1953 (1955 edition) 7.5-minute topographic map, a hollow square, possibly indicating a small structure, is observed in the central area of Section 25, to the east of the survey area. A reservoir is shown adjacent to the western edge of the project area along the west side of Haven Road on the same topographic map; however, it is situated outside of the project area and will not be impacted by the potential development of the Group 2 parcels.

The earliest aerial photograph of the Group 2 survey area dates to 1938; it shows open land and agricultural fields within the project area. By 1948, additional agriculture is represented in the area with what may be farm buildings or a residence with outbuildings situated in the northwest quarter of the southwest quarter of Section 25; however, these buildings are located outside of the Group 2 survey area. In addition, the reservoir shown on topographic maps appears in aerial photos as early as 1948. By 1959, additional development, likely related to agriculture, is shown in the area, but outside of the Group 2 parcels. On the 1966 aerial, it appears that the majority of the lands surrounding the project have been left fallow and are still undeveloped. However, an influx of development occurred between 1966 and 1994, when aerial images show the region considerably more populated by buildings and roads; these are situated adjacent to, but outside of, the current project site. The area remains much as shown from 1994 until the final aerial image, dating to 2012.

Survey

A pedestrian survey of the Group 2 parcels was conducted on March 13, 2019 by HELIX archaeological field director Julie Roy and field archaeologists Ariana Yanez and Kellie Kandybowicz. Stephen Bernal, a Native American monitor with the Gabrieleño Band of Mission Indians - Kizh Nation, assisted in the survey activities. Vegetation consisted of thick native and non-native weeds and flowering plants. Visibility ranged from 30 percent along the edges of the roads to 0 percent away from the roads, with rodent back dirt piles sometimes being the only soils visually inspected. Numerous berms were observed within the survey area. The berms may involve buried water transmission pipes. No cultural resources were observed during the survey effort.

SUMMARY AND RECOMMENDATIONS

A cultural resources survey of the project site was conducted on March 13, 2019, no cultural resources were recorded during the survey effort. It must be noted that although no Native American cultural resources have been documented in the NAHC's SLF for the project area, the general area is of importance to the Native American community.

No known cultural resources will be impacted by the potential development of the Group 2 parcels, and no constraints related to cultural resources are anticipated; however, completion of a cultural resources technical report addressing both California Environmental Quality Act (CEQA) significance and federal compliance (e.g., Section 106 of the National Historic Preservation Act) is recommended.

If you have any questions, please call Stacie Wilson at (619) 462-1515.

Stacie Wilson, RPA
Senior Archaeologist

Julie Roy
Archaeological Field Director

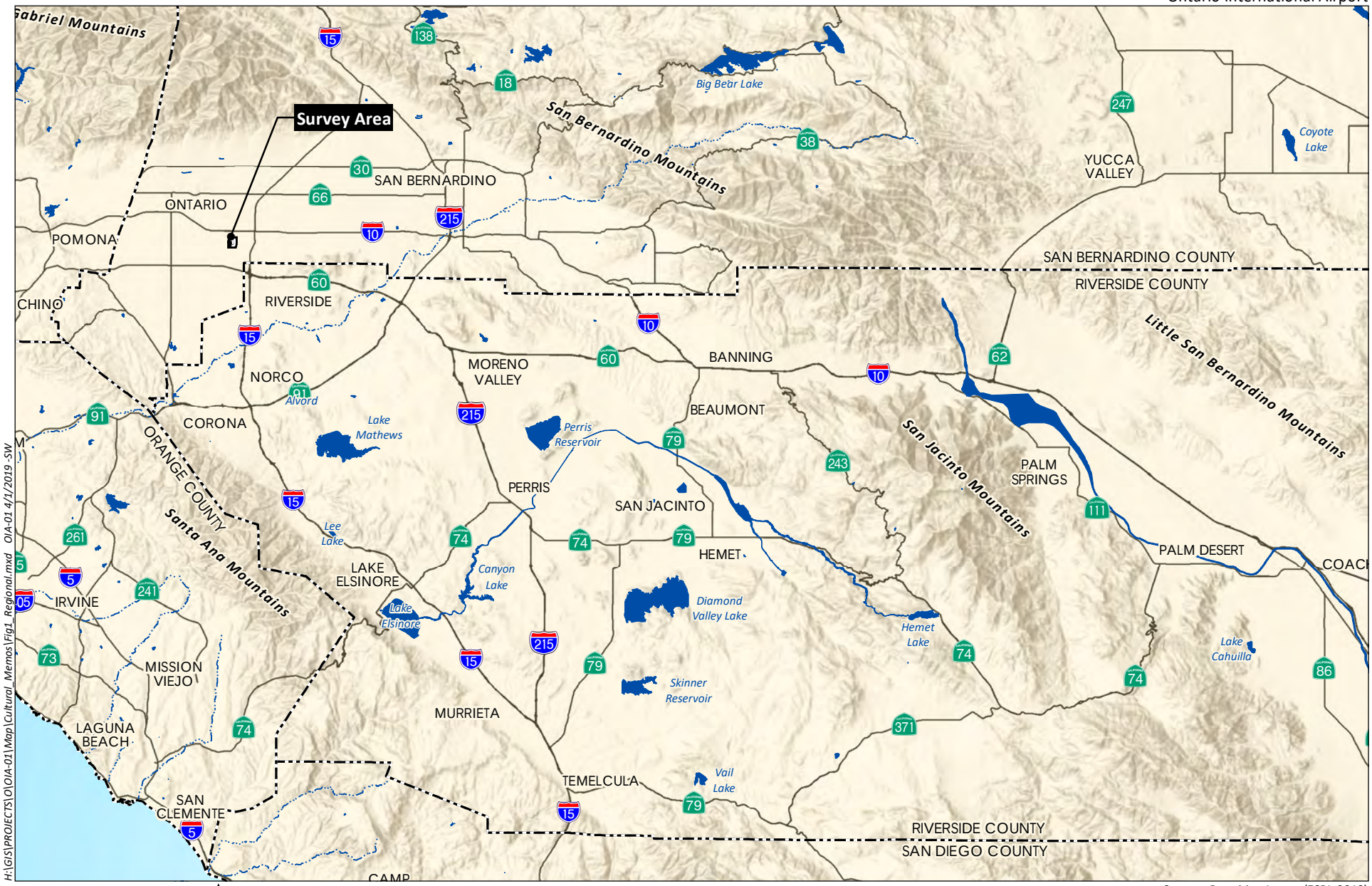
Attachments:
Figure 1: Regional Location
Figure 2: USGS Topography
Figure 3: Aerial Photograph

REFERENCES

Davis, Shannon and Marilyn Novell
2017 *Ontario International Airport Historic Context Statement*. Prepared for the City of Ontario Planning Department. Prepared by ASM Affiliates, Inc. On file at HELIX.

Douglas, Diane L. and David Livingstone
2006 *Historical Architectural and Cultural Resources Inventory Report. Pacific Gateway Cargo Center Ontario Airport San Bernardino County*, California. Prepared for Aero Ontario RFP, LLC. URS Project No. 29870326.04200. On file at HELIX.

NETR Online
2019 *Historic Aerials*. Nationwide Environmental Title Research, LLC. Electronic document available at: http://www.historicaerials.com, accessed March 2019.



H:\GIS\PROJECTS\O\OIA-01\Map\Cultural Memos\Fig1 Regional.mxd OIA-01 4/1/2019 -SW

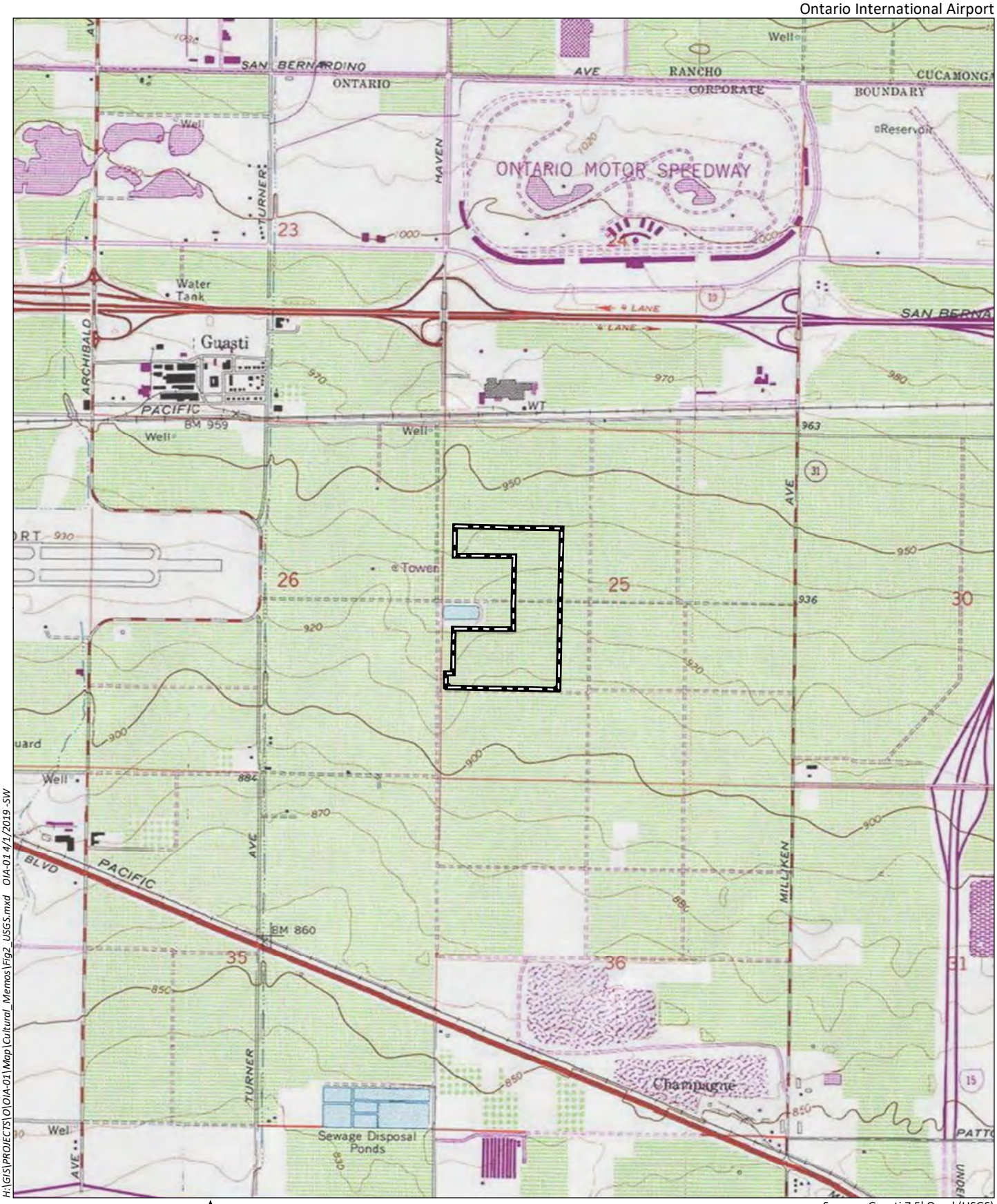
Source: Base Map Layers (ESRI, 2013)

HELIX Environmental Planning

Regional Location

Figure 1

3734



H:\GIS\PROJECTS\O\OIA-01\Map\Cultural_Memos\Fig2_USGS.mxd OIA-01 4/1/2019 -SW

0 2,000 Feet

Source: Guasti 7.5' Quad (USGS)

HELIX Environmental Planning

Vicinity Map

Figure 2

H:\GIS\PROJECTS\O\OIA-01\Map\Cultural_Memos\Fig3_Aerial.mxd OIA-01 4/1/2019 -EC

0 1,000 Feet

Source: Base Map Layers (Eagle Aerial, 2014)

HELIX Environmental Planning

Aerial Photograph

Figure 3

3736

December 8, 2021

Mr. Bruce McDonald
McDonald Property Group
1140 N. Coast Highway
Laguna Beach, California 92651

SUBJECT: CALIFORNIA LOGISTICS CENTER AT ONTARIO INTERNATIONAL AIRPORT VEHICLE MILES TRAVELED (VMT) ANALYSIS

Dear Mr. Bruce McDonald:

The following VMT Analysis has been prepared for the proposed California Logistics Center at Ontario International Airport Project (**Project**), which is located on the southeast corner of Haven Avenue and E. Airport Drive in the City of Ontario.

PROJECT OVERVIEW

It is our understanding that the proposed Project intends to develop 9 industrial warehouse buildings totaling of 4,282,450 square feet (SF). (See Attachment A)

It should be noted that, for the purposes of trip generation evaluation contained within this VMT analysis, the following mix of land uses are proposed to be evaluated for the Project:

- 642,368 SF of high-cube cold storage warehouse use (15% of the total square footage)
- 3,640,082 SF of high-cube fulfillment center warehouse use (85% of the total square footage)
- **Total of 4,282,450 SF**

BACKGROUND

Changes to California Environmental Quality Act (CEQA) Guidelines were adopted in December 2018, which require all lead agencies to adopt VMT as a replacement for automobile delay-based level of service (LOS) as the measure for identifying transportation impacts for land use projects. This statewide mandate went into effect July 1, 2020. To aid in this transition, the Governor's Office of Planning and Research (OPR) released a Technical Advisory on Evaluating Transportation Impacts in CEQA (December of 2018) (**Technical Advisory**). (1) Based on the Technical Advisory, the City of Ontario has developed and adopted their own VMT methodologies and thresholds, which were adopted by City Council in June 2020 (**City Guidelines**). (2) It is our understanding the City of Ontario utilizes the San Bernardino County Transportation Authority (SBCTA) VMT Screening Tool (**Screening Tool**). The Screening Tool allows users to select an assessor's parcel number (APN) to determine if a project's location meets one or more of

the screening thresholds for land use projects identified in the City Guidelines. This VMT analysis has been developed based on the adopted City Guidelines.

VMT SCREENING EVALUATION

City Guidelines identify Projects that meet certain VMT screening criteria may be presumed to result in a less than significant transportation impact. The City Guidelines lists the following VMT screening criteria:

- Transit Priority Area (TPA) Screening
- Low VMT Area Screening
- Project Type Screening

A land use project need only meet one of the above screening criteria to result in a less than significant impact.

TPA SCREENING

Consistent with guidance identified in the City Guidelines, projects located within a Transit Priority Area (TPA) (i.e., within ½ mile of an existing "major transit stop"[1] or an existing stop along a "high-quality transit corridor"[2]) may be presumed to have a less than significant impact absent substantial evidence to the contrary. However, the presumption may not be appropriate if a project:

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate or high-income residential units.

The Screening Tool was utilized to locate the Project site and its proximity to a TPA. Results as shown in attachment B identify the Project Site is not located within ½ mile of an existing major transit stop, or along a high-quality transit corridor.

TPA screening criteria is not met.

[1] Pub. Resources Code, § 21064.3 ("'Major transit stop' means a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.").
[2] Pub. Resources Code, § 21155 ("For purposes of this section, a high-quality transit corridor means a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.").

LOW VMT AREA SCREENING

As noted in the Technical Advisory, "Residential and office projects that locate in areas with low VMT and that incorporate similar features (density, mix of uses, and transit accessibility) will tend to exhibit similarly low VMT."

City Guidelines state that projects may be presumed to have a less than significant VMT impact if located in an already low VMT generating traffic analysis zones (TAZs) that generates a VMT per service population (SP) that is 15% below County of San Bernardino Baseline VMT per SP. The Screening Tool uses the sub-regional San Bernardino Transportation Analysis Model (SBTAM) to measure VMT performance within individual TAZ's within the region. The Project's physical location based on parcel number is selected in the Screening Tool to determine the TAZ in which the Project will reside. The Project's TAZs VMT per service population was compared to 15% below County of San Bernardino Baseline VMT per SP. The parcel containing the proposed Project was selected and the Screening Tool was run for production-attraction (PA) VMT per service population, the Project is not located within a low VMT generating zone. (See Attachment B)

Low VMT Area screening criteria is not met.

PROJECT TYPE SCREENING

The City Guidelines identify that local serving retail less than 50,000 square feet or other local serving essential services (e.g., day care centers, public schools, medical/dental office buildings, etc.) are presumed to have a less than significant impact absent substantial evidence to the contrary. The Project as intended does not contain any local serving uses.

Additionally, the City Guidelines state that small projects generating fewer than 110 daily vehicle trips or less may be presumed to have a less than significant impact, subject to discretionary approval by the City. Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021. (3) The Project is anticipated to generate 7,980 daily vehicle trip-ends per day. Therefore, the Project generate daily vehicle trips exceeding the 110 daily vehicle trip threshold. (See Attachment C)

The Project Type screening threshold is not met.

Based on a more detailed review of the applicable VMT screening methods, it was determined that the Project is not eligible for screening and VMT analysis should be performed.

VMT ANALYSIS

VMT MODELING

The City Guidelines identifies SBTAM as the appropriate tool for conducting VMT analysis for land use projects in the City of Ontario, as it considers interaction between different land uses based on socio-economic data, such as population, households, and employment. The calculation of VMT for land use projects is based on the total number of trips generated and the average trip length of each vehicle. SBTAM is also consistent with the model used to develop the City's VMT impact thresholds listed by the City Guidelines. Therefore, the vehicle trips and average daily trip length for project-related vehicle trips are model derived from SBTAM.

VMT METRIC AND SIGNIFICANCE THRESHOLD

The City Guidelines state for land use projects in the City of Ontario shall use the VMT metric of VMT per Service Population as the appropriate measure in a VMT analysis. The City Guidelines have identified following recommended threshold:

- A significant impact would occur if the project VMT per Service Population exceeds the Citywide average for Service Population under General Plan Buildout Conditions.

SBCTA provides VMT calculations for each of its member agencies and for the City of Ontario's average for Service Population under General Plan Buildout Conditions. Urban Crossroads has obtained this published data from SBCTA, which for the **City of Ontario's General Plan Buildout is 36.2 VMT per SP**.

PROJECT LAND USE CONVERSION

In order to evaluate Project VMT, standard land use information must first be converted into a SBTAM compatible dataset. The SBTAM model utilizes socio-economic data (SED) (e.g., population, households, employment, etc.) instead of land use information for the purposes of vehicle trip estimation. Project land use information such as building square footage must first be converted to SED for input into SBTAM. Adjustments in SED have been made to the appropriate TAZ within the SBTAM model to reflect the Project's proposed land uses (i.e., warehouse). Table 1 summarizes the employment estimates for the Project. It should be noted that the employment estimates are consistent with the employment density factors identified in the Southern California Association of Governments (SCAG) Employment Density Study (October 2001). (4)

TABLE 1: EMPLOYMENT ESTIMATES

Land Use	Quantity (SF)	Employment Density Factor[3]	Estimated Employees
Warehouse	4,282,450	1 employee per 1,195 SF	3,585

[3] SCAG Employment Density Study; Table II-B

PROJECT VMT CALCULATION

Adjustments to employment for the Project's TAZ were made to both the SBTAM baseline year (2016) and cumulative year (2040) traffic models. The ability to capture all trips by all trip purposes can be achieved with the SBTAM model by using the Origin-Destination (OD) trip matrices. Using these OD trip matrices, the project generated total VMT was calculated utilizing straight-line interpolation for the baseline (2021) conditions. The total VMT for all scenarios is then normalized by dividing by the Project's service population (SP) (e.g., employees). As shown in Table 2, the Project Baseline VMT per SP is 32.96 and Project Cumulative VMT per SP is 33.60.

TABLE 2: PROJECT VMT PER SP

	Base Year (2016)	Cumulative Year (2040)	Baseline (2021)
Employment[4]	3,585	3,585	3,585
VMT	117,069	120,453	118,156
VMT / SP	32.66	33.60	32.96

PROJECT COMPARISON TO SIGNIFICANCE THRESHOLD

Table 3 illustrates the comparison between Project generated VMT per SP in the Baseline and Cumulative Conditions to the City of Ontario's future Buildout VMT per SP. As shown, the Project would not exceed the City's threshold of City of Ontario's future Buildout VMT per SP for either in the Baseline or Cumulative Project conditions. The Project VMT impact is therefore considered less than significant.

TABLE 3: PROJECT VMT PER SP COMPARISON

	Baseline	Cumulative
Impact Threshold	36.2	36.2
Project	32.96	33.60
Percent Change	-8.95%	-7.18%
Potentially Significant?	No	No

PROJECT CUMULATIVE IMPACT ON VMT

The City Guidelines consistent with the Technical Advisory states that cumulative impacts on VMT "… metrics such as VMT per capita or VMT per employee, i.e., metrics framed in terms of efficiency (as recommended below for use on residential and office projects), cannot be summed because they employ a denominator. A project that falls below an efficiency-based threshold that is aligned with long-term goals and relevant plans has no cumulative impact distinct from the project impact. Accordingly, a finding of a less-than-significant project impact would imply a less than significant cumulative impact, and vice versa. This is similar to the analysis typically conducted for greenhouse gas emissions, air quality impacts,

[4] Since the Project does not have a residential component, the service population consists entirely of employment.

and impact that utilize plan compliance as a threshold of significance."[5] The Project is consistent with the City's General Plan underlying land use assumptions and the Project was found to have a less than significant impact at the project level. The Project is also considered to be less than significant cumulative impact as well.

CONCLUSION

In summary, the Project was not found to meet any of the City's described screening criteria and a project level VMT analysis was performed. The Project's VMT analysis findings for project generated VMT per service population was found to not exceed the City's threshold, the Project's impact on VMT is presumed to be less than significant**.**

If you have any questions, please contact me directly at 949-660-1994.

Respectfully submitted,

URBAN CROSSROADS, INC.

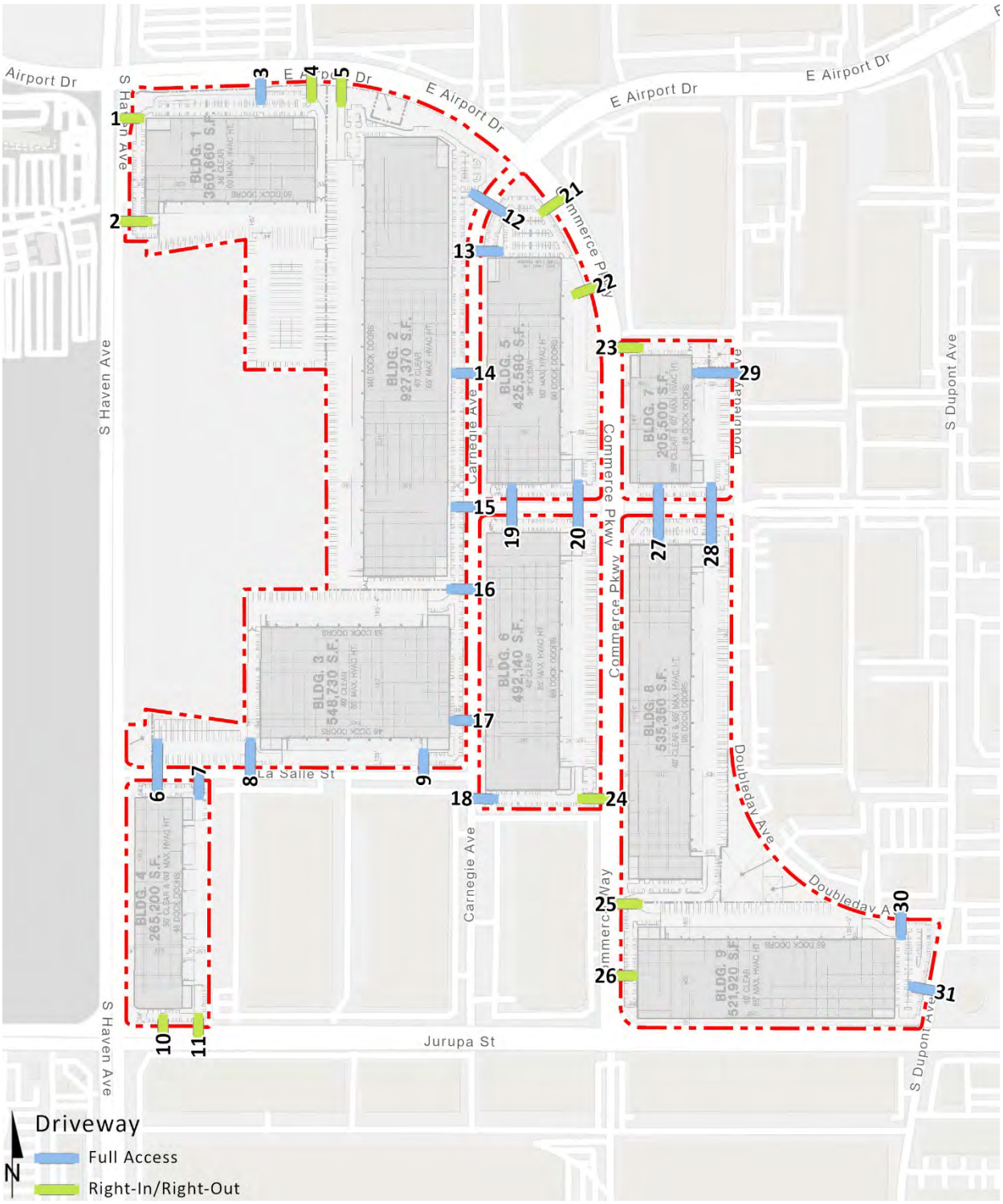
Alexander So
Senior Analyst

[5] OPR's Technical Advisory; Page 6.

REFERENCES

1. **Office of Planning and Research.** *Technical Advisory on Evaluating Transportation Impacts in CEQA.* State of California : s.n., December 2018.
2. **City of Ontario.** *SB 743 VMT Thresholds.* City of Ontario : s.n., June 2020.
3. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
4. **Southern California Association of Governments.** *Employment Density Study.* October 2001.

ATTACHMENT A
PRELIMINARY SITE PLAN


Airport Dr
E Airport Dr
S Haven Ave
S Dupont Ave
Commerce Pkwy
Carnegie Ave
Doubleday Ave
La Salle St
Jurupa St
BLDG. 1
360,860 S.F.
BLDG. 2
927,370 S.F.
BLDG. 3
548,730 S.F.
BLDG. 4
265,200 S.F.
BLDG. 5
425,580 S.F.
BLDG. 6
492,140 S.F.
BLDG. 7
205,500 S.F.
BLDG. 8
535,350 S.F.
BLDG. 9
521,920 S.F.
Driveway
Full Access
Right-In/Right-Out
N

ATTACHMENT B
SBCTA SCREENING TOOL

EXHIBIT 1: TAZ 53687702

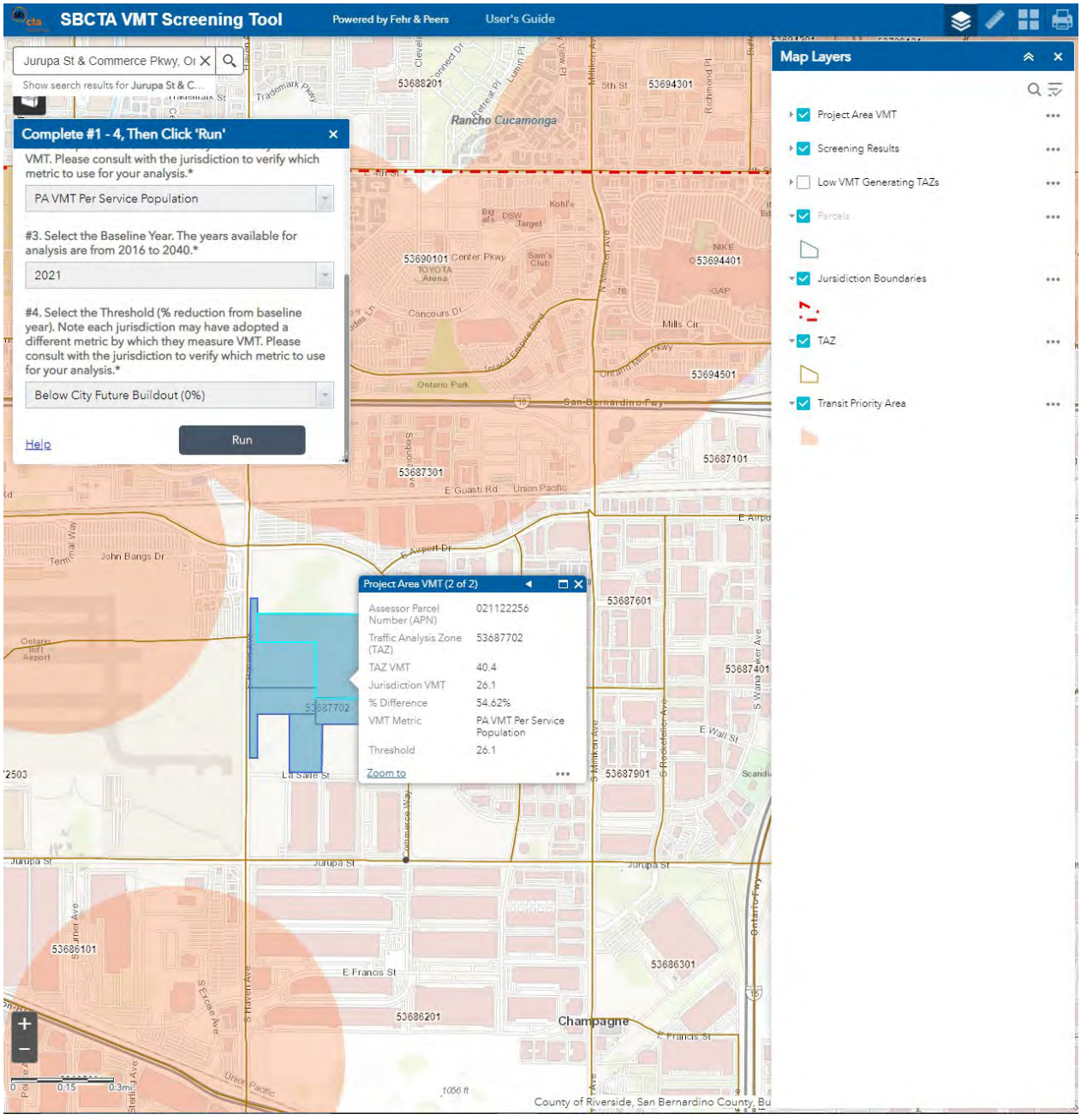


EXHIBIT 2: TAZ 53687701

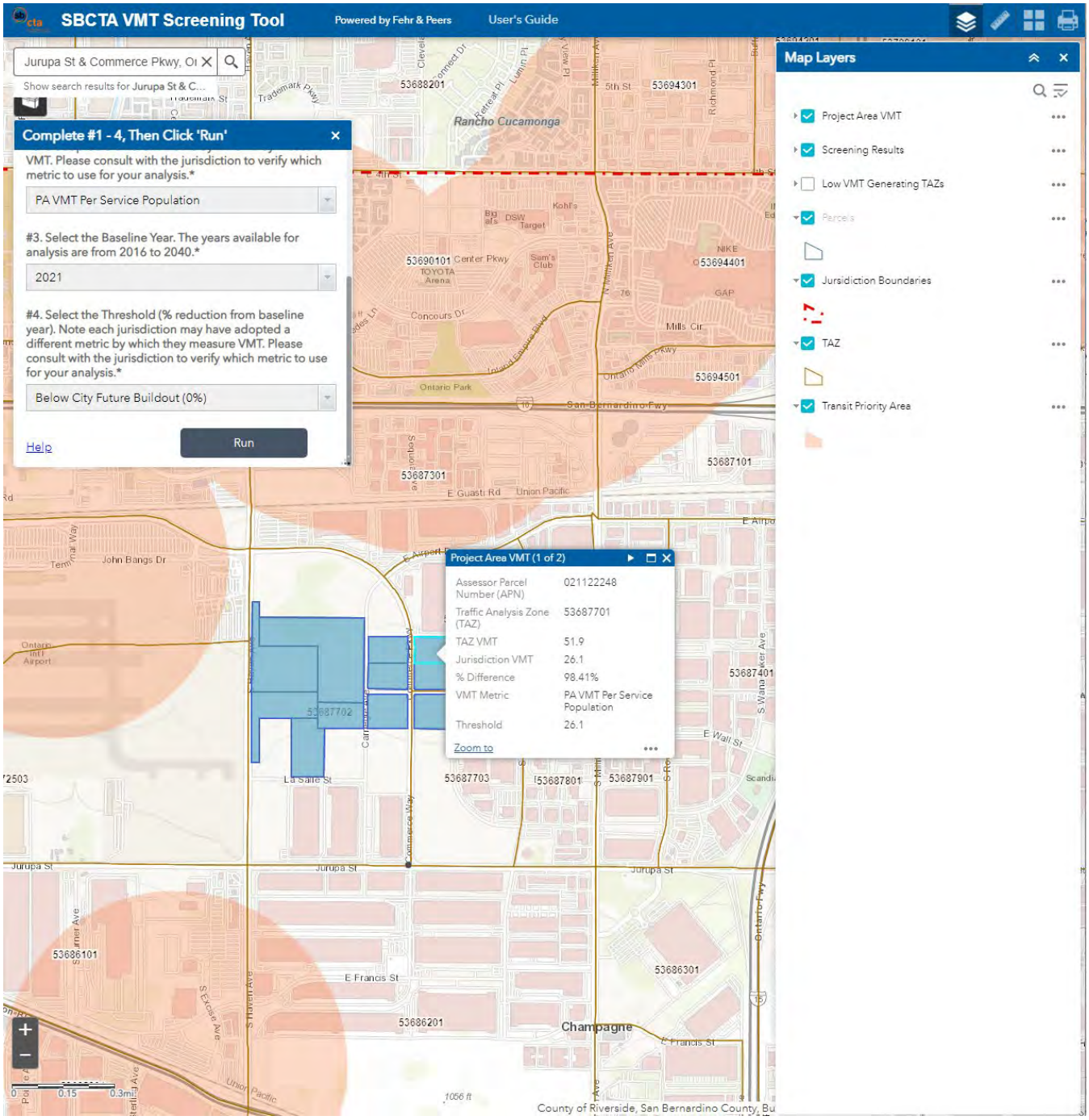
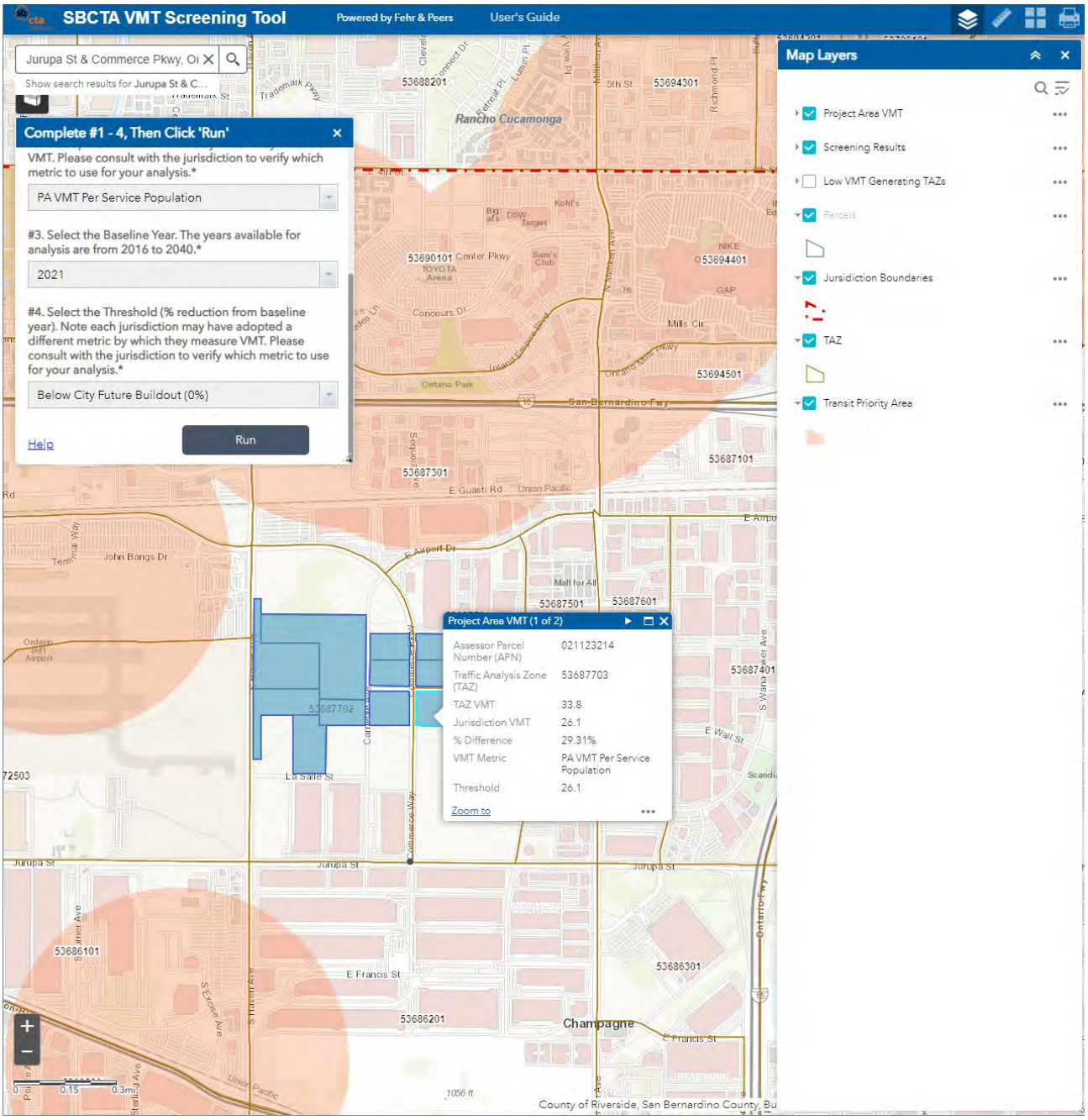


EXHIBIT 3: TAZ 53687703



ATTACHMENT C
PROJECT TRIP GENERATION

TABLE 1: TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
High-Cube Fulfillment Center (Non-Sort)[3]	TSF	155	0.122	0.028	0.150	0.062	0.098	0.160	1.810
Passenger Cars			0.105	0.025	0.130	0.059	0.091	0.150	1.580
2-Axle Trucks			0.002	0.001	0.003	0.001	0.001	0.002	0.038
3-Axle Trucks			0.002	0.002	0.004	0.001	0.001	0.002	0.048
4+-Axle Trucks			0.006	0.007	0.013	0.003	0.003	0.006	0.144
High-Cube Cold Storage Warehouse[3]	TSF	157	0.085	0.025	0.110	0.034	0.086	0.120	2.120
Passenger Cars			0.062	0.018	0.080	0.025	0.065	0.090	1.665
2-Axle Trucks			0.003	0.007	0.010	0.005	0.005	0.010	0.260
3-Axle Trucks			0.001	0.002	0.003	0.002	0.001	0.003	0.083
4+-Axle Trucks			0.005	0.011	0.016	0.008	0.008	0.016	0.113

[1] Trip Generation and Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition (2021).

[2] TSF = thousand square feet

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.
Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

TABLE 2: TRIP GENERATION SUMMARY

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Building 1:								
Passenger Cars:	360.660 TSF	35	9	44	19	32	51	574
Total Truck Trips (Actual Vehicles):		4	4	8	1	1	2	96
Building 1 Total Trips (Actual Vehicles)[2]		**39**	**13**	**52**	**20**	**33**	**53**	**670**
Building 2:								
Passenger Cars:	927.370 TSF	92	23	114	50	81	130	1,478
Total Truck Trips (Actual Vehicles):		10	11	21	6	7	13	246
Building 2 Total Trips (Actual Vehicles)[2]		**102**	**34**	**135**	**56**	**88**	**143**	**1,724**
Building 3:								
Passenger Cars:	548.730 TSF	54	13	67	30	47	77	876
Total Truck Trips (Actual Vehicles):		5	7	12	2	3	5	148
Building 3 Total Trips (Actual Vehicles)[2]		**59**	**20**	**79**	**32**	**50**	**82**	**1,024**
Building 4:								
Passenger Cars:	265.200 TSF	26	7	32	14	24	38	422
Total Truck Trips (Actual Vehicles):		1	1	2	1	1	2	72
Building 4 Total Trips (Actual Vehicles)[2]		**27**	**8**	**34**	**15**	**25**	**40**	**494**
Building 5:								
Passenger Cars:	425.580 TSF	42	10	52	23	37	60	678
Total Truck Trips (Actual Vehicles):		4	4	8	2	2	4	116
Building 5 Total Trips (Actual Vehicles)[2]		**46**	**14**	**60**	**25**	**39**	**64**	**794**
Building 6:								
Passenger Cars:	492.140 TSF	49	11	60	27	43	70	786
Total Truck Trips (Actual Vehicles):		5	7	12	2	2	4	130
Building 6 Total Trips (Actual Vehicles)[2]		**54**	**18**	**72**	**29**	**45**	**74**	**916**
Building 7:								
Passenger Cars:	205.500 TSF	20	5	26	11	18	29	328
Total Truck Trips (Actual Vehicles):		1	1	2	1	1	2	58
Building 7 Total Trips (Actual Vehicles)[2]		**21**	**6**	**28**	**12**	**19**	**31**	**386**
Building 8:								
Passenger Cars:	535.350 TSF	53	12	65	29	46	75	854
Total Truck Trips (Actual Vehicles):		5	7	12	2	2	4	146
Building 8 Total Trips (Actual Vehicles)[2]		**58**	**19**	**77**	**31**	**48**	**79**	**1,000**
Building 9:								
Passenger Cars:	521.920 TSF	52	12	64	28	45	74	832
Total Truck Trips (Actual Vehicles):		5	7	12	2	2	4	140
Building 9 Total Trips (Actual Vehicles)[2]		**57**	**19**	**76**	**30**	**47**	**78**	**972**
Passenger Car Total		423	102	524	231	373	604	6,828
Truck Total (Actual Vehicles)		40	49	89	19	21	40	1,152
Project Total Trips (Actual Vehicles)[2]		**463**	**151**	**613**	**250**	**394**	**644**	**7,980**

[1] TSF = thousand square feet

California Logistics Center

TRAFFIC ANALYSIS
CITY OF ONTARIO

PREPARED BY:

Aric Evatt, PTP
aevatt@urbanxroads.com

Charlene So, PE
cso@urbanxroads.com

Robert Vu, PE
rvu@urbanxroads.com

JANUARY 11, 2022

14274-03 TA Report

DRAFT

DRAFT

TABLE OF CONTENTS

TABLE OF CONTENTS I
APPENDICES III
LIST OF EXHIBITS V
LIST OF TABLES VI
LIST OF ABBREVIATED TERMS VIII
1 INTRODUCTION 1
1.1 Summary of Findings 1
1.2 Project Overview 3
1.3 Analysis Scenarios 3
1.4 Study Area 5
1.5 Project Deficiencies 9
1.6 Recommendations 10
2 METHODOLOGIES 21
2.1 Level of Service 23
2.2 Intersection Capacity Analysis 23
2.3 Traffic Signal Warrant Analysis Methodology 25
2.4 Minimum Acceptable Levels of Service (LOS) 27
2.5 Deficiency Criteria 28
2.5 Project Fair Share Calculation Methodology 29
3 AREA CONDITIONS 31
3.1 Existing Circulation Network 31
3.2 City of Ontario General Plan Circulation Element 31
3.3 City of Eastvale General Plan Circulation Element 37
3.4 Truck Routes 37
3.5 Bicycle, Equestrian, & Pedestrian Facilities 37
3.6 Transit Service 37
3.7 Existing Traffic Counts 45
3.8 Intersection Operations Analysis 46
3.9 Traffic Signal Warrants Analysis 50
4 PROJECTED FUTURE TRAFFIC 51
4.1 Project Trip Generation 51
4.2 Project Trip Distribution 55
4.3 Modal Split 56
4.4 Project Trip Assignment 56
4.5 Background Traffic 56
4.6 Cumulative Development Traffic 62
4.7 Horizon Year (2040) Volume Development 71
5 E+P TRAFFIC CONDITIONS 73
5.1 Roadway Improvements 73
5.2 Existing plus Project Traffic Volume Forecasts 73
5.3 Intersection Operations Analysis 73
5.4 Traffic Signal Warrants Analysis 73
5.5 Off-Ramp Queuing Analysis ..... **Error! Bookmark not defined.**
5.6 Improvements 78

DRAFT

6 OPENING YEAR CUMULATIVE (2026) TRAFFIC CONDITIONS 79
6.1 Roadway Improvements 79
6.2 Opening Year Cumulative (2026) Without Project Traffic Volume Forecasts 79
6.3 Opening Year Cumulative (2026) With Project Traffic Volume Forecasts 79
6.4 Intersection Operations Analysis 79
6.5 Traffic Signal Warrants Analysis 86
6.6 Off-Ramp Queuing Analysis ..... **Error! Bookmark not defined.**
6.7 Improvements ..... **Error! Bookmark not defined.**
7 HORIZON YEAR (2040) TRAFFIC CONDITIONS 89
7.1 Roadway Improvements 89
7.2 Horizon Year (2040) Without Project Traffic Volume Forecasts 89
7.3 Horizon Year (2040) With Project Traffic Volume Forecasts 89
7.4 Intersection Operations Analysis 96
7.5 Traffic Signal Warrants Analysis 96
7.6 Off-Ramp Queuing Analysis ..... **Error! Bookmark not defined.**
7.7 Improvements 98
8 LOCAL AND REGIONAL FUNDING MECHANISMS 100
8.1 City of Ontario Development Impact Fee Program 101
8.2 Measure "I" Funds 102
8.3 Fair Share Contribution 102
9 REFERENCES 105

DRAFT

APPENDICES

APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT
APPENDIX 1.2: SITE ADJACENT QUEUES
APPENDIX 3.1: EXISTING TRAFFIC COUNTS – JANUARY 2019
APPENDIX 3.2: EXISTING (2021) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS
APPENDIX 3.3: EXISTING (2021) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS
APPENDIX 3.4: EXISTING (2021) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS
APPENDIX 4.1: POST PROCESSING WORKSHEETS
APPENDIX 5.1: E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS
APPENDIX 5.2: E+P CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS
APPENDIX 5.3: E+P CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS
APPENDIX 5.4: E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS
APPENDIX 6.1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS
APPENDIX 6.2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS
APPENDIX 6.3: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS
APPENDIX 6.4: OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS
APPENDIX 6.5: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS
APPENDIX 6.6: OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS
APPENDIX 6.7: OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS
APPENDIX 7.1: HORIZON YEAR (2040) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS
APPENDIX 7.2: HORIZON YEAR (2040) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS
APPENDIX 7.3: HORIZON YEAR (2040) WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS
APPENDIX 7.4: HORIZON YEAR (2040) WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS
APPENDIX 7.5: HORIZON YEAR (2040) WITHOUT PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS
APPENDIX 7.6: HORIZON YEAR (2040) WITH PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS
APPENDIX 7.7: HORIZON YEAR (2040) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

DRAFT

This Page Intentionally Left Blank

DRAFT

LIST OF EXHIBITS

EXHIBIT 1-1: LOCATION MAP **2**
EXHIBIT 1-2: PRELIMINARY SITE PLAN **4**
EXHIBIT 1-3: LOCATION MAP (1 OF 2) **8**
EXHIBIT 1-3: LOCATION MAP (2 OF 2) ..... ERROR! BOOKMARK NOT DEFINED.
EXHIBIT 1-4: SITE ADJACENT ROADWAY AND SITE RECOMMENDATIONS (1 OF 2) **12**
EXHIBIT 1-4: SITE ADJACENT ROADWAY AND SITE RECOMMENDATIONS (2 OF 2) **13**
EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS (1 OF 4) ... ERROR! BOOKMARK NOT DEFINED.
EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS (2 OF 4) **32**
EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS (3 OF 4) **33**
EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS (4 OF 4) **34**
EXHIBIT 3-2: CITY OF ONTARIO GENERAL PLAN CIRCULATION ELEMENT **35**
EXHIBIT 3-3: CITY OF ONTARIO GENERAL PLAN ROADWAY CROSS-SECTIONS **36**
EXHIBIT 3-4: CITY OF EASTVALE GENERAL PLAN CIRCULATION ELEMENT **38**
EXHIBIT 3-5: CITY OF EASTVALE GENERAL PLAN ROADWAY CROSS-SECTIONS **39**
EXHIBIT 3-6: CITY OF ONTARIO TRUCK ROUTES **40**
EXHIBIT 3-7: CITY OF ONTARIO GENERAL PLAN TRAILS AND BIKEWAY SYSTEMS **41**
EXHIBIT 3-8: EASTVALE AREA TRAILS AND BIKEWAYS **42**
EXHIBIT 3-9: EXISTING PEDESTRIAN FACILITIES **43**
EXHIBIT 3-10: EXISTING TRANSIT ROUTES **44**
EXHIBIT 3-11: EXISTING (2021) TRAFFIC VOLUMES (1 OF 3) **46**
EXHIBIT 3-11: EXISTING (2021) TRAFFIC VOLUMES (2 OF 3) **47**
EXHIBIT 3-11: EXISTING (2021) TRAFFIC VOLUMES (3 OF 3) **48**
EXHIBIT 4-1: PROJECT (TRUCK) TRIP DISTRIBUTION **57**
EXHIBIT 4-2: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION **58**
EXHIBIT 4-4: PROJECT ONLY TRAFFIC VOLUMES (1 OF 3) **59**
EXHIBIT 4-4: PROJECT ONLY TRAFFIC VOLUMES (2 OF 3) **60**
EXHIBIT 4-4: PROJECT ONLY TRAFFIC VOLUMES (3 OF 3) **61**
EXHIBIT 4-6: CUMULATIVE DEVELOPMENT LOCATION MAP **63**
EXHIBIT 4-7: CUMULATIVE ONLY TRAFFIC VOLUMES (1 OF 3) **64**
EXHIBIT 4-7: CUMULATIVE ONLY TRAFFIC VOLUMES (2 OF 3) **65**
EXHIBIT 4-7: CUMULATIVE ONLY TRAFFIC VOLUMES (3 OF 3) **66**
EXHIBIT 5-1: E+P TRAFFIC VOLUMES (1 OF 3) **74**
EXHIBIT 5-1: E+P TRAFFIC VOLUMES (2 OF 3) **75**
EXHIBIT 5-1: E+P TRAFFIC VOLUMES (3 OF 3) **76**
EXHIBIT 6-1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC VOLUMES (1 OF 3) **80**
EXHIBIT 6-1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC VOLUMES (2 OF 3) **81**
EXHIBIT 6-1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC VOLUMES (3 OF 3) **82**
EXHIBIT 6-2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT TRAFFIC VOLUMES (1 OF 3) **83**
EXHIBIT 6-2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT TRAFFIC VOLUMES (2 OF 3) **84**
EXHIBIT 6-2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT TRAFFIC VOLUMES (3 OF 3) **85**
EXHIBIT 7-1: HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC VOLUMES (1 OF 3) **90**
EXHIBIT 7-1: HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC VOLUMES (2 OF 3) **91**
EXHIBIT 7-1: HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC VOLUMES (3 OF 3) **92**
EXHIBIT 7-2: HORIZON YEAR (2040) WITH PROJECT TRAFFIC VOLUMES (1 OF 3) **93**
EXHIBIT 7-2: HORIZON YEAR (2040) WITH PROJECT TRAFFIC VOLUMES (2 OF 3) **94**

DRAFT

EXHIBIT 7-2: HORIZON YEAR (2040) WITH PROJECT TRAFFIC VOLUMES (3 OF 3) 95

This Page Intentionally Left Blank

DRAFT

LIST OF TABLES

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS 6
TABLE 1-2: SUMMARY OF DEFICIENT INTERSECTIONS BY ANALYSIS SCENARIO 9
TABLE 1-3: SUMMARY OF IMPROVEMENTS RECOMMENDED TO MEET CITY OF ONTARIO OR SURROUNDING AGENCY LOS REQUIREMENTS 21
TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS 24
TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS 25
TABLE 2-3: UNSIGNALIZED INTERSECTION LOCATIONS 27
TABLE 2-6: DEFICIENCY CRITERIA 29
TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2021) CONDITIONS 49
TABLE 4-1: PROJECT TRIP GENERATION RATES 52
TABLE 4-2: PROJECT TRIP GENERATION SUMMARY (ACTUAL) 53
TABLE 4-3: PROJECT TRIP GENERATION SUMMARY (PCE) 54
TABLE 4-4: CUMULATIVE DEVELOPMENT LAND USE SUMMARY (1 OF 4) 67
TABLE 4-4: CUMULATIVE DEVELOPMENT LAND USE SUMMARY (2 OF 4) 68
TABLE 4-4: CUMULATIVE DEVELOPMENT LAND USE SUMMARY (3 OF 4) 69
TABLE 4-4: CUMULATIVE DEVELOPMENT LAND USE SUMMARY (4 OF 4) 70
TABLE 5-1: INTERSECTION ANALYSIS FOR E+P CONDITIONS (1 OF 2) 77
TABLE 5-1: INTERSECTION ANALYSIS FOR E+P CONDITIONS (2 OF 2) 78
TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS (1 OF 2) 87
TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS (2 OF 2) 88
TABLE 7-1: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS (1 OF 2) 97
TABLE 7-1: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS (2 OF 2) 98
TABLE 7-2: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS WITH IMPROVEMENTS 99
TABLE 8-1: ESTIMATED FEE OBLIGATION 102
TABLE 8-2: PROJECT FAIR SHARE CALCULATIONS FOR INTERSECTIONS 103

DRAFT

This Page Intentionally Left Blank

DRAFT

LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CAMUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CCI	Construction Cost Index
CMP	Congestion Management Program
DIF	Development Impact Fee
E+P	Existing Plus Project
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
NCHRP	National Cooperative Highway Research Program
PCE	Passenger Car Equivalents
PHF	Peak Hour Factor
Project	California Logistics Center
RTP	Regional Transportation Plan
SBCTA	San Bernardino County Transportation Authority
SBTAM	San Bernardino Transportation Analysis Model
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
SHS	State Highway System
SR	State Route
TA	Traffic Analysis
v/c	Volume to Capacity
vphgpl	Vehicles per Hour Green per Lane

DRAFT

This Page Intentionally Left Blank

DRAFT

1 INTRODUCTION

This report presents the results of the traffic analysis (TA) for the proposed California Logistics Center ("Project"), which is located on the southeast corner of Haven Avenue and E. Airport Drive in the City of Ontario. The Project's location relative to the surrounding area is shown on Exhibit 1-1.

The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project, and where necessary recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies. This traffic study has been prepared in accordance with the San Bernardino County Congestion Management Program (CMP) Guidelines for CMP Traffic Impact Analysis Reports (Appendix B, 2016 Update) and consultation with City staff during the traffic study scoping process. (1) The City approved Project Traffic Study Scoping agreement is provided in Appendix 1.1 of this TA.

1.1 SUMMARY OF FINDINGS

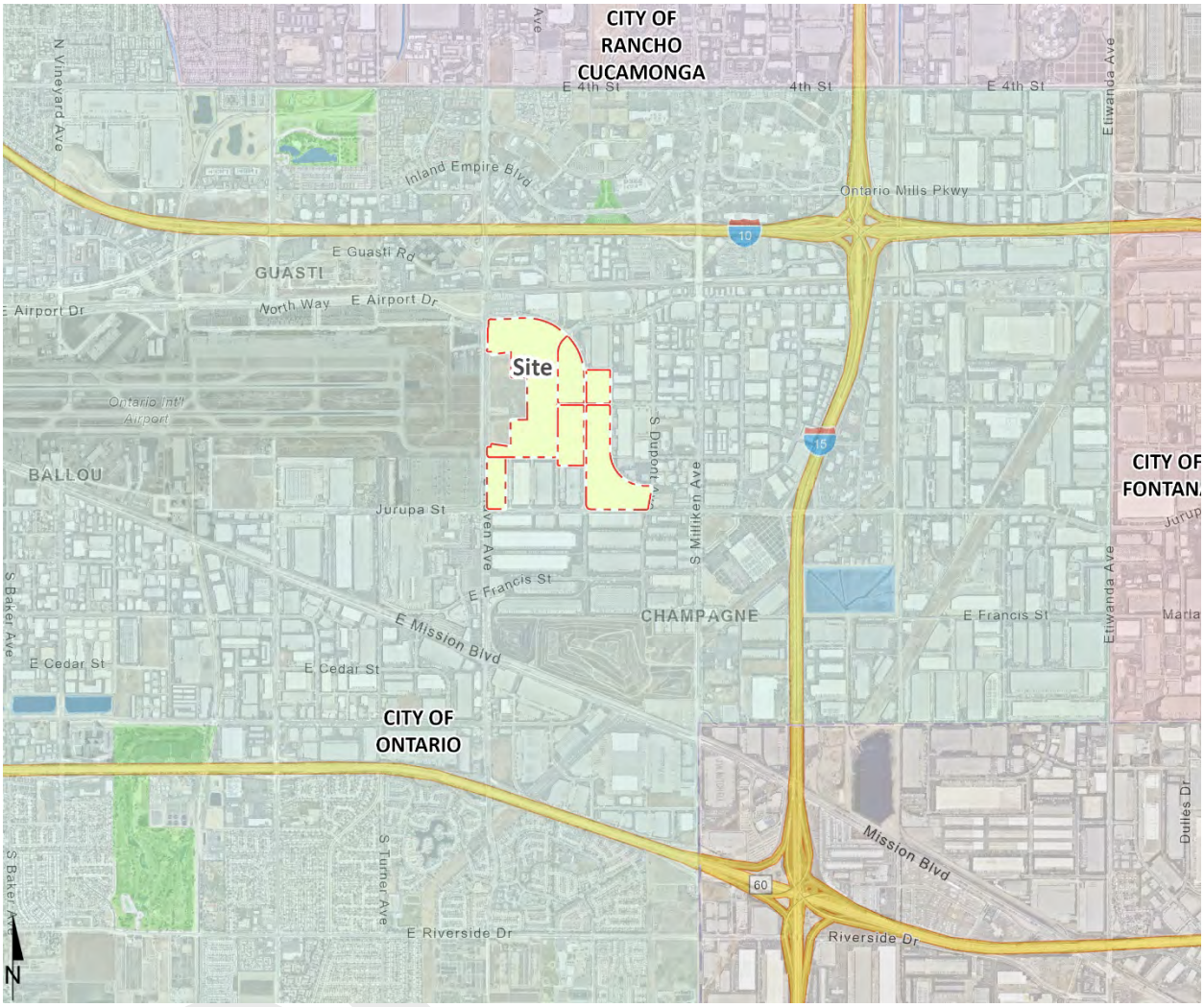
The Project is to construct the following improvements as design features in conjunction with development of the site:

- Project to install stop sign for egress traffic from the proposed Project at all driveway locations.
- Airport Drive, Commerce Parkway, Haven Avenue, La Salle Street, Carnegie Avenue, Santa Ana Street, Jurupa Avenue, Doubleday Avenue, and Dupont Avenue are currently constructed at its ultimate full-width consistent with the City's standards. Project to construct curb-and gutter and sidewalk improvements along the Project boundary.

Additional details and intersection lane geometrics are provided in Section 1.6 *Recommendations* of this report.

DRAFT

EXHIBIT 1-1: LOCATION MAP



1.2 PROJECT OVERVIEW

Exhibit 1-2 illustrates the preliminary Project site plan. For the purposes of this TA, the Project has been assumed to be developed in a single phase and anticipated to be fully built and operational by 2026. For purposes of this analysis, the following mix of industrial/warehousing land uses are assumed for the Project:

- 642,368 square feet of high-cube cold storage warehouse use (15% of the total square footage)
- 3,640,082 square feet of high-cube fulfillment center warehouse use (85% of the total square footage)
- **Total of 4,282,450 square feet**

Access to the proposed Project would be provided to the surrounding roadways of Haven Avenue, E. Airport Drive, Carnegie Avenue, Commerce Parkway, Doubleday Avenue, Dupont Avenue, La Salle Street, Santa Ana Street, and Jurupa Avenue.

Trips generated by the Project's proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition, 2021. (3) The proposed Project is anticipated to generate a total of 7,980 trip-ends per day, 613 AM peak hour trips, and 644 PM peak hour trips (in actual vehicles). The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

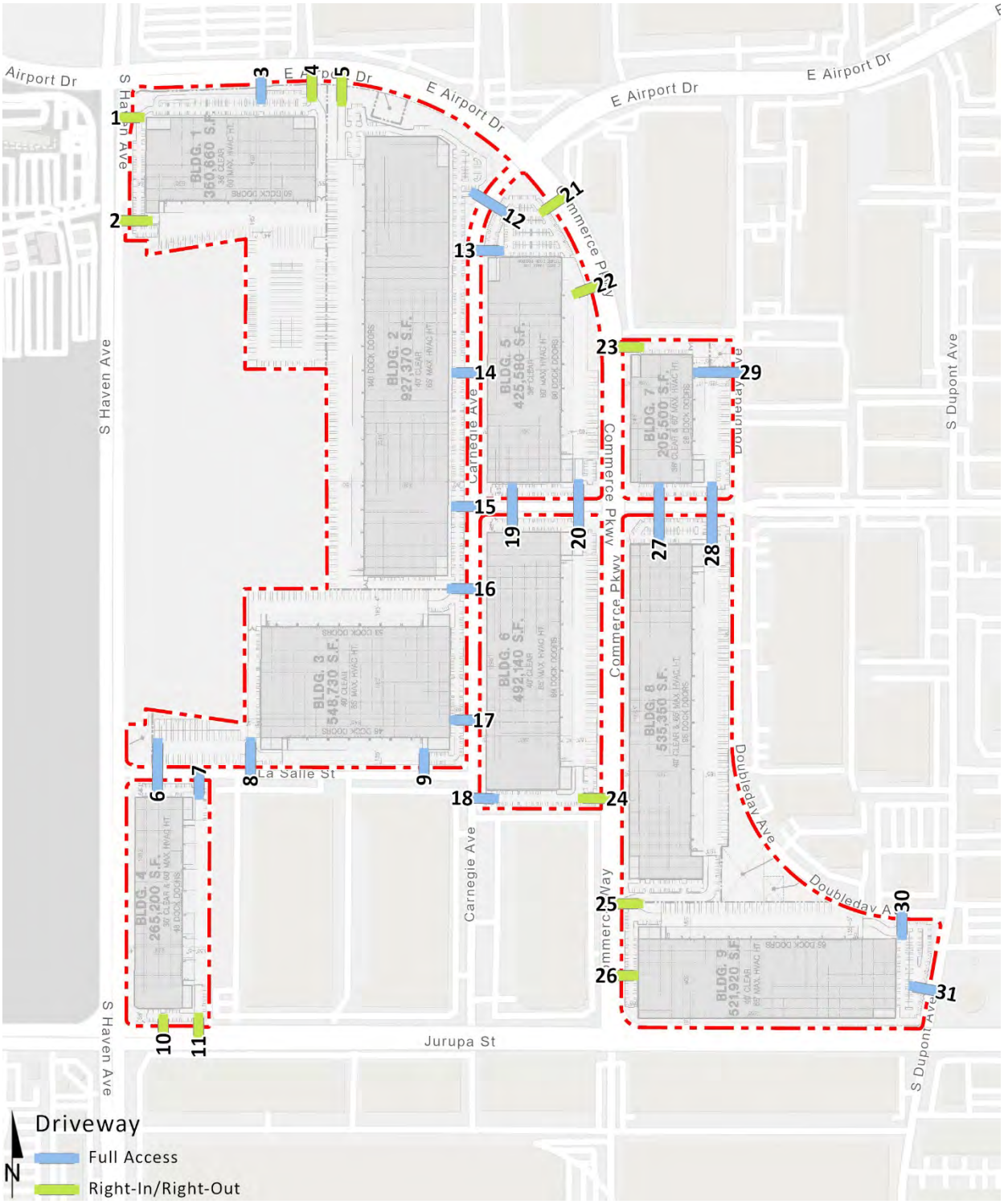
1.3 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2021)
- Existing plus Project (E+P)
- Opening Year Cumulative (2026) Without Project
- Opening Year Cumulative (2026) With Project
- Horizon Year (2040) Without Project
- Horizon Year (2040) With Project

DRAFT

EXHIBIT 1-2: PRELIMINARY SITE PLAN



1.3.1 Existing (2021) Conditions

Information for Existing (2021) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared. See Section 3.7 *Existing Traffic Counts* for a detailed discussion on the methodology.

1.3.2 Existing Plus Project Conditions

The Existing plus Project (E+P) analysis determines traffic deficiencies that would occur on the existing roadway system with the addition of Project traffic. E+P traffic conditions have been evaluated in order to determine any potential off-site improvements.

1.3.3 Opening Year Cumulative (2026) Conditions

The Opening Year Cumulative conditions analysis determines the potential near-term cumulative circulation system deficiencies. To account for background traffic growth, traffic associated with other known cumulative development projects in conjunction with an ambient growth factor from Existing conditions of 2% per year (compounded annually over four years) are included for Opening Year Cumulative (2026) traffic conditions. Opening Year Cumulative traffic conditions have been evaluated for the proposed Project. This comprehensive list was compiled from information provided by the City of Ontario and other near-by agencies.

1.3.4 Horizon Year (2040) Conditions

Traffic projections for Horizon Year (2040) with Project conditions were derived from the San Bernardino Transportation Analysis Model (SBTAM), which represents the 2040 forecast year of the City of Ontario. The Horizon Year (2040) conditions analysis will be utilized to determine if improvements funded through regional transportation mitigation fee programs, such as the City's Development Impact Fee (DIF) program, or other approved funding mechanisms can accommodate the long-range cumulative traffic at the target level of service (LOS) identified by the City of Ontario (lead agency). It should be noted that the City of Ontario has updated their DIF program to also include appropriate contributions towards regionally significant improvements that have been identified via the San Bernardino County CMP regional fee program study. If the planned and funded improvements can provide the target LOS, then the Project's payment into established fee programs will be considered as an improvement to address deficiencies. Other improvements needed beyond the "funded" improvements (such as localized improvements to non-DIF facilities) are identified as such.

1.4 Study Area

To ensure that this TA satisfies the City of Ontario's traffic study requirements, Urban Crossroads, Inc. prepared a project traffic study scoping package for review by City staff prior to the preparation of this report. The Agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology.

1.4.1 INTERSECTIONS

The following 55 study area intersections shown on Exhibit 1-3 and listed on Table 1-1 were selected for this TA based on consultation with City of Ontario staff. The "50 peak hour trip" criterion utilized by the City of Ontario is consistent with the methodology employed by the County of San Bernardino, and generally represents a minimum number of trips at which a typical intersection would have the potential to be affected by a given development proposal. Although each intersection may have unique operating characteristics, this traffic engineering rule of thumb is a widely utilized tool for estimating a potential area of influence (i.e., study area). The "50 peak hour trip" criterion is also utilized by the City of Eastvale. Other analysis intersections, within the adjacent cities were not selected for evaluation as the Project is anticipated to contribute less than 50 peak hour trips.

TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction	SBCTA CMP?
1	Haven Av. & Inland Empire Bl.	Ontario	No
2	Haven Av. & I-10 WB Ramps	Ontario, Caltrans	No
3	Haven Av. & I-10 EB Ramps	Ontario, Caltrans	No
4	Haven Av. & E. Guasti Rd.	Ontario	No
5	Haven Av. & E. Airport Dr.	Ontario	No
6	Haven Av. & Driveway 1	Ontario	No
7	Haven Av. & Driveway 2	Ontario	No
8	Haven Av. & La Salle St.	Ontario	No
9	Haven Av. & Jurupa Av.	Ontario	No
10	Haven Av. & Mission Bl.	Ontario	No
11	Haven Av. & SR-60 WB Ramps	Ontario, Caltrans	No
12	Haven Av. & SR-60 EB Ramps	Ontario, Caltrans	No
13	Driveway 3 & E. Airport Dr.	Ontario	No
14	Driveway 4 & E. Airport Dr.	Ontario	No
15	Driveway 5 & E. Airport Dr.	Ontario	No
16	Driveway 6 & La Salle St.	Ontario	No
17	Driveway 7 & La Salle St.	Ontario	No
18	Driveway 8 & La Salle St.	Ontario	No
19	Driveway 9 & La Salle St.	Ontario	No
20	Driveway 10 & Jurupa Av.	Ontario	No
21	Driveway 11 & Jurupa Av.	Ontario	No
22	Carnegie Av. & E. Airport Dr.	Ontario	No
23	Carnegie Av. & Driveway 12	Ontario	No
24	Carnegie Av. & Driveway 13	Ontario	No
25	Carnegie Av. & Driveway 14	Ontario	No
26	Carnegie Av. & Driveway 15/Santa Ana St.	Ontario	No
27	Carnegie Av. & Driveway 16	Ontario	No
28	Carnegie Av. & Driveway 17	Ontario	No

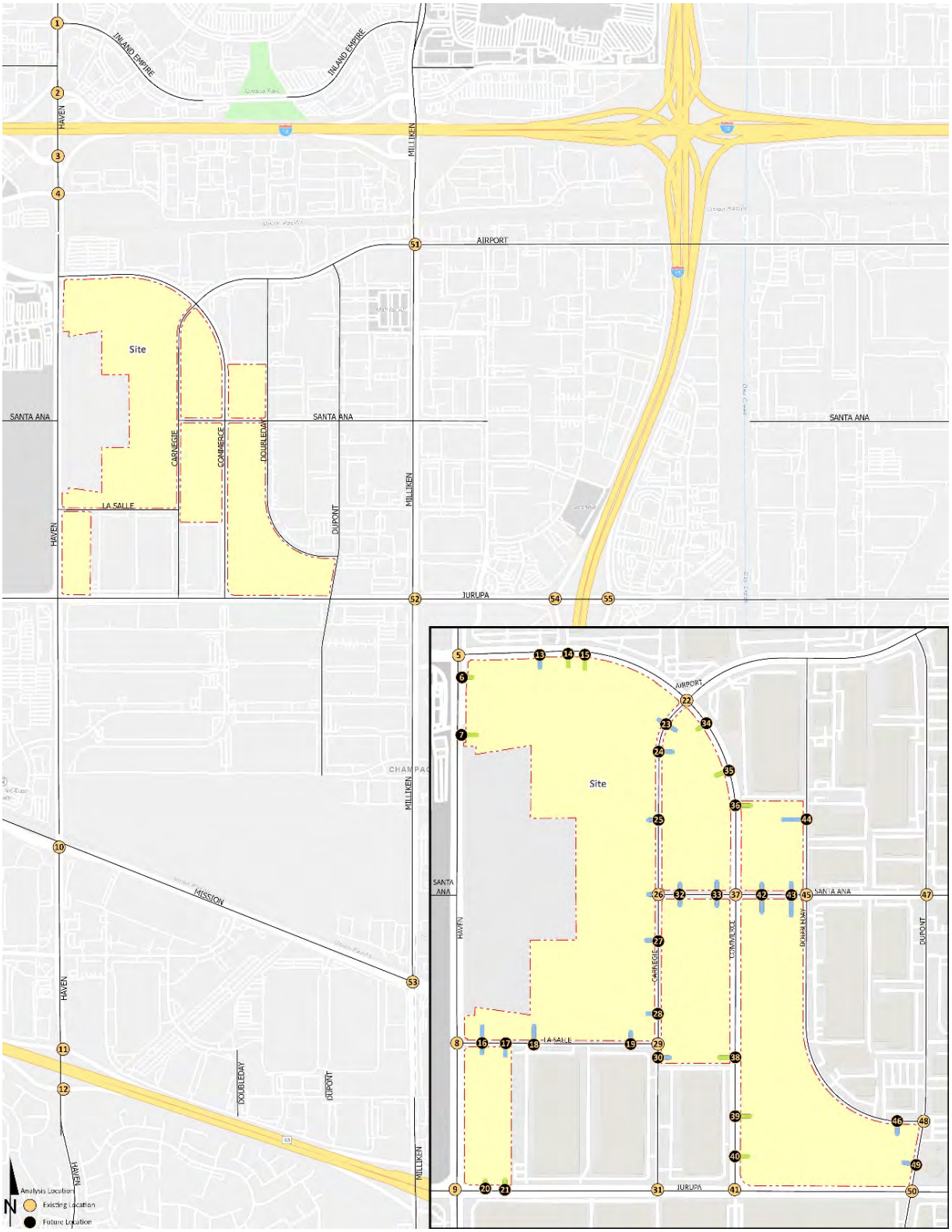
DRAFT

ID	Intersection Location	Jurisdiction	SBCTA CMP?
29	Carnegie Av. & La Salle St.	Ontario	No
30	Carnegie Av. & Driveway 18	Ontario	No
31	Carnegie Av. & Jurupa Av.	Ontario	No
32	Driveway 19 & Santa Ana St.	Ontario	No
33	Driveway 20 & Santa Ana St.	Ontario	No
34	Commerce Pkwy. & Driveway 21	Ontario	No
35	Commerce Pkwy. & Driveway 22	Ontario	No
36	Commerce Pkwy. & Driveway 23	Ontario	No
37	Commerce Pkwy. & Santa Ana St.	Ontario	No
38	Commerce Pkwy. & Driveway 24	Ontario	No
39	Commerce Pkwy. & Driveway 25	Ontario	No
40	Commerce Pkwy. & Driveway 26	Ontario	No
41	Commerce Pkwy. & Jurupa Av.	Ontario	No
42	Driveway 27 & Santa Ana St.	Ontario	No
43	Driveway 28 & Santa Ana St.	Ontario	No
44	Doubleday Av. & Driveway 29	Ontario	No
45	Doubleday Av. & Santa Ana St.	Ontario	No
46	Driveway 30 & Doubleday Av.	Ontario	No
47	Dupont Av. & Santa Ana St.	Ontario	No
48	Dupont Av. & Doubleday Av.	Ontario	No
49	Dupont Av. & Driveway 31	Ontario	No
50	Dupont Av. & Jurupa Av.	Ontario	No
51	Milliken Av. & E. Airport Dr.	Ontario	No
52	Milliken Av. & Jurupa Av.	Ontario	No
53	Milliken Av. & Mission Bl.	Ontario, Eastvale	No
54	I-15 SB Ramps & Jurupa Av.	Ontario, Caltrans	No
55	I-15 NB Ramps & Jurupa Av.	Ontario, Caltrans	No

The intent of a CMP is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. Counties within California have developed CMPs with varying methods and strategies to meet the intent of the CMP legislation. Study area intersections that are identified as CMP facilities in the County of San Bernardino per the San Bernardino County Transportation Authority (SBCTA) CMP are indicated on Table 1-1. (1)

DRAFT

EXHIBIT 1-3: LOCATION MAP



1.5 PROJECT DEFICIENCIES

This section provides a summary of Project deficiencies. Section 2 *Methodologies* provides information on the methodologies used in the analysis and Section 5 *E+P Traffic Analysis*, Section 6 *Opening Year Cumulative (2026)*, and Section 7 *Horizon Year (2040) Traffic Analysis* includes the detailed analysis. A summary of LOS results for all analysis scenarios is presented on Table 1-2.

1.5.1 EXISTING (2021) CONDITIONS

The existing study area intersections are currently operating at acceptable LOS during the peak hours.

1.5.2 E+P CONDITIONS

There are no study area intersections anticipated to operate at an unacceptable LOS with the addition of Project traffic.

1.5.3 OPENING YEAR CUMULATIVE (2026) CONDITIONS

There are no study area intersections are anticipated to operate at an unacceptable LOS. No study area intersections are anticipated to operate at a deficient LOS during one or both peak hours for Opening Year Cumulative (2026) With Project traffic conditions with the addition of Project Buildout traffic.

1.5.4 HORIZON YEAR (2040) CONDITIONS

There are no study area intersections are anticipated to operate at an unacceptable LOS under Horizon Year (2040) Without Project traffic conditions.

The following study area intersections are anticipated to operate at a deficient LOS during one or both peak hours for Horizon Year (2040) With Project traffic conditions with the addition of Project traffic:

- Driveway 3 & E. Airport Dr. (#13) – LOS F PM peak hour only
- Milliken Av. & Mission Bl. (#53) – LOS E AM peak hour; LOS F PM peak hour

DRAFT

TABLE 1-2: SUMMARY OF DEFICIENT INTERSECTIONS BY ANALYSIS SCENARIO

#	Intersection	Existing		E+P		2026 Without Project		2026 With Project		2040 Without Project		2040 With Project	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Haven Av. & Inland Empire Bl.												
2	Haven Av. & I-10 WB Ramps												
3	Haven Av. & I-10 EB Ramps												
4	Haven Av. & E. Guasti Rd.												
5	Haven Av. & E. Airport Dr.												
6	Haven Av. & Driveway 1	N/A	N/A			N/A	N/A			N/A	N/A		
7	Haven Av. & Driveway 2	N/A	N/A			N/A	N/A			N/A	N/A		
8	Haven Av. & La Salle St.												
9	Haven Av. & Jurupa Av.												
10	Haven Av. & Mission Bl.												
11	Haven Av. & SR-60 WB Ramps												
12	Haven Av. & SR-60 EB Ramps												
13	Driveway 3 & E. Airport Dr.	N/A	N/A			N/A	N/A			N/A	N/A		
14	Driveway 4 & E. Airport Dr.	N/A	N/A			N/A	N/A			N/A	N/A		
15	Driveway 5 & E. Airport Dr.	N/A	N/A			N/A	N/A			N/A	N/A		
16	Driveway 6 & La Salle St.	N/A	N/A			N/A	N/A			N/A	N/A		
17	Driveway 7 & La Salle St.	N/A	N/A			N/A	N/A			N/A	N/A		
18	Driveway 8 & La Salle St.	N/A	N/A			N/A	N/A			N/A	N/A		
19	Driveway 9 & La Salle St.	N/A	N/A			N/A	N/A			N/A	N/A		
20	Driveway 10 & Jurupa Av.	N/A	N/A			N/A	N/A			N/A	N/A		
21	Driveway 11 & Jurupa Av.	N/A	N/A			N/A	N/A			N/A	N/A		
22	Carnegie Av. & E. Airport Dr.												
23	Carnegie Av. & Driveway 12	N/A	N/A			N/A	N/A			N/A	N/A		
24	Carnegie Av. & Driveway 13	N/A	N/A			N/A	N/A			N/A	N/A		
25	Carnegie Av. & Driveway 14	N/A	N/A			N/A	N/A			N/A	N/A		
26	Carnegie Av. & Driveway 15/Santa Ana St.												
27	Carnegie Av. & Driveway 16	N/A	N/A			N/A	N/A			N/A	N/A		
28	Carnegie Av. & Driveway 17	N/A	N/A			N/A	N/A			N/A	N/A		
29	Carnegie Av. & La Salle St.												
30	Carnegie Av. & Driveway 18	N/A	N/A			N/A	N/A			N/A	N/A		
31	Carnegie Av. & Jurupa Av.												
32	Driveway 19 & Santa Ana St.	N/A	N/A			N/A	N/A			N/A	N/A		
33	Driveway 20 & Santa Ana St.	N/A	N/A			N/A	N/A			N/A	N/A		
34	Commerce Pkwy. & Driveway 21	N/A	N/A			N/A	N/A			N/A	N/A		
35	Commerce Pkwy. & Driveway 22	N/A	N/A			N/A	N/A			N/A	N/A		
36	Commerce Pkwy. & Driveway 23	N/A	N/A			N/A	N/A			N/A	N/A		
37	Commerce Pkwy. & Santa Ana St.												
38	Commerce Pkwy. & Driveway 24	N/A	N/A			N/A	N/A			N/A	N/A		
39	Commerce Pkwy. & Driveway 25	N/A	N/A			N/A	N/A			N/A	N/A		
40	Commerce Pkwy. & Driveway 26	N/A	N/A			N/A	N/A			N/A	N/A		
41	Commerce Pkwy. & Jurupa Av.												
42	Driveway 27 & Santa Ana St.	N/A	N/A			N/A	N/A			N/A	N/A		
43	Driveway 28 & Santa Ana St.	N/A	N/A			N/A	N/A			N/A	N/A		
44	Double Day Av. & Driveway 29	N/A	N/A			N/A	N/A			N/A	N/A		
45	Double Day Av. & Santa Ana St.												
46	Driveway 30 & Double Day Av.	N/A	N/A			N/A	N/A			N/A	N/A		
47	Dupont Av. & Santa Ana St.												
48	Dupont Av. & Double Day Av.												
49	Dupont Av. & Driveway 31	N/A	N/A			N/A	N/A			N/A	N/A		
50	Dupont Av. & Jurupa Av.												
51	Milliken Av. & E. Airport Dr.												
52	Milliken Av. & Jurupa Av.												
53	Milliken Av. & Mission Bl.												
54	I-15 SB Ramps & Jurupa Av.												
55	I-15 NB Ramps & Jurupa Av.												

= A - D = E = F

1.6 RECOMMENDATIONS

1.6.1 SITE ACCESS AND SITE ADJACENT ROADWAY RECOMMENDATIONS

The following recommendations are based on the improvements needed to accommodate site access. Exhibit 1-4 shows the site adjacent recommendations for off-site improvement recommendations.

Recommendation 1 – Haven Av. & E. Airport Dr. (#5) – Maintain the existing traffic control and lane geometrics.

Recommendation 2 – Haven Av. & Driveway 1 (#6) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the westbound approach and a right turn only lane.

Recommendation 3 – Haven Av. & Driveway 2 (#7) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the westbound approach and a right turn only lane.

Recommendation 4 – Haven Av. & La Salle St. (#8) – Maintain the existing traffic control and lane geometrics.

Recommendation 5 – Haven Av. & Jurupa Av. (#9) – Maintain the existing traffic control and lane geometrics.

Recommendation 6 – Driveway 3 & E. Airport Dr. (#13) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the northbound approach and a shared left-through-right turn lane.
- Project to construct a westbound left turn lane.

Recommendation 7 – Driveway 4 & E. Airport Dr. (#14) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the northbound approach and a right turn only lane.

Recommendation 8 – Driveway 5 & E. Airport Dr. (#15) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the northbound approach and a right turn only lane.

Recommendation 9 – Driveway 6 & La Salle St. (#16) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the northbound and southbound approaches, and a shared left-through-right turn lane on both approaches.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

DRAFT

EXHIBIT 1-4: SITE ADJACENT ROADWAY AND SITE RECOMMENDATIONS (1 OF 2)

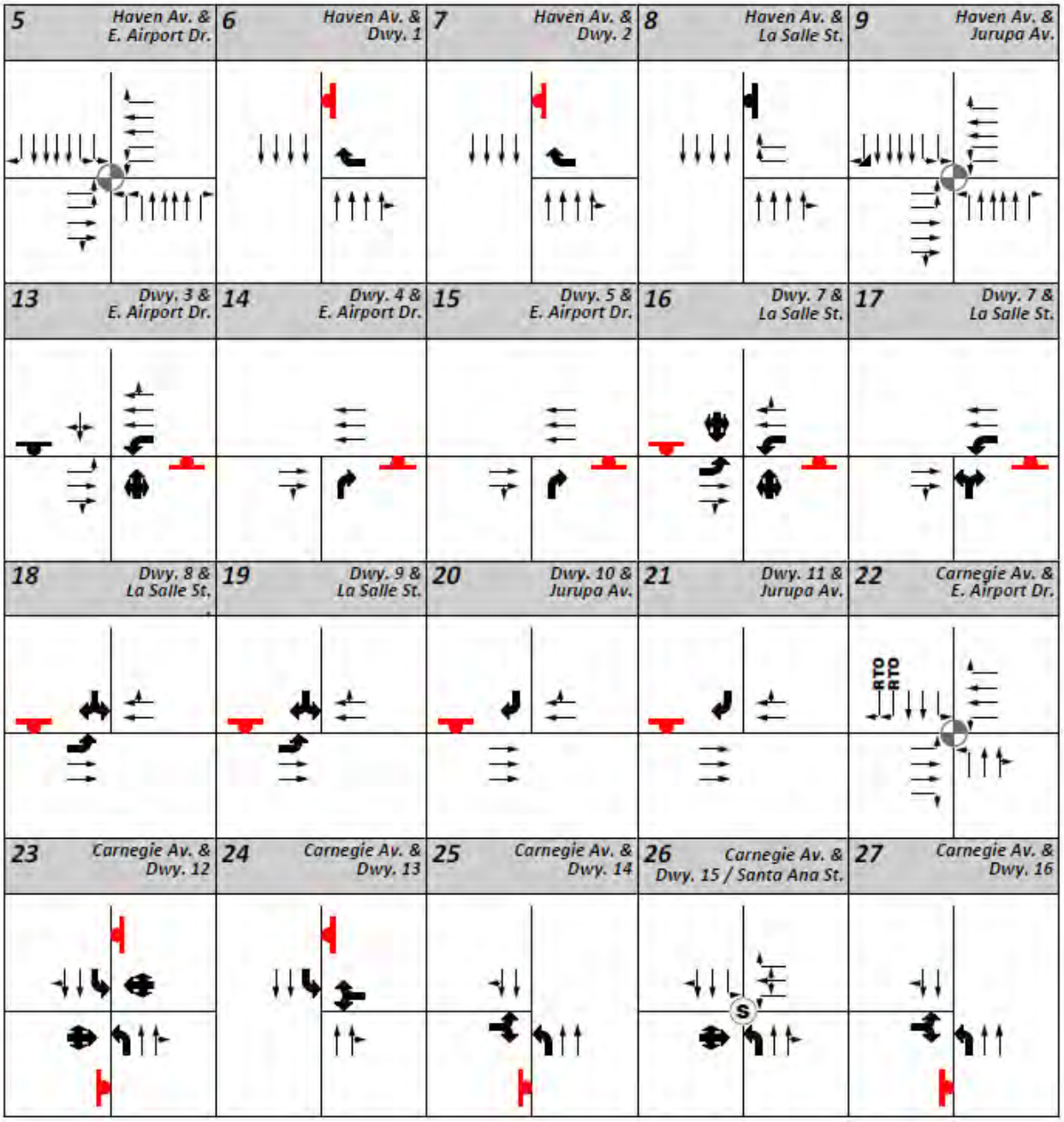
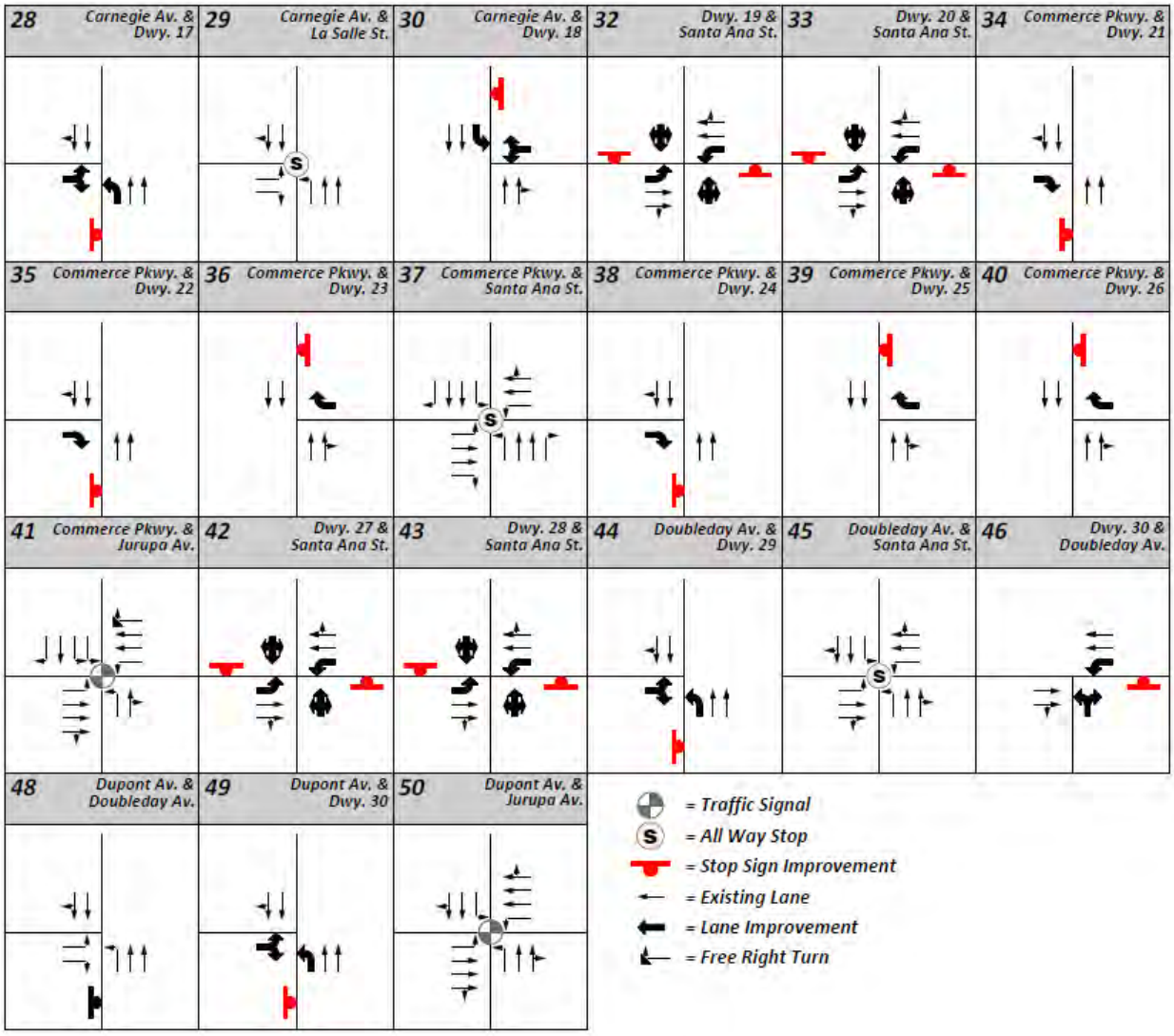


EXHIBIT 1-4: SITE ADJACENT ROADWAY AND SITE RECOMMENDATIONS (2 OF 2)



Recommendation 10 – Driveway 7 & La Salle St. (#17) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the northbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 11 – Driveway 8 & La Salle St. (#18) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the southbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 12 – Driveway 9 & La Salle St. (#19) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the southbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 13 – Driveway 10 & Jurupa Av. (#20) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the southbound approach and a right turn only lane.

Recommendation 14 – Driveway 11 & Jurupa Av. (#21) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the southbound approach and a right turn only lane.

Recommendation 15 – Carnegie Av. & E. Airport Dr. (#22) – Maintain the existing traffic control and lane geometrics.

Recommendation 16 – Carnegie Av. & Driveway 12 (#23) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the eastbound and westbound approaches, and a shared left-through-right turn lane on both approaches.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 17 – Carnegie Av. & Driveway 13 (#24) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the westbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 18 – Carnegie Av. & Driveway 14 (#25) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the eastbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

DRAFT

Recommendation 19 – Carnegie Av. & Driveway 15/Santa Ana St. (#26) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the eastbound approach and a shared left-through-right turn lane.
- Project to construct a northbound left turn lane in the two-way-left-turn lane medium.
- Project to restripe the westbound left-right turn lane to a shared a shared left-through-right turn lane.

Recommendation 20 – Carnegie Av. & Driveway 16 (#27) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the eastbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 21 – Carnegie Av. & Driveway 17 (#28) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the eastbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 22 – Carnegie Av. & La Salle St. (#29) – Maintain the existing traffic control and lane geometrics.

Recommendation 23 – Carnegie Av. & Driveway 18 (#30) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the westbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 24 – Driveway 19 & Santa Ana St. (#32) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the northbound and southbound approaches, and a shared left-through-right turn lane on both approaches.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 25 – Driveway 20 & Santa Ana St. (#33) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the northbound and southbound approaches, and a shared left-through-right turn lane on both approaches.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 26 – Commerce Pkwy. & Driveway 21 (#34) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the eastbound approach and a right turn only lane.

DRAFT

Recommendation 27 – Commerce Pkwy. & Driveway 22 (#35) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the eastbound approach and a right turn only lane.

Recommendation 28 – Commerce Pkwy. & Driveway 23 (#36) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the westbound approach and a right turn only lane.

Recommendation 29 – Commerce Pkwy. & Santa Ana St. (#37) – Maintain the existing traffic control and lane geometrics.

Recommendation 30 – Commerce Pkwy. & Driveway 24 (#38) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the eastbound approach and a right turn only lane.

Recommendation 31 – Commerce Pkwy. & Driveway 25 (#39) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the westbound approach and a right turn only lane.

Recommendation 32 – Commerce Pkwy. & Driveway 26 (#10) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the westbound approach and a right turn only lane.

Recommendation 33 – Commerce Pkwy. & Jurupa Av. (#41) – Maintain the existing traffic control and lane geometrics.

Recommendation 34 – Driveway 27 & Santa Ana St. (#42) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the northbound and southbound approaches, and a shared left-through-right turn lane on both approaches.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 35 – Driveway 28 & Santa Ana St. (#43) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the northbound and southbound approaches, and a shared left-through-right turn lane on both approaches.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 36 – Doubleday Av. & Driveway 29 (#44) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the eastbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

DRAFT

Recommendation 37 – Doubleday Av. & Santa Ana St. (#45) – Maintain the existing traffic control and lane geometrics.

Recommendation 38 – Driveway 30 & Doubleday Av. (#46) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the northbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 39 – Dupont Av. & Doubleday Av. (#48) – Maintain the existing traffic control and lane geometrics.

Recommendation 40 – Dupont Av. & Driveway 31 (#49) – The following improvement is necessary to accommodate site access:

- Project to install a stop control on the eastbound approach and a shared left-right turn lane.
- Project to utilize the existing two-way-left-turn lane for inbound left turn movements.

Recommendation 41 – Dupont Av. & Jurupa Av. (#50) – Maintain the existing traffic control and lane geometrics.

Recommendation 42 – Airport Drive is an east-west oriented roadway located on the Project's northern boundary. Airport Drive is currently constructed at its ultimate full-width as a Principal Arterial (120-foot right-of-way) from the Project's western boundary to Carnegie Avenue consistent with the City's standards. Project to construct curb-and gutter and sidewalk improvements along the Project boundary.

Recommendation 43 – Commerce Parkway is a north-south oriented roadway bisected by the Project. Commerce Parkway is currently constructed at its ultimate full-width as a Principal Arterial (120-foot right-of-way) from Carnegie Avenue to Jurupa Street consistent with the City's standards. Project to construct curb-and gutter and sidewalk improvements along the Project boundary.

Recommendation 44 – Haven Avenue is a north-south oriented roadway located on the Project's western boundary. Haven Avenue is currently constructed at its ultimate full-width as a Principal Arterial from Airport Drive to Jurupa Street consistent with the City's standards. Project to construct curb-and gutter and sidewalk improvements along the Project boundary.

Recommendation 45 – La Salle Street is an east-west oriented roadway bisected by the Project. La Salle Street is currently constructed at its ultimate full-width as a Collector (88-foot right-of-way) from Haven Avenue to Carnegie Avenue consistent with the City's standards. Project to construct curb-and gutter and sidewalk improvements along the Project boundary.

Recommendation 46 – Carnegie Avenue is a north-south oriented roadway bisected by the Project. Carnegie Avenue is currently constructed at its ultimate full-width as a Collector (88-foot right-of-way) from Airport Drive to the Project's southern boundary consistent with the City's standards. Project to construct curb-and gutter and sidewalk improvements along the Project boundary.

Recommendation 47 – Santa Ana Street is an east-west oriented roadway bisected by the Project. Santa Ana Street is currently constructed at its ultimate full-width as an Other Principal Arterial (100-foot right-of-way) from Carnegie Avenue to Doubleday Avenue consistent with the City's standards. Project to construct curb-and gutter and sidewalk improvements along the Project boundary.

Recommendation 48 – Jurupa Avenue is an east-west oriented roadway located on the Project's southern boundary. Jurupa Avenue is currently constructed at its ultimate full-width as a Principal Arterial (120-foot right-of-way) from Haven Avenue to Dupont Avenue consistent with the City's standards. Project to construct curb-and gutter and sidewalk improvements along the Project boundary.

Recommendation 49 – Doubleday Avenue is a north-south oriented roadway located on the Project's northern boundary. Doubleday Avenue is currently constructed at its ultimate full-width as a Collector (88-foot right-of-way) from Santa Ana Street to Dupont Avenue consistent with the City's standards. Project to construct curb-and gutter and sidewalk improvements along the Project boundary.

Recommendation 50 – Dupont Avenue is a north-south oriented roadway located on the Project's eastern boundary. Dupont Avenue is currently constructed at its ultimate full-width as a Collector (88-foot right-of-way) from Doubleday Avenue to Jurupa Street consistent with the City's standards. Project to construct curb-and gutter and sidewalk improvements along the Project boundary.

On-site traffic signing and striping should be implemented agreeable with the provisions of the California Department of Transportation (Caltrans) California Manual on Uniform Traffic Control Devices (CA MUTCD) and in conjunction with detailed construction plans for the Project site.

Sight distance at each project access point should be reviewed with respect to standard Caltrans and City of Ontario sight distance standards at the time of preparation of final grading, landscape, and street improvement plans.

1.6.2 OFF-SITE RECOMMENDATIONS

The recommended improvements needed to address the cumulative deficiencies identified under Horizon Year (2040) traffic conditions are summarized in Table 1-3. For those improvements listed in Table 1-3 and not constructed as part of the Project, the Project Applicant's responsibility for the Project's contributions towards deficient intersections is fulfilled through payment of fees (e.g., DIF) or fair share that would be assigned to construction of the identified recommended improvements. Please refer to Section 8 *Local and Regional Funding Mechanisms*.

Table 1-3 also summarizes the applicable cost associated with each of the recommended improvements based on the preliminary construction cost estimates found in Appendix G of the San Bernardino County CMP in conjunction with a cost escalation factor of 1.71 to reflect current (2021) costs. A rough order of magnitude cost has been prepared to determine the appropriate contribution value based upon the Project's fair share of traffic as part of the project approval

process. Based on the Project fair share percentages, the Project's fair share cost is estimated at $1,765. These estimates are a rough order of magnitude only as they are intended only for disclosure purposes and do not imply any legal responsibility or formula for contributions or mitigation.

Recommendation 51 – Prior to the issuance of building permits, the Project Applicant shall pay the Project's fair share amount of $1,765 for the improvements identified in Table 1-3 at intersections located within the City of Ontario, or as agreed to by the City and Project Applicant.

1.7 TRUCK ACCESS AND CIRCULATION

A truck turning template has been overlaid on the site plan at the applicable driveways, which are anticipated to be utilized by heavy trucks, in order to determine the appropriate curb radii and to verify that trucks will have sufficient space to execute turning maneuvers. For the purposes of this evaluation, the WB-67 class truck template has been utilized. WB-67 class trucks are approximately 73.5 feet in length with a trailer length of 53-feet.

The proposed truck access for the site and circulation can be found in Appendix 1.3. As shown on Appendix 1.3, the following modifications are recommended to accommodate the ingress and egress of trucks:

- Driveway 2 on Haven Avenue should be modified to widen the driveway to 50-feet wide by relocating the southern curb of the drive aisle to the south and provide a 40-foot radius on the northeast and southeast curbs.
- Driveway 4 on E. Airport Drive should be modified to relocate the eastern curb of the drive aisle 5-feet to the east, provide a 45-foot radius on the southwest curb, and provide a 40-foot radius on the southeast curb.
- Driveway 5 on E. Airport Drive should be modified to widen the driveway to 45-feet wide by relocating the western curb of the drive aisle 5-feet to the west, provide a 45-foot radius on the southwest curb, and provide a 40-foot radius on the southeast curb.
- Driveway 6 on La Salle Street should be modified to widen the driveway to 50-feet wide, provide a 40-foot radius on the northwest curb, and provide a 45-foot radius on the northeast curb.
- Driveway 7 on La Salle Street should be modified to widen the driveway to 50-feet wide, provide a 40-foot radius on the southwest curb, and provide a 45-foot radius on the southeast curb.
- Driveway 8 on La Salle Street should be modified to widen the driveway to 50-feet wide, provide a 40-foot radius on the southwest curb, and provide a 45-foot radius on the southeast curb.
- Driveway 9 on La Salle Street should be modified to widen the driveway to 50-feet wide, provide a 45-foot radius on the northwest curb, and provide a 40-foot radius on the northeast curb.
- Driveway 11 on Jurupa Avenue modified to provide a 40-foot radius on the northwest curb and a 45-foot radius on the northeast curb.
- Driveway 16 on Carnegie Avenue should be modified to widen the driveway to 65-feet wide by relocating the northern and southern curb of the drive aisle, relocate the on-site median 30 feet to the west, and provide a 40-foot radius on the southwest curb.
- Driveway 20 on Santa Ana Street should be modified to provide a 40-foot radius on the southwest and southeast curbs.

- Driveway 22 on Commerce Parkway should be modified to widen the driveway to 68-feet wide by relocating the northern and southern curb of the drive aisle and provide a 40-foot radius on the northwest curb.
- Driveway 24 on Commerce Parkway should be modified to provide a 35-foot radius on the northwest curb.
- Driveway 25 on Commerce Parkway should be modified to widen the driveway by relocating the southern curb of the drive aisle to the south by 24-feet and relocate the on-site median 30 feet to the east.
- Driveway 28 on Santa Ana Street should be modified to provide a 40-foot radius on the northeast curb.
- Driveway 29 on Doubleday Avenue should be modified to widen the driveway to 50-feet wide by relocating the southern curb of the drive aisle to the south and provide a 40-foot radius on the northwest and southwest curbs.

DRAFT

TABLE 1-3: SUMMARY OF IMPROVEMENTS RECOMMENDED TO MEET CITY OF ONTARIO OR SURROUNDING AGENCY LOS REQUIREMENTS

#	Intersection Location	Jurisdiction	E+P	2026 With Project	2040 With Project	Improvements in City DIF?[1]	Project Responsibility[6]	Total Cost[2,3,4]	Fair Share %[4]	Fair Share Cost[5]
53	Milliken Av. & Mission Bl.	Ontario, Eastvale	None	None	Modify the traffic signal to implement overlap phasing for the NB and EB right turn lanes	No	Fair Share	$128,250	2.8%	$3,530
							Total	**$128,250**		**$3,530**
							Total Costs for Horizon Year (2040) Improvements	**$128,250**		**$3,530**
							Total Project Fair Share Contribution to the City of Ontario (non-DIF/other)[6]		**$1,765**	

[1] Improvements included in City of Ontario DIF program for local, regional and specific plan components.

[2] Costs have been estimated using the data provided in Appendix "G" of the CMP (2003 Update) for preliminary construction costs.

[3] Appendix "G" costs escalated by a factor of 1.568 per City direction except Traffic Signals.

[4] Program improvements constructed by project may be eligible for fee credit, at discretion of City. See Table 8-2 for Fair Share Calculations.

[5] Rough order of magnitude cost estimate.

[6] Total project fair share contribution consists of the improvements which are not already included in the City-wide DIF for those intersections wholly or partially within the City of Ontario.

DRAFT

This Page Intentionally Left Blank

DRAFT

2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are consistent with City of Ontario's Traffic Study Guidelines.

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 6th Edition Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (4) The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

City of Ontario and City of Eastvale

The City of Ontario and the City of Eastvale require signalized intersection operations analysis based on the methodology described in the HCM. (4) Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described on Table 2-1.

DRAFT

TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A	F
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B	F
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C	F
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D	F
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E	F
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F	F

Source: HCM (6th Edition)

Consistent with Appendix B of the San Bernardino County CMP, the following saturation flow rates, in vehicles per hour green per lane (vphgpl), will be utilized in the traffic analysis for signalized intersections:

Existing and Opening Year Cumulative Traffic Conditions:

- Exclusive through: 1800 vphgpl
- Exclusive left: 1700 vphgpl
- Exclusive right: 1800 vphgpl
- Exclusive dual left: 1600 vphgpl
- Exclusive triple left: 1500 vphgpl

Horizon Year (2040) Traffic Conditions:

- Exclusive through: 1900 vphgpl
- Exclusive left: 1800 vphgpl
- Exclusive dual left: 1700 vphgpl
- Exclusive right: 1900 vphgpl
- Exclusive dual right: 1800 vphgpl
- Exclusive triple left: 1600 vphgpl or less

The traffic modeling and signal timing optimization software package Synchro (Version 11) has been utilized to analyze signalized intersections within the City of Ontario and City of Eastvale.

DRAFT

Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g., PHF = [Hourly Volume] / [4 x Peak 15-minute Flow Rate]). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (4)

2.2.2 UNSIGNALIZED INTERSECTIONS

The City of Ontario and City of Eastvale require the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (4) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2).

TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS

Description	Average Control Delay Per Vehicle (Seconds)	Level of Service, V/C ≤ 1.0	Level of Service, V/C > 1.0
Little or no delays.	0 to 10.00	A	F
Short traffic delays.	10.01 to 15.00	B	F
Average traffic delays.	15.01 to 25.00	C	F
Long traffic delays.	25.01 to 35.00	D	F
Very long traffic delays.	35.01 to 50.00	E	F
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F	F

Source: HCM (6th Edition)

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Per HCM, the worst individual turning movement (typically on the side-street) is reported for the overall intersection's delay at cross-street stop-controlled intersections. For all-way stop controlled intersections, LOS is computed for the intersection as a whole.

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic

signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (5)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (5) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics (e.g., located in communities with populations of less than 10,000 persons or with adjacent major streets operating above 40 miles per hour). For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

Future intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets.

Traffic signal warrant analyses were performed for the following study area intersection shown on Table 2-3. Traffic signal warrants have not been evaluated for intersections that are anticipated to have restricted access (right-in/right-out only) and would therefore not be suitable locations for installing a traffic signal.

DRAFT

TABLE 2-3: UNSIGNALIZED INTERSECTION LOCATIONS

ID	Intersection Location	Jurisdiction
13	Driveway 3 & E. Airport Dr.	Ontario
16	Driveway 6 & La Salle St.	Ontario
17	Driveway 7 & La Salle St.	Ontario
18	Driveway 8 & La Salle St.	Ontario
19	Driveway 9 & La Salle St.	Ontario
23	Carnegie Av. & Driveway 12	Ontario
24	Carnegie Av. & Driveway 13	Ontario
25	Carnegie Av. & Driveway 14	Ontario
26	Carnegie Av. & Driveway 15/Santa Ana St.	Ontario
27	Carnegie Av. & Driveway 16	Ontario
28	Carnegie Av. & Driveway 17	Ontario
29	Carnegie Av. & La Salle St.	Ontario
30	Carnegie Av. & Driveway 18	Ontario
32	Driveway 19 & Santa Ana St.	Ontario
33	Driveway 20 & Santa Ana St.	Ontario
37	Commerce Pkwy. & Santa Ana St.	Ontario
42	Driveway 27 & Santa Ana St.	Ontario
43	Driveway 28 & Santa Ana St.	Ontario
44	Doubleday Av. & Driveway 29	Ontario
45	Doubleday Av. & Santa Ana St.	Ontario
46	Driveway 30 & Doubleday Av.	Ontario
47	Dupont Av. & Santa Ana St.	Ontario
48	Dupont Av. & Doubleday Av.	Ontario
49	Dupont Av. & Driveway 31	Ontario

The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3 *Area Conditions* of this report. The traffic signal warrant analyses for future conditions are presented in Section 5 *E+P Traffic Analysis,* Section 6 *Opening Year Cumulative (2026) Traffic Analysis,* and Section 7 *Horizon Year (2040) Traffic Analysis* of this report. It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

2.4 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

Minimum Acceptable LOS and associated definitions of intersection deficiencies has been obtained from each of the applicable surrounding jurisdictions.

2.4.1 CITY OF ONTARIO

Per the Ontario Plan's Policy M-1, the City of Ontario utilizes a minimum acceptable LOS of LOS E, where feasible. (6)

2.4.2 CITY OF EASTVALE

The City of Eastvale General Plan Policy C-10 sets a standard of LOS C with LOS D as acceptable in commercial and employment areas and at intersections of any combination of major highways, urban arterials, secondary highways, or freeway ramps. (7) Based on this criterion, where feasible, LOS D is the minimum acceptable LOS at each of the study intersections within the City of Eastvale.

2.4.3 CMP

The CMP definition of deficiency is based on maintaining a level of service standard of LOS E or better, where feasible, except where an existing LOS F condition is identified in the CMP document. However, in an effort to overstate as opposed to understate potential deficiencies, LOS D has been utilized for the CMP intersections for the purposes of this analysis, unless the intersection is located in the City of Ontario (which uses LOS E). (1)

2.5 DEFICIENCY CRITERIA

To determine whether the addition of project traffic at a study intersection would result in a traffic deficiency, the following will be utilized:

- When the Without Project condition is at or better than LOS D (or LOS E for CMP intersections and intersections located in the City of Ontario) (i.e., acceptable LOS), and project-generated traffic causes deterioration below LOS D/LOS E (i.e., unacceptable LOS), a deficiency is deemed to occur.

When the Without Project condition is already below LOS D/LOS E (i.e., unacceptable LOS), the Project will be responsible for improving its deficiency to acceptable levels of service. Thus, for intersections operating at unacceptable LOS during either the AM and/or PM peak hour, improvements have been identified to improve the deficiencies of the Project to an intersection LOS that is equal to or better than Without Project conditions (see Table 2-6).

The Project's contribution to a deficiency can be reduced if the Project is required to implement or fund its fair share of improvements designed to alleviate its contribution to the deficient condition.

DRAFT

TABLE 2-6: DEFICIENCY CRITERIA

Without Project Level of Service	Level of Service	Deficient?	Improvement Required?
City of Ontario			
A	A-D	No	No
B	B-D	No	No
C	C-D	No	No
D	D-E	No	No
E	E	No	No
A-E	F	Yes	Yes, bring LOS to E or better
F	F	Yes	Yes, bring LOS to E or better
City of Eastvale			
A	A-D	No	No
B	B-D	No	No
C	C-D	No	No
D	D	No	No
A-D	E or F	Yes	Yes, bring LOS to D or better
E	E	Yes	Yes, bring LOS to D or better
E	F	Yes	Yes, bring LOS to D or better
F	F	Yes	Yes, bring LOS to D or better

In the event that an intersection is operating at or is forecast to operate at a deficient LOS, the CMP guidelines have defined a series of steps to be completed to determine the Project's contribution to the deficiency of intersections, which has been applied to both CMP and non-CMP study area intersections. The steps are as follows:

- Determine the improvements necessary to achieve an acceptable service level,
- Calculate the Project's share in the future traffic volume projections for the peak hours,
- Estimate the cost to implement recommended improvements, and
- Calculate the Project's fair-share contribution to improve the Project's traffic deficiencies

2.5 PROJECT FAIR SHARE CALCULATION METHODOLOGY

In cases where this TA identifies that the Project would contribute additional traffic volumes to traffic deficiencies, Project fair share costs of improvements necessary to address deficiencies have been identified. The Project's fair share cost of improvements is determined based on the following equation, which is the ratio of Project traffic to new traffic, and new traffic is total future (Horizon Year) traffic less existing baseline traffic:

Project Fair Share % = Project (2040) AM/PM Traffic / (2040 With Project AM/PM Total Traffic – Existing AM/PM Traffic)

DRAFT

The project fair share percentage has been calculated for both the AM peak hour and PM peak hour and the highest of the two has been selected. The Project fair share contribution calculations are presented in Section 8 *Local and Regional Funding Mechanisms* of this TA. The cost of implementing the improvements shown on Table 1-3 have been estimated based on the preliminary construction cost estimates found in Appendix G of the San Bernardino County CMP in conjunction with a total cost escalation factor of 1.71 to more closely approximate current (2021) costs. These cost estimates have been utilized in conjunction with the Project fair share percentages to determine the Project's fair share cost of the recommended improvements (see Table 8-2). These estimates are a rough order of magnitude only as they are intended only for discussion purposes and do not imply any legal responsibility or formula for contributions or physical improvements.

DRAFT

3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Ontario General Plan Circulation Network, and a review of existing peak hour intersection operations and traffic signal warrant analyses.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the agreement with City of Ontario staff (Appendix 1.1), the study area includes a total of 55 existing and future intersections as shown previously on Exhibit 1-2. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 CITY OF ONTARIO GENERAL PLAN CIRCULATION ELEMENT

As noted previously, the Project site is located within the City of Ontario. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on the City of Ontario General Plan Circulation Element, are described subsequently. Exhibit 3-2 shows the City of Ontario General Plan Circulation Element and Exhibit 3-3 illustrates the City of Ontario General Plan roadway cross-sections.

The study area roadways that are classified as 8-lane Other Principal Arterials are identified as having four lanes of travel in each direction. The following study area roadways within the City of Ontario are classified as 8-lane Other Principal Arterials:

- Haven Avenue, north of the SR-60 Freeway

The study area roadways that are classified as 6-lane Other Principal Arterials are identified as having three lanes of travel in each direction and a 14-foot curbed or painted median. The following study area roadways within the City of Ontario are classified as 6-lane Other Principal Arterials:

- Milliken Avenue, north of Airport Drive
- Mission Boulevard
- Jurupa Avenue

The study area roadway that is classified as a 6-lane Minor Arterial is identified as having three lanes of travel in each direction. The following study area roadway within the City of Ontario is classified as a 6-lane Minor Arterial:

- Airport Drive, between Grove Avenue and Hamner Avenue
- Commerce Parkway
- Inland Empire Boulevard, east of Haven Avenue

DRAFT

EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS (1 OF 3)

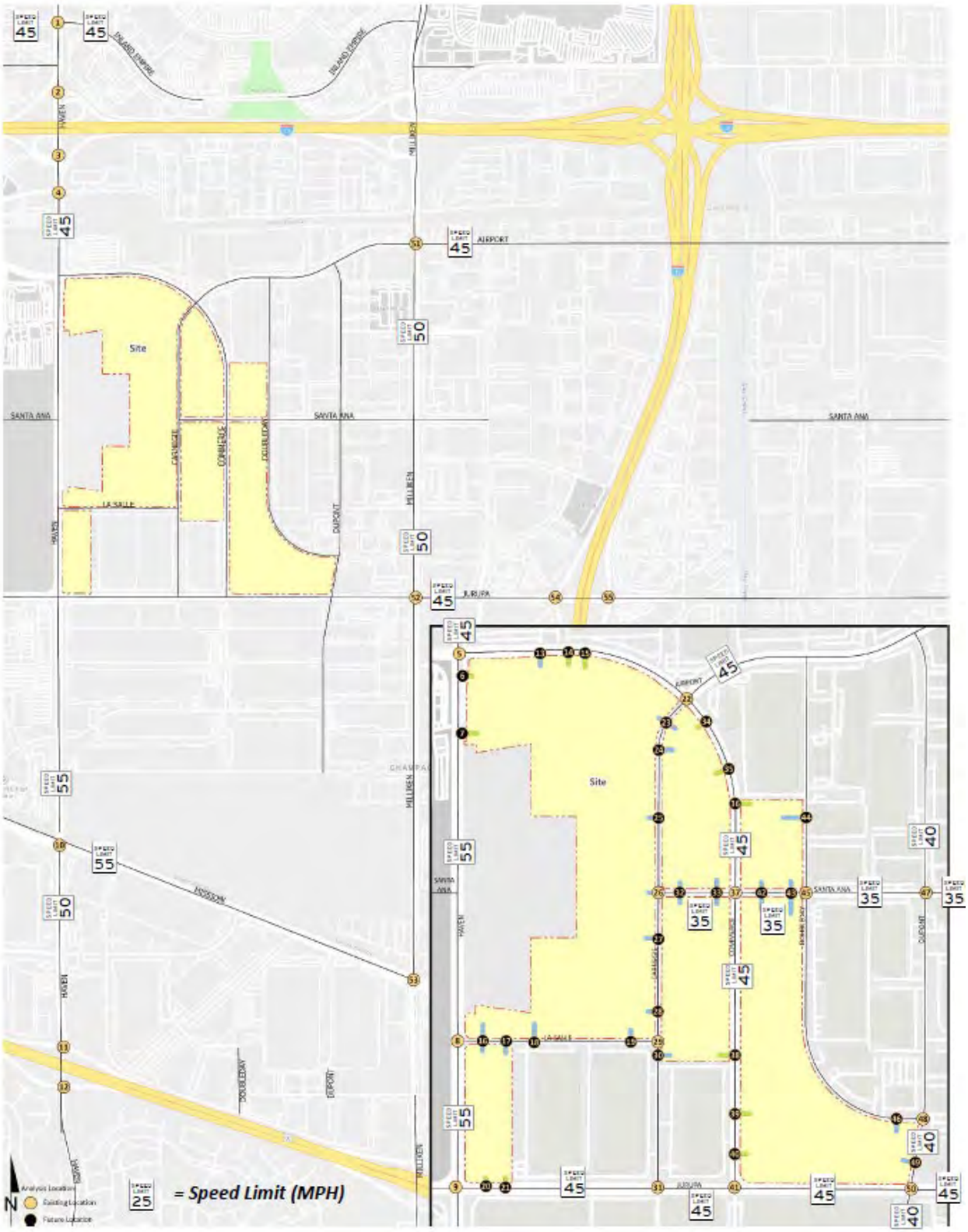


EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS (2 OF 3)

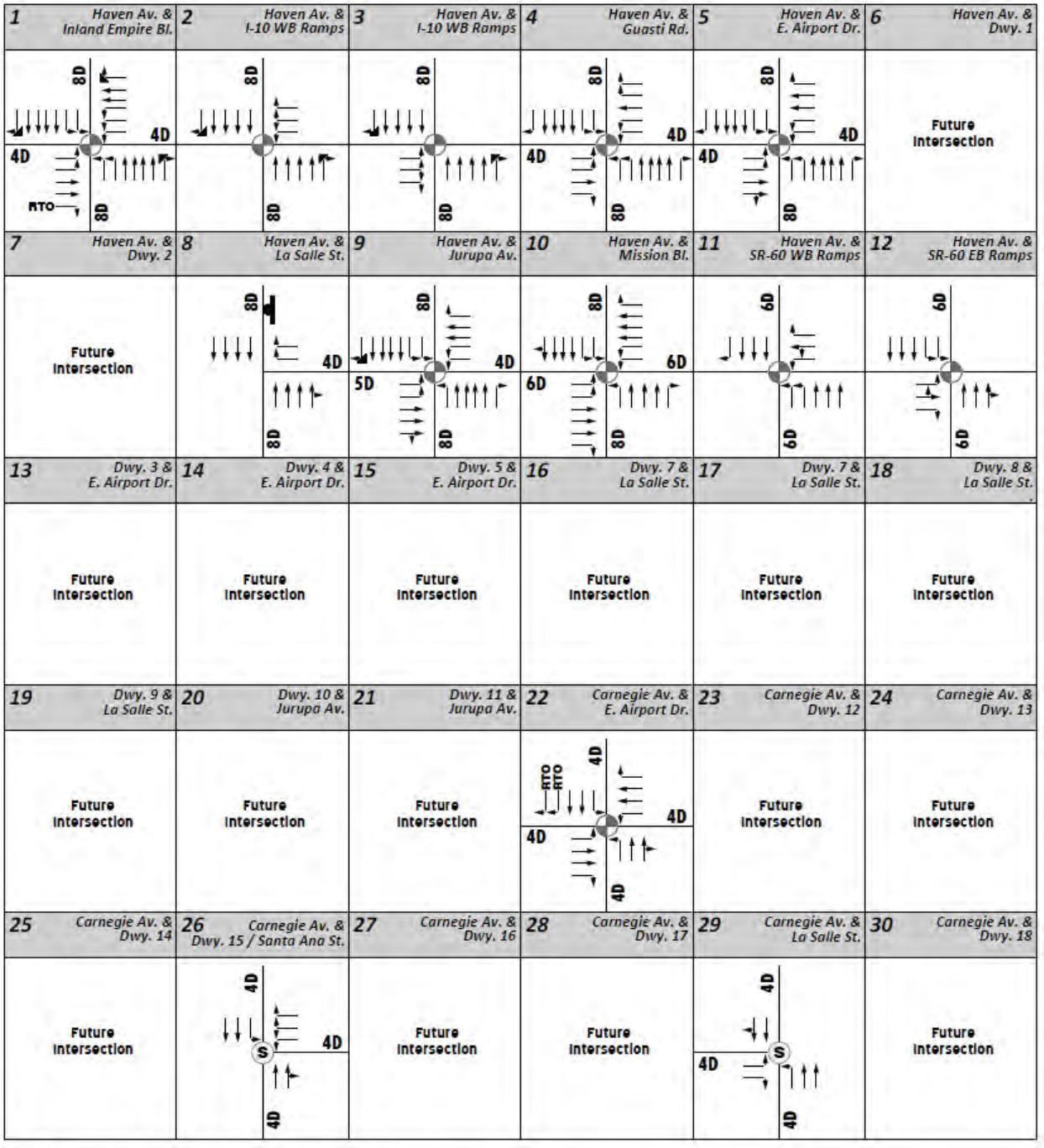


EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS (3 OF 3)

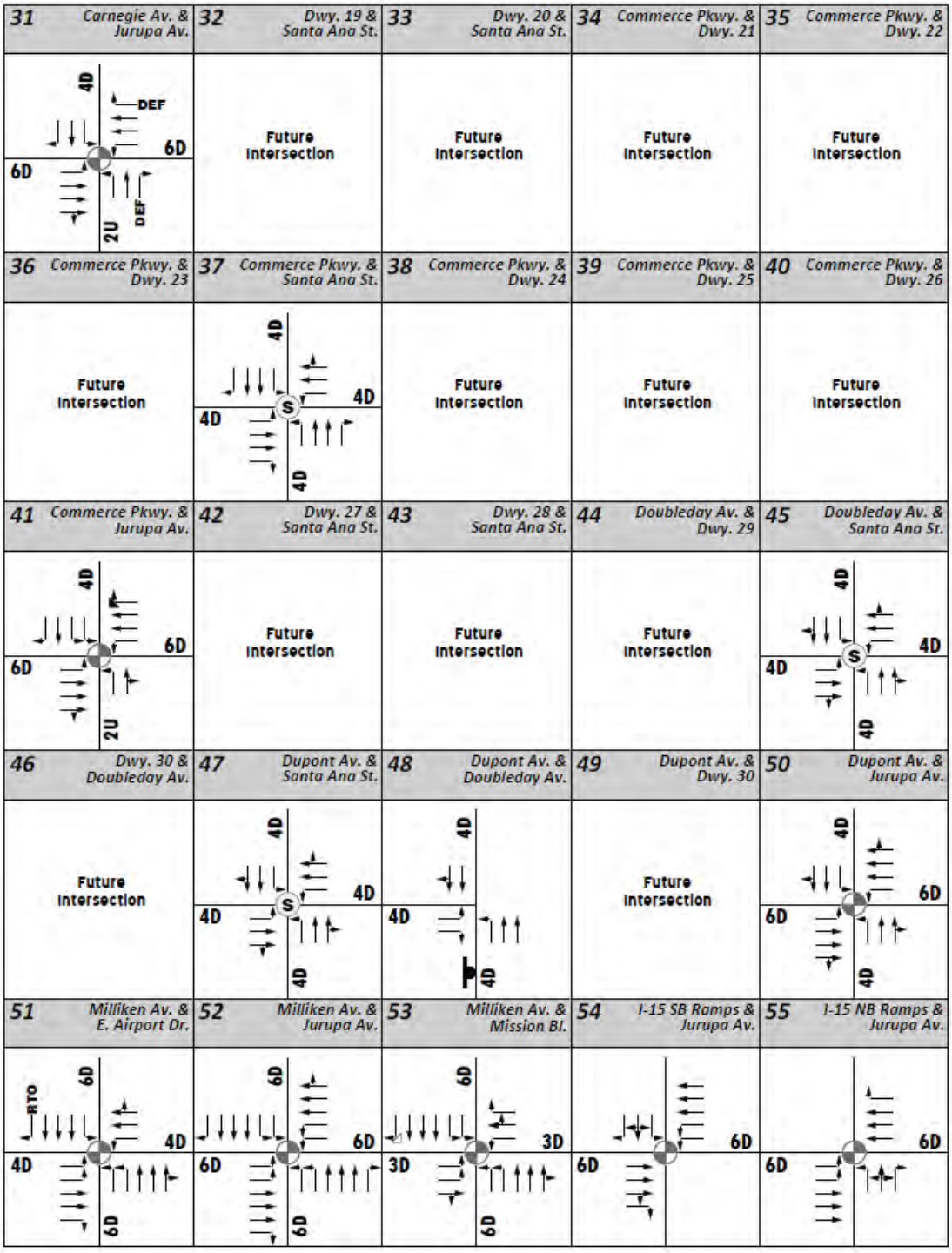
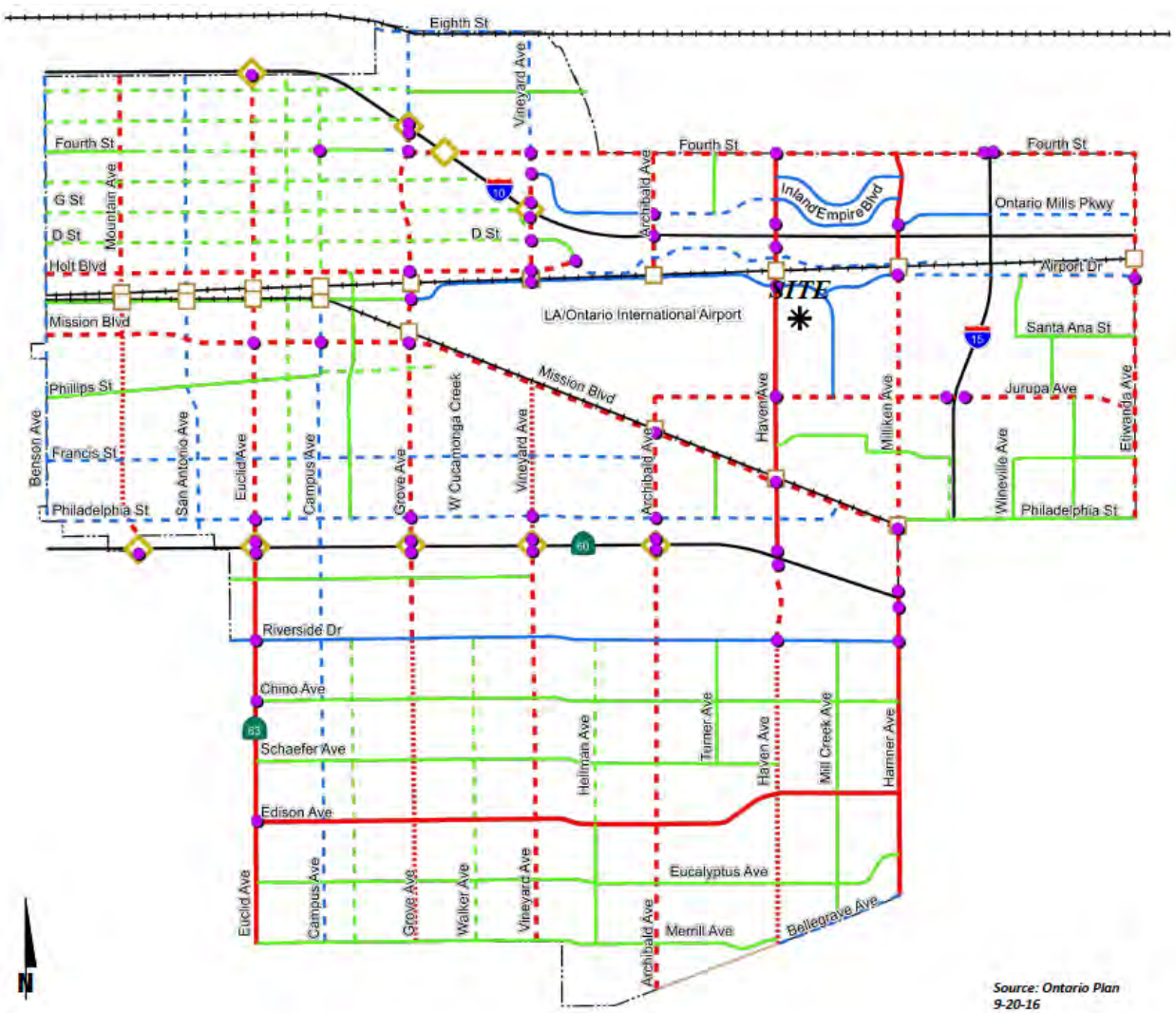


EXHIBIT 3-2: CITY OF ONTARIO GENERAL PLAN CIRCULATION ELEMENT



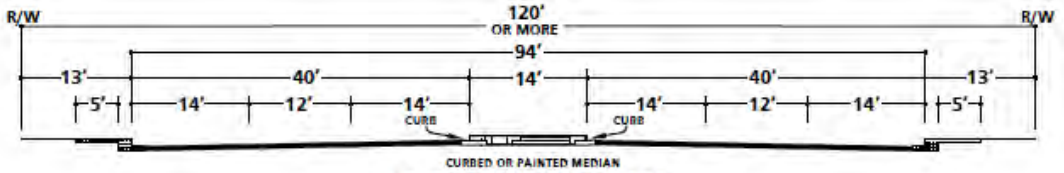
Other Principal Arterial
- 8 Lanes
- 6 Lanes
- 4 Lanes

Minor Arterial
- 6 Lanes
- 4 Lanes

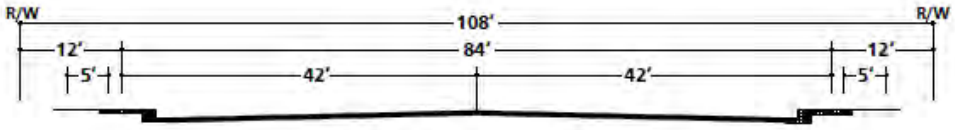
Collector Street
- 4 Lanes
- 2 Lanes

Freeways
Railroads
Freeway Interchange
Grade-Separated Rail Crossings
Enhanced Intersections

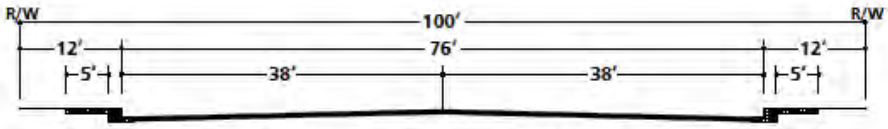
EXHIBIT 3-3: CITY OF ONTARIO GENERAL PLAN ROADWAY CROSS-SECTIONS



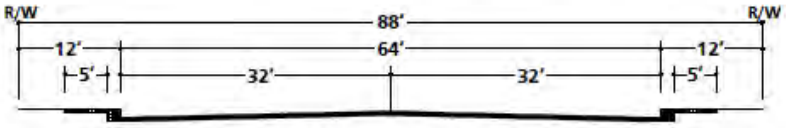
PRINCIPAL ARTERIAL



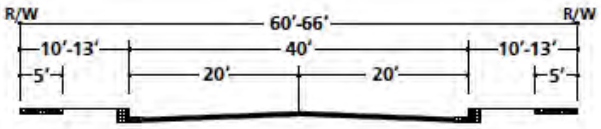
MINOR ARTERIAL



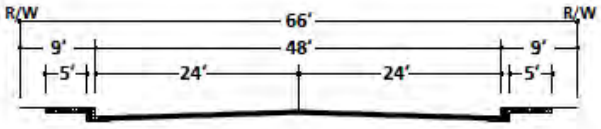
OTHER PRINCIPAL ARTERIAL



COLLECTOR STREET



LOCAL STREET



LOCAL INDUSTRIAL STREET

SOURCE: CITY OF ONTARIO

The study area roadway that is classified as a 4-lane Minor Arterial is identified as having two lanes of travel in each direction and a 14-foot median. The following study area roadway within the City of Ontario is classified as a 4-lane Minor Arterial:

- Inland Empire Boulevard, between Archibald Avenue and Haven Avenue
- Guasti Road

3.3 CITY OF EASTVALE GENERAL PLAN CIRCULATION ELEMENT

Exhibits 3-4 and 3-5 show the City of Eastvale General Plan Circulation Element and roadway cross-sections, respectively.

3.4 TRUCK ROUTES

The City of Ontario designated truck route map is shown on Exhibit 3-6. Commerce Parkway, Airport Drive, Haven Avenue, Milliken Avenue, Jurupa Avenue, and Mission Boulevard are designated as Truck Routes in the City of Ontario. The designated truck route map has been utilized to route truck traffic for the proposed Project and cumulative development projects throughout the study area.

3.5 BICYCLE, EQUESTRIAN, & PEDESTRIAN FACILITIES

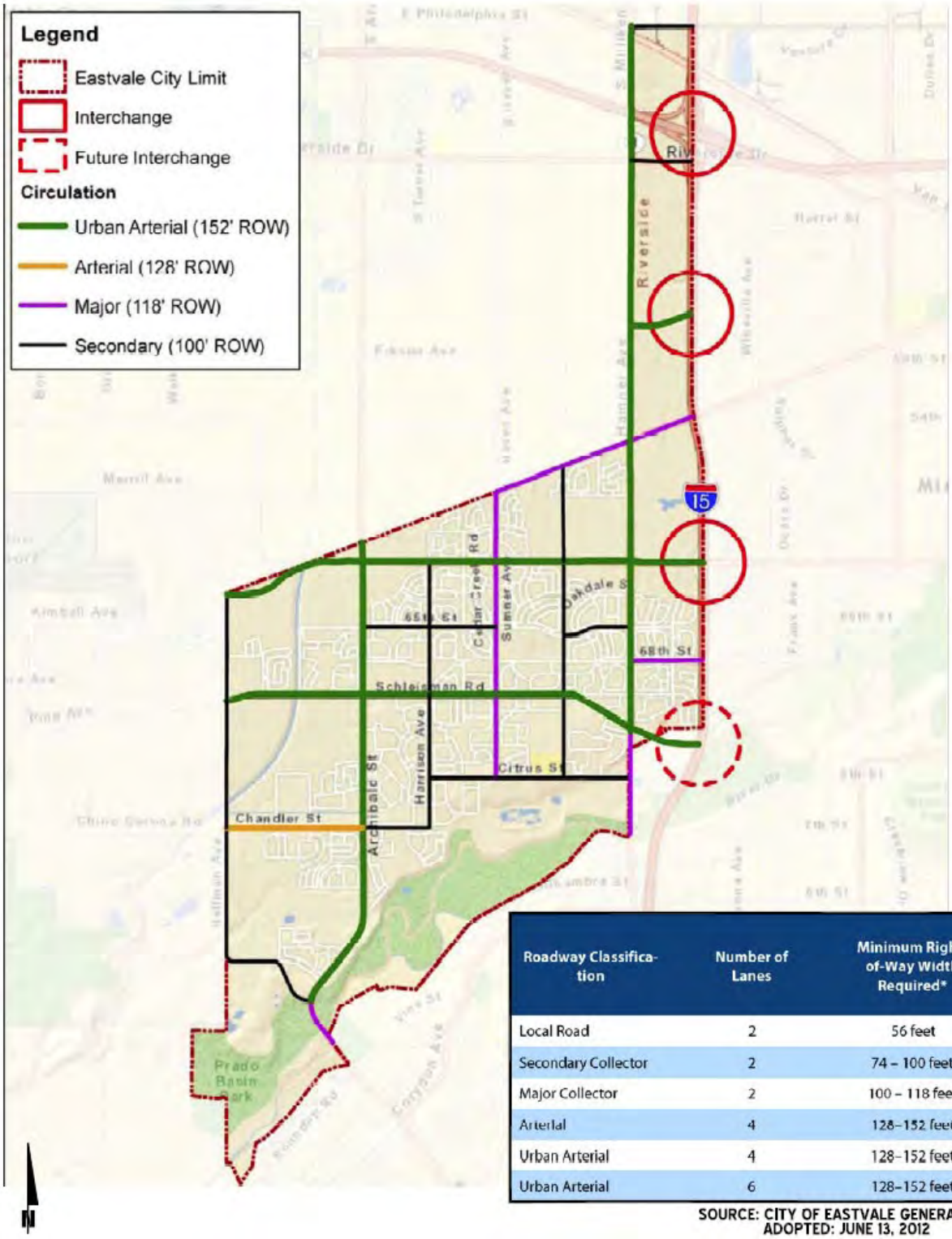
Field observations indicate nominal pedestrian and bicycle activity within the study area. Exhibit 3-7 illustrates the City of Ontario future planned bicycle facilities, which proposes Class II and Multipurpose Trails along Guasti Road and Inland Empire Boulevard located north of the Project. Haven Avenue and Mission Boulevard are designated as a Bicycle Corridor. Exhibit 3-8 illustrates the City of Eastvale trails and bikeway systems. Existing pedestrian facilities within the study area are shown on Exhibit 3-9.

3.6 TRANSIT SERVICE

The study area within the City of Ontario is currently served by Omnitrans, a public transit agency serving various jurisdictions within San Bernardino County. Based on a review of the existing transit routes within the vicinity of the proposed Project, Omnitrans Route 81 operates on Haven Avenue, adjacent to the site. There are existing comments located near Haven Avenue at Airport Drive and Jurupa Street, and near Milliken Avenue at Santa Ana Street, Lowell Street, and Jurupa Street. Transit service is reviewed and updated by Omnitrans periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate. As such, it is recommended that the applicant work in conjunction with Omnitrans to potentially provide additional bus service to the site. Existing transit routes in the vicinity of the study area are illustrated on Exhibit 3-10.

DRAFT

EXHIBIT 3-4: CITY OF EASTVALE GENERAL PLAN CIRCULATION ELEMENT



Roadway Classification	Number of Lanes	Minimum Right-of-Way Width Required*
Local Road	2	56 feet
Secondary Collector	2	74 – 100 feet
Major Collector	2	100 – 118 feet
Arterial	4	128–152 feet
Urban Arterial	4	128–152 feet
Urban Arterial	6	128–152 feet

SOURCE: CITY OF EASTVALE GENERAL PLAN ADOPTED: JUNE 13, 2012

EXHIBIT 3-5: CITY OF EASTVALE GENERAL PLAN ROADWAY CROSS-SECTIONS

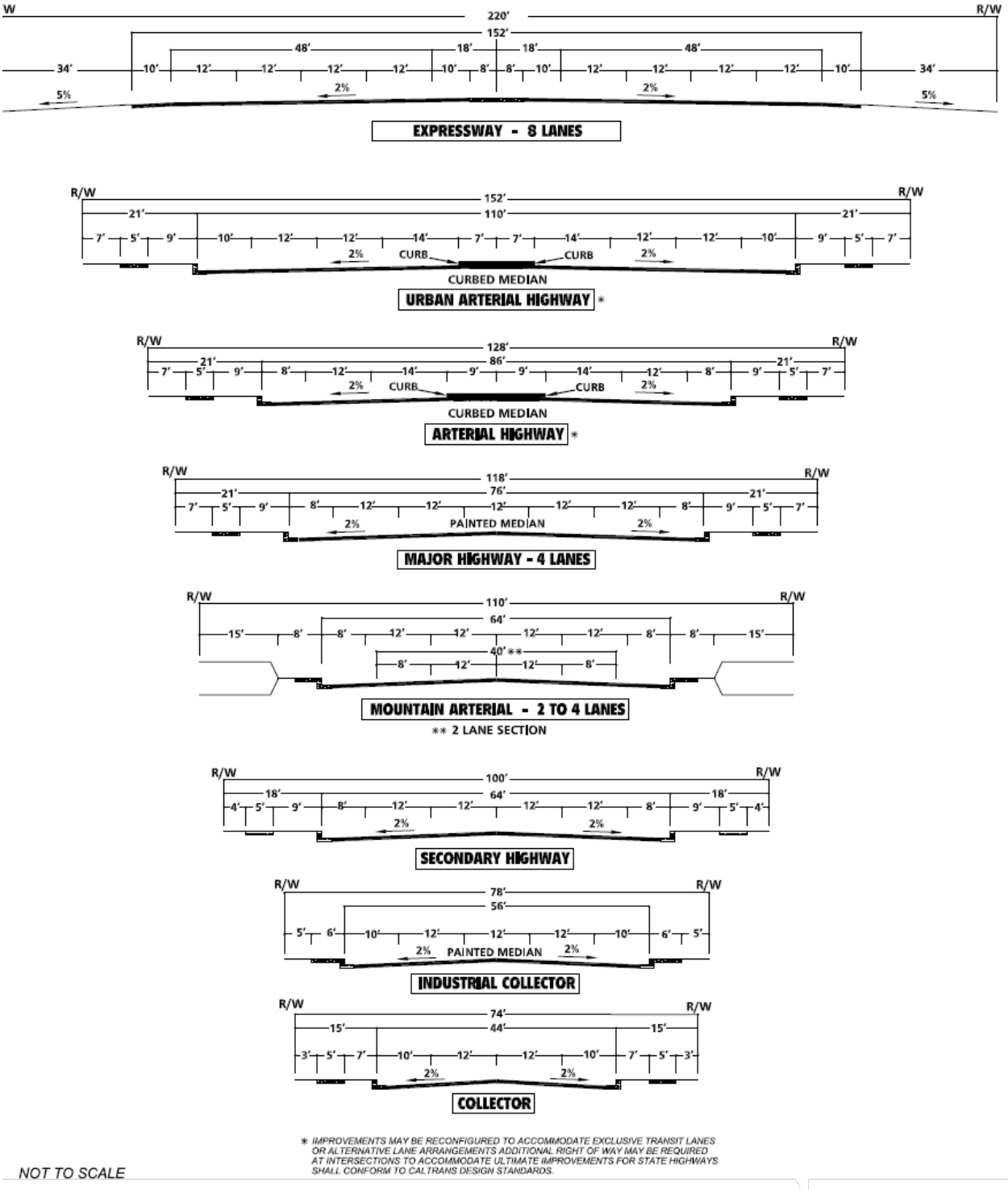


EXHIBIT 3-6: CITY OF ONTARIO TRUCK ROUTES

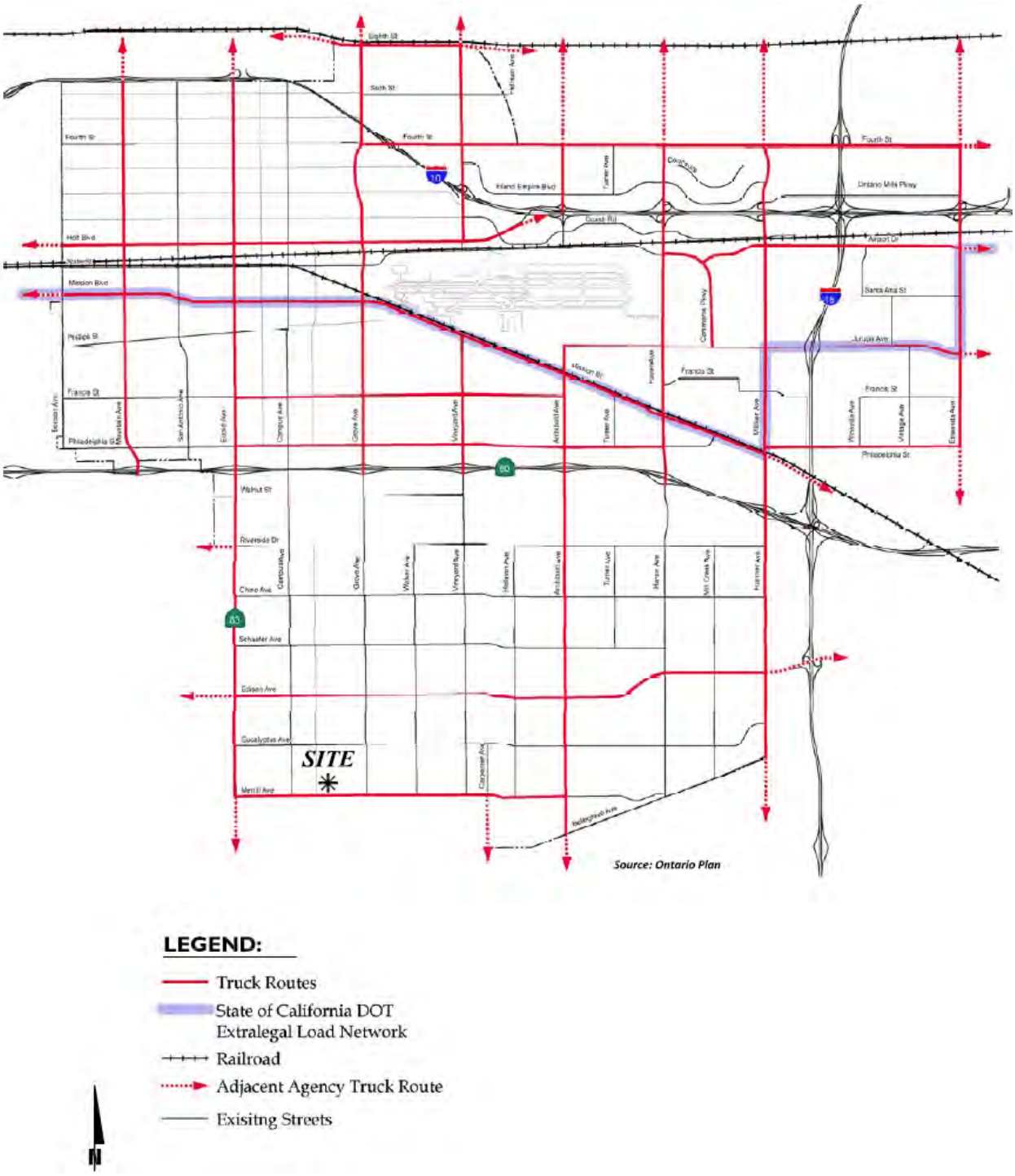
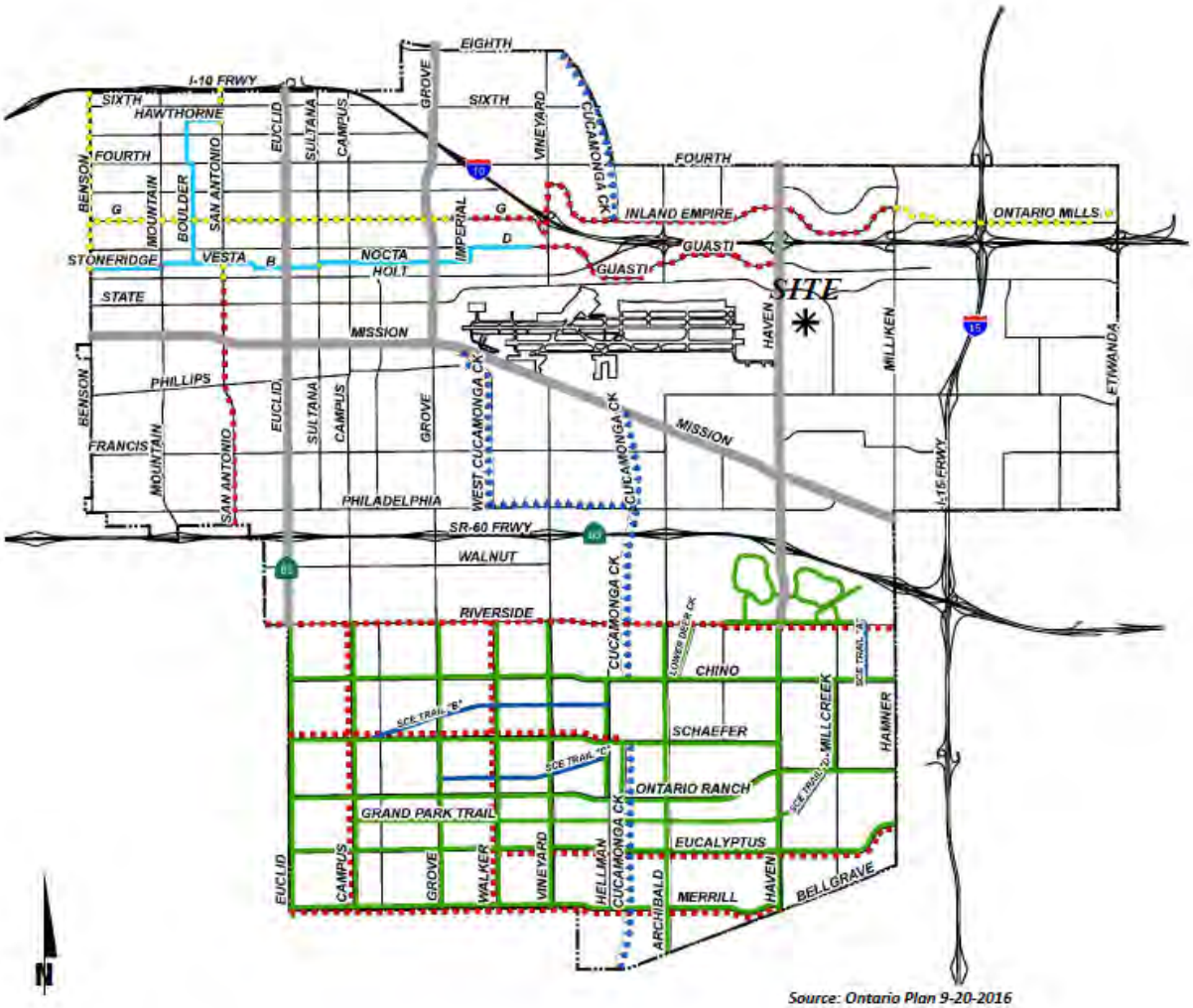


EXHIBIT 3-7: CITY OF ONTARIO GENERAL PLAN TRAILS AND BIKEWAY SYSTEMS



Freeway
Streets
Multipurpose Trail
Class I
Class II
Class III
Sharrow/Bike Boulevard
SCE Trail
Bicycle Corridor

EXHIBIT 3-8: EASTVALE AREA TRAILS AND BIKEWAYS

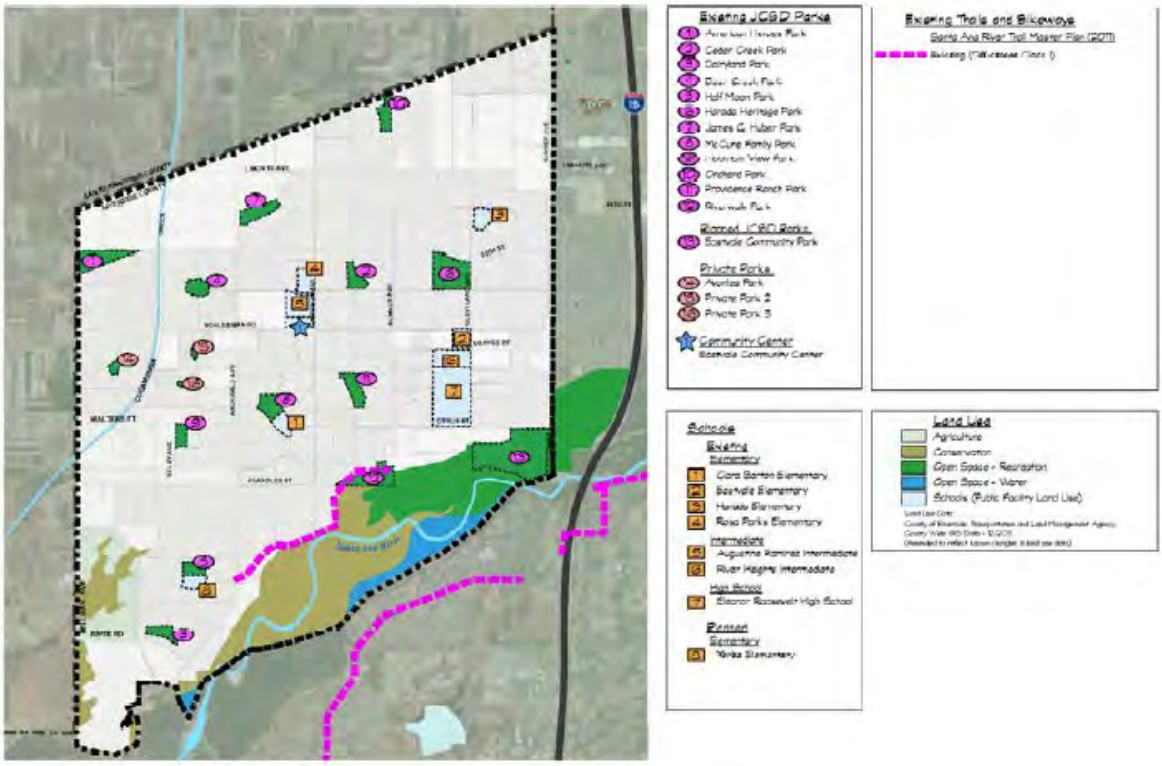


Exhibit 2.8-1 Existing Trails

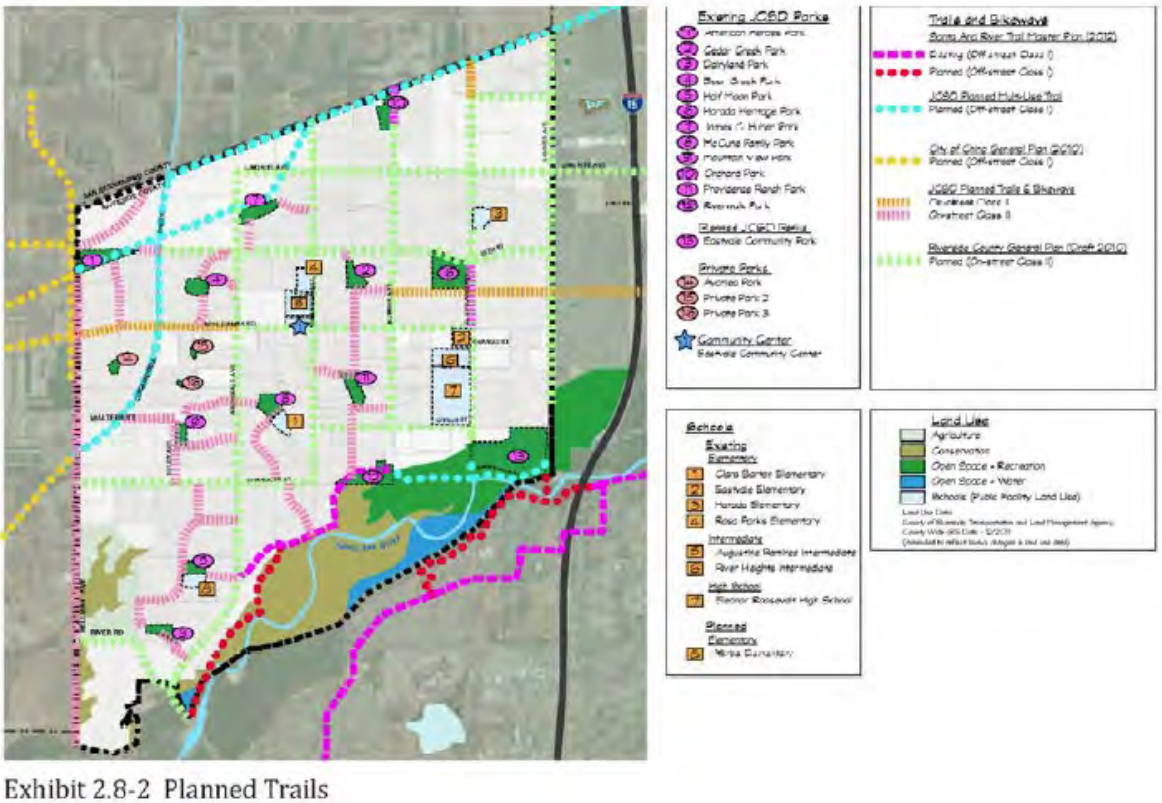


Exhibit 2.8-2 Planned Trails

EXHIBIT 3-9: EXISTING PEDESTRIAN FACILITIES

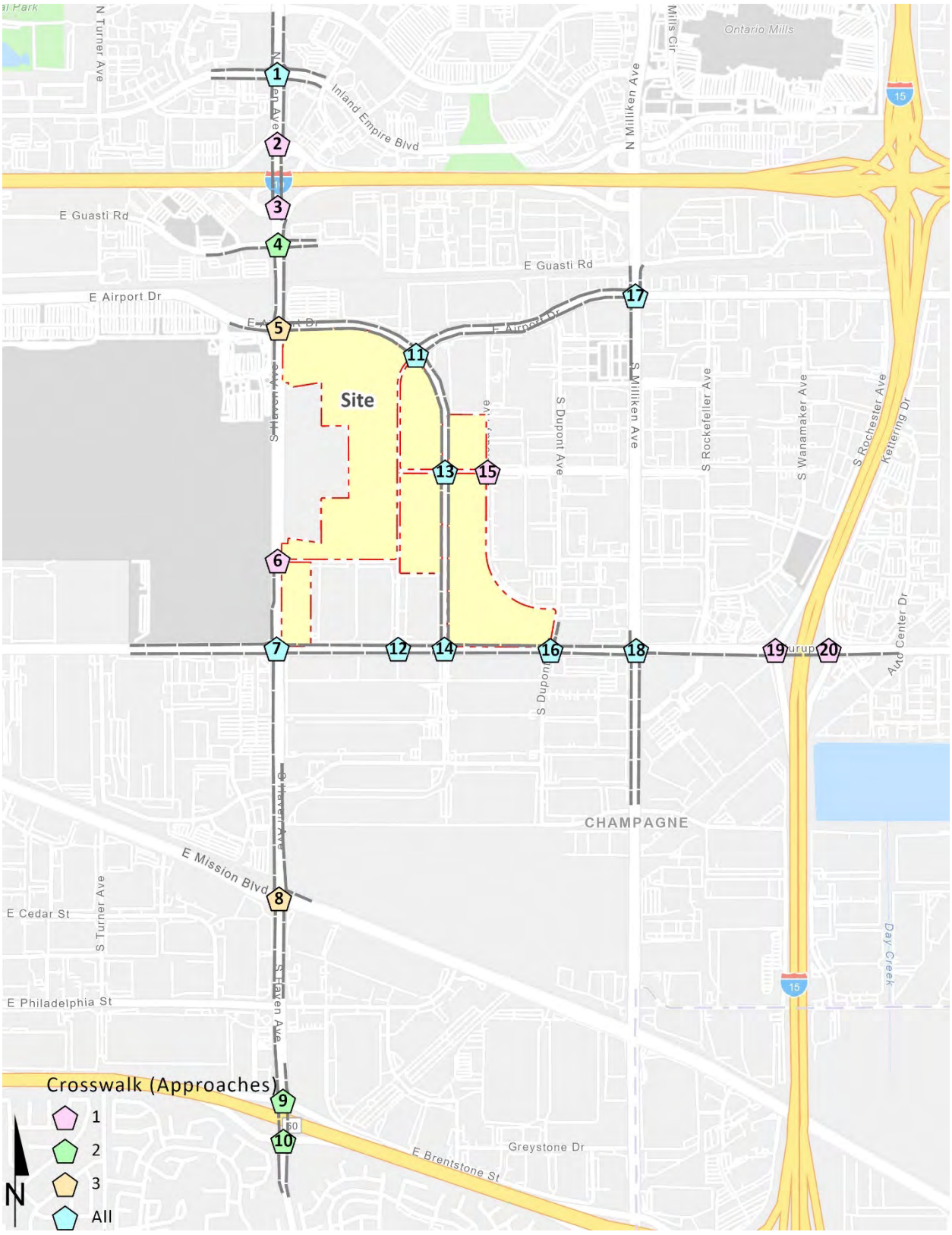
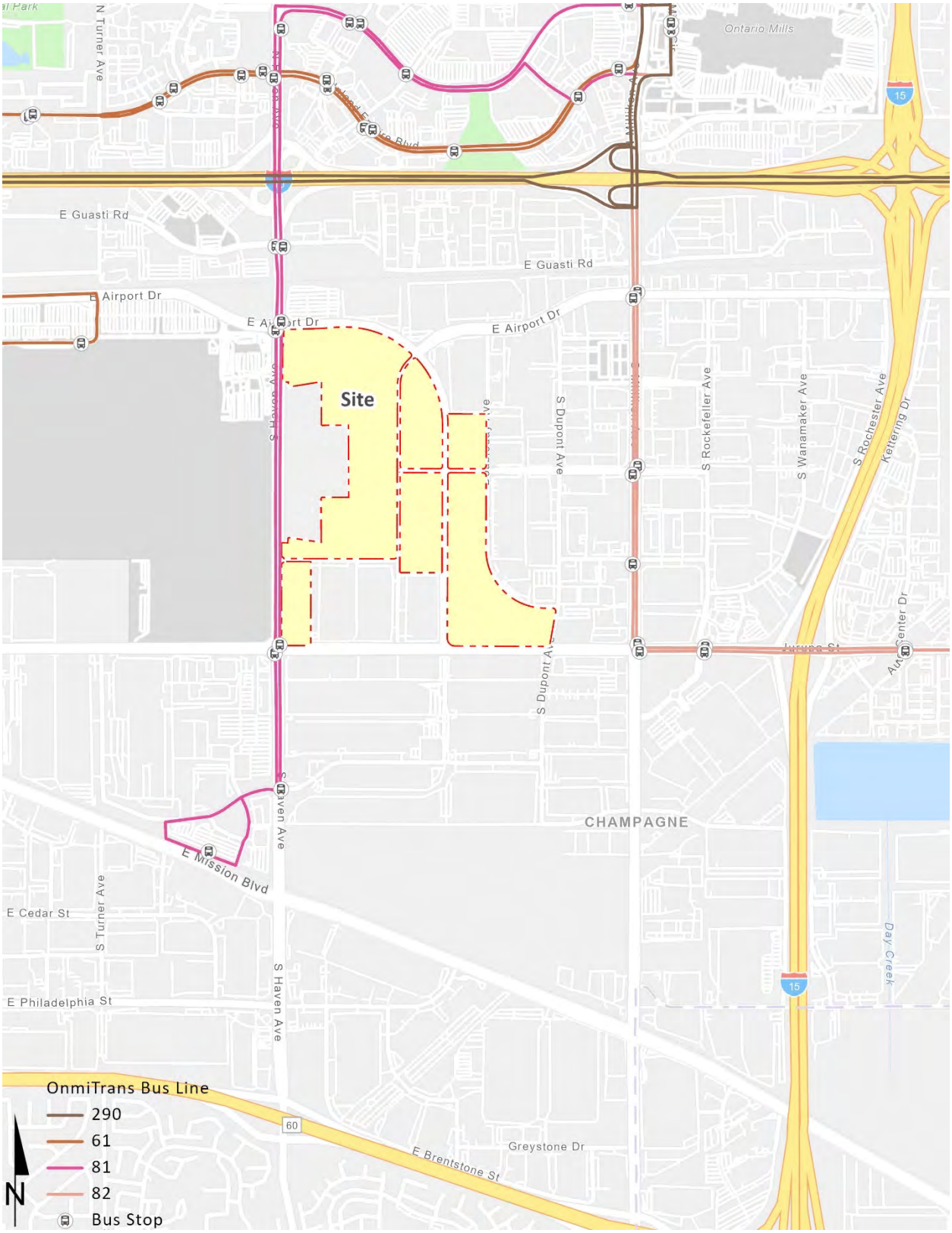


EXHIBIT 3-10: EXISTING TRANSIT ROUTES



3.7 EXISTING TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in October 2021. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

The weekday AM and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

The traffic counts collected in October 2021 include the following vehicle classifications: Passenger Cars, 2-Axle Trucks, 2-Axle Trucks, and 4 or More Axle Trucks. To represent the effect of large trucks, buses and recreational vehicles have on traffic flow; all trucks were converted into passenger car equivalent (PCE). By their size alone, these vehicles occupy the same space as two or more passenger cars. In addition, the time it takes for them to accelerate and slow-down is much longer than for passenger cars and varies depending on the type of vehicle and number of axles. For the purpose of this analysis, a PCE factor of 1.5 has been applied to 2-axle trucks, 2.0 for 3-axle trucks, and 3.0 for 4+-axle trucks to estimate each turning movement. These factors are consistent with the values recommended for use in the CMP.

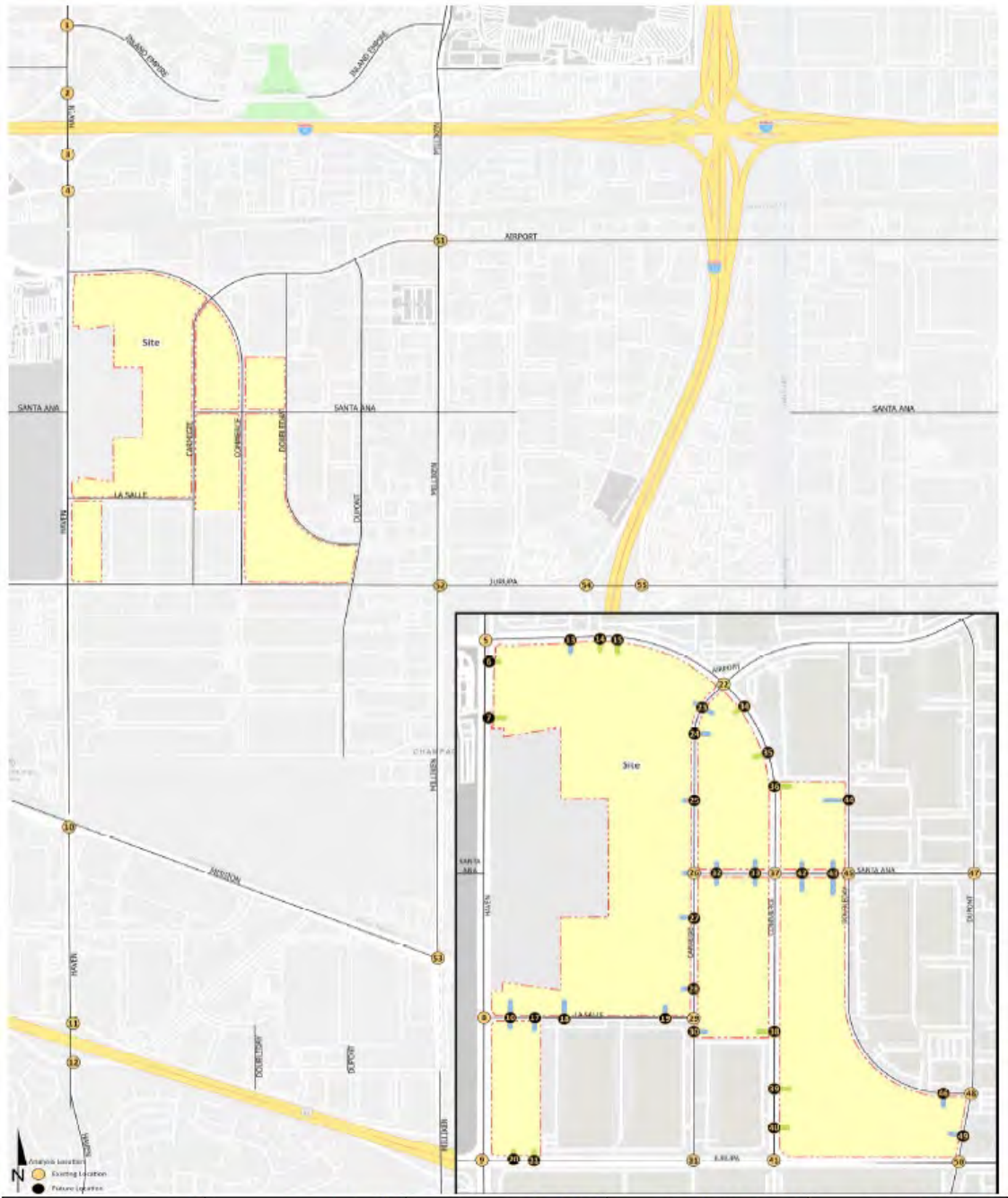
Existing weekday ADT volumes are shown on Exhibit 3-11. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

Weekday PM Peak Hour (Approach Volume + Exit Volume) x 8.62 = Leg Volume

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 11.60 percent. As such, the above equation utilizing a factor of 8.62 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 11.60 percent (i.e., 1/0.1160 = 8.62) and was assumed to sufficiently estimate average daily traffic (ADT) volumes for planning-level analyses. Existing weekday AM and weekday PM peak hour intersection volumes (in actual vehicles) are shown on Exhibit 3-11. The peak hour operations analyses utilize PCE volumes per the City's Traffic Study Guidelines (PCE volumes are included in the appendices with the HCM operations analysis worksheets for each applicable analysis scenario).

DRAFT

EXHIBIT 3-11: EXISTING (2021) TRAFFIC VOLUMES (1 OF 3)



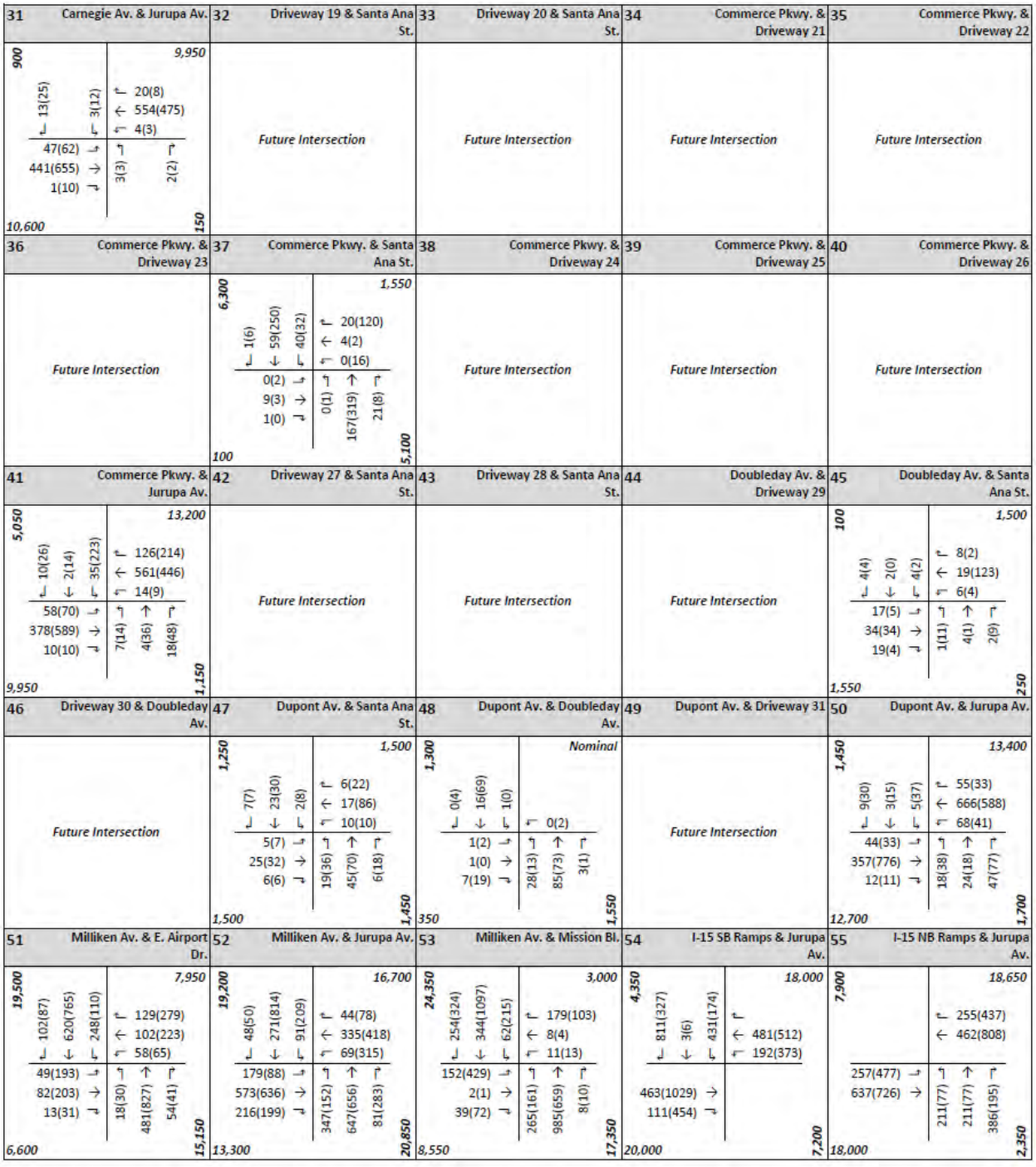
| 1 Haven Av. & Inland Empire Bl. | | |

EXHIBIT 3-11: EXISTING (2021) TRAFFIC VOLUMES (2 OF 3)

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 3-11: EXISTING (2021) TRAFFIC VOLUMES (3 OF 3)



##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

3.8 INTERSECTION OPERATIONS ANALYSIS

Existing peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized on Table 3-1, which indicates that all existing study area intersections are currently operating at acceptable LOS during the peak hours. The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2021) CONDITIONS

#	Intersection	Traffic Control[2]	Delay[1] (secs.) AM	Delay[1] (secs.) PM	Level of Service AM	Level of Service PM	Jurisdiction(s) / LOS Standard[3]
1	Haven Av. & Inland Empire Bl.	TS	21.0	29.3	C	C	Ontario / LOS E
2	Haven Av. & I-10 WB Ramps	TS	11.3	6.2	B	A	Ontario, Caltrans / LOS D
3	Haven Av. & I-10 EB Ramps	TS	15.8	10.7	B	B	Ontario, Caltrans / LOS D
4	Haven Av. & E. Guasti Rd.	TS	19.5	30.6	B	C	Ontario / LOS E
5	Haven Av. & E. Airport Dr.	TS	22.3	53.8	C	D	Ontario / LOS E
6	Haven Av. & Driveway 1		Future Intersection				Ontario / LOS E
7	Haven Av. & Driveway 2		Future Intersection				Ontario / LOS E
8	Haven Av. & La Salle St.	CSS	17.3	24.2	C	C	Ontario / LOS E
9	Haven Av. & Jurupa Av.	TS	24.8	39.8	C	D	Ontario / LOS E
10	Haven Av. & Mission Bl.	TS	40.9	45.3	D	D	Ontario / LOS E
11	Haven Av. & SR-60 WB Ramps	TS	13.0	12.6	B	B	Ontario, Caltrans / LOS D
12	Haven Av. & SR-60 EB Ramps	TS	23.4	14.2	C	B	Ontario, Caltrans / LOS D
13	Driveway 3 & E. Airport Dr.		Future Intersection				Ontario / LOS E
14	Driveway 4 & E. Airport Dr.		Future Intersection				Ontario / LOS E
15	Driveway 5 & E. Airport Dr.		Future Intersection				Ontario / LOS E
16	Driveway 6 & La Salle St.		Future Intersection				Ontario / LOS E
17	Driveway 7 & La Salle St.		Future Intersection				Ontario / LOS E
18	Driveway 8 & La Salle St.		Future Intersection				Ontario / LOS E
19	Driveway 9 & La Salle St.		Future Intersection				Ontario / LOS E
20	Driveway 10 & Jurupa Av.		Future Intersection				Ontario / LOS E
21	Driveway 11 & Jurupa Av.		Future Intersection				Ontario / LOS E
22	Carnegie Av. & E. Airport Dr.	TS	16.6	18.4	B	B	Ontario / LOS E
23	Carnegie Av. & Driveway 12		Future Intersection				Ontario / LOS E
24	Carnegie Av. & Driveway 13		Future Intersection				Ontario / LOS E
25	Carnegie Av. & Driveway 14		Future Intersection				Ontario / LOS E
26	Carnegie Av. & Driveway 15/Santa Ana St.	AWS	7.2	7.0	A	A	Ontario / LOS E
27	Carnegie Av. & Driveway 16		Future Intersection				Ontario / LOS E
28	Carnegie Av. & Driveway 17		Future Intersection				Ontario / LOS E
29	Carnegie Av. & La Salle St.	AWS	7.5	7.6	A	A	Ontario / LOS E
30	Carnegie Av. & Driveway 18		Future Intersection				Ontario / LOS E
31	Carnegie Av. & Jurupa Av.	TS	4.3	4.0	A	A	Ontario / LOS E
32	Driveway 19 & Santa Ana St.		Future Intersection				Ontario / LOS E
33	Driveway 20 & Santa Ana St.		Future Intersection				Ontario / LOS E
34	Commerce Pkwy. & Driveway 21		Future Intersection				Ontario / LOS E
35	Commerce Pkwy. & Driveway 22		Future Intersection				Ontario / LOS E
36	Commerce Pkwy. & Driveway 23		Future Intersection				Ontario / LOS E
37	Commerce Pkwy. & Santa Ana St.	AWS	8.4	11.0	A	B	Ontario / LOS E
38	Commerce Pkwy. & Driveway 24		Future Intersection				Ontario / LOS E
39	Commerce Pkwy. & Driveway 25		Future Intersection				Ontario / LOS E
40	Commerce Pkwy. & Driveway 26		Future Intersection				Ontario / LOS E
41	Commerce Pkwy. & Jurupa Av.	TS	14.0	18.6	B	B	Ontario / LOS E
42	Driveway 27 & Santa Ana St.		Future Intersection				Ontario / LOS E

#	Intersection	Traffic Control[2]	Delay[1] (secs.) AM	Delay[1] (secs.) PM	Level of Service AM	Level of Service PM	Jurisdiction(s) / LOS Standard[3]
43	Driveway 28 & Santa Ana St.		Future Intersection				Ontario / LOS E
44	Double Day Av. & Driveway 29		Future Intersection				Ontario / LOS E
45	Double Day Av. & Santa Ana St.	AWS	7.5	8.0	A	A	Ontario / LOS E
46	Driveway 30 & Double Day Av.		Future Intersection				Ontario / LOS E
47	Dupont Av. & Santa Ana St.	AWS	7.8	8.5	A	A	Ontario / LOS E
48	Dupont Av. & Double Day Av.	CSS	9.4	9.6	A	A	Ontario / LOS E
49	Dupont Av. & Driveway 31		Future Intersection				Ontario / LOS E
50	Dupont Av. & Jurupa Av.	TS	11.6	12.3	B	B	Ontario / LOS E
51	Milliken Av. & E. Airport Dr.	TS	22.5	24.0	C	C	Ontario / LOS E
52	Milliken Av. & Jurupa Av.	TS	22.0	29.4	C	C	Ontario / LOS E
53	Milliken Av. & Mission Bl.	TS	23.0	30.4	C	C	Eastvale, Ontario / LOS D
54	I-15 SB Ramps & Jurupa Av.	TS	22.5	17.3	C	B	Ontario, Caltrans / LOS D
55	I-15 NB Ramps & Jurupa Av.	TS	14.0	13.3	B	B	Ontario, Caltrans / LOS D

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal

[3] Minimum acceptable LOS for each applicable jurisdiction.

3.9 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. No study area intersections currently warrant a traffic signal for Existing traffic conditions. Existing conditions traffic signal warrant analysis worksheets are provided in Appendix 3.3.

DRAFT

4 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. For the purposes of this TA, the proposed Project is anticipated to be developed by the Year 2026 in a single phase.

The proposed Project includes the following mix of land uses:

- 642,368 square feet of high-cube cold storage warehouse use (15% of the total square footage)
- 3,640,082 square feet of high-cube fulfillment center warehouse use (85% of the total square footage)
- **Total of 4,282,450 square feet**

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

Trip generation rates for the Project are shown on Table 4-1 for both actual vehicles and PCE. The trip generation summary illustrating daily, and peak hour trip generation estimates for the proposed Project in actual vehicles and PCE are shown in Table 4-2 and Table 4-3, respectively. The trip generation rates used for this analysis are based upon information collected by the ITE as provided in their Trip Generation Manual (11th Edition, 2021). (3)

DRAFT

TABLE 4-1: PROJECT TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
High-Cube Fulfillment Center (Non-Sort)[3]	TSF	155	0.122	0.028	0.150	0.062	0.098	0.160	1.810
Passenger Cars			0.105	0.025	0.130	0.059	0.091	0.150	1.580
2-Axle Trucks			0.002	0.001	0.003	0.001	0.001	0.002	0.038
3-Axle Trucks			0.002	0.002	0.004	0.001	0.001	0.002	0.048
4+-Axle Trucks			0.006	0.007	0.013	0.003	0.003	0.006	0.144
High-Cube Cold Storage Warehouse[3]	TSF	157	0.085	0.025	0.110	0.034	0.086	0.120	2.120
Passenger Cars			0.062	0.018	0.080	0.025	0.065	0.090	1.665
2-Axle Trucks			0.003	0.007	0.010	0.005	0.005	0.010	0.260
3-Axle Trucks			0.001	0.002	0.003	0.002	0.001	0.003	0.083
4+-Axle Trucks			0.005	0.011	0.016	0.008	0.008	0.016	0.113
Passenger Car Equivalent (PCE) Trip Generation Rates[4]									
High-Cube Fulfillment Center (Non-Sort)[3]	TSF	155	0.122	0.028	0.150	0.062	0.098	0.160	1.810
Passenger Cars			0.105	0.025	0.130	0.059	0.091	0.150	1.580
2-Axle Trucks (PCE = 1.5)			0.003	0.002	0.005	0.002	0.001	0.003	0.058
3-Axle Trucks (PCE = 2.0)			0.005	0.005	0.010	0.003	0.003	0.005	0.119
4+-Axle Trucks (PCE = 3.0)			0.018	0.020	0.038	0.009	0.010	0.019	0.432
High-Cube Cold Storage Warehouse[3]	TSF	157	0.085	0.025	0.110	0.034	0.086	0.120	2.120
Passenger Cars			0.062	0.018	0.080	0.025	0.065	0.090	1.665
2-Axle Trucks (PCE = 1.5)			0.005	0.011	0.016	0.008	0.008	0.016	0.390
3-Axle Trucks (PCE = 2.0)			0.002	0.005	0.007	0.004	0.003	0.007	0.165
4+-Axle Trucks (PCE = 3.0)			0.015	0.034	0.049	0.024	0.025	0.049	0.338

[1] Trip Generation and Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] TSF = thousand square feet

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.
Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

[4] PCE factors: 2-axle = 1.5; 3-axle = 2.0; 4+-axle = 3.0.

DRAFT

TABLE 4-2: PROJECT TRIP GENERATION SUMMARY (ACTUAL)

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Building 1:								
Passenger Cars:	360.660 TSF	35	9	44	19	32	51	574
Total Truck Trips (Actual Vehicles):		4	4	8	1	1	2	96
Building 1 Total Trips (Actual Vehicles)[2]		**39**	**13**	**52**	**20**	**33**	**53**	**670**
Building 2:								
Passenger Cars:	927.370 TSF	92	23	114	50	81	130	1,478
Total Truck Trips (Actual Vehicles):		10	11	21	6	7	13	246
Building 2 Total Trips (Actual Vehicles)[2]		**102**	**34**	**135**	**56**	**88**	**143**	**1,724**
Building 3:								
Passenger Cars:	548.730 TSF	54	13	67	30	47	77	876
Total Truck Trips (Actual Vehicles):		5	7	12	2	3	5	148
Building 3 Total Trips (Actual Vehicles)[2]		**59**	**20**	**79**	**32**	**50**	**82**	**1,024**
Building 4:								
Passenger Cars:	265.200 TSF	26	7	32	14	24	38	422
Total Truck Trips (Actual Vehicles):		1	1	2	1	1	2	72
Building 4 Total Trips (Actual Vehicles)[2]		**27**	**8**	**34**	**15**	**25**	**40**	**494**
Building 5:								
Passenger Cars:	425.580 TSF	42	10	52	23	37	60	678
Total Truck Trips (Actual Vehicles):		4	4	8	2	2	4	116
Building 5 Total Trips (Actual Vehicles)[2]		**46**	**14**	**60**	**25**	**39**	**64**	**794**
Building 6:								
Passenger Cars:	492.140 TSF	49	11	60	27	43	70	786
Total Truck Trips (Actual Vehicles):		5	7	12	2	2	4	130
Building 6 Total Trips (Actual Vehicles)[2]		**54**	**18**	**72**	**29**	**45**	**74**	**916**
Building 7:								
Passenger Cars:	205.500 TSF	20	5	26	11	18	29	328
Total Truck Trips (Actual Vehicles):		1	1	2	1	1	2	58
Building 7 Total Trips (Actual Vehicles)[2]		**21**	**6**	**28**	**12**	**19**	**31**	**386**
Building 8:								
Passenger Cars:	535.350 TSF	53	12	65	29	46	75	854
Total Truck Trips (Actual Vehicles):		5	7	12	2	2	4	146
Building 8 Total Trips (Actual Vehicles)[2]		**58**	**19**	**77**	**31**	**48**	**79**	**1,000**
Building 9:								
Passenger Cars:	521.920 TSF	52	12	64	28	45	74	832
Total Truck Trips (Actual Vehicles):		5	7	12	2	2	4	140
Building 9 Total Trips (Actual Vehicles)[2]		**57**	**19**	**76**	**30**	**47**	**78**	**972**
Passenger Car Total		423	102	524	231	373	604	6,828
Truck Total (Actual Vehicles)		40	49	89	19	21	40	1,152
Project Total Trips (Actual Vehicles)[2]		**463**	**151**	**613**	**250**	**394**	**644**	**7,980**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

DRAFT

TABLE 4-3: PROJECT TRIP GENERATION SUMMARY (PCE)

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Building 1:								
Passenger Cars:	360.660 TSF	35	9	44	19	32	51	574
Total Truck Trips (PCE):		10	12	22	5	5	10	236
Building 1 Total Trips (PCE)[2]		**45**	**21**	**66**	**24**	**37**	**61**	**810**
Building 2:								
Passenger Cars:	927.370 TSF	92	23	114	50	81	130	1,478
Total Truck Trips (PCE):		23	29	52	15	15	30	606
Building 2 Total Trips (PCE)[2]		**115**	**52**	**166**	**65**	**96**	**160**	**2,084**
Building 3:								
Passenger Cars:	548.730 TSF	54	13	67	30	47	77	876
Total Truck Trips (PCE):		12	16	28	9	9	18	360
Building 3 Total Trips (PCE)[2]		**66**	**29**	**95**	**39**	**56**	**95**	**1,236**
Building 4:								
Passenger Cars:	265.200 TSF	26	7	32	14	24	38	422
Total Truck Trips (PCE):		7	6	13	4	4	8	178
Building 4 Total Trips (PCE)[2]		**33**	**13**	**45**	**18**	**28**	**46**	**600**
Building 5:								
Passenger Cars:	425.580 TSF	42	10	52	23	37	60	678
Total Truck Trips (PCE):		11	13	24	7	8	15	282
Building 5 Total Trips (PCE)[2]		**53**	**23**	**76**	**30**	**45**	**75**	**960**
Building 6:								
Passenger Cars:	492.140 TSF	49	11	60	27	43	70	786
Total Truck Trips (PCE):		12	15	27	9	8	17	324
Building 6 Total Trips (PCE)[2]		**61**	**26**	**87**	**36**	**51**	**87**	**1,110**
Building 7:								
Passenger Cars:	205.500 TSF	20	5	26	11	18	29	328
Total Truck Trips (PCE):		5	5	10	3	3	6	136
Building 7 Total Trips (PCE)[2]		**25**	**10**	**36**	**14**	**21**	**35**	**464**
Building 8:								
Passenger Cars:	535.350 TSF	53	12	65	29	46	75	854
Total Truck Trips (PCE):		12	16	28	9	8	17	352
Building 8 Total Trips (PCE)[2]		**65**	**28**	**93**	**38**	**54**	**92**	**1,206**
Building 9:								
Passenger Cars:	521.920 TSF	52	12	64	28	45	74	832
Total Truck Trips (PCE):		12	16	28	9	8	17	344
Building 9 Total Trips (PCE)[2]		**64**	**28**	**92**	**37**	**53**	**91**	**1,176**
Passenger Car Total		423	102	524	231	373	604	6,828
Truck Total (PCE)		104	128	232	70	68	138	2,818
Project Total Trips (PCE)[2]		**527**	**230**	**756**	**301**	**441**	**742**	**9,646**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

DRAFT

For purposes of this analysis, the following ITE land use codes and vehicle mixes have been utilized:

- ITE land use code 155 (High-Cube Fulfillment Center Warehouse, Non-Sort Facility) has been used to derive site specific trip generation estimates for up to 3,640,082 square feet. High-cube (non-sort facility) fulfillment center warehouses are primarily used for the storage and/or consolidation of manufactured goods prior to their distribution to retail locations or other warehouses. A typical high-cube warehouse will have a high level of automation and logistics management where the automation and logistics enable the processing of goods in a highly efficient manner. Fulfillment center warehouses include warehouses characterized by a significant storage function and direct distribution of ecommerce product to end users. These facilities handle smaller packages and quantities than other high-cube warehouses. A non-sort facility is a fulfillment center that ships large box items that are processed primarily with automation rather than through manual means. The High-Cube Fulfillment Center (Non-Sort Facility) Warehouse vehicle mix (passenger cars versus trucks) has also been obtained from the ITE's latest Trip Generation Manual. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%.
- ITE land use code 157 (High-Cube Cold Storage Warehouse) has been used to derive site specific trip generation estimates for up to 642,368 square feet. High-cube cold storage warehouses include warehouses characterized by the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. High-cube cold storage warehouses are facilities typified by temperature-controlled environments for frozen food or other perishable products. The High-Cube Cold Storage Warehouse vehicle mix (passenger cars versus trucks) has also been obtained from the ITE's latest Trip Generation Manual. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 34.7%; 3-Axle = 11.0%; 4+-Axle = 54.3%.

Finally, PCE factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles) for the Project. PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in Appendix B of the San Bernardino County Congestion Management Program (CMP), 2016 Update.

As shown on Table 4-2, the proposed Project is anticipated to generate a total of 7,980 two-way trips per day, with 613 AM peak hour trips and 644 PM peak hour trips (in actual vehicles). For the purposes of the operations analysis, the PCE trip generation shown in Table 4-3 has been utilized. Detailed Project trip generation summaries for each building are provided in Appendix 4.1.

4.2 PROJECT TRIP DISTRIBUTION

The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution pattern of passenger cars is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional freeway system. The trip distribution pattern for truck traffic is also influenced by the local truck routes approved by the City of Ontario, City of Eastvale, and Caltrans.

Given these differences, separate trip distributions were generated for both passenger cars and truck trips.

Exhibit 4-1 illustrates the external truck trip distribution patterns and Exhibit 4-2 illustrates the external passenger car trip distribution patterns. As shown on Exhibit 4-1, trucks are anticipated to utilize designated truck routes to reach regional State highways such as the I-10, SR-60, and I-15 Freeways. Detailed Project trip distributions for each building are provided in Appendix 4.2.

4.3 MODAL SPLIT

The potential for Project trips (non-truck) to be reduced by the use of public transit, walking or bicycling have not been included as part of the Project's estimated trip generation. Essentially, the Project's traffic projections are "conservative" in that these alternative travel modes would reduce the forecasted traffic volumes (non-truck trips only).

4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project ADT and peak hour intersection turning movement volumes are shown on Exhibit 4-3.

4.5 BACKGROUND TRAFFIC

4.5.1 OPENING YEAR CUMULATIVE CONDITIONS

Future year traffic forecasts have been based upon background (ambient) growth at 2% per year for 2026 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies.

Opening Year Cumulative (2026) traffic volumes are provided in Section 6 of this report. The traffic generated by the proposed Project was then manually added to the base volume to determine Opening Year Cumulative "With Project" forecasts.

DRAFT

EXHIBIT 4-1: PROJECT (TRUCK) TRIP DISTRIBUTION

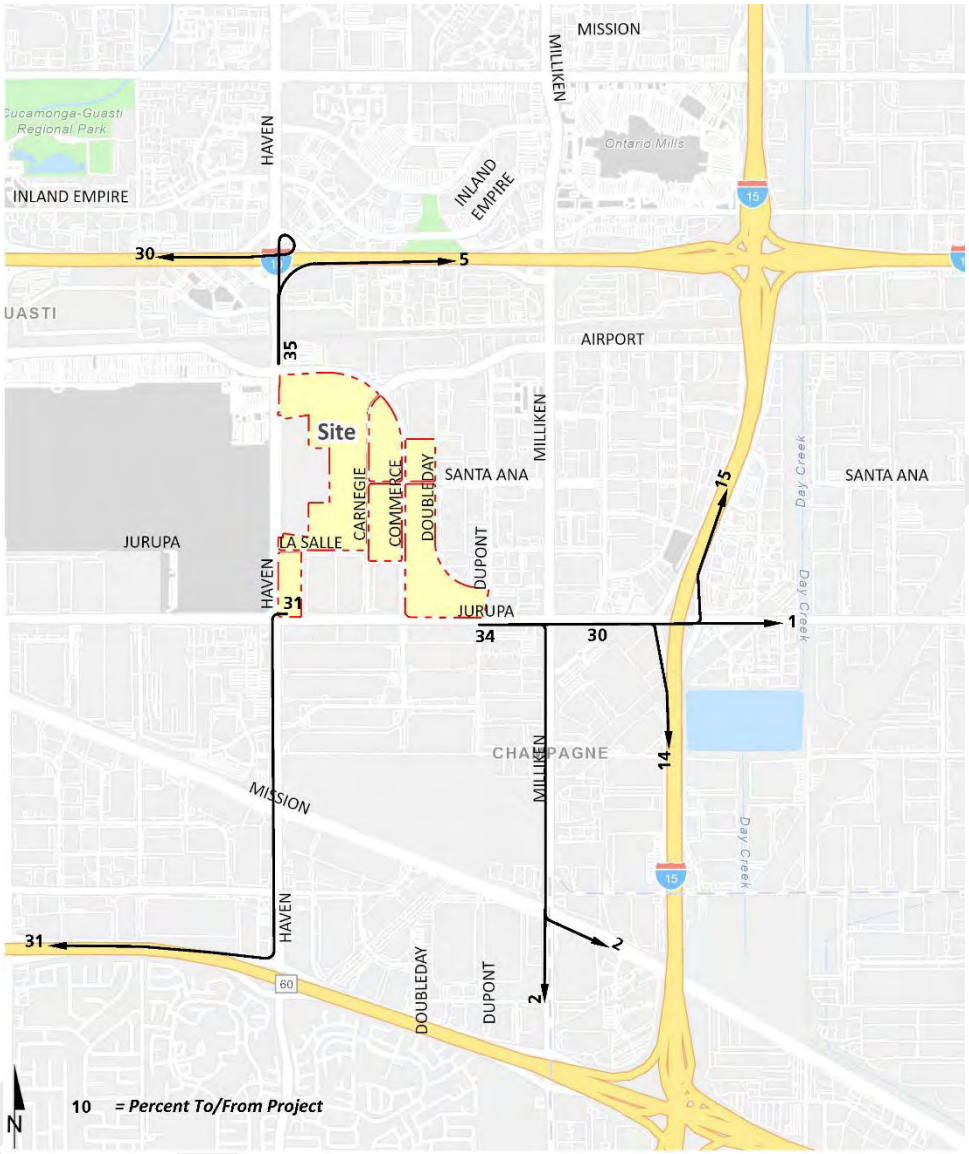


EXHIBIT 4-2: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION

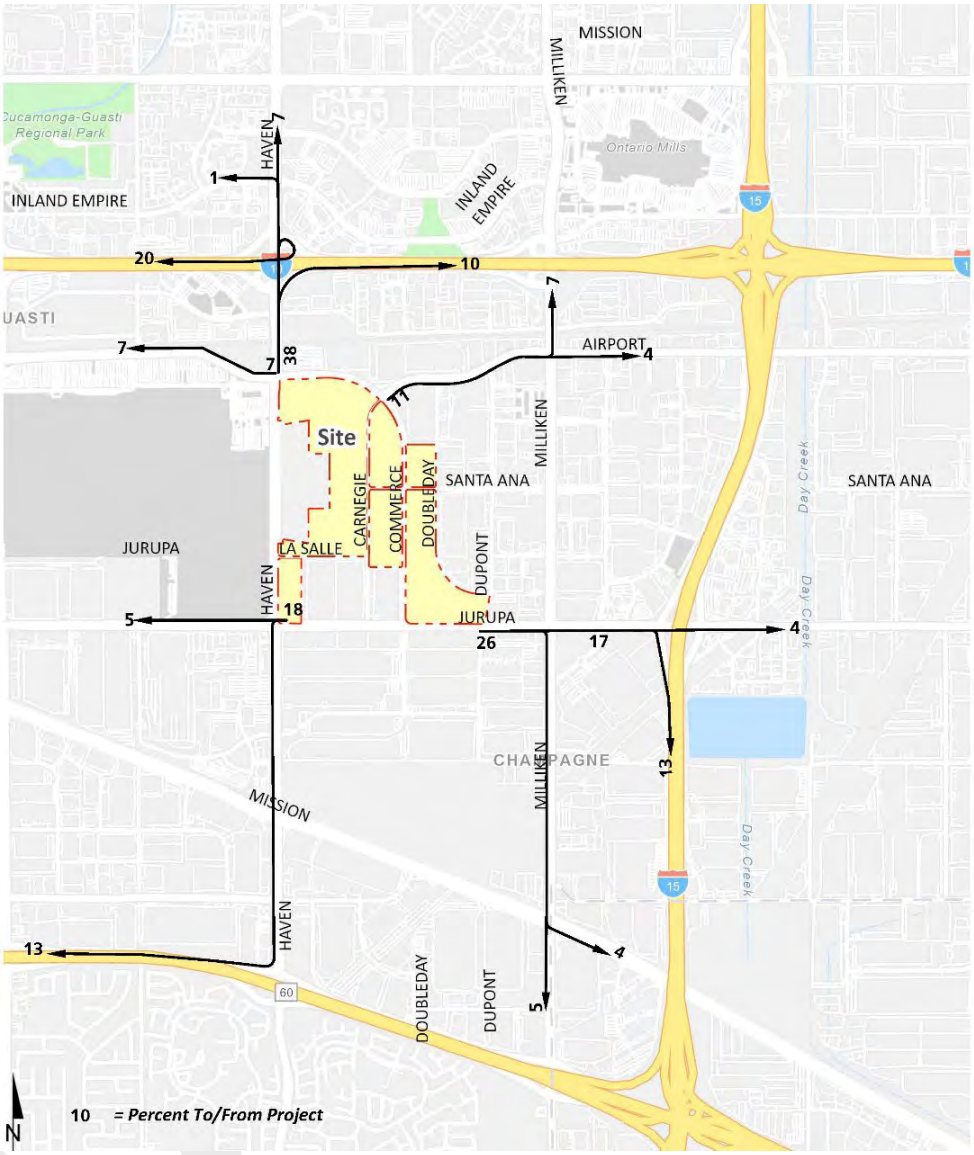
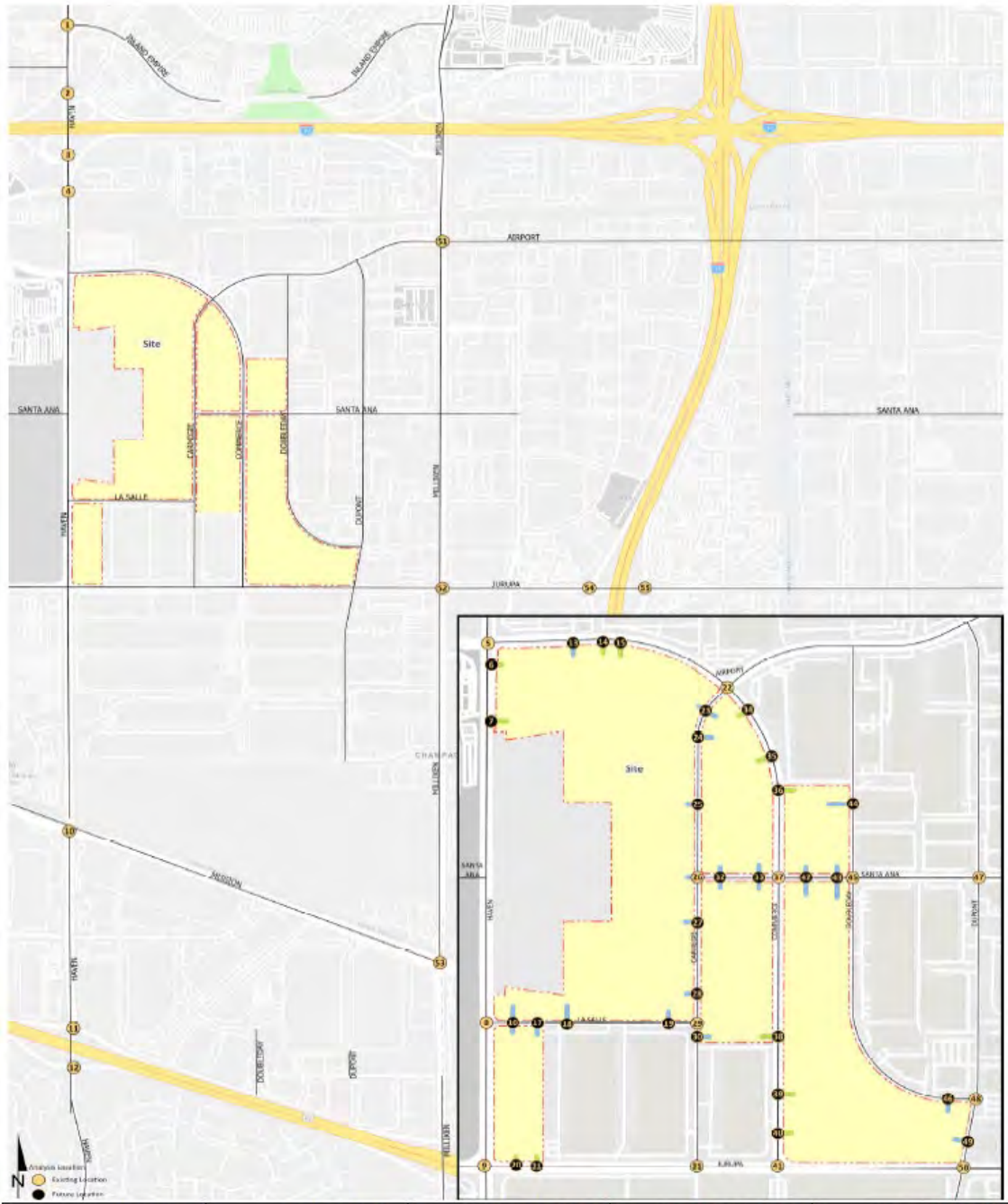


EXHIBIT 4-3: PROJECT ONLY TRAFFIC VOLUMES (1 OF 3)

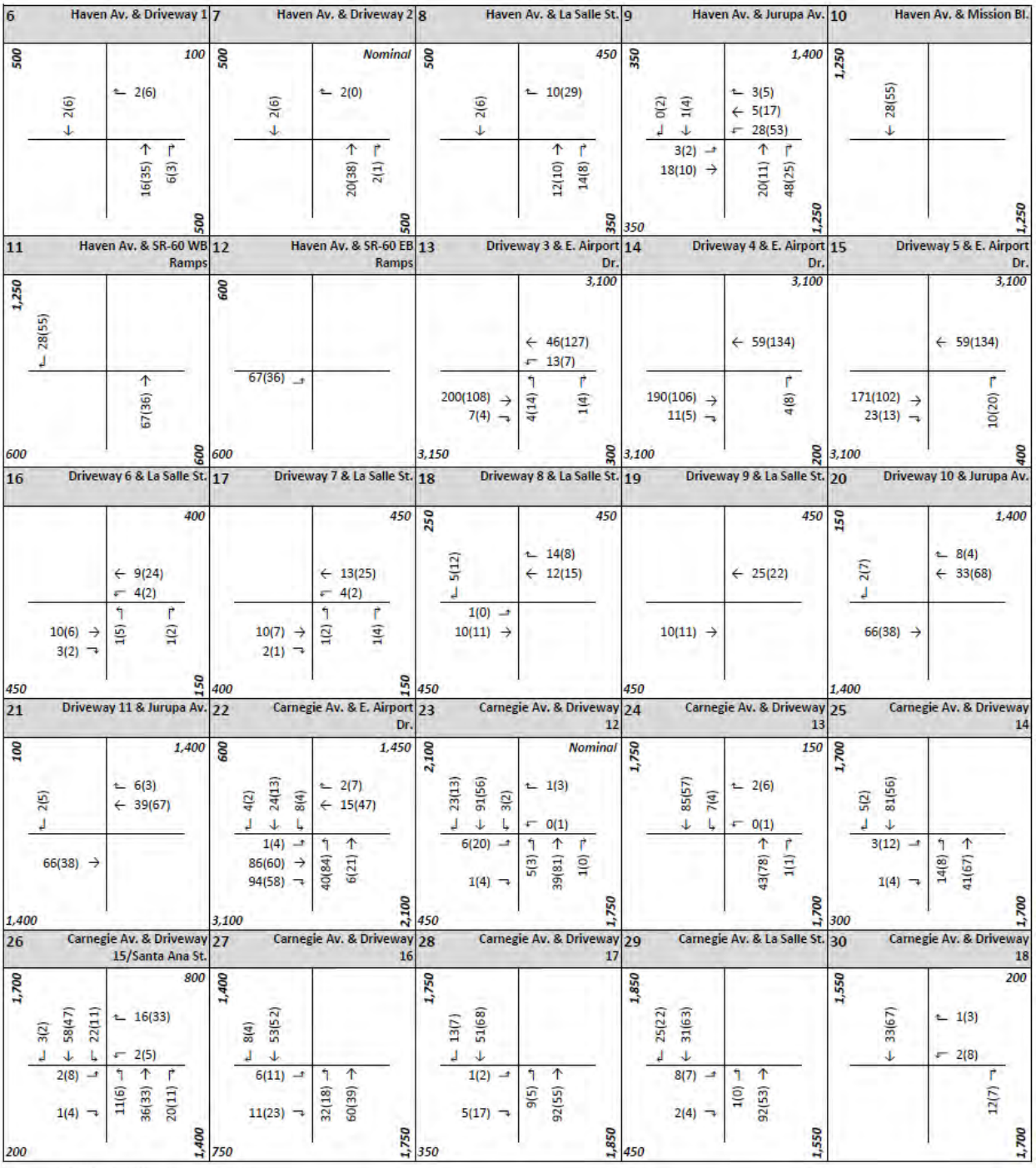


1 Haven Av. & Inland Empire Bl.	2 Haven Av. & I-10 WB Ramps	3 Haven Av. & I-10 EB Ramps	4 Haven Av. & E. Guasti Rd.	5 Haven Av. & E. Airport Dr.
500	550 / 1,250	1,750 / 350	3,000	3,000 / 3,150
← 30(16)	← 34(18)	← 78(43)	← 175(94)	← 175(94)
4(2) ↴	↰ 44(24)	97(52) ↴	56(149) →	↰ 42(114)
↰ 1(4)	↑ 8(30)	↑ 43(111)	↑	← 6(21)
↑ 7(26)	↱ 35(81)	↱ 13(38)		↰ 2(6)
				30(16) →
				↰ 1(5)
				↑ 14(35)
				↱ 3(1)
Nominal 550	1,750	850 / 3,000	3,000	500 / 500

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

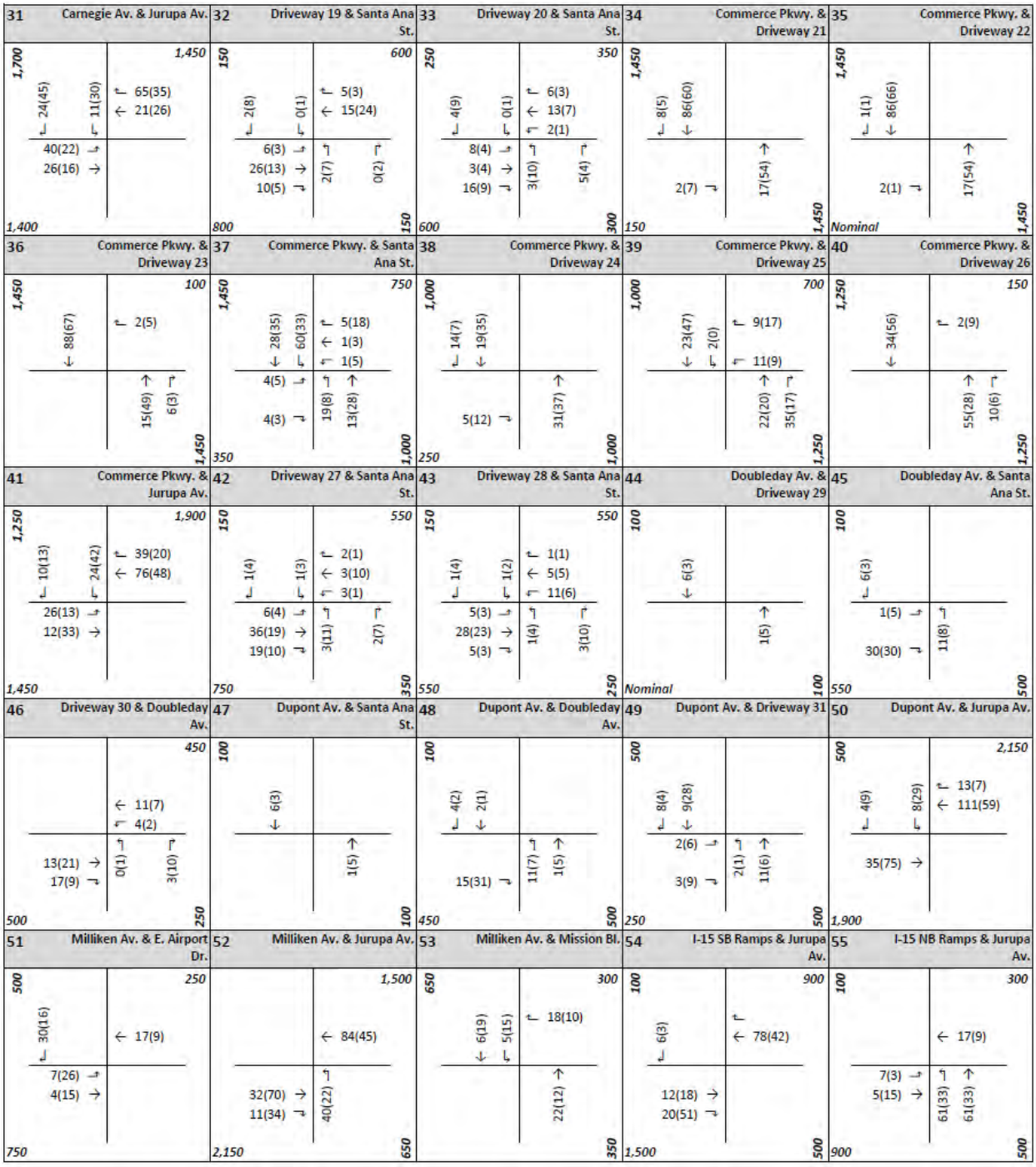
EXHIBIT 4-3: PROJECT ONLY TRAFFIC VOLUMES (2 OF 3)



##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 4-3: PROJECT ONLY TRAFFIC VOLUMES (3 OF 3)



##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

4.5.2 HORIZON YEAR (2040) CONDITIONS

The adopted Southern California Association of Governments (SCAG) 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) (May 2020) growth forecasts for the City of Ontario identifies projected growth in population of 172,200 in 2016 to 269,100 in 2045, or a 56.3% increase over the 29-year period. (8) The change in population equates to roughly a 1.55% growth rate, compounded annually. Similarly, growth over the same 29-year period in households is projected to increase by 62.0%, or a 1.67% annual growth rate. Finally, growth in employment over the same 29-year period is projected to increase by 48.6%, or a 1.38% annual growth rate.

Therefore, the annual growth rate utilized for the purposes of this analysis would appear to conservatively approximate the anticipated regional growth in traffic volumes in the City of Ontario for Opening Year Cumulative and Horizon Year (2040) traffic conditions, especially when considered along with the addition of project-related traffic. As such, the growth in traffic volumes assumed in this traffic impact analysis would tend to overstate as opposed to understate the potential deficiencies to traffic and circulation. Horizon Year (2040) With Project traffic forecasts reflects buildout of the Project.

4.6 CUMULATIVE DEVELOPMENT TRAFFIC

A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the City of Ontario. The cumulative projects listed are those that would generate traffic and would contribute traffic to study area intersections. The neighboring jurisdictions of Rancho Cucamonga, Eastvale, and Jurupa Valley have also been contacted to include key projects in their respective cities.

Exhibit 4-4 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown on Table 4-4. If applicable, the traffic generated by individual cumulative projects was manually added to the Opening Year Cumulative forecasts to ensure that traffic generated by the listed cumulative development projects on Table 4-4 are reflected as part of the background traffic. In an effort to conduct a conservative analysis, the cumulative projects are added in conjunction with the ambient growth identified in Section 4.5.1 *Background Traffic: Opening Year Cumulative Conditions*. Cumulative ADT and peak hour intersection turning movement volumes are shown on Exhibit 4-5.

DRAFT

EXHIBIT 4-4: CUMULATIVE DEVELOPMENT LOCATION MAP

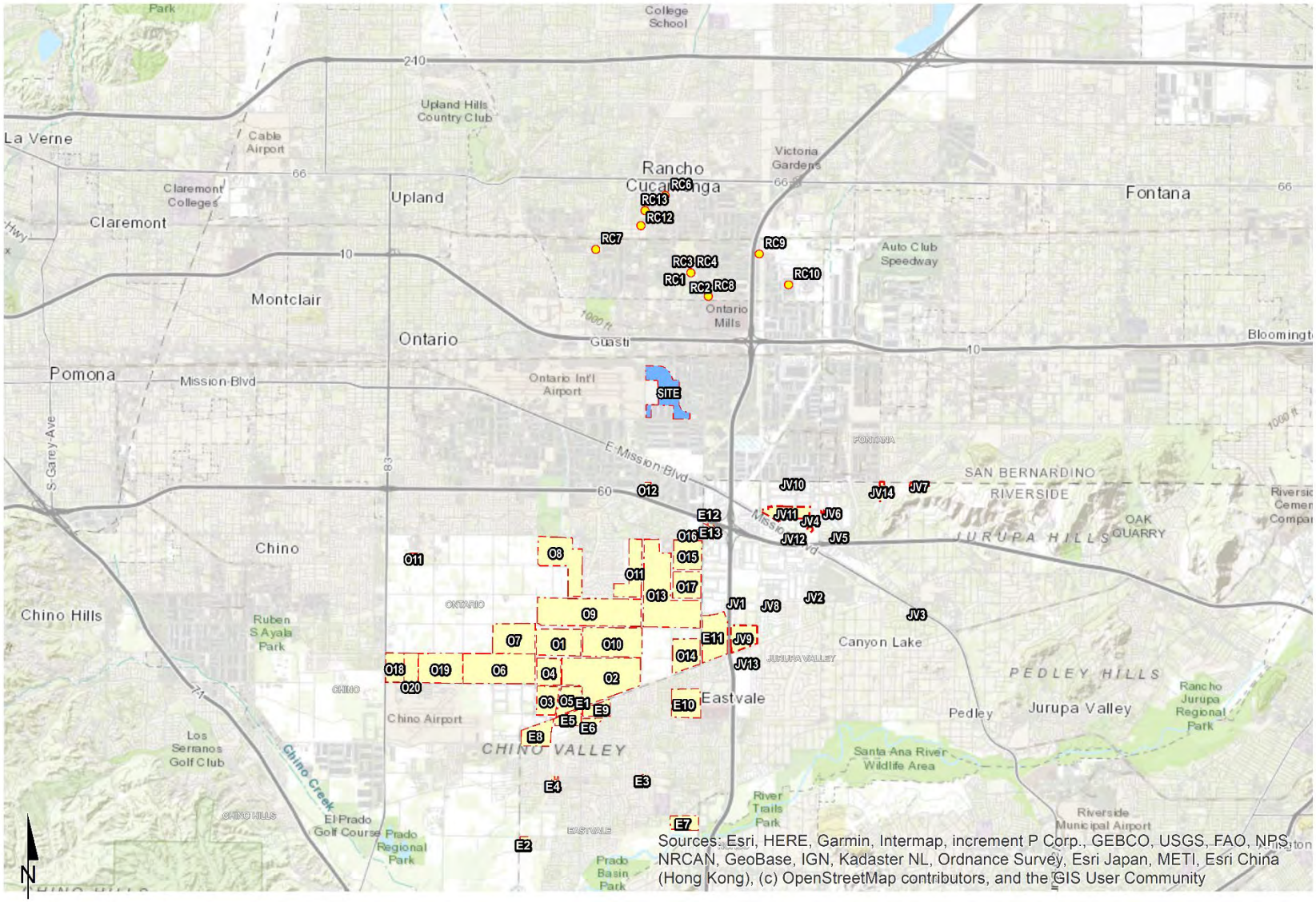


EXHIBIT 4-5: CUMULATIVE ONLY TRAFFIC VOLUMES (1 OF 3)

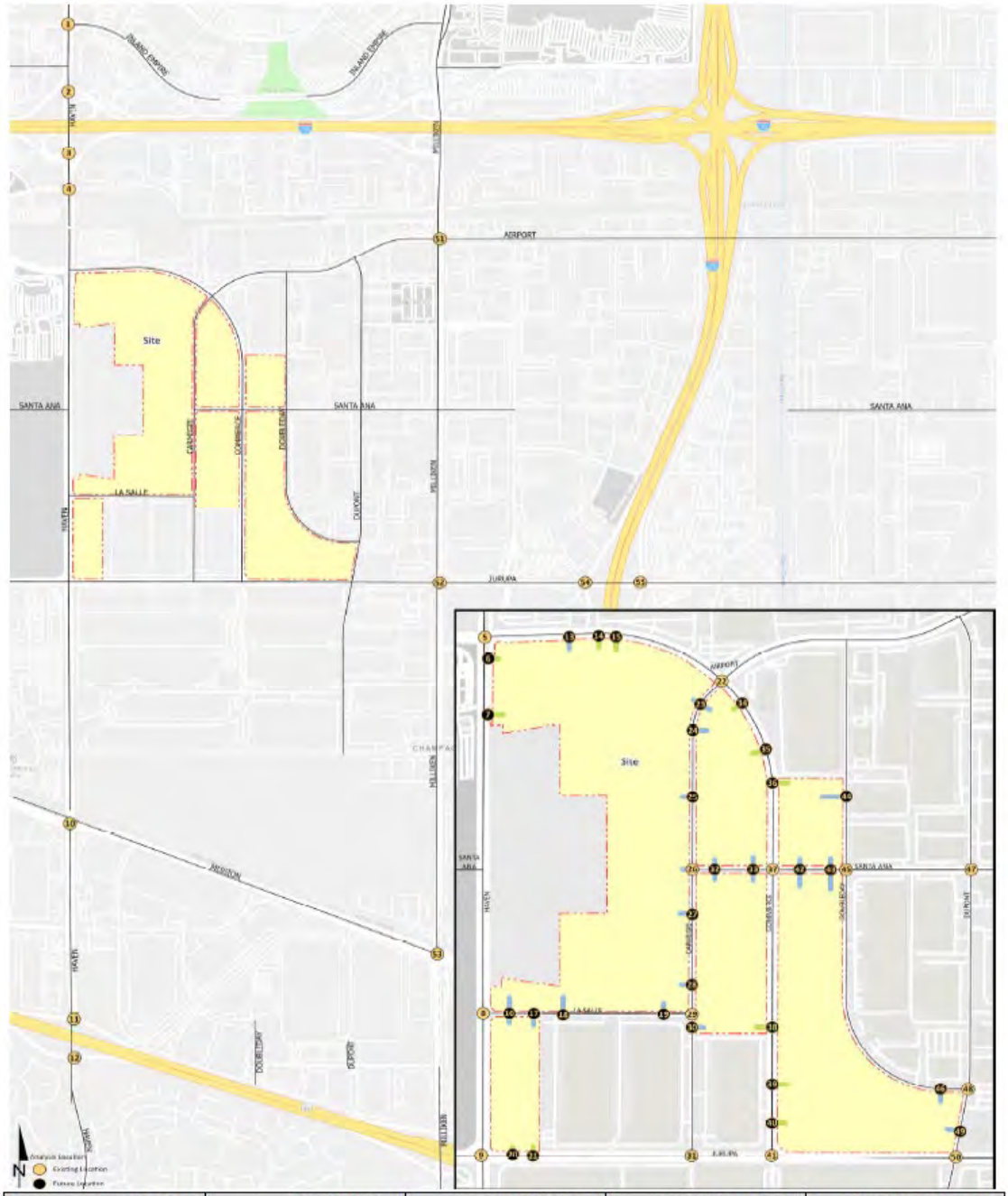
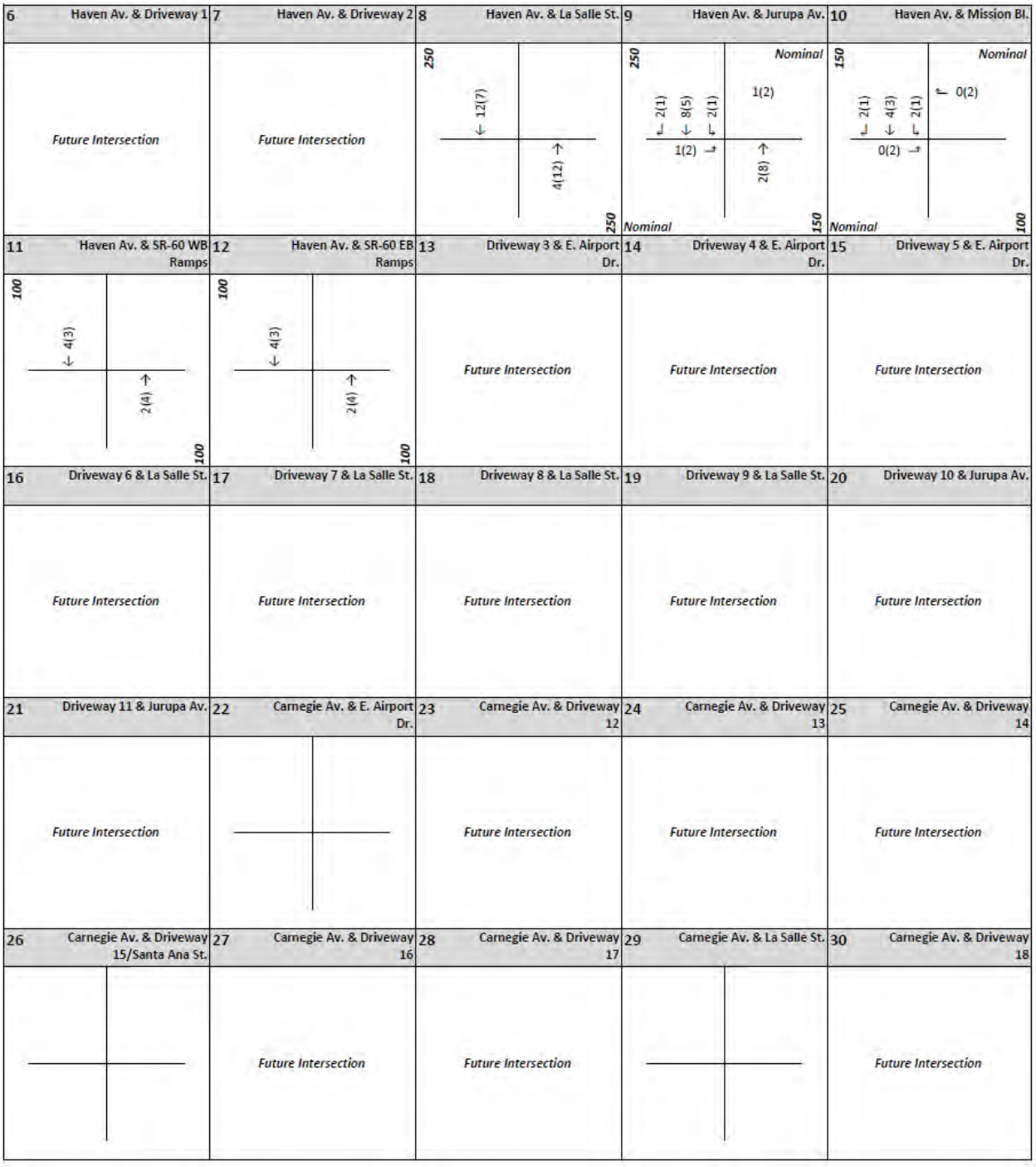


EXHIBIT 4-5: CUMULATIVE ONLY TRAFFIC VOLUMES (2 OF 3)



##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 4-5: CUMULATIVE ONLY TRAFFIC VOLUMES (3 OF 3)

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

TABLE 4-4: CUMULATIVE DEVELOPMENT LAND USE SUMMARY (1 OF 4)

#	Project/Location	Land Use[1]	Quantity	Units[2]
		City of Ontario		
O1	Parkside	SFDR	437	DU
		Multi-Family Attached (Apartments)	1,510	DU
		Shopping Center	115.000	TSF
O2	Subarea 29 & Amendment (40% complete)	SFDR	2,149	DU
		Shopping Center	87.000	TSF
O3	Colony Commerce West	High-Cube Warehouse	2213.360	TSF
		Manufacturing	737.786	TSF
O4	West Ontario Commerce Center SP	High-Cube Warehouse	1976.535	TSF
		Manufacturing	658.845	TSF
		Business Park	115.760	TSF
O5	Colony Commerce East	High-Cube Warehouse	998.680	TSF
		Manufacturing	233.129	TSF
		Warehousing	699.387	TSF
O6	Merrill Commerce Center	High-Cube Fulfillment Warehouse	7014.000	TSF
		Business Park	1441.000	TSF
O6	Ontario Ranch Commerce Center	High-Cube Cold Storage Warehouse	1159.200	TSF
		Warehousing	337.600	TSF
		Business Park	290.200	TSF
O7	Parente Home Ranch SP	SFDR	270	DU
		Condo/Townhouse	1,872	DU
		General Office	462.281	TSF
		Shopping Center	194.278	TSF
O8	Countryside	SFDR	819	DU
	Armstrong Ranch	SFDR	994	DU
O9	The Avenue	SFDR	2,020	DU
		Multi-Family Attached (Apartments)	586	DU
		Shopping Center	250.000	TSF
O10	Grand Park	SFDR	484	DU
		Multi-Family Attached (Apartments)	843	DU
O11	West Haven	SFDR	753	DU
		Shopping Center	87.000	TSF
O12	Haven Gateway	General Light Industrial	42.160	TSF
		High-Cube Warehouse	168.640	TSF

TABLE 4-4: CUMULATIVE DEVELOPMENT LAND USE SUMMARY (2 OF 4)

#	Project/Location	Land Use[1]	Quantity	Units[2]
O13	Rich Haven	SFDR	2,732	DU
		Multi-Family Attached (Condo)	1,524	DU
		Shopping Center	317.400	TSF
O14	Esperanza	SFDR	914	DU
		Multi-Family Attached (Apartments)	496	DU
O15	Edenglen	SFDR	310	DU
		Multi-Family Attached (Condo)	274	DU
		Shopping Center	217.520	TSF
		Business Park	550.000	TSF
O16	PDEV10-008 - Dry Food Storage	Mini-Warehouse	17.000	TSF
O17	Tuscana Village	SFDR	176	DU
		Shopping Center	26.000	TSF
O18	Ontario Ranch Commerce Center	High-Cube Fulfillment Warehouse	1,447.123	TSF
		High-Cube Cold Storage Warehouse	200.000	TSF
		Warehousing	357.836	TSF
		Business Park	457.904	TSF
O19	South Ontario Logistics Center	Business Park	1,075.235	TSF
		High-Cube Fulfillment Warehouse	2,819.282	TSF
		High-Cube Cold Storage Warehouse	563.857	TSF
		Warehousing	954.218	TSF
O20	Ontario Ranch Business Park	Business Park	227.951	TSF
		High-Cube Fulfillment Warehouse	913.053	TSF
		High-Cube Cold Storage Warehouse	179.135	TSF
		Warehousing	320.551	TSF
		City of Eastvale		
E1	The Merge	Warehousing	336.501	TSF
		Shopping Center	4.750	TSF
		Supermarket	30.000	TSF
		Gas Station w/ convenience store	16	VFP
		Pharmacy/Drugstore with Drive-Thru	14.600	TSF
		Fast-Food with Drive-Thru	6.000	TSF
		Automated Car Wash	4.000	TSF
		Fast-Food Without Drive-Thru	7.750	TSF
		Coffee/Donut Shop With Drive-Thru	2.500	TSF

TABLE 4-4: CUMULATIVE DEVELOPMENT LAND USE SUMMARY (3 OF 4)

#	Project/Location	Land Use[1]	Quantity	Units[2]
E2	TR29997	SFDR	122	DU
E3	13-0632 - Sumner Residential (Stratham Homes)	SFDR	129	DU
E4	TR35751	Condo/Townhouse	243	DU
E5	PP23219 (PM35865) (50% complete)	General Light Industrial	738.430	TSF
E6	Eastvale Shopping Center	Free-Standing Discount Superstore	192.000	TSF
		Specialty Retail	9.200	TSF
		Fast-Food Without Drive-Thru	7.200	TSF
		Coffee/Donut Shop w/ Drive Thru	2.000	TSF
		Fast-Food with Drive-Thru	3.500	TSF
		Gas Station w/ convenience store and car wash	16	VFP
E7	Van Leeuwen	SFDR	224	DU
E8	SP00358 - The Ranch at Eastvale	Shopping Center	267.200	TSF
		General Light Industrial	801.500	TSF
		Business Park	1,121.100	TSF
E9	SC Limonite, LLC	SFDR	330	TSF
E10	Leal Master Plan	Lifestyle Center (Commercial)	1,300.000	TSF
		General Commercial	225.000	TSF
		Office	920.000	TSF
		Hotel	450	RM
		High Density Residential	500-660	DU
E11	Eastvale Commerce Center	Shopping Center	650.000	TSF
E12	S. Milliken Warehouse	High-Cube Warehouse	280.000	TSF
E13	15-1508 - Industrial Warehouse	Warehousing	155.000	TSF
		City of Jurupa Valley		
JV1	Cantu Galleano Gas Station	Gas Station	2.276	TSF
		Fast-Food Restaurant w/ Drive-Through	2.532	TSF
JV2	Horizon Business Park	High-Cube Warehouse	310.760	TSF
JV3	Van Buren Commercial Development	Gas Station with Car Wash	5.044	TSF
		Fast-Food Restaurant w/ Drive-Through	7.944	TSF
		High Turnover (Sit Down) Restaurant	12.000	TSF
		Anchor Retail Building	40.940	TSF
		Retail Area Adjacent to Anchor	20.940	TSF
JV4	Space Center	High-Cube Warehouse	1124.860	TSF
JV5	Articom Refrigeration	High-Cube Cold Storage Warehouse	33.733	TSF

TABLE 4-4: CUMULATIVE DEVELOPMENT LAND USE SUMMARY (4 OF 4)

#	Project/Location	Land Use[1]	Quantity	Units[2]
JV6	Pingo Solar	Manufacturing	9.095	TSF
JV7	TTM 37214, CZ17002	Single Family Detached Residential	44	DU
JV8	Barrington Place	Single Family Detached Residential	18	DU
JV9	Vernola Park	Community Center	42.132	TSF
JV10	Crest Global (MA 18163)	General Light Industrial	20.950	TSF
JV11	BRE Space Mira Loma	High-Cube Warehouse	280.013	TSF
		High-Cube Fulfillment Warehouse	1,079.287	TSF
		High-Cube Cold Storage Warehouse	580.012	TSF
JV12	Car Auto Auction House	Auto Sales - Used	16.000	TSF
JV13	Thoroughbred Farms (SP No. 376)	General Light Industrial	917.580	TSF
		Business Park	598.510	TSF
		Shopping Center	229.640	TSF
JV14	Country Village Shopping Center	Shopping Center	145.000	TSF
		City of Rancho Cucamonga		
RC1	Van Daele	Multi-Family Attached	296	DU
RC2	New Home	Multi-Family Attached	135	DU
RC3	Tempo at the Resort	Multi-Family Attached (Condo)	80	DU
RC4	Homecoming at the Resort	Multi-Family Attached (Apartments)	867	DU
RC5	Arbor Express Carwash	Carwash	5.865	TSF
RC6	8281 Utica Office	Office	12.000	TSF
RC7	Scheu	Warehousing	198.000	TSF
RC8	Milliken and Jersey Industrial	Warehousing	143.014	TSF
RC9	23,380 sf. Commercial warehouse	Warehousing	23.380	TSF
RC10	Bridge Development	Industrial	2,200.000	TSF
RC11	Empire Lakes Specific Plan	Specific Plan Amendment	–	
RC12	Haven and 26th	Multi-Family Attached	207	DU
		Commercial	14.300	TSF
RC13	Haven and Arrow	Mixed Use	240	DU

[1] SFDR = Single Family Detached Residential

[2] TSF = Thousand Square Feet; DU = Dwelling Unit; VFP = Vehicle Fueling Position ; AC = Acres; RM = Rooms

4.7 HORIZON YEAR (2040) VOLUME DEVELOPMENT

Traffic projections for Horizon Year (2040) without Project conditions were derived from the San Bernardino Transportation Analysis Model (SBTAM) using accepted procedures for model forecast refinement and smoothing for study area intersections located within the County of San Bernardino. The current version of the SBTAM (Version 2.20, March 2019) reflects the local input in the adopted 2020 SCAG RTP within the County of San Bernardino.

The traffic forecasts reflect the area-wide growth anticipated between Existing (2021) conditions and Horizon Year (2040) traffic conditions. In most instances the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Horizon Year (2040) peak hour forecasts were refined using the model derived long range forecasts, base (validation) year model forecasts, along with existing peak hour traffic count data collected at each analysis location in January 2019. The SBTAM has a base (validation) year of 2016 and a horizon (future forecast) year of 2040. The difference in model volumes (2040-2016) defines the growth in traffic over the 28-year period.

The refined future peak hour approach and departure volumes obtained from the model output data are then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program (NCHRP Report 785), along with initial estimates of turning movement proportions. A linear programming algorithm is used to calculate individual turning movements which match the known directional roadway segment forecast volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The SBTAM uses an AM peak period-to-peak hour factor of 0.35 and a PM peak period-to-peak hour factor of 0.27. These factors represent the relationship of the highest single AM peak hour to the modeled 3-hour AM peak period (an even distribution would result in a factor of 0.33) and the highest single PM peak hour to the modeled 4-hour PM peak period (an even distribution would result in a factor of 0.25).

Typically, the model growth is prorated and is subsequently added to the existing (base validation) traffic volumes to represent Horizon Year traffic conditions. In an effort to conduct a conservative analysis, reductions to traffic forecasts from either Existing or Opening Year Cumulative traffic conditions were not assumed as part of this analysis. As such, in conjunction with the addition of cumulative projects that are not consistent with the General Plan, additional growth has also been applied on a movement-by-movement basis, where applicable, to estimate reasonable Horizon Year (2040) forecasts. Horizon Year (2040) turning volumes were compared to Opening Year Cumulative (2026) volumes in order to ensure a minimum growth as a part of the refinement process. The minimum growth includes any additional growth between Opening Year Cumulative (2026) and Horizon Year (2040) traffic conditions that is not accounted for by the traffic generated by cumulative development projects and ambient growth rates assumed between Existing (2021) and Opening Year Cumulative (2026) conditions. Adjustments have not been made to study area intersections that may be affected by new future roadway connections (such as the extension of Kimball Avenue/Limonite Avenue), where travel patterns would likely

get affected and forecasts may potentially decrease from the Opening Year Cumulative conditions. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Horizon Year (2040) peak hour forecasts.

The future Horizon Year (2040) Without Project peak hour turning movements were then reviewed by Urban Crossroads, Inc. for reasonableness, and in some cases, were adjusted to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes. Flow conservation checks ensure that traffic flow between two closely spaced intersections, such as two adjacent driveway locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there is no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis.

The SBTAM does not include a truck component or have data that is unusually low. As such, in an effort to conduct a conservative analysis, the presence of trucks has been accounted for based on the manual volume adjustments made to demonstrate growth above Opening Year Cumulative (2026) traffic forecasts, which are presented and evaluated in PCE (see Section 3.7 *Existing Traffic Counts* for discussion on PCE). As such, the Horizon Year (2040) forecasts are also assumed to be in PCE for the purposes of this analysis. Post-processing worksheets for Horizon Year (2040) without Project traffic conditions are provided in Appendix 4.3.

DRAFT

5 E+P TRAFFIC CONDITIONS

This section discusses the traffic forecasts for Existing plus Project (E+P) conditions and the resulting intersection operations and traffic signal warrant analyses.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for E+P conditions only (e.g., intersection and roadway improvements at the Project's frontage and driveways).

5.2 EXISTING PLUS PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus Project traffic. The ADT and weekday AM and PM peak hour intersection turning movement volumes which can be expected for E+P traffic conditions are shown on Exhibit 5-1.

5.3 INTERSECTION OPERATIONS ANALYSIS

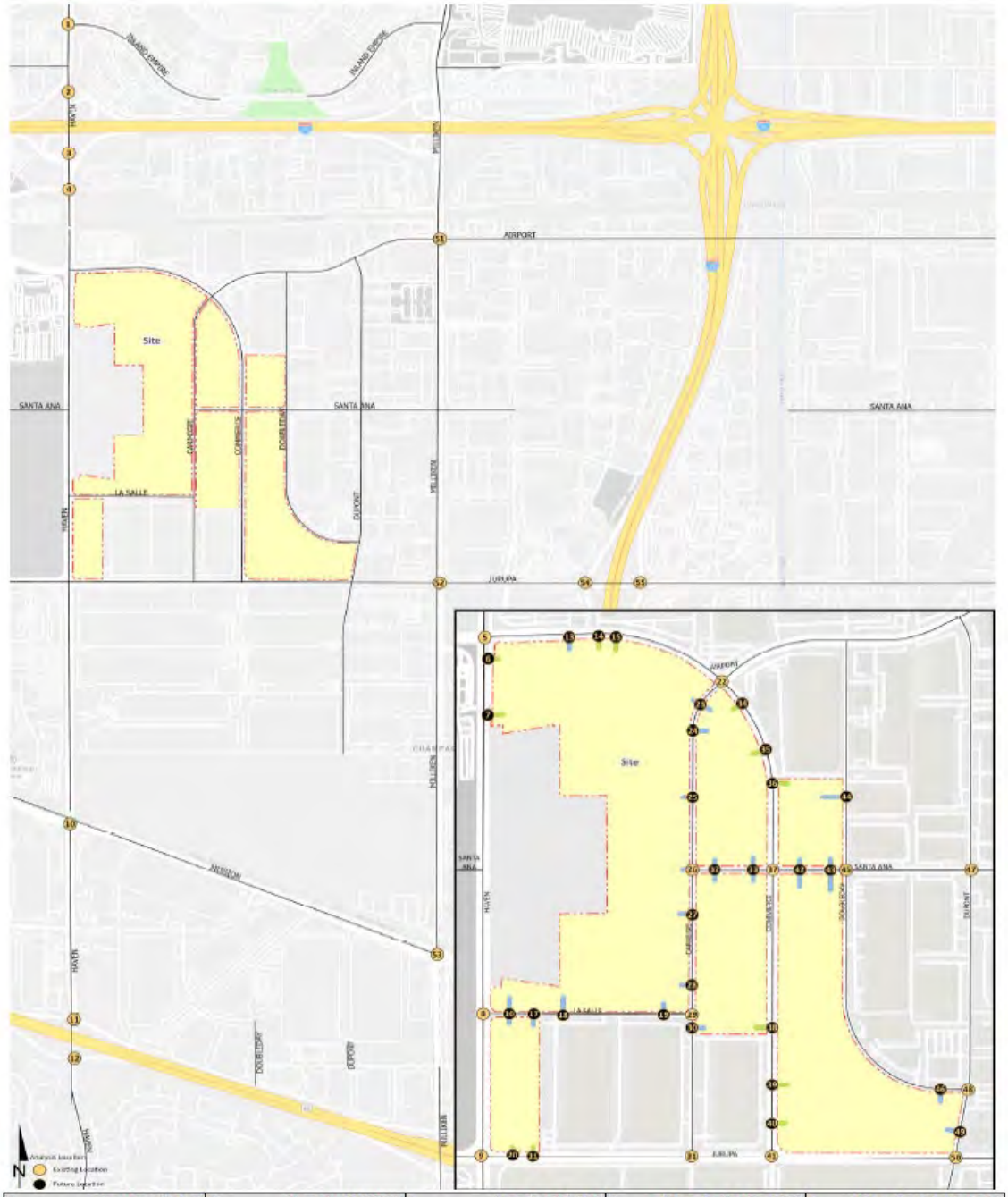
E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TA. The intersection analysis results are summarized on Table 5-1 for E+P traffic conditions, which indicate that the following no study area intersections are anticipated to operate at an unacceptable LOS. The intersection operations analysis worksheets for E+P traffic conditions are included in Appendix 5.1 of this TA.

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

No study area intersections are anticipated to meet peak hour or planning-level ADT volume-based traffic signal warrants for E+P traffic conditions (see Appendix 5.2).

DRAFT

EXHIBIT 5-1: E+P TRAFFIC VOLUMES (1 OF 3)



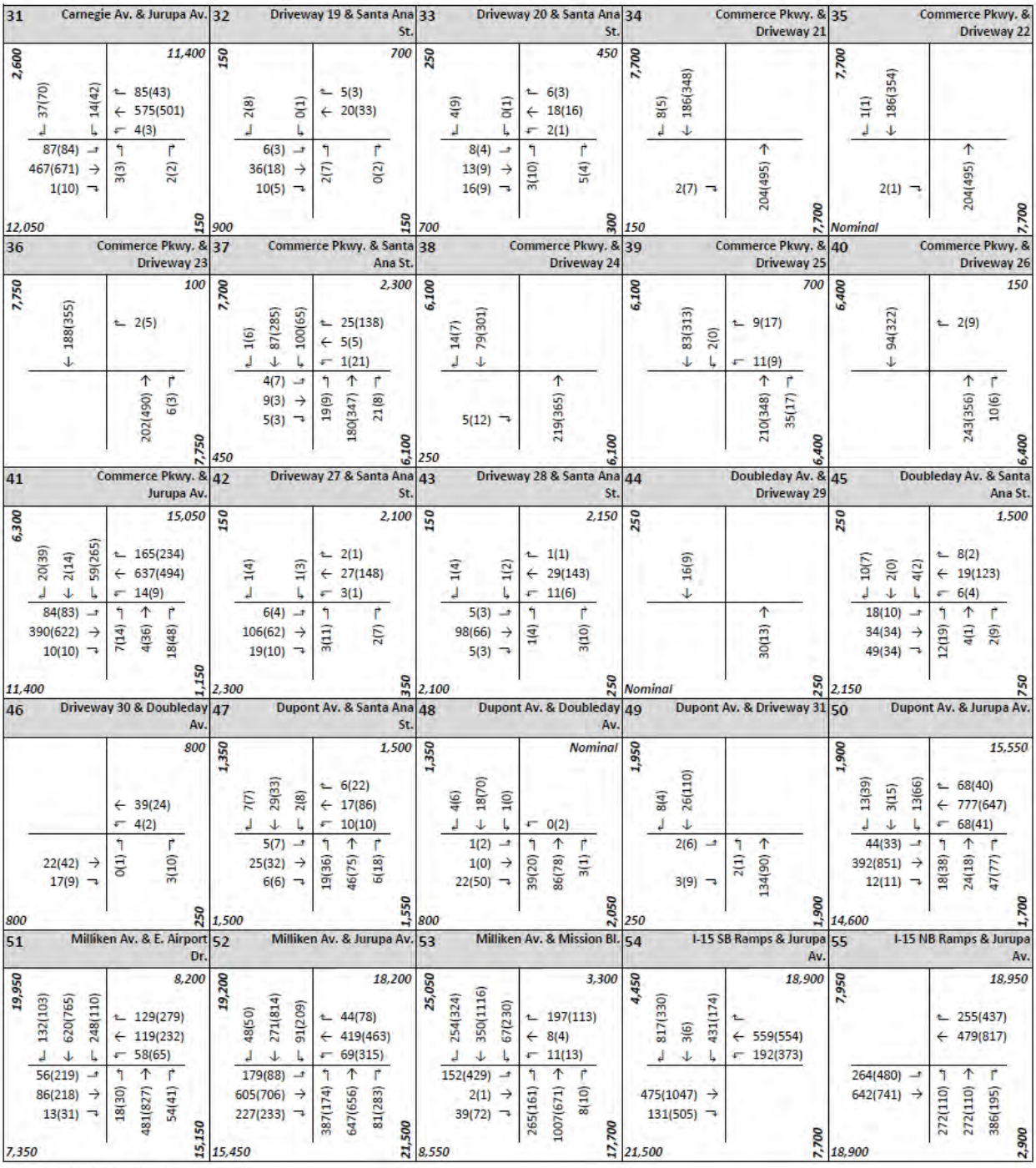
| 1 Haven Av. & Inland Empire Bl. | | |

EXHIBIT 5-1: E+P TRAFFIC VOLUMES (2 OF 3)

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 5-1: E+P TRAFFIC VOLUMES (3 OF 3)



##(##) AM(PM) Peak Hour Intersection Volumes

*Average Daily Trips*

TABLE 5-1: INTERSECTION ANALYSIS FOR E+P CONDITIONS (1 OF 2)

#	Intersection	Traffic Control[2]	Existing (2021) Delay[1] (secs.) AM	Existing (2021) Delay[1] (secs.) PM	Existing (2021) Level of Service AM	Existing (2021) Level of Service PM	E+P Delay[1] (secs.) AM	E+P Delay[1] (secs.) PM	E+P Level of Service AM	E+P Level of Service PM	Jurisdiction(s) / LOS Standard[3]
1	Haven Av. & Inland Empire Bl.	TS	21.0	29.3	C	C	21.1	29.6	C	C	Ontario / LOS E
2	Haven Av. & I-10 WB Ramps	TS	11.3	6.2	B	A	11.8	6.4	B	A	Ontario, Caltrans / LOS D
3	Haven Av. & I-10 EB Ramps	TS	15.8	10.7	B	B	16.4	11.4	B	B	Ontario, Caltrans / LOS D
4	Haven Av. & E. Guasti Rd.	TS	19.5	30.6	B	C	19.7	33.6	B	C	Ontario / LOS E
5	Haven Av. & E. Airport Dr.	TS	22.3	53.8	C	D	27.9	65.4	C	E	Ontario / LOS E
6	Haven Av. & Driveway 1	--/CSS	Future Intersection				24.5	25.4	C	D	Ontario / LOS E
7	Haven Av. & Driveway 2	--/CSS	Future Intersection				24.9	24.9	C	C	Ontario / LOS E
8	Haven Av. & La Salle St.	CSS	17.3	24.2	C	C	25.7	25.3	D	D	Ontario / LOS E
9	Haven Av. & Jurupa Av.	TS	24.8	39.8	C	D	25.5	46.0	C	D	Ontario / LOS E
10	Haven Av. & Mission Bl.	TS	40.9	45.3	D	D	43.2	57.0	D	D	Ontario / LOS E
11	Haven Av. & SR-60 WB Ramps	TS	13.0	12.6	B	B	13.8	12.7	B	B	Ontario, Caltrans / LOS D
12	Haven Av. & SR-60 EB Ramps	TS	23.4	14.2	C	B	26.1	15.0	C	B	Ontario, Caltrans / LOS D
13	Driveway 3 & E. Airport Dr.	--/CSS	Future Intersection				20.2	32.8	C	D	Ontario / LOS E
14	Driveway 4 & E. Airport Dr.	--/CSS	Future Intersection				11.1	11.3	B	B	Ontario / LOS E
15	Driveway 5 & E. Airport Dr.	--/CSS	Future Intersection				11.2	11.5	B	B	Ontario / LOS E
16	Driveway 6 & La Salle St.	--/CSS	Future Intersection				8.6	8.7	A	A	Ontario / LOS E
17	Driveway 7 & La Salle St.	--/CSS	Future Intersection				8.6	8.6	A	A	Ontario / LOS E
18	Driveway 8 & La Salle St.	--/CSS	Future Intersection				8.5	8.5	A	A	Ontario / LOS E
19	Driveway 9 & La Salle St.	--/CSS	Future Intersection				8.8	0.0	A	A	Ontario / LOS E
20	Driveway 10 & Jurupa Av.	--/CSS	Future Intersection				10.6	11.4	B	B	Ontario / LOS E
21	Driveway 11 & Jurupa Av.	--/CSS	Future Intersection				10.6	11.3	B	B	Ontario / LOS E
22	Carnegie Av. & E. Airport Dr.	TS	16.6	18.4	B	B	17.4	24.1	B	C	Ontario / LOS E
23	Carnegie Av. & Driveway 12	--/CSS	Future Intersection				9.6	9.5	A	A	Ontario / LOS E
24	Carnegie Av. & Driveway 13	--/CSS	Future Intersection				8.5	8.9	A	A	Ontario / LOS E
25	Carnegie Av. & Driveway 14	--/CSS	Future Intersection				9.3	9.3	A	A	Ontario / LOS E
26	Carnegie Av. & Driveway 15/Santa Ana St.	AWS	7.2	7.0	A	A	8.2	8.0	A	A	Ontario / LOS E
27	Carnegie Av. & Driveway 16	--/CSS	Future Intersection				9.1	9.0	A	A	Ontario / LOS E
28	Carnegie Av. & Driveway 17	--/CSS	Future Intersection				8.7	8.8	A	A	Ontario / LOS E
29	Carnegie Av. & La Salle St.	AWS	7.5	7.6	A	A	7.5	7.8	A	A	Ontario / LOS E
30	Carnegie Av. & Driveway 18	--/CSS	Future Intersection				9.3	9.7	A	A	Ontario / LOS E
31	Carnegie Av. & Jurupa Av.	TS	4.3	4.0	A	A	4.9	5.2	A	A	Ontario / LOS E
32	Driveway 19 & Santa Ana St.	--/CSS	Future Intersection				9.1	8.9	A	A	Ontario / LOS E
33	Driveway 20 & Santa Ana St.	--/CSS	Future Intersection				8.6	8.8	A	A	Ontario / LOS E
34	Commerce Pkwy. & Driveway 21	--/CSS	Future Intersection				9.7	10.4	A	B	Ontario / LOS E
35	Commerce Pkwy. & Driveway 22	--/CSS	Future Intersection				9.7	10.4	A	B	Ontario / LOS E
36	Commerce Pkwy. & Driveway 23	--/CSS	Future Intersection				9.7	11.0	A	B	Ontario / LOS E
37	Commerce Pkwy. & Santa Ana St.	AWS	8.4	11.0	A	B	9.0	12.3	A	B	Ontario / LOS E
38	Commerce Pkwy. & Driveway 24	--/CSS	Future Intersection				8.7	9.4	A	A	Ontario / LOS E
39	Commerce Pkwy. & Driveway 25	--/CSS	Future Intersection				10.7	12.1	B	B	Ontario / LOS E
40	Commerce Pkwy. & Driveway 26	--/CSS	Future Intersection				9.9	10.5	A	B	Ontario / LOS E
41	Commerce Pkwy. & Jurupa Av.	TS	14.0	18.6	B	B	16.4	20.1	B	C	Ontario / LOS E
42	Driveway 27 & Santa Ana St.	--/CSS	Future Intersection				9.4	9.2	A	A	Ontario / LOS E

TABLE 5-1: INTERSECTION ANALYSIS FOR E+P CONDITIONS (2 OF 2)

#	Intersection	Traffic Control[2]	Existing (2021) Delay[1] (secs.) AM	Existing (2021) Delay[1] (secs.) PM	Existing (2021) Level of Service AM	Existing (2021) Level of Service PM	E+P Delay[1] (secs.) AM	E+P Delay[1] (secs.) PM	E+P Level of Service AM	E+P Level of Service PM	Jurisdiction(s) / LOS Standard[3]
43	Driveway 28 & Santa Ana St.	--/**CSS**	Future Intersection				9.0	9.2	A	A	Ontario / LOS E
44	Double Day Av. & Driveway 29	--/**CSS**	Future Intersection				8.7	8.9	A	A	Ontario / LOS E
45	Double Day Av. & Santa Ana St.	AWS	7.5	8.0	A	A	7.6	8.1	A	A	Ontario / LOS E
46	Driveway 30 & Double Day Av.	--/**CSS**	Future Intersection				8.4	8.6	A	A	Ontario / LOS E
47	Dupont Av. & Santa Ana St.	AWS	7.8	8.5	A	A	7.8	8.6	A	A	Ontario / LOS E
48	Dupont Av. & Double Day Av.	CSS	9.4	9.6	A	A	9.5	9.8	A	A	Ontario / LOS E
49	Dupont Av. & Driveway 31	--/**CSS**	Future Intersection				8.7	9.1	A	A	Ontario / LOS E
50	Dupont Av. & Jurupa Av.	TS	11.6	12.3	B	B	11.7	12.4	B	B	Ontario / LOS E
51	Milliken Av. & E. Airport Dr.	TS	22.5	24.0	C	C	22.5	24.7	C	C	Ontario / LOS E
52	Milliken Av. & Jurupa Av.	TS	22.0	29.4	C	C	22.5	31.2	C	C	Ontario / LOS E
53	Milliken Av. & Mission Bl.	TS	23.0	30.4	C	C	23.0	30.8	C	C	Eastvale, Ontario / LOS D
54	I-15 SB Ramps & Jurupa Av.	TS	22.5	17.3	C	B	23.1	17.8	C	B	Ontario, Caltrans / LOS D
55	I-15 NB Ramps & Jurupa Av.	TS	14.0	13.3	B	B	14.4	13.7	B	B	Ontario, Caltrans / LOS D

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; **CSS** = Improvement

[3] Minimum acceptable LOS for each applicable jurisdiction.

5.5 IMPROVEMENTS

This section provides a summary of Project deficiencies and identified improvements. Based on the City of Ontario deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, no intersections were found to be deficient.

5.5.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

As shown on Table 5-1, all intersections are anticipated to operate at an acceptable LOS for E+P traffic conditions. No improvements have been recommended.

DRAFT

6 OPENING YEAR CUMULATIVE (2026) TRAFFIC CONDITIONS

This section discusses the methods used to develop Opening Year Cumulative (2026) Without and With Project traffic forecasts, and the resulting intersection operations and traffic signal warrant analyses.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year Cumulative (2026) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Opening Year Cumulative conditions only (e.g., intersection and roadway improvements along the Project's frontage and driveways).
- Driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for Opening Year Cumulative conditions only.

6.2 OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing traffic volumes plus an ambient growth factor of 10.26% plus traffic from pending and approved but not yet constructed known development projects in the area. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Opening Year Cumulative (2026) Without Project traffic conditions are shown on Exhibit 6-1.

6.3 OPENING YEAR CUMULATIVE (2026) WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Opening Year Cumulative (2026) Without Project traffic in conjunction with the addition of Project traffic. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Opening Year Cumulative (2026) With Project traffic conditions are shown on Exhibit 6-2, respectively.

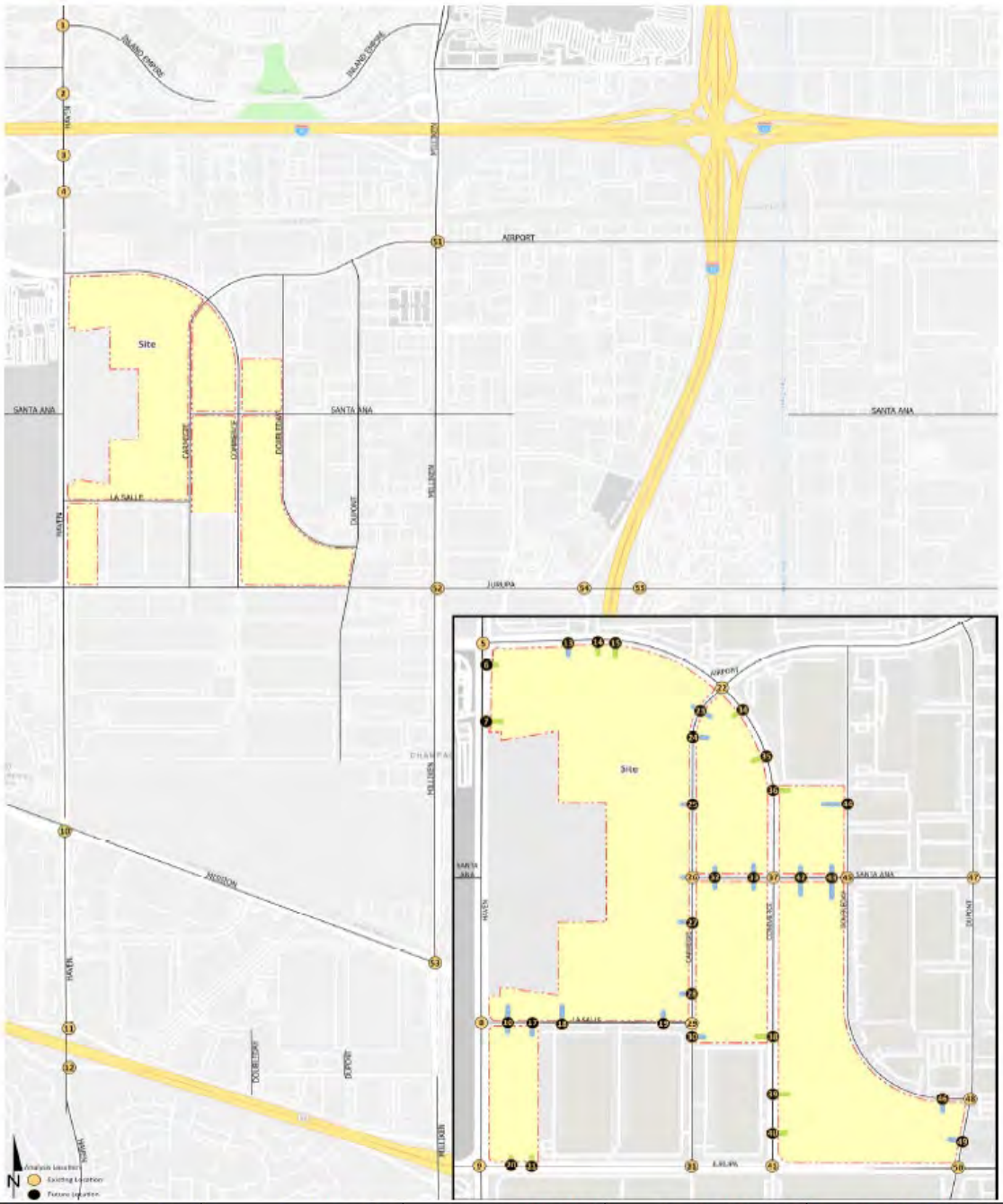
6.4 INTERSECTION OPERATIONS ANALYSIS

6.4.1 OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC CONDITIONS

LOS calculations were conducted for the study intersections to evaluate their operations under Opening Year Cumulative (2026) Without Project conditions with roadway and intersection geometrics consistent with Section 6.1 *Roadway Improvements*. As shown on Table 6-1, no study area intersections are anticipated to operate at an unacceptable LOS under Opening Year Cumulative (2026) Without Project traffic conditions. The intersection operations analysis worksheets for Opening Year Cumulative (2026) Without Project traffic conditions are included in Appendix 6.1 of this TA.

DRAFT

EXHIBIT 6-1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC VOLUMES (1 OF 3)



1	Haven Av. & Inland Empire Bl.												13,050
34,700													
												↱ 19(42)	
			87(72)	1459(1750)	45(41)							← 100(246)	
			↳	←	↰							↰ 124(364)	
			77(209)	↰	↑	↱							
			103(364)	→									
			272(406)	↲									
							401(362)	1788(1902)	359(457)				45,300
14,300													

2	Haven Av. & I-10 WB Ramps												12,250
45,450													
												↱ 602(335)	
			↳ 497(751)	1387(1792)									
			←	↰								↰ 465(204)	
						↰	↑	↱					
							→						
						↲							
							1948(2387)	381(880)					45,450
6,450													

3	Haven Av. & I-10 EB Ramps												6,400
45,450													
			↳ 453(373)	1399(1623)									
			←										
						↰	↑	↱					
			856(523)	↳									
							→						
			528(223)	↲									
							1471(2743)	296(741)					46,050
9,650													

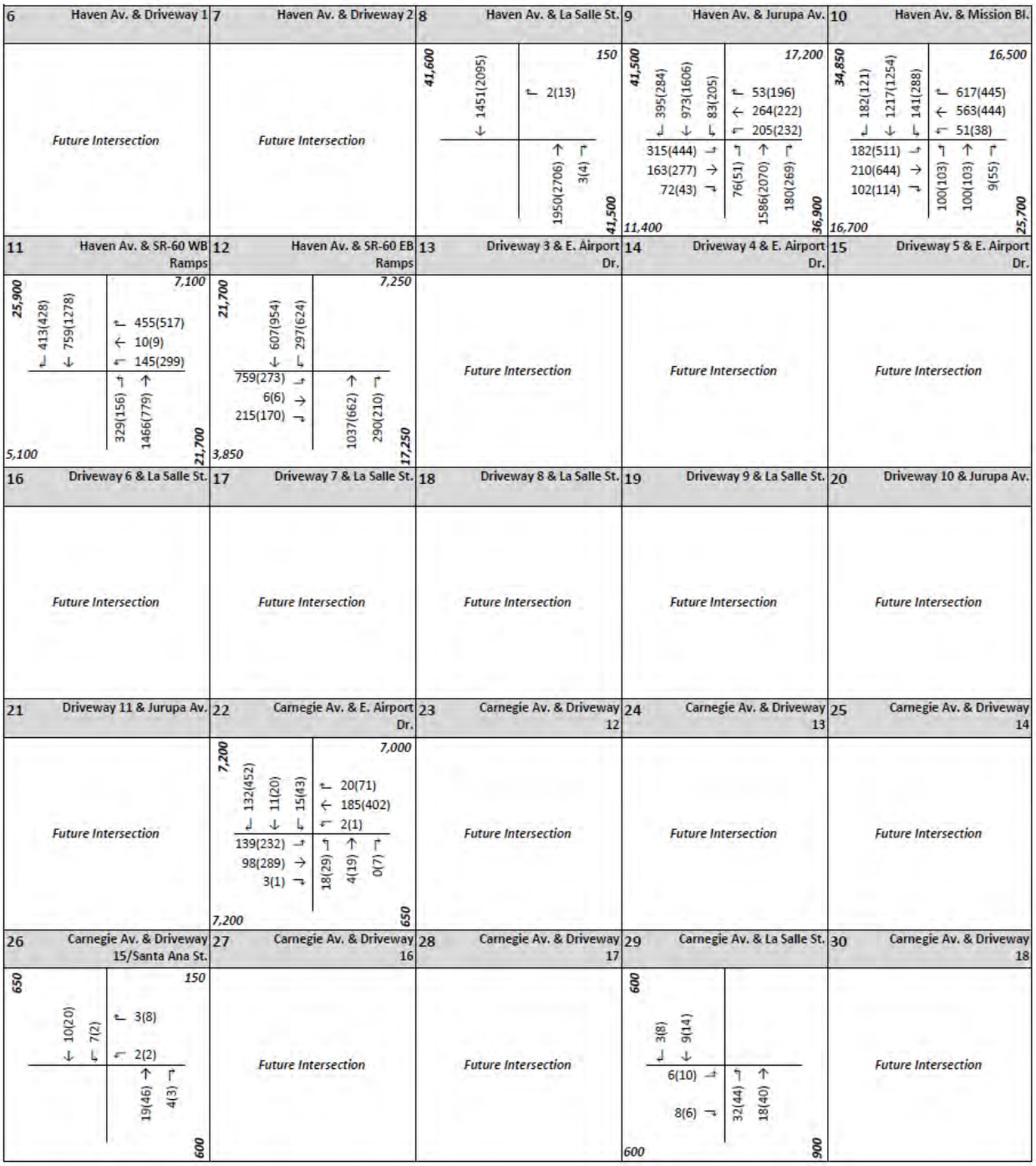
4	Haven Av. & E. Guasti Rd.												5,950
46,050													
												↱ 145(242)	
			↳ 297(118)	1408(1553)	↰ 222(176)							← 41(21)	
			←									↰ 63(88)	
						↰	↑	↱					
			83(418)	↳									
			29(50)	→									
			32(226)	↲									
							168(66)	1540(2824)	109(114)				42,100
7,750													

5	Haven Av. & E. Airport Dr.												15,100
53,800													
												↱ 149(478)	
			↳ 132(184)	1137(1445)	148(168)							← 160(606)	
			←	↰								↰ 33(22)	
						↰	↑	↱					
			95(316)	↳									
			145(457)	→									
			218(618)	↲									
							427(506)	1312(2195)	213(19)				41,500
23,150													

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 6-1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC VOLUMES (2 OF 3)



##(##) AM(PM) Peak Hour Intersection Volumes

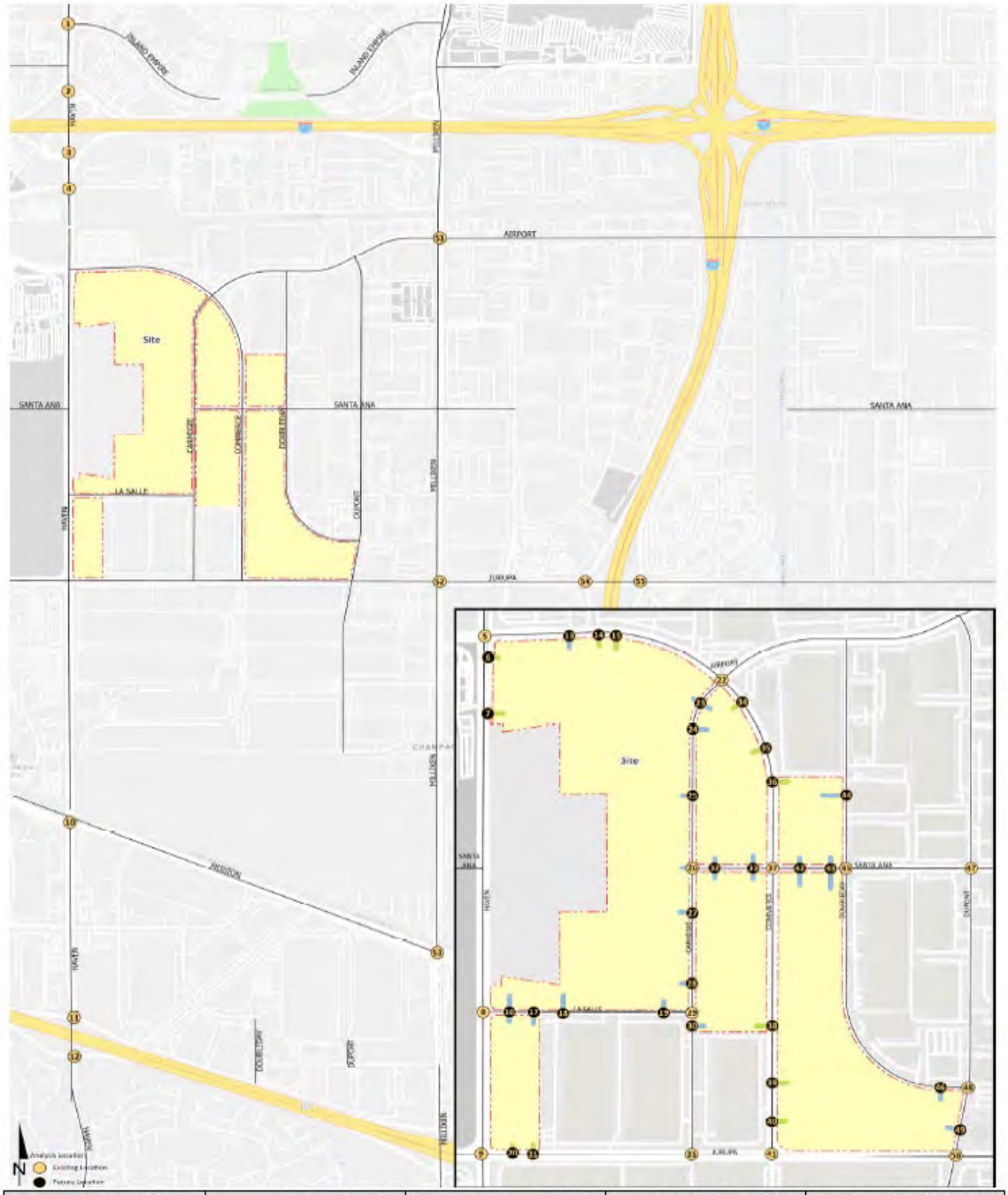
Average Daily Trips

EXHIBIT 6-1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC VOLUMES (3 OF 3)

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 6-2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT TRAFFIC VOLUMES (1 OF 3)



1 Haven Av. & Inland Empire Bl.	2 Haven Av. & I-10 WB Ramps	3 Haven Av. & I-10 EB Ramps	4 Haven Av. & E. Guasti Rd.	5 Haven Av. & E. Airport Dr.
35,200	46,000	47,250	49,050	56,800
↳ 87(72) ← 1489(1766) ↱ 45(41)	↳ 497(751) ← 1421(1810)	↳ 453(373) ← 1477(1666)	↳ 297(118) ← 1583(1647) ↱ 222(176)	↳ 132(184) ← 1137(1445) ↱ 323(262)
13,050	13,450	6,750	5,950	18,250
↰ 19(42) ← 100(246) ↰ 124(364)	↰ 602(335) ↰ 509(228)		↰ 145(242) ← 41(21) ↰ 63(88)	↰ 191(592) ← 166(627) ↰ 35(28)
77(209) ↳ 103(364) → 276(408) ↴	195(2417) → 416(961) ↱	856(523) ↳ 625(275) ↴	83(418) ↳ 29(50) → 32(226) ↴	95(316) ↳ 175(473) → 218(618) ↴
402(366) 1795(1928) 399(457)		1514(2854) 309(779)	168(66) 1596(2973) 109(114)	428(511) 1326(2230) 216(20)
14,350	6,450	10,500	7,750	23,650
45,850	47,250	49,050	45,100	42,000

##(##) AM(PM) Peak Hour Intersection Volumes

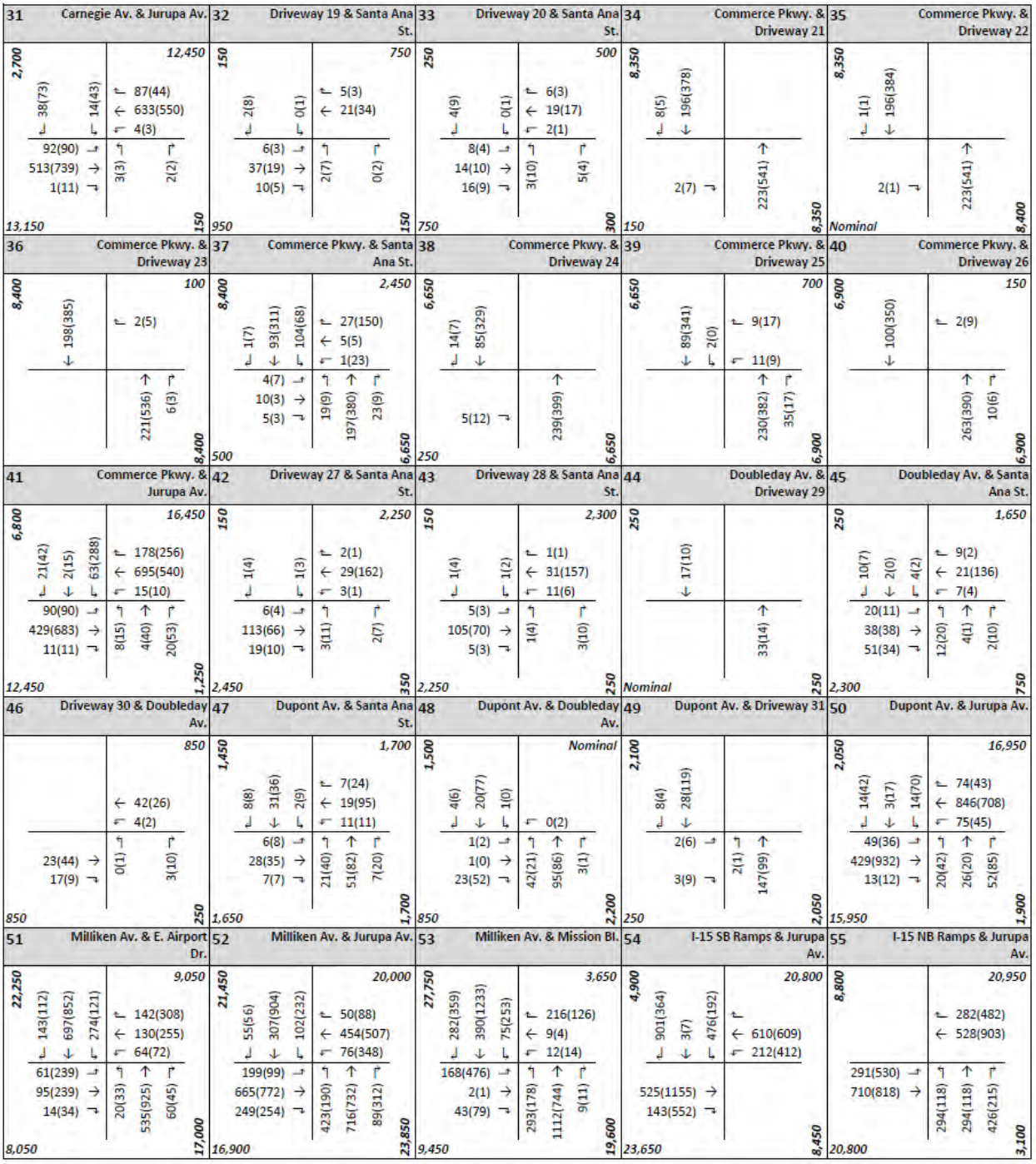
***Average Daily Trips***

EXHIBIT 6-2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT TRAFFIC VOLUMES (2 OF 3)

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 6-2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT TRAFFIC VOLUMES (3 OF 3)



##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

6.4.2 Opening Year Cumulative (2026) With Project Traffic Conditions

As shown on Table 6-1, no study area intersections are anticipated to operate at a deficient LOS during one or both peak hours for Opening Year Cumulative (2026) With Project traffic conditions with the addition of Project Buildout traffic. The intersection operations analysis worksheets for Opening Year Cumulative (2026) With Project traffic conditions are included in Appendix 6.2 of this TA.

6.5 Traffic Signal Warrants Analysis

No unsignalized study area intersection is anticipated to meet a peak hour or daily volume-based traffic signal warrant under Opening Year Cumulative (2026) Without Project traffic conditions, in addition to the locations previously identified under Existing and E+P traffic conditions (see Appendix 6.3).

The following unsignalized study area intersections anticipated to meet a peak hour volume-based traffic signal warrant under Opening Year Cumulative (2026) With Project traffic conditions (see Appendix 6.4):

- Commerce Pkwy. & Santa Ana St. (#37)

6.6 Improvements

This section provides a summary of Project deficiencies and identified improvements. Based on the City of Ontario deficiency criteria discussed in Section 2.6 *Deficiency Criteria*, no intersections were found to be deficient.

6.6.1 Improvements To Address Deficiencies At Intersections

As shown on Table 6-1, all intersections are anticipated to operate at an acceptable LOS for Opening Year Cumulative (2026) Without and With Project traffic conditions. No improvements have been recommended.

DRAFT

TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS (1 OF 2)

#	Intersection	Traffic Control[2]	2026 Without Project Delay[1] (secs.) AM	PM	2026 Without Project Level of Service AM	PM	2026 With Project Delay[1] (secs.) AM	PM	2026 With Project Level of Service AM	PM	Jurisdiction(s) / LOS Standard[3]
1	Haven Av. & Inland Empire Bl.	TS	22.4	35.2	C	D	22.6	35.6	C	D	Ontario / LOS E
2	Haven Av. & I-10 WB Ramps	TS	12.0	6.4	B	A	12.5	6.6	B	A	Ontario, Caltrans / LOS D
3	Haven Av. & I-10 EB Ramps	TS	16.7	11.7	B	B	17.9	12.5	B	B	Ontario, Caltrans / LOS D
4	Haven Av. & E. Guasti Rd.	TS	20.3	42.9	C	D	20.6	53.1	C	D	Ontario / LOS E
5	Haven Av. & E. Airport Dr.	TS	24.5	69.9	C	E	32.7	70.9	C	E	Ontario / LOS E
6	Haven Av. & Driveway 1	--/CSS	Future Intersection				19.6	29.6	C	D	Ontario / LOS E
7	Haven Av. & Driveway 2	--/CSS	Future Intersection				19.9	28.9	C	D	Ontario / LOS E
8	Haven Av. & La Salle St.	CSS	19.0	27.0	A	D	19.8	29.9	C	D	Ontario / LOS E
9	Haven Av. & Jurupa Av.	TS	28.4	54.1	C	D	29.4	62.8	C	E	Ontario / LOS E
10	Haven Av. & Mission Bl.	TS	48.5	66.8	D	E	58.6	73.5	E	E	Ontario / LOS E
11	Haven Av. & SR-60 WB Ramps	TS	16.2	14.4	B	B	17.8	14.6	B	B	Ontario, Caltrans / LOS D
12	Haven Av. & SR-60 EB Ramps	TS	30.4	15.9	C	B	34.2	16.8	C	B	Ontario, Caltrans / LOS D
13	Driveway 3 & E. Airport Dr.	--/CSS	Future Intersection				21.9	39.1	C	E	Ontario / LOS E
14	Driveway 4 & E. Airport Dr.	--/CSS	Future Intersection				11.3	11.7	B	B	Ontario / LOS E
15	Driveway 5 & E. Airport Dr.	--/CSS	Future Intersection				11.5	11.9	B	B	Ontario / LOS E
16	Driveway 6 & La Salle St.	--/CSS	Future Intersection				8.6	8.7	A	A	Ontario / LOS E
17	Driveway 7 & La Salle St.	--/CSS	Future Intersection				8.6	8.6	A	A	Ontario / LOS E
18	Driveway 8 & La Salle St.	--/CSS	Future Intersection				8.5	8.5	A	A	Ontario / LOS E
19	Driveway 9 & La Salle St.	--/CSS	Future Intersection				8.8	0.0	A	A	Ontario / LOS E
20	Driveway 10 & Jurupa Av.	--/CSS	Future Intersection				10.9	11.8	A	B	Ontario / LOS E
21	Driveway 11 & Jurupa Av.	--/CSS	Future Intersection				10.9	11.8	A	B	Ontario / LOS E
22	Carnegie Av. & E. Airport Dr.	TS	16.8	19.1	B	B	17.6	27.0	B	C	Ontario / LOS E
23	Carnegie Av. & Driveway 12	--/CSS	Future Intersection				9.6	9.6	A	A	Ontario / LOS E
24	Carnegie Av. & Driveway 13	--/CSS	Future Intersection				8.5	8.9	A	A	Ontario / LOS E
25	Carnegie Av. & Driveway 14	--/CSS	Future Intersection				9.3	9.3	A	A	Ontario / LOS E
26	Carnegie Av. & Driveway 15/Santa Ana St.	AWS	7.2	7.1	A	A	8.2	8.1	A	A	Ontario / LOS E
27	Carnegie Av. & Driveway 16	--/CSS	Future Intersection				9.1	9.1	A	A	Ontario / LOS E
28	Carnegie Av. & Driveway 17	--/CSS	Future Intersection				8.7	8.8	A	A	Ontario / LOS E
29	Carnegie Av. & La Salle St.	AWS	7.5	7.7	A	A	7.6	7.9	A	A	Ontario / LOS E
30	Carnegie Av. & Driveway 18	--/CSS	Future Intersection				9.4	9.7	A	A	Ontario / LOS E
31	Carnegie Av. & Jurupa Av.	TS	4.3	4.0	A	A	4.9	5.1	A	A	Ontario / LOS E
32	Driveway 19 & Santa Ana St.	--/CSS	Future Intersection				9.2	8.9	A	A	Ontario / LOS E
33	Driveway 20 & Santa Ana St.	--/CSS	Future Intersection				8.6	8.8	A	A	Ontario / LOS E
34	Commerce Pkwy. & Driveway 21	--/CSS	Future Intersection				9.7	10.6	A	B	Ontario / LOS E
35	Commerce Pkwy. & Driveway 22	--/CSS	Future Intersection				9.7	10.6	A	B	Ontario / LOS E
36	Commerce Pkwy. & Driveway 23	--/CSS	Future Intersection				9.8	11.2	A	B	Ontario / LOS E
37	Commerce Pkwy. & Santa Ana St.	AWS	8.5	11.8	A	B	9.1	13.3	A	B	Ontario / LOS E
38	Commerce Pkwy. & Driveway 24	--/CSS	Future Intersection				8.7	9.5	A	A	Ontario / LOS E
39	Commerce Pkwy. & Driveway 25	--/CSS	Future Intersection				10.9	12.6	B	B	Ontario / LOS E
40	Commerce Pkwy. & Driveway 26	--/CSS	Future Intersection				10.0	10.6	B	B	Ontario / LOS E
41	Commerce Pkwy. & Jurupa Av.	TS	14.5	19.5	B	B	16.9	21.0	B	C	Ontario / LOS E
42	Driveway 27 & Santa Ana St.	--/CSS	Future Intersection				9.5	9.3	A	A	Ontario / LOS E

TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS (2 OF 2)

#	Intersection	Traffic Control[2]	2026 Without Project Delay[1] (secs.) AM	2026 Without Project Delay[1] (secs.) PM	2026 Without Project Level of Service AM	2026 Without Project Level of Service PM	2026 With Project Delay[1] (secs.) AM	2026 With Project Delay[1] (secs.) PM	2026 With Project Level of Service AM	2026 With Project Level of Service PM	Jurisdiction(s) / LOS Standard[3]
43	Driveway 28 & Santa Ana St.	--/**CSS**	Future Intersection				9.0	9.3	A	A	Ontario / LOS E
44	Double Day Av. & Driveway 29	--/**CSS**	Future Intersection				8.7	8.9	A	A	Ontario / LOS E
45	Double Day Av. & Santa Ana St.	AWS	7.6	8.1	A	A	7.6	8.3	A	A	Ontario / LOS E
46	Driveway 30 & Double Day Av.	--/**CSS**	Future Intersection				8.4	8.6	A	A	Ontario / LOS E
47	Dupont Av. & Santa Ana St.	AWS	7.8	8.7	A	A	7.8	8.7	A	A	Ontario / LOS E
48	Dupont Av. & Double Day Av.	CSS	9.4	9.8	A	A	9.6	9.9	A	A	Ontario / LOS E
49	Dupont Av. & Driveway 31	--/**CSS**	Future Intersection				8.8	9.1	A	A	Ontario / LOS E
50	Dupont Av. & Jurupa Av.	TS	11.9	12.5	B	B	12.1	12.7	B	B	Ontario / LOS E
51	Milliken Av. & E. Airport Dr.	TS	25.1	27.3	C	C	25.6	28.3	C	C	Ontario / LOS E
52	Milliken Av. & Jurupa Av.	TS	23.3	34.5	C	C	24.0	36.9	C	D	Ontario / LOS E
53	Milliken Av. & Mission Bl.	TS	24.5	35.1	C	D	24.5	35.7	C	D	Eastvale, Ontario / LOS D
54	I-15 SB Ramps & Jurupa Av.	TS	28.6	20.5	C	C	29.6	21.7	C	C	Ontario, Caltrans / LOS D
55	I-15 NB Ramps & Jurupa Av.	TS	15.8	15.5	B	B	16.1	16.2	B	B	Ontario, Caltrans / LOS D

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; **CSS** = Improvement

[3] Minimum acceptable LOS for each applicable jurisdiction.

DRAFT

7 HORIZON YEAR (2040) TRAFFIC CONDITIONS

This section discusses the methods used to develop Horizon Year (2040) Without and With Project traffic forecasts, and the resulting intersection operations and traffic signal warrant analyses.

7.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Horizon Year (2040) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Horizon Year conditions only (e.g., intersection and roadway improvements along the Project's frontage and driveways).
- Driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for Horizon Year conditions only (e.g., intersection and roadway improvements along the cumulative development's frontages and driveways).

7.2 HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

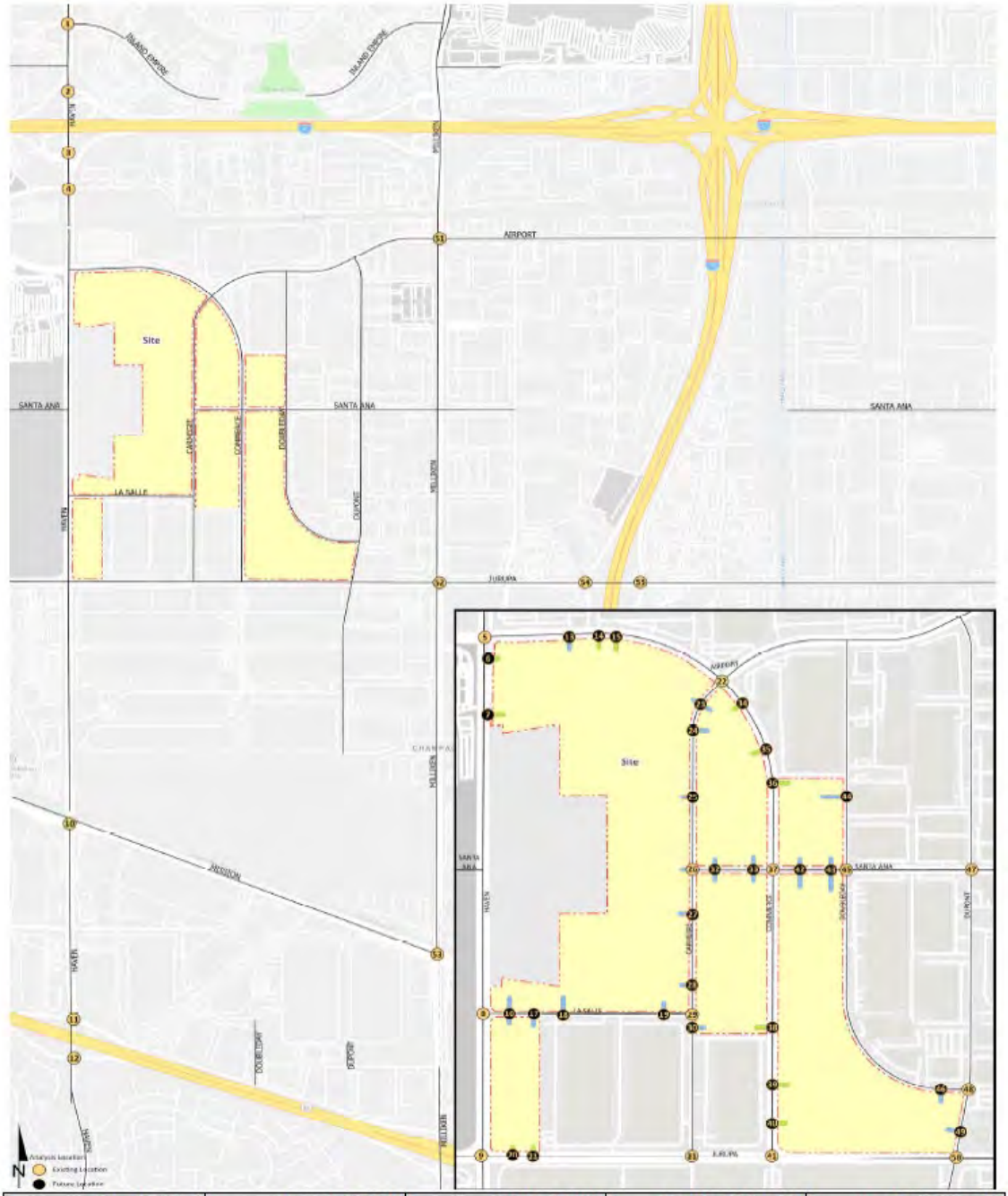
This scenario includes the refined post-process volumes obtained from the SBTAM (see Section 4.7 *Horizon Year (2040) Volume Development* of this TA for a detailed discussion on the post-processing methodology). The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Horizon Year (2040) Without Project traffic conditions are shown on Exhibit 7-1.

7.3 HORIZON YEAR (2040) WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-process volumes obtained from the SBTAM, plus the traffic generated by the proposed Project. Horizon Year (2040) With Project traffic forecasts assumes buildout of the Project. The weekday ADT and weekday AM and PM peak hour volumes which can be expected for Horizon Year (2040) With Project traffic conditions are shown on Exhibit 7-2.

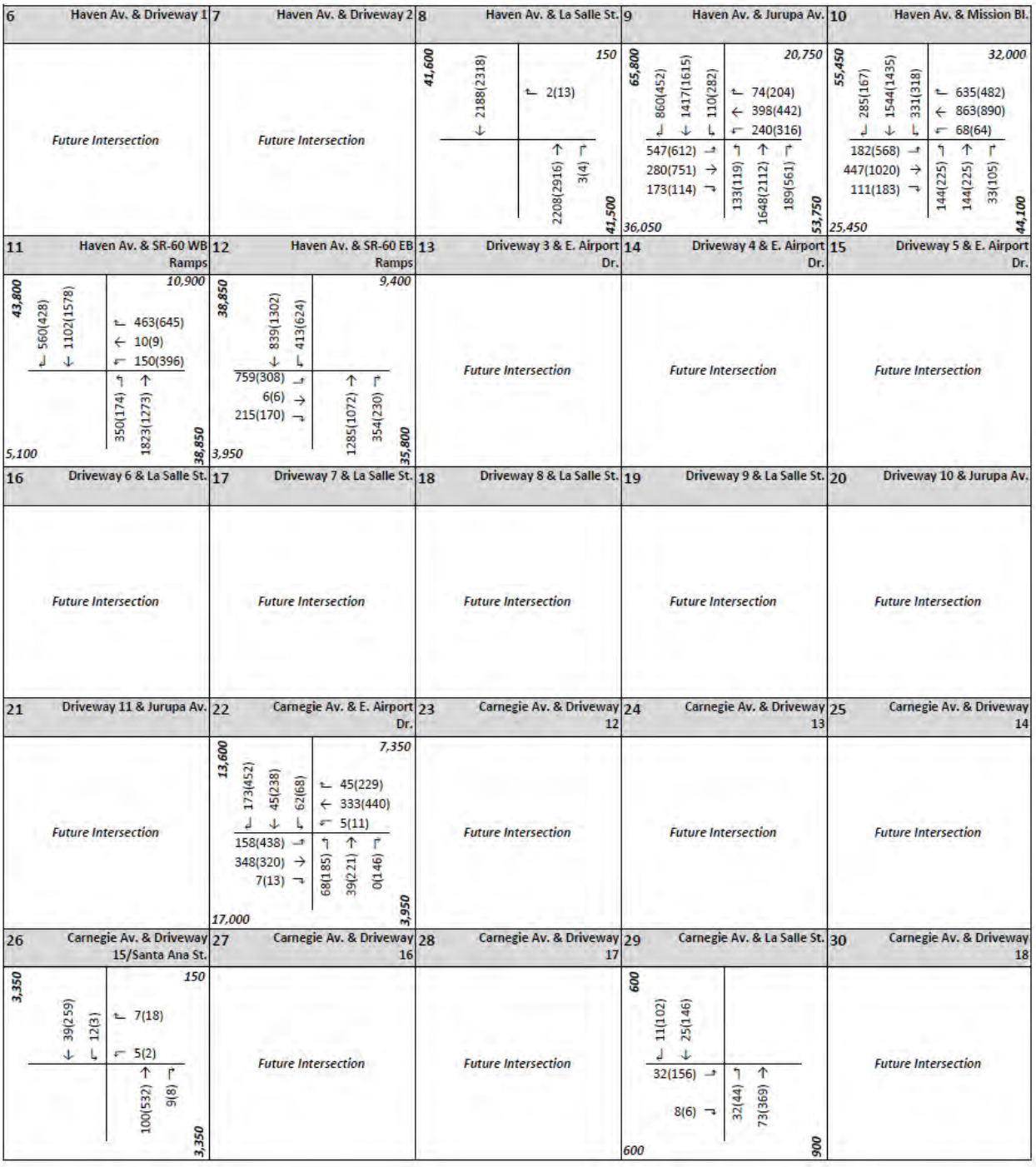
DRAFT

EXHIBIT 7-1: HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC VOLUMES (1 OF 3)



| 1 Haven Av. & Inland Empire Bl. | | |

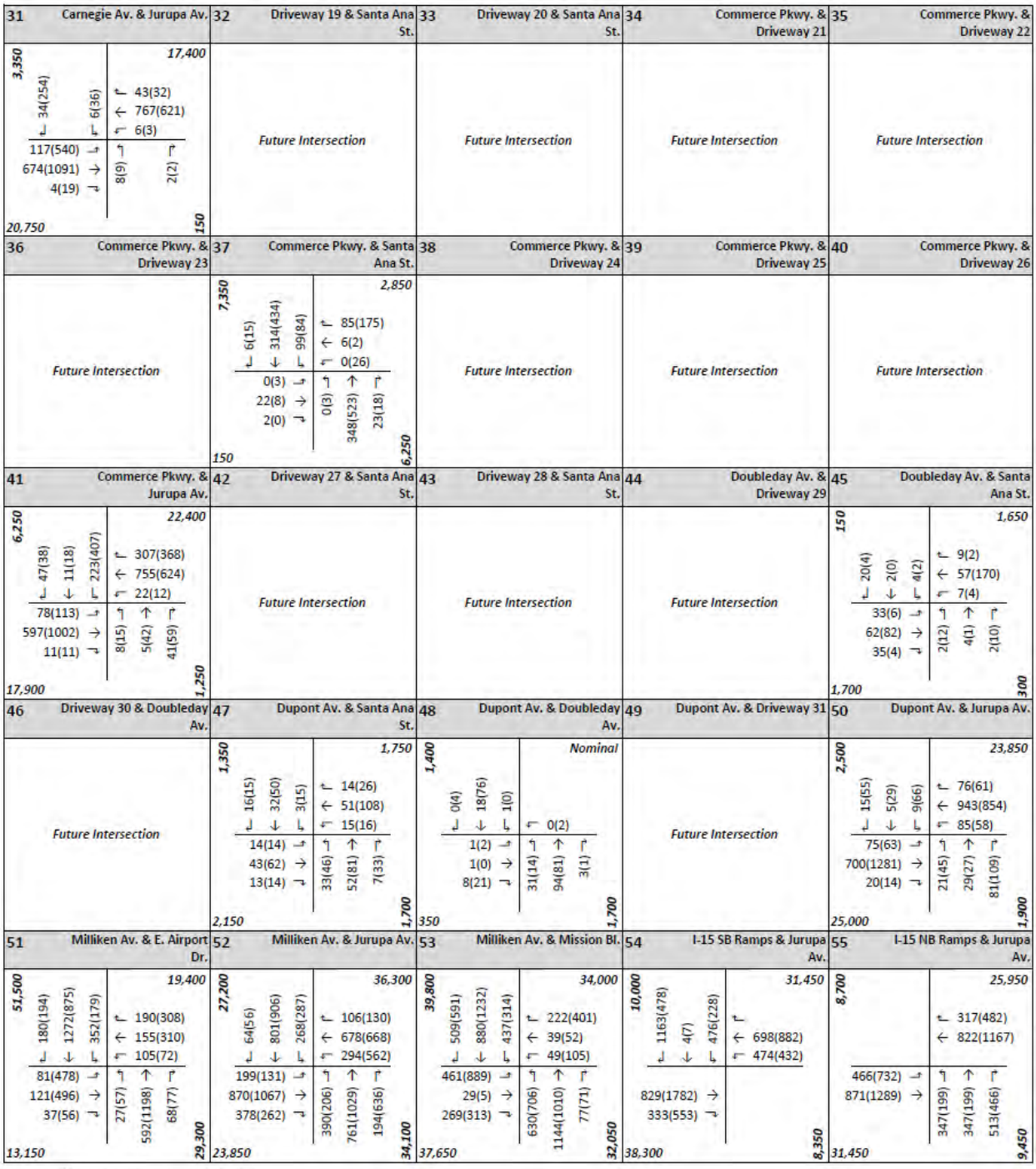
EXHIBIT 7-1: HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC VOLUMES (2 OF 3)



##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

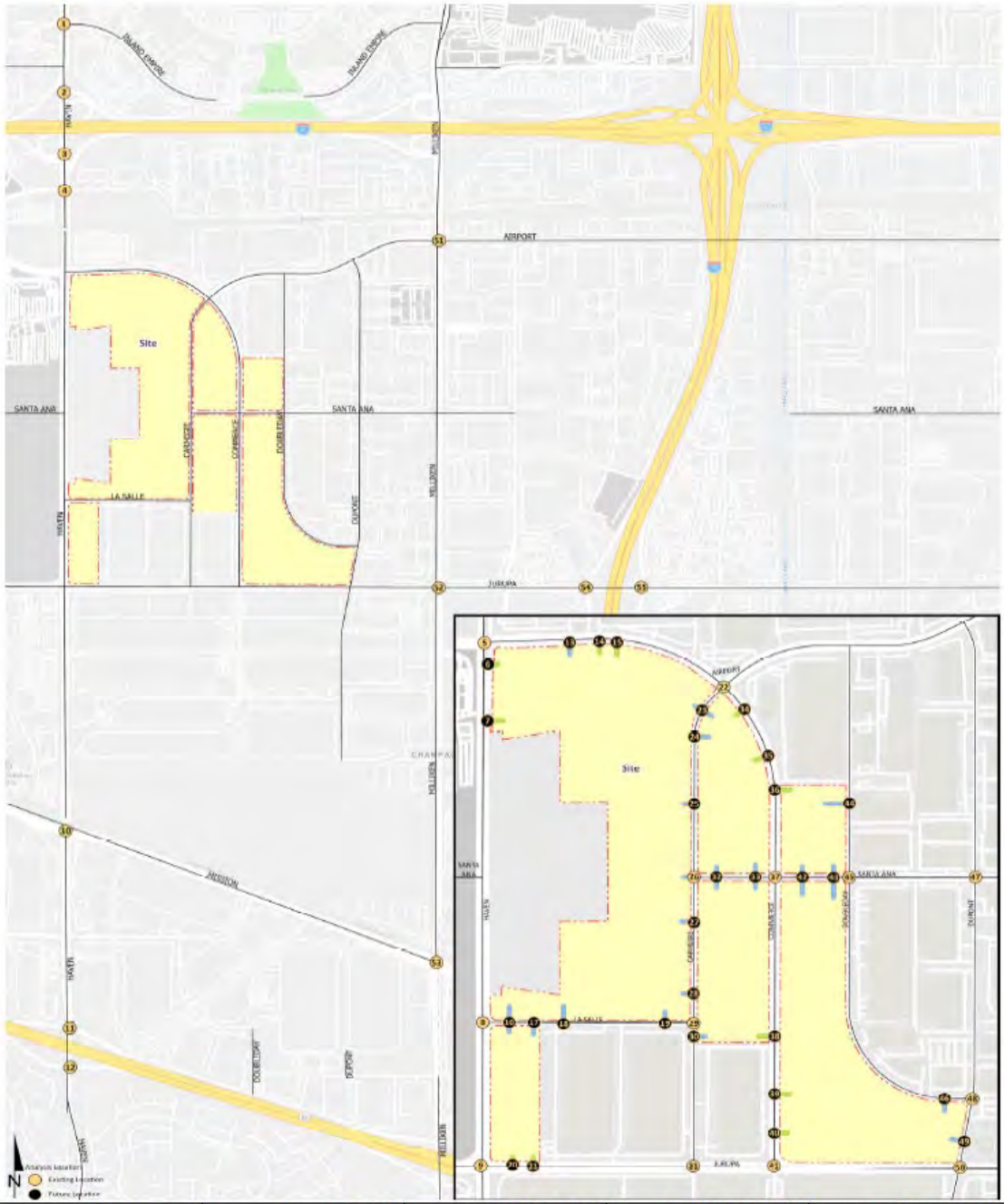
EXHIBIT 7-1: HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC VOLUMES (3 OF 3)



##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 7-2: HORIZON YEAR (2040) WITH PROJECT TRAFFIC VOLUMES (1 OF 3)



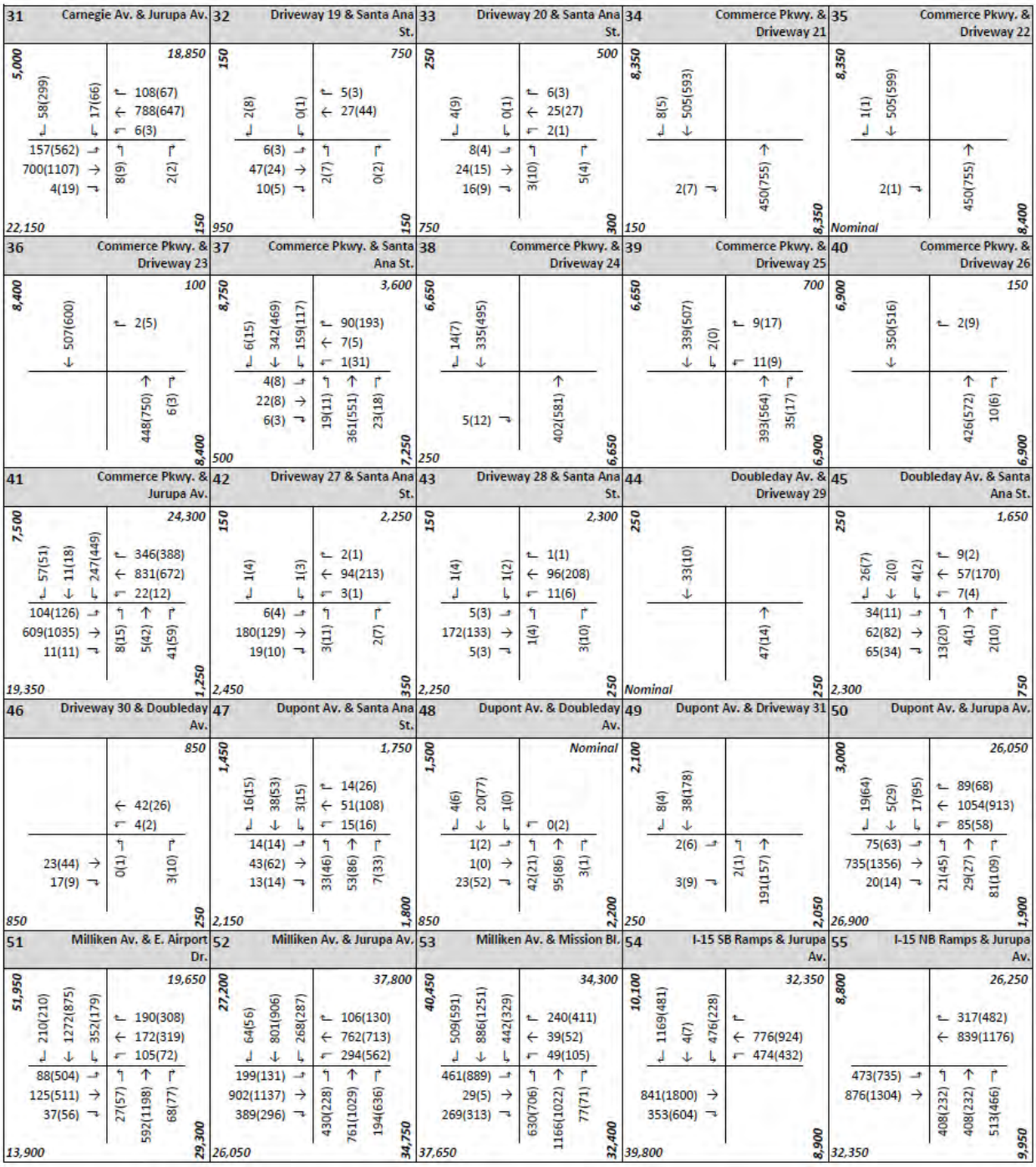
1 Haven Av. & Inland Empire Bl.			2 Haven Av. & I-10 WB Ramps			3 Haven Av. & I-10 EB Ramps			4 Haven Av. & E. Guasti Rd.			5 Haven Av. & E. Airport Dr.		
50,500		13,700	46,000		17,400	55,050		6,750	57,900		5,950	60,250		20,150
↳ 155(72)	← 1838(1854)	↰ 55(44)	↳ 590(751)	← 1845(1900)	↰ 616(392)	↳ 453(373)	← 2282(1790)		↳ 297(126)	← 2553(2264)	↰ 222(185)	↳ 205(347)	← 1722(1736)	↰ 415(390)	↰ 305(604)
		← 21(42)									← 145(250)			← 255(728)
		← 142(246)									← 41(21)			↰ 81(28)
		← 124(364)			← 934(292)						← 75(88)			
112(223) ↳		↰				892(826) ↳			83(434) ↳		↰	239(385) ↳		↰
130(414) →		→			→			→	29(50) →		→	352(592) →		→
330(415) ↳		↱			↱	793(678) ↳		↱	42(226) ↳		↱	509(618) ↳		↱
	484(436)			2102(3072)			1761(3287)			168(66)			507(631)	
	1883(2447)			465(1000)			448(788)			1969(3418)			1692(2364)	
	359(581)									109(114)			230(20)	
20,850		54,550	6,450		55,050	15,550		63,100	7,750		58,400	29,700		66,400

##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

EXHIBIT 7-2: HORIZON YEAR (2040) WITH PROJECT TRAFFIC VOLUMES (2 OF 3)

EXHIBIT 7-2: HORIZON YEAR (2040) WITH PROJECT TRAFFIC VOLUMES (3 OF 3)



##(##) AM(PM) Peak Hour Intersection Volumes

Average Daily Trips

7.4 INTERSECTION OPERATIONS ANALYSIS

7.4.1 HORIZON YEAR (2040) WITHOUT PROJECT TRAFFIC CONDITIONS

LOS calculations were conducted for the study intersections to evaluate their operations under Horizon Year (2040) Without Project conditions with roadway and intersection geometrics consistent with Section 7.1 *Roadway Improvements*. As shown on Table 7-1, no study area intersections are anticipated to operate at an unacceptable LOS under Horizon Year (2040) Without Project traffic conditions. The intersection operations analysis worksheets for Horizon Year (2040) Without Project traffic conditions are included in Appendix 7.1 of this TA.

7.4.2 HORIZON YEAR (2040) WITH PROJECT TRAFFIC CONDITIONS

As shown on Table 7-1, the following study area intersections are anticipated to operate at a deficient LOS during one or both peak hours for Horizon Year (2040) With Project traffic conditions with the addition of Project traffic:

- Driveway 3 & E. Airport Dr. (#13) – LOS F PM peak hour only
- Milliken Av. & Mission Bl. (#53) – LOS E AM peak hour; LOS F PM peak hour

The intersection operations analysis worksheets for Horizon Year (2040) With Project traffic conditions are included in Appendix 7.2 of this TA.

7.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

No additional study area intersections are anticipated to meet peak hour or planning level (ADT) volume-based traffic signal warrants for Horizon Year (2040) Without Project traffic conditions (see Appendix 7.3), in addition to those previously warranted under Opening Year Cumulative (2026) With Project traffic conditions.

No additional study area intersections anticipated to meet planning level (ADT) volume-based traffic signal warrant for Horizon Year (2040) With Project traffic conditions (see Appendix 7.4) with the addition of Project traffic.

DRAFT

TABLE 7-1: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS (1 OF 2)

#	Intersection	Traffic Control[2]	2040 Without Project Delay[1] (secs.) AM	PM	Level of Service AM	PM	2040 With Project Delay[1] (secs.) AM	PM	Level of Service AM	PM	Jurisdiction(s) / LOS Standard[3]
1	Haven Av. & Inland Empire Bl.	TS	20.5	26.7	C	C	25.1	35.5	C	D	Ontario / LOS E
2	Haven Av. & I-10 WB Ramps	TS	11.1	6.1	B	A	15.5	6.4	B	A	Ontario, Caltrans / LOS D
3	Haven Av. & I-10 EB Ramps	TS	15.3	10.3	B	B	17.5	26.3	B	C	Ontario, Caltrans / LOS D
4	Haven Av. & E. Guasti Rd.	TS	19.1	27.7	B	C	21.7	54.9	C	D	Ontario / LOS E
5	Haven Av. & E. Airport Dr.	TS	21.7	48.1	C	D	69.2	63.9	E	E	Ontario / LOS E
6	Haven Av. & Driveway 1	--/CSS	Future Intersection				34.3	33.5	D	D	Ontario / LOS E
7	Haven Av. & Driveway 2	--/CSS	Future Intersection				35.1	32.5	E	D	Ontario / LOS E
8	Haven Av. & La Salle St.	CSS	17.3	23.3	C	C	37.1	34.2	E	D	Ontario / LOS E
9	Haven Av. & Jurupa Av.	TS	23.7	35.3	C	D	39.3	76.5	D	E	Ontario / LOS E
10	Haven Av. & Mission Bl.	TS	37.7	48.9	D	D	73.0	72.6	E	E	Ontario / LOS E
11	Haven Av. & SR-60 WB Ramps	TS	12.2	12.2	B	B	16.5	17.8	B	B	Ontario, Caltrans / LOS D
12	Haven Av. & SR-60 EB Ramps	TS	20.6	13.6	C	B	42.9	18.8	D	B	Ontario, Caltrans / LOS D
13	Driveway 3 & E. Airport Dr.	--/CSS	Future Intersection				32.4	**55.8**	D	F	Ontario / LOS E
14	Driveway 4 & E. Airport Dr.	--/CSS	Future Intersection				12.7	12.7	B	B	Ontario / LOS E
15	Driveway 5 & E. Airport Dr.	--/CSS	Future Intersection				12.8	13.0	B	B	Ontario / LOS E
16	Driveway 6 & La Salle St.	--/CSS	Future Intersection				8.6	8.7	A	A	Ontario / LOS E
17	Driveway 7 & La Salle St.	--/CSS	Future Intersection				8.6	8.6	A	A	Ontario / LOS E
18	Driveway 8 & La Salle St.	--/CSS	Future Intersection				8.5	8.5	A	A	Ontario / LOS E
19	Driveway 9 & La Salle St.	--/CSS	Future Intersection				8.8	0.0	A	A	Ontario / LOS E
20	Driveway 10 & Jurupa Av.	--/CSS	Future Intersection				11.3	13.0	B	B	Ontario / LOS E
21	Driveway 11 & Jurupa Av.	--/CSS	Future Intersection				11.4	12.9	B	B	Ontario / LOS E
22	Carnegie Av. & E. Airport Dr.	TS	16.4	18.1	B	B	20.4	57.9	C	E	Ontario / LOS E
23	Carnegie Av. & Driveway 12	--/CSS	Future Intersection				9.8	12.1	A	B	Ontario / LOS E
24	Carnegie Av. & Driveway 13	--/CSS	Future Intersection				8.8	11.0	A	B	Ontario / LOS E
25	Carnegie Av. & Driveway 14	--/CSS	Future Intersection				9.5	11.2	A	B	Ontario / LOS E
26	Carnegie Av. & Driveway 15/Santa Ana St.	AWS	7.2	7.0	A	A	8.9	17.9	A	C	Ontario / LOS E
27	Carnegie Av. & Driveway 16	--/CSS	Future Intersection				9.3	10.4	A	B	Ontario / LOS E
28	Carnegie Av. & Driveway 17	--/CSS	Future Intersection				8.8	9.7	A	A	Ontario / LOS E
29	Carnegie Av. & La Salle St.	AWS	7.5	7.6	A	A	7.9	11.9	A	B	Ontario / LOS E
30	Carnegie Av. & Driveway 18	--/CSS	Future Intersection				9.6	12.2	A	B	Ontario / LOS E
31	Carnegie Av. & Jurupa Av.	TS	4.3	4.0	A	A	4.8	43.6	A	D	Ontario / LOS E
32	Driveway 19 & Santa Ana St.	--/CSS	Future Intersection				9.2	8.9	A	A	Ontario / LOS E
33	Driveway 20 & Santa Ana St.	--/CSS	Future Intersection				8.6	8.8	A	A	Ontario / LOS E
34	Commerce Pkwy. & Driveway 21	--/CSS	Future Intersection				10.9	11.4	B	B	Ontario / LOS E
35	Commerce Pkwy. & Driveway 22	--/CSS	Future Intersection				11.0	11.4	B	B	Ontario / LOS E
36	Commerce Pkwy. & Driveway 23	--/CSS	Future Intersection				10.6	12.1	B	B	Ontario / LOS E
37	Commerce Pkwy. & Santa Ana St.	AWS	8.4	11.0	A	B	12.1	21.3	B	C	Ontario / LOS E
38	Commerce Pkwy. & Driveway 24	--/CSS	Future Intersection				9.5	10.1	A	B	Ontario / LOS E
39	Commerce Pkwy. & Driveway 25	--/CSS	Future Intersection				13.0	14.7	B	B	Ontario / LOS E
40	Commerce Pkwy. & Driveway 26	--/CSS	Future Intersection				10.6	11.3	B	B	Ontario / LOS E
41	Commerce Pkwy. & Jurupa Av.	TS	13.8	18.1	B	B	21.9	23.5	C	C	Ontario / LOS E
42	Driveway 27 & Santa Ana St.	--/CSS	Future Intersection				10.0	9.5	B	A	Ontario / LOS E

TABLE 7-1: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS (2 OF 2)

#	Intersection	Traffic Control[2]	2040 Without Project Delay[1] (secs.) AM	PM	Level of Service AM	PM	2040 With Project Delay[1] (secs.) AM	PM	Level of Service AM	PM	Jurisdiction(s) / LOS Standard[3]
43	Driveway 28 & Santa Ana St.	--/CSS	Future Intersection				9.3	9.5	A	A	Ontario / LOS E
44	Double Day Av. & Driveway 29	--/CSS	Future Intersection				8.8	8.9	A	A	Ontario / LOS E
45	Double Day Av. & Santa Ana St.	AWS	7.5	8.0	A	A	7.9	8.6	A	A	Ontario / LOS E
46	Driveway 30 & Double Day Av.	--/CSS	Future Intersection				8.4	8.6	A	A	Ontario / LOS E
47	Dupont Av. & Santa Ana St.	AWS	4.7	8.5	A	A	8.1	9.0	A	A	Ontario / LOS E
48	Dupont Av. & Double Day Av.	CSS	9.4	9.6	A	A	9.6	9.9	A	A	Ontario / LOS E
49	Dupont Av. & Driveway 31	--/CSS	Future Intersection				8.8	9.3	A	A	Ontario / LOS E
50	Dupont Av. & Jurupa Av.	TS	11.4	12.1	B	B	12.2	12.7	B	B	Ontario / LOS E
51	Milliken Av. & E. Airport Dr.	TS	21.7	22.9	C	C	24.2	41.8	C	D	Ontario / LOS E
52	Milliken Av. & Jurupa Av.	TS	21.5	27.8	C	C	39.8	60.4	D	E	Ontario / LOS E
53	Milliken Av. & Mission Bl.	TS	22.5	28.7	C	C	**63.0**	**96.0**	**E**	**F**	Eastvale, Ontario / LOS D
54	I-15 SB Ramps & Jurupa Av.	TS	20.4	16.2	C	B	46.5	22.2	D	C	Ontario, Caltrans / LOS D
55	I-15 NB Ramps & Jurupa Av.	TS	13.4	12.7	B	B	16.9	20.5	B	C	Ontario, Caltrans / LOS D

* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[1] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[2] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; **CSS** = Improvement

[3] Minimum acceptable LOS for each applicable jurisdiction.

7.6 IMPROVEMENTS

7.6.1 IMPROVEMENTS TO ADDRESS DEFICIENCIES AT INTERSECTIONS

Improvement strategies have been identified at intersections that have been identified as deficient, in an effort to reduce each location's peak hour delay and improve the associated LOS grade to an acceptable LOS (LOS D/E or better). The effectiveness of the recommended improvement strategies to address Horizon Year (2040) traffic deficiencies are presented on Table 7-2. Improvements have not been recommended at the intersection of Driveway 3 and E. Airport Drive. The deficiency is anticipated to occur within the driveway for vehicles making an outbound left turn movement during the PM peak hour only. During congested peak hours, vehicles are likely to make a right turn or utilize alternative driveways on-site.

If not constructed by the Project, the Project Applicant shall contribute to these improvements through payment of City DIF fees or fair share contribution as identified on Table 1-3. Worksheets for Horizon Year (2040) With Project conditions, with improvements, HCM calculation worksheets are provided in Appendix 7.5, respectively.

TABLE 7-2: INTERSECTION ANALYSIS FOR HORIZON YEAR (2040) CONDITIONS WITH IMPROVEMENTS

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		Level of Service		Jurisdiction(s) / LOS Standard
			Northbound			Southbound			Eastbound			Westbound							
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	
53	Milliken Av. & Mission Bl.																		
	Without Improvements	TS	2	3	0	2	3	1	1	2	0	1	1	1	63.0	96.0	E	F	Eastvale,
	With Improvements	TS	2	3	0	2	3	1	1	2	0	1	1	1>	42.4	54.7	D	D	Ontario / LOS D

[1] When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; > = Right-Turn Overlap Phasing; 1 = Improvement

[2] Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

[3] TS = Traffic Signal

DRAFT

This Page Intentionally Left Blank

DRAFT

8 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Ontario are funded through a combination of construction of improvements, development impact fee programs or fair share contributions, such as the City of Ontario DIF program. Identification and timing of needed improvements is generally determined through local jurisdictions based upon a variety of factors.

8.1 CITY OF ONTARIO DEVELOPMENT IMPACT FEE PROGRAM

The City of Ontario has created its own local DIF program to impose and collect fees from new residential, commercial, and industrial development for the purpose of funding roadways and intersections necessary to accommodate City growth as identified in the City's General Plan Circulation Element. The City's DIF includes regional improvements to comply with Measure "I." The fee schedule was last updated in January 2020 and is reviewed/adjusted annually based upon changes in the construction cost index (CCI). Under the City's DIF program, the City may grant to developers a credit against specific components of fees when those developers construct certain facilities and landscaped medians identified in the list of improvements funded by the DIF program.

The timing to use the DIF fees is established through periodic capital improvement programs which are overseen by the City's Public Works Department. Periodic traffic counts, review of traffic accidents, and a review of traffic trends throughout the City are also periodically performed by City staff and consultants. The City uses this data to determine the timing of implementing the improvements listed in its facilities list. The City also uses this data to ensure that the improvements listed on the facilities list are constructed before the LOS falls below the LOS performance standards adopted by the City. In this way, the improvements are constructed before the LOS falls below the City's LOS performance thresholds.

The Project Applicant will be subject to the City's DIF fee program and will pay the requisite City DIF fees at the rates then in effect pursuant to the City's ordinance. The Project Applicant's payment of the requisite DIF at the rates then in effect, pursuant to the City DIF Program, would satisfy the Project's proportional improvement requirements at potentially affected DIF-funded facilities.

DRAFT

TABLE 8-1: ESTIMATED FEE OBLIGATION

Fee Reference	Industrial ($ PER SQ. FT.)
Industrial: Regional and Local Streets	$3.002/SF

Fee Calculation

Program	Category	Unit Cost	Units/Sq.Ft.	Local Circulation
Local/Regional Impacts	Industrial	$3.00	4,282,450	$12,848,206
			Total Transportation Impact Fees	$12,848,206

8.2 MEASURE "I" FUNDS

In 2004, the voters of San Bernardino County approved the 30-year extension of Measure "I," a one-half of one percent sales tax on retail transactions, through the year 2040, for transportation projects including, but not limited to, infrastructure improvements, commuter rail, public transit, and other identified improvements. The Measure "I" extension requires that a regional traffic impact fee be created to ensure development is paying its fair share. A regional Nexus study was prepared by SBCTA and concluded that each jurisdiction should include a regional fee component in their local programs in order to meet the Measure "I" requirement. The regional component assigns specific facilities and cost sharing formulas to each jurisdiction and was most recently updated in November 2011. Revenues collected through these programs are used in tandem with Measure "I" funds to deliver projects identified in the Nexus Study. While Measure "I" is a self-executing sales tax administered by SBCTA, it bears discussion here because the funds raised through Measure "I" have funded in the past and will continue to fund new transportation facilities in San Bernardino County.

8.3 FAIR SHARE CONTRIBUTION

Project improvement may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate (to be determined at the City's discretion).

When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each peak hour, has been provided on Table 8-2 for the applicable deficient study area intersections.

These fees are collected with the proceeds solely used as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases.

TABLE 8-2: PROJECT FAIR SHARE CALCULATIONS FOR INTERSECTIONS

#	Intersection		Existing	Total Project	2040 With Project Volume	Total New Traffic	Project % of New Traffic
53	Milliken Av. & Mission Bl.						
		AM:	2,980	57	5,051	2,071	2.8%
		PM:	3,680	60	5,964	2,284	2.6%

BOLD = Denotes highest fair share percentage.

DRAFT

This Page Intentionally Left Blank

DRAFT

9 REFERENCES

1. **San Bernardino Associated Governments.** *Congestion Management Program for County of San Bernardino.* County of San Bernardino : s.n., Updated June 2016.
2. **Institute of Transportation Engineers.** *Trip Generation Manual.* 11th Edition. 2021.
3. **Transportation Research Board.** *Highway Capacity Manual (HCM).* 6th Edition. s.l. : National Academy of Sciences, 2016.
4. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CA MUTCD).* 2014.
5. **The Planning Center for The City of Ontario.** *The Ontario Plan Environmental Impact Report.* Ontario : s.n., July 2009.
6. **The City of Eastvale.** *Adopted Genreal Plan.* Eastvale : s.n., June 13, 2012.
7. **Southern California Association of Governments.** *2020 Regional Transportation Plan/Sustainable Communities Strategy.* May 2020.

DRAFT

This Page Intentionally Left Blank

DRAFT

APPENDIX 1.1:

APPROVED TRAFFIC STUDY SCOPING AGREEMENT

This Page Intentionally Left Blank

October 25, 2021

Mr. Jay Bautista
City of Ontario
303 E. B Street
Ontario, CA 91764

SUBJECT: SCOPING ASSUMPTIONS FOR THE CALIFORNIA LOGISTICS CENTER TRAFFIC ANALYSIS

Dear Mr. Jay Bautista:

Urban Crossroads, Inc. has conducted an initial assessment of the proposed California Logistics Center development (**Project**) to establish a traffic analysis (**TA**) scope of work that would be prepared in support of an Environmental Impact Report (**EIR**) Addendum. The Project is located on the southeast corner of Haven Avenue and E. Airport Drive in the City of Ontario. The following memo outlines the project-related trip generation, trip distribution patterns, proposed study area and analysis scenarios expected to be included in the Project traffic analysis.

PROJECT DESCRIPTION

Exhibit 1 illustrates the location map for the proposed Project and Exhibit 2 shows the preliminary site plan. The proposed Project is anticipated to be developed in one phase with an opening year of 2026. For purposes of TA, the following mix of land uses are proposed to be evaluated for the Project:

- 642,368 square feet of high-cube cold storage warehouse use (15% of the total square footage)
- 3,640,082 square feet of high-cube fulfillment center warehouse use (85% of the total square footage)
- **Total of 4,282,450 square feet**

Access to the proposed Project would be provided to the surrounding roadways of Haven Avenue, E. Airport Drive, Carnegie Avenue, Commerce Parkway, Double Day Avenue, Dupont Avenue, La Salle Street, Santa Ana Street, and Jurupa Avenue. Exhibit 3 illustrates the Project with respect to the proposed study area.

EXHIBIT 1: LOCATION MAP

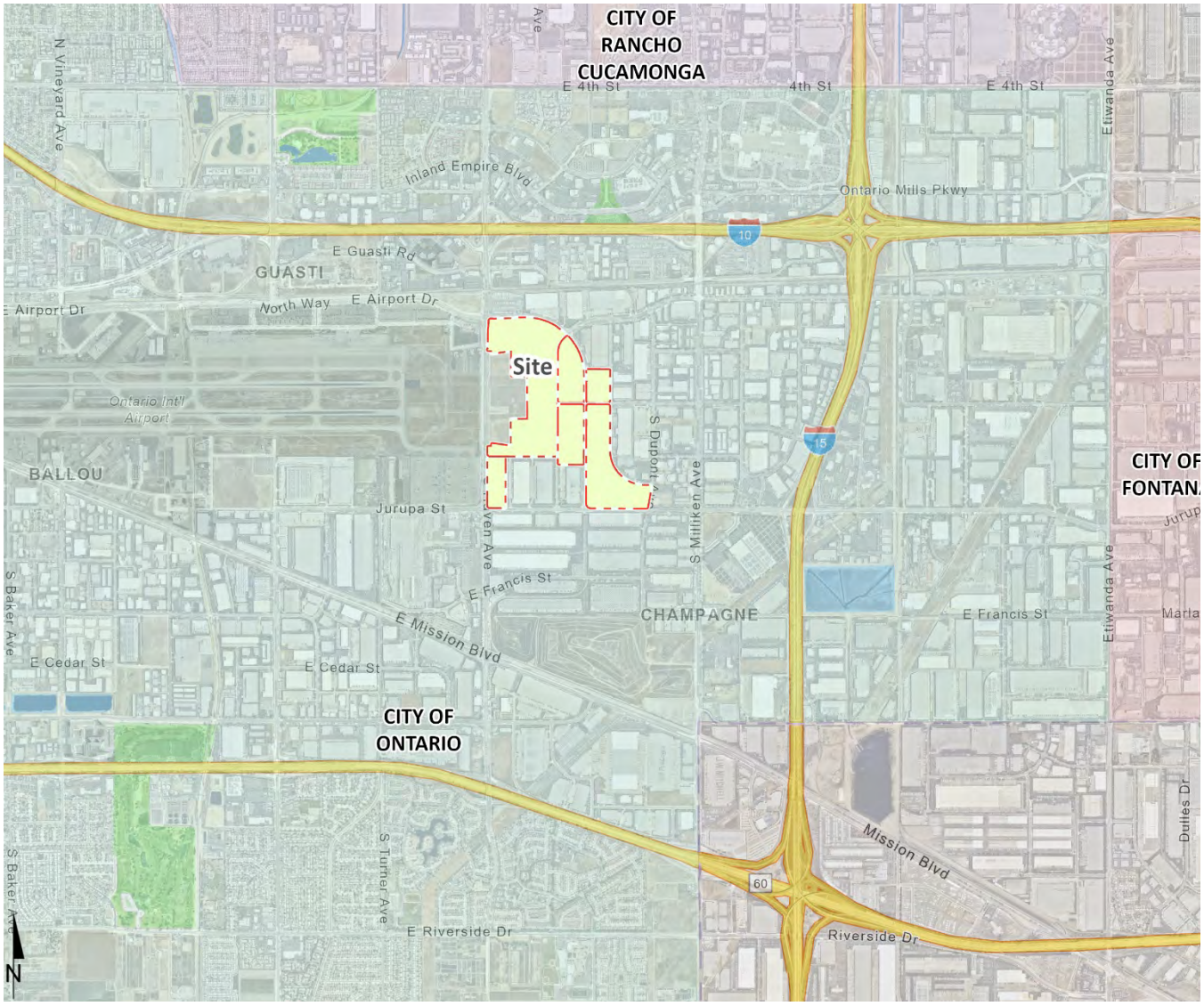


EXHIBIT 2: PRELIMINARY SITE PLAN

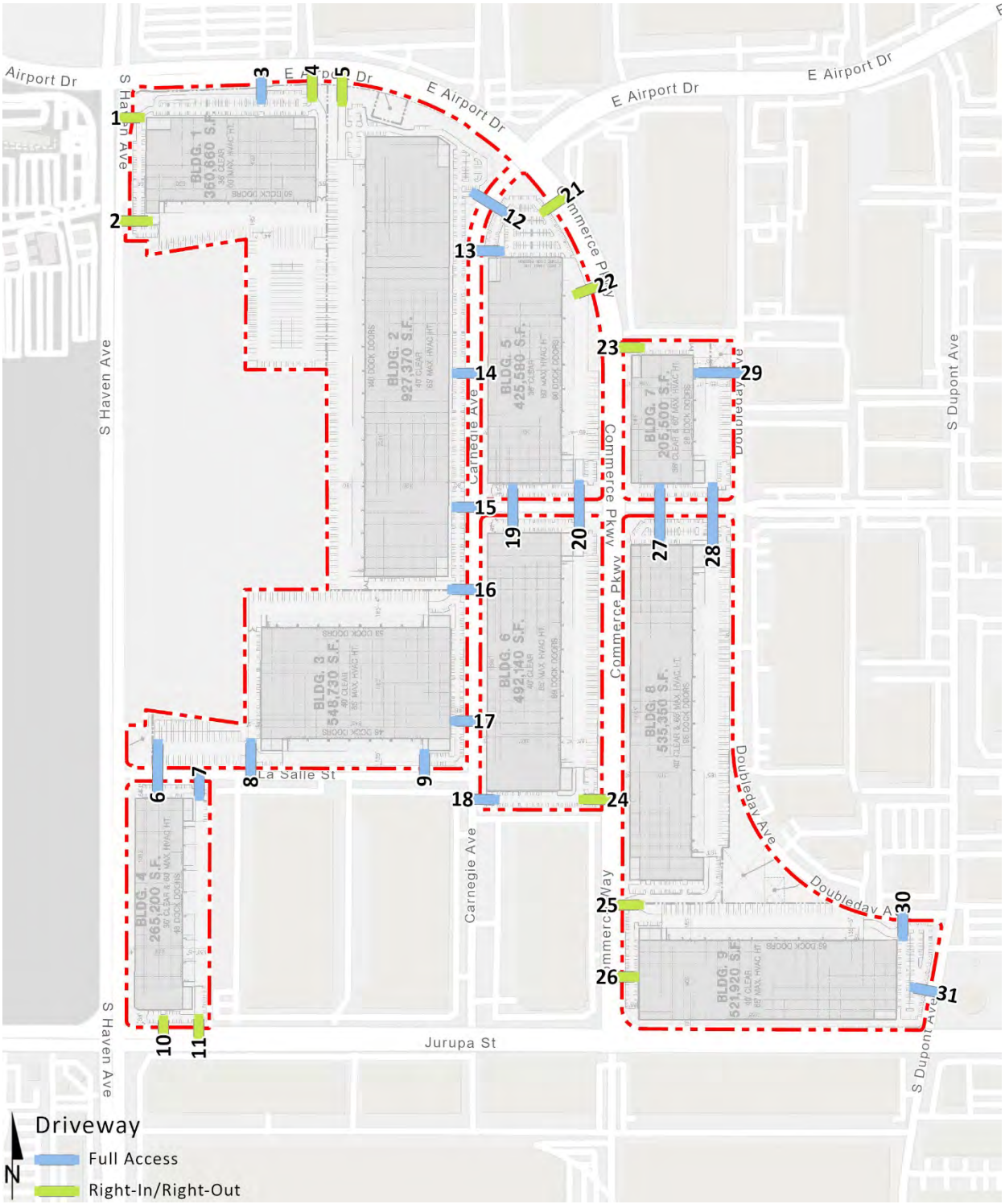
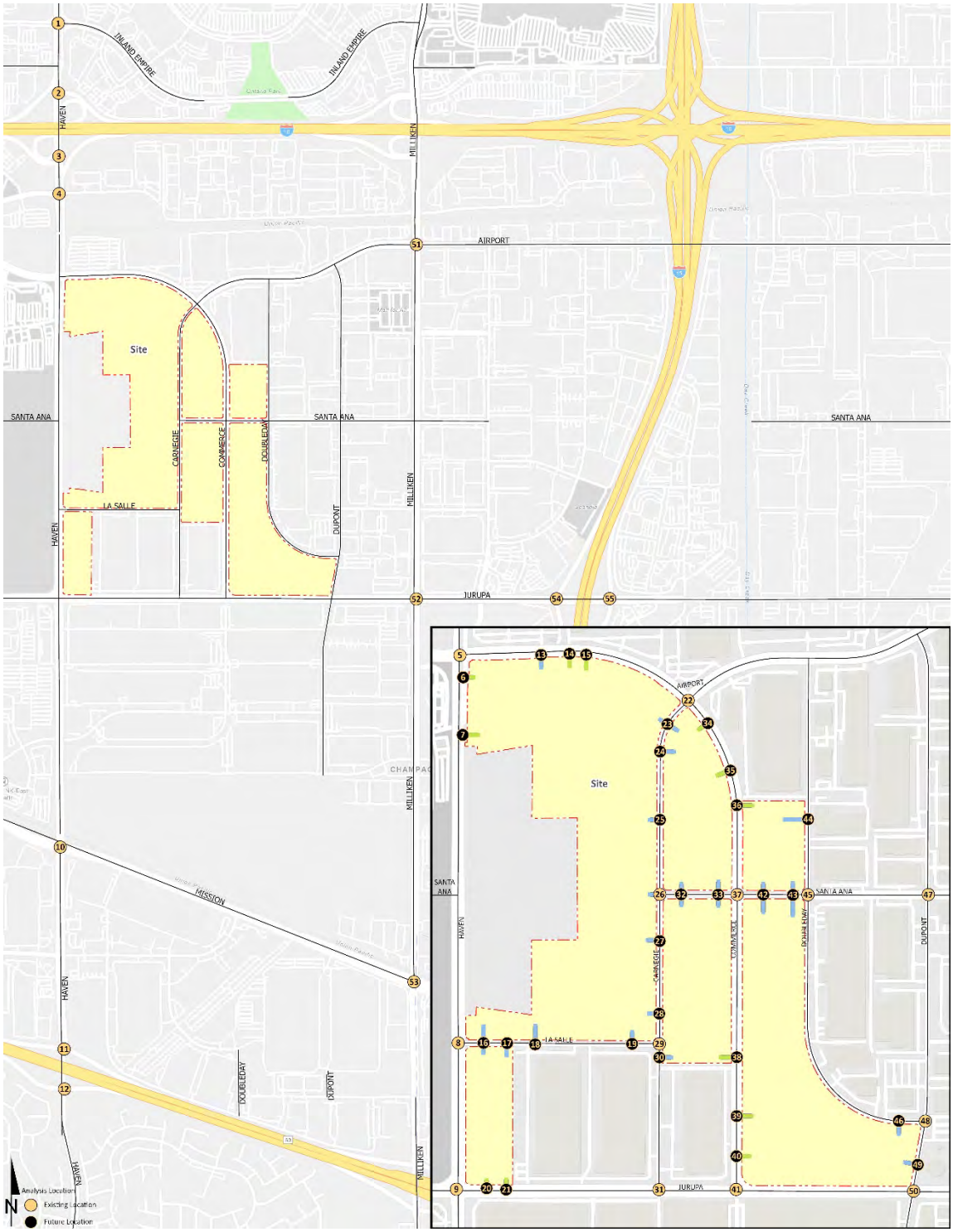


EXHIBIT 3: STUDY AREA



PROPOSED ANALYSIS SCENARIOS

The following analysis scenarios are proposed based on planned development phasing:

- Existing (2021)
- Existing plus Project
- Opening Year Cumulative (2026) Without Project
- Opening Year Cumulative (2026) With Project
- Horizon Year (2040) Without Project
- Horizon Year (2040) With Project

EXISTING COUNT DATA

The Cucamonga School District (in which the Project area lies within) started school for the 2021-2022 school year on August 12, 2021. In addition, Mountain View School District and Ontario Montclair School District have also started their school year. It is our understanding that schools are back to in-person instruction. We are proposing to conduct new traffic counts for the study area intersections and not apply any further adjustments in establishing the baseline as traffic counts would reflect the current conditions, including any foreseeable lasting effects due to the currently ongoing COVID-19 pandemic.

AMBIENT GROWTH

Future year traffic forecasts will be based upon a background (ambient) growth of 2% per year, compounded annually. The growth factor for Opening Year Cumulative (2026) traffic conditions will be 10.41% (or $1.02^{5\ years}$).

TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. Trip generation rates for the Project are shown in Table 1 for both actual vehicles and passenger car equivalent (PCE). The trip generation rates used for this analysis are based upon information collected by the Institute of Transportation Engineers (ITE) as provided in their Trip Generation Manual (11^{th} Edition, 2021).

TABLE 1: PROJECT TRIP GENERATION RATES

Land Use[1]	Units[2]	ITE LU Code	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicle Trip Generation Rates									
High-Cube Fulfillment Center (Non-Sort)[3]	TSF	155	0.122	0.028	0.150	0.062	0.098	0.160	1.810
Passenger Cars			0.105	0.025	0.130	0.059	0.091	0.150	1.580
2-Axle Trucks			0.002	0.001	0.003	0.001	0.001	0.002	0.038
3-Axle Trucks			0.002	0.002	0.004	0.001	0.001	0.002	0.048
4+-Axle Trucks			0.006	0.007	0.013	0.003	0.003	0.006	0.144
High-Cube Cold Storage Warehouse[3]	TSF	157	0.085	0.025	0.110	0.034	0.086	0.120	2.120
Passenger Cars			0.062	0.018	0.080	0.025	0.065	0.090	1.665
2-Axle Trucks			0.003	0.007	0.010	0.005	0.005	0.010	0.260
3-Axle Trucks			0.001	0.002	0.003	0.002	0.001	0.003	0.083
4+-Axle Trucks			0.005	0.011	0.016	0.008	0.008	0.016	0.113
Passenger Car Equivalent (PCE) Trip Generation Rates[4]									
High-Cube Fulfillment Center (Non-Sort)[3]	TSF	155	0.122	0.028	0.150	0.062	0.098	0.160	1.810
Passenger Cars			0.105	0.025	0.130	0.059	0.091	0.150	1.580
2-Axle Trucks (PCE = 1.5)			0.003	0.002	0.005	0.002	0.001	0.003	0.058
3-Axle Trucks (PCE = 2.0)			0.005	0.005	0.010	0.003	0.003	0.005	0.119
4+-Axle Trucks (PCE = 3.0)			0.018	0.020	0.038	0.009	0.010	0.019	0.432
High-Cube Cold Storage Warehouse[3]	TSF	157	0.085	0.025	0.110	0.034	0.086	0.120	2.120
Passenger Cars			0.062	0.018	0.080	0.025	0.065	0.090	1.665
2-Axle Trucks (PCE = 1.5)			0.005	0.011	0.016	0.008	0.008	0.016	0.390
3-Axle Trucks (PCE = 2.0)			0.002	0.005	0.007	0.004	0.003	0.007	0.165
4+-Axle Trucks (PCE = 3.0)			0.015	0.034	0.049	0.024	0.025	0.049	0.338

[1] Trip Generation and Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

[2] TSF = thousand square feet

[3] Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.
Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.
Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

[4] PCE factors: 2-axle = 1.5; 3-axle = 2.0; 4+-axle = 3.0.

For purposes of this analysis, the following ITE land use codes and vehicle mixes have been utilized:

- ITE land use code 155 (High-Cube Fulfillment Center Warehouse, Non-Sort Facility) has been used to derive site specific trip generation estimates for up to 3,640,082 square feet. High-cube (non-sort facility) fulfillment center warehouses are primarily used for the storage and/or consolidation of manufactured goods prior to their distribution to retail locations or other warehouses. A typical high-cube warehouse will have a high level of automation and logistics management where the automation and logistics enable the processing of goods in a highly efficient manner. Fulfillment center warehouses include warehouses characterized by a significant storage function and direct distribution of ecommerce product to end users. These facilities handle smaller packages and quantities than other high-cube warehouses. A non-sort facility is a fulfillment center that ships large box items that are processed primarily with automation rather than through manual means. The High-Cube Fulfillment Center (Non-Sort

Facility) Warehouse vehicle mix (passenger cars versus trucks) has also been obtained from the ITE's latest Trip Generation Manual. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 16.7%; 3-Axle = 20.7%; 4+-Axle = 62.6%.

- ITE land use code 157 (High-Cube Cold Storage Warehouse) has been used to derive site specific trip generation estimates for up to 642,368 square feet. High-cube cold storage warehouses include warehouses characterized by the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses. High-cube cold storage warehouses are facilities typified by temperature-controlled environments for frozen food or other perishable products. The High-Cube Cold Storage Warehouse vehicle mix (passenger cars versus trucks) has also been obtained from the ITE's latest Trip Generation Manual. The truck percentages were further broken down by axle type per the following SCAQMD recommended truck mix: 2-Axle = 34.7%; 3-Axle = 11.0%; 4+-Axle = 54.3%.

Finally, PCE factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles) for the Project. PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in Appendix B of the San Bernardino County Congestion Management Program (CMP), 2016 Update.

The trip generation summary illustrating daily and peak hour trip generation estimates for the proposed Project in actual vehicles are shown on Table 2, and Table 3 shows the trip generation summary based on PCE. As shown on Table 2, the proposed Project is anticipated to generate a total of 7,980 vehicle trip-ends per day with 613 AM peak hour trips and 644 PM peak hour trips (in actual vehicles). For the purposes of the operations analyses, the PCE trip generation shown in Table 3 will be utilized consistent with other studies prepared within the City. Detailed Project trip generation by Building are provided in Attachment A of this scoping memorandum.

TABLE 2: PROJECT TRIP GENERATION SUMMARY (ACTUAL VEHICLES)

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Building 1:								
Passenger Cars:	360.660 TSF	35	9	44	19	32	51	574
Total Truck Trips (Actual Vehicles):		4	4	8	1	1	2	96
Building 1 Total Trips (Actual Vehicles)[2]		**39**	**13**	**52**	**20**	**33**	**53**	**670**
Building 2:								
Passenger Cars:	927.370 TSF	92	23	114	50	81	130	1,478
Total Truck Trips (Actual Vehicles):		10	11	21	6	7	13	246
Building 2 Total Trips (Actual Vehicles)[2]		**102**	**34**	**135**	**56**	**88**	**143**	**1,724**
Building 3:								
Passenger Cars:	548.730 TSF	54	13	67	30	47	77	876
Total Truck Trips (Actual Vehicles):		5	7	12	2	3	5	148
Building 3 Total Trips (Actual Vehicles)[2]		**59**	**20**	**79**	**32**	**50**	**82**	**1,024**
Building 4:								
Passenger Cars:	265.200 TSF	26	7	32	14	24	38	422
Total Truck Trips (Actual Vehicles):		1	1	2	1	1	2	72
Building 4 Total Trips (Actual Vehicles)[2]		**27**	**8**	**34**	**15**	**25**	**40**	**494**
Building 5:								
Passenger Cars:	425.580 TSF	42	10	52	23	37	60	678
Total Truck Trips (Actual Vehicles):		4	4	8	2	2	4	116
Building 5 Total Trips (Actual Vehicles)[2]		**46**	**14**	**60**	**25**	**39**	**64**	**794**
Building 6:								
Passenger Cars:	492.140 TSF	49	11	60	27	43	70	786
Total Truck Trips (Actual Vehicles):		5	7	12	2	2	4	130
Building 6 Total Trips (Actual Vehicles)[2]		**54**	**18**	**72**	**29**	**45**	**74**	**916**
Building 7:								
Passenger Cars:	205.500 TSF	20	5	26	11	18	29	328
Total Truck Trips (Actual Vehicles):		1	1	2	1	1	2	58
Building 7 Total Trips (Actual Vehicles)[2]		**21**	**6**	**28**	**12**	**19**	**31**	**386**
Building 8:								
Passenger Cars:	535.350 TSF	53	12	65	29	46	75	854
Total Truck Trips (Actual Vehicles):		5	7	12	2	2	4	146
Building 8 Total Trips (Actual Vehicles)[2]		**58**	**19**	**77**	**31**	**48**	**79**	**1,000**
Building 9:								
Passenger Cars:	521.920 TSF	52	12	64	28	45	74	832
Total Truck Trips (Actual Vehicles):		5	7	12	2	2	4	140
Building 9 Total Trips (Actual Vehicles)[2]		**57**	**19**	**76**	**30**	**47**	**78**	**972**
Passenger Car Total		423	102	524	231	373	604	6,828
Truck Total (Actual Vehicles)		40	49	89	19	21	40	1,152
Project Total Trips (Actual Vehicles)[2]		**463**	**151**	**613**	**250**	**394**	**644**	**7,980**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

TABLE 3: PROJECT TRIP GENERATION SUMMARY (PCE)

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Building 1:								
Passenger Cars:	360.660 TSF	35	9	44	19	32	51	574
Total Truck Trips (PCE):		10	12	22	5	5	10	236
Building 1 Total Trips (PCE)[2]		**45**	**21**	**66**	**24**	**37**	**61**	**810**
Building 2:								
Passenger Cars:	927.370 TSF	92	23	114	50	81	130	1,478
Total Truck Trips (PCE):		23	29	52	15	15	30	606
Building 2 Total Trips (PCE)[2]		**115**	**52**	**166**	**65**	**96**	**160**	**2,084**
Building 3:								
Passenger Cars:	548.730 TSF	54	13	67	30	47	77	876
Total Truck Trips (PCE):		12	16	28	9	9	18	360
Building 3 Total Trips (PCE)[2]		**66**	**29**	**95**	**39**	**56**	**95**	**1,236**
Building 4:								
Passenger Cars:	265.200 TSF	26	7	32	14	24	38	422
Total Truck Trips (PCE):		7	6	13	4	4	8	178
Building 4 Total Trips (PCE)[2]		**33**	**13**	**45**	**18**	**28**	**46**	**600**
Building 5:								
Passenger Cars:	425.580 TSF	42	10	52	23	37	60	678
Total Truck Trips (PCE):		11	13	24	7	8	15	282
Building 5 Total Trips (PCE)[2]		**53**	**23**	**76**	**30**	**45**	**75**	**960**
Building 6:								
Passenger Cars:	492.140 TSF	49	11	60	27	43	70	786
Total Truck Trips (PCE):		12	15	27	9	8	17	324
Building 6 Total Trips (PCE)[2]		**61**	**26**	**87**	**36**	**51**	**87**	**1,110**
Building 7:								
Passenger Cars:	205.500 TSF	20	5	26	11	18	29	328
Total Truck Trips (PCE):		5	5	10	3	3	6	136
Building 7 Total Trips (PCE)[2]		**25**	**10**	**36**	**14**	**21**	**35**	**464**
Building 8:								
Passenger Cars:	535.350 TSF	53	12	65	29	46	75	854
Total Truck Trips (PCE):		12	16	28	9	8	17	352
Building 8 Total Trips (PCE)[2]		**65**	**28**	**93**	**38**	**54**	**92**	**1,206**
Building 9:								
Passenger Cars:	521.920 TSF	52	12	64	28	45	74	832
Total Truck Trips (PCE):		12	16	28	9	8	17	344
Building 9 Total Trips (PCE)[2]		**64**	**28**	**92**	**37**	**53**	**91**	**1,176**
Passenger Car Total		423	102	524	231	373	604	6,828
Truck Total (PCE)		104	128	232	70	68	138	2,818
Project Total Trips (PCE)[2]		**527**	**230**	**756**	**301**	**441**	**742**	**9,646**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

TRIP DISTRIBUTION

The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. Exhibit 3 illustrates the truck trip distribution patterns for Existing plus Project, Opening Year Cumulative and Horizon Year conditions. As shown on Exhibit 4, trucks are anticipated to utilize designated truck routes to reach regional State highways such as the I-10, SR-60, and I-15 Freeways. Exhibit 5 illustrates the passenger car trip distribution patterns. Detailed Project trip distributions for each building are provided in Attachment B.

EXHIBIT 4: PROJECT (TRUCK) TRIP DISTRIBUTION

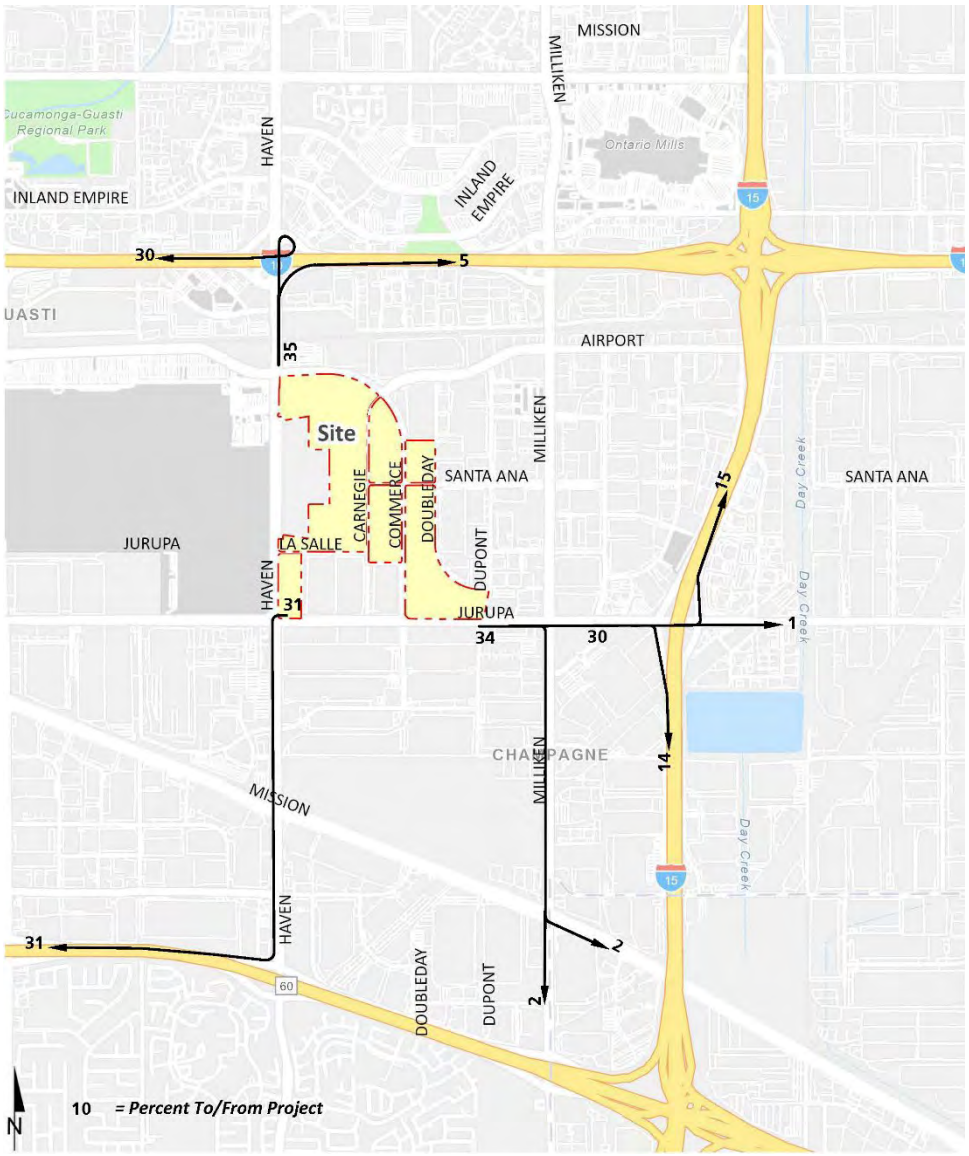
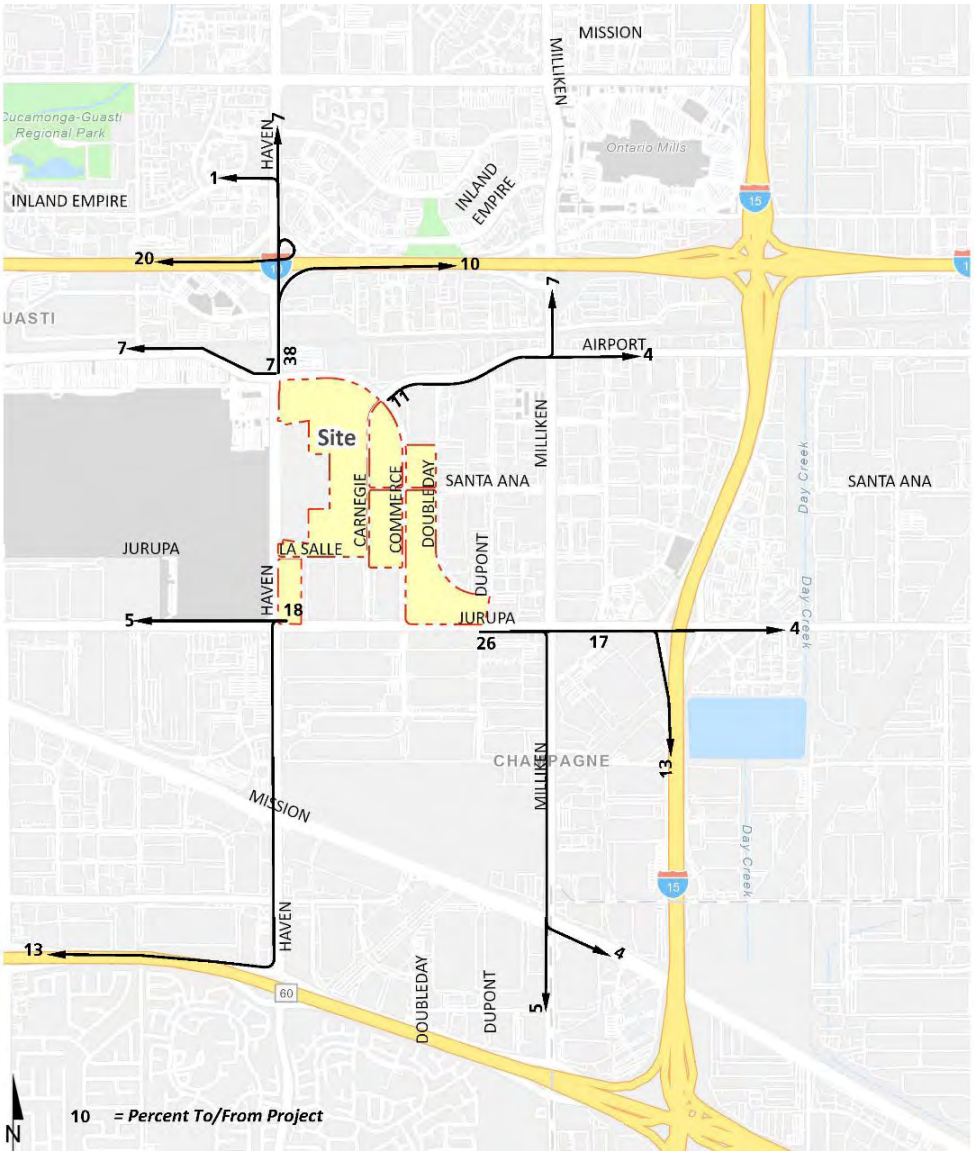


EXHIBIT 5: PROJECT (PASSENGER CAR) TRIP DISTRIBUTION



INTERSECTION ANALYSIS LOCATIONS

Exhibit 3 depicts the recommended intersection analysis locations, based upon the Project trip generation and trip distribution patterns included as part of this letter. The recommended intersection analysis locations are based on the highest Project traffic contribution presented for either Opening Year Cumulative or Horizon Year scenarios (i.e., 50 peak hour trip criteria). Table 4 also includes a summary of the study area intersections.

TABLE 4: INTERSECTION ANALYSIS LOCATIONS

#	Intersection	#	Intersection
1	Haven Av. & Inland Empire Bl.	30	Carnegie Av. & Driveway 18
2	Haven Av. & I-10 WB Ramps	31	Carnegie Av. & Jurupa Av.
3	Haven Av. & I-10 EB Ramps	32	Driveway 19 & Santa Ana St.
4	Haven Av. & E. Guasti Rd.	33	Driveway 20 & Santa Ana St.
5	Haven Av. & E. Airport Dr.	34	Commerce Pkwy. & Driveway 21
6	Haven Av. & Driveway 1	35	Commerce Pkwy. & Driveway 22
7	Haven Av. & Driveway 2	36	Commerce Pkwy. & Driveway 23
8	Haven Av. & La Salle St.	37	Commerce Pkwy. & Santa Ana St.
9	Haven Av. & Jurupa Av.	38	Commerce Pkwy. & Driveway 24
10	Haven Av. & Mission Bl.	39	Commerce Pkwy. & Driveway 25
11	Haven Av. & SR-60 WB Ramps	40	Commerce Pkwy. & Driveway 26
12	Haven Av. & SR-60 EB Ramps	41	Commerce Pkwy. & Jurupa Av.
13	Driveway 3 & E. Airport Dr.	42	Driveway 27 & Santa Ana St.
14	Driveway 4 & E. Airport Dr.	43	Driveway 28 & Santa Ana St.
15	Driveway 5 & E. Airport Dr.	44	Double Day Av. & Santa Ana St.
16	Driveway 6 & La Salle St.	45	Double Day Av. & Driveway 29
17	Driveway 7 & La Salle St.	46	Driveway 30 & Double Day Av.
18	Driveway 8 & La Salle St.	47	Dupont Av. & Santa Ana St.
19	Driveway 9 & Jurupa Av.	48	Dupont Av. & Double Day Av.
20	Driveway 10 & Jurupa Av.	49	Dupont Av. & Driveway 31
21	Driveway 11 & La Salle St.	50	Dupont Av. & Jurupa Av.
22	Carnegie Av. & E. Airport Dr.	51	Milliken Av. & E. Airport Dr.
23	Carnegie Av. & Driveway 12	52	Milliken Av. & Jurupa Av.
24	Carnegie Av. & Driveway 13	53	Milliken Av. & Mission Bl.
25	Carnegie Av. & Driveway 14	54	I-15 SB Ramps & Jurupa Av.
26	Carnegie Av. & Driveway 15/Santa Ana St.	55	I-15 NB Ramps & Jurupa Av.
27	Carnegie Av. & Driveway 16		
28	Carnegie Av. & Driveway 17		
29	Carnegie Av. & La Salle St.		

VEHICLE MILES TRAVELLED (VMT)

The VMT thresholds and methodology outlined in the City of Ontario's May 2020 VMT guidelines will be utilized to conduct the VMT analysis for the Project. The VMT analysis will be prepared and submitted under separate cover.

TRAFFIC SIGNAL WARRANTS

Traffic signal warrant analysis will be conducted for all unsignalized full access driveways/intersections following the guidance of the California Manual on Uniform Control Devices (CA MUTCD).

OPEN ITEMS – CUMULATIVE DEVELOPMENT PROJECTS

It is requested that the City of Ontario provide a current list of cumulative development projects for inclusion in our traffic study.

OPEN ITEMS – SIGNAL TIMING

It is requested that the City provide traffic signal timing for any City controlled intersections that we should take into consideration in our operations analysis.

If you have any questions, please contact me directly at (949) 861-0177.

Respectfully submitted,

URBAN CROSSROADS, INC.

Charlene So

Charlene So, PE
Associate Principal

ATTACHMENT A: PROJECT TRIP GENERATION SUMMARIES BY BUILDING

Table A-1

Project Trip Generation Summary (Building 1)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	306.561	TSF							
Passenger Cars:			32	8	40	18	28	46	484
2-axle Trucks:			1	0	1	0	0	1	12
3-axle Trucks:			1	1	1	0	0	1	16
4+-axle Trucks:			2	2	4	1	1	2	44
Total Truck Trips (Actual Vehicles):			4	3	7	1	1	2	72
Total Trips (Actual Vehicles)[2]			**36**	**11**	**47**	**19**	**29**	**48**	**556**
High-Cube Cold Storage (15%)	54.099	TSF							
Passenger Cars:			3	1	4	1	4	5	90
2-axle Trucks:			0	0	0	0	0	0	14
3-axle Trucks:			0	0	0	0	0	0	4
4+-axle Trucks:			0	1	1	0	0	0	6
Total Truck Trips (Actual Vehicles):			0	1	1	0	0	0	24
Total Trips (Actual Vehicles)[2]			**3**	**2**	**5**	**1**	**4**	**5**	**114**
Passenger Car Total			35	9	44	19	32	51	574
Truck Total (Actual Vehicles)			4	4	8	1	1	2	96
Building 1 Total Trips (Actual Vehicles)[2]			**39**	**13**	**52**	**20**	**33**	**53**	**670**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	306.561	TSF							
Passenger Cars:			32	8	40	18	28	46	484
2-axle Trucks:			1	1	2	0	0	1	18
3-axle Trucks:			2	2	3	1	1	2	36
4+-axle Trucks:			6	6	12	3	3	6	132
Total Truck Trips (PCE):			9	9	18	4	4	8	186
Total Trips (PCE)[2]			**41**	**17**	**58**	**22**	**32**	**54**	**670**
High-Cube Cold Storage (15%)	54.099	TSF							
Passenger Cars:			3	1	4	1	4	5	90
2-axle Trucks:			0	1	1	0	0	0	22
3-axle Trucks:			0	0	0	0	0	0	10
4+-axle Trucks:			1	2	3	1	1	2	18
Total Truck Trips (PCE):			1	3	4	1	1	2	50
Total Trips (PCE)[2]			**4**	**4**	**8**	**2**	**5**	**7**	**140**
Passenger Car Total			35	9	44	19	32	51	574
Truck Total (PCE)			10	12	22	5	5	10	236
Building 1 Total Trips (PCE)[2]			**45**	**21**	**66**	**24**	**37**	**61**	**810**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table A-2

Project Trip Generation Summary (Building 2)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	788.265	TSF							
Passenger Cars:			83	20	102	47	72	118	1,246
2-axle Trucks:			2	1	3	1	1	1	30
3-axle Trucks:			2	2	3	1	1	2	38
4+-axle Trucks:			5	5	10	2	3	5	114
Total Truck Trips (Actual Vehicles):			9	8	17	4	5	9	182
Total Trips (Actual Vehicles)[2]			**92**	**28**	**119**	**51**	**77**	**127**	**1,428**
High-Cube Cold Storage (15%)	139.106	TSF							
Passenger Cars:			9	3	12	3	9	12	232
2-axle Trucks:			0	1	1	1	1	2	36
3-axle Trucks:			0	0	0	0	0	0	12
4+-axle Trucks:			1	2	3	1	1	2	16
Total Truck Trips (Actual Vehicles):			1	3	4	2	2	4	64
Total Trips (Actual Vehicles)[2]			**10**	**6**	**16**	**5**	**11**	**16**	**296**
Passenger Car Total			92	23	114	50	81	130	1,478
Truck Total (Actual Vehicles)			10	11	21	6	7	13	246
Building 2 Total Trips (Actual Vehicles)[2]			**102**	**34**	**135**	**56**	**88**	**143**	**1,724**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	788.265	TSF							
Passenger Cars:			83	20	102	47	72	118	1,246
2-axle Trucks:			2	2	4	1	1	2	46
3-axle Trucks:			4	4	8	2	2	4	94
4+-axle Trucks:			14	15	30	7	8	15	340
Total Truck Trips (PCE):			20	21	41	10	11	21	480
Total Trips (PCE)[2]			**103**	**41**	**143**	**57**	**83**	**139**	**1,726**
High-Cube Cold Storage (15%)	139.106	TSF							
Passenger Cars:			9	3	12	3	9	12	232
2-axle Trucks:			1	2	3	1	1	2	54
3-axle Trucks:			0	1	1	1	0	1	24
4+-axle Trucks:			2	5	7	3	3	6	48
Total Truck Trips (PCE):			3	8	11	5	4	9	126
Total Trips (PCE)[2]			**12**	**11**	**23**	**8**	**13**	**21**	**358**
Passenger Car Total			92	23	114	50	81	130	1,478
Truck Total (PCE)			23	29	52	15	15	30	606
Building 2 Total Trips (PCE)[2]			**115**	**52**	**166**	**65**	**96**	**160**	**2,084**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table A-3

Project Trip Generation Summary (Building 3)

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:								
High-Cube Fulfillment (Non-Sort Facility) (85%)	466.421 TSF							
Passenger Cars:		49	12	61	28	42	70	738
2-axle Trucks:		1	1	2	0	0	1	18
3-axle Trucks:		1	1	2	0	0	1	22
4+-axle Trucks:		3	3	6	1	2	3	68
Total Truck Trips (Actual Vehicles):		5	5	10	1	2	3	108
Total Trips (Actual Vehicles)[2]		**54**	**17**	**71**	**29**	**44**	**73**	**846**
High-Cube Cold Storage (15%)	82.310 TSF							
Passenger Cars:		5	1	6	2	5	7	138
2-axle Trucks:		0	1	1	0	0	0	22
3-axle Trucks:		0	0	0	0	0	0	8
4+-axle Trucks:		0	1	1	1	1	2	10
Total Truck Trips (Actual Vehicles):		0	2	2	1	1	2	40
Total Trips (Actual Vehicles)[2]		**5**	**3**	**8**	**3**	**6**	**9**	**178**
Passenger Car Total		54	13	67	30	47	77	876
Truck Total (Actual Vehicles)		5	7	12	2	3	5	148
Building 3 Total Trips (Actual Vehicles)[2]		**59**	**20**	**79**	**32**	**50**	**82**	**1,024**
Passenger Car Equivalent (PCE):								
High-Cube Fulfillment (Non-Sort Facility) (85%)	466.421 TSF							
Passenger Cars:		49	12	61	28	42	70	738
2-axle Trucks:		1	1	2	1	0	1	28
3-axle Trucks:		2	2	5	1	1	2	56
4+-axle Trucks:		8	9	18	4	5	9	202
Total Truck Trips (PCE):		11	12	23	6	6	12	286
Total Trips (PCE)[2]		**60**	**24**	**84**	**34**	**48**	**82**	**1,024**
High-Cube Cold Storage (15%)	82.310 TSF							
Passenger Cars:		5	1	6	2	5	7	138
2-axle Trucks:		0	1	1	1	1	2	32
3-axle Trucks:		0	0	0	0	0	0	14
4+-axle Trucks:		1	3	4	2	2	4	28
Total Truck Trips (PCE):		1	4	5	3	3	6	74
Total Trips (PCE)[2]		**6**	**5**	**11**	**5**	**8**	**13**	**212**
Passenger Car Total		54	13	67	30	47	77	876
Truck Total (PCE)		12	16	28	9	9	18	360
Building 3 Total Trips (PCE)[2]		**66**	**29**	**95**	**39**	**56**	**95**	**1,236**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table A-4

Project Trip Generation Summary (Building 4)

Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:								
High-Cube Fulfillment (Non-Sort Facility) (85%)	225.420 TSF							
Passenger Cars:		24	6	29	13	21	34	356
2-axle Trucks:		0	0	1	0	0	0	10
3-axle Trucks:		0	0	1	0	0	0	12
4+-axle Trucks:		1	1	3	1	1	1	32
Total Truck Trips (Actual Vehicles):		1	1	2	1	1	2	54
Total Trips (Actual Vehicles)[2]		**25**	**7**	**31**	**14**	**22**	**36**	**410**
High-Cube Cold Storage (15%)	39.780 TSF							
Passenger Cars:		2	1	3	1	3	4	66
2-axle Trucks:		0	0	0	0	0	0	10
3-axle Trucks:		0	0	0	0	0	0	4
4+-axle Trucks:		0	0	0	0	0	0	4
Total Truck Trips (Actual Vehicles):		0	0	0	0	0	0	18
Total Trips (Actual Vehicles)[2]		**2**	**1**	**3**	**1**	**3**	**4**	**84**
Passenger Car Total		26	7	32	14	24	38	422
Truck Total (Actual Vehicles)		1	1	2	1	1	2	72
Building 4 Total Trips (Actual Vehicles)[2]		**27**	**8**	**34**	**15**	**25**	**40**	**494**
Passenger Car Equivalent (PCE):								
High-Cube Fulfillment (Non-Sort Facility) (85%)	225.420 TSF							
Passenger Cars:		24	6	29	13	21	34	356
2-axle Trucks:		1	0	1	0	0	1	14
3-axle Trucks:		1	1	2	1	1	1	28
4+-axle Trucks:		4	4	8	2	2	4	98
Total Truck Trips (PCE):		6	5	11	3	3	6	140
Total Trips (PCE)[2]		**30**	**11**	**40**	**16**	**24**	**40**	**496**
High-Cube Cold Storage (15%)	39.780 TSF							
Passenger Cars:		2	1	3	1	3	4	66
2-axle Trucks:		0	0	0	0	0	0	16
3-axle Trucks:		0	0	0	0	0	0	8
4+-axle Trucks:		1	1	2	1	1	2	14
Total Truck Trips (PCE):		1	1	2	1	1	2	38
Total Trips (PCE)[2]		**3**	**2**	**5**	**2**	**4**	**6**	**104**
Passenger Car Total		26	7	32	14	24	38	422
Truck Total (PCE)		7	6	13	4	4	8	178
Building 4 Total Trips (PCE)[2]		**33**	**13**	**45**	**18**	**28**	**46**	**600**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table A-5

Project Trip Generation Summary (Building 5)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	361.743	TSF							
Passenger Cars:			38	9	47	21	33	54	572
2-axle Trucks:			1	0	1	0	0	1	14
3-axle Trucks:			1	1	1	0	0	1	18
4+-axle Trucks:			2	2	5	1	1	2	52
Total Truck Trips (Actual Vehicles):			4	3	7	1	1	2	84
Total Trips (Actual Vehicles)[2]			**42**	**12**	**54**	**22**	**34**	**56**	**656**
High-Cube Cold Storage (15%)	63.837	TSF							
Passenger Cars:			4	1	5	2	4	6	106
2-axle Trucks:			0	0	0	0	0	0	18
3-axle Trucks:			0	0	0	0	0	0	6
4+-axle Trucks:			0	1	1	1	1	2	8
Total Truck Trips (Actual Vehicles):			0	1	1	1	1	2	32
Total Trips (Actual Vehicles)[2]			**4**	**2**	**6**	**3**	**5**	**8**	**138**
Passenger Car Total			42	10	52	23	37	60	678
Truck Total (Actual Vehicles)			4	4	8	2	2	4	116
Building 5 Total Trips (Actual Vehicles)[2]			**46**	**14**	**60**	**25**	**39**	**64**	**794**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	361.743	TSF							
Passenger Cars:			38	9	47	21	33	54	572
2-axle Trucks:			1	1	2	1	0	1	22
3-axle Trucks:			2	2	4	1	1	2	44
4+-axle Trucks:			7	7	14	3	4	7	156
Total Truck Trips (PCE):			10	10	20	5	5	10	222
Total Trips (PCE)[2]			**48**	**19**	**67**	**26**	**38**	**64**	**794**
High-Cube Cold Storage (15%)	63.837	TSF							
Passenger Cars:			4	1	5	2	4	6	106
2-axle Trucks:			0	1	1	0	1	1	26
3-axle Trucks:			0	0	0	0	0	0	12
4+-axle Trucks:			1	2	3	2	2	4	22
Total Truck Trips (PCE):			1	3	4	2	3	5	60
Total Trips (PCE)[2]			**5**	**4**	**9**	**4**	**7**	**11**	**166**
Passenger Car Total			42	10	52	23	37	60	678
Truck Total (PCE)			11	13	24	7	8	15	282
Building 5 Total Trips (PCE)[2]			**53**	**23**	**76**	**30**	**45**	**75**	**960**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table A-6

Project Trip Generation Summary (Building 6)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	418.319	TSF							
Passenger Cars:			44	10	54	25	38	63	662
2-axle Trucks:			1	1	1	0	0	1	16
3-axle Trucks:			1	1	2	0	0	1	20
4+-axle Trucks:			3	3	5	1	1	3	60
Total Truck Trips (Actual Vehicles):			5	5	10	1	1	2	96
Total Trips (Actual Vehicles)[2]			**49**	**15**	**64**	**26**	**39**	**65**	**758**
High-Cube Cold Storage (15%)	73.821	TSF							
Passenger Cars:			5	1	6	2	5	7	124
2-axle Trucks:			0	1	1	0	0	0	20
3-axle Trucks:			0	0	0	0	0	0	6
4+-axle Trucks:			0	1	1	1	1	2	8
Total Truck Trips (Actual Vehicles):			0	2	2	1	1	2	34
Total Trips (Actual Vehicles)[2]			**5**	**3**	**8**	**3**	**6**	**9**	**158**
Passenger Car Total			49	11	60	27	43	70	786
Truck Total (Actual Vehicles)			5	7	12	2	2	4	130
Building 6 Total Trips (Actual Vehicles)[2]			**54**	**18**	**72**	**29**	**45**	**74**	**916**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	418.319	TSF							
Passenger Cars:			44	10	54	25	38	63	662
2-axle Trucks:			1	1	2	1	0	1	24
3-axle Trucks:			2	2	4	1	1	2	50
4+-axle Trucks:			8	8	16	4	4	8	182
Total Truck Trips (PCE):			11	11	22	6	5	11	256
Total Trips (PCE)[2]			**55**	**21**	**76**	**31**	**43**	**74**	**918**
High-Cube Cold Storage (15%)	73.821	TSF							
Passenger Cars:			5	1	6	2	5	7	124
2-axle Trucks:			0	1	1	1	1	2	30
3-axle Trucks:			0	0	0	0	0	0	12
4+-axle Trucks:			1	3	4	2	2	4	26
Total Truck Trips (PCE):			1	4	5	3	3	6	68
Total Trips (PCE)[2]			**6**	**5**	**11**	**5**	**8**	**13**	**192**
Passenger Car Total			49	11	60	27	43	70	786
Truck Total (PCE)			12	15	27	9	8	17	324
Building 6 Total Trips (PCE)[2]			**61**	**26**	**87**	**36**	**51**	**87**	**1,110**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table A-7

Project Trip Generation Summary (Building 7)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	174.675	TSF							
Passenger Cars:			18	4	23	10	16	26	276
2-axle Trucks:			0	0	1	0	0	0	8
3-axle Trucks:			0	0	1	0	0	0	8
4+-axle Trucks:			1	1	2	1	1	1	26
Total Truck Trips (Actual Vehicles):			1	1	2	1	1	2	42
Total Trips (Actual Vehicles)[2]			**19**	**5**	**25**	**11**	**17**	**28**	**318**
High-Cube Cold Storage (15%)	30.825	TSF							
Passenger Cars:			2	1	3	1	2	3	52
2-axle Trucks:			0	0	0	0	0	0	8
3-axle Trucks:			0	0	0	0	0	0	4
4+-axle Trucks:			0	0	0	0	0	0	4
Total Truck Trips (Actual Vehicles):			0	0	0	0	0	0	16
Total Trips (Actual Vehicles)[2]			**2**	**1**	**3**	**1**	**2**	**3**	**68**
Passenger Car Total			20	5	26	11	18	29	328
Truck Total (Actual Vehicles)			1	1	2	1	1	2	58
Building 7 Total Trips (Actual Vehicles)[2]			**21**	**6**	**28**	**12**	**19**	**31**	**386**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	174.675	TSF							
Passenger Cars:			18	4	23	10	16	26	276
2-axle Trucks:			1	0	1	0	0	0	10
3-axle Trucks:			1	1	2	0	0	1	22
4+-axle Trucks:			3	3	7	2	2	3	76
Total Truck Trips (PCE):			5	4	9	2	2	4	108
Total Trips (PCE)[2]			**23**	**8**	**32**	**12**	**18**	**30**	**384**
High-Cube Cold Storage (15%)	30.825	TSF							
Passenger Cars:			2	1	3	1	2	3	52
2-axle Trucks:			0	0	0	0	0	0	12
3-axle Trucks:			0	0	0	0	0	0	6
4+-axle Trucks:			0	1	1	1	1	2	10
Total Truck Trips (PCE):			0	1	1	1	1	2	28
Total Trips (PCE)[2]			**2**	**2**	**4**	**2**	**3**	**5**	**80**
Passenger Car Total			20	5	26	11	18	29	328
Truck Total (PCE)			5	5	10	3	3	6	136
Building 7 Total Trips (PCE)[2]			**25**	**10**	**36**	**14**	**21**	**35**	**464**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table A-8

Project Trip Generation Summary (Building 8)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	455.048	TSF							
Passenger Cars:			48	11	59	27	41	68	720
2-axle Trucks:			1	1	2	0	0	1	18
3-axle Trucks:			1	1	2	0	0	1	22
4+-axle Trucks:			3	3	6	1	1	3	66
Total Truck Trips (Actual Vehicles):			5	5	10	1	1	2	106
Total Trips (Actual Vehicles)[2]			**53**	**16**	**69**	**28**	**42**	**70**	**826**
High-Cube Cold Storage (15%)	80.303	TSF							
Passenger Cars:			5	1	6	2	5	7	134
2-axle Trucks:			0	1	1	0	0	0	22
3-axle Trucks:			0	0	0	0	0	0	8
4+-axle Trucks:			0	1	1	1	1	2	10
Total Truck Trips (Actual Vehicles):			0	2	2	1	1	2	40
Total Trips (Actual Vehicles)[2]			**5**	**3**	**8**	**3**	**6**	**9**	**174**
Passenger Car Total			53	12	65	29	46	75	854
Truck Total (Actual Vehicles)			5	7	12	2	2	4	146
Building 8 Total Trips (Actual Vehicles)[2]			**58**	**19**	**77**	**31**	**48**	**79**	**1,000**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	455.048	TSF							
Passenger Cars:			48	11	59	27	41	68	720
2-axle Trucks:			1	1	2	1	0	1	26
3-axle Trucks:			2	2	5	1	1	2	54
4+-axle Trucks:			8	9	17	4	4	9	198
Total Truck Trips (PCE):			11	12	23	6	5	11	278
Total Trips (PCE)[2]			**59**	**23**	**82**	**33**	**46**	**79**	**998**
High-Cube Cold Storage (15%)	80.303	TSF							
Passenger Cars:			5	1	6	2	5	7	134
2-axle Trucks:			0	1	1	1	1	2	32
3-axle Trucks:			0	0	0	0	0	0	14
4+-axle Trucks:			1	3	4	2	2	4	28
Total Truck Trips (PCE):			1	4	5	3	3	6	74
Total Trips (PCE)[2]			**6**	**5**	**11**	**5**	**8**	**13**	**208**
Passenger Car Total			53	12	65	29	46	75	854
Truck Total (PCE)			12	16	28	9	8	17	352
Building 8 Total Trips (PCE)[2]			**65**	**28**	**93**	**38**	**54**	**92**	**1,206**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table A-9

Project Trip Generation Summary (Building 9)

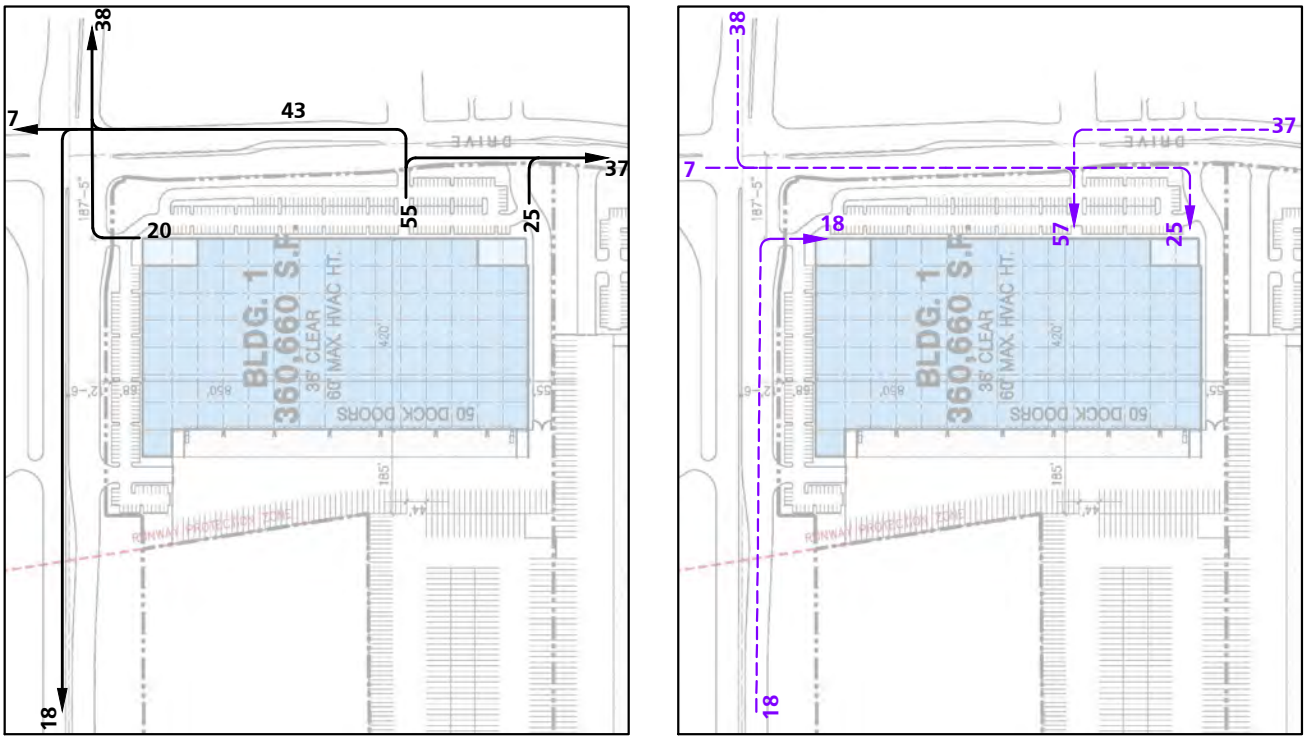
Land Use	Quantity Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:								
High-Cube Fulfillment (Non-Sort Facility) (85%)	443.632 TSF							
Passenger Cars:		47	11	58	26	40	67	702
2-axle Trucks:		1	1	1	0	0	1	18
3-axle Trucks:		1	1	2	0	0	1	22
4+-axle Trucks:		3	3	6	1	1	3	64
Total Truck Trips (Actual Vehicles):		5	5	10	1	1	2	104
Total Trips (Actual Vehicles)[2]		**52**	**16**	**68**	**27**	**41**	**69**	**806**
High-Cube Cold Storage (15%)	78.288 TSF							
Passenger Cars:		5	1	6	2	5	7	130
2-axle Trucks:		0	1	1	0	0	0	20
3-axle Trucks:		0	0	0	0	0	0	6
4+-axle Trucks:		0	1	1	1	1	2	10
Total Truck Trips (Actual Vehicles):		0	2	2	1	1	2	36
Total Trips (Actual Vehicles)[2]		**5**	**3**	**8**	**3**	**6**	**9**	**166**
Passenger Car Total		52	12	64	28	45	74	832
Truck Total (Actual Vehicles)		5	7	12	2	2	4	140
Building 9 Total Trips (Actual Vehicles)[2]		**57**	**19**	**76**	**30**	**47**	**78**	**972**
Passenger Car Equivalent (PCE):								
High-Cube Fulfillment (Non-Sort Facility) (85%)	443.632 TSF							
Passenger Cars:		47	11	58	26	40	67	702
2-axle Trucks:		1	1	2	1	0	1	26
3-axle Trucks:		2	2	5	1	1	2	54
4+-axle Trucks:		8	9	17	4	4	8	192
Total Truck Trips (PCE):		11	12	23	6	5	11	272
Total Trips (PCE)[2]		**58**	**23**	**81**	**32**	**45**	**78**	**974**
High-Cube Cold Storage (15%)	78.288 TSF							
Passenger Cars:		5	1	6	2	5	7	130
2-axle Trucks:		0	1	1	1	1	2	32
3-axle Trucks:		0	0	0	0	0	0	14
4+-axle Trucks:		1	3	4	2	2	4	26
Total Truck Trips (PCE):		1	4	5	3	3	6	72
Total Trips (PCE)[2]		**6**	**5**	**11**	**5**	**8**	**13**	**202**
Passenger Car Total		52	12	64	28	45	74	832
Truck Total (PCE)		12	16	28	9	8	17	344
Building 9 Total Trips (PCE)[2]		**64**	**28**	**92**	**37**	**53**	**91**	**1,176**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

ATTACHMENT B: DETAILED DISTRIBUTIONS BY BUILDING

Cars

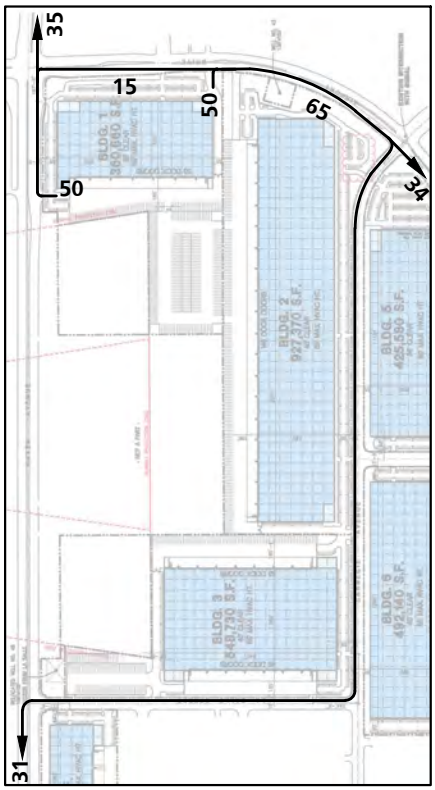


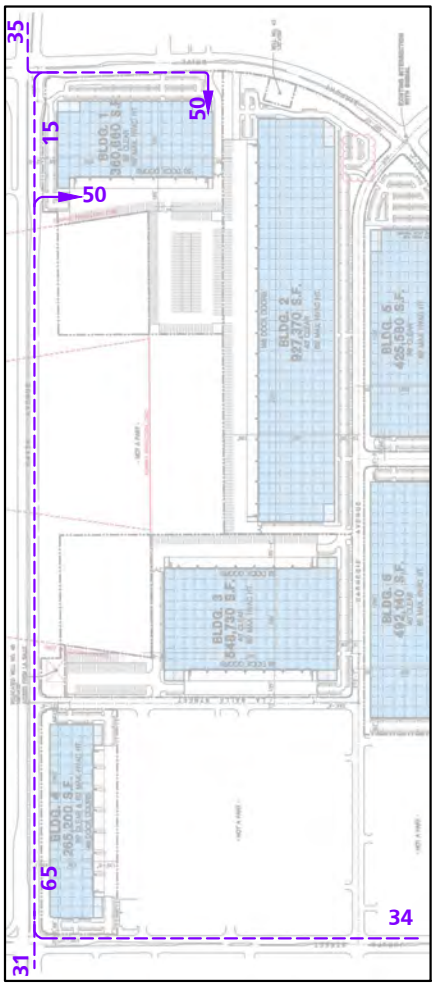
10 = *Percent To/From Project*

= *Outbound*

= *Inbound*

Trucks





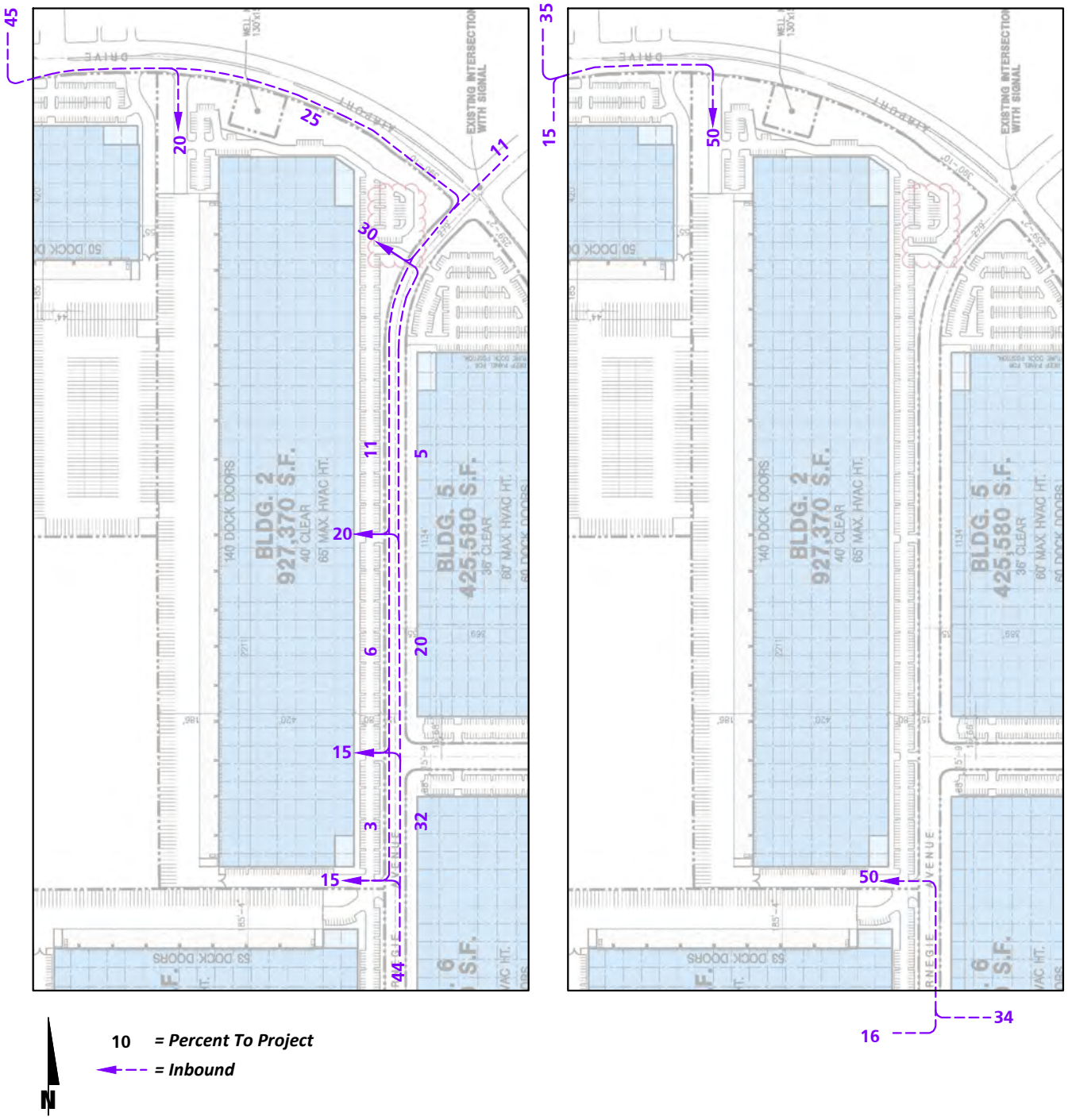
10 *= Percent To/From Project*

= Outbound

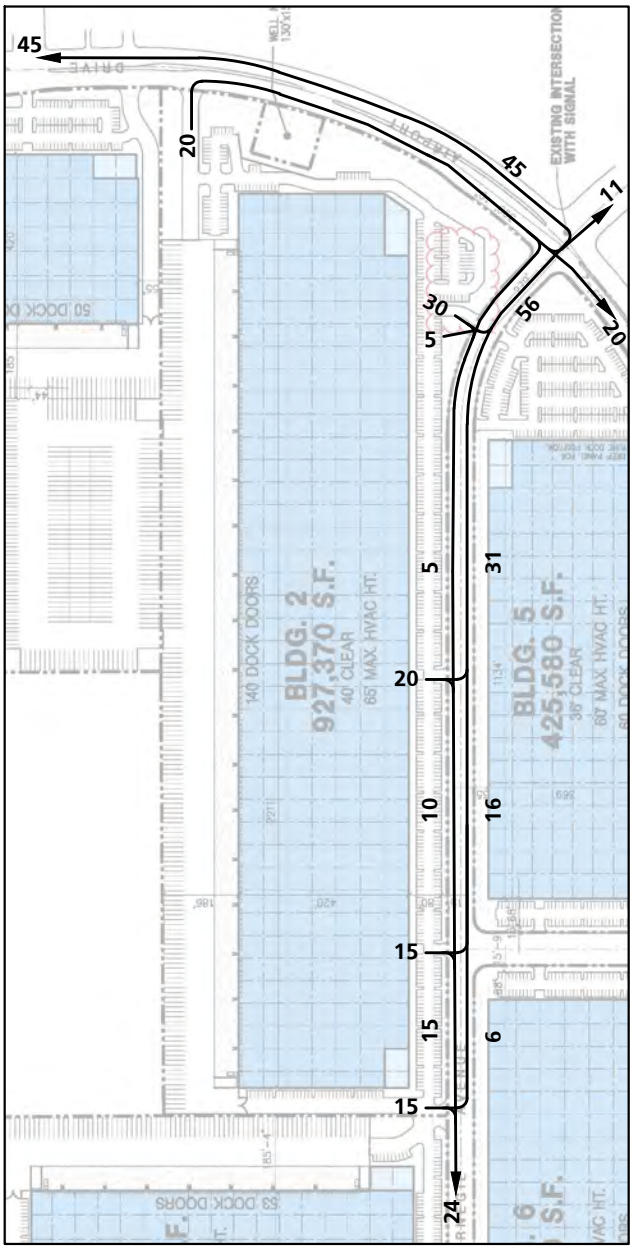
= Inbound

Cars

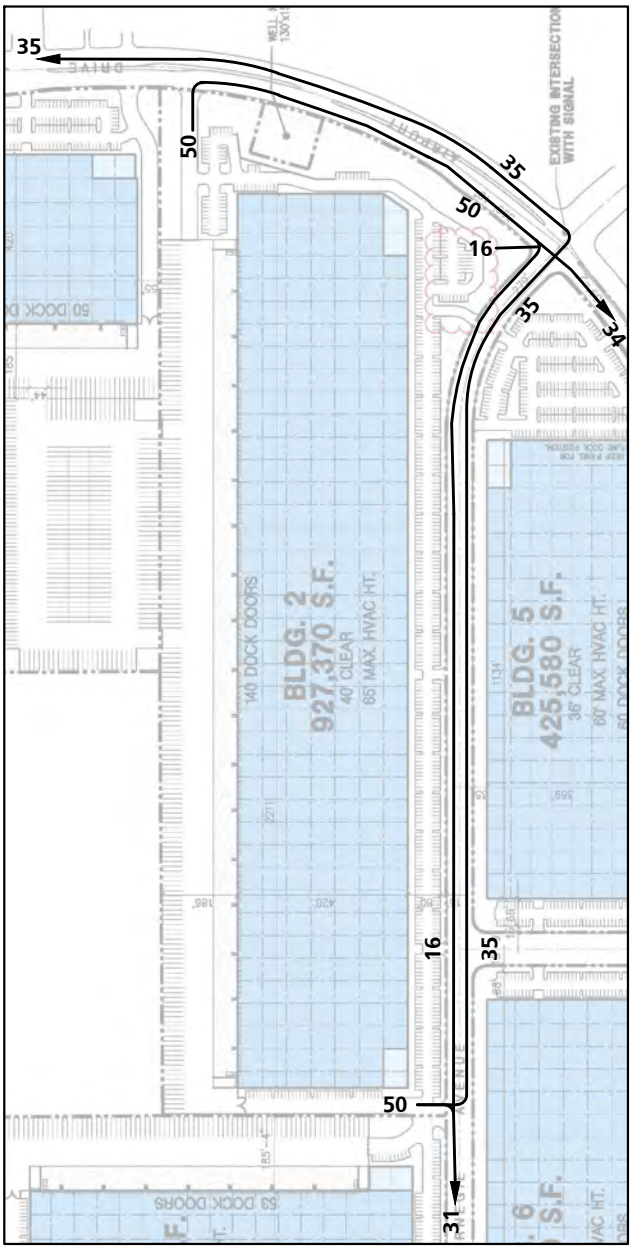
Trucks


45
20
25
11
30
BLDG. 2
927,370 S.F.
140 DOCK DOORS
40' CLEAR
85' MAX. HVAC HT.
BLDG. 5
425,580 S.F.
36' CLEAR
60' MAX. HVAC HT.
EXISTING INTERSECTION WITH SIGNAL
11
5
20
6
20
15
3
32
15
44
35
15
50
50
16
34
10 = Percent To Project
= Inbound
N

Cars



Trucks

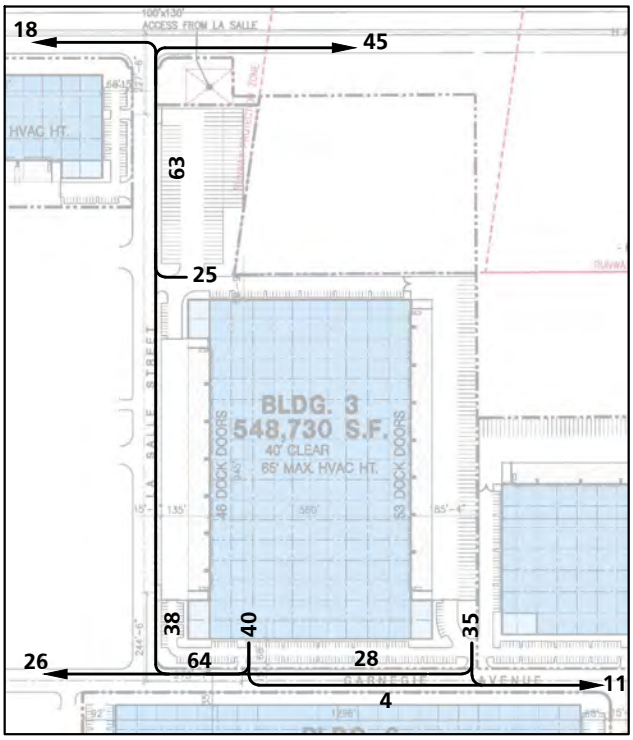


10 = *Percent To/From Project*

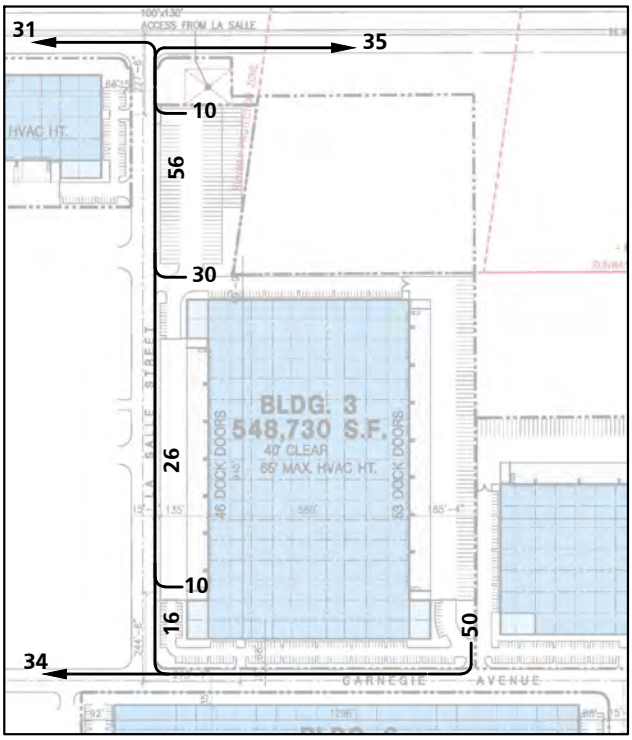
= *Outbound*

N

Cars



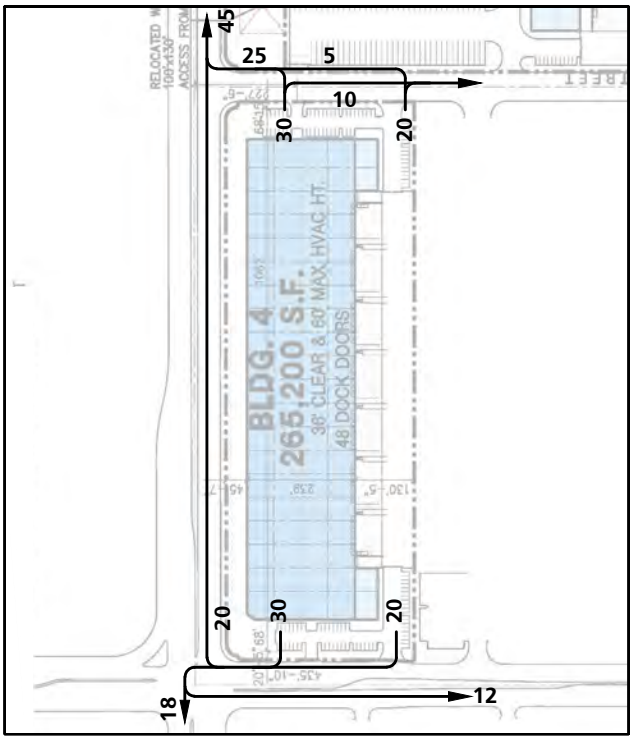
Trucks



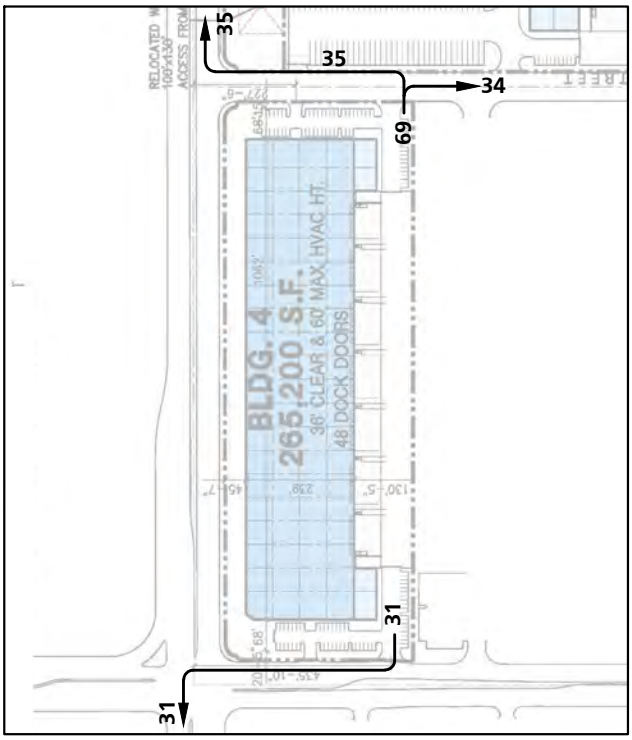
N

10 *= Percent To/From Project*

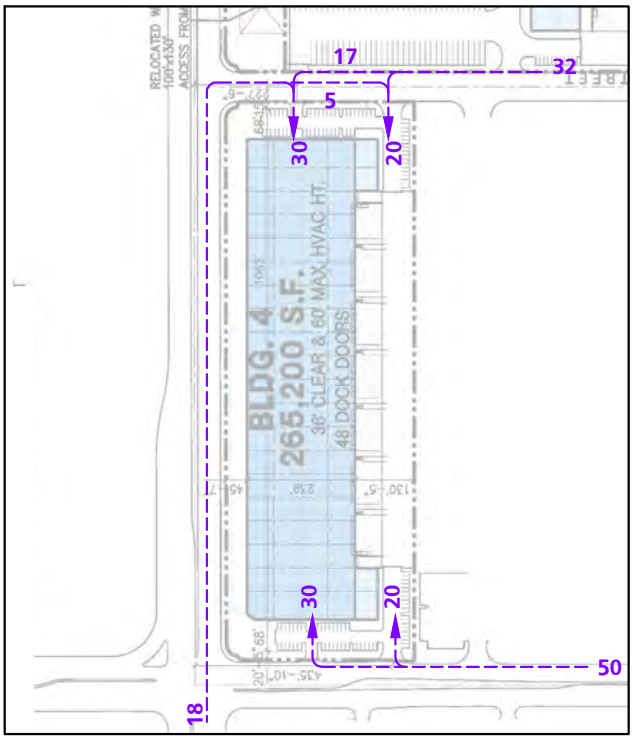
Cars



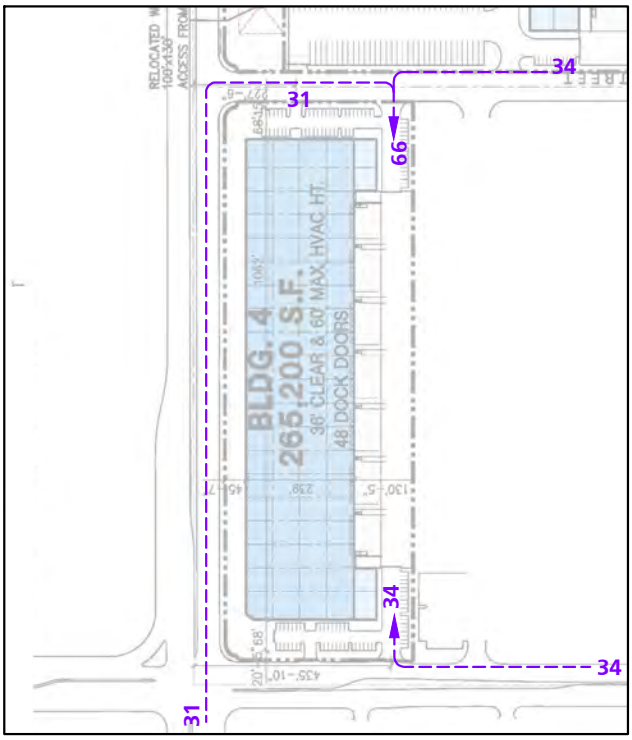
Trucks



Cars



Trucks



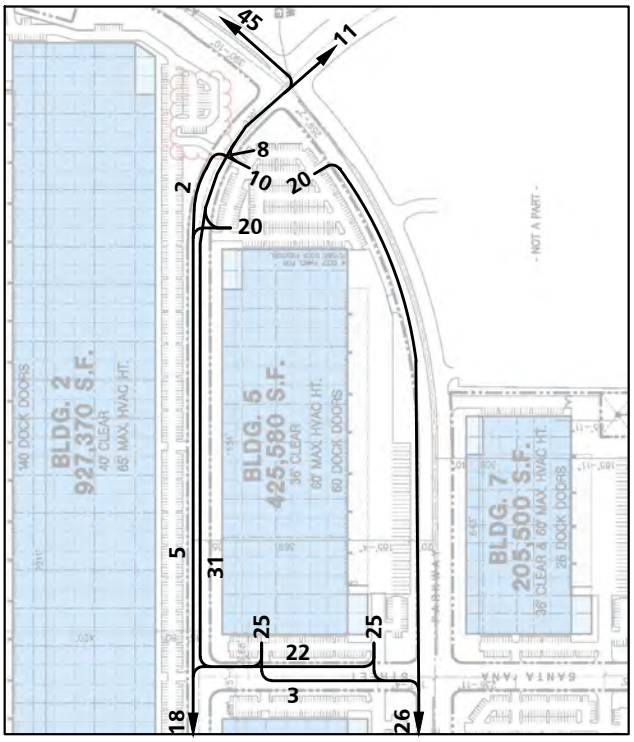
N

10 = *Percent To/From Project*

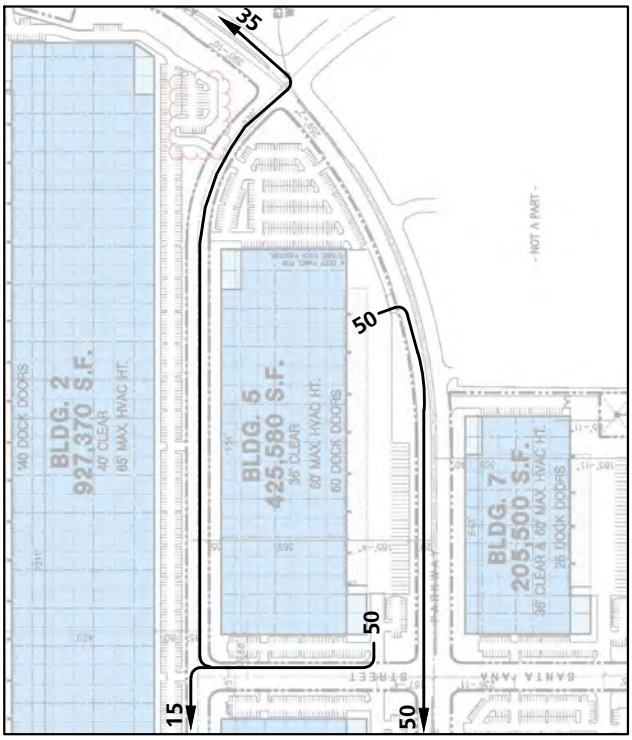
= *Outbound*

= *Inbound*

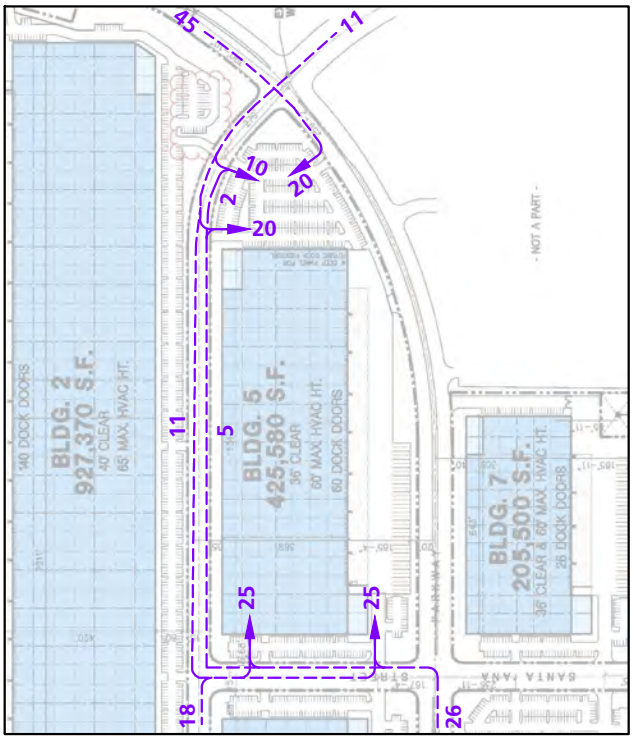
Cars



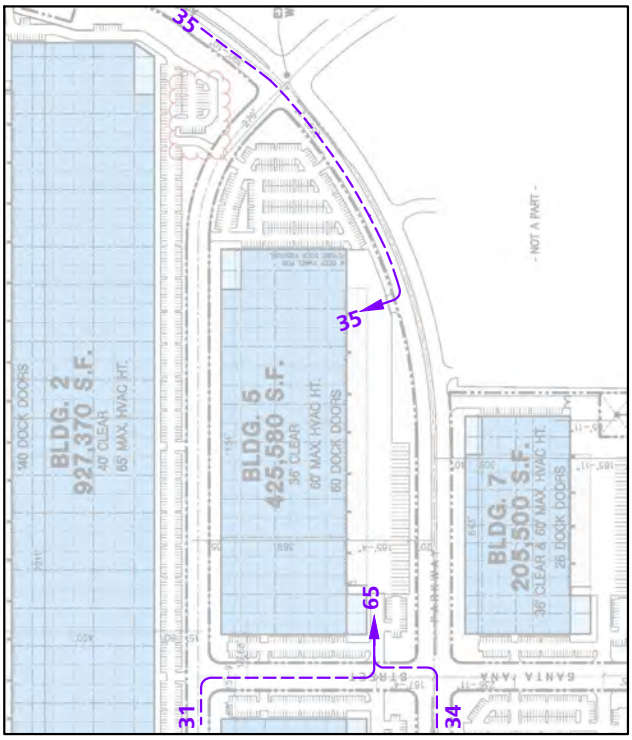
Trucks



Cars



Trucks



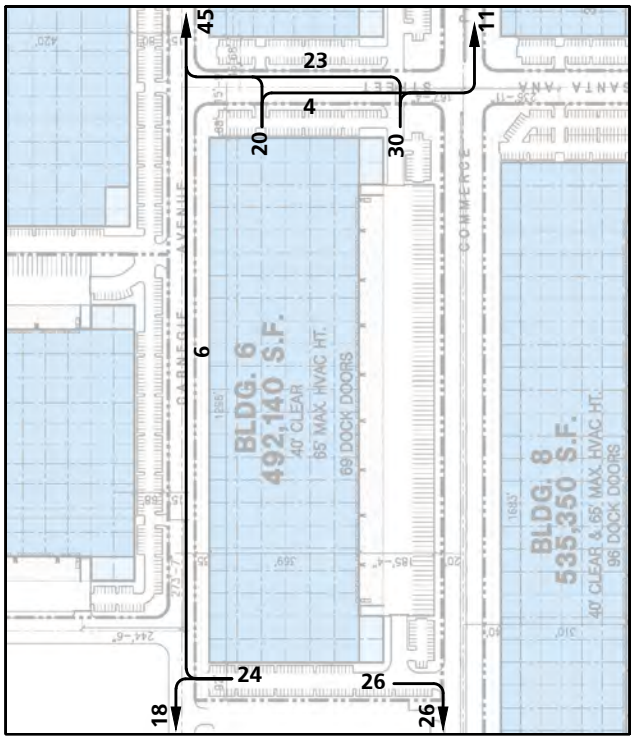
N

10 = *Percent To/From Project*

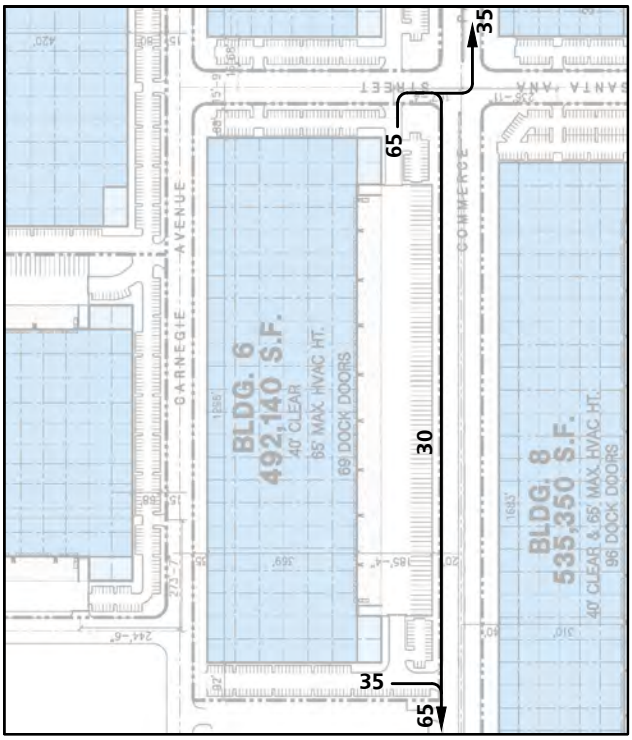
= *Outbound*

= *Inbound*

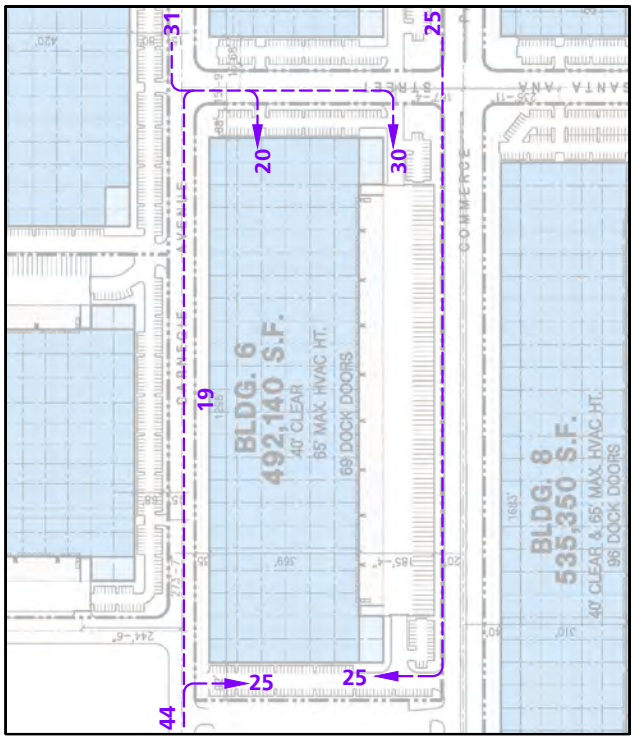
Cars



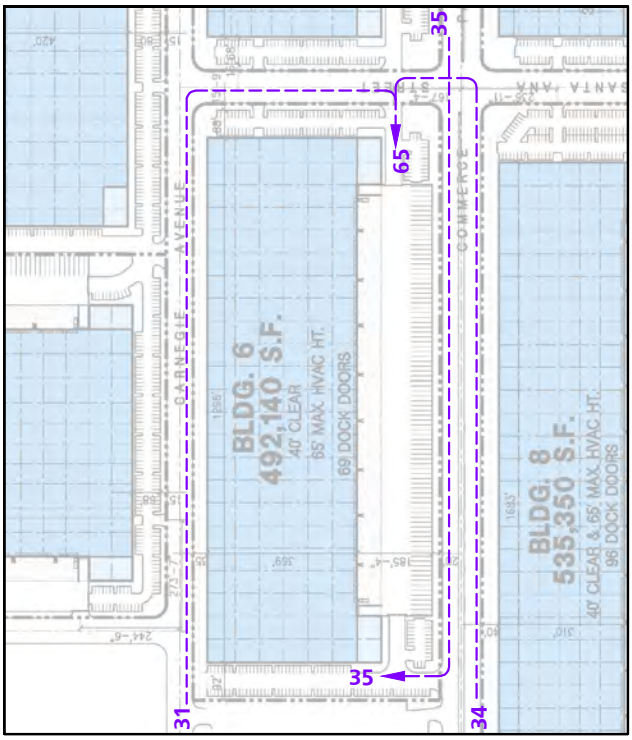
Trucks



Cars



Trucks



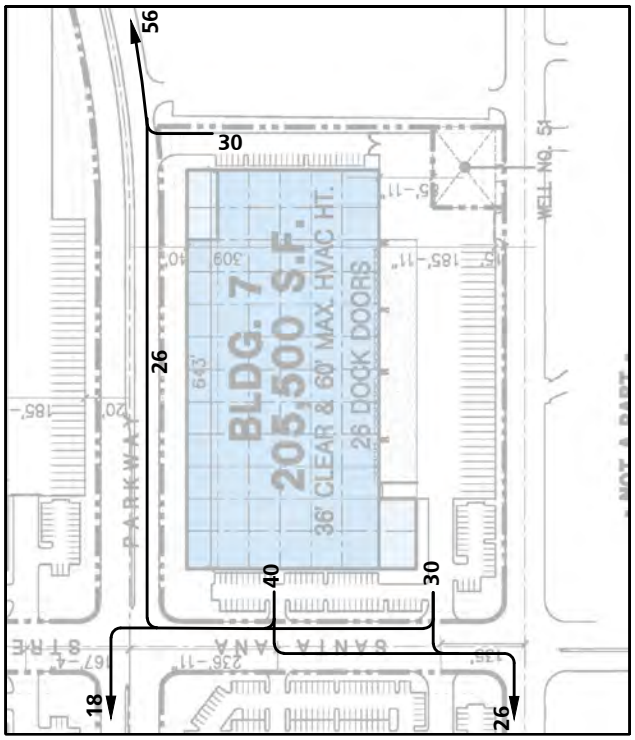
N

10 = *Percent To/From Project*

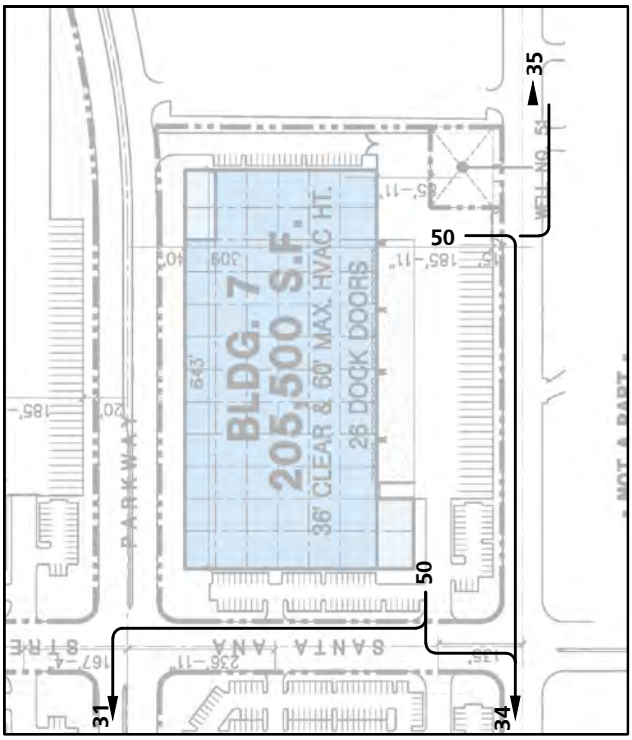
= *Outbound*

= *Inbound*

Cars

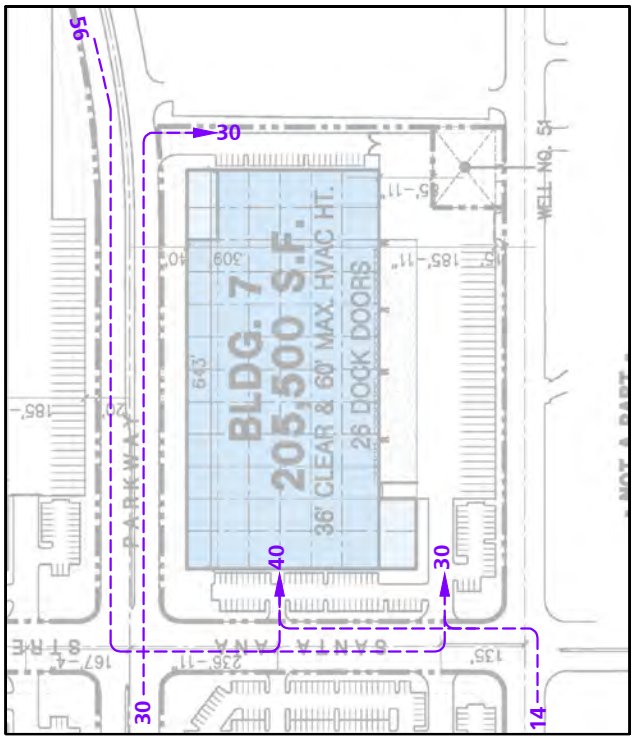


Trucks



10 = *Percent To/From Project*

Cars



Trucks

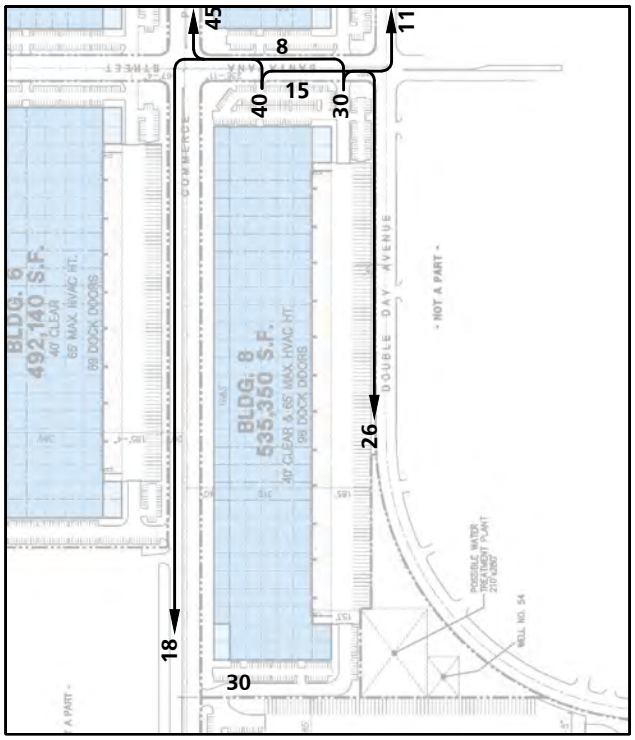
10 = *Percent To/From Project*

= *Outbound*

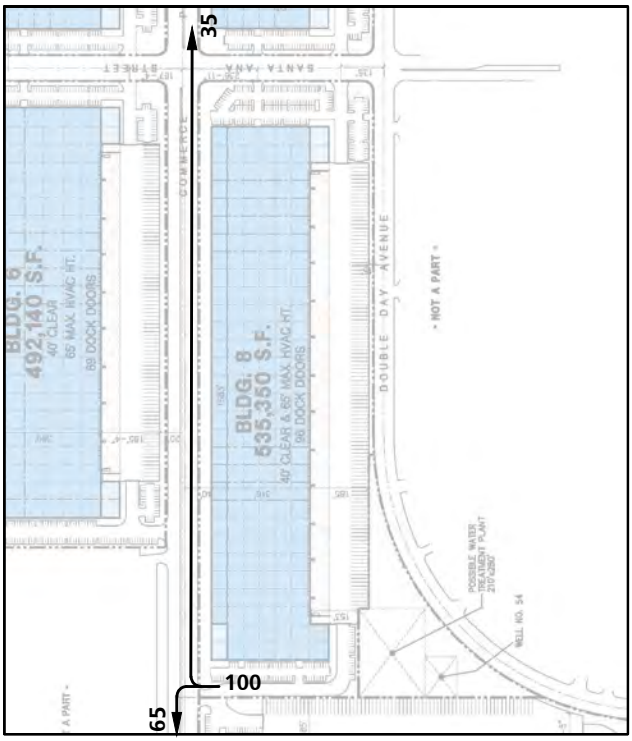
= *Inbound*

N

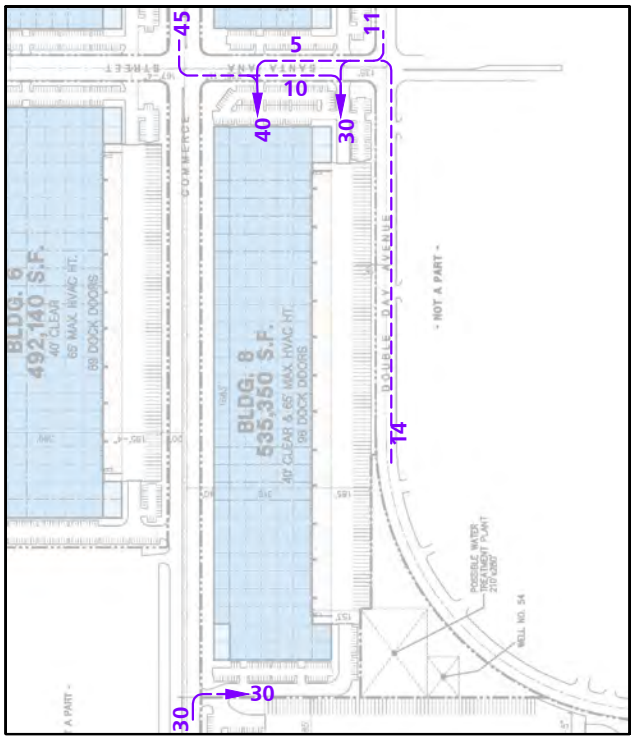
Cars



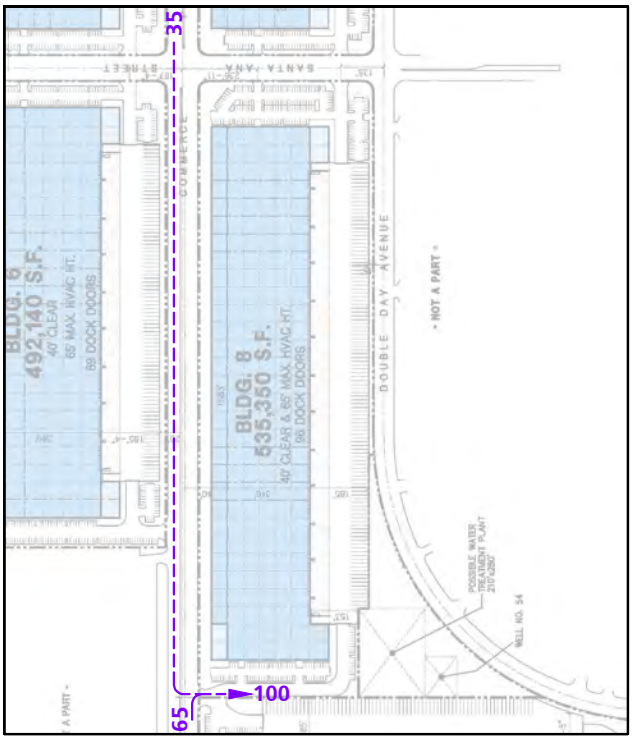
Trucks



Cars



Trucks

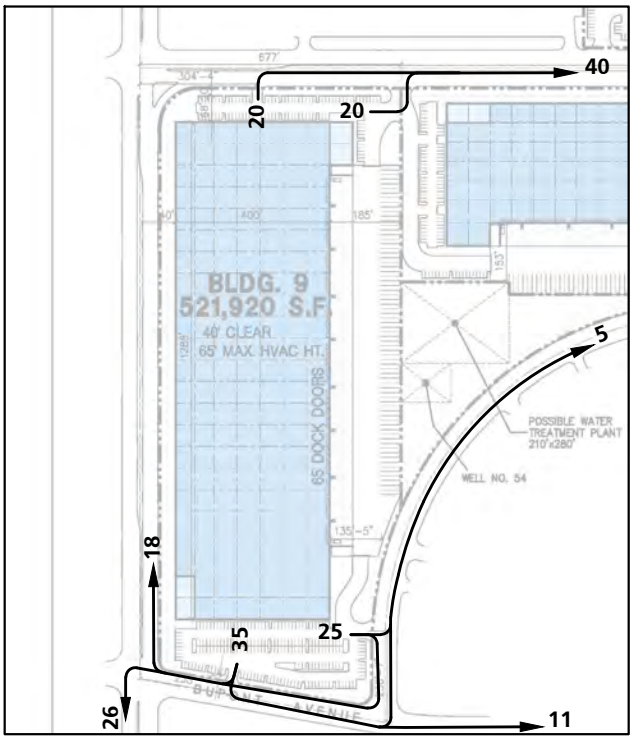


10 = *Percent To/From Project*

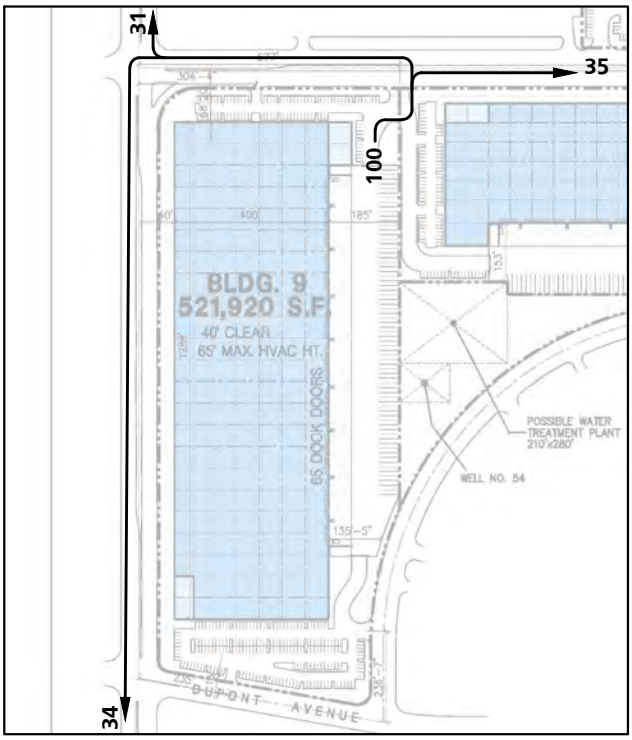
= *Outbound*

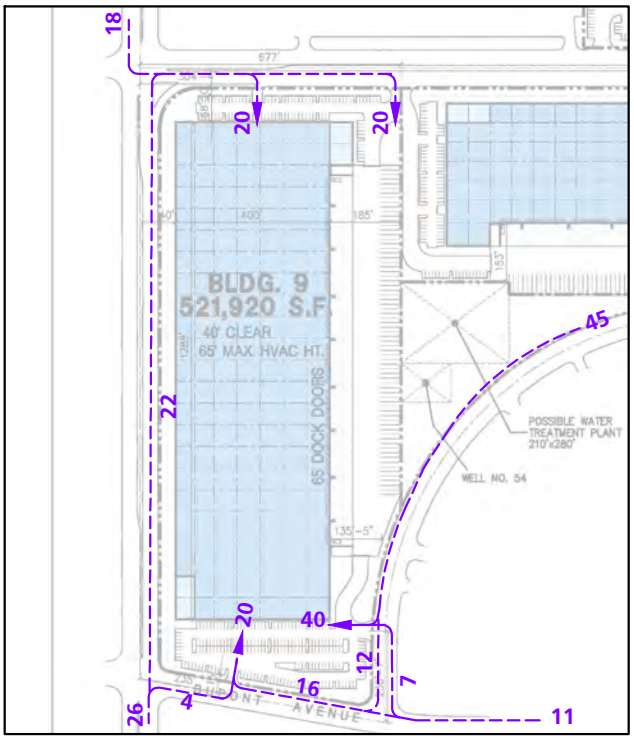
= *Inbound*

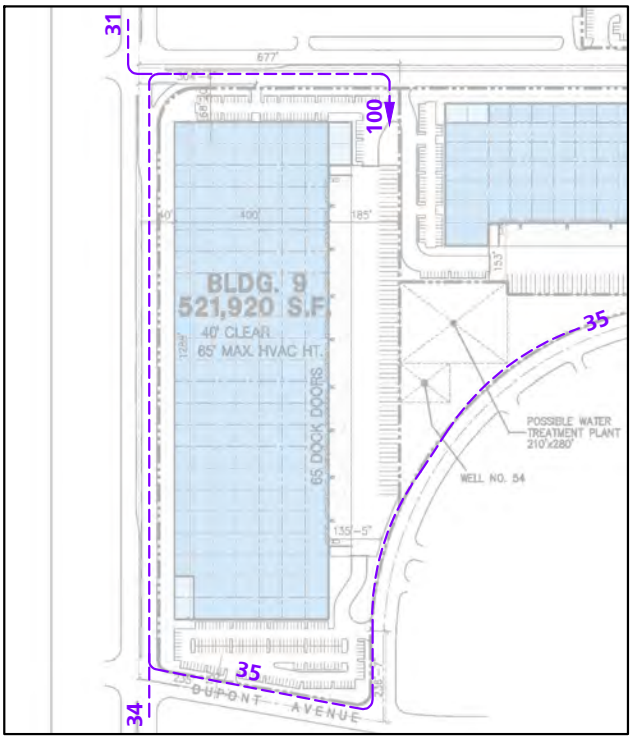
Cars



Trucks







N

10 = *Percent To/From Project*

= *Outbound*

= *Inbound*

This Page Intentionally Left Blank

APPENDIX 1.2:

SITE ADJACENT QUEUES

This Page Intentionally Left Blank

Intersection: 6: Haven Av. & Driveway 1

Movement	WB	NB	NB	NB
Directions Served	R	T	T	TR
Maximum Queue (ft)	28	514	504	509
Average Queue (ft)	4	473	475	477
95th Queue (ft)	19	492	491	498
Link Distance (ft)	193	465	465	465
Upstream Blk Time (%)		71	38	41
Queuing Penalty (veh)		583	309	332
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Haven Av. & Driveway 2

Movement	WB	NB	NB	NB
Directions Served	R	T	T	TR
Maximum Queue (ft)	160	2760	2791	2810
Average Queue (ft)	49	2708	2643	2608
95th Queue (ft)	132	2936	2931	3058
Link Distance (ft)	408	2745	2745	2745
Upstream Blk Time (%)		65	8	10
Queuing Penalty (veh)		531	65	86
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 13: Driveway 3 & E. Airport Dr.

Movement	WB	NB
Directions Served	L	LTR
Maximum Queue (ft)	29	30
Average Queue (ft)	8	3
95th Queue (ft)	29	18
Link Distance (ft)		318
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	210	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 14: Driveway 4 & E. Airport Dr.

Movement	NB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	6
95th Queue (ft)	26
Link Distance (ft)	265
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 15: Driveway 5 & E. Airport Dr.

Movement	EB	NB
Directions Served	TR	R
Maximum Queue (ft)	54	31
Average Queue (ft)	2	14
95th Queue (ft)	18	39
Link Distance (ft)	105	362
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 16: Driveway 6 & La Salle St.

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (ft)	31	31
Average Queue (ft)	1	3
95th Queue (ft)	10	19
Link Distance (ft)		213
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	200	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 17: Driveway 7 & La Salle St.

Movement	NB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	6
95th Queue (ft)	25
Link Distance (ft)	176
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: La Salle St. & Driveway 8

Movement	SB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	6
95th Queue (ft)	26
Link Distance (ft)	693
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: La Salle St. & Driveway 9

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	1
95th Queue (ft)	10
Link Distance (ft)	218
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 20: Jurupa St. & Driveway 10

Movement	WB	WB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	136	120	31
Average Queue (ft)	19	22	2
95th Queue (ft)	83	83	15
Link Distance (ft)	120	120	324
Upstream Blk Time (%)	2	2	
Queuing Penalty (veh)	8	8	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 21: Jurupa St. & Driveway 11

Movement	WB	WB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	209	117	31
Average Queue (ft)	13	7	2
95th Queue (ft)	96	51	14
Link Distance (ft)	1279	1279	479
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 23: Carnegie Av. & Driveway 12

Movement	EB
Directions Served	LTR
Maximum Queue (ft)	31
Average Queue (ft)	6
95th Queue (ft)	27
Link Distance (ft)	244
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 24: Carnegie Av. & Driveway 13

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	30	31
Average Queue (ft)	1	4
95th Queue (ft)	10	21
Link Distance (ft)	241	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 25: Carnegie Av. & Driveway 14

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	5
95th Queue (ft)	24
Link Distance (ft)	385
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 26: Carnegie Av. & Driveway 15/Santa Ana St.

Movement	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	L	LTR	R	L	T	TR	L	T	TR
Maximum Queue (ft)	29	30	31	30	25	51	51	46	23	43
Average Queue (ft)	1	2	24	5	6	28	29	15	8	21
95th Queue (ft)	10	14	44	23	23	41	40	35	25	38
Link Distance (ft)	661		127	127		325	325		624	624
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		200			200			110		
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 27: Carnegie Av. & Driveway 16

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	31	31
Average Queue (ft)	18	4
95th Queue (ft)	42	21
Link Distance (ft)	496	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 28: Carnegie Av. & Driveway 17

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	3
95th Queue (ft)	18
Link Distance (ft)	411
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 30: Carnegie Av. & Driveway 18

Movement	WB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	21
Link Distance (ft)	255
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 32: Driveway 19 & Santa Ana St.

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	31	31
Average Queue (ft)	3	2
95th Queue (ft)	18	15
Link Distance (ft)	310	364
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: Driveway 20 & Santa Ana St.

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	31	31	31
Average Queue (ft)	1	9	8
95th Queue (ft)	10	32	30
Link Distance (ft)		389	368
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 34: Commerce Pkwy. & Driveway 21

Movement	EB
Directions Served	R
Maximum Queue (ft)	29
Average Queue (ft)	4
95th Queue (ft)	20
Link Distance (ft)	216
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 35: Commerce Pkwy. & Driveway 22

Movement	EB
Directions Served	R
Maximum Queue (ft)	30
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	338
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 36: Commerce Pkwy. & Driveway 23

Movement	WB
Directions Served	R
Maximum Queue (ft)	28
Average Queue (ft)	2
95th Queue (ft)	14
Link Distance (ft)	419
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 38: Commerce Pkwy. & Driveway 24

Movement	EB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	11
95th Queue (ft)	35
Link Distance (ft)	224
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 39: Commerce Pkwy. & Driveway 25

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	75	26
Average Queue (ft)	23	1
95th Queue (ft)	51	9
Link Distance (ft)	413	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 40: Commerce Pkwy. & Driveway 26

Movement	WB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	4
95th Queue (ft)	21
Link Distance (ft)	338
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 42: Driveway 27 & Santa Ana St.

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	28	30	31	31
Average Queue (ft)	1	1	4	3
95th Queue (ft)	9	10	22	18
Link Distance (ft)			368	230
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	200	200		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 43: Driveway 28 & Santa Ana St.

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	31	30	31	31
Average Queue (ft)	1	3	4	4
95th Queue (ft)	10	18	19	21
Link Distance (ft)			336	236
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	200	200		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 44: Doubleday Av. & Driveway 29

Movement	EB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	2
95th Queue (ft)	15
Link Distance (ft)	385
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 46: Driveway 30 & Doubleday Av.

Movement	NB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	2
95th Queue (ft)	14
Link Distance (ft)	210
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 1922

Intersection: 6: Haven Av. & Driveway 1

Movement	WB	NB	NB	NB
Directions Served	R	T	T	TR
Maximum Queue (ft)	50	517	501	508
Average Queue (ft)	5	476	474	476
95th Queue (ft)	24	493	491	495
Link Distance (ft)	193	465	465	465
Upstream Blk Time (%)		77	40	47
Queuing Penalty (veh)		613	319	371
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 7: Haven Av. & Driveway 2

Movement	NB	NB	NB
Directions Served	T	T	TR
Maximum Queue (ft)	2780	2780	2818
Average Queue (ft)	2506	2485	2253
95th Queue (ft)	3144	3137	3345
Link Distance (ft)	2745	2745	2745
Upstream Blk Time (%)	53	14	8
Queuing Penalty (veh)	415	113	62
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 13: Driveway 3 & E. Airport Dr.

Movement	EB	EB	WB	WB	WB	NB
Directions Served	T	TR	L	T	TR	LTR
Maximum Queue (ft)	587	598	27	68	205	113
Average Queue (ft)	216	165	3	2	25	27
95th Queue (ft)	604	535	18	22	115	78
Link Distance (ft)	587	587		205	205	318
Upstream Blk Time (%)	0	0			1	
Queuing Penalty (veh)	2	1			3	
Storage Bay Dist (ft)			210			
Storage Blk Time (%)	32					
Queuing Penalty (veh)	0					

Intersection: 14: Driveway 4 & E. Airport Dr.

Movement	EB	EB	WB	NB
Directions Served	T	TR	T	R
Maximum Queue (ft)	227	280	53	184
Average Queue (ft)	126	36	2	67
95th Queue (ft)	297	176	17	191
Link Distance (ft)	205	205	105	265
Upstream Blk Time (%)	29	3		
Queuing Penalty (veh)	150	16		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 15: Driveway 5 & E. Airport Dr.

Movement	EB	EB	NB
Directions Served	T	TR	R
Maximum Queue (ft)	122	95	289
Average Queue (ft)	77	3	82
95th Queue (ft)	165	31	217
Link Distance (ft)	105	105	362
Upstream Blk Time (%)	32	0	
Queuing Penalty (veh)	165	0	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 16: Driveway 6 & La Salle St.

Movement	WB	WB	NB
Directions Served	T	T	LR
Maximum Queue (ft)	141	160	31
Average Queue (ft)	28	35	5
95th Queue (ft)	101	123	24
Link Distance (ft)	156	156	213
Upstream Blk Time (%)	0	4	
Queuing Penalty (veh)	0	1	
Storage Bay Dist (ft)			
Storage Blk Time (%)	0		
Queuing Penalty (veh)	0		

Intersection: 17: Driveway 7 & La Salle St.

Movement	NB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	7
95th Queue (ft)	28
Link Distance (ft)	176
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 18: La Salle St. & Driveway 8

Movement	SB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	14
95th Queue (ft)	40
Link Distance (ft)	693
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: La Salle St. & Driveway 9

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 20: Jurupa St. & Driveway 10

Movement	WB	WB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	145	122	96
Average Queue (ft)	127	93	47
95th Queue (ft)	138	162	77
Link Distance (ft)	120	120	324
Upstream Blk Time (%)	71	15	
Queuing Penalty (veh)	384	83	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 21: Jurupa St. & Driveway 11

Movement	WB	WB	SB
Directions Served	T	TR	R
Maximum Queue (ft)	1301	1290	74
Average Queue (ft)	818	571	13
95th Queue (ft)	1337	1256	46
Link Distance (ft)	1279	1279	479
Upstream Blk Time (%)	9	2	
Queuing Penalty (veh)	44	13	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 23: Carnegie Av. & Driveway 12

Movement	EB	WB	NB	NB	NB
Directions Served	LTR	LTR	L	T	TR
Maximum Queue (ft)	202	30	189	221	126
Average Queue (ft)	79	9	6	113	5
95th Queue (ft)	176	28	62	253	43
Link Distance (ft)	244	187		204	204
Upstream Blk Time (%)			0	13	
Queuing Penalty (veh)			0	42	
Storage Bay Dist (ft)			200		
Storage Blk Time (%)			0	13	
Queuing Penalty (veh)			0	0	

Intersection: 24: Carnegie Av. & Driveway 13

Movement	WB	NB	NB
Directions Served	LR	T	TR
Maximum Queue (ft)	31	197	98
Average Queue (ft)	9	28	3
95th Queue (ft)	32	125	32
Link Distance (ft)	241	538	538
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 25: Carnegie Av. & Driveway 14

Movement	EB
Directions Served	LR
Maximum Queue (ft)	54
Average Queue (ft)	14
95th Queue (ft)	42
Link Distance (ft)	385
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 26: Carnegie Av. & Driveway 15/Santa Ana St.

Movement	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	L	LTR	R	L	T	TR	L	T	TR
Maximum Queue (ft)	31	31	31	31	25	53	71	49	48	61
Average Queue (ft)	8	2	25	18	2	39	40	12	28	40
95th Queue (ft)	31	15	44	42	14	57	61	34	48	58
Link Distance (ft)	661		127	127		325	325		624	624
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)		200			200			110		
Storage Blk Time (%)										
Queuing Penalty (veh)										

Intersection: 27: Carnegie Av. & Driveway 16

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	31	31
Average Queue (ft)	23	8
95th Queue (ft)	45	30
Link Distance (ft)	496	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 28: Carnegie Av. & Driveway 17

Movement	EB	NB
Directions Served	LR	L
Maximum Queue (ft)	32	29
Average Queue (ft)	12	1
95th Queue (ft)	36	10
Link Distance (ft)	411	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 30: Carnegie Av. & Driveway 18

Movement	WB	NB	NB
Directions Served	LR	T	TR
Maximum Queue (ft)	31	56	31
Average Queue (ft)	13	3	1
95th Queue (ft)	37	21	10
Link Distance (ft)	255	1115	1115
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 32: Driveway 19 & Santa Ana St.

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	31	31
Average Queue (ft)	5	5
95th Queue (ft)	24	24
Link Distance (ft)	310	364
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 33: Driveway 20 & Santa Ana St.

Movement	NB	SB
Directions Served	LTR	LTR
Maximum Queue (ft)	31	31
Average Queue (ft)	16	15
95th Queue (ft)	42	41
Link Distance (ft)	389	368
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 34: Commerce Pkwy. & Driveway 21

Movement	EB	NB
Directions Served	R	T
Maximum Queue (ft)	29	53
Average Queue (ft)	5	3
95th Queue (ft)	23	21
Link Distance (ft)	216	433
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 35: Commerce Pkwy. & Driveway 22

Movement	EB
Directions Served	R
Maximum Queue (ft)	30
Average Queue (ft)	4
95th Queue (ft)	21
Link Distance (ft)	338
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 36: Commerce Pkwy. & Driveway 23

Movement	WB
Directions Served	R
Maximum Queue (ft)	30
Average Queue (ft)	6
95th Queue (ft)	26
Link Distance (ft)	419
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 38: Commerce Pkwy. & Driveway 24

Movement	EB	NB
Directions Served	R	T
Maximum Queue (ft)	31	42
Average Queue (ft)	14	1
95th Queue (ft)	40	14
Link Distance (ft)	224	463
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 39: Commerce Pkwy. & Driveway 25

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	55	31
Average Queue (ft)	17	1
95th Queue (ft)	45	10
Link Distance (ft)	413	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		200
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 40: Commerce Pkwy. & Driveway 26

Movement	WB
Directions Served	R
Maximum Queue (ft)	31
Average Queue (ft)	5
95th Queue (ft)	23
Link Distance (ft)	338
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 42: Driveway 27 & Santa Ana St.

Movement	EB	NB	SB
Directions Served	L	LTR	LTR
Maximum Queue (ft)	30	54	31
Average Queue (ft)	1	18	6
95th Queue (ft)	10	45	26
Link Distance (ft)		368	230
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	200		
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 43: Driveway 28 & Santa Ana St.

Movement	EB	WB	NB	SB
Directions Served	L	L	LTR	LTR
Maximum Queue (ft)	30	30	31	31
Average Queue (ft)	1	1	12	6
95th Queue (ft)	10	10	37	25
Link Distance (ft)			336	236
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	200	200		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 44: Doubleday Av. & Driveway 29

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 46: Driveway 30 & Doubleday Av.

Movement	NB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	11
95th Queue (ft)	34
Link Distance (ft)	210
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

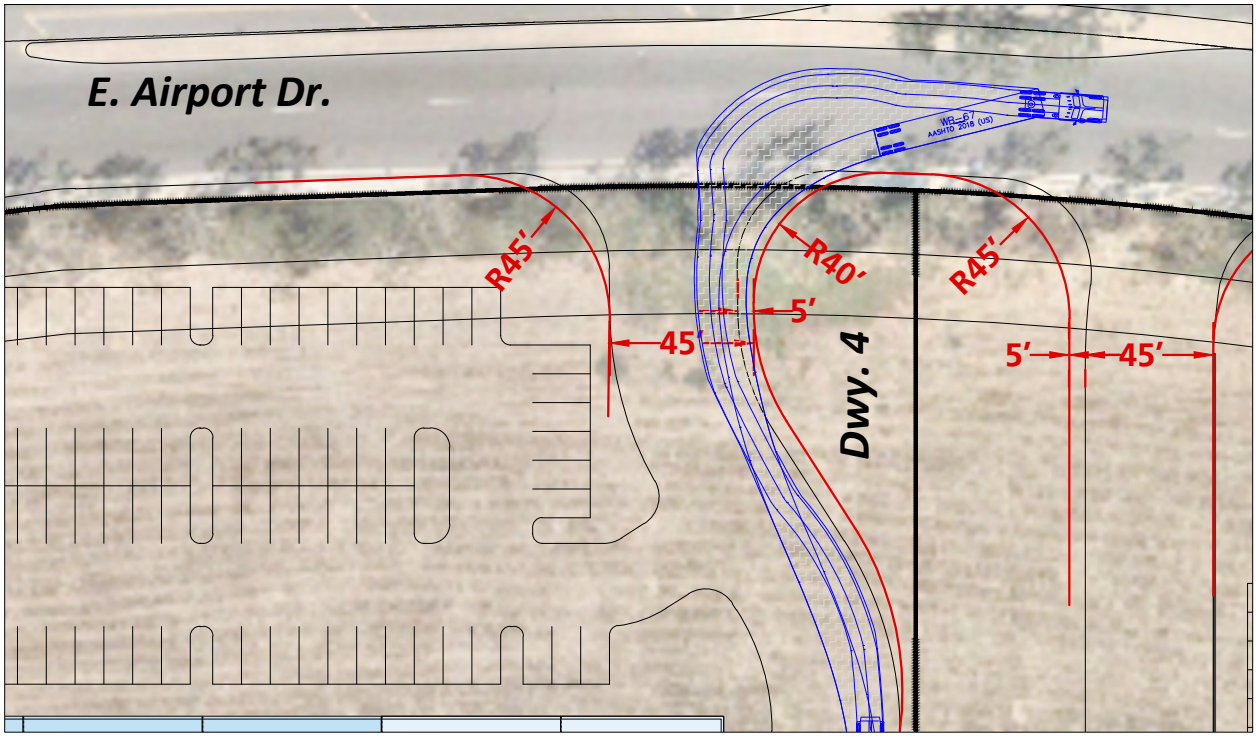
Zone Summary

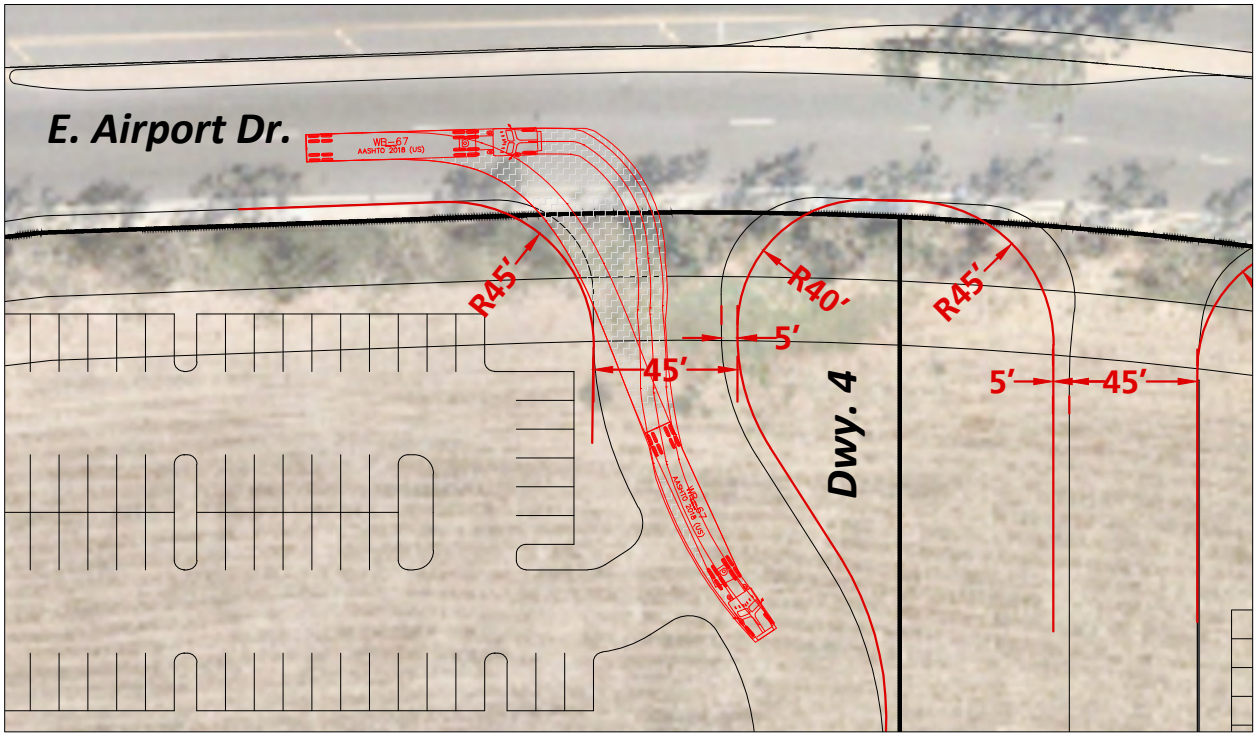
Zone wide Queuing Penalty: 2796

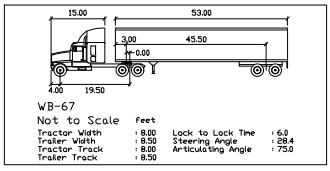
APPENDIX 1.3:

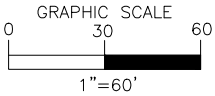
TRUCK TURNING TEMPLATE

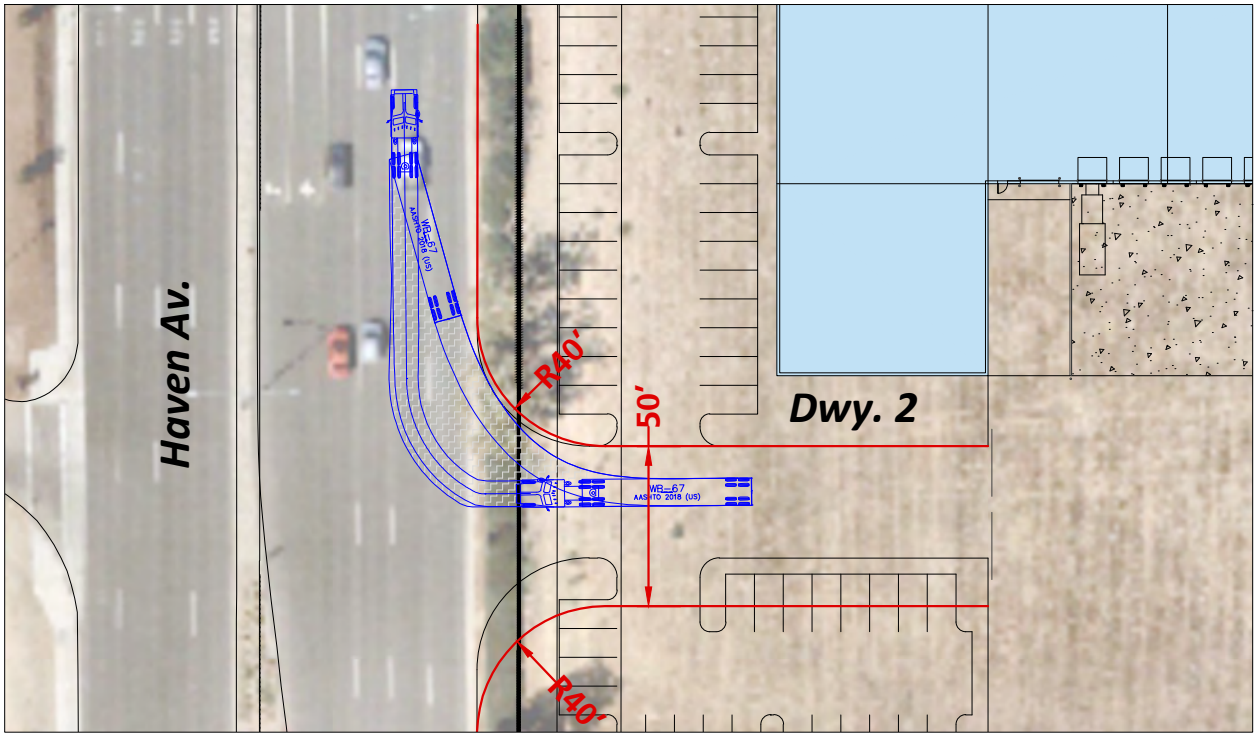
This Page Intentionally Left Blank

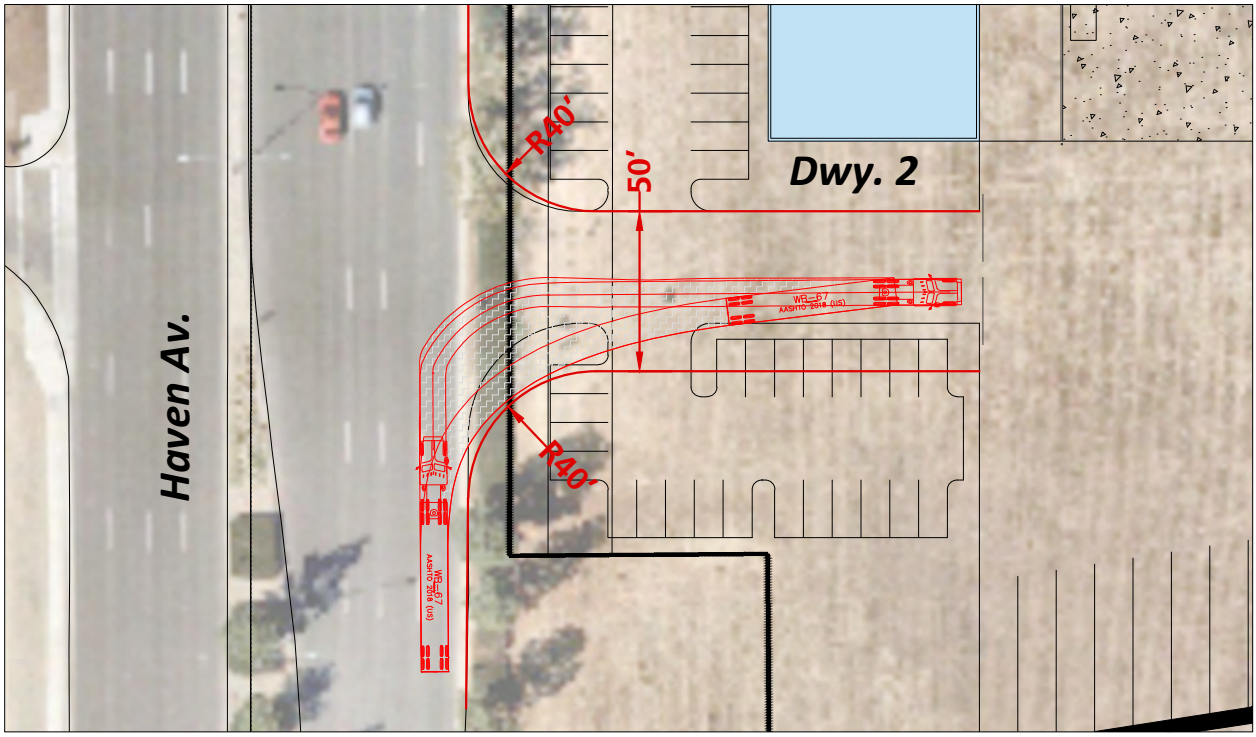

E. Airport Dr.
R45'
R40'
R45'
45'
5'
5'
45'
Dwy. 4


E. Airport Dr.
R45'
R40'
R45'
45'
5'
5'
45'
Dwy. 4

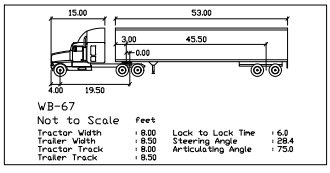

15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0

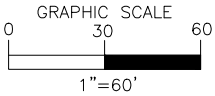

GRAPHIC SCALE
0
30
60
1"=60'


Haven Av.
R40'
50'
Dwy. 2
R40'

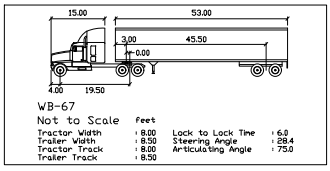

Haven Av.
R40'
50'
Dwy. 2
R40'

N

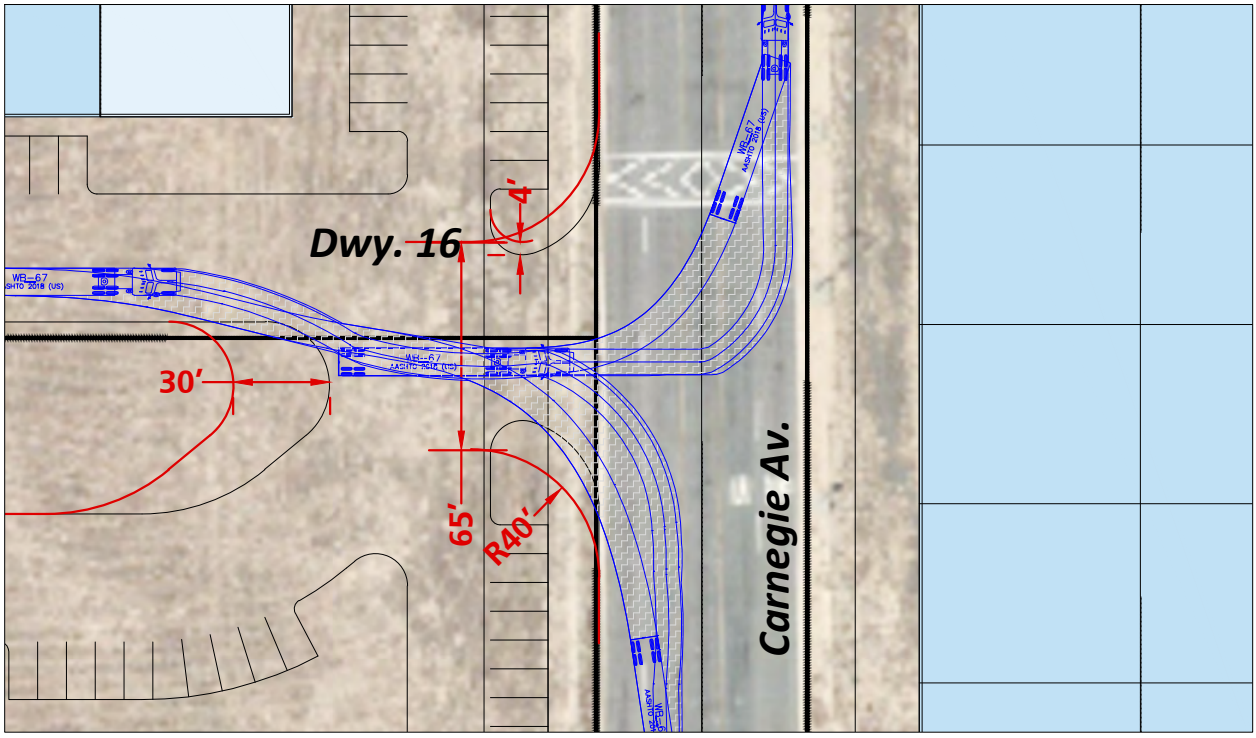

15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0

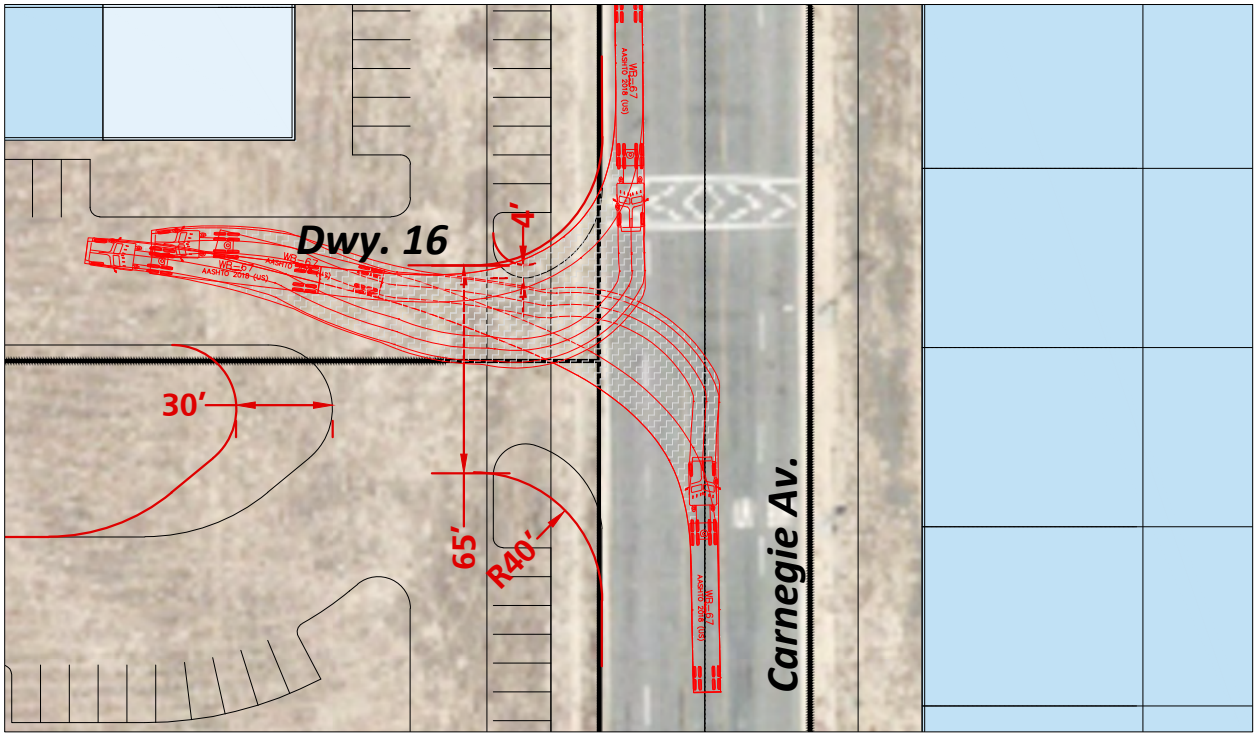

GRAPHIC SCALE
0
30
60
1"=60'

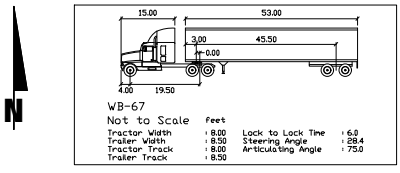
N

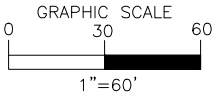


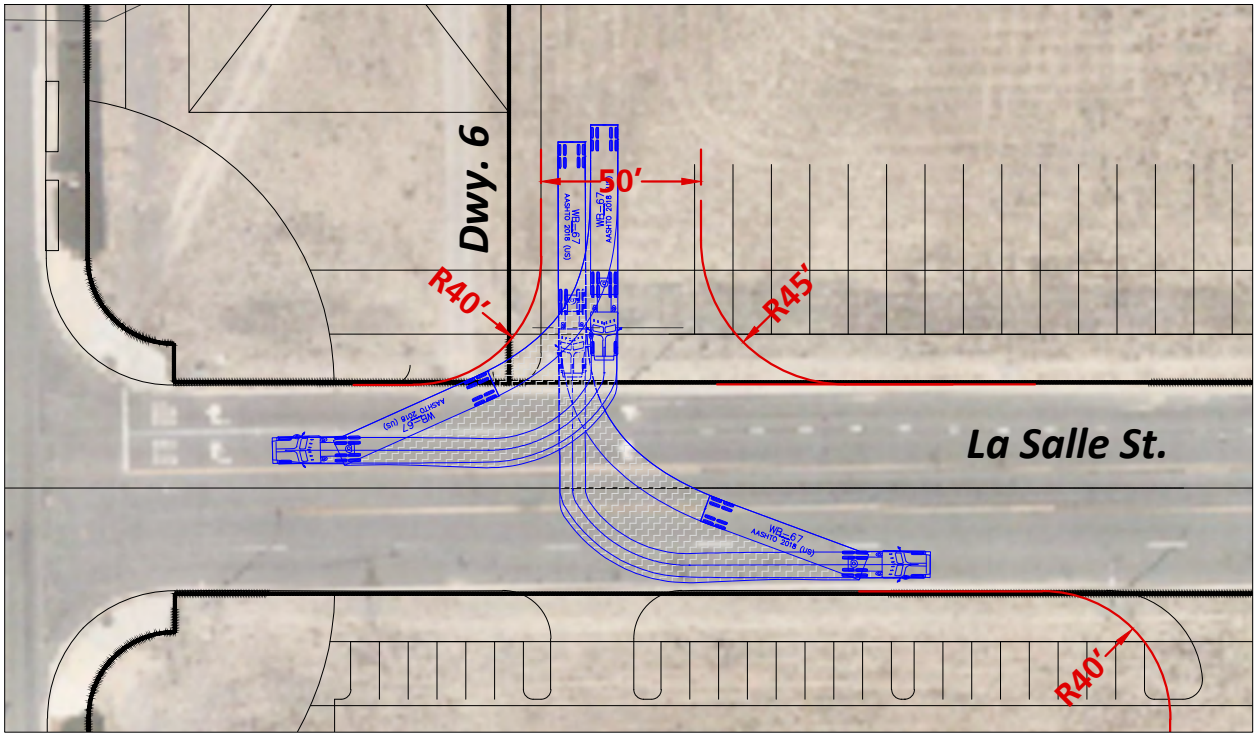
GRAPHIC SCALE
0 30 60
1"=60'

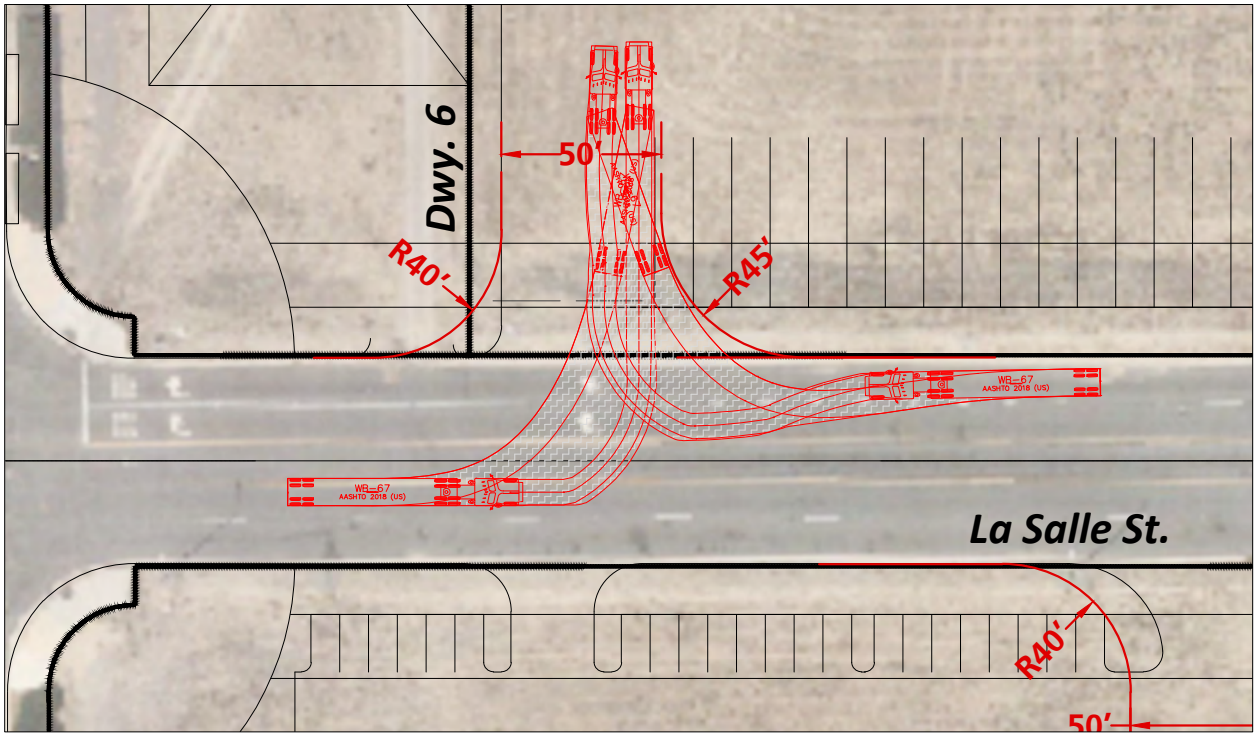

Dwy. 16
4'
30'
65'
R40'
Carnegie Av.


Dwy. 16
4'
30'
65'
R40'
Carnegie Av.

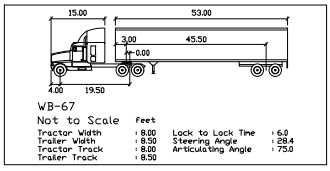

15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0


GRAPHIC SCALE
0
30
60
1"=60'

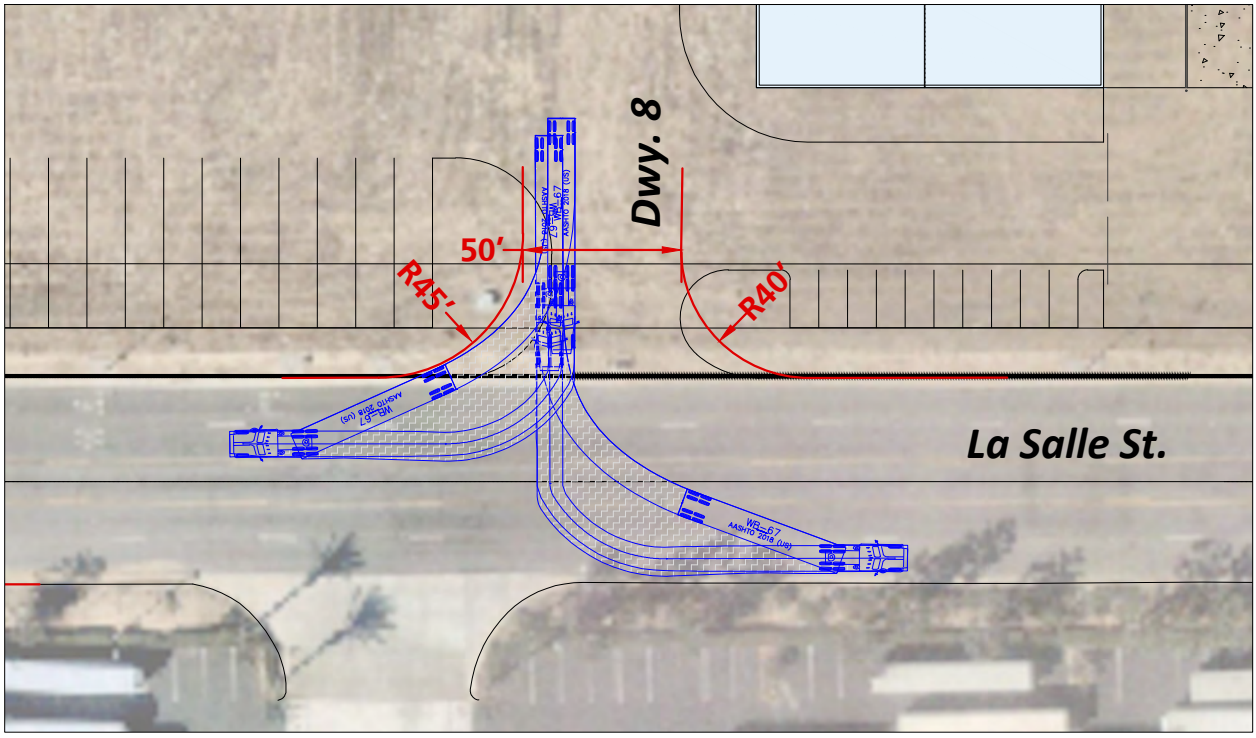


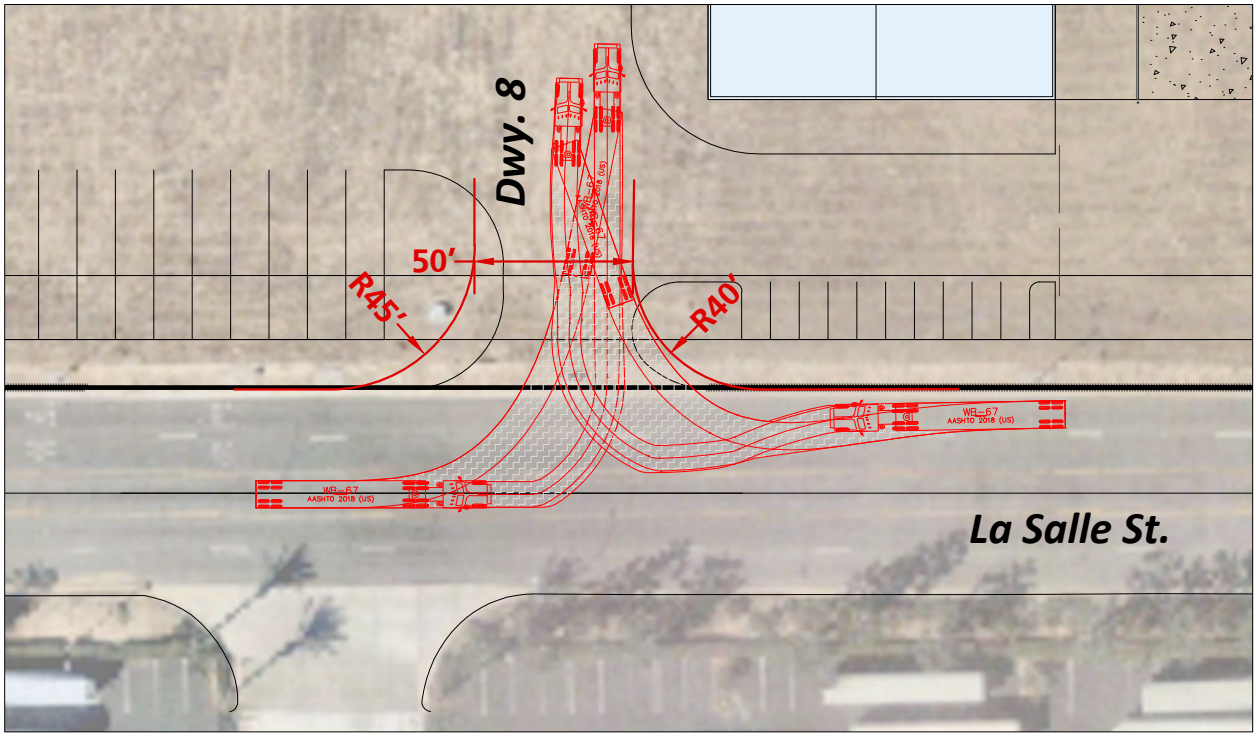


N

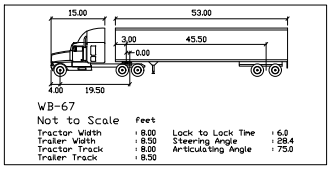


GRAPHIC SCALE
0 30 60
1"=60'

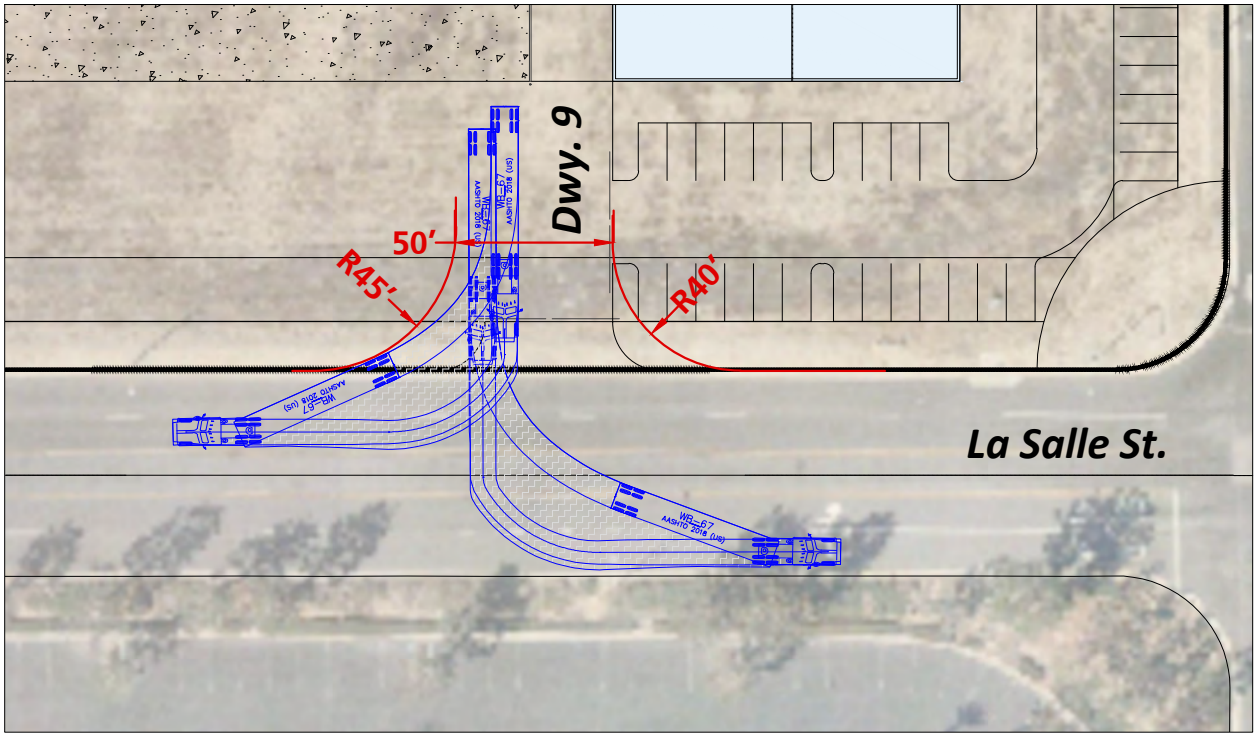


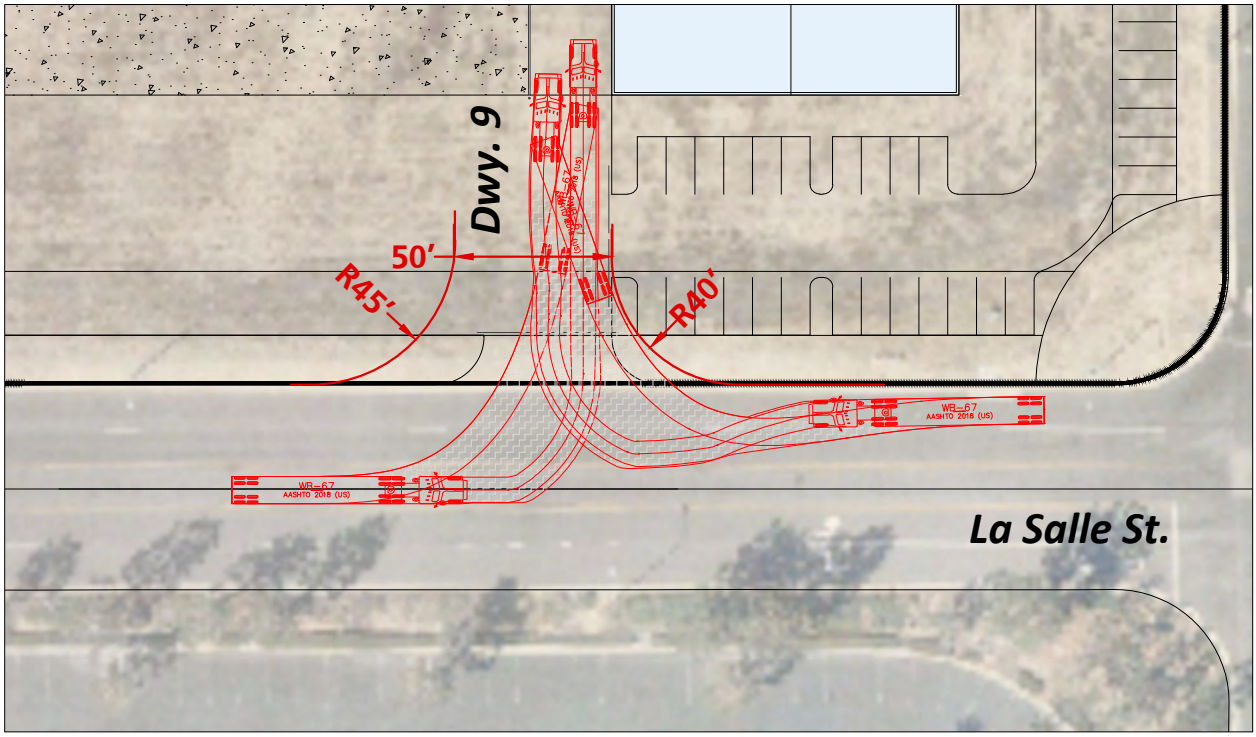


N

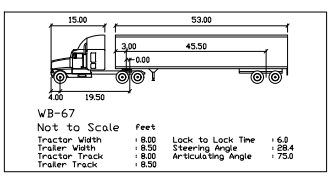


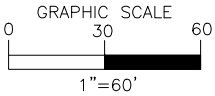
GRAPHIC SCALE
0 30 60
1"=60'

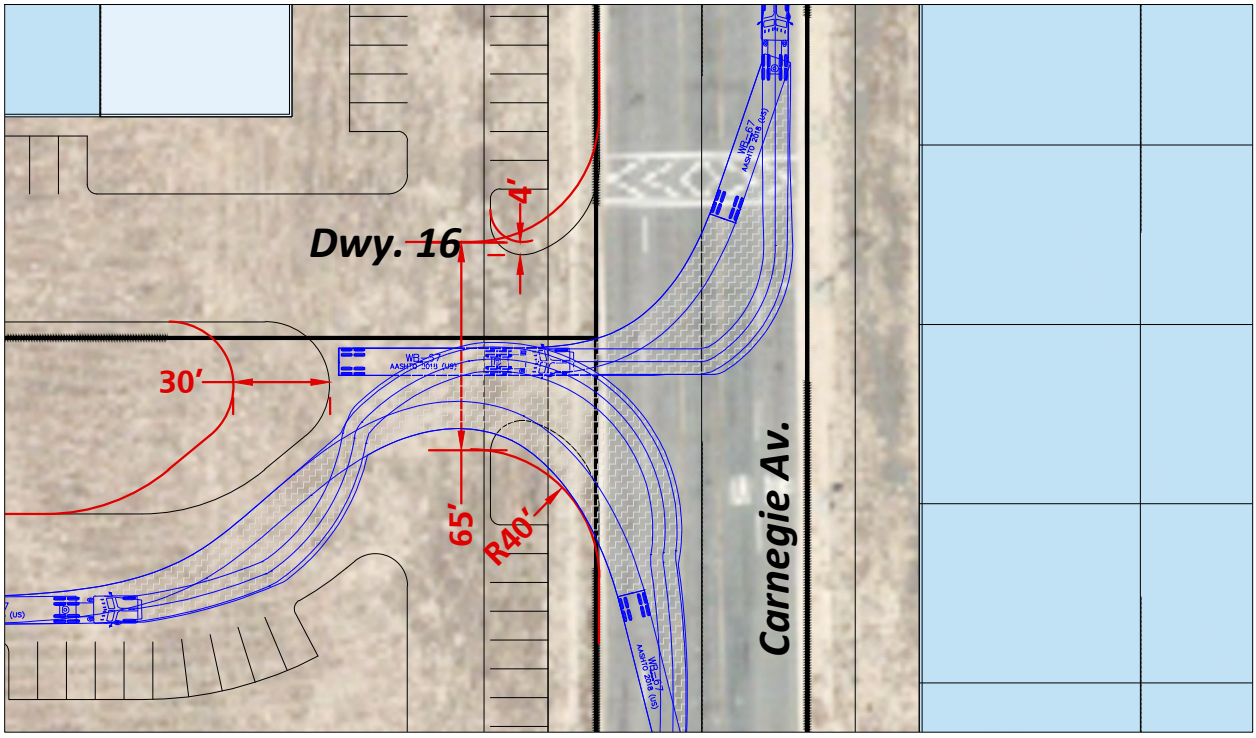

Dwy. 9
50'
R45'
R40'
La Salle St.

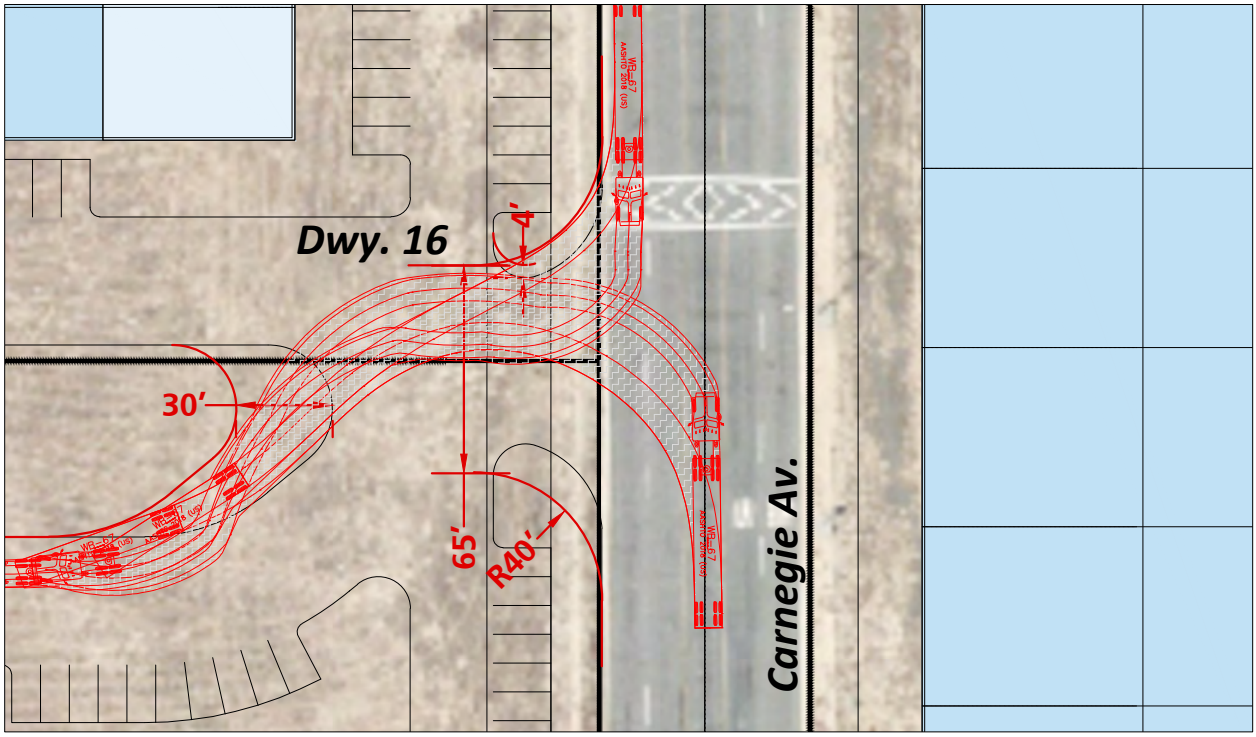

Dwy. 9
50'
R45'
R40'
La Salle St.

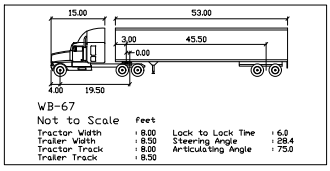
N

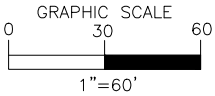

15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0

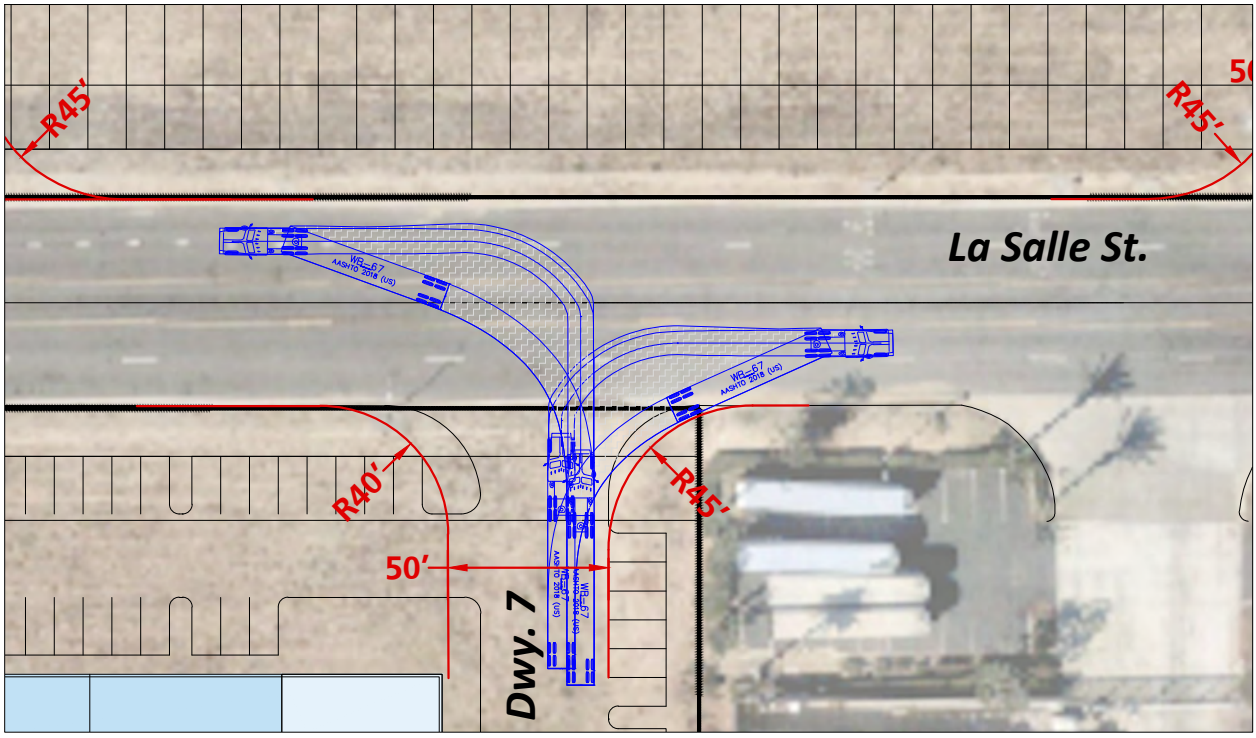

GRAPHIC SCALE
0
30
60
1"=60'

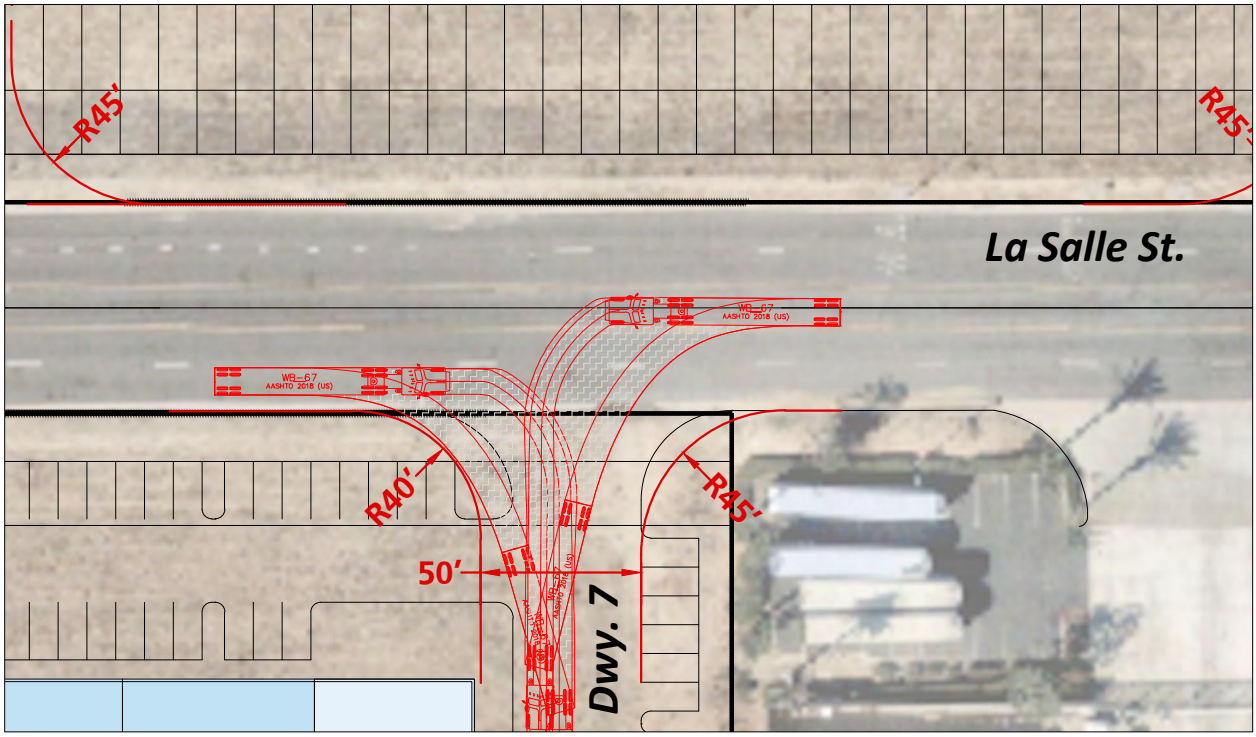

Dwy. 16
4'
30'
65'
R40'
Carnegie Av.


Dwy. 16
4'
30'
65'
R40'
Carnegie Av.

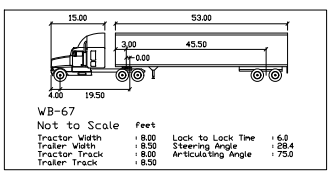

15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0

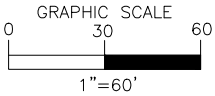

GRAPHIC SCALE
0
30
60
1"=60'

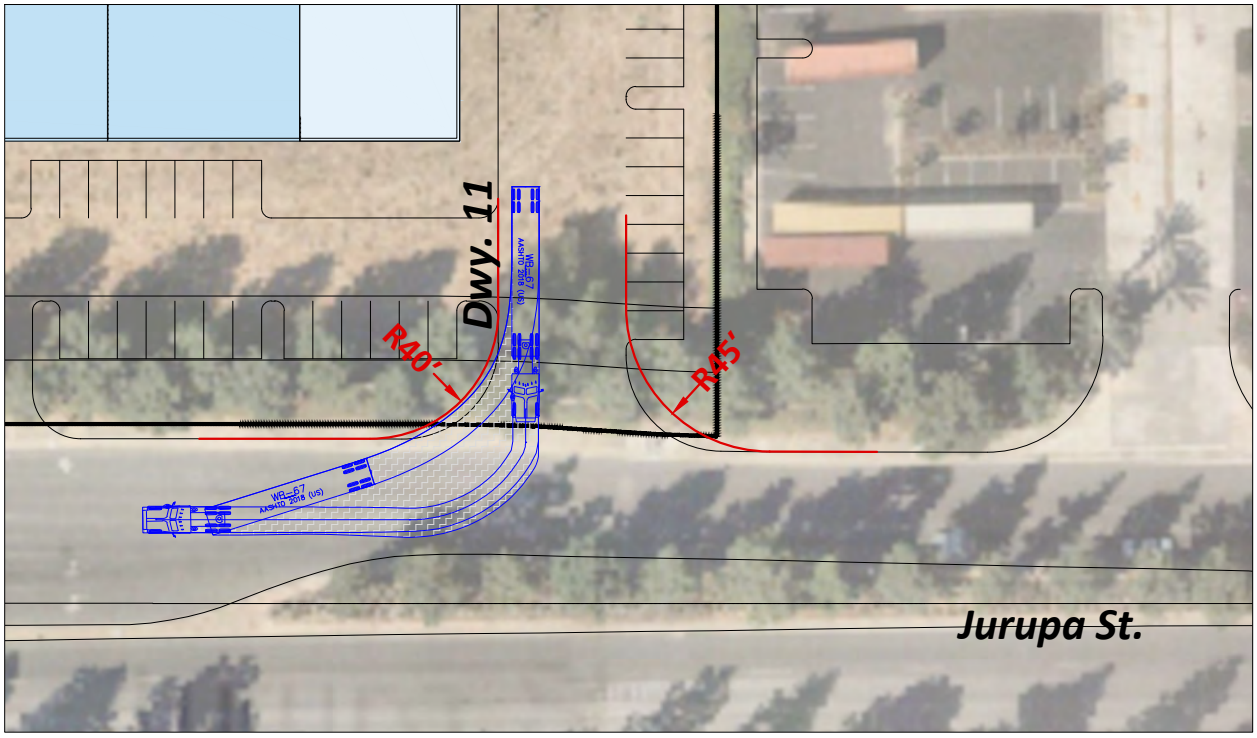

R45'
R45'
La Salle St.
R40'
R45'
50'
Dwy. 7

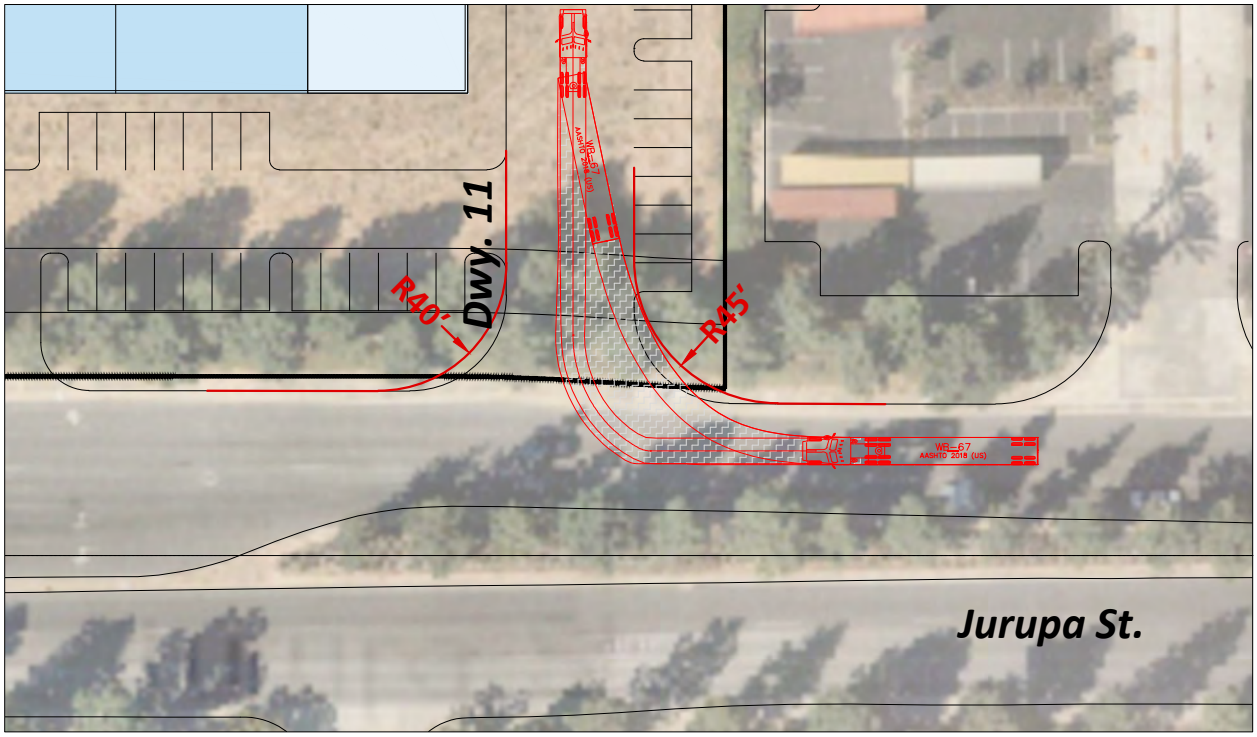

R45'
R45'
La Salle St.
R40'
R45'
50'
Dwy. 7

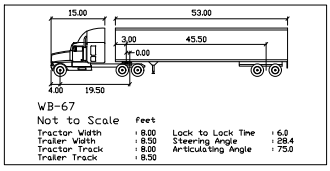
N


15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0

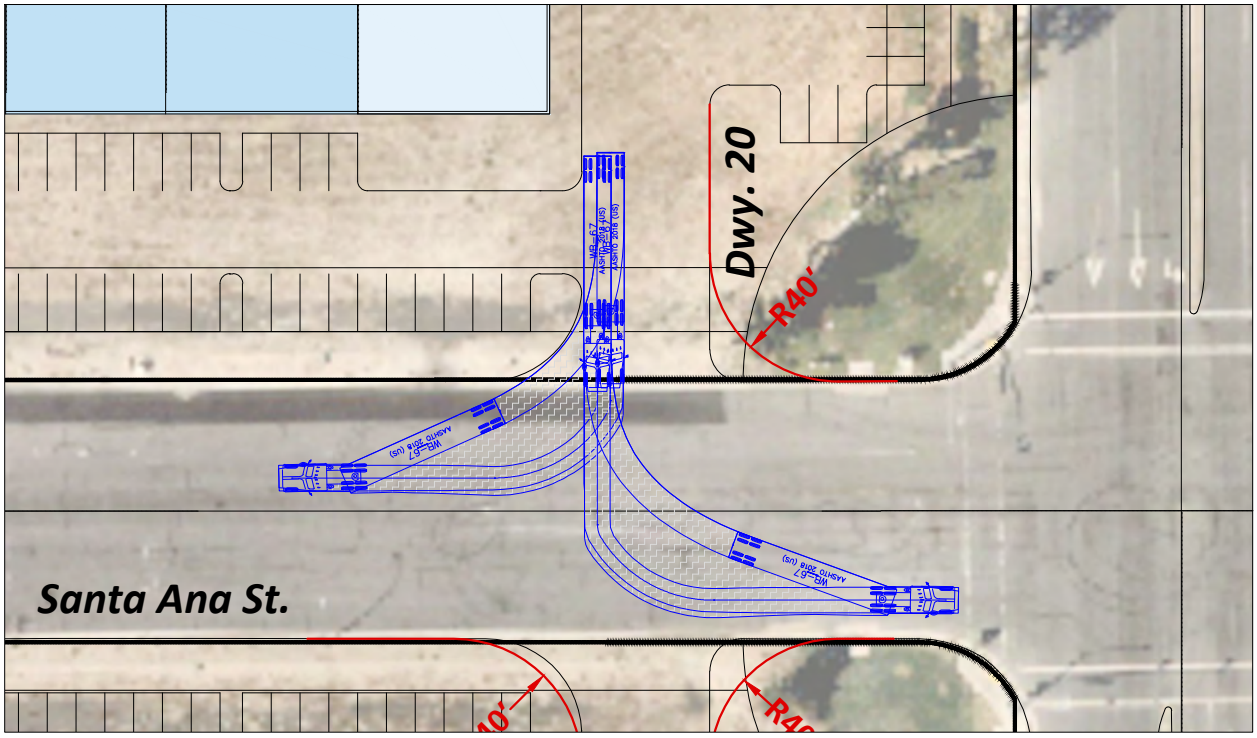

GRAPHIC SCALE
0
30
60
1"=60'

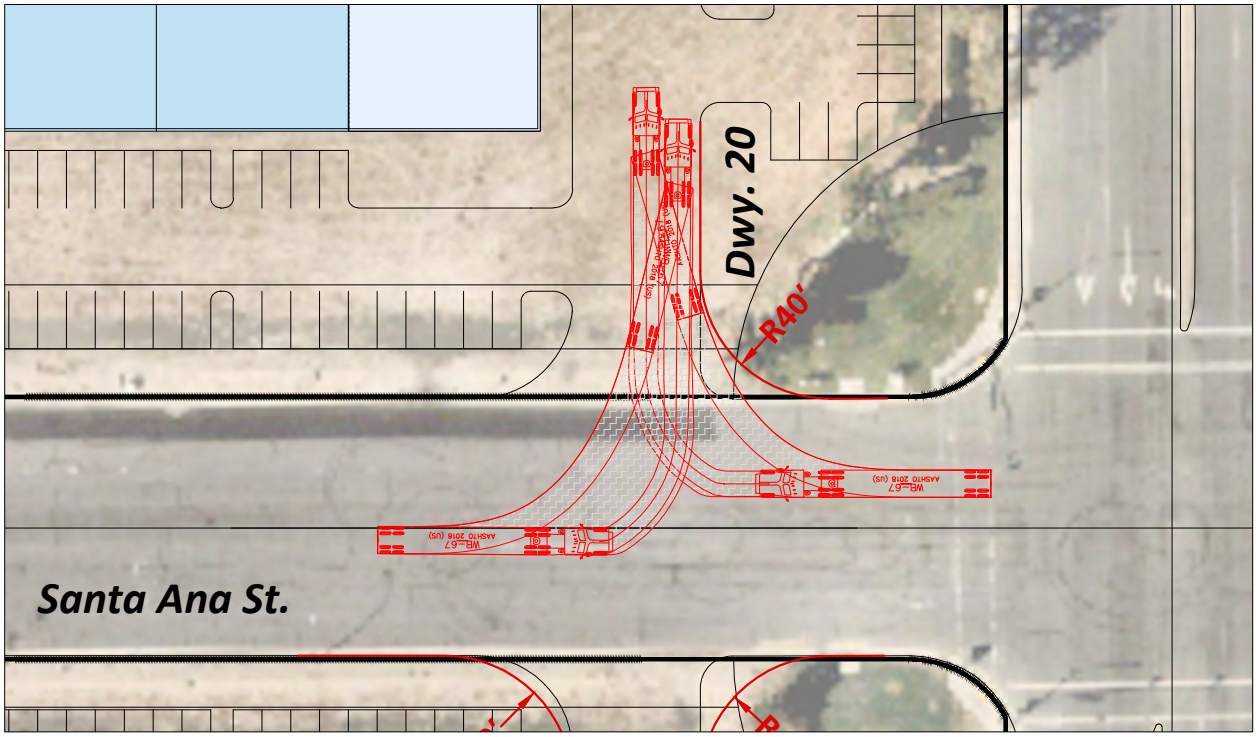




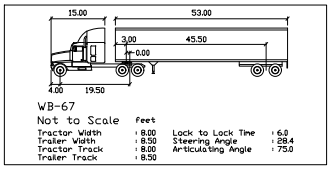


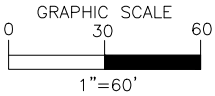
GRAPHIC SCALE
0 30 60
1"=60'

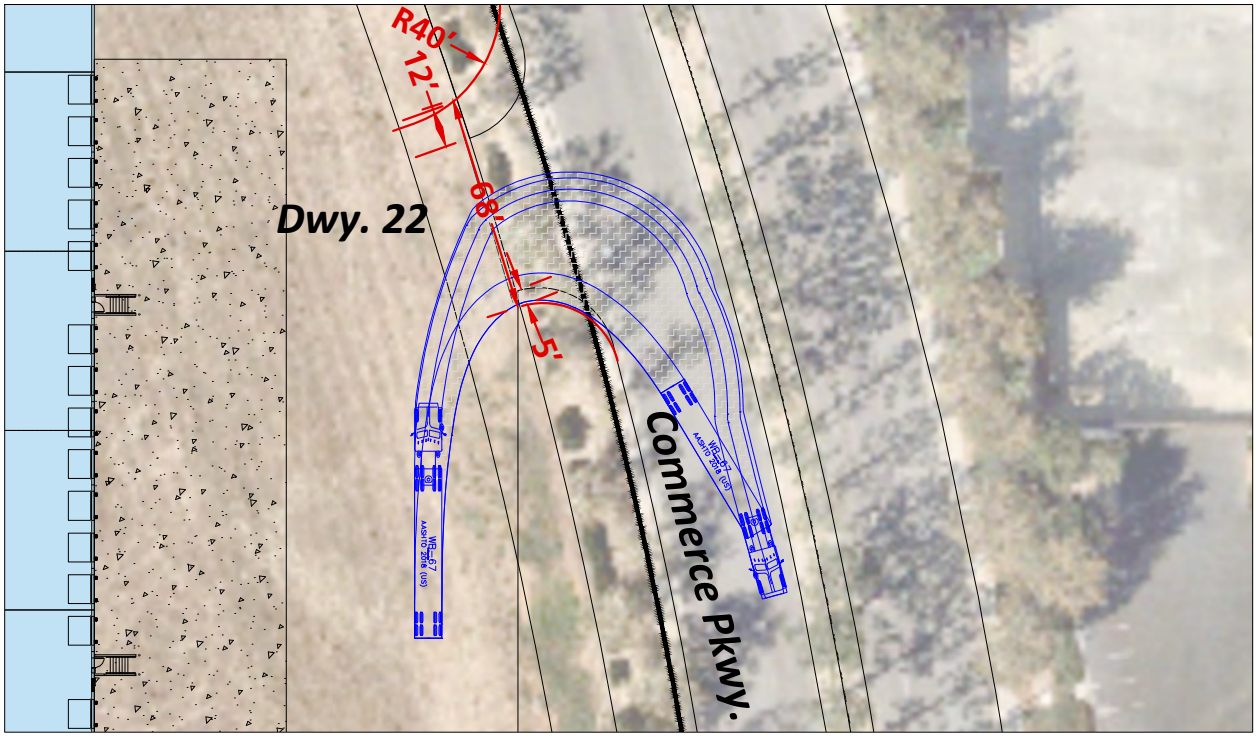

Dwy. 20
R40'
Santa Ana St.

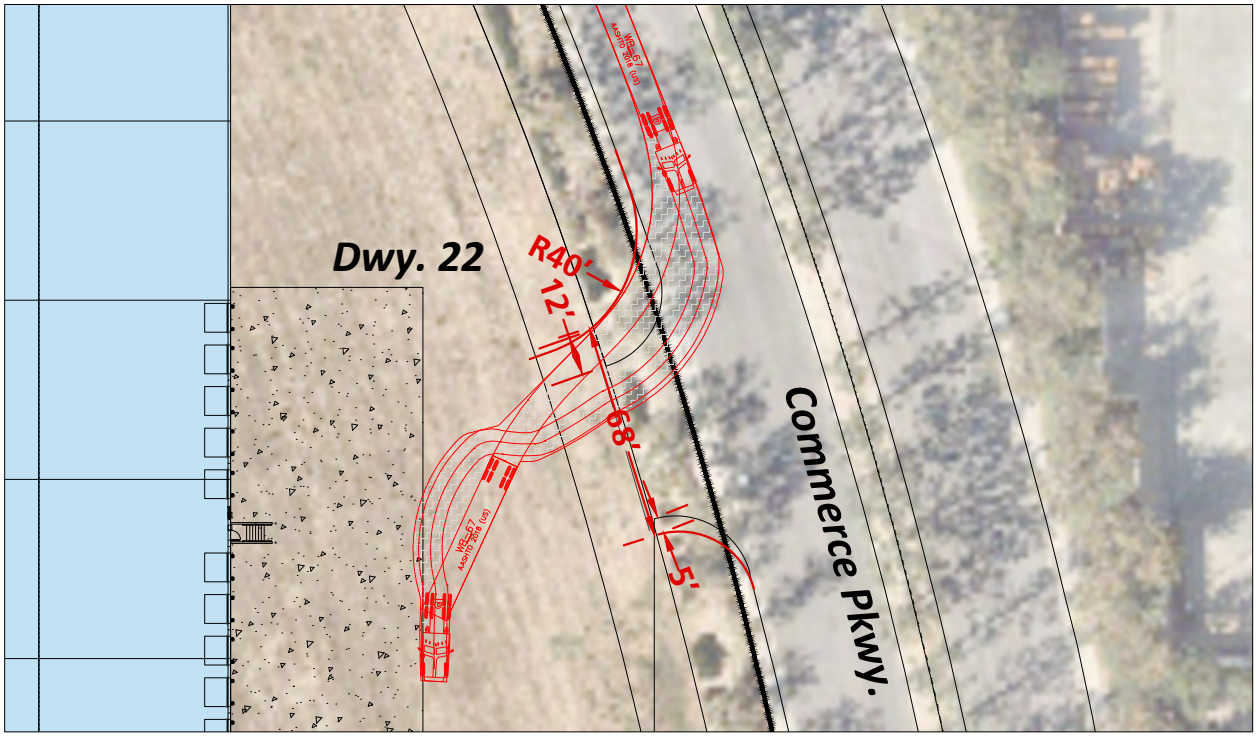

Dwy. 20
R40'
Santa Ana St.

N

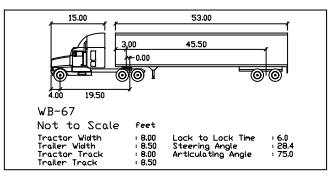

15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0

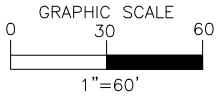

GRAPHIC SCALE
0
30
60
1"=60'

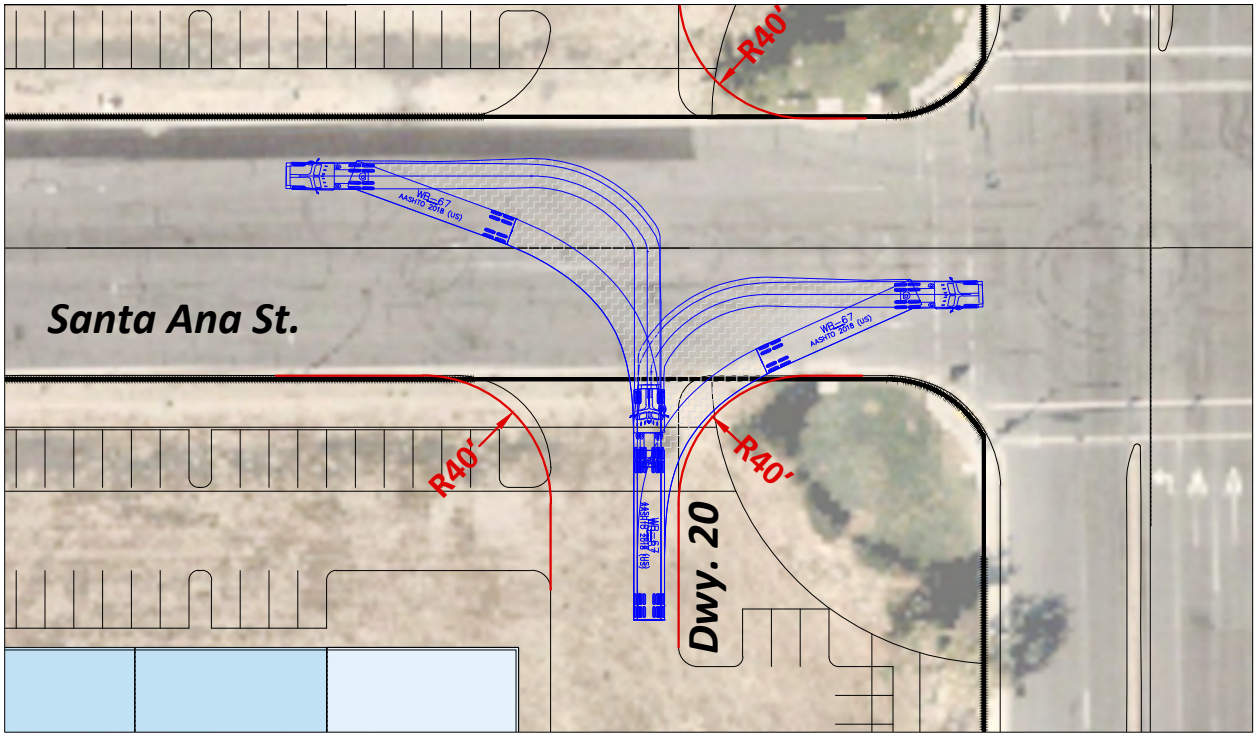

R40'
12'
68'
5'
Dwy. 22
Commerce Pkwy.
WB-67
Asshto 2014 (US)

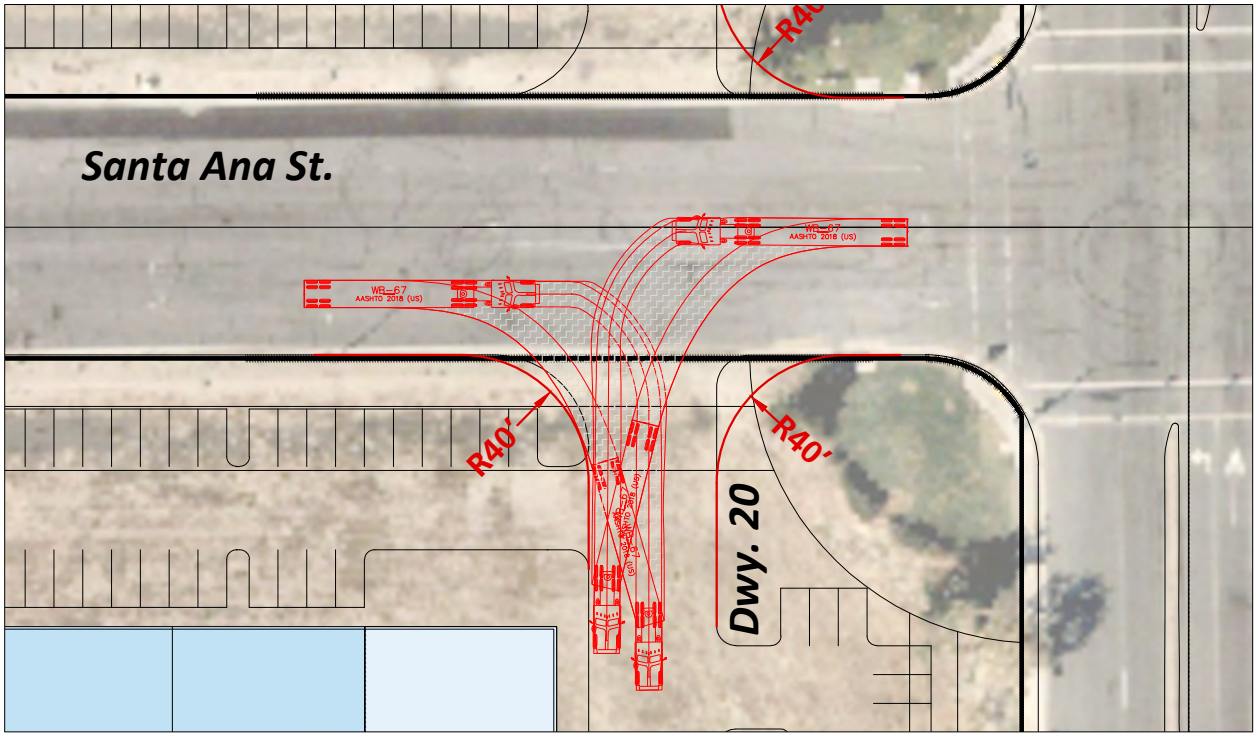

Dwy. 22
R40'
12'
68'
5'
Commerce Pkwy.
WB-67
Asshto 2014 (US)

N

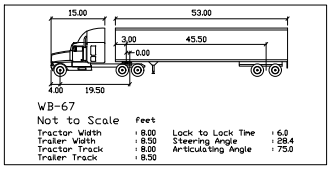

15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0


GRAPHIC SCALE
0
30
60
1"=60'

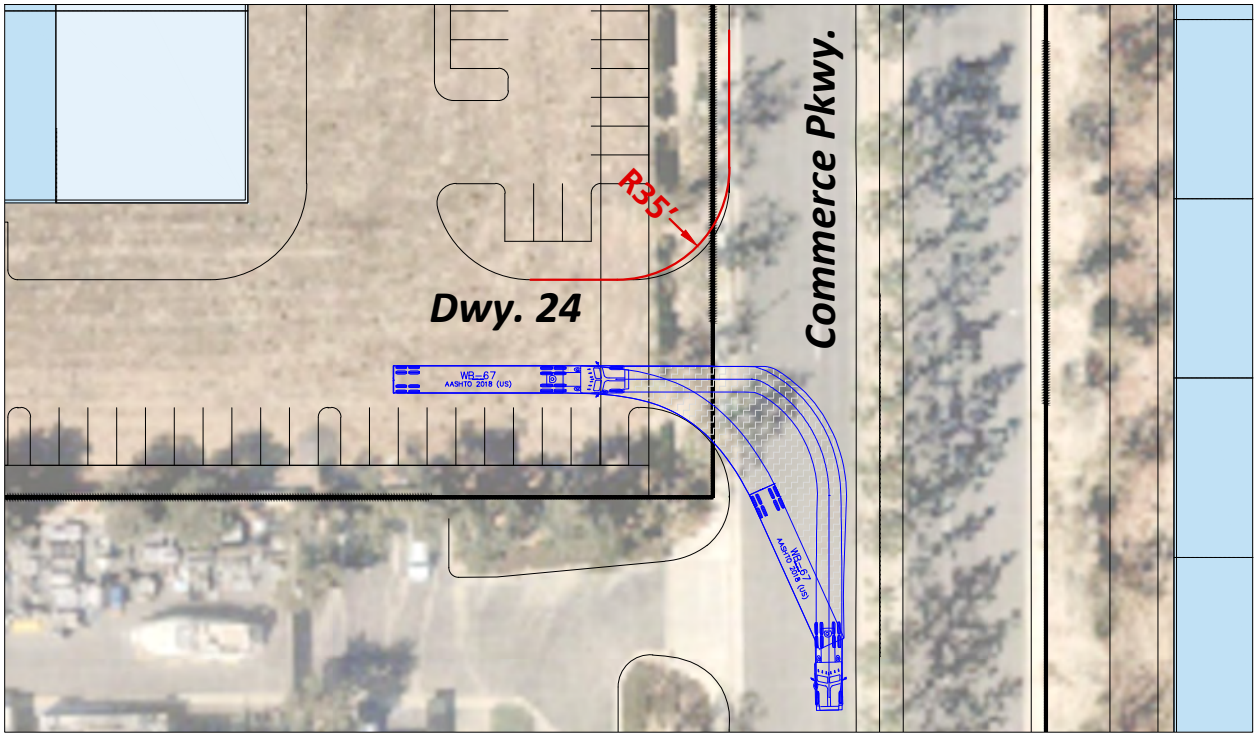


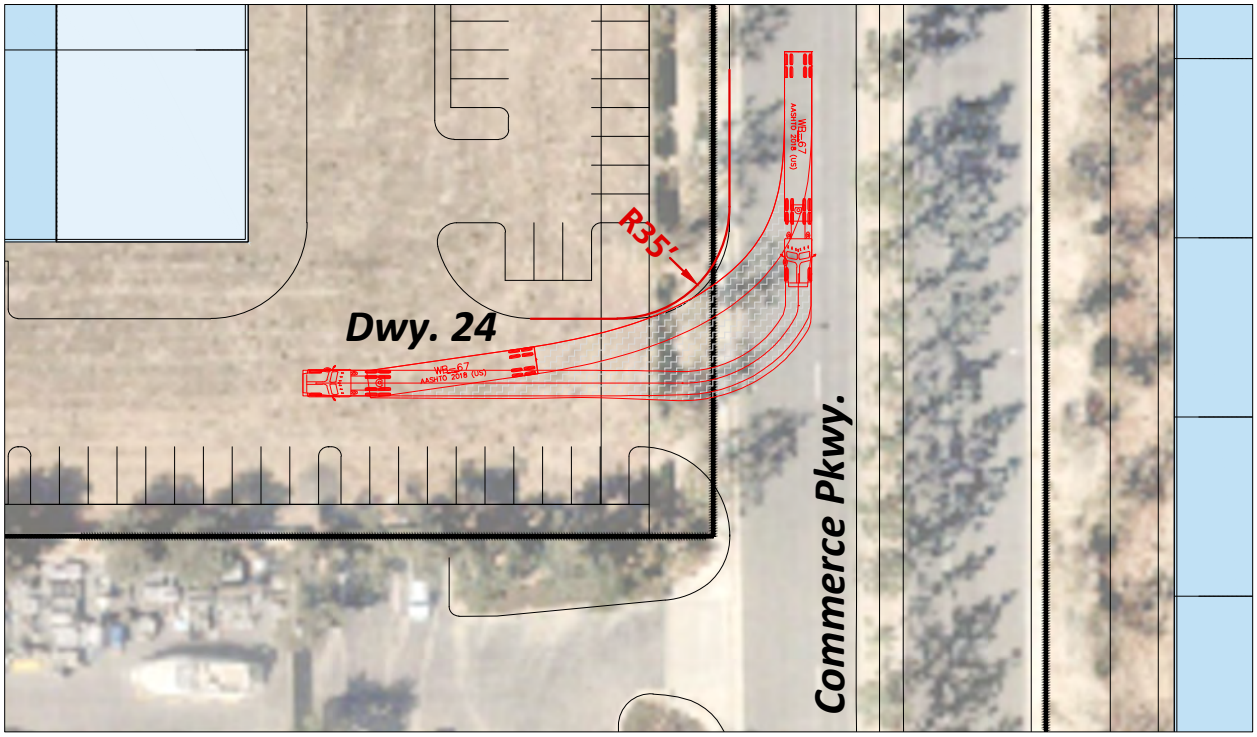


N

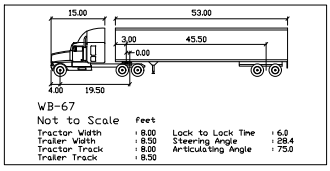


GRAPHIC SCALE
0 30 60
1"=60'





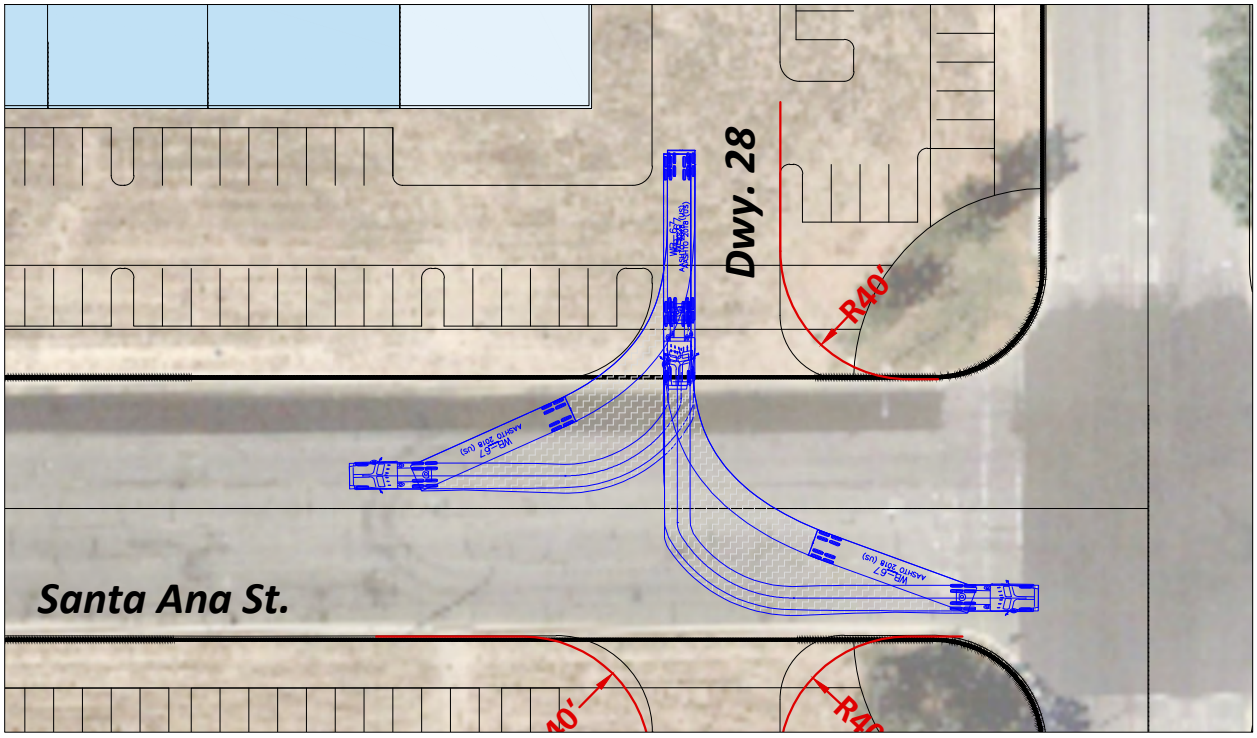
N

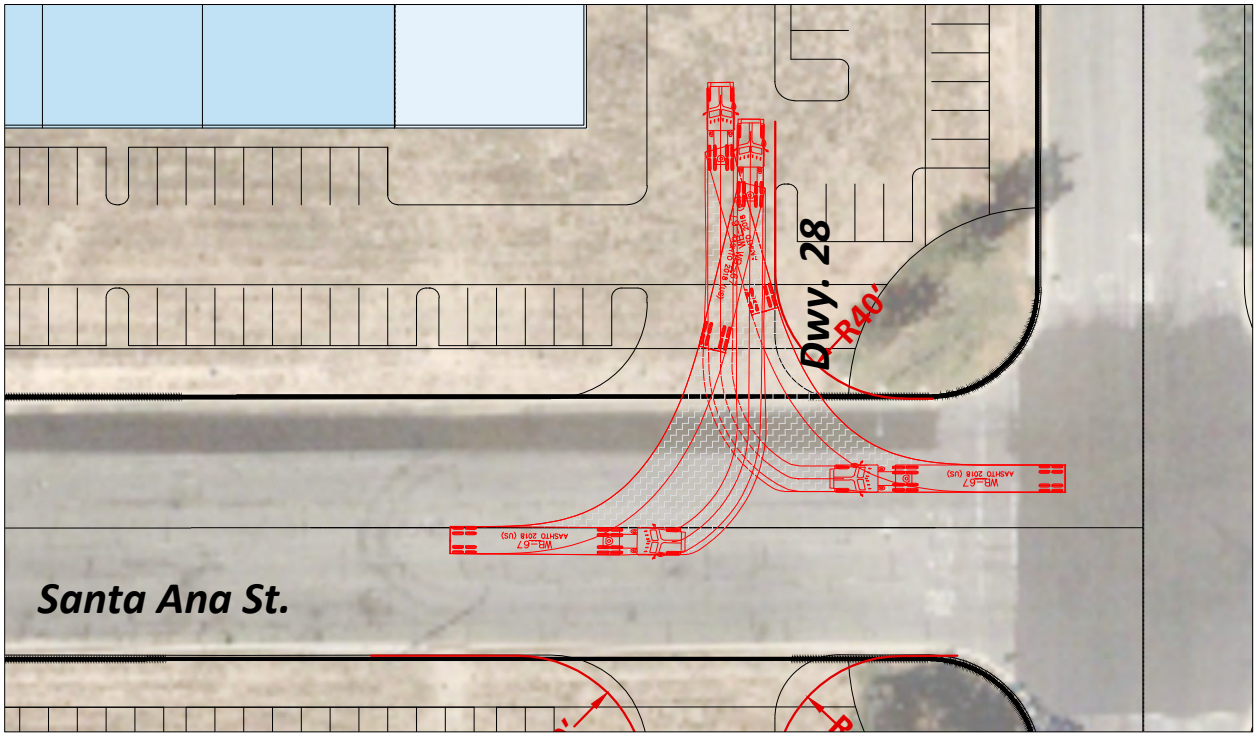


GRAPHIC SCALE

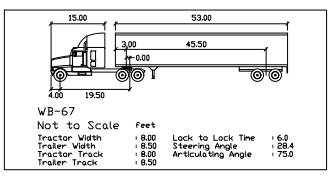
0 30 60

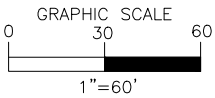
1"=60'

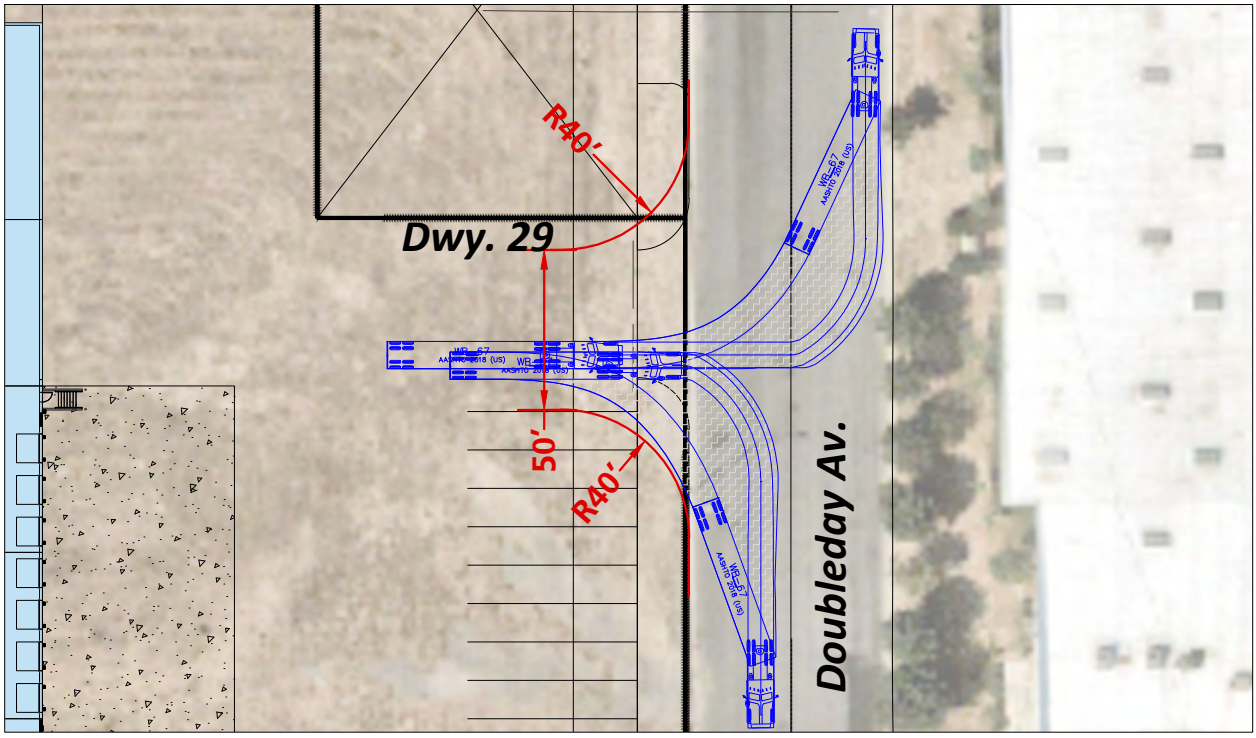

Dwy. 28
R40'
Santa Ana St.

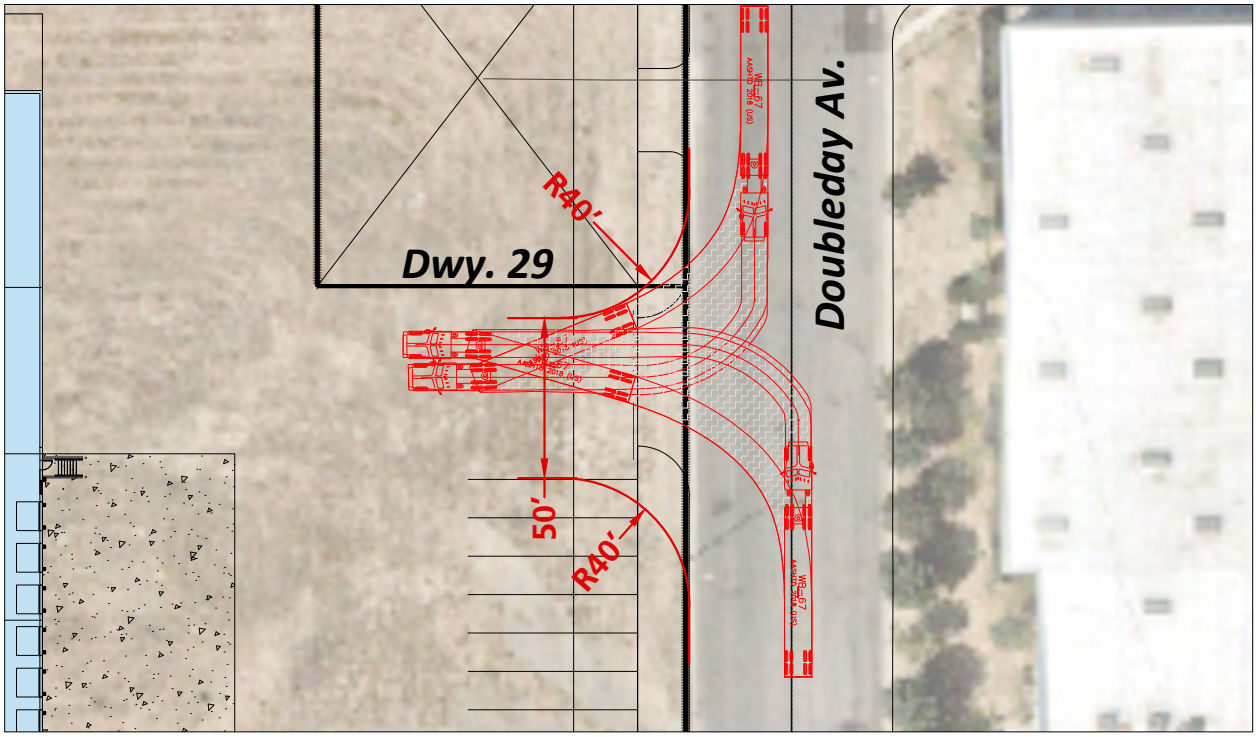

Dwy. 28
R40'
Santa Ana St.

N

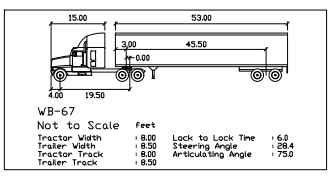

15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0


GRAPHIC SCALE
0
30
60
1"=60'

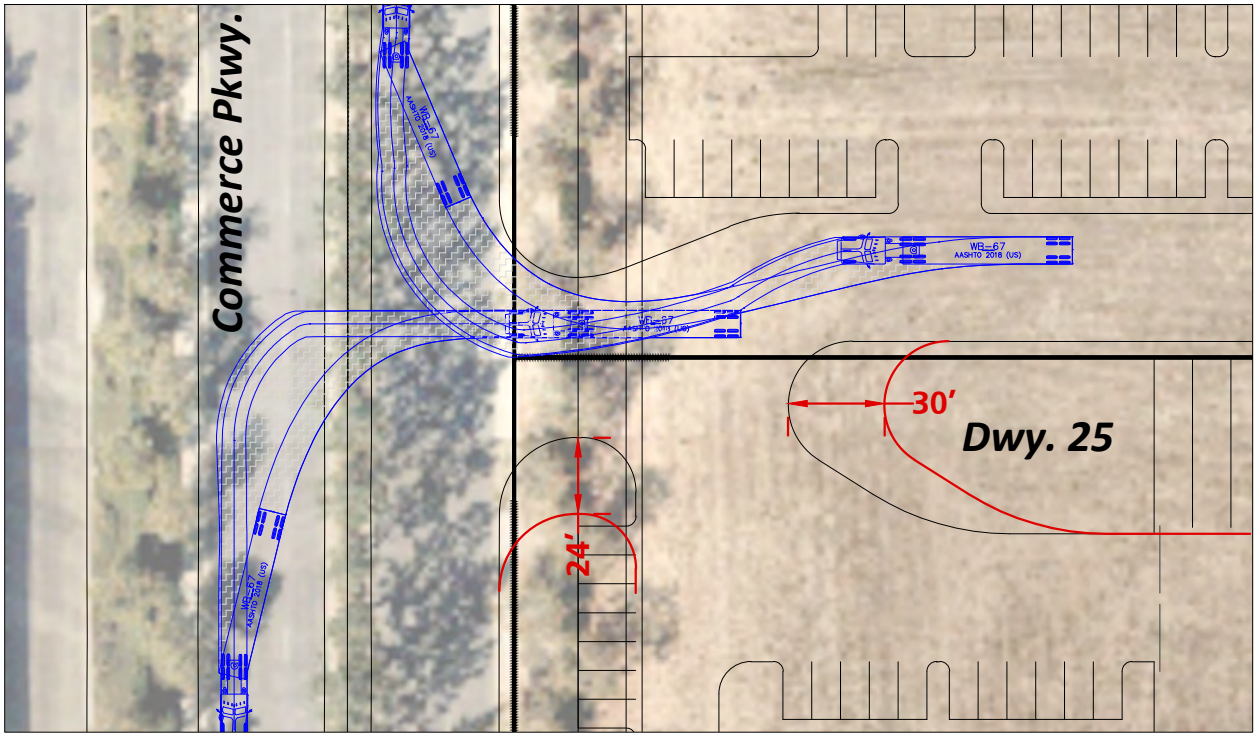


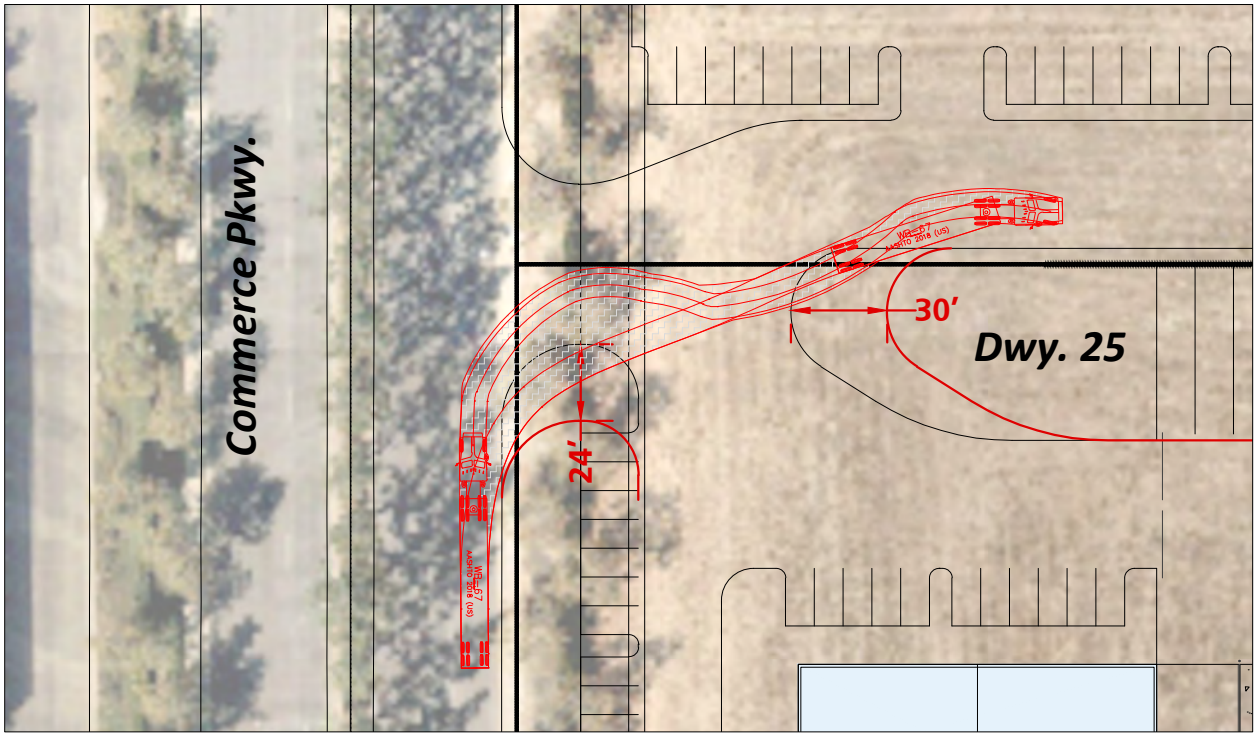


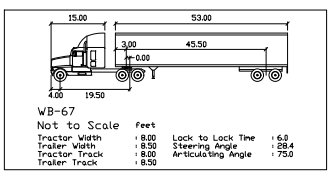
N

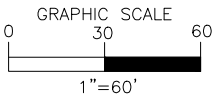


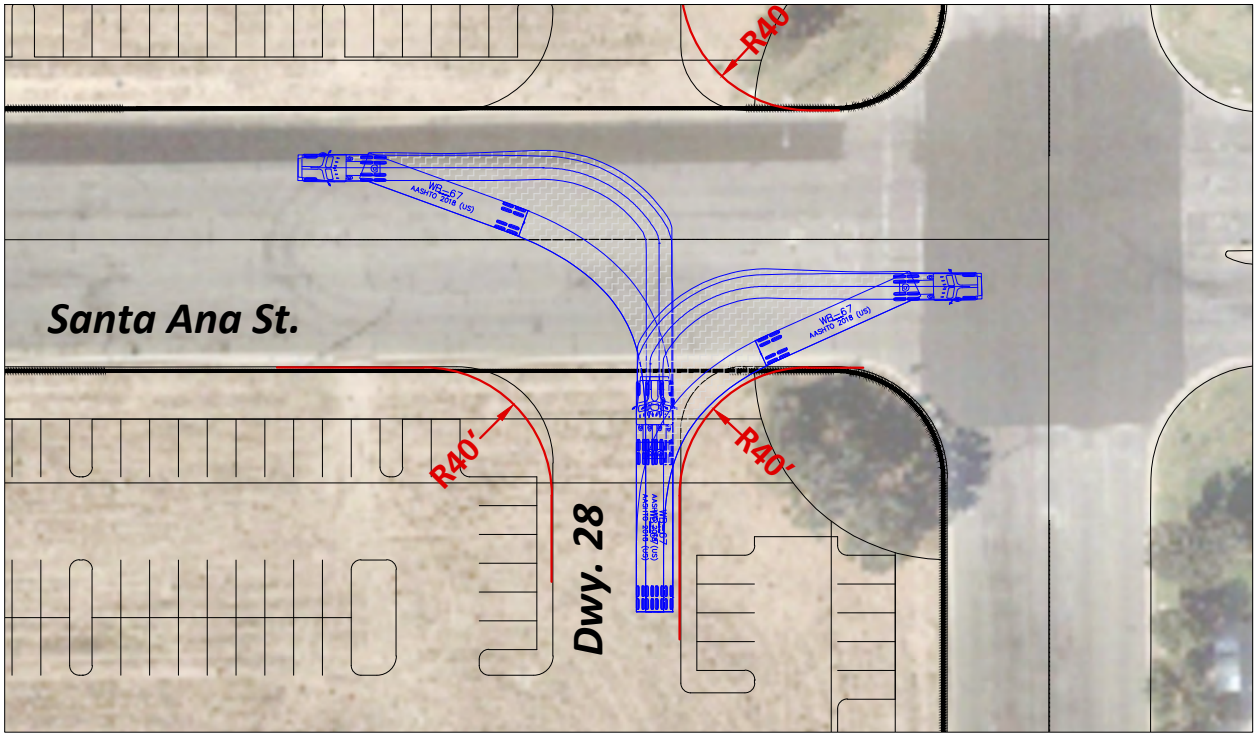
GRAPHIC SCALE
0 30 60
1"=60'

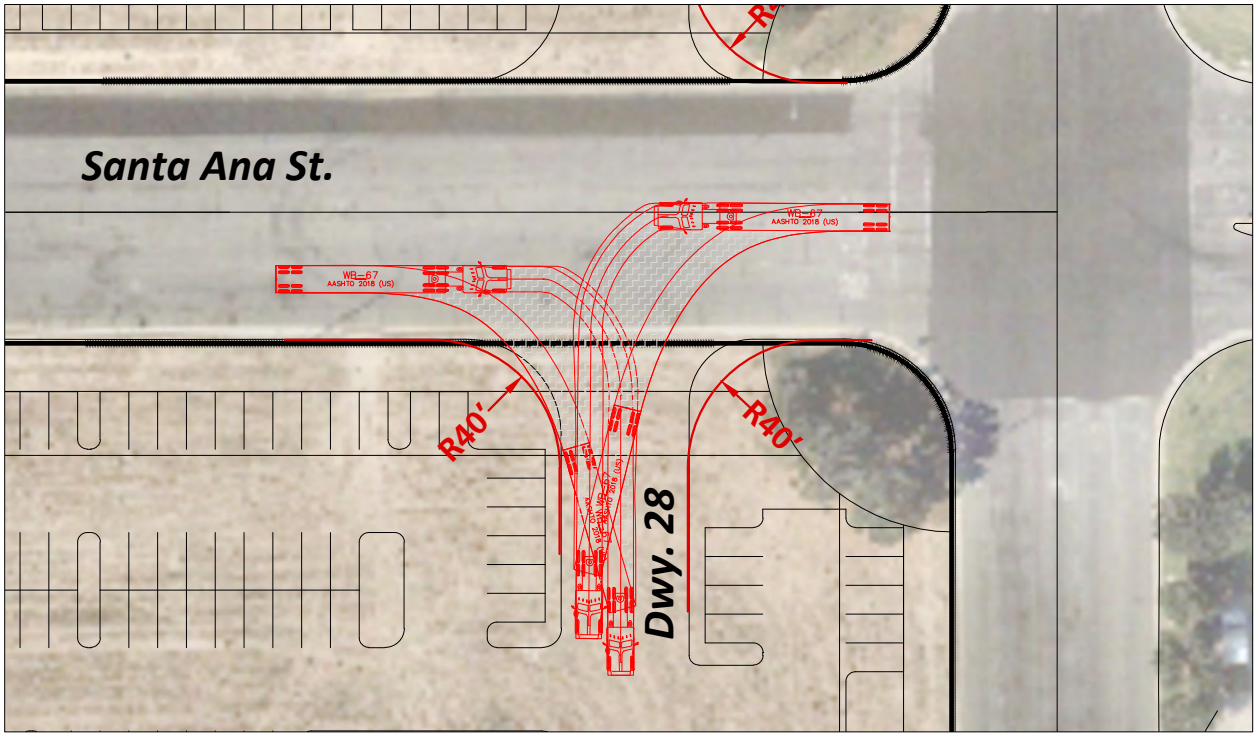

Commerce Pkwy.
30'
Dwy. 25
24'


Commerce Pkwy.
30'
Dwy. 25
24'

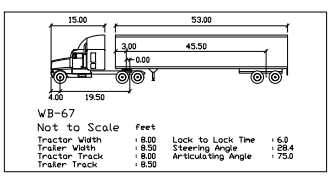

15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0

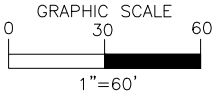

GRAPHIC SCALE
0
30
60
1"=60'

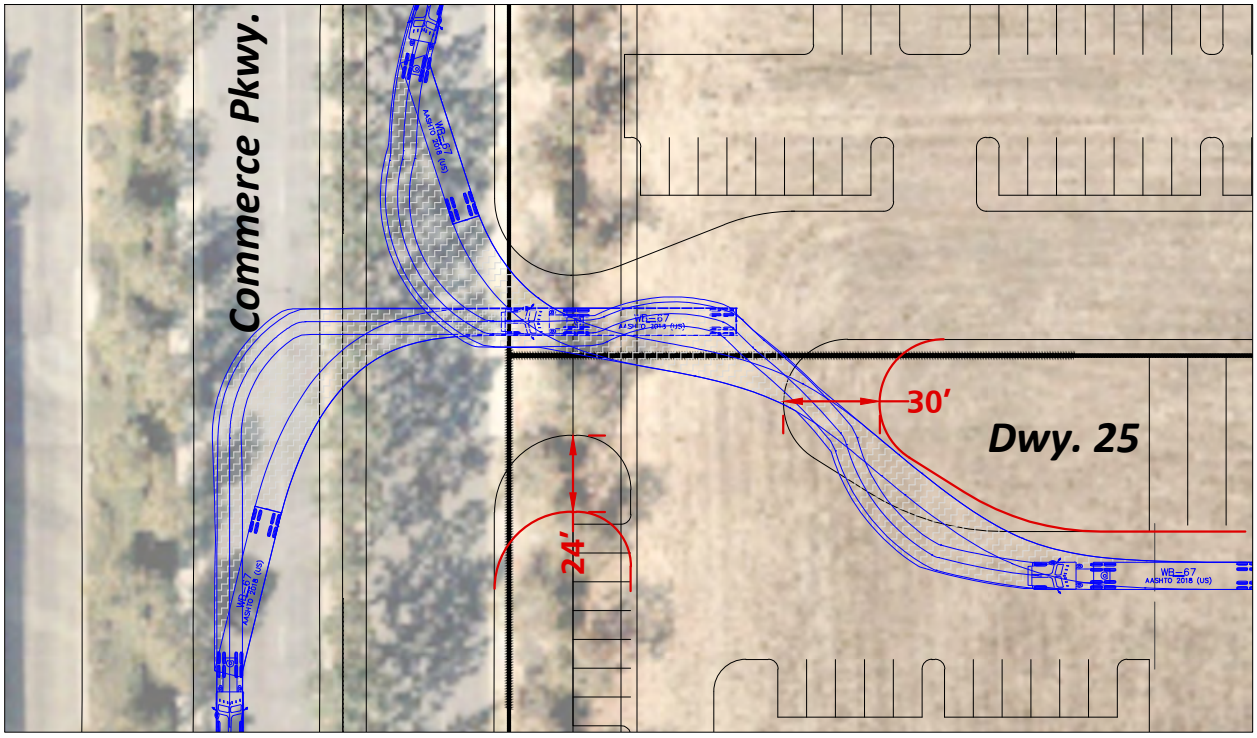

R40'
Santa Ana St.
R40'
R40'
Dwy. 28

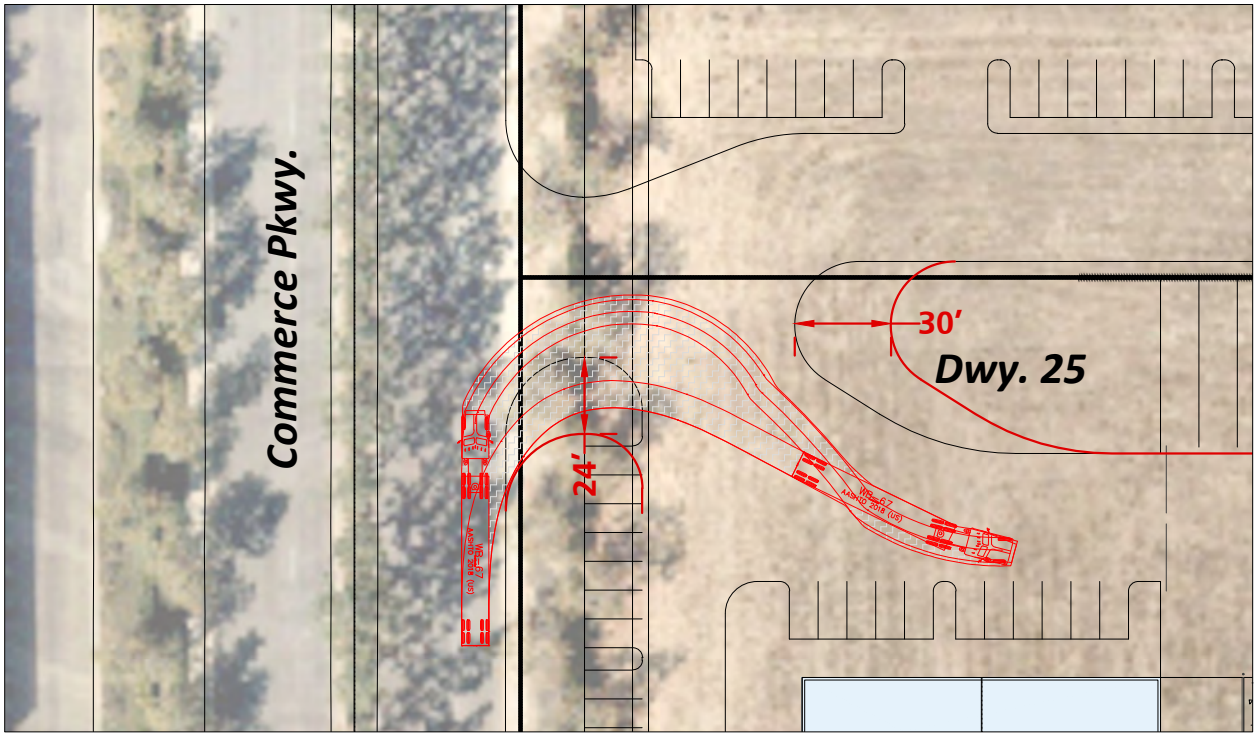

Santa Ana St.
R40'
R40'
Dwy. 28

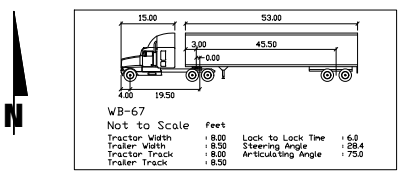
N

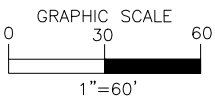

15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0


GRAPHIC SCALE
0
30
60
1"=60'


Commerce Pkwy.
30'
Dwy. 25
24'


Commerce Pkwy.
30'
Dwy. 25
24'


15.00
53.00
3.00
45.50
0.00
4.00
19.50
WB-67
Not to Scale
Feet
Tractor Width : 8.00
Trailer Width : 8.50
Tractor Track : 8.00
Trailer Track : 8.50
Lock to Lock Time : 6.0
Steering Angle : 28.4
Articulating Angle : 75.0


GRAPHIC SCALE
0
30
60
1"=60'

This Page Intentionally Left Blank

APPENDIX 3.1:

EXISTING TRAFFIC COUNTS – OCTOBER 2021

This Page Intentionally Left Blank

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

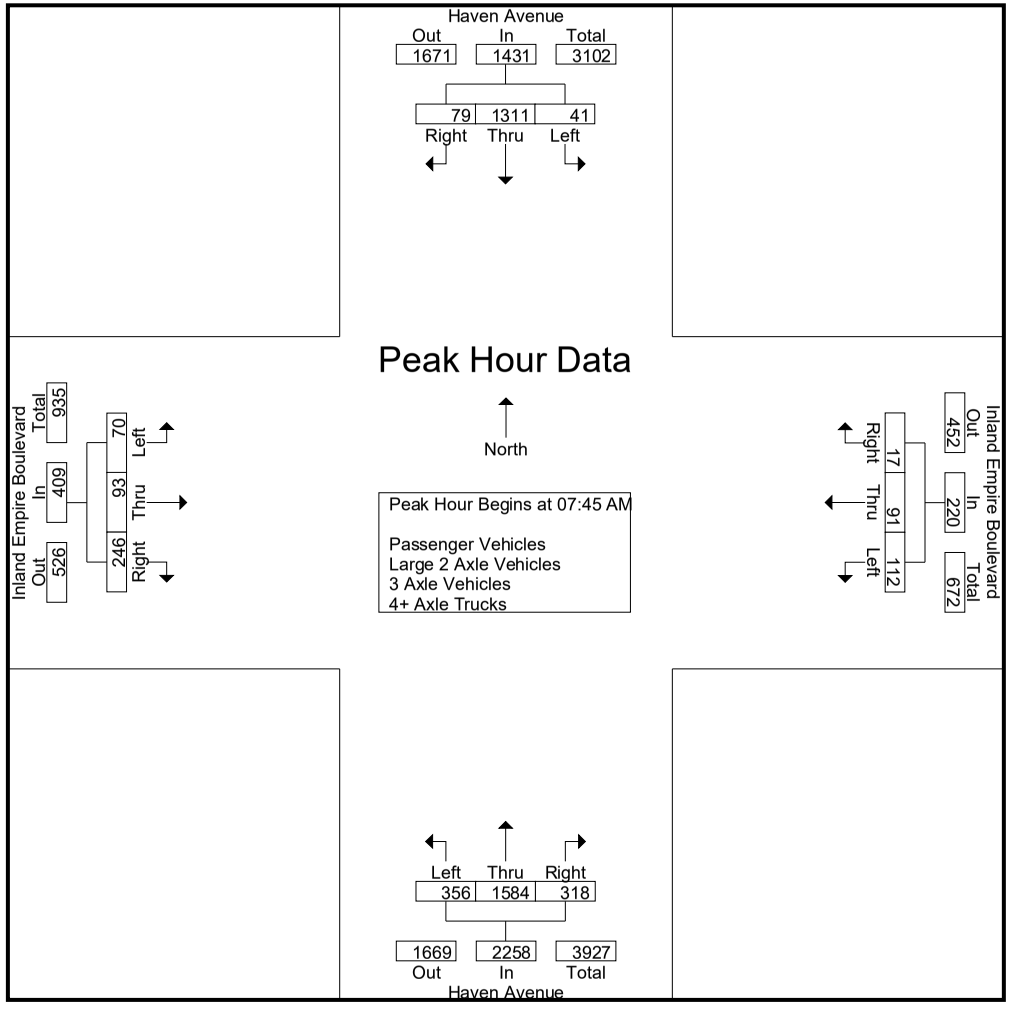
	Haven Avenue Southbound					Inland Empire Boulevard Westbound					Haven Avenue Northbound					Inland Empire Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	4	234	9	0	247	20	17	2	0	39	46	284	46	0	376	5	11	45	36	61	36	723	759
07:15 AM	4	266	9	0	279	18	31	3	0	52	55	284	57	0	396	8	15	58	33	81	33	808	841
07:30 AM	9	291	11	0	311	20	21	5	0	46	75	339	71	0	485	4	14	61	46	79	46	921	967
07:45 AM	11	354	25	0	390	22	23	4	0	49	104	412	103	0	619	21	22	69	48	112	48	1170	1218
Total	28	1145	54	0	1227	80	92	14	0	186	280	1319	277	0	1876	38	62	233	163	333	163	3622	3785
08:00 AM	7	350	15	0	372	37	23	3	0	63	80	415	69	0	564	29	22	73	36	124	36	1123	1159
08:15 AM	14	295	22	0	331	26	22	4	0	52	87	398	79	0	564	15	27	46	33	88	33	1035	1068
08:30 AM	9	312	17	0	338	27	23	6	0	56	85	359	67	0	511	5	22	58	42	85	42	990	1032
08:45 AM	9	300	17	0	326	31	22	9	0	62	93	401	84	0	578	16	16	57	32	89	32	1055	1087
Total	39	1257	71	0	1367	121	90	22	0	233	345	1573	299	0	2217	65	87	234	143	386	143	4203	4346
Grand Total	67	2402	125	0	2594	201	182	36	0	419	625	2892	576	0	4093	103	149	467	306	719	306	7825	8131
Apprch %	2.6	92.6	4.8			48	43.4	8.6			15.3	70.7	14.1			14.3	20.7	65					
Total %	0.9	30.7	1.6		33.2	2.6	2.3	0.5		5.4	8	37	7.4		52.3	1.3	1.9	6		9.2	3.8	96.2	
Passenger Vehicles	66	2200	121		2387	183	172	35		390	607	2688	566		3861	99	140	435		960	0	0	7598
% Passenger Vehicles	98.5	91.6	96.8	0	92	91	94.5	97.2	0	93.1	97.1	92.9	98.3	0	94.3	96.1	94	93.1	93.5	93.7	0	0	93.4
Large 2 Axle Vehicles	1	72	3		76	15	9	1		25	5	71	4		80	2	6	11		25	0	0	206
% Large 2 Axle Vehicles	1.5	3	2.4	0	2.9	7.5	4.9	2.8	0	6	0.8	2.5	0.7	0	2	1.9	4	2.4	2	2.4	0	0	2.5
3 Axle Vehicles	0	29	0		29	2	0	0		2	2	17	3		22	0	0	2		4	0	0	57
% 3 Axle Vehicles	0	1.2	0	0	1.1	1	0	0	0	0.5	0.3	0.6	0.5	0	0.5	0	0	0.4	0.7	0.4	0	0	0.7
4+ Axle Trucks	0	101	1		102	1	1	0		2	11	116	3		130	2	3	19		36	0	0	270
% 4+ Axle Trucks	0	4.2	0.8	0	3.9	0.5	0.5	0	0	0.5	1.8	4	0.5	0	3.2	1.9	2	4.1	3.9	3.5	0	0	3.3

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	11	**354**	**25**	**390**	22	**23**	4	49	**104**	412	**103**	**619**	21	22	69	112	**1170**
08:00 AM	7	350	15	372	**37**	23	3	**63**	80	**415**	69	564	**29**	22	**73**	**124**	1123
08:15 AM	**14**	295	22	331	26	22	4	52	87	398	79	564	15	**27**	46	88	1035
08:30 AM	9	312	17	338	27	23	**6**	56	85	359	67	511	5	22	58	85	990
Total Volume	41	1311	79	1431	112	91	17	220	356	1584	318	2258	70	93	246	409	4318
% App. Total	2.9	91.6	5.5		50.9	41.4	7.7		15.8	70.2	14.1		17.1	22.7	60.1		
PHF	.732	.926	.790	.917	.757	.989	.708	.873	.856	.954	.772	.912	.603	.861	.842	.825	.923

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				08:00 AM				07:45 AM				07:45 AM				
+0 mins.	11	**354**	**25**	**390**	**37**	**23**	3	**63**	**104**	412	**103**	**619**	21	22	69	112	
+15 mins.	7	350	15	372	26	22	4	52	80	**415**	69	564	**29**	22	**73**	**124**	
+30 mins.	**14**	295	22	331	27	23	6	56	87	398	79	564	15	**27**	46	88	
+45 mins.	9	312	17	338	31	22	**9**	62	85	359	67	511	5	22	58	85	
Total Volume	41	1311	79	1431	121	90	22	233	356	1584	318	2258	70	93	246	409	
% App. Total	2.9	91.6	5.5		51.9	38.6	9.4		15.8	70.2	14.1		17.1	22.7	60.1		
PHF	.732	.926	.790	.917	.818	.978	.611	.925	.856	.954	.772	.912	.603	.861	.842	.825	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

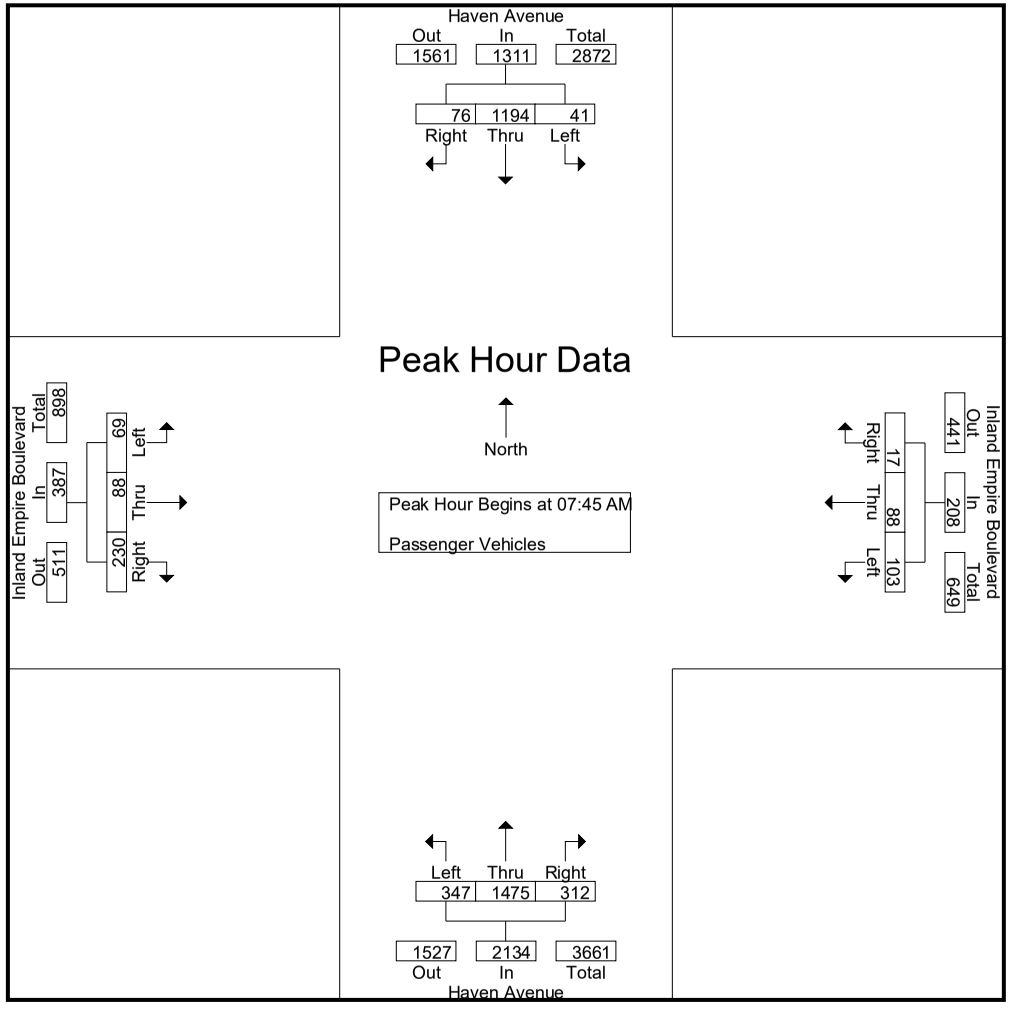
	Haven Avenue Southbound					Inland Empire Boulevard Westbound					Haven Avenue Northbound					Inland Empire Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	4	213	9	0	226	17	16	2	0	35	44	259	44	0	347	5	10	43	34	58	34	666	700
07:15 AM	4	249	9	0	262	17	28	3	0	48	54	260	57	0	371	6	14	54	32	74	32	755	787
07:30 AM	9	275	11	0	295	17	19	4	0	40	72	319	70	0	461	4	14	56	42	74	42	870	912
07:45 AM	11	329	25	0	365	22	23	4	0	49	101	388	101	0	590	20	20	66	47	106	47	1110	1157
Total	28	1066	54	0	1148	73	86	13	0	172	271	1226	272	0	1769	35	58	219	155	312	155	3401	3556
08:00 AM	7	315	14	0	336	32	22	3	0	57	80	385	67	0	532	29	22	68	34	119	34	1044	1078
08:15 AM	14	267	20	0	301	24	21	4	0	49	85	373	78	0	536	15	26	42	31	83	31	969	1000
08:30 AM	9	283	17	0	309	25	22	6	0	53	81	329	66	0	476	5	20	54	38	79	38	917	955
08:45 AM	8	269	16	0	293	29	21	9	0	59	90	375	83	0	548	15	14	52	28	81	28	981	1009
Total	38	1134	67	0	1239	110	86	22	0	218	336	1462	294	0	2092	64	82	216	131	362	131	3911	4042
Grand Total	66	2200	121	0	2387	183	172	35	0	390	607	2688	566	0	3861	99	140	435	286	674	286	7312	7598
Apprch %	2.8	92.2	5.1			46.9	44.1	9			15.7	69.6	14.7			14.7	20.8	64.5					
Total %	0.9	30.1	1.7		32.6	2.5	2.4	0.5		5.3	8.3	36.8	7.7		52.8	1.4	1.9	5.9		9.2	3.8	96.2	

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	11	**329**	**25**	**365**	22	**23**	4	49	**101**	**388**	**101**	**590**	20	20	66	106	**1110**
08:00 AM	7	315	14	336	**32**	22	3	**57**	80	385	67	532	**29**	22	**68**	**119**	1044
08:15 AM	**14**	267	20	301	24	21	4	49	85	373	78	536	15	**26**	42	83	969
08:30 AM	9	283	17	309	25	22	**6**	53	81	329	66	476	5	20	54	79	917
Total Volume	41	1194	76	1311	103	88	17	208	347	1475	312	2134	69	88	230	387	4040
% App. Total	3.1	91.1	5.8		49.5	42.3	8.2		16.3	69.1	14.6		17.8	22.7	59.4		
PHF	.732	.907	.760	.898	.805	.957	.708	.912	.859	.950	.772	.904	.595	.846	.846	.813	.910

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	11	**329**	**25**	**365**	22	**23**	4	49	**101**	**388**	**101**	**590**	20	20	66	106	
+15 mins.	7	315	14	336	**32**	22	3	**57**	80	385	67	532	**29**	22	**68**	**119**	
+30 mins.	**14**	267	20	301	24	21	4	49	85	373	78	536	15	**26**	42	83	
+45 mins.	9	283	17	309	25	22	**6**	53	81	329	66	476	5	20	54	79	
Total Volume	41	1194	76	1311	103	88	17	208	347	1475	312	2134	69	88	230	387	
% App. Total	3.1	91.1	5.8		49.5	42.3	8.2		16.3	69.1	14.6		17.8	22.7	59.4		
PHF	.732	.907	.760	.898	.805	.957	.708	.912	.859	.950	.772	.904	.595	.846	.846	.813	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

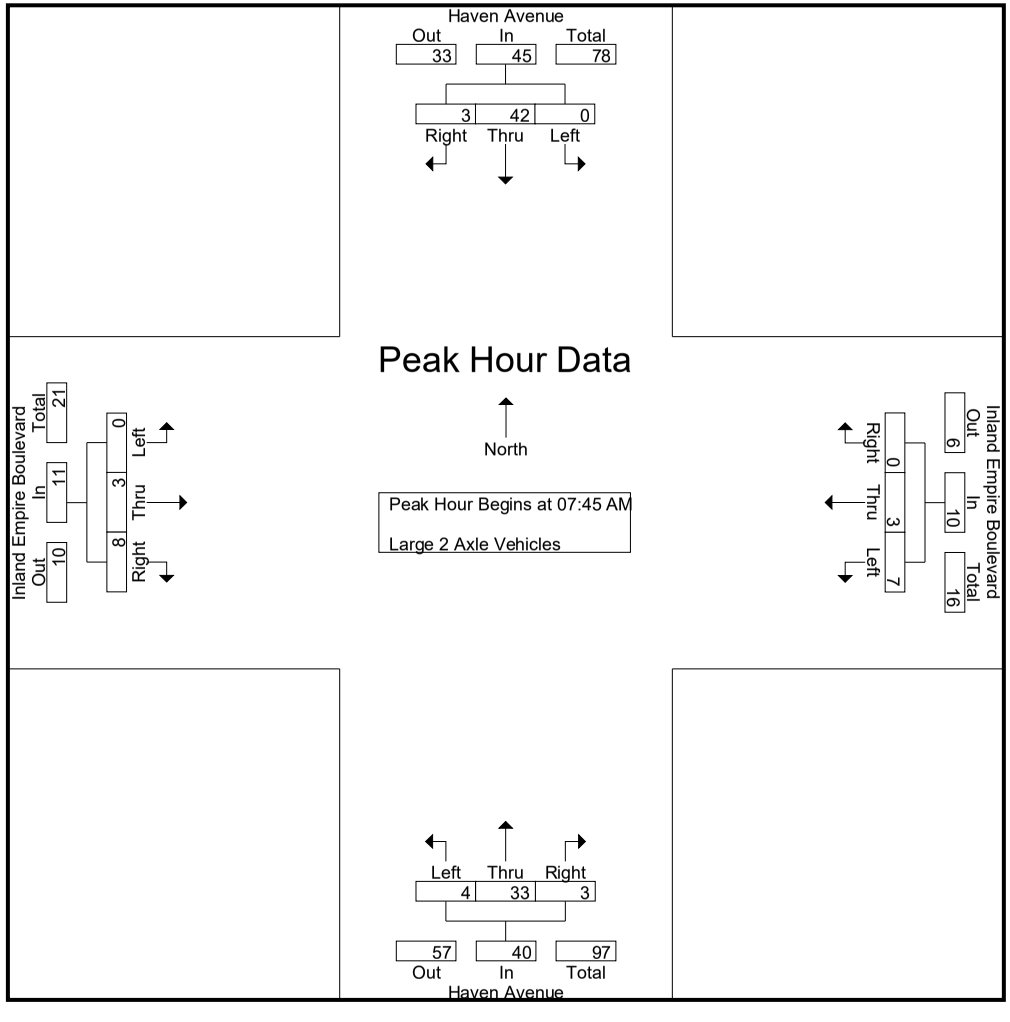
	Haven Avenue Southbound					Inland Empire Boulevard Westbound					Haven Avenue Northbound					Inland Empire Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	10	0	0	10	2	1	0	0	3	0	6	0	0	6	0	1	0	0	1	0	20	20
07:15 AM	0	5	0	0	5	1	2	0	0	3	0	9	0	0	9	1	1	3	1	5	1	22	23
07:30 AM	0	5	0	0	5	3	2	1	0	6	0	8	0	0	8	0	0	0	0	0	0	19	19
07:45 AM	0	13	0	0	13	0	0	0	0	0	1	8	1	0	10	0	1	2	1	3	1	26	27
Total	0	33	0	0	33	6	5	1	0	12	1	31	1	0	33	1	3	5	2	9	2	87	89
08:00 AM	0	11	1	0	12	4	1	0	0	5	0	9	0	0	9	0	0	2	1	2	1	28	29
08:15 AM	0	9	2	0	11	2	1	0	0	3	2	6	1	0	9	0	1	2	1	3	1	26	27
08:30 AM	0	9	0	0	9	1	1	0	0	2	1	10	1	0	12	0	1	2	2	3	2	26	28
08:45 AM	1	10	0	0	11	2	1	0	0	3	1	15	1	0	17	1	1	0	0	2	0	33	33
Total	1	39	3	0	43	9	4	0	0	13	4	40	3	0	47	1	3	6	4	10	4	113	117
Grand Total	1	72	3	0	76	15	9	1	0	25	5	71	4	0	80	2	6	11	6	19	6	200	206
Apprch %	1.3	94.7	3.9			60	36	4			6.2	88.8	5			10.5	31.6	57.9					
Total %	0.5	36	1.5		38	7.5	4.5	0.5		12.5	2.5	35.5	2		40	1	3	5.5		9.5	2.9	97.1	

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**13**	0	**13**	0	0	0	0	1	8	**1**	10	0	**1**	**2**	**3**	26
08:00 AM	0	11	1	12	**4**	**1**	0	**5**	0	9	0	9	0	0	2	2	**28**
08:15 AM	0	9	**2**	11	2	1	0	3	**2**	6	1	9	0	1	2	3	26
08:30 AM	0	9	0	9	1	1	0	2	1	**10**	1	**12**	0	1	2	3	26
Total Volume	0	42	3	45	7	3	0	10	4	33	3	40	0	3	8	11	106
% App. Total	0	93.3	6.7		70	30	0		10	82.5	7.5		0	27.3	72.7		
PHF	.000	.808	.375	.865	.438	.750	.000	.500	.500	.825	.750	.833	.000	.750	1.00	.917	.946

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	**13**	0	**13**	0	0	0	0	1	8	**1**	10	0	**1**	**2**	**3**	
+15 mins.	0	11	1	12	**4**	**1**	0	**5**	0	9	0	9	0	0	2	2	
+30 mins.	0	9	**2**	11	2	1	0	3	**2**	6	1	9	0	1	2	3	
+45 mins.	0	9	0	9	1	1	0	2	1	**10**	1	**12**	0	1	2	3	
Total Volume	0	42	3	45	7	3	0	10	4	33	3	40	0	3	8	11	
% App. Total	0	93.3	6.7		70	30	0		10	82.5	7.5		0	27.3	72.7		
PHF	.000	.808	.375	.865	.438	.750	.000	.500	.500	.825	.750	.833	.000	.750	1.000	.917	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Haven Avenue Southbound					Inland Empire Boulevard Westbound					Haven Avenue Northbound					Inland Empire Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	4	0	0	4	1	0	0	0	1	1	5	1	0	7	0	0	1	1	1	1	13	14
07:15 AM	0	2	0	0	2	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	5
07:30 AM	0	2	0	0	2	0	0	0	0	0	1	2	1	0	4	0	0	1	1	1	1	7	8
07:45 AM	0	3	0	0	3	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	5	5
Total	0	11	0	0	11	1	0	0	0	1	2	11	3	0	16	0	0	2	2	2	2	30	32
08:00 AM	0	6	0	0	6	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	9	9
08:15 AM	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	6	6
08:30 AM	0	4	0	0	4	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	7	7
08:45 AM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
Total	0	18	0	0	18	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	0	25	25
Grand Total	0	29	0	0	29	2	0	0	0	2	2	17	3	0	22	0	0	2	2	2	2	55	57
Apprch %	0	100	0			100	0	0			9.1	77.3	13.6			0	0	100					
Total %	0	52.7	0		52.7	3.6	0	0		3.6	3.6	30.9	5.5		40	0	0	3.6		3.6	3.5	96.5	

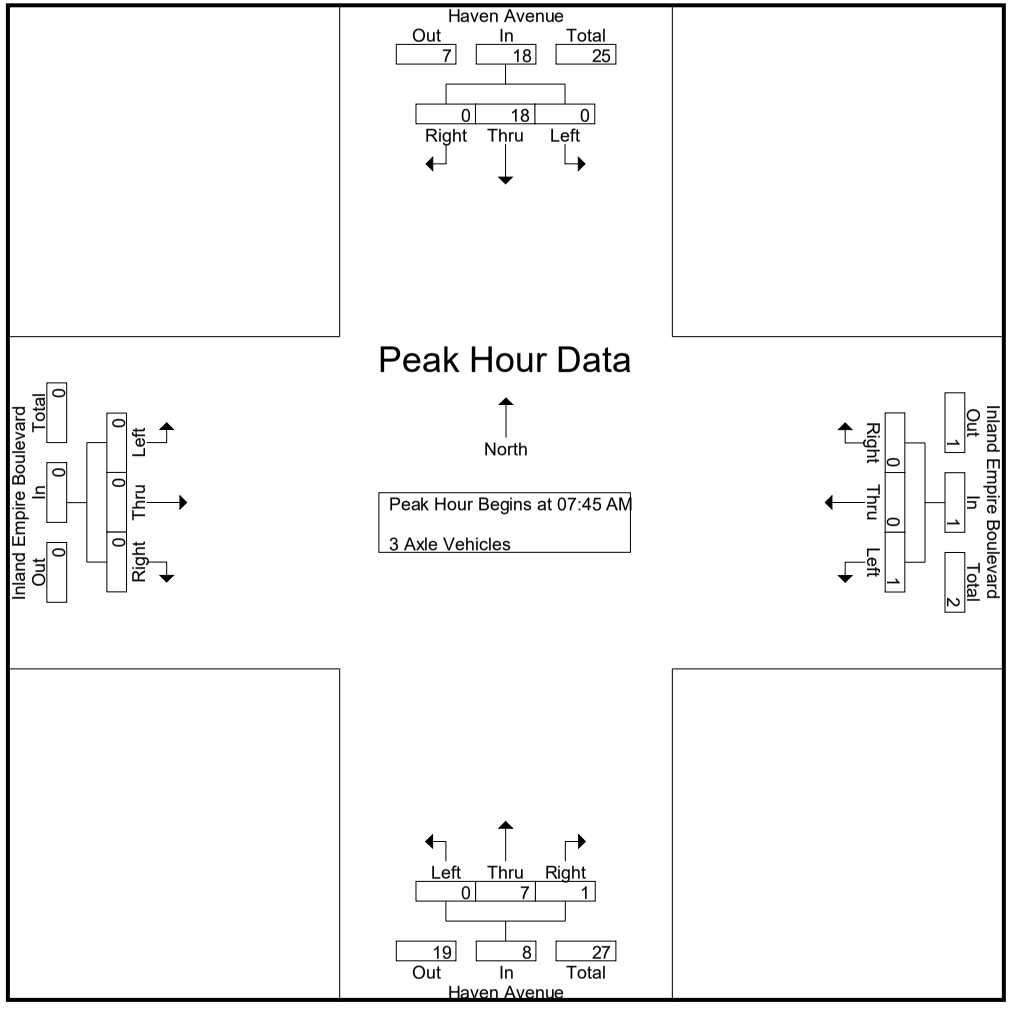
3.1-10

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	3	0	3	0	0	0	0	0	1	**1**	2	0	0	0	0	5
08:00 AM	0	**6**	0	**6**	0	0	0	0	0	**3**	0	**3**	0	0	0	0	**9**
08:15 AM	0	5	0	5	0	0	0	0	0	1	0	1	0	0	0	0	6
08:30 AM	0	4	0	4	**1**	0	0	**1**	0	2	0	2	0	0	0	0	7
Total Volume	0	18	0	18	1	0	0	1	0	7	1	8	0	0	0	0	27
% App. Total	0	100	0		100	0	0		0	87.5	12.5		0	0	0		
PHF	.000	.750	.000	.750	.250	.000	.000	.250	.000	.583	.250	.667	.000	.000	.000	.000	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	3	0	3	0	0	0	0	0	1	**1**	2	0	0	0	0	
+15 mins.	0	**6**	0	**6**	0	0	0	0	0	**3**	0	**3**	0	0	0	0	
+30 mins.	0	5	0	5	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	0	4	0	4	**1**	0	0	**1**	0	2	0	2	0	0	0	0	
Total Volume	0	18	0	18	1	0	0	1	0	7	1	8	0	0	0	0	
% App. Total	0	100	0		100	0	0		0	87.5	12.5		0	0	0		
PHF	.000	.750	.000	.750	.250	.000	.000	.250	.000	.583	.250	.667	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Haven Avenue Southbound					Inland Empire Boulevard Westbound					Haven Avenue Northbound					Inland Empire Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	7	0	0	7	0	0	0	0	0	1	14	1	0	16	0	0	1	1	1	1	24	25
07:15 AM	0	10	0	0	10	0	1	0	0	1	1	12	0	0	13	1	0	1	0	2	0	26	26
07:30 AM	0	9	0	0	9	0	0	0	0	0	2	10	0	0	12	0	0	4	3	4	3	25	28
07:45 AM	0	9	0	0	9	0	0	0	0	0	2	15	0	0	17	1	1	1	0	3	0	29	29
Total	0	35	0	0	35	0	1	0	0	1	6	51	1	0	58	2	1	7	4	10	4	104	108
08:00 AM	0	18	0	0	18	1	0	0	0	1	0	18	2	0	20	0	0	3	1	3	1	42	43
08:15 AM	0	14	0	0	14	0	0	0	0	0	0	18	0	0	18	0	0	2	1	2	1	34	35
08:30 AM	0	16	0	0	16	0	0	0	0	0	3	18	0	0	21	0	1	2	2	3	2	40	42
08:45 AM	0	18	1	0	19	0	0	0	0	0	2	11	0	0	13	0	1	5	4	6	4	38	42
Total	0	66	1	0	67	1	0	0	0	1	5	65	2	0	72	0	2	12	8	14	8	154	162
Grand Total	0	101	1	0	102	1	1	0	0	2	11	116	3	0	130	2	3	19	12	24	12	258	270
Apprch %	0	99	1			50	50	0			8.5	89.2	2.3			8.3	12.5	79.2					
Total %	0	39.1	0.4		39.5	0.4	0.4	0		0.8	4.3	45	1.2		50.4	0.8	1.2	7.4		9.3	4.4	95.6	

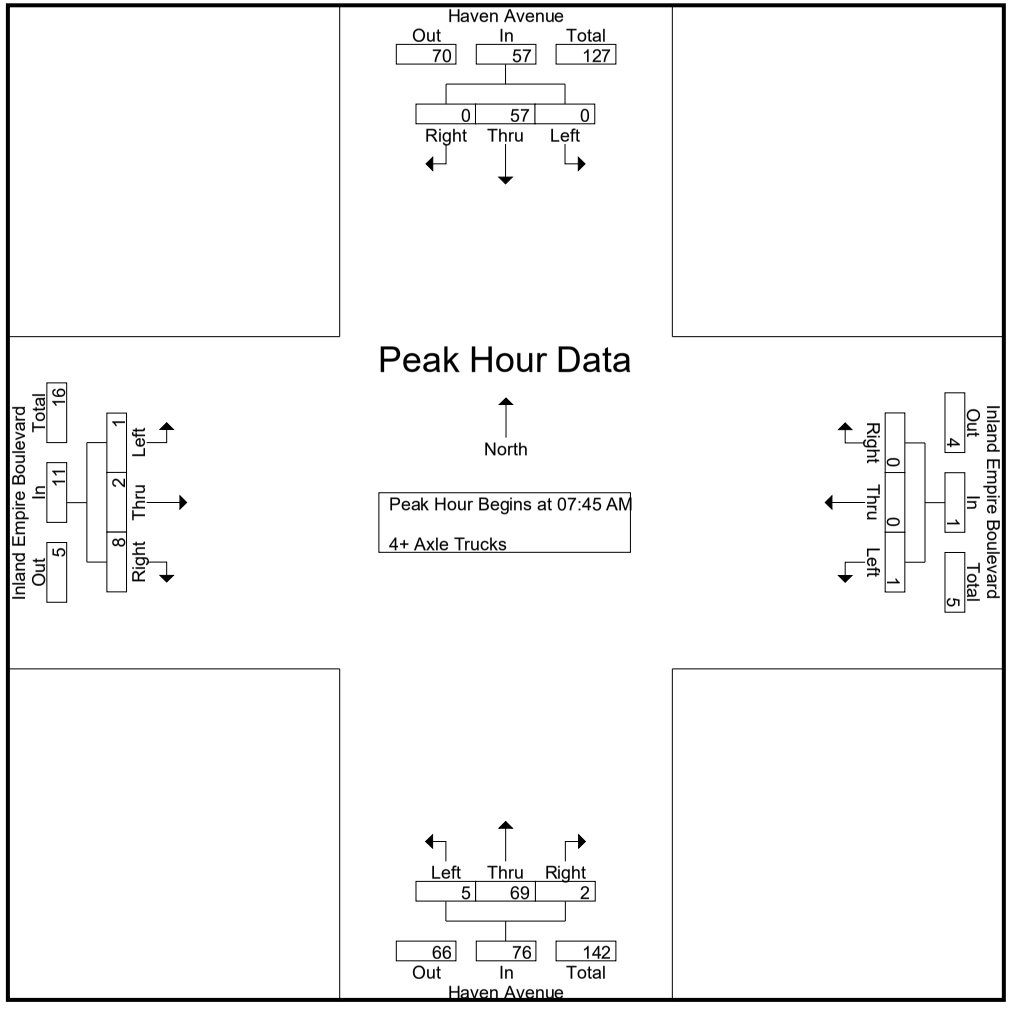
3.1-13

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	9	0	9	0	0	0	0	2	15	0	17	**1**	**1**	1	**3**	29
08:00 AM	0	**18**	0	**18**	**1**	0	0	**1**	0	**18**	**2**	20	0	0	**3**	3	**42**
08:15 AM	0	14	0	14	0	0	0	0	0	18	0	18	0	0	2	2	34
08:30 AM	0	16	0	16	0	0	0	0	**3**	18	0	**21**	0	1	2	3	40
Total Volume	0	57	0	57	1	0	0	1	5	69	2	76	1	2	8	11	145
% App. Total	0	100	0		100	0	0		6.6	90.8	2.6		9.1	18.2	72.7		
PHF	.000	.792	.000	.792	.250	.000	.000	.250	.417	.958	.250	.905	.250	.500	.667	.917	.863

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	9	0	9	0	0	0	0	2	15	0	17	**1**	**1**	1	**3**	
+15 mins.	0	**18**	0	**18**	**1**	0	0	**1**	0	**18**	**2**	20	0	0	**3**	3	
+30 mins.	0	14	0	14	0	0	0	0	0	18	0	18	0	0	2	2	
+45 mins.	0	16	0	16	0	0	0	0	**3**	18	0	**21**	0	1	2	3	
Total Volume	0	57	0	57	1	0	0	1	5	69	2	76	1	2	8	11	
% App. Total	0	100	0		100	0	0		6.6	90.8	2.6		9.1	18.2	72.7		
PHF	.000	.792	.000	.792	.250	.000	.000	.250	.417	.958	.250	.905	.250	.500	.667	.917	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					Inland Empire Boulevard Westbound					Haven Avenue Northbound					Inland Empire Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	10	346	20	0	376	106	48	9	0	163	61	434	123	0	618	38	51	80	31	169	31	1326	1357
04:15 PM	13	386	12	0	411	73	48	14	0	135	67	454	98	0	619	38	54	84	24	176	24	1341	1365
04:30 PM	13	393	13	0	419	90	46	8	0	144	86	429	90	0	605	46	80	98	44	224	44	1392	1436
04:45 PM	10	380	24	0	414	68	59	8	0	135	65	430	99	0	594	45	74	72	38	191	38	1334	1372
Total	46	1505	69	0	1620	337	201	39	0	577	279	1747	410	0	2436	167	259	334	137	760	137	5393	5530
05:00 PM	6	424	12	0	442	90	65	10	0	165	82	401	96	0	579	59	84	107	42	250	42	1436	1478
05:15 PM	8	382	16	0	406	82	53	12	0	147	82	383	112	0	577	39	92	91	43	222	43	1352	1395
05:30 PM	6	344	13	0	363	76	55	19	0	150	80	454	99	0	633	34	58	72	42	164	42	1310	1352
05:45 PM	8	270	17	0	295	58	41	11	0	110	79	415	61	0	555	24	40	49	21	113	21	1073	1094
Total	28	1420	58	0	1506	306	214	52	0	572	323	1653	368	0	2344	156	274	319	148	749	148	5171	5319
Grand Total	74	2925	127	0	3126	643	415	91	0	1149	602	3400	778	0	4780	323	533	653	285	1509	285	10564	10849
Apprch %	2.4	93.6	4.1			56	36.1	7.9			12.6	71.1	16.3			21.4	35.3	43.3					
Total %	0.7	27.7	1.2		29.6	6.1	3.9	0.9		10.9	5.7	32.2	7.4		45.2	3.1	5	6.2		14.3	2.6	97.4	
Passenger Vehicles	72	2762	125		2959	633	403	89		1125	593	3242	763		4598	320	522	636		1757	0	0	10439
% Passenger Vehicles	97.3	94.4	98.4	0	94.7	98.4	97.1	97.8	0	97.9	98.5	95.4	98.1	0	96.2	99.1	97.9	97.4	97.9	97.9	0	0	96.2
Large 2 Axle Vehicles	0	63	2		65	7	10	0		17	7	43	8		58	2	9	11		27	0	0	167
% Large 2 Axle Vehicles	0	2.2	1.6	0	2.1	1.1	2.4	0	0	1.5	1.2	1.3	1	0	1.2	0.6	1.7	1.7	1.8	1.5	0	0	1.5
3 Axle Vehicles	0	22	0		22	1	1	2		4	0	16	3		19	0	1	1		2	0	0	47
% 3 Axle Vehicles	0	0.8	0	0	0.7	0.2	0.2	2.2	0	0.3	0	0.5	0.4	0	0.4	0	0.2	0.2	0	0.1	0	0	0.4
4+ Axle Trucks	2	78	0		80	2	1	0		3	2	99	4		105	1	1	5		8	0	0	196
% 4+ Axle Trucks	2.7	2.7	0	0	2.6	0.3	0.2	0	0	0.3	0.3	2.9	0.5	0	2.2	0.3	0.2	0.8	0.4	0.4	0	0	1.8

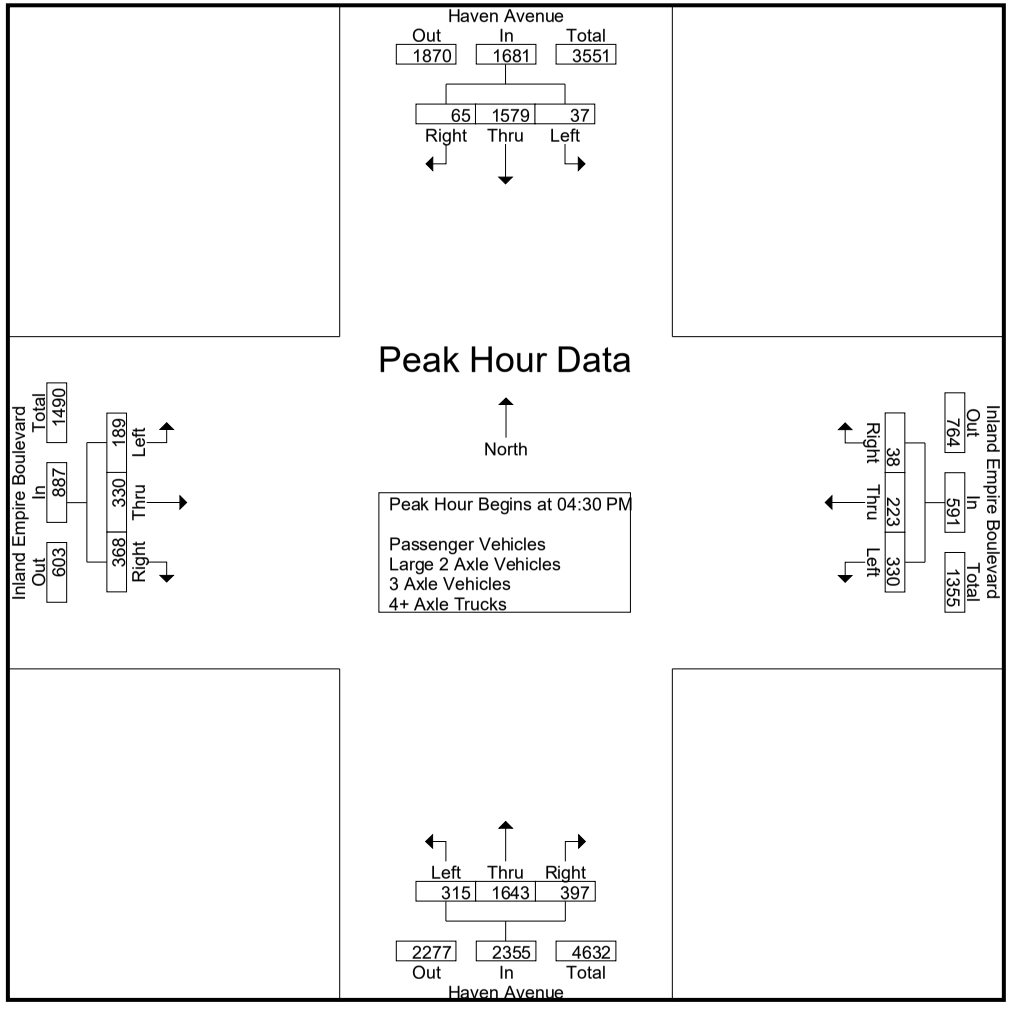
3.1-16

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**13**	393	13	419	**90**	46	8	144	**86**	429	90	**605**	46	80	98	224	1392
04:45 PM	10	380	**24**	414	68	59	8	135	65	**430**	99	594	45	74	72	191	1334
05:00 PM	6	**424**	12	**442**	90	**65**	10	**165**	82	401	96	579	**59**	84	**107**	**250**	**1436**
05:15 PM	8	382	16	406	82	53	**12**	147	82	383	**112**	577	39	**92**	91	222	1352
Total Volume	37	1579	65	1681	330	223	38	591	315	1643	397	2355	189	330	368	887	5514
% App. Total	2.2	93.9	3.9		55.8	37.7	6.4		13.4	69.8	16.9		21.3	37.2	41.5		
PHF	.712	.931	.677	.951	.917	.858	.792	.895	.916	.955	.886	.973	.801	.897	.860	.887	.960

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:45 PM				04:00 PM				04:30 PM				
+0 mins.	**13**	386	12	411	68	59	8	135	61	434	**123**	618	46	80	98	224	
+15 mins.	13	393	13	419	**90**	**65**	10	**165**	67	**454**	98	**619**	45	74	72	191	
+30 mins.	10	380	**24**	414	82	53	12	147	**86**	429	90	605	**59**	84	**107**	**250**	
+45 mins.	6	**424**	12	**442**	76	55	**19**	150	65	430	99	594	39	**92**	91	222	
Total Volume	42	1583	61	1686	316	232	49	597	279	1747	410	2436	189	330	368	887	
% App. Total	2.5	93.9	3.6		52.9	38.9	8.2		11.5	71.7	16.8		21.3	37.2	41.5		
PHF	.808	.933	.635	.954	.878	.892	.645	.905	.811	.962	.833	.984	.801	.897	.860	.887	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					Inland Empire Boulevard Westbound					Haven Avenue Northbound					Inland Empire Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	9	324	20	0	353	104	46	9	0	159	59	406	121	0	586	36	51	78	31	165	31	1263	1294
04:15 PM	13	357	12	0	382	72	46	14	0	132	65	436	97	0	598	38	52	82	24	172	24	1284	1308
04:30 PM	12	371	13	0	396	88	46	8	0	142	84	404	87	0	575	46	78	97	44	221	44	1334	1378
04:45 PM	10	354	23	0	387	65	58	7	0	130	63	407	95	0	565	45	73	71	38	189	38	1271	1309
Total	44	1406	68	0	1518	329	196	38	0	563	271	1653	400	0	2324	165	254	328	137	747	137	5152	5289
05:00 PM	6	408	12	0	426	90	61	10	0	161	82	385	93	0	560	59	83	106	42	248	42	1395	1437
05:15 PM	8	367	16	0	391	81	53	12	0	146	82	371	110	0	563	39	88	86	41	213	41	1313	1354
05:30 PM	6	322	12	0	340	76	53	19	0	148	79	441	99	0	619	34	58	69	39	161	39	1268	1307
05:45 PM	8	259	17	0	284	57	40	10	0	107	79	392	61	0	532	23	39	47	20	109	20	1032	1052
Total	28	1356	57	0	1441	304	207	51	0	562	322	1589	363	0	2274	155	268	308	142	731	142	5008	5150
Grand Total	72	2762	125	0	2959	633	403	89	0	1125	593	3242	763	0	4598	320	522	636	279	1478	279	10160	10439
Apprch %	2.4	93.3	4.2			56.3	35.8	7.9			12.9	70.5	16.6			21.7	35.3	43					
Total %	0.7	27.2	1.2		29.1	6.2	4	0.9		11.1	5.8	31.9	7.5		45.3	3.1	5.1	6.3		14.5	2.7	97.3	

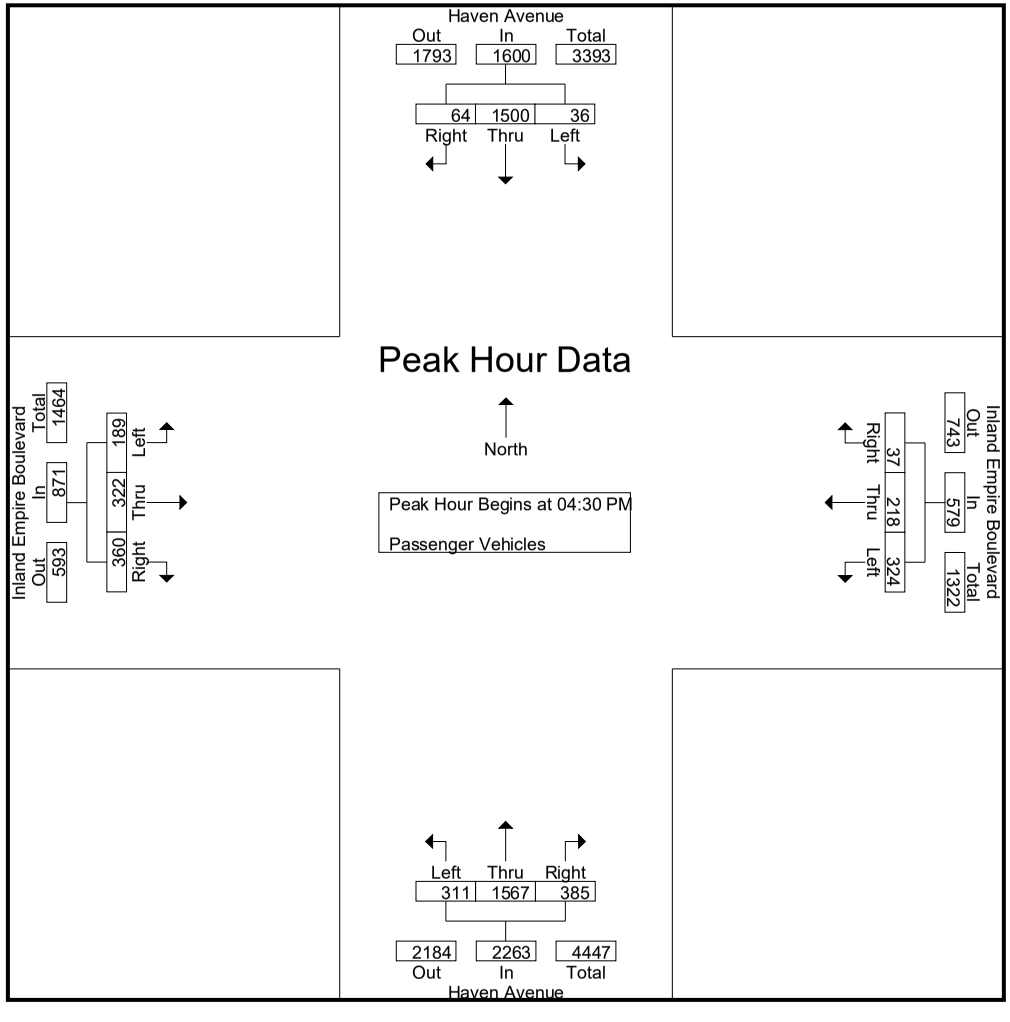
3.1-19

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**12**	371	13	396	88	46	8	142	**84**	404	87	**575**	46	78	97	221	1334
04:45 PM	10	354	**23**	387	65	58	7	130	63	**407**	95	565	45	73	71	189	1271
05:00 PM	6	**408**	12	**426**	**90**	**61**	10	**161**	82	385	93	560	**59**	83	**106**	**248**	**1395**
05:15 PM	8	367	16	391	81	53	**12**	146	82	371	**110**	563	39	**88**	86	213	1313
Total Volume	36	1500	64	1600	324	218	37	579	311	1567	385	2263	189	322	360	871	5313
% App. Total	2.2	93.8	4		56	37.7	6.4		13.7	69.2	17		21.7	37	41.3		
PHF	.750	.919	.696	.939	.900	.893	.771	.899	.926	.963	.875	.984	.801	.915	.849	.878	.952

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**12**	371	13	396	88	46	8	142	**84**	404	87	**575**	46	78	97	221	
+15 mins.	10	354	**23**	387	65	58	7	130	63	**407**	95	565	45	73	71	189	
+30 mins.	6	**408**	12	**426**	**90**	**61**	10	**161**	82	385	93	560	**59**	83	**106**	**248**	
+45 mins.	8	367	16	391	81	53	**12**	146	82	371	**110**	563	39	**88**	86	213	
Total Volume	36	1500	64	1600	324	218	37	579	311	1567	385	2263	189	322	360	871	
% App. Total	2.2	93.8	4		56	37.7	6.4		13.7	69.2	17		21.7	37	41.3		
PHF	.750	.919	.696	.939	.900	.893	.771	.899	.926	.963	.875	.984	.801	.915	.849	.878	

3.1-21

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Haven Avenue Southbound					Inland Empire Boulevard Westbound					Haven Avenue Northbound					Inland Empire Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	8	0	0	8	1	2	0	0	3	1	11	2	0	14	1	0	1	0	2	0	27	27
04:15 PM	0	11	0	0	11	1	1	0	0	2	1	6	0	0	7	0	1	0	0	1	0	21	21
04:30 PM	0	8	0	0	8	2	0	0	0	2	2	9	2	0	13	0	2	1	0	3	0	26	26
04:45 PM	0	10	1	0	11	1	1	0	0	2	2	3	1	0	6	0	1	1	0	2	0	21	21
Total	0	37	1	0	38	5	4	0	0	9	6	29	5	0	40	1	4	3	0	8	0	95	95
05:00 PM	0	8	0	0	8	0	4	0	0	4	0	4	2	0	6	0	1	1	0	2	0	20	20
05:15 PM	0	6	0	0	6	1	0	0	0	1	0	1	1	0	2	0	3	4	2	7	2	16	18
05:30 PM	0	8	1	0	9	0	2	0	0	2	1	4	0	0	5	0	0	2	2	2	2	18	20
05:45 PM	0	4	0	0	4	1	0	0	0	1	0	5	0	0	5	1	1	1	1	3	1	13	14
Total	0	26	1	0	27	2	6	0	0	8	1	14	3	0	18	1	5	8	5	14	5	67	72
Grand Total	0	63	2	0	65	7	10	0	0	17	7	43	8	0	58	2	9	11	5	22	5	162	167
Apprch %	0	96.9	3.1			41.2	58.8	0			12.1	74.1	13.8			9.1	40.9	50					
Total %	0	38.9	1.2		40.1	4.3	6.2	0		10.5	4.3	26.5	4.9		35.8	1.2	5.6	6.8		13.6	3	97	

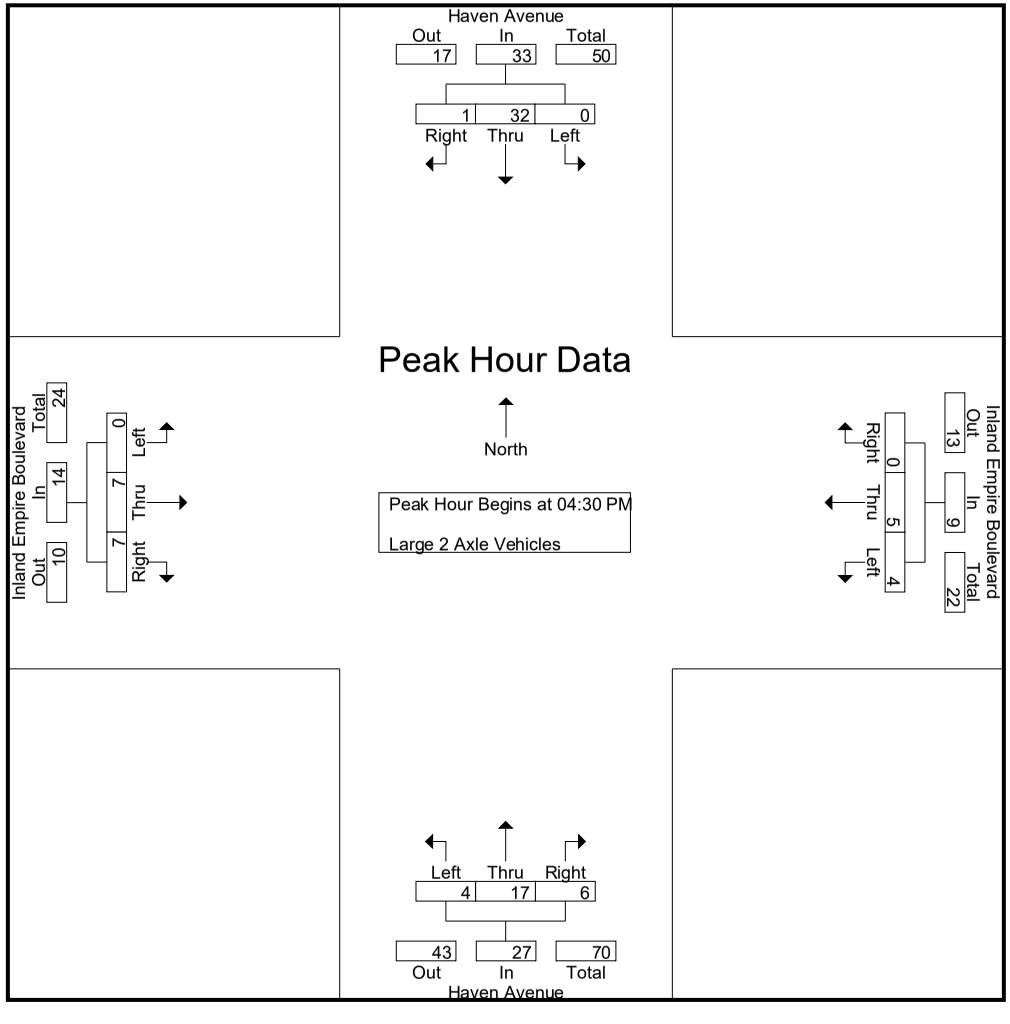
3.1-22

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	8	0	8	**2**	0	0	2	**2**	**9**	**2**	**13**	0	2	1	3	**26**
04:45 PM	0	**10**	**1**	**11**	1	1	0	2	2	3	1	6	0	1	1	2	21
05:00 PM	0	8	0	8	0	**4**	0	**4**	0	4	2	6	0	1	1	2	20
05:15 PM	0	6	0	6	1	0	0	1	0	1	1	2	0	**3**	**4**	**7**	16
Total Volume	0	32	1	33	4	5	0	9	4	17	6	27	0	7	7	14	83
% App. Total	0	97	3		44.4	55.6	0		14.8	63	22.2		0	50	50		
PHF	.000	.800	.250	.750	.500	.313	.000	.563	.500	.472	.750	.519	.000	.583	.438	.500	.798

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	8	0	8	**2**	0	0	2	**2**	**9**	**2**	**13**	0	2	1	3	
+15 mins.	0	**10**	**1**	**11**	1	1	0	2	2	3	1	6	0	1	1	2	
+30 mins.	0	8	0	8	0	**4**	0	**4**	0	4	2	6	0	1	1	2	
+45 mins.	0	6	0	6	1	0	0	1	0	1	1	2	0	**3**	**4**	**7**	
Total Volume	0	32	1	33	4	5	0	9	4	17	6	27	0	7	7	14	
% App. Total	0	97	3		44.4	55.6	0		14.8	63	22.2		0	50	50		
PHF	.000	.800	.250	.750	.500	.313	.000	.563	.500	.472	.750	.519	.000	.583	.438	.500	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Haven Avenue Southbound					Inland Empire Boulevard Westbound					Haven Avenue Northbound					Inland Empire Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	5	0	0	5	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	7	7
04:15 PM	0	5	0	0	5	0	1	0	0	1	0	3	0	0	3	0	0	1	0	1	0	10	10
04:30 PM	0	3	0	0	3	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	5	5
04:45 PM	0	0	0	0	0	0	0	1	0	1	0	4	1	0	5	0	0	0	0	0	0	6	6
Total	0	13	0	0	13	1	1	1	0	3	0	9	2	0	11	0	0	1	0	1	0	28	28
05:00 PM	0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	3	1	0	4	0	1	0	0	1	0	7	7
05:30 PM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	5
05:45 PM	0	1	0	0	1	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	4	4
Total	0	9	0	0	9	0	0	1	0	1	0	7	1	0	8	0	1	0	0	1	0	19	19
Grand Total	0	22	0	0	22	1	1	2	0	4	0	16	3	0	19	0	1	1	0	2	0	47	47
Apprch %	0	100	0			25	25	50			0	84.2	15.8			0	50	50					
Total %	0	46.8	0		46.8	2.1	2.1	4.3		8.5	0	34	6.4		40.4	0	2.1	2.1		4.3	0	100	

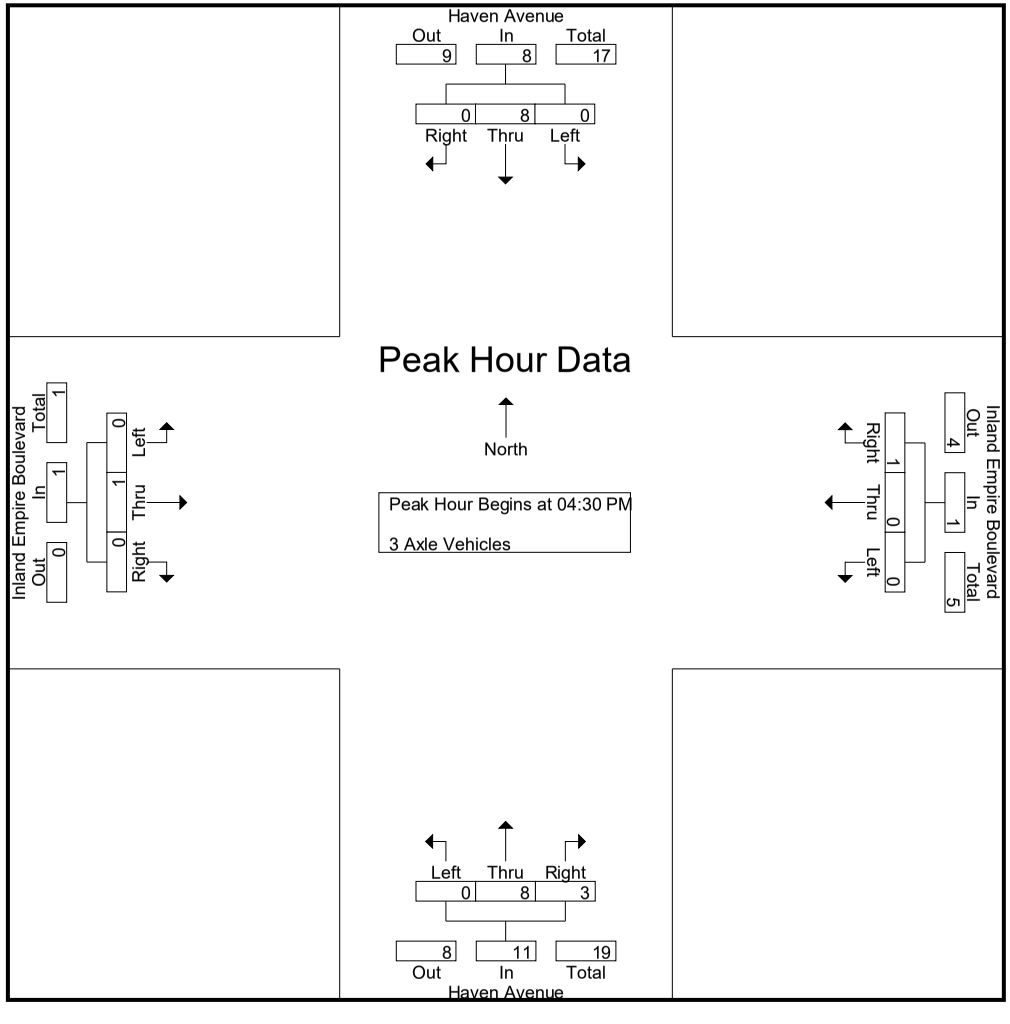
3.1-25

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**3**	0	**3**	0	0	0	0	0	1	**1**	2	0	0	0	0	5
04:45 PM	0	0	0	0	0	0	**1**	**1**	0	**4**	1	**5**	0	0	0	0	6
05:00 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	2	0	2	0	0	0	0	0	3	1	4	0	**1**	0	**1**	**7**
Total Volume	0	8	0	8	0	0	1	1	0	8	3	11	0	1	0	1	21
% App. Total	0	100	0		0	0	100		0	72.7	27.3		0	100	0		
PHF	.000	.667	.000	.667	.000	.000	.250	.250	.000	.500	.750	.550	.000	.250	.000	.250	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**3**	0	**3**	0	0	0	0	0	1	**1**	2	0	0	0	0	
+15 mins.	0	0	0	0	0	0	**1**	**1**	0	**4**	1	**5**	0	0	0	0	
+30 mins.	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	2	0	2	0	0	0	0	0	3	1	4	0	**1**	0	**1**	
Total Volume	0	8	0	8	0	0	1	1	0	8	3	11	0	1	0	1	
% App. Total	0	100	0		0	0	100		0	72.7	27.3		0	100	0		
PHF	.000	.667	.000	.667	.000	.000	.250	.250	.000	.500	.750	.550	.000	.250	.000	.250	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Haven Avenue Southbound					Inland Empire Boulevard Westbound					Haven Avenue Northbound					Inland Empire Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	9	0	0	10	0	0	0	0	0	1	16	0	0	17	1	0	1	0	2	0	29	29
04:15 PM	0	13	0	0	13	0	0	0	0	0	1	9	1	0	11	0	1	1	0	2	0	26	26
04:30 PM	1	11	0	0	12	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	27	27
04:45 PM	0	16	0	0	16	2	0	0	0	2	0	16	2	0	18	0	0	0	0	0	0	36	36
Total	2	49	0	0	51	2	0	0	0	2	2	56	3	0	61	1	1	2	0	4	0	118	118
05:00 PM	0	5	0	0	5	0	0	0	0	0	0	12	1	0	13	0	0	0	0	0	0	18	18
05:15 PM	0	7	0	0	7	0	0	0	0	0	0	8	0	0	8	0	0	1	0	1	0	16	16
05:30 PM	0	11	0	0	11	0	0	0	0	0	0	7	0	0	7	0	0	1	1	1	1	19	20
05:45 PM	0	6	0	0	6	0	1	0	0	1	0	16	0	0	16	0	0	1	0	1	0	24	24
Total	0	29	0	0	29	0	1	0	0	1	0	43	1	0	44	0	0	3	1	3	1	77	78
Grand Total	2	78	0	0	80	2	1	0	0	3	2	99	4	0	105	1	1	5	1	7	1	195	196
Apprch %	2.5	97.5	0			66.7	33.3	0			1.9	94.3	3.8			14.3	14.3	71.4					
Total %	1	40	0		41	1	0.5	0		1.5	1	50.8	2.1		53.8	0.5	0.5	2.6		3.6	0.5	99.5	

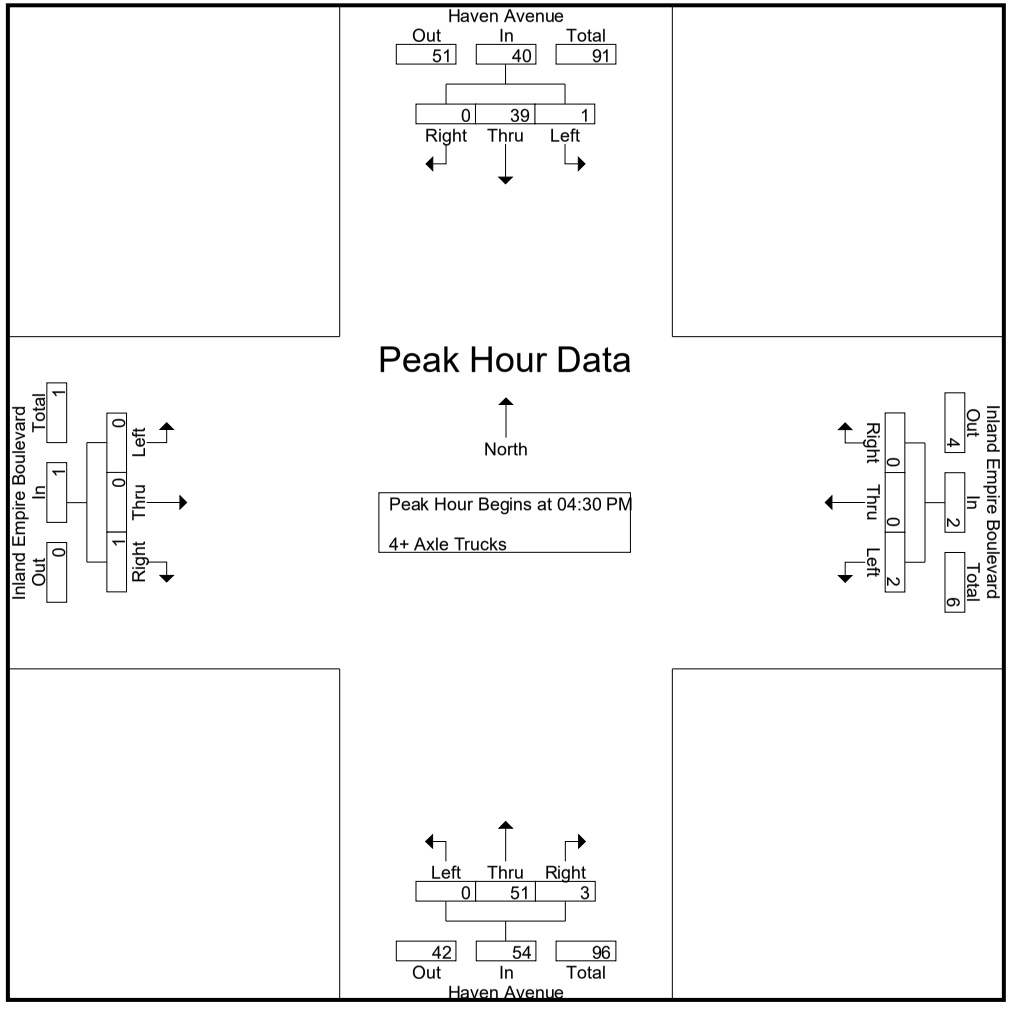
3.1-28

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**1**	11	0	12	0	0	0	0	0	15	0	15	0	0	0	0	27
04:45 PM	0	**16**	0	**16**	**2**	0	0	**2**	0	**16**	**2**	**18**	0	0	0	0	**36**
05:00 PM	0	5	0	5	0	0	0	0	0	12	1	13	0	0	0	0	18
05:15 PM	0	7	0	7	0	0	0	0	0	8	0	8	0	0	**1**	**1**	16
Total Volume	1	39	0	40	2	0	0	2	0	51	3	54	0	0	1	1	97
% App. Total	2.5	97.5	0		100	0	0		0	94.4	5.6		0	0	100		
PHF	.250	.609	.000	.625	.250	.000	.000	.250	.000	.797	.375	.750	.000	.000	.250	.250	.674

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Inland Empire Boulevard
Weather: Clear

File Name : 01_ONT_Hav_Inland PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Inland Empire Boulevard Westbound				Haven Avenue Northbound				Inland Empire Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**1**	11	0	12	0	0	0	0	0	15	0	15	0	0	0	0	
+15 mins.	0	**16**	0	**16**	**2**	0	0	**2**	0	**16**	**2**	**18**	0	0	0	0	
+30 mins.	0	5	0	5	0	0	0	0	0	12	1	13	0	0	0	0	
+45 mins.	0	7	0	7	0	0	0	0	0	8	0	8	0	0	**1**	**1**	
Total Volume	1	39	0	40	2	0	0	2	0	51	3	54	0	0	1	1	
% App. Total	2.5	97.5	0		100	0	0		0	94.4	5.6		0	0	100		
PHF	.250	.609	.000	.625	.250	.000	.000	.250	.000	.797	.375	.750	.000	.000	.250	.250	

Location: Ontario
N/S: Haven Avenue
E/W: Inland Empire Blvd

Date: 11/18/2021
Day: Thursday

PEDESTRIANS

	North Leg Haven Avenue	East Leg Inland Empire Blvd	South Leg Haven Avenue	West Leg Inland Empire Blvd	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	1	0	2	0	3
7:15 AM	0	0	1	0	1
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	1	1
8:00 AM	0	3	4	0	7
8:15 AM	0	2	0	0	2
8:30 AM	0	0	0	0	0
8:45 AM	1	0	0	0	1
TOTAL VOLUMES:	2	5	8	1	16

	North Leg Haven Avenue	East Leg Inland Empire Blvd	South Leg Haven Avenue	West Leg Inland Empire Blvd	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	2	0	1	2	5
4:15 PM	2	0	6	3	11
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1
TOTAL VOLUMES:	4	0	7	7	18

Location: Ontario
N/S: Haven Avenue
E/W: Inland Empire Blvd

Date: 11/18/2021
Day: Thursday

BICYCLES

	Southbound Haven Avenue			Westbound Inland Empire Blvd			Northbound Haven Avenue			Eastbound Inland Empire Blvd			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Haven Avenue			Westbound Inland Empire Blvd			Northbound Haven Avenue			Eastbound Inland Empire Blvd			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					I-60 Westbound Ramps Westbound					Haven Avenue Northbound					I-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	216	86	0	302	70	0	101	27	171	0	275	69	0	344	0	0	0	0	0	27	817	844
07:15 AM	0	242	83	0	325	70	0	123	43	193	0	282	64	0	346	0	0	0	0	0	43	864	907
07:30 AM	0	247	114	0	361	89	0	104	31	193	0	390	114	0	504	0	0	0	0	0	31	1058	1089
07:45 AM	0	313	118	0	431	121	0	154	24	275	0	481	91	0	572	0	0	0	0	0	24	1278	1302
Total	0	1018	401	0	1419	350	0	482	125	832	0	1428	338	0	1766	0	0	0	0	0	125	4017	4142
08:00 AM	0	341	119	0	460	113	0	128	33	241	0	431	77	0	508	0	0	0	0	0	33	1209	1242
08:15 AM	0	270	94	0	364	83	0	131	35	214	0	456	95	0	551	0	0	0	0	0	35	1129	1164
08:30 AM	0	291	119	0	410	95	0	132	33	227	0	379	80	0	459	0	0	0	0	0	33	1096	1129
08:45 AM	0	269	120	0	389	68	0	165	23	233	0	444	94	0	538	0	0	0	0	0	23	1160	1183
Total	0	1171	452	0	1623	359	0	556	124	915	0	1710	346	0	2056	0	0	0	0	0	124	4594	4718
Grand Total	0	2189	853	0	3042	709	0	1038	249	1747	0	3138	684	0	3822	0	0	0	0	0	249	8611	8860
Apprch %	0	72	28			40.6	0	59.4			0	82.1	17.9			0	0	0					
Total %	0	25.4	9.9		35.3	8.2	0	12.1		20.3	0	36.4	7.9		44.4	0	0	0		0	2.8	97.2	
Passenger Vehicles	0	2052	733		2785	638	0	989		1872	0	2953	552		3505	0	0	0		0	0	0	8162
% Passenger Vehicles	0	93.7	85.9	0	91.6	90	0	95.3	98.4	93.8	0	94.1	80.7	0	91.7	0	0	0	0	0	0	0	92.1
Large 2 Axle Vehicles	0	59	40		99	16	0	14		32	0	67	51		118	0	0	0		0	0	0	249
% Large 2 Axle Vehicles	0	2.7	4.7	0	3.3	2.3	0	1.3	0.8	1.6	0	2.1	7.5	0	3.1	0	0	0	0	0	0	0	2.8
3 Axle Vehicles	0	22	12		34	15	0	2		17	0	15	28		43	0	0	0		0	0	0	94
% 3 Axle Vehicles	0	1	1.4	0	1.1	2.1	0	0.2	0	0.9	0	0.5	4.1	0	1.1	0	0	0	0	0	0	0	1.1
4+ Axle Trucks	0	56	68		124	40	0	33		75	0	103	53		156	0	0	0		0	0	0	355
% 4+ Axle Trucks	0	2.6	8	0	4.1	5.6	0	3.2	0.8	3.8	0	3.3	7.7	0	4.1	0	0	0	0	0	0	0	4

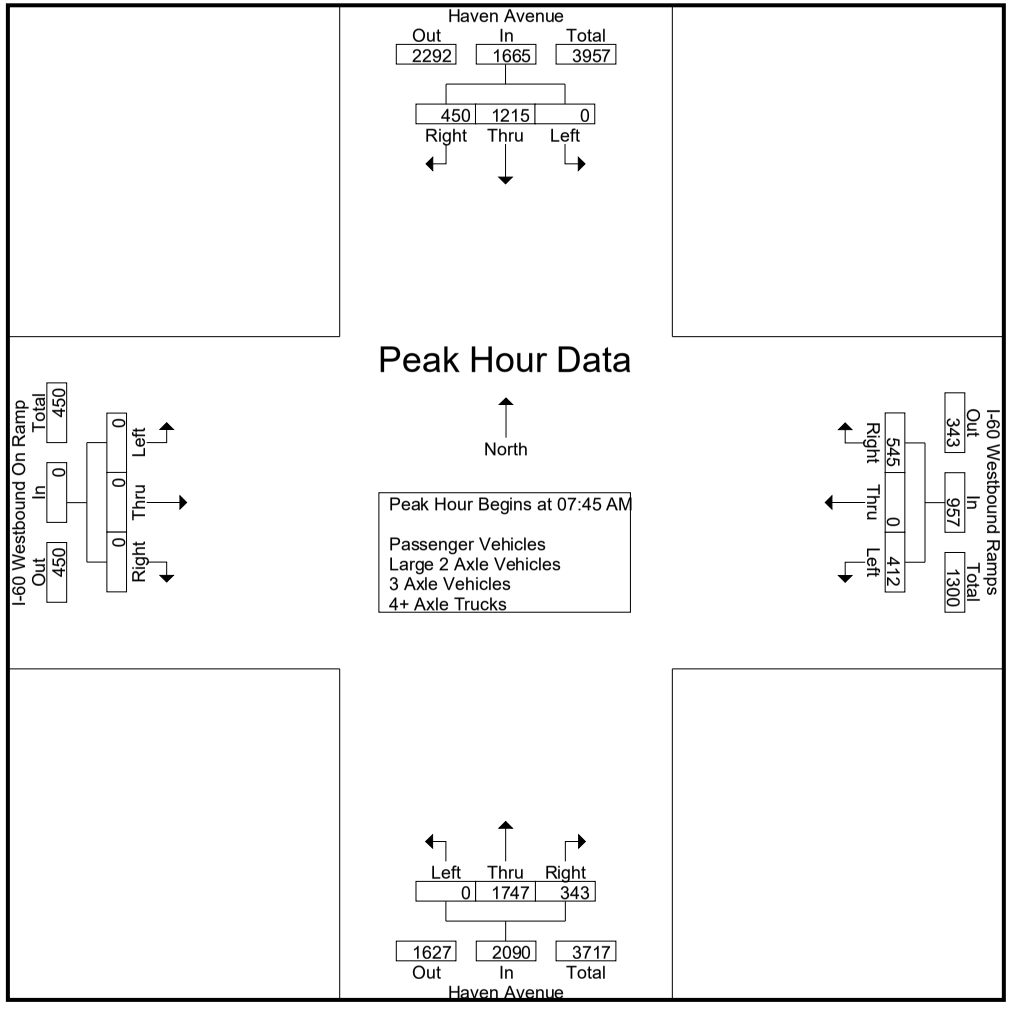
3-1-33

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	313	118	431	**121**	0	**154**	**275**	0	**481**	91	**572**	0	0	0	0	**1278**
08:00 AM	0	**341**	**119**	**460**	113	0	128	241	0	431	77	508	0	0	0	0	1209
08:15 AM	0	270	94	364	83	0	131	214	0	456	**95**	551	0	0	0	0	1129
08:30 AM	0	291	119	410	95	0	132	227	0	379	80	459	0	0	0	0	1096
Total Volume	0	1215	450	1665	412	0	545	957	0	1747	343	2090	0	0	0	0	4712
% App. Total	0	73	27		43.1	0	56.9		0	83.6	16.4		0	0	0		
PHF	.000	.891	.945	.905	.851	.000	.885	.870	.000	.908	.903	.913	.000	.000	.000	.000	.922

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:30 AM				07:00 AM				
+0 mins.	0	313	118	431	**121**	0	**154**	**275**	0	390	**114**	504	0	0	0	0	
+15 mins.	0	**341**	**119**	**460**	113	0	128	241	0	**481**	91	**572**	0	0	0	0	
+30 mins.	0	270	94	364	83	0	131	214	0	431	77	508	0	0	0	0	
+45 mins.	0	291	119	410	95	0	132	227	0	456	95	551	0	0	0	0	
Total Volume	0	1215	450	1665	412	0	545	957	0	1758	377	2135	0	0	0	0	
% App. Total	0	73	27		43.1	0	56.9		0	82.3	17.7		0	0	0		
PHF	.000	.891	.945	.905	.851	.000	.885	.870	.000	.914	.827	.933	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					I-60 Westbound Ramps Westbound					Haven Avenue Northbound					I-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	201	73	0	274	64	0	96	26	160	0	253	59	0	312	0	0	0	0	0	26	746	772
07:15 AM	0	230	71	0	301	65	0	116	42	181	0	264	50	0	314	0	0	0	0	0	42	796	838
07:30 AM	0	233	104	0	337	85	0	102	31	187	0	364	89	0	453	0	0	0	0	0	31	977	1008
07:45 AM	0	294	104	0	398	108	0	149	24	257	0	456	80	0	536	0	0	0	0	0	24	1191	1215
Total	0	958	352	0	1310	322	0	463	123	785	0	1337	278	0	1615	0	0	0	0	0	123	3710	3833
08:00 AM	0	318	98	0	416	104	0	120	31	224	0	409	63	0	472	0	0	0	0	0	31	1112	1143
08:15 AM	0	254	79	0	333	75	0	123	35	198	0	432	77	0	509	0	0	0	0	0	35	1040	1075
08:30 AM	0	273	99	0	372	81	0	128	33	209	0	353	61	0	414	0	0	0	0	0	33	995	1028
08:45 AM	0	249	105	0	354	56	0	155	23	211	0	422	73	0	495	0	0	0	0	0	23	1060	1083
Total	0	1094	381	0	1475	316	0	526	122	842	0	1616	274	0	1890	0	0	0	0	0	122	4207	4329
Grand Total	0	2052	733	0	2785	638	0	989	245	1627	0	2953	552	0	3505	0	0	0	0	0	245	7917	8162
Apprch %	0	73.7	26.3			39.2	0	60.8			0	84.3	15.7			0	0	0					
Total %	0	25.9	9.3		35.2	8.1	0	12.5		20.6	0	37.3	7		44.3	0	0	0		0	3	97	

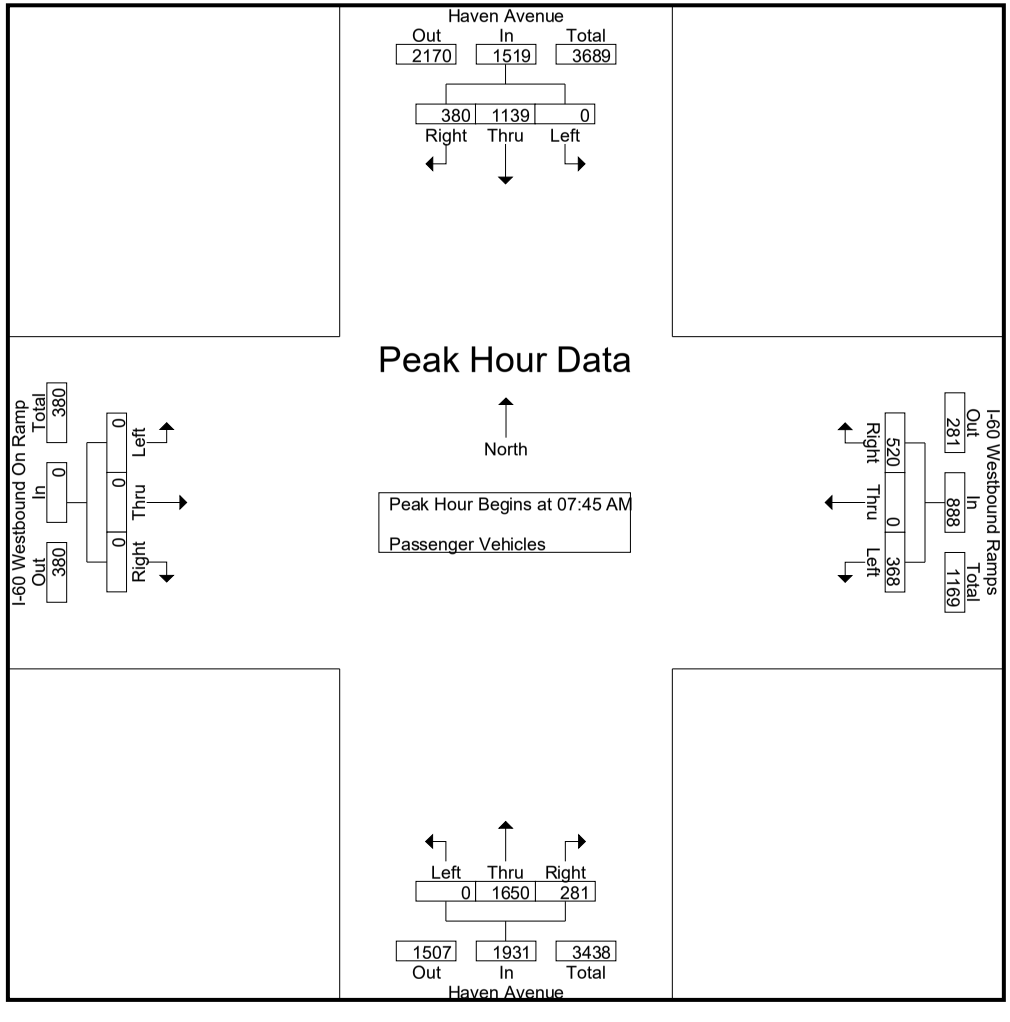
3-1-36

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	294	**104**	398	**108**	0	**149**	**257**	0	**456**	**80**	**536**	0	0	0	0	**1191**
08:00 AM	0	**318**	98	**416**	104	0	120	224	0	409	63	472	0	0	0	0	1112
08:15 AM	0	254	79	333	75	0	123	198	0	432	77	509	0	0	0	0	1040
08:30 AM	0	273	99	372	81	0	128	209	0	353	61	414	0	0	0	0	995
Total Volume	0	1139	380	1519	368	0	520	888	0	1650	281	1931	0	0	0	0	4338
% App. Total	0	75	25		41.4	0	58.6		0	85.4	14.6		0	0	0		
PHF	.000	.895	.913	.913	.852	.000	.872	.864	.000	.905	.878	.901	.000	.000	.000	.000	.911

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	294	**104**	398	**108**	0	**149**	**257**	0	**456**	**80**	**536**	0	0	0	0	
+15 mins.	0	**318**	98	**416**	104	0	120	224	0	409	63	472	0	0	0	0	
+30 mins.	0	254	79	333	75	0	123	198	0	432	77	509	0	0	0	0	
+45 mins.	0	273	99	372	81	0	128	209	0	353	61	414	0	0	0	0	
Total Volume	0	1139	380	1519	368	0	520	888	0	1650	281	1931	0	0	0	0	
% App. Total	0	75	25		41.4	0	58.6		0	85.4	14.6		0	0	0		
PHF	.000	.895	.913	.913	.852	.000	.872	.864	.000	.905	.878	.901	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Haven Avenue Southbound					I-60 Westbound Ramps Westbound					Haven Avenue Northbound					I-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	9	4	0	13	3	0	0	0	3	0	5	4	0	9	0	0	0	0	0	0	25	25
07:15 AM	0	6	3	0	9	1	0	2	1	3	0	6	7	0	13	0	0	0	0	0	1	25	26
07:30 AM	0	4	6	0	10	1	0	0	0	1	0	11	9	0	20	0	0	0	0	0	0	31	31
07:45 AM	0	12	6	0	18	4	0	0	0	4	0	9	3	0	12	0	0	0	0	0	0	34	34
Total	0	31	19	0	50	9	0	2	1	11	0	31	23	0	54	0	0	0	0	0	1	115	116
08:00 AM	0	11	5	0	16	0	0	2	1	2	0	9	3	0	12	0	0	0	0	0	1	30	31
08:15 AM	0	4	6	0	10	1	0	3	0	4	0	6	7	0	13	0	0	0	0	0	0	27	27
08:30 AM	0	6	7	0	13	4	0	1	0	5	0	10	8	0	18	0	0	0	0	0	0	36	36
08:45 AM	0	7	3	0	10	2	0	6	0	8	0	11	10	0	21	0	0	0	0	0	0	39	39
Total	0	28	21	0	49	7	0	12	1	19	0	36	28	0	64	0	0	0	0	0	1	132	133
Grand Total	0	59	40	0	99	16	0	14	2	30	0	67	51	0	118	0	0	0	0	0	2	247	249
Apprch %	0	59.6	40.4			53.3	0	46.7			0	56.8	43.2			0	0	0					
Total %	0	23.9	16.2		40.1	6.5	0	5.7		12.1	0	27.1	20.6		47.8	0	0	0		0	0.8	99.2	

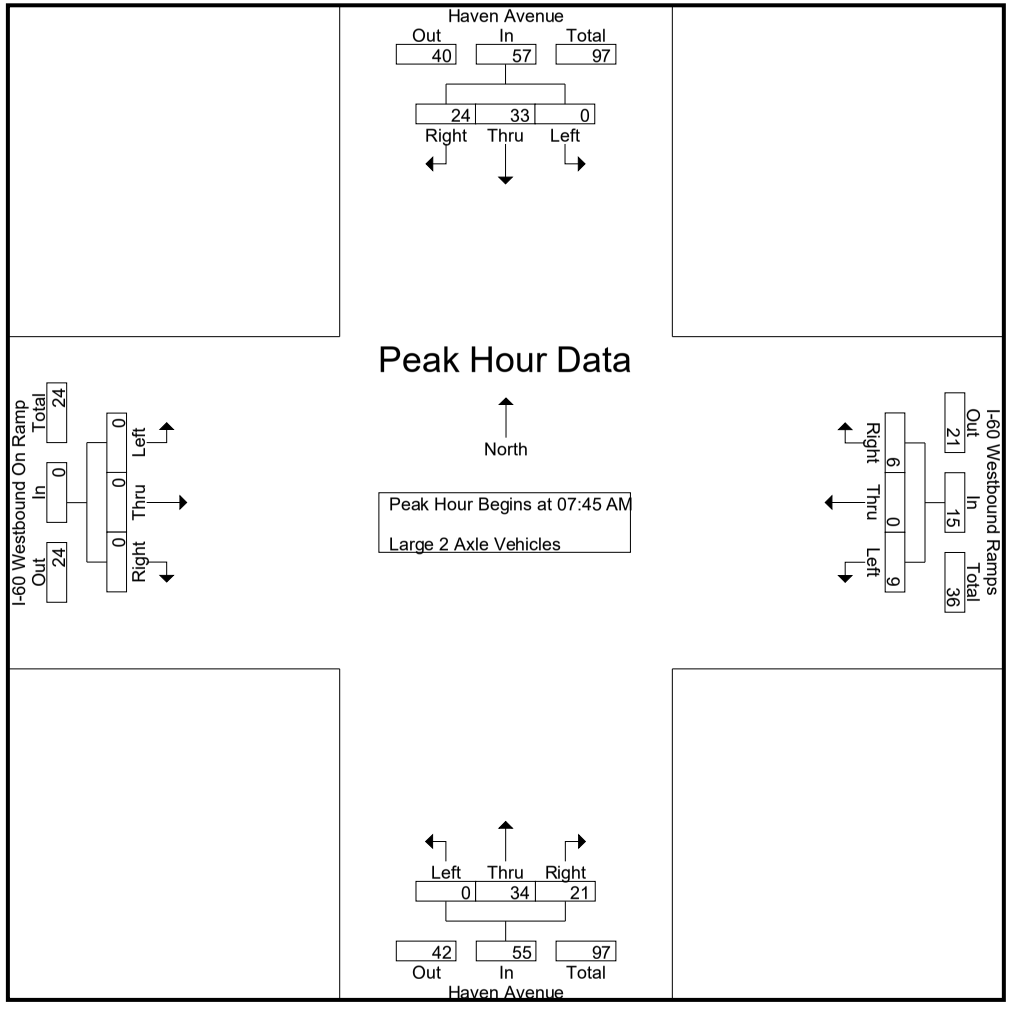
3.1-39

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**12**	6	**18**	**4**	0	0	4	0	9	3	12	0	0	0	0	34
08:00 AM	0	11	5	16	0	0	2	2	0	9	3	12	0	0	0	0	30
08:15 AM	0	4	6	10	1	0	**3**	4	0	6	7	13	0	0	0	0	27
08:30 AM	0	6	**7**	13	4	0	1	**5**	0	**10**	**8**	**18**	0	0	0	0	**36**
Total Volume	0	33	24	57	9	0	6	15	0	34	21	55	0	0	0	0	127
% App. Total	0	57.9	42.1		60	0	40		0	61.8	38.2		0	0	0		
PHF	.000	.688	.857	.792	.563	.000	.500	.750	.000	.850	.656	.764	.000	.000	.000	.000	.882

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	**12**	6	**18**	**4**	0	0	4	0	9	3	12	0	0	0	0	
+15 mins.	0	11	5	16	0	0	2	2	0	9	3	12	0	0	0	0	
+30 mins.	0	4	6	10	1	0	**3**	4	0	6	7	13	0	0	0	0	
+45 mins.	0	6	**7**	13	4	0	1	**5**	0	**10**	**8**	**18**	0	0	0	0	
Total Volume	0	33	24	57	9	0	6	15	0	34	21	55	0	0	0	0	
% App. Total	0	57.9	42.1		60	0	40		0	61.8	38.2		0	0	0		
PHF	.000	.688	.857	.792	.563	.000	.500	.750	.000	.850	.656	.764	.000	.000	.000	.000	

3.1-41

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Haven Avenue Southbound					I-60 Westbound Ramps Westbound					Haven Avenue Northbound					I-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	2	3	0	5	1	0	0	0	1	0	7	2	0	9	0	0	0	0	0	0	15	15
07:15 AM	0	1	1	0	2	0	0	1	0	1	0	1	4	0	5	0	0	0	0	0	0	8	8
07:30 AM	0	3	0	0	3	0	0	0	0	0	0	2	12	0	14	0	0	0	0	0	0	17	17
07:45 AM	0	3	1	0	4	3	0	0	0	3	0	1	2	0	3	0	0	0	0	0	0	10	10
Total	0	9	5	0	14	4	0	1	0	5	0	11	20	0	31	0	0	0	0	0	0	50	50
08:00 AM	0	3	3	0	6	3	0	0	0	3	0	2	2	0	4	0	0	0	0	0	0	13	13
08:15 AM	0	5	1	0	6	1	0	0	0	1	0	2	3	0	5	0	0	0	0	0	0	12	12
08:30 AM	0	4	1	0	5	3	0	1	0	4	0	0	1	0	1	0	0	0	0	0	0	10	10
08:45 AM	0	1	2	0	3	4	0	0	0	4	0	0	2	0	2	0	0	0	0	0	0	9	9
Total	0	13	7	0	20	11	0	1	0	12	0	4	8	0	12	0	0	0	0	0	0	44	44
Grand Total	0	22	12	0	34	15	0	2	0	17	0	15	28	0	43	0	0	0	0	0	0	94	94
Apprch %	0	64.7	35.3			88.2	0	11.8			0	34.9	65.1			0	0	0					
Total %	0	23.4	12.8		36.2	16	0	2.1		18.1	0	16	29.8		45.7	0	0	0		0	0	100	

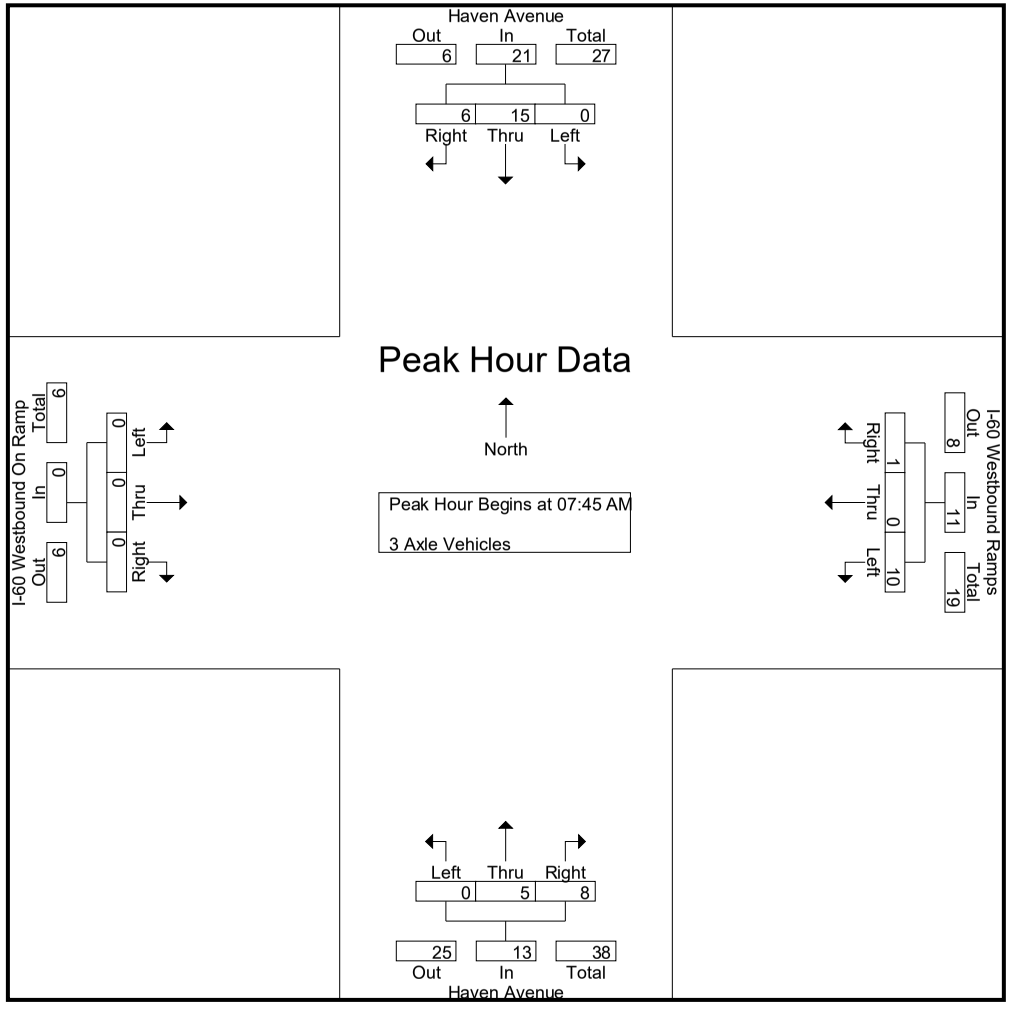
3;1-42

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	3	1	4	**3**	0	0	3	0	1	2	3	0	0	0	0	10
08:00 AM	0	3	**3**	**6**	3	0	0	3	0	**2**	2	4	0	0	0	0	**13**
08:15 AM	0	**5**	1	6	1	0	0	1	0	2	**3**	**5**	0	0	0	0	12
08:30 AM	0	4	1	5	3	0	**1**	**4**	0	0	1	1	0	0	0	0	10
Total Volume	0	15	6	21	10	0	1	11	0	5	8	13	0	0	0	0	45
% App. Total	0	71.4	28.6		90.9	0	9.1		0	38.5	61.5		0	0	0		
PHF	.000	.750	.500	.875	.833	.000	.250	.688	.000	.625	.667	.650	.000	.000	.000	.000	.865

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	3	1	4	**3**	0	0	3	0	1	2	3	0	0	0	0	
+15 mins.	0	3	**3**	**6**	3	0	0	3	0	**2**	2	4	0	0	0	0	
+30 mins.	0	**5**	1	6	1	0	0	1	0	2	**3**	**5**	0	0	0	0	
+45 mins.	0	4	1	5	3	0	**1**	**4**	0	0	1	1	0	0	0	0	
Total Volume	0	15	6	21	10	0	1	11	0	5	8	13	0	0	0	0	
% App. Total	0	71.4	28.6		90.9	0	9.1		0	38.5	61.5		0	0	0		
PHF	.000	.750	.500	.875	.833	.000	.250	.688	.000	.625	.667	.650	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Haven Avenue Southbound					I-60 Westbound Ramps Westbound					Haven Avenue Northbound					I-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	4	6	0	10	2	0	5	1	7	0	10	4	0	14	0	0	0	0	0	1	31	32
07:15 AM	0	5	8	0	13	4	0	4	0	8	0	11	3	0	14	0	0	0	0	0	0	35	35
07:30 AM	0	7	4	0	11	3	0	2	0	5	0	13	4	0	17	0	0	0	0	0	0	33	33
07:45 AM	0	4	7	0	11	6	0	5	0	11	0	15	6	0	21	0	0	0	0	0	0	43	43
Total	0	20	25	0	45	15	0	16	1	31	0	49	17	0	66	0	0	0	0	0	1	142	143
08:00 AM	0	9	13	0	22	6	0	6	1	12	0	11	9	0	20	0	0	0	0	0	1	54	55
08:15 AM	0	7	8	0	15	6	0	5	0	11	0	16	8	0	24	0	0	0	0	0	0	50	50
08:30 AM	0	8	12	0	20	7	0	2	0	9	0	16	10	0	26	0	0	0	0	0	0	55	55
08:45 AM	0	12	10	0	22	6	0	4	0	10	0	11	9	0	20	0	0	0	0	0	0	52	52
Total	0	36	43	0	79	25	0	17	1	42	0	54	36	0	90	0	0	0	0	0	1	211	212
Grand Total	0	56	68	0	124	40	0	33	2	73	0	103	53	0	156	0	0	0	0	0	2	353	355
Apprch %	0	45.2	54.8			54.8	0	45.2			0	66	34			0	0	0					
Total %	0	15.9	19.3		35.1	11.3	0	9.3		20.7	0	29.2	15		44.2	0	0	0		0	0.6	99.4	

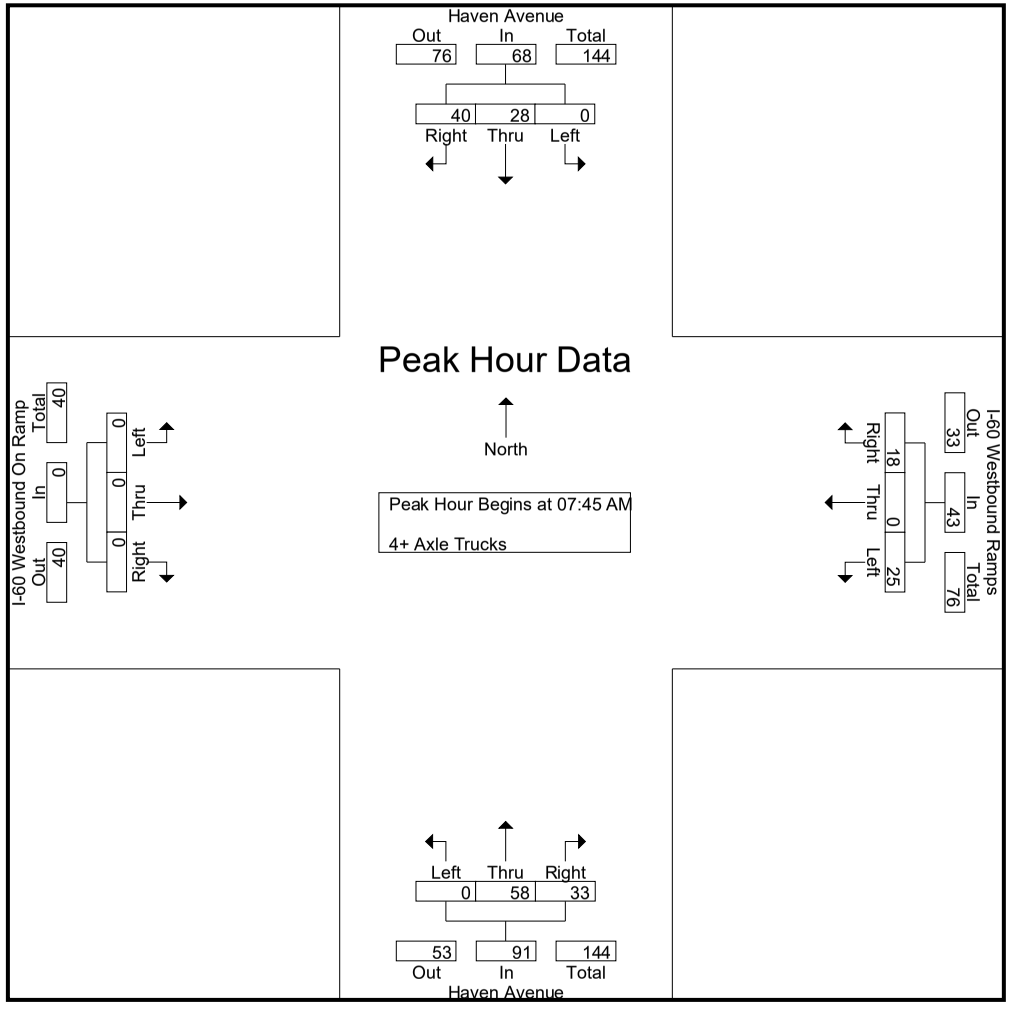
3.1-45

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	4	7	11	6	0	5	11	0	15	6	21	0	0	0	0	43
08:00 AM	0	**9**	**13**	**22**	6	0	**6**	**12**	0	11	9	20	0	0	0	0	54
08:15 AM	0	7	8	15	6	0	5	11	0	**16**	8	24	0	0	0	0	50
08:30 AM	0	8	12	20	**7**	0	2	9	0	16	**10**	**26**	0	0	0	0	**55**
Total Volume	0	28	40	68	25	0	18	43	0	58	33	91	0	0	0	0	202
% App. Total	0	41.2	58.8		58.1	0	41.9		0	63.7	36.3		0	0	0		
PHF	.000	.778	.769	.773	.893	.000	.750	.896	.000	.906	.825	.875	.000	.000	.000	.000	.918

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	4	7	11	6	0	5	11	0	15	6	21	0	0	0	0	
+15 mins.	0	**9**	**13**	**22**	6	0	**6**	**12**	0	11	9	20	0	0	0	0	
+30 mins.	0	7	8	15	6	0	5	11	0	**16**	8	24	0	0	0	0	
+45 mins.	0	8	12	20	**7**	0	2	9	0	16	**10**	**26**	0	0	0	0	
Total Volume	0	28	40	68	25	0	18	43	0	58	33	91	0	0	0	0	
% App. Total	0	41.2	58.8		58.1	0	41.9		0	63.7	36.3		0	0	0		
PHF	.000	.778	.769	.773	.893	.000	.750	.896	.000	.906	.825	.875	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					I-60 Westbound Ramps Westbound					Haven Avenue Northbound					I-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	335	207	0	542	52	0	90	24	142	0	560	127	0	687	0	0	0	0	0	24	1371	1395
04:15 PM	0	366	179	0	545	47	0	72	16	119	0	567	162	0	729	0	0	0	0	0	16	1393	1409
04:30 PM	0	401	181	0	582	51	0	78	28	129	0	532	198	0	730	0	0	0	0	0	28	1441	1469
04:45 PM	0	370	163	0	533	46	0	70	15	116	0	553	191	0	744	0	0	0	0	0	15	1393	1408
Total	0	1472	730	0	2202	196	0	310	83	506	0	2212	678	0	2890	0	0	0	0	0	83	5598	5681
05:00 PM	0	420	190	0	610	39	0	82	20	121	0	530	201	0	731	0	0	0	0	0	20	1462	1482
05:15 PM	0	418	146	0	564	49	0	73	14	122	0	536	207	0	743	0	0	0	0	0	14	1429	1443
05:30 PM	0	323	166	0	489	34	0	77	17	111	0	546	131	0	677	0	0	0	0	0	17	1277	1294
05:45 PM	0	281	105	0	386	48	0	85	23	133	0	477	97	0	574	0	0	0	0	0	23	1093	1116
Total	0	1442	607	0	2049	170	0	317	74	487	0	2089	636	0	2725	0	0	0	0	0	74	5261	5335
Grand Total	0	2914	1337	0	4251	366	0	627	157	993	0	4301	1314	0	5615	0	0	0	0	0	157	10859	11016
Apprch %	0	68.5	31.5			36.9	0	63.1			0	76.6	23.4			0	0	0					
Total %	0	26.8	12.3		39.1	3.4	0	5.8		9.1	0	39.6	12.1		51.7	0	0	0		0	1.4	98.6	
Passenger Vehicles	0	2777	1292		4069	305	0	593		1050	0	4144	1219		5363	0	0	0		0	0	0	10482
% Passenger Vehicles	0	95.3	96.6	0	95.7	83.3	0	94.6	96.8	91.3	0	96.3	92.8	0	95.5	0	0	0	0	0	0	0	95.2
Large 2 Axle Vehicles	0	62	15		77	21	0	10		35	0	60	28		88	0	0	0		0	0	0	200
% Large 2 Axle Vehicles	0	2.1	1.1	0	1.8	5.7	0	1.6	2.5	3	0	1.4	2.1	0	1.6	0	0	0	0	0	0	0	1.8
3 Axle Vehicles	0	15	5		20	8	0	4		12	0	12	4		16	0	0	0		0	0	0	48
% 3 Axle Vehicles	0	0.5	0.4	0	0.5	2.2	0	0.6	0	1	0	0.3	0.3	0	0.3	0	0	0	0	0	0	0	0.4
4+ Axle Trucks	0	60	25		85	32	0	20		53	0	85	63		148	0	0	0		0	0	0	286
% 4+ Axle Trucks	0	2.1	1.9	0	2	8.7	0	3.2	0.6	4.6	0	2	4.8	0	2.6	0	0	0	0	0	0	0	2.6

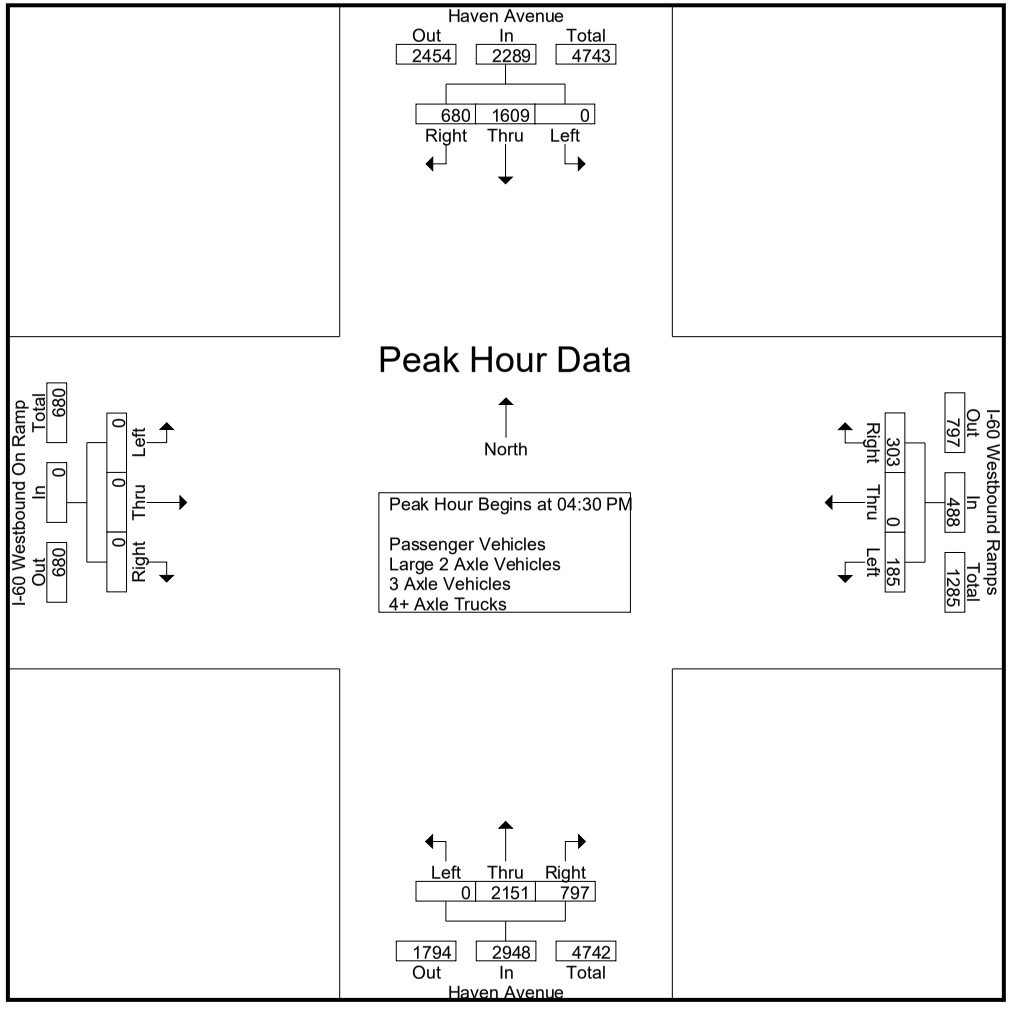
3,1-48

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	401	181	582	**51**	0	78	**129**	0	532	198	730	0	0	0	0	1441
04:45 PM	0	370	163	533	46	0	70	116	0	**553**	191	**744**	0	0	0	0	1393
05:00 PM	0	**420**	**190**	**610**	39	0	**82**	121	0	530	201	731	0	0	0	0	**1462**
05:15 PM	0	418	146	564	49	0	73	122	0	536	**207**	743	0	0	0	0	1429
Total Volume	0	1609	680	2289	185	0	303	488	0	2151	797	2948	0	0	0	0	5725
% App. Total	0	70.3	29.7		37.9	0	62.1		0	73	27		0	0	0		
PHF	.000	.958	.895	.938	.907	.000	.924	.946	.000	.972	.963	.991	.000	.000	.000	.000	.979

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:00 PM				04:30 PM				04:00 PM				
+0 mins.	0	401	181	582	**52**	0	**90**	**142**	0	532	198	730	0	0	0	0	
+15 mins.	0	370	163	533	47	0	72	119	0	**553**	191	**744**	0	0	0	0	
+30 mins.	0	**420**	**190**	**610**	51	0	78	129	0	530	201	731	0	0	0	0	
+45 mins.	0	418	146	564	46	0	70	116	0	536	**207**	743	0	0	0	0	
Total Volume	0	1609	680	2289	196	0	310	506	0	2151	797	2948	0	0	0	0	
% App. Total	0	70.3	29.7		38.7	0	61.3		0	73	27		0	0	0		
PHF	.000	.958	.895	.938	.942	.000	.861	.891	.000	.972	.963	.991	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					I-60 Westbound Ramps Westbound					Haven Avenue Northbound					I-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	321	199	0	520	45	0	81	23	126	0	538	115	0	653	0	0	0	0	0	23	1299	1322
04:15 PM	0	339	172	0	511	38	0	69	16	107	0	547	148	0	695	0	0	0	0	0	16	1313	1329
04:30 PM	0	382	175	0	557	44	0	75	26	119	0	499	184	0	683	0	0	0	0	0	26	1359	1385
04:45 PM	0	351	151	0	502	40	0	66	15	106	0	528	181	0	709	0	0	0	0	0	15	1317	1332
Total	0	1393	697	0	2090	167	0	291	80	458	0	2112	628	0	2740	0	0	0	0	0	80	5288	5368
05:00 PM	0	404	188	0	592	33	0	79	20	112	0	509	183	0	692	0	0	0	0	0	20	1396	1416
05:15 PM	0	401	145	0	546	42	0	72	13	114	0	524	198	0	722	0	0	0	0	0	13	1382	1395
05:30 PM	0	307	160	0	467	23	0	76	17	99	0	533	120	0	653	0	0	0	0	0	17	1219	1236
05:45 PM	0	272	102	0	374	40	0	75	22	115	0	466	90	0	556	0	0	0	0	0	22	1045	1067
Total	0	1384	595	0	1979	138	0	302	72	440	0	2032	591	0	2623	0	0	0	0	0	72	5042	5114
Grand Total	0	2777	1292	0	4069	305	0	593	152	898	0	4144	1219	0	5363	0	0	0	0	0	152	10330	10482
Apprch %	0	68.2	31.8			34	0	66			0	77.3	22.7			0	0	0					
Total %	0	26.9	12.5		39.4	3	0	5.7		8.7	0	40.1	11.8		51.9	0	0	0		0	1.5	98.5	

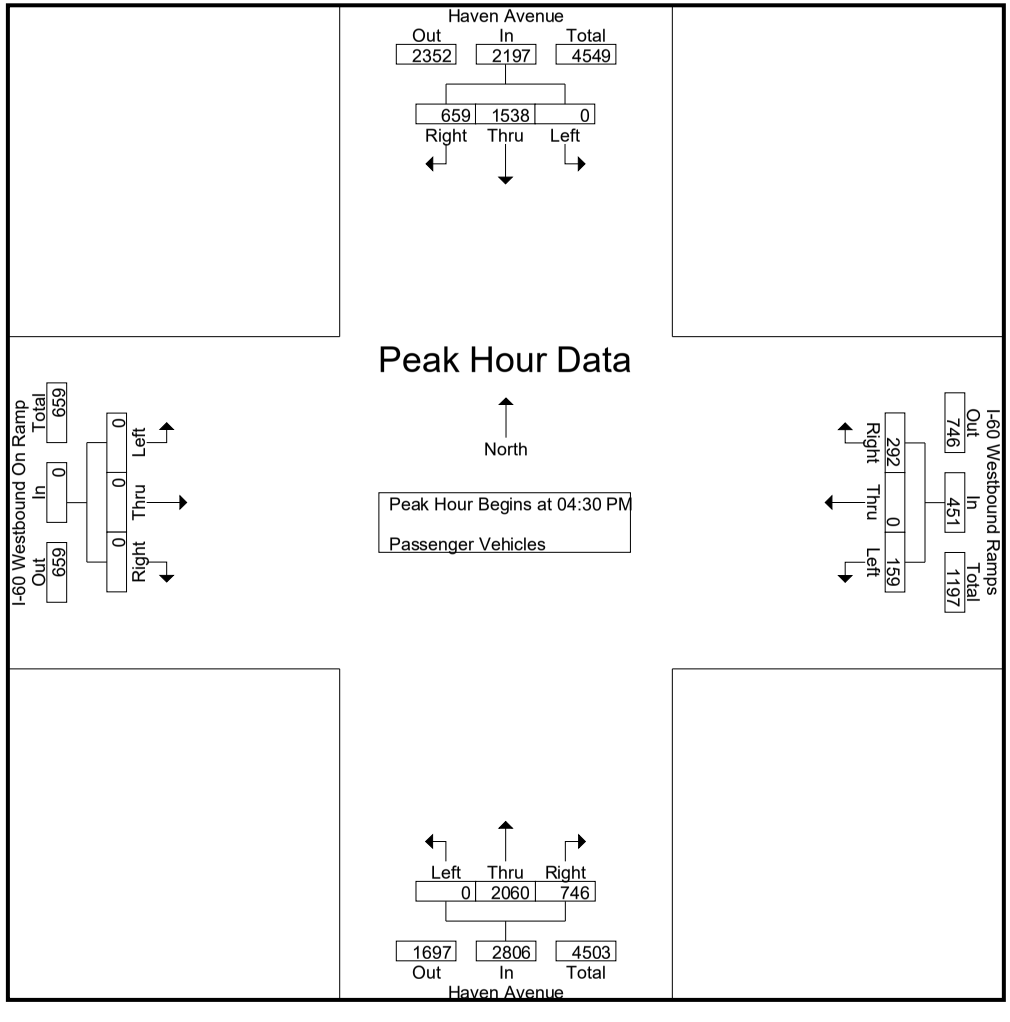
3-1-51

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	382	175	557	**44**	0	75	**119**	0	499	184	683	0	0	0	0	1359
04:45 PM	0	351	151	502	40	0	66	106	0	**528**	181	709	0	0	0	0	1317
05:00 PM	0	**404**	**188**	**592**	33	0	**79**	112	0	509	183	692	0	0	0	0	**1396**
05:15 PM	0	401	145	546	42	0	72	114	0	524	**198**	**722**	0	0	0	0	1382
Total Volume	0	1538	659	2197	159	0	292	451	0	2060	746	2806	0	0	0	0	5454
% App. Total	0	70	30		35.3	0	64.7		0	73.4	26.6		0	0	0		
PHF	.000	.952	.876	.928	.903	.000	.924	.947	.000	.975	.942	.972	.000	.000	.000	.000	.977

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	382	175	557	**44**	0	75	**119**	0	499	184	683	0	0	0	0	
+15 mins.	0	351	151	502	40	0	66	106	0	**528**	181	709	0	0	0	0	
+30 mins.	0	**404**	**188**	**592**	33	0	**79**	112	0	509	183	692	0	0	0	0	
+45 mins.	0	401	145	546	42	0	72	114	0	524	**198**	**722**	0	0	0	0	
Total Volume	0	1538	659	2197	159	0	292	451	0	2060	746	2806	0	0	0	0	
% App. Total	0	70	30		35.3	0	64.7		0	73.4	26.6		0	0	0		
PHF	.000	.952	.876	.928	.903	.000	.924	.947	.000	.975	.942	.972	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

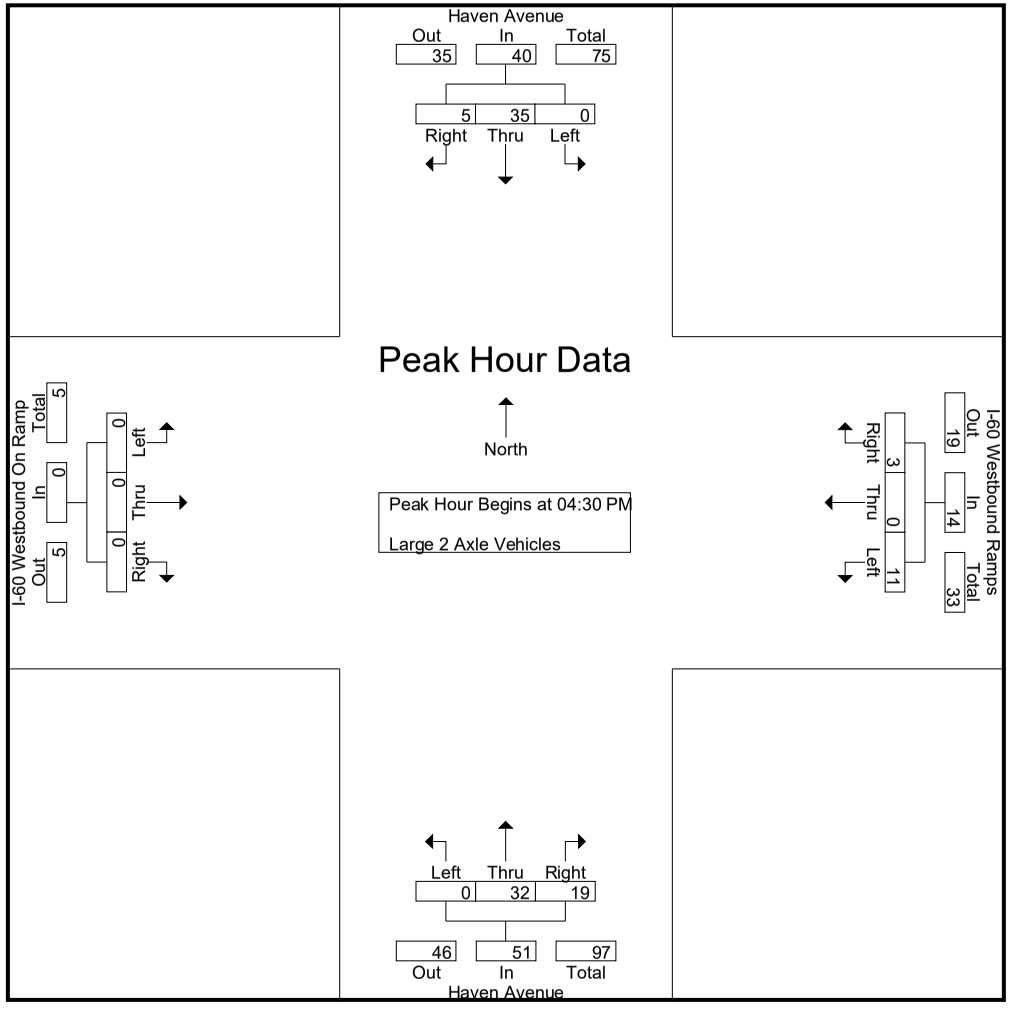
	Haven Avenue Southbound					I-60 Westbound Ramps Westbound					Haven Avenue Northbound					I-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	5	3	0	8	1	0	2	0	3	0	12	1	0	13	0	0	0	0	0	0	24	24
04:15 PM	0	10	3	0	13	3	0	2	0	5	0	9	5	0	14	0	0	0	0	0	0	32	32
04:30 PM	0	8	2	0	10	4	0	2	2	6	0	15	6	0	21	0	0	0	0	0	2	37	39
04:45 PM	0	11	2	0	13	2	0	0	0	2	0	5	5	0	10	0	0	0	0	0	0	25	25
Total	0	34	10	0	44	10	0	6	2	16	0	41	17	0	58	0	0	0	0	0	2	118	120
05:00 PM	0	6	1	0	7	4	0	0	0	4	0	8	5	0	13	0	0	0	0	0	0	24	24
05:15 PM	0	10	0	0	10	1	0	1	1	2	0	4	3	0	7	0	0	0	0	0	1	19	20
05:30 PM	0	7	4	0	11	4	0	1	0	5	0	6	2	0	8	0	0	0	0	0	0	24	24
05:45 PM	0	5	0	0	5	2	0	2	1	4	0	1	1	0	2	0	0	0	0	0	1	11	12
Total	0	28	5	0	33	11	0	4	2	15	0	19	11	0	30	0	0	0	0	0	2	78	80
Grand Total	0	62	15	0	77	21	0	10	4	31	0	60	28	0	88	0	0	0	0	0	4	196	200
Apprch %	0	80.5	19.5			67.7	0	32.3			0	68.2	31.8			0	0	0					
Total %	0	31.6	7.7		39.3	10.7	0	5.1		15.8	0	30.6	14.3		44.9	0	0	0		0	2	98	

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	8	**2**	10	**4**	0	**2**	**6**	0	**15**	**6**	**21**	0	0	0	0	**37**
04:45 PM	0	**11**	2	**13**	2	0	0	2	0	5	5	10	0	0	0	0	25
05:00 PM	0	6	1	7	4	0	0	4	0	8	5	13	0	0	0	0	24
05:15 PM	0	10	0	10	1	0	1	2	0	4	3	7	0	0	0	0	19
Total Volume	0	35	5	40	11	0	3	14	0	32	19	51	0	0	0	0	105
% App. Total	0	87.5	12.5		78.6	0	21.4		0	62.7	37.3		0	0	0		
PHF	.000	.795	.625	.769	.688	.000	.375	.583	.000	.533	.792	.607	.000	.000	.000	.000	.709

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	8	**2**	10	**4**	0	**2**	**6**	0	**15**	**6**	**21**	0	0	0	0	
+15 mins.	0	**11**	2	**13**	2	0	0	2	0	5	5	10	0	0	0	0	
+30 mins.	0	6	1	7	4	0	0	4	0	8	5	13	0	0	0	0	
+45 mins.	0	10	0	10	1	0	1	2	0	4	3	7	0	0	0	0	
Total Volume	0	35	5	40	11	0	3	14	0	32	19	51	0	0	0	0	
% App. Total	0	87.5	12.5		78.6	0	21.4		0	62.7	37.3		0	0	0		
PHF	.000	.795	.625	.769	.688	.000	.375	.583	.000	.533	.792	.607	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

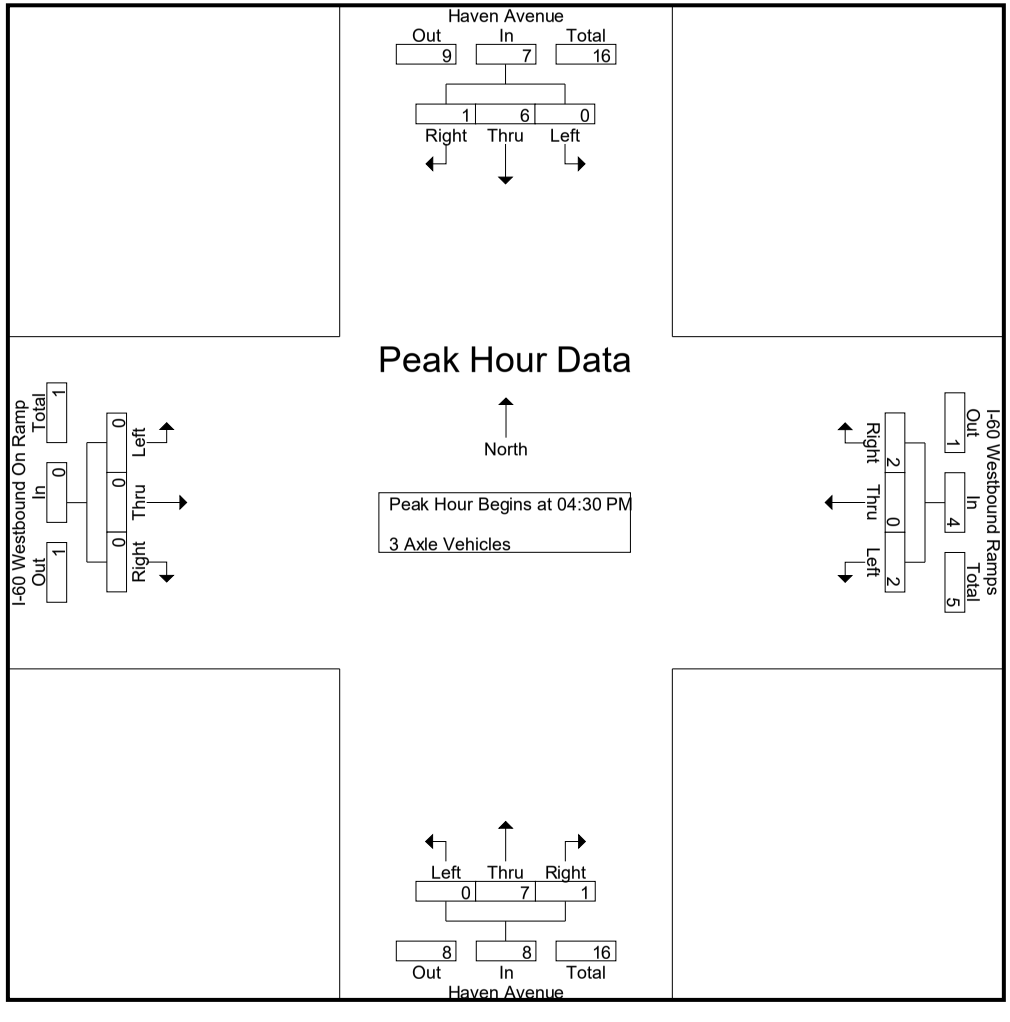
	Haven Avenue Southbound					I-60 Westbound Ramps Westbound					Haven Avenue Northbound					I-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	3	2	0	5	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	0	8	8
04:15 PM	0	5	1	0	6	2	0	1	0	3	0	2	2	0	4	0	0	0	0	0	0	13	13
04:30 PM	0	2	1	0	3	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	5	5
04:45 PM	0	1	0	0	1	1	0	2	0	3	0	3	0	0	3	0	0	0	0	0	0	7	7
Total	0	11	4	0	15	5	0	3	0	8	0	7	3	0	10	0	0	0	0	0	0	33	33
05:00 PM	0	3	0	0	3	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	5	5
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	2
05:30 PM	0	1	0	0	1	2	0	0	0	2	0	1	0	0	1	0	0	0	0	0	0	4	4
05:45 PM	0	0	1	0	1	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	0	4	4
Total	0	4	1	0	5	3	0	1	0	4	0	5	1	0	6	0	0	0	0	0	0	15	15
Grand Total	0	15	5	0	20	8	0	4	0	12	0	12	4	0	16	0	0	0	0	0	0	48	48
Apprch %	0	75	25			66.7	0	33.3			0	75	25			0	0	0					
Total %	0	31.2	10.4		41.7	16.7	0	8.3		25	0	25	8.3		33.3	0	0	0		0	0	100	

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	2	**1**	**3**	**1**	0	0	1	0	1	0	1	0	0	0	0	5
04:45 PM	0	1	0	1	1	0	**2**	**3**	0	**3**	0	**3**	0	0	0	0	**7**
05:00 PM	0	**3**	0	3	0	0	0	0	0	1	**1**	2	0	0	0	0	5
05:15 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total Volume	0	6	1	7	2	0	2	4	0	7	1	8	0	0	0	0	19
% App. Total	0	85.7	14.3		50	0	50		0	87.5	12.5		0	0	0		
PHF	.000	.500	.250	.583	.500	.000	.250	.333	.000	.583	.250	.667	.000	.000	.000	.000	.679

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	2	**1**	**3**	**1**	0	0	1	0	1	0	1	0	0	0	0	
+15 mins.	0	1	0	1	1	0	**2**	**3**	0	**3**	0	**3**	0	0	0	0	
+30 mins.	0	**3**	0	3	0	0	0	0	0	1	**1**	2	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	
Total Volume	0	6	1	7	2	0	2	4	0	7	1	8	0	0	0	0	
% App. Total	0	85.7	14.3		50	0	50		0	87.5	12.5		0	0	0		
PHF	.000	.500	.250	.583	.500	.000	.250	.333	.000	.583	.250	.667	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Haven Avenue Southbound					I-60 Westbound Ramps Westbound					Haven Avenue Northbound					I-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	6	3	0	9	5	0	7	1	12	0	9	10	0	19	0	0	0	0	0	1	40	41
04:15 PM	0	12	3	0	15	4	0	0	0	4	0	9	7	0	16	0	0	0	0	0	0	35	35
04:30 PM	0	9	3	0	12	2	0	1	0	3	0	17	8	0	25	0	0	0	0	0	0	40	40
04:45 PM	0	7	10	0	17	3	0	2	0	5	0	17	5	0	22	0	0	0	0	0	0	44	44
Total	0	34	19	0	53	14	0	10	1	24	0	52	30	0	82	0	0	0	0	0	1	159	160
05:00 PM	0	7	1	0	8	2	0	3	0	5	0	12	12	0	24	0	0	0	0	0	0	37	37
05:15 PM	0	7	1	0	8	6	0	0	0	6	0	6	6	0	12	0	0	0	0	0	0	26	26
05:30 PM	0	8	2	0	10	5	0	0	0	5	0	6	9	0	15	0	0	0	0	0	0	30	30
05:45 PM	0	4	2	0	6	5	0	7	0	12	0	9	6	0	15	0	0	0	0	0	0	33	33
Total	0	26	6	0	32	18	0	10	0	28	0	33	33	0	66	0	0	0	0	0	0	126	126
Grand Total	0	60	25	0	85	32	0	20	1	52	0	85	63	0	148	0	0	0	0	0	1	285	286
Apprch %	0	70.6	29.4			61.5	0	38.5			0	57.4	42.6			0	0	0					
Total %	0	21.1	8.8		29.8	11.2	0	7		18.2	0	29.8	22.1		51.9	0	0	0		0	0.3	99.7	

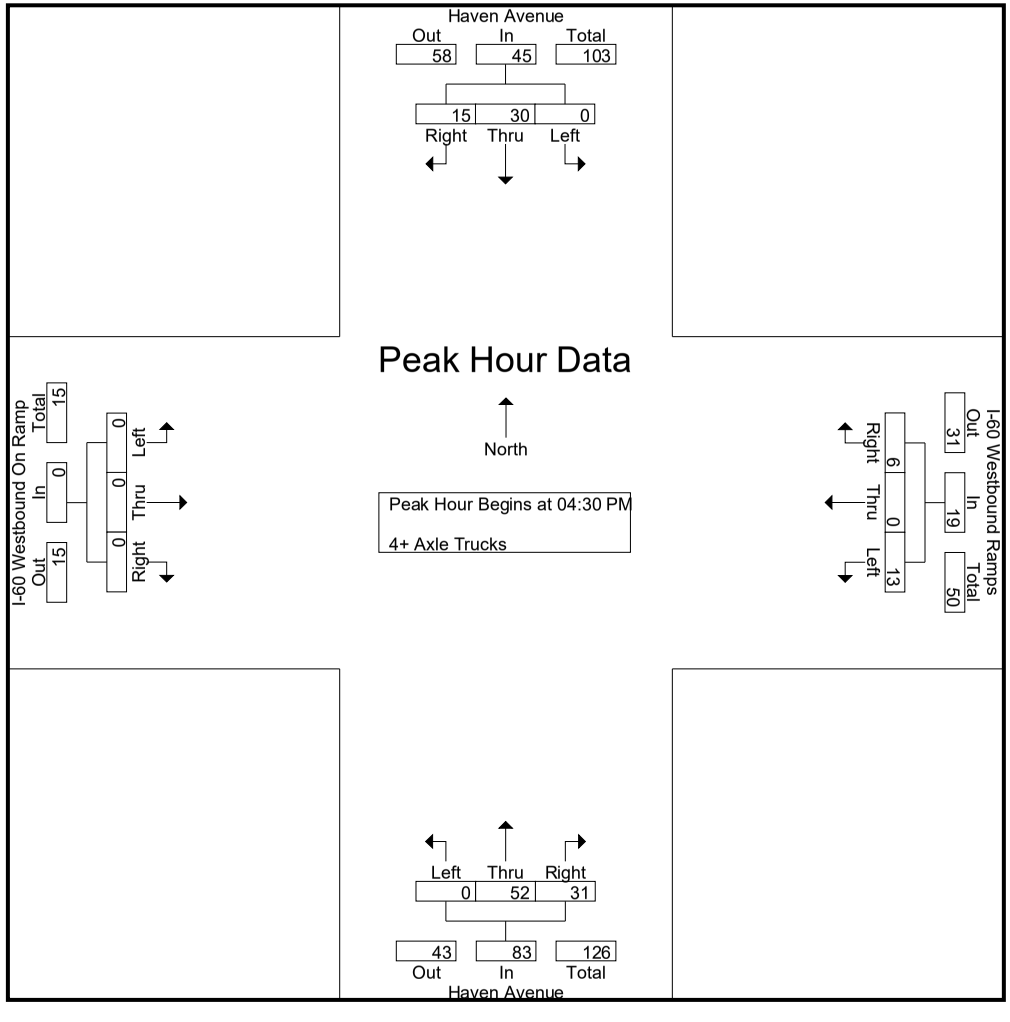
3.1-60

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**9**	3	12	2	0	1	3	0	**17**	8	**25**	0	0	0	0	40
04:45 PM	0	7	**10**	**17**	3	0	2	5	0	17	5	22	0	0	0	0	**44**
05:00 PM	0	7	1	8	2	0	**3**	5	0	12	**12**	24	0	0	0	0	37
05:15 PM	0	7	1	8	**6**	0	0	**6**	0	6	6	12	0	0	0	0	26
Total Volume	0	30	15	45	13	0	6	19	0	52	31	83	0	0	0	0	147
% App. Total	0	66.7	33.3		68.4	0	31.6		0	62.7	37.3		0	0	0		
PHF	.000	.833	.375	.662	.542	.000	.500	.792	.000	.765	.646	.830	.000	.000	.000	.000	.835

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Westbound Ramps
Weather: Clear

File Name : 02_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 11/18/2021

	Haven Avenue Southbound				I-60 Westbound Ramps Westbound				Haven Avenue Northbound				I-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**9**	3	12	2	0	1	3	0	**17**	8	**25**	0	0	0	0	
+15 mins.	0	7	**10**	**17**	3	0	2	5	0	17	5	22	0	0	0	0	
+30 mins.	0	7	1	8	2	0	**3**	5	0	12	**12**	24	0	0	0	0	
+45 mins.	0	7	1	8	**6**	0	0	**6**	0	6	6	12	0	0	0	0	
Total Volume	0	30	15	45	13	0	6	19	0	52	31	83	0	0	0	0	
% App. Total	0	66.7	33.3		68.4	0	31.6		0	62.7	37.3		0	0	0		
PHF	.000	.833	.375	.662	.542	.000	.500	.792	.000	.765	.646	.830	.000	.000	.000	.000	

Location: Ontario
N/S: Haven Avenue
E/W: I-60 WB Ramps

Date: 11/18/2021
Day: Thursday

PEDESTRIANS

	North Leg Haven Avenue	East Leg I-60 WB Ramps	South Leg Haven Avenue	West Leg I-60 WB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	1	0	0	1
8:00 AM	0	1	0	0	1
8:15 AM	0	2	0	0	2
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	4	0	0	4

	North Leg Haven Avenue	East Leg I-60 WB Ramps	South Leg Haven Avenue	West Leg I-60 WB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	2

Location: Ontario
N/S: Haven Avenue
E/W: I-60 WB Ramps

Date: 11/18/2021
Day: Thursday

BICYCLES

	Southbound Haven Avenue			Westbound I-60 WB Ramps			Northbound Haven Avenue			Eastbound I-60 WB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Haven Avenue			Westbound I-60 WB Ramps			Northbound Haven Avenue			Eastbound I-60 WB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

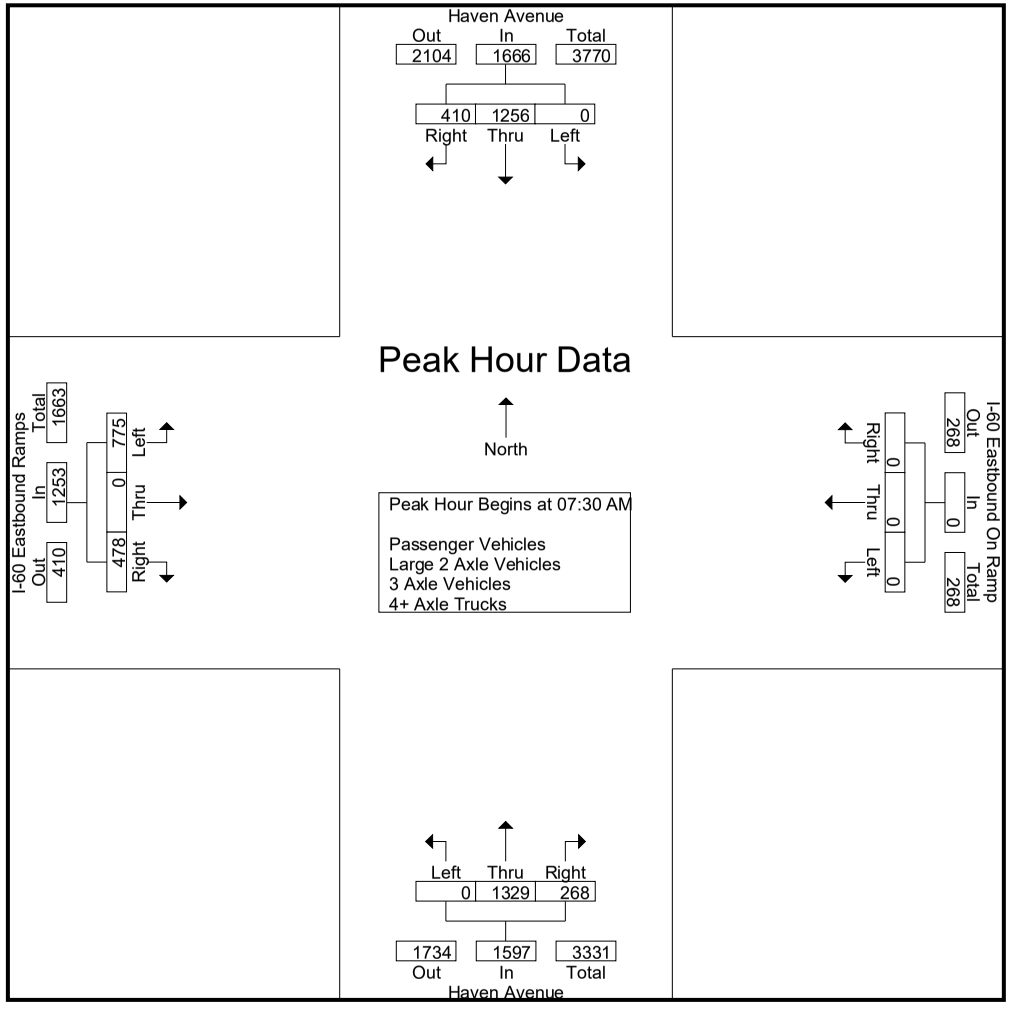
	Haven Avenue Southbound					I-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					I-60 Eastbound Ramps Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	211	92	0	303	0	0	0	0	0	0	233	60	0	293	98	0	79	31	177	31	773	804
07:15 AM	0	231	88	0	319	0	0	0	0	0	0	218	52	0	270	132	0	81	32	213	32	802	834
07:30 AM	0	276	107	0	383	0	0	0	0	0	0	324	68	0	392	174	0	123	27	297	27	1072	1099
07:45 AM	0	358	99	0	457	0	0	0	0	0	0	317	69	0	386	235	0	124	13	359	13	1202	1215
Total	0	1076	386	0	1462	0	0	0	0	0	0	1092	249	0	1341	639	0	407	103	1046	103	3849	3952
08:00 AM	0	328	120	0	448	0	0	0	0	0	0	341	58	0	399	181	0	114	26	295	26	1142	1168
08:15 AM	0	294	84	0	378	0	0	0	0	0	0	347	73	0	420	185	0	117	22	302	22	1100	1122
08:30 AM	0	292	102	0	394	0	0	0	0	0	0	297	95	0	392	175	0	103	18	278	18	1064	1082
08:45 AM	0	256	109	0	365	0	0	0	0	0	0	325	89	0	414	193	0	102	23	295	23	1074	1097
Total	0	1170	415	0	1585	0	0	0	0	0	0	1310	315	0	1625	734	0	436	89	1170	89	4380	4469
Grand Total	0	2246	801	0	3047	0	0	0	0	0	0	2402	564	0	2966	1373	0	843	192	2216	192	8229	8421
Apprch %	0	73.7	26.3			0	0	0			0	81	19			62	0	38					
Total %	0	27.3	9.7		37	0	0	0		0	0	29.2	6.9		36	16.7	0	10.2		26.9	2.3	97.7	
Passenger Vehicles	0	2094	740		2834	0	0	0		0	0	2227	457		2684	1245	0	786		2216	0	0	7734
% Passenger Vehicles	0	93.2	92.4	0	93	0	0	0	0	0	0	92.7	81	0	90.5	90.7	0	93.2	96.4	92	0	0	91.8
Large 2 Axle Vehicles	0	52	28		80	0	0	0		0	0	75	35		110	33	0	20		57	0	0	247
% Large 2 Axle Vehicles	0	2.3	3.5	0	2.6	0	0	0	0	0	0	3.1	6.2	0	3.7	2.4	0	2.4	2.1	2.4	0	0	2.9
3 Axle Vehicles	0	27	10		37	0	0	0		0	0	18	12		30	7	0	3		10	0	0	77
% 3 Axle Vehicles	0	1.2	1.2	0	1.2	0	0	0	0	0	0	0.7	2.1	0	1	0.5	0	0.4	0	0.4	0	0	0.9
4+ Axle Trucks	0	73	23		96	0	0	0		0	0	82	60		142	88	0	34		125	0	0	363
% 4+ Axle Trucks	0	3.3	2.9	0	3.2	0	0	0	0	0	0	3.4	10.6	0	4.8	6.4	0	4	1.6	5.2	0	0	4.3

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	276	107	383	0	0	0	0	0	324	68	392	174	0	123	297	1072
07:45 AM	0	**358**	99	**457**	0	0	0	0	0	317	69	386	**235**	0	**124**	**359**	**1202**
08:00 AM	0	328	**120**	448	0	0	0	0	0	341	58	399	181	0	114	295	1142
08:15 AM	0	294	84	378	0	0	0	0	0	**347**	**73**	**420**	185	0	117	302	1100
Total Volume	0	1256	410	1666	0	0	0	0	0	1329	268	1597	775	0	478	1253	4516
% App. Total	0	75.4	24.6		0	0	0		0	83.2	16.8		61.9	0	38.1		
PHF	.000	.877	.854	.911	.000	.000	.000	.000	.000	.957	.918	.951	.824	.000	.964	.873	.939

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:00 AM				08:00 AM				07:30 AM				
+0 mins.	0	**358**	99	**457**	0	0	0	0	0	341	58	399	174	0	123	297	
+15 mins.	0	328	**120**	448	0	0	0	0	0	**347**	73	**420**	**235**	0	**124**	**359**	
+30 mins.	0	294	84	378	0	0	0	0	0	297	**95**	392	181	0	114	295	
+45 mins.	0	292	102	394	0	0	0	0	0	325	89	414	185	0	117	302	
Total Volume	0	1272	405	1677	0	0	0	0	0	1310	315	1625	775	0	478	1253	
% App. Total	0	75.8	24.2		0	0	0		0	80.6	19.4		61.9	0	38.1		
PHF	.000	.888	.844	.917	.000	.000	.000	.000	.000	.944	.829	.967	.824	.000	.964	.873	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					I-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					I-60 Eastbound Ramps Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	195	89	0	284	0	0	0	0	0	0	217	42	0	259	87	0	75	31	162	31	705	736
07:15 AM	0	219	81	0	300	0	0	0	0	0	0	198	46	0	244	121	0	78	31	199	31	743	774
07:30 AM	0	268	97	0	365	0	0	0	0	0	0	298	55	0	353	149	0	113	26	262	26	980	1006
07:45 AM	0	333	94	0	427	0	0	0	0	0	0	300	54	0	354	221	0	113	11	334	11	1115	1126
Total	0	1015	361	0	1376	0	0	0	0	0	0	1013	197	0	1210	578	0	379	99	957	99	3543	3642
08:00 AM	0	306	111	0	417	0	0	0	0	0	0	317	53	0	370	166	0	107	26	273	26	1060	1086
08:15 AM	0	273	75	0	348	0	0	0	0	0	0	329	56	0	385	169	0	110	21	279	21	1012	1033
08:30 AM	0	274	95	0	369	0	0	0	0	0	0	273	81	0	354	156	0	95	18	251	18	974	992
08:45 AM	0	226	98	0	324	0	0	0	0	0	0	295	70	0	365	176	0	95	21	271	21	960	981
Total	0	1079	379	0	1458	0	0	0	0	0	0	1214	260	0	1474	667	0	407	86	1074	86	4006	4092
Grand Total	0	2094	740	0	2834	0	0	0	0	0	0	2227	457	0	2684	1245	0	786	185	2031	185	7549	7734
Apprch %	0	73.9	26.1			0	0	0			0	83	17			61.3	0	38.7					
Total %	0	27.7	9.8		37.5	0	0	0		0	0	29.5	6.1		35.6	16.5	0	10.4		26.9	2.4	97.6	

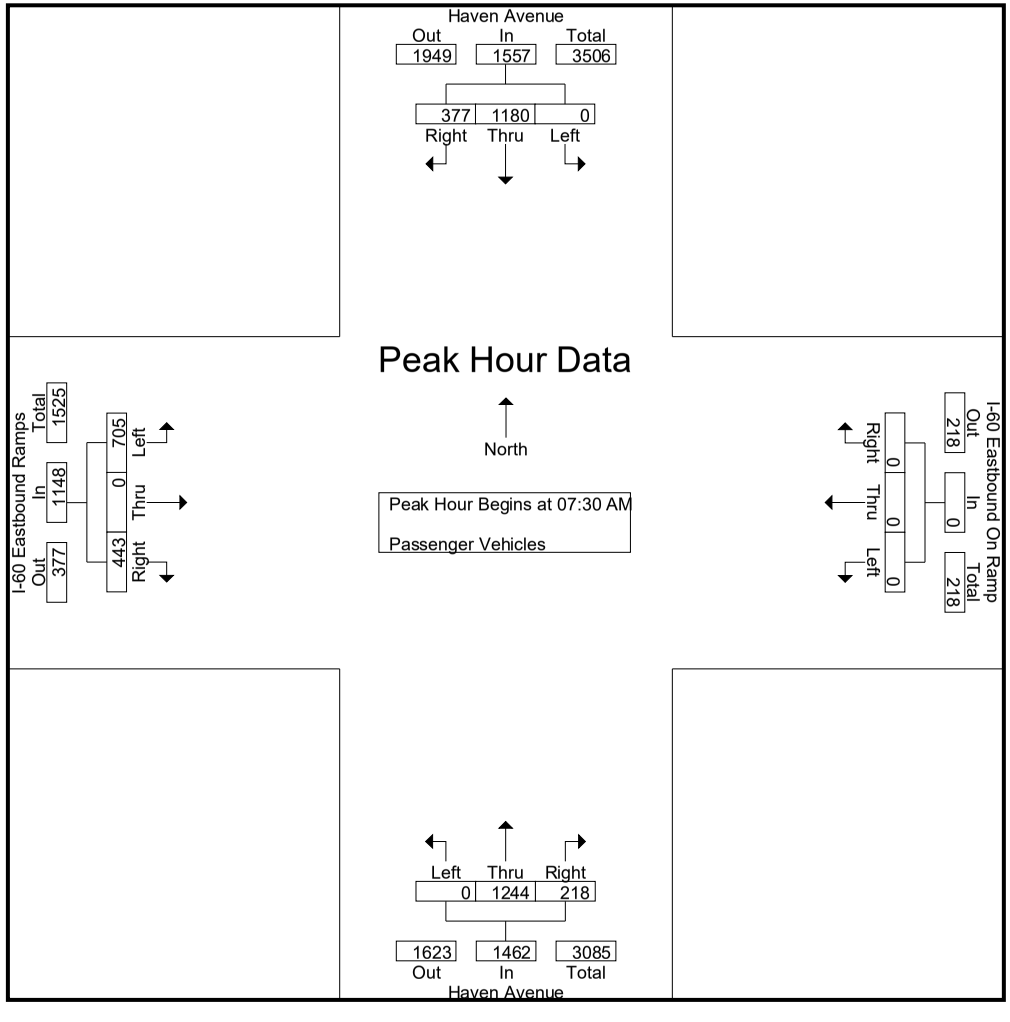
3-1-68

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	268	97	365	0	0	0	0	0	298	55	353	149	0	**113**	262	980
07:45 AM	0	**333**	94	**427**	0	0	0	0	0	300	54	354	**221**	0	113	**334**	**1115**
08:00 AM	0	306	**111**	417	0	0	0	0	0	317	53	370	166	0	107	273	1060
08:15 AM	0	273	75	348	0	0	0	0	0	**329**	**56**	**385**	169	0	110	279	1012
Total Volume	0	1180	377	1557	0	0	0	0	0	1244	218	1462	705	0	443	1148	4167
% App. Total	0	75.8	24.2		0	0	0		0	85.1	14.9		61.4	0	38.6		
PHF	.000	.886	.849	.912	.000	.000	.000	.000	.000	.945	.973	.949	.798	.000	.980	.859	.934

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	268	97	365	0	0	0	0	0	298	55	353	149	0	**113**	262	
+15 mins.	0	**333**	94	**427**	0	0	0	0	0	300	54	354	**221**	0	113	**334**	
+30 mins.	0	306	**111**	417	0	0	0	0	0	317	53	370	166	0	107	273	
+45 mins.	0	273	75	348	0	0	0	0	0	**329**	**56**	**385**	169	0	110	279	
Total Volume	0	1180	377	1557	0	0	0	0	0	1244	218	1462	705	0	443	1148	
% App. Total	0	75.8	24.2		0	0	0		0	85.1	14.9		61.4	0	38.6		
PHF	.000	.886	.849	.912	.000	.000	.000	.000	.000	.945	.973	.949	.798	.000	.980	.859	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

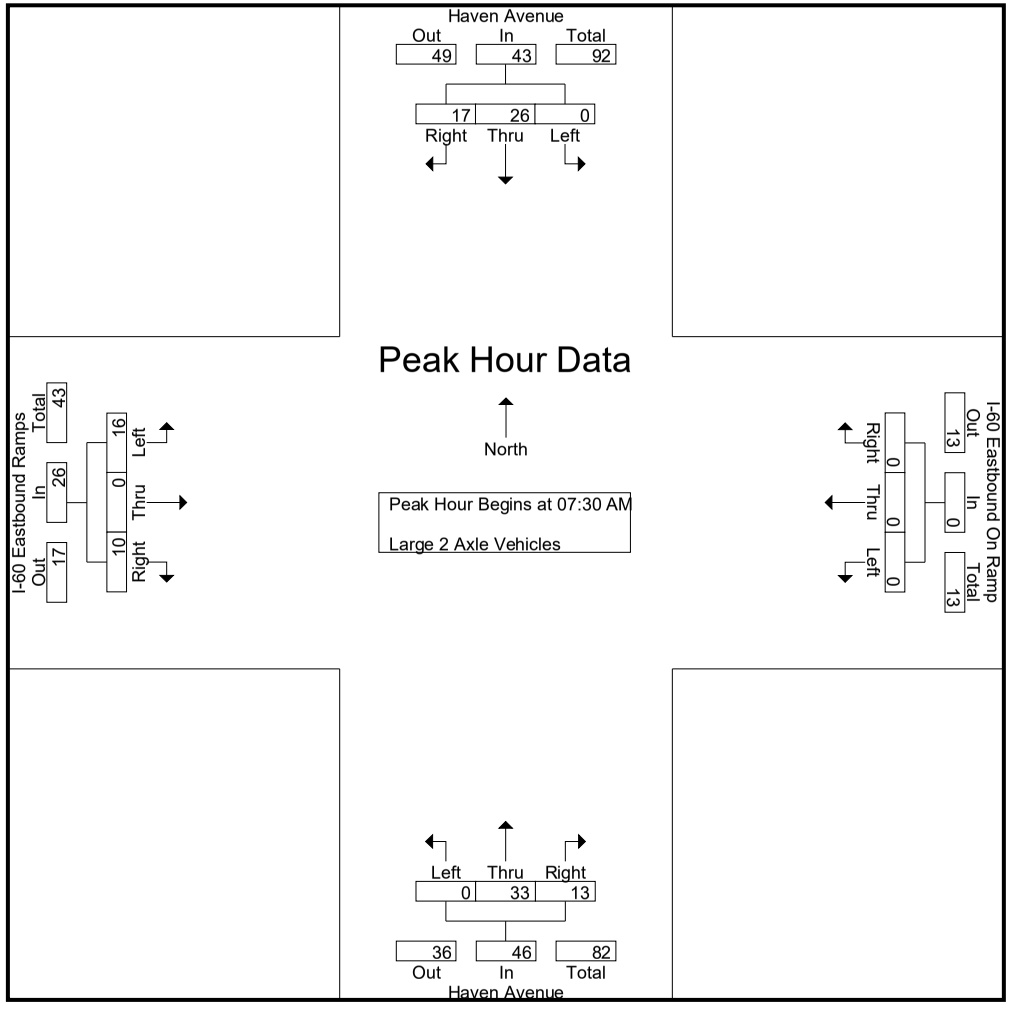
	Haven Avenue Southbound					I-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					I-60 Eastbound Ramps Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	7	2	0	9	0	0	0	0	0	0	6	11	0	17	3	0	1	0	4	0	30	30
07:15 AM	0	3	5	0	8	0	0	0	0	0	0	8	2	0	10	5	0	1	0	6	0	24	24
07:30 AM	0	4	2	0	6	0	0	0	0	0	0	12	2	0	14	6	0	1	1	7	1	27	28
07:45 AM	0	10	4	0	14	0	0	0	0	0	0	4	3	0	7	5	0	2	0	7	0	28	28
Total	0	24	13	0	37	0	0	0	0	0	0	30	18	0	48	19	0	5	1	24	1	109	110
08:00 AM	0	5	6	0	11	0	0	0	0	0	0	11	1	0	12	2	0	3	0	5	0	28	28
08:15 AM	0	7	5	0	12	0	0	0	0	0	0	6	7	0	13	3	0	4	1	7	1	32	33
08:30 AM	0	5	3	0	8	0	0	0	0	0	0	10	5	0	15	6	0	1	0	7	0	30	30
08:45 AM	0	11	1	0	12	0	0	0	0	0	0	18	4	0	22	3	0	7	2	10	2	44	46
Total	0	28	15	0	43	0	0	0	0	0	0	45	17	0	62	14	0	15	3	29	3	134	137
Grand Total	0	52	28	0	80	0	0	0	0	0	0	75	35	0	110	33	0	20	4	53	4	243	247
Apprch %	0	65	35			0	0	0			0	68.2	31.8			62.3	0	37.7					
Total %	0	21.4	11.5		32.9	0	0	0		0	0	30.9	14.4		45.3	13.6	0	8.2		21.8	1.6	98.4	

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	4	2	6	0	0	0	0	0	**12**	2	**14**	**6**	0	1	**7**	27
07:45 AM	0	**10**	4	**14**	0	0	0	0	0	4	3	7	5	0	2	7	28
08:00 AM	0	5	**6**	11	0	0	0	0	0	11	1	12	2	0	3	5	28
08:15 AM	0	7	5	12	0	0	0	0	0	6	**7**	13	3	0	**4**	7	**32**
Total Volume	0	26	17	43	0	0	0	0	0	33	13	46	16	0	10	26	115
% App. Total	0	60.5	39.5		0	0	0		0	71.7	28.3		61.5	0	38.5		
PHF	.000	.650	.708	.768	.000	.000	.000	.000	.000	.688	.464	.821	.667	.000	.625	.929	.898

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	4	2	6	0	0	0	0	0	**12**	2	**14**	**6**	0	1	**7**	
+15 mins.	0	**10**	4	**14**	0	0	0	0	0	4	3	7	5	0	2	7	
+30 mins.	0	5	**6**	11	0	0	0	0	0	11	1	12	2	0	3	5	
+45 mins.	0	7	5	12	0	0	0	0	0	6	**7**	13	3	0	**4**	7	
Total Volume	0	26	17	43	0	0	0	0	0	33	13	46	16	0	10	26	
% App. Total	0	60.5	39.5		0	0	0		0	71.7	28.3		61.5	0	38.5		
PHF	.000	.650	.708	.768	.000	.000	.000	.000	.000	.688	.464	.821	.667	.000	.625	.929	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Haven Avenue Southbound					I-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					I-60 Eastbound Ramps Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	4	0	0	4	0	0	0	0	0	0	3	2	0	5	3	0	1	0	4	0	13	13
07:15 AM	0	2	0	0	2	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	0	7	7
07:30 AM	0	1	1	0	2	0	0	0	0	0	0	3	2	0	5	1	0	0	0	1	0	8	8
07:45 AM	0	5	1	0	6	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	0	9	9
Total	0	12	2	0	14	0	0	0	0	0	0	10	6	0	16	5	0	2	0	7	0	37	37
08:00 AM	0	5	0	0	5	0	0	0	0	0	0	3	1	0	4	1	0	0	0	1	0	10	10
08:15 AM	0	3	2	0	5	0	0	0	0	0	0	2	2	0	4	0	0	1	0	1	0	10	10
08:30 AM	0	3	2	0	5	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	6	6
08:45 AM	0	4	4	0	8	0	0	0	0	0	0	3	2	0	5	1	0	0	0	1	0	14	14
Total	0	15	8	0	23	0	0	0	0	0	0	8	6	0	14	2	0	1	0	3	0	40	40
Grand Total	0	27	10	0	37	0	0	0	0	0	0	18	12	0	30	7	0	3	0	10	0	77	77
Apprch %	0	73	27			0	0	0			0	60	40			70	0	30					
Total %	0	35.1	13		48.1	0	0	0		0	0	23.4	15.6		39	9.1	0	3.9		13	0	100	

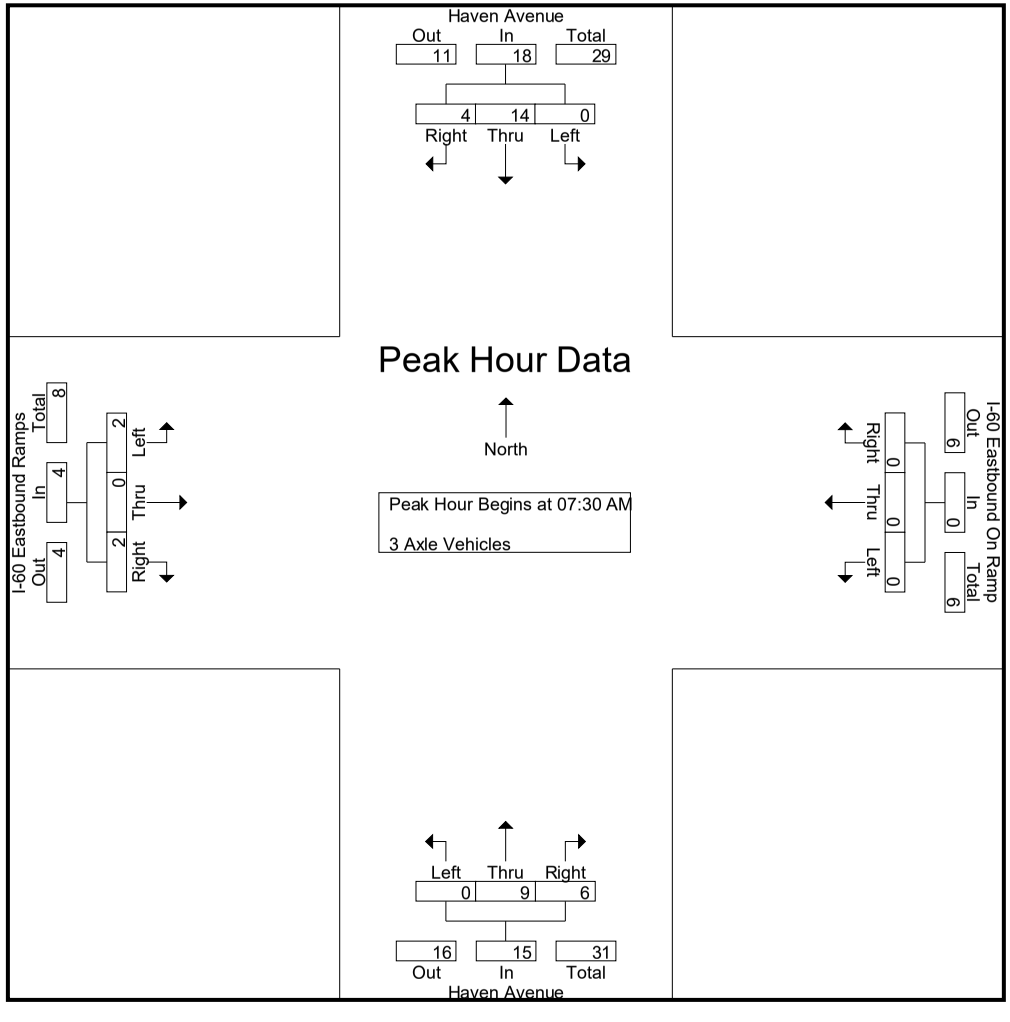
3.1-74

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	1	2	0	0	0	0	0	**3**	**2**	**5**	**1**	0	0	**1**	8
07:45 AM	0	**5**	1	**6**	0	0	0	0	0	1	1	2	0	0	**1**	1	9
08:00 AM	0	5	0	5	0	0	0	0	0	3	1	4	1	0	0	1	**10**
08:15 AM	0	3	**2**	5	0	0	0	0	0	2	2	4	0	0	1	1	10
Total Volume	0	14	4	18	0	0	0	0	0	9	6	15	2	0	2	4	37
% App. Total	0	77.8	22.2		0	0	0		0	60	40		50	0	50		
PHF	.000	.700	.500	.750	.000	.000	.000	.000	.000	.750	.750	.750	.500	.000	.500	1.00	.925

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	1	1	2	0	0	0	0	0	**3**	**2**	**5**	**1**	0	0	**1**	
+15 mins.	0	**5**	1	**6**	0	0	0	0	0	1	1	2	0	0	**1**	1	
+30 mins.	0	5	0	5	0	0	0	0	0	3	1	4	1	0	0	1	
+45 mins.	0	3	**2**	5	0	0	0	0	0	2	2	4	0	0	1	1	
Total Volume	0	14	4	18	0	0	0	0	0	9	6	15	2	0	2	4	
% App. Total	0	77.8	22.2		0	0	0		0	60	40		50	0	50		
PHF	.000	.700	.500	.750	.000	.000	.000	.000	.000	.750	.750	.750	.500	.000	.500	1.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Haven Avenue Southbound					I-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					I-60 Eastbound Ramps Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	5	1	0	6	0	0	0	0	0	0	7	5	0	12	5	0	2	0	7	0	25	25
07:15 AM	0	7	2	0	9	0	0	0	0	0	0	9	3	0	12	5	0	2	1	7	1	28	29
07:30 AM	0	3	7	0	10	0	0	0	0	0	0	11	9	0	20	18	0	9	0	27	0	57	57
07:45 AM	0	10	0	0	10	0	0	0	0	0	0	12	11	0	23	9	0	8	2	17	2	50	52
Total	0	25	10	0	35	0	0	0	0	0	0	39	28	0	67	37	0	21	3	58	3	160	163
08:00 AM	0	12	3	0	15	0	0	0	0	0	0	10	3	0	13	12	0	4	0	16	0	44	44
08:15 AM	0	11	2	0	13	0	0	0	0	0	0	10	8	0	18	13	0	2	0	15	0	46	46
08:30 AM	0	10	2	0	12	0	0	0	0	0	0	14	8	0	22	13	0	7	0	20	0	54	54
08:45 AM	0	15	6	0	21	0	0	0	0	0	0	9	13	0	22	13	0	0	0	13	0	56	56
Total	0	48	13	0	61	0	0	0	0	0	0	43	32	0	75	51	0	13	0	64	0	200	200
Grand Total	0	73	23	0	96	0	0	0	0	0	0	82	60	0	142	88	0	34	3	122	3	360	363
Apprch %	0	76	24			0	0	0			0	57.7	42.3			72.1	0	27.9					
Total %	0	20.3	6.4		26.7	0	0	0		0	0	22.8	16.7		39.4	24.4	0	9.4		33.9	0.8	99.2	

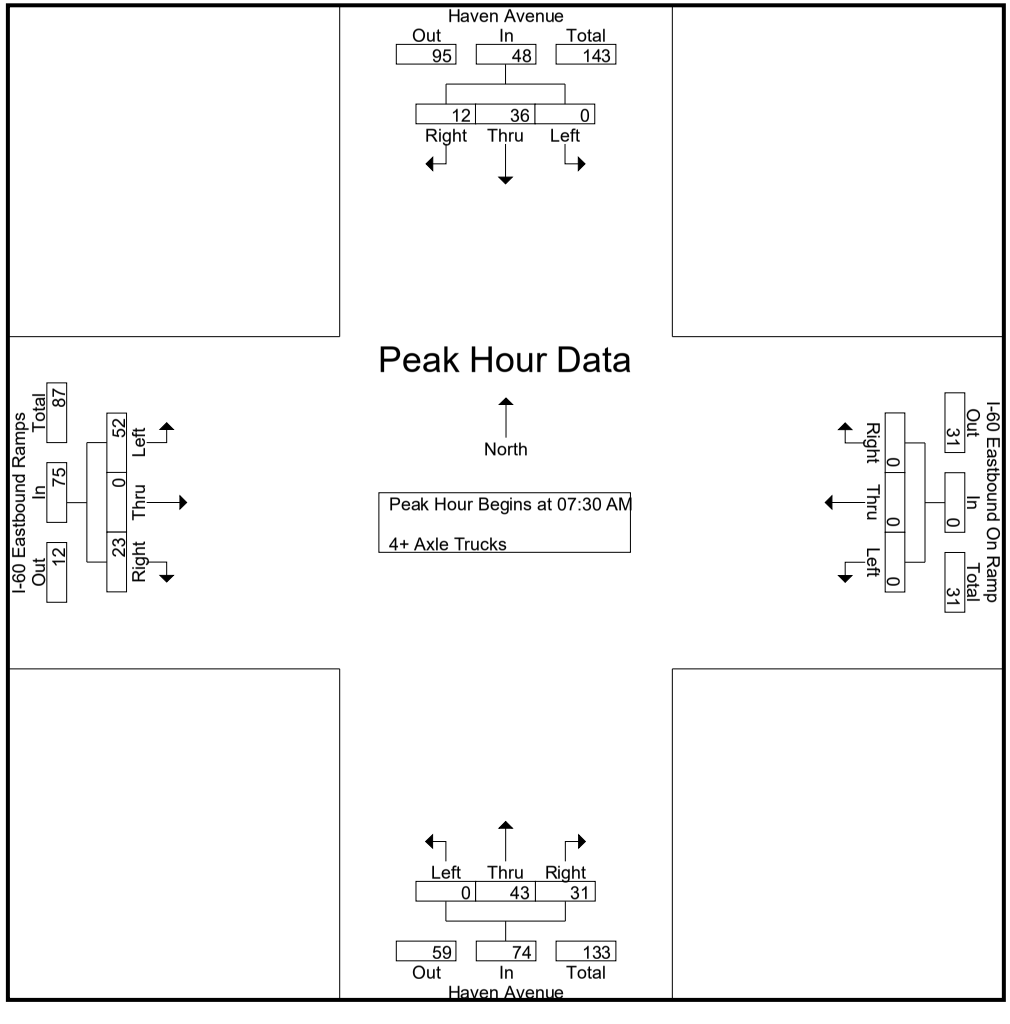
3-77

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	3	**7**	10	0	0	0	0	0	11	9	20	**18**	0	**9**	**27**	**57**
07:45 AM	0	10	0	10	0	0	0	0	0	**12**	**11**	**23**	9	0	8	17	50
08:00 AM	0	**12**	3	**15**	0	0	0	0	0	10	3	13	12	0	4	16	44
08:15 AM	0	11	2	13	0	0	0	0	0	10	8	18	13	0	2	15	46
Total Volume	0	36	12	48	0	0	0	0	0	43	31	74	52	0	23	75	197
% App. Total	0	75	25		0	0	0		0	58.1	41.9		69.3	0	30.7		
PHF	.000	.750	.429	.800	.000	.000	.000	.000	.000	.896	.705	.804	.722	.000	.639	.694	.864

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	3	**7**	10	0	0	0	0	0	11	9	20	**18**	0	**9**	**27**	
+15 mins.	0	10	0	10	0	0	0	0	0	**12**	**11**	**23**	9	0	8	17	
+30 mins.	0	**12**	3	**15**	0	0	0	0	0	10	3	13	12	0	4	16	
+45 mins.	0	11	2	13	0	0	0	0	0	10	8	18	13	0	2	15	
Total Volume	0	36	12	48	0	0	0	0	0	43	31	74	52	0	23	75	
% App. Total	0	75	25		0	0	0		0	58.1	41.9		69.3	0	30.7		
PHF	.000	.750	.429	.800	.000	.000	.000	.000	.000	.896	.705	.804	.722	.000	.639	.694	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

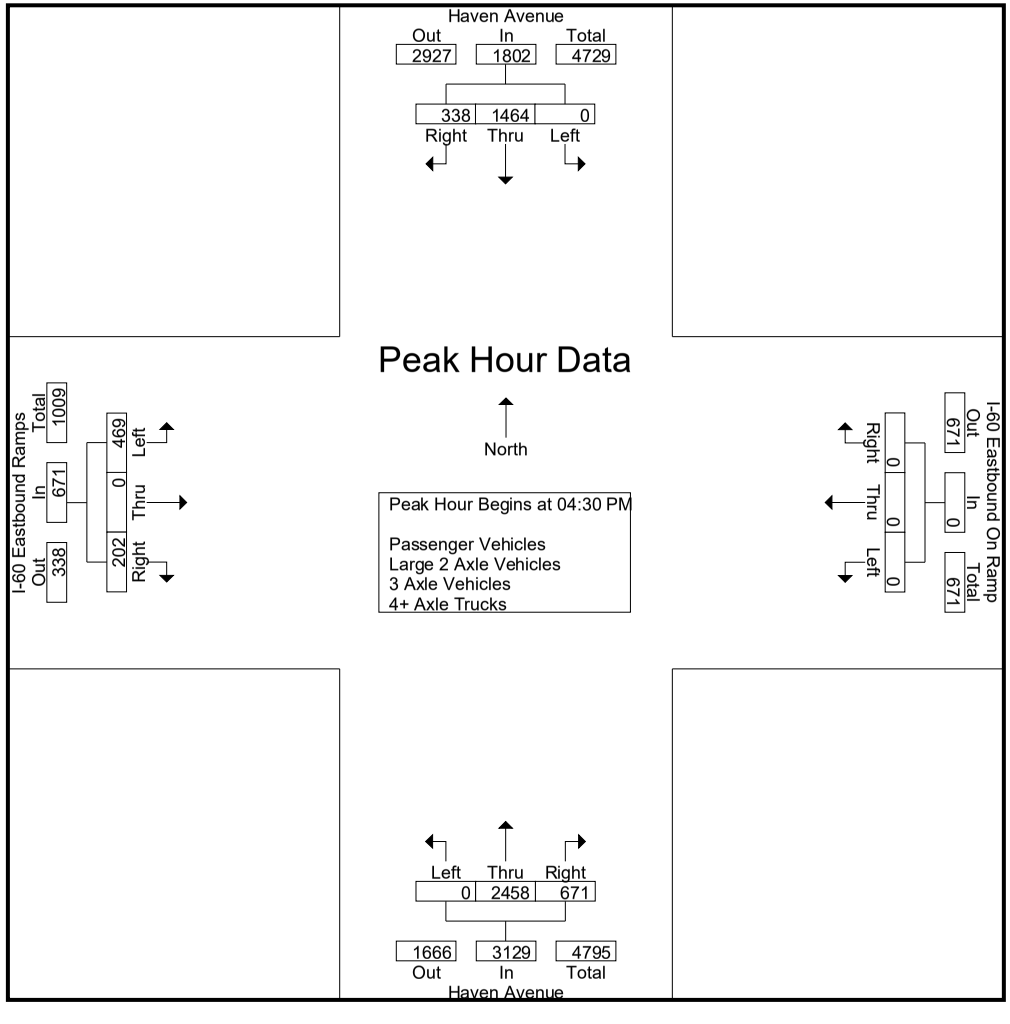
	Haven Avenue Southbound					I-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					I-60 Eastbound Ramps Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	308	88	0	396	0	0	0	0	0	0	537	151	0	688	142	0	89	40	231	40	1315	1355
04:15 PM	0	353	69	0	422	0	0	0	0	0	0	560	176	0	736	156	0	74	14	230	14	1388	1402
04:30 PM	0	374	84	0	458	0	0	0	0	0	0	587	176	0	763	125	0	65	29	190	29	1411	1440
04:45 PM	0	341	70	0	411	0	0	0	0	0	0	628	162	0	790	124	0	38	14	162	14	1363	1377
Total	0	1376	311	0	1687	0	0	0	0	0	0	2312	665	0	2977	547	0	266	97	813	97	5477	5574
05:00 PM	0	361	101	0	462	0	0	0	0	0	0	606	166	0	772	115	0	42	18	157	18	1391	1409
05:15 PM	0	388	83	0	471	0	0	0	0	0	0	637	167	0	804	105	0	57	16	162	16	1437	1453
05:30 PM	0	297	65	0	362	0	0	0	0	0	0	588	180	0	768	83	0	26	16	109	16	1239	1255
05:45 PM	0	279	62	0	341	0	0	0	0	0	0	513	167	0	680	54	0	26	12	80	12	1101	1113
Total	0	1325	311	0	1636	0	0	0	0	0	0	2344	680	0	3024	357	0	151	62	508	62	5168	5230
Grand Total	0	2701	622	0	3323	0	0	0	0	0	0	4656	1345	0	6001	904	0	417	159	1321	159	10645	10804
Apprch %	0	81.3	18.7			0	0	0			0	77.6	22.4			68.4	0	31.6					
Total %	0	25.4	5.8		31.2	0	0	0		0	0	43.7	12.6		56.4	8.5	0	3.9		12.4	1.5	98.5	
Passenger Vehicles	0	2518	595		3113	0	0	0		0	0	4483	1282		5765	843	0	365		1354	0	0	10232
% Passenger Vehicles	0	93.2	95.7	0	93.7	0	0	0	0	0	0	96.3	95.3	0	96.1	93.3	0	87.5	91.8	91.5	0	0	94.7
Large 2 Axle Vehicles	0	87	10		97	0	0	0		0	0	53	11		64	21	0	18		46	0	0	207
% Large 2 Axle Vehicles	0	3.2	1.6	0	2.9	0	0	0	0	0	0	1.1	0.8	0	1.1	2.3	0	4.3	4.4	3.1	0	0	1.9
3 Axle Vehicles	0	20	3		23	0	0	0		0	0	15	9		24	5	0	6		14	0	0	61
% 3 Axle Vehicles	0	0.7	0.5	0	0.7	0	0	0	0	0	0	0.3	0.7	0	0.4	0.6	0	1.4	1.9	0.9	0	0	0.6
4+ Axle Trucks	0	76	14		90	0	0	0		0	0	105	43		148	35	0	28		66	0	0	304
% 4+ Axle Trucks	0	2.8	2.3	0	2.7	0	0	0	0	0	0	2.3	3.2	0	2.5	3.9	0	6.7	1.9	4.5	0	0	2.8

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	374	84	458	0	0	0	0	0	587	**176**	763	**125**	0	**65**	**190**	1411
04:45 PM	0	341	70	411	0	0	0	0	0	628	162	790	124	0	38	162	1363
05:00 PM	0	361	**101**	462	0	0	0	0	0	606	166	772	115	0	42	157	1391
05:15 PM	0	**388**	83	**471**	0	0	0	0	0	**637**	167	**804**	105	0	57	162	**1437**
Total Volume	0	1464	338	1802	0	0	0	0	0	2458	671	3129	469	0	202	671	5602
% App. Total	0	81.2	18.8		0	0	0		0	78.6	21.4		69.9	0	30.1		
PHF	.000	.943	.837	.956	.000	.000	.000	.000	.000	.965	.953	.973	.938	.000	.777	.883	.975

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:00 PM				04:45 PM				04:00 PM				
+0 mins.	0	374	84	458	0	0	0	0	0	628	162	790	142	0	**89**	**231**	
+15 mins.	0	341	70	411	0	0	0	0	0	606	166	772	**156**	0	74	230	
+30 mins.	0	361	**101**	462	0	0	0	0	0	**637**	167	**804**	125	0	65	190	
+45 mins.	0	**388**	83	**471**	0	0	0	0	0	588	**180**	768	124	0	38	162	
Total Volume	0	1464	338	1802	0	0	0	0	0	2459	675	3134	547	0	266	813	
% App. Total	0	81.2	18.8		0	0	0		0	78.5	21.5		67.3	0	32.7		
PHF	.000	.943	.837	.956	.000	.000	.000	.000	.000	.965	.938	.975	.877	.000	.747	.880	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					I-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					I-60 Eastbound Ramps Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	291	84	0	375	0	0	0	0	0	0	508	142	0	650	135	0	81	37	216	37	1241	1278
04:15 PM	0	323	63	0	386	0	0	0	0	0	0	538	167	0	705	146	0	66	14	212	14	1303	1317
04:30 PM	0	352	80	0	432	0	0	0	0	0	0	554	167	0	721	117	0	56	24	173	24	1326	1350
04:45 PM	0	318	70	0	388	0	0	0	0	0	0	601	156	0	757	116	0	27	12	143	12	1288	1300
Total	0	1284	297	0	1581	0	0	0	0	0	0	2201	632	0	2833	514	0	230	87	744	87	5158	5245
05:00 PM	0	343	98	0	441	0	0	0	0	0	0	585	160	0	745	106	0	37	16	143	16	1329	1345
05:15 PM	0	365	80	0	445	0	0	0	0	0	0	627	161	0	788	95	0	51	16	146	16	1379	1395
05:30 PM	0	267	62	0	329	0	0	0	0	0	0	572	172	0	744	78	0	21	15	99	15	1172	1187
05:45 PM	0	259	58	0	317	0	0	0	0	0	0	498	157	0	655	50	0	26	12	76	12	1048	1060
Total	0	1234	298	0	1532	0	0	0	0	0	0	2282	650	0	2932	329	0	135	59	464	59	4928	4987
Grand Total	0	2518	595	0	3113	0	0	0	0	0	0	4483	1282	0	5765	843	0	365	146	1208	146	10086	10232
Apprch %	0	80.9	19.1			0	0	0			0	77.8	22.2			69.8	0	30.2					
Total %	0	25	5.9		30.9	0	0	0		0	0	44.4	12.7		57.2	8.4	0	3.6		12	1.4	98.6	

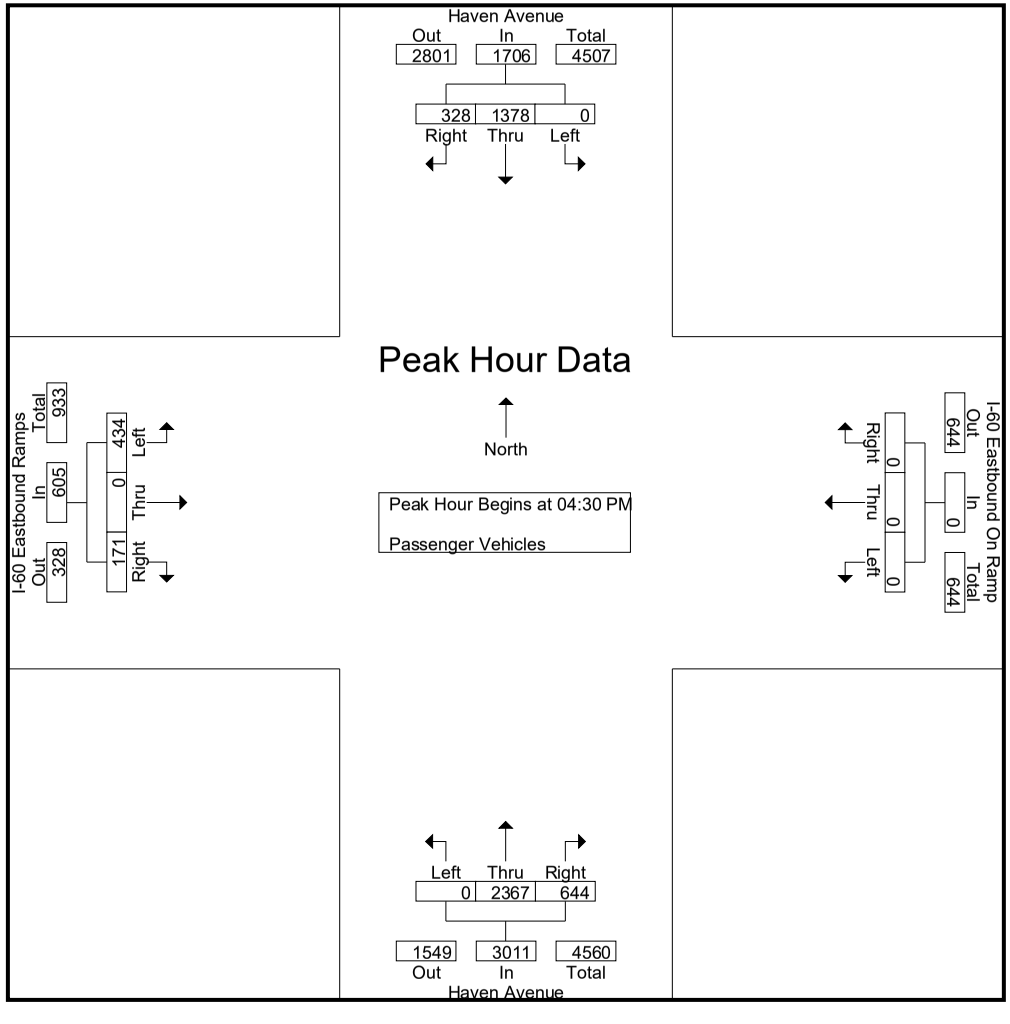
3.1-83

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	352	80	432	0	0	0	0	0	554	**167**	721	**117**	0	**56**	**173**	1326
04:45 PM	0	318	70	388	0	0	0	0	0	601	156	757	116	0	27	143	1288
05:00 PM	0	343	**98**	441	0	0	0	0	0	585	160	745	106	0	37	143	1329
05:15 PM	0	**365**	80	**445**	0	0	0	0	0	**627**	161	**788**	95	0	51	146	**1379**
Total Volume	0	1378	328	1706	0	0	0	0	0	2367	644	3011	434	0	171	605	5322
% App. Total	0	80.8	19.2		0	0	0		0	78.6	21.4		71.7	0	28.3		
PHF	.000	.944	.837	.958	.000	.000	.000	.000	.000	.944	.964	.955	.927	.000	.763	.874	.965

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	352	80	432	0	0	0	0	0	554	**167**	721	**117**	0	**56**	**173**	
+15 mins.	0	318	70	388	0	0	0	0	0	601	156	757	116	0	27	143	
+30 mins.	0	343	**98**	441	0	0	0	0	0	585	160	745	106	0	37	143	
+45 mins.	0	**365**	80	**445**	0	0	0	0	0	**627**	161	**788**	95	0	51	146	
Total Volume	0	1378	328	1706	0	0	0	0	0	2367	644	3011	434	0	171	605	
% App. Total	0	80.8	19.2		0	0	0		0	78.6	21.4		71.7	0	28.3		
PHF	.000	.944	.837	.958	.000	.000	.000	.000	.000	.944	.964	.955	.927	.000	.763	.874	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

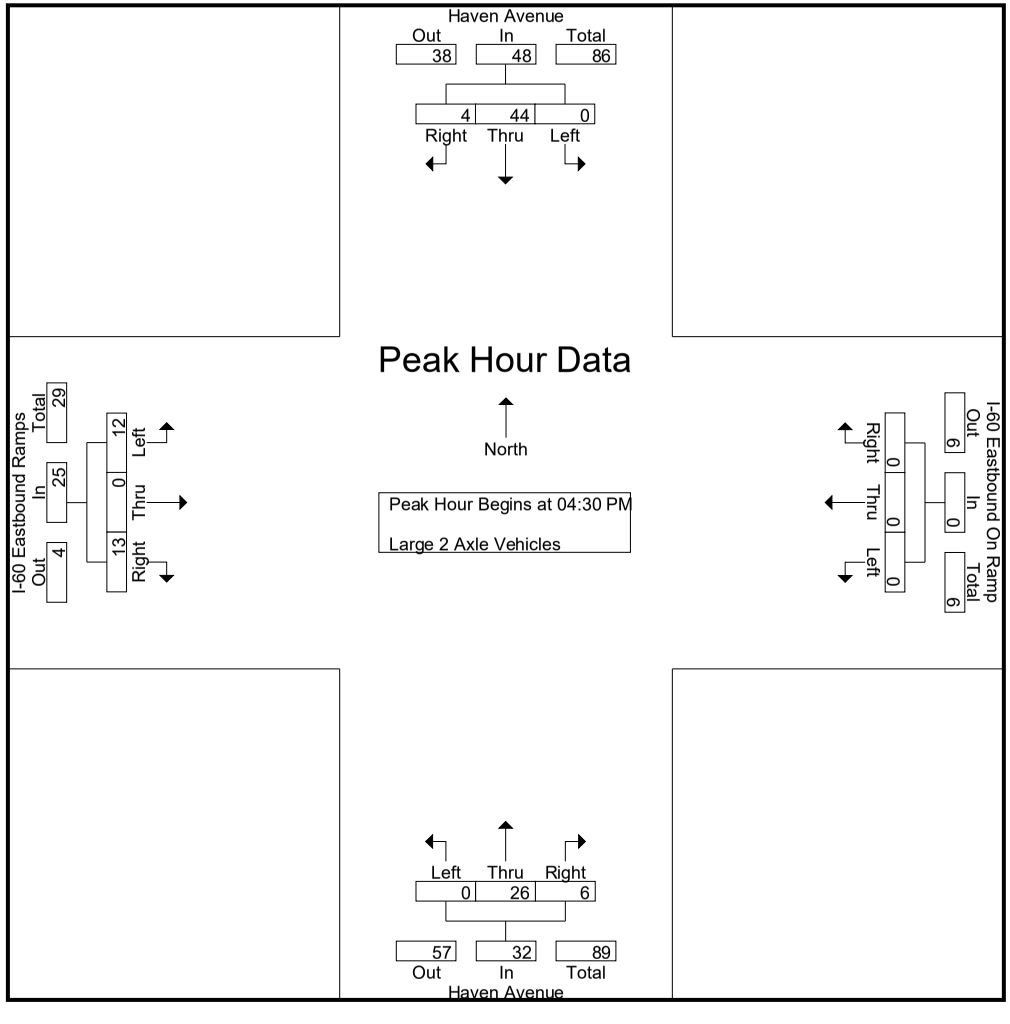
	Haven Avenue Southbound					I-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					I-60 Eastbound Ramps Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	6	1	0	7	0	0	0	0	0	0	11	1	0	12	2	0	1	1	3	1	22	23
04:15 PM	0	13	1	0	14	0	0	0	0	0	0	8	0	0	8	4	0	3	0	7	0	29	29
04:30 PM	0	11	1	0	12	0	0	0	0	0	0	13	2	0	15	4	0	4	3	8	3	35	38
04:45 PM	0	13	0	0	13	0	0	0	0	0	0	7	1	0	8	2	0	4	1	6	1	27	28
Total	0	43	3	0	46	0	0	0	0	0	0	39	4	0	43	12	0	12	5	24	5	113	118
05:00 PM	0	10	2	0	12	0	0	0	0	0	0	3	2	0	5	4	0	3	2	7	2	24	26
05:15 PM	0	10	1	0	11	0	0	0	0	0	0	3	1	0	4	2	0	2	0	4	0	19	19
05:30 PM	0	13	2	0	15	0	0	0	0	0	0	5	2	0	7	2	0	1	0	3	0	25	25
05:45 PM	0	11	2	0	13	0	0	0	0	0	0	3	2	0	5	1	0	0	0	1	0	19	19
Total	0	44	7	0	51	0	0	0	0	0	0	14	7	0	21	9	0	6	2	15	2	87	89
Grand Total	0	87	10	0	97	0	0	0	0	0	0	53	11	0	64	21	0	18	7	39	7	200	207
Apprch %	0	89.7	10.3			0	0	0			0	82.8	17.2			53.8	0	46.2					
Total %	0	43.5	5		48.5	0	0	0		0	0	26.5	5.5		32	10.5	0	9		19.5	3.4	96.6	

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	11	1	12	0	0	0	0	0	**13**	**2**	**15**	**4**	0	**4**	**8**	**35**
04:45 PM	0	**13**	0	**13**	0	0	0	0	0	7	1	8	2	0	4	6	27
05:00 PM	0	10	**2**	12	0	0	0	0	0	3	2	5	4	0	3	7	24
05:15 PM	0	10	1	11	0	0	0	0	0	3	1	4	2	0	2	4	19
Total Volume	0	44	4	48	0	0	0	0	0	26	6	32	12	0	13	25	105
% App. Total	0	91.7	8.3		0	0	0		0	81.2	18.8		48	0	52		
PHF	.000	.846	.500	.923	.000	.000	.000	.000	.000	.500	.750	.533	.750	.000	.813	.781	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	11	1	12	0	0	0	0	0	**13**	**2**	**15**	**4**	0	**4**	**8**	
+15 mins.	0	**13**	0	**13**	0	0	0	0	0	7	1	8	2	0	4	6	
+30 mins.	0	10	**2**	12	0	0	0	0	0	3	2	5	4	0	3	7	
+45 mins.	0	10	1	11	0	0	0	0	0	3	1	4	2	0	2	4	
Total Volume	0	44	4	48	0	0	0	0	0	26	6	32	12	0	13	25	
% App. Total	0	91.7	8.3		0	0	0		0	81.2	18.8		48	0	52		
PHF	.000	.846	.500	.923	.000	.000	.000	.000	.000	.500	.750	.533	.750	.000	.813	.781	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

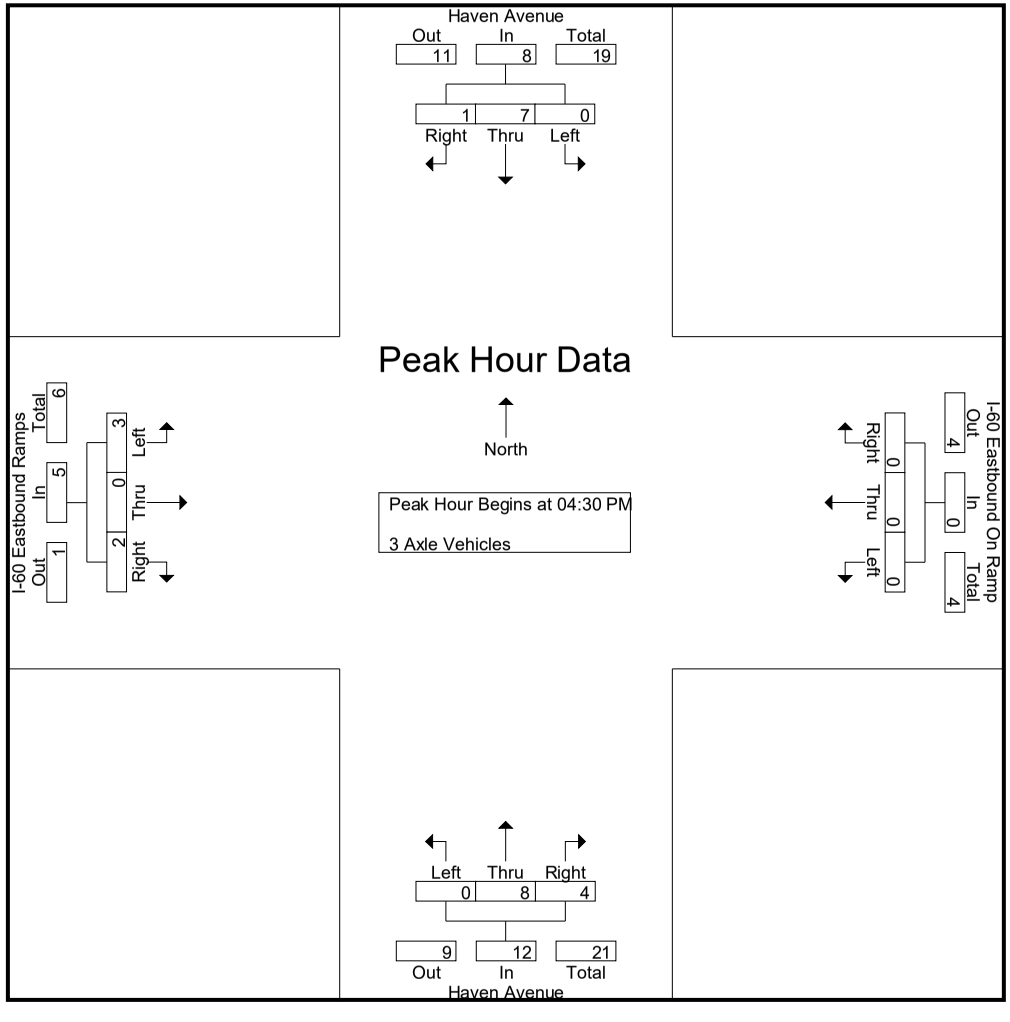
	Haven Avenue Southbound					I-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					I-60 Eastbound Ramps Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	2	1	0	3	0	0	0	0	0	0	2	3	0	5	1	0	2	2	3	2	11	13
04:15 PM	0	6	1	0	7	0	0	0	0	0	0	3	2	0	5	0	0	1	0	1	0	13	13
04:30 PM	0	2	1	0	3	0	0	0	0	0	0	1	1	0	2	2	0	0	0	2	0	7	7
04:45 PM	0	1	0	0	1	0	0	0	0	0	0	5	1	0	6	0	0	1	0	1	0	8	8
Total	0	11	3	0	14	0	0	0	0	0	0	11	7	0	18	3	0	4	2	7	2	39	41
05:00 PM	0	2	0	0	2	0	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	5	5
05:15 PM	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	1	0	1	0	2	0	5	5
05:30 PM	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	1	6	7
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	3	3
Total	0	9	0	0	9	0	0	0	0	0	0	4	2	0	6	2	0	2	1	4	1	19	20
Grand Total	0	20	3	0	23	0	0	0	0	0	0	15	9	0	24	5	0	6	3	11	3	58	61
Apprch %	0	87	13			0	0	0			0	62.5	37.5			45.5	0	54.5					
Total %	0	34.5	5.2		39.7	0	0	0		0	0	25.9	15.5		41.4	8.6	0	10.3		19	4.9	95.1	

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**2**	**1**	**3**	0	0	0	0	0	1	1	2	**2**	0	0	**2**	7
04:45 PM	0	1	0	1	0	0	0	0	0	**5**	1	**6**	0	0	**1**	1	**8**
05:00 PM	0	2	0	2	0	0	0	0	0	1	**2**	3	0	0	0	0	5
05:15 PM	0	2	0	2	0	0	0	0	0	1	0	1	1	0	1	2	5
Total Volume	0	7	1	8	0	0	0	0	0	8	4	12	3	0	2	5	25
% App. Total	0	87.5	12.5		0	0	0		0	66.7	33.3		60	0	40		
PHF	.000	.875	.250	.667	.000	.000	.000	.000	.000	.400	.500	.500	.375	.000	.500	.625	.781

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**2**	**1**	**3**	0	0	0	0	0	1	1	2	**2**	0	0	**2**	
+15 mins.	0	1	0	1	0	0	0	0	0	**5**	1	**6**	0	0	**1**	1	
+30 mins.	0	2	0	2	0	0	0	0	0	1	**2**	3	0	0	0	0	
+45 mins.	0	2	0	2	0	0	0	0	0	1	0	1	1	0	1	2	
Total Volume	0	7	1	8	0	0	0	0	0	8	4	12	3	0	2	5	
% App. Total	0	87.5	12.5		0	0	0		0	66.7	33.3		60	0	40		
PHF	.000	.875	.250	.667	.000	.000	.000	.000	.000	.400	.500	.500	.375	.000	.500	.625	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

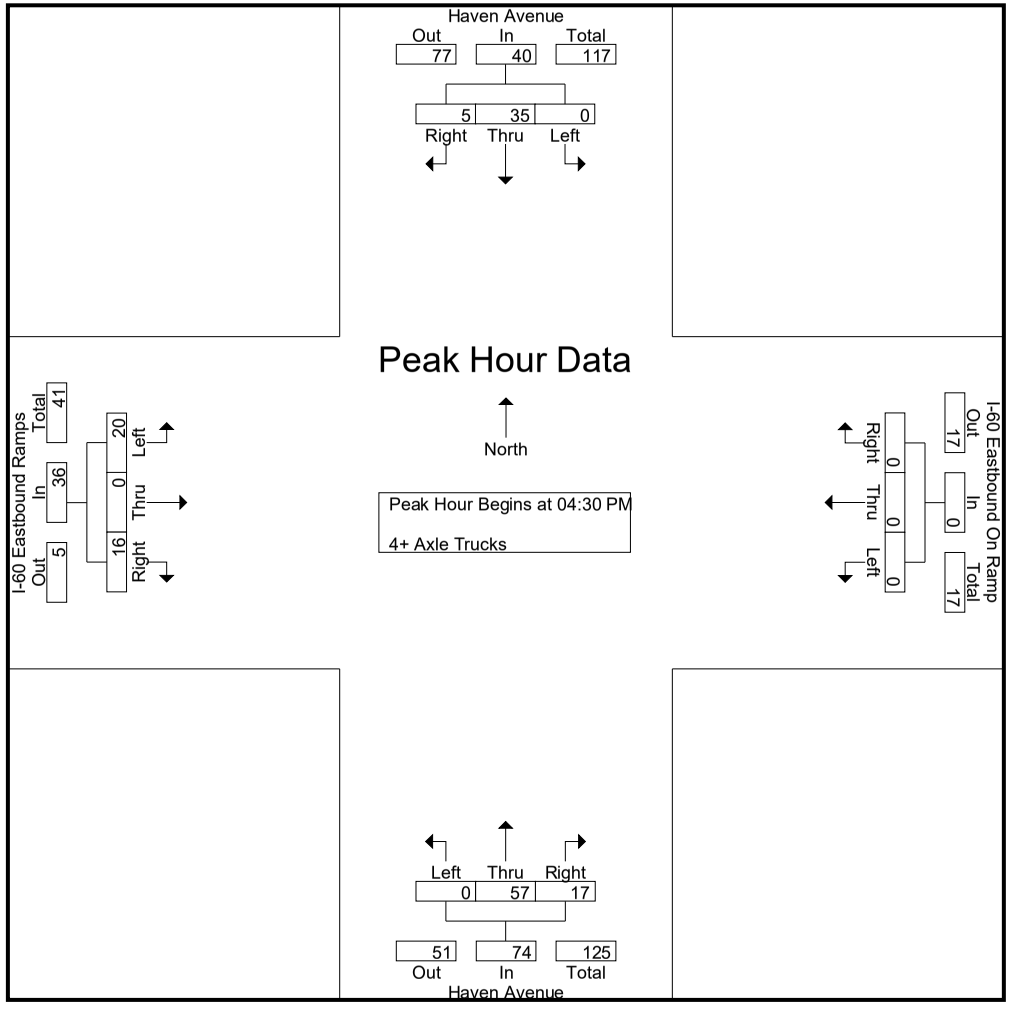
	Haven Avenue Southbound					I-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					I-60 Eastbound Ramps Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	9	2	0	11	0	0	0	0	0	0	16	5	0	21	4	0	5	0	9	0	41	41
04:15 PM	0	11	4	0	15	0	0	0	0	0	0	11	7	0	18	6	0	4	0	10	0	43	43
04:30 PM	0	9	2	0	11	0	0	0	0	0	0	19	6	0	25	2	0	5	2	7	2	43	45
04:45 PM	0	9	0	0	9	0	0	0	0	0	0	15	4	0	19	6	0	6	1	12	1	40	41
Total	0	38	8	0	46	0	0	0	0	0	0	61	22	0	83	18	0	20	3	38	3	167	170
05:00 PM	0	6	1	0	7	0	0	0	0	0	0	17	2	0	19	5	0	2	0	7	0	33	33
05:15 PM	0	11	2	0	13	0	0	0	0	0	0	6	5	0	11	7	0	3	0	10	0	34	34
05:30 PM	0	13	1	0	14	0	0	0	0	0	0	10	6	0	16	3	0	3	0	6	0	36	36
05:45 PM	0	8	2	0	10	0	0	0	0	0	0	11	8	0	19	2	0	0	0	2	0	31	31
Total	0	38	6	0	44	0	0	0	0	0	0	44	21	0	65	17	0	8	0	25	0	134	134
Grand Total	0	76	14	0	90	0	0	0	0	0	0	105	43	0	148	35	0	28	3	63	3	301	304
Apprch %	0	84.4	15.6			0	0	0			0	70.9	29.1			55.6	0	44.4					
Total %	0	25.2	4.7		29.9	0	0	0		0	0	34.9	14.3		49.2	11.6	0	9.3		20.9	1	99	

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	9	**2**	11	0	0	0	0	0	**19**	**6**	**25**	2	0	5	7	**43**
04:45 PM	0	9	0	9	0	0	0	0	0	15	4	19	6	0	**6**	**12**	40
05:00 PM	0	6	1	7	0	0	0	0	0	17	2	19	5	0	2	7	33
05:15 PM	0	**11**	2	**13**	0	0	0	0	0	6	5	11	**7**	0	3	10	34
Total Volume	0	35	5	40	0	0	0	0	0	57	17	74	20	0	16	36	150
% App. Total	0	87.5	12.5		0	0	0		0	77	23		55.6	0	44.4		
PHF	.000	.795	.625	.769	.000	.000	.000	.000	.000	.750	.708	.740	.714	.000	.667	.750	.872

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: I-60 Eastbound Ramps
Weather: Clear

File Name : 03_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 11/18/2021

	Haven Avenue Southbound				I-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				I-60 Eastbound Ramps Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	9	**2**	11	0	0	0	0	0	**19**	**6**	**25**	2	0	5	7	
+15 mins.	0	9	0	9	0	0	0	0	0	15	4	19	6	0	**6**	**12**	
+30 mins.	0	6	1	7	0	0	0	0	0	17	2	19	5	0	2	7	
+45 mins.	0	**11**	2	**13**	0	0	0	0	0	6	5	11	**7**	0	3	10	
Total Volume	0	35	5	40	0	0	0	0	0	57	17	74	20	0	16	36	
% App. Total	0	87.5	12.5		0	0	0		0	77	23		55.6	0	44.4		
PHF	.000	.795	.625	.769	.000	.000	.000	.000	.000	.750	.708	.740	.714	.000	.667	.750	

Location: Ontario
N/S: Haven Avenue
E/W: I-60 EB Ramps

Date: 11/18/2021
Day: Thursday

PEDESTRIANS

	North Leg Haven Avenue	East Leg I-60 EB Ramps	South Leg Haven Avenue	West Leg I-60 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	1	0	1
8:00 AM	0	0	1	1	2
8:15 AM	0	0	2	0	2
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	4	1	5

	North Leg Haven Avenue	East Leg I-60 EB Ramps	South Leg Haven Avenue	West Leg I-60 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	1	0	1
4:15 PM	0	0	1	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	2	0	2

Location: Ontario
N/S: Haven Avenue
E/W: I-60 EB Ramps

Date: 11/18/2021
Day: Thursday

BICYCLES

	Southbound Haven Avenue			Westbound I-60 EB Ramps			Northbound Haven Avenue			Eastbound I-60 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Haven Avenue			Westbound I-60 EB Ramps			Northbound Haven Avenue			Eastbound I-60 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

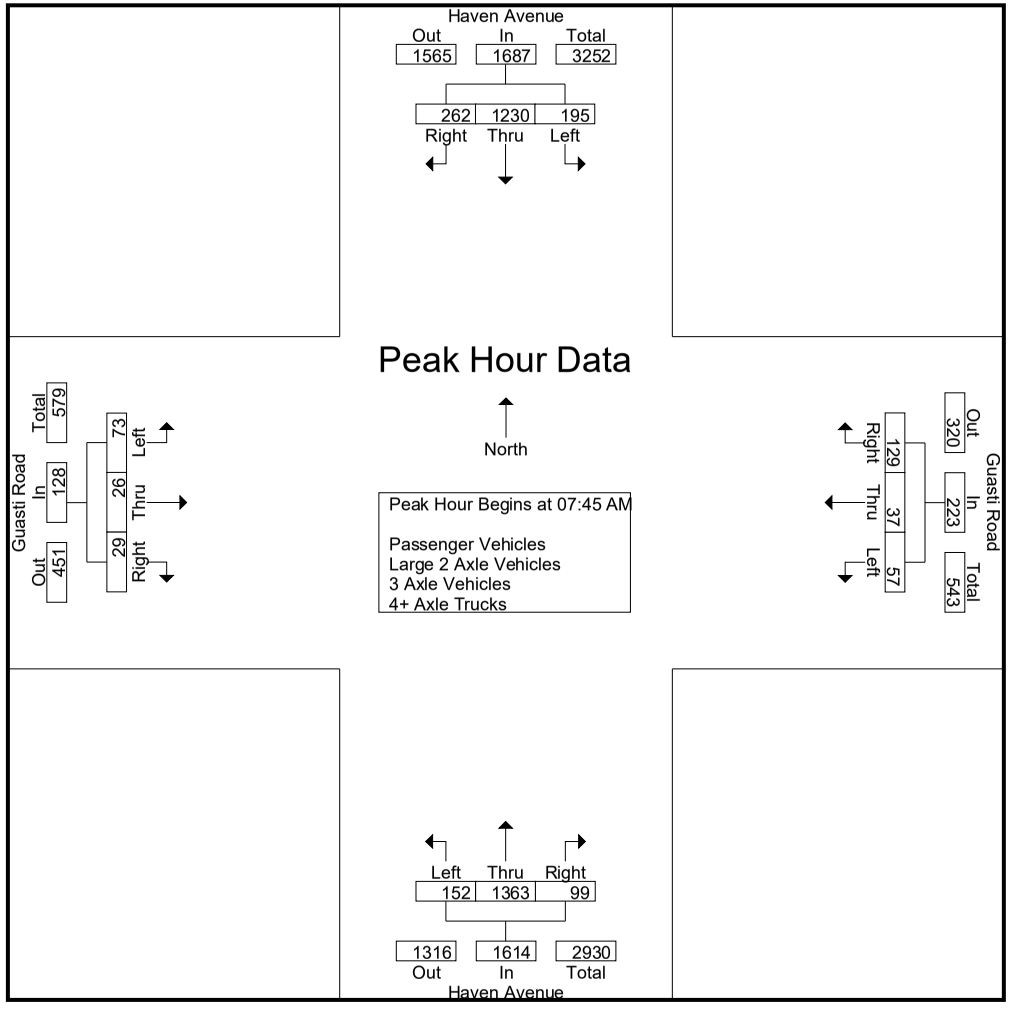
	Haven Avenue Southbound					Guasti Road Westbound					Haven Avenue Northbound					Guasti Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	32	212	34	11	278	17	8	25	20	50	10	254	24	2	288	6	2	6	6	14	39	630	669
07:15 AM	36	239	41	17	316	16	8	30	20	54	23	239	13	5	275	10	3	5	1	18	43	663	706
07:30 AM	35	304	48	15	387	12	8	44	30	64	24	341	24	6	389	9	5	4	4	18	55	858	913
07:45 AM	42	339	80	33	461	10	10	30	15	50	49	312	22	8	383	24	7	9	6	40	62	934	996
Total	145	1094	203	76	1442	55	34	129	85	218	106	1146	83	21	1335	49	17	24	17	90	199	3085	3284
08:00 AM	53	313	72	22	438	20	14	32	19	66	44	343	22	9	409	12	5	2	2	19	52	932	984
08:15 AM	63	287	58	30	408	10	6	31	15	47	30	360	27	10	417	17	10	12	6	39	61	911	972
08:30 AM	37	291	52	17	380	17	7	36	16	60	29	348	28	6	405	20	4	6	3	30	42	875	917
08:45 AM	50	253	54	18	357	17	11	39	24	67	37	335	31	6	403	17	16	9	4	42	52	869	921
Total	203	1144	236	87	1583	64	38	138	74	240	140	1386	108	31	1634	66	35	29	15	130	207	3587	3794
Grand Total	348	2238	439	163	3025	119	72	267	159	458	246	2532	191	52	2969	115	52	53	32	220	406	6672	7078
Apprch %	11.5	74	14.5			26	15.7	58.3			8.3	85.3	6.4			52.3	23.6	24.1					
Total %	5.2	33.5	6.6		45.3	1.8	1.1	4		6.9	3.7	37.9	2.9		44.5	1.7	0.8	0.8		3.3	5.7	94.3	
Passenger Vehicles	347	2044	428		2979	117	72	262		605	241	2256	187		2735	110	51	49		239	0	0	6558
% Passenger Vehicles	99.7	91.3	97.5	98.2	93.4	98.3	100	98.1	96.9	98.1	98	89.1	97.9	98.1	90.5	95.7	98.1	92.5	90.6	94.8	0	0	92.7
Large 2 Axle Vehicles	1	64	4		71	1	0	2		5	0	114	2		117	2	0	1		4	0	0	197
% Large 2 Axle Vehicles	0.3	2.9	0.9	1.2	2.2	0.8	0	0.7	1.3	0.8	0	4.5	1	1.9	3.9	1.7	0	1.9	3.1	1.6	0	0	2.8
3 Axle Vehicles	0	31	1		33	1	0	0		1	2	34	0		36	0	1	1		3	0	0	73
% 3 Axle Vehicles	0	1.4	0.2	0.6	1	0.8	0	0	0	0.2	0.8	1.3	0	0	1.2	0	1.9	1.9	3.1	1.2	0	0	1
4+ Axle Trucks	0	99	6		105	0	0	3		6	3	128	2		133	3	0	2		6	0	0	250
% 4+ Axle Trucks	0	4.4	1.4	0	3.3	0	0	1.1	1.9	1	1.2	5.1	1	0	4.4	2.6	0	3.8	3.1	2.4	0	0	3.5

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	42	**339**	**80**	**461**	10	10	30	50	**49**	312	22	383	**24**	7	9	**40**	**934**
08:00 AM	53	313	72	438	**20**	**14**	32	**66**	44	343	22	409	12	5	2	19	932
08:15 AM	**63**	287	58	408	10	6	31	47	30	**360**	27	**417**	17	**10**	**12**	39	911
08:30 AM	37	291	52	380	17	7	**36**	60	29	348	**28**	405	20	4	6	30	875
Total Volume	195	1230	262	1687	57	37	129	223	152	1363	99	1614	73	26	29	128	3652
% App. Total	11.6	72.9	15.5		25.6	16.6	57.8		9.4	84.4	6.1		57	20.3	22.7		
PHF	.774	.907	.819	.915	.713	.661	.896	.845	.776	.947	.884	.968	.760	.650	.604	.800	.978

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-98

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				08:00 AM				08:00 AM				08:00 AM				
+0 mins.	35	304	48	387	**20**	**14**	32	66	**44**	343	22	409	12	5	2	19	
+15 mins.	42	**339**	**80**	**461**	10	6	31	47	30	**360**	27	**417**	17	10	**12**	39	
+30 mins.	53	313	72	438	17	7	36	60	29	348	28	405	**20**	4	6	30	
+45 mins.	**63**	287	58	408	17	11	**39**	**67**	37	335	**31**	403	17	**16**	9	**42**	
Total Volume	193	1243	258	1694	64	38	138	240	140	1386	108	1634	66	35	29	130	
% App. Total	11.4	73.4	15.2		26.7	15.8	57.5		8.6	84.8	6.6		50.8	26.9	22.3		
PHF	.766	.917	.806	.919	.800	.679	.885	.896	.795	.963	.871	.980	.825	.547	.604	.774	

3.1-99

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					Guasti Road Westbound					Haven Avenue Northbound					Guasti Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	32	194	33	11	259	17	8	24	19	49	10	222	23	2	255	6	1	6	6	13	38	576	614
07:15 AM	36	224	40	17	300	15	8	29	19	52	23	212	13	5	248	10	3	5	1	18	42	618	660
07:30 AM	35	287	46	14	368	12	8	42	28	62	23	303	23	6	349	9	5	4	4	18	52	797	849
07:45 AM	42	306	79	33	427	10	10	30	15	50	47	285	22	8	354	21	7	9	6	37	62	868	930
Total	145	1011	198	75	1354	54	34	125	81	213	103	1022	81	21	1206	46	16	24	17	86	194	2859	3053
08:00 AM	53	282	71	21	406	20	14	32	19	66	44	313	22	9	379	12	5	1	1	18	50	869	919
08:15 AM	62	263	58	30	383	10	6	31	15	47	30	326	27	10	383	16	10	10	4	36	59	849	908
08:30 AM	37	264	52	17	353	17	7	36	16	60	28	309	27	5	364	19	4	5	3	28	41	805	846
08:45 AM	50	224	49	17	323	16	11	38	23	65	36	286	30	6	352	17	16	9	4	42	50	782	832
Total	202	1033	230	85	1465	63	38	137	73	238	138	1234	106	30	1478	64	35	25	12	124	200	3305	3505
Grand Total	347	2044	428	160	2819	117	72	262	154	451	241	2256	187	51	2684	110	51	49	29	210	394	6164	6558
Apprch %	12.3	72.5	15.2			25.9	16	58.1			9	84.1	7			52.4	24.3	23.3					
Total %	5.6	33.2	6.9		45.7	1.9	1.2	4.3		7.3	3.9	36.6	3		43.5	1.8	0.8	0.8		3.4	6	94	

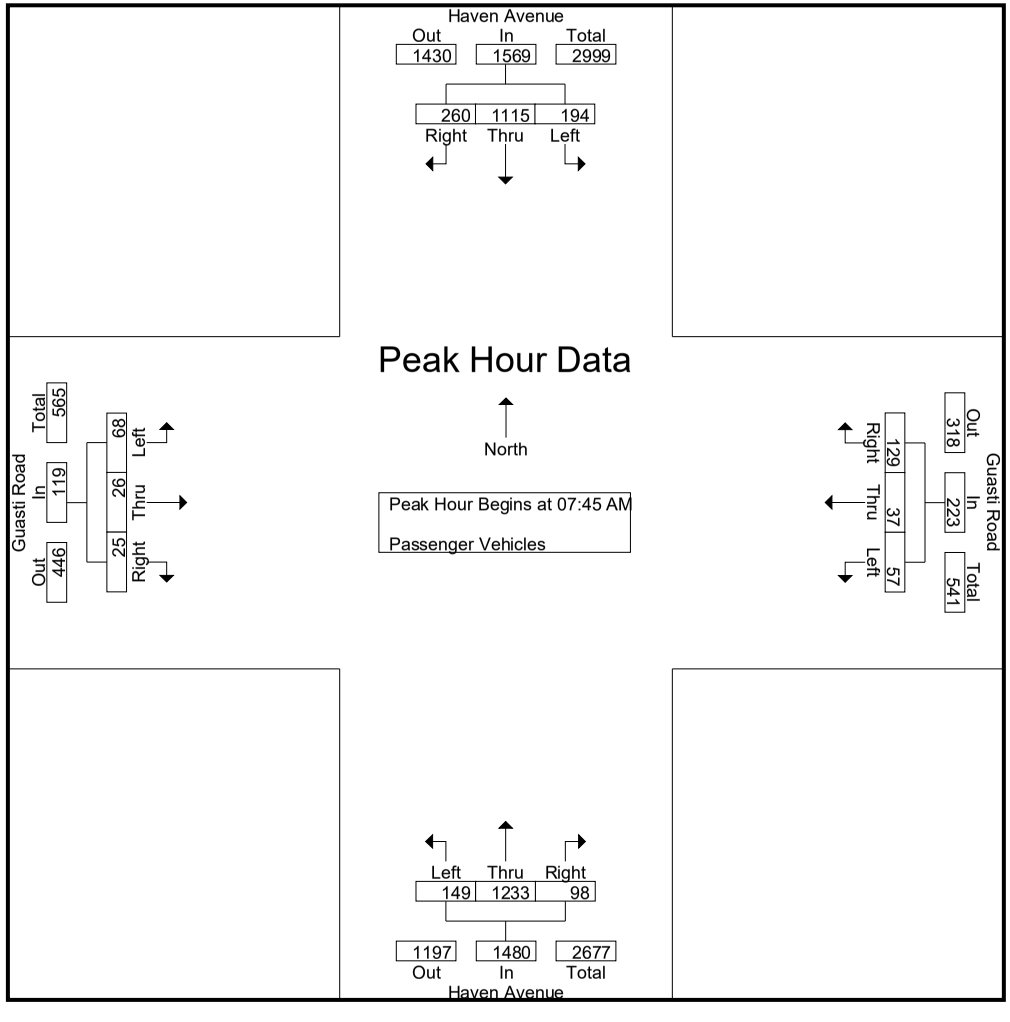
03.1-100

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	42	**306**	**79**	**427**	10	10	30	50	**47**	285	22	354	**21**	7	9	**37**	868
08:00 AM	53	282	71	406	**20**	**14**	32	**66**	44	313	22	379	12	5	1	18	**869**
08:15 AM	**62**	263	58	383	10	6	31	47	30	**326**	**27**	**383**	16	**10**	**10**	36	849
08:30 AM	37	264	52	353	17	7	**36**	60	28	309	27	364	19	4	5	28	805
Total Volume	194	1115	260	1569	57	37	129	223	149	1233	98	1480	68	26	25	119	3391
% App. Total	12.4	71.1	16.6		25.6	16.6	57.8		10.1	83.3	6.6		57.1	21.8	21		
PHF	.782	.911	.823	.919	.713	.661	.896	.845	.793	.946	.907	.966	.810	.650	.625	.804	.976

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-101

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	42	**306**	**79**	**427**	10	10	30	50	**47**	285	22	354	**21**	7	9	**37**	
+15 mins.	53	282	71	406	**20**	**14**	32	**66**	44	313	22	379	12	5	1	18	
+30 mins.	**62**	263	58	383	10	6	31	47	30	**326**	**27**	**383**	16	**10**	**10**	36	
+45 mins.	37	264	52	353	17	7	**36**	60	28	309	27	364	19	4	5	28	
Total Volume	194	1115	260	1569	57	37	129	223	149	1233	98	1480	68	26	25	119	
% App. Total	12.4	71.1	16.6		25.6	16.6	57.8		10.1	83.3	6.6		57.1	21.8	21		
PHF	.782	.911	.823	.919	.713	.661	.896	.845	.793	.946	.907	.966	.810	.650	.625	.804	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

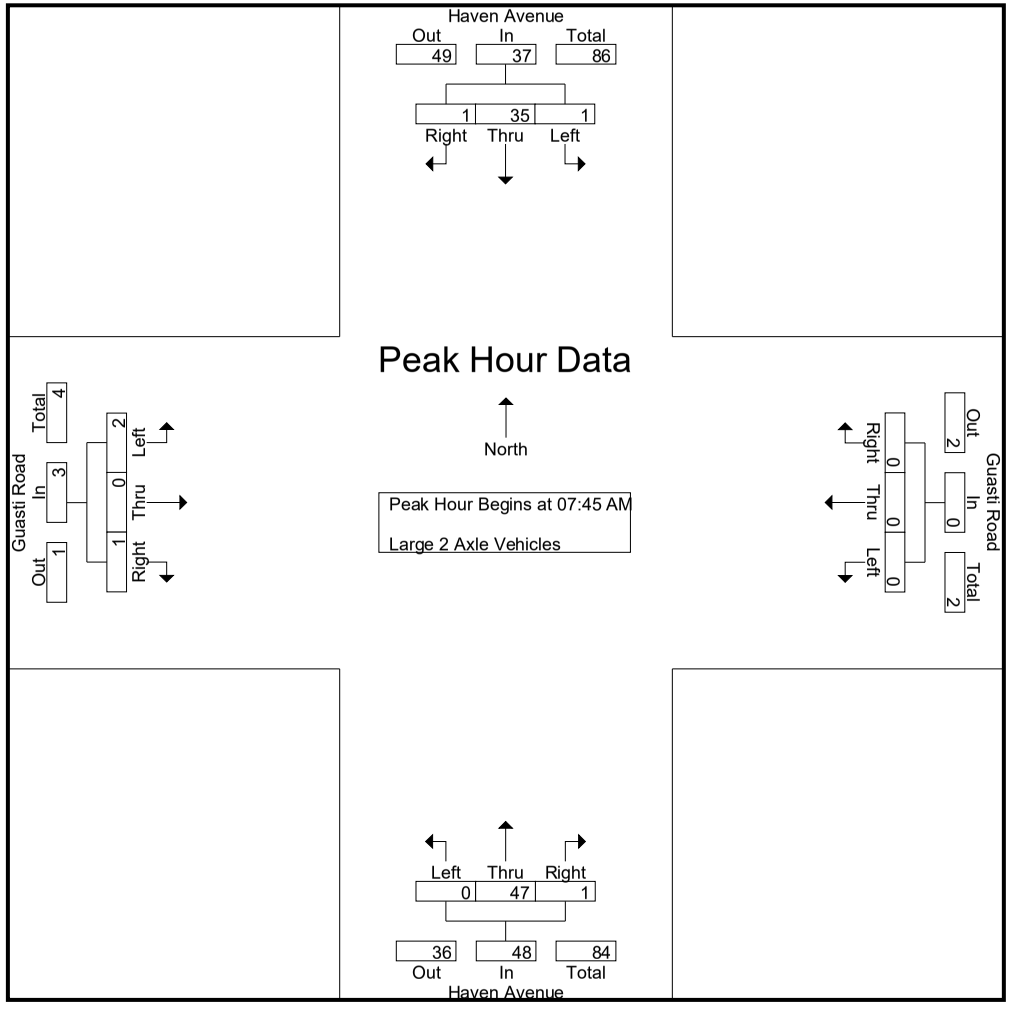
	Haven Avenue Southbound					Guasti Road Westbound					Haven Avenue Northbound					Guasti Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	6	0	0	6	0	0	0	0	0	0	18	0	0	18	0	0	0	0	0	0	24	24
07:15 AM	0	4	0	0	4	0	0	1	1	1	0	10	0	0	10	0	0	0	0	0	1	15	16
07:30 AM	0	4	2	1	6	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	1	23	24
07:45 AM	0	9	0	0	9	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	0	16	16
Total	0	23	2	1	25	0	0	1	1	1	0	52	0	0	52	0	0	0	0	0	2	78	80
08:00 AM	0	11	1	1	12	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	1	23	24
08:15 AM	1	9	0	0	10	0	0	0	0	0	0	13	0	0	13	1	0	1	1	2	1	25	26
08:30 AM	0	6	0	0	6	0	0	0	0	0	0	16	1	1	17	1	0	0	0	1	1	24	25
08:45 AM	0	15	1	0	16	1	0	1	1	2	0	22	1	0	23	0	0	0	0	0	1	41	42
Total	1	41	2	1	44	1	0	1	1	2	0	62	2	1	64	2	0	1	1	3	4	113	117
Grand Total	1	64	4	2	69	1	0	2	2	3	0	114	2	1	116	2	0	1	1	3	6	191	197
Apprch %	1.4	92.8	5.8			33.3	0	66.7			0	98.3	1.7			66.7	0	33.3					
Total %	0.5	33.5	2.1		36.1	0.5	0	1		1.6	0	59.7	1		60.7	1	0	0.5		1.6	3	97	

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	9	0	9	0	0	0	0	0	7	0	7	0	0	0	0	16
08:00 AM	0	**11**	**1**	**12**	0	0	0	0	0	11	0	11	0	0	0	0	23
08:15 AM	**1**	9	0	10	0	0	0	0	0	13	0	13	**1**	0	**1**	**2**	**25**
08:30 AM	0	6	0	6	0	0	0	0	0	**16**	**1**	**17**	1	0	0	1	24
Total Volume	1	35	1	37	0	0	0	0	0	47	1	48	2	0	1	3	88
% App. Total	2.7	94.6	2.7		0	0	0		0	97.9	2.1		66.7	0	33.3		
PHF	.250	.795	.250	.771	.000	.000	.000	.000	.000	.734	.250	.706	.500	.000	.250	.375	.880

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	9	0	9	0	0	0	0	0	7	0	7	0	0	0	0	
+15 mins.	0	**11**	**1**	**12**	0	0	0	0	0	11	0	11	0	0	0	0	
+30 mins.	**1**	9	0	10	0	0	0	0	0	13	0	13	**1**	0	**1**	**2**	
+45 mins.	0	6	0	6	0	0	0	0	0	**16**	**1**	**17**	1	0	0	1	
Total Volume	1	35	1	37	0	0	0	0	0	47	1	48	2	0	1	3	
% App. Total	2.7	94.6	2.7		0	0	0		0	97.9	2.1		66.7	0	33.3		
PHF	.250	.795	.250	.771	.000	.000	.000	.000	.000	.734	.250	.706	.500	.000	.250	.375	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

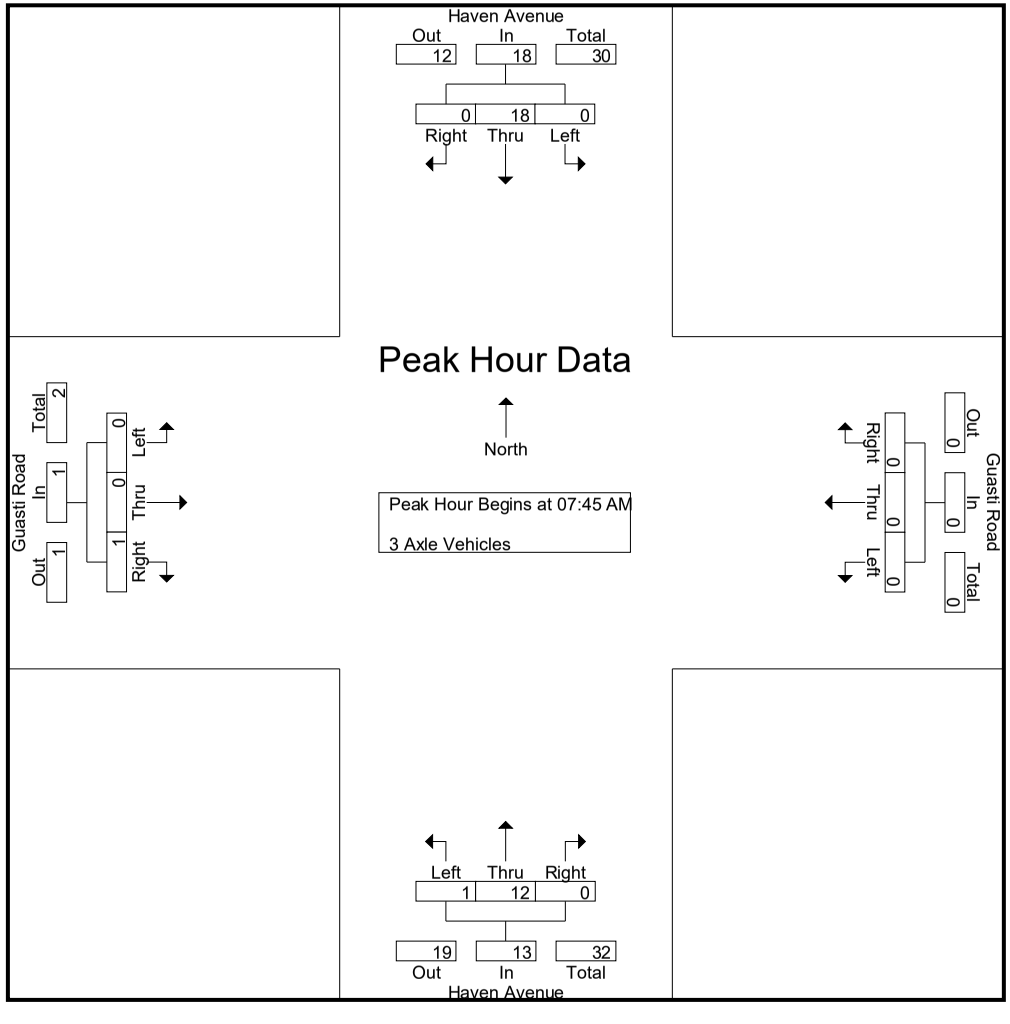
	Haven Avenue Southbound					Guasti Road Westbound					Haven Avenue Northbound					Guasti Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	6	0	0	6	0	0	0	0	0	0	4	0	0	4	0	1	0	0	1	0	11	11
07:15 AM	0	3	0	0	3	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	8	8
07:30 AM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	7	7
07:45 AM	0	6	0	0	6	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	9	9
Total	0	16	0	0	16	1	0	0	0	1	1	16	0	0	17	0	1	0	0	1	0	35	35
08:00 AM	0	4	0	0	4	0	0	0	0	0	0	4	0	0	4	0	0	1	1	1	1	9	10
08:15 AM	0	5	0	0	5	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	10	10
08:30 AM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	4
08:45 AM	0	3	1	1	4	0	0	0	0	0	1	8	0	0	9	0	0	0	0	0	1	13	14
Total	0	15	1	1	16	0	0	0	0	0	1	18	0	0	19	0	0	1	1	1	2	36	38
Grand Total	0	31	1	1	32	1	0	0	0	1	2	34	0	0	36	0	1	1	1	2	2	71	73
Apprch %	0	96.9	3.1			100	0	0			5.6	94.4	0			0	50	50					
Total %	0	43.7	1.4		45.1	1.4	0	0		1.4	2.8	47.9	0		50.7	0	1.4	1.4		2.8	2.7	97.3	

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**6**	0	**6**	0	0	0	0	**1**	2	0	3	0	0	0	0	9
08:00 AM	0	4	0	4	0	0	0	0	0	4	0	4	0	0	**1**	**1**	9
08:15 AM	0	5	0	5	0	0	0	0	0	**5**	0	**5**	0	0	0	0	**10**
08:30 AM	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	4
Total Volume	0	18	0	18	0	0	0	0	1	12	0	13	0	0	1	1	32
% App. Total	0	100	0		0	0	0		7.7	92.3	0		0	0	100		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.250	.600	.000	.650	.000	.000	.250	.250	.800

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	**6**	0	**6**	0	0	0	0	**1**	2	0	3	0	0	0	0	
+15 mins.	0	4	0	4	0	0	0	0	0	4	0	4	0	0	**1**	**1**	
+30 mins.	0	5	0	5	0	0	0	0	0	**5**	0	**5**	0	0	0	0	
+45 mins.	0	3	0	3	0	0	0	0	0	1	0	1	0	0	0	0	
Total Volume	0	18	0	18	0	0	0	0	1	12	0	13	0	0	1	1	
% App. Total	0	100	0		0	0	0		7.7	92.3	0		0	0	100		
PHF	.000	.750	.000	.750	.000	.000	.000	.000	.250	.600	.000	.650	.000	.000	.250	.250	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

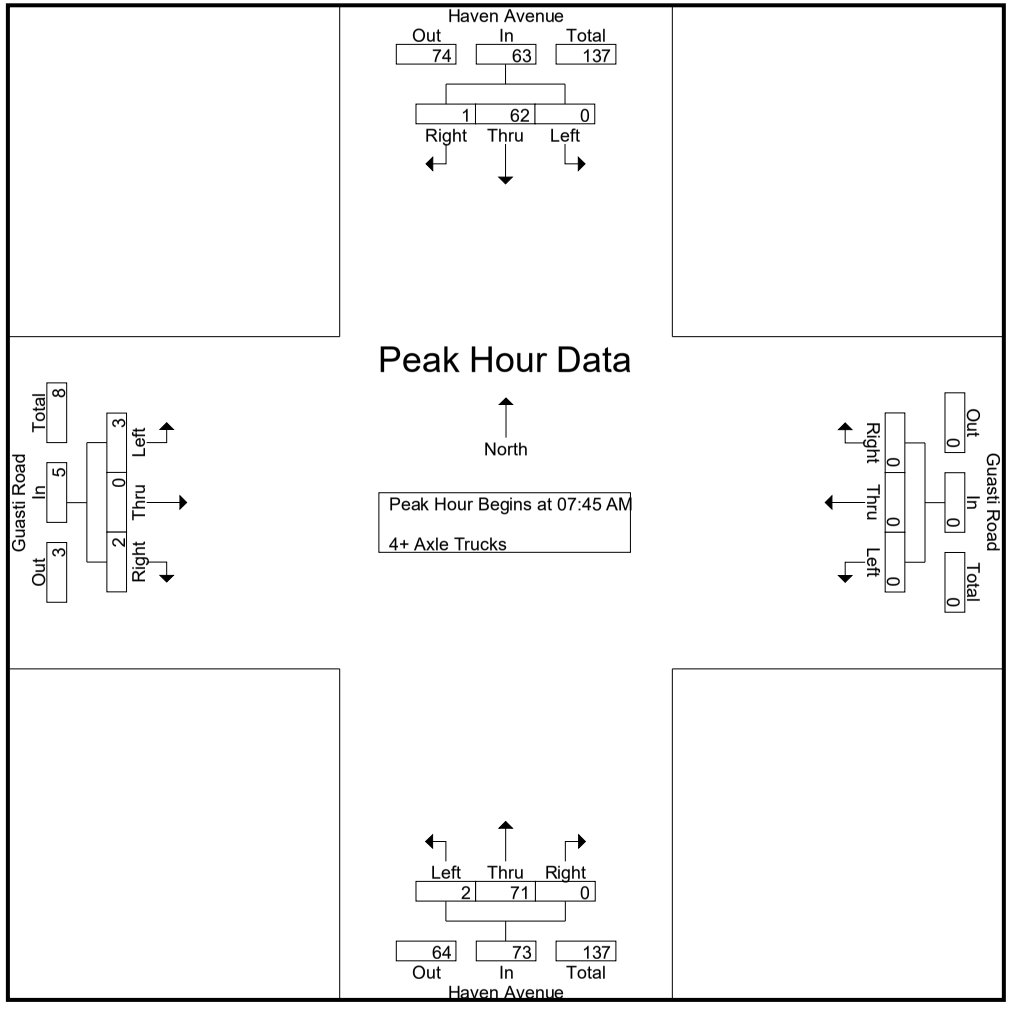
	Haven Avenue Southbound					Guasti Road Westbound					Haven Avenue Northbound					Guasti Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	6	1	0	7	0	0	1	1	1	0	10	1	0	11	0	0	0	0	0	1	19	20
07:15 AM	0	8	1	0	9	0	0	0	0	0	0	13	0	0	13	0	0	0	0	0	0	22	22
07:30 AM	0	12	0	0	12	0	0	2	2	2	1	15	1	0	17	0	0	0	0	0	2	31	33
07:45 AM	0	18	1	0	19	0	0	0	0	0	1	18	0	0	19	3	0	0	0	3	0	41	41
Total	0	44	3	0	47	0	0	3	3	3	2	56	2	0	60	3	0	0	0	3	3	113	116
08:00 AM	0	16	0	0	16	0	0	0	0	0	0	15	0	0	15	0	0	0	0	0	0	31	31
08:15 AM	0	10	0	0	10	0	0	0	0	0	0	16	0	0	16	0	0	1	1	1	1	27	28
08:30 AM	0	18	0	0	18	0	0	0	0	0	1	22	0	0	23	0	0	1	0	1	0	42	42
08:45 AM	0	11	3	0	14	0	0	0	0	0	0	19	0	0	19	0	0	0	0	0	0	33	33
Total	0	55	3	0	58	0	0	0	0	0	1	72	0	0	73	0	0	2	1	2	1	133	134
Grand Total	0	99	6	0	105	0	0	3	3	3	3	128	2	0	133	3	0	2	1	5	4	246	250
Apprch %	0	94.3	5.7			0	0	100			2.3	96.2	1.5			60	0	40					
Total %	0	40.2	2.4		42.7	0	0	1.2		1.2	1.2	52	0.8		54.1	1.2	0	0.8		2	1.6	98.4	

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**18**	**1**	**19**	0	0	0	0	**1**	18	0	19	**3**	0	0	**3**	41
08:00 AM	0	16	0	16	0	0	0	0	0	15	0	15	0	0	0	0	31
08:15 AM	0	10	0	10	0	0	0	0	0	16	0	16	0	0	**1**	1	27
08:30 AM	0	18	0	18	0	0	0	0	1	**22**	0	**23**	0	0	1	1	**42**
Total Volume	0	62	1	63	0	0	0	0	2	71	0	73	3	0	2	5	141
% App. Total	0	98.4	1.6		0	0	0		2.7	97.3	0		60	0	40		
PHF	.000	.861	.250	.829	.000	.000	.000	.000	.500	.807	.000	.793	.250	.000	.500	.417	.839

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti AM2
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	**18**	**1**	**19**	0	0	0	0	**1**	18	0	19	**3**	0	0	**3**	
+15 mins.	0	16	0	16	0	0	0	0	0	15	0	15	0	0	0	0	
+30 mins.	0	10	0	10	0	0	0	0	0	16	0	16	0	0	**1**	1	
+45 mins.	0	18	0	18	0	0	0	0	1	**22**	0	**23**	0	0	1	1	
Total Volume	0	62	1	63	0	0	0	0	2	71	0	73	3	0	2	5	
% App. Total	0	98.4	1.6		0	0	0		2.7	97.3	0		60	0	40		
PHF	.000	.861	.250	.829	.000	.000	.000	.000	.500	.807	.000	.793	.250	.000	.500	.417	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

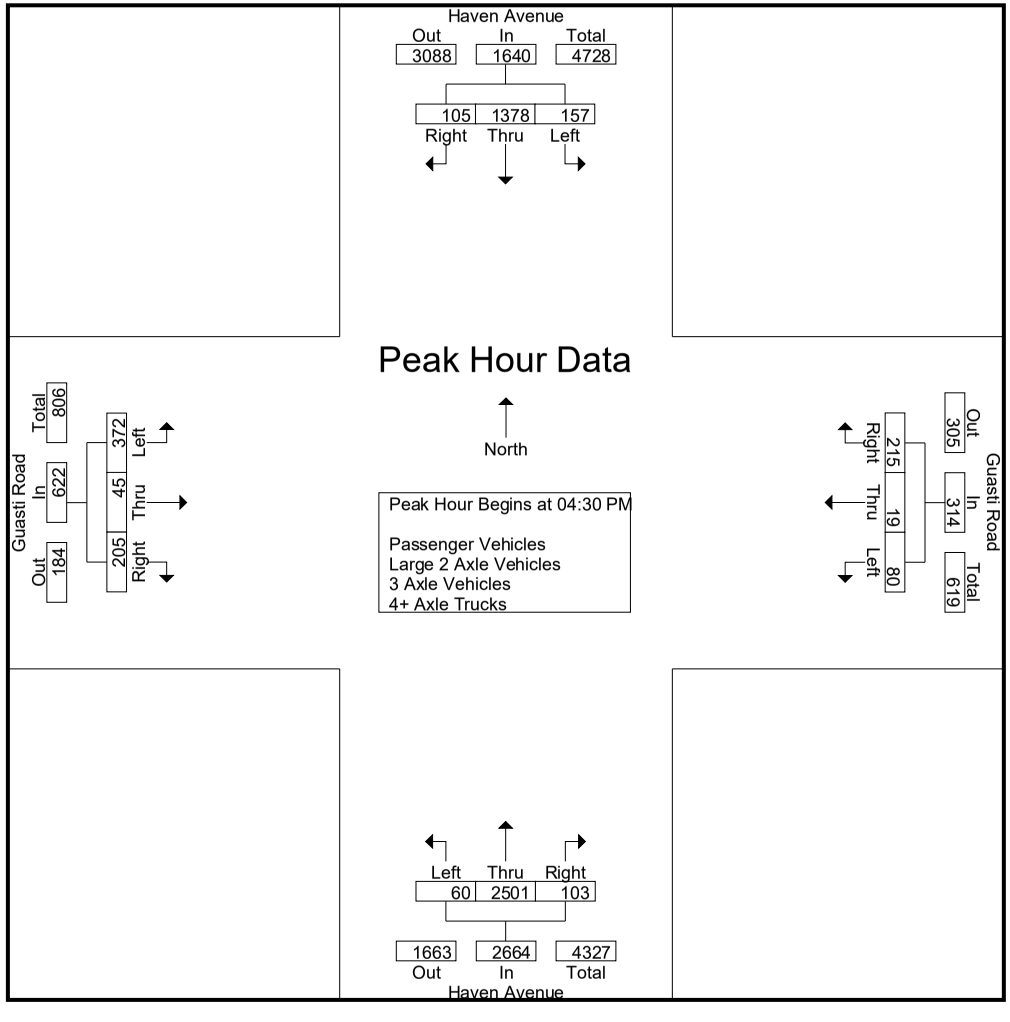
	Haven Avenue Southbound					Guasti Road Westbound					Haven Avenue Northbound					Guasti Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	37	355	14	4	406	17	9	37	21	63	17	564	28	10	609	71	12	35	26	118	61	1196	1257
04:15 PM	38	356	29	6	423	12	5	41	20	58	11	628	28	11	667	67	6	28	19	101	56	1249	1305
04:30 PM	50	357	25	5	432	23	5	60	26	88	20	597	24	11	641	100	14	54	32	168	74	1329	1403
04:45 PM	34	324	22	5	380	16	5	46	12	67	17	640	31	7	688	91	9	21	13	121	37	1256	1293
Total	159	1392	90	20	1641	68	24	184	79	276	65	2429	111	39	2605	329	41	138	90	508	228	5030	5258
05:00 PM	43	323	19	5	385	28	7	54	18	89	12	615	18	7	645	93	15	84	51	192	81	1311	1392
05:15 PM	30	374	39	8	443	13	2	55	22	70	11	649	30	10	690	88	7	46	28	141	68	1344	1412
05:30 PM	20	262	25	8	307	18	2	57	22	77	10	615	20	9	645	90	3	53	43	146	82	1175	1257
05:45 PM	32	270	18	4	320	14	5	44	21	63	17	572	21	10	610	73	7	23	17	103	52	1096	1148
Total	125	1229	101	25	1455	73	16	210	83	299	50	2451	89	36	2590	344	32	206	139	582	283	4926	5209
Grand Total	284	2621	191	45	3096	141	40	394	162	575	115	4880	200	75	5195	673	73	344	229	1090	511	9956	10467
Apprch %	9.2	84.7	6.2			24.5	7	68.5			2.2	93.9	3.8			61.7	6.7	31.6					
Total %	2.9	26.3	1.9		31.1	1.4	0.4	4		5.8	1.2	49	2		52.2	6.8	0.7	3.5		10.9	4.9	95.1	
Passenger Vehicles	281	2395	186		2907	141	40	392		735	112	4652	199		5038	665	72	336		1298	0	0	9978
% Passenger Vehicles	98.9	91.4	97.4	100	92.6	100	100	99.5	100	99.7	97.4	95.3	99.5	100	95.6	98.8	98.6	97.7	98.3	98.4	0	0	95.3
Large 2 Axle Vehicles	1	99	3		103	0	0	0		0	1	71	0		72	6	1	6		17	0	0	192
% Large 2 Axle Vehicles	0.4	3.8	1.6	0	3.3	0	0	0	0	0	0.9	1.5	0	0	1.4	0.9	1.4	1.7	1.7	1.3	0	0	1.8
3 Axle Vehicles	1	28	0		29	0	0	0		0	1	22	0		23	1	0	1		2	0	0	54
% 3 Axle Vehicles	0.4	1.1	0	0	0.9	0	0	0	0	0	0.9	0.5	0	0	0.4	0.1	0	0.3	0	0.2	0	0	0.5
4+ Axle Trucks	1	99	2		102	0	0	2		2	1	135	1		137	1	0	1		2	0	0	243
% 4+ Axle Trucks	0.4	3.8	1	0	3.2	0	0	0.5	0	0.3	0.9	2.8	0.5	0	2.6	0.1	0	0.3	0	0.2	0	0	2.3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**50**	357	25	432	23	5	**60**	88	**20**	597	24	641	**100**	14	54	168	1329
04:45 PM	34	324	22	380	16	5	46	67	17	640	**31**	688	91	9	21	121	1256
05:00 PM	43	323	19	385	**28**	**7**	54	**89**	12	615	18	645	93	**15**	**84**	**192**	1311
05:15 PM	30	**374**	**39**	**443**	13	2	55	70	11	**649**	30	**690**	88	7	46	141	**1344**
Total Volume	157	1378	105	1640	80	19	215	314	60	2501	103	2664	372	45	205	622	5240
% App. Total	9.6	84	6.4		25.5	6.1	68.5		2.3	93.9	3.9		59.8	7.2	33		
PHF	.785	.921	.673	.926	.714	.679	.896	.882	.750	.963	.831	.965	.930	.750	.610	.810	.975

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:30 PM				04:45 PM				04:30 PM				
+0 mins.	37	355	14	406	23	5	**60**	88	**17**	640	**31**	688	**100**	14	54	168	
+15 mins.	38	356	**29**	423	16	5	46	67	12	615	18	645	91	9	21	121	
+30 mins.	**50**	**357**	25	**432**	**28**	**7**	54	**89**	11	**649**	30	**690**	93	**15**	**84**	**192**	
+45 mins.	34	324	22	380	13	2	55	70	10	615	20	645	88	7	46	141	
Total Volume	159	1392	90	1641	80	19	215	314	50	2519	99	2668	372	45	205	622	
% App. Total	9.7	84.8	5.5		25.5	6.1	68.5		1.9	94.4	3.7		59.8	7.2	33		
PHF	.795	.975	.776	.950	.714	.679	.896	.882	.735	.970	.798	.967	.930	.750	.610	.810	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					Guasti Road Westbound					Haven Avenue Northbound					Guasti Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	37	329	14	4	380	17	9	37	21	63	16	528	28	10	572	70	11	34	26	115	61	1130	1191
04:15 PM	38	319	29	6	386	12	5	41	20	58	11	594	28	11	633	67	6	27	18	100	55	1177	1232
04:30 PM	48	329	24	5	401	23	5	59	26	87	20	560	24	11	604	98	14	52	31	164	73	1256	1329
04:45 PM	34	290	22	5	346	16	5	46	12	67	15	608	31	7	654	90	9	21	13	120	37	1187	1224
Total	157	1267	89	20	1513	68	24	183	79	275	62	2290	111	39	2463	325	40	134	88	499	226	4750	4976
05:00 PM	43	300	18	5	361	28	7	54	18	89	12	591	17	7	620	92	15	81	50	188	80	1258	1338
05:15 PM	30	344	38	8	412	13	2	54	22	69	11	635	30	10	676	88	7	46	28	141	68	1298	1366
05:30 PM	19	234	23	8	276	18	2	57	22	77	10	589	20	9	619	88	3	52	42	143	81	1115	1196
05:45 PM	32	250	18	4	300	14	5	44	21	63	17	547	21	10	585	72	7	23	17	102	52	1050	1102
Total	124	1128	97	25	1349	73	16	209	83	298	50	2362	88	36	2500	340	32	202	137	574	281	4721	5002
Grand Total	281	2395	186	45	2862	141	40	392	162	573	112	4652	199	75	4963	665	72	336	225	1073	507	9471	9978
Apprch %	9.8	83.7	6.5			24.6	7	68.4			2.3	93.7	4			62	6.7	31.3					
Total %	3	25.3	2		30.2	1.5	0.4	4.1		6.1	1.2	49.1	2.1		52.4	7	0.8	3.5		11.3	5.1	94.9	

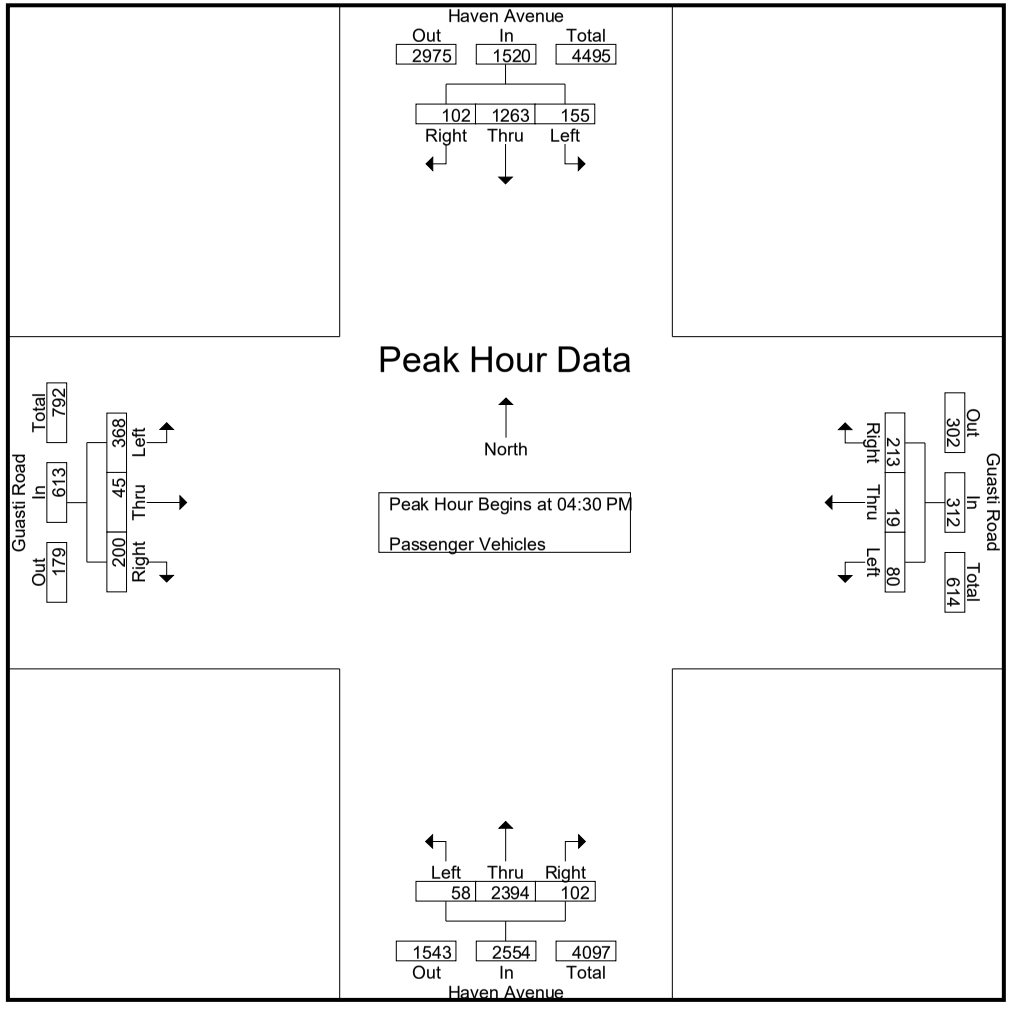
3.1-115

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**48**	329	24	401	23	5	**59**	87	**20**	560	24	604	**98**	14	52	164	1256
04:45 PM	34	290	22	346	16	5	46	67	15	608	**31**	654	90	9	21	120	1187
05:00 PM	43	300	18	361	**28**	**7**	54	**89**	12	591	17	620	92	**15**	**81**	**188**	1258
05:15 PM	30	**344**	**38**	**412**	13	2	54	69	11	**635**	30	**676**	88	7	46	141	**1298**
Total Volume	155	1263	102	1520	80	19	213	312	58	2394	102	2554	368	45	200	613	4999
% App. Total	10.2	83.1	6.7		25.6	6.1	68.3		2.3	93.7	4		60	7.3	32.6		
PHF	.807	.918	.671	.922	.714	.679	.903	.876	.725	.943	.823	.945	.939	.750	.617	.815	.963

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**48**	329	24	401	23	5	**59**	87	**20**	560	24	604	**98**	14	52	164	
+15 mins.	34	290	22	346	16	5	46	67	15	608	**31**	654	90	9	21	120	
+30 mins.	43	300	18	361	**28**	**7**	54	**89**	12	591	17	620	92	**15**	**81**	**188**	
+45 mins.	30	**344**	**38**	**412**	13	2	54	69	11	**635**	30	**676**	88	7	46	141	
Total Volume	155	1263	102	1520	80	19	213	312	58	2394	102	2554	368	45	200	613	
% App. Total	10.2	83.1	6.7		25.6	6.1	68.3		2.3	93.7	4		60	7.3	32.6		
PHF	.807	.918	.671	.922	.714	.679	.903	.876	.725	.943	.823	.945	.939	.750	.617	.815	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Haven Avenue Southbound					Guasti Road Westbound					Haven Avenue Northbound					Guasti Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	6	0	0	6	0	0	0	0	0	1	12	0	0	13	1	1	0	0	2	0	21	21
04:15 PM	0	16	0	0	16	0	0	0	0	0	0	12	0	0	12	0	0	1	1	1	1	29	30
04:30 PM	0	16	0	0	16	0	0	0	0	0	0	15	0	0	15	1	0	1	1	2	1	33	34
04:45 PM	0	16	0	0	16	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	24	24
Total	0	54	0	0	54	0	0	0	0	0	1	47	0	0	48	2	1	2	2	5	2	107	109
05:00 PM	0	13	1	0	14	0	0	0	0	0	0	6	0	0	6	1	0	3	1	4	1	24	25
05:15 PM	0	13	1	0	14	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	18	18
05:30 PM	1	8	1	0	10	0	0	0	0	0	0	7	0	0	7	2	0	1	1	3	1	20	21
05:45 PM	0	11	0	0	11	0	0	0	0	0	0	7	0	0	7	1	0	0	0	1	0	19	19
Total	1	45	3	0	49	0	0	0	0	0	0	24	0	0	24	4	0	4	2	8	2	81	83
Grand Total	1	99	3	0	103	0	0	0	0	0	1	71	0	0	72	6	1	6	4	13	4	188	192
Apprch %	1	96.1	2.9			0	0	0			1.4	98.6	0			46.2	7.7	46.2					
Total %	0.5	52.7	1.6		54.8	0	0	0		0	0.5	37.8	0		38.3	3.2	0.5	3.2		6.9	2.1	97.9	

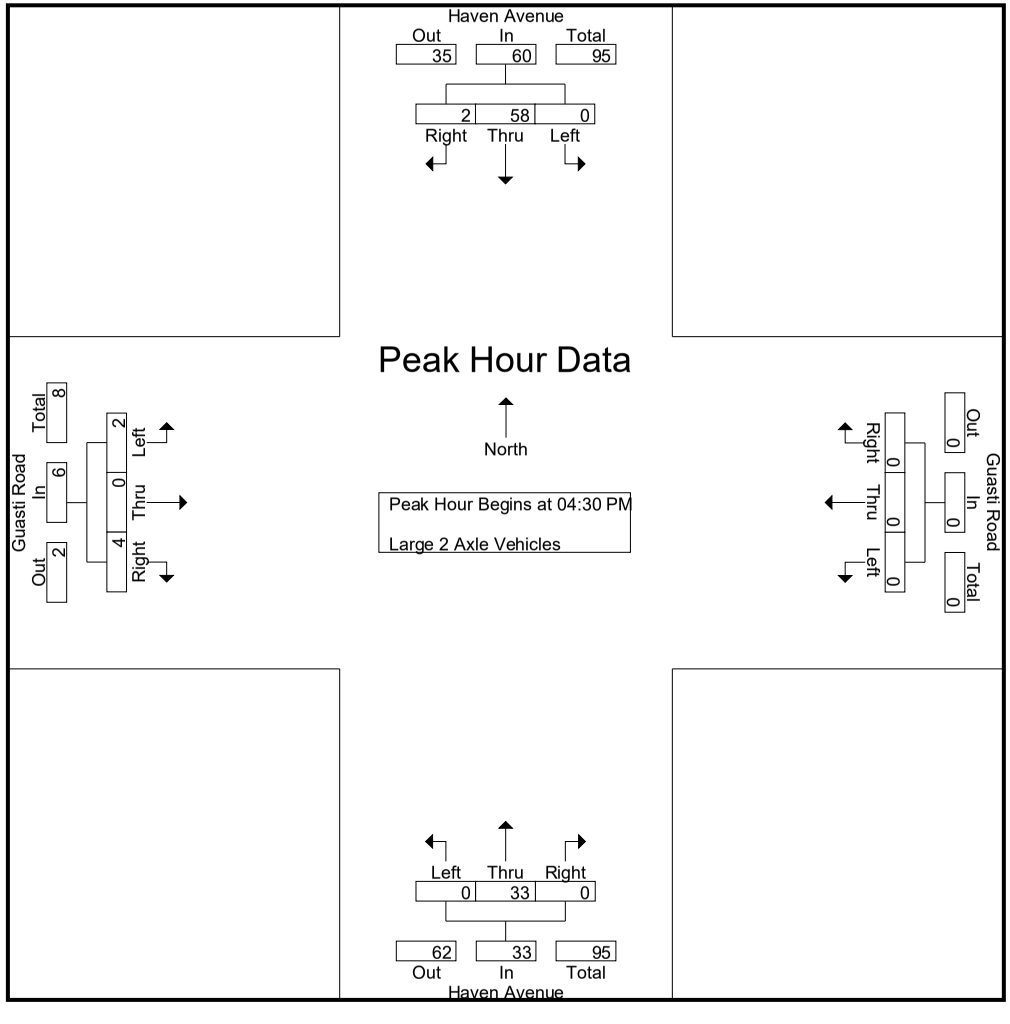
3.1-118

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**16**	0	**16**	0	0	0	0	0	**15**	0	**15**	**1**	0	1	2	**33**
04:45 PM	0	16	0	16	0	0	0	0	0	8	0	8	0	0	0	0	24
05:00 PM	0	13	**1**	14	0	0	0	0	0	6	0	6	1	0	**3**	**4**	24
05:15 PM	0	13	1	14	0	0	0	0	0	4	0	4	0	0	0	0	18
Total Volume	0	58	2	60	0	0	0	0	0	33	0	33	2	0	4	6	99
% App. Total	0	96.7	3.3		0	0	0		0	100	0		33.3	0	66.7		
PHF	.000	.906	.500	.938	.000	.000	.000	.000	.000	.550	.000	.550	.500	.000	.333	.375	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**16**	0	**16**	0	0	0	0	0	**15**	0	**15**	**1**	0	1	2	
+15 mins.	0	16	0	16	0	0	0	0	0	8	0	8	0	0	0	0	
+30 mins.	0	13	**1**	14	0	0	0	0	0	6	0	6	1	0	**3**	**4**	
+45 mins.	0	13	1	14	0	0	0	0	0	4	0	4	0	0	0	0	
Total Volume	0	58	2	60	0	0	0	0	0	33	0	33	2	0	4	6	
% App. Total	0	96.7	3.3		0	0	0		0	100	0		33.3	0	66.7		
PHF	.000	.906	.500	.938	.000	.000	.000	.000	.000	.550	.000	.550	.500	.000	.333	.375	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

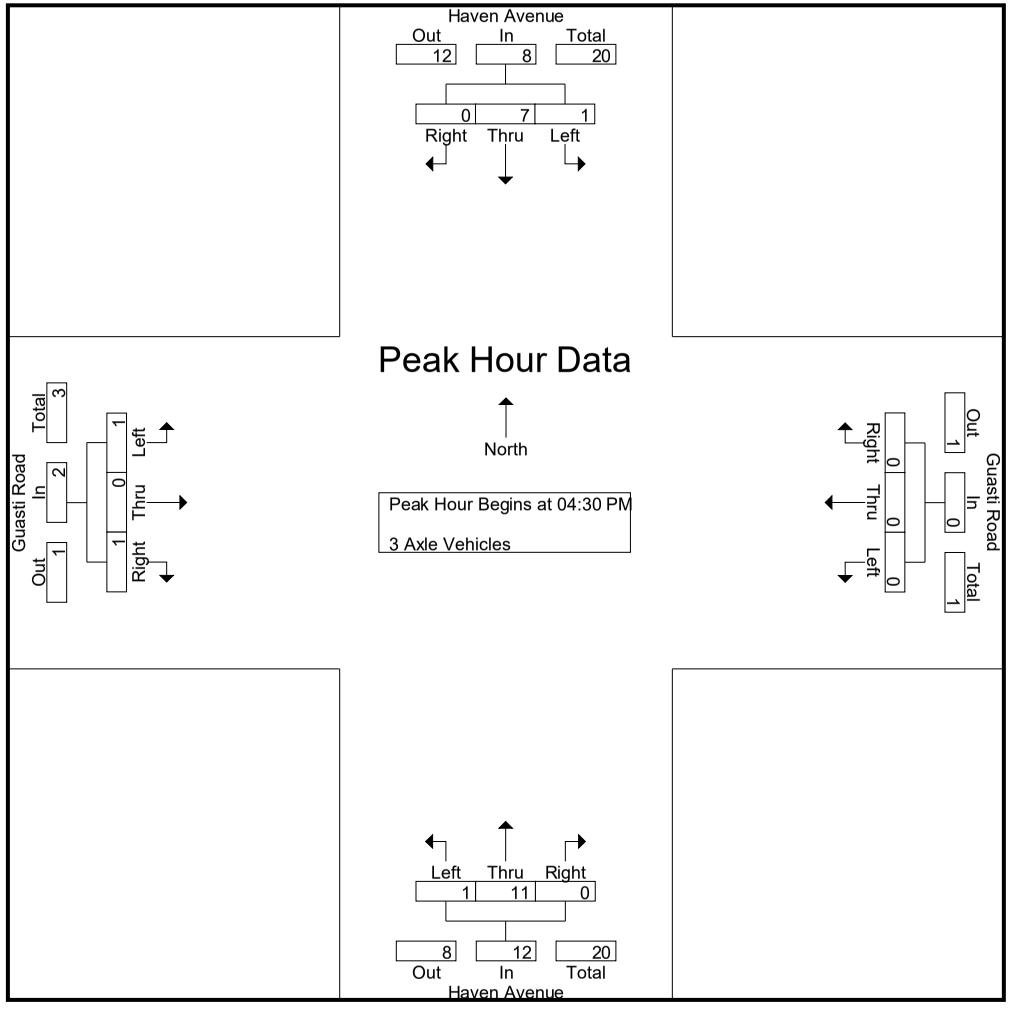
	Haven Avenue Southbound					Guasti Road Westbound					Haven Avenue Northbound					Guasti Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	6	0	0	6	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	9	9
04:15 PM	0	7	0	0	7	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	11	11
04:30 PM	1	1	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	4	4
04:45 PM	0	1	0	0	1	0	0	0	0	0	1	5	0	0	6	1	0	0	0	1	0	8	8
Total	1	15	0	0	16	0	0	0	0	0	1	13	0	0	14	1	0	1	0	2	0	32	32
05:00 PM	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	6	6
05:15 PM	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	4
05:30 PM	0	7	0	0	7	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	10	10
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
Total	0	13	0	0	13	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	0	22	22
Grand Total	1	28	0	0	29	0	0	0	0	0	1	22	0	0	23	1	0	1	0	2	0	54	54
Apprch %	3.4	96.6	0			0	0	0			4.3	95.7	0			50	0	50					
Total %	1.9	51.9	0		53.7	0	0	0		0	1.9	40.7	0		42.6	1.9	0	1.9		3.7	0	100	

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**1**	1	0	2	0	0	0	0	0	1	0	1	0	0	**1**	**1**	4
04:45 PM	0	1	0	1	0	0	0	0	**1**	**5**	0	**6**	**1**	0	0	1	**8**
05:00 PM	0	2	0	2	0	0	0	0	0	4	0	4	0	0	0	0	6
05:15 PM	0	**3**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0	4
Total Volume	1	7	0	8	0	0	0	0	1	11	0	12	1	0	1	2	22
% App. Total	12.5	87.5	0		0	0	0		8.3	91.7	0		50	0	50		
PHF	.250	.583	.000	.667	.000	.000	.000	.000	.250	.550	.000	.500	.250	.000	.250	.500	.688

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**1**	1	0	2	0	0	0	0	0	1	0	1	0	0	**1**	**1**	
+15 mins.	0	1	0	1	0	0	0	0	**1**	**5**	0	**6**	**1**	0	0	1	
+30 mins.	0	2	0	2	0	0	0	0	0	4	0	4	0	0	0	0	
+45 mins.	0	**3**	0	**3**	0	0	0	0	0	1	0	1	0	0	0	0	
Total Volume	1	7	0	8	0	0	0	0	1	11	0	12	1	0	1	2	
% App. Total	12.5	87.5	0		0	0	0		8.3	91.7	0		50	0	50		
PHF	.250	.583	.000	.667	.000	.000	.000	.000	.250	.550	.000	.500	.250	.000	.250	.500	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

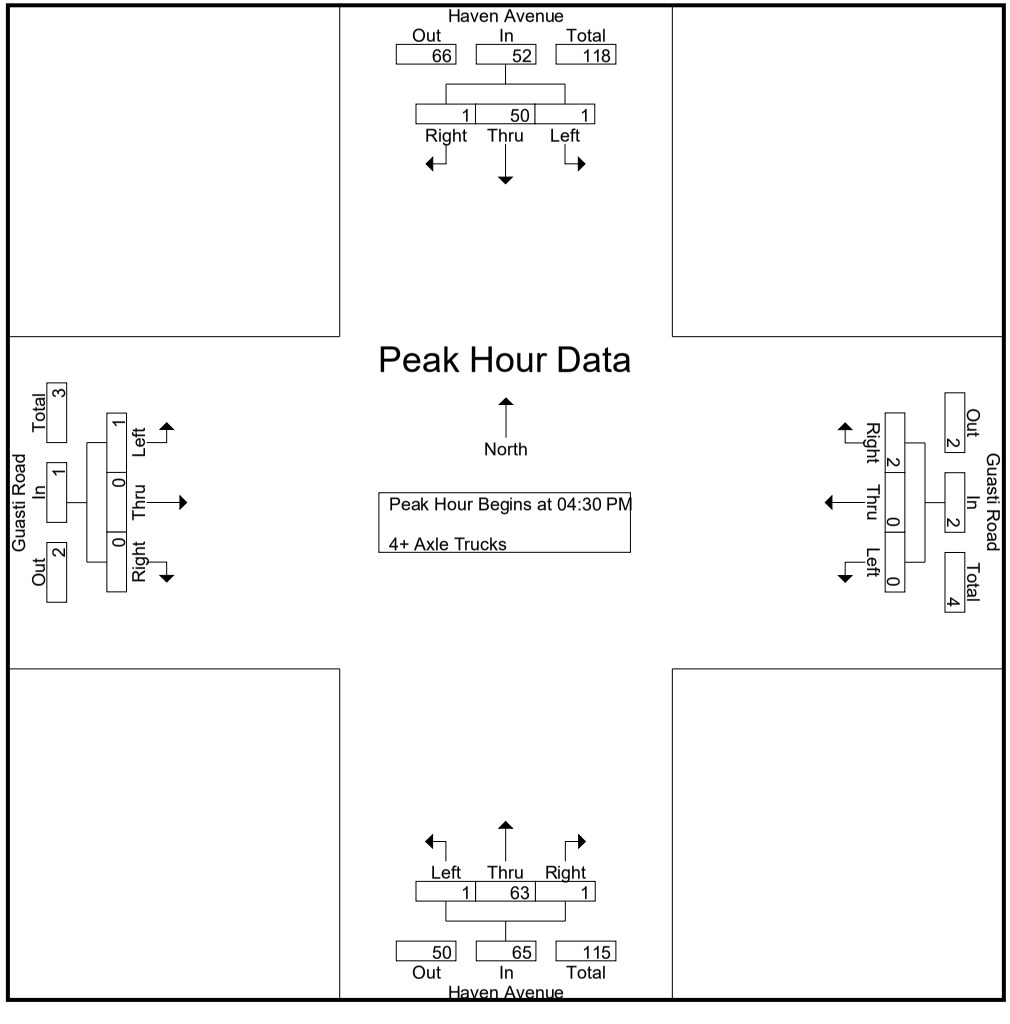
	Haven Avenue Southbound					Guasti Road Westbound					Haven Avenue Northbound					Guasti Road Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	14	0	0	14	0	0	0	0	0	0	21	0	0	21	0	0	1	0	1	0	36	36
04:15 PM	0	14	0	0	14	0	0	0	0	0	0	18	0	0	18	0	0	0	0	0	0	32	32
04:30 PM	1	11	1	0	13	0	0	1	0	1	0	21	0	0	21	1	0	0	0	1	0	36	36
04:45 PM	0	17	0	0	17	0	0	0	0	0	1	19	0	0	20	0	0	0	0	0	0	37	37
Total	1	56	1	0	58	0	0	1	0	1	1	79	0	0	80	1	0	1	0	2	0	141	141
05:00 PM	0	8	0	0	8	0	0	0	0	0	0	14	1	0	15	0	0	0	0	0	0	23	23
05:15 PM	0	14	0	0	14	0	0	1	0	1	0	9	0	0	9	0	0	0	0	0	0	24	24
05:30 PM	0	13	1	0	14	0	0	0	0	0	0	16	0	0	16	0	0	0	0	0	0	30	30
05:45 PM	0	8	0	0	8	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	0	25	25
Total	0	43	1	0	44	0	0	1	0	1	0	56	1	0	57	0	0	0	0	0	0	102	102
Grand Total	1	99	2	0	102	0	0	2	0	2	1	135	1	0	137	1	0	1	0	2	0	243	243
Apprch %	1	97.1	2			0	0	100			0.7	98.5	0.7			50	0	50					
Total %	0.4	40.7	0.8		42	0	0	0.8		0.8	0.4	55.6	0.4		56.4	0.4	0	0.4		0.8	0	100	

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**1**	11	**1**	13	0	0	**1**	**1**	0	**21**	0	**21**	**1**	0	0	**1**	36
04:45 PM	0	**17**	0	**17**	0	0	0	0	**1**	19	0	20	0	0	0	0	**37**
05:00 PM	0	8	0	8	0	0	0	0	0	14	**1**	15	0	0	0	0	23
05:15 PM	0	14	0	14	0	0	1	1	0	9	0	9	0	0	0	0	24
Total Volume	1	50	1	52	0	0	2	2	1	63	1	65	1	0	0	1	120
% App. Total	1.9	96.2	1.9		0	0	100		1.5	96.9	1.5		100	0	0		
PHF	.250	.735	.250	.765	.000	.000	.500	.500	.250	.750	.250	.774	.250	.000	.000	.250	.811

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Guasti Road
Weather: Clear

File Name : 04_ONT_Hav_Guasti PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Guasti Road Westbound				Haven Avenue Northbound				Guasti Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**1**	11	**1**	13	0	0	**1**	**1**	0	**21**	0	**21**	**1**	0	0	**1**	
+15 mins.	0	**17**	0	**17**	0	0	0	0	**1**	19	0	20	0	0	0	0	
+30 mins.	0	8	0	8	0	0	0	0	0	14	**1**	15	0	0	0	0	
+45 mins.	0	14	0	14	0	0	1	1	0	9	0	9	0	0	0	0	
Total Volume	1	50	1	52	0	0	2	2	1	63	1	65	1	0	0	1	
% App. Total	1.9	96.2	1.9		0	0	100		1.5	96.9	1.5		100	0	0		
PHF	.250	.735	.250	.765	.000	.000	.500	.500	.250	.750	.250	.774	.250	.000	.000	.250	

Location: Ontario
N/S: Haven Avenue
E/W: Guasti Road

Date: 11/18/2021
Day: Thursday

PEDESTRIANS

	North Leg Haven Avenue	East Leg Guasti Road	South Leg Haven Avenue	West Leg Guasti Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	1	2	1	4
8:00 AM	0	0	2	0	2
8:15 AM	0	2	3	0	5
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	3	7	1	11

	North Leg Haven Avenue	East Leg Guasti Road	South Leg Haven Avenue	West Leg Guasti Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	1	0	2
4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1
TOTAL VOLUMES:	0	2	1	1	4

Location: Ontario
N/S: Haven Avenue
E/W: Guasti Road

Date: 11/18/2021
Day: Thursday

BICYCLES

	Southbound Haven Avenue			Westbound Guasti Road			Northbound Haven Avenue			Eastbound Guasti Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Haven Avenue			Westbound Guasti Road			Northbound Haven Avenue			Eastbound Guasti Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

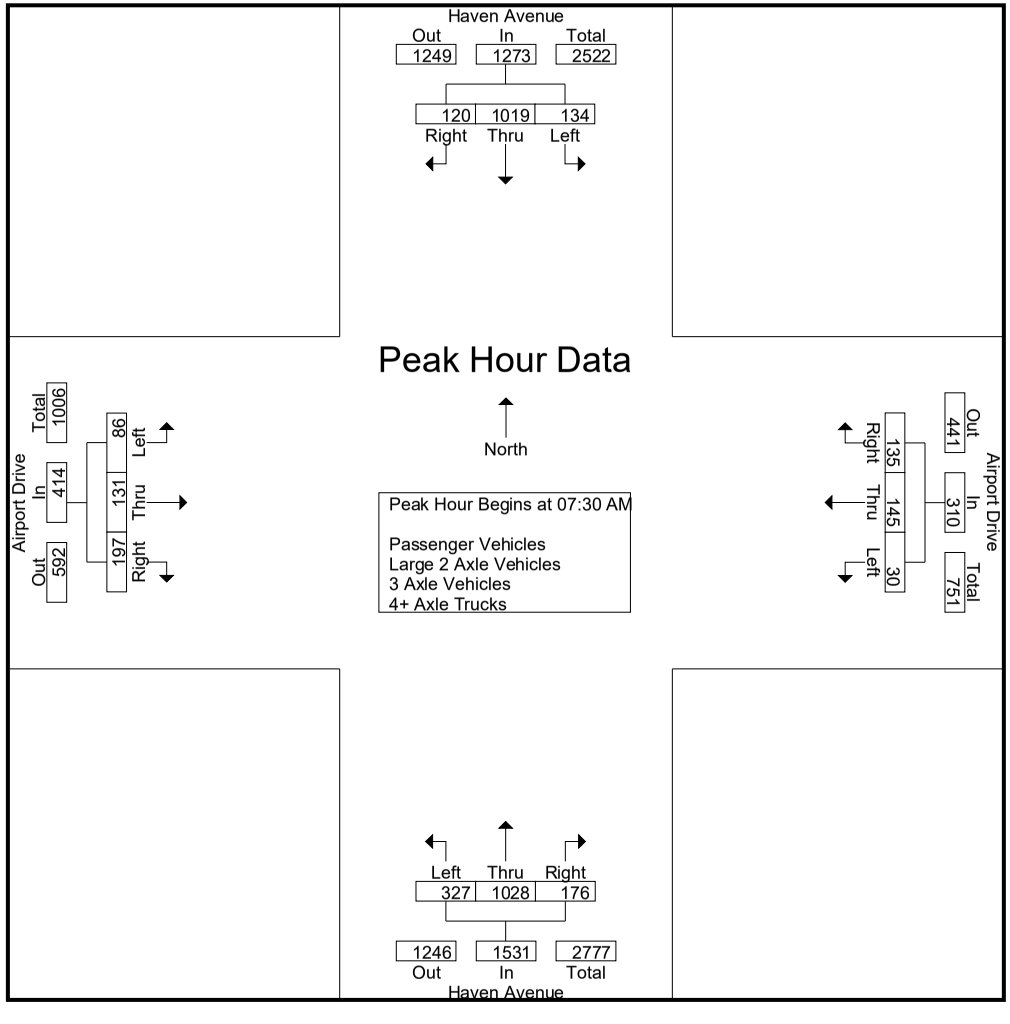
	Haven Avenue Southbound					Airport Drive Westbound					Haven Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	20	165	30	12	215	3	26	20	16	49	42	241	3	1	286	23	27	44	20	94	49	644	693
07:15 AM	16	208	16	3	240	2	38	12	7	52	69	263	6	5	338	30	37	39	13	106	28	736	764
07:30 AM	42	248	20	5	310	2	38	39	15	79	49	319	5	1	373	22	39	58	27	119	48	881	929
07:45 AM	39	280	30	10	349	7	27	40	18	74	91	341	1	0	433	20	38	54	19	112	47	968	1015
Total	117	901	96	30	1114	14	129	111	56	254	251	1164	15	7	1430	95	141	195	79	431	172	3229	3401
08:00 AM	21	257	31	8	309	11	41	30	23	82	84	321	9	3	414	32	47	56	21	135	55	940	995
08:15 AM	32	234	39	9	305	10	39	26	17	75	103	47	161	29	311	12	7	29	17	48	72	739	811
08:30 AM	33	249	39	13	321	6	39	28	17	73	100	55	207	16	362	3	3	36	11	42	57	798	855
08:45 AM	38	199	34	14	271	8	26	28	19	62	98	79	240	19	417	8	4	37	34	49	86	799	885
Total	124	939	143	44	1206	35	145	112	76	292	385	502	617	67	1504	55	61	158	83	274	270	3276	3546
Grand Total	241	1840	239	74	2320	49	274	223	132	546	636	1666	632	74	2934	150	202	353	162	705	442	6505	6947
Apprch %	10.4	79.3	10.3			9	50.2	40.8			21.7	56.8	21.5			21.3	28.7	50.1					
Total %	3.7	28.3	3.7		35.7	0.8	4.2	3.4		8.4	9.8	25.6	9.7		45.1	2.3	3.1	5.4		10.8	6.4	93.6	
Passenger Vehicles	208	1680	229		2191	23	246	179		554	615	1426	617		2727	137	179	329		800	0	0	6272
% Passenger Vehicles	86.3	91.3	95.8	100	91.5	46.9	89.8	80.3	80.3	81.7	96.7	85.6	97.6	93.2	90.7	91.3	88.6	93.2	95.7	92.3	0	0	90.3
Large 2 Axle Vehicles	9	57	5		71	4	17	15		45	8	108	3		122	7	11	5		24	0	0	262
% Large 2 Axle Vehicles	3.7	3.1	2.1	0	3	8.2	6.2	6.7	6.8	6.6	1.3	6.5	0.5	4.1	4.1	4.7	5.4	1.4	0.6	2.8	0	0	3.8
3 Axle Vehicles	5	29	1		35	6	4	5		17	5	25	1		31	2	6	5		14	0	0	97
% 3 Axle Vehicles	2.1	1.6	0.4	0	1.5	12.2	1.5	2.2	1.5	2.5	0.8	1.5	0.2	0	1	1.3	3	1.4	0.6	1.6	0	0	1.4
4+ Axle Trucks	19	74	4		97	16	7	24		62	8	107	11		128	4	6	14		29	0	0	316
% 4+ Axle Trucks	7.9	4	1.7	0	4.1	32.7	2.6	10.8	11.4	9.1	1.3	6.4	1.7	2.7	4.3	2.7	3	4	3.1	3.3	0	0	4.5

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**42**	248	20	310	2	38	39	79	49	319	5	373	22	39	**58**	119	881
07:45 AM	39	**280**	30	**349**	7	27	**40**	74	91	**341**	1	**433**	20	38	54	112	**968**
08:00 AM	21	257	31	309	**11**	**41**	30	**82**	84	321	9	414	**32**	**47**	56	**135**	940
08:15 AM	32	234	**39**	305	10	39	26	75	**103**	47	**161**	311	12	7	29	48	739
Total Volume	134	1019	120	1273	30	145	135	310	327	1028	176	1531	86	131	197	414	3528
% App. Total	10.5	80	9.4		9.7	46.8	43.5		21.4	67.1	11.5		20.8	31.6	47.6		
PHF	.798	.910	.769	.912	.682	.884	.844	.945	.794	.754	.273	.884	.672	.697	.849	.767	.911

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:30 AM				07:15 AM				07:15 AM				
+0 mins.	**39**	**280**	30	**349**	2	38	39	79	69	263	6	338	30	37	39	106	
+15 mins.	21	257	31	309	7	27	**40**	74	49	319	5	373	22	39	**58**	119	
+30 mins.	32	234	**39**	305	**11**	**41**	30	**82**	**91**	**341**	1	**433**	20	38	54	112	
+45 mins.	33	249	39	321	10	39	26	75	84	321	**9**	414	**32**	**47**	56	**135**	
Total Volume	125	1020	139	1284	30	145	135	310	293	1244	21	1558	104	161	207	472	
% App. Total	9.7	79.4	10.8		9.7	46.8	43.5		18.8	79.8	1.3		22	34.1	43.9		
PHF	.801	.911	.891	.920	.682	.884	.844	.945	.805	.912	.583	.900	.813	.856	.892	.874	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021

Groups Printed- Passenger Vehicles

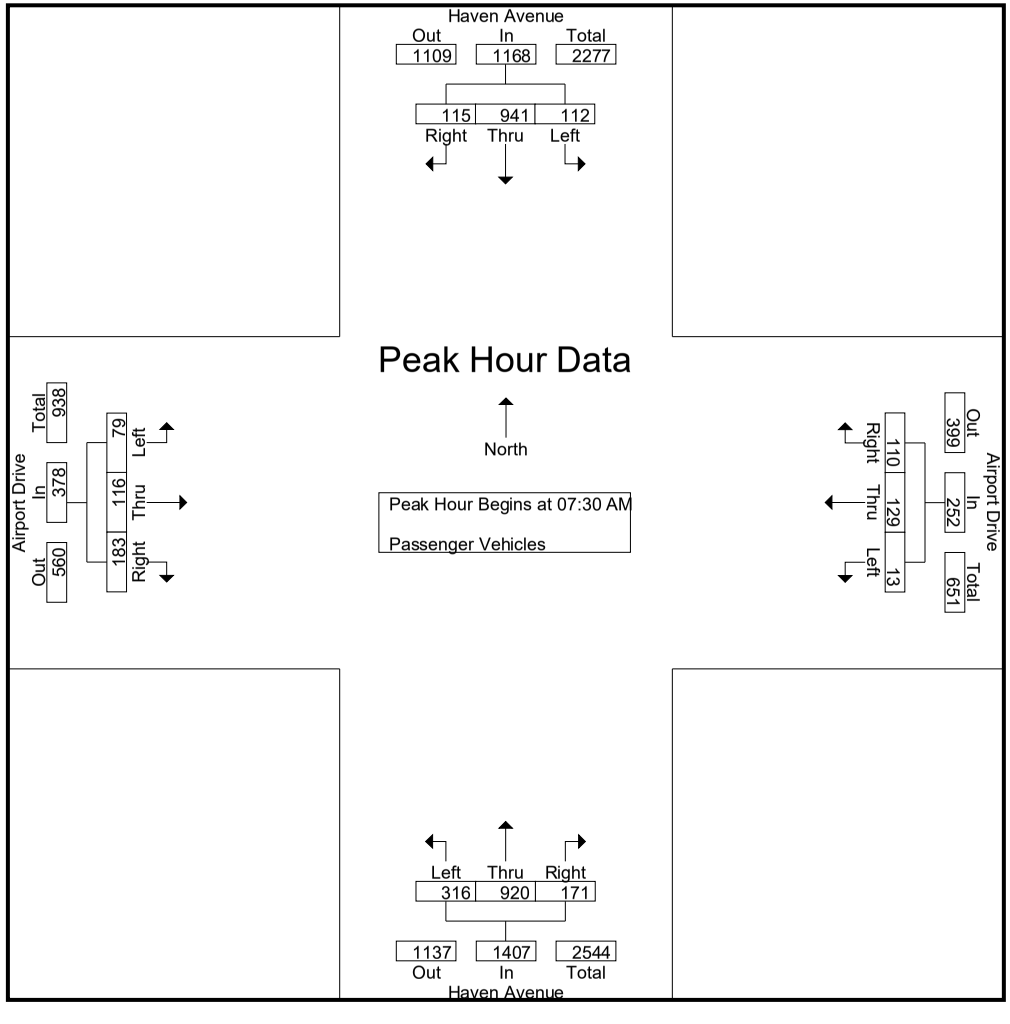
	Haven Avenue Southbound					Airport Drive Westbound					Haven Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	19	150	29	12	198	1	22	15	12	38	40	219	2	1	261	21	26	42	20	89	45	586	631
07:15 AM	13	194	15	3	222	0	35	10	6	45	67	236	2	2	305	29	36	35	13	100	24	672	696
07:30 AM	38	238	18	5	294	1	34	31	11	66	47	287	5	1	339	20	33	56	27	109	44	808	852
07:45 AM	30	257	29	10	316	2	27	34	16	63	90	311	1	0	402	17	38	53	19	108	45	889	934
Total	100	839	91	30	1030	4	118	90	45	212	244	1053	10	4	1307	87	133	186	79	406	158	2955	3113
08:00 AM	19	232	31	8	282	6	33	24	19	63	79	303	5	3	387	30	44	52	20	126	50	858	908
08:15 AM	25	214	37	9	276	4	35	21	14	60	100	19	160	29	279	12	1	22	15	35	67	650	717
08:30 AM	30	225	36	13	291	3	36	23	13	62	98	13	204	15	315	3	0	35	10	38	51	706	757
08:45 AM	34	170	34	14	238	6	24	21	15	51	94	38	238	18	370	5	1	34	31	40	78	699	777
Total	108	841	138	44	1087	19	128	89	61	236	371	373	607	65	1351	50	46	143	76	239	246	2913	3159
Grand Total	208	1680	229	74	2117	23	246	179	106	448	615	1426	617	69	2658	137	179	329	155	645	404	5868	6272
Apprch %	9.8	79.4	10.8			5.1	54.9	40			23.1	53.6	23.2			21.2	27.8	51					
Total %	3.5	28.6	3.9		36.1	0.4	4.2	3.1		7.6	10.5	24.3	10.5		45.3	2.3	3.1	5.6		11	6.4	93.6	

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**38**	238	18	294	1	34	31	**66**	47	287	5	339	20	33	**56**	109	808
07:45 AM	30	**257**	29	**316**	2	27	**34**	63	90	**311**	1	**402**	17	38	53	108	**889**
08:00 AM	19	232	31	282	**6**	33	24	63	79	303	5	387	**30**	**44**	52	**126**	858
08:15 AM	25	214	**37**	276	4	**35**	21	60	**100**	19	**160**	279	12	1	22	35	650
Total Volume	112	941	115	1168	13	129	110	252	316	920	171	1407	79	116	183	378	3205
% App. Total	9.6	80.6	9.8		5.2	51.2	43.7		22.5	65.4	12.2		20.9	30.7	48.4		
PHF	.737	.915	.777	.924	.542	.921	.809	.955	.790	.740	.267	.875	.658	.659	.817	.750	.901

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**38**	238	18	294	1	34	31	**66**	47	287	5	339	20	33	**56**	109	
+15 mins.	30	**257**	29	**316**	2	27	**34**	63	90	**311**	1	**402**	17	38	53	108	
+30 mins.	19	232	31	282	**6**	33	24	63	79	303	5	387	**30**	**44**	52	**126**	
+45 mins.	25	214	**37**	276	4	**35**	21	60	**100**	19	**160**	279	12	1	22	35	
Total Volume	112	941	115	1168	13	129	110	252	316	920	171	1407	79	116	183	378	
% App. Total	9.6	80.6	9.8		5.2	51.2	43.7		22.5	65.4	12.2		20.9	30.7	48.4		
PHF	.737	.915	.777	.924	.542	.921	.809	.955	.790	.740	.267	.875	.658	.659	.817	.750	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Haven Avenue Southbound					Airport Drive Westbound					Haven Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	6	0	0	6	0	2	3	2	5	1	15	0	0	16	1	0	0	0	1	2	28	30
07:15 AM	0	5	0	0	5	0	1	1	1	2	2	10	2	2	14	1	1	1	0	3	3	24	27
07:30 AM	0	3	1	0	4	0	1	3	1	4	0	16	0	0	16	0	3	0	0	3	1	27	28
07:45 AM	2	7	1	0	10	3	0	2	0	5	0	10	0	0	10	2	0	1	0	3	0	28	28
Total	2	21	2	0	25	3	4	9	4	16	3	51	2	2	56	4	4	2	0	10	6	107	113
08:00 AM	0	10	0	0	10	1	6	1	1	8	1	7	0	0	8	1	3	1	0	5	1	31	32
08:15 AM	3	5	2	0	10	0	3	2	2	5	1	10	0	0	11	0	2	1	0	3	2	29	31
08:30 AM	1	6	1	0	8	0	3	1	1	4	1	18	1	1	20	0	1	0	0	1	2	33	35
08:45 AM	3	15	0	0	18	0	1	2	1	3	2	22	0	0	24	2	1	1	1	4	2	49	51
Total	7	36	3	0	46	1	13	6	5	20	5	57	1	1	63	3	7	3	1	13	7	142	149
Grand Total	9	57	5	0	71	4	17	15	9	36	8	108	3	3	119	7	11	5	1	23	13	249	262
Apprch %	12.7	80.3	7			11.1	47.2	41.7			6.7	90.8	2.5			30.4	47.8	21.7					
Total %	3.6	22.9	2		28.5	1.6	6.8	6		14.5	3.2	43.4	1.2		47.8	2.8	4.4	2		9.2	5	95	

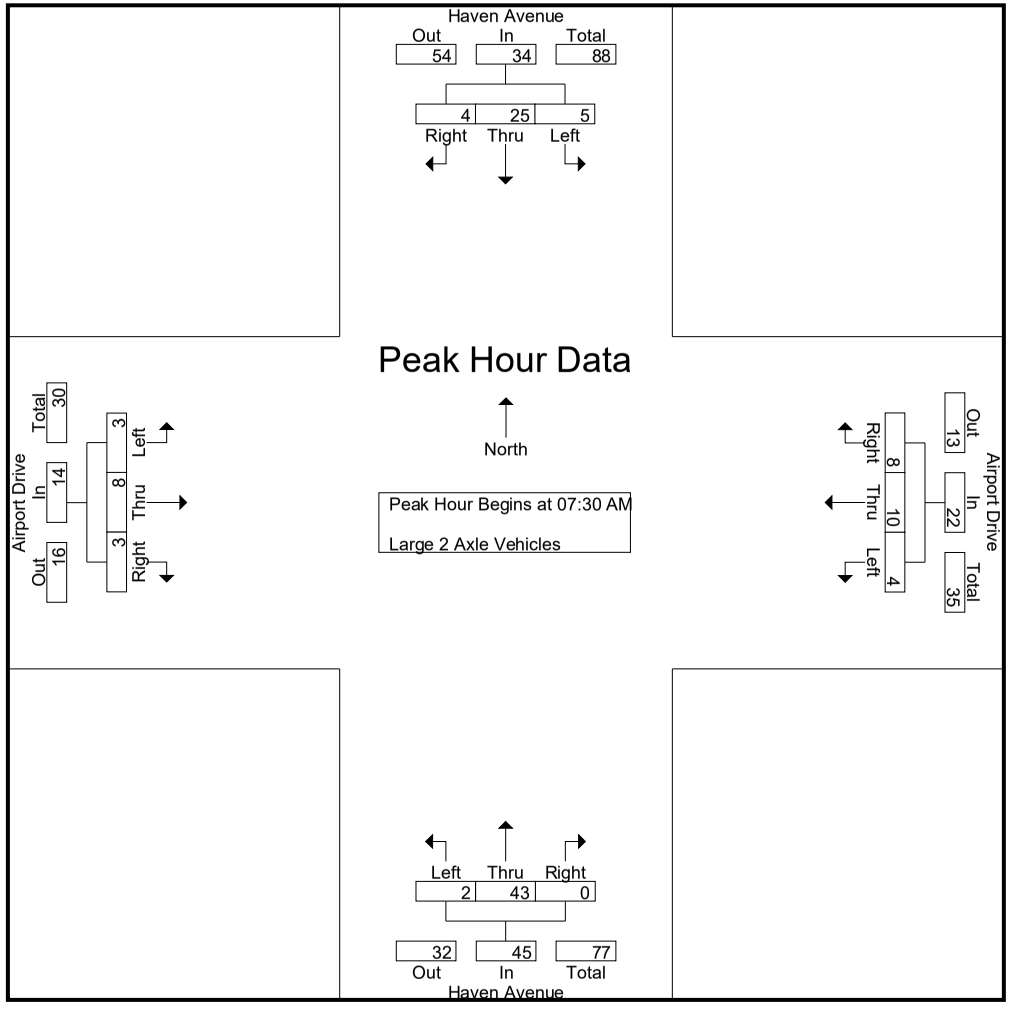
3.1-135

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	3	1	4	0	1	**3**	4	0	**16**	0	**16**	0	**3**	0	3	27
07:45 AM	2	7	1	**10**	**3**	0	2	5	0	10	0	10	**2**	0	**1**	3	28
08:00 AM	0	**10**	0	10	1	**6**	1	**8**	**1**	7	0	8	1	3	1	**5**	**31**
08:15 AM	**3**	5	**2**	10	0	3	2	5	1	10	0	11	0	2	1	3	29
Total Volume	5	25	4	34	4	10	8	22	2	43	0	45	3	8	3	14	115
% App. Total	14.7	73.5	11.8		18.2	45.5	36.4		4.4	95.6	0		21.4	57.1	21.4		
PHF	.417	.625	.500	.850	.333	.417	.667	.688	.500	.672	.000	.703	.375	.667	.750	.700	.927

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	3	1	4	0	1	**3**	4	0	**16**	0	**16**	0	**3**	0	3	
+15 mins.	2	7	1	**10**	**3**	0	2	5	0	10	0	10	**2**	0	**1**	3	
+30 mins.	0	**10**	0	10	1	**6**	1	**8**	**1**	7	0	8	1	3	1	**5**	
+45 mins.	**3**	5	**2**	10	0	3	2	5	1	10	0	11	0	2	1	3	
Total Volume	5	25	4	34	4	10	8	22	2	43	0	45	3	8	3	14	
% App. Total	14.7	73.5	11.8		18.2	45.5	36.4		4.4	95.6	0		21.4	57.1	21.4		
PHF	.417	.625	.500	.850	.333	.417	.667	.688	.500	.672	.000	.703	.375	.667	.750	.700	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

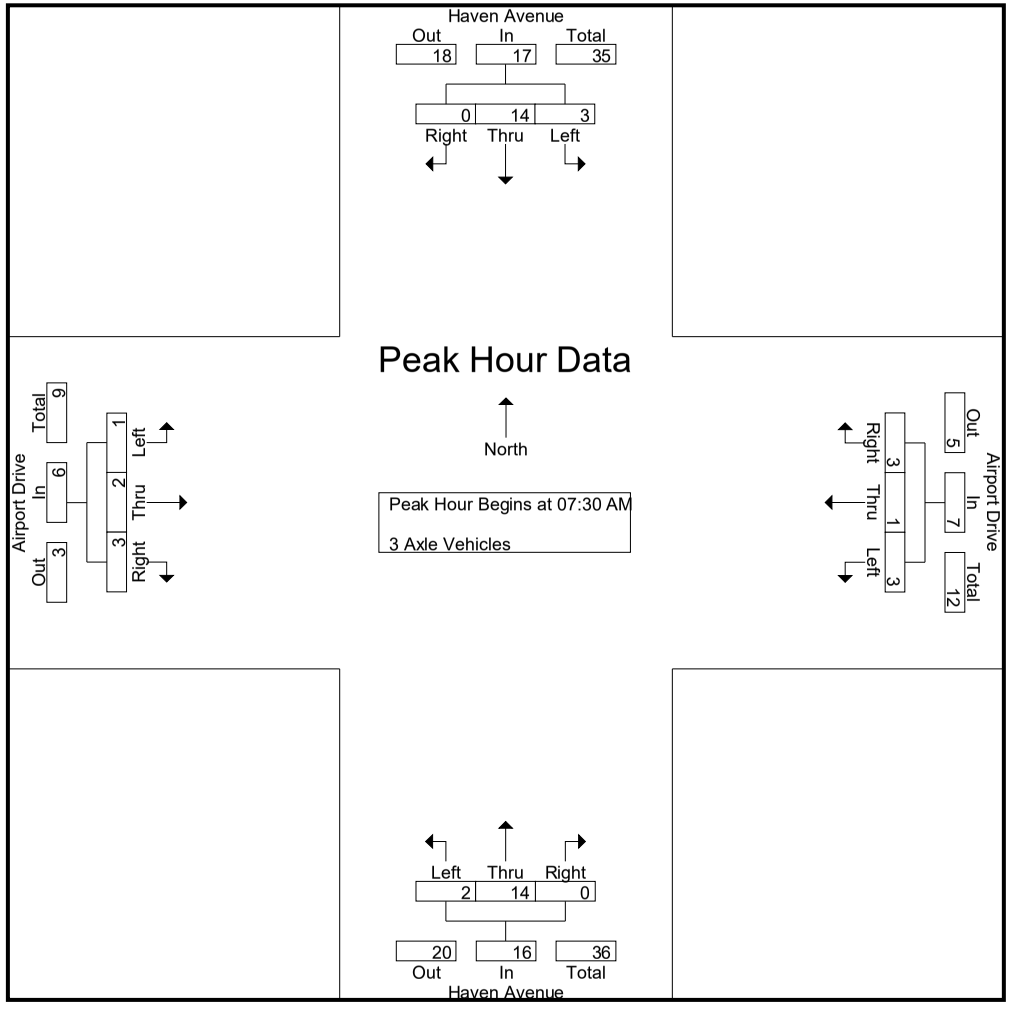
	Haven Avenue Southbound					Airport Drive Westbound					Haven Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	5	0	0	6	0	1	0	0	1	1	2	1	0	4	1	1	1	0	3	0	14	14
07:15 AM	1	2	1	0	4	0	2	0	0	2	0	4	0	0	4	0	0	1	0	1	0	11	11
07:30 AM	0	1	0	0	1	0	0	1	0	1	0	4	0	0	4	1	1	1	0	3	0	9	9
07:45 AM	1	5	0	0	6	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	8	8
Total	3	13	1	0	17	0	3	2	0	5	1	11	1	0	13	2	2	3	0	7	0	42	42
08:00 AM	1	4	0	0	5	3	1	1	1	5	1	3	0	0	4	0	0	1	1	1	2	15	17
08:15 AM	1	4	0	0	5	0	0	0	0	0	1	6	0	0	7	0	1	1	0	2	0	14	14
08:30 AM	0	4	0	0	4	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1	0	7	7
08:45 AM	0	4	0	0	4	1	0	2	1	3	2	5	0	0	7	0	2	0	0	2	1	16	17
Total	2	16	0	0	18	6	1	3	2	10	4	14	0	0	18	0	4	2	1	6	3	52	55
Grand Total	5	29	1	0	35	6	4	5	2	15	5	25	1	0	31	2	6	5	1	13	3	94	97
Apprch %	14.3	82.9	2.9			40	26.7	33.3			16.1	80.6	3.2			15.4	46.2	38.5					
Total %	5.3	30.9	1.1		37.2	6.4	4.3	5.3		16	5.3	26.6	1.1		33	2.1	6.4	5.3		13.8	3.1	96.9	

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	0	1	0	0	**1**	1	0	4	0	4	**1**	**1**	**1**	**3**	9
07:45 AM	**1**	**5**	0	**6**	0	0	1	1	0	1	0	1	0	0	0	0	8
08:00 AM	1	4	0	5	**3**	**1**	1	**5**	**1**	3	0	4	0	0	1	1	**15**
08:15 AM	1	4	0	5	0	0	0	0	1	**6**	0	**7**	0	1	1	2	14
Total Volume	3	14	0	17	3	1	3	7	2	14	0	16	1	2	3	6	46
% App. Total	17.6	82.4	0		42.9	14.3	42.9		12.5	87.5	0		16.7	33.3	50		
PHF	.750	.700	.000	.708	.250	.250	.750	.350	.500	.583	.000	.571	.250	.500	.750	.500	.767

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	1	0	1	0	0	**1**	1	0	4	0	4	**1**	**1**	**1**	**3**	
+15 mins.	**1**	**5**	0	**6**	0	0	1	1	0	1	0	1	0	0	0	0	
+30 mins.	1	4	0	5	**3**	**1**	1	**5**	**1**	3	0	4	0	0	1	1	
+45 mins.	1	4	0	5	0	0	0	0	1	**6**	0	**7**	0	1	1	2	
Total Volume	3	14	0	17	3	1	3	7	2	14	0	16	1	2	3	6	
% App. Total	17.6	82.4	0		42.9	14.3	42.9		12.5	87.5	0		16.7	33.3	50		
PHF	.750	.700	.000	.708	.250	.250	.750	.350	.500	.583	.000	.571	.250	.500	.750	.500	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Haven Avenue Southbound					Airport Drive Westbound					Haven Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	4	1	0	5	2	1	2	2	5	0	5	0	0	5	0	0	1	0	1	2	16	18
07:15 AM	2	7	0	0	9	2	0	1	0	3	0	13	2	1	15	0	0	2	0	2	1	29	30
07:30 AM	4	6	1	0	11	1	3	4	3	8	2	12	0	0	14	1	2	1	0	4	3	37	40
07:45 AM	6	11	0	0	17	2	0	3	2	5	1	19	0	0	20	1	0	0	0	1	2	43	45
Total	12	28	2	0	42	7	4	10	7	21	3	49	2	1	54	2	2	4	0	8	8	125	133
08:00 AM	1	11	0	0	12	1	1	4	2	6	3	8	4	0	15	1	0	2	0	3	2	36	38
08:15 AM	3	11	0	0	14	6	1	3	1	10	1	12	1	0	14	0	3	5	2	8	3	46	49
08:30 AM	2	14	2	0	18	1	0	4	3	5	1	24	2	0	27	0	1	1	1	2	4	52	56
08:45 AM	1	10	0	0	11	1	1	3	2	5	0	14	2	1	16	1	0	2	2	3	5	35	40
Total	7	46	2	0	55	9	3	14	8	26	5	58	9	1	72	2	4	10	5	16	14	169	183
Grand Total	19	74	4	0	97	16	7	24	15	47	8	107	11	2	126	4	6	14	5	24	22	294	316
Apprch %	19.6	76.3	4.1			34	14.9	51.1			6.3	84.9	8.7			16.7	25	58.3					
Total %	6.5	25.2	1.4		33	5.4	2.4	8.2		16	2.7	36.4	3.7		42.9	1.4	2	4.8		8.2	7	93	

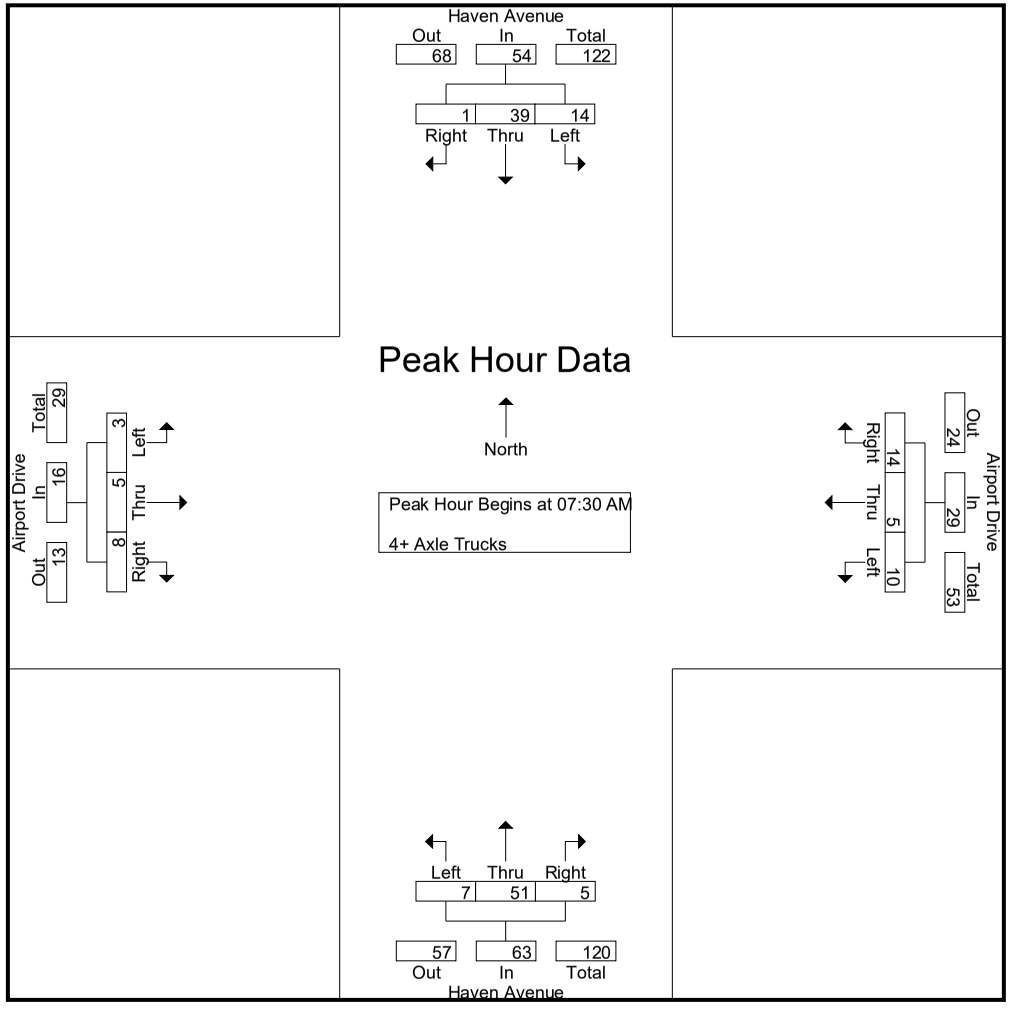
3.1-141

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	6	**1**	11	1	**3**	**4**	8	2	12	0	14	**1**	2	1	4	37
07:45 AM	**6**	**11**	0	**17**	2	0	3	5	1	**19**	0	**20**	1	0	0	1	43
08:00 AM	1	11	0	12	1	1	4	6	**3**	8	**4**	15	1	0	2	3	36
08:15 AM	3	11	0	14	**6**	1	3	**10**	1	12	1	14	0	**3**	**5**	**8**	**46**
Total Volume	14	39	1	54	10	5	14	29	7	51	5	63	3	5	8	16	162
% App. Total	25.9	72.2	1.9		34.5	17.2	48.3		11.1	81	7.9		18.8	31.2	50		
PHF	.583	.886	.250	.794	.417	.417	.875	.725	.583	.671	.313	.788	.750	.417	.400	.500	.880

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	4	6	**1**	11	1	**3**	**4**	8	2	12	0	14	**1**	2	1	4	
+15 mins.	**6**	**11**	0	**17**	2	0	3	5	1	**19**	0	**20**	1	0	0	1	
+30 mins.	1	11	0	12	1	1	4	6	**3**	8	**4**	15	1	0	2	3	
+45 mins.	3	11	0	14	**6**	1	3	**10**	1	12	1	14	0	**3**	**5**	**8**	
Total Volume	14	39	1	54	10	5	14	29	7	51	5	63	3	5	8	16	
% App. Total	25.9	72.2	1.9		34.5	17.2	48.3		11.1	81	7.9		18.8	31.2	50		
PHF	.583	.886	.250	.794	.417	.417	.875	.725	.583	.671	.313	.788	.750	.417	.400	.500	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

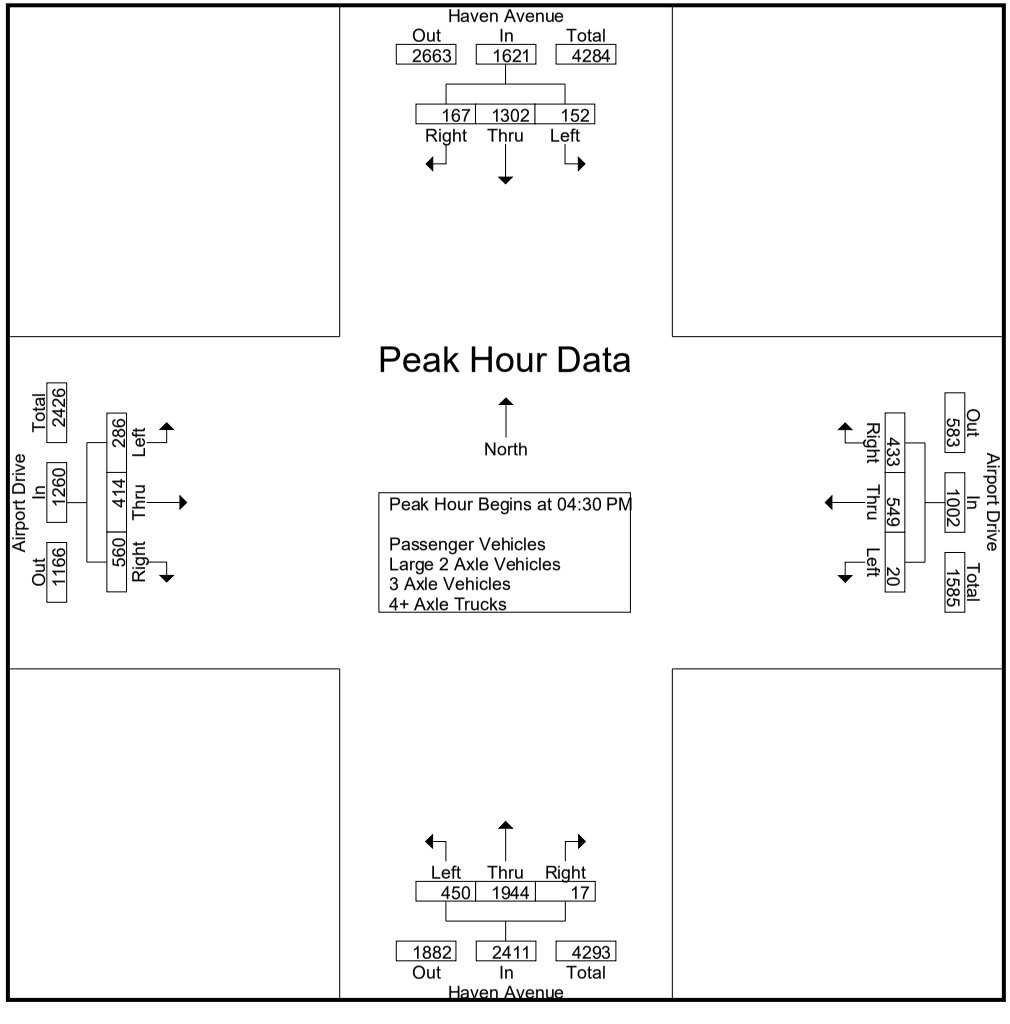
	Haven Avenue Southbound					Airport Drive Westbound					Haven Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	45	313	27	9	385	4	127	95	28	226	113	427	5	2	545	81	78	134	35	293	74	1449	1523
04:15 PM	44	327	34	3	405	6	151	77	24	234	107	542	8	3	657	64	73	127	24	264	54	1560	1614
04:30 PM	47	336	43	10	426	1	128	103	34	232	117	462	8	1	587	80	92	150	38	322	83	1567	1650
04:45 PM	33	283	36	6	352	5	152	118	55	275	134	519	4	0	657	43	93	153	50	289	111	1573	1684
Total	169	1259	140	28	1568	16	558	393	141	967	471	1950	25	6	2446	268	336	564	147	1168	322	6149	6471
05:00 PM	43	344	40	11	427	5	125	102	43	232	93	488	3	0	584	74	120	120	25	314	79	1557	1636
05:15 PM	29	339	48	13	416	9	144	110	37	263	106	475	2	1	583	89	109	137	29	335	80	1597	1677
05:30 PM	29	261	24	8	314	9	157	118	37	284	103	481	8	2	592	60	91	110	39	261	86	1451	1537
05:45 PM	18	270	34	8	322	7	96	57	24	160	95	479	3	0	577	67	60	83	14	210	46	1269	1315
Total	119	1214	146	40	1479	30	522	387	141	939	397	1923	16	3	2336	290	380	450	107	1120	291	5874	6165
Grand Total	288	2473	286	68	3047	46	1080	780	282	1906	868	3873	41	9	4782	558	716	1014	254	2288	613	12023	12636
Apprch %	9.5	81.2	9.4			2.4	56.7	40.9			18.2	81	0.9			24.4	31.3	44.3					
Total %	2.4	20.6	2.4		25.3	0.4	9	6.5		15.9	7.2	32.2	0.3		39.8	4.6	6	8.4		19	4.9	95.1	
Passenger Vehicles	256	2282	278		2883	38	1028	735		2069	818	3679	38		4544	549	656	940		2382	0	0	11878
% Passenger Vehicles	88.9	92.3	97.2	98.5	92.6	82.6	95.2	94.2	95	94.6	94.2	95	92.7	100	94.8	98.4	91.6	92.7	93.3	93.7	0	0	94
Large 2 Axle Vehicles	10	89	5		105	2	34	13		52	28	65	2		95	6	33	43		88	0	0	340
% Large 2 Axle Vehicles	3.5	3.6	1.7	1.5	3.4	4.3	3.1	1.7	1.1	2.4	3.2	1.7	4.9	0	2	1.1	4.6	4.2	2.4	3.5	0	0	2.7
3 Axle Vehicles	4	23	3		30	4	6	6		19	11	13	0		24	1	8	6		17	0	0	90
% 3 Axle Vehicles	1.4	0.9	1	0	1	8.7	0.6	0.8	1.1	0.9	1.3	0.3	0	0	0.5	0.2	1.1	0.6	0.8	0.7	0	0	0.7
4+ Axle Trucks	18	79	0		97	2	12	26		48	11	116	1		128	2	19	25		55	0	0	328
% 4+ Axle Trucks	6.2	3.2	0	0	3.1	4.3	1.1	3.3	2.8	2.2	1.3	3	2.4	0	2.7	0.4	2.7	2.5	3.5	2.2	0	0	2.6

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**47**	336	43	426	1	128	103	232	117	462	**8**	587	80	92	150	322	1567
04:45 PM	33	283	36	352	5	**152**	**118**	**275**	**134**	**519**	4	**657**	43	93	**153**	289	1573
05:00 PM	43	**344**	40	**427**	5	125	102	232	93	488	3	584	74	**120**	120	314	1557
05:15 PM	29	339	**48**	416	**9**	144	110	263	106	475	2	583	**89**	109	137	**335**	**1597**
Total Volume	152	1302	167	1621	20	549	433	1002	450	1944	17	2411	286	414	560	1260	6294
% App. Total	9.4	80.3	10.3		2	54.8	43.2		18.7	80.6	0.7		22.7	32.9	44.4		
PHF	.809	.946	.870	.949	.556	.903	.917	.911	.840	.936	.531	.917	.803	.863	.915	.940	.985

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:45 PM				04:15 PM				04:30 PM				
+0 mins.	**47**	336	43	426	5	152	**118**	275	107	**542**	**8**	**657**	80	92	150	322	
+15 mins.	33	283	36	352	5	125	102	232	117	462	8	587	43	93	**153**	289	
+30 mins.	43	**344**	40	**427**	**9**	144	110	263	**134**	519	4	657	74	**120**	120	314	
+45 mins.	29	339	**48**	416	9	**157**	118	**284**	93	488	3	584	**89**	109	137	**335**	
Total Volume	152	1302	167	1621	28	578	448	1054	451	2011	23	2485	286	414	560	1260	
% App. Total	9.4	80.3	10.3		2.7	54.8	42.5		18.1	80.9	0.9		22.7	32.9	44.4		
PHF	.809	.946	.870	.949	.778	.920	.949	.928	.841	.928	.719	.946	.803	.863	.915	.940	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

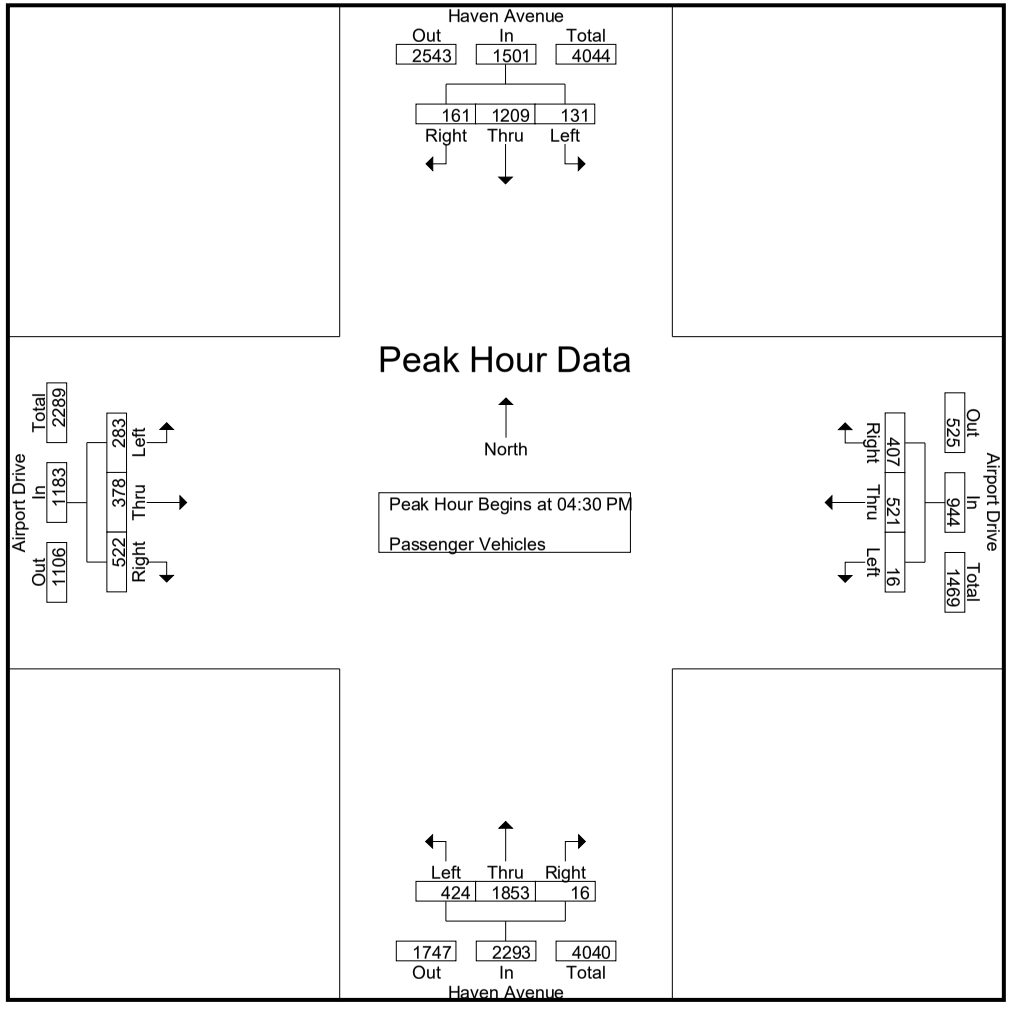
	Haven Avenue Southbound					Airport Drive Westbound					Haven Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	39	295	27	9	361	4	120	89	28	213	107	395	4	2	506	80	68	127	33	275	72	1355	1427
04:15 PM	41	297	32	3	370	4	143	70	21	217	102	514	7	3	623	61	67	117	22	245	49	1455	1504
04:30 PM	40	313	39	9	392	1	126	96	32	223	112	431	7	1	550	78	84	139	35	301	77	1466	1543
04:45 PM	29	257	36	6	322	5	144	111	52	260	125	493	4	0	622	43	84	145	48	272	106	1476	1582
Total	149	1162	134	27	1445	14	533	366	133	913	446	1833	22	6	2301	262	303	528	138	1093	304	5752	6056
05:00 PM	37	322	38	11	397	4	119	95	42	218	84	464	3	0	551	74	111	117	24	302	77	1468	1545
05:15 PM	25	317	48	13	390	6	132	105	36	243	103	465	2	1	570	88	99	121	26	308	76	1511	1587
05:30 PM	27	236	24	8	287	8	152	115	36	275	98	459	8	2	565	60	87	102	36	249	82	1376	1458
05:45 PM	18	245	34	8	297	6	92	54	21	152	87	458	3	0	548	65	56	72	13	193	42	1190	1232
Total	107	1120	144	40	1371	24	495	369	135	888	372	1846	16	3	2234	287	353	412	99	1052	277	5545	5822
Grand Total	256	2282	278	67	2816	38	1028	735	268	1801	818	3679	38	9	4535	549	656	940	237	2145	581	11297	11878
Apprch %	9.1	81	9.9			2.1	57.1	40.8			18	81.1	0.8			25.6	30.6	43.8					
Total %	2.3	20.2	2.5		24.9	0.3	9.1	6.5		15.9	7.2	32.6	0.3		40.1	4.9	5.8	8.3		19	4.9	95.1	

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**40**	313	39	392	1	126	96	223	112	431	**7**	550	78	84	139	301	1466
04:45 PM	29	257	36	322	5	**144**	**111**	**260**	**125**	**493**	4	**622**	43	84	**145**	272	1476
05:00 PM	37	**322**	38	**397**	4	119	95	218	84	464	3	551	74	**111**	117	302	1468
05:15 PM	25	317	**48**	390	**6**	132	105	243	103	465	2	570	**88**	99	121	**308**	**1511**
Total Volume	131	1209	161	1501	16	521	407	944	424	1853	16	2293	283	378	522	1183	5921
% App. Total	8.7	80.5	10.7		1.7	55.2	43.1		18.5	80.8	0.7		23.9	32	44.1		
PHF	.819	.939	.839	.945	.667	.905	.917	.908	.848	.940	.571	.922	.804	.851	.900	.960	.980

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**40**	313	39	392	1	126	96	223	112	431	**7**	550	78	84	139	301	
+15 mins.	29	257	36	322	5	**144**	**111**	**260**	**125**	**493**	4	**622**	43	84	**145**	272	
+30 mins.	37	**322**	38	**397**	4	119	95	218	84	464	3	551	74	**111**	117	302	
+45 mins.	25	317	**48**	390	**6**	132	105	243	103	465	2	570	**88**	99	121	**308**	
Total Volume	131	1209	161	1501	16	521	407	944	424	1853	16	2293	283	378	522	1183	
% App. Total	8.7	80.5	10.7		1.7	55.2	43.1		18.5	80.8	0.7		23.9	32	44.1		
PHF	.819	.939	.839	.945	.667	.905	.917	.908	.848	.940	.571	.922	.804	.851	.900	.960	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Haven Avenue Southbound					Airport Drive Westbound					Haven Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	2	3	0	0	5	0	7	3	0	10	3	10	0	0	13	0	8	3	0	11	0	39	39
04:15 PM	0	12	2	0	14	2	4	3	2	9	3	11	1	0	15	2	3	8	2	13	4	51	55
04:30 PM	3	14	2	1	19	0	2	2	0	4	2	13	1	0	16	1	4	7	1	12	2	51	53
04:45 PM	2	15	0	0	17	0	3	2	0	5	7	7	0	0	14	0	2	5	1	7	1	43	44
Total	7	44	4	1	55	2	16	10	2	28	15	41	2	0	58	3	17	23	4	43	7	184	191
05:00 PM	2	13	1	0	16	0	2	0	0	2	5	7	0	0	12	0	3	2	0	5	0	35	35
05:15 PM	0	11	0	0	11	0	7	1	0	8	3	5	0	0	8	1	8	9	1	18	1	45	46
05:30 PM	1	7	0	0	8	0	5	2	1	7	3	6	0	0	9	0	3	3	1	6	2	30	32
05:45 PM	0	14	0	0	14	0	4	0	0	4	2	6	0	0	8	2	2	6	0	10	0	36	36
Total	3	45	1	0	49	0	18	3	1	21	13	24	0	0	37	3	16	20	2	39	3	146	149
Grand Total	10	89	5	1	104	2	34	13	3	49	28	65	2	0	95	6	33	43	6	82	10	330	340
Apprch %	9.6	85.6	4.8			4.1	69.4	26.5			29.5	68.4	2.1			7.3	40.2	52.4					
Total %	3	27	1.5		31.5	0.6	10.3	3.9		14.8	8.5	19.7	0.6		28.8	1.8	10	13		24.8	2.9	97.1	

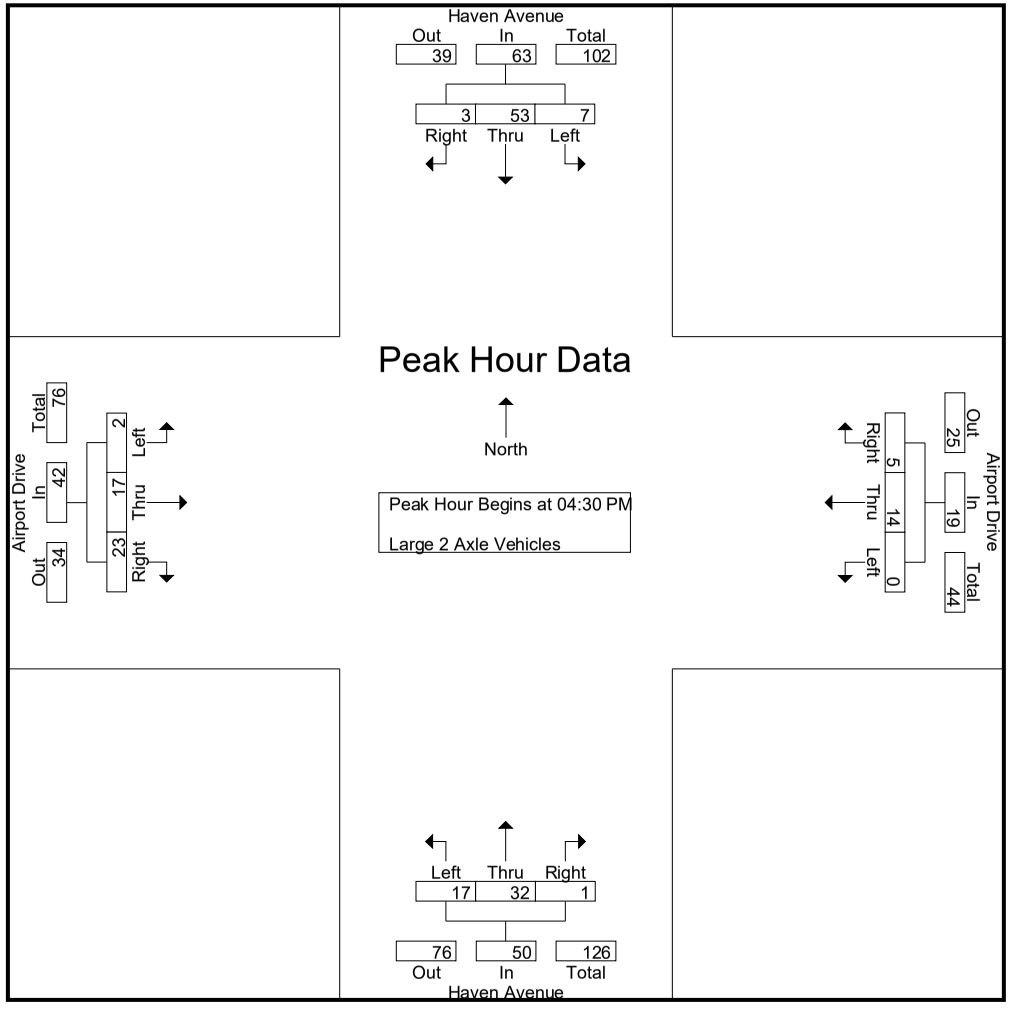
03-1-150

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**3**	14	**2**	**19**	0	2	**2**	4	2	**13**	**1**	**16**	**1**	4	7	12	**51**
04:45 PM	2	**15**	0	17	0	3	2	5	**7**	7	0	14	0	2	5	7	43
05:00 PM	2	13	1	16	0	2	0	2	5	7	0	12	0	3	2	5	35
05:15 PM	0	11	0	11	0	**7**	1	**8**	3	5	0	8	1	**8**	**9**	**18**	45
Total Volume	7	53	3	63	0	14	5	19	17	32	1	50	2	17	23	42	174
% App. Total	11.1	84.1	4.8		0	73.7	26.3		34	64	2		4.8	40.5	54.8		
PHF	.583	.883	.375	.829	.000	.500	.625	.594	.607	.615	.250	.781	.500	.531	.639	.583	.853

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**3**	14	**2**	**19**	0	2	**2**	4	2	**13**	**1**	**16**	**1**	4	7	12	
+15 mins.	2	**15**	0	17	0	3	2	5	**7**	7	0	14	0	2	5	7	
+30 mins.	2	13	1	16	0	2	0	2	5	7	0	12	0	3	2	5	
+45 mins.	0	11	0	11	0	**7**	1	**8**	3	5	0	8	1	**8**	**9**	**18**	
Total Volume	7	53	3	63	0	14	5	19	17	32	1	50	2	17	23	42	
% App. Total	11.1	84.1	4.8		0	73.7	26.3		34	64	2		4.8	40.5	54.8		
PHF	.583	.883	.375	.829	.000	.500	.625	.594	.607	.615	.250	.781	.500	.531	.639	.583	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

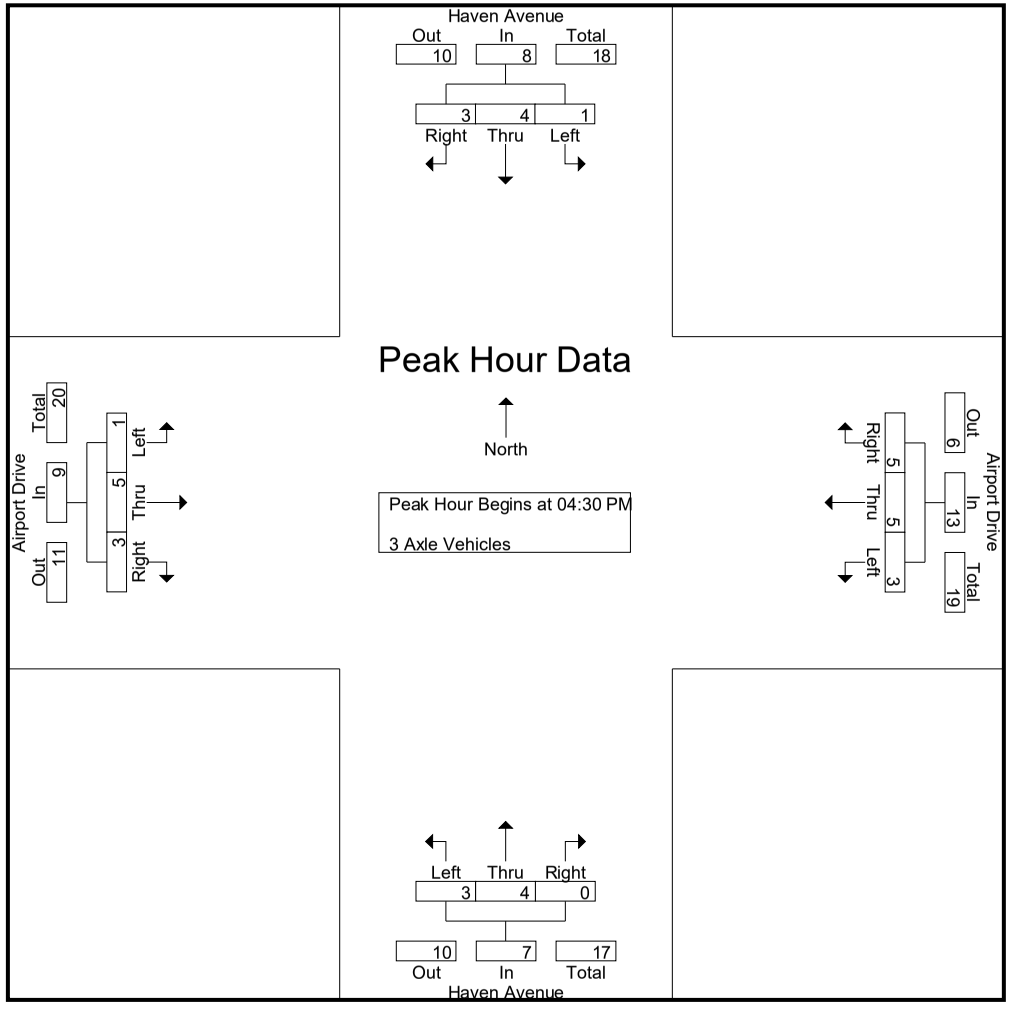
	Haven Avenue Southbound					Airport Drive Westbound					Haven Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	5	0	0	6	0	0	0	0	0	2	4	0	0	6	0	1	2	1	3	1	15	16
04:15 PM	1	7	0	0	8	0	1	1	1	2	2	2	0	0	4	0	0	0	0	0	1	14	15
04:30 PM	0	1	2	0	3	0	0	0	0	0	2	1	0	0	3	1	2	0	0	3	0	9	9
04:45 PM	0	1	0	0	1	0	3	3	2	6	1	1	0	0	2	0	2	1	0	3	2	12	14
Total	2	14	2	0	18	0	4	4	3	8	7	8	0	0	15	1	5	3	1	9	4	50	54
05:00 PM	0	1	1	0	2	1	0	1	0	2	0	2	0	0	2	0	1	0	0	1	0	7	7
05:15 PM	1	1	0	0	2	2	2	1	0	5	0	0	0	0	0	0	0	2	1	2	1	9	10
05:30 PM	1	4	0	0	5	1	0	0	0	1	0	2	0	0	2	0	0	1	0	1	0	9	9
05:45 PM	0	3	0	0	3	0	0	0	0	0	4	1	0	0	5	0	2	0	0	2	0	10	10
Total	2	9	1	0	12	4	2	2	0	8	4	5	0	0	9	0	3	3	1	6	1	35	36
Grand Total	4	23	3	0	30	4	6	6	3	16	11	13	0	0	24	1	8	6	2	15	5	85	90
Apprch %	13.3	76.7	10			25	37.5	37.5			45.8	54.2	0			6.7	53.3	40					
Total %	4.7	27.1	3.5		35.3	4.7	7.1	7.1		18.8	12.9	15.3	0		28.2	1.2	9.4	7.1		17.6	5.6	94.4	

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**1**	**2**	**3**	0	0	0	0	**2**	1	0	**3**	**1**	**2**	0	**3**	9
04:45 PM	0	1	0	1	0	**3**	**3**	**6**	1	1	0	2	0	2	1	3	**12**
05:00 PM	0	1	1	2	1	0	1	2	0	**2**	0	2	0	1	0	1	7
05:15 PM	**1**	1	0	2	**2**	2	1	5	0	0	0	0	0	0	**2**	2	9
Total Volume	1	4	3	8	3	5	5	13	3	4	0	7	1	5	3	9	37
% App. Total	12.5	50	37.5		23.1	38.5	38.5		42.9	57.1	0		11.1	55.6	33.3		
PHF	.250	1.00	.375	.667	.375	.417	.417	.542	.375	.500	.000	.583	.250	.625	.375	.750	.771

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**1**	**2**	**3**	0	0	0	0	**2**	1	0	**3**	**1**	**2**	0	**3**	
+15 mins.	0	1	0	1	0	**3**	**3**	**6**	1	1	0	2	0	2	1	3	
+30 mins.	0	1	1	2	1	0	1	2	0	**2**	0	2	0	1	0	1	
+45 mins.	**1**	1	0	2	**2**	2	1	5	0	0	0	0	0	0	**2**	2	
Total Volume	1	4	3	8	3	5	5	13	3	4	0	7	1	5	3	9	
% App. Total	12.5	50	37.5		23.1	38.5	38.5		42.9	57.1	0		11.1	55.6	33.3		
PHF	.250	1.000	.375	.667	.375	.417	.417	.542	.375	.500	.000	.583	.250	.625	.375	.750	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

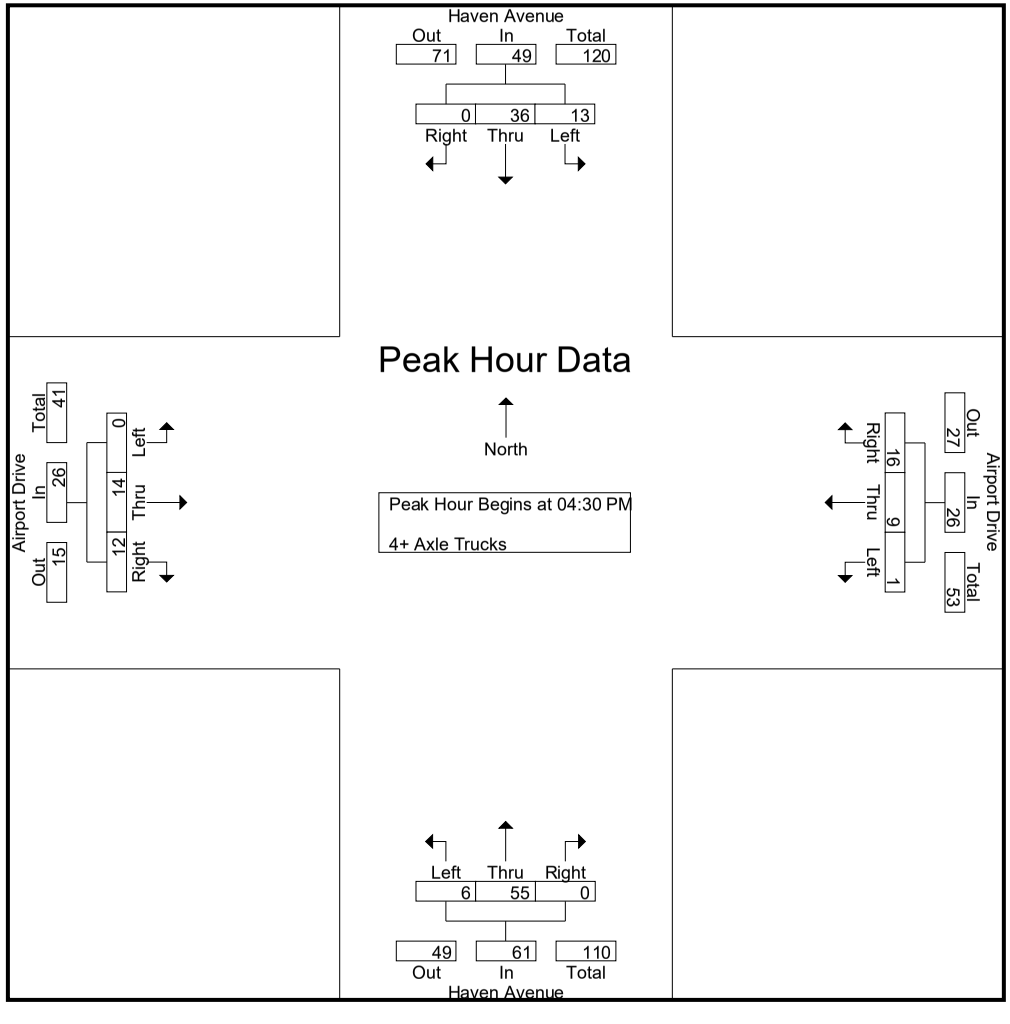
	Haven Avenue Southbound					Airport Drive Westbound					Haven Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	3	10	0	0	13	0	0	3	0	3	1	18	1	0	20	1	1	2	1	4	1	40	41
04:15 PM	2	11	0	0	13	0	3	3	0	6	0	15	0	0	15	1	3	2	0	6	0	40	40
04:30 PM	4	8	0	0	12	0	0	5	2	5	1	17	0	0	18	0	2	4	2	6	4	41	45
04:45 PM	2	10	0	0	12	0	2	2	1	4	1	18	0	0	19	0	5	2	1	7	2	42	44
Total	11	39	0	0	50	0	5	13	3	18	3	68	1	0	72	2	11	10	4	23	7	163	170
05:00 PM	4	8	0	0	12	0	4	6	1	10	4	15	0	0	19	0	5	1	1	6	2	47	49
05:15 PM	3	10	0	0	13	1	3	3	1	7	0	5	0	0	5	0	2	5	1	7	2	32	34
05:30 PM	0	14	0	0	14	0	0	1	0	1	2	14	0	0	16	0	1	4	2	5	2	36	38
05:45 PM	0	8	0	0	8	1	0	3	3	4	2	14	0	0	16	0	0	5	1	5	4	33	37
Total	7	40	0	0	47	2	7	13	5	22	8	48	0	0	56	0	8	15	5	23	10	148	158
Grand Total	18	79	0	0	97	2	12	26	8	40	11	116	1	0	128	2	19	25	9	46	17	311	328
Apprch %	18.6	81.4	0			5	30	65			8.6	90.6	0.8			4.3	41.3	54.3					
Total %	5.8	25.4	0		31.2	0.6	3.9	8.4		12.9	3.5	37.3	0.3		41.2	0.6	6.1	8		14.8	5.2	94.8	

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**4**	8	0	12	0	0	5	5	1	17	0	18	0	2	4	6	41
04:45 PM	2	**10**	0	12	0	2	2	4	1	**18**	0	**19**	0	**5**	2	**7**	42
05:00 PM	4	8	0	12	0	**4**	**6**	**10**	**4**	15	0	19	0	5	1	6	**47**
05:15 PM	3	10	0	**13**	**1**	3	3	7	0	5	0	5	0	2	**5**	7	32
Total Volume	13	36	0	49	1	9	16	26	6	55	0	61	0	14	12	26	162
% App. Total	26.5	73.5	0		3.8	34.6	61.5		9.8	90.2	0		0	53.8	46.2		
PHF	.813	.900	.000	.942	.250	.563	.667	.650	.375	.764	.000	.803	.000	.700	.600	.929	.862

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Airport Drive
Weather: Clear

File Name : 05_ONT_Hav_Airport PM2
Site Code : 05121618
Start Date : 11/18/2021

	Haven Avenue Southbound				Airport Drive Westbound				Haven Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**4**	8	0	12	0	0	5	5	1	17	0	18	0	2	4	6	
+15 mins.	2	**10**	0	12	0	2	2	4	1	**18**	0	**19**	0	**5**	2	**7**	
+30 mins.	4	8	0	12	0	**4**	**6**	**10**	**4**	15	0	19	0	5	1	6	
+45 mins.	3	10	0	**13**	**1**	3	3	7	0	5	0	5	0	2	**5**	7	
Total Volume	13	36	0	49	1	9	16	26	6	55	0	61	0	14	12	26	
% App. Total	26.5	73.5	0		3.8	34.6	61.5		9.8	90.2	0		0	53.8	46.2		
PHF	.813	.900	.000	.942	.250	.563	.667	.650	.375	.764	.000	.803	.000	.700	.600	.929	

Location: Ontario
N/S: Haven Avenue
E/W: Airport Drive

Date: 11/18/2021
Day: Thursday

PEDESTRIANS

	North Leg Haven Avenue	East Leg Airport Drive	South Leg Haven Avenue	West Leg Airport Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	1	1
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	1	1	0	2
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	1	1	1	3

	North Leg Haven Avenue	East Leg Airport Drive	South Leg Haven Avenue	West Leg Airport Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	1	0	2
4:15 PM	0	0	0	0	0
4:30 PM	0	0	1	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	1	1
TOTAL VOLUMES:	0	1	2	1	4

Location: Ontario
N/S: Haven Avenue
E/W: Airport Drive

Date: 11/18/2021
Day: Thursday

BICYCLES

	Southbound Haven Avenue			Westbound Airport Drive			Northbound Haven Avenue			Eastbound Airport Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Haven Avenue			Westbound Airport Drive			Northbound Haven Avenue			Eastbound Airport Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	1	0	0	0	3	0	0	0	0	0	0	4
TOTAL VOLUMES:	0	1	0	0	0	3	0	0	0	0	0	0	4

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

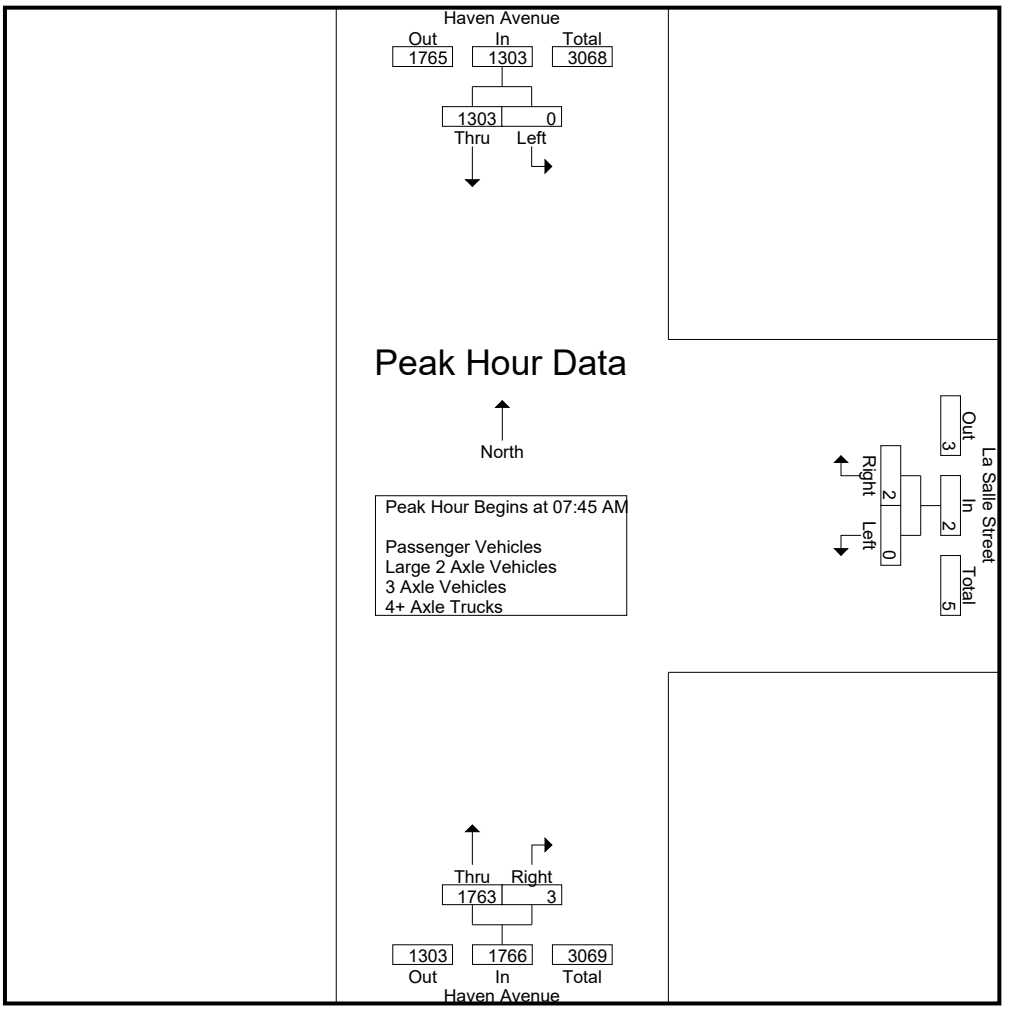
	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	207	207	0	1	1	260	3	263	471
07:15 AM	0	264	264	0	0	0	365	4	369	633
07:30 AM	0	290	290	0	2	2	369	0	369	661
07:45 AM	0	329	329	0	0	0	466	1	467	796
Total	0	1090	1090	0	3	3	1460	8	1468	2561
08:00 AM	0	330	330	0	1	1	408	1	409	740
08:15 AM	0	335	335	0	1	1	485	0	485	821
08:30 AM	0	309	309	0	0	0	404	1	405	714
08:45 AM	0	325	325	0	0	0	427	1	428	753
Total	0	1299	1299	0	2	2	1724	3	1727	3028
Grand Total	0	2389	2389	0	5	5	3184	11	3195	5589
Apprch %	0	100		0	100		99.7	0.3		
Total %	0	42.7	42.7	0	0.1	0.1	57	0.2	57.2	
Passenger Vehicles	0	2181	2181	0	4	4	2914	5	2919	5104
% Passenger Vehicles	0	91.3	91.3	0	80	80	91.5	45.5	91.4	91.3
Large 2 Axle Vehicles	0	59	59	0	0	0	114	1	115	174
% Large 2 Axle Vehicles	0	2.5	2.5	0	0	0	3.6	9.1	3.6	3.1
3 Axle Vehicles	0	37	37	0	0	0	28	0	28	65
% 3 Axle Vehicles	0	1.5	1.5	0	0	0	0.9	0	0.9	1.2
4+ Axle Trucks	0	112	112	0	1	1	128	5	133	246
% 4+ Axle Trucks	0	4.7	4.7	0	20	20	4	45.5	4.2	4.4

	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	329	329	0	0	0	466	**1**	467	796
08:00 AM	0	330	330	0	**1**	**1**	408	1	409	740
08:15 AM	0	**335**	**335**	0	1	1	**485**	0	**485**	**821**
08:30 AM	0	309	309	0	0	0	404	1	405	714
Total Volume	0	1303	1303	0	2	2	1763	3	1766	3071
% App. Total	0	100		0	100		99.8	0.2		
PHF	.000	.972	.972	.000	.500	.500	.909	.750	.910	.935

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:30 AM			07:45 AM		
+0 mins.	0	329	329	0	**2**	**2**	466	**1**	467
+15 mins.	0	330	330	0	0	0	408	1	409
+30 mins.	0	**335**	**335**	0	1	1	**485**	0	**485**
+45 mins.	0	309	309	0	1	1	404	1	405
Total Volume	0	1303	1303	0	4	4	1763	3	1766
% App. Total	0	100		0	100		99.8	0.2	
PHF	.000	.972	.972	.000	.500	.500	.909	.750	.910

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

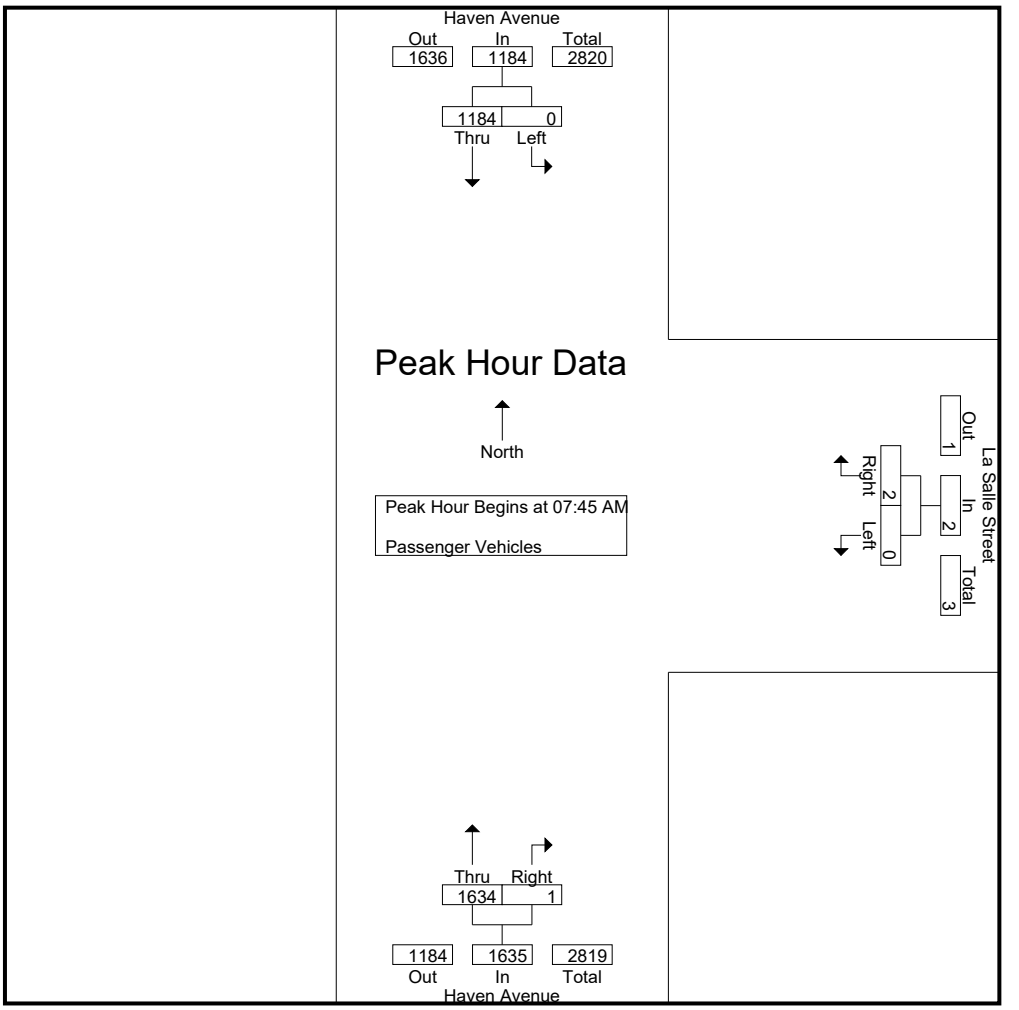
	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	186	186	0	1	1	231	1	232	419
07:15 AM	0	243	243	0	0	0	336	2	338	581
07:30 AM	0	277	277	0	1	1	339	0	339	617
07:45 AM	0	306	306	0	0	0	434	1	435	741
Total	0	1012	1012	0	2	2	1340	4	1344	2358
08:00 AM	0	295	295	0	1	1	383	0	383	679
08:15 AM	0	301	301	0	1	1	448	0	448	750
08:30 AM	0	282	282	0	0	0	369	0	369	651
08:45 AM	0	291	291	0	0	0	374	1	375	666
Total	0	1169	1169	0	2	2	1574	1	1575	2746
Grand Total	0	2181	2181	0	4	4	2914	5	2919	5104
Apprch %	0	100		0	100		99.8	0.2		
Total %	0	42.7	42.7	0	0.1	0.1	57.1	0.1	57.2	

	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	**306**	**306**	0	0	0	434	**1**	435	741
08:00 AM	0	295	295	0	**1**	**1**	383	0	383	679
08:15 AM	0	301	301	0	1	1	**448**	0	**448**	**750**
08:30 AM	0	282	282	0	0	0	369	0	369	651
Total Volume	0	1184	1184	0	2	2	1634	1	1635	2821
% App. Total	0	100		0	100		99.9	0.1		
PHF	.000	.967	.967	.000	.500	.500	.912	.250	.912	.940

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	**306**	**306**	0	0	0	434	**1**	435
+15 mins.	0	295	295	0	**1**	**1**	383	0	383
+30 mins.	0	301	301	0	1	1	**448**	0	**448**
+45 mins.	0	282	282	0	0	0	369	0	369
Total Volume	0	1184	1184	0	2	2	1634	1	1635
% App. Total	0	100		0	100		99.9	0.1	
PHF	.000	.967	.967	.000	.500	.500	.912	.250	.912

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

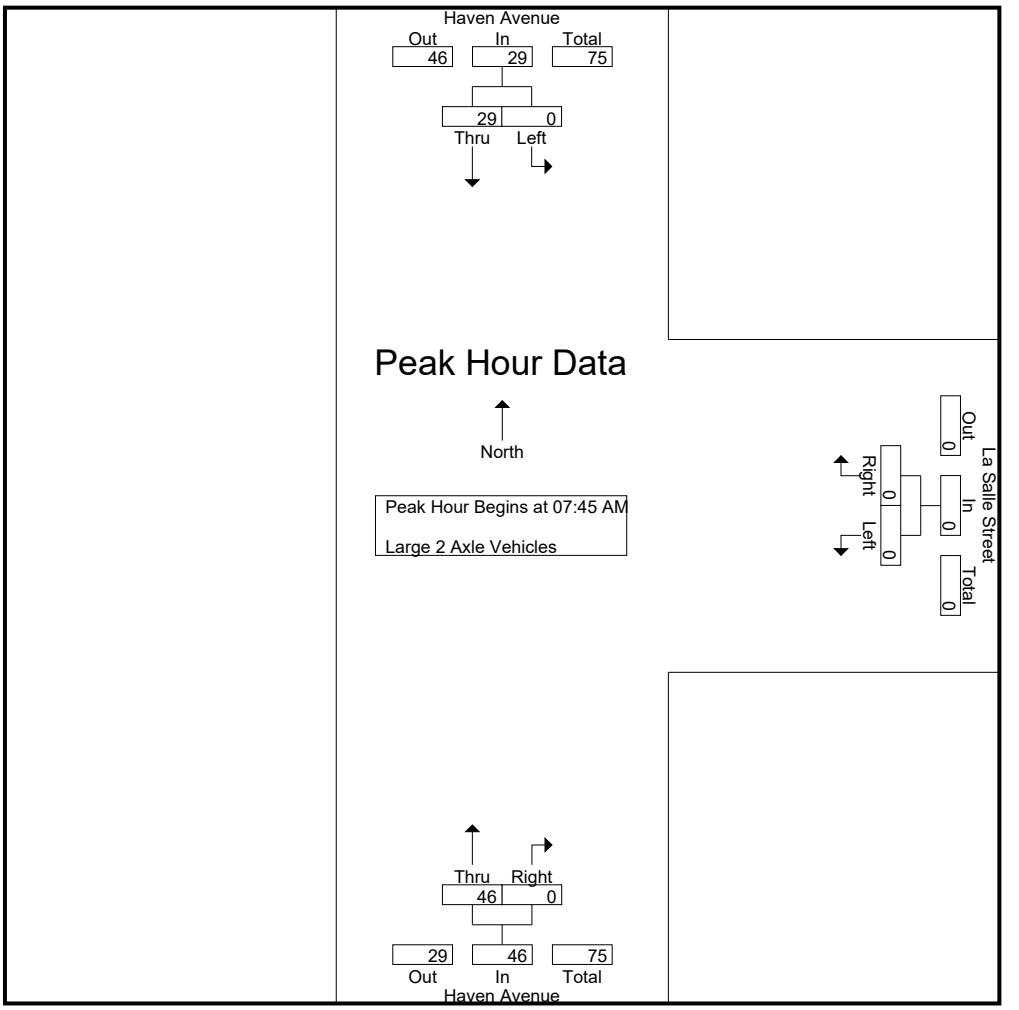
	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	6	6	0	0	0	18	1	19	25
07:15 AM	0	7	7	0	0	0	11	0	11	18
07:30 AM	0	3	3	0	0	0	11	0	11	14
07:45 AM	0	6	6	0	0	0	7	0	7	13
Total	0	22	22	0	0	0	47	1	48	70
08:00 AM	0	11	11	0	0	0	10	0	10	21
08:15 AM	0	7	7	0	0	0	13	0	13	20
08:30 AM	0	5	5	0	0	0	16	0	16	21
08:45 AM	0	14	14	0	0	0	28	0	28	42
Total	0	37	37	0	0	0	67	0	67	104
Grand Total	0	59	59	0	0	0	114	1	115	174
Apprch %	0	100		0	0		99.1	0.9		
Total %	0	33.9	33.9	0	0	0	65.5	0.6	66.1	

	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	6	6	0	0	0	7	0	7	13
08:00 AM	0	**11**	**11**	0	0	0	10	0	10	**21**
08:15 AM	0	7	7	0	0	0	13	0	13	20
08:30 AM	0	5	5	0	0	0	**16**	0	**16**	21
Total Volume	0	29	29	0	0	0	46	0	46	75
% App. Total	0	100		0	0		100	0		
PHF	.000	.659	.659	.000	.000	.000	.719	.000	.719	.893

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	6	6	0	0	0	7	0	7
+15 mins.	0	**11**	**11**	0	0	0	10	0	10
+30 mins.	0	7	7	0	0	0	13	0	13
+45 mins.	0	5	5	0	0	0	**16**	0	**16**
Total Volume	0	29	29	0	0	0	46	0	46
% App. Total	0	100		0	0		100	0	
PHF	.000	.659	.659	.000	.000	.000	.719	.000	.719

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

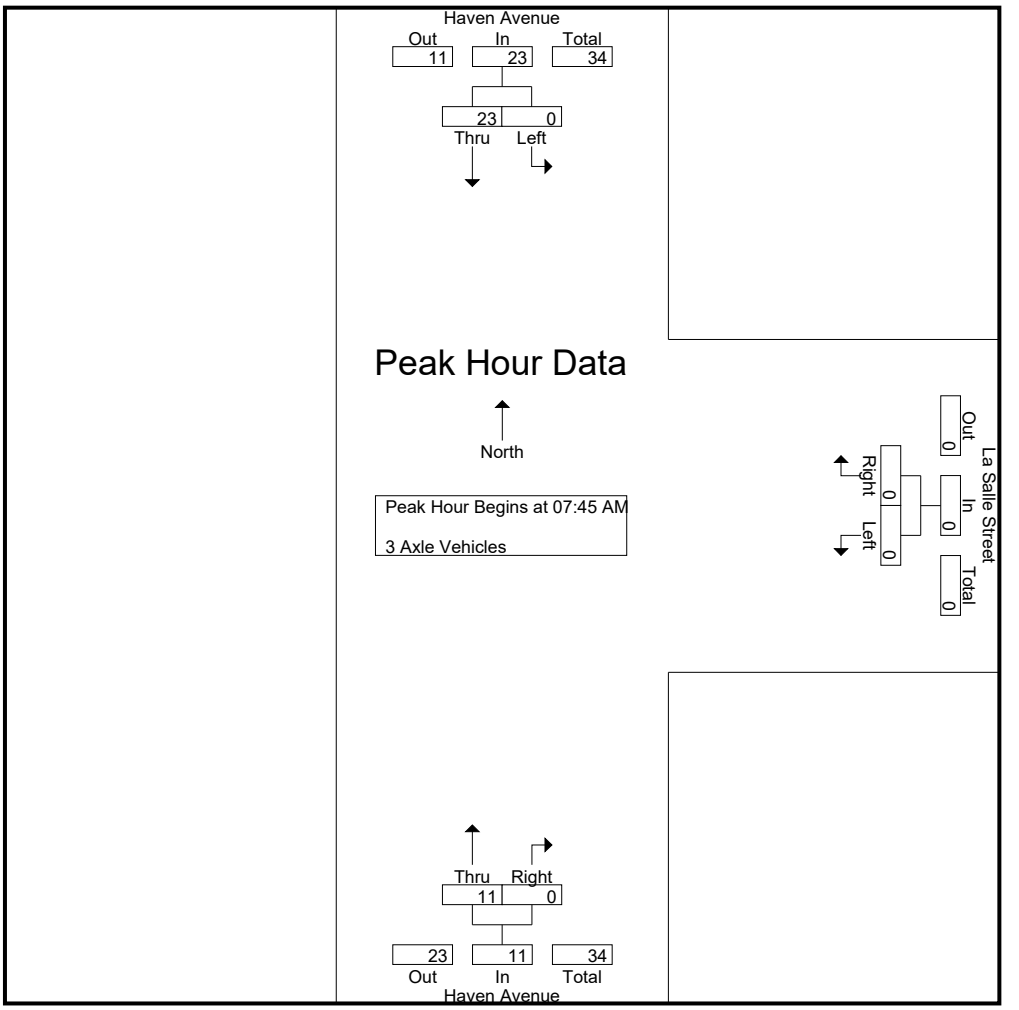
	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	5	5	0	0	0	5	0	5	10
07:15 AM	0	2	2	0	0	0	3	0	3	5
07:30 AM	0	1	1	0	0	0	2	0	2	3
07:45 AM	0	3	3	0	0	0	2	0	2	5
Total	0	11	11	0	0	0	12	0	12	23
08:00 AM	0	9	9	0	0	0	3	0	3	12
08:15 AM	0	5	5	0	0	0	6	0	6	11
08:30 AM	0	6	6	0	0	0	0	0	0	6
08:45 AM	0	6	6	0	0	0	7	0	7	13
Total	0	26	26	0	0	0	16	0	16	42
Grand Total	0	37	37	0	0	0	28	0	28	65
Apprch %	0	100		0	0		100	0		
Total %	0	56.9	56.9	0	0	0	43.1	0	43.1	

	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	3	3	0	0	0	2	0	2	5
08:00 AM	0	**9**	**9**	0	0	0	3	0	3	**12**
08:15 AM	0	5	5	0	0	0	**6**	0	**6**	11
08:30 AM	0	6	6	0	0	0	0	0	0	6
Total Volume	0	23	23	0	0	0	11	0	11	34
% App. Total	0	100		0	0		100	0		
PHF	.000	.639	.639	.000	.000	.000	.458	.000	.458	.708

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	3	3	0	0	0	2	0	2
+15 mins.	0	**9**	**9**	0	0	0	3	0	3
+30 mins.	0	5	5	0	0	0	**6**	0	**6**
+45 mins.	0	6	6	0	0	0	0	0	0
Total Volume	0	23	23	0	0	0	11	0	11
% App. Total	0	100		0	0		100	0	
PHF	.000	.639	.639	.000	.000	.000	.458	.000	.458

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

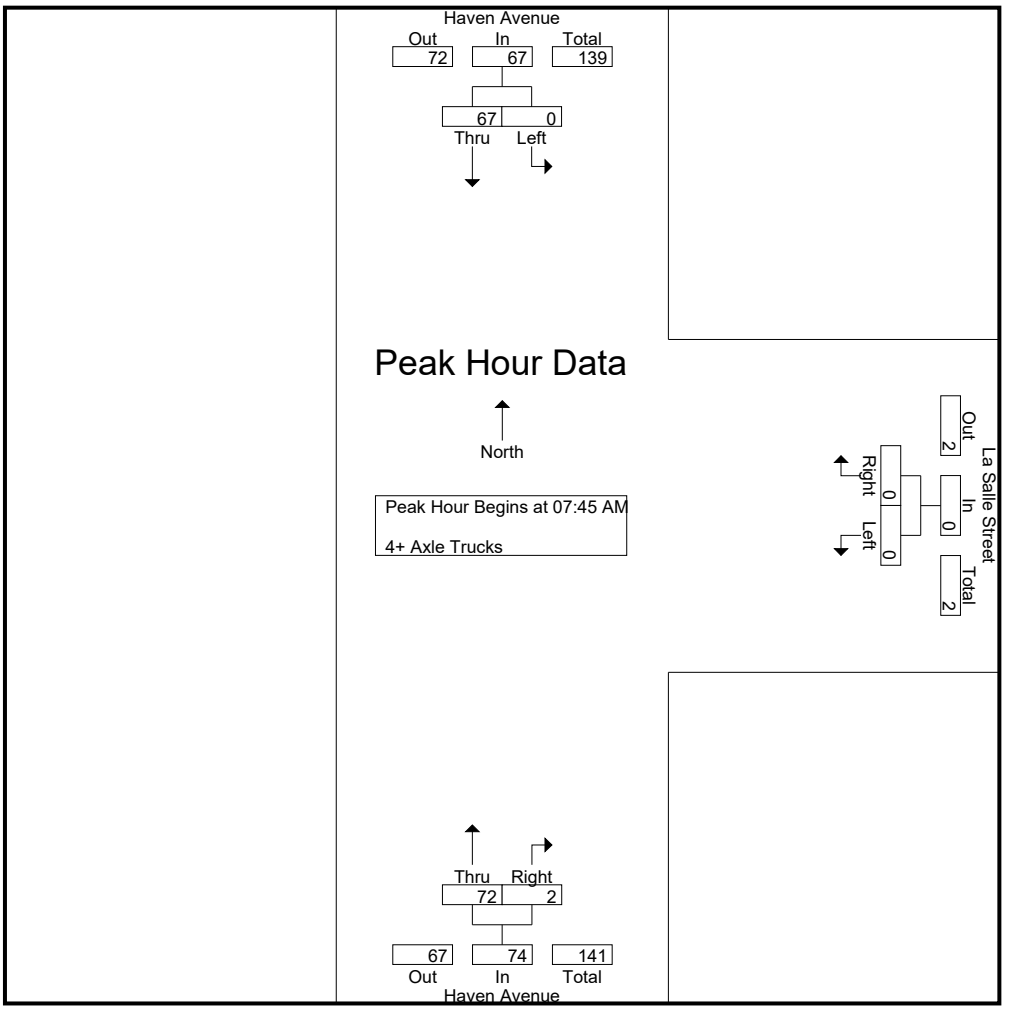
	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	10	10	0	0	0	6	1	7	17
07:15 AM	0	12	12	0	0	0	15	2	17	29
07:30 AM	0	9	9	0	1	1	17	0	17	27
07:45 AM	0	14	14	0	0	0	23	0	23	37
Total	0	45	45	0	1	1	61	3	64	110
08:00 AM	0	15	15	0	0	0	12	1	13	28
08:15 AM	0	22	22	0	0	0	18	0	18	40
08:30 AM	0	16	16	0	0	0	19	1	20	36
08:45 AM	0	14	14	0	0	0	18	0	18	32
Total	0	67	67	0	0	0	67	2	69	136
Grand Total	0	112	112	0	1	1	128	5	133	246
Apprch %	0	100		0	100		96.2	3.8		
Total %	0	45.5	45.5	0	0.4	0.4	52	2	54.1	

	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	14	14	0	0	0	**23**	0	**23**	37
08:00 AM	0	15	15	0	0	0	12	**1**	13	28
08:15 AM	0	**22**	**22**	0	0	0	18	0	18	**40**
08:30 AM	0	16	16	0	0	0	19	1	20	36
Total Volume	0	67	67	0	0	0	72	2	74	141
% App. Total	0	100		0	0		97.3	2.7		
PHF	.000	.761	.761	.000	.000	.000	.783	.500	.804	.881

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM			07:45 AM			07:45 AM		
+0 mins.	0	14	14	0	0	0	**23**	0	**23**
+15 mins.	0	15	15	0	0	0	12	**1**	13
+30 mins.	0	**22**	**22**	0	0	0	18	0	18
+45 mins.	0	16	16	0	0	0	19	1	20
Total Volume	0	67	67	0	0	0	72	2	74
% App. Total	0	100		0	0		97.3	2.7	
PHF	.000	.761	.761	.000	.000	.000	.783	.500	.804

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

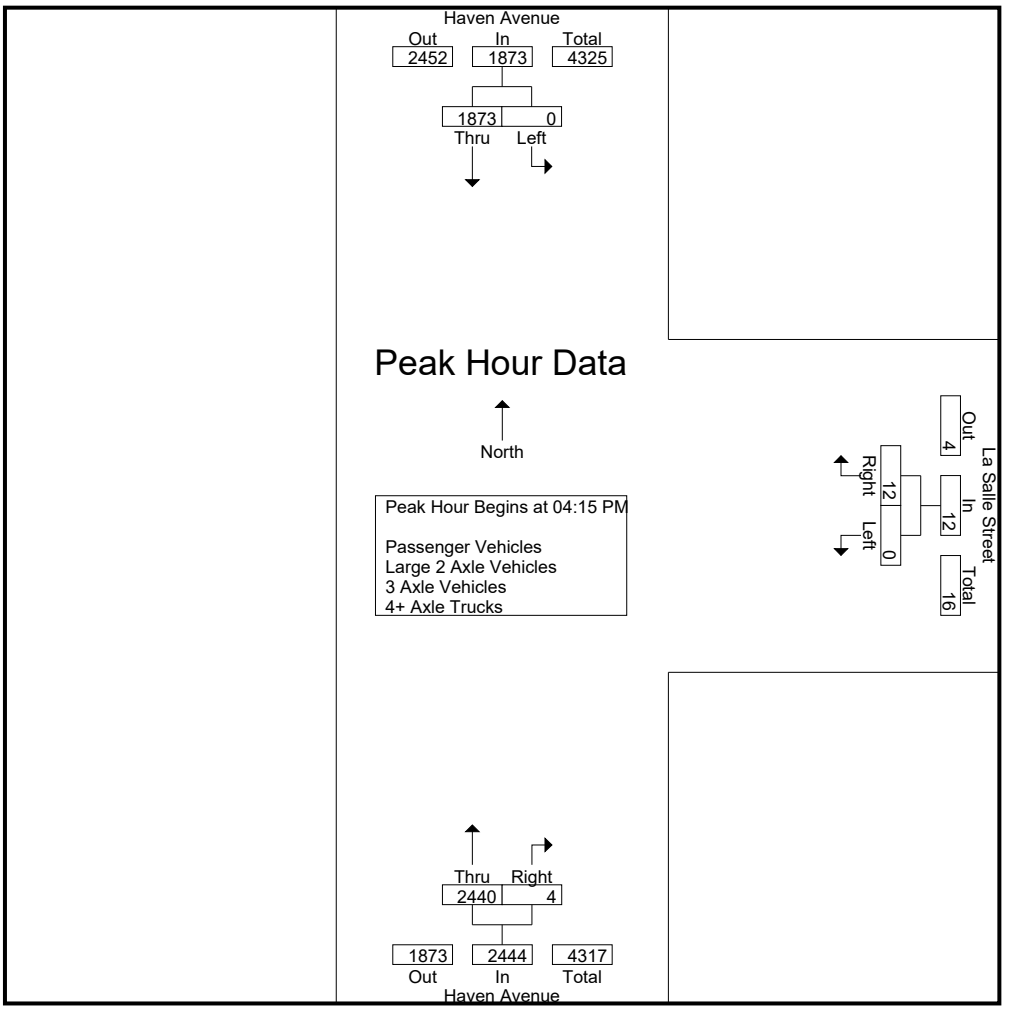
	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	426	426	0	4	4	580	1	581	1011
04:15 PM	0	475	475	0	2	2	640	1	641	1118
04:30 PM	0	489	489	0	5	5	612	1	613	1107
04:45 PM	0	442	442	0	1	1	610	1	611	1054
Total	0	1832	1832	0	12	12	2442	4	2446	4290
05:00 PM	0	467	467	0	4	4	578	1	579	1050
05:15 PM	0	479	479	0	0	0	620	0	620	1099
05:30 PM	0	413	413	0	2	2	603	2	605	1020
05:45 PM	0	353	353	0	2	2	542	1	543	898
Total	0	1712	1712	0	8	8	2343	4	2347	4067
Grand Total	0	3544	3544	0	20	20	4785	8	4793	8357
Apprch %	0	100		0	100		99.8	0.2		
Total %	0	42.4	42.4	0	0.2	0.2	57.3	0.1	57.4	
Passenger Vehicles	0	3276	3276	0	16	16	4550	3	4553	7845
% Passenger Vehicles	0	92.4	92.4	0	80	80	95.1	37.5	95	93.9
Large 2 Axle Vehicles	0	125	125	0	0	0	78	1	79	204
% Large 2 Axle Vehicles	0	3.5	3.5	0	0	0	1.6	12.5	1.6	2.4
3 Axle Vehicles	0	31	31	0	1	1	29	2	31	63
% 3 Axle Vehicles	0	0.9	0.9	0	5	5	0.6	25	0.6	0.8
4+ Axle Trucks	0	112	112	0	3	3	128	2	130	245
% 4+ Axle Trucks	0	3.2	3.2	0	15	15	2.7	25	2.7	2.9

	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	475	475	0	2	2	**640**	**1**	**641**	**1118**
04:30 PM	0	**489**	**489**	0	**5**	**5**	612	1	613	1107
04:45 PM	0	442	442	0	1	1	610	1	611	1054
05:00 PM	0	467	467	0	4	4	578	1	579	1050
Total Volume	0	1873	1873	0	12	12	2440	4	2444	4329
% App. Total	0	100		0	100		99.8	0.2		
PHF	.000	.958	.958	.000	.600	.600	.953	1.00	.953	.968

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			04:00 PM			04:00 PM		
+0 mins.	0	**489**	**489**	0	4	4	580	**1**	581
+15 mins.	0	442	442	0	2	2	**640**	1	**641**
+30 mins.	0	467	467	0	**5**	**5**	612	1	613
+45 mins.	0	479	479	0	1	1	610	1	611
Total Volume	0	1877	1877	0	12	12	2442	4	2446
% App. Total	0	100		0	100		99.8	0.2	
PHF	.000	.960	.960	.000	.600	.600	.954	1.000	.954

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

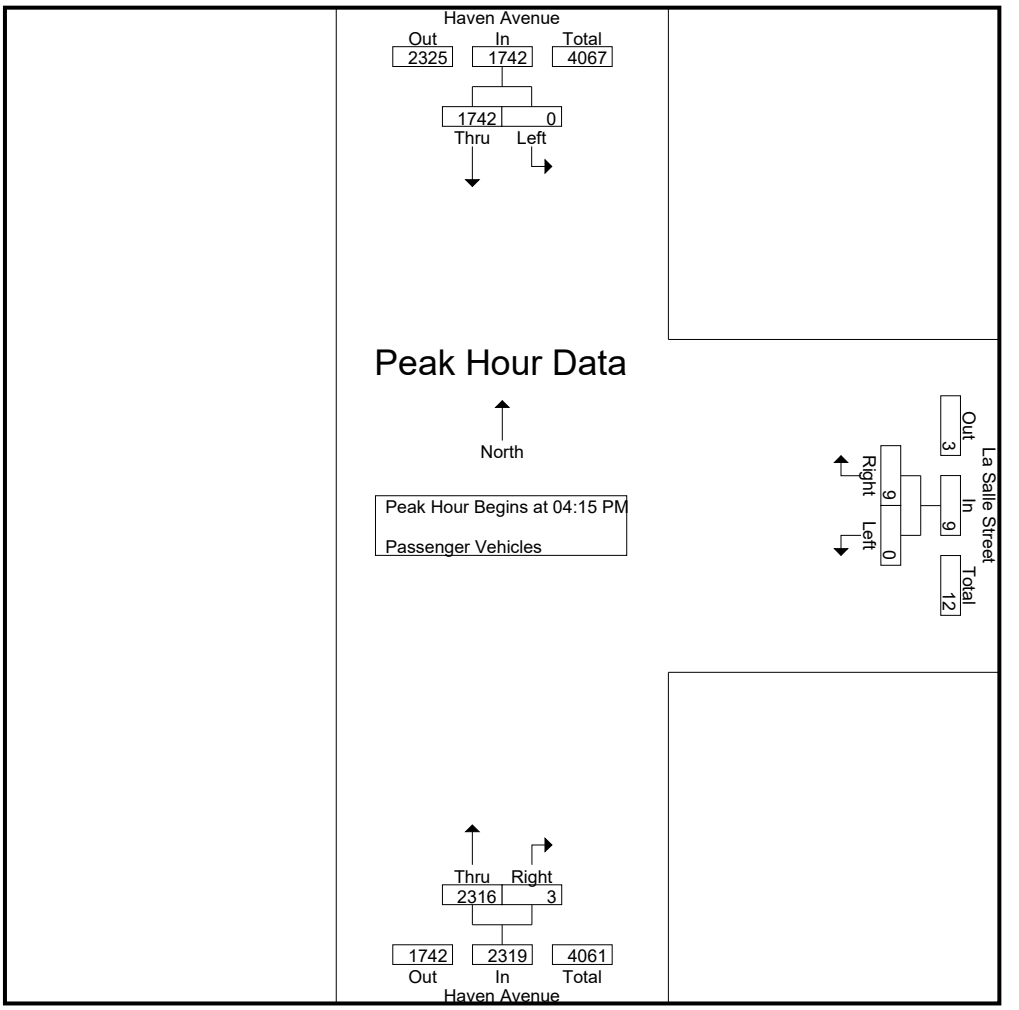
	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	401	401	0	3	3	541	0	541	945
04:15 PM	0	437	437	0	2	2	602	1	603	1042
04:30 PM	0	455	455	0	4	4	580	1	581	1040
04:45 PM	0	409	409	0	1	1	581	0	581	991
Total	0	1702	1702	0	10	10	2304	2	2306	4018
05:00 PM	0	441	441	0	2	2	553	1	554	997
05:15 PM	0	439	439	0	0	0	603	0	603	1042
05:30 PM	0	378	378	0	2	2	575	0	575	955
05:45 PM	0	316	316	0	2	2	515	0	515	833
Total	0	1574	1574	0	6	6	2246	1	2247	3827
Grand Total	0	3276	3276	0	16	16	4550	3	4553	7845
Apprch %	0	100		0	100		99.9	0.1		
Total %	0	41.8	41.8	0	0.2	0.2	58	0	58	

	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	437	437	0	2	2	**602**	**1**	**603**	**1042**
04:30 PM	0	**455**	**455**	0	**4**	**4**	580	1	581	1040
04:45 PM	0	409	409	0	1	1	581	0	581	991
05:00 PM	0	441	441	0	2	2	553	1	554	997
Total Volume	0	1742	1742	0	9	9	2316	3	2319	4070
% App. Total	0	100		0	100		99.9	0.1		
PHF	.000	.957	.957	.000	.563	.563	.962	.750	.961	.976

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	437	437	0	2	2	**602**	**1**	**603**
+15 mins.	0	**455**	**455**	0	**4**	**4**	580	1	581
+30 mins.	0	409	409	0	1	1	581	0	581
+45 mins.	0	441	441	0	2	2	553	1	554
Total Volume	0	1742	1742	0	9	9	2316	3	2319
% App. Total	0	100		0	100		99.9	0.1	
PHF	.000	.957	.957	.000	.563	.563	.962	.750	.961

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

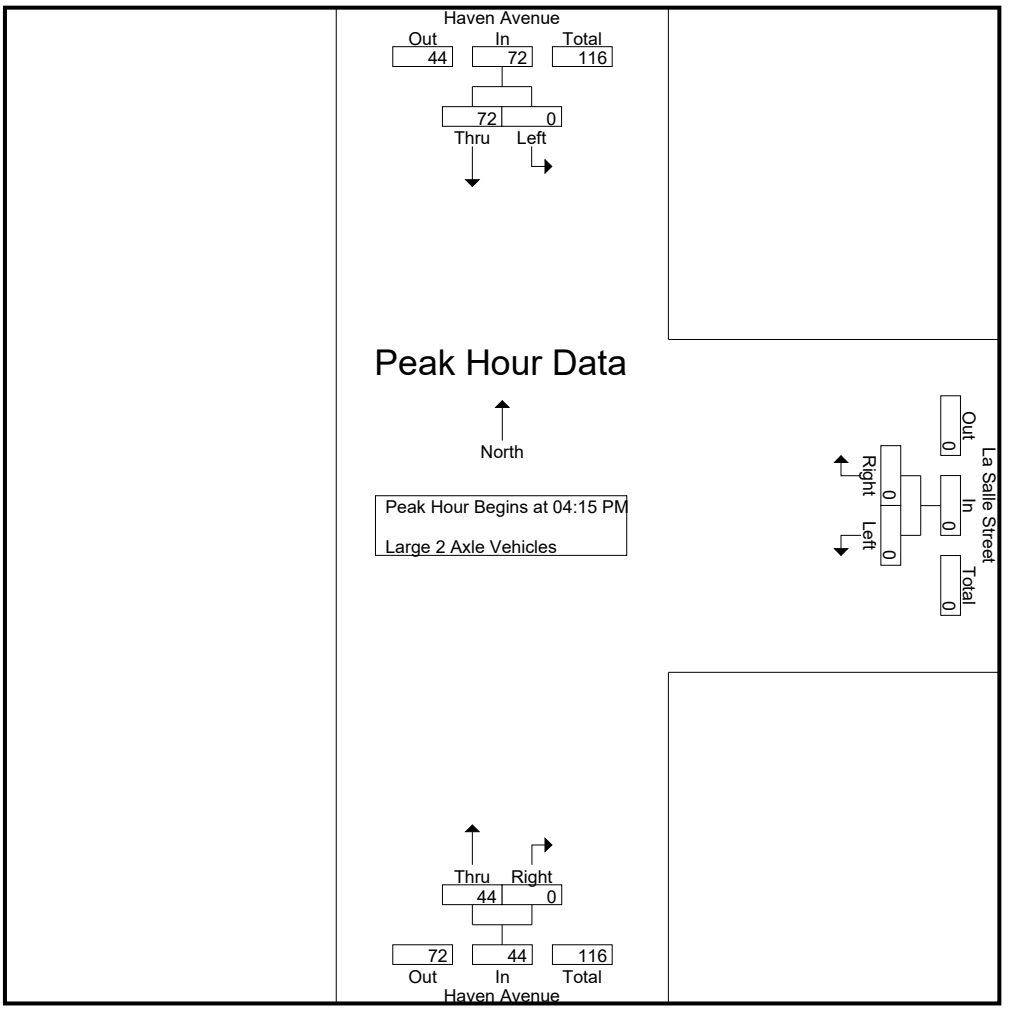
	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	5	5	0	0	0	12	0	12	17
04:15 PM	0	18	18	0	0	0	14	0	14	32
04:30 PM	0	20	20	0	0	0	13	0	13	33
04:45 PM	0	20	20	0	0	0	9	0	9	29
Total	0	63	63	0	0	0	48	0	48	111
05:00 PM	0	14	14	0	0	0	8	0	8	22
05:15 PM	0	20	20	0	0	0	10	0	10	30
05:30 PM	0	11	11	0	0	0	5	0	5	16
05:45 PM	0	17	17	0	0	0	7	1	8	25
Total	0	62	62	0	0	0	30	1	31	93
Grand Total	0	125	125	0	0	0	78	1	79	204
Apprch %	0	100		0	0		98.7	1.3		
Total %	0	61.3	61.3	0	0	0	38.2	0.5	38.7	

	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	18	18	0	0	0	**14**	0	**14**	32
04:30 PM	0	**20**	**20**	0	0	0	13	0	13	**33**
04:45 PM	0	20	20	0	0	0	9	0	9	29
05:00 PM	0	14	14	0	0	0	8	0	8	22
Total Volume	0	72	72	0	0	0	44	0	44	116
% App. Total	0	100		0	0		100	0		
PHF	.000	.900	.900	.000	.000	.000	.786	.000	.786	.879

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	18	18	0	0	0	**14**	0	**14**
+15 mins.	0	**20**	**20**	0	0	0	13	0	13
+30 mins.	0	20	20	0	0	0	9	0	9
+45 mins.	0	14	14	0	0	0	8	0	8
Total Volume	0	72	72	0	0	0	44	0	44
% App. Total	0	100		0	0		100	0	
PHF	.000	.900	.900	.000	.000	.000	.786	.000	.786

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

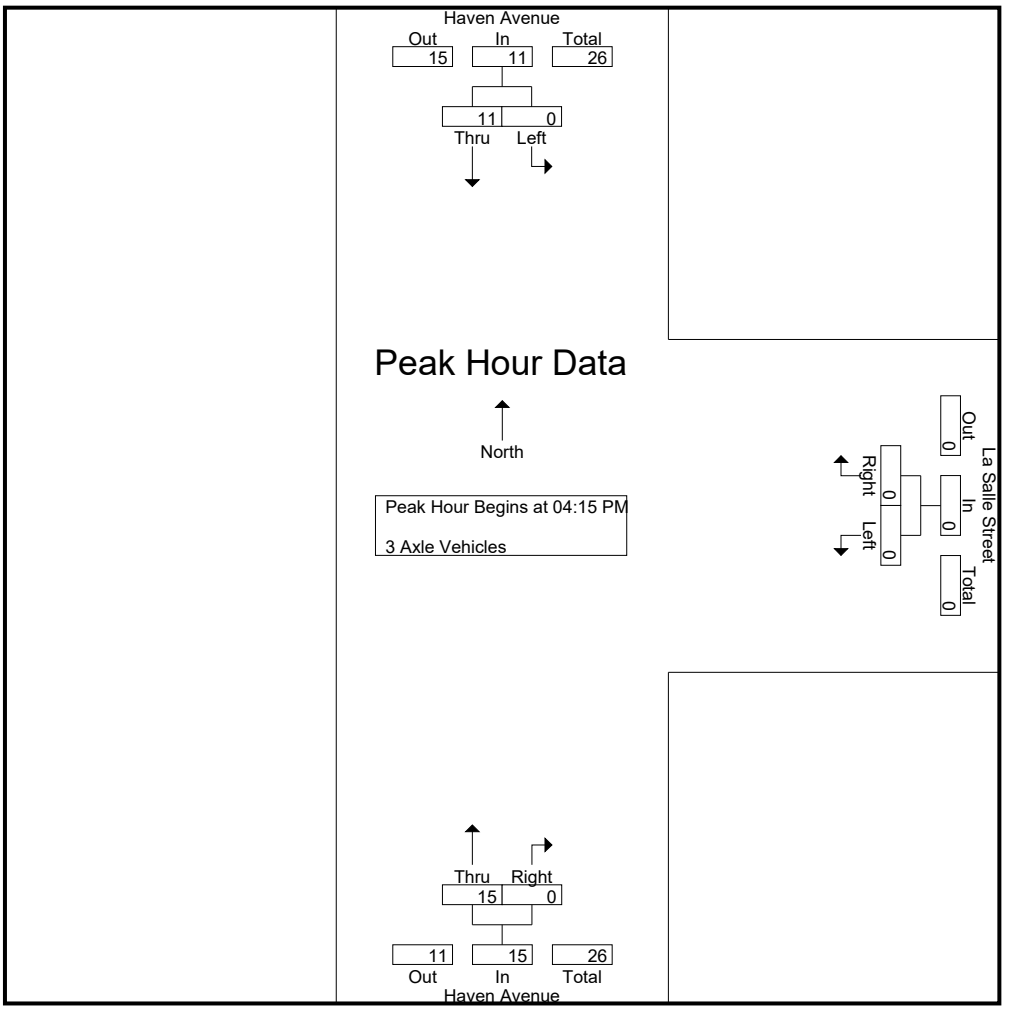
	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	8	8	0	1	1	8	1	9	18
04:15 PM	0	6	6	0	0	0	3	0	3	9
04:30 PM	0	1	1	0	0	0	6	0	6	7
04:45 PM	0	2	2	0	0	0	4	0	4	6
Total	0	17	17	0	1	1	21	1	22	40
05:00 PM	0	2	2	0	0	0	2	0	2	4
05:15 PM	0	4	4	0	0	0	1	0	1	5
05:30 PM	0	5	5	0	0	0	2	1	3	8
05:45 PM	0	3	3	0	0	0	3	0	3	6
Total	0	14	14	0	0	0	8	1	9	23
Grand Total	0	31	31	0	1	1	29	2	31	63
Apprch %	0	100		0	100		93.5	6.5		
Total %	0	49.2	49.2	0	1.6	1.6	46	3.2	49.2	

	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	**6**	**6**	0	0	0	3	0	3	**9**
04:30 PM	0	1	1	0	0	0	**6**	0	**6**	7
04:45 PM	0	2	2	0	0	0	4	0	4	6
05:00 PM	0	2	2	0	0	0	2	0	2	4
Total Volume	0	11	11	0	0	0	15	0	15	26
% App. Total	0	100		0	0		100	0		
PHF	.000	.458	.458	.000	.000	.000	.625	.000	.625	.722

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	**6**	**6**	0	0	0	3	0	3
+15 mins.	0	1	1	0	0	0	**6**	0	**6**
+30 mins.	0	2	2	0	0	0	4	0	4
+45 mins.	0	2	2	0	0	0	2	0	2
Total Volume	0	11	11	0	0	0	15	0	15
% App. Total	0	100		0	0		100	0	
PHF	.000	.458	.458	.000	.000	.000	.625	.000	.625

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	12	12	0	0	0	19	0	19	31
04:15 PM	0	14	14	0	0	0	21	0	21	35
04:30 PM	0	13	13	0	1	1	13	0	13	27
04:45 PM	0	11	11	0	0	0	16	1	17	28
Total	0	50	50	0	1	1	69	1	70	121
05:00 PM	0	10	10	0	2	2	15	0	15	27
05:15 PM	0	16	16	0	0	0	6	0	6	22
05:30 PM	0	19	19	0	0	0	21	1	22	41
05:45 PM	0	17	17	0	0	0	17	0	17	34
Total	0	62	62	0	2	2	59	1	60	124
Grand Total	0	112	112	0	3	3	128	2	130	245
Apprch %	0	100		0	100		98.5	1.5		
Total %	0	45.7	45.7	0	1.2	1.2	52.2	0.8	53.1	

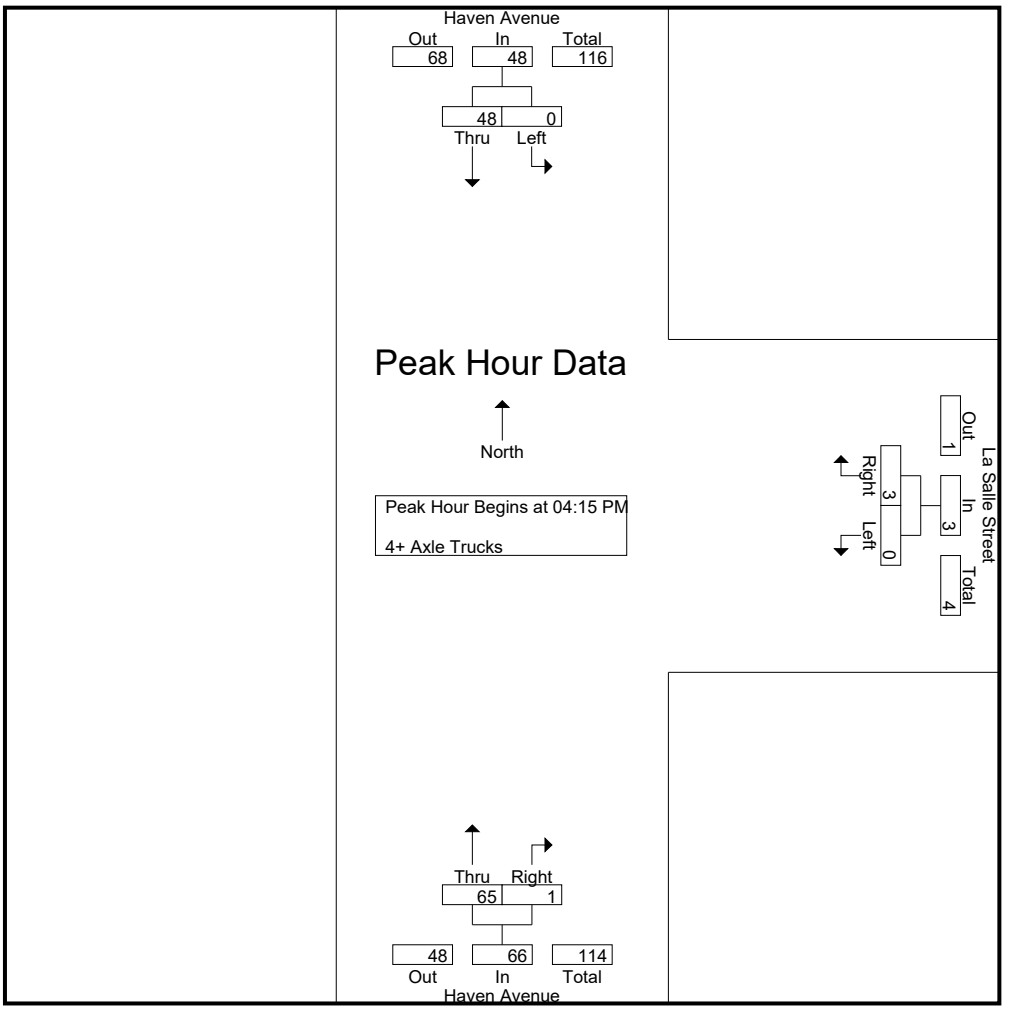
	Haven Avenue Southbound			La Salle Street Westbound			Haven Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	**14**	**14**	0	0	0	**21**	0	**21**	**35**
04:30 PM	0	13	13	0	1	1	13	0	13	27
04:45 PM	0	11	11	0	0	0	16	**1**	17	28
05:00 PM	0	10	10	0	**2**	**2**	15	0	15	27
Total Volume	0	48	48	0	3	3	65	1	66	117
% App. Total	0	100		0	100		98.5	1.5		
PHF	.000	.857	.857	.000	.375	.375	.774	.250	.786	.836

4133

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: La Salle Street
Weather: Clear

File Name : 06_ONT_Hav_La S PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	**14**	**14**	0	0	0	**21**	0	**21**
+15 mins.	0	13	13	0	1	1	13	0	13
+30 mins.	0	11	11	0	0	0	16	**1**	17
+45 mins.	0	10	10	0	**2**	**2**	15	0	15
Total Volume	0	48	48	0	3	3	65	1	66
% App. Total	0	100		0	100		98.5	1.5	
PHF	.000	.857	.857	.000	.375	.375	.774	.250	.786

Location: Ontario
N/S: Haven Avenue
E/W: La Salle Street

Date: 11/18/2021
Day: Thursday

PEDESTRIANS

	North Leg Haven Avenue	East Leg La Salle Street	South Leg Haven Avenue	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Haven Avenue	East Leg La Salle Street	South Leg Haven Avenue	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Ontario
N/S: Haven Avenue
E/W: La Salle Street

Date: 11/18/2021
Day: Thursday

BICYCLES

	Southbound Haven Avenue			Westbound La Salle Street			Northbound Haven Avenue			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Haven Avenue			Westbound La Salle Street			Northbound Haven Avenue			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					Jurupa Street Westbound					Haven Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	10	130	62	0	202	44	52	11	8	107	12	210	27	18	249	49	34	19	13	102	39	660	699
07:15 AM	22	186	55	0	263	47	43	11	7	101	8	309	32	13	349	42	30	12	9	84	29	797	826
07:30 AM	14	192	80	0	286	65	69	11	8	145	18	293	34	25	345	62	33	14	5	109	38	885	923
07:45 AM	14	235	76	0	325	40	60	12	5	112	24	404	44	29	472	59	33	18	9	110	43	1019	1062
Total	60	743	273	0	1076	196	224	45	28	465	62	1216	137	85	1415	212	130	63	36	405	149	3361	3510
08:00 AM	20	203	102	0	325	40	50	14	8	104	13	314	45	25	372	70	46	21	7	137	40	938	978
08:15 AM	23	228	92	0	343	41	60	8	4	109	14	377	40	30	431	84	36	12	3	132	37	1015	1052
08:30 AM	14	198	88	0	300	42	54	7	4	103	13	319	32	15	364	68	32	9	4	109	23	876	899
08:45 AM	23	235	84	0	342	34	52	18	6	104	14	354	45	17	413	60	33	9	2	102	25	961	986
Total	80	864	366	0	1310	157	216	47	22	420	54	1364	162	87	1580	282	147	51	16	480	125	3790	3915
Grand Total	140	1607	639	0	2386	353	440	92	50	885	116	2580	299	172	2995	494	277	114	52	885	274	7151	7425
Apprch %	5.9	67.4	26.8			39.9	49.7	10.4			3.9	86.1	10			55.8	31.3	12.9					
Total %	2	22.5	8.9		33.4	4.9	6.2	1.3		12.4	1.6	36.1	4.2		41.9	6.9	3.9	1.6		12.4	3.7	96.3	
Passenger Vehicles	135	1487	557		2179	288	369	74		776	83	2416	248		2892	403	220	70		731	0	0	6578
% Passenger Vehicles	96.4	92.5	87.2	0	91.3	81.6	83.9	80.4	90	83	71.6	93.6	82.9	84.3	91.3	81.6	79.4	61.4	73.1	78	0	0	88.6
Large 2 Axle Vehicles	0	40	16		56	11	10	1		22	3	66	10		85	47	13	7		72	0	0	235
% Large 2 Axle Vehicles	0	2.5	2.5	0	2.3	3.1	2.3	1.1	0	2.4	2.6	2.6	3.3	3.5	2.7	9.5	4.7	6.1	9.6	7.7	0	0	3.2
3 Axle Vehicles	0	18	17		35	9	22	3		37	5	15	3		26	10	17	5		34	0	0	132
% 3 Axle Vehicles	0	1.1	2.7	0	1.5	2.5	5	3.3	6	4	4.3	0.6	1	1.7	0.8	2	6.1	4.4	3.8	3.6	0	0	1.8
4+ Axle Trucks	5	62	49		116	45	39	14		100	25	83	38		164	34	27	32		100	0	0	480
% 4+ Axle Trucks	3.6	3.9	7.7	0	4.9	12.7	8.9	15.2	4	10.7	21.6	3.2	12.7	10.5	5.2	6.9	9.7	28.1	13.5	10.7	0	0	6.5

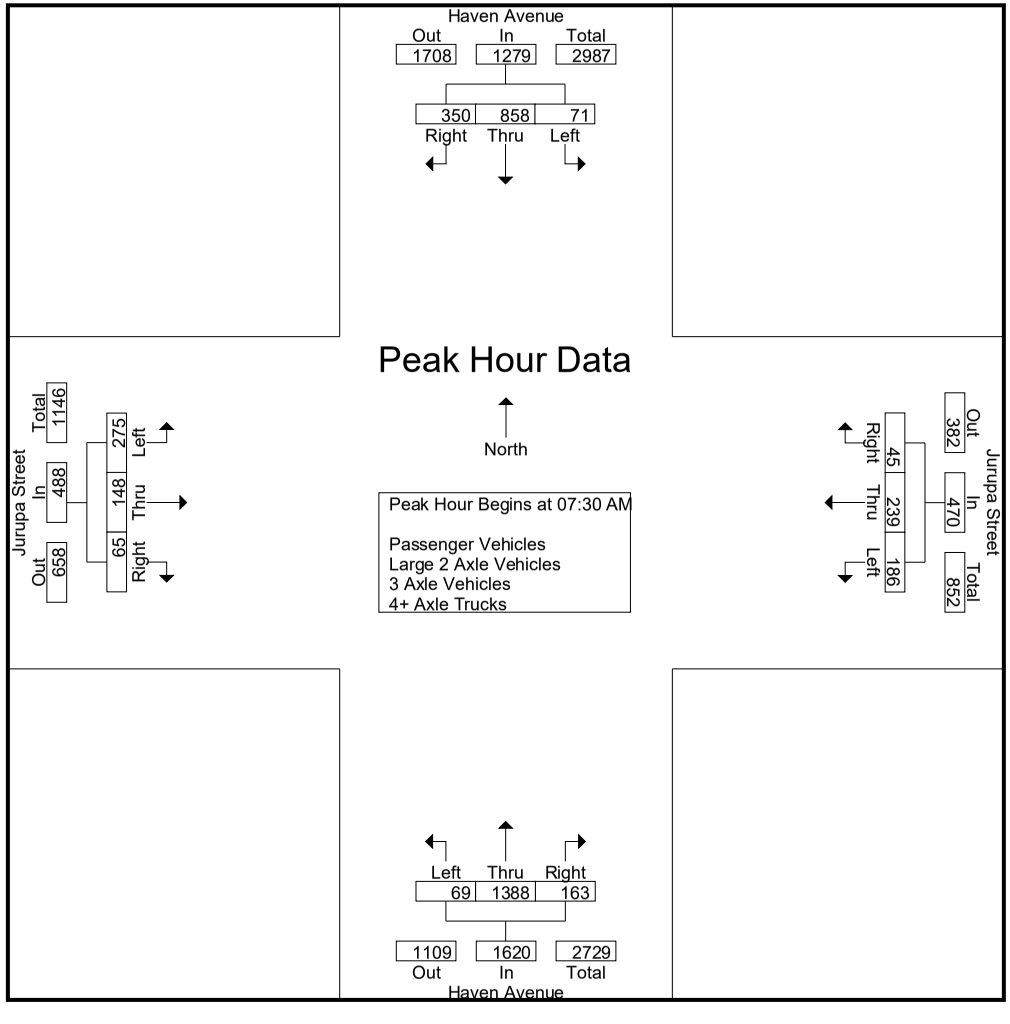
	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	14	192	80	286	**65**	**69**	11	**145**	18	293	34	345	62	33	14	109	885
07:45 AM	14	**235**	76	325	40	60	12	112	**24**	**404**	44	**472**	59	33	18	110	**1019**
08:00 AM	20	203	**102**	325	40	50	**14**	104	13	314	**45**	372	70	**46**	**21**	**137**	938
08:15 AM	**23**	228	92	**343**	41	60	8	109	14	377	40	431	**84**	36	12	132	1015
Total Volume	71	858	350	1279	186	239	45	470	69	1388	163	1620	275	148	65	488	3857
% App. Total	5.6	67.1	27.4		39.6	50.9	9.6		4.3	85.7	10.1		56.4	30.3	13.3		
PHF	.772	.913	.858	.932	.715	.866	.804	.810	.719	.859	.906	.858	.818	.804	.774	.891	.946

3.1-183

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	08:00 AM				07:30 AM				07:45 AM				07:30 AM				
+0 mins.	20	203	**102**	325	**65**	**69**	11	**145**	**24**	**404**	44	**472**	62	33	14	109	
+15 mins.	**23**	228	92	**343**	40	60	12	112	13	314	**45**	372	59	33	18	110	
+30 mins.	14	198	88	300	40	50	**14**	104	14	377	40	431	70	**46**	**21**	**137**	
+45 mins.	23	**235**	84	342	41	60	8	109	13	319	32	364	**84**	36	12	132	
Total Volume	80	864	366	1310	186	239	45	470	64	1414	161	1639	275	148	65	488	
% App. Total	6.1	66	27.9		39.6	50.9	9.6		3.9	86.3	9.8		56.4	30.3	13.3		
PHF	.870	.919	.897	.955	.715	.866	.804	.810	.667	.875	.894	.868	.818	.804	.774	.891	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

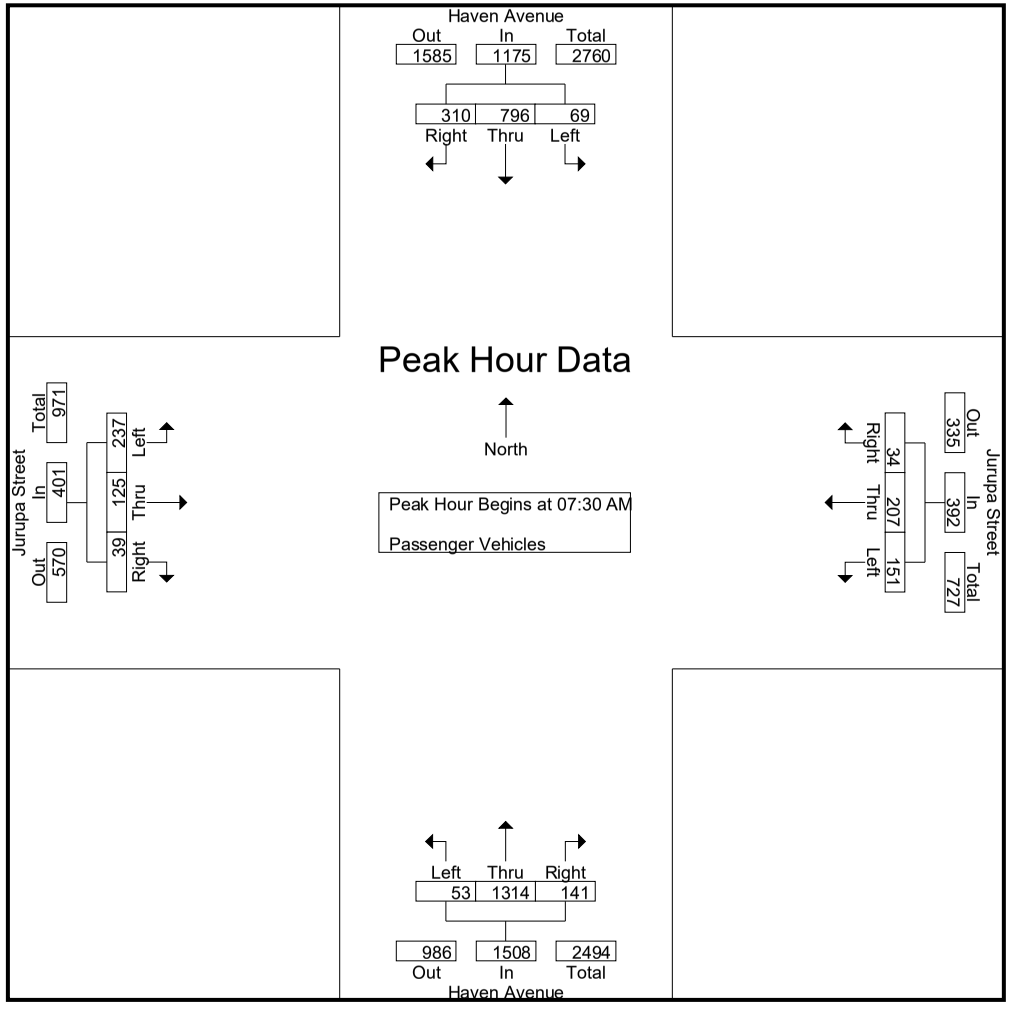
	Haven Avenue Southbound					Jurupa Street Westbound					Haven Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	9	120	52	0	181	33	46	10	7	89	7	192	22	14	221	34	28	14	11	76	32	567	599
07:15 AM	21	170	50	0	241	43	32	9	7	84	8	289	29	11	326	34	20	5	4	59	22	710	732
07:30 AM	14	186	74	0	274	57	59	11	8	127	13	275	29	24	317	50	26	9	3	85	35	803	838
07:45 AM	14	220	68	0	302	33	55	10	5	98	16	384	40	27	440	49	28	14	7	91	39	931	970
Total	58	696	244	0	998	166	192	40	27	398	44	1140	120	76	1304	167	102	42	25	311	128	3011	3139
08:00 AM	19	182	89	0	290	30	38	7	5	75	12	303	37	21	352	60	41	10	6	111	32	828	860
08:15 AM	22	208	79	0	309	31	55	6	3	92	12	352	35	28	399	78	30	6	2	114	33	914	947
08:30 AM	13	185	76	0	274	31	44	6	4	81	6	291	25	10	322	58	24	5	3	87	17	764	781
08:45 AM	23	216	69	0	308	30	40	15	6	85	9	330	31	10	370	40	23	7	2	70	18	833	851
Total	77	791	313	0	1181	122	177	34	18	333	39	1276	128	69	1443	236	118	28	13	382	100	3339	3439
Grand Total	135	1487	557	0	2179	288	369	74	45	731	83	2416	248	145	2747	403	220	70	38	693	228	6350	6578
Apprch %	6.2	68.2	25.6			39.4	50.5	10.1			3	88	9			58.2	31.7	10.1					
Total %	2.1	23.4	8.8		34.3	4.5	5.8	1.2		11.5	1.3	38	3.9		43.3	6.3	3.5	1.1		10.9	3.5	96.5	

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	14	186	74	274	**57**	**59**	**11**	**127**	13	275	29	317	50	26	9	85	803
07:45 AM	14	**220**	68	302	33	55	10	98	**16**	**384**	**40**	**440**	49	28	**14**	91	**931**
08:00 AM	19	182	**89**	290	30	38	7	75	12	303	37	352	60	**41**	10	111	828
08:15 AM	**22**	208	79	**309**	31	55	6	92	12	352	35	399	**78**	30	6	**114**	914
Total Volume	69	796	310	1175	151	207	34	392	53	1314	141	1508	237	125	39	401	3476
% App. Total	5.9	67.7	26.4		38.5	52.8	8.7		3.5	87.1	9.4		59.1	31.2	9.7		
PHF	.784	.905	.871	.951	.662	.877	.773	.772	.828	.855	.881	.857	.760	.762	.696	.879	.933

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	14	186	74	274	**57**	**59**	**11**	**127**	13	275	29	317	50	26	9	85	
+15 mins.	14	**220**	68	302	33	55	10	98	**16**	**384**	**40**	**440**	49	28	**14**	91	
+30 mins.	19	182	**89**	290	30	38	7	75	12	303	37	352	60	**41**	10	111	
+45 mins.	**22**	208	79	**309**	31	55	6	92	12	352	35	399	**78**	30	6	**114**	
Total Volume	69	796	310	1175	151	207	34	392	53	1314	141	1508	237	125	39	401	
% App. Total	5.9	67.7	26.4		38.5	52.8	8.7		3.5	87.1	9.4		59.1	31.2	9.7		
PHF	.784	.905	.871	.951	.662	.877	.773	.772	.828	.855	.881	.857	.760	.762	.696	.879	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

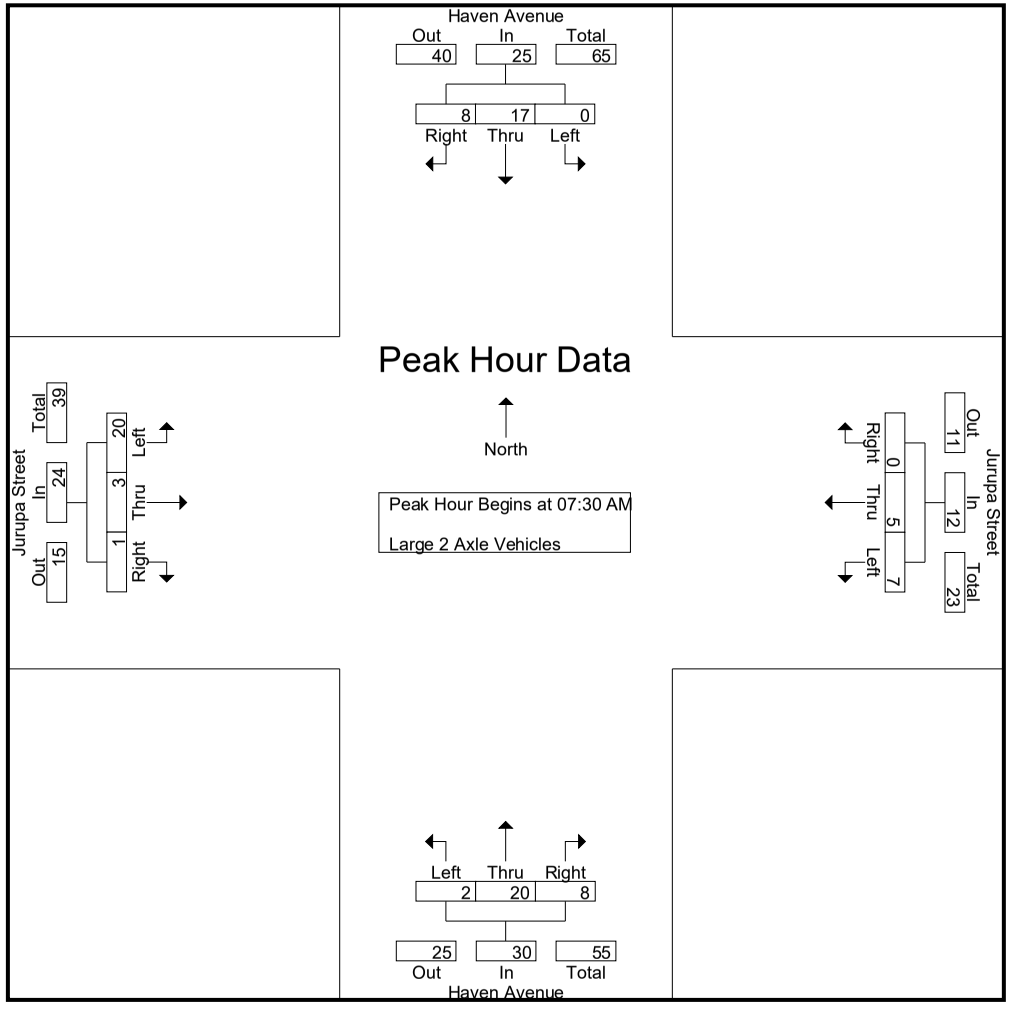
	Haven Avenue Southbound					Jurupa Street Westbound					Haven Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	5	1	0	6	1	0	0	0	1	1	11	0	0	12	11	1	1	1	13	1	32	33
07:15 AM	0	7	1	0	8	0	4	0	0	4	0	8	0	0	8	3	5	5	4	13	4	33	37
07:30 AM	0	2	1	0	3	2	1	0	0	3	1	4	1	1	6	7	1	0	0	8	1	20	21
07:45 AM	0	5	0	0	5	3	2	0	0	5	1	3	2	1	6	4	1	1	0	6	1	22	23
Total	0	19	3	0	22	6	7	0	0	13	3	26	3	2	32	25	8	7	5	40	7	107	114
08:00 AM	0	7	3	0	10	0	1	0	0	1	0	4	3	1	7	6	0	0	0	6	1	24	25
08:15 AM	0	3	4	0	7	2	1	0	0	3	0	9	2	1	11	3	1	0	0	4	1	25	26
08:30 AM	0	3	1	0	4	2	0	0	0	2	0	15	1	1	16	2	1	0	0	3	1	25	26
08:45 AM	0	8	5	0	13	1	1	1	0	3	0	12	1	1	13	11	3	0	0	14	1	43	44
Total	0	21	13	0	34	5	3	1	0	9	0	40	7	4	47	22	5	0	0	27	4	117	121
Grand Total	0	40	16	0	56	11	10	1	0	22	3	66	10	6	79	47	13	7	5	67	11	224	235
Apprch %	0	71.4	28.6			50	45.5	4.5			3.8	83.5	12.7			70.1	19.4	10.4					
Total %	0	17.9	7.1		25	4.9	4.5	0.4		9.8	1.3	29.5	4.5		35.3	21	5.8	3.1		29.9	4.7	95.3	

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	2	1	3	2	1	0	3	**1**	4	1	6	**7**	**1**	0	**8**	20
07:45 AM	0	5	0	5	**3**	**2**	0	**5**	1	3	2	6	4	1	**1**	6	22
08:00 AM	0	**7**	3	**10**	0	1	0	1	0	4	**3**	7	6	0	0	6	24
08:15 AM	0	3	**4**	7	2	1	0	3	0	**9**	2	**11**	3	1	0	4	**25**
Total Volume	0	17	8	25	7	5	0	12	2	20	8	30	20	3	1	24	91
% App. Total	0	68	32		58.3	41.7	0		6.7	66.7	26.7		83.3	12.5	4.2		
PHF	.000	.607	.500	.625	.583	.625	.000	.600	.500	.556	.667	.682	.714	.750	.250	.750	.910

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	2	1	3	2	1	0	3	**1**	4	1	6	**7**	**1**	0	**8**	
+15 mins.	0	5	0	5	**3**	**2**	0	**5**	1	3	2	6	4	1	**1**	6	
+30 mins.	0	**7**	3	**10**	0	1	0	1	0	4	**3**	7	6	0	0	6	
+45 mins.	0	3	**4**	7	2	1	0	3	0	**9**	2	**11**	3	1	0	4	
Total Volume	0	17	8	25	7	5	0	12	2	20	8	30	20	3	1	24	
% App. Total	0	68	32		58.3	41.7	0		6.7	66.7	26.7		83.3	12.5	4.2		
PHF	.000	.607	.500	.625	.583	.625	.000	.600	.500	.556	.667	.682	.714	.750	.250	.750	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

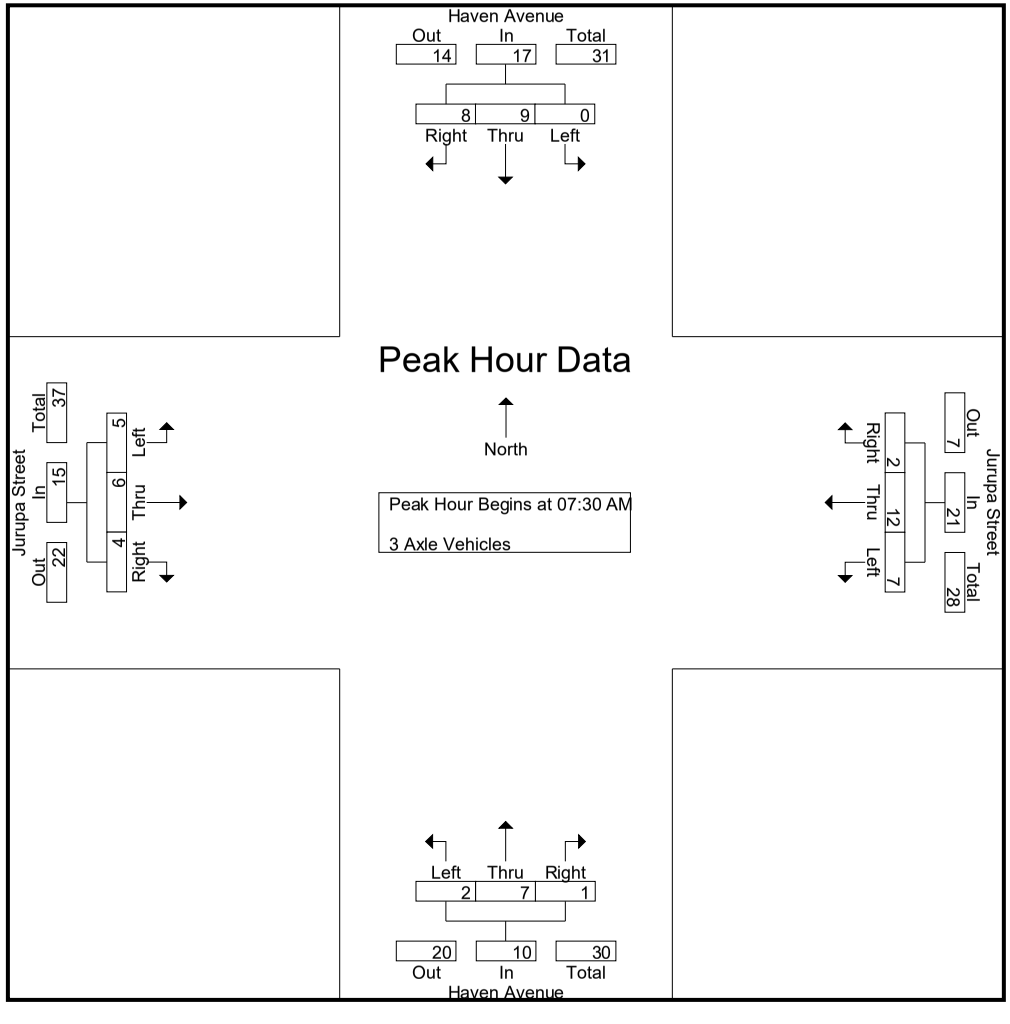
	Haven Avenue Southbound					Jurupa Street Westbound					Haven Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	2	2	0	4	1	1	1	1	3	0	3	1	1	4	1	2	1	0	4	2	15	17
07:15 AM	0	1	0	0	1	0	3	0	0	3	0	2	0	0	2	1	2	0	0	3	0	9	9
07:30 AM	0	0	0	0	0	1	6	0	0	7	1	0	0	0	1	2	0	2	1	4	1	12	13
07:45 AM	0	1	1	0	2	0	0	0	0	0	1	2	0	0	3	1	0	0	0	1	0	6	6
Total	0	4	3	0	7	2	10	1	1	13	2	7	1	1	10	5	4	3	1	12	3	42	45
08:00 AM	0	5	5	0	10	2	5	1	1	8	0	3	1	1	4	0	4	1	0	5	2	27	29
08:15 AM	0	3	2	0	5	4	1	1	1	6	0	2	0	0	2	2	2	1	1	5	2	18	20
08:30 AM	0	3	3	0	6	1	2	0	0	3	1	0	0	0	1	0	3	0	0	3	0	13	13
08:45 AM	0	3	4	0	7	0	4	0	0	4	2	3	1	1	6	3	4	0	0	7	1	24	25
Total	0	14	14	0	28	7	12	2	2	21	3	8	2	2	13	5	13	2	1	20	5	82	87
Grand Total	0	18	17	0	35	9	22	3	3	34	5	15	3	3	23	10	17	5	2	32	8	124	132
Apprch %	0	51.4	48.6			26.5	64.7	8.8			21.7	65.2	13			31.2	53.1	15.6					
Total %	0	14.5	13.7		28.2	7.3	17.7	2.4		27.4	4	12.1	2.4		18.5	8.1	13.7	4		25.8	6.1	93.9	

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	1	**6**	0	7	**1**	0	0	1	**2**	0	**2**	4	12
07:45 AM	0	1	1	2	0	0	0	0	1	2	0	3	1	0	0	1	6
08:00 AM	0	**5**	**5**	**10**	2	5	**1**	**8**	0	**3**	**1**	**4**	0	**4**	1	**5**	**27**
08:15 AM	0	3	2	5	**4**	1	1	6	0	2	0	2	2	2	1	5	18
Total Volume	0	9	8	17	7	12	2	21	2	7	1	10	5	6	4	15	63
% App. Total	0	52.9	47.1		33.3	57.1	9.5		20	70	10		33.3	40	26.7		
PHF	.000	.450	.400	.425	.438	.500	.500	.656	.500	.583	.250	.625	.625	.375	.500	.750	.583

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	1	**6**	0	7	**1**	0	0	1	**2**	0	**2**	4	
+15 mins.	0	1	1	2	0	0	0	0	1	2	0	3	1	0	0	1	
+30 mins.	0	**5**	**5**	**10**	2	5	**1**	**8**	0	**3**	**1**	**4**	0	**4**	1	**5**	
+45 mins.	0	3	2	5	**4**	1	1	6	0	2	0	2	2	2	1	5	
Total Volume	0	9	8	17	7	12	2	21	2	7	1	10	5	6	4	15	
% App. Total	0	52.9	47.1		33.3	57.1	9.5		20	70	10		33.3	40	26.7		
PHF	.000	.450	.400	.425	.438	.500	.500	.656	.500	.583	.250	.625	.625	.375	.500	.750	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

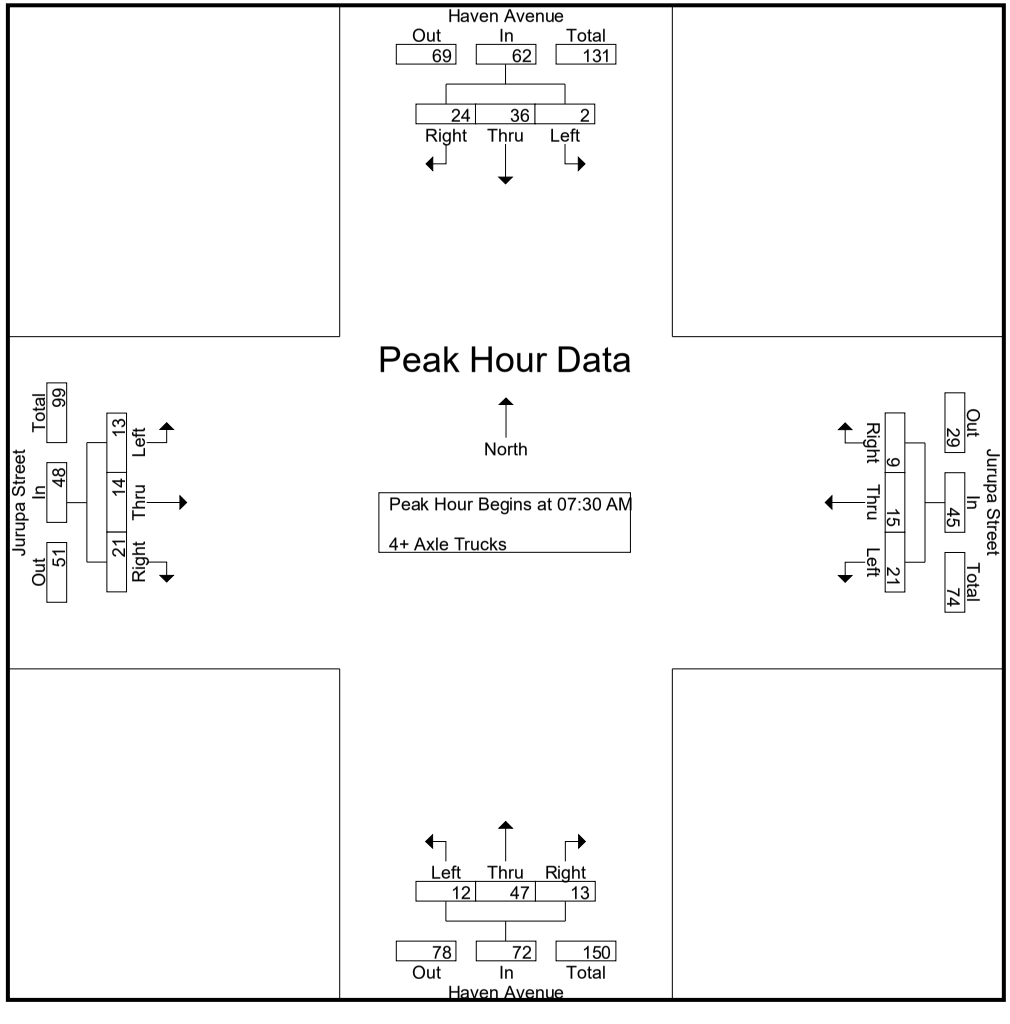
	Haven Avenue Southbound					Jurupa Street Westbound					Haven Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	3	7	0	11	9	5	0	0	14	4	4	4	3	12	3	3	3	1	9	4	46	50
07:15 AM	1	8	4	0	13	4	4	2	0	10	0	10	3	2	13	4	3	2	1	9	3	45	48
07:30 AM	0	4	5	0	9	5	3	0	0	8	3	14	4	0	21	3	6	3	1	12	1	50	51
07:45 AM	0	9	7	0	16	4	3	2	0	9	6	15	2	1	23	5	4	3	2	12	3	60	63
Total	2	24	23	0	49	22	15	4	0	41	13	43	13	6	69	15	16	11	5	42	11	201	212
08:00 AM	1	9	5	0	15	8	6	6	2	20	1	4	4	2	9	4	1	10	1	15	5	59	64
08:15 AM	1	14	7	0	22	4	3	1	0	8	2	14	3	1	19	1	3	5	0	9	1	58	59
08:30 AM	1	7	8	0	16	8	8	1	0	17	6	13	6	4	25	8	4	4	1	16	5	74	79
08:45 AM	0	8	6	0	14	3	7	2	0	12	3	9	12	5	24	6	3	2	0	11	5	61	66
Total	3	38	26	0	67	23	24	10	2	57	12	40	25	12	77	19	11	21	2	51	16	252	268
Grand Total	5	62	49	0	116	45	39	14	2	98	25	83	38	18	146	34	27	32	7	93	27	453	480
Apprch %	4.3	53.4	42.2			45.9	39.8	14.3			17.1	56.8	26			36.6	29	34.4					
Total %	1.1	13.7	10.8		25.6	9.9	8.6	3.1		21.6	5.5	18.3	8.4		32.2	7.5	6	7.1		20.5	5.6	94.4	

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	4	5	9	5	3	0	8	3	14	**4**	21	3	**6**	3	12	50
07:45 AM	0	9	**7**	16	4	3	2	9	**6**	**15**	2	**23**	**5**	4	3	12	**60**
08:00 AM	**1**	9	5	15	**8**	**6**	**6**	**20**	1	4	4	9	4	1	**10**	**15**	59
08:15 AM	1	**14**	7	**22**	4	3	1	8	2	14	3	19	1	3	5	9	58
Total Volume	2	36	24	62	21	15	9	45	12	47	13	72	13	14	21	48	227
% App. Total	3.2	58.1	38.7		46.7	33.3	20		16.7	65.3	18.1		27.1	29.2	43.8		
PHF	.500	.643	.857	.705	.656	.625	.375	.563	.500	.783	.813	.783	.650	.583	.525	.800	.946

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa AM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	4	5	9	5	3	0	8	3	14	**4**	21	3	**6**	3	12	
+15 mins.	0	9	**7**	16	4	3	2	9	**6**	**15**	2	**23**	**5**	4	3	12	
+30 mins.	**1**	9	5	15	**8**	**6**	**6**	**20**	1	4	4	9	4	1	**10**	**15**	
+45 mins.	1	**14**	7	**22**	4	3	1	8	2	14	3	19	1	3	5	9	
Total Volume	2	36	24	62	21	15	9	45	12	47	13	72	13	14	21	48	
% App. Total	3.2	58.1	38.7		46.7	33.3	20		16.7	65.3	18.1		27.1	29.2	43.8		
PHF	.500	.643	.857	.705	.656	.625	.375	.563	.500	.783	.813	.783	.650	.583	.525	.800	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					Jurupa Street Westbound					Haven Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	28	299	82	0	409	52	57	33	14	142	16	456	44	15	516	105	70	13	7	188	36	1255	1291
04:15 PM	36	380	66	0	482	52	44	22	10	118	6	535	45	17	586	99	45	8	6	152	33	1338	1371
04:30 PM	47	378	71	0	496	44	59	34	14	137	18	464	60	30	542	103	64	7	4	174	48	1349	1397
04:45 PM	42	342	60	0	444	48	51	45	16	144	8	446	70	18	524	103	59	13	2	175	36	1287	1323
Total	153	1399	279	0	1831	196	211	134	54	541	48	1901	219	80	2168	410	238	41	19	689	153	5229	5382
05:00 PM	38	375	52	0	465	58	51	42	15	151	10	455	56	21	521	103	75	9	2	187	38	1324	1362
05:15 PM	58	355	73	0	486	60	40	53	12	153	10	495	58	23	563	87	53	10	5	150	40	1352	1392
05:30 PM	56	321	54	0	431	41	61	32	16	134	9	478	52	13	539	80	65	11	5	156	34	1260	1294
05:45 PM	31	264	48	0	343	40	50	25	6	115	17	418	47	25	482	84	47	8	3	139	34	1079	1113
Total	183	1315	227	0	1725	199	202	152	49	553	46	1846	213	82	2105	354	240	38	15	632	146	5015	5161
Grand Total	336	2714	506	0	3556	395	413	286	103	1094	94	3747	432	162	4273	764	478	79	34	1321	299	10244	10543
Apprch %	9.4	76.3	14.2			36.1	37.8	26.1			2.2	87.7	10.1			57.8	36.2	6					
Total %	3.3	26.5	4.9		34.7	3.9	4	2.8		10.7	0.9	36.6	4.2		41.7	7.5	4.7	0.8		12.9	2.8	97.2	
Passenger Vehicles	313	2605	376		3294	338	289	260		984	66	3610	351		4161	679	383	50		1139	0	0	9578
% Passenger Vehicles	93.2	96	74.3	0	92.6	85.6	70	90.9	94.2	82.2	70.2	96.3	81.2	82.7	93.8	88.9	80.1	63.3	79.4	84.1	0	0	90.8
Large 2 Axle Vehicles	5	56	57		118	14	52	8		78	11	56	20		94	24	28	3		58	0	0	348
% Large 2 Axle Vehicles	1.5	2.1	11.3	0	3.3	3.5	12.6	2.8	3.9	6.5	11.7	1.5	4.6	4.3	2.1	3.1	5.9	3.8	8.8	4.3	0	0	3.3
3 Axle Vehicles	5	16	6		27	11	17	2		30	1	14	18		40	10	14	5		32	0	0	129
% 3 Axle Vehicles	1.5	0.6	1.2	0	0.8	2.8	4.1	0.7	0	2.5	1.1	0.4	4.2	4.3	0.9	1.3	2.9	6.3	8.8	2.4	0	0	1.2
4+ Axle Trucks	13	37	67		117	32	55	16		105	16	67	43		140	51	53	21		126	0	0	488
% 4+ Axle Trucks	3.9	1.4	13.2	0	3.3	8.1	13.3	5.6	1.9	8.8	17	1.8	10	8.6	3.2	6.7	11.1	26.6	2.9	9.3	0	0	4.6

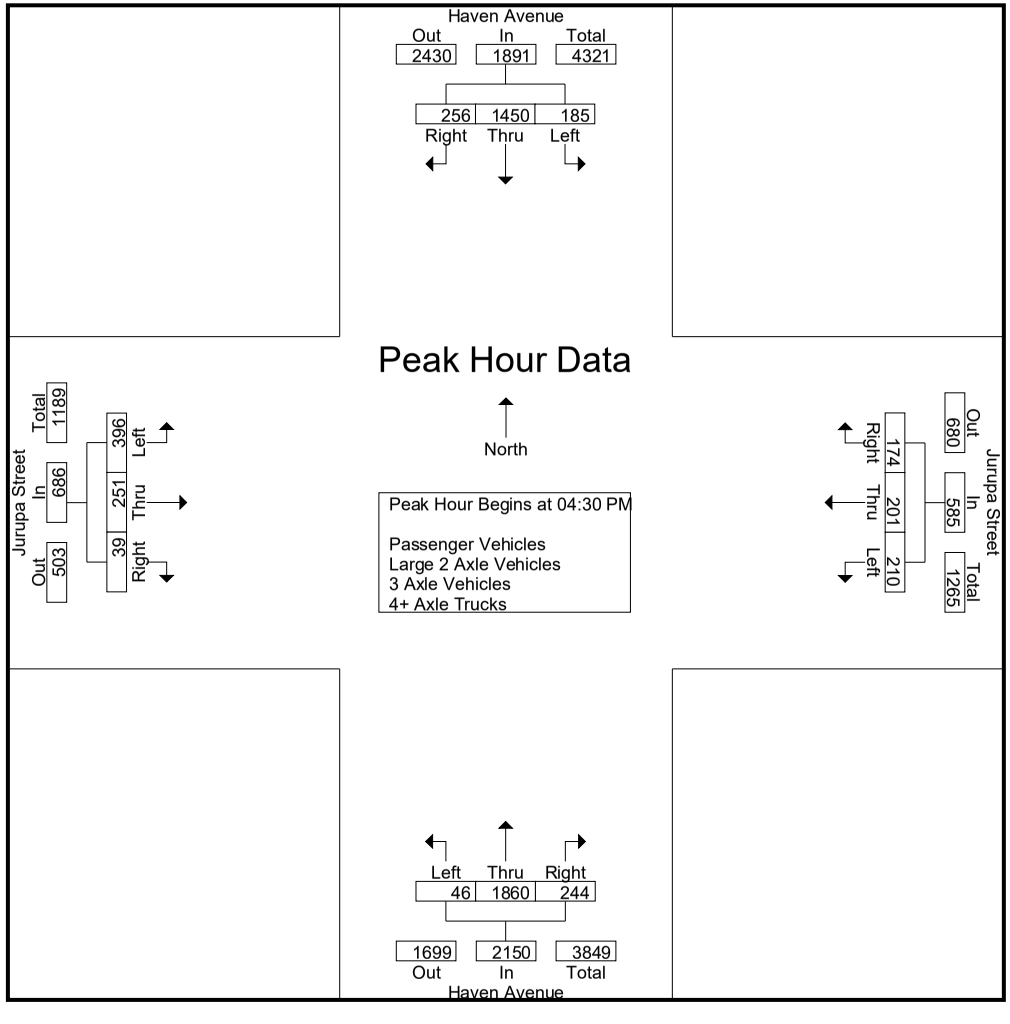
	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	47	**378**	71	**496**	44	**59**	34	137	**18**	464	60	542	**103**	64	7	174	1349
04:45 PM	42	342	60	444	48	51	45	144	8	446	**70**	524	103	59	**13**	175	1287
05:00 PM	38	375	52	465	58	51	42	151	10	455	56	521	103	**75**	9	**187**	1324
05:15 PM	**58**	355	**73**	486	**60**	40	**53**	**153**	10	**495**	58	**563**	87	53	10	150	**1352**
Total Volume	185	1450	256	1891	210	201	174	585	46	1860	244	2150	396	251	39	686	5312
% App. Total	9.8	76.7	13.5		35.9	34.4	29.7		2.1	86.5	11.3		57.7	36.6	5.7		
PHF	.797	.959	.877	.953	.875	.852	.821	.956	.639	.939	.871	.955	.961	.837	.750	.917	.982

3.1-198

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:15 PM				04:00 PM				
+0 mins.	47	**378**	71	**496**	44	**59**	34	137	6	**535**	45	**586**	**105**	**70**	**13**	**188**	
+15 mins.	42	342	60	444	48	51	45	144	**18**	464	60	542	99	45	8	152	
+30 mins.	38	375	52	465	58	51	42	151	8	446	**70**	524	103	64	7	174	
+45 mins.	**58**	355	**73**	486	**60**	40	**53**	**153**	10	455	56	521	103	59	13	175	
Total Volume	185	1450	256	1891	210	201	174	585	42	1900	231	2173	410	238	41	689	
% App. Total	9.8	76.7	13.5		35.9	34.4	29.7		1.9	87.4	10.6		59.5	34.5	6		
PHF	.797	.959	.877	.953	.875	.852	.821	.956	.583	.888	.825	.927	.976	.850	.788	.916	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					Jurupa Street Westbound					Haven Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	26	289	70	0	385	45	38	29	13	112	16	435	35	14	486	92	60	11	6	163	33	1146	1179
04:15 PM	33	364	52	0	449	43	37	21	10	101	2	508	41	13	551	85	36	5	5	126	28	1227	1255
04:30 PM	43	362	57	0	462	39	43	32	13	114	13	450	46	24	509	91	53	3	2	147	39	1232	1271
04:45 PM	39	326	46	0	411	40	37	40	14	117	7	427	55	15	489	95	43	6	2	144	31	1161	1192
Total	141	1341	225	0	1707	167	155	122	50	444	38	1820	177	66	2035	363	192	25	15	580	131	4766	4897
05:00 PM	37	364	38	0	439	52	37	37	13	126	6	438	48	19	492	96	62	7	2	165	34	1222	1256
05:15 PM	55	338	55	0	448	51	29	48	12	128	5	487	49	19	541	83	40	7	4	130	35	1247	1282
05:30 PM	51	308	35	0	394	34	40	30	16	104	7	463	39	10	509	65	51	8	4	124	30	1131	1161
05:45 PM	29	254	23	0	306	34	28	23	6	85	10	402	38	20	450	72	38	3	2	113	28	954	982
Total	172	1264	151	0	1587	171	134	138	47	443	28	1790	174	68	1992	316	191	25	12	532	127	4554	4681
Grand Total	313	2605	376	0	3294	338	289	260	97	887	66	3610	351	134	4027	679	383	50	27	1112	258	9320	9578
Apprch %	9.5	79.1	11.4			38.1	32.6	29.3			1.6	89.6	8.7			61.1	34.4	4.5					
Total %	3.4	28	4		35.3	3.6	3.1	2.8		9.5	0.7	38.7	3.8		43.2	7.3	4.1	0.5		11.9	2.7	97.3	

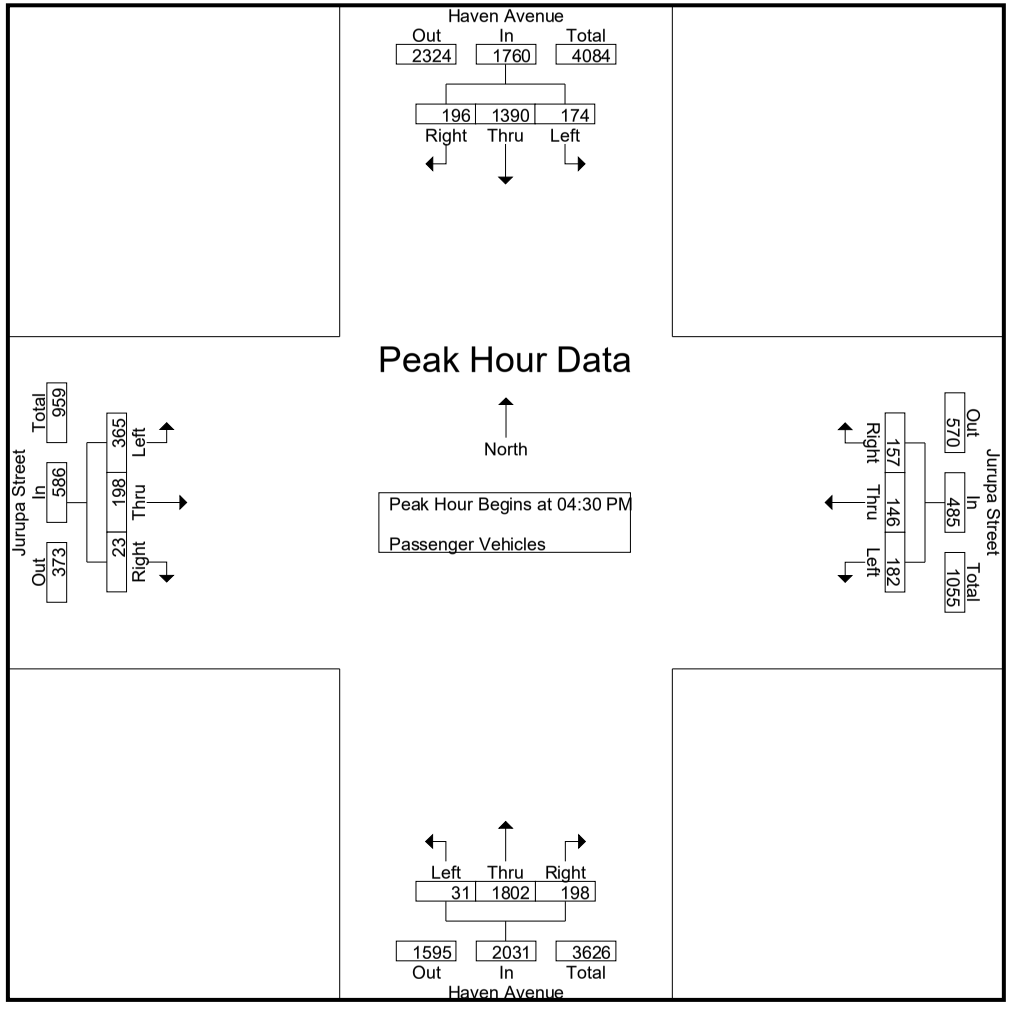
8.1-201

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	43	362	**57**	**462**	39	**43**	32	114	**13**	450	46	509	91	53	3	147	1232
04:45 PM	39	326	46	411	40	37	40	117	7	427	**55**	489	95	43	6	144	1161
05:00 PM	37	**364**	38	439	**52**	37	37	126	6	438	48	492	**96**	**62**	**7**	**165**	1222
05:15 PM	**55**	338	55	448	51	29	**48**	**128**	5	**487**	49	**541**	83	40	7	130	**1247**
Total Volume	174	1390	196	1760	182	146	157	485	31	1802	198	2031	365	198	23	586	4862
% App. Total	9.9	79	11.1		37.5	30.1	32.4		1.5	88.7	9.7		62.3	33.8	3.9		
PHF	.791	.955	.860	.952	.875	.849	.818	.947	.596	.925	.900	.939	.951	.798	.821	.888	.975

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	43	362	**57**	**462**	39	**43**	32	114	**13**	450	46	509	91	53	3	147	
+15 mins.	39	326	46	411	40	37	40	117	7	427	**55**	489	95	43	6	144	
+30 mins.	37	**364**	38	439	**52**	37	37	126	6	438	48	492	**96**	**62**	**7**	**165**	
+45 mins.	**55**	338	55	448	51	29	**48**	**128**	5	**487**	49	**541**	83	40	7	130	
Total Volume	174	1390	196	1760	182	146	157	485	31	1802	198	2031	365	198	23	586	
% App. Total	9.9	79	11.1		37.5	30.1	32.4		1.5	88.7	9.7		62.3	33.8	3.9		
PHF	.791	.955	.860	.952	.875	.849	.818	.947	.596	.925	.900	.939	.951	.798	.821	.888	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Haven Avenue Southbound					Jurupa Street Westbound					Haven Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	2	2	0	4	2	6	1	1	9	0	8	1	0	9	3	3	0	0	6	1	28	29
04:15 PM	2	6	7	0	15	0	3	0	0	3	0	13	1	1	14	5	1	0	0	6	1	38	39
04:30 PM	1	12	6	0	19	1	8	0	0	9	2	6	7	2	15	5	4	1	1	10	3	53	56
04:45 PM	0	9	12	0	21	3	6	1	1	10	0	7	4	0	11	3	5	0	0	8	1	50	51
Total	3	29	27	0	59	6	23	2	2	31	2	34	13	3	49	16	13	1	1	30	6	169	175
05:00 PM	0	6	6	0	12	3	7	3	2	13	2	6	1	1	9	2	4	0	0	6	3	40	43
05:15 PM	1	12	7	0	20	3	4	3	0	10	2	5	1	0	8	2	3	1	1	6	1	44	45
05:30 PM	0	4	8	0	12	1	8	0	0	9	1	3	3	1	7	3	5	1	1	9	2	37	39
05:45 PM	1	5	9	0	15	1	10	0	0	11	4	8	2	2	14	1	3	0	0	4	2	44	46
Total	2	27	30	0	59	8	29	6	2	43	9	22	7	4	38	8	15	2	2	25	8	165	173
Grand Total	5	56	57	0	118	14	52	8	4	74	11	56	20	7	87	24	28	3	3	55	14	334	348
Apprch %	4.2	47.5	48.3			18.9	70.3	10.8			12.6	64.4	23			43.6	50.9	5.5					
Total %	1.5	16.8	17.1		35.3	4.2	15.6	2.4		22.2	3.3	16.8	6		26	7.2	8.4	0.9		16.5	4	96	

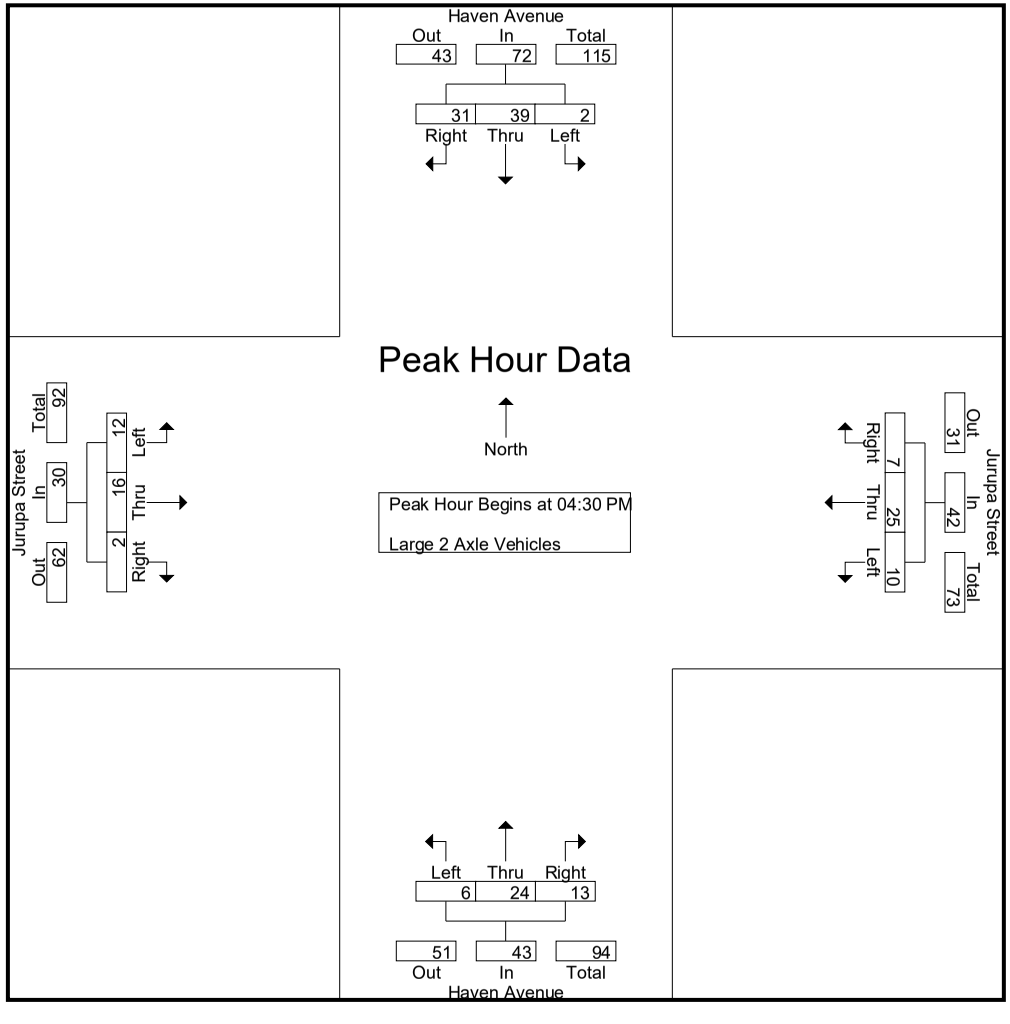
3.1-204

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**1**	**12**	6	19	1	**8**	0	9	**2**	6	**7**	**15**	**5**	4	**1**	**10**	**53**
04:45 PM	0	9	**12**	**21**	**3**	6	1	10	0	**7**	4	11	3	**5**	0	8	50
05:00 PM	0	6	6	12	3	7	**3**	**13**	2	6	1	9	2	4	0	6	40
05:15 PM	1	12	7	20	3	4	3	10	2	5	1	8	2	3	1	6	44
Total Volume	2	39	31	72	10	25	7	42	6	24	13	43	12	16	2	30	187
% App. Total	2.8	54.2	43.1		23.8	59.5	16.7		14	55.8	30.2		40	53.3	6.7		
PHF	.500	.813	.646	.857	.833	.781	.583	.808	.750	.857	.464	.717	.600	.800	.500	.750	.882

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**1**	**12**	6	19	1	**8**	0	9	**2**	6	**7**	**15**	**5**	4	**1**	**10**	
+15 mins.	0	9	**12**	**21**	**3**	6	1	10	0	**7**	4	11	3	**5**	0	8	
+30 mins.	0	6	6	12	3	7	**3**	**13**	2	6	1	9	2	4	0	6	
+45 mins.	1	12	7	20	3	4	3	10	2	5	1	8	2	3	1	6	
Total Volume	2	39	31	72	10	25	7	42	6	24	13	43	12	16	2	30	
% App. Total	2.8	54.2	43.1		23.8	59.5	16.7		14	55.8	30.2		40	53.3	6.7		
PHF	.500	.813	.646	.857	.833	.781	.583	.808	.750	.857	.464	.717	.600	.800	.500	.750	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Haven Avenue Southbound					Jurupa Street Westbound					Haven Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	5	2	0	8	2	4	0	0	6	0	6	6	1	12	2	3	1	1	6	2	32	34
04:15 PM	0	4	0	0	4	1	1	0	0	2	0	0	0	0	0	2	2	1	1	5	1	11	12
04:30 PM	0	1	0	0	1	1	2	0	0	3	1	0	3	2	4	3	0	1	1	4	3	12	15
04:45 PM	1	0	1	0	2	1	1	1	0	3	0	1	3	1	4	1	1	2	0	4	1	13	14
Total	2	10	3	0	15	5	8	1	0	14	1	7	12	4	20	8	6	5	3	19	7	68	75
05:00 PM	0	2	1	0	3	0	4	0	0	4	0	2	2	1	4	0	3	0	0	3	1	14	15
05:15 PM	1	1	0	0	2	4	1	0	0	5	0	1	1	0	2	0	1	0	0	1	0	10	10
05:30 PM	2	1	1	0	4	2	4	1	0	7	0	1	1	0	2	1	2	0	0	3	0	16	16
05:45 PM	0	2	1	0	3	0	0	0	0	0	0	3	2	2	5	1	2	0	0	3	2	11	13
Total	3	6	3	0	12	6	9	1	0	16	0	7	6	3	13	2	8	0	0	10	3	51	54
Grand Total	5	16	6	0	27	11	17	2	0	30	1	14	18	7	33	10	14	5	3	29	10	119	129
Apprch %	18.5	59.3	22.2			36.7	56.7	6.7			3	42.4	54.5			34.5	48.3	17.2					
Total %	4.2	13.4	5		22.7	9.2	14.3	1.7		25.2	0.8	11.8	15.1		27.7	8.4	11.8	4.2		24.4	7.8	92.2	

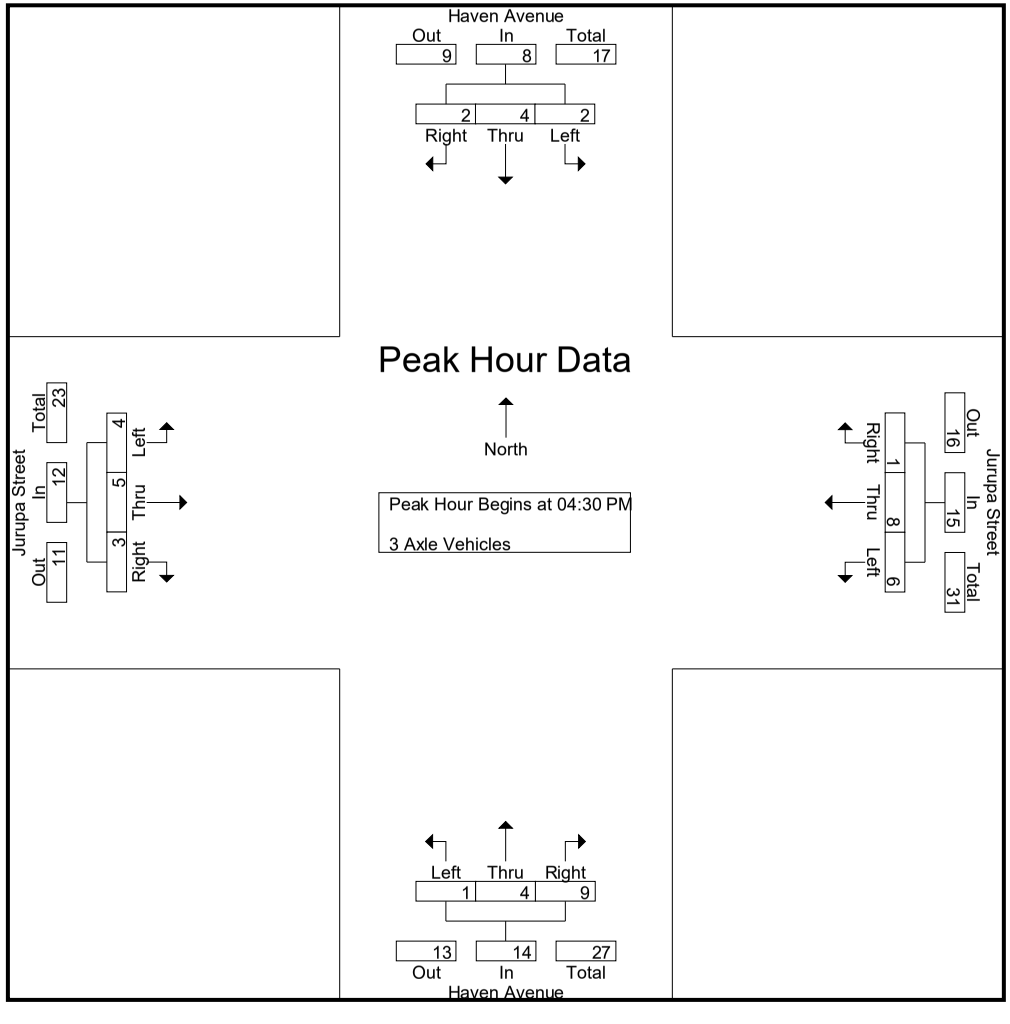
3.1-207

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	1	0	1	1	2	0	3	**1**	0	**3**	**4**	**3**	0	1	**4**	12
04:45 PM	**1**	0	**1**	2	1	1	**1**	3	0	1	3	4	1	1	**2**	4	13
05:00 PM	0	**2**	1	**3**	0	**4**	0	4	0	**2**	2	4	0	**3**	0	3	**14**
05:15 PM	1	1	0	2	**4**	1	0	**5**	0	1	1	2	0	1	0	1	10
Total Volume	2	4	2	8	6	8	1	15	1	4	9	14	4	5	3	12	49
% App. Total	25	50	25		40	53.3	6.7		7.1	28.6	64.3		33.3	41.7	25		
PHF	.500	.500	.500	.667	.375	.500	.250	.750	.250	.500	.750	.875	.333	.417	.375	.750	.875

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	1	0	1	1	2	0	3	**1**	0	**3**	**4**	**3**	0	1	**4**	
+15 mins.	**1**	0	**1**	2	1	1	**1**	3	0	1	3	4	1	1	**2**	4	
+30 mins.	0	**2**	1	**3**	0	**4**	0	4	0	**2**	2	4	0	**3**	0	3	
+45 mins.	1	1	0	2	**4**	1	0	**5**	0	1	1	2	0	1	0	1	
Total Volume	2	4	2	8	6	8	1	15	1	4	9	14	4	5	3	12	
% App. Total	25	50	25		40	53.3	6.7		7.1	28.6	64.3		33.3	41.7	25		
PHF	.500	.500	.500	.667	.375	.500	.250	.750	.250	.500	.750	.875	.333	.417	.375	.750	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Haven Avenue Southbound					Jurupa Street Westbound					Haven Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	3	8	0	12	3	9	3	0	15	0	7	2	0	9	8	4	1	0	13	0	49	49
04:15 PM	1	6	7	0	14	8	3	1	0	12	4	14	3	3	21	7	6	2	0	15	3	62	65
04:30 PM	3	3	8	0	14	3	6	2	1	11	2	8	4	2	14	4	7	2	0	13	3	52	55
04:45 PM	2	7	1	0	10	4	7	3	1	14	1	11	8	2	20	4	10	5	0	19	3	63	66
Total	7	19	24	0	50	18	25	9	2	52	7	40	17	7	64	23	27	10	0	60	9	226	235
05:00 PM	1	3	7	0	11	3	3	2	0	8	2	9	5	0	16	5	6	2	0	13	0	48	48
05:15 PM	1	4	11	0	16	2	6	2	0	10	3	2	7	4	12	2	9	2	0	13	4	51	55
05:30 PM	3	8	10	0	21	4	9	1	0	14	1	11	9	2	21	11	7	2	0	20	2	76	78
05:45 PM	1	3	15	0	19	5	12	2	0	19	3	5	5	1	13	10	4	5	1	19	2	70	72
Total	6	18	43	0	67	14	30	7	0	51	9	27	26	7	62	28	26	11	1	65	8	245	253
Grand Total	13	37	67	0	117	32	55	16	2	103	16	67	43	14	126	51	53	21	1	125	17	471	488
Apprch %	11.1	31.6	57.3			31.1	53.4	15.5			12.7	53.2	34.1			40.8	42.4	16.8					
Total %	2.8	7.9	14.2		24.8	6.8	11.7	3.4		21.9	3.4	14.2	9.1		26.8	10.8	11.3	4.5		26.5	3.5	96.5	

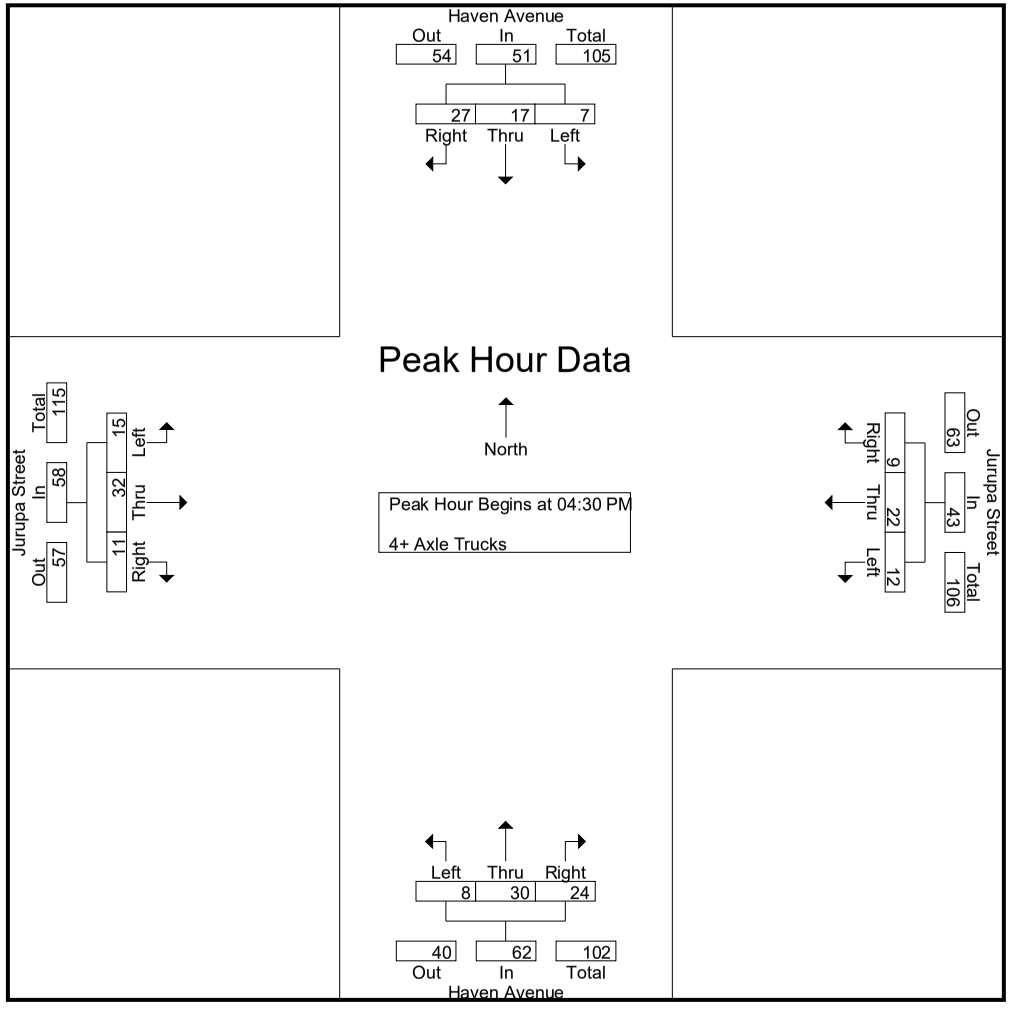
3.1-210

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**3**	3	8	14	3	6	2	11	2	8	4	14	4	7	2	13	52
04:45 PM	2	**7**	1	10	**4**	**7**	**3**	**14**	1	**11**	**8**	**20**	4	**10**	**5**	**19**	**63**
05:00 PM	1	3	7	11	3	3	2	8	2	9	5	16	**5**	6	2	13	48
05:15 PM	1	4	**11**	**16**	2	6	2	10	**3**	2	7	12	2	9	2	13	51
Total Volume	7	17	27	51	12	22	9	43	8	30	24	62	15	32	11	58	214
% App. Total	13.7	33.3	52.9		27.9	51.2	20.9		12.9	48.4	38.7		25.9	55.2	19		
PHF	.583	.607	.614	.797	.750	.786	.750	.768	.667	.682	.750	.775	.750	.800	.550	.763	.849

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 07_ONT_Hav_Jurupa PM2
Site Code : 05121618
Start Date : 11/18/2021
Page No : 3

	Haven Avenue Southbound				Jurupa Street Westbound				Haven Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**3**	3	8	14	3	6	2	11	2	8	4	14	4	7	2	13	
+15 mins.	2	**7**	1	10	**4**	**7**	**3**	**14**	1	**11**	**8**	**20**	4	**10**	**5**	**19**	
+30 mins.	1	3	7	11	3	3	2	8	2	9	5	16	**5**	6	2	13	
+45 mins.	1	4	**11**	**16**	2	6	2	10	**3**	2	7	12	2	9	2	13	
Total Volume	7	17	27	51	12	22	9	43	8	30	24	62	15	32	11	58	
% App. Total	13.7	33.3	52.9		27.9	51.2	20.9		12.9	48.4	38.7		25.9	55.2	19		
PHF	.583	.607	.614	.797	.750	.786	.750	.768	.667	.682	.750	.775	.750	.800	.550	.763	

Location: Ontario
N/S: Haven Avenue
E/W: Jurupa Street

Date: 11/18/2021
Day: Thursday

PEDESTRIANS

	North Leg Haven Avenue Pedestrians	East Leg Jurupa Street Pedestrians	South Leg Haven Avenue Pedestrians	West Leg Jurupa Street Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	1	2
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	2	2
TOTAL VOLUMES:	0	0	2	3	5

	North Leg Haven Avenue Pedestrians	East Leg Jurupa Street Pedestrians	South Leg Haven Avenue Pedestrians	West Leg Jurupa Street Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	1	1	0	2
4:45 PM	0	0	1	0	1
5:00 PM	0	2	0	0	2
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	3	2	0	5

Location: Ontario
N/S: Haven Avenue
E/W: Jurupa Street

Date: 11/18/2021
Day: Thursday

BICYCLES

	Southbound Haven Avenue			Westbound Jurupa Street			Northbound Haven Avenue			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound Haven Avenue			Westbound Jurupa Street			Northbound Haven Avenue			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					Mission Boulevard Westbound					Haven Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	19	195	25	5	239	14	184	121	37	319	21	192	4	3	217	40	44	6	3	90	48	865	913
07:15 AM	24	223	37	2	284	14	166	130	48	310	16	234	1	1	251	33	37	17	8	87	59	932	991
07:30 AM	28	262	43	6	333	10	160	138	28	308	12	319	3	1	334	54	43	15	6	112	41	1087	1128
07:45 AM	36	287	46	5	369	21	162	127	28	310	21	360	3	1	384	51	58	20	5	129	39	1192	1231
Total	107	967	151	18	1225	59	672	516	141	1247	70	1105	11	6	1186	178	182	58	22	418	187	4076	4263
08:00 AM	29	291	38	4	358	12	146	131	33	289	16	319	4	3	339	35	44	37	4	116	44	1102	1146
08:15 AM	29	255	38	3	322	8	126	156	43	290	25	326	0	0	351	46	47	27	9	120	55	1083	1138
08:30 AM	32	266	41	3	339	5	76	145	51	226	29	428	1	1	458	33	41	8	4	82	59	1105	1164
08:45 AM	31	233	34	2	298	4	93	134	42	231	20	312	2	0	334	36	49	9	3	94	47	957	1004
Total	121	1045	151	12	1317	29	441	566	169	1036	90	1385	7	4	1482	150	181	81	20	412	205	4247	4452
Grand Total	228	2012	302	30	2542	88	1113	1082	310	2283	160	2490	18	10	2668	328	363	139	42	830	392	8323	8715
Apprch %	9	79.2	11.9			3.9	48.8	47.4			6	93.3	0.7			39.5	43.7	16.7					
Total %	2.7	24.2	3.6		30.5	1.1	13.4	13		27.4	1.9	29.9	0.2		32.1	3.9	4.4	1.7		10	4.5	95.5	
Passenger Vehicles	206	1801	259		2295	78	1003	1040		2423	145	2332	12		2497	265	287	104		685	0	0	7900
% Passenger Vehicles	90.4	89.5	85.8	96.7	89.2	88.6	90.1	96.1	97.4	93.4	90.6	93.7	66.7	80	93.2	80.8	79.1	74.8	69	78.6	0	0	90.6
Large 2 Axle Vehicles	10	88	14		113	0	45	17		65	12	57	1		70	28	28	9		70	0	0	318
% Large 2 Axle Vehicles	4.4	4.4	4.6	3.3	4.4	0	4	1.6	1	2.5	7.5	2.3	5.6	0	2.6	8.5	7.7	6.5	11.9	8	0	0	3.6
3 Axle Vehicles	0	25	3		28	0	14	4		19	2	13	1		17	6	10	4		22	0	0	86
% 3 Axle Vehicles	0	1.2	1	0	1.1	0	1.3	0.4	0.3	0.7	1.2	0.5	5.6	10	0.6	1.8	2.8	2.9	4.8	2.5	0	0	1
4+ Axle Trucks	12	98	26		136	10	51	21		86	1	88	4		94	29	38	22		95	0	0	411
% 4+ Axle Trucks	5.3	4.9	8.6	0	5.3	11.4	4.6	1.9	1.3	3.3	0.6	3.5	22.2	10	3.5	8.8	10.5	15.8	14.3	10.9	0	0	4.7

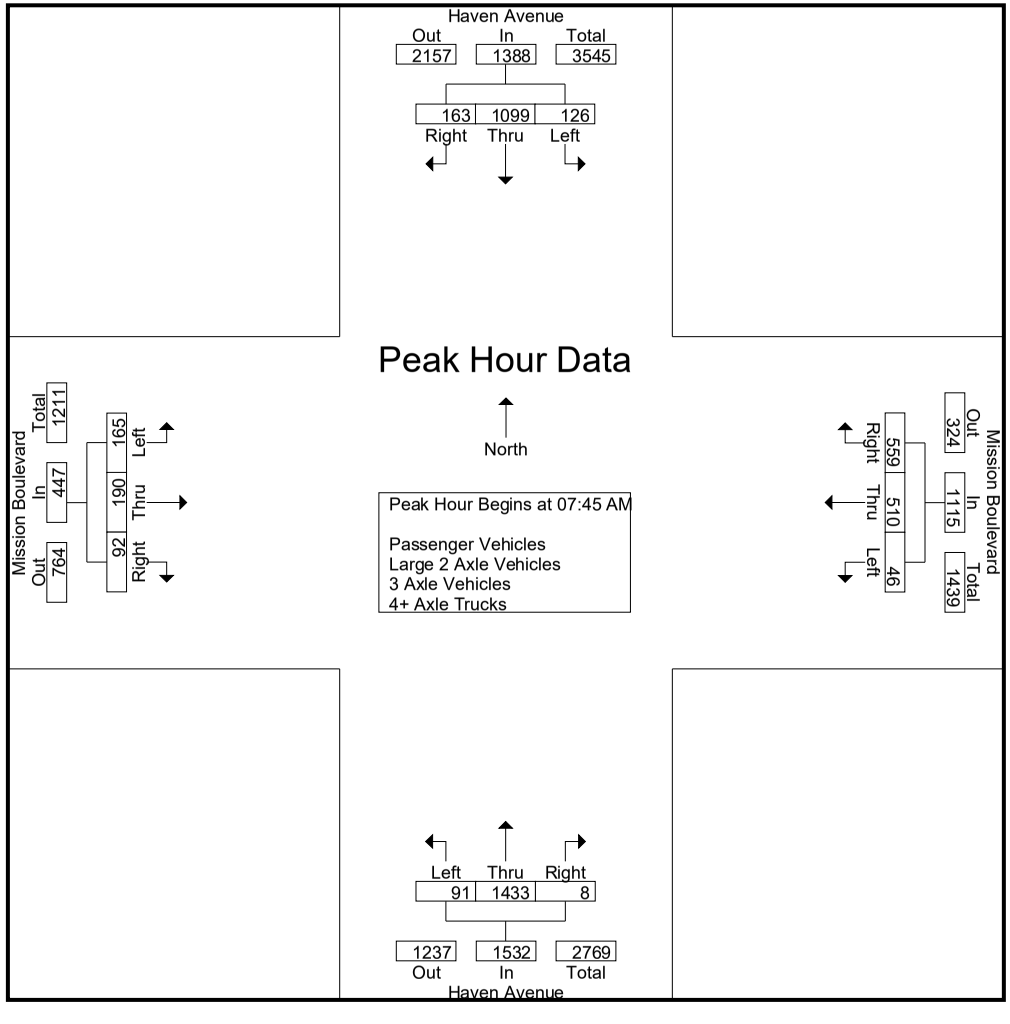
	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**36**	287	**46**	**369**	**21**	**162**	127	**310**	21	360	3	384	**51**	**58**	20	**129**	**1192**
08:00 AM	29	**291**	38	358	12	146	131	289	16	319	**4**	339	35	44	**37**	116	1102
08:15 AM	29	255	38	322	8	126	**156**	290	25	326	0	351	46	47	27	120	1083
08:30 AM	32	266	41	339	5	76	145	226	**29**	**428**	1	**458**	33	41	8	82	1105
Total Volume	126	1099	163	1388	46	510	559	1115	91	1433	8	1532	165	190	92	447	4482
% App. Total	9.1	79.2	11.7		4.1	45.7	50.1		5.9	93.5	0.5		36.9	42.5	20.6		
PHF	.875	.944	.886	.940	.548	.787	.896	.899	.784	.837	.500	.836	.809	.819	.622	.866	.940

3.1-21

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:00 AM				07:45 AM				07:30 AM				
+0 mins.	**36**	287	**46**	**369**	14	**184**	121	**319**	21	360	3	384	**54**	43	15	112	
+15 mins.	29	**291**	38	358	14	166	130	310	16	319	**4**	339	51	**58**	20	**129**	
+30 mins.	29	255	38	322	10	160	**138**	308	25	326	0	351	35	44	**37**	116	
+45 mins.	32	266	41	339	**21**	162	127	310	**29**	**428**	1	**458**	46	47	27	120	
Total Volume	126	1099	163	1388	59	672	516	1247	91	1433	8	1532	186	192	99	477	
% App. Total	9.1	79.2	11.7		4.7	53.9	41.4		5.9	93.5	0.5		39	40.3	20.8		
PHF	.875	.944	.886	.940	.702	.913	.935	.977	.784	.837	.500	.836	.861	.828	.669	.924	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

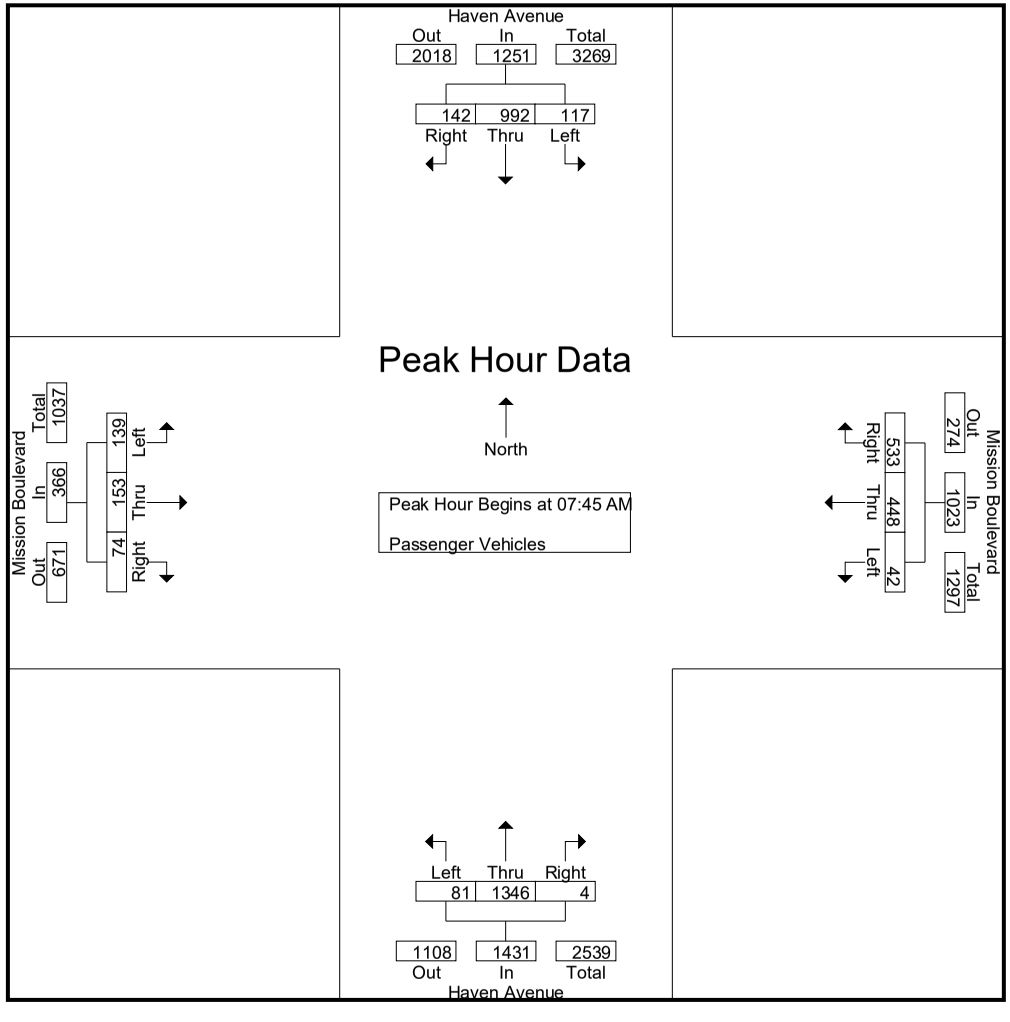
	Haven Avenue Southbound					Mission Boulevard Westbound					Haven Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	18	168	22	5	208	13	171	114	35	298	21	178	3	3	202	29	38	5	2	72	45	780	825
07:15 AM	23	198	30	2	251	11	156	129	48	296	15	219	1	1	235	27	27	10	4	64	55	846	901
07:30 AM	25	246	37	6	308	8	147	136	28	291	11	303	2	1	316	42	34	13	5	89	40	1004	1044
07:45 AM	34	259	42	4	335	21	153	121	27	295	21	342	1	0	364	44	51	15	3	110	34	1104	1138
Total	100	871	131	17	1102	53	627	500	138	1180	68	1042	7	5	1117	142	150	43	14	335	174	3734	3908
08:00 AM	26	264	33	4	323	8	126	123	32	257	15	307	2	2	324	30	33	30	1	93	39	997	1036
08:15 AM	27	230	33	3	290	8	108	153	42	269	19	310	0	0	329	37	37	21	9	95	54	983	1037
08:30 AM	30	239	34	3	303	5	61	136	50	202	26	387	1	1	414	28	32	8	4	68	58	987	1045
08:45 AM	23	197	28	2	248	4	81	128	40	213	17	286	2	0	305	28	35	2	1	65	43	831	874
Total	106	930	128	12	1164	25	376	540	164	941	77	1290	5	3	1372	123	137	61	15	321	194	3798	3992
Grand Total	206	1801	259	29	2266	78	1003	1040	302	2121	145	2332	12	8	2489	265	287	104	29	656	368	7532	7900
Apprch %	9.1	79.5	11.4			3.7	47.3	49			5.8	93.7	0.5			40.4	43.8	15.9					
Total %	2.7	23.9	3.4		30.1	1	13.3	13.8		28.2	1.9	31	0.2		33	3.5	3.8	1.4		8.7	4.7	95.3	

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**34**	259	**42**	**335**	**21**	**153**	121	**295**	21	342	1	364	**44**	**51**	15	**110**	**1104**
08:00 AM	26	**264**	33	323	8	126	123	257	15	307	**2**	324	30	33	**30**	93	997
08:15 AM	27	230	33	290	8	108	**153**	269	19	310	0	329	37	37	21	95	983
08:30 AM	30	239	34	303	5	61	136	202	**26**	**387**	1	**414**	28	32	8	68	987
Total Volume	117	992	142	1251	42	448	533	1023	81	1346	4	1431	139	153	74	366	4071
% App. Total	9.4	79.3	11.4		4.1	43.8	52.1		5.7	94.1	0.3		38	41.8	20.2		
PHF	.860	.939	.845	.934	.500	.732	.871	.867	.779	.870	.500	.864	.790	.750	.617	.832	.922

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	**34**	259	**42**	**335**	**21**	**153**	121	**295**	21	342	1	364	**44**	**51**	15	**110**	
+15 mins.	26	**264**	33	323	8	126	123	257	15	307	**2**	324	30	33	**30**	93	
+30 mins.	27	230	33	290	8	108	**153**	269	19	310	0	329	37	37	21	95	
+45 mins.	30	239	34	303	5	61	136	202	**26**	**387**	1	**414**	28	32	8	68	
Total Volume	117	992	142	1251	42	448	533	1023	81	1346	4	1431	139	153	74	366	
% App. Total	9.4	79.3	11.4		4.1	43.8	52.1		5.7	94.1	0.3		38	41.8	20.2		
PHF	.860	.939	.845	.934	.500	.732	.871	.867	.779	.870	.500	.864	.790	.750	.617	.832	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

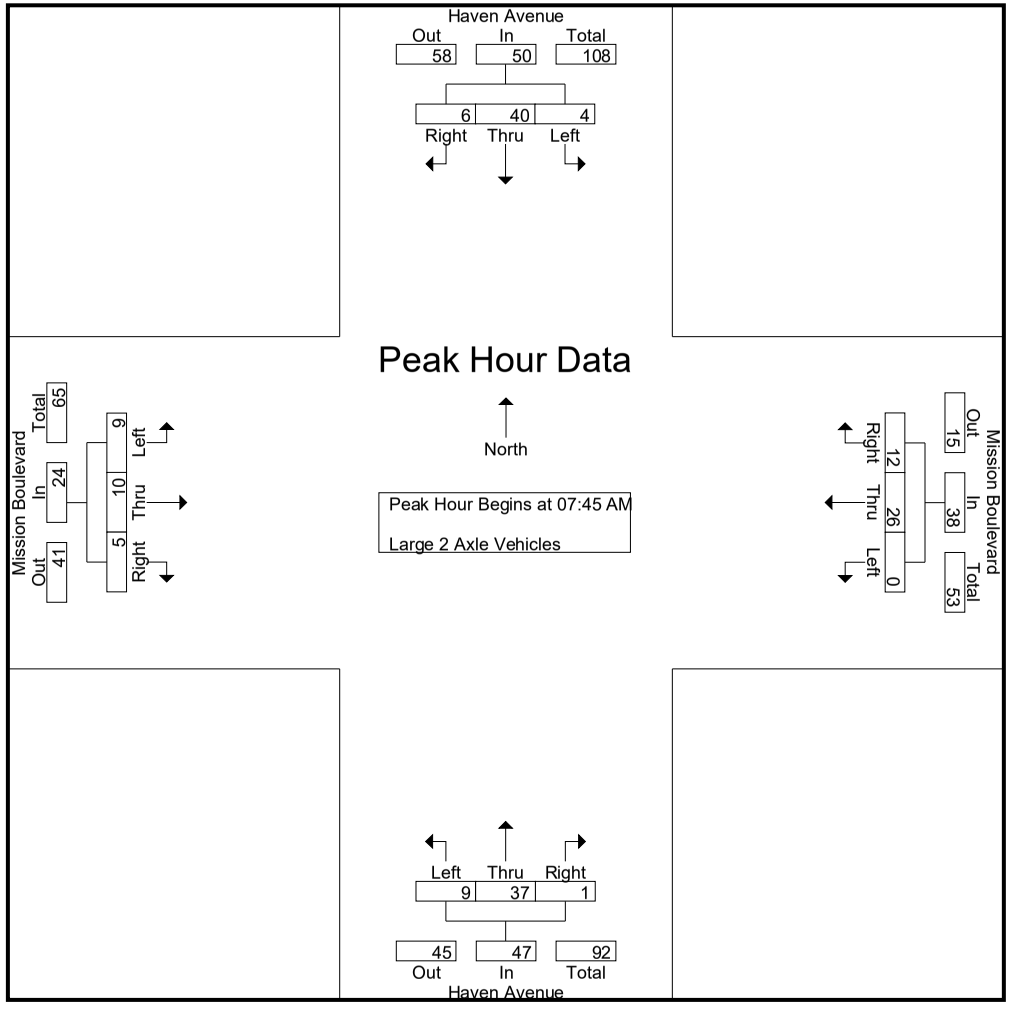
	Haven Avenue Southbound					Mission Boulevard Westbound					Haven Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	13	0	0	13	0	7	5	1	12	0	2	0	0	2	6	3	0	0	9	1	36	37
07:15 AM	0	9	4	0	13	0	4	0	0	4	1	5	0	0	6	4	4	2	2	10	2	33	35
07:30 AM	0	5	2	0	7	0	3	0	0	3	1	4	0	0	5	3	3	0	0	6	0	21	21
07:45 AM	0	11	3	1	14	0	2	2	0	4	0	8	1	0	9	4	3	3	1	10	2	37	39
Total	0	38	9	1	47	0	16	7	1	23	2	19	1	0	22	17	13	5	3	35	5	127	132
08:00 AM	1	8	1	0	10	0	9	4	0	13	1	3	0	0	4	2	4	1	1	7	1	34	35
08:15 AM	1	7	1	0	9	0	9	2	1	11	5	4	0	0	9	3	2	1	0	6	1	35	36
08:30 AM	2	14	1	0	17	0	6	4	1	10	3	22	0	0	25	0	1	0	0	1	1	53	54
08:45 AM	6	21	2	0	29	0	5	0	0	5	1	9	0	0	10	6	8	2	1	16	1	60	61
Total	10	50	5	0	65	0	29	10	2	39	10	38	0	0	48	11	15	4	2	30	4	182	186
Grand Total	10	88	14	1	112	0	45	17	3	62	12	57	1	0	70	28	28	9	5	65	9	309	318
Apprch %	8.9	78.6	12.5			0	72.6	27.4			17.1	81.4	1.4			43.1	43.1	13.8					
Total %	3.2	28.5	4.5		36.2	0	14.6	5.5		20.1	3.9	18.4	0.3		22.7	9.1	9.1	2.9		21	2.8	97.2	

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	11	**3**	14	0	2	2	4	0	8	**1**	9	**4**	3	**3**	**10**	37
08:00 AM	1	8	1	10	0	**9**	**4**	**13**	1	3	0	4	2	**4**	1	7	34
08:15 AM	1	7	1	9	0	9	2	11	**5**	4	0	9	3	2	1	6	35
08:30 AM	**2**	**14**	1	**17**	0	6	4	10	3	**22**	0	**25**	0	1	0	1	**53**
Total Volume	4	40	6	50	0	26	12	38	9	37	1	47	9	10	5	24	159
% App. Total	8	80	12		0	68.4	31.6		19.1	78.7	2.1		37.5	41.7	20.8		
PHF	.500	.714	.500	.735	.000	.722	.750	.731	.450	.420	.250	.470	.563	.625	.417	.600	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	11	**3**	14	0	2	2	4	0	8	**1**	9	**4**	3	**3**	**10**	
+15 mins.	1	8	1	10	0	**9**	**4**	**13**	1	3	0	4	2	**4**	1	7	
+30 mins.	1	7	1	9	0	9	2	11	**5**	4	0	9	3	2	1	6	
+45 mins.	**2**	**14**	1	**17**	0	6	4	10	3	**22**	0	**25**	0	1	0	1	
Total Volume	4	40	6	50	0	26	12	38	9	37	1	47	9	10	5	24	
% App. Total	8	80	12		0	68.4	31.6		19.1	78.7	2.1		37.5	41.7	20.8		
PHF	.500	.714	.500	.735	.000	.722	.750	.731	.450	.420	.250	.470	.563	.625	.417	.600	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

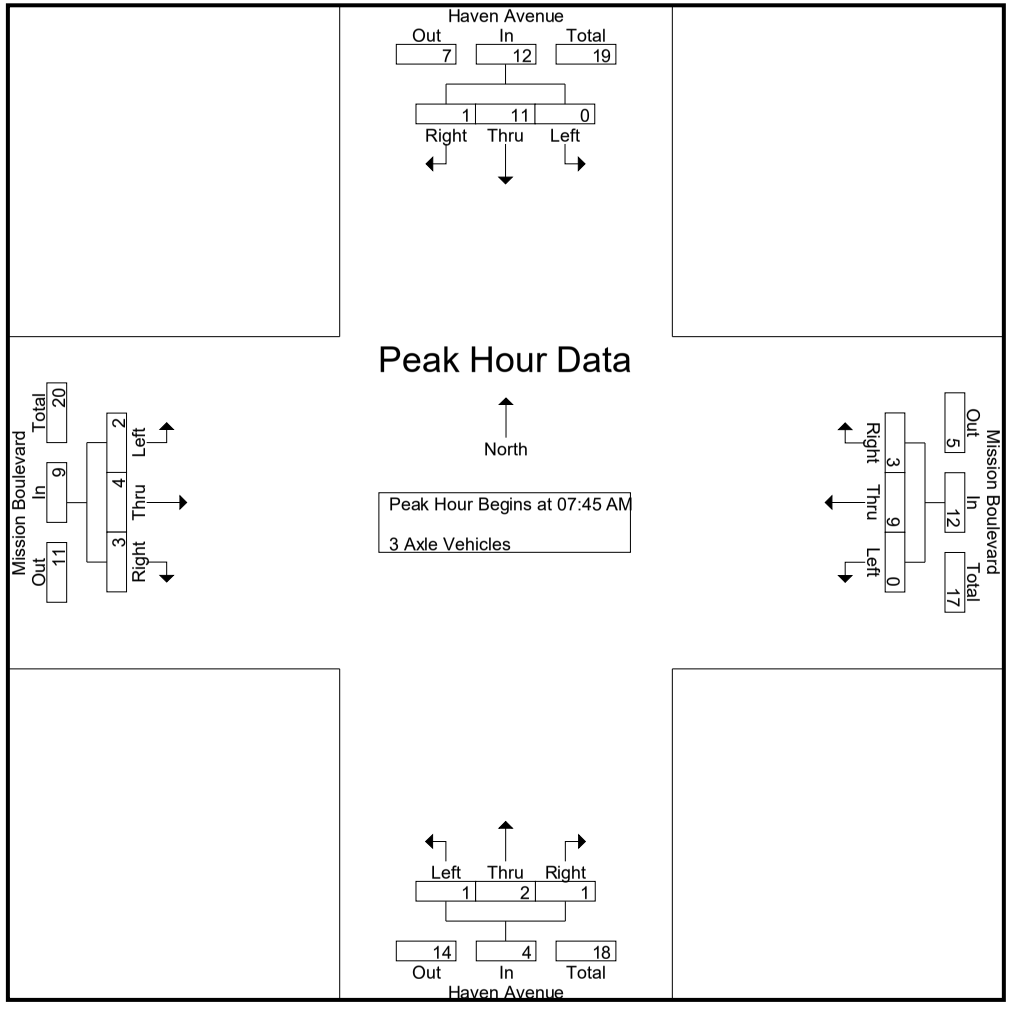
	Haven Avenue Southbound					Mission Boulevard Westbound					Haven Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	3	0	0	3	0	1	0	0	1	0	4	0	0	4	1	1	0	0	2	0	10	10
07:15 AM	0	6	0	0	6	0	2	0	0	2	0	3	0	0	3	1	2	0	0	3	0	14	14
07:30 AM	0	2	1	0	3	0	1	1	0	2	0	2	0	0	2	1	1	0	0	2	0	9	9
07:45 AM	0	2	0	0	2	0	2	2	1	4	0	0	0	0	0	1	0	1	0	2	1	8	9
Total	0	13	1	0	14	0	6	3	1	9	0	9	0	0	9	4	4	1	0	9	1	41	42
08:00 AM	0	4	1	0	5	0	4	1	0	5	0	0	1	1	1	0	1	2	1	3	2	14	16
08:15 AM	0	4	0	0	4	0	1	0	0	1	1	1	0	0	2	1	3	0	0	4	0	11	11
08:30 AM	0	1	0	0	1	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	0	4	4
08:45 AM	0	3	1	0	4	0	1	0	0	1	1	2	0	0	3	1	2	1	1	4	1	12	13
Total	0	12	2	0	14	0	8	1	0	9	2	4	1	1	7	2	6	3	2	11	3	41	44
Grand Total	0	25	3	0	28	0	14	4	1	18	2	13	1	1	16	6	10	4	2	20	4	82	86
Apprch %	0	89.3	10.7			0	77.8	22.2			12.5	81.2	6.2			30	50	20					
Total %	0	30.5	3.7		34.1	0	17.1	4.9		22	2.4	15.9	1.2		19.5	7.3	12.2	4.9		24.4	4.7	95.3	

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	2	0	2	0	2	**2**	4	0	0	0	0	**1**	0	1	2	8
08:00 AM	0	**4**	**1**	**5**	0	**4**	1	**5**	0	0	**1**	1	0	1	**2**	3	**14**
08:15 AM	0	4	0	4	0	1	0	1	**1**	**1**	0	**2**	1	**3**	0	**4**	11
08:30 AM	0	1	0	1	0	2	0	2	0	1	0	1	0	0	0	0	4
Total Volume	0	11	1	12	0	9	3	12	1	2	1	4	2	4	3	9	37
% App. Total	0	91.7	8.3		0	75	25		25	50	25		22.2	44.4	33.3		
PHF	.000	.688	.250	.600	.000	.563	.375	.600	.250	.500	.250	.500	.500	.333	.375	.563	.661

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	2	0	2	0	2	**2**	4	0	0	0	0	**1**	0	1	2	
+15 mins.	0	**4**	**1**	**5**	0	**4**	1	**5**	0	0	**1**	1	0	1	**2**	3	
+30 mins.	0	4	0	4	0	1	0	1	**1**	**1**	0	**2**	1	**3**	0	**4**	
+45 mins.	0	1	0	1	0	2	0	2	0	1	0	1	0	0	0	0	
Total Volume	0	11	1	12	0	9	3	12	1	2	1	4	2	4	3	9	
% App. Total	0	91.7	8.3		0	75	25		25	50	25		22.2	44.4	33.3		
PHF	.000	.688	.250	.600	.000	.563	.375	.600	.250	.500	.250	.500	.500	.333	.375	.563	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Haven Avenue Southbound					Mission Boulevard Westbound					Haven Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	11	3	0	15	1	5	2	1	8	0	8	1	0	9	4	2	1	1	7	2	39	41
07:15 AM	1	10	3	0	14	3	4	1	0	8	0	7	0	0	7	1	4	5	2	10	2	39	41
07:30 AM	3	9	3	0	15	2	9	1	0	12	0	10	1	0	11	8	5	2	1	15	1	53	54
07:45 AM	2	15	1	0	18	0	5	2	0	7	0	10	1	1	11	2	4	1	1	7	2	43	45
Total	7	45	10	0	62	6	23	6	1	35	0	35	3	1	38	15	15	9	5	39	7	174	181
08:00 AM	2	15	3	0	20	4	7	3	1	14	0	9	1	0	10	3	6	4	1	13	2	57	59
08:15 AM	1	14	4	0	19	0	8	1	0	9	0	11	0	0	11	5	5	5	0	15	0	54	54
08:30 AM	0	12	6	0	18	0	7	5	0	12	0	18	0	0	18	5	8	0	0	13	0	61	61
08:45 AM	2	12	3	0	17	0	6	6	2	12	1	15	0	0	16	1	4	4	0	9	2	54	56
Total	5	53	16	0	74	4	28	15	3	47	1	53	1	0	55	14	23	13	1	50	4	226	230
Grand Total	12	98	26	0	136	10	51	21	4	82	1	88	4	1	93	29	38	22	6	89	11	400	411
Apprch %	8.8	72.1	19.1			12.2	62.2	25.6			1.1	94.6	4.3			32.6	42.7	24.7					
Total %	3	24.5	6.5		34	2.5	12.8	5.2		20.5	0.2	22	1		23.2	7.2	9.5	5.5		22.2	2.7	97.3	

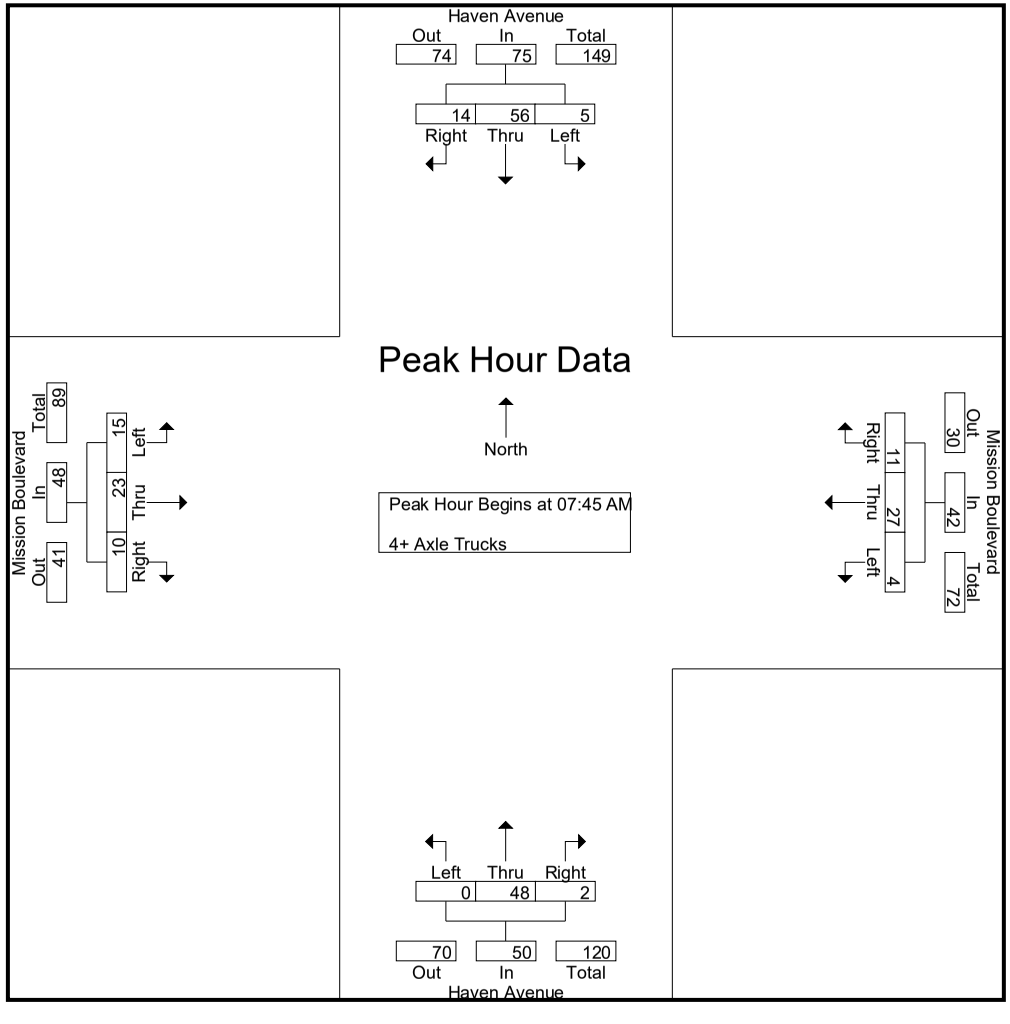
3.1-227

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**2**	**15**	1	18	0	5	2	7	0	10	**1**	11	2	4	1	7	43
08:00 AM	2	15	3	**20**	**4**	7	3	**14**	0	9	1	10	3	6	4	13	57
08:15 AM	1	14	4	19	0	**8**	1	9	0	11	0	11	**5**	5	**5**	**15**	54
08:30 AM	0	12	**6**	18	0	7	**5**	12	0	**18**	0	**18**	5	**8**	0	13	**61**
Total Volume	5	56	14	75	4	27	11	42	0	48	2	50	15	23	10	48	215
% App. Total	6.7	74.7	18.7		9.5	64.3	26.2		0	96	4		31.2	47.9	20.8		
PHF	.625	.933	.583	.938	.250	.844	.550	.750	.000	.667	.500	.694	.750	.719	.500	.800	.881

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	**2**	**15**	1	18	0	5	2	7	0	10	**1**	11	2	4	1	7	
+15 mins.	2	15	3	**20**	**4**	7	3	**14**	0	9	1	10	3	6	4	13	
+30 mins.	1	14	4	19	0	**8**	1	9	0	11	0	11	**5**	5	**5**	**15**	
+45 mins.	0	12	**6**	18	0	7	**5**	12	0	**18**	0	**18**	5	**8**	0	13	
Total Volume	5	56	14	75	4	27	11	42	0	48	2	50	15	23	10	48	
% App. Total	6.7	74.7	18.7		9.5	64.3	26.2		0	96	4		31.2	47.9	20.8		
PHF	.625	.933	.583	.938	.250	.844	.550	.750	.000	.667	.500	.694	.750	.719	.500	.800	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					Mission Boulevard Westbound					Haven Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	66	278	22	1	366	9	97	109	31	215	20	283	4	2	307	113	130	24	10	267	44	1155	1199
04:15 PM	69	290	30	5	389	8	95	92	30	195	12	318	15	3	345	117	143	19	10	279	48	1208	1256
04:30 PM	61	279	30	1	370	7	113	97	32	217	39	331	24	13	394	110	143	35	13	288	59	1269	1328
04:45 PM	64	286	27	4	377	10	97	103	16	210	22	347	7	1	376	121	167	25	10	313	31	1276	1307
Total	260	1133	109	11	1502	34	402	401	109	837	93	1279	50	19	1422	461	583	103	43	1147	182	4908	5090
05:00 PM	57	273	25	5	355	14	74	92	24	180	27	302	9	2	338	118	117	32	14	267	45	1140	1185
05:15 PM	60	318	25	1	403	5	95	72	15	172	17	278	4	0	299	77	174	24	11	275	27	1149	1176
05:30 PM	52	302	29	4	383	6	103	104	19	213	13	289	2	1	304	62	147	23	15	232	39	1132	1171
05:45 PM	53	314	25	2	392	10	83	97	38	190	25	291	4	0	320	65	133	38	13	236	53	1138	1191
Total	222	1207	104	12	1533	35	355	365	96	755	82	1160	19	3	1261	322	571	117	53	1010	164	4559	4723
Grand Total	482	2340	213	23	3035	69	757	766	205	1592	175	2439	69	22	2683	783	1154	220	96	2157	346	9467	9813
Apprch %	15.9	77.1	7			4.3	47.6	48.1			6.5	90.9	2.6			36.3	53.5	10.2					
Total %	5.1	24.7	2.2		32.1	0.7	8	8.1		16.8	1.8	25.8	0.7		28.3	8.3	12.2	2.3		22.8	3.5	96.5	
Passenger Vehicles	427	2200	183		2830	64	695	728		1681	164	2251	64		2500	702	1049	211		2055	0	0	9066
% Passenger Vehicles	88.6	94	85.9	87	92.5	92.8	91.8	95	94.6	93.5	93.7	92.3	92.8	95.5	92.4	89.7	90.9	95.9	96.9	91.2	0	0	92.4
Large 2 Axle Vehicles	26	45	12		84	3	21	15		45	8	67	0		75	31	36	4		72	0	0	276
% Large 2 Axle Vehicles	5.4	1.9	5.6	4.3	2.7	4.3	2.8	2	2.9	2.5	4.6	2.7	0	0	2.8	4	3.1	1.8	1	3.2	0	0	2.8
3 Axle Vehicles	6	16	4		27	0	8	4		15	1	18	1		21	6	21	2		29	0	0	92
% 3 Axle Vehicles	1.2	0.7	1.9	4.3	0.9	0	1.1	0.5	1.5	0.8	0.6	0.7	1.4	4.5	0.8	0.8	1.8	0.9	0	1.3	0	0	0.9
4+ Axle Trucks	23	79	14		117	2	33	19		56	2	103	4		109	44	48	3		97	0	0	379
% 4+ Axle Trucks	4.8	3.4	6.6	4.3	3.8	2.9	4.4	2.5	1	3.1	1.1	4.2	5.8	0	4	5.6	4.2	1.4	2.1	4.3	0	0	3.9

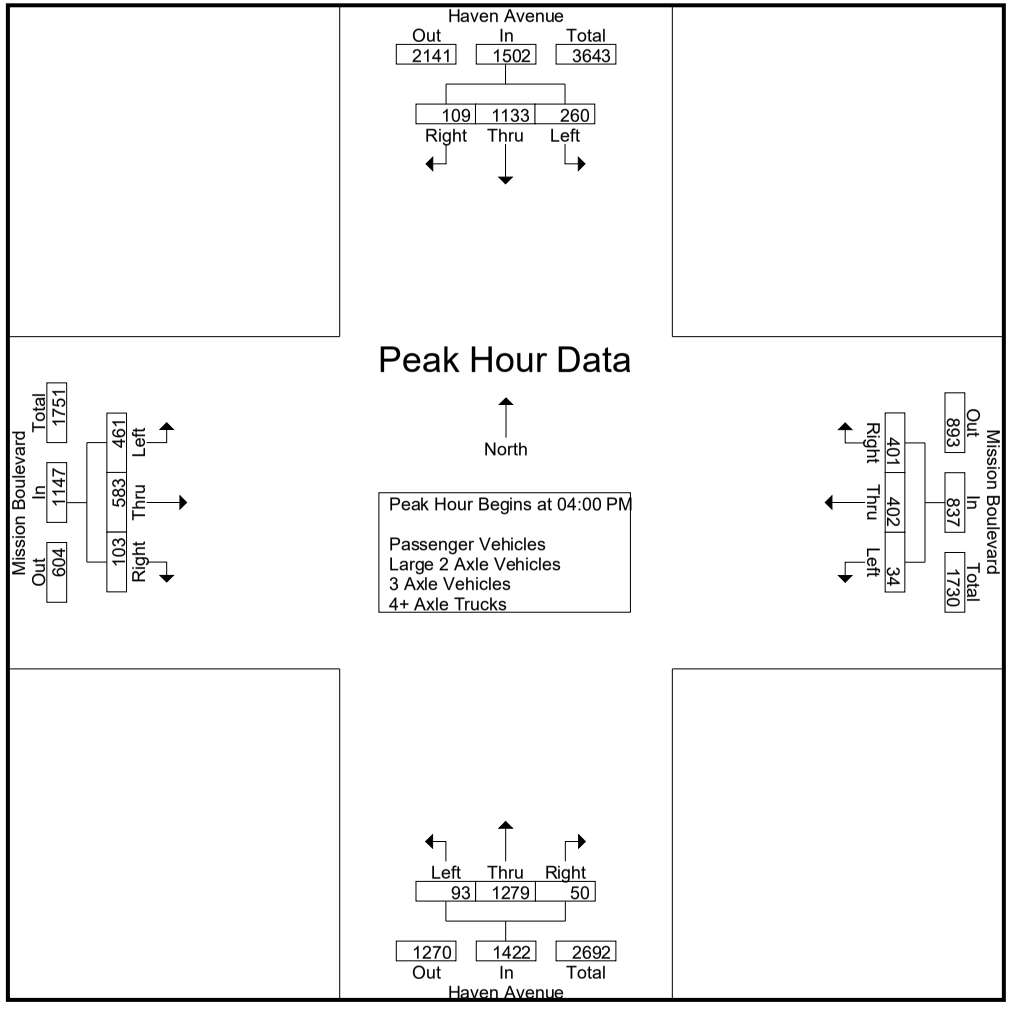
3.1-230

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	66	278	22	366	9	97	**109**	215	20	283	4	307	113	130	24	267	1155
04:15 PM	**69**	**290**	**30**	**389**	8	95	92	195	12	318	15	345	117	143	19	279	1208
04:30 PM	61	279	30	370	7	**113**	97	**217**	**39**	331	**24**	**394**	110	143	**35**	288	1269
04:45 PM	64	286	27	377	**10**	97	103	210	22	**347**	7	376	**121**	**167**	25	**313**	**1276**
Total Volume	260	1133	109	1502	34	402	401	837	93	1279	50	1422	461	583	103	1147	4908
% App. Total	17.3	75.4	7.3		4.1	48	47.9		6.5	89.9	3.5		40.2	50.8	9		
PHF	.942	.977	.908	.965	.850	.889	.920	.964	.596	.921	.521	.902	.952	.873	.736	.916	.962

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:00 PM				04:15 PM				04:00 PM				
+0 mins.	57	273	25	355	9	97	**109**	215	12	318	15	345	113	130	24	267	
+15 mins.	**60**	**318**	25	**403**	8	95	92	195	**39**	331	**24**	**394**	117	143	19	279	
+30 mins.	52	302	**29**	383	7	**113**	97	**217**	22	**347**	7	376	110	143	**35**	288	
+45 mins.	53	314	25	392	**10**	97	103	210	27	302	9	338	**121**	**167**	25	**313**	
Total Volume	222	1207	104	1533	34	402	401	837	100	1298	55	1453	461	583	103	1147	
% App. Total	14.5	78.7	6.8		4.1	48	47.9		6.9	89.3	3.8		40.2	50.8	9		
PHF	.925	.949	.897	.951	.850	.889	.920	.964	.641	.935	.573	.922	.952	.873	.736	.916	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					Mission Boulevard Westbound					Haven Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	60	249	18	1	327	9	86	102	30	197	18	254	2	1	274	100	119	21	9	240	41	1038	1079
04:15 PM	58	270	27	4	355	7	87	88	29	182	10	293	13	3	316	110	128	19	10	257	46	1110	1156
04:30 PM	52	261	28	1	341	6	103	93	31	202	38	298	24	13	360	100	127	34	13	261	58	1164	1222
04:45 PM	56	263	20	3	339	10	89	101	16	200	19	326	7	1	352	109	151	24	9	284	29	1175	1204
Total	226	1043	93	9	1362	32	365	384	106	781	85	1171	46	18	1302	419	525	98	41	1042	174	4487	4661
05:00 PM	52	256	19	4	327	13	68	88	22	169	25	290	9	2	324	107	103	30	14	240	42	1060	1102
05:15 PM	53	311	21	1	385	5	88	69	15	162	16	261	4	0	281	66	161	23	11	250	27	1078	1105
05:30 PM	49	290	28	4	367	5	96	98	19	199	13	262	2	1	277	54	138	22	14	214	38	1057	1095
05:45 PM	47	300	22	2	369	9	78	89	32	176	25	267	3	0	295	56	122	38	13	216	47	1056	1103
Total	201	1157	90	11	1448	32	330	344	88	706	79	1080	18	3	1177	283	524	113	52	920	154	4251	4405
Grand Total	427	2200	183	20	2810	64	695	728	194	1487	164	2251	64	21	2479	702	1049	211	93	1962	328	8738	9066
Apprch %	15.2	78.3	6.5			4.3	46.7	49			6.6	90.8	2.6			35.8	53.5	10.8					
Total %	4.9	25.2	2.1		32.2	0.7	8	8.3		17	1.9	25.8	0.7		28.4	8	12	2.4		22.5	3.6	96.4	

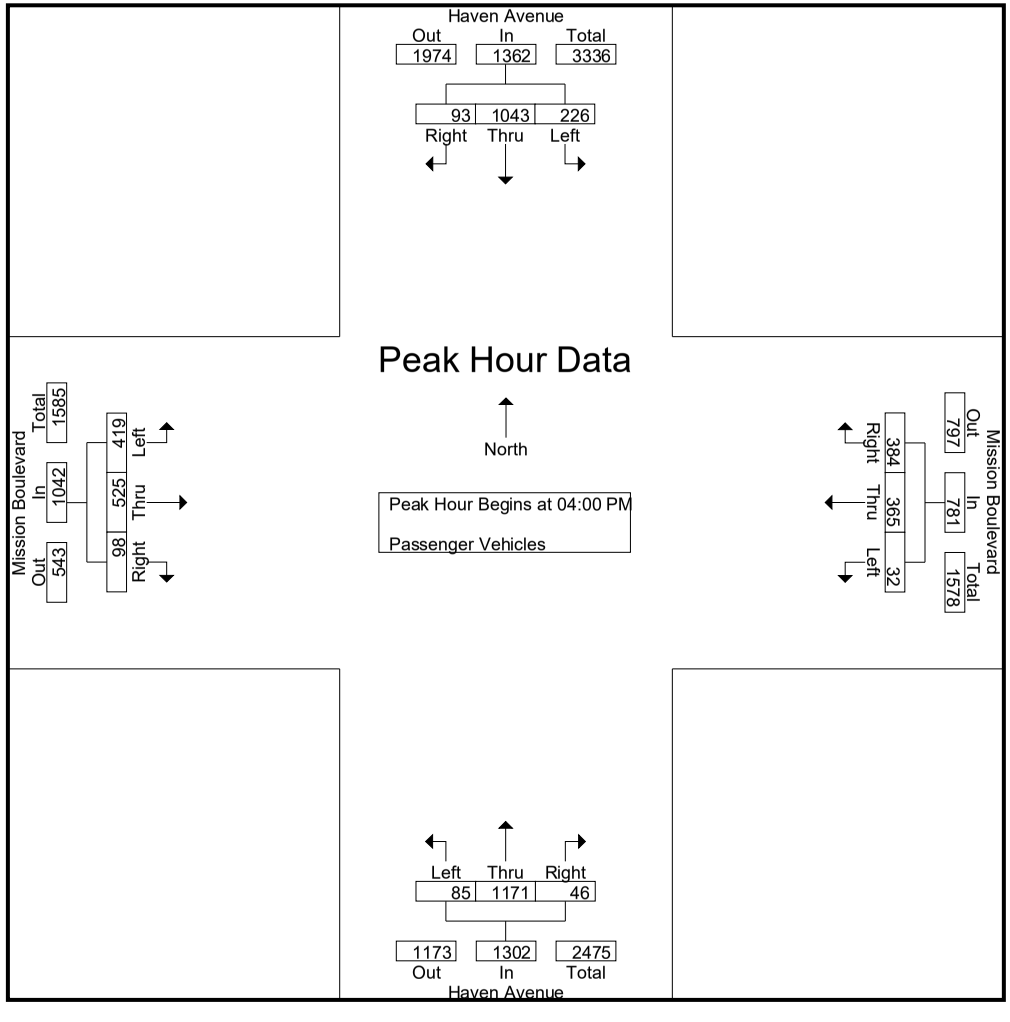
3.1-233

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**60**	249	18	327	9	86	**102**	197	18	254	2	274	100	119	21	240	1038
04:15 PM	58	**270**	27	**355**	7	87	88	182	10	293	13	316	**110**	128	19	257	1110
04:30 PM	52	261	**28**	341	6	**103**	93	**202**	**38**	298	**24**	**360**	100	127	**34**	261	1164
04:45 PM	56	263	20	339	**10**	89	101	200	19	**326**	7	352	109	**151**	24	**284**	**1175**
Total Volume	226	1043	93	1362	32	365	384	781	85	1171	46	1302	419	525	98	1042	4487
% App. Total	16.6	76.6	6.8		4.1	46.7	49.2		6.5	89.9	3.5		40.2	50.4	9.4		
PHF	.942	.966	.830	.959	.800	.886	.941	.967	.559	.898	.479	.904	.952	.869	.721	.917	.955

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	**60**	249	18	327	9	86	**102**	197	18	254	2	274	100	119	21	240	
+15 mins.	58	**270**	27	**355**	7	87	88	182	10	293	13	316	**110**	128	19	257	
+30 mins.	52	261	**28**	341	6	**103**	93	**202**	**38**	298	**24**	**360**	100	127	**34**	261	
+45 mins.	56	263	20	339	**10**	89	101	200	19	**326**	7	352	109	**151**	24	**284**	
Total Volume	226	1043	93	1362	32	365	384	781	85	1171	46	1302	419	525	98	1042	
% App. Total	16.6	76.6	6.8		4.1	46.7	49.2		6.5	89.9	3.5		40.2	50.4	9.4		
PHF	.942	.966	.830	.959	.800	.886	.941	.967	.559	.898	.479	.904	.952	.869	.721	.917	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Haven Avenue Southbound					Mission Boulevard Westbound					Haven Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	2	14	2	0	18	0	5	3	0	8	2	6	0	0	8	3	7	3	1	13	1	47	48
04:15 PM	6	8	1	0	15	0	4	1	0	5	1	8	0	0	9	1	7	0	0	8	0	37	37
04:30 PM	3	2	0	0	5	1	2	2	1	5	0	13	0	0	13	5	3	0	0	8	1	31	32
04:45 PM	3	7	3	1	13	0	4	1	0	5	2	5	0	0	7	6	4	0	0	10	1	35	36
Total	14	31	6	1	51	1	15	7	1	23	5	32	0	0	37	15	21	3	1	39	3	150	153
05:00 PM	4	7	3	0	14	1	2	2	2	5	2	8	0	0	10	3	5	1	0	9	2	38	40
05:15 PM	2	1	2	0	5	0	1	1	0	2	1	5	0	0	6	5	2	0	0	7	0	20	20
05:30 PM	2	3	1	0	6	1	1	0	0	2	0	9	0	0	9	4	4	0	0	8	0	25	25
05:45 PM	4	3	0	0	7	0	2	5	3	7	0	13	0	0	13	4	4	0	0	8	3	35	38
Total	12	14	6	0	32	2	6	8	5	16	3	35	0	0	38	16	15	1	0	32	5	118	123
Grand Total	26	45	12	1	83	3	21	15	6	39	8	67	0	0	75	31	36	4	1	71	8	268	276
Apprch %	31.3	54.2	14.5			7.7	53.8	38.5			10.7	89.3	0			43.7	50.7	5.6					
Total %	9.7	16.8	4.5		31	1.1	7.8	5.6		14.6	3	25	0		28	11.6	13.4	1.5		26.5	2.9	97.1	

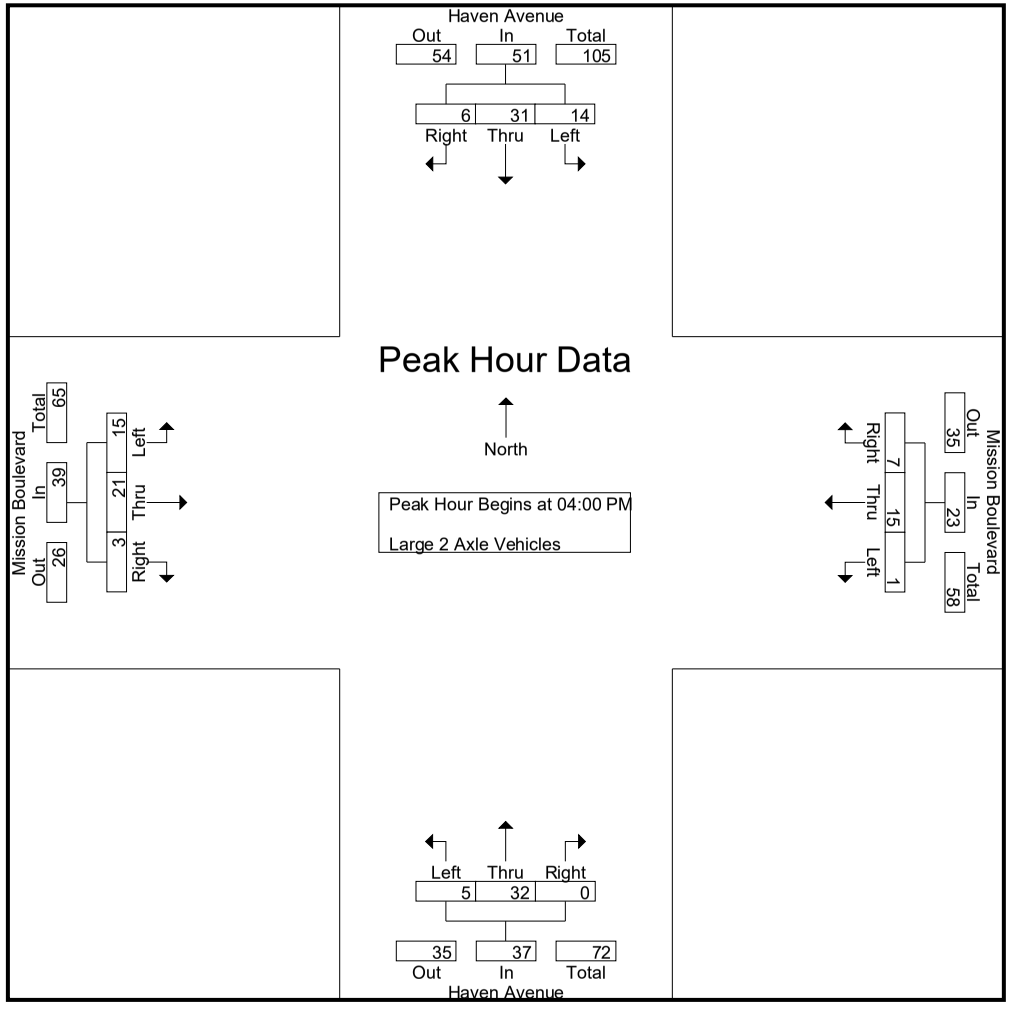
8.1-236

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	2	**14**	2	**18**	0	**5**	**3**	**8**	**2**	6	0	8	3	**7**	**3**	**13**	**47**
04:15 PM	**6**	8	1	15	0	4	1	5	1	8	0	9	1	7	0	8	37
04:30 PM	3	2	0	5	**1**	2	2	5	0	**13**	0	**13**	5	3	0	8	31
04:45 PM	3	7	**3**	13	0	4	1	5	2	5	0	7	**6**	4	0	10	35
Total Volume	14	31	6	51	1	15	7	23	5	32	0	37	15	21	3	39	150
% App. Total	27.5	60.8	11.8		4.3	65.2	30.4		13.5	86.5	0		38.5	53.8	7.7		
PHF	.583	.554	.500	.708	.250	.750	.583	.719	.625	.615	.000	.712	.625	.750	.250	.750	.798

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	2	**14**	2	**18**	0	**5**	**3**	**8**	**2**	6	0	8	3	**7**	**3**	**13**	
+15 mins.	**6**	8	1	15	0	4	1	5	1	8	0	9	1	7	0	8	
+30 mins.	3	2	0	5	**1**	2	2	5	0	**13**	0	**13**	5	3	0	8	
+45 mins.	3	7	**3**	13	0	4	1	5	2	5	0	7	**6**	4	0	10	
Total Volume	14	31	6	51	1	15	7	23	5	32	0	37	15	21	3	39	
% App. Total	27.5	60.8	11.8		4.3	65.2	30.4		13.5	86.5	0		38.5	53.8	7.7		
PHF	.583	.554	.500	.708	.250	.750	.583	.719	.625	.615	.000	.712	.625	.750	.250	.750	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

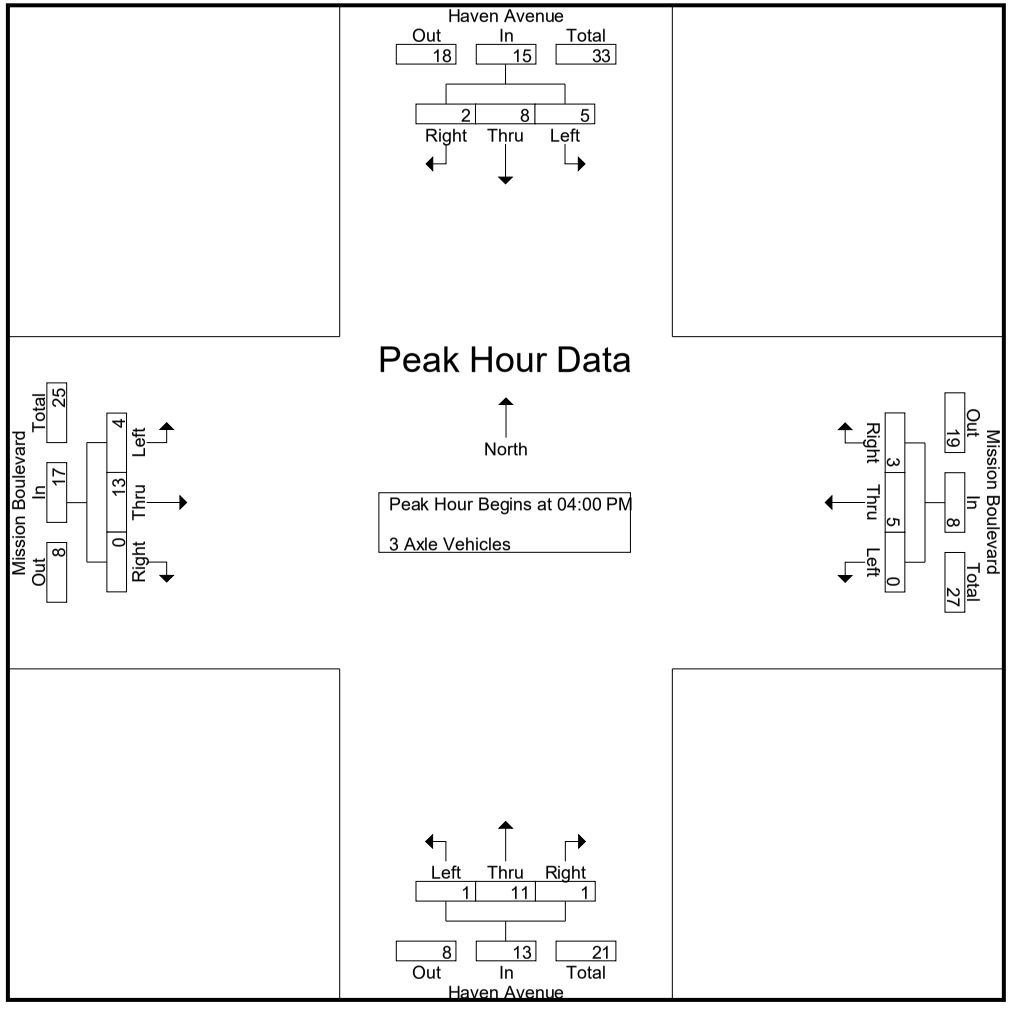
	Haven Avenue Southbound					Mission Boulevard Westbound					Haven Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	1	1	0	3	0	1	1	1	2	0	2	1	1	3	3	0	0	0	3	2	11	13
04:15 PM	1	4	1	0	6	0	2	1	1	3	0	3	0	0	3	1	2	0	0	3	1	15	16
04:30 PM	1	2	0	0	3	0	2	0	0	2	0	4	0	0	4	0	6	0	0	6	0	15	15
04:45 PM	2	1	0	0	3	0	0	1	0	1	1	2	0	0	3	0	5	0	0	5	0	12	12
Total	5	8	2	0	15	0	5	3	2	8	1	11	1	1	13	4	13	0	0	17	3	53	56
05:00 PM	0	4	2	1	6	0	1	0	0	1	0	0	0	0	0	1	3	1	0	5	1	12	13
05:15 PM	1	1	0	0	2	0	0	0	0	0	0	3	0	0	3	0	3	1	0	4	0	9	9
05:30 PM	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	0	1	0	0	1	0	5	5
05:45 PM	0	3	0	0	3	0	1	1	1	2	0	1	0	0	1	1	1	0	0	2	1	8	9
Total	1	8	2	1	11	0	3	1	1	4	0	7	0	0	7	2	8	2	0	12	2	34	36
Grand Total	6	16	4	1	26	0	8	4	3	12	1	18	1	1	20	6	21	2	0	29	5	87	92
Apprch %	23.1	61.5	15.4			0	66.7	33.3			5	90	5			20.7	72.4	6.9					
Total %	6.9	18.4	4.6		29.9	0	9.2	4.6		13.8	1.1	20.7	1.1		23	6.9	24.1	2.3		33.3	5.4	94.6	

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	1	**1**	3	0	1	**1**	2	0	2	**1**	3	**3**	0	0	3	11
04:15 PM	1	**4**	1	**6**	0	**2**	1	**3**	0	3	0	3	1	2	0	3	**15**
04:30 PM	1	2	0	3	0	2	0	2	0	**4**	0	**4**	0	**6**	0	**6**	15
04:45 PM	**2**	1	0	3	0	0	1	1	**1**	2	0	3	0	5	0	5	12
Total Volume	5	8	2	15	0	5	3	8	1	11	1	13	4	13	0	17	53
% App. Total	33.3	53.3	13.3		0	62.5	37.5		7.7	84.6	7.7		23.5	76.5	0		
PHF	.625	.500	.500	.625	.000	.625	.750	.667	.250	.688	.250	.813	.333	.542	.000	.708	.883

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	1	1	**1**	3	0	1	**1**	2	0	2	**1**	3	**3**	0	0	3	
+15 mins.	1	**4**	1	**6**	0	**2**	1	**3**	0	3	0	3	1	2	0	3	
+30 mins.	1	2	0	3	0	2	0	2	0	**4**	0	**4**	0	**6**	0	**6**	
+45 mins.	**2**	1	0	3	0	0	1	1	**1**	2	0	3	0	5	0	5	
Total Volume	5	8	2	15	0	5	3	8	1	11	1	13	4	13	0	17	
% App. Total	33.3	53.3	13.3		0	62.5	37.5		7.7	84.6	7.7		23.5	76.5	0		
PHF	.625	.500	.500	.625	.000	.625	.750	.667	.250	.688	.250	.813	.333	.542	.000	.708	

3.1-241

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

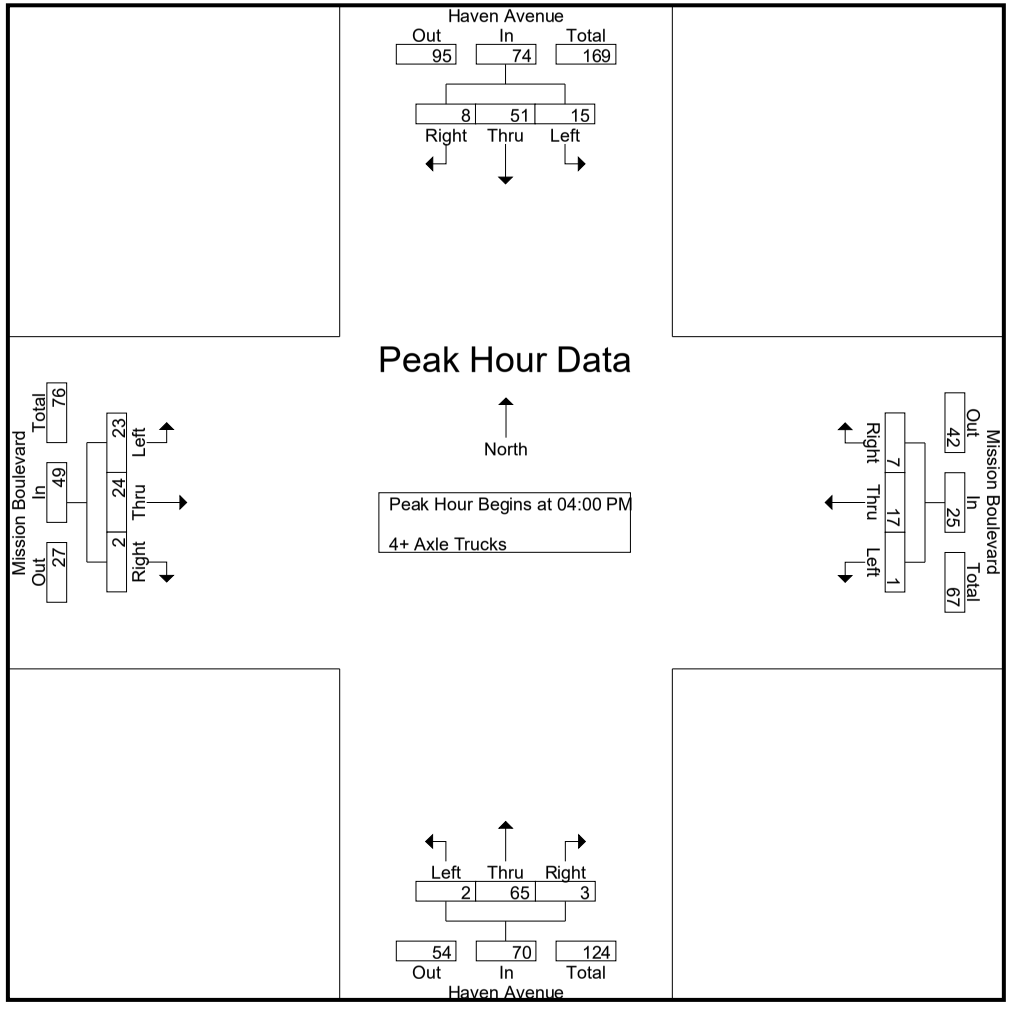
	Haven Avenue Southbound					Mission Boulevard Westbound					Haven Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	3	14	1	0	18	0	5	3	0	8	0	21	1	0	22	7	4	0	0	11	0	59	59
04:15 PM	4	8	1	1	13	1	2	2	0	5	1	14	2	0	17	5	6	0	0	11	1	46	47
04:30 PM	5	14	2	0	21	0	6	2	0	8	1	16	0	0	17	5	7	1	0	13	0	59	59
04:45 PM	3	15	4	0	22	0	4	0	0	4	0	14	0	0	14	6	7	1	1	14	1	54	55
Total	15	51	8	1	74	1	17	7	0	25	2	65	3	0	70	23	24	2	1	49	2	218	220
05:00 PM	1	6	1	0	8	0	3	2	0	5	0	4	0	0	4	7	6	0	0	13	0	30	30
05:15 PM	4	5	2	0	11	0	6	2	0	8	0	9	0	0	9	6	8	0	0	14	0	42	42
05:30 PM	1	9	0	0	10	0	5	6	0	11	0	15	0	0	15	4	4	1	1	9	1	45	46
05:45 PM	2	8	3	0	13	1	2	2	2	5	0	10	1	0	11	4	6	0	0	10	2	39	41
Total	8	28	6	0	42	1	16	12	2	29	0	38	1	0	39	21	24	1	1	46	3	156	159
Grand Total	23	79	14	1	116	2	33	19	2	54	2	103	4	0	109	44	48	3	2	95	5	374	379
Apprch %	19.8	68.1	12.1			3.7	61.1	35.2			1.8	94.5	3.7			46.3	50.5	3.2					
Total %	6.1	21.1	3.7		31	0.5	8.8	5.1		14.4	0.5	27.5	1.1		29.1	11.8	12.8	0.8		25.4	1.3	98.7	

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	3	14	1	18	0	5	**3**	**8**	0	**21**	1	**22**	**7**	4	0	11	**59**
04:15 PM	4	8	1	13	**1**	2	2	5	**1**	14	**2**	17	5	6	0	11	46
04:30 PM	**5**	14	2	21	0	**6**	2	8	1	16	0	17	5	**7**	**1**	13	59
04:45 PM	3	**15**	**4**	**22**	0	4	0	4	0	14	0	14	6	7	1	**14**	54
Total Volume	15	51	8	74	1	17	7	25	2	65	3	70	23	24	2	49	218
% App. Total	20.3	68.9	10.8		4	68	28		2.9	92.9	4.3		46.9	49	4.1		
PHF	.750	.850	.500	.841	.250	.708	.583	.781	.500	.774	.375	.795	.821	.857	.500	.875	.924

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 08_ONT_Hav_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				Mission Boulevard Westbound				Haven Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	3	14	1	18	0	5	**3**	**8**	0	**21**	1	**22**	**7**	4	0	11	
+15 mins.	4	8	1	13	**1**	2	2	5	**1**	14	**2**	17	5	6	0	11	
+30 mins.	**5**	14	2	21	0	**6**	2	8	1	16	0	17	5	**7**	**1**	13	
+45 mins.	3	**15**	**4**	**22**	0	4	0	4	0	14	0	14	6	7	1	**14**	
Total Volume	15	51	8	74	1	17	7	25	2	65	3	70	23	24	2	49	
% App. Total	20.3	68.9	10.8		4	68	28		2.9	92.9	4.3		46.9	49	4.1		
PHF	.750	.850	.500	.841	.250	.708	.583	.781	.500	.774	.375	.795	.821	.857	.500	.875	

Location: Ontario
N/S: Haven Avenue
E/W: Mission Boulevard

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Haven Avenue	East Leg Mission Boulevard	South Leg Haven Avenue	West Leg Mission Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	1	0	0	1
8:00 AM	0	2	2	0	4
8:15 AM	0	0	0	0	0
8:30 AM	0	1	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	4	2	0	6

	North Leg Haven Avenue	East Leg Mission Boulevard	South Leg Haven Avenue	West Leg Mission Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	1	1	0	2
4:45 PM	0	0	0	0	0
5:00 PM	1	0	0	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	1	1	1	0	3

Location: Ontario
N/S: Haven Avenue
E/W: Mission Boulevard

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Haven Avenue			Westbound Mission Boulevard			Northbound Haven Avenue			Eastbound Mission Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Haven Avenue			Westbound Mission Boulevard			Northbound Haven Avenue			Eastbound Mission Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	1	1	0	0	0	3

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					SR-60 Westbound Off Ramp Westbound					Haven Avenue Northbound					SR-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	138	64	25	202	31	1	63	36	95	82	202	0	0	284	0	0	0	0	0	61	581	642
07:15 AM	0	141	79	27	220	43	1	47	23	91	93	255	0	0	348	0	0	0	0	0	50	659	709
07:30 AM	0	156	52	17	208	41	3	71	40	115	91	300	0	0	391	0	0	0	0	0	57	714	771
07:45 AM	0	131	94	45	225	30	3	90	57	123	67	331	0	0	398	0	0	0	0	0	102	746	848
Total	0	566	289	114	855	145	8	271	156	424	333	1088	0	0	1421	0	0	0	0	0	270	2700	2970
08:00 AM	0	209	102	35	311	27	5	75	41	107	82	323	0	0	405	0	0	0	0	0	76	823	899
08:15 AM	0	172	96	46	268	28	1	96	54	125	74	333	0	0	407	0	0	0	0	0	100	800	900
08:30 AM	0	135	82	31	217	39	0	151	64	190	64	289	0	0	353	0	0	0	0	0	95	760	855
08:45 AM	0	166	65	29	231	33	1	112	59	146	42	249	0	0	291	0	0	0	0	0	88	668	756
Total	0	682	345	141	1027	127	7	434	218	568	262	1194	0	0	1456	0	0	0	0	0	359	3051	3410
Grand Total	0	1248	634	255	1882	272	15	705	374	992	595	2282	0	0	2877	0	0	0	0	0	629	5751	6380
Apprch %	0	66.3	33.7			27.4	1.5	71.1			20.7	79.3	0			0	0	0					
Total %	0	21.7	11		32.7	4.7	0.3	12.3		17.2	10.3	39.7	0		50	0	0	0		0	9.9	90.1	
Passenger Vehicles	0	1116	456		1757	257	15	632		1239	588	2128	0		2716	0	0	0		0	0	0	5712
% Passenger Vehicles	0	89.4	71.9	72.5	82.2	94.5	100	89.6	89.6	90.7	98.8	93.3	0	0	94.4	0	0	0	0	0	0	0	89.5
Large 2 Axle Vehicles	0	63	50		138	9	0	25		48	5	44	0		49	0	0	0		0	0	0	235
% Large 2 Axle Vehicles	0	5	7.9	9.8	6.5	3.3	0	3.5	3.7	3.5	0.8	1.9	0	0	1.7	0	0	0	0	0	0	0	3.7
3 Axle Vehicles	0	20	16		47	4	0	9		19	0	6	0		6	0	0	0		0	0	0	72
% 3 Axle Vehicles	0	1.6	2.5	4.3	2.2	1.5	0	1.3	1.6	1.4	0	0.3	0	0	0.2	0	0	0	0	0	0	0	1.1
4+ Axle Trucks	0	49	112		195	2	0	39		60	2	104	0		106	0	0	0		0	0	0	361
% 4+ Axle Trucks	0	3.9	17.7	13.3	9.1	0.7	0	5.5	5.1	4.4	0.3	4.6	0	0	3.7	0	0	0	0	0	0	0	5.7

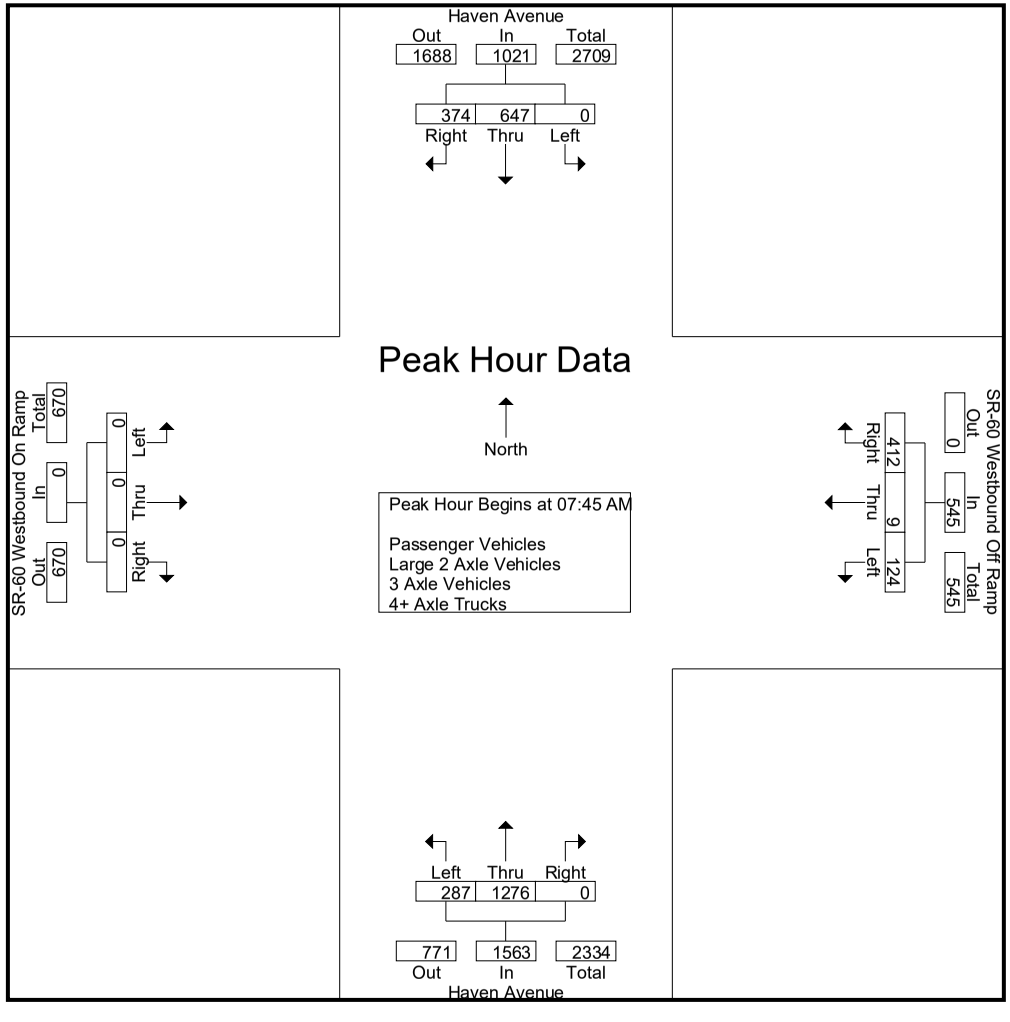
8.1-24.7

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	131	94	225	30	3	90	123	67	331	0	398	0	0	0	0	746
08:00 AM	0	**209**	**102**	**311**	27	**5**	75	107	**82**	323	0	405	0	0	0	0	**823**
08:15 AM	0	172	96	268	28	1	96	125	74	**333**	0	**407**	0	0	0	0	800
08:30 AM	0	135	82	217	**39**	0	**151**	**190**	64	289	0	353	0	0	0	0	760
Total Volume	0	647	374	1021	124	9	412	545	287	1276	0	1563	0	0	0	0	3129
% App. Total	0	63.4	36.6		22.8	1.7	75.6		18.4	81.6	0		0	0	0		
PHF	.000	.774	.917	.821	.795	.450	.682	.717	.875	.958	.000	.960	.000	.000	.000	.000	.950

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	08:00 AM				08:00 AM				07:30 AM				07:00 AM				
+0 mins.	0	**209**	**102**	**311**	27	**5**	75	107	**91**	300	0	391	0	0	0	0	
+15 mins.	0	172	96	268	28	1	96	125	67	331	0	398	0	0	0	0	
+30 mins.	0	135	82	217	**39**	0	**151**	**190**	82	323	0	405	0	0	0	0	
+45 mins.	0	166	65	231	33	1	112	146	74	**333**	0	**407**	0	0	0	0	
Total Volume	0	682	345	1027	127	7	434	568	314	1287	0	1601	0	0	0	0	
% App. Total	0	66.4	33.6		22.4	1.2	76.4		19.6	80.4	0		0	0	0		
PHF	.000	.816	.846	.826	.814	.350	.719	.747	.863	.966	.000	.983	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					SR-60 Westbound Off Ramp Westbound					Haven Avenue Northbound					SR-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	119	42	18	161	29	1	54	31	84	81	183	0	0	264	0	0	0	0	0	49	509	558
07:15 AM	0	119	55	14	174	42	1	41	20	84	93	241	0	0	334	0	0	0	0	0	34	592	626
07:30 AM	0	139	37	14	176	39	3	66	38	108	90	282	0	0	372	0	0	0	0	0	52	656	708
07:45 AM	0	121	68	32	189	29	3	81	53	113	66	314	0	0	380	0	0	0	0	0	85	682	767
Total	0	498	202	78	700	139	8	242	142	389	330	1020	0	0	1350	0	0	0	0	0	220	2439	2659
08:00 AM	0	196	79	29	275	26	5	68	39	99	82	306	0	0	388	0	0	0	0	0	68	762	830
08:15 AM	0	154	71	33	225	27	1	90	51	118	72	309	0	0	381	0	0	0	0	0	84	724	808
08:30 AM	0	118	64	23	182	37	0	136	55	173	63	261	0	0	324	0	0	0	0	0	78	679	757
08:45 AM	0	150	40	22	190	28	1	96	48	125	41	232	0	0	273	0	0	0	0	0	70	588	658
Total	0	618	254	107	872	118	7	390	193	515	258	1108	0	0	1366	0	0	0	0	0	300	2753	3053
Grand Total	0	1116	456	185	1572	257	15	632	335	904	588	2128	0	0	2716	0	0	0	0	0	520	5192	5712
Apprch %	0	71	29			28.4	1.7	69.9			21.6	78.4	0			0	0	0					
Total %	0	21.5	8.8		30.3	4.9	0.3	12.2		17.4	11.3	41	0		52.3	0	0	0		0	9.1	90.9	

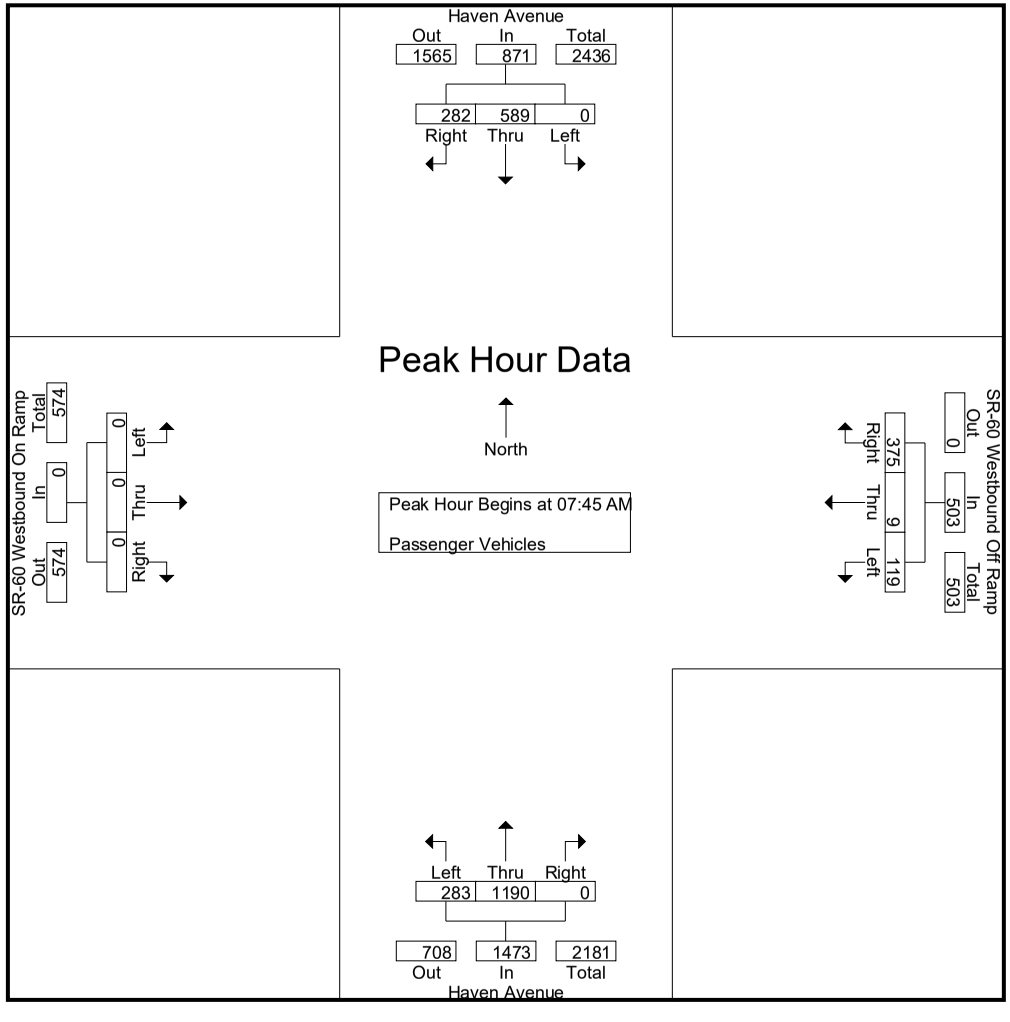
3.1-250

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	121	68	189	29	3	81	113	66	**314**	0	380	0	0	0	0	682
08:00 AM	0	**196**	**79**	**275**	26	**5**	68	99	**82**	306	0	**388**	0	0	0	0	**762**
08:15 AM	0	154	71	225	27	1	90	118	72	309	0	381	0	0	0	0	724
08:30 AM	0	118	64	182	**37**	0	**136**	**173**	63	261	0	324	0	0	0	0	679
Total Volume	0	589	282	871	119	9	375	503	283	1190	0	1473	0	0	0	0	2847
% App. Total	0	67.6	32.4		23.7	1.8	74.6		19.2	80.8	0		0	0	0		
PHF	.000	.751	.892	.792	.804	.450	.689	.727	.863	.947	.000	.949	.000	.000	.000	.000	.934

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	121	68	189	29	3	81	113	66	**314**	0	380	0	0	0	0	
+15 mins.	0	**196**	**79**	**275**	26	**5**	68	99	**82**	306	0	**388**	0	0	0	0	
+30 mins.	0	154	71	225	27	1	90	118	72	309	0	381	0	0	0	0	
+45 mins.	0	118	64	182	**37**	0	**136**	**173**	63	261	0	324	0	0	0	0	
Total Volume	0	589	282	871	119	9	375	503	283	1190	0	1473	0	0	0	0	
% App. Total	0	67.6	32.4		23.7	1.8	74.6		19.2	80.8	0		0	0	0		
PHF	.000	.751	.892	.792	.804	.450	.689	.727	.863	.947	.000	.949	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

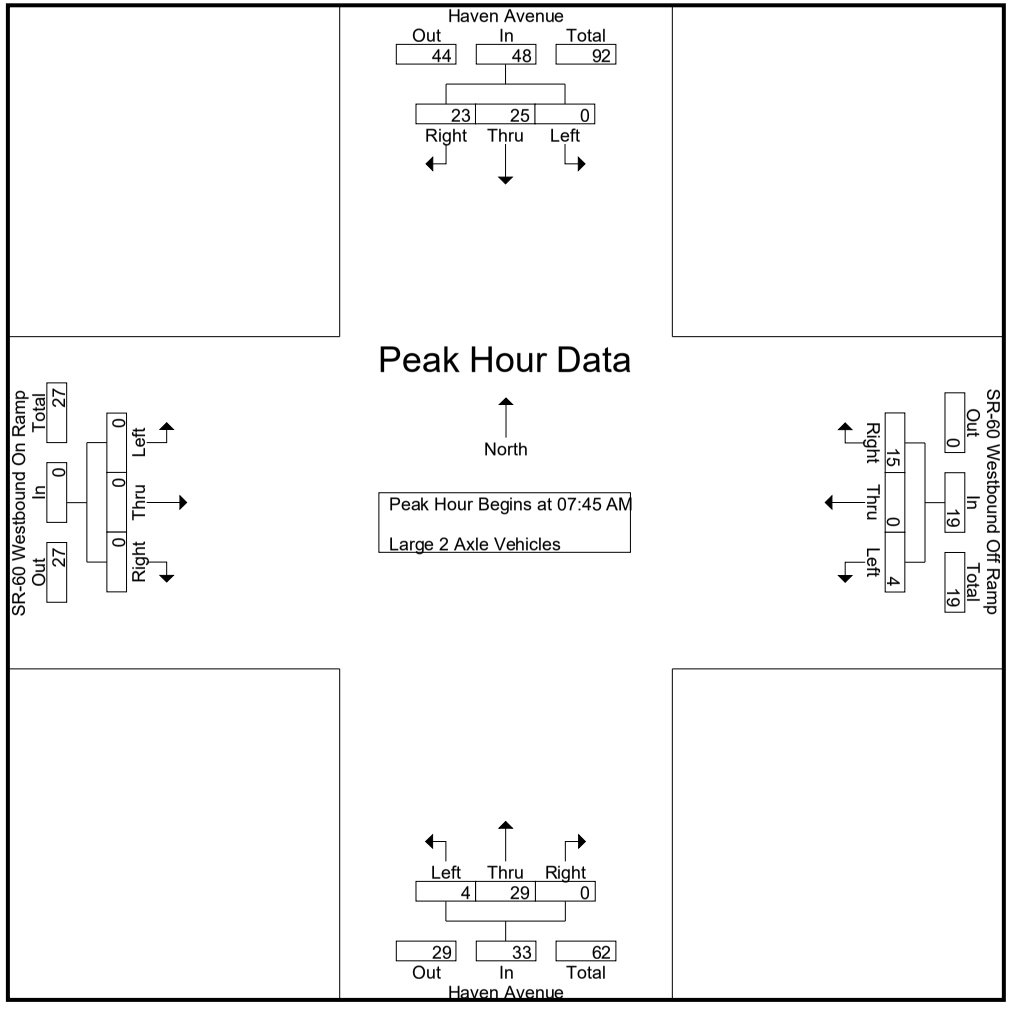
	Haven Avenue Southbound					SR-60 Westbound Off Ramp Westbound					Haven Avenue Northbound					SR-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	12	7	2	19	1	0	3	3	4	1	2	0	0	3	0	0	0	0	0	5	26	31
07:15 AM	0	10	8	4	18	1	0	2	0	3	0	6	0	0	6	0	0	0	0	0	4	27	31
07:30 AM	0	8	2	1	10	1	0	1	1	2	0	5	0	0	5	0	0	0	0	0	2	17	19
07:45 AM	0	4	8	6	12	1	0	5	3	6	1	6	0	0	7	0	0	0	0	0	9	25	34
Total	0	34	25	13	59	4	0	11	7	15	2	19	0	0	21	0	0	0	0	0	20	95	115
08:00 AM	0	5	4	1	9	1	0	2	1	3	0	2	0	0	2	0	0	0	0	0	2	14	16
08:15 AM	0	7	7	5	14	1	0	2	0	3	2	9	0	0	11	0	0	0	0	0	5	28	33
08:30 AM	0	9	4	2	13	1	0	6	4	7	1	12	0	0	13	0	0	0	0	0	6	33	39
08:45 AM	0	8	10	4	18	2	0	4	2	6	0	2	0	0	2	0	0	0	0	0	6	26	32
Total	0	29	25	12	54	5	0	14	7	19	3	25	0	0	28	0	0	0	0	0	19	101	120
Grand Total	0	63	50	25	113	9	0	25	14	34	5	44	0	0	49	0	0	0	0	0	39	196	235
Apprch %	0	55.8	44.2			26.5	0	73.5			10.2	89.8	0			0	0	0					
Total %	0	32.1	25.5		57.7	4.6	0	12.8		17.3	2.6	22.4	0		25	0	0	0		0	16.6	83.4	

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	4	**8**	12	**1**	0	5	6	1	6	0	7	0	0	0	0	25
08:00 AM	0	5	4	9	1	0	2	3	0	2	0	2	0	0	0	0	14
08:15 AM	0	7	7	**14**	1	0	2	3	**2**	9	0	11	0	0	0	0	28
08:30 AM	0	**9**	4	13	1	0	**6**	**7**	1	**12**	0	**13**	0	0	0	0	**33**
Total Volume	0	25	23	48	4	0	15	19	4	29	0	33	0	0	0	0	100
% App. Total	0	52.1	47.9		21.1	0	78.9		12.1	87.9	0		0	0	0		
PHF	.000	.694	.719	.857	1.00	.000	.625	.679	.500	.604	.000	.635	.000	.000	.000	.000	.758

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	4	**8**	12	**1**	0	5	6	1	6	0	7	0	0	0	0	
+15 mins.	0	5	4	9	1	0	2	3	0	2	0	2	0	0	0	0	
+30 mins.	0	7	7	**14**	1	0	2	3	**2**	9	0	11	0	0	0	0	
+45 mins.	0	**9**	4	13	1	0	**6**	**7**	1	**12**	0	**13**	0	0	0	0	
Total Volume	0	25	23	48	4	0	15	19	4	29	0	33	0	0	0	0	0
% App. Total	0	52.1	47.9		21.1	0	78.9		12.1	87.9	0		0	0	0		
PHF	.000	.694	.719	.857	1.000	.000	.625	.679	.500	.604	.000	.635	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Haven Avenue Southbound					SR-60 Westbound Off Ramp Westbound					Haven Avenue Northbound					SR-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	1	3	3	4	0	0	3	2	3	0	1	0	0	1	0	0	0	0	0	5	8	13
07:15 AM	0	3	4	3	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	10
07:30 AM	0	5	1	1	6	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	1	8	9
07:45 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
Total	0	9	9	8	18	1	0	4	2	5	0	1	0	0	1	0	0	0	0	0	10	24	34
08:00 AM	0	2	4	1	6	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	1	8	9
08:15 AM	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	5
08:30 AM	0	2	1	1	3	1	0	2	2	3	0	0	0	0	0	0	0	0	0	0	3	6	9
08:45 AM	0	4	2	1	6	2	0	2	2	4	0	2	0	0	2	0	0	0	0	0	3	12	15
Total	0	11	7	3	18	3	0	5	4	8	0	5	0	0	5	0	0	0	0	0	7	31	38
Grand Total	0	20	16	11	36	4	0	9	6	13	0	6	0	0	6	0	0	0	0	0	17	55	72
Apprch %	0	55.6	44.4			30.8	0	69.2			0	100	0			0	0	0					
Total %	0	36.4	29.1		65.5	7.3	0	16.4		23.6	0	10.9	0		10.9	0	0	0		0	23.6	76.4	

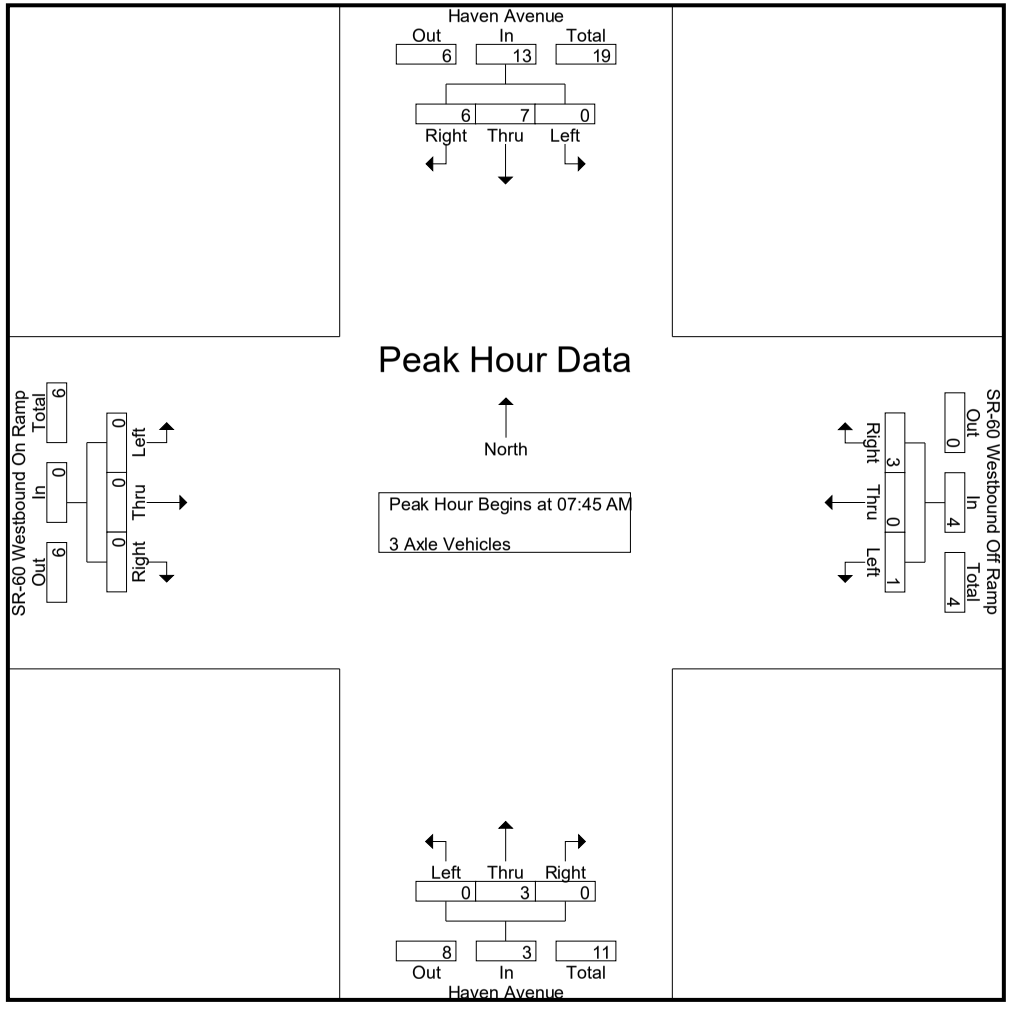
G3.1-256

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00 AM	0	2	**4**	**6**	0	0	1	1	0	1	0	1	0	0	0	0	**8**
08:15 AM	0	**3**	0	3	0	0	0	0	0	**2**	0	**2**	0	0	0	0	5
08:30 AM	0	2	1	3	**1**	0	**2**	**3**	0	0	0	0	0	0	0	0	6
Total Volume	0	7	6	13	1	0	3	4	0	3	0	3	0	0	0	0	20
% App. Total	0	53.8	46.2		25	0	75		0	100	0		0	0	0		
PHF	.000	.583	.375	.542	.250	.000	.375	.333	.000	.375	.000	.375	.000	.000	.000	.000	.625

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	2	**4**	**6**	0	0	1	1	0	1	0	1	0	0	0	0	
+30 mins.	0	**3**	0	3	0	0	0	0	0	**2**	0	**2**	0	0	0	0	
+45 mins.	0	2	1	3	**1**	0	**2**	**3**	0	0	0	0	0	0	0	0	
Total Volume	0	7	6	13	1	0	3	4	0	3	0	3	0	0	0	0	
% App. Total	0	53.8	46.2		25	0	75		0	100	0		0	0	0		
PHF	.000	.583	.375	.542	.250	.000	.375	.333	.000	.375	.000	.375	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

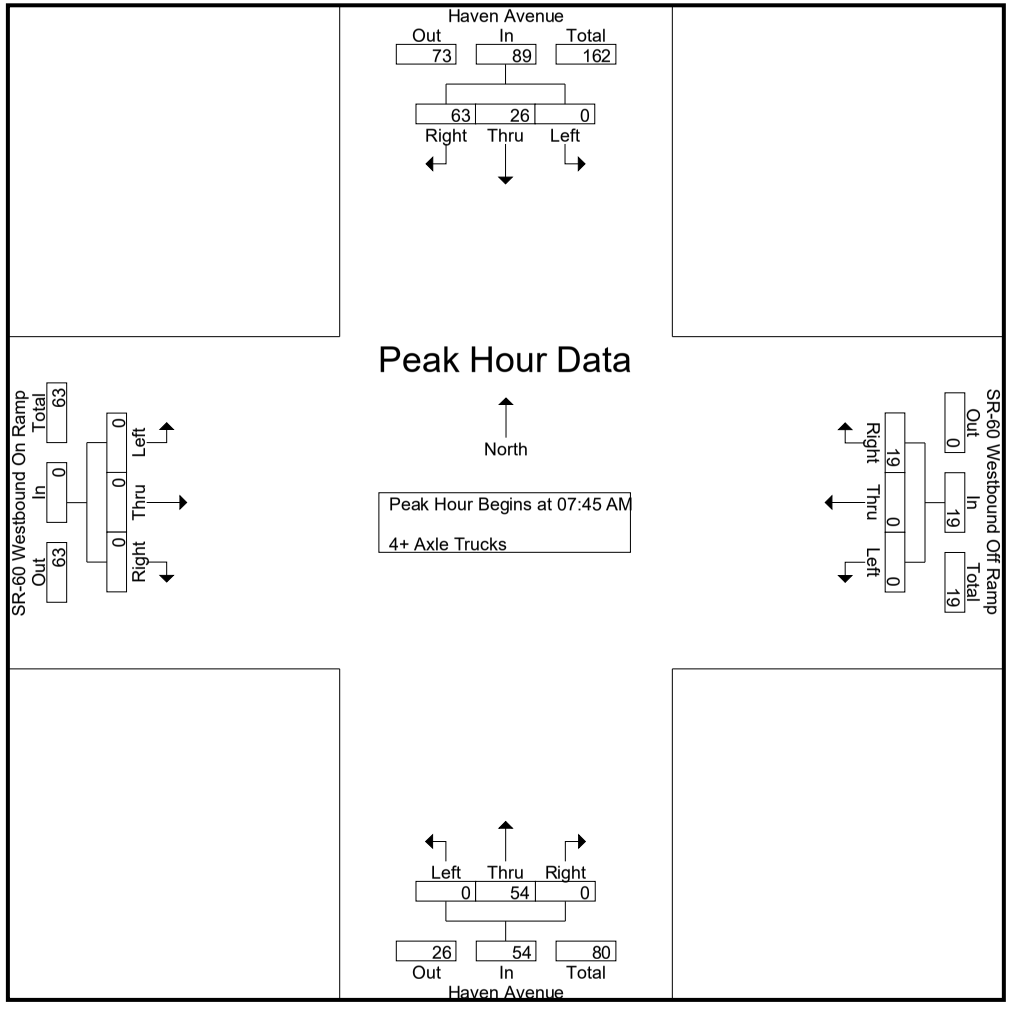
	Haven Avenue Southbound					SR-60 Westbound Off Ramp Westbound					Haven Avenue Northbound					SR-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	6	12	2	18	1	0	3	0	4	0	16	0	0	16	0	0	0	0	0	2	38	40
07:15 AM	0	9	12	6	21	0	0	4	3	4	0	8	0	0	8	0	0	0	0	0	9	33	42
07:30 AM	0	4	12	1	16	0	0	3	1	3	1	13	0	0	14	0	0	0	0	0	2	33	35
07:45 AM	0	6	17	6	23	0	0	4	1	4	0	11	0	0	11	0	0	0	0	0	7	38	45
Total	0	25	53	15	78	1	0	14	5	15	1	48	0	0	49	0	0	0	0	0	20	142	162
08:00 AM	0	6	15	4	21	0	0	4	1	4	0	14	0	0	14	0	0	0	0	0	5	39	44
08:15 AM	0	8	18	8	26	0	0	4	3	4	0	13	0	0	13	0	0	0	0	0	11	43	54
08:30 AM	0	6	13	5	19	0	0	7	3	7	0	16	0	0	16	0	0	0	0	0	8	42	50
08:45 AM	0	4	13	2	17	1	0	10	7	11	1	13	0	0	14	0	0	0	0	0	9	42	51
Total	0	24	59	19	83	1	0	25	14	26	1	56	0	0	57	0	0	0	0	0	33	166	199
Grand Total	0	49	112	34	161	2	0	39	19	41	2	104	0	0	106	0	0	0	0	0	53	308	361
Apprch %	0	30.4	69.6			4.9	0	95.1			1.9	98.1	0			0	0	0					
Total %	0	15.9	36.4		52.3	0.6	0	12.7		13.3	0.6	33.8	0		34.4	0	0	0		0	14.7	85.3	

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	6	17	23	0	0	4	4	0	11	0	11	0	0	0	0	38
08:00 AM	0	6	15	21	0	0	4	4	0	14	0	14	0	0	0	0	39
08:15 AM	0	**8**	**18**	**26**	0	0	4	4	0	13	0	13	0	0	0	0	**43**
08:30 AM	0	6	13	19	0	0	**7**	**7**	0	**16**	0	**16**	0	0	0	0	42
Total Volume	0	26	63	89	0	0	19	19	0	54	0	54	0	0	0	0	162
% App. Total	0	29.2	70.8		0	0	100		0	100	0		0	0	0		
PHF	.000	.813	.875	.856	.000	.000	.679	.679	.000	.844	.000	.844	.000	.000	.000	.000	.942

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	6	17	23	0	0	4	4	0	11	0	11	0	0	0	0	
+15 mins.	0	6	15	21	0	0	4	4	0	14	0	14	0	0	0	0	
+30 mins.	0	**8**	**18**	**26**	0	0	4	4	0	13	0	13	0	0	0	0	
+45 mins.	0	6	13	19	0	0	**7**	**7**	0	**16**	0	**16**	0	0	0	0	
Total Volume	0	26	63	89	0	0	19	19	0	54	0	54	0	0	0	0	
% App. Total	0	29.2	70.8		0	0	100		0	100	0		0	0	0		
PHF	.000	.813	.875	.856	.000	.000	.679	.679	.000	.844	.000	.844	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					SR-60 Westbound Off Ramp Westbound					Haven Avenue Northbound					SR-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	250	100	39	350	48	0	77	36	125	44	181	0	0	225	0	0	0	0	0	75	700	775
04:15 PM	0	255	95	38	350	65	3	120	60	188	34	189	0	0	223	0	0	0	0	0	98	761	859
04:30 PM	0	281	108	38	389	58	2	106	49	166	32	198	0	0	230	0	0	0	0	0	87	785	872
04:45 PM	0	271	86	35	357	73	2	124	66	199	36	199	0	0	235	0	0	0	0	0	101	791	892
Total	0	1057	389	150	1446	244	7	427	211	678	146	767	0	0	913	0	0	0	0	0	361	3037	3398
05:00 PM	0	279	95	39	374	64	1	113	75	178	34	155	0	0	189	0	0	0	0	0	114	741	855
05:15 PM	0	301	94	36	395	68	2	120	64	190	33	144	0	0	177	0	0	0	0	0	100	762	862
05:30 PM	0	304	113	50	417	66	3	111	72	180	30	179	0	0	209	0	0	0	0	0	122	806	928
05:45 PM	0	260	92	32	352	76	1	109	74	186	37	179	0	0	216	0	0	0	0	0	106	754	860
Total	0	1144	394	157	1538	274	7	453	285	734	134	657	0	0	791	0	0	0	0	0	442	3063	3505
Grand Total	0	2201	783	307	2984	518	14	880	496	1412	280	1424	0	0	1704	0	0	0	0	0	803	6100	6903
Apprch %	0	73.8	26.2			36.7	1	62.3			16.4	83.6	0			0	0	0					
Total %	0	36.1	12.8		48.9	8.5	0.2	14.4		23.1	4.6	23.3	0		27.9	0	0	0		0	11.6	88.4	
Passenger Vehicles	0	2154	683		3102	509	12	805		1782	274	1278	0		1552	0	0	0		0	0	0	6436
% Passenger Vehicles	0	97.9	87.2	86.3	94.3	98.3	85.7	91.5	91.9	93.4	97.9	89.7	0	0	91.1	0	0	0	0	0	0	0	93.2
Large 2 Axle Vehicles	0	15	15		38	5	2	28		49	6	32	0		38	0	0	0		0	0	0	125
% Large 2 Axle Vehicles	0	0.7	1.9	2.6	1.2	1	14.3	3.2	2.8	2.6	2.1	2.2	0	0	2.2	0	0	0	0	0	0	0	1.8
3 Axle Vehicles	0	10	13		29	0	0	13		23	0	11	0		11	0	0	0		0	0	0	63
% 3 Axle Vehicles	0	0.5	1.7	2	0.9	0	0	1.5	2	1.2	0	0.8	0	0	0.6	0	0	0	0	0	0	0	0.9
4+ Axle Trucks	0	22	72		122	4	0	34		54	0	103	0		103	0	0	0		0	0	0	279
% 4+ Axle Trucks	0	1	9.2	9.1	3.7	0.8	0	3.9	3.2	2.8	0	7.2	0	0	6	0	0	0	0	0	0	0	4

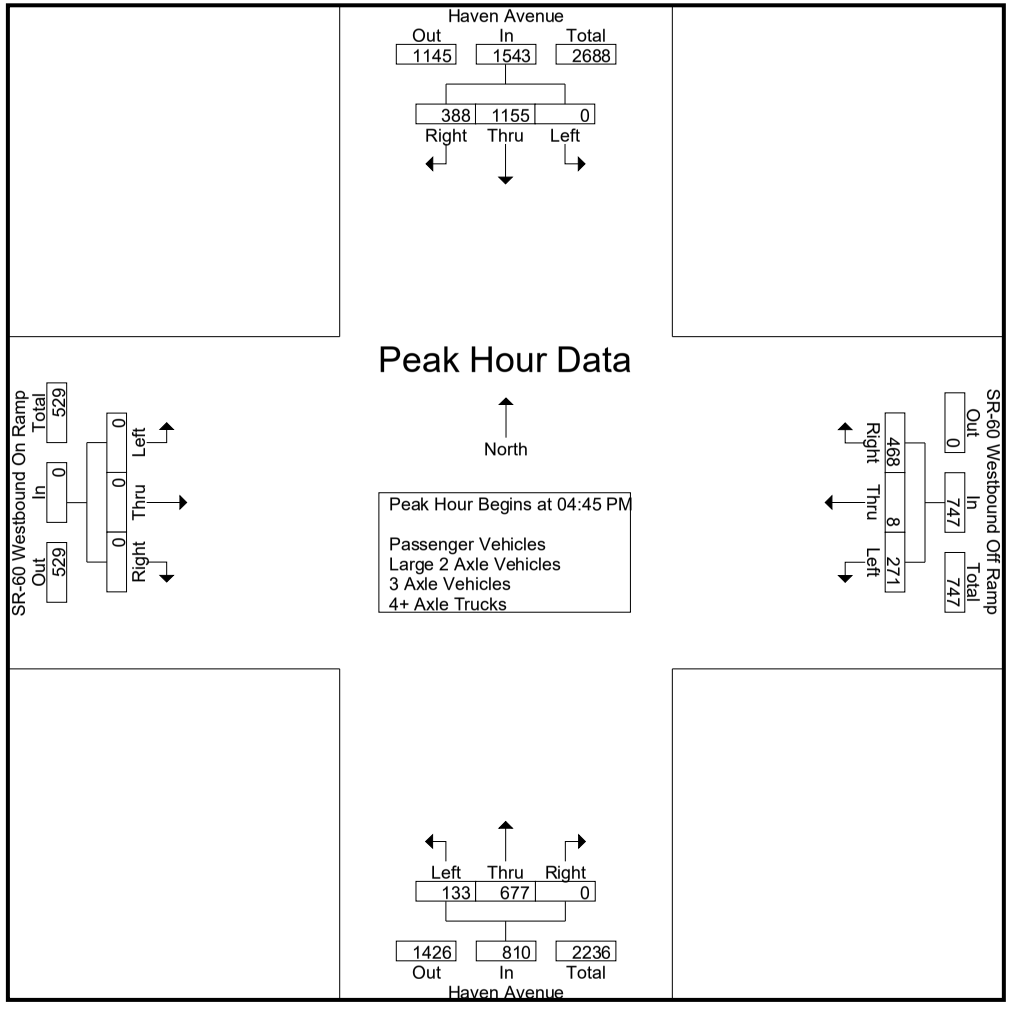
	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	271	86	357	**73**	2	**124**	**199**	**36**	**199**	0	**235**	0	0	0	0	791
05:00 PM	0	279	95	374	64	1	113	178	34	155	0	189	0	0	0	0	741
05:15 PM	0	301	94	395	68	2	120	190	33	144	0	177	0	0	0	0	762
05:30 PM	0	**304**	**113**	**417**	66	**3**	111	180	30	179	0	209	0	0	0	0	**806**
Total Volume	0	1155	388	1543	271	8	468	747	133	677	0	810	0	0	0	0	3100
% App. Total	0	74.9	25.1		36.3	1.1	62.7		16.4	83.6	0		0	0	0		
PHF	.000	.950	.858	.925	.928	.667	.944	.938	.924	.851	.000	.862	.000	.000	.000	.000	.962

3.1-262

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:00 PM				04:00 PM				
+0 mins.	0	271	86	357	**73**	2	**124**	**199**	**44**	181	0	225	0	0	0	0	
+15 mins.	0	279	95	374	64	1	113	178	34	189	0	223	0	0	0	0	
+30 mins.	0	301	94	395	68	2	120	190	32	198	0	230	0	0	0	0	
+45 mins.	0	**304**	**113**	**417**	66	**3**	111	180	36	**199**	0	**235**	0	0	0	0	
Total Volume	0	1155	388	1543	271	8	468	747	146	767	0	913	0	0	0	0	0
% App. Total	0	74.9	25.1		36.3	1.1	62.7		16	84	0		0	0	0		
PHF	.000	.950	.858	.925	.928	.667	.944	.938	.830	.964	.000	.971	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

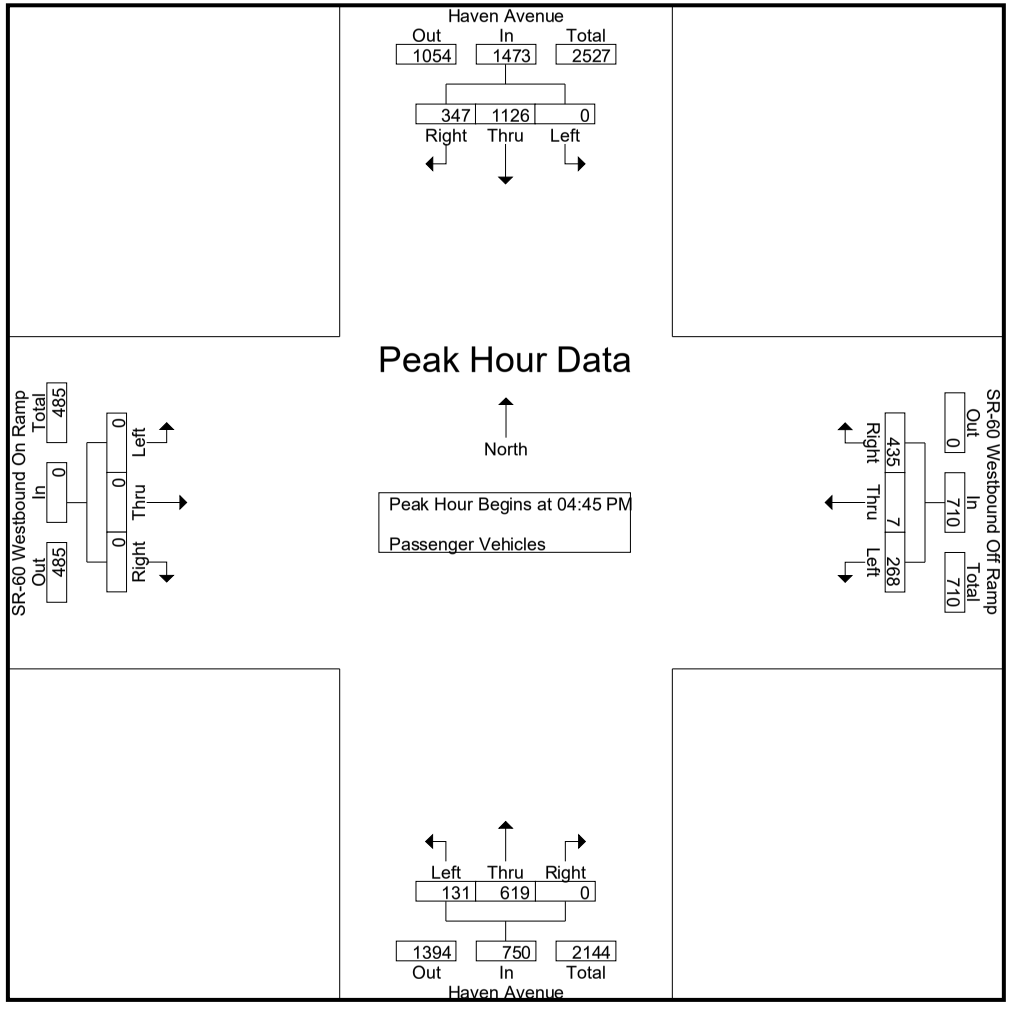
	Haven Avenue Southbound					SR-60 Westbound Off Ramp Westbound					Haven Avenue Northbound					SR-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	243	81	32	324	48	0	68	30	116	43	157	0	0	200	0	0	0	0	0	62	640	702
04:15 PM	0	250	86	34	336	63	3	109	55	175	33	164	0	0	197	0	0	0	0	0	89	708	797
04:30 PM	0	278	90	30	368	55	1	97	47	153	31	177	0	0	208	0	0	0	0	0	77	729	806
04:45 PM	0	263	70	30	333	73	2	113	60	188	36	183	0	0	219	0	0	0	0	0	90	740	830
Total	0	1034	327	126	1361	239	6	387	192	632	143	681	0	0	824	0	0	0	0	0	318	2817	3135
05:00 PM	0	270	82	32	352	64	1	104	71	169	34	142	0	0	176	0	0	0	0	0	103	697	800
05:15 PM	0	294	91	35	385	67	1	115	61	183	33	131	0	0	164	0	0	0	0	0	96	732	828
05:30 PM	0	299	104	45	403	64	3	103	67	170	28	163	0	0	191	0	0	0	0	0	112	764	876
05:45 PM	0	257	79	27	336	75	1	96	65	172	36	161	0	0	197	0	0	0	0	0	92	705	797
Total	0	1120	356	139	1476	270	6	418	264	694	131	597	0	0	728	0	0	0	0	0	403	2898	3301
Grand Total	0	2154	683	265	2837	509	12	805	456	1326	274	1278	0	0	1552	0	0	0	0	0	721	5715	6436
Apprch %	0	75.9	24.1			38.4	0.9	60.7			17.7	82.3	0			0	0	0					
Total %	0	37.7	12		49.6	8.9	0.2	14.1		23.2	4.8	22.4	0		27.2	0	0	0		0	11.2	88.8	

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	263	70	333	**73**	2	113	**188**	**36**	**183**	0	**219**	0	0	0	0	740
05:00 PM	0	270	82	352	64	1	104	169	34	142	0	176	0	0	0	0	697
05:15 PM	0	294	91	385	67	1	**115**	183	33	131	0	164	0	0	0	0	732
05:30 PM	0	**299**	**104**	**403**	64	**3**	103	170	28	163	0	191	0	0	0	0	**764**
Total Volume	0	1126	347	1473	268	7	435	710	131	619	0	750	0	0	0	0	2933
% App. Total	0	76.4	23.6		37.7	1	61.3		17.5	82.5	0		0	0	0		
PHF	.000	.941	.834	.914	.918	.583	.946	.944	.910	.846	.000	.856	.000	.000	.000	.000	.960

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	263	70	333	**73**	2	113	**188**	**36**	**183**	0	**219**	0	0	0	0	
+15 mins.	0	270	82	352	64	1	104	169	34	142	0	176	0	0	0	0	
+30 mins.	0	294	91	385	67	1	**115**	183	33	131	0	164	0	0	0	0	
+45 mins.	0	**299**	**104**	**403**	64	**3**	103	170	28	163	0	191	0	0	0	0	
Total Volume	0	1126	347	1473	268	7	435	710	131	619	0	750	0	0	0	0	
% App. Total	0	76.4	23.6		37.7	1	61.3		17.5	82.5	0		0	0	0		
PHF	.000	.941	.834	.914	.918	.583	.946	.944	.910	.846	.000	.856	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

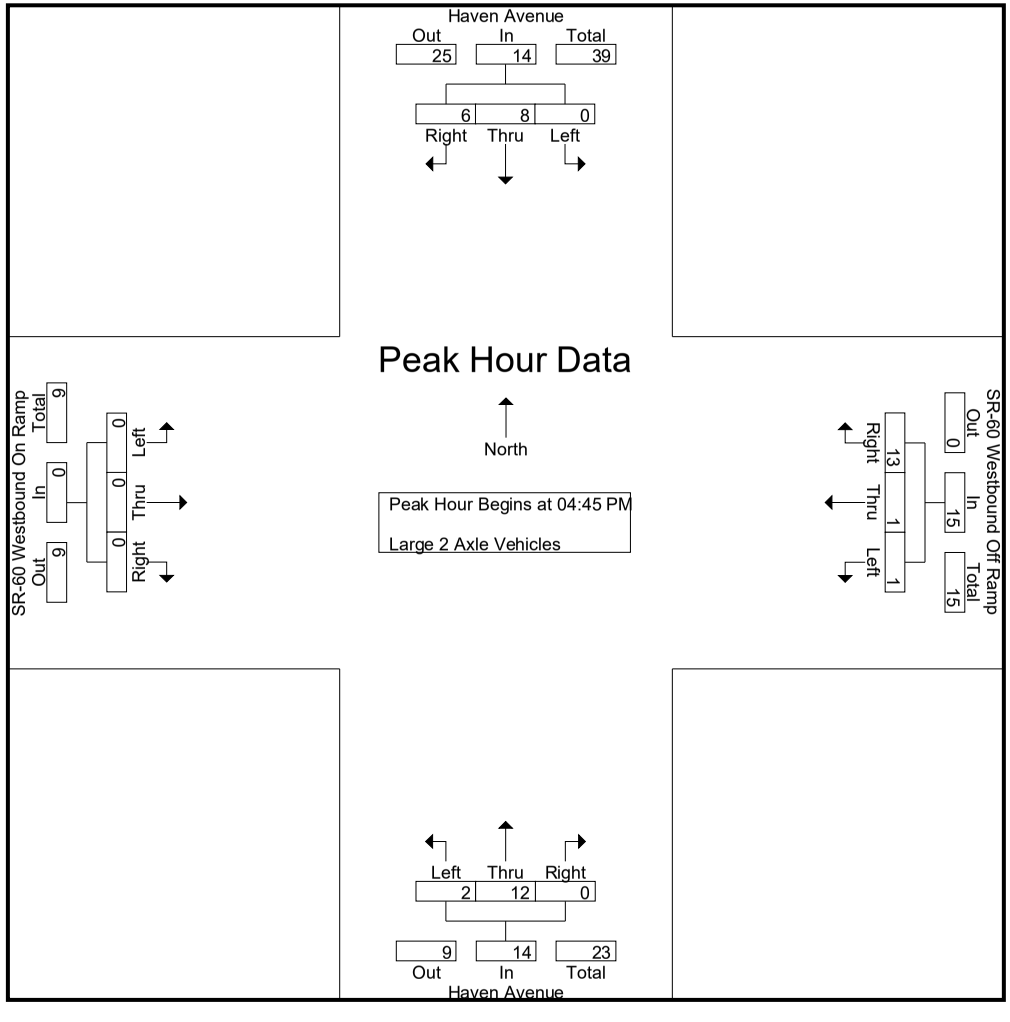
	Haven Avenue Southbound					SR-60 Westbound Off Ramp Westbound					Haven Avenue Northbound					SR-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	4	4	1	8	0	0	0	0	0	1	4	0	0	5	0	0	0	0	0	1	13	14
04:15 PM	0	2	3	2	5	2	0	4	3	6	1	6	0	0	7	0	0	0	0	0	5	18	23
04:30 PM	0	1	0	0	1	2	1	4	1	7	1	6	0	0	7	0	0	0	0	0	1	15	16
04:45 PM	0	2	0	0	2	0	0	2	1	2	0	3	0	0	3	0	0	0	0	0	1	7	8
Total	0	9	7	3	16	4	1	10	5	15	3	19	0	0	22	0	0	0	0	0	8	53	61
05:00 PM	0	4	5	3	9	0	0	6	3	6	0	6	0	0	6	0	0	0	0	0	6	21	27
05:15 PM	0	1	0	0	1	0	1	1	0	2	0	1	0	0	1	0	0	0	0	0	0	4	4
05:30 PM	0	1	1	1	2	1	0	4	2	5	2	2	0	0	4	0	0	0	0	0	3	11	14
05:45 PM	0	0	2	1	2	0	0	7	4	7	1	4	0	0	5	0	0	0	0	0	5	14	19
Total	0	6	8	5	14	1	1	18	9	20	3	13	0	0	16	0	0	0	0	0	14	50	64
Grand Total	0	15	15	8	30	5	2	28	14	35	6	32	0	0	38	0	0	0	0	0	22	103	125
Apprch %	0	50	50			14.3	5.7	80			15.8	84.2	0			0	0	0					
Total %	0	14.6	14.6		29.1	4.9	1.9	27.2		34	5.8	31.1	0		36.9	0	0	0		0	17.6	82.4	

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	2	0	2	0	0	2	2	0	3	0	3	0	0	0	0	7
05:00 PM	0	**4**	**5**	**9**	0	0	**6**	**6**	0	**6**	0	**6**	0	0	0	0	**21**
05:15 PM	0	1	0	1	0	**1**	1	2	0	1	0	1	0	0	0	0	4
05:30 PM	0	1	1	2	**1**	0	4	5	**2**	2	0	4	0	0	0	0	11
Total Volume	0	8	6	14	1	1	13	15	2	12	0	14	0	0	0	0	43
% App. Total	0	57.1	42.9		6.7	6.7	86.7		14.3	85.7	0		0	0	0		
PHF	.000	.500	.300	.389	.250	.250	.542	.625	.250	.500	.000	.583	.000	.000	.000	.000	.512

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	2	0	2	0	0	2	2	0	3	0	3	0	0	0	0	
+15 mins.	0	**4**	**5**	**9**	0	0	**6**	**6**	0	**6**	0	**6**	0	0	0	0	
+30 mins.	0	1	0	1	0	**1**	1	2	0	1	0	1	0	0	0	0	
+45 mins.	0	1	1	2	**1**	0	4	5	**2**	2	0	4	0	0	0	0	
Total Volume	0	8	6	14	1	1	13	15	2	12	0	14	0	0	0	0	
% App. Total	0	57.1	42.9		6.7	6.7	86.7		14.3	85.7	0		0	0	0		
PHF	.000	.500	.300	.389	.250	.250	.542	.625	.250	.500	.000	.583	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

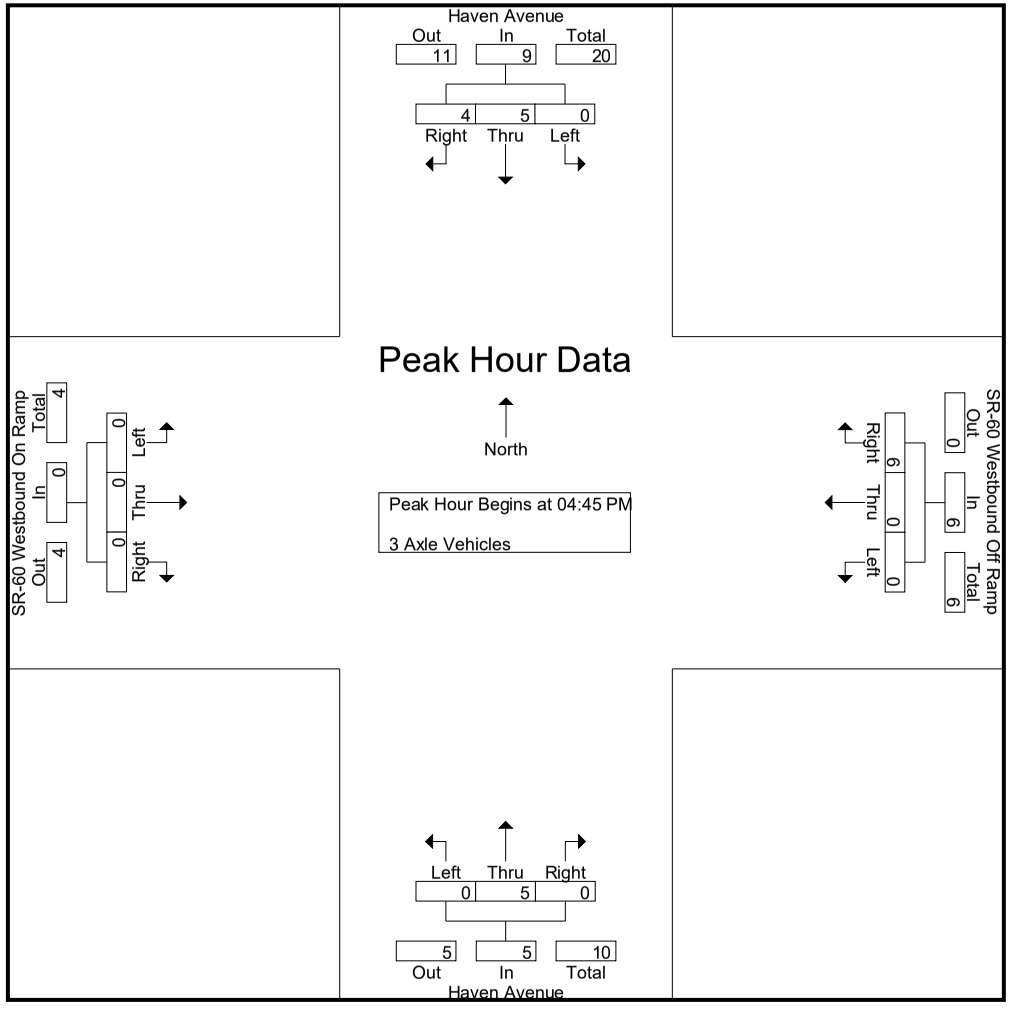
	Haven Avenue Southbound					SR-60 Westbound Off Ramp Westbound					Haven Avenue Northbound					SR-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	2	3	2	5	0	0	3	3	3	0	2	0	0	2	0	0	0	0	0	5	10	15
04:15 PM	0	1	2	1	3	0	0	3	1	3	0	2	0	0	2	0	0	0	0	0	2	8	10
04:30 PM	0	1	2	0	3	0	0	1	1	1	0	2	0	0	2	0	0	0	0	0	1	6	7
04:45 PM	0	2	0	0	2	0	0	2	2	2	0	0	0	0	0	0	0	0	0	0	2	4	6
Total	0	6	7	3	13	0	0	9	7	9	0	6	0	0	6	0	0	0	0	0	10	28	38
05:00 PM	0	1	2	1	3	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	5	6
05:15 PM	0	2	0	0	2	0	0	2	2	2	0	1	0	0	1	0	0	0	0	0	2	5	7
05:30 PM	0	0	2	1	2	0	0	2	1	2	0	2	0	0	2	0	0	0	0	0	2	6	8
05:45 PM	0	1	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	4
Total	0	4	6	3	10	0	0	4	3	4	0	5	0	0	5	0	0	0	0	0	6	19	25
Grand Total	0	10	13	6	23	0	0	13	10	13	0	11	0	0	11	0	0	0	0	0	16	47	63
Apprch %	0	43.5	56.5			0	0	100			0	100	0			0	0	0					
Total %	0	21.3	27.7		48.9	0	0	27.7		27.7	0	23.4	0		23.4	0	0	0		0	25.4	74.6	

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	**2**	0	2	0	0	**2**	**2**	0	0	0	0	0	0	0	0	4
05:00 PM	0	1	**2**	**3**	0	0	0	0	0	**2**	0	**2**	0	0	0	0	5
05:15 PM	0	2	0	2	0	0	2	2	0	1	0	1	0	0	0	0	5
05:30 PM	0	0	2	2	0	0	2	2	0	2	0	2	0	0	0	0	**6**
Total Volume	0	5	4	9	0	0	6	6	0	5	0	5	0	0	0	0	20
% App. Total	0	55.6	44.4		0	0	100		0	100	0		0	0	0		
PHF	.000	.625	.500	.750	.000	.000	.750	.750	.000	.625	.000	.625	.000	.000	.000	.000	.833

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	**2**	0	2	0	0	**2**	**2**	0	0	0	0	0	0	0	0	
+15 mins.	0	1	**2**	**3**	0	0	0	0	0	**2**	0	**2**	0	0	0	0	
+30 mins.	0	2	0	2	0	0	2	2	0	1	0	1	0	0	0	0	
+45 mins.	0	0	2	2	0	0	2	2	0	2	0	2	0	0	0	0	
Total Volume	0	5	4	9	0	0	6	6	0	5	0	5	0	0	0	0	
% App. Total	0	55.6	44.4		0	0	100		0	100	0		0	0	0		
PHF	.000	.625	.500	.750	.000	.000	.750	.750	.000	.625	.000	.625	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Haven Avenue Southbound					SR-60 Westbound Off Ramp Westbound					Haven Avenue Northbound					SR-60 Westbound On Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	1	12	4	13	0	0	6	3	6	0	18	0	0	18	0	0	0	0	0	7	37	44
04:15 PM	0	2	4	1	6	0	0	4	1	4	0	17	0	0	17	0	0	0	0	0	2	27	29
04:30 PM	0	1	16	8	17	1	0	4	0	5	0	13	0	0	13	0	0	0	0	0	8	35	43
04:45 PM	0	4	16	5	20	0	0	7	3	7	0	13	0	0	13	0	0	0	0	0	8	40	48
Total	0	8	48	18	56	1	0	21	7	22	0	61	0	0	61	0	0	0	0	0	25	139	164
05:00 PM	0	4	6	3	10	0	0	3	1	3	0	5	0	0	5	0	0	0	0	0	4	18	22
05:15 PM	0	4	3	1	7	1	0	2	1	3	0	11	0	0	11	0	0	0	0	0	2	21	23
05:30 PM	0	4	6	3	10	1	0	2	2	3	0	12	0	0	12	0	0	0	0	0	5	25	30
05:45 PM	0	2	9	3	11	1	0	6	5	7	0	14	0	0	14	0	0	0	0	0	8	32	40
Total	0	14	24	10	38	3	0	13	9	16	0	42	0	0	42	0	0	0	0	0	19	96	115
Grand Total	0	22	72	28	94	4	0	34	16	38	0	103	0	0	103	0	0	0	0	0	44	235	279
Apprch %	0	23.4	76.6			10.5	0	89.5			0	100	0			0	0	0					
Total %	0	9.4	30.6		40	1.7	0	14.5		16.2	0	43.8	0		43.8	0	0	0		0	15.8	84.2	

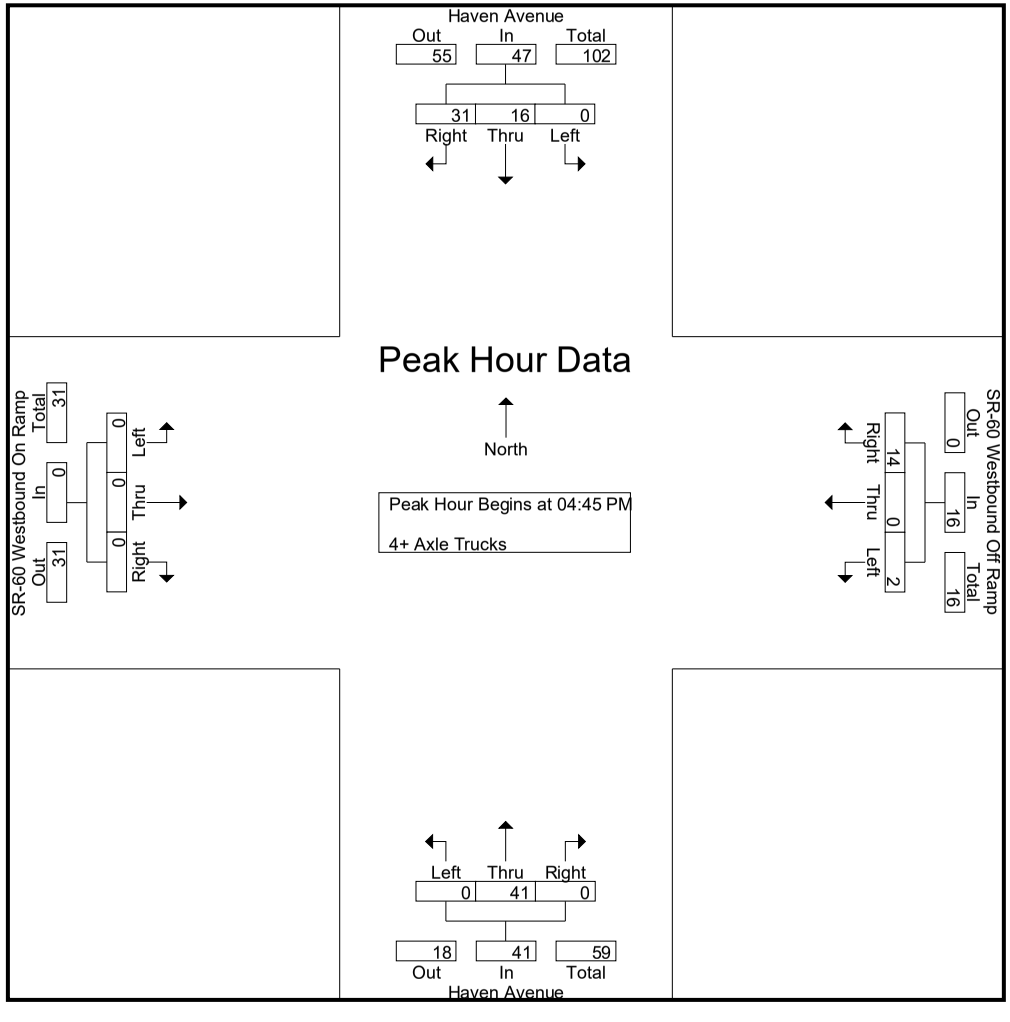
G3.1-274

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	**4**	**16**	**20**	0	0	**7**	**7**	0	**13**	0	**13**	0	0	0	0	**40**
05:00 PM	0	4	6	10	0	0	3	3	0	5	0	5	0	0	0	0	18
05:15 PM	0	4	3	7	**1**	0	2	3	0	11	0	11	0	0	0	0	21
05:30 PM	0	4	6	10	1	0	2	3	0	12	0	12	0	0	0	0	25
Total Volume	0	16	31	47	2	0	14	16	0	41	0	41	0	0	0	0	104
% App. Total	0	34	66		12.5	0	87.5		0	100	0		0	0	0		
PHF	.000	1.00	.484	.588	.500	.000	.500	.571	.000	.788	.000	.788	.000	.000	.000	.000	.650

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Westbound Ramps
Weather: Clear

File Name : 09_ONT_Hav_60W PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Westbound Off Ramp Westbound				Haven Avenue Northbound				SR-60 Westbound On Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	**4**	**16**	**20**	0	0	**7**	**7**	0	**13**	0	**13**	0	0	0	0	
+15 mins.	0	4	6	10	0	0	3	3	0	5	0	5	0	0	0	0	
+30 mins.	0	4	3	7	**1**	0	2	3	0	11	0	11	0	0	0	0	
+45 mins.	0	4	6	10	1	0	2	3	0	12	0	12	0	0	0	0	
Total Volume	0	16	31	47	2	0	14	16	0	41	0	41	0	0	0	0	
% App. Total	0	34	66		12.5	0	87.5		0	100	0		0	0	0		
PHF	.000	1.000	.484	.588	.500	.000	.500	.571	.000	.788	.000	.788	.000	.000	.000	.000	

Location: Ontario
N/S: Haven Avenue
E/W: SR-60 WB Ramps

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Haven Avenue	East Leg SR-60 WB Ramps	South Leg Haven Avenue	West Leg SR-60 WB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Haven Avenue	East Leg SR-60 WB Ramps	South Leg Haven Avenue	West Leg SR-60 WB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	2	0	0	2
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	2

Location: Ontario
N/S: Haven Avenue
E/W: SR-60 WB Ramps

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Haven Avenue			Westbound SR-60 WB Ramps			Northbound Haven Avenue			Eastbound SR-60 WB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Haven Avenue			Westbound SR-60 WB Ramps			Northbound Haven Avenue			Eastbound SR-60 WB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	1	0	0	0	0	3

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	73	100	0	0	173	0	0	0	0	0	0	187	63	19	250	98	0	33	23	131	42	554	596
07:15 AM	77	110	0	0	187	0	0	0	0	0	0	236	67	17	303	121	1	26	19	148	36	638	674
07:30 AM	86	118	0	0	204	0	0	0	0	0	0	226	77	19	303	167	3	41	28	211	47	718	765
07:45 AM	61	109	0	0	170	0	0	0	0	0	0	230	64	16	294	177	0	59	42	236	58	700	758
Total	297	437	0	0	734	0	0	0	0	0	0	879	271	71	1150	563	4	159	112	726	183	2610	2793
08:00 AM	60	182	0	0	242	0	0	0	0	0	0	236	71	19	307	170	0	45	26	215	45	764	809
08:15 AM	62	137	0	0	199	0	0	0	0	0	0	245	51	7	296	173	2	50	38	225	45	720	765
08:30 AM	54	118	0	0	172	0	0	0	0	0	0	220	42	11	262	138	0	26	20	164	31	598	629
08:45 AM	96	99	0	0	195	0	0	0	0	0	0	175	21	3	196	110	2	29	16	141	19	532	551
Total	272	536	0	0	808	0	0	0	0	0	0	876	185	40	1061	591	4	150	100	745	140	2614	2754
Grand Total	569	973	0	0	1542	0	0	0	0	0	0	1755	456	111	2211	1154	8	309	212	1471	323	5224	5547
Apprch %	36.9	63.1	0			0	0	0			0	79.4	20.6			78.5	0.5	21					
Total %	10.9	18.6	0		29.5	0	0	0		0	0	33.6	8.7		42.3	22.1	0.2	5.9		28.2	5.8	94.2	
Passenger Vehicles	461	939	0		1400	0	0	0		0	0	1728	448		2287	1015	6	304		1533	0	0	5220
% Passenger Vehicles	81	96.5	0	0	90.8	0	0	0	0	0	0	98.5	98.2	100	98.5	88	75	98.4	98.1	91.1	0	0	94.1
Large 2 Axle Vehicles	34	29	0		63	0	0	0		0	0	25	6		31	25	1	4		34	0	0	128
% Large 2 Axle Vehicles	6	3	0	0	4.1	0	0	0	0	0	0	1.4	1.3	0	1.3	2.2	12.5	1.3	1.9	2	0	0	2.3
3 Axle Vehicles	22	4	0		26	0	0	0		0	0	2	1		3	7	1	1		9	0	0	38
% 3 Axle Vehicles	3.9	0.4	0	0	1.7	0	0	0	0	0	0	0.1	0.2	0	0.1	0.6	12.5	0.3	0	0.5	0	0	0.7
4+ Axle Trucks	52	1	0		53	0	0	0		0	0	0	1		1	107	0	0		107	0	0	161
% 4+ Axle Trucks	9.1	0.1	0	0	3.4	0	0	0	0	0	0	0	0.2	0	0	9.3	0	0	0	6.4	0	0	2.9

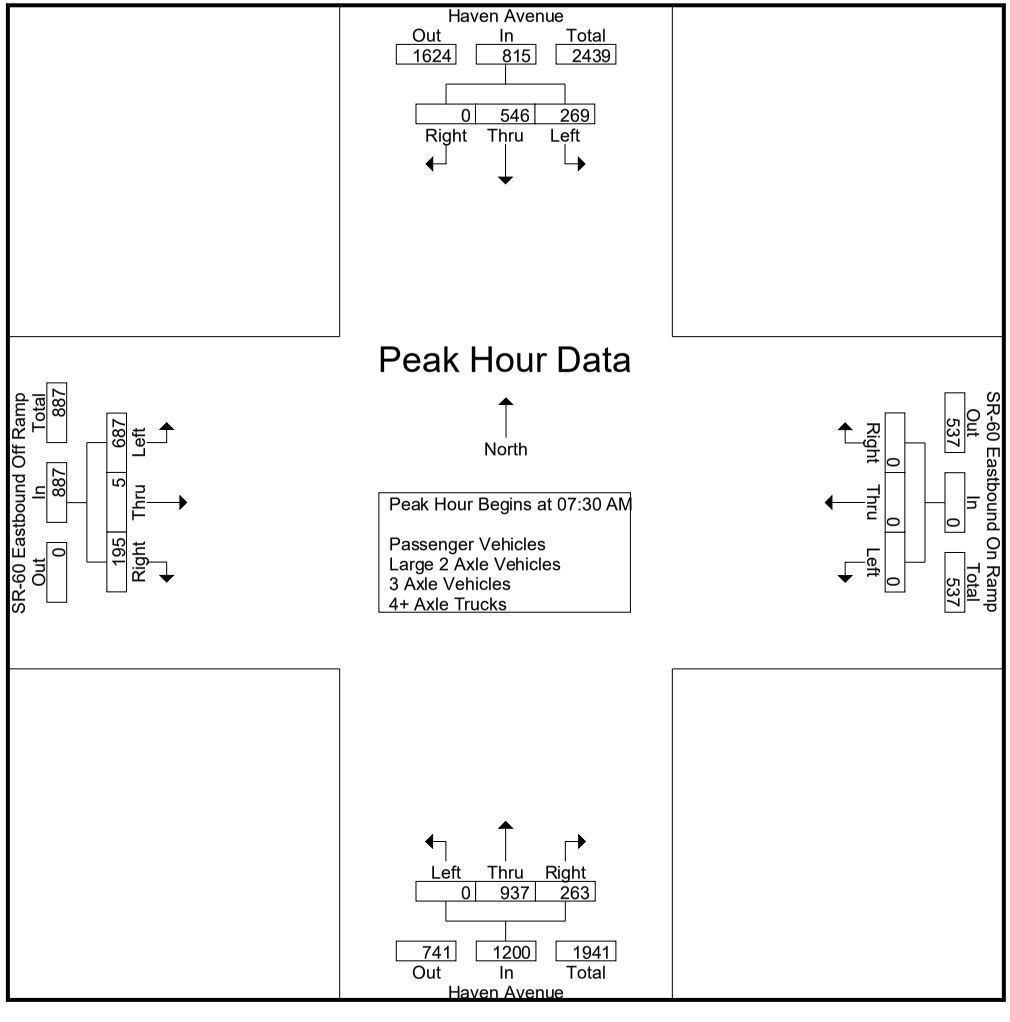
	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**86**	118	0	204	0	0	0	0	0	226	**77**	303	167	**3**	41	211	718
07:45 AM	61	109	0	170	0	0	0	0	0	230	64	294	**177**	0	**59**	**236**	700
08:00 AM	60	**182**	0	**242**	0	0	0	0	0	236	71	**307**	170	0	45	215	**764**
08:15 AM	62	137	0	199	0	0	0	0	0	**245**	51	296	173	2	50	225	720
Total Volume	269	546	0	815	0	0	0	0	0	937	263	1200	687	5	195	887	2902
% App. Total	33	67	0		0	0	0		0	78.1	21.9		77.5	0.6	22		
PHF	.782	.750	.000	.842	.000	.000	.000	.000	.000	.956	.854	.977	.970	.417	.826	.940	.950

3.1-27c

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:00 AM				07:15 AM				07:30 AM				
+0 mins.	**86**	118	0	204	0	0	0	0	0	**236**	67	303	167	**3**	41	211	
+15 mins.	61	109	0	170	0	0	0	0	0	226	**77**	303	**177**	0	**59**	**236**	
+30 mins.	60	**182**	0	**242**	0	0	0	0	0	230	64	294	170	0	45	215	
+45 mins.	62	137	0	199	0	0	0	0	0	236	71	**307**	173	2	50	225	
Total Volume	269	546	0	815	0	0	0	0	0	928	279	1207	687	5	195	887	
% App. Total	33	67	0		0	0	0		0	76.9	23.1		77.5	0.6	22		
PHF	.782	.750	.000	.842	.000	.000	.000	.000	.000	.983	.906	.983	.970	.417	.826	.940	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Haven Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	57	96	0	0	153	0	0	0	0	0	0	185	63	19	248	79	0	33	23	112	42	513	555
07:15 AM	60	105	0	0	165	0	0	0	0	0	0	234	67	17	301	109	1	25	18	135	35	601	636
07:30 AM	69	115	0	0	184	0	0	0	0	0	0	221	76	19	297	152	2	39	26	193	45	674	719
07:45 AM	52	105	0	0	157	0	0	0	0	0	0	227	64	16	291	160	0	58	42	218	58	666	724
Total	238	421	0	0	659	0	0	0	0	0	0	867	270	71	1137	500	3	155	109	658	180	2454	2634
08:00 AM	52	177	0	0	229	0	0	0	0	0	0	235	69	19	304	154	0	44	25	198	44	731	775
08:15 AM	47	134	0	0	181	0	0	0	0	0	0	236	49	7	285	153	1	50	38	204	45	670	715
08:30 AM	42	115	0	0	157	0	0	0	0	0	0	217	39	11	256	114	0	26	20	140	31	553	584
08:45 AM	82	92	0	0	174	0	0	0	0	0	0	173	21	3	194	94	2	29	16	125	19	493	512
Total	223	518	0	0	741	0	0	0	0	0	0	861	178	40	1039	515	3	149	99	667	139	2447	2586
Grand Total	461	939	0	0	1400	0	0	0	0	0	0	1728	448	111	2176	1015	6	304	208	1325	319	4901	5220
Apprch %	32.9	67.1	0			0	0	0			0	79.4	20.6			76.6	0.5	22.9					
Total %	9.4	19.2	0		28.6	0	0	0		0	0	35.3	9.1		44.4	20.7	0.1	6.2		27	6.1	93.9	

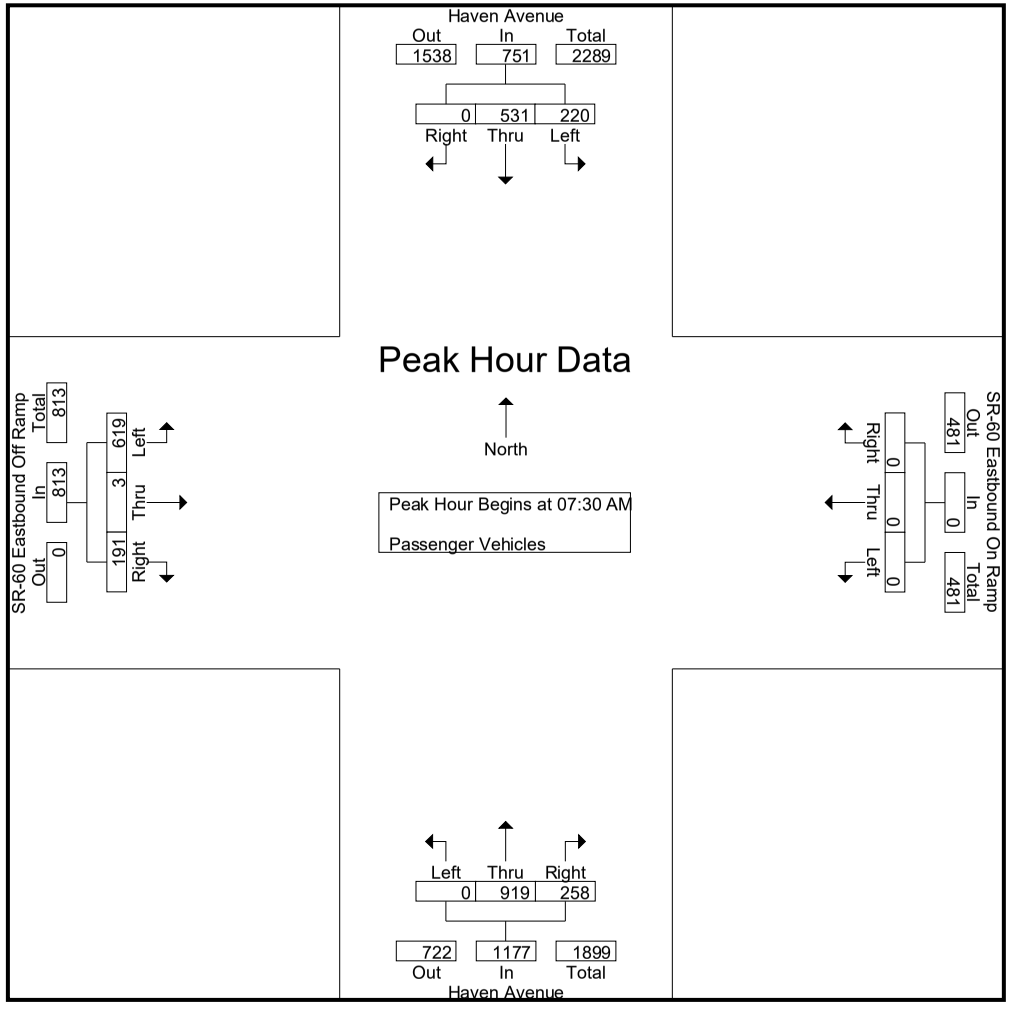
3.1-282

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**69**	115	0	184	0	0	0	0	0	221	**76**	297	152	**2**	39	193	674
07:45 AM	52	105	0	157	0	0	0	0	0	227	64	291	**160**	0	**58**	**218**	666
08:00 AM	52	**177**	0	**229**	0	0	0	0	0	235	69	**304**	154	0	44	198	**731**
08:15 AM	47	134	0	181	0	0	0	0	0	**236**	49	285	153	1	50	204	670
Total Volume	220	531	0	751	0	0	0	0	0	919	258	1177	619	3	191	813	2741
% App. Total	29.3	70.7	0		0	0	0		0	78.1	21.9		76.1	0.4	23.5		
PHF	.797	.750	.000	.820	.000	.000	.000	.000	.000	.974	.849	.968	.967	.375	.823	.932	.937

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**69**	115	0	184	0	0	0	0	0	221	**76**	297	152	**2**	39	193	
+15 mins.	52	105	0	157	0	0	0	0	0	227	64	291	**160**	0	**58**	**218**	
+30 mins.	52	**177**	0	**229**	0	0	0	0	0	235	69	**304**	154	0	44	198	
+45 mins.	47	134	0	181	0	0	0	0	0	**236**	49	285	153	1	50	204	
Total Volume	220	531	0	751	0	0	0	0	0	919	258	1177	619	3	191	813	
% App. Total	29.3	70.7	0		0	0	0		0	78.1	21.9		76.1	0.4	23.5		
PHF	.797	.750	.000	.820	.000	.000	.000	.000	.000	.974	.849	.968	.967	.375	.823	.932	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

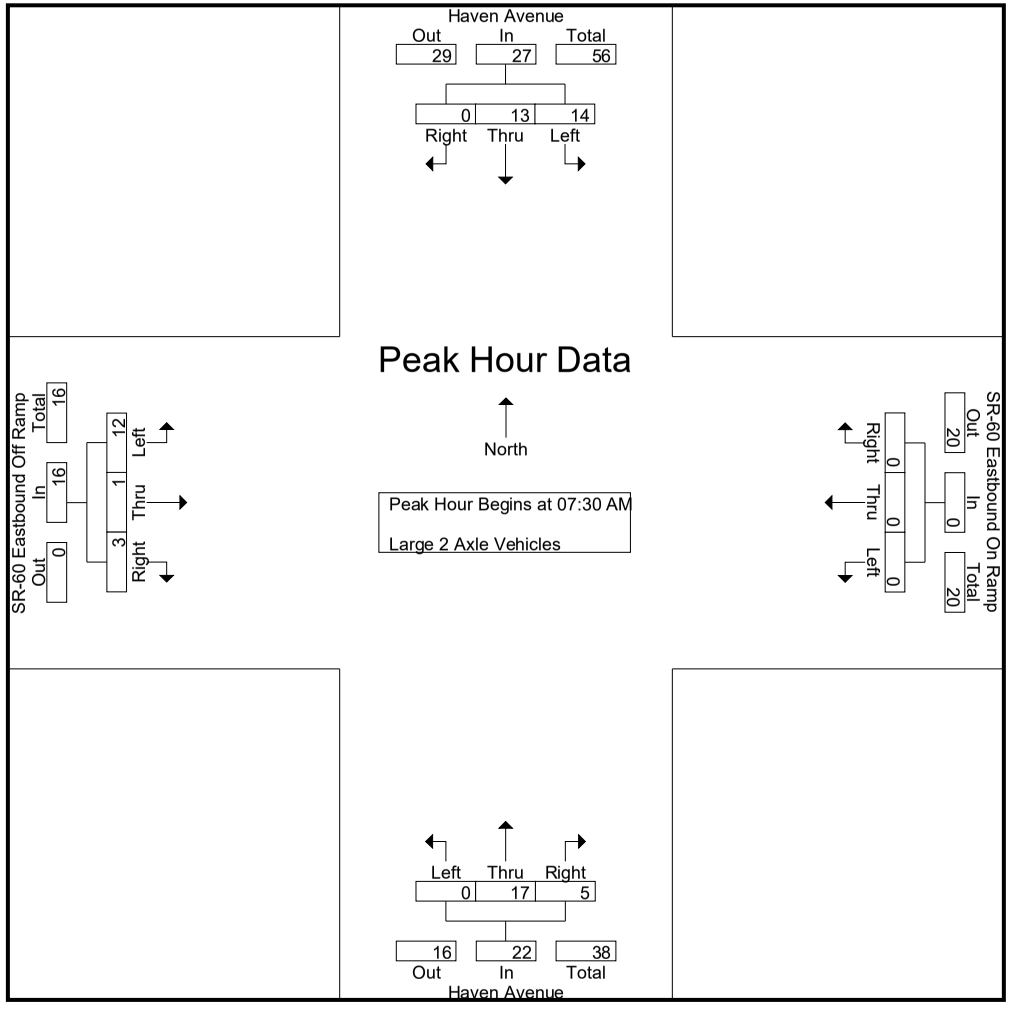
	Haven Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	7	4	0	0	11	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	14	14
07:15 AM	4	5	0	0	9	0	0	0	0	0	0	2	0	0	2	4	0	1	1	5	1	16	17
07:30 AM	7	2	0	0	9	0	0	0	0	0	0	4	1	0	5	1	0	2	2	3	2	17	19
07:45 AM	3	4	0	0	7	0	0	0	0	0	0	3	0	0	3	4	0	0	0	4	0	14	14
Total	21	15	0	0	36	0	0	0	0	0	0	11	1	0	12	10	0	3	3	13	3	61	64
08:00 AM	0	5	0	0	5	0	0	0	0	0	0	1	2	0	3	2	0	1	1	3	1	11	12
08:15 AM	4	2	0	0	6	0	0	0	0	0	0	9	2	0	11	5	1	0	0	6	0	23	23
08:30 AM	3	3	0	0	6	0	0	0	0	0	0	3	1	0	4	7	0	0	0	7	0	17	17
08:45 AM	6	4	0	0	10	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	12	12
Total	13	14	0	0	27	0	0	0	0	0	0	14	5	0	19	15	1	1	1	17	1	63	64
Grand Total	34	29	0	0	63	0	0	0	0	0	0	25	6	0	31	25	1	4	4	30	4	124	128
Apprch %	54	46	0			0	0	0			0	80.6	19.4			83.3	3.3	13.3					
Total %	27.4	23.4	0		50.8	0	0	0		0	0	20.2	4.8		25	20.2	0.8	3.2		24.2	3.1	96.9	

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**7**	2	0	**9**	0	0	0	0	0	4	1	5	1	0	**2**	3	17
07:45 AM	3	4	0	7	0	0	0	0	0	3	0	3	4	0	0	4	14
08:00 AM	0	**5**	0	5	0	0	0	0	0	1	**2**	3	2	0	1	3	11
08:15 AM	4	2	0	6	0	0	0	0	0	**9**	2	**11**	**5**	**1**	0	**6**	**23**
Total Volume	14	13	0	27	0	0	0	0	0	17	5	22	12	1	3	16	65
% App. Total	51.9	48.1	0		0	0	0		0	77.3	22.7		75	6.2	18.8		
PHF	.500	.650	.000	.750	.000	.000	.000	.000	.000	.472	.625	.500	.600	.250	.375	.667	.707

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**7**	2	0	**9**	0	0	0	0	0	4	1	5	1	0	**2**	3	
+15 mins.	3	4	0	7	0	0	0	0	0	3	0	3	4	0	0	4	
+30 mins.	0	**5**	0	5	0	0	0	0	0	1	**2**	3	2	0	1	3	
+45 mins.	4	2	0	6	0	0	0	0	0	**9**	2	**11**	**5**	**1**	0	**6**	
Total Volume	14	13	0	27	0	0	0	0	0	17	5	22	12	1	3	16	
% App. Total	51.9	48.1	0		0	0	0		0	77.3	22.7		75	6.2	18.8		
PHF	.500	.650	.000	.750	.000	.000	.000	.000	.000	.472	.625	.500	.600	.250	.375	.667	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

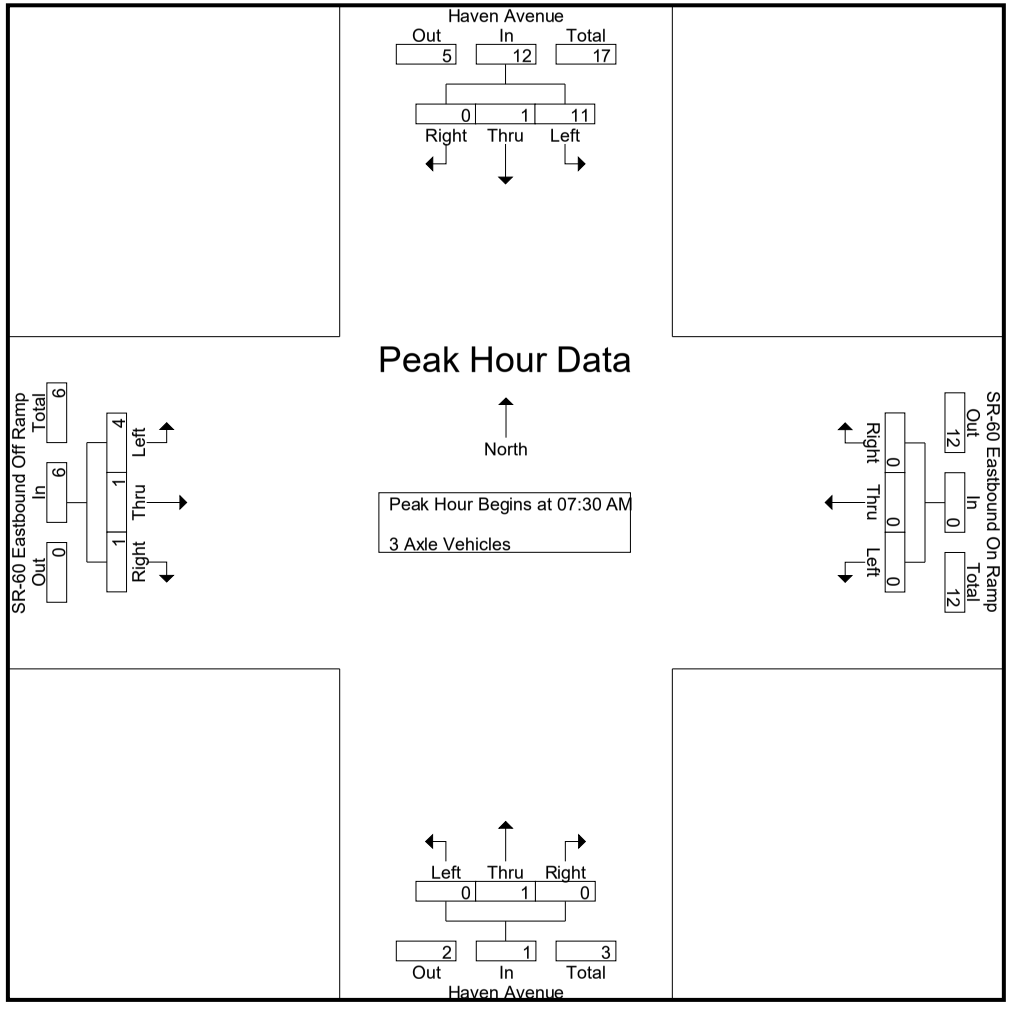
	Haven Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	3	3
07:15 AM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4
07:30 AM	5	1	0	0	6	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	8	8
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
Total	11	1	0	0	12	0	0	0	0	0	0	1	0	0	1	1	1	1	0	3	0	16	16
08:00 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	4	4
08:15 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	6	6
08:30 AM	2	0	0	0	2	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	4	4
08:45 AM	3	3	0	0	6	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	8	8
Total	11	3	0	0	14	0	0	0	0	0	0	1	1	0	2	6	0	0	0	6	0	22	22
Grand Total	22	4	0	0	26	0	0	0	0	0	0	2	1	0	3	7	1	1	0	9	0	38	38
Apprch %	84.6	15.4	0			0	0	0			0	66.7	33.3			77.8	11.1	11.1					
Total %	57.9	10.5	0		68.4	0	0	0		0	0	5.3	2.6		7.9	18.4	2.6	2.6		23.7	0	100	

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**5**	**1**	0	**6**	0	0	0	0	0	**1**	0	**1**	0	**1**	0	1	**8**
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	1
08:00 AM	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	4
08:15 AM	3	0	0	3	0	0	0	0	0	0	0	0	**3**	0	0	**3**	6
Total Volume	11	1	0	12	0	0	0	0	0	1	0	1	4	1	1	6	19
% App. Total	91.7	8.3	0		0	0	0		0	100	0		66.7	16.7	16.7		
PHF	.550	.250	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.333	.250	.250	.500	.594

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**5**	**1**	0	**6**	0	0	0	0	0	**1**	0	**1**	0	**1**	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	
+30 mins.	3	0	0	3	0	0	0	0	0	0	0	0	1	0	0	1	
+45 mins.	3	0	0	3	0	0	0	0	0	0	0	0	**3**	0	0	**3**	
Total Volume	11	1	0	12	0	0	0	0	0	1	0	1	4	1	1	6	
% App. Total	91.7	8.3	0		0	0	0		0	100	0		66.7	16.7	16.7		
PHF	.550	.250	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.333	.250	.250	.500	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

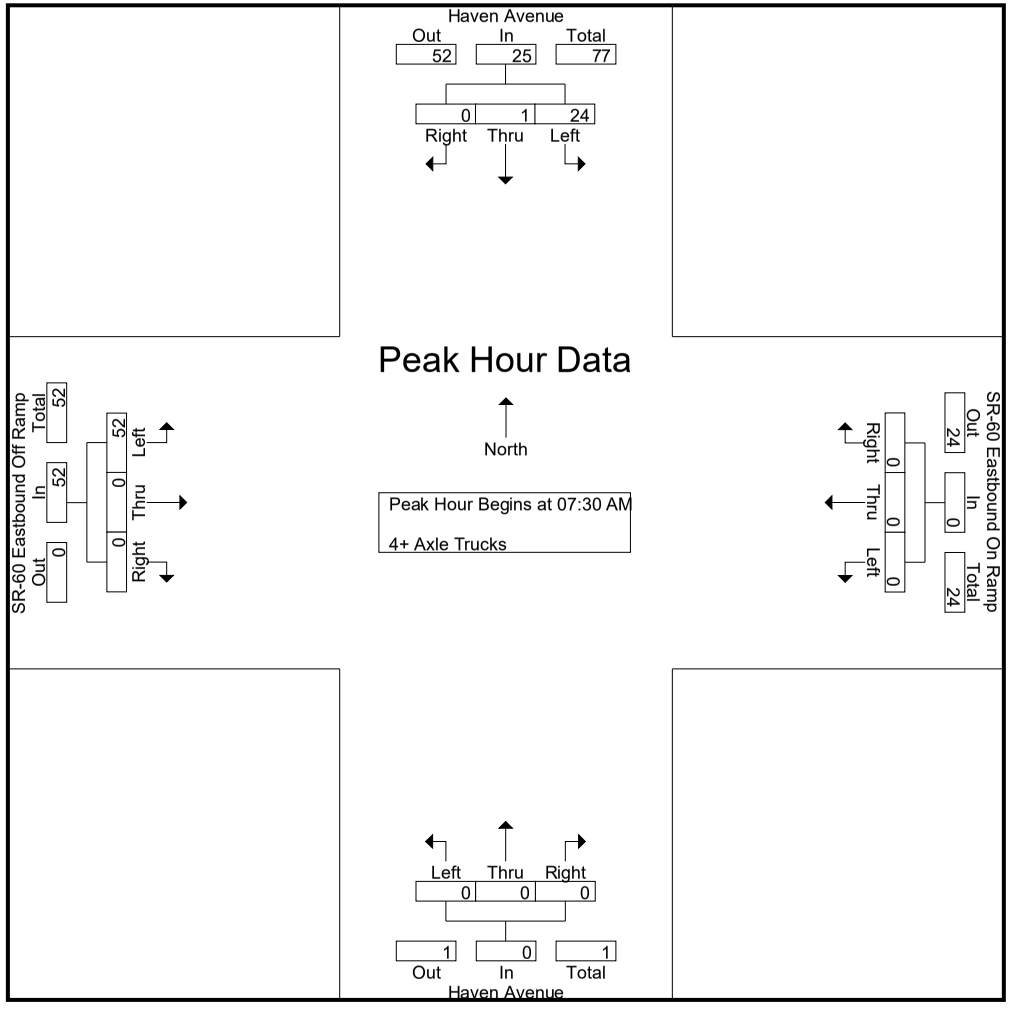
	Haven Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	17	0	0	0	17	0	24	24
07:15 AM	9	0	0	0	9	0	0	0	0	0	0	0	0	0	0	8	0	0	0	8	0	17	17
07:30 AM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	14	0	0	0	14	0	19	19
07:45 AM	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	13	0	0	0	13	0	19	19
Total	27	0	0	0	27	0	0	0	0	0	0	0	0	0	0	52	0	0	0	52	0	79	79
08:00 AM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	13	0	0	0	13	0	18	18
08:15 AM	8	1	0	0	9	0	0	0	0	0	0	0	0	0	0	12	0	0	0	12	0	21	21
08:30 AM	7	0	0	0	7	0	0	0	0	0	0	0	1	0	1	16	0	0	0	16	0	24	24
08:45 AM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	14	0	0	0	14	0	19	19
Total	25	1	0	0	26	0	0	0	0	0	0	0	1	0	1	55	0	0	0	55	0	82	82
Grand Total	52	1	0	0	53	0	0	0	0	0	0	0	1	0	1	107	0	0	0	107	0	161	161
Apprch %	98.1	1.9	0			0	0	0			0	0	100			100	0	0					
Total %	32.3	0.6	0		32.9	0	0	0		0	0	0	0.6		0.6	66.5	0	0		66.5	0	100	

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	5	0	0	5	0	0	0	0	0	0	0	0	**14**	0	0	**14**	19
07:45 AM	6	0	0	6	0	0	0	0	0	0	0	0	13	0	0	13	19
08:00 AM	5	0	0	5	0	0	0	0	0	0	0	0	13	0	0	13	18
08:15 AM	**8**	**1**	0	**9**	0	0	0	0	0	0	0	0	12	0	0	12	**21**
Total Volume	24	1	0	25	0	0	0	0	0	0	0	0	52	0	0	52	77
% App. Total	96	4	0		0	0	0		0	0	0		100	0	0		
PHF	.750	.250	.000	.694	.000	.000	.000	.000	.000	.000	.000	.000	.929	.000	.000	.929	.917

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	5	0	0	5	0	0	0	0	0	0	0	0	**14**	0	0	**14**	
+15 mins.	6	0	0	6	0	0	0	0	0	0	0	0	13	0	0	13	
+30 mins.	5	0	0	5	0	0	0	0	0	0	0	0	13	0	0	13	
+45 mins.	**8**	**1**	0	**9**	0	0	0	0	0	0	0	0	12	0	0	12	
Total Volume	24	1	0	25	0	0	0	0	0	0	0	0	52	0	0	52	
% App. Total	96	4	0		0	0	0		0	0	0		100	0	0		
PHF	.750	.250	.000	.694	.000	.000	.000	.000	.000	.000	.000	.000	.929	.000	.000	.929	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Haven Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	129	181	0	0	310	0	0	0	0	0	0	158	44	7	202	68	0	30	23	98	30	610	640
04:15 PM	135	174	0	0	309	0	0	0	0	0	0	154	38	14	192	70	1	38	22	109	36	610	646
04:30 PM	147	208	0	0	355	0	0	0	0	0	0	158	56	13	214	85	2	44	28	131	41	700	741
04:45 PM	138	210	0	0	348	0	0	0	0	0	0	164	47	11	211	67	1	32	24	100	35	659	694
Total	549	773	0	0	1322	0	0	0	0	0	0	634	185	45	819	290	4	144	97	438	142	2579	2721
05:00 PM	144	205	0	0	349	0	0	0	0	0	0	144	45	11	189	49	1	31	17	81	28	619	647
05:15 PM	134	234	0	0	368	0	0	0	0	0	0	130	42	22	172	46	1	47	33	94	55	634	689
05:30 PM	152	228	0	0	380	0	0	0	0	0	0	155	44	10	199	70	0	39	23	109	33	688	721
05:45 PM	93	228	0	0	321	0	0	0	0	0	0	152	37	15	189	66	0	43	25	109	40	619	659
Total	523	895	0	0	1418	0	0	0	0	0	0	581	168	58	749	231	2	160	98	393	156	2560	2716
Grand Total	1072	1668	0	0	2740	0	0	0	0	0	0	1215	353	103	1568	521	6	304	195	831	298	5139	5437
Apprch %	39.1	60.9	0			0	0	0			0	77.5	22.5			62.7	0.7	36.6					
Total %	20.9	32.5	0		53.3	0	0	0		0	0	23.6	6.9		30.5	10.1	0.1	5.9		16.2	5.5	94.5	
Passenger Vehicles	1030	1653	0		2683	0	0	0		0	0	1193	347		1642	387	2	300		881	0	0	5206
% Passenger Vehicles	96.1	99.1	0	0	97.9	0	0	0	0	0	0	98.2	98.3	99	98.3	74.3	33.3	98.7	98.5	85.9	0	0	95.8
Large 2 Axle Vehicles	8	13	0		21	0	0	0		0	0	17	4		22	26	3	4		36	0	0	79
% Large 2 Axle Vehicles	0.7	0.8	0	0	0.8	0	0	0	0	0	0	1.4	1.1	1	1.3	5	50	1.3	1.5	3.5	0	0	1.5
3 Axle Vehicles	10	1	0		11	0	0	0		0	0	2	1		3	10	1	0		11	0	0	25
% 3 Axle Vehicles	0.9	0.1	0	0	0.4	0	0	0	0	0	0	0.2	0.3	0	0.2	1.9	16.7	0	0	1.1	0	0	0.5
4+ Axle Trucks	24	1	0		25	0	0	0		0	0	3	1		4	98	0	0		98	0	0	127
% 4+ Axle Trucks	2.2	0.1	0	0	0.9	0	0	0	0	0	0	0.2	0.3	0	0.2	18.8	0	0	0	9.6	0	0	2.3

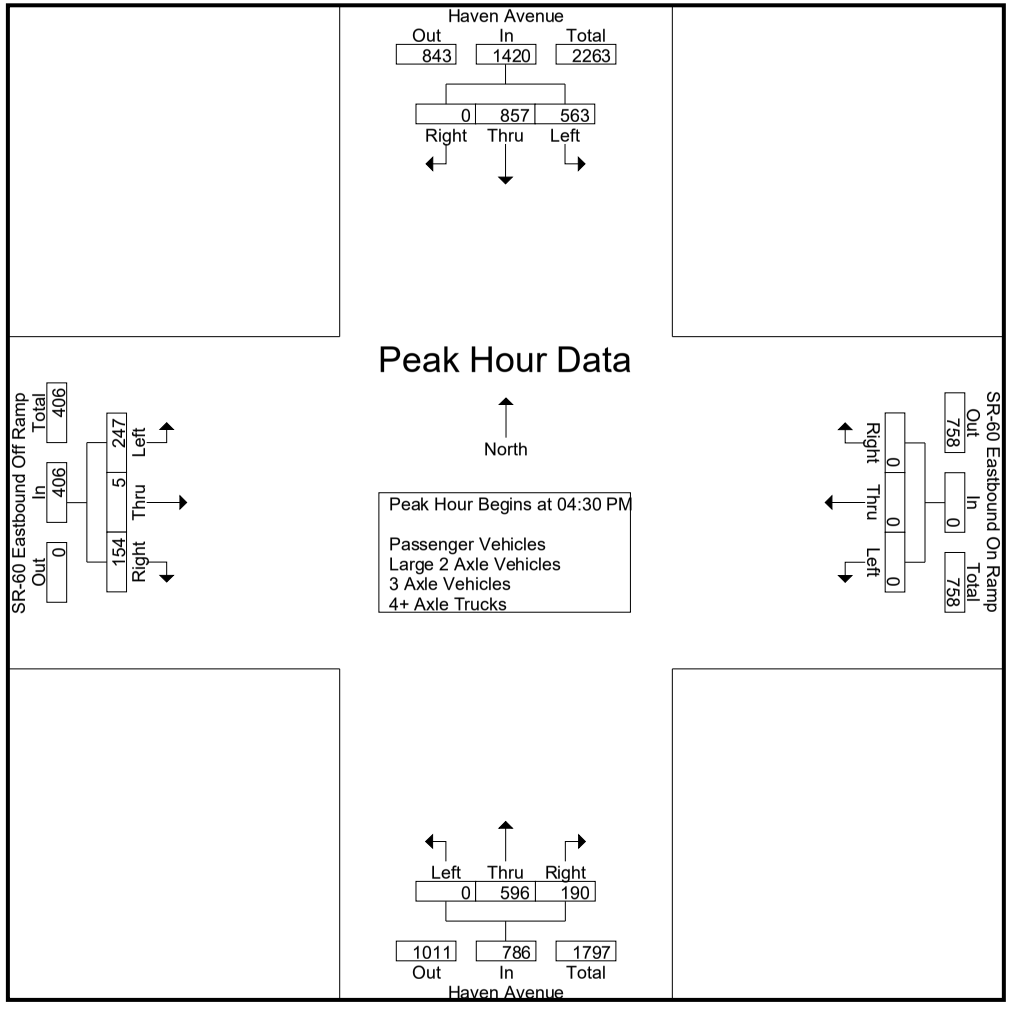
	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**147**	208	0	355	0	0	0	0	0	158	**56**	**214**	**85**	**2**	44	**131**	**700**
04:45 PM	138	210	0	348	0	0	0	0	0	**164**	47	211	67	1	32	100	659
05:00 PM	144	205	0	349	0	0	0	0	0	144	45	189	49	1	31	81	619
05:15 PM	134	**234**	0	**368**	0	0	0	0	0	130	42	172	46	1	**47**	94	634
Total Volume	563	857	0	1420	0	0	0	0	0	596	190	786	247	5	154	406	2612
% App. Total	39.6	60.4	0		0	0	0		0	75.8	24.2		60.8	1.2	37.9		
PHF	.957	.916	.000	.965	.000	.000	.000	.000	.000	.909	.848	.918	.726	.625	.819	.775	.933

3.1-29A

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	138	210	0	348	0	0	0	0	0	158	44	202	68	0	30	98	
+15 mins.	144	205	0	349	0	0	0	0	0	154	38	192	70	1	38	109	
+30 mins.	134	**234**	0	368	0	0	0	0	0	158	**56**	**214**	**85**	**2**	**44**	**131**	
+45 mins.	**152**	228	0	**380**	0	0	0	0	0	**164**	47	211	67	1	32	100	
Total Volume	568	877	0	1445	0	0	0	0	0	634	185	819	290	4	144	438	
% App. Total	39.3	60.7	0		0	0	0		0	77.4	22.6		66.2	0.9	32.9		
PHF	.934	.937	.000	.951	.000	.000	.000	.000	.000	.966	.826	.957	.853	.500	.818	.836	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

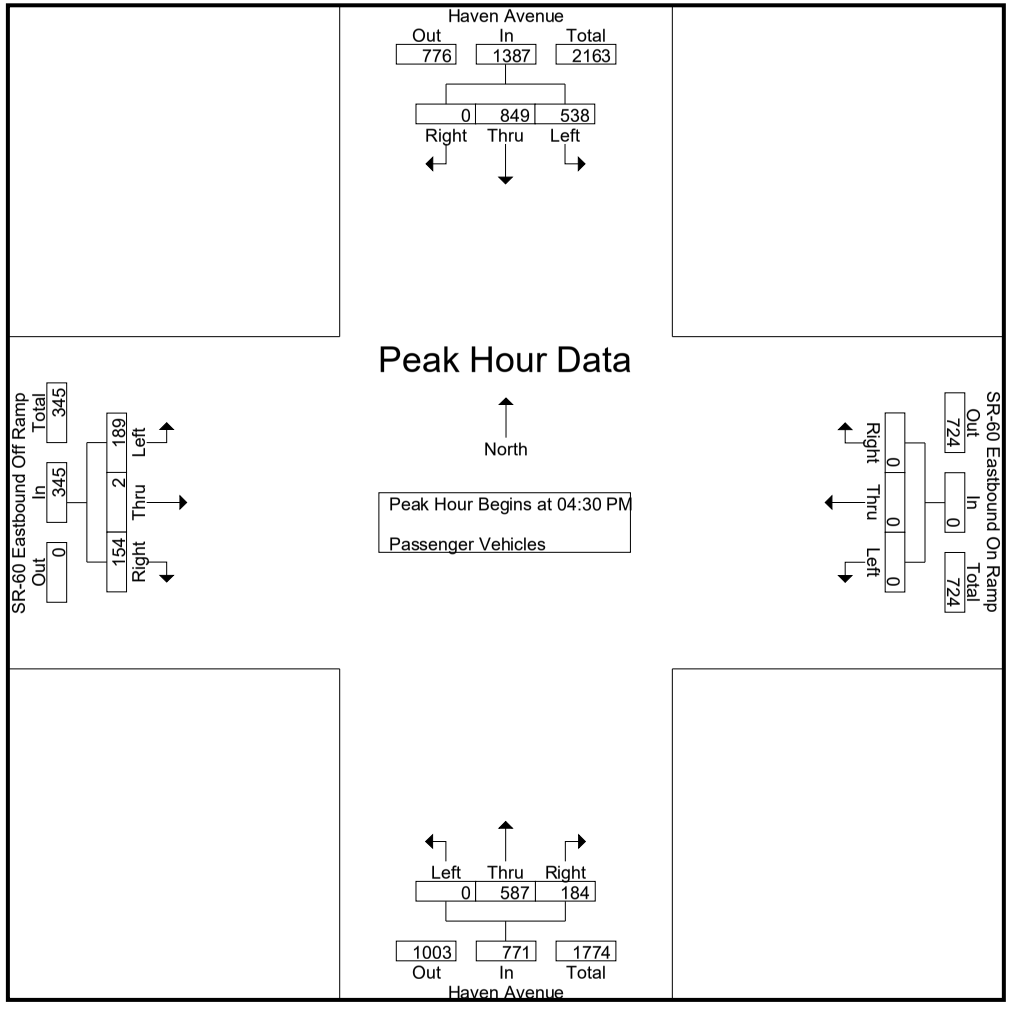
	Haven Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	122	180	0	0	302	0	0	0	0	0	0	155	44	7	199	46	0	28	21	74	28	575	603
04:15 PM	131	171	0	0	302	0	0	0	0	0	0	150	38	14	188	47	0	36	21	83	35	573	608
04:30 PM	142	205	0	0	347	0	0	0	0	0	0	154	54	12	208	64	1	44	28	109	40	664	704
04:45 PM	132	208	0	0	340	0	0	0	0	0	0	164	45	11	209	52	0	32	24	84	35	633	668
Total	527	764	0	0	1291	0	0	0	0	0	0	623	181	44	804	209	1	140	94	350	138	2445	2583
05:00 PM	136	204	0	0	340	0	0	0	0	0	0	140	44	11	184	40	1	31	17	72	28	596	624
05:15 PM	128	232	0	0	360	0	0	0	0	0	0	129	41	22	170	33	0	47	33	80	55	610	665
05:30 PM	147	225	0	0	372	0	0	0	0	0	0	153	44	10	197	52	0	39	23	91	33	660	693
05:45 PM	92	228	0	0	320	0	0	0	0	0	0	148	37	15	185	53	0	43	25	96	40	601	641
Total	503	889	0	0	1392	0	0	0	0	0	0	570	166	58	736	178	1	160	98	339	156	2467	2623
Grand Total	1030	1653	0	0	2683	0	0	0	0	0	0	1193	347	102	1540	387	2	300	192	689	294	4912	5206
Apprch %	38.4	61.6	0			0	0	0			0	77.5	22.5			56.2	0.3	43.5					
Total %	21	33.7	0		54.6	0	0	0		0	0	24.3	7.1		31.4	7.9	0	6.1		14	5.6	94.4	

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**142**	205	0	347	0	0	0	0	0	154	**54**	208	**64**	**1**	44	**109**	**664**
04:45 PM	132	208	0	340	0	0	0	0	0	**164**	45	**209**	52	0	32	84	633
05:00 PM	136	204	0	340	0	0	0	0	0	140	44	184	40	1	31	72	596
05:15 PM	128	**232**	0	**360**	0	0	0	0	0	129	41	170	33	0	**47**	80	610
Total Volume	538	849	0	1387	0	0	0	0	0	587	184	771	189	2	154	345	2503
% App. Total	38.8	61.2	0		0	0	0		0	76.1	23.9		54.8	0.6	44.6		
PHF	.947	.915	.000	.963	.000	.000	.000	.000	.000	.895	.852	.922	.738	.500	.819	.791	.942

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**142**	205	0	347	0	0	0	0	0	154	**54**	208	**64**	**1**	44	**109**	
+15 mins.	132	208	0	340	0	0	0	0	0	**164**	45	**209**	52	0	32	84	
+30 mins.	136	204	0	340	0	0	0	0	0	140	44	184	40	1	31	72	
+45 mins.	128	**232**	0	**360**	0	0	0	0	0	129	41	170	33	0	**47**	80	
Total Volume	538	849	0	1387	0	0	0	0	0	587	184	771	189	2	154	345	
% App. Total	38.8	61.2	0		0	0	0		0	76.1	23.9		54.8	0.6	44.6		
PHF	.947	.915	.000	.963	.000	.000	.000	.000	.000	.895	.852	.922	.738	.500	.819	.791	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Haven Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	3	1	0	0	4	0	0	0	0	0	0	3	0	0	3	3	0	2	2	5	2	12	14
04:15 PM	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1	7	1	2	1	10	1	15	16
04:30 PM	1	3	0	0	4	0	0	0	0	0	0	3	2	1	5	6	1	0	0	7	1	16	17
04:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	0	5	5
Total	5	9	0	0	14	0	0	0	0	0	0	7	3	1	10	18	2	4	3	24	4	48	52
05:00 PM	3	1	0	0	4	0	0	0	0	0	0	4	0	0	4	3	0	0	0	3	0	11	11
05:15 PM	0	1	0	0	1	0	0	0	0	0	0	1	1	0	2	1	1	0	0	2	0	5	5
05:30 PM	0	2	0	0	2	0	0	0	0	0	0	2	0	0	2	2	0	0	0	2	0	6	6
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	2	0	0	0	2	0	5	5
Total	3	4	0	0	7	0	0	0	0	0	0	10	1	0	11	8	1	0	0	9	0	27	27
Grand Total	8	13	0	0	21	0	0	0	0	0	0	17	4	1	21	26	3	4	3	33	4	75	79
Apprch %	38.1	61.9	0			0	0	0			0	81	19			78.8	9.1	12.1					
Total %	10.7	17.3	0		28	0	0	0		0	0	22.7	5.3		28	34.7	4	5.3		44	5.1	94.9	

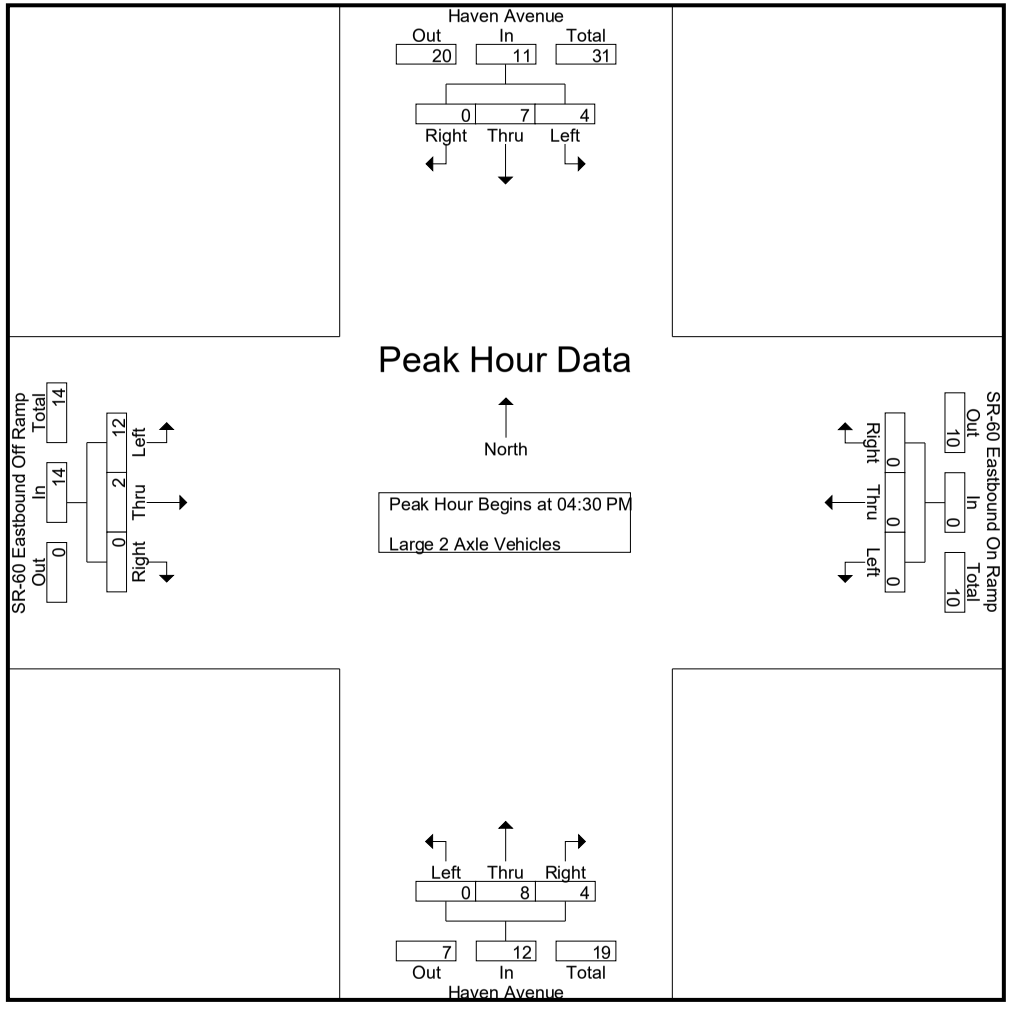
3.1-300

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	**3**	0	**4**	0	0	0	0	0	3	**2**	**5**	**6**	**1**	0	**7**	**16**
04:45 PM	0	2	0	2	0	0	0	0	0	0	1	1	2	0	0	2	5
05:00 PM	**3**	1	0	4	0	0	0	0	0	**4**	0	4	3	0	0	3	11
05:15 PM	0	1	0	1	0	0	0	0	0	1	1	2	1	1	0	2	5
Total Volume	4	7	0	11	0	0	0	0	0	8	4	12	12	2	0	14	37
% App. Total	36.4	63.6	0		0	0	0		0	66.7	33.3		85.7	14.3	0		
PHF	.333	.583	.000	.688	.000	.000	.000	.000	.000	.500	.500	.600	.500	.500	.000	.500	.578

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	1	**3**	0	**4**	0	0	0	0	0	3	**2**	**5**	**6**	**1**	0	**7**	
+15 mins.	0	2	0	2	0	0	0	0	0	0	1	1	2	0	0	2	
+30 mins.	**3**	1	0	4	0	0	0	0	0	**4**	0	4	3	0	0	3	
+45 mins.	0	1	0	1	0	0	0	0	0	1	1	2	1	1	0	2	
Total Volume	4	7	0	11	0	0	0	0	0	8	4	12	12	2	0	14	
% App. Total	36.4	63.6	0		0	0	0		0	66.7	33.3		85.7	14.3	0		
PHF	.333	.583	.000	.688	.000	.000	.000	.000	.000	.500	.500	.600	.500	.500	.000	.500	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

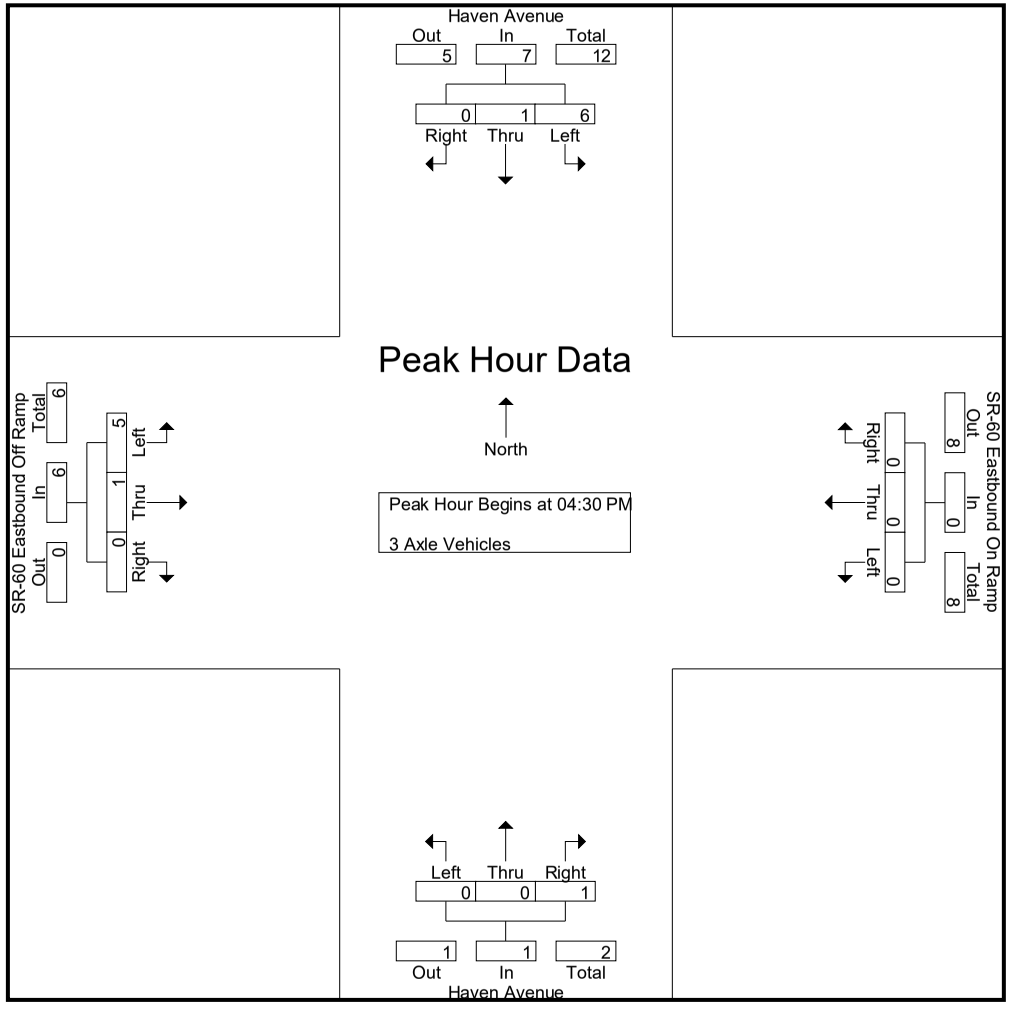
	Haven Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	4
04:15 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	3	3
04:30 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	4
04:45 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	4	4
Total	7	0	0	0	7	0	0	0	0	0	0	1	0	0	1	6	1	0	0	7	0	15	15
05:00 PM	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	3	3
05:15 PM	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	3	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	2	2
05:45 PM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
Total	3	1	0	0	4	0	0	0	0	0	0	1	1	0	2	4	0	0	0	4	0	10	10
Grand Total	10	1	0	0	11	0	0	0	0	0	0	2	1	0	3	10	1	0	0	11	0	25	25
Apprch %	90.9	9.1	0			0	0	0			0	66.7	33.3			90.9	9.1	0				
Total %	40	4	0		44	0	0	0		0	0	8	4		12	40	4	0		44	0	100	

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**2**	0	0	**2**	0	0	0	0	0	0	0	0	**2**	0	0	**2**	**4**
04:45 PM	2	0	0	2	0	0	0	0	0	0	0	0	1	**1**	0	2	4
05:00 PM	1	0	0	1	0	0	0	0	0	0	**1**	**1**	1	0	0	1	3
05:15 PM	1	**1**	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
Total Volume	6	1	0	7	0	0	0	0	0	0	1	1	5	1	0	6	14
% App. Total	85.7	14.3	0		0	0	0		0	0	100		83.3	16.7	0		
PHF	.750	.250	.000	.875	.000	.000	.000	.000	.000	.000	.250	.250	.625	.250	.000	.750	.875

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**2**	0	0	**2**	0	0	0	0	0	0	0	0	**2**	0	0	**2**	
+15 mins.	2	0	0	2	0	0	0	0	0	0	0	0	1	**1**	0	2	
+30 mins.	1	0	0	1	0	0	0	0	0	0	**1**	**1**	1	0	0	1	
+45 mins.	1	**1**	0	2	0	0	0	0	0	0	0	0	1	0	0	1	
Total Volume	6	1	0	7	0	0	0	0	0	0	1	1	5	1	0	6	
% App. Total	85.7	14.3	0		0	0	0		0	0	100		83.3	16.7	0		
PHF	.750	.250	.000	.875	.000	.000	.000	.000	.000	.000	.250	.250	.625	.250	.000	.750	

3.1-305

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

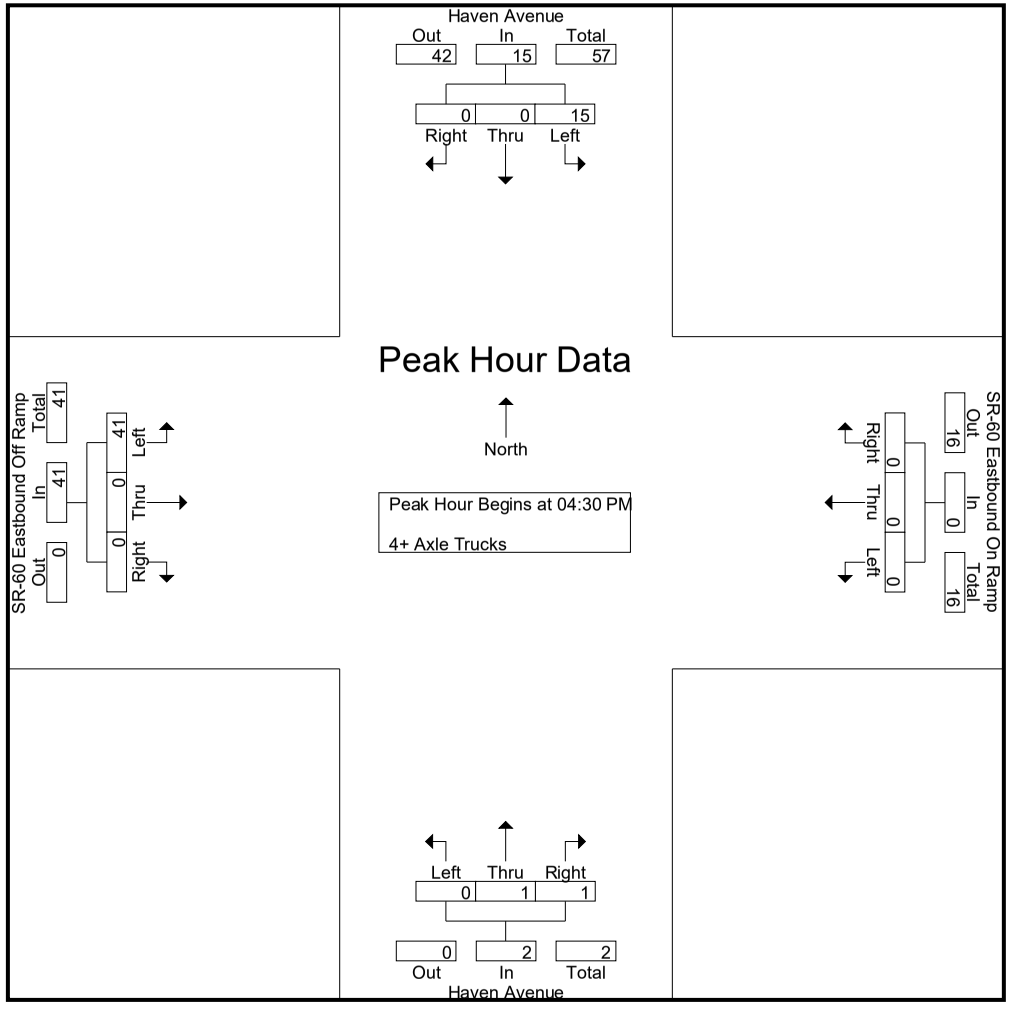
	Haven Avenue Southbound					SR-60 Eastbound On Ramp Westbound					Haven Avenue Northbound					SR-60 Eastbound Off Ramp Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	17	0	0	0	17	0	19	19
04:15 PM	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	15	0	0	0	15	0	19	19
04:30 PM	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1	13	0	0	0	13	0	16	16
04:45 PM	4	0	0	0	4	0	0	0	0	0	0	0	1	0	1	12	0	0	0	12	0	17	17
Total	10	0	0	0	10	0	0	0	0	0	0	3	1	0	4	57	0	0	0	57	0	71	71
05:00 PM	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	9	9
05:15 PM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	11	0	0	0	11	0	16	16
05:30 PM	5	1	0	0	6	0	0	0	0	0	0	0	0	0	0	14	0	0	0	14	0	20	20
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	11	0	11	11
Total	14	1	0	0	15	0	0	0	0	0	0	0	0	0	0	41	0	0	0	41	0	56	56
Grand Total	24	1	0	0	25	0	0	0	0	0	0	3	1	0	4	98	0	0	0	98	0	127	127
Apprch %	96	4	0			0	0	0			0	75	25			100	0	0					
Total %	18.9	0.8	0		19.7	0	0	0		0	0	2.4	0.8		3.1	77.2	0	0		77.2	0	100	

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	0	0	2	0	0	0	0	0	**1**	0	**1**	**13**	0	0	**13**	16
04:45 PM	4	0	0	4	0	0	0	0	0	0	**1**	1	12	0	0	12	**17**
05:00 PM	4	0	0	4	0	0	0	0	0	0	0	0	5	0	0	5	9
05:15 PM	**5**	0	0	**5**	0	0	0	0	0	0	0	0	11	0	0	11	16
Total Volume	15	0	0	15	0	0	0	0	0	1	1	2	41	0	0	41	58
% App. Total	100	0	0		0	0	0		0	50	50		100	0	0		
PHF	.750	.000	.000	.750	.000	.000	.000	.000	.000	.250	.250	.500	.788	.000	.000	.788	.853

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Haven Avenue
E/W: SR-60 Eastbound Ramps
Weather: Clear

File Name : 10_ONT_Hav_60E PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Haven Avenue Southbound				SR-60 Eastbound On Ramp Westbound				Haven Avenue Northbound				SR-60 Eastbound Off Ramp Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	2	0	0	2	0	0	0	0	0	**1**	0	**1**	**13**	0	0	**13**	
+15 mins.	4	0	0	4	0	0	0	0	0	0	**1**	1	12	0	0	12	
+30 mins.	4	0	0	4	0	0	0	0	0	0	0	0	5	0	0	5	
+45 mins.	**5**	0	0	**5**	0	0	0	0	0	0	0	0	11	0	0	11	
Total Volume	15	0	0	15	0	0	0	0	0	1	1	2	41	0	0	41	
% App. Total	100	0	0		0	0	0		0	50	50		100	0	0		
PHF	.750	.000	.000	.750	.000	.000	.000	.000	.000	.250	.250	.500	.788	.000	.000	.788	

Location: Ontario
N/S: Haven Avenue
E/W: I-60 EB Ramps

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Haven Avenue	East Leg I-60 EB Ramps	South Leg Haven Avenue	West Leg I-60 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Haven Avenue	East Leg I-60 EB Ramps	South Leg Haven Avenue	West Leg I-60 EB Ramps	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Ontario
N/S: Haven Avenue
E/W: I-60 EB Ramps

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Haven Avenue			Westbound I-60 EB Ramps			Northbound Haven Avenue			Eastbound I-60 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Haven Avenue			Westbound I-60 EB Ramps			Northbound Haven Avenue			Eastbound I-60 EB Ramps			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	0	1	0	0	0	3

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Airport Drive Southbound					Commerce Parkway Westbound					Carnegie Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	3	1	25	10	29	0	41	4	1	45	5	0	0	0	5	20	23	0	0	43	11	122	133
07:15 AM	3	2	30	18	35	2	43	3	3	48	0	0	0	0	0	28	26	2	0	56	21	139	160
07:30 AM	2	3	32	8	37	0	40	5	3	45	4	2	0	0	6	27	18	1	1	46	12	134	146
07:45 AM	6	4	33	13	43	0	44	6	3	50	2	1	0	0	3	51	22	0	0	73	16	169	185
Total	14	10	120	49	144	2	168	18	10	188	11	3	0	0	14	126	89	3	1	218	60	564	624
08:00 AM	4	2	26	8	32	0	39	1	1	40	2	0	0	0	2	22	20	0	0	42	9	116	125
08:15 AM	4	0	34	12	38	0	40	0	0	40	3	3	0	0	6	37	21	1	0	59	12	143	155
08:30 AM	3	3	35	20	41	0	38	4	1	42	3	3	0	0	6	24	13	0	0	37	21	126	147
08:45 AM	8	4	35	10	47	2	36	3	2	41	5	1	0	0	6	29	16	3	3	48	15	142	157
Total	19	9	130	50	158	2	153	8	4	163	13	7	0	0	20	112	70	4	3	186	57	527	584
Grand Total	33	19	250	99	302	4	321	26	14	351	24	10	0	0	34	238	159	7	4	404	117	1091	1208
Apprch %	10.9	6.3	82.8			1.1	91.5	7.4			70.6	29.4	0			58.9	39.4	1.7					
Total %	3	1.7	22.9		27.7	0.4	29.4	2.4		32.2	2.2	0.9	0		3.1	21.8	14.6	0.6		37	9.7	90.3	
Passenger Vehicles	26	14	190		315	2	287	18		317	20	7	0		27	202	146	2		351	0	0	1010
% Passenger Vehicles	78.8	73.7	76	85.9	78.6	50	89.4	69.2	71.4	86.8	83.3	70	0	0	79.4	84.9	91.8	28.6	25	86	0	0	83.6
Large 2 Axle Vehicles	1	1	13		17	0	17	1		18	2	2	0		4	12	3	1		17	0	0	56
% Large 2 Axle Vehicles	3	5.3	5.2	2	4.2	0	5.3	3.8	0	4.9	8.3	20	0	0	11.8	5	1.9	14.3	25	4.2	0	0	4.6
3 Axle Vehicles	1	0	12		14	0	4	1		6	1	0	0		1	4	1	3		9	0	0	30
% 3 Axle Vehicles	3	0	4.8	1	3.5	0	1.2	3.8	7.1	1.6	4.2	0	0	0	2.9	1.7	0.6	42.9	25	2.2	0	0	2.5
4+ Axle Trucks	5	4	35		55	2	13	6		24	1	1	0		2	20	9	1		31	0	0	112
% 4+ Axle Trucks	15.2	21.1	14	11.1	13.7	50	4	23.1	21.4	6.6	4.2	10	0	0	5.9	8.4	5.7	14.3	25	7.6	0	0	9.3

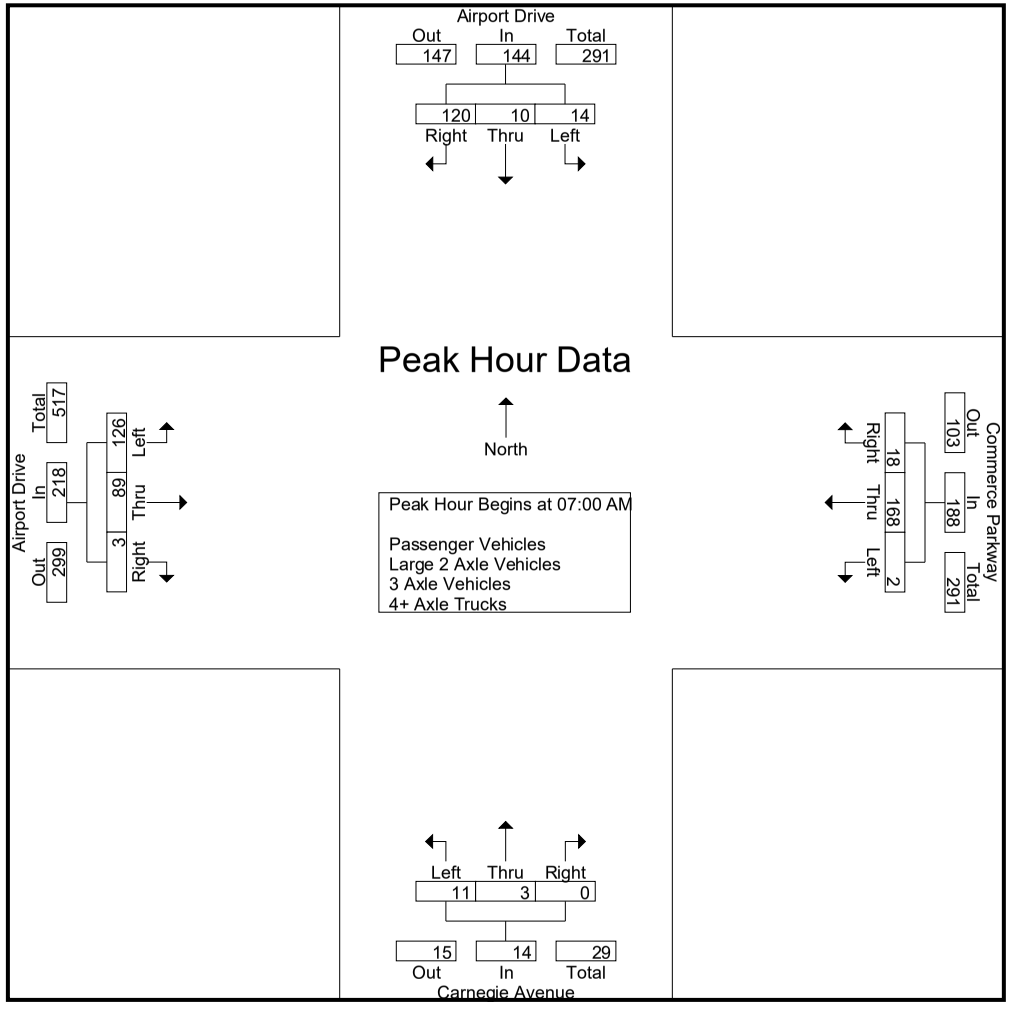
	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	1	25	29	0	41	4	45	**5**	0	0	5	20	23	0	43	122
07:15 AM	3	2	30	35	**2**	43	3	48	0	0	0	0	28	**26**	**2**	56	139
07:30 AM	2	3	32	37	0	40	5	45	4	**2**	0	**6**	27	18	1	46	134
07:45 AM	**6**	**4**	**33**	**43**	0	**44**	**6**	**50**	2	1	0	3	**51**	22	0	**73**	**169**
Total Volume	14	10	120	144	2	168	18	188	11	3	0	14	126	89	3	218	564
% App. Total	9.7	6.9	83.3		1.1	89.4	9.6		78.6	21.4	0		57.8	40.8	1.4		
PHF	.583	.625	.909	.837	.250	.955	.750	.940	.550	.375	.000	.583	.618	.856	.375	.747	.834

3.1-31

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-312

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	08:00 AM				07:00 AM				08:00 AM				07:30 AM				
+0 mins.	4	2	26	32	0	41	4	45	2	0	0	2	27	18	**1**	46	
+15 mins.	4	0	34	38	**2**	43	3	48	3	**3**	0	**6**	**51**	**22**	0	**73**	
+30 mins.	3	3	**35**	41	0	40	5	45	3	3	0	6	22	20	0	42	
+45 mins.	**8**	**4**	35	**47**	0	**44**	**6**	**50**	**5**	1	0	6	37	21	1	59	
Total Volume	19	9	130	158	2	168	18	188	13	7	0	20	137	81	2	220	
% App. Total	12	5.7	82.3		1.1	89.4	9.6		65	35	0		62.3	36.8	0.9		
PHF	.594	.563	.929	.840	.250	.955	.750	.940	.650	.583	.000	.833	.672	.920	.500	.753	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Airport Drive Southbound					Commerce Parkway Westbound					Carnegie Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	2	1	20	10	23	0	36	3	1	39	5	0	0	0	5	17	20	0	0	37	11	104	115
07:15 AM	3	2	23	16	28	2	40	2	2	44	0	0	0	0	0	23	24	1	0	48	18	120	138
07:30 AM	1	3	24	6	28	0	37	5	3	42	4	1	0	0	5	25	16	0	0	41	9	116	125
07:45 AM	5	3	27	10	35	0	39	3	1	42	2	1	0	0	3	43	22	0	0	65	11	145	156
Total	11	9	94	42	114	2	152	13	7	167	11	2	0	0	13	108	82	1	0	191	49	485	534
08:00 AM	3	1	17	7	21	0	32	1	1	33	1	0	0	0	1	19	19	0	0	38	8	93	101
08:15 AM	2	0	28	11	30	0	37	0	0	37	1	2	0	0	3	35	18	0	0	53	11	123	134
08:30 AM	3	1	25	16	29	0	34	2	0	36	3	2	0	0	5	19	13	0	0	32	16	102	118
08:45 AM	7	3	26	9	36	0	32	2	2	34	4	1	0	0	5	21	14	1	1	36	12	111	123
Total	15	5	96	43	116	0	135	5	3	140	9	5	0	0	14	94	64	1	1	159	47	429	476
Grand Total	26	14	190	85	230	2	287	18	10	307	20	7	0	0	27	202	146	2	1	350	96	914	1010
Apprch %	11.3	6.1	82.6			0.7	93.5	5.9			74.1	25.9	0			57.7	41.7	0.6					
Total %	2.8	1.5	20.8		25.2	0.2	31.4	2		33.6	2.2	0.8	0		3	22.1	16	0.2		38.3	9.5	90.5	

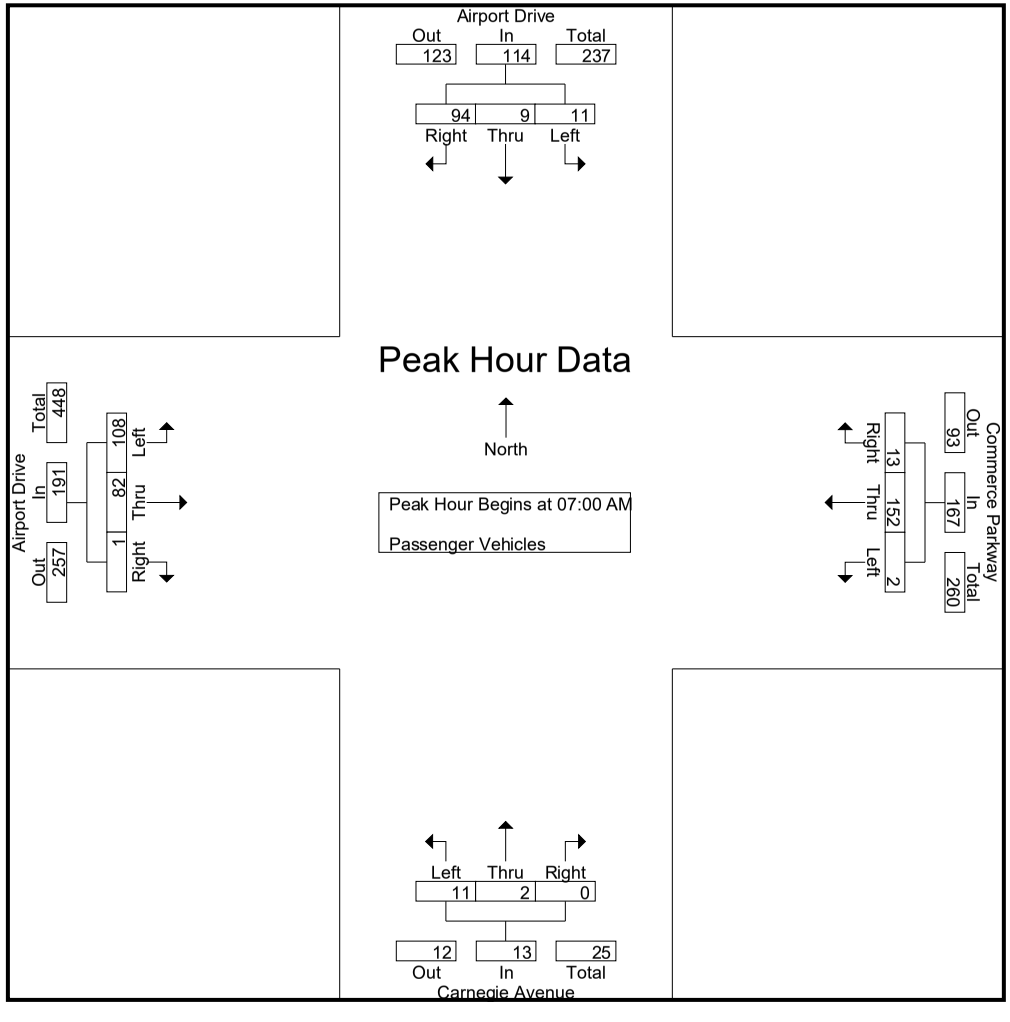
3.1-314

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	2	1	20	23	0	36	3	39	**5**	0	0	**5**	17	20	0	37	104
07:15 AM	3	2	23	28	**2**	**40**	2	**44**	0	0	0	0	23	**24**	**1**	48	120
07:30 AM	1	**3**	24	28	0	37	**5**	42	4	**1**	0	5	25	16	0	41	116
07:45 AM	**5**	3	**27**	**35**	0	39	3	42	2	1	0	3	**43**	22	0	**65**	**145**
Total Volume	11	9	94	114	2	152	13	167	11	2	0	13	108	82	1	191	485
% App. Total	9.6	7.9	82.5		1.2	91	7.8		84.6	15.4	0		56.5	42.9	0.5		
PHF	.550	.750	.870	.814	.250	.950	.650	.949	.550	.500	.000	.650	.628	.854	.250	.735	.836

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	2	1	20	23	0	36	3	39	**5**	0	0	**5**	17	20	0	37	
+15 mins.	3	2	23	28	**2**	**40**	2	**44**	0	0	0	0	23	**24**	**1**	48	
+30 mins.	1	**3**	24	28	0	37	**5**	42	4	**1**	0	5	25	16	0	41	
+45 mins.	**5**	3	**27**	**35**	0	39	3	42	2	1	0	3	**43**	22	0	**65**	
Total Volume	11	9	94	114	2	152	13	167	11	2	0	13	108	82	1	191	
% App. Total	9.6	7.9	82.5		1.2	91	7.8		84.6	15.4	0		56.5	42.9	0.5		
PHF	.550	.750	.870	.814	.250	.950	.650	.949	.550	.500	.000	.650	.628	.854	.250	.735	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

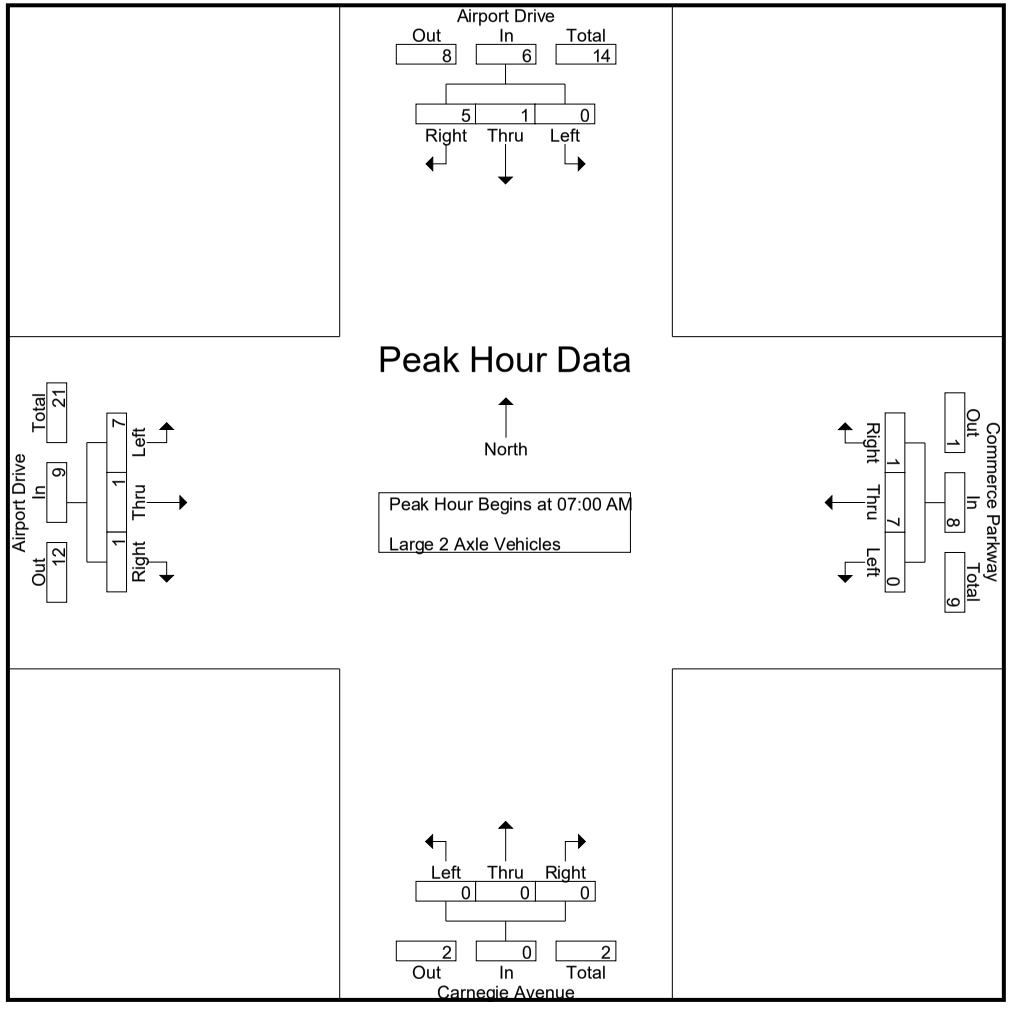
	Airport Drive Southbound					Commerce Parkway Westbound					Carnegie Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	2	0	2	0	3	0	0	3	0	0	0	0	0	2	0	0	0	2	0	7	7
07:15 AM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	2	1	0	0	3	0	7	7
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	2
07:45 AM	0	1	2	0	3	0	1	1	0	2	0	0	0	0	0	3	0	0	0	3	0	8	8
Total	0	1	5	0	6	0	7	1	0	8	0	0	0	0	0	7	1	1	1	9	1	23	24
08:00 AM	0	0	2	0	2	0	7	0	0	7	1	0	0	0	1	1	1	0	0	2	0	12	12
08:15 AM	1	0	0	0	1	0	0	0	0	0	0	1	0	0	1	1	1	0	0	2	0	4	4
08:30 AM	0	0	2	1	2	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	1	4	5
08:45 AM	0	0	4	1	4	0	2	0	0	2	1	0	0	0	1	3	0	0	0	3	1	10	11
Total	1	0	8	2	9	0	10	0	0	10	2	2	0	0	4	5	2	0	0	7	2	30	32
Grand Total	1	1	13	2	15	0	17	1	0	18	2	2	0	0	4	12	3	1	1	16	3	53	56
Apprch %	6.7	6.7	86.7			0	94.4	5.6			50	50	0			75	18.8	6.2					
Total %	1.9	1.9	24.5		28.3	0	32.1	1.9		34	3.8	3.8	0		7.5	22.6	5.7	1.9		30.2	5.4	94.6	

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	**2**	2	0	**3**	0	**3**	0	0	0	0	2	0	0	2	7
07:15 AM	0	0	1	1	0	3	0	3	0	0	0	0	2	**1**	0	**3**	7
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	1
07:45 AM	0	**1**	2	**3**	0	1	**1**	2	0	0	0	0	**3**	0	0	3	**8**
Total Volume	0	1	5	6	0	7	1	8	0	0	0	0	7	1	1	9	23
% App. Total	0	16.7	83.3		0	87.5	12.5		0	0	0		77.8	11.1	11.1		
PHF	.000	.250	.625	.500	.000	.583	.250	.667	.000	.000	.000	.000	.583	.250	.250	.750	.719

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	**2**	2	0	**3**	0	**3**	0	0	0	0	2	0	0	2	
+15 mins.	0	0	1	1	0	3	0	3	0	0	0	0	2	**1**	0	**3**	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	1	
+45 mins.	0	**1**	2	**3**	0	1	**1**	2	0	0	0	0	**3**	0	0	3	
Total Volume	0	1	5	6	0	7	1	8	0	0	0	0	7	1	1	9	
% App. Total	0	16.7	83.3		0	87.5	12.5		0	0	0		77.8	11.1	11.1		
PHF	.000	.250	.625	.500	.000	.583	.250	.667	.000	.000	.000	.000	.583	.250	.250	.750	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Airport Drive Southbound					Commerce Parkway Westbound					Carnegie Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	0	1	0	2	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	3
07:15 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	2
07:30 AM	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	0	4	4
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	0	0	2	0	3	3
Total	1	0	4	0	5	0	3	0	0	3	0	0	0	0	0	3	0	1	0	4	0	12	12
08:00 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
08:15 AM	0	0	3	0	3	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1	0	5	5
08:30 AM	0	0	3	1	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	2	4	6
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1	1	1	3	1	4	5
Total	0	0	8	1	8	0	1	1	1	2	1	0	0	0	1	1	1	2	1	4	3	15	18
Grand Total	1	0	12	1	13	0	4	1	1	5	1	0	0	0	1	4	1	3	1	8	3	27	30
Apprch %	7.7	0	92.3			0	80	20			100	0	0			50	12.5	37.5					
Total %	3.7	0	44.4		48.1	0	14.8	3.7		18.5	3.7	0	0		3.7	14.8	3.7	11.1		29.6	10	90	

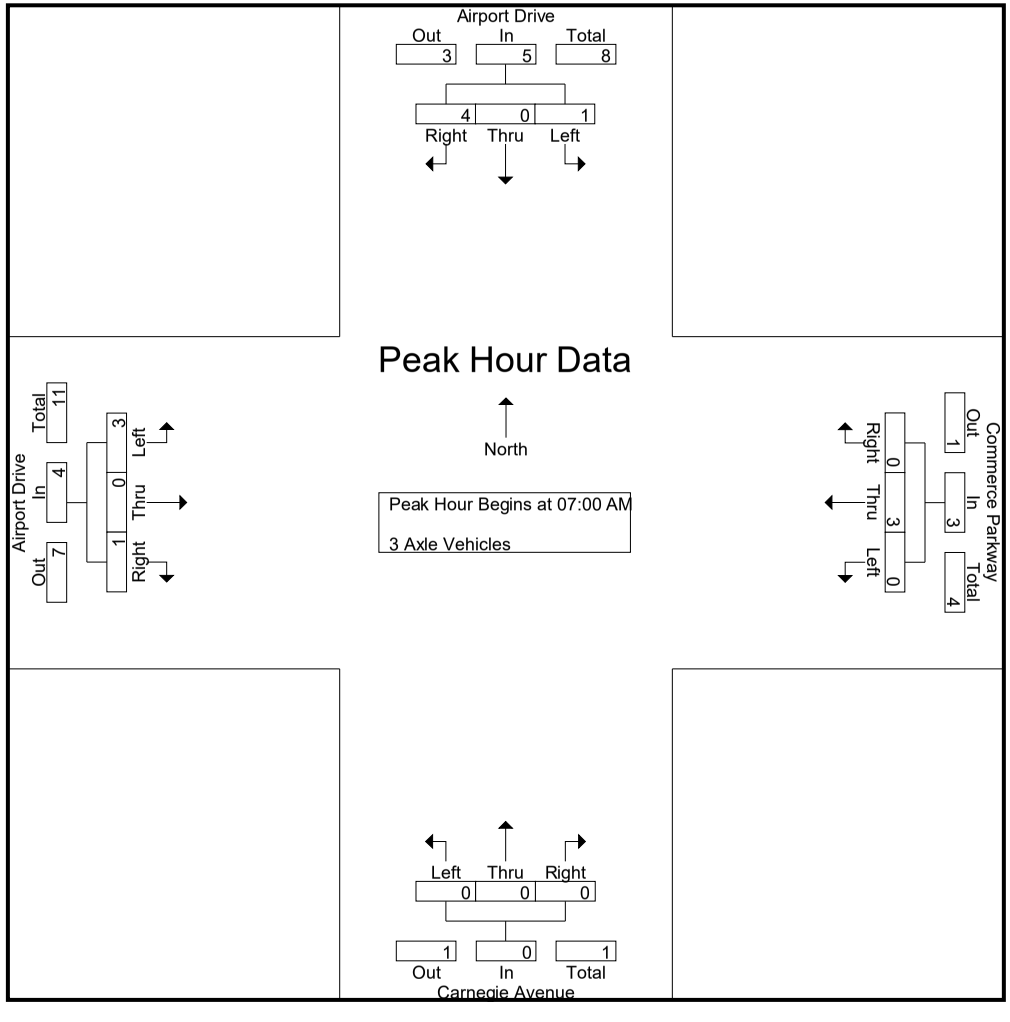
3.1-320

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	**1**	0	1	**2**	0	**1**	0	**1**	0	0	0	0	0	0	0	0	3
07:15 AM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	**1**	1	2
07:30 AM	0	0	**2**	2	0	1	0	1	0	0	0	0	1	0	0	1	**4**
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	**2**	0	0	**2**	3
Total Volume	1	0	4	5	0	3	0	3	0	0	0	0	3	0	1	4	12
% App. Total	20	0	80		0	100	0		0	0	0		75	0	25		
PHF	.250	.000	.500	.625	.000	.750	.000	.750	.000	.000	.000	.000	.375	.000	.250	.500	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	**1**	0	1	**2**	0	**1**	0	**1**	0	0	0	0	0	0	0	0	
+15 mins.	0	0	1	1	0	0	0	0	0	0	0	0	0	0	**1**	1	
+30 mins.	0	0	**2**	2	0	1	0	1	0	0	0	0	1	0	0	1	
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	**2**	0	0	**2**	
Total Volume	1	0	4	5	0	3	0	3	0	0	0	0	3	0	1	4	
% App. Total	20	0	80		0	100	0		0	0	0		75	0	25		
PHF	.250	.000	.500	.625	.000	.750	.000	.750	.000	.000	.000	.000	.375	.000	.250	.500	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

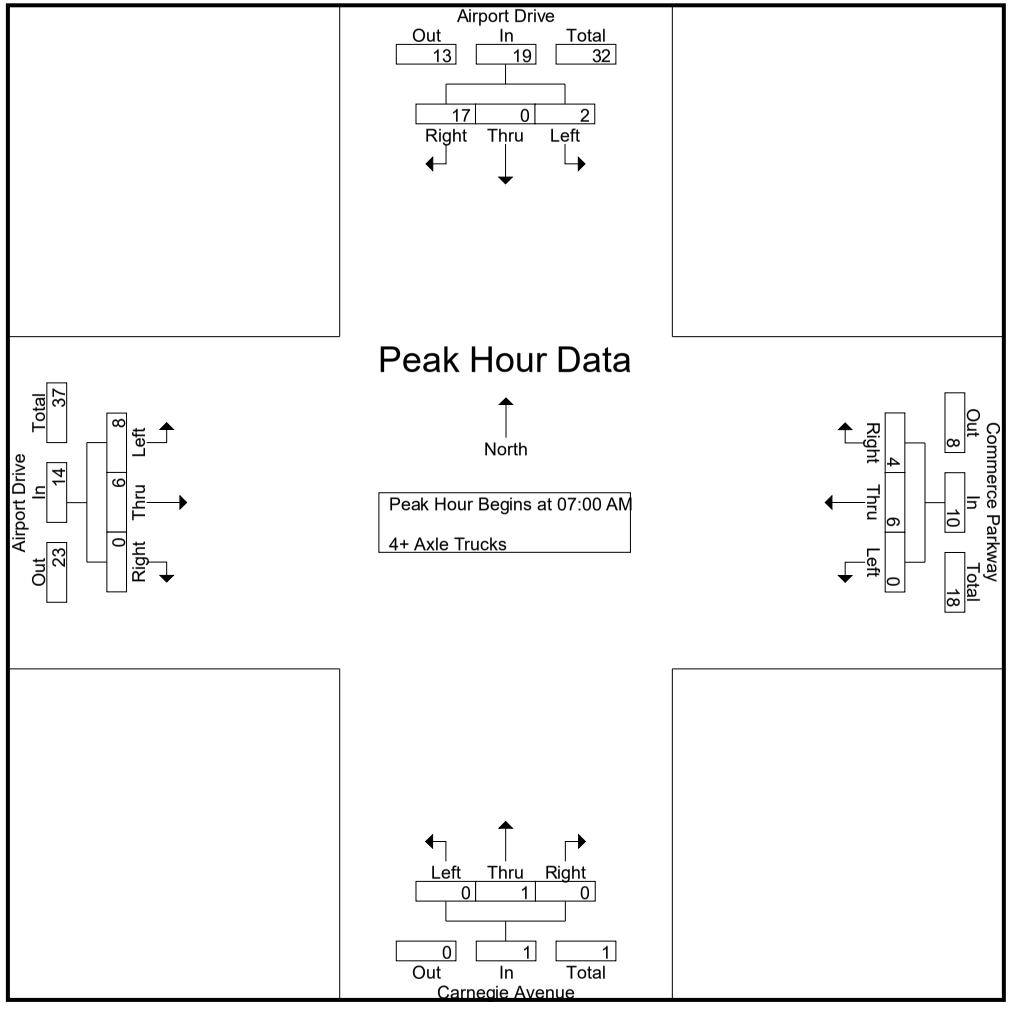
	Airport Drive Southbound					Commerce Parkway Westbound					Carnegie Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	2	0	2	0	1	1	0	2	0	0	0	0	0	1	3	0	0	4	0	8	8
07:15 AM	0	0	5	2	5	0	0	1	1	1	0	0	0	0	0	3	1	0	0	4	3	10	13
07:30 AM	1	0	6	2	7	0	2	0	0	2	0	1	0	0	1	1	2	0	0	3	2	13	15
07:45 AM	1	0	4	3	5	0	3	2	2	5	0	0	0	0	0	3	0	0	0	3	5	13	18
Total	2	0	17	7	19	0	6	4	3	10	0	1	0	0	1	8	6	0	0	14	10	44	54
08:00 AM	1	1	5	1	7	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	1	9	10
08:15 AM	1	0	3	1	4	0	3	0	0	3	1	0	0	0	1	1	2	0	0	3	1	11	12
08:30 AM	0	2	5	2	7	0	3	1	0	4	0	0	0	0	0	5	0	0	0	5	2	16	18
08:45 AM	1	1	5	0	7	2	1	1	0	4	0	0	0	0	0	4	1	1	1	6	1	17	18
Total	3	4	18	4	25	2	7	2	0	11	1	0	0	0	1	12	3	1	1	16	5	53	58
Grand Total	5	4	35	11	44	2	13	6	3	21	1	1	0	0	2	20	9	1	1	30	15	97	112
Apprch %	11.4	9.1	79.5			9.5	61.9	28.6			50	50	0			66.7	30	3.3					
Total %	5.2	4.1	36.1		45.4	2.1	13.4	6.2		21.6	1	1	0		2.1	20.6	9.3	1		30.9	13.4	86.6	

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	2	2	0	1	1	2	0	0	0	0	1	**3**	0	**4**	8
07:15 AM	0	0	5	5	0	0	1	1	0	0	0	0	**3**	1	0	4	10
07:30 AM	**1**	0	**6**	**7**	0	2	0	2	0	**1**	0	**1**	1	2	0	3	**13**
07:45 AM	1	0	4	5	0	**3**	**2**	**5**	0	0	0	0	3	0	0	3	13
Total Volume	2	0	17	19	0	6	4	10	0	1	0	1	8	6	0	14	44
% App. Total	10.5	0	89.5		0	60	40		0	100	0		57.1	42.9	0		
PHF	.500	.000	.708	.679	.000	.500	.500	.500	.000	.250	.000	.250	.667	.500	.000	.875	.846

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	2	2	0	1	1	2	0	0	0	0	1	**3**	0	**4**	
+15 mins.	0	0	5	5	0	0	1	1	0	0	0	0	**3**	1	0	4	
+30 mins.	**1**	0	**6**	**7**	0	2	0	2	0	**1**	0	**1**	1	2	0	3	
+45 mins.	1	0	4	5	0	**3**	**2**	**5**	0	0	0	0	3	0	0	3	
Total Volume	2	0	17	19	0	6	4	10	0	1	0	1	8	6	0	14	
% App. Total	10.5	0	89.5		0	60	40		0	100	0		57.1	42.9	0		
PHF	.500	.000	.708	.679	.000	.500	.500	.500	.000	.250	.000	.250	.667	.500	.000	.875	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Airport Drive Southbound					Commerce Parkway Westbound					Carnegie Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	14	2	104	43	120	0	88	11	2	99	4	1	0	0	5	47	34	2	0	83	45	307	352
04:15 PM	11	3	89	55	103	0	82	13	5	95	8	5	0	0	13	46	63	1	0	110	60	321	381
04:30 PM	8	4	130	50	142	0	114	18	6	132	4	7	0	0	11	49	64	0	0	113	56	398	454
04:45 PM	8	6	101	57	115	0	77	15	10	92	4	2	0	0	6	53	62	1	0	116	67	329	396
Total	41	15	424	205	480	0	361	57	23	418	20	15	0	0	35	195	223	4	0	422	228	1355	1583
05:00 PM	15	1	113	51	129	1	82	15	5	98	6	4	2	0	12	50	63	0	0	113	56	352	408
05:15 PM	8	0	65	29	73	0	91	16	8	107	8	2	4	0	14	58	73	0	0	131	37	325	362
05:30 PM	12	0	86	39	98	0	74	8	3	82	1	4	2	0	7	62	89	1	0	152	42	339	381
05:45 PM	11	5	60	36	76	0	53	7	1	60	1	4	0	0	5	48	47	2	0	97	37	238	275
Total	46	6	324	155	376	1	300	46	17	347	16	14	8	0	38	218	272	3	0	493	172	1254	1426
Grand Total	87	21	748	360	856	1	661	103	40	765	36	29	8	0	73	413	495	7	0	915	400	2609	3009
Apprch %	10.2	2.5	87.4			0.1	86.4	13.5			49.3	39.7	11			45.1	54.1	0.8					
Total %	3.3	0.8	28.7		32.8	0	25.3	3.9		29.3	1.4	1.1	0.3		2.8	15.8	19	0.3		35.1	13.3	86.7	
Passenger Vehicles	78	14	689		1126	1	612	78		722	27	27	0		54	365	452	1		818	0	0	2720
% Passenger Vehicles	89.7	66.7	92.1	95.8	92.6	100	92.6	75.7	77.5	89.7	75	93.1	0	0	74	88.4	91.3	14.3	0	89.4	0	0	90.4
Large 2 Axle Vehicles	3	2	28		42	0	21	4		28	1	0	0		1	21	26	1		48	0	0	119
% Large 2 Axle Vehicles	3.4	9.5	3.7	2.5	3.5	0	3.2	3.9	7.5	3.5	2.8	0	0	0	1.4	5.1	5.3	14.3	0	5.2	0	0	4
3 Axle Vehicles	0	0	3		4	0	17	2		19	2	0	0		2	6	3	4		13	0	0	38
% 3 Axle Vehicles	0	0	0.4	0.3	0.3	0	2.6	1.9	0	2.4	5.6	0	0	0	2.7	1.5	0.6	57.1	0	1.4	0	0	1.3
4+ Axle Trucks	6	5	28		44	0	11	19		36	6	2	8		16	21	14	1		36	0	0	132
% 4+ Axle Trucks	6.9	23.8	3.7	1.4	3.6	0	1.7	18.4	15	4.5	16.7	6.9	100	0	21.9	5.1	2.8	14.3	0	3.9	0	0	4.4

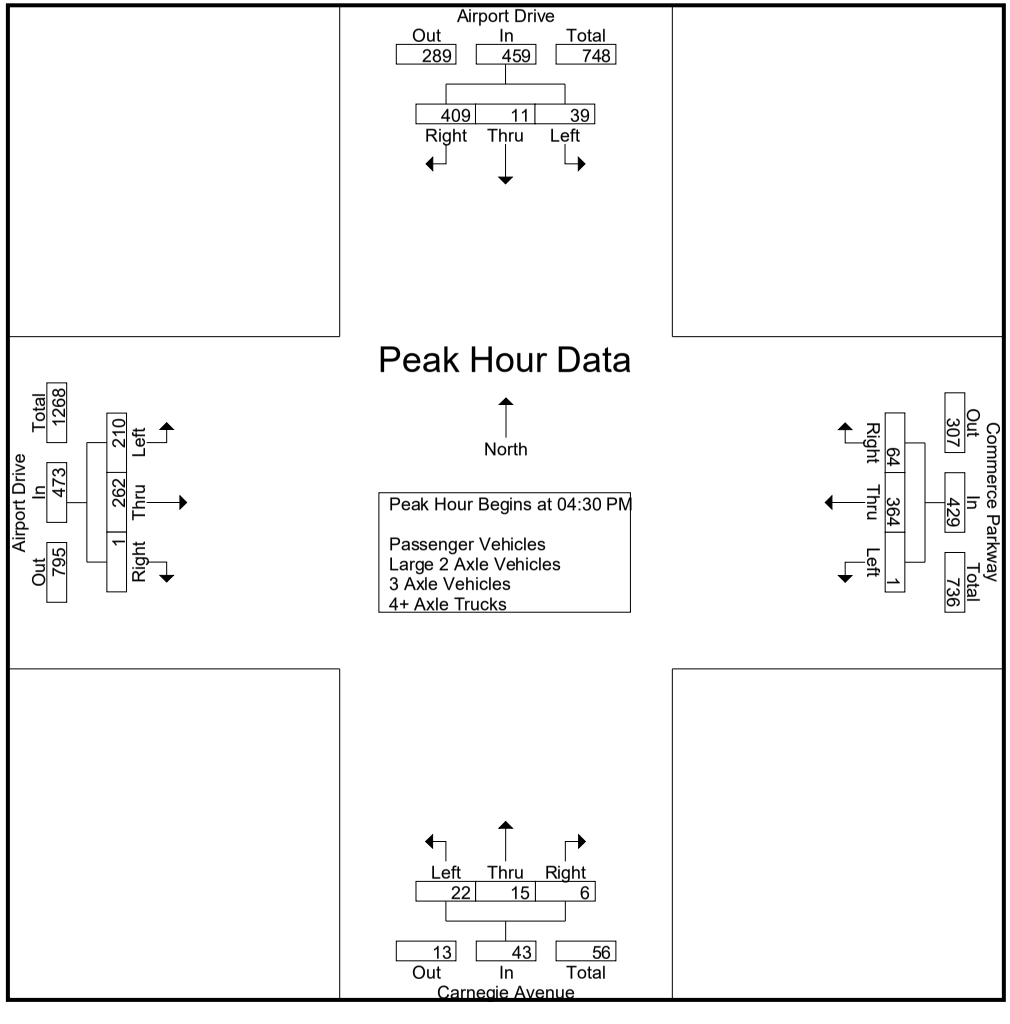
	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	8	4	**130**	**142**	0	**114**	**18**	**132**	4	**7**	0	11	49	64	0	113	**398**
04:45 PM	8	**6**	101	115	0	77	15	92	4	2	0	6	53	62	**1**	116	329
05:00 PM	**15**	1	113	129	**1**	82	15	98	6	4	2	12	50	63	0	113	352
05:15 PM	8	0	65	73	0	91	16	107	**8**	2	**4**	**14**	**58**	**73**	0	**131**	325
Total Volume	39	11	409	459	1	364	64	429	22	15	6	43	210	262	1	473	1404
% App. Total	8.5	2.4	89.1		0.2	84.8	14.9		51.2	34.9	14		44.4	55.4	0.2		
PHF	.650	.458	.787	.808	.250	.798	.889	.813	.688	.536	.375	.768	.905	.897	.250	.903	.882

3.1-32

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:30 PM				04:30 PM				04:45 PM				
+0 mins.	11	3	89	103	0	**114**	**18**	**132**	4	**7**	0	11	53	62	**1**	116	
+15 mins.	8	4	**130**	**142**	0	77	15	92	4	2	0	6	50	63	0	113	
+30 mins.	8	**6**	101	115	**1**	82	15	98	6	4	2	12	58	73	0	131	
+45 mins.	**15**	1	113	129	0	91	16	107	**8**	2	**4**	**14**	**62**	**89**	1	**152**	
Total Volume	42	14	433	489	1	364	64	429	22	15	6	43	223	287	2	512	
% App. Total	8.6	2.9	88.5		0.2	84.8	14.9		51.2	34.9	14		43.6	56.1	0.4		
PHF	.700	.583	.833	.861	.250	.798	.889	.813	.688	.536	.375	.768	.899	.806	.500	.842	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

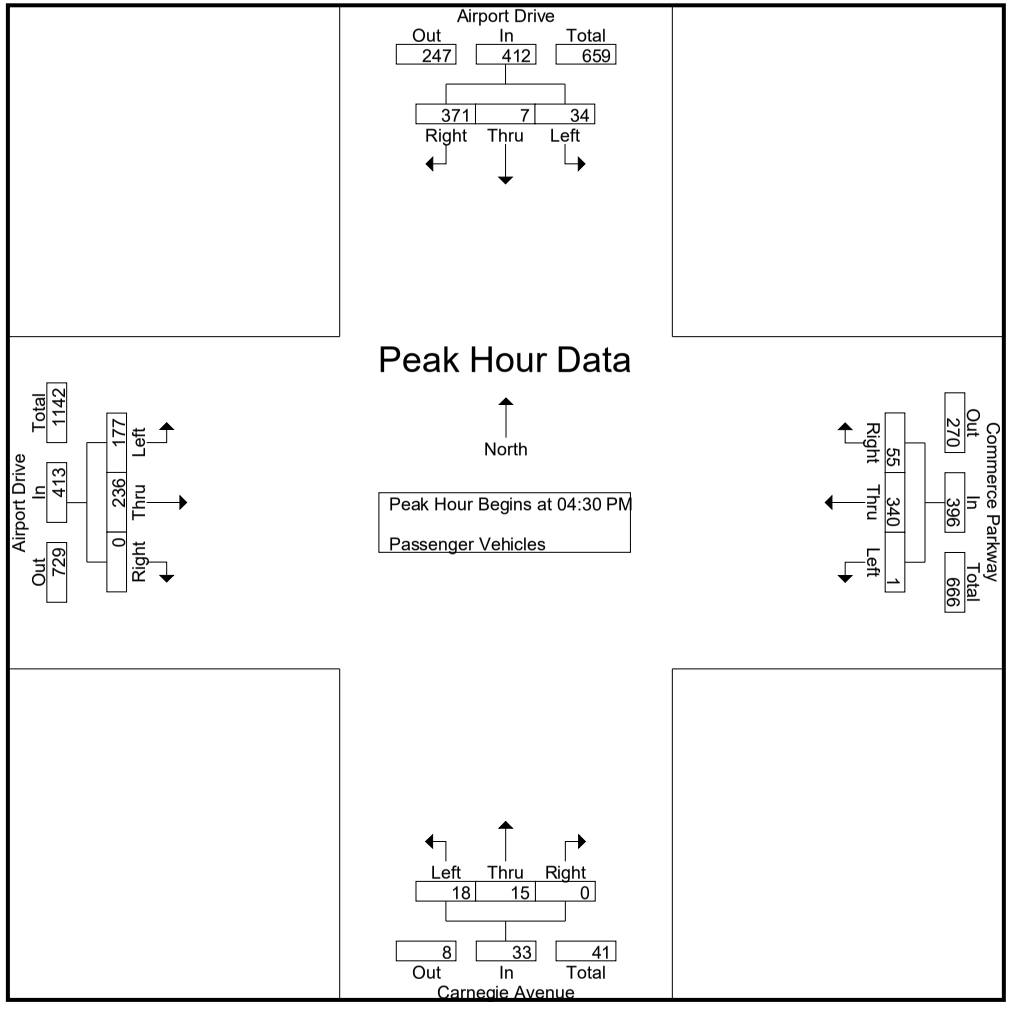
	Airport Drive Southbound					Commerce Parkway Westbound					Carnegie Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	14	1	95	43	110	0	81	5	1	86	3	1	0	0	4	37	33	0	0	70	44	270	314
04:15 PM	10	2	85	53	97	0	80	9	4	89	6	4	0	0	10	45	59	0	0	104	57	300	357
04:30 PM	8	3	122	49	133	0	102	16	5	118	4	7	0	0	11	40	58	0	0	98	54	360	414
04:45 PM	6	3	87	54	96	0	72	14	9	86	3	2	0	0	5	43	55	0	0	98	63	285	348
Total	38	9	389	199	436	0	335	44	19	379	16	14	0	0	30	165	205	0	0	370	218	1215	1433
05:00 PM	14	1	104	49	119	1	79	13	4	93	5	4	0	0	9	44	56	0	0	100	53	321	374
05:15 PM	6	0	58	25	64	0	87	12	6	99	6	2	0	0	8	50	67	0	0	117	31	288	319
05:30 PM	11	0	82	37	93	0	67	5	1	72	0	4	0	0	4	60	82	0	0	142	38	311	349
05:45 PM	9	4	56	35	69	0	44	4	1	48	0	3	0	0	3	46	42	1	0	89	36	209	245
Total	40	5	300	146	345	1	277	34	12	312	11	13	0	0	24	200	247	1	0	448	158	1129	1287
Grand Total	78	14	689	345	781	1	612	78	31	691	27	27	0	0	54	365	452	1	0	818	376	2344	2720
Apprch %	10	1.8	88.2			0.1	88.6	11.3			50	50	0			44.6	55.3	0.1					
Total %	3.3	0.6	29.4		33.3	0	26.1	3.3		29.5	1.2	1.2	0		2.3	15.6	19.3	0		34.9	13.8	86.2	

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	8	**3**	**122**	**133**	0	**102**	**16**	**118**	4	**7**	0	**11**	40	58	0	98	**360**
04:45 PM	6	3	87	96	0	72	14	86	3	2	0	5	43	55	0	98	285
05:00 PM	**14**	1	104	119	**1**	79	13	93	5	4	0	9	44	56	0	100	321
05:15 PM	6	0	58	64	0	87	12	99	**6**	2	0	8	**50**	**67**	0	**117**	288
Total Volume	34	7	371	412	1	340	55	396	18	15	0	33	177	236	0	413	1254
% App. Total	8.3	1.7	90		0.3	85.9	13.9		54.5	45.5	0		42.9	57.1	0		
PHF	.607	.583	.760	.774	.250	.833	.859	.839	.750	.536	.000	.750	.885	.881	.000	.882	.871

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	8	**3**	**122**	**133**	0	**102**	**16**	**118**	4	**7**	0	**11**	40	58	0	98	
+15 mins.	6	3	87	96	0	72	14	86	3	2	0	5	43	55	0	98	
+30 mins.	**14**	1	104	119	**1**	79	13	93	5	4	0	9	44	56	0	100	
+45 mins.	6	0	58	64	0	87	12	99	**6**	2	0	8	**50**	**67**	0	**117**	
Total Volume	34	7	371	412	1	340	55	396	18	15	0	33	177	236	0	413	
% App. Total	8.3	1.7	90		0.3	85.9	13.9		54.5	45.5	0		42.9	57.1	0		
PHF	.607	.583	.760	.774	.250	.833	.859	.839	.750	.536	.000	.750	.885	.881	.000	.882	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

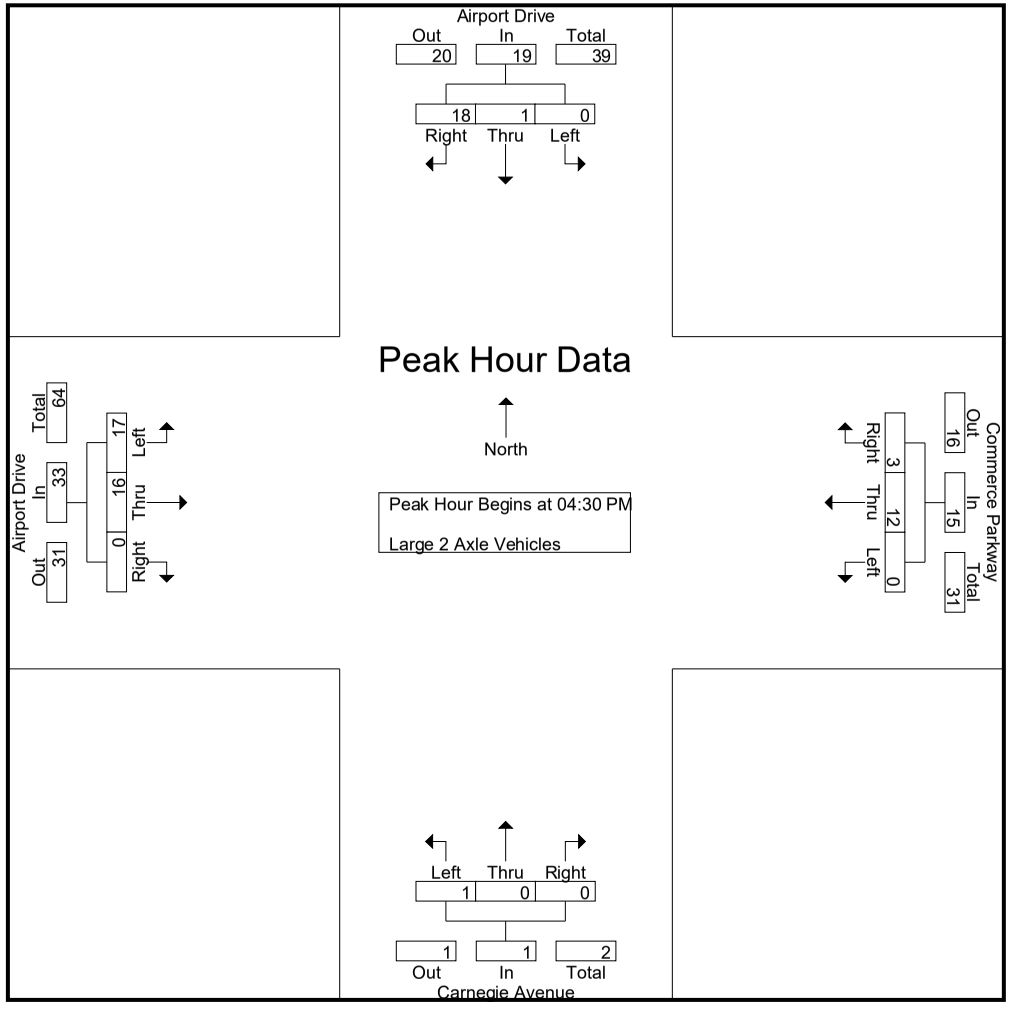
	Airport Drive Southbound					Commerce Parkway Westbound					Carnegie Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	5	0	5	0	3	0	0	3	0	0	0	0	0	2	1	0	0	3	0	11	11
04:15 PM	1	1	1	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	6	6
04:30 PM	0	0	2	1	2	0	6	0	0	6	0	0	0	0	0	5	5	0	0	10	1	18	19
04:45 PM	0	1	6	2	7	0	1	0	0	1	1	0	0	0	1	6	4	0	0	10	2	19	21
Total	1	2	14	3	17	0	10	0	0	10	1	0	0	0	1	13	13	0	0	26	3	54	57
05:00 PM	0	0	6	1	6	0	2	1	1	3	0	0	0	0	0	2	4	0	0	6	2	15	17
05:15 PM	0	0	4	3	4	0	3	2	1	5	0	0	0	0	0	4	3	0	0	7	4	16	20
05:30 PM	0	0	3	1	3	0	2	1	1	3	0	0	0	0	0	0	3	1	0	4	2	10	12
05:45 PM	2	0	1	1	3	0	4	0	0	4	0	0	0	0	0	2	3	0	0	5	1	12	13
Total	2	0	14	6	16	0	11	4	3	15	0	0	0	0	0	8	13	1	0	22	9	53	62
Grand Total	3	2	28	9	33	0	21	4	3	25	1	0	0	0	1	21	26	1	0	48	12	107	119
Apprch %	9.1	6.1	84.8			0	84	16			100	0	0			43.8	54.2	2.1					
Total %	2.8	1.9	26.2		30.8	0	19.6	3.7		23.4	0.9	0	0		0.9	19.6	24.3	0.9		44.9	10.1	89.9	

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	2	2	0	**6**	0	**6**	0	0	0	0	5	**5**	0	**10**	18
04:45 PM	0	**1**	**6**	**7**	0	1	0	1	**1**	0	0	**1**	**6**	4	0	10	**19**
05:00 PM	0	0	6	6	0	2	1	3	0	0	0	0	2	4	0	6	15
05:15 PM	0	0	4	4	0	3	**2**	5	0	0	0	0	4	3	0	7	16
Total Volume	0	1	18	19	0	12	3	15	1	0	0	1	17	16	0	33	68
% App. Total	0	5.3	94.7		0	80	20		100	0	0		51.5	48.5	0		
PHF	.000	.250	.750	.679	.000	.500	.375	.625	.250	.000	.000	.250	.708	.800	.000	.825	.895

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	2	2	0	**6**	0	**6**	0	0	0	0	5	**5**	0	**10**	
+15 mins.	0	**1**	**6**	**7**	0	1	0	1	**1**	0	0	**1**	**6**	4	0	10	
+30 mins.	0	0	6	6	0	2	1	3	0	0	0	0	2	4	0	6	
+45 mins.	0	0	4	4	0	3	**2**	5	0	0	0	0	4	3	0	7	
Total Volume	0	1	18	19	0	12	3	15	1	0	0	1	17	16	0	33	
% App. Total	0	5.3	94.7		0	80	20		100	0	0		51.5	48.5	0		
PHF	.000	.250	.750	.679	.000	.500	.375	.625	.250	.000	.000	.250	.708	.800	.000	.825	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

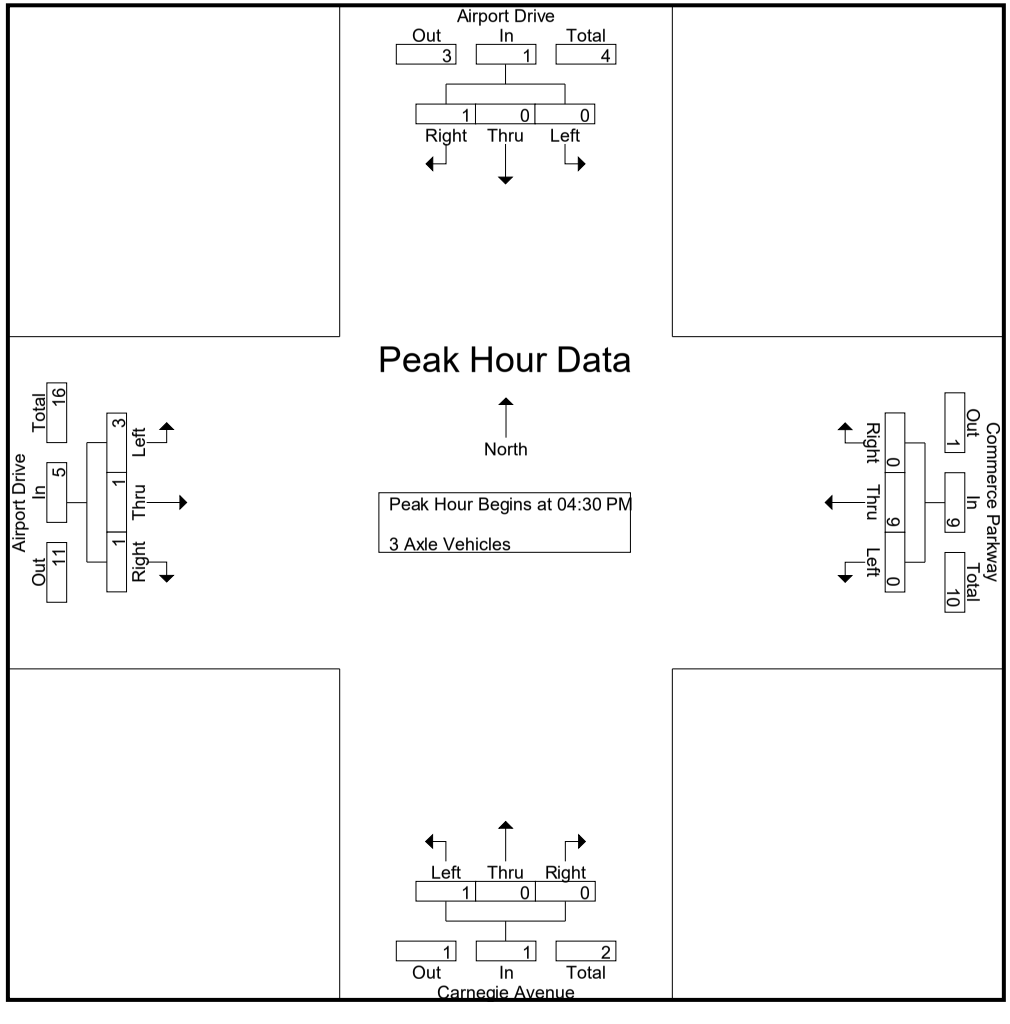
	Airport Drive Southbound					Commerce Parkway Westbound					Carnegie Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	1	0	1	0	1	2	0	3	0	0	0	0	0	2	0	1	0	3	0	7	7
04:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	0	2	0	3	3
04:30 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	1	0	0	0	1	0	6	6
04:45 PM	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	1	0	1	0	2	0	6	6
Total	0	0	2	0	2	0	9	2	0	11	1	0	0	0	1	5	0	3	0	8	0	22	22
05:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	2	2
05:30 PM	0	0	1	1	1	0	4	0	0	4	0	0	0	0	0	0	1	0	0	1	1	6	7
05:45 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	1	0	2	0	5	5
Total	0	0	1	1	1	0	8	0	0	8	1	0	0	0	1	1	3	1	0	5	1	15	16
Grand Total	0	0	3	1	3	0	17	2	0	19	2	0	0	0	2	6	3	4	0	13	1	37	38
Apprch %	0	0	100			0	89.5	10.5			100	0	0			46.2	23.1	30.8					
Total %	0	0	8.1		8.1	0	45.9	5.4		51.4	5.4	0	0		5.4	16.2	8.1	10.8		35.1	2.6	97.4	

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	**5**	0	**5**	0	0	0	0	**1**	0	0	1	**6**
04:45 PM	0	0	**1**	**1**	0	3	0	3	0	0	0	0	1	0	**1**	**2**	6
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	**1**	0	1	2
05:15 PM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	1	0	0	1	2
Total Volume	0	0	1	1	0	9	0	9	1	0	0	1	3	1	1	5	16
% App. Total	0	0	100		0	100	0		100	0	0		60	20	20		
PHF	.000	.000	.250	.250	.000	.450	.000	.450	.250	.000	.000	.250	.750	.250	.250	.625	.667

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	0	0	0	0	**5**	0	**5**	0	0	0	0	**1**	0	0	1	
+15 mins.	0	0	**1**	**1**	0	3	0	3	0	0	0	0	1	0	**1**	**2**	
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**1**	0	1	
+45 mins.	0	0	0	0	0	0	0	0	**1**	0	0	**1**	1	0	0	1	
Total Volume	0	0	1	1	0	9	0	9	1	0	0	1	3	1	1	5	
% App. Total	0	0	100		0	100	0		100	0	0		60	20	20		
PHF	.000	.000	.250	.250	.000	.450	.000	.450	.250	.000	.000	.250	.750	.250	.250	.625	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

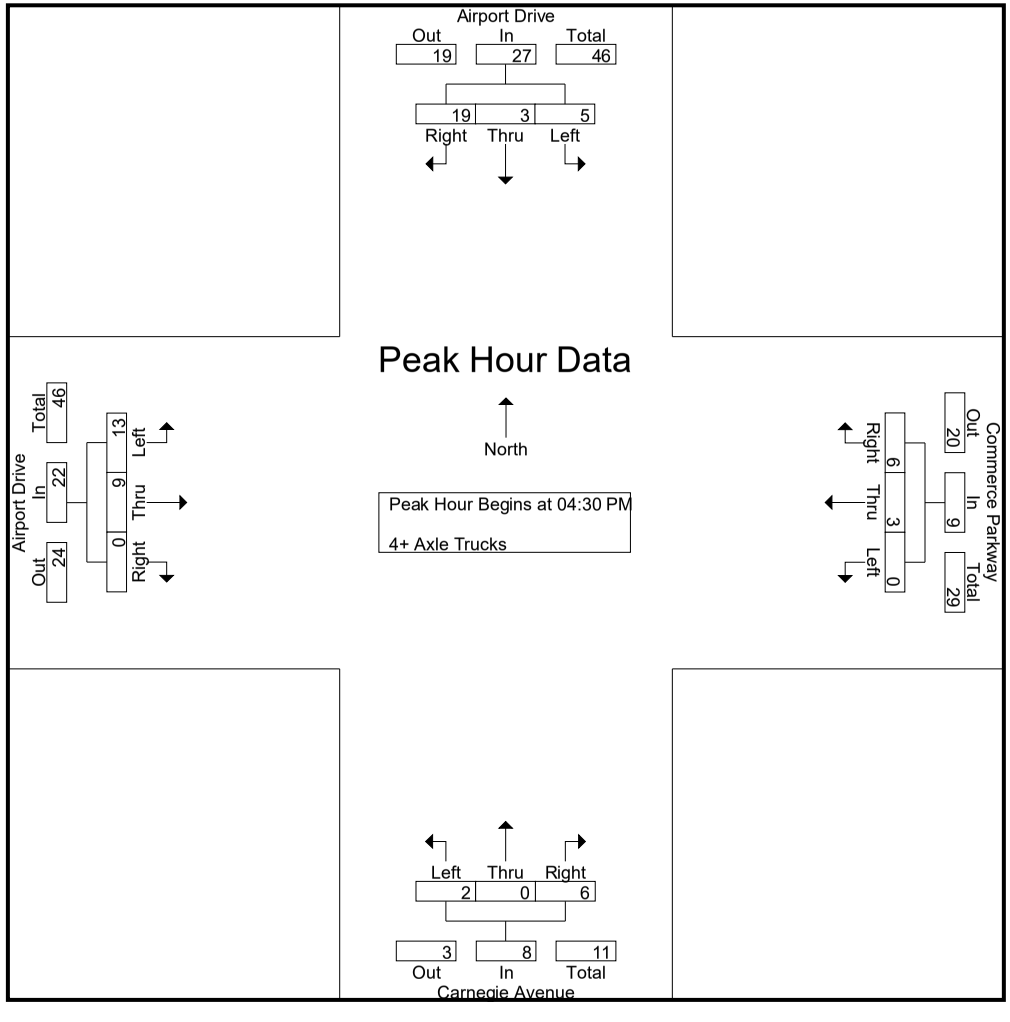
	Airport Drive Southbound					Commerce Parkway Westbound					Carnegie Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	1	3	0	4	0	3	4	1	7	1	0	0	0	1	6	0	1	0	7	1	19	20
04:15 PM	0	0	3	2	3	0	2	4	1	6	1	1	0	0	2	0	1	0	0	1	3	12	15
04:30 PM	0	1	6	0	7	0	1	2	1	3	0	0	0	0	0	3	1	0	0	4	1	14	15
04:45 PM	2	2	7	1	11	0	1	1	1	2	0	0	0	0	0	3	3	0	0	6	2	19	21
Total	2	4	19	3	25	0	7	11	4	18	2	1	0	0	3	12	5	1	0	18	7	64	71
05:00 PM	1	0	3	1	4	0	0	1	0	1	1	0	2	0	3	4	2	0	0	6	1	14	15
05:15 PM	2	0	3	1	5	0	1	2	1	3	1	0	4	0	5	3	3	0	0	6	2	19	21
05:30 PM	1	0	0	0	1	0	1	2	1	3	1	0	2	0	3	2	3	0	0	5	1	12	13
05:45 PM	0	1	3	0	4	0	2	3	0	5	1	1	0	0	2	0	1	0	0	1	0	12	12
Total	4	1	9	2	14	0	4	8	2	12	4	1	8	0	13	9	9	0	0	18	4	57	61
Grand Total	6	5	28	5	39	0	11	19	6	30	6	2	8	0	16	21	14	1	0	36	11	121	132
Apprch %	15.4	12.8	71.8			0	36.7	63.3			37.5	12.5	50			58.3	38.9	2.8					
Total %	5	4.1	23.1		32.2	0	9.1	15.7		24.8	5	1.7	6.6		13.2	17.4	11.6	0.8		29.8	8.3	91.7	

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	1	6	7	0	**1**	**2**	**3**	0	0	0	0	3	1	0	4	14
04:45 PM	**2**	**2**	**7**	**11**	0	1	1	2	0	0	0	0	3	**3**	0	**6**	**19**
05:00 PM	1	0	3	4	0	0	1	1	**1**	0	2	3	**4**	2	0	6	14
05:15 PM	2	0	3	5	0	1	2	3	1	0	**4**	**5**	3	3	0	6	19
Total Volume	5	3	19	27	0	3	6	9	2	0	6	8	13	9	0	22	66
% App. Total	18.5	11.1	70.4		0	33.3	66.7		25	0	75		59.1	40.9	0		
PHF	.625	.375	.679	.614	.000	.750	.750	.750	.500	.000	.375	.400	.813	.750	.000	.917	.868

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Airport Drive/Carnegie Avenue
E/W: Airport Drive/Commerce Parkway
Weather: Clear

File Name : 11_ONT_Air_Carn PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Airport Drive Southbound				Commerce Parkway Westbound				Carnegie Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	1	6	7	0	**1**	**2**	**3**	0	0	0	0	3	1	0	4	
+15 mins.	**2**	**2**	**7**	**11**	0	1	1	2	0	0	0	0	3	**3**	0	**6**	
+30 mins.	1	0	3	4	0	0	1	1	**1**	0	2	3	**4**	2	0	6	
+45 mins.	2	0	3	5	0	1	2	3	1	0	**4**	**5**	3	3	0	6	
Total Volume	5	3	19	27	0	3	6	9	2	0	6	8	13	9	0	22	
% App. Total	18.5	11.1	70.4		0	33.3	66.7		25	0	75		59.1	40.9	0		
PHF	.625	.375	.679	.614	.000	.750	.750	.750	.500	.000	.375	.400	.813	.750	.000	.917	

Location: Ontario
N/S: Airport Dr/Carnegie Ave
E/W: Airport Dr/Commerce Pkwy

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Airport Drive	East Leg Commerce Parkway	South Leg Carnegie Avenue	West Leg Airport Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Airport Drive	East Leg Commerce Parkway	South Leg Carnegie Avenue	West Leg Airport Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

Location: Ontario
N/S: Airport Dr/Carnegie Ave
E/W: Airport Dr/Commerce Pkwy

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Airport Drive			Westbound Commerce Parkway			Northbound Carnegie Avenue			Eastbound Airport Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	1	2

	Southbound Airport Drive			Westbound Commerce Parkway			Northbound Carnegie Avenue			Eastbound Airport Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

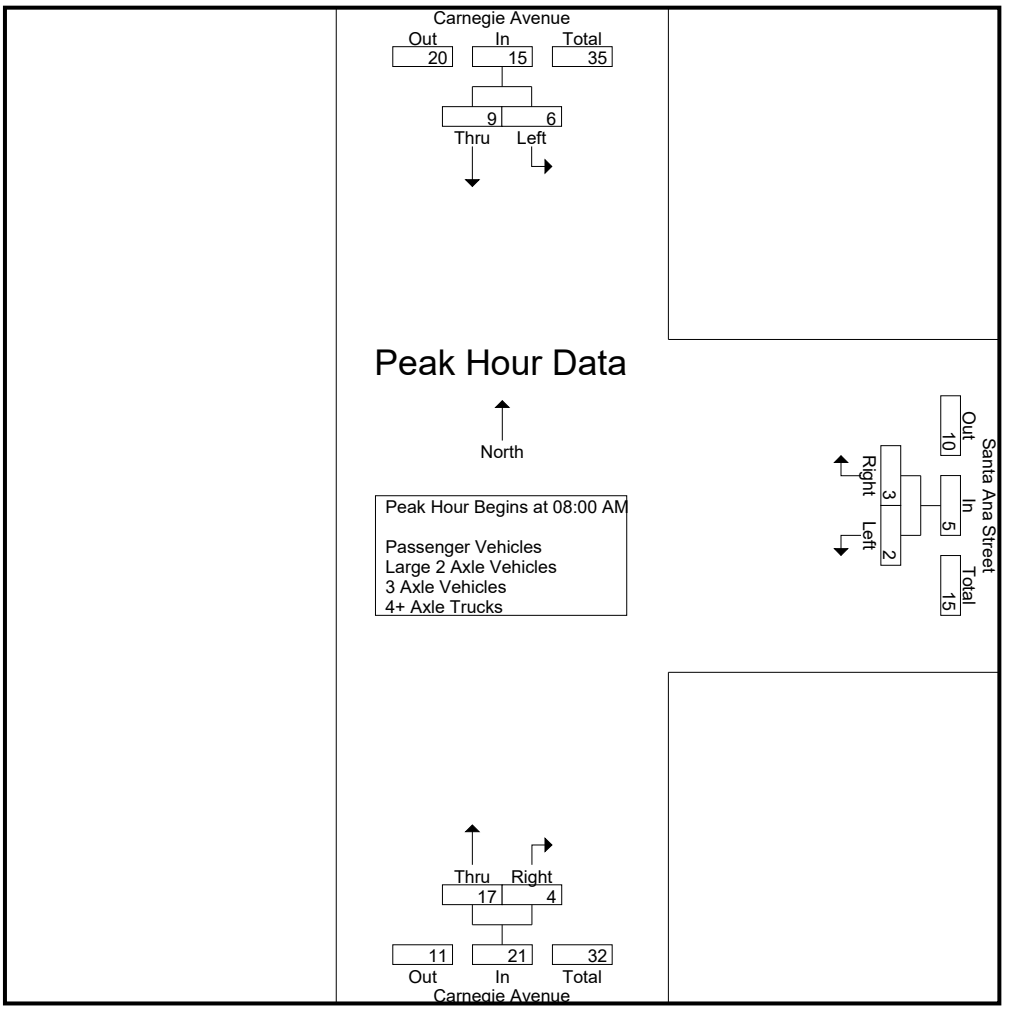
	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	1	0	0	0	5	0	5	6
07:15 AM	1	2	3	1	0	1	0	0	0	4
07:30 AM	0	4	4	0	1	1	5	0	5	10
07:45 AM	0	4	4	0	0	0	3	0	3	7
Total	1	11	12	1	1	2	13	0	13	27
08:00 AM	0	2	2	0	1	1	1	1	2	5
08:15 AM	0	2	2	1	0	1	5	2	7	10
08:30 AM	0	1	1	1	1	2	6	1	7	10
08:45 AM	6	4	10	0	1	1	5	0	5	16
Total	6	9	15	2	3	5	17	4	21	41
Grand Total	7	20	27	3	4	7	30	4	34	68
Apprch %	25.9	74.1		42.9	57.1		88.2	11.8		
Total %	10.3	29.4	39.7	4.4	5.9	10.3	44.1	5.9	50	
Passenger Vehicles	2	13	15	3	3	6	25	4	29	50
% Passenger Vehicles	28.6	65	55.6	100	75	85.7	83.3	100	85.3	73.5
Large 2 Axle Vehicles	0	2	2	0	0	0	3	0	3	5
% Large 2 Axle Vehicles	0	10	7.4	0	0	0	10	0	8.8	7.4
3 Axle Vehicles	0	3	3	0	0	0	1	0	1	4
% 3 Axle Vehicles	0	15	11.1	0	0	0	3.3	0	2.9	5.9
4+ Axle Trucks	5	2	7	0	1	1	1	0	1	9
% 4+ Axle Trucks	71.4	10	25.9	0	25	14.3	3.3	0	2.9	13.2

	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	2	2	0	**1**	1	1	1	2	5
08:15 AM	0	2	2	**1**	0	1	5	**2**	**7**	10
08:30 AM	0	1	1	1	1	**2**	**6**	1	7	10
08:45 AM	**6**	**4**	**10**	0	1	1	5	0	5	**16**
Total Volume	6	9	15	2	3	5	17	4	21	41
% App. Total	40	60		40	60		81	19		
PHF	.250	.563	.375	.500	.750	.625	.708	.500	.750	.641

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	2	2	0	**1**	1	1	1	2
+15 mins.	0	2	2	**1**	0	1	5	**2**	**7**
+30 mins.	0	1	1	1	1	**2**	**6**	1	7
+45 mins.	**6**	**4**	**10**	0	1	1	5	0	5
Total Volume	6	9	15	2	3	5	17	4	21
% App. Total	40	60		40	60		81	19	
PHF	.250	.563	.375	.500	.750	.625	.708	.500	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

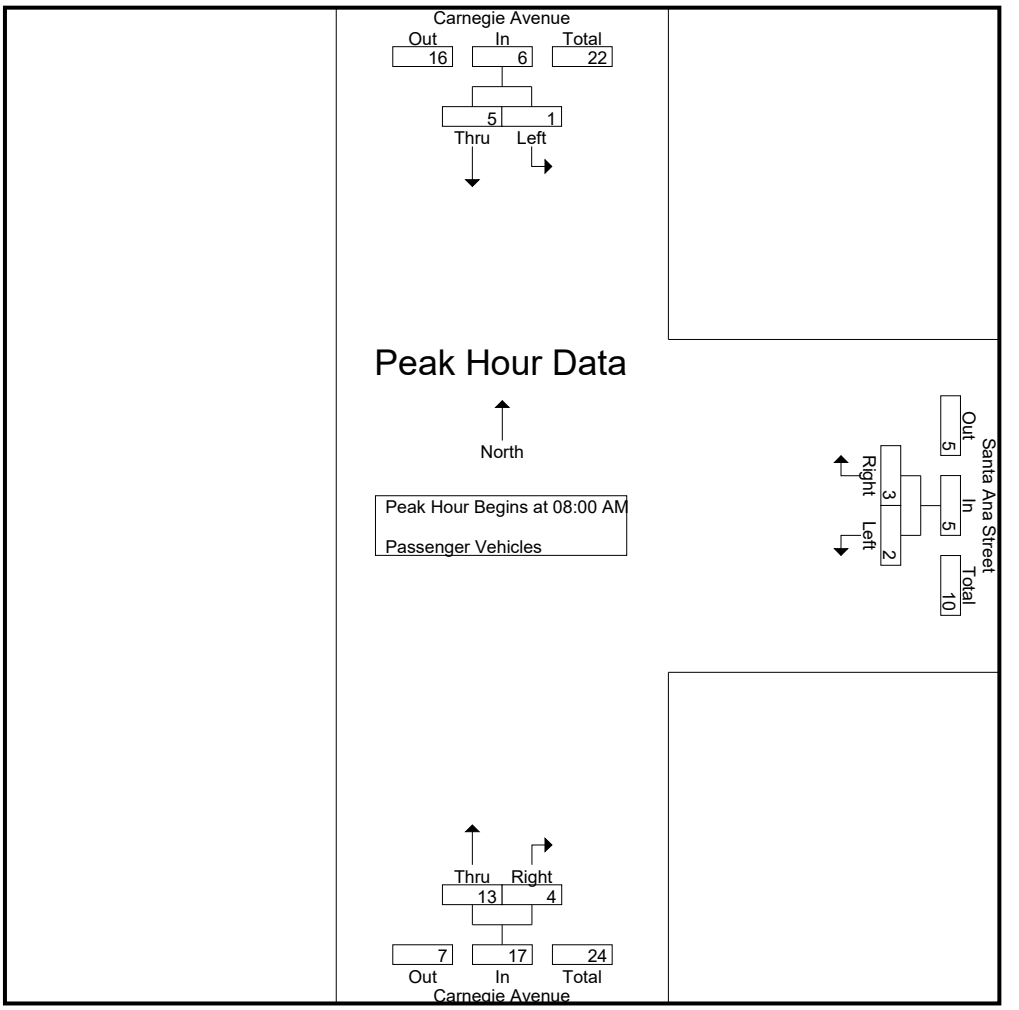
	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	1	0	0	0	5	0	5	6
07:15 AM	1	1	2	1	0	1	0	0	0	3
07:30 AM	0	3	3	0	0	0	5	0	5	8
07:45 AM	0	3	3	0	0	0	2	0	2	5
Total	1	8	9	1	0	1	12	0	12	22
08:00 AM	0	1	1	0	1	1	1	1	2	4
08:15 AM	0	0	0	1	0	1	2	2	4	5
08:30 AM	0	1	1	1	1	2	6	1	7	10
08:45 AM	1	3	4	0	1	1	4	0	4	9
Total	1	5	6	2	3	5	13	4	17	28
Grand Total	2	13	15	3	3	6	25	4	29	50
Apprch %	13.3	86.7		50	50		86.2	13.8		
Total %	4	26	30	6	6	12	50	8	58	

	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	1	1	0	**1**	1	1	1	2	4
08:15 AM	0	0	0	**1**	0	1	2	**2**	4	5
08:30 AM	0	1	1	1	1	**2**	**6**	1	**7**	**10**
08:45 AM	**1**	**3**	**4**	0	1	1	4	0	4	9
Total Volume	1	5	6	2	3	5	13	4	17	28
% App. Total	16.7	83.3		40	60		76.5	23.5		
PHF	.250	.417	.375	.500	.750	.625	.542	.500	.607	.700

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	1	1	0	**1**	1	1	1	2
+15 mins.	0	0	0	**1**	0	1	2	**2**	4
+30 mins.	0	1	1	1	1	**2**	**6**	1	**7**
+45 mins.	**1**	**3**	**4**	0	1	1	4	0	4
Total Volume	1	5	6	2	3	5	13	4	17
% App. Total	16.7	83.3		40	60		76.5	23.5	
PHF	.250	.417	.375	.500	.750	.625	.542	.500	.607

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

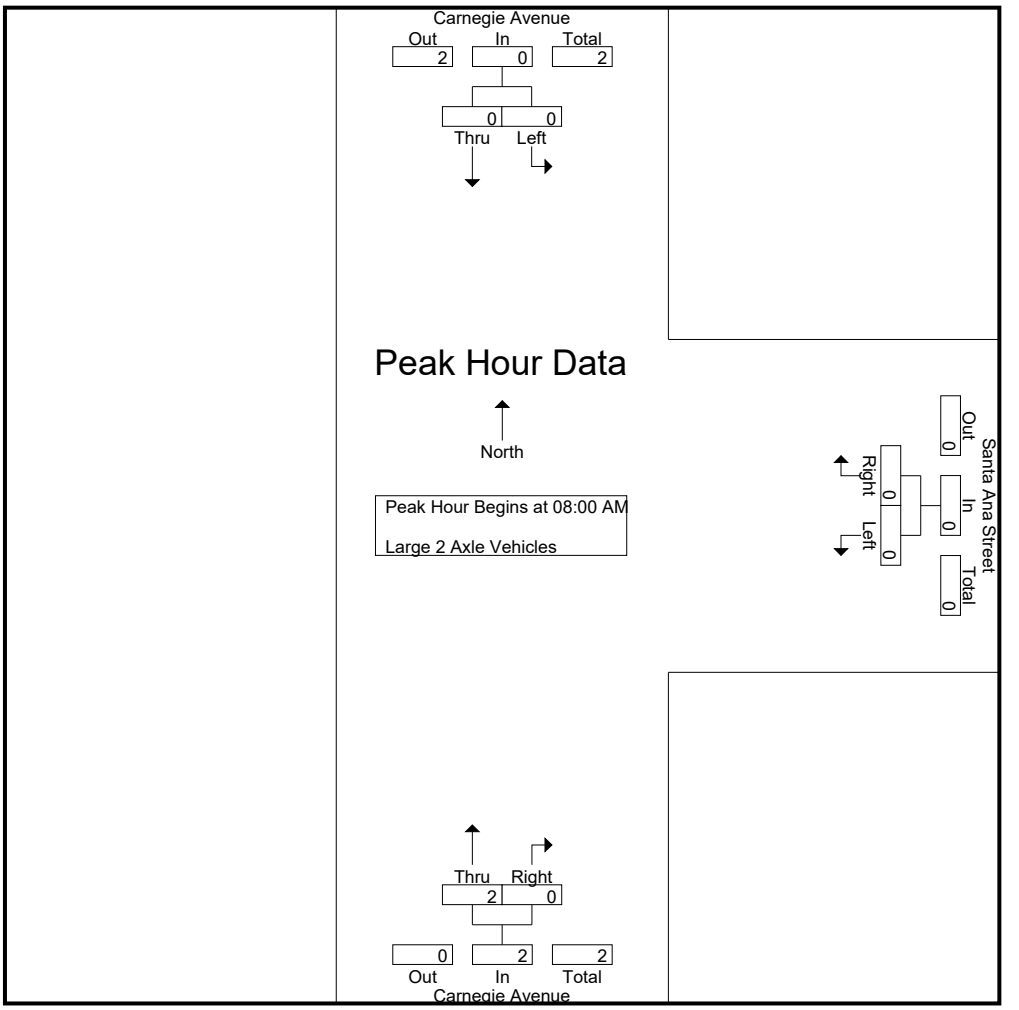
	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	1	0	0	0	0	0	0	1
07:45 AM	0	1	1	0	0	0	1	0	1	2
Total	0	2	2	0	0	0	1	0	1	3
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	0	2	0	2	2
Grand Total	0	2	2	0	0	0	3	0	3	5
Apprch %	0	100		0	0		100	0		
Total %	0	40	40	0	0	0	60	0	60	

	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	**1**	0	**1**	**1**
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	2	0	2	2
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.500	.000	.500	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	0	2	0	2
% App. Total	0	0		0	0		100	0	
PHF	.000	.000	.000	.000	.000	.000	.500	.000	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

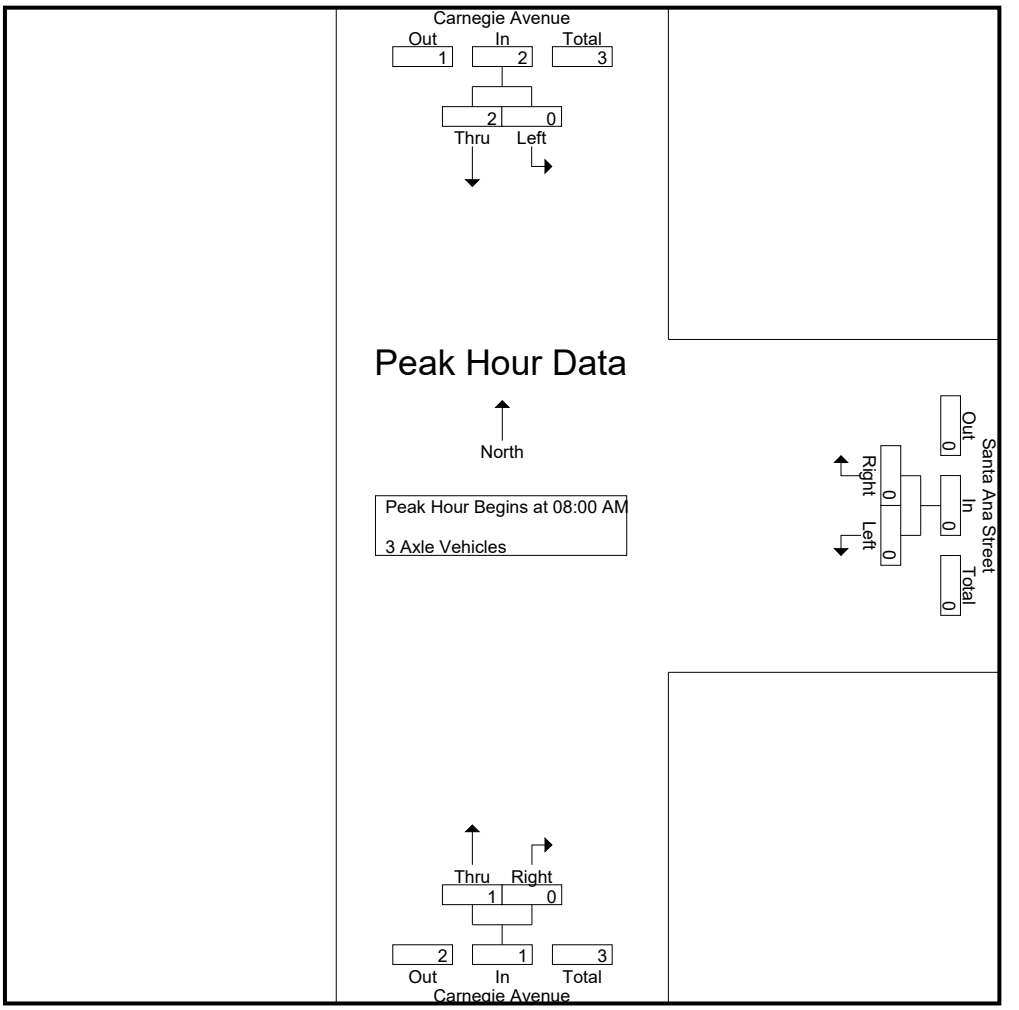
	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	1	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	2	2	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	2	2	0	0	0	1	0	1	3
Grand Total	0	3	3	0	0	0	1	0	1	4
Apprch %	0	100		0	0		100	0		
Total %	0	75	75	0	0	0	25	0	25	

	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	**2**	**2**	0	0	0	**1**	0	**1**	**3**
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	0	0	0	1	0	1	3
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	**2**	**2**	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	0	0	0	1	0	1
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

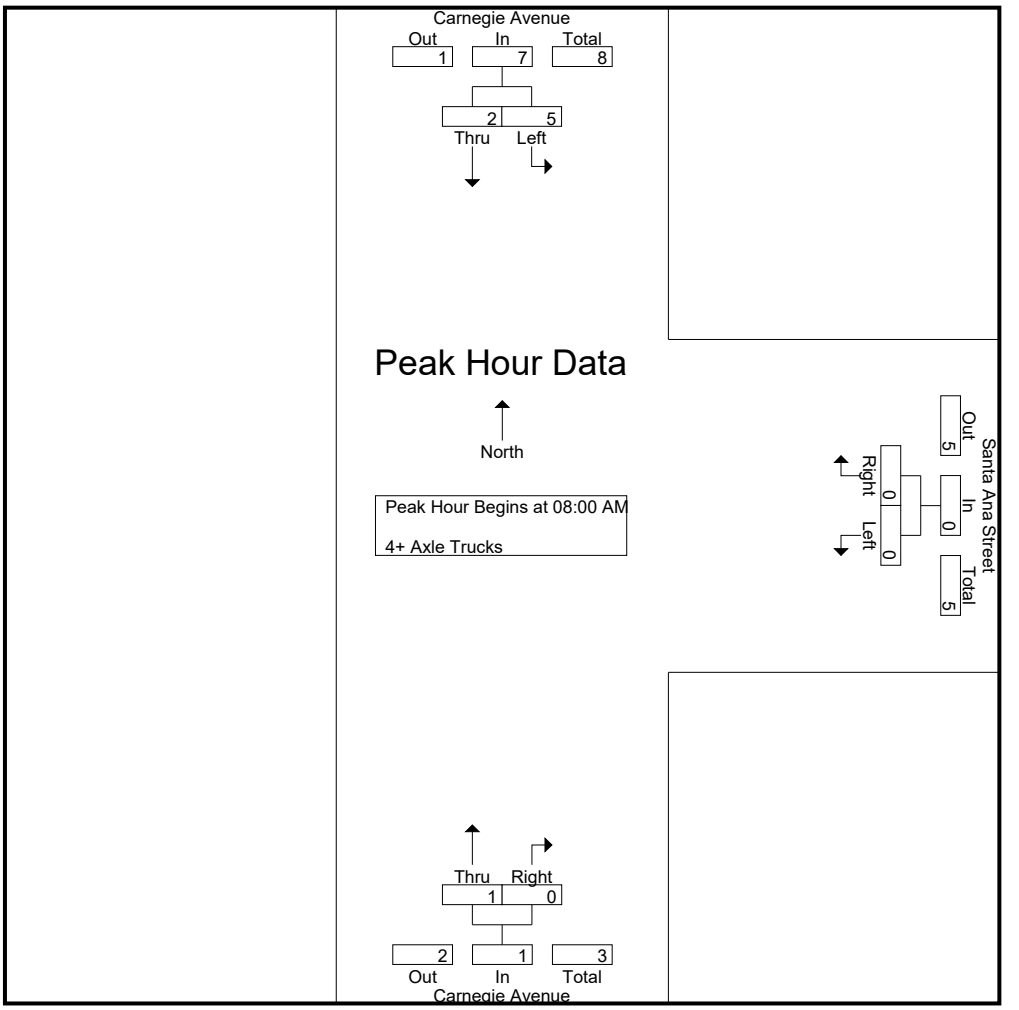
	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	1	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	1	0	0	0	1
08:00 AM	0	1	1	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	5	1	6	0	0	0	0	0	0	6
Total	5	2	7	0	0	0	1	0	1	8
Grand Total	5	2	7	0	1	1	1	0	1	9
Apprch %	71.4	28.6		0	100		100	0		
Total %	55.6	22.2	77.8	0	11.1	11.1	11.1	0	11.1	

	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	**1**	1	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	**1**	0	**1**	1
08:30 AM	0	0	0	0	0	0	0	0	0	0
08:45 AM	**5**	1	**6**	0	0	0	0	0	0	**6**
Total Volume	5	2	7	0	0	0	1	0	1	8
% App. Total	71.4	28.6		0	0		100	0		
PHF	.250	.500	.292	.000	.000	.000	.250	.000	.250	.333

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	**1**	1	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	**5**	1	**6**	0	0	0	0	0	0
Total Volume	5	2	7	0	0	0	1	0	1
% App. Total	71.4	28.6		0	0		100	0	
PHF	.250	.500	.292	.000	.000	.000	.250	.000	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

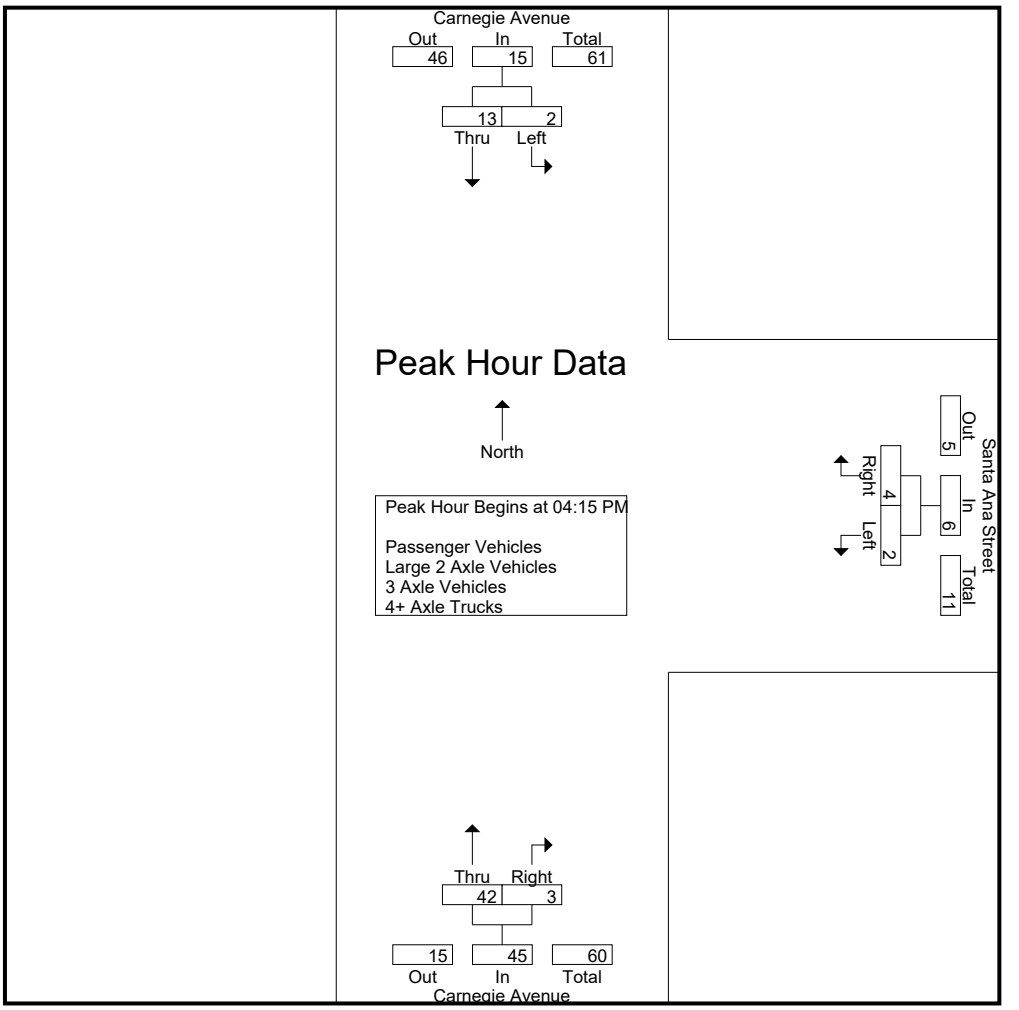
	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	4	5	1	0	1	6	2	8	14
04:15 PM	0	3	3	1	0	1	12	0	12	16
04:30 PM	1	1	2	1	1	2	12	2	14	18
04:45 PM	0	7	7	0	0	0	4	0	4	11
Total	2	15	17	3	1	4	34	4	38	59
05:00 PM	1	2	3	0	3	3	14	1	15	21
05:15 PM	0	1	1	0	4	4	6	0	6	11
05:30 PM	0	2	2	3	2	5	6	3	9	16
05:45 PM	0	7	7	2	0	2	2	1	3	12
Total	1	12	13	5	9	14	28	5	33	60
Grand Total	3	27	30	8	10	18	62	9	71	119
Apprch %	10	90		44.4	55.6		87.3	12.7		
Total %	2.5	22.7	25.2	6.7	8.4	15.1	52.1	7.6	59.7	
Passenger Vehicles	2	12	14	5	2	7	50	6	56	77
% Passenger Vehicles	66.7	44.4	46.7	62.5	20	38.9	80.6	66.7	78.9	64.7
Large 2 Axle Vehicles	0	4	4	1	0	1	2	0	2	7
% Large 2 Axle Vehicles	0	14.8	13.3	12.5	0	5.6	3.2	0	2.8	5.9
3 Axle Vehicles	0	6	6	0	0	0	2	0	2	8
% 3 Axle Vehicles	0	22.2	20	0	0	0	3.2	0	2.8	6.7
4+ Axle Trucks	1	5	6	2	8	10	8	3	11	27
% 4+ Axle Trucks	33.3	18.5	20	25	80	55.6	12.9	33.3	15.5	22.7

	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	3	3	**1**	0	1	12	0	12	16
04:30 PM	**1**	1	2	1	1	2	12	**2**	14	18
04:45 PM	0	**7**	**7**	0	0	0	4	0	4	11
05:00 PM	1	2	3	0	**3**	**3**	**14**	1	**15**	**21**
Total Volume	2	13	15	2	4	6	42	3	45	66
% App. Total	13.3	86.7		33.3	66.7		93.3	6.7		
PHF	.500	.464	.536	.500	.333	.500	.750	.375	.750	.786

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			05:00 PM			04:15 PM		
+0 mins.	**1**	4	5	0	3	3	12	0	12
+15 mins.	0	3	3	0	**4**	4	12	**2**	14
+30 mins.	1	1	2	**3**	2	**5**	4	0	4
+45 mins.	0	**7**	**7**	2	0	2	**14**	1	**15**
Total Volume	2	15	17	5	9	14	42	3	45
% App. Total	11.8	88.2		35.7	64.3		93.3	6.7	
PHF	.500	.536	.607	.417	.563	.700	.750	.375	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

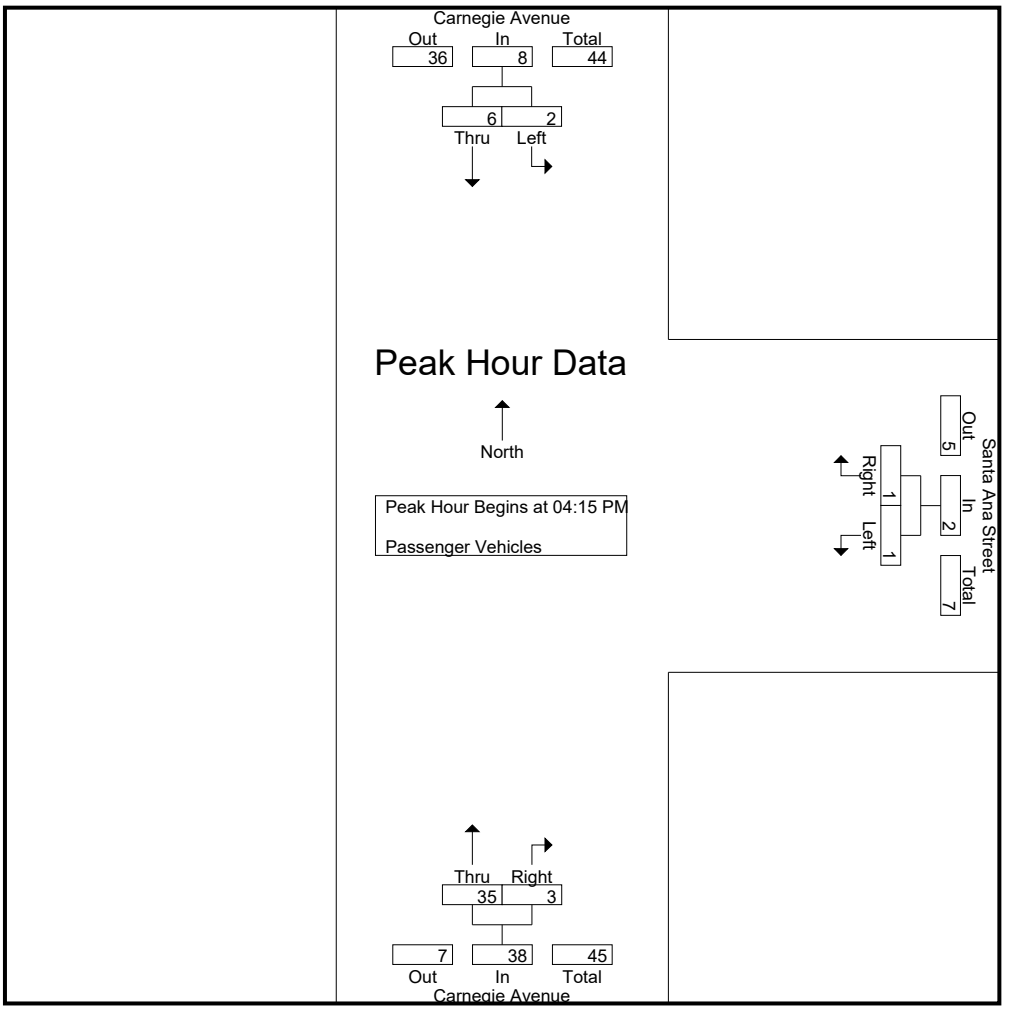
	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	1	1	0	1	4	0	4	6
04:15 PM	0	1	1	1	0	1	9	0	9	11
04:30 PM	1	0	1	0	1	1	12	2	14	16
04:45 PM	0	4	4	0	0	0	3	0	3	7
Total	1	6	7	2	1	3	28	2	30	40
05:00 PM	1	1	2	0	0	0	11	1	12	14
05:15 PM	0	1	1	0	1	1	6	0	6	8
05:30 PM	0	0	0	2	0	2	4	2	6	8
05:45 PM	0	4	4	1	0	1	1	1	2	7
Total	1	6	7	3	1	4	22	4	26	37
Grand Total	2	12	14	5	2	7	50	6	56	77
Apprch %	14.3	85.7		71.4	28.6		89.3	10.7		
Total %	2.6	15.6	18.2	6.5	2.6	9.1	64.9	7.8	72.7	

	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	1	1	**1**	0	**1**	9	0	9	11
04:30 PM	**1**	0	1	0	**1**	1	**12**	**2**	**14**	**16**
04:45 PM	0	**4**	**4**	0	0	0	3	0	3	7
05:00 PM	1	1	2	0	0	0	11	1	12	14
Total Volume	2	6	8	1	1	2	35	3	38	48
% App. Total	25	75		50	50		92.1	7.9		
PHF	.500	.375	.500	.250	.250	.500	.729	.375	.679	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	1	1	**1**	0	**1**	9	0	9
+15 mins.	**1**	0	1	0	**1**	1	**12**	**2**	**14**
+30 mins.	0	**4**	**4**	0	0	0	3	0	3
+45 mins.	1	1	2	0	0	0	11	1	12
Total Volume	2	6	8	1	1	2	35	3	38
% App. Total	25	75		50	50		92.1	7.9	
PHF	.500	.375	.500	.250	.250	.500	.729	.375	.679

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

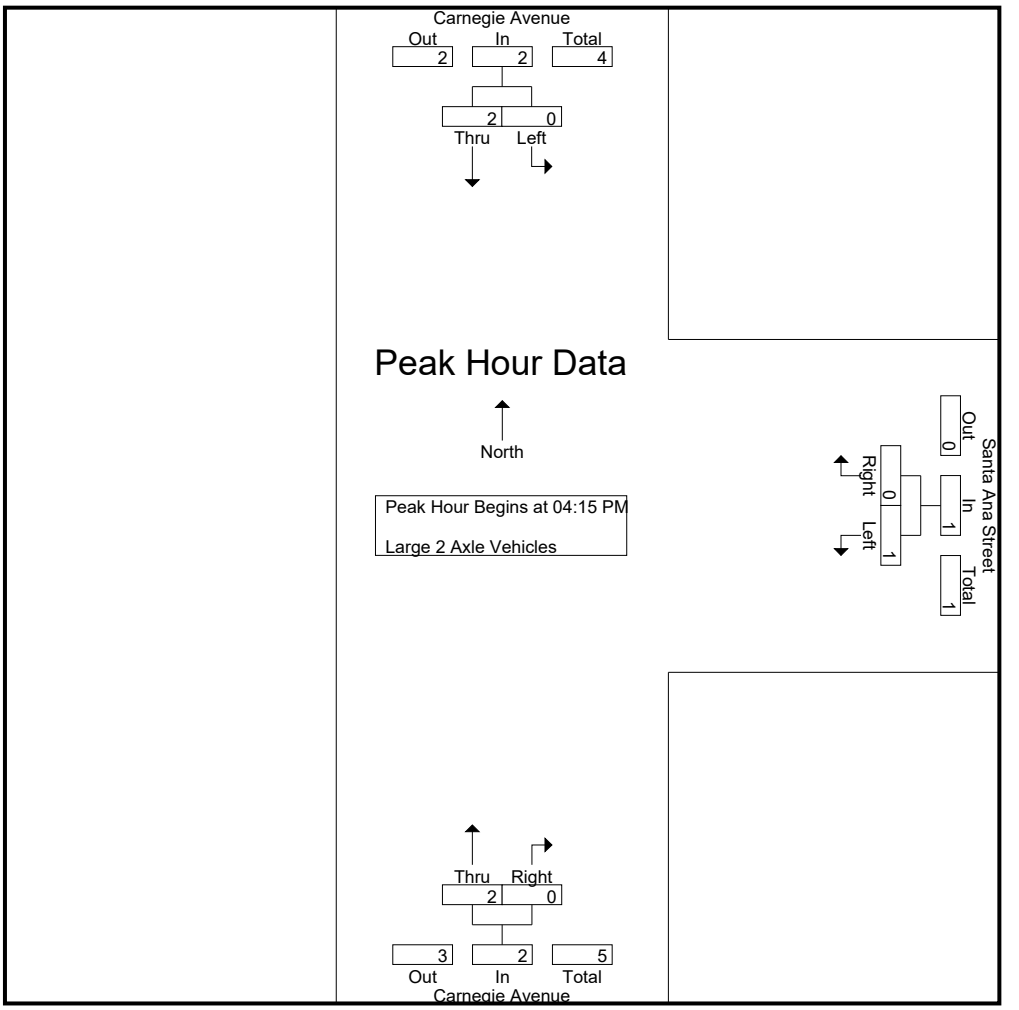
	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	1	0	0	0	0	0	0	1
04:30 PM	0	0	0	1	0	1	0	0	0	1
04:45 PM	0	1	1	0	0	0	1	0	1	2
Total	0	2	2	1	0	1	1	0	1	4
05:00 PM	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	1	0	0	0	0	0	0	1
05:45 PM	0	1	1	0	0	0	0	0	0	1
Total	0	2	2	0	0	0	1	0	1	3
Grand Total	0	4	4	1	0	1	2	0	2	7
Apprch %	0	100		100	0		100	0		
Total %	0	57.1	57.1	14.3	0	14.3	28.6	0	28.6	

	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	**1**	**1**	0	0	0	0	0	0	1
04:30 PM	0	0	0	**1**	0	**1**	0	0	0	1
04:45 PM	0	1	1	0	0	0	**1**	0	**1**	**2**
05:00 PM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	2	2	1	0	1	2	0	2	5
% App. Total	0	100		100	0		100	0		
PHF	.000	.500	.500	.250	.000	.250	.500	.000	.500	.625

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	**1**	**1**	0	0	0	0	0	0
+15 mins.	0	0	0	**1**	0	**1**	0	0	0
+30 mins.	0	1	1	0	0	0	**1**	0	**1**
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	2	2	1	0	1	2	0	2
% App. Total	0	100		100	0		100	0	
PHF	.000	.500	.500	.250	.000	.250	.500	.000	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

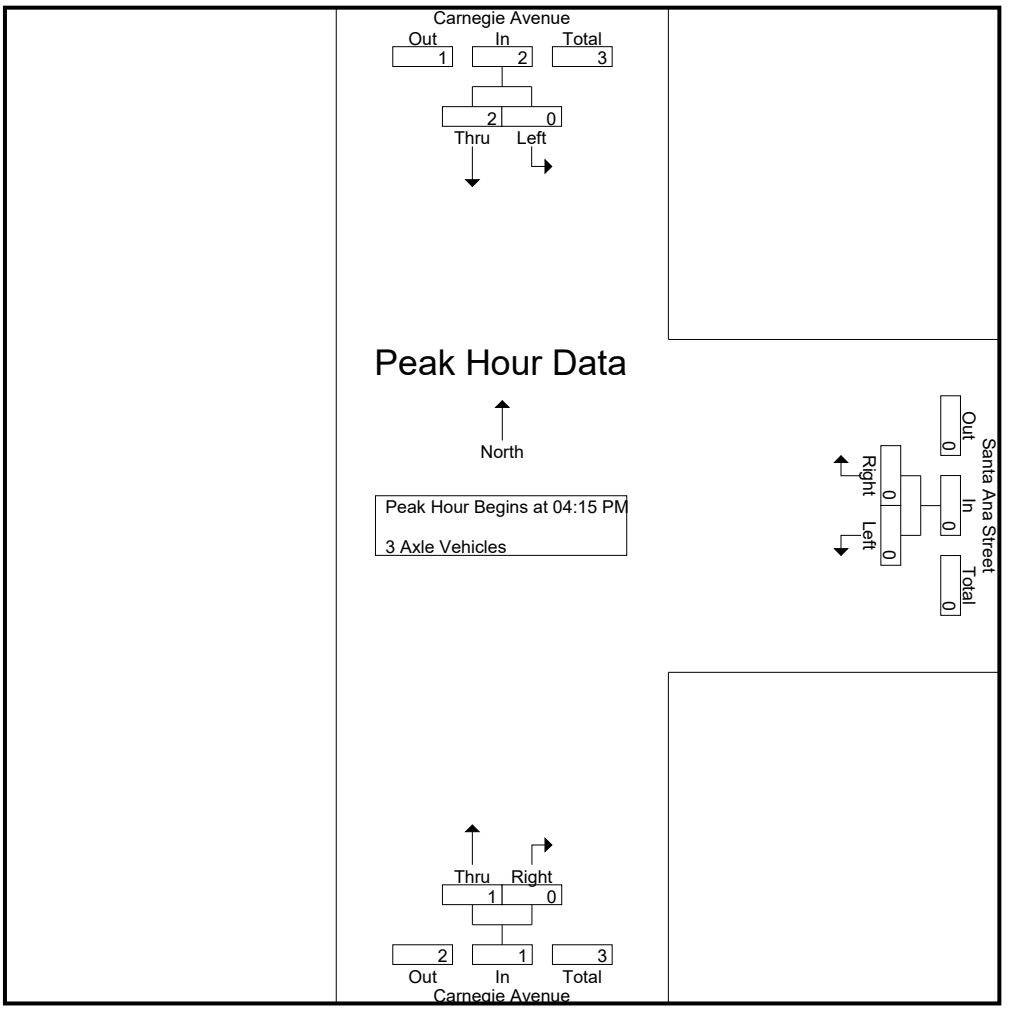
	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	2	0	0	0	1	0	1	3
04:15 PM	0	1	1	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	0	3	3	0	0	0	2	0	2	5
05:00 PM	0	1	1	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	1	0	0	0	0	0	0	1
05:45 PM	0	1	1	0	0	0	0	0	0	1
Total	0	3	3	0	0	0	0	0	0	3
Grand Total	0	6	6	0	0	0	2	0	2	8
Apprch %	0	100		0	0		100	0		
Total %	0	75	75	0	0	0	25	0	25	

	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	**1**	**1**	0	0	0	**1**	0	**1**	**2**
04:30 PM	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	1	1	0	0	0	0	0	0	1
Total Volume	0	2	2	0	0	0	1	0	1	3
% App. Total	0	100		0	0		100	0		
PHF	.000	.500	.500	.000	.000	.000	.250	.000	.250	.375

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	**1**	**1**	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	1	0	0	0	0	0	0
Total Volume	0	2	2	0	0	0	1	0	1
% App. Total	0	100		0	0		100	0	
PHF	.000	.500	.500	.000	.000	.000	.250	.000	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

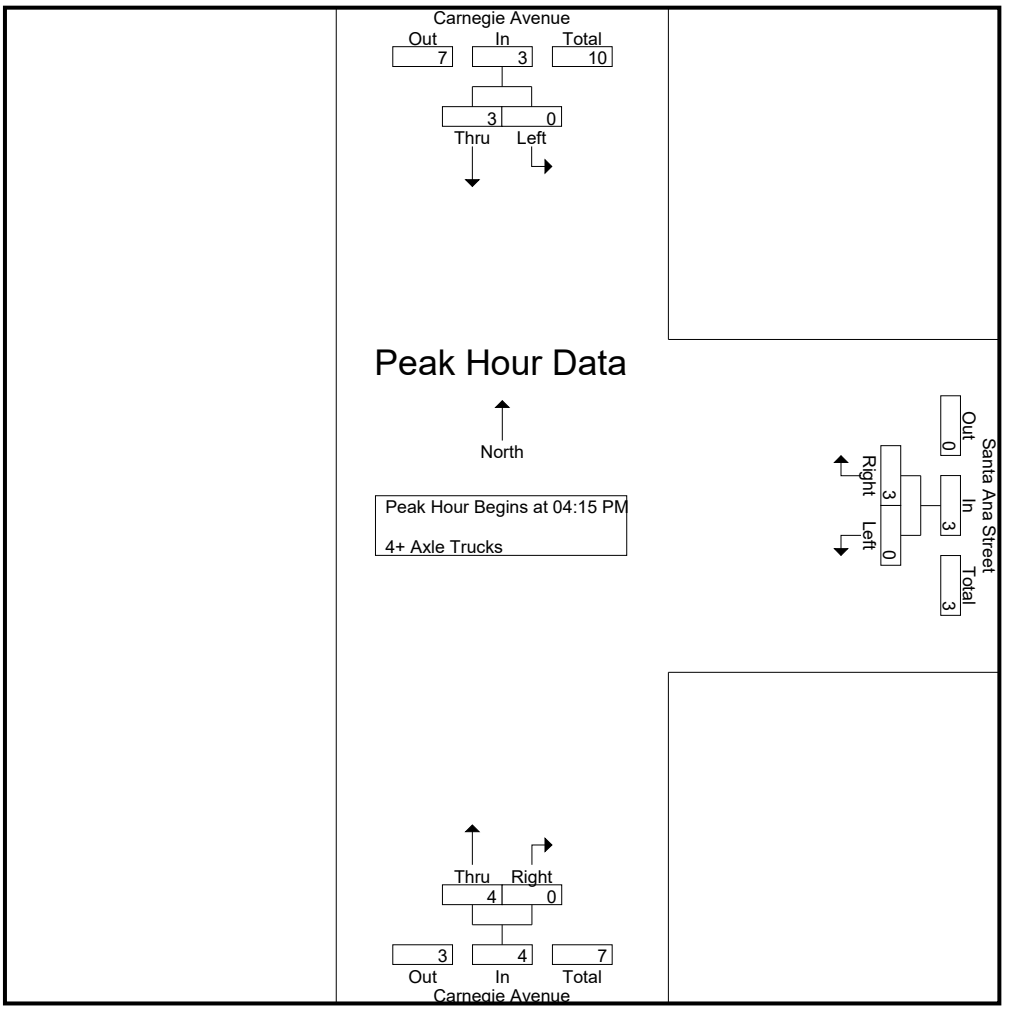
	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	1	2	0	0	0	1	2	3	5
04:15 PM	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	2	2	0	0	0	0	0	0	2
Total	1	4	5	0	0	0	3	2	5	10
05:00 PM	0	0	0	0	3	3	2	0	2	5
05:15 PM	0	0	0	0	3	3	0	0	0	3
05:30 PM	0	0	0	1	2	3	2	1	3	6
05:45 PM	0	1	1	1	0	1	1	0	1	3
Total	0	1	1	2	8	10	5	1	6	17
Grand Total	1	5	6	2	8	10	8	3	11	27
Apprch %	16.7	83.3		20	80		72.7	27.3		
Total %	3.7	18.5	22.2	7.4	29.6	37	29.6	11.1	40.7	

	Carnegie Avenue Southbound			Santa Ana Street Westbound			Carnegie Avenue Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:15 PM										
04:15 PM	0	0	0	0	0	0	**2**	0	**2**	2
04:30 PM	0	1	1	0	0	0	0	0	0	1
04:45 PM	0	**2**	**2**	0	0	0	0	0	0	2
05:00 PM	0	0	0	0	**3**	**3**	2	0	2	**5**
Total Volume	0	3	3	0	3	3	4	0	4	10
% App. Total	0	100		0	100		100	0		
PHF	.000	.375	.375	.000	.250	.250	.500	.000	.500	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 12_ONT_Carn_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM			04:15 PM			04:15 PM		
+0 mins.	0	0	0	0	0	0	**2**	0	**2**
+15 mins.	0	1	1	0	0	0	0	0	0
+30 mins.	0	**2**	**2**	0	0	0	0	0	0
+45 mins.	0	0	0	0	**3**	**3**	2	0	2
Total Volume	0	3	3	0	3	3	4	0	4
% App. Total	0	100		0	100		100	0	
PHF	.000	.375	.375	.000	.250	.250	.500	.000	.500

Location: Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Carnegie Avenue	East Leg Santa Ana Street	South Leg Carnegie Avenue	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Carnegie Avenue	East Leg Santa Ana Street	South Leg Carnegie Avenue	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Ontario
N/S: Carnegie Avenue
E/W: Santa Ana Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Carnegie Avenue			Westbound Santa Ana Street			Northbound Carnegie Avenue			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	1	0	0	0	0	0	0	1	0	0	0	0	2

	Southbound Carnegie Avenue			Westbound Santa Ana Street			Northbound Carnegie Avenue			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

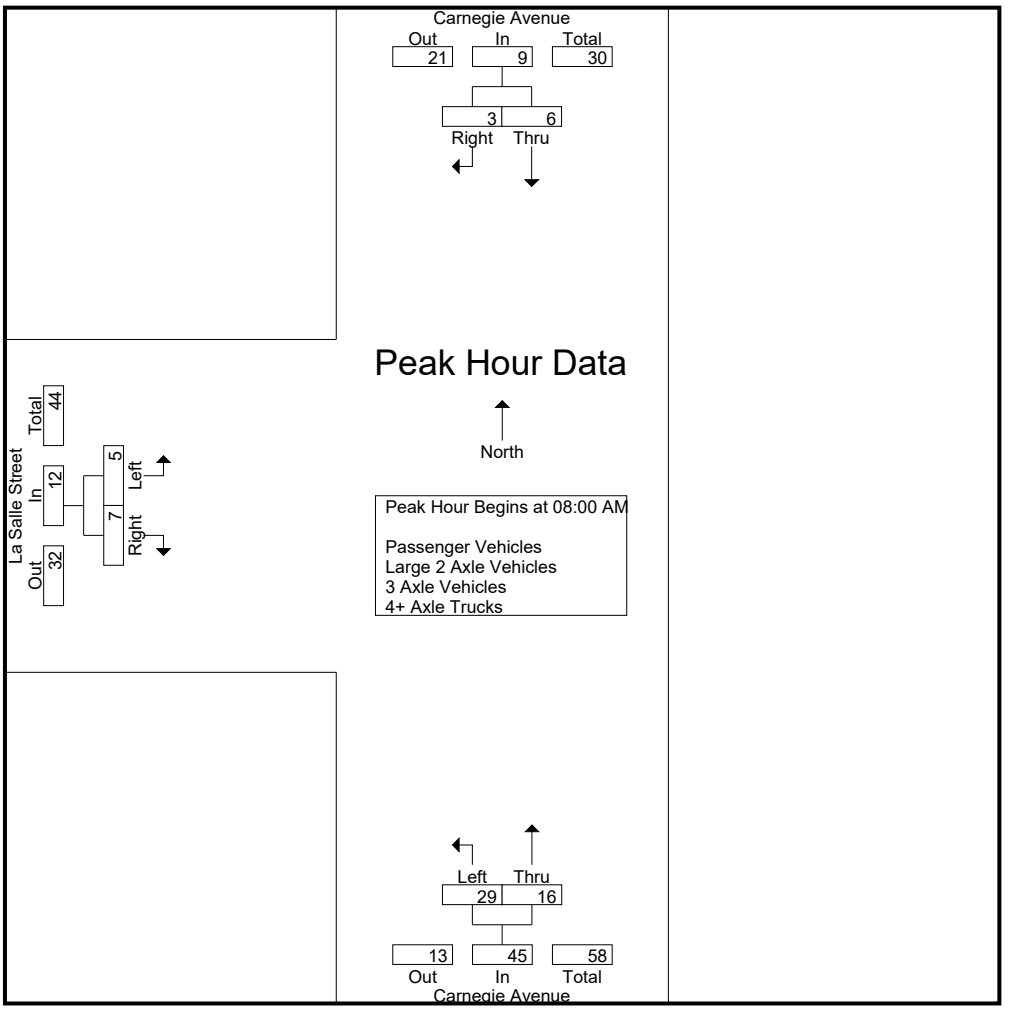
	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	1	0	1	4	5	9	0	2	2	12
07:15 AM	2	0	2	4	0	4	0	0	0	6
07:30 AM	5	0	5	3	5	8	0	2	2	15
07:45 AM	4	0	4	8	1	9	2	1	3	16
Total	12	0	12	19	11	30	2	5	7	49
08:00 AM	2	0	2	7	4	11	1	1	2	15
08:15 AM	1	1	2	7	3	10	2	1	3	15
08:30 AM	2	0	2	7	7	14	0	2	2	18
08:45 AM	1	2	3	8	2	10	2	3	5	18
Total	6	3	9	29	16	45	5	7	12	66
Grand Total	18	3	21	48	27	75	7	12	19	115
Apprch %	85.7	14.3		64	36		36.8	63.2		
Total %	15.7	2.6	18.3	41.7	23.5	65.2	6.1	10.4	16.5	
Passenger Vehicles	14	1	15	32	27	59	4	9	13	87
% Passenger Vehicles	77.8	33.3	71.4	66.7	100	78.7	57.1	75	68.4	75.7
Large 2 Axle Vehicles	2	0	2	9	0	9	1	0	1	12
% Large 2 Axle Vehicles	11.1	0	9.5	18.8	0	12	14.3	0	5.3	10.4
3 Axle Vehicles	1	1	2	4	0	4	1	0	1	7
% 3 Axle Vehicles	5.6	33.3	9.5	8.3	0	5.3	14.3	0	5.3	6.1
4+ Axle Trucks	1	1	2	3	0	3	1	3	4	9
% 4+ Axle Trucks	5.6	33.3	9.5	6.2	0	4	14.3	25	21.1	7.8

	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	**2**	0	2	7	4	11	1	1	2	15
08:15 AM	1	1	2	7	3	10	**2**	1	3	15
08:30 AM	2	0	2	7	**7**	**14**	0	2	2	**18**
08:45 AM	1	**2**	**3**	**8**	2	10	2	**3**	**5**	18
Total Volume	6	3	9	29	16	45	5	7	12	66
% App. Total	66.7	33.3		64.4	35.6		41.7	58.3		
PHF	.750	.375	.750	.906	.571	.804	.625	.583	.600	.917

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM			08:00 AM			08:00 AM		
+0 mins.	2	0	2	7	4	11	1	1	2
+15 mins.	**5**	0	**5**	7	3	10	**2**	1	3
+30 mins.	4	0	4	7	**7**	**14**	0	2	2
+45 mins.	2	0	2	**8**	2	10	2	**3**	**5**
Total Volume	13	0	13	29	16	45	5	7	12
% App. Total	100	0		64.4	35.6		41.7	58.3	
PHF	.650	.000	.650	.906	.571	.804	.625	.583	.600

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

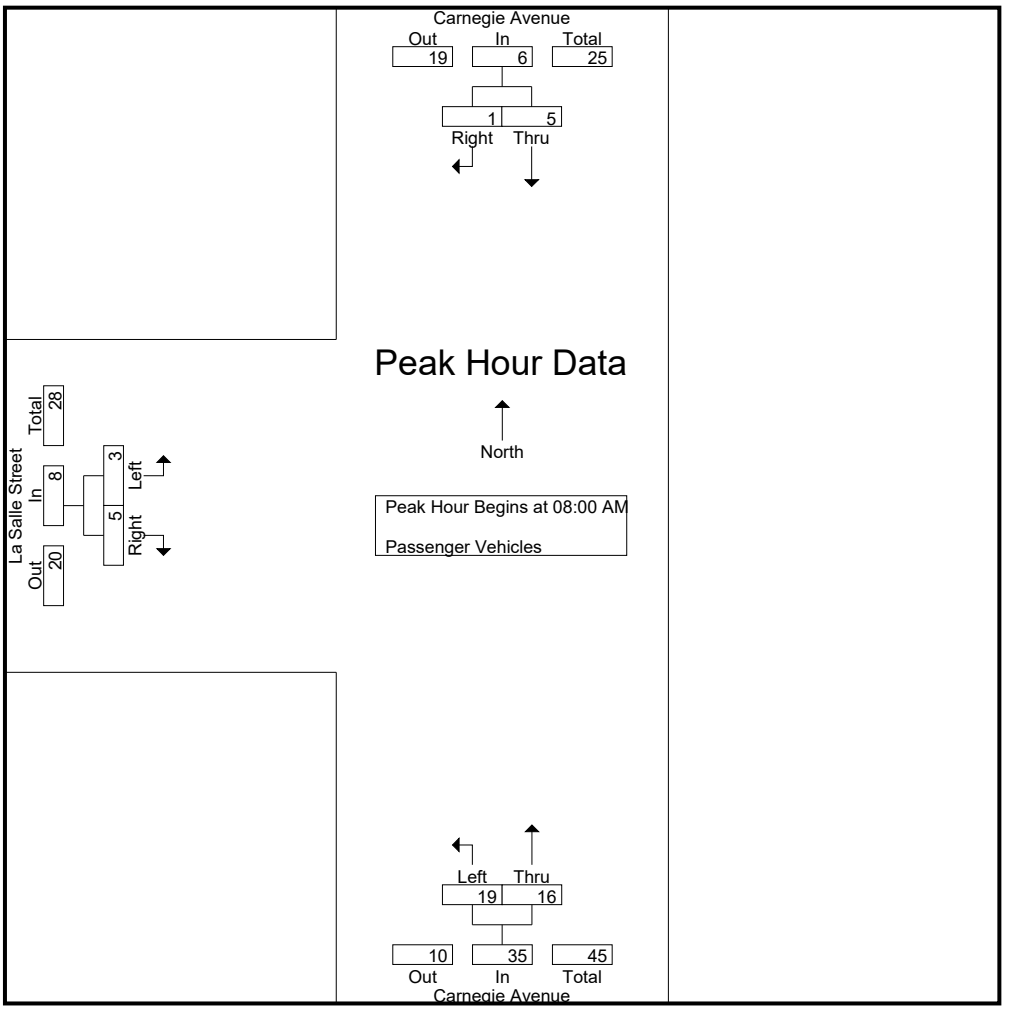
	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	1	0	1	2	5	7	0	2	2	10
07:15 AM	2	0	2	3	0	3	0	0	0	5
07:30 AM	3	0	3	3	5	8	0	1	1	12
07:45 AM	3	0	3	5	1	6	1	1	2	11
Total	9	0	9	13	11	24	1	4	5	38
08:00 AM	1	0	1	6	4	10	0	1	1	12
08:15 AM	1	0	1	5	3	8	1	1	2	11
08:30 AM	2	0	2	5	7	12	0	1	1	15
08:45 AM	1	1	2	3	2	5	2	2	4	11
Total	5	1	6	19	16	35	3	5	8	49
Grand Total	14	1	15	32	27	59	4	9	13	87
Apprch %	93.3	6.7		54.2	45.8		30.8	69.2		
Total %	16.1	1.1	17.2	36.8	31	67.8	4.6	10.3	14.9	

	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	1	0	1	**6**	4	10	0	1	1	12
08:15 AM	1	0	1	5	3	8	1	1	2	11
08:30 AM	**2**	0	**2**	5	**7**	**12**	0	1	1	**15**
08:45 AM	1	**1**	2	3	2	5	**2**	**2**	**4**	11
Total Volume	5	1	6	19	16	35	3	5	8	49
% App. Total	83.3	16.7		54.3	45.7		37.5	62.5		
PHF	.625	.250	.750	.792	.571	.729	.375	.625	.500	.817

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	1	0	1	**6**	4	10	0	1	1
+15 mins.	1	0	1	5	3	8	1	1	2
+30 mins.	**2**	0	**2**	5	**7**	**12**	0	1	1
+45 mins.	1	**1**	2	3	2	5	**2**	**2**	**4**
Total Volume	5	1	6	19	16	35	3	5	8
% App. Total	83.3	16.7		54.3	45.7		37.5	62.5	
PHF	.625	.250	.750	.792	.571	.729	.375	.625	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

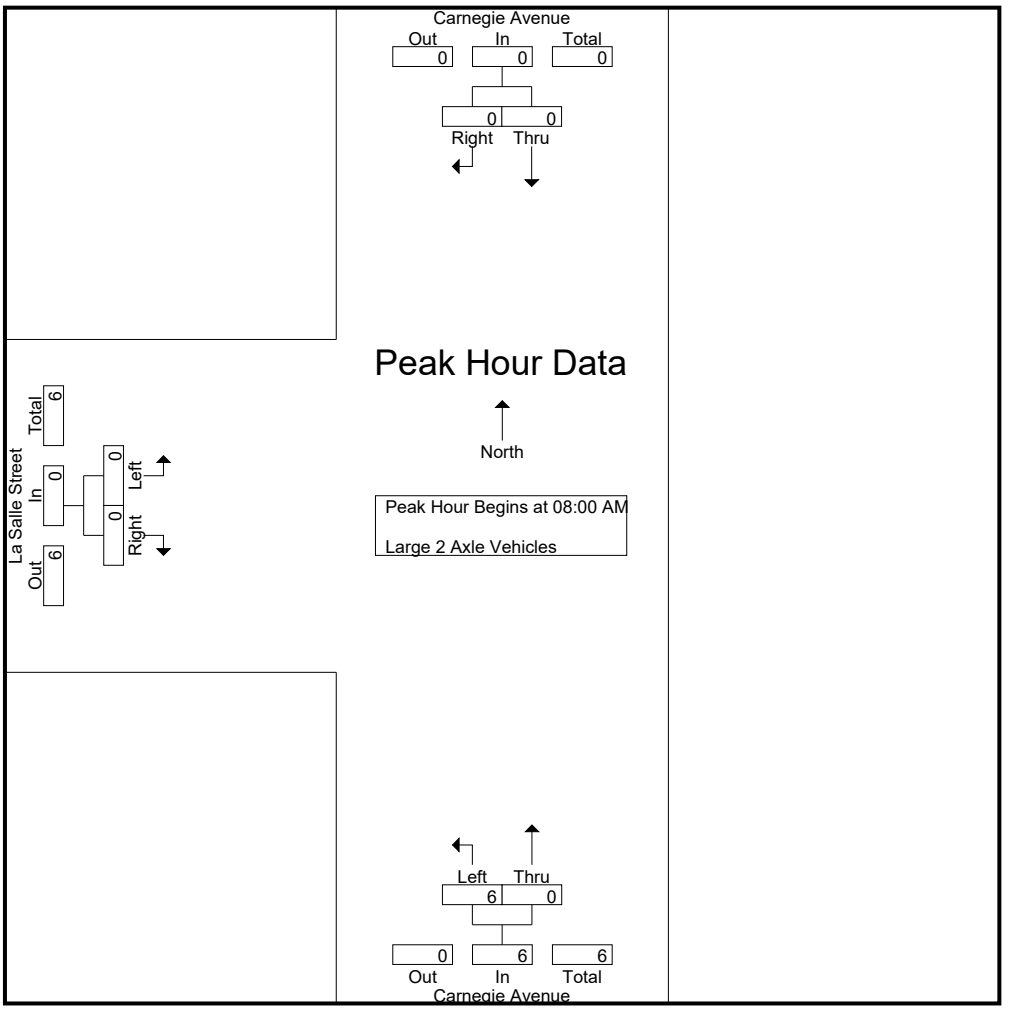
	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	0	0	0	2	0	2	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	1	0	1	0	0	0	0	0	0	1
07:45 AM	1	0	1	1	0	1	1	0	1	3
Total	2	0	2	3	0	3	1	0	1	6
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	1	0	1	0	0	0	1
08:30 AM	0	0	0	1	0	1	0	0	0	1
08:45 AM	0	0	0	4	0	4	0	0	0	4
Total	0	0	0	6	0	6	0	0	0	6
Grand Total	2	0	2	9	0	9	1	0	1	12
Apprch %	100	0		100	0		100	0		
Total %	16.7	0	16.7	75	0	75	8.3	0	8.3	

	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	1	0	1	0	0	0	1
08:30 AM	0	0	0	1	0	1	0	0	0	1
08:45 AM	0	0	0	**4**	0	**4**	0	0	0	**4**
Total Volume	0	0	0	6	0	6	0	0	0	6
% App. Total	0	0		100	0		0	0		
PHF	.000	.000	.000	.375	.000	.375	.000	.000	.000	.375

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	1	0	1	0	0	0
+30 mins.	0	0	0	1	0	1	0	0	0
+45 mins.	0	0	0	**4**	0	**4**	0	0	0
Total Volume	0	0	0	6	0	6	0	0	0
% App. Total	0	0		100	0		0	0	
PHF	.000	.000	.000	.375	.000	.375	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

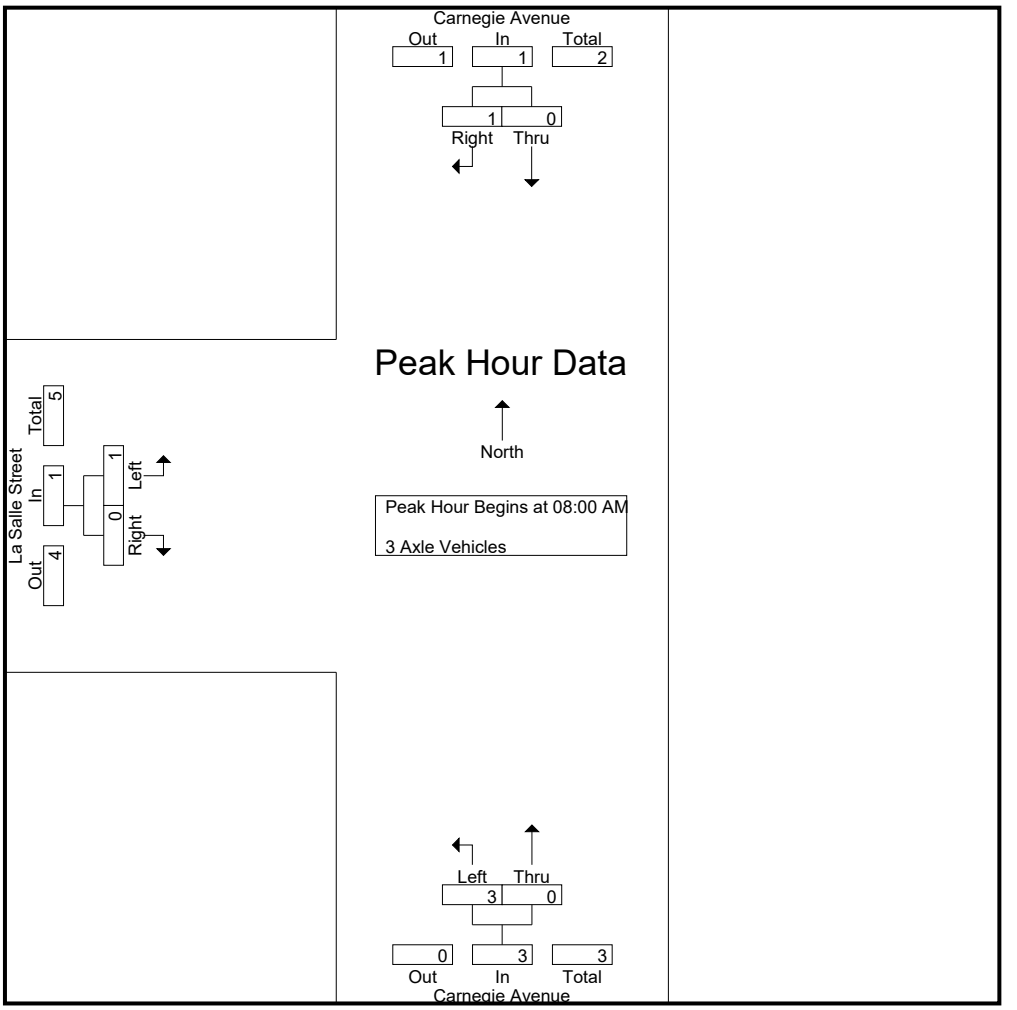
	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	1	0	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	1	0	1	0	0	0	1
Total	1	0	1	1	0	1	0	0	0	2
08:00 AM	0	0	0	1	0	1	0	0	0	1
08:15 AM	0	1	1	1	0	1	1	0	1	3
08:30 AM	0	0	0	1	0	1	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	3	0	3	1	0	1	5
Grand Total	1	1	2	4	0	4	1	0	1	7
Apprch %	50	50		100	0		100	0		
Total %	14.3	14.3	28.6	57.1	0	57.1	14.3	0	14.3	

	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	0	0	0	**1**	0	**1**	0	0	0	1
08:15 AM	0	**1**	**1**	1	0	1	**1**	0	**1**	**3**
08:30 AM	0	0	0	1	0	1	0	0	0	1
08:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	3	0	3	1	0	1	5
% App. Total	0	100		100	0		100	0		
PHF	.000	.250	.250	.750	.000	.750	.250	.000	.250	.417

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	0	0	0	**1**	0	**1**	0	0	0
+15 mins.	0	**1**	**1**	1	0	1	**1**	0	**1**
+30 mins.	0	0	0	1	0	1	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	3	0	3	1	0	1
% App. Total	0	100		100	0		100	0	
PHF	.000	.250	.250	.750	.000	.750	.250	.000	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

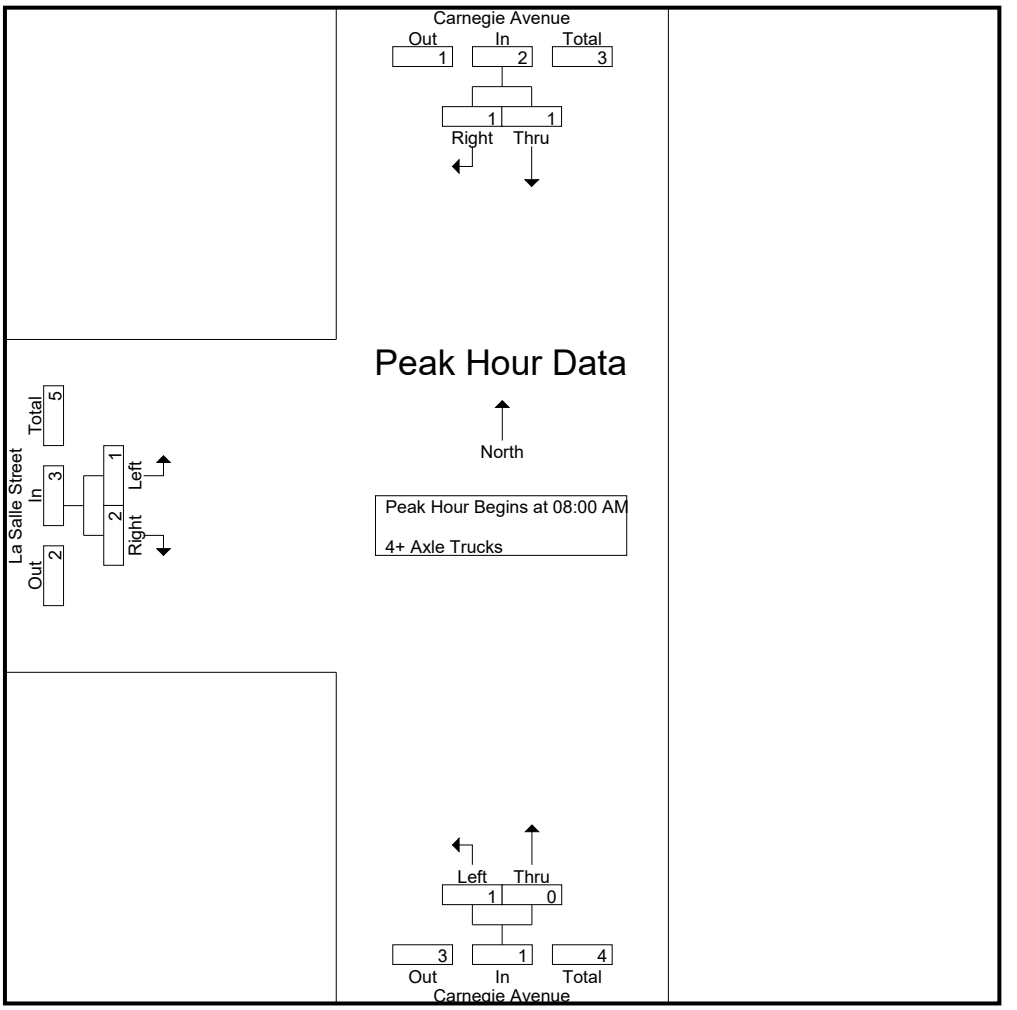
	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	1	0	1	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	1	1	1
07:45 AM	0	0	0	1	0	1	0	0	0	1
Total	0	0	0	2	0	2	0	1	1	3
08:00 AM	1	0	1	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	1	1	1
08:45 AM	0	1	1	1	0	1	0	1	1	3
Total	1	1	2	1	0	1	1	2	3	6
Grand Total	1	1	2	3	0	3	1	3	4	9
Apprch %	50	50		100	0		25	75		
Total %	11.1	11.1	22.2	33.3	0	33.3	11.1	33.3	44.4	

	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	**1**	0	**1**	0	0	0	**1**	0	**1**	2
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	**1**	1	1
08:45 AM	0	**1**	1	**1**	0	**1**	0	1	1	**3**
Total Volume	1	1	2	1	0	1	1	2	3	6
% App. Total	50	50		100	0		33.3	66.7		
PHF	.250	.250	.500	.250	.000	.250	.250	.500	.750	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM			08:00 AM			08:00 AM		
+0 mins.	**1**	0	**1**	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	**1**	1
+45 mins.	0	**1**	1	**1**	0	**1**	0	1	1
Total Volume	1	1	2	1	0	1	1	2	3
% App. Total	50	50		100	0		33.3	66.7	
PHF	.250	.250	.500	.250	.000	.250	.250	.500	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

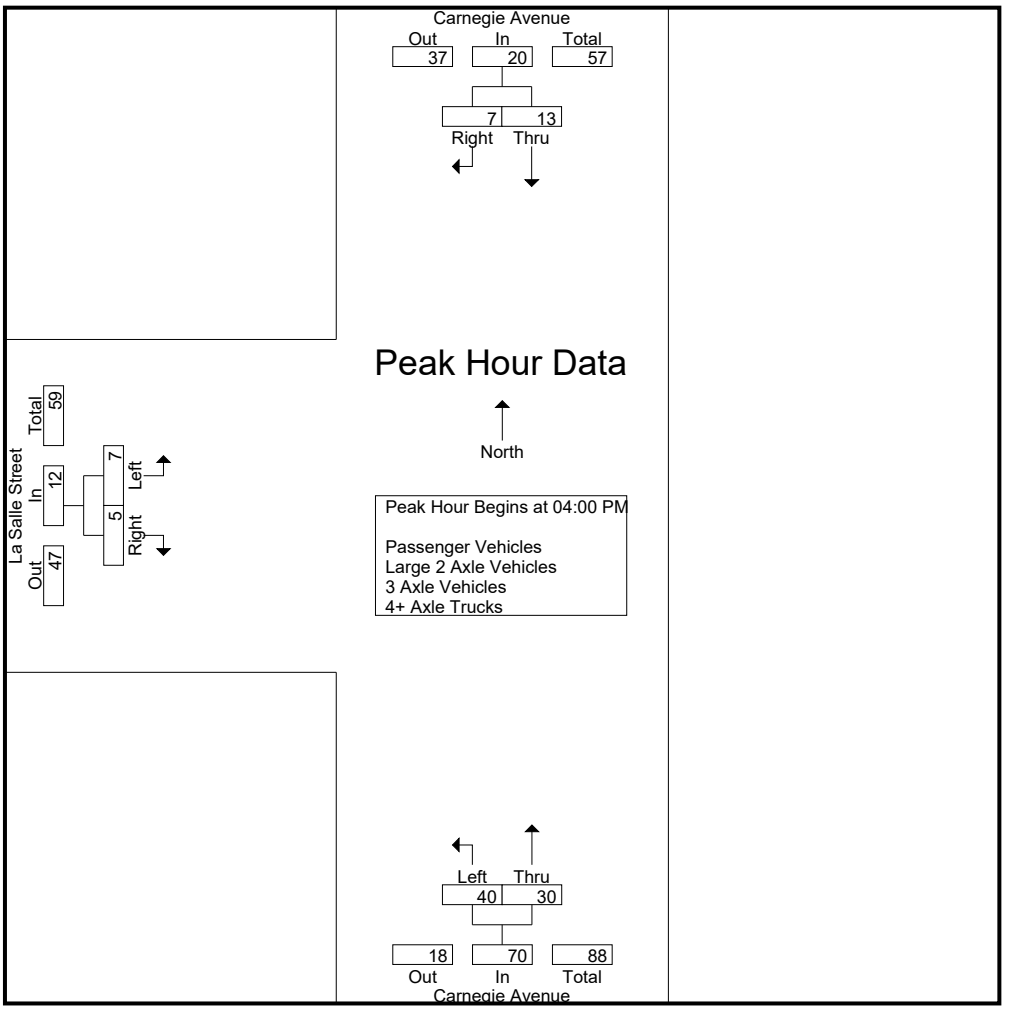
	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	4	3	7	12	5	17	2	1	3	27
04:15 PM	3	1	4	9	8	17	4	1	5	26
04:30 PM	1	0	1	11	12	23	1	2	3	27
04:45 PM	5	3	8	8	5	13	0	1	1	22
Total	13	7	20	40	30	70	7	5	12	102
05:00 PM	1	1	2	3	10	13	4	2	6	21
05:15 PM	1	0	1	4	6	10	0	1	1	12
05:30 PM	4	1	5	1	5	6	4	0	4	15
05:45 PM	6	3	9	0	4	4	0	3	3	16
Total	12	5	17	8	25	33	8	6	14	64
Grand Total	25	12	37	48	55	103	15	11	26	166
Apprch %	67.6	32.4		46.6	53.4		57.7	42.3		
Total %	15.1	7.2	22.3	28.9	33.1	62	9	6.6	15.7	
Passenger Vehicles	16	4	20	24	50	74	6	7	13	107
% Passenger Vehicles	64	33.3	54.1	50	90.9	71.8	40	63.6	50	64.5
Large 2 Axle Vehicles	3	1	4	7	1	8	0	2	2	14
% Large 2 Axle Vehicles	12	8.3	10.8	14.6	1.8	7.8	0	18.2	7.7	8.4
3 Axle Vehicles	1	5	6	5	0	5	2	1	3	14
% 3 Axle Vehicles	4	41.7	16.2	10.4	0	4.9	13.3	9.1	11.5	8.4
4+ Axle Trucks	5	2	7	12	4	16	7	1	8	31
% 4+ Axle Trucks	20	16.7	18.9	25	7.3	15.5	46.7	9.1	30.8	18.7

	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	4	**3**	7	**12**	5	17	2	1	3	**27**
04:15 PM	3	1	4	9	8	17	**4**	1	**5**	26
04:30 PM	1	0	1	11	**12**	**23**	1	**2**	3	27
04:45 PM	**5**	3	**8**	8	5	13	0	1	1	22
Total Volume	13	7	20	40	30	70	7	5	12	102
% App. Total	65	35		57.1	42.9		58.3	41.7		
PHF	.650	.583	.625	.833	.625	.761	.438	.625	.600	.944

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:15 PM		
+0 mins.	4	**3**	7	**12**	5	17	**4**	1	5
+15 mins.	3	1	4	9	8	17	1	**2**	3
+30 mins.	1	0	1	11	**12**	**23**	0	1	1
+45 mins.	**5**	3	**8**	8	5	13	4	2	**6**
Total Volume	13	7	20	40	30	70	9	6	15
% App. Total	65	35		57.1	42.9		60	40	
PHF	.650	.583	.625	.833	.625	.761	.563	.750	.625

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

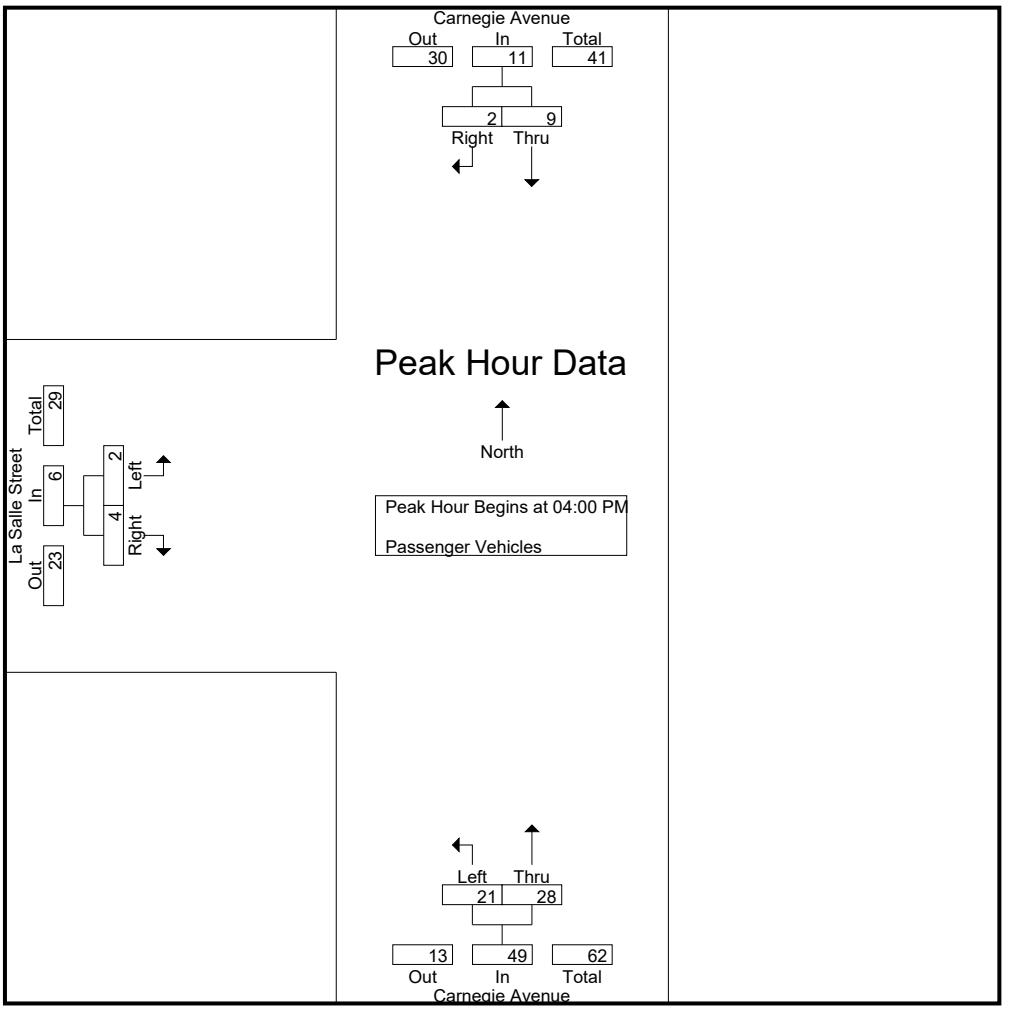
	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	2	2	4	6	4	10	0	0	0	14
04:15 PM	2	0	2	5	8	13	1	1	2	17
04:30 PM	1	0	1	5	12	17	1	2	3	21
04:45 PM	4	0	4	5	4	9	0	1	1	14
Total	9	2	11	21	28	49	2	4	6	66
05:00 PM	1	0	1	1	9	10	2	0	2	13
05:15 PM	1	0	1	2	6	8	0	1	1	10
05:30 PM	2	0	2	0	4	4	2	0	2	8
05:45 PM	3	2	5	0	3	3	0	2	2	10
Total	7	2	9	3	22	25	4	3	7	41
Grand Total	16	4	20	24	50	74	6	7	13	107
Apprch %	80	20		32.4	67.6		46.2	53.8		
Total %	15	3.7	18.7	22.4	46.7	69.2	5.6	6.5	12.1	

	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	2	**2**	**4**	**6**	4	10	0	0	0	14
04:15 PM	2	0	2	5	8	13	**1**	1	2	17
04:30 PM	1	0	1	5	**12**	**17**	1	**2**	**3**	**21**
04:45 PM	**4**	0	4	5	4	9	0	1	1	14
Total Volume	9	2	11	21	28	49	2	4	6	66
% App. Total	81.8	18.2		42.9	57.1		33.3	66.7		
PHF	.563	.250	.688	.875	.583	.721	.500	.500	.500	.786

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	2	**2**	**4**	**6**	4	10	0	0	0
+15 mins.	2	0	2	5	8	13	**1**	1	2
+30 mins.	1	0	1	5	**12**	**17**	1	**2**	**3**
+45 mins.	**4**	0	4	5	4	9	0	1	1
Total Volume	9	2	11	21	28	49	2	4	6
% App. Total	81.8	18.2		42.9	57.1		33.3	66.7	
PHF	.563	.250	.688	.875	.583	.721	.500	.500	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

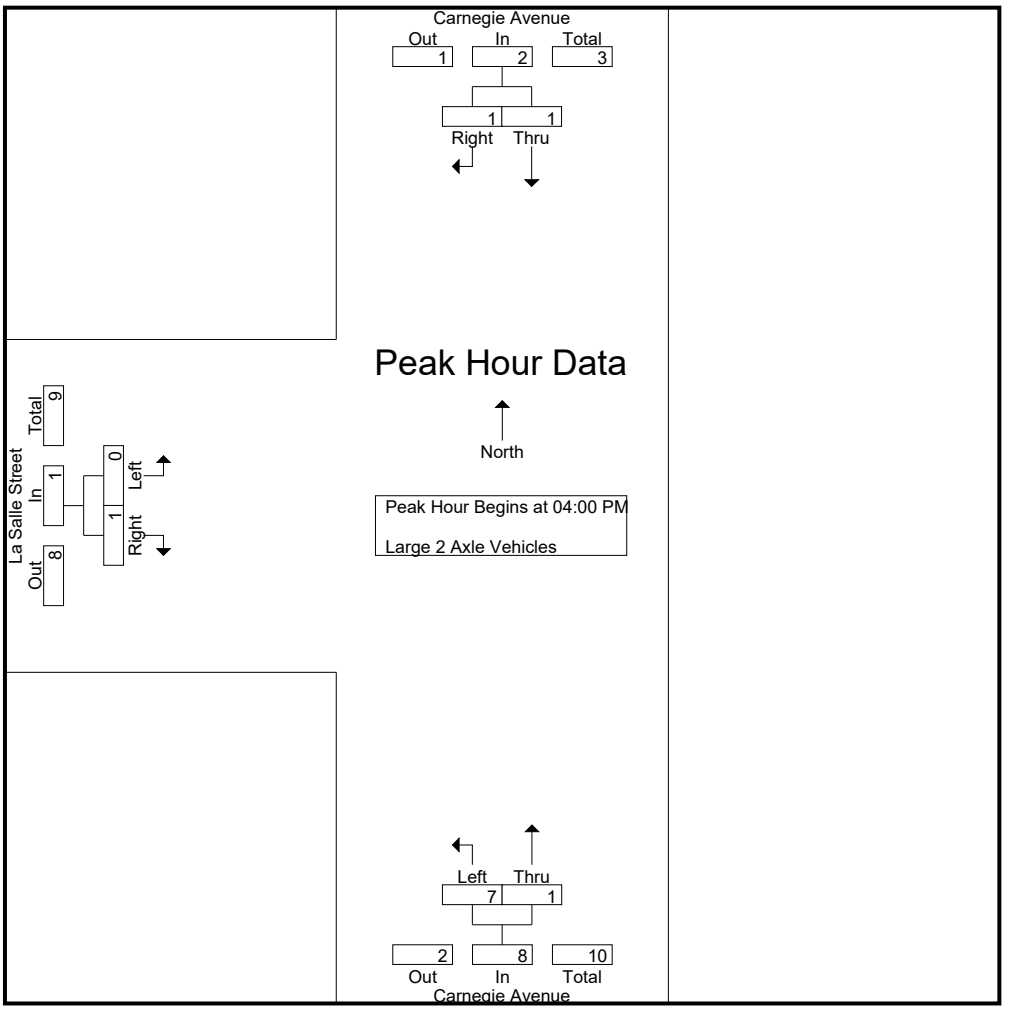
	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	0	0	0	3	0	3	0	1	1	4
04:15 PM	1	0	1	2	0	2	0	0	0	3
04:30 PM	0	0	0	2	0	2	0	0	0	2
04:45 PM	0	1	1	0	1	1	0	0	0	2
Total	1	1	2	7	1	8	0	1	1	11
05:00 PM	0	0	0	0	0	0	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	0	1	0	0	0	0	0	0	1
05:45 PM	1	0	1	0	0	0	0	0	0	1
Total	2	0	2	0	0	0	0	1	1	3
Grand Total	3	1	4	7	1	8	0	2	2	14
Apprch %	75	25		87.5	12.5		0	100		
Total %	21.4	7.1	28.6	50	7.1	57.1	0	14.3	14.3	

	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	0	0	0	**3**	0	**3**	0	**1**	**1**	**4**
04:15 PM	**1**	0	**1**	2	0	2	0	0	0	3
04:30 PM	0	0	0	2	0	2	0	0	0	2
04:45 PM	0	**1**	1	0	**1**	1	0	0	0	2
Total Volume	1	1	2	7	1	8	0	1	1	11
% App. Total	50	50		87.5	12.5		0	100		
PHF	.250	.250	.500	.583	.250	.667	.000	.250	.250	.688

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	0	0	0	**3**	0	**3**	0	**1**	**1**
+15 mins.	**1**	0	**1**	2	0	2	0	0	0
+30 mins.	0	0	0	2	0	2	0	0	0
+45 mins.	0	**1**	1	0	**1**	1	0	0	0
Total Volume	1	1	2	7	1	8	0	1	1
% App. Total	50	50		87.5	12.5		0	100	
PHF	.250	.250	.500	.583	.250	.667	.000	.250	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

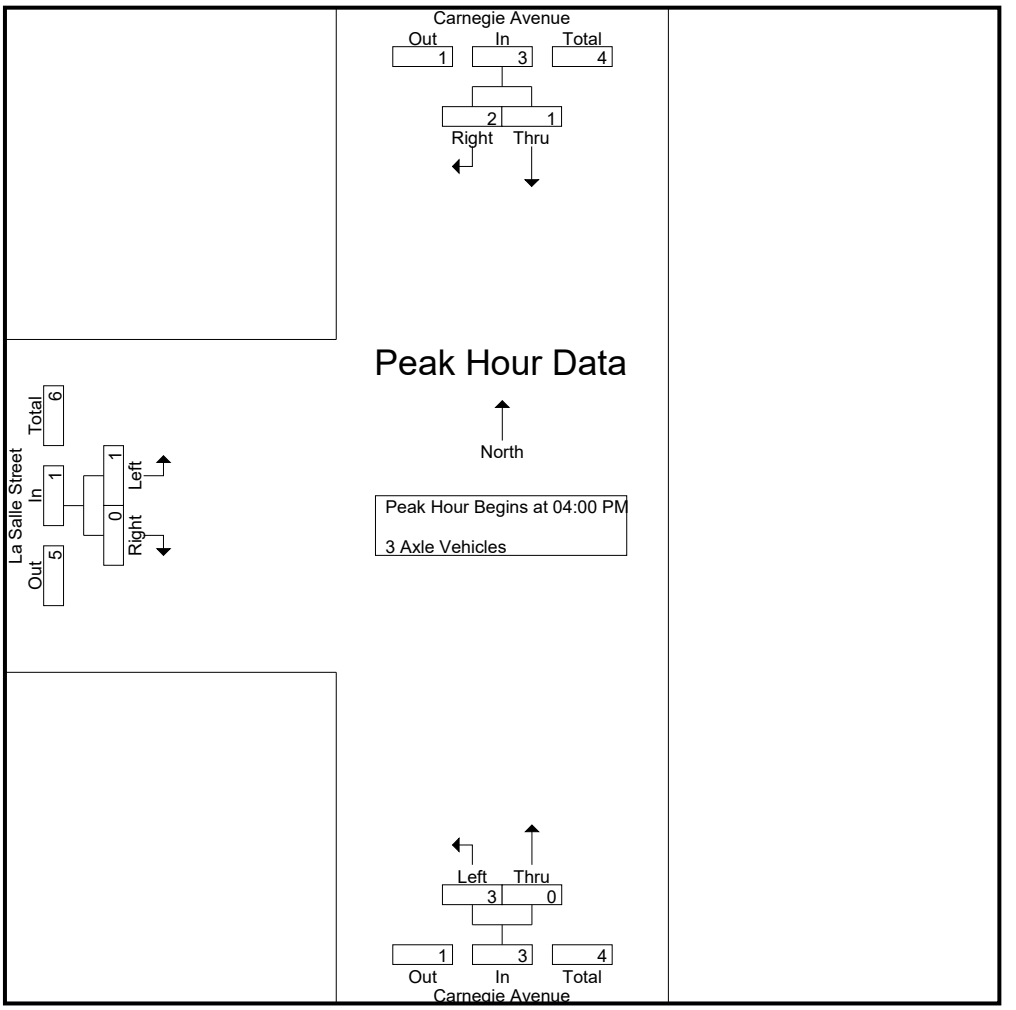
	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	1	1	2	1	0	1	0	0	0	3
04:15 PM	0	1	1	1	0	1	1	0	1	3
04:30 PM	0	0	0	1	0	1	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	2	3	3	0	3	1	0	1	7
05:00 PM	0	1	1	2	0	2	1	1	2	5
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	1	0	0	0	0	0	0	1
05:45 PM	0	1	1	0	0	0	0	0	0	1
Total	0	3	3	2	0	2	1	1	2	7
Grand Total	1	5	6	5	0	5	2	1	3	14
Apprch %	16.7	83.3		100	0		66.7	33.3		
Total %	7.1	35.7	42.9	35.7	0	35.7	14.3	7.1	21.4	

	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	**1**	**1**	**2**	**1**	0	**1**	0	0	0	**3**
04:15 PM	0	1	1	1	0	1	**1**	0	**1**	3
04:30 PM	0	0	0	1	0	1	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	1	2	3	3	0	3	1	0	1	7
% App. Total	33.3	66.7		100	0		100	0		
PHF	.250	.500	.375	.750	.000	.750	.250	.000	.250	.583

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	**1**	**1**	**2**	**1**	0	**1**	0	0	0
+15 mins.	0	1	1	1	0	1	**1**	0	**1**
+30 mins.	0	0	0	1	0	1	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	1	2	3	3	0	3	1	0	1
% App. Total	33.3	66.7		100	0		100	0	
PHF	.250	.500	.375	.750	.000	.750	.250	.000	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

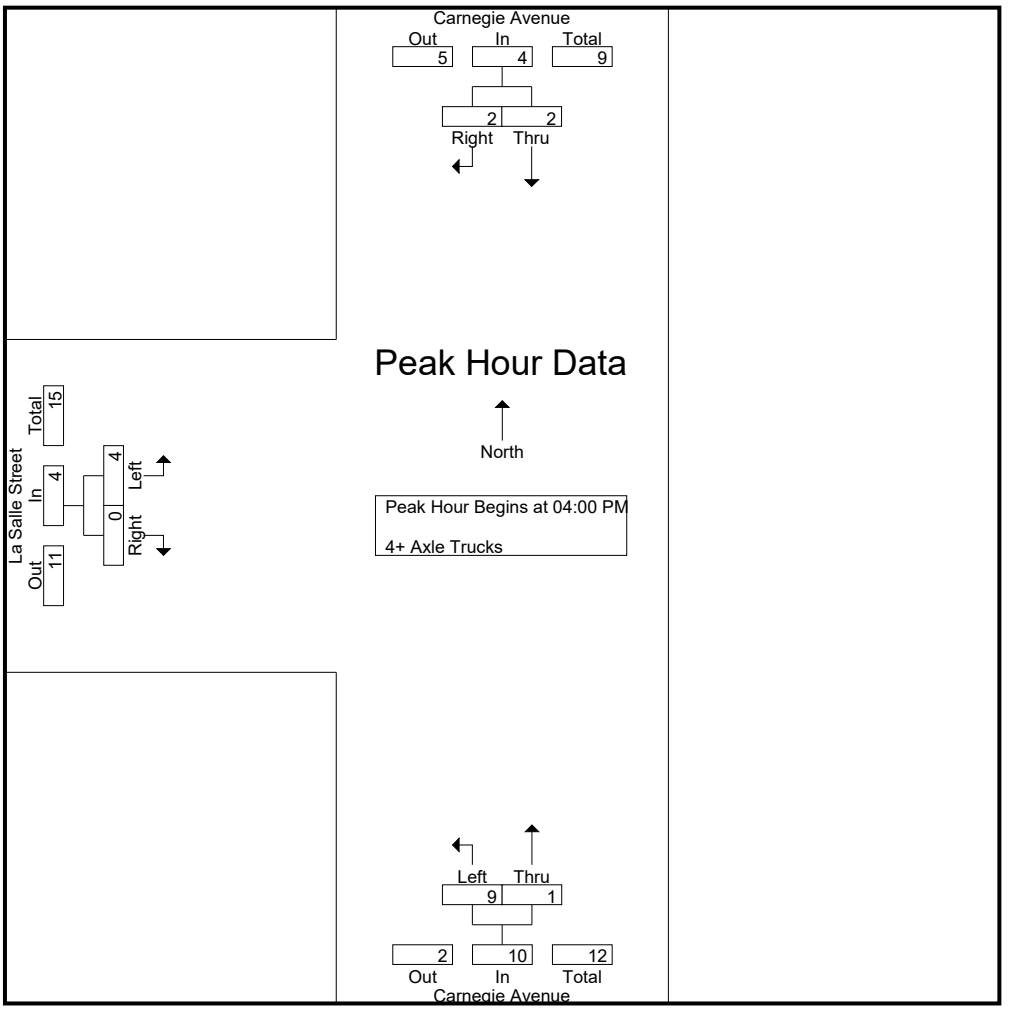
	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	1	0	1	2	1	3	2	0	2	6
04:15 PM	0	0	0	1	0	1	2	0	2	3
04:30 PM	0	0	0	3	0	3	0	0	0	3
04:45 PM	1	2	3	3	0	3	0	0	0	6
Total	2	2	4	9	1	10	4	0	4	18
05:00 PM	0	0	0	0	1	1	1	0	1	2
05:15 PM	0	0	0	2	0	2	0	0	0	2
05:30 PM	1	0	1	1	1	2	2	0	2	5
05:45 PM	2	0	2	0	1	1	0	1	1	4
Total	3	0	3	3	3	6	3	1	4	13
Grand Total	5	2	7	12	4	16	7	1	8	31
Apprch %	71.4	28.6		75	25		87.5	12.5		
Total %	16.1	6.5	22.6	38.7	12.9	51.6	22.6	3.2	25.8	

	Carnegie Avenue Southbound			Carnegie Avenue Northbound			La Salle Street Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	**1**	0	1	2	**1**	**3**	**2**	0	**2**	**6**
04:15 PM	0	0	0	1	0	1	2	0	2	3
04:30 PM	0	0	0	**3**	0	3	0	0	0	3
04:45 PM	1	**2**	**3**	3	0	3	0	0	0	6
Total Volume	2	2	4	9	1	10	4	0	4	18
% App. Total	50	50		90	10		100	0		
PHF	.500	.250	.333	.750	.250	.833	.500	.000	.500	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: La Salle Street
Weather: Clear

File Name : 13_ONT_Carn_La S PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	**1**	0	1	2	**1**	**3**	**2**	0	**2**
+15 mins.	0	0	0	1	0	1	2	0	2
+30 mins.	0	0	0	**3**	0	3	0	0	0
+45 mins.	1	**2**	**3**	3	0	3	0	0	0
Total Volume	2	2	4	9	1	10	4	0	4
% App. Total	50	50		90	10		100	0	
PHF	.500	.250	.333	.750	.250	.833	.500	.000	.500

Location: Ontario
N/S: Carnegie Avenue
E/W: La Salle Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Carnegie Avenue	East Leg Dead End	South Leg Carnegie Avenue	West Leg La Salle Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Carnegie Avenue	East Leg Dead End	South Leg Carnegie Avenue	West Leg La Salle Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Ontario
N/S: Carnegie Avenue
E/W: La Salle Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Carnegie Avenue			Westbound Dead End			Northbound Carnegie Avenue			Eastbound La Salle Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

	Southbound Carnegie Avenue			Westbound Dead End			Northbound Carnegie Avenue			Eastbound La Salle Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Carnegie Avenue Southbound					Jurupa Street Westbound					Commercial Driveway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	0	4	3	5	0	137	8	0	145	0	0	1	1	1	12	104	0	0	116	4	267	271
07:15 AM	0	0	1	1	1	0	118	4	0	122	0	0	1	1	1	5	79	0	0	84	2	208	210
07:30 AM	1	0	5	5	6	0	127	2	0	129	0	0	0	0	0	8	98	1	0	107	5	242	247
07:45 AM	2	0	6	3	8	1	107	4	0	112	0	0	0	0	0	13	112	0	0	125	3	245	248
Total	4	0	16	12	20	1	489	18	0	508	0	0	2	2	2	38	393	1	0	432	14	962	976
08:00 AM	0	0	4	3	4	2	135	2	0	139	0	0	0	0	0	9	98	1	0	108	3	251	254
08:15 AM	0	0	1	1	1	1	142	6	0	149	0	0	1	1	1	10	89	0	0	99	2	250	252
08:30 AM	1	0	2	2	3	0	141	8	0	149	3	0	1	0	4	15	115	0	0	130	2	286	288
08:45 AM	3	0	1	1	4	0	103	5	0	108	0	0	1	1	1	15	114	2	0	131	2	244	246
Total	4	0	8	7	12	3	521	21	0	545	3	0	3	2	6	49	416	3	0	468	9	1031	1040
Grand Total	8	0	24	19	32	4	1010	39	0	1053	3	0	5	4	8	87	809	4	0	900	23	1993	2016
Apprch %	25	0	75			0.4	95.9	3.7			37.5	0	62.5			9.7	89.9	0.4					
Total %	0.4	0	1.2		1.6	0.2	50.7	2		52.8	0.2	0	0.3		0.4	4.4	40.6	0.2		45.2	1.1	98.9	
Passenger Vehicles	4	0	15		31	3	860	31		894	0	0	4		8	65	636	2		703	0	0	1636
% Passenger Vehicles	50	0	62.5	63.2	60.8	75	85.1	79.5	0	84.9	0	0	80	100	66.7	74.7	78.6	50	0	78.1	0	0	81.2
Large 2 Axle Vehicles	1	0	5		9	0	50	3		53	0	0	1		1	15	65	0		80	0	0	143
% Large 2 Axle Vehicles	12.5	0	20.8	15.8	17.6	0	5	7.7	0	5	0	0	20	0	8.3	17.2	8	0	0	8.9	0	0	7.1
3 Axle Vehicles	0	0	1		2	0	17	1		18	1	0	0		1	4	25	0		29	0	0	50
% 3 Axle Vehicles	0	0	4.2	5.3	3.9	0	1.7	2.6	0	1.7	33.3	0	0	0	8.3	4.6	3.1	0	0	3.2	0	0	2.5
4+ Axle Trucks	3	0	3		9	1	83	4		88	2	0	0		2	3	83	2		88	0	0	187
% 4+ Axle Trucks	37.5	0	12.5	15.8	17.6	25	8.2	10.3	0	8.4	66.7	0	0	0	16.7	3.4	10.3	50	0	9.8	0	0	9.3

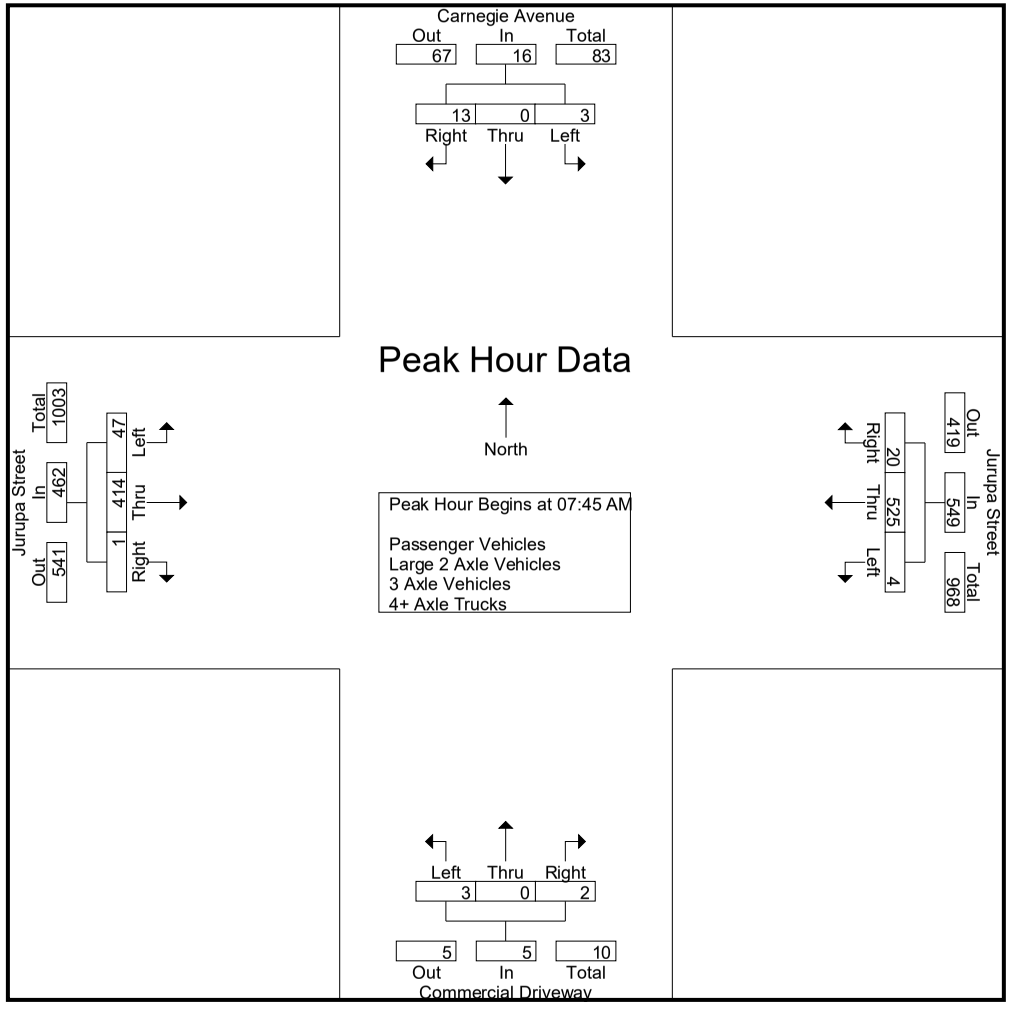
3.1-38

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**2**	0	**6**	**8**	1	107	4	112	0	0	0	0	13	112	0	125	245
08:00 AM	0	0	4	4	**2**	135	2	139	0	0	0	0	9	98	**1**	108	251
08:15 AM	0	0	1	1	1	**142**	6	**149**	0	0	**1**	1	10	89	0	99	250
08:30 AM	1	0	2	3	0	141	**8**	149	**3**	0	1	**4**	**15**	**115**	0	**130**	**286**
Total Volume	3	0	13	16	4	525	20	549	3	0	2	5	47	414	1	462	1032
% App. Total	18.8	0	81.2		0.7	95.6	3.6		60	0	40		10.2	89.6	0.2		
PHF	.375	.000	.542	.500	.500	.924	.625	.921	.250	.000	.500	.313	.783	.900	.250	.888	.902

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-388

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:45 AM				08:00 AM				08:00 AM				
+0 mins.	1	0	4	5	1	107	4	112	0	0	0	0	9	98	1	108	
+15 mins.	0	0	1	1	**2**	135	2	139	0	0	**1**	1	10	89	0	99	
+30 mins.	1	0	5	6	1	**142**	6	**149**	**3**	0	1	**4**	**15**	**115**	0	130	
+45 mins.	**2**	0	**6**	**8**	0	141	**8**	149	0	0	1	1	15	114	**2**	**131**	
Total Volume	4	0	16	20	4	525	20	549	3	0	3	6	49	416	3	468	
% App. Total	20	0	80		0.7	95.6	3.6		50	0	50		10.5	88.9	0.6		
PHF	.500	.000	.667	.625	.500	.924	.625	.921	.250	.000	.750	.375	.817	.904	.375	.893	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Carnegie Avenue Southbound					Jurupa Street Westbound					Commercial Driveway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	0	3	2	4	0	122	7	0	129	0	0	1	1	1	9	84	0	0	93	3	227	230
07:15 AM	0	0	1	1	1	0	100	4	0	104	0	0	1	1	1	4	67	0	0	71	2	177	179
07:30 AM	0	0	3	3	3	0	115	2	0	117	0	0	0	0	0	8	86	0	0	94	3	214	217
07:45 AM	1	0	4	2	5	1	91	3	0	95	0	0	0	0	0	10	93	0	0	103	2	203	205
Total	2	0	11	8	13	1	428	16	0	445	0	0	2	2	2	31	330	0	0	361	10	821	831
08:00 AM	0	0	1	1	1	2	118	1	0	121	0	0	0	0	0	9	75	0	0	84	1	206	207
08:15 AM	0	0	0	0	0	0	115	4	0	119	0	0	1	1	1	8	66	0	0	74	1	194	195
08:30 AM	0	0	2	2	2	0	121	6	0	127	0	0	0	0	0	11	96	0	0	107	2	236	238
08:45 AM	2	0	1	1	3	0	78	4	0	82	0	0	1	1	1	6	69	2	0	77	2	163	165
Total	2	0	4	4	6	2	432	15	0	449	0	0	2	2	2	34	306	2	0	342	6	799	805
Grand Total	4	0	15	12	19	3	860	31	0	894	0	0	4	4	4	65	636	2	0	703	16	1620	1636
Apprch %	21.1	0	78.9			0.3	96.2	3.5			0	0	100			9.2	90.5	0.3					
Total %	0.2	0	0.9		1.2	0.2	53.1	1.9		55.2	0	0	0.2		0.2	4	39.3	0.1		43.4	1	99	

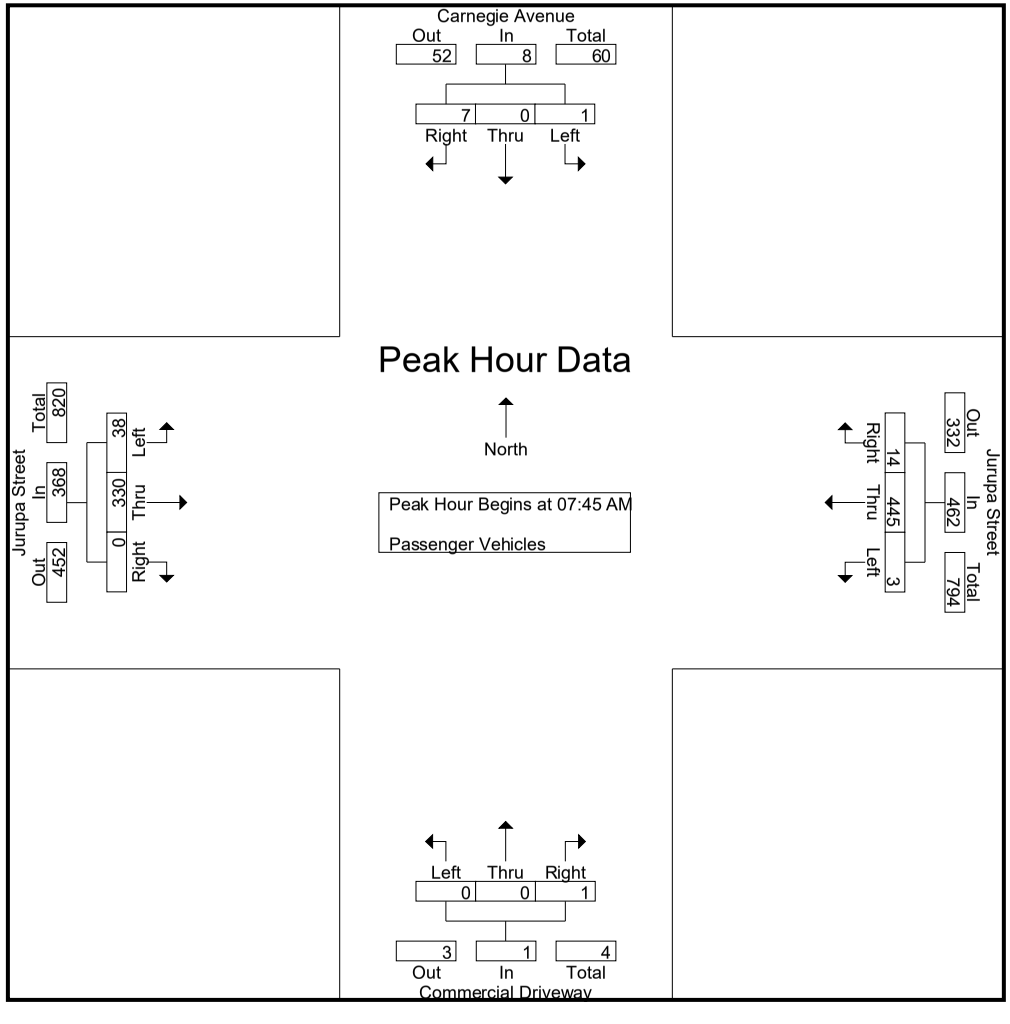
3.1-390

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**1**	0	**4**	**5**	1	91	3	95	0	0	0	0	10	93	0	103	203
08:00 AM	0	0	1	1	**2**	118	1	121	0	0	0	0	9	75	0	84	206
08:15 AM	0	0	0	0	0	115	4	119	0	0	**1**	**1**	8	66	0	74	194
08:30 AM	0	0	2	2	0	**121**	**6**	**127**	0	0	0	0	**11**	**96**	0	**107**	**236**
Total Volume	1	0	7	8	3	445	14	462	0	0	1	1	38	330	0	368	839
% App. Total	12.5	0	87.5		0.6	96.3	3		0	0	100		10.3	89.7	0		
PHF	.250	.000	.438	.400	.375	.919	.583	.909	.000	.000	.250	.250	.864	.859	.000	.860	.889

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	**1**	0	**4**	**5**	1	91	3	95	0	0	0	0	10	93	0	103	
+15 mins.	0	0	1	1	**2**	118	1	121	0	0	0	0	9	75	0	84	
+30 mins.	0	0	0	0	0	115	4	119	0	0	**1**	**1**	8	66	0	74	
+45 mins.	0	0	2	2	0	**121**	**6**	**127**	0	0	0	0	**11**	**96**	0	**107**	
Total Volume	1	0	7	8	3	445	14	462	0	0	1	1	38	330	0	368	
% App. Total	12.5	0	87.5		0.6	96.3	3		0	0	100		10.3	89.7	0		
PHF	.250	.000	.438	.400	.375	.919	.583	.909	.000	.000	.250	.250	.864	.859	.000	.860	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Carnegie Avenue Southbound					Jurupa Street Westbound					Commercial Driveway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	1	1	1	0	2	1	0	3	0	0	0	0	0	3	6	0	0	9	1	13	14
07:15 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	4	0	0	4	0	9	9
07:30 AM	0	0	1	1	1	0	3	0	0	3	0	0	0	0	0	0	2	0	0	2	1	6	7
07:45 AM	1	0	1	0	2	0	7	0	0	7	0	0	0	0	0	1	6	0	0	7	0	16	16
Total	1	0	3	2	4	0	17	1	0	18	0	0	0	0	0	4	18	0	0	22	2	44	46
08:00 AM	0	0	1	0	1	0	8	0	0	8	0	0	0	0	0	0	6	0	0	6	0	15	15
08:15 AM	0	0	1	1	1	0	7	2	0	9	0	0	0	0	0	1	8	0	0	9	1	19	20
08:30 AM	0	0	0	0	0	0	9	0	0	9	0	0	1	0	1	3	3	0	0	6	0	16	16
08:45 AM	0	0	0	0	0	0	9	0	0	9	0	0	0	0	0	7	30	0	0	37	0	46	46
Total	0	0	2	1	2	0	33	2	0	35	0	0	1	0	1	11	47	0	0	58	1	96	97
Grand Total	1	0	5	3	6	0	50	3	0	53	0	0	1	0	1	15	65	0	0	80	3	140	143
Apprch %	16.7	0	83.3			0	94.3	5.7			0	0	100			18.8	81.2	0					
Total %	0.7	0	3.6		4.3	0	35.7	2.1		37.9	0	0	0.7		0.7	10.7	46.4	0		57.1	2.1	97.9	

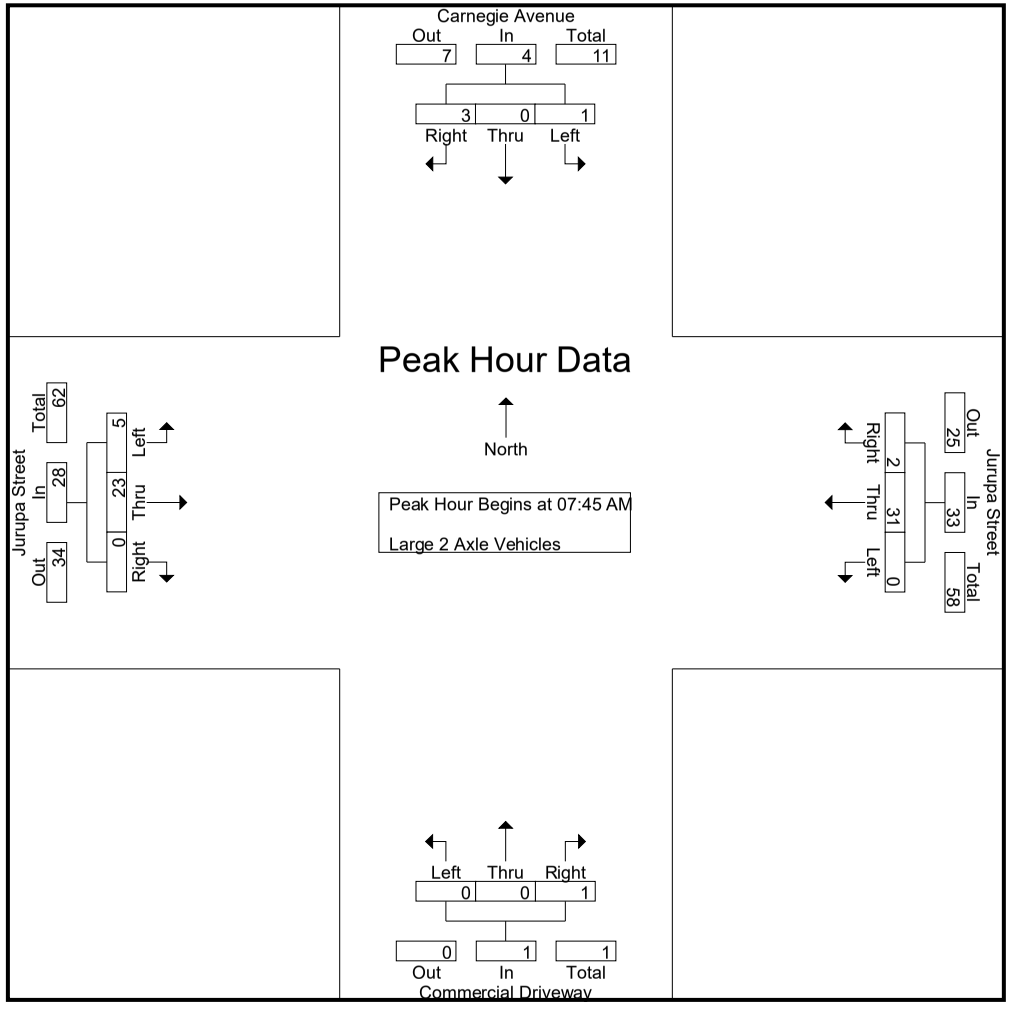
3.1-393

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**1**	0	**1**	**2**	0	7	0	7	0	0	0	0	1	6	0	7	16
08:00 AM	0	0	1	1	0	8	0	8	0	0	0	0	0	6	0	6	15
08:15 AM	0	0	1	1	0	7	**2**	**9**	0	0	0	0	1	**8**	0	**9**	**19**
08:30 AM	0	0	0	0	0	**9**	0	9	0	0	**1**	**1**	**3**	3	0	6	16
Total Volume	1	0	3	4	0	31	2	33	0	0	1	1	5	23	0	28	66
% App. Total	25	0	75		0	93.9	6.1		0	0	100		17.9	82.1	0		
PHF	.250	.000	.750	.500	.000	.861	.250	.917	.000	.000	.250	.250	.417	.719	.000	.778	.868

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	**1**	0	**1**	**2**	0	7	0	7	0	0	0	0	1	6	0	7	
+15 mins.	0	0	1	1	0	8	0	8	0	0	0	0	0	6	0	6	
+30 mins.	0	0	1	1	0	7	**2**	**9**	0	0	0	0	1	**8**	0	**9**	
+45 mins.	0	0	0	0	0	**9**	0	9	0	0	**1**	**1**	**3**	3	0	6	
Total Volume	1	0	3	4	0	31	2	33	0	0	1	1	5	23	0	28	
% App. Total	25	0	75		0	93.9	6.1		0	0	100		17.9	82.1	0		
PHF	.250	.000	.750	.500	.000	.861	.250	.917	.000	.000	.250	.250	.417	.719	.000	.778	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Carnegie Avenue Southbound					Jurupa Street Westbound					Commercial Driveway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	0	8	8
07:15 AM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4
07:30 AM	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	2	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	6	0	6	6
Total	0	0	1	1	1	0	5	0	0	5	0	0	0	0	0	1	13	0	0	14	1	20	21
08:00 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	2	0	0	2	0	4	4
08:15 AM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	1	2	0	0	3	0	7	7
08:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	0	3	3
08:45 AM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	1	7	0	0	8	0	15	15
Total	0	0	0	0	0	0	12	1	0	13	1	0	0	0	1	3	12	0	0	15	0	29	29
Grand Total	0	0	1	1	1	0	17	1	0	18	1	0	0	0	1	4	25	0	0	29	1	49	50
Apprch %	0	0	100			0	94.4	5.6			100	0	0			13.8	86.2	0					
Total %	0	0	2		2	0	34.7	2		36.7	2	0	0		2	8.2	51	0		59.2	2	98	

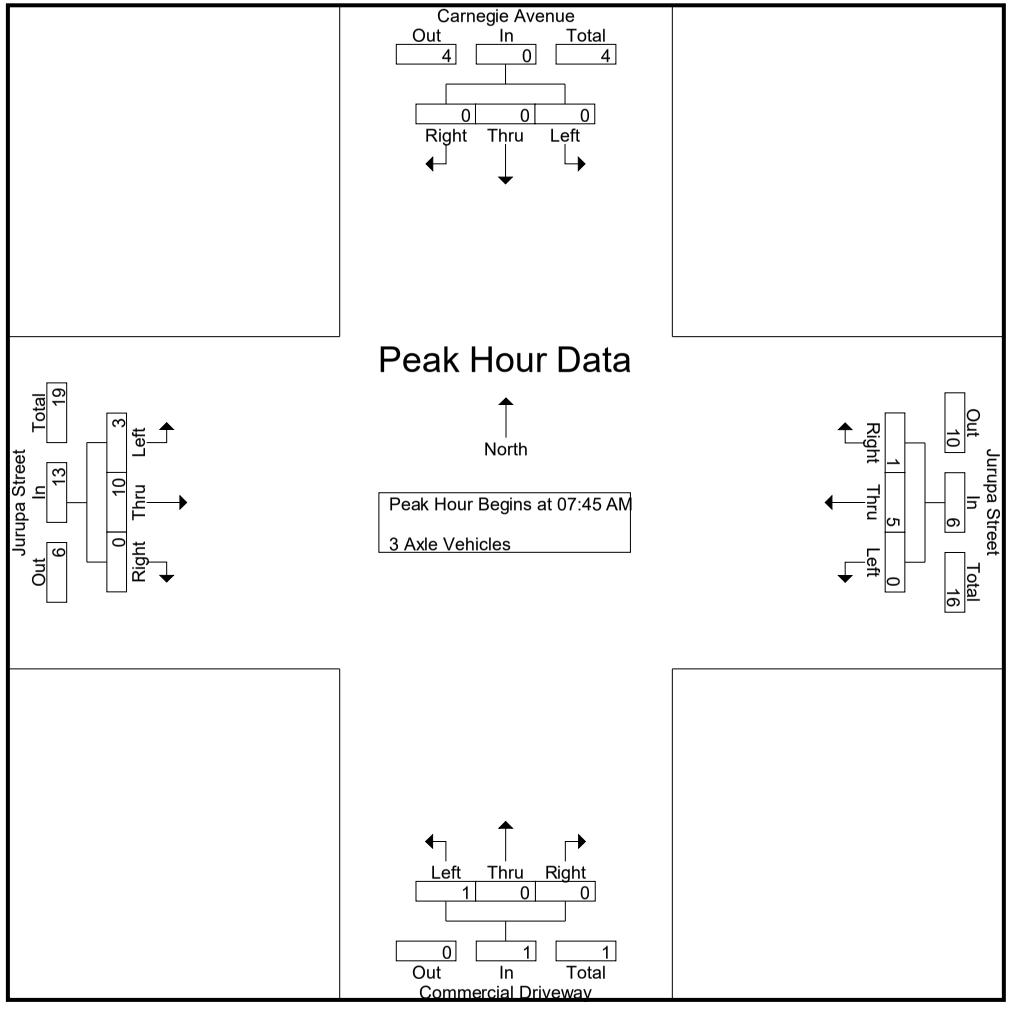
3.1-396

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**5**	0	**6**	6
08:00 AM	0	0	0	0	0	1	**1**	2	0	0	0	0	0	2	0	2	4
08:15 AM	0	0	0	0	0	**4**	0	**4**	0	0	0	0	1	2	0	3	**7**
08:30 AM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	1	1	0	2	3
Total Volume	0	0	0	0	0	5	1	6	1	0	0	1	3	10	0	13	20
% App. Total	0	0	0		0	83.3	16.7		100	0	0		23.1	76.9	0		
PHF	.000	.000	.000	.000	.000	.313	.250	.375	.250	.000	.000	.250	.750	.500	.000	.542	.714

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**5**	0	**6**	
+15 mins.	0	0	0	0	0	1	**1**	2	0	0	0	0	0	2	0	2	
+30 mins.	0	0	0	0	0	**4**	0	**4**	0	0	0	0	1	2	0	3	
+45 mins.	0	0	0	0	0	0	0	0	**1**	0	0	**1**	1	1	0	2	
Total Volume	0	0	0	0	0	5	1	6	1	0	0	1	3	10	0	13	
% App. Total	0	0	0		0	83.3	16.7		100	0	0		23.1	76.9	0		
PHF	.000	.000	.000	.000	.000	.313	.250	.375	.250	.000	.000	.250	.750	.500	.000	.542	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Carnegie Avenue Southbound					Jurupa Street Westbound					Commercial Driveway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	11	0	0	11	0	0	0	0	0	0	8	0	0	8	0	19	19
07:15 AM	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	1	7	0	0	8	0	18	18
07:30 AM	1	0	0	0	1	0	9	0	0	9	0	0	0	0	0	0	9	1	0	10	0	20	20
07:45 AM	0	0	1	1	1	0	9	1	0	10	0	0	0	0	0	1	8	0	0	9	1	20	21
Total	1	0	1	1	2	0	39	1	0	40	0	0	0	0	0	2	32	1	0	35	1	77	78
08:00 AM	0	0	2	2	2	0	8	0	0	8	0	0	0	0	0	0	15	1	0	16	2	26	28
08:15 AM	0	0	0	0	0	1	16	0	0	17	0	0	0	0	0	0	13	0	0	13	0	30	30
08:30 AM	1	0	0	0	1	0	11	2	0	13	2	0	0	0	2	0	15	0	0	15	0	31	31
08:45 AM	1	0	0	0	1	0	9	1	0	10	0	0	0	0	0	1	8	0	0	9	0	20	20
Total	2	0	2	2	4	1	44	3	0	48	2	0	0	0	2	1	51	1	0	53	2	107	109
Grand Total	3	0	3	3	6	1	83	4	0	88	2	0	0	0	2	3	83	2	0	88	3	184	187
Apprch %	50	0	50			1.1	94.3	4.5			100	0	0			3.4	94.3	2.3					
Total %	1.6	0	1.6		3.3	0.5	45.1	2.2		47.8	1.1	0	0		1.1	1.6	45.1	1.1		47.8	1.6	98.4	

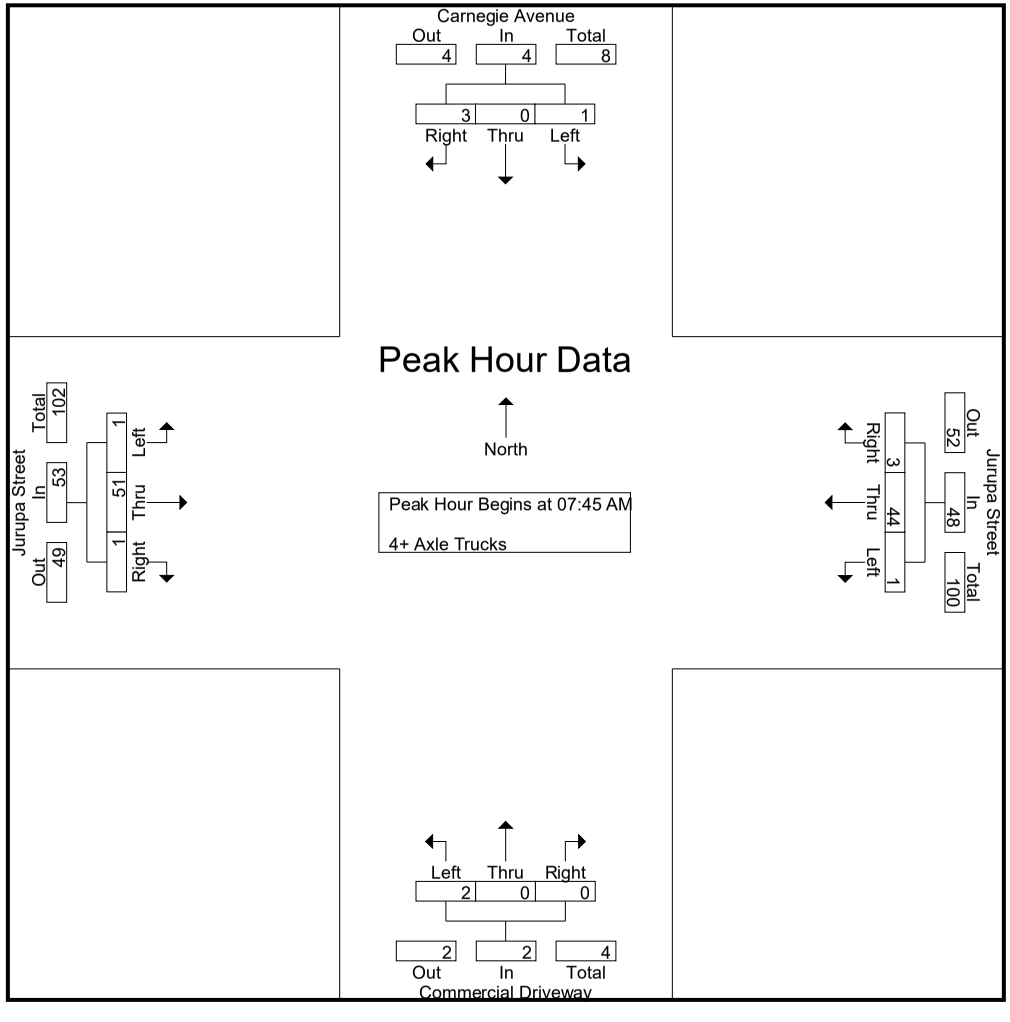
3.1-399

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	1	1	0	9	1	10	0	0	0	0	**1**	8	0	9	20
08:00 AM	0	0	**2**	**2**	0	8	0	8	0	0	0	0	0	**15**	**1**	**16**	26
08:15 AM	0	0	0	0	**1**	**16**	0	**17**	0	0	0	0	0	13	0	13	30
08:30 AM	**1**	0	0	1	0	11	**2**	13	**2**	0	0	**2**	0	15	0	15	**31**
Total Volume	1	0	3	4	1	44	3	48	2	0	0	2	1	51	1	53	107
% App. Total	25	0	75		2.1	91.7	6.2		100	0	0		1.9	96.2	1.9		
PHF	.250	.000	.375	.500	.250	.688	.375	.706	.250	.000	.000	.250	.250	.850	.250	.828	.863

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-400

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	1	1	0	9	1	10	0	0	0	0	**1**	8	0	9	
+15 mins.	0	0	**2**	**2**	0	8	0	8	0	0	0	0	0	**15**	**1**	**16**	
+30 mins.	0	0	0	0	**1**	**16**	0	**17**	0	0	0	0	0	13	0	13	
+45 mins.	**1**	0	0	1	0	11	**2**	13	**2**	0	0	**2**	0	15	0	15	
Total Volume	1	0	3	4	1	44	3	48	2	0	0	2	1	51	1	53	
% App. Total	25	0	75		2.1	91.7	6.2		100	0	0		1.9	96.2	1.9		
PHF	.250	.000	.375	.500	.250	.688	.375	.706	.250	.000	.000	.250	.250	.850	.250	.828	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Carnegie Avenue Southbound					Jurupa Street Westbound					Commercial Driveway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	6	0	9	9	15	0	111	3	0	114	0	0	3	3	3	15	133	2	1	150	13	282	295
04:15 PM	2	0	6	5	8	2	128	2	1	132	1	0	0	0	1	16	168	2	0	186	6	327	333
04:30 PM	5	0	2	2	7	1	117	1	0	119	1	0	1	1	2	19	157	4	0	180	3	308	311
04:45 PM	0	0	9	9	9	0	113	1	0	114	0	0	1	1	1	14	169	3	0	186	10	310	320
Total	13	0	26	25	39	3	469	7	1	479	2	0	5	5	7	64	627	11	1	702	32	1227	1259
05:00 PM	5	0	8	8	13	0	114	4	0	118	1	0	0	0	1	13	161	1	0	175	8	307	315
05:15 PM	3	1	6	5	10	0	95	4	1	99	0	0	0	0	0	6	154	1	0	161	6	270	276
05:30 PM	4	0	6	6	10	0	126	2	0	128	0	0	0	0	0	6	161	1	0	168	6	306	312
05:45 PM	5	0	8	7	13	1	114	2	0	117	1	0	0	0	1	6	152	0	0	158	7	289	296
Total	17	1	28	26	46	1	449	12	1	462	2	0	0	0	2	31	628	3	0	662	27	1172	1199
Grand Total	30	1	54	51	85	4	918	19	2	941	4	0	5	5	9	95	1255	14	1	1364	59	2399	2458
Apprch %	35.3	1.2	63.5			0.4	97.6	2			44.4	0	55.6			7	92	1					
Total %	1.3	0	2.3		3.5	0.2	38.3	0.8		39.2	0.2	0	0.2		0.4	4	52.3	0.6		56.9	2.4	97.6	
Passenger Vehicles	27	0	39		103	2	732	11		745	1	0	4		9	70	1034	4		1108	0	0	1965
% Passenger Vehicles	90	0	72.2	72.5	75.7	50	79.7	57.9	0	79	25	0	80	80	64.3	73.7	82.4	28.6	0	81.2	0	0	79.9
Large 2 Axle Vehicles	2	1	6		14	1	70	0		71	1	0	1		3	9	50	4		64	0	0	152
% Large 2 Axle Vehicles	6.7	100	11.1	9.8	10.3	25	7.6	0	0	7.5	25	0	20	20	21.4	9.5	4	28.6	100	4.7	0	0	6.2
3 Axle Vehicles	0	0	2		4	0	24	1		25	0	0	0		0	3	28	0		31	0	0	60
% 3 Axle Vehicles	0	0	3.7	3.9	2.9	0	2.6	5.3	0	2.7	0	0	0	0	0	3.2	2.2	0	0	2.3	0	0	2.4
4+ Axle Trucks	1	0	7		15	1	92	7		102	2	0	0		2	13	143	6		162	0	0	281
% 4+ Axle Trucks	3.3	0	13	13.7	11	25	10	36.8	100	10.8	50	0	0	0	14.3	13.7	11.4	42.9	0	11.9	0	0	11.4

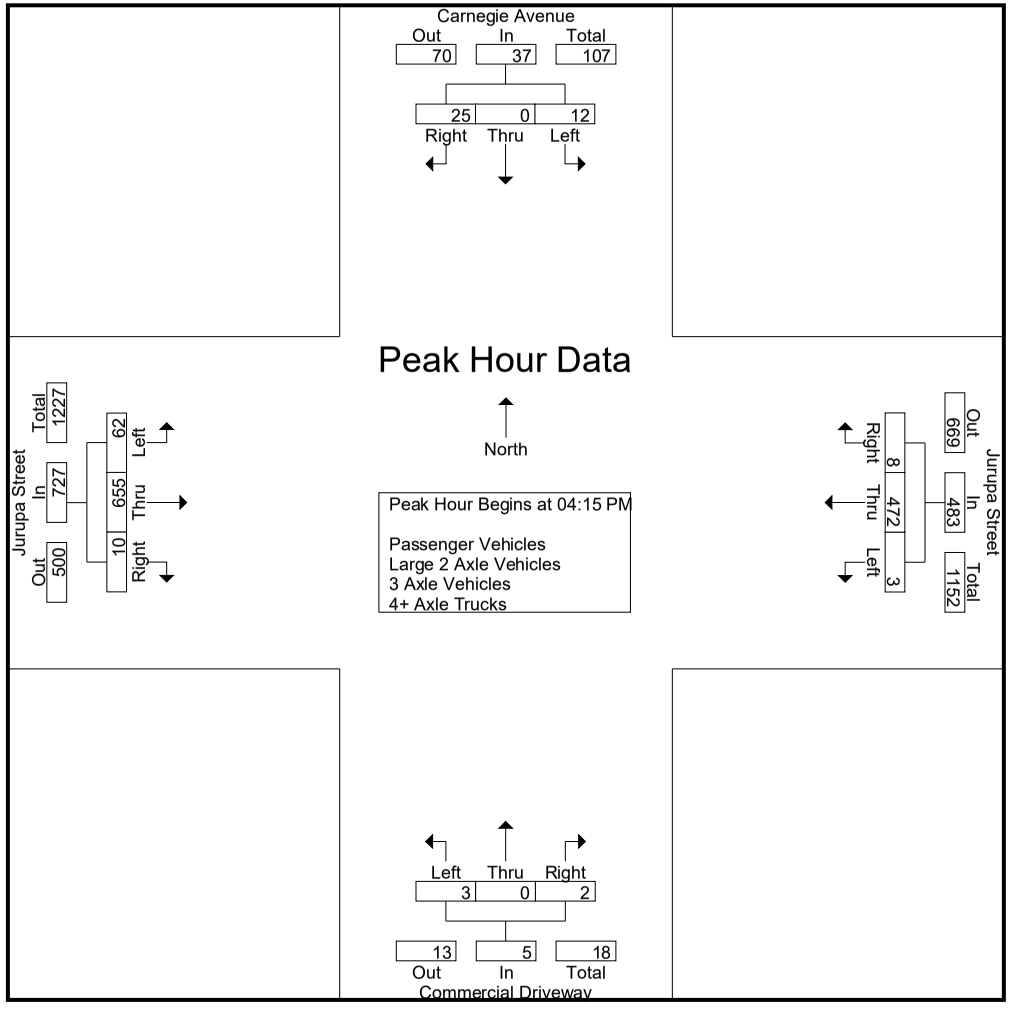
3.1-402

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	2	0	6	8	**2**	**128**	2	**132**	**1**	0	0	1	16	168	2	**186**	**327**
04:30 PM	**5**	0	2	7	1	117	1	119	1	0	**1**	**2**	**19**	157	**4**	180	308
04:45 PM	0	0	**9**	9	0	113	1	114	0	0	1	1	14	**169**	3	186	310
05:00 PM	5	0	8	**13**	0	114	**4**	118	1	0	0	1	13	161	1	175	307
Total Volume	12	0	25	37	3	472	8	483	3	0	2	5	62	655	10	727	1252
% App. Total	32.4	0	67.6		0.6	97.7	1.7		60	0	40		8.5	90.1	1.4		
PHF	.600	.000	.694	.712	.375	.922	.500	.915	.750	.000	.500	.625	.816	.969	.625	.977	.957

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:15 PM				04:00 PM				04:15 PM				
+0 mins.	**5**	0	**8**	**13**	**2**	**128**	2	**132**	0	0	**3**	**3**	16	168	2	**186**	
+15 mins.	3	**1**	6	10	1	117	1	119	**1**	0	0	1	**19**	157	**4**	180	
+30 mins.	4	0	6	10	0	113	1	114	1	0	1	2	14	**169**	3	186	
+45 mins.	5	0	8	13	0	114	**4**	118	0	0	1	1	13	161	1	175	
Total Volume	17	1	28	46	3	472	8	483	2	0	5	7	62	655	10	727	
% App. Total	37	2.2	60.9		0.6	97.7	1.7		28.6	0	71.4		8.5	90.1	1.4		
PHF	.850	.250	.875	.885	.375	.922	.500	.915	.500	.000	.417	.583	.816	.969	.625	.977	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Carnegie Avenue Southbound					Jurupa Street Westbound					Commercial Driveway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	6	0	6	6	12	0	91	3	0	94	0	0	2	2	2	8	103	0	0	111	8	219	227
04:15 PM	2	0	5	5	7	2	105	0	0	107	1	0	0	0	1	13	137	1	0	151	5	266	271
04:30 PM	4	0	1	1	5	0	98	1	0	99	0	0	1	1	1	14	129	1	0	144	2	249	251
04:45 PM	0	0	6	6	6	0	91	1	0	92	0	0	1	1	1	9	147	2	0	158	7	257	264
Total	12	0	18	18	30	2	385	5	0	392	1	0	4	4	5	44	516	4	0	564	22	991	1013
05:00 PM	5	0	5	5	10	0	87	2	0	89	0	0	0	0	0	11	134	0	0	145	5	244	249
05:15 PM	3	0	6	5	9	0	75	2	0	77	0	0	0	0	0	6	129	0	0	135	5	221	226
05:30 PM	3	0	5	5	8	0	101	1	0	102	0	0	0	0	0	4	129	0	0	133	5	243	248
05:45 PM	4	0	5	4	9	0	84	1	0	85	0	0	0	0	0	5	126	0	0	131	4	225	229
Total	15	0	21	19	36	0	347	6	0	353	0	0	0	0	0	26	518	0	0	544	19	933	952
Grand Total	27	0	39	37	66	2	732	11	0	745	1	0	4	4	5	70	1034	4	0	1108	41	1924	1965
Apprch %	40.9	0	59.1			0.3	98.3	1.5			20	0	80			6.3	93.3	0.4					
Total %	1.4	0	2		3.4	0.1	38	0.6		38.7	0.1	0	0.2		0.3	3.6	53.7	0.2		57.6	2.1	97.9	

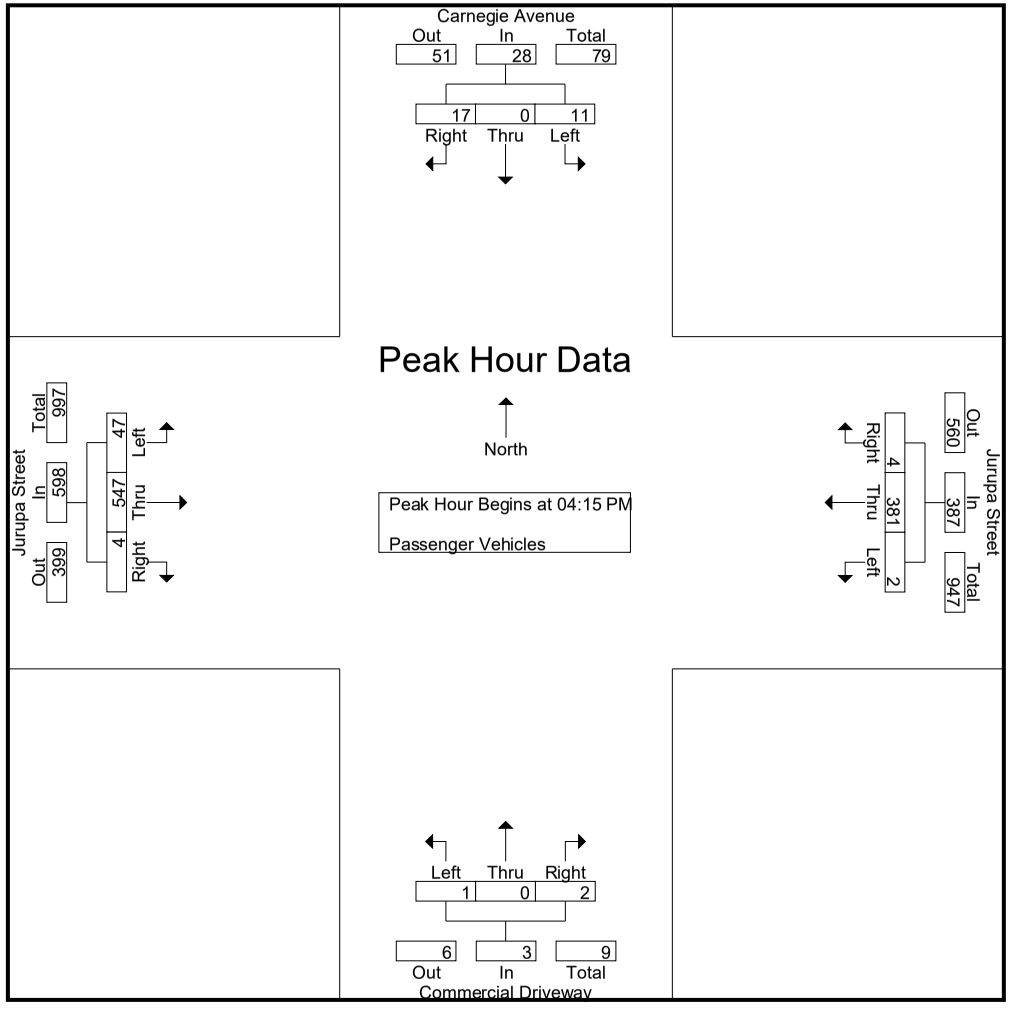
03-1405

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	2	0	5	7	**2**	**105**	0	**107**	**1**	0	0	**1**	13	137	1	151	**266**
04:30 PM	4	0	1	5	0	98	1	99	0	0	**1**	1	**14**	129	1	144	249
04:45 PM	0	0	**6**	6	0	91	1	92	0	0	1	1	9	**147**	**2**	**158**	257
05:00 PM	**5**	0	5	**10**	0	87	**2**	89	0	0	0	0	11	134	0	145	244
Total Volume	11	0	17	28	2	381	4	387	1	0	2	3	47	547	4	598	1016
% App. Total	39.3	0	60.7		0.5	98.4	1		33.3	0	66.7		7.9	91.5	0.7		
PHF	.550	.000	.708	.700	.250	.907	.500	.904	.250	.000	.500	.750	.839	.930	.500	.946	.955

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-406

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	2	0	5	7	**2**	**105**	0	**107**	**1**	0	0	**1**	13	137	1	151	
+15 mins.	4	0	1	5	0	98	1	99	0	0	**1**	1	**14**	129	1	144	
+30 mins.	0	0	**6**	6	0	91	1	92	0	0	1	1	9	**147**	**2**	**158**	
+45 mins.	**5**	0	5	**10**	0	87	**2**	89	0	0	0	0	11	134	0	145	
Total Volume	11	0	17	28	2	381	4	387	1	0	2	3	47	547	4	598	
% App. Total	39.3	0	60.7		0.5	98.4	1		33.3	0	66.7		7.9	91.5	0.7		
PHF	.550	.000	.708	.700	.250	.907	.500	.904	.250	.000	.500	.750	.839	.930	.500	.946	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Carnegie Avenue Southbound					Jurupa Street Westbound					Commercial Driveway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	1	1	1	0	5	0	0	5	0	0	1	1	1	3	5	1	1	9	3	16	19
04:15 PM	0	0	1	0	1	0	7	0	0	7	0	0	0	0	0	2	11	1	0	14	0	22	22
04:30 PM	1	0	0	0	1	1	3	0	0	4	1	0	0	0	1	2	7	1	0	10	0	16	16
04:45 PM	0	0	2	2	2	0	10	0	0	10	0	0	0	0	0	2	7	1	0	10	2	22	24
Total	1	0	4	3	5	1	25	0	0	26	1	0	1	1	2	9	30	4	1	43	5	76	81
05:00 PM	0	0	1	1	1	0	11	0	0	11	0	0	0	0	0	0	4	0	0	4	1	16	17
05:15 PM	0	1	0	0	1	0	7	0	0	7	0	0	0	0	0	0	8	0	0	8	0	16	16
05:30 PM	0	0	1	1	1	0	10	0	0	10	0	0	0	0	0	0	6	0	0	6	1	17	18
05:45 PM	1	0	0	0	1	0	17	0	0	17	0	0	0	0	0	0	2	0	0	2	0	20	20
Total	1	1	2	2	4	0	45	0	0	45	0	0	0	0	0	0	20	0	0	20	2	69	71
Grand Total	2	1	6	5	9	1	70	0	0	71	1	0	1	1	2	9	50	4	1	63	7	145	152
Apprch %	22.2	11.1	66.7			1.4	98.6	0			50	0	50			14.3	79.4	6.3					
Total %	1.4	0.7	4.1		6.2	0.7	48.3	0		49	0.7	0	0.7		1.4	6.2	34.5	2.8		43.4	4.6	95.4	

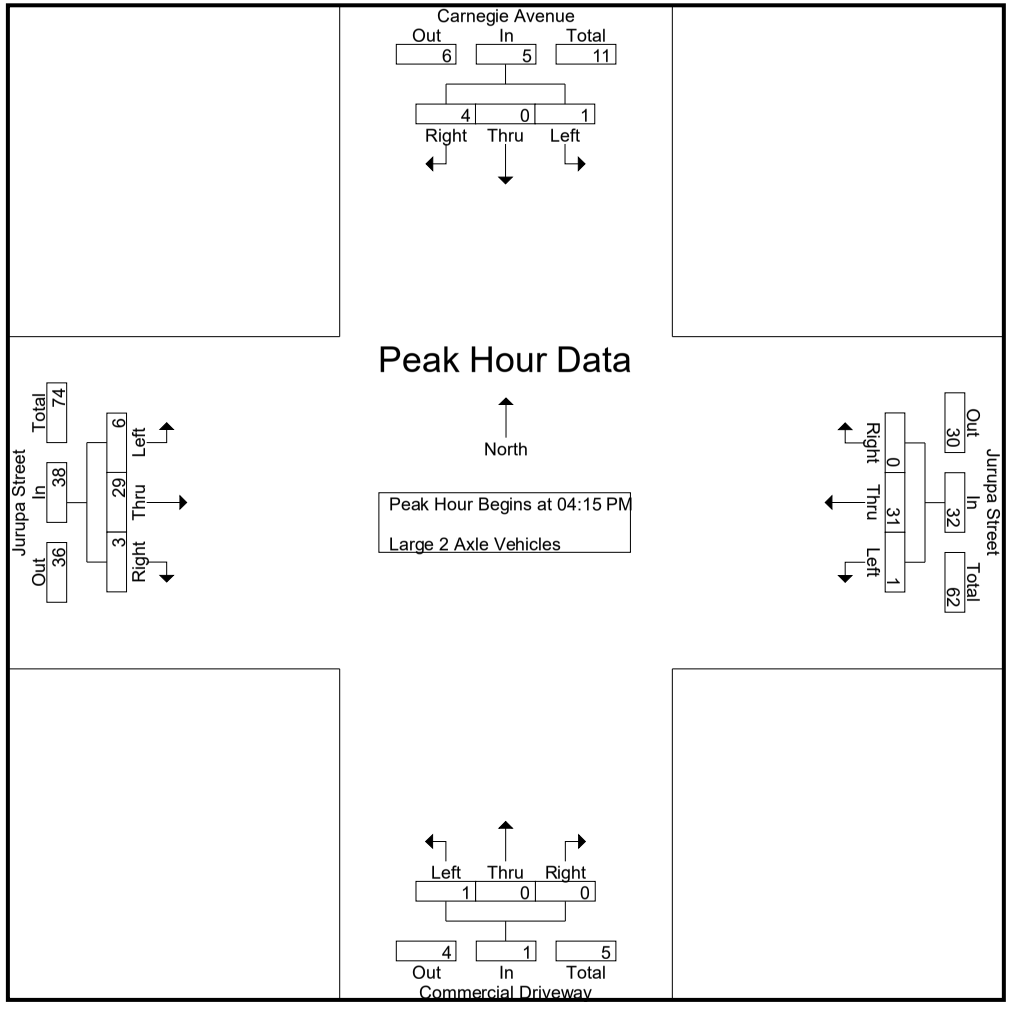
3.1-408

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	1	1	0	7	0	7	0	0	0	0	**2**	**11**	**1**	**14**	**22**
04:30 PM	**1**	0	0	1	**1**	3	0	4	**1**	0	0	**1**	2	7	1	10	16
04:45 PM	0	0	**2**	**2**	0	10	0	10	0	0	0	0	2	7	1	10	22
05:00 PM	0	0	1	1	0	**11**	0	**11**	0	0	0	0	0	4	0	4	16
Total Volume	1	0	4	5	1	31	0	32	1	0	0	1	6	29	3	38	76
% App. Total	20	0	80		3.1	96.9	0		100	0	0		15.8	76.3	7.9		
PHF	.250	.000	.500	.625	.250	.705	.000	.727	.250	.000	.000	.250	.750	.659	.750	.679	.864

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-409

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	1	1	0	7	0	7	0	0	0	0	**2**	**11**	**1**	**14**	
+15 mins.	**1**	0	0	1	**1**	3	0	4	**1**	0	0	**1**	2	7	1	10	
+30 mins.	0	0	**2**	**2**	0	10	0	10	0	0	0	0	2	7	1	10	
+45 mins.	0	0	1	1	0	**11**	0	**11**	0	0	0	0	0	4	0	4	
Total Volume	1	0	4	5	1	31	0	32	1	0	0	1	6	29	3	38	
% App. Total	20	0	80		3.1	96.9	0		100	0	0		15.8	76.3	7.9		
PHF	.250	.000	.500	.625	.250	.705	.000	.727	.250	.000	.000	.250	.750	.659	.750	.679	

3.1-410

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Carnegie Avenue Southbound					Jurupa Street Westbound					Commercial Driveway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	1	1	1	0	6	0	0	6	0	0	0	0	0	1	4	0	0	5	1	12	13
04:15 PM	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	1	5	0	0	6	0	10	10
04:30 PM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	0	7	7
04:45 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	0	4	4
Total	0	0	1	1	1	0	18	0	0	18	0	0	0	0	0	2	12	0	0	14	1	33	34
05:00 PM	0	0	1	1	1	0	2	0	0	2	0	0	0	0	0	1	4	0	0	5	1	8	9
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	0	8	8
05:45 PM	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	6	0	0	6	0	9	9
Total	0	0	1	1	1	0	6	1	0	7	0	0	0	0	0	1	16	0	0	17	1	25	26
Grand Total	0	0	2	2	2	0	24	1	0	25	0	0	0	0	0	3	28	0	0	31	2	58	60
Apprch %	0	0	100			0	96	4			0	0	0			9.7	90.3	0					
Total %	0	0	3.4		3.4	0	41.4	1.7		43.1	0	0	0		0	5.2	48.3	0		53.4	3.3	96.7	

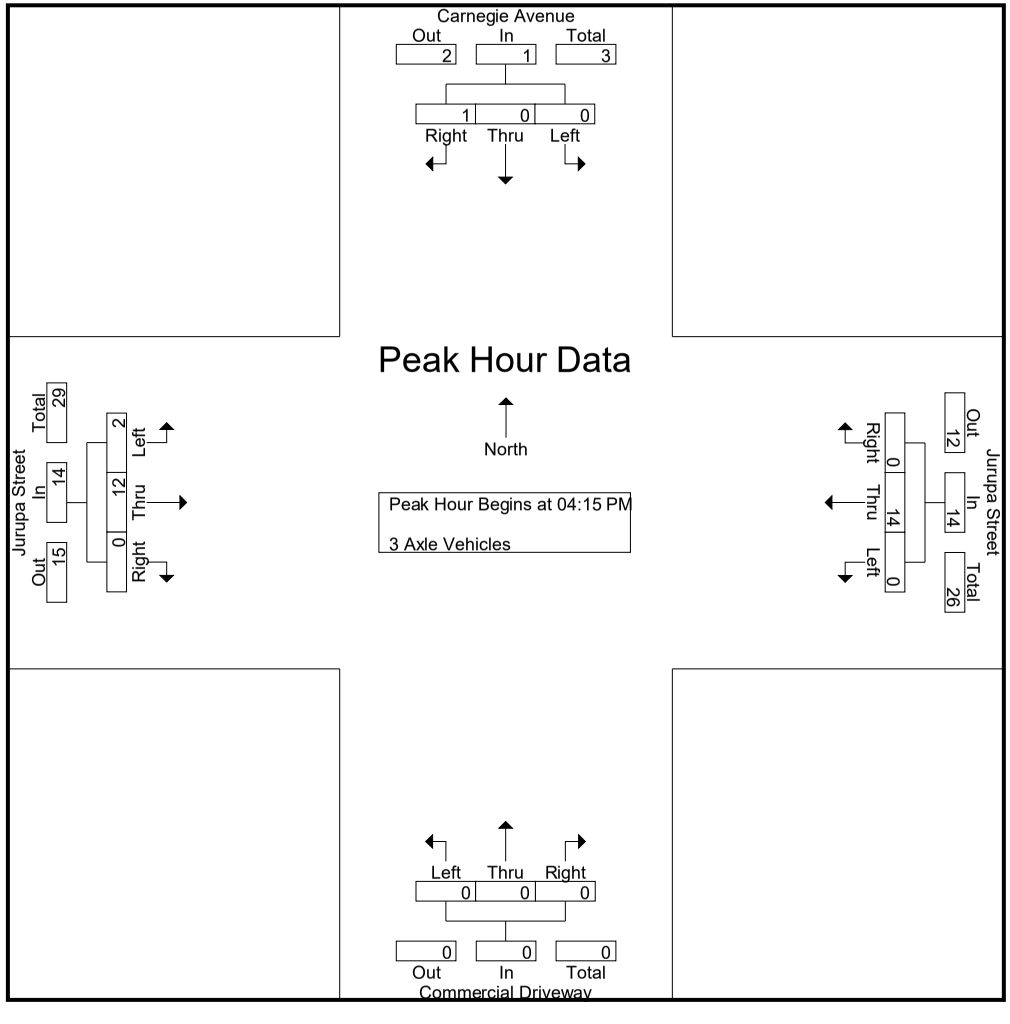
3.1-411

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	4	0	4	0	0	0	0	**1**	**5**	0	**6**	**10**
04:30 PM	0	0	0	0	0	**5**	0	**5**	0	0	0	0	0	2	0	2	7
04:45 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
05:00 PM	0	0	**1**	**1**	0	2	0	2	0	0	0	0	1	4	0	5	8
Total Volume	0	0	1	1	0	14	0	14	0	0	0	0	2	12	0	14	29
% App. Total	0	0	100		0	100	0		0	0	0		14.3	85.7	0		
PHF	.000	.000	.250	.250	.000	.700	.000	.700	.000	.000	.000	.000	.500	.600	.000	.583	.725

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	0	0	0	4	0	4	0	0	0	0	**1**	**5**	0	**6**	
+15 mins.	0	0	0	0	0	**5**	0	**5**	0	0	0	0	0	2	0	2	
+30 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	
+45 mins.	0	0	**1**	**1**	0	2	0	2	0	0	0	0	1	4	0	5	
Total Volume	0	0	1	1	0	14	0	14	0	0	0	0	2	12	0	14	
% App. Total	0	0	100		0	100	0		0	0	0		14.3	85.7	0		
PHF	.000	.000	.250	.250	.000	.700	.000	.700	.000	.000	.000	.000	.500	.600	.000	.583	

3.1-413

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

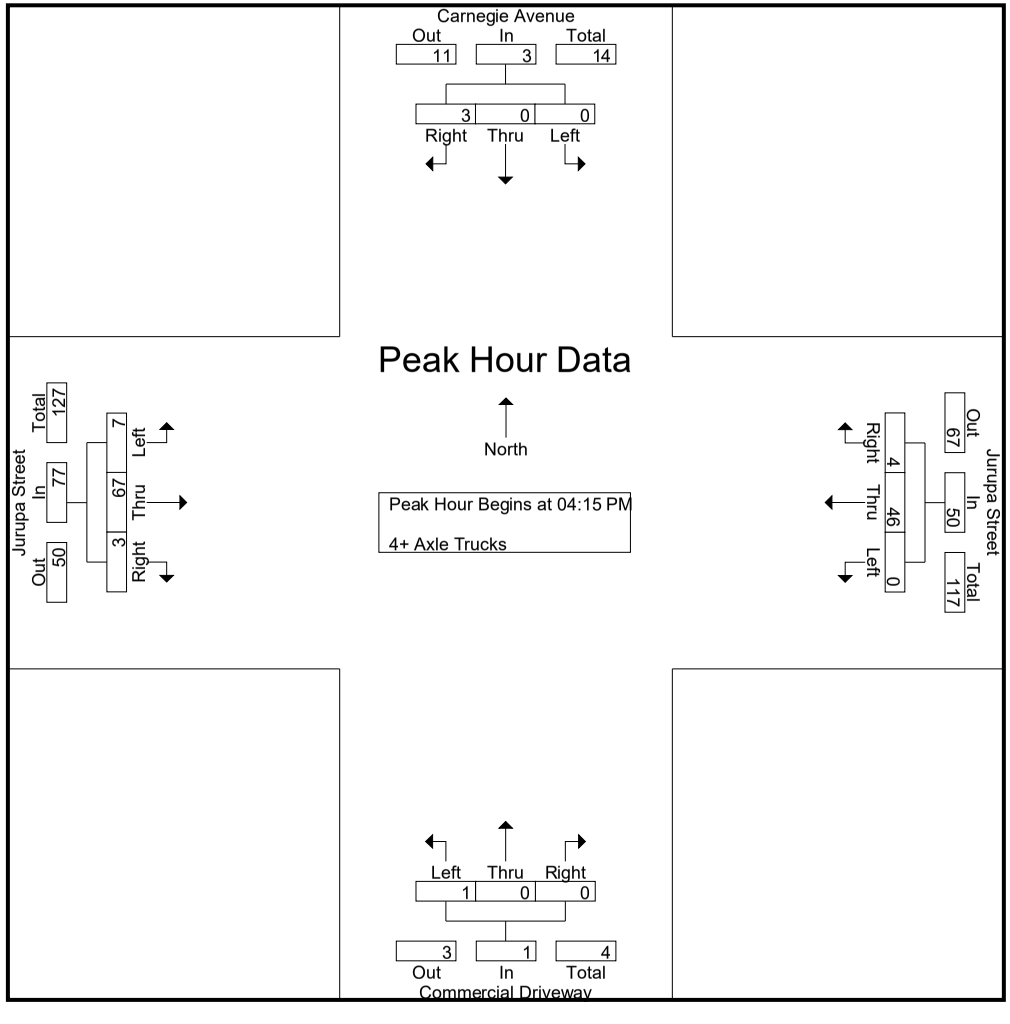
	Carnegie Avenue Southbound					Jurupa Street Westbound					Commercial Driveway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	1	1	1	0	9	0	0	9	0	0	0	0	0	3	21	1	0	25	1	35	36
04:15 PM	0	0	0	0	0	0	12	2	1	14	0	0	0	0	0	0	15	0	0	15	1	29	30
04:30 PM	0	0	1	1	1	0	11	0	0	11	0	0	0	0	0	3	19	2	0	24	1	36	37
04:45 PM	0	0	1	1	1	0	9	0	0	9	0	0	0	0	0	3	14	0	0	17	1	27	28
Total	0	0	3	3	3	0	41	2	1	43	0	0	0	0	0	9	69	3	0	81	4	127	131
05:00 PM	0	0	1	1	1	0	14	2	0	16	1	0	0	0	1	1	19	1	0	21	1	39	40
05:15 PM	0	0	0	0	0	0	13	2	1	15	0	0	0	0	0	0	17	1	0	18	1	33	34
05:30 PM	1	0	0	0	1	0	13	1	0	14	0	0	0	0	0	2	20	1	0	23	0	38	38
05:45 PM	0	0	3	3	3	1	11	0	0	12	1	0	0	0	1	1	18	0	0	19	3	35	38
Total	1	0	4	4	5	1	51	5	1	57	2	0	0	0	2	4	74	3	0	81	5	145	150
Grand Total	1	0	7	7	8	1	92	7	2	100	2	0	0	0	2	13	143	6	0	162	9	272	281
Apprch %	12.5	0	87.5			1	92	7			100	0	0			8	88.3	3.7					
Total %	0.4	0	2.6		2.9	0.4	33.8	2.6		36.8	0.7	0	0		0.7	4.8	52.6	2.2		59.6	3.2	96.8	

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	12	**2**	14	0	0	0	0	0	15	0	15	29
04:30 PM	0	0	**1**	**1**	0	11	0	11	0	0	0	0	**3**	**19**	**2**	**24**	36
04:45 PM	0	0	1	1	0	9	0	9	0	0	0	0	3	14	0	17	27
05:00 PM	0	0	1	1	0	**14**	2	**16**	**1**	0	0	**1**	1	19	1	21	**39**
Total Volume	0	0	3	3	0	46	4	50	1	0	0	1	7	67	3	77	131
% App. Total	0	0	100		0	92	8		100	0	0		9.1	87	3.9		
PHF	.000	.000	.750	.750	.000	.821	.500	.781	.250	.000	.000	.250	.583	.882	.375	.802	.840

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 14_ONT_Carn_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Carnegie Avenue Southbound				Jurupa Street Westbound				Commercial Driveway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	0	0	0	12	**2**	14	0	0	0	0	0	15	0	15	
+15 mins.	0	0	**1**	**1**	0	11	0	11	0	0	0	0	**3**	**19**	**2**	**24**	
+30 mins.	0	0	1	1	0	9	0	9	0	0	0	0	3	14	0	17	
+45 mins.	0	0	1	1	0	**14**	2	**16**	**1**	0	0	**1**	1	19	1	21	
Total Volume	0	0	3	3	0	46	4	50	1	0	0	1	7	67	3	77	
% App. Total	0	0	100		0	92	8		100	0	0		9.1	87	3.9		
PHF	.000	.000	.750	.750	.000	.821	.500	.781	.250	.000	.000	.250	.583	.882	.375	.802	

Location: Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Carnegie Avenue	East Leg Jurupa Street	South Leg Commercial Driveway	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	1	0	1
7:30 AM	0	1	0	0	1
7:45 AM	0	1	1	0	2
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	1	1	0	0	2
TOTAL VOLUMES:	1	3	2	0	6

	North Leg Carnegie Avenue	East Leg Jurupa Street	South Leg Commercial Driveway	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	1	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	1

Location: Ontario
N/S: Carnegie Avenue
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Carnegie Avenue			Westbound Jurupa Street			Northbound Commercial Driveway			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	1	0	0	1	0	0	2	0	4

	Southbound Carnegie Avenue			Westbound Jurupa Street			Northbound Commercial Driveway			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Commerce Parkway Southbound					Santa Ana Street Westbound					Commerce Parkway Northbound					Santa Ana Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	8	16	0	0	24	0	0	3	3	3	0	40	6	0	46	0	1	0	0	1	3	74	77
07:15 AM	6	20	0	0	26	0	1	9	9	10	0	40	3	0	43	0	0	1	1	1	10	80	90
07:30 AM	8	13	1	0	22	0	0	1	1	1	0	44	2	0	46	0	0	0	0	0	1	69	70
07:45 AM	11	14	0	0	25	0	0	5	4	5	0	43	9	0	52	0	0	0	0	0	4	82	86
Total	33	63	1	0	97	0	1	18	17	19	0	167	20	0	187	0	1	1	1	2	18	305	323
08:00 AM	15	12	0	0	27	0	1	5	4	6	0	40	7	0	47	0	0	0	0	0	4	80	84
08:15 AM	9	9	0	0	18	2	1	4	3	7	0	37	4	0	41	0	1	2	1	3	4	69	73
08:30 AM	6	13	0	0	19	1	1	2	1	4	1	39	10	1	50	0	1	0	0	1	2	74	76
08:45 AM	8	12	1	0	21	1	0	5	3	6	0	35	8	0	43	2	1	1	0	4	3	74	77
Total	38	46	1	0	85	4	3	16	11	23	1	151	29	1	181	2	3	3	1	8	13	297	310
Grand Total	71	109	2	0	182	4	4	34	28	42	1	318	49	1	368	2	4	4	2	10	31	602	633
Apprch %	39	59.9	1.1			9.5	9.5	81			0.3	86.4	13.3			20	40	40					
Total %	11.8	18.1	0.3		30.2	0.7	0.7	5.6		7	0.2	52.8	8.1		61.1	0.3	0.7	0.7		1.7	4.9	95.1	
Passenger Vehicles	65	97	1		163	0	4	25		52	1	285	47		333	0	2	4		8	0	0	556
% Passenger Vehicles	91.5	89	50	0	89.6	0	100	73.5	82.1	74.3	100	89.6	95.9	0	90.2	0	50	100	100	66.7	0	0	87.8
Large 2 Axle Vehicles	2	1	0		3	1	0	3		7	0	14	0		14	0	0	0		0	0	0	24
% Large 2 Axle Vehicles	2.8	0.9	0	0	1.6	25	0	8.8	10.7	10	0	4.4	0	0	3.8	0	0	0	0	0	0	0	3.8
3 Axle Vehicles	0	1	0		1	0	0	2		3	0	3	0		3	0	0	0		0	0	0	7
% 3 Axle Vehicles	0	0.9	0	0	0.5	0	0	5.9	3.6	4.3	0	0.9	0	0	0.8	0	0	0	0	0	0	0	1.1
4+ Axle Trucks	4	10	1		15	3	0	4		8	0	16	2		19	2	2	0		4	0	0	46
% 4+ Axle Trucks	5.6	9.2	50	0	8.2	75	0	11.8	3.6	11.4	0	5	4.1	100	5.1	100	50	0	0	33.3	0	0	7.3

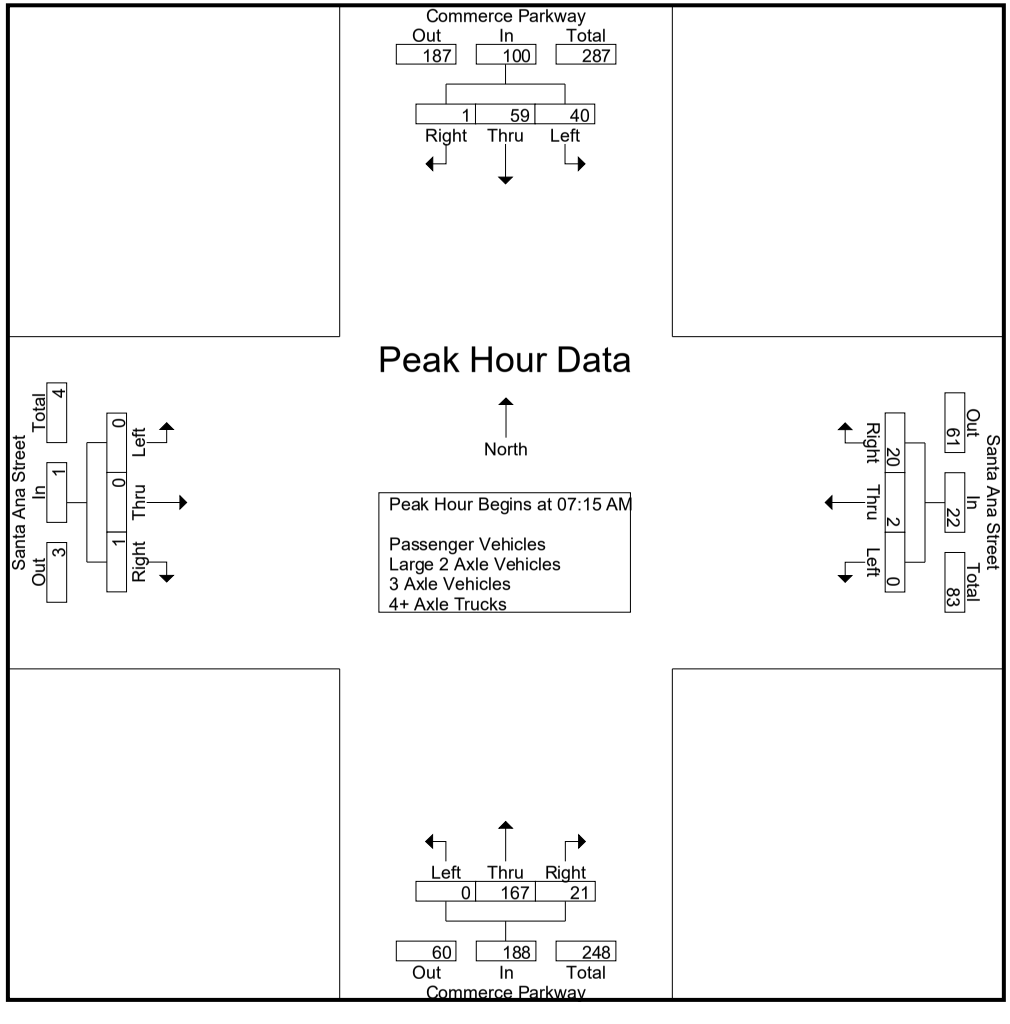
	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	6	**20**	0	26	0	**1**	**9**	**10**	0	40	3	43	0	0	**1**	**1**	80
07:30 AM	8	13	**1**	22	0	0	1	1	0	**44**	2	46	0	0	0	0	69
07:45 AM	11	14	0	25	0	0	5	5	0	43	**9**	**52**	0	0	0	0	**82**
08:00 AM	**15**	12	0	**27**	0	1	5	6	0	40	7	47	0	0	0	0	80
Total Volume	40	59	1	100	0	2	20	22	0	167	21	188	0	0	1	1	311
% App. Total	40	59	1		0	9.1	90.9		0	88.8	11.2		0	0	100		
PHF	.667	.738	.250	.926	.000	.500	.556	.550	.000	.949	.583	.904	.000	.000	.250	.250	.948

3.1-41

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-420

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				08:00 AM				07:45 AM				08:00 AM				
+0 mins.	6	**20**	0	26	0	**1**	**5**	6	0	**43**	9	**52**	0	0	0	0	
+15 mins.	8	13	**1**	22	**2**	1	4	**7**	0	40	7	47	0	**1**	**2**	3	
+30 mins.	11	14	0	25	1	1	2	4	0	37	4	41	0	1	0	1	
+45 mins.	**15**	12	0	**27**	1	0	5	6	**1**	39	**10**	50	**2**	1	1	**4**	
Total Volume	40	59	1	100	4	3	16	23	1	159	30	190	2	3	3	8	
% App. Total	40	59	1		17.4	13	69.6		0.5	83.7	15.8		25	37.5	37.5		
PHF	.667	.738	.250	.926	.500	.750	.800	.821	.250	.924	.750	.913	.250	.750	.375	.500	

3.1-421

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Commerce Parkway Southbound					Santa Ana Street Westbound					Commerce Parkway Northbound					Santa Ana Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	7	14	0	0	21	0	0	2	2	2	0	36	6	0	42	0	0	0	0	0	2	65	67
07:15 AM	6	18	0	0	24	0	1	8	8	9	0	37	3	0	40	0	0	1	1	1	9	74	83
07:30 AM	7	12	0	0	19	0	0	0	0	0	0	39	2	0	41	0	0	0	0	0	0	60	60
07:45 AM	10	13	0	0	23	0	0	4	4	4	0	39	8	0	47	0	0	0	0	0	4	74	78
Total	30	57	0	0	87	0	1	14	14	15	0	151	19	0	170	0	0	1	1	1	15	273	288
08:00 AM	13	12	0	0	25	0	1	3	3	4	0	35	7	0	42	0	0	0	0	0	3	71	74
08:15 AM	8	6	0	0	14	0	1	4	3	5	0	34	4	0	38	0	1	2	1	3	4	60	64
08:30 AM	6	13	0	0	19	0	1	2	1	3	1	33	9	0	43	0	1	0	0	1	1	66	67
08:45 AM	8	9	1	0	18	0	0	2	2	2	0	32	8	0	40	0	0	1	0	1	2	61	63
Total	35	40	1	0	76	0	3	11	9	14	1	134	28	0	163	0	2	3	1	5	10	258	268
Grand Total	65	97	1	0	163	0	4	25	23	29	1	285	47	0	333	0	2	4	2	6	25	531	556
Apprch %	39.9	59.5	0.6			0	13.8	86.2			0.3	85.6	14.1			0	33.3	66.7					
Total %	12.2	18.3	0.2		30.7	0	0.8	4.7		5.5	0.2	53.7	8.9		62.7	0	0.4	0.8		1.1	4.5	95.5	

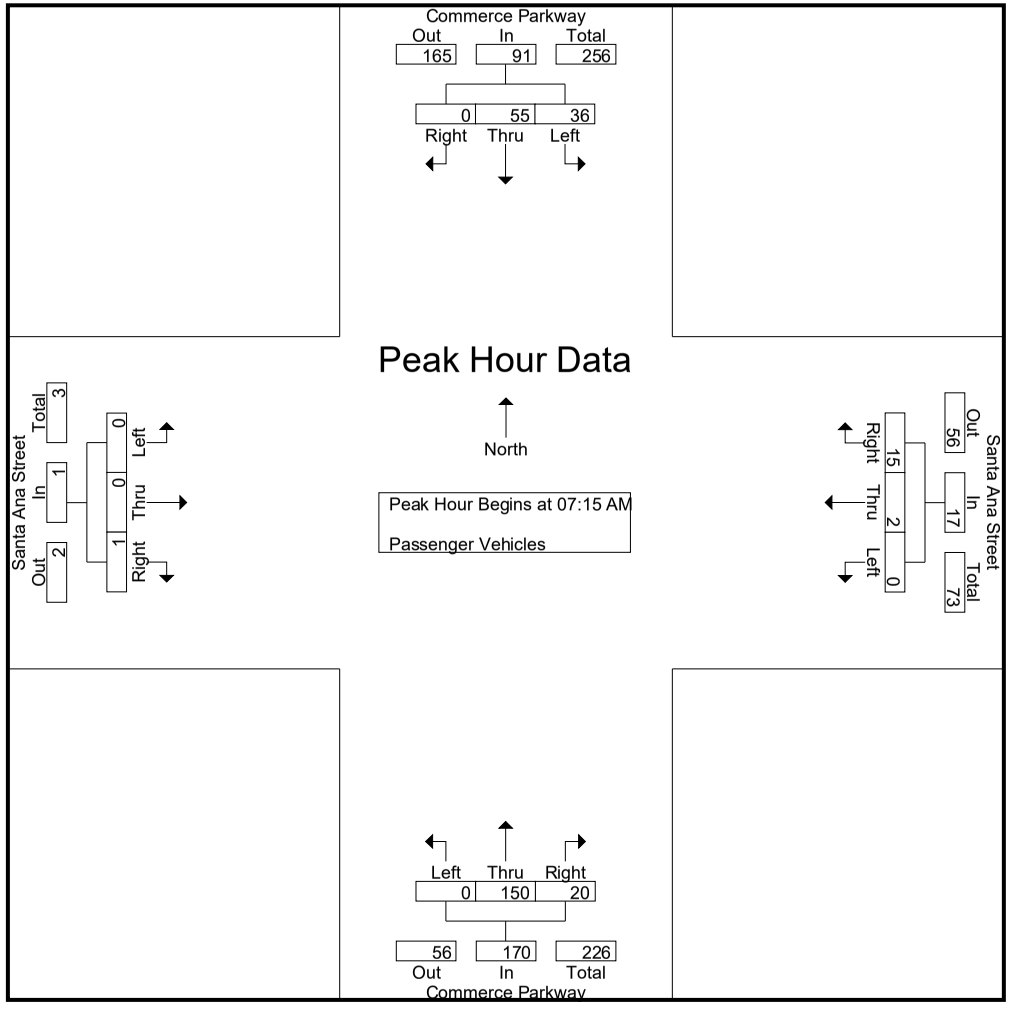
03.1-422

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	6	**18**	0	24	0	**1**	**8**	**9**	0	37	3	40	0	0	**1**	**1**	**74**
07:30 AM	7	12	0	19	0	0	0	0	0	**39**	2	41	0	0	0	0	60
07:45 AM	10	13	0	23	0	0	4	4	0	39	**8**	**47**	0	0	0	0	74
08:00 AM	**13**	12	0	**25**	0	1	3	4	0	35	7	42	0	0	0	0	71
Total Volume	36	55	0	91	0	2	15	17	0	150	20	170	0	0	1	1	279
% App. Total	39.6	60.4	0		0	11.8	88.2		0	88.2	11.8		0	0	100		
PHF	.692	.764	.000	.910	.000	.500	.469	.472	.000	.962	.625	.904	.000	.000	.250	.250	.943

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	6	**18**	0	24	0	**1**	**8**	**9**	0	37	3	40	0	0	**1**	**1**	
+15 mins.	7	12	0	19	0	0	0	0	0	**39**	2	41	0	0	0	0	
+30 mins.	10	13	0	23	0	0	4	4	0	39	**8**	**47**	0	0	0	0	
+45 mins.	**13**	12	0	**25**	0	1	3	4	0	35	7	42	0	0	0	0	
Total Volume	36	55	0	91	0	2	15	17	0	150	20	170	0	0	1	1	
% App. Total	39.6	60.4	0		0	11.8	88.2		0	88.2	11.8		0	0	100		
PHF	.692	.764	.000	.910	.000	.500	.469	.472	.000	.962	.625	.904	.000	.000	.250	.250	

3.1-424

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

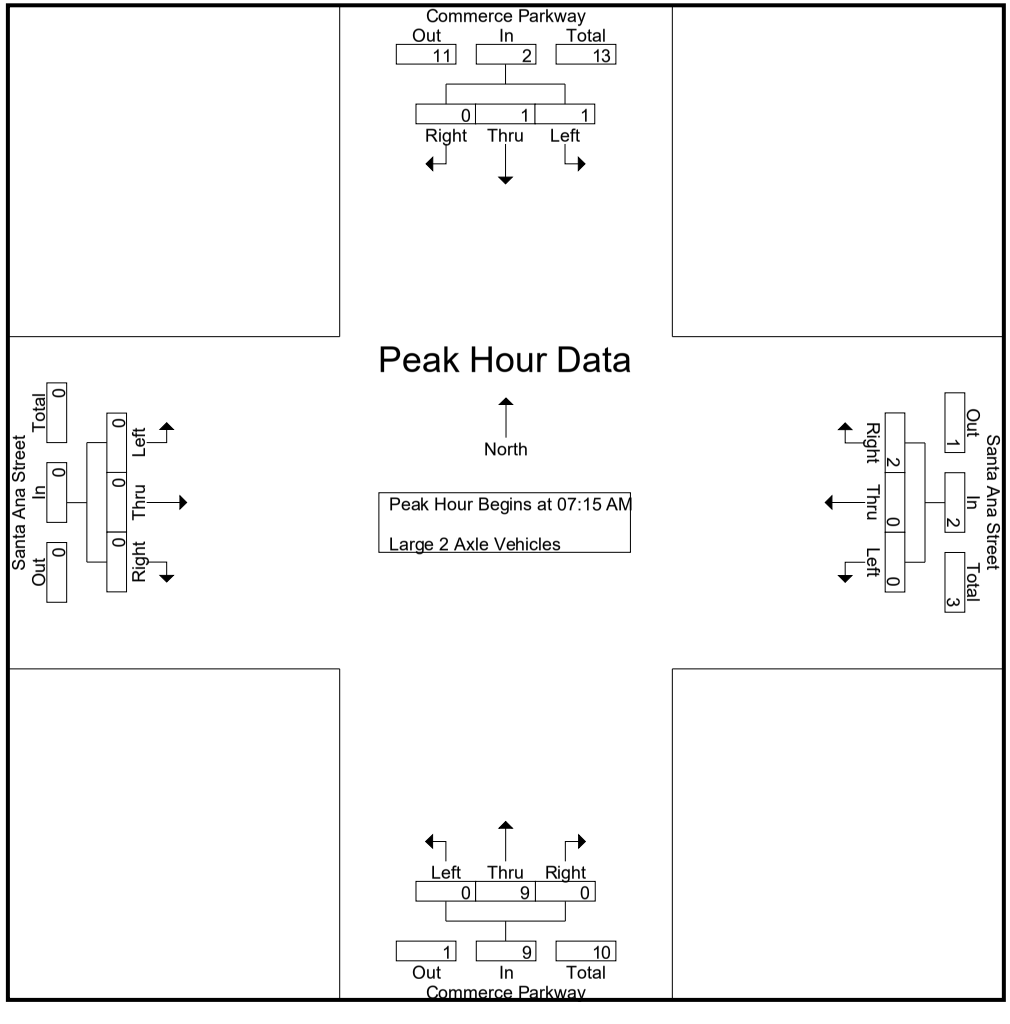
	Commerce Parkway Southbound					Santa Ana Street Westbound					Commerce Parkway Northbound					Santa Ana Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3	3
07:15 AM	0	1	0	0	1	0	0	1	1	1	0	2	0	0	2	0	0	0	0	0	1	4	5
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
Total	0	1	0	0	1	0	0	1	1	1	0	7	0	0	7	0	0	0	0	0	1	9	10
08:00 AM	1	0	0	0	1	0	0	1	1	1	0	5	0	0	5	0	0	0	0	0	1	7	8
08:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
08:45 AM	0	0	0	0	0	1	0	1	1	2	0	1	0	0	1	0	0	0	0	0	1	3	4
Total	2	0	0	0	2	1	0	2	2	3	0	7	0	0	7	0	0	0	0	0	2	12	14
Grand Total	2	1	0	0	3	1	0	3	3	4	0	14	0	0	14	0	0	0	0	0	3	21	24
Apprch %	66.7	33.3	0			25	0	75			0	100	0			0	0	0					
Total %	9.5	4.8	0		14.3	4.8	0	14.3		19	0	66.7	0		66.7	0	0	0		0	12.5	87.5	

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**1**	0	**1**	0	0	**1**	**1**	0	2	0	2	0	0	0	0	4
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00 AM	**1**	0	0	1	0	0	1	1	0	**5**	0	**5**	0	0	0	0	**7**
Total Volume	1	1	0	2	0	0	2	2	0	9	0	9	0	0	0	0	13
% App. Total	50	50	0		0	0	100		0	100	0		0	0	0		
PHF	.250	.250	.000	.500	.000	.000	.500	.500	.000	.450	.000	.450	.000	.000	.000	.000	.464

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	**1**	0	**1**	0	0	**1**	**1**	0	2	0	2	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	**1**	0	0	1	0	0	1	1	0	**5**	0	**5**	0	0	0	0	
Total Volume	1	1	0	2	0	0	2	2	0	9	0	9	0	0	0	0	
% App. Total	50	50	0		0	0	100		0	100	0		0	0	0		
PHF	.250	.250	.000	.500	.000	.000	.500	.500	.000	.450	.000	.450	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Commerce Parkway Southbound					Santa Ana Street Westbound					Commerce Parkway Northbound					Santa Ana Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	1	2	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	2
08:45 AM	0	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
Total	0	1	0	0	1	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	0	4	4
Grand Total	0	1	0	0	1	0	0	2	1	2	0	3	0	0	3	0	0	0	0	0	1	6	7
Apprch %	0	100	0			0	0	100			0	100	0			0	0	0					
Total %	0	16.7	0		16.7	0	0	33.3		33.3	0	50	0		50	0	0	0		0	14.3	85.7	

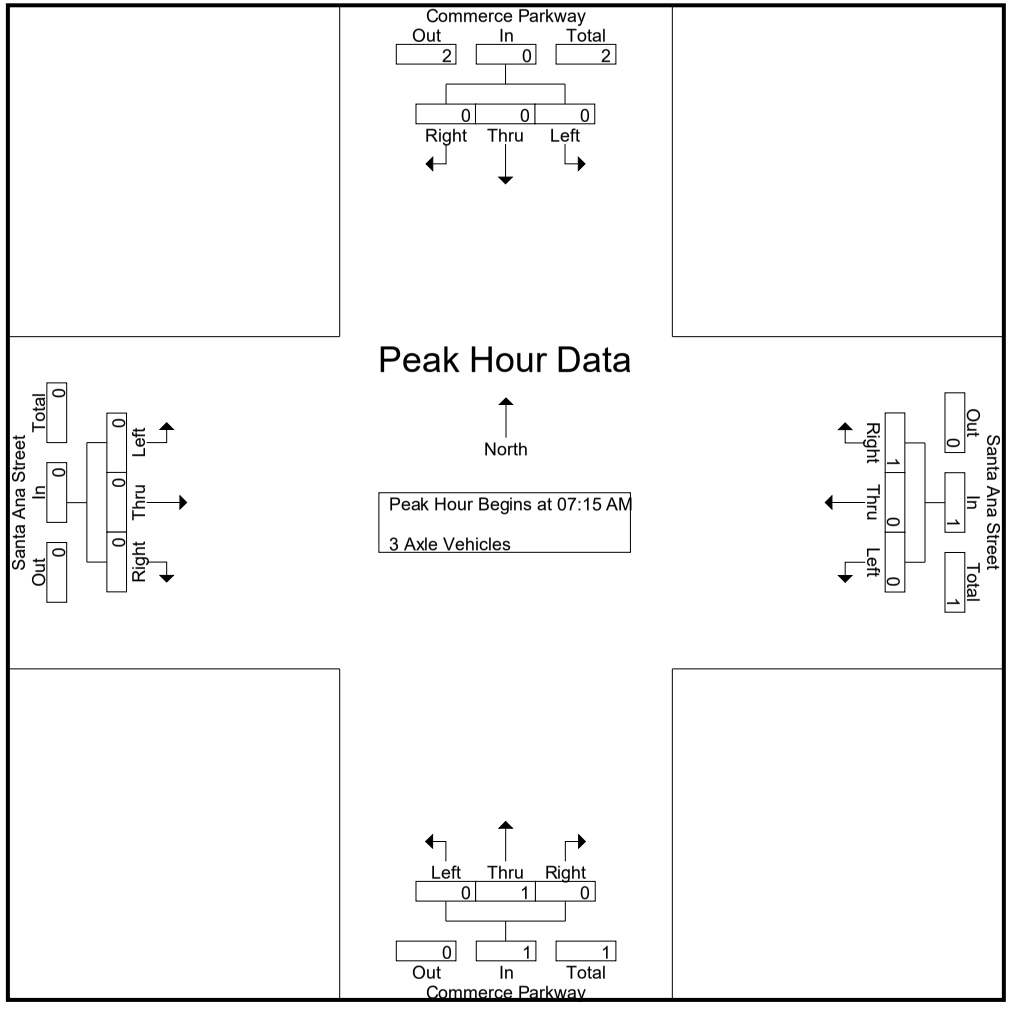
G3.1-428

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	0	0	0	**1**
07:45 AM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
% App. Total	0	0	0		0	0	100		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.000	.250	.000	.250	.000	.000	.000	.000	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	
% App. Total	0	0	0		0	0	100		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.250	.000	.250	.000	.250	.000	.000	.000	.000	

3.1-430

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Commerce Parkway Southbound					Santa Ana Street Westbound					Commerce Parkway Northbound					Santa Ana Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	2	0	0	3	0	0	1	1	1	0	1	0	0	1	0	1	0	0	1	1	6	7
07:15 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2
07:30 AM	1	1	1	0	3	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	7	7
07:45 AM	1	1	0	0	2	0	0	1	0	1	0	2	1	0	3	0	0	0	0	0	0	6	6
Total	3	5	1	0	9	0	0	2	1	2	0	8	1	0	9	0	1	0	0	1	1	21	22
08:00 AM	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2
08:15 AM	0	3	0	0	3	2	0	0	0	2	0	3	0	0	3	0	0	0	0	0	0	8	8
08:30 AM	0	0	0	0	0	1	0	0	0	1	0	3	1	1	4	0	0	0	0	0	1	5	6
08:45 AM	0	2	0	0	2	0	0	1	0	1	0	2	0	0	2	2	1	0	0	3	0	8	8
Total	1	5	0	0	6	3	0	2	0	5	0	8	1	1	9	2	1	0	0	3	1	23	24
Grand Total	4	10	1	0	15	3	0	4	1	7	0	16	2	1	18	2	2	0	0	4	2	44	46
Apprch %	26.7	66.7	6.7			42.9	0	57.1			0	88.9	11.1			50	50	0					
Total %	9.1	22.7	2.3		34.1	6.8	0	9.1		15.9	0	36.4	4.5		40.9	4.5	4.5	0		9.1	4.3	95.7	

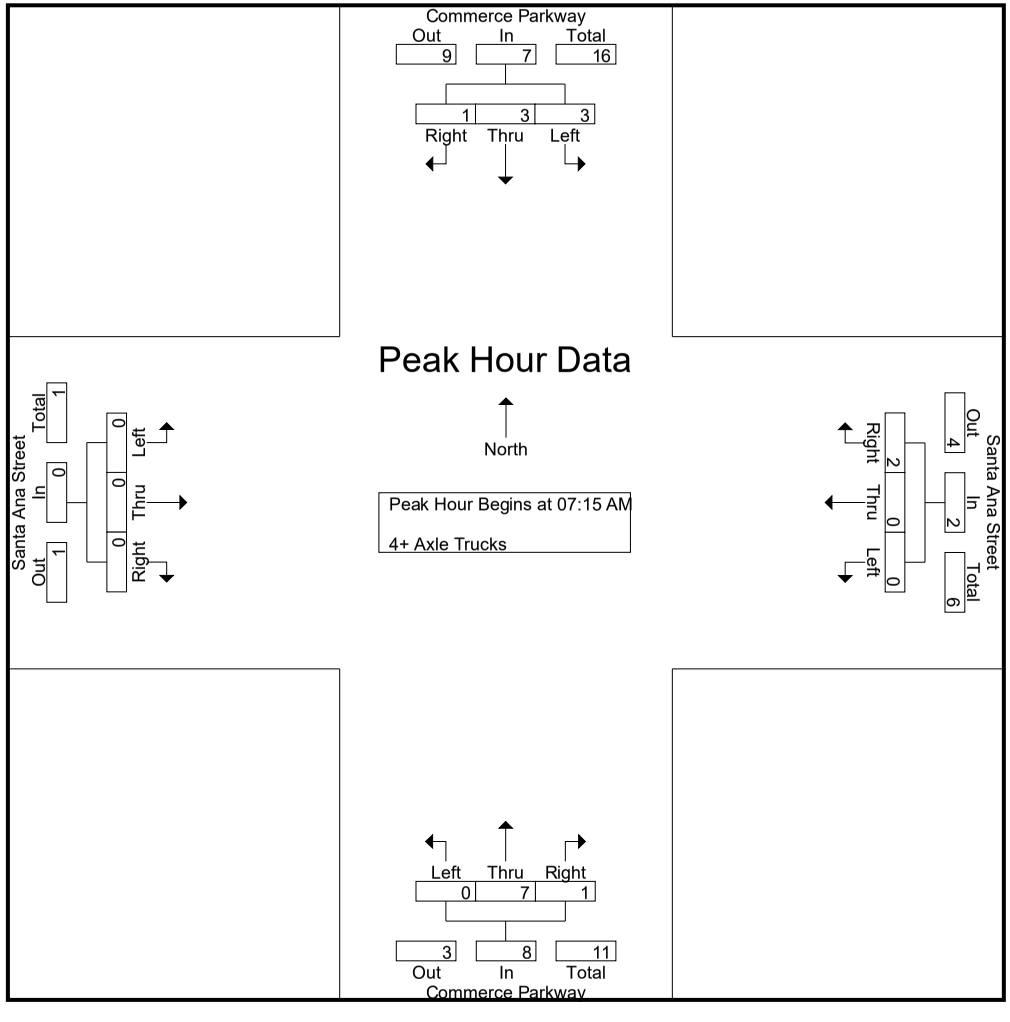
3.1-431

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	**1**	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:30 AM	**1**	1	**1**	**3**	0	0	0	0	0	**4**	0	**4**	0	0	0	0	**7**
07:45 AM	1	1	0	2	0	0	**1**	**1**	0	2	**1**	3	0	0	0	0	6
08:00 AM	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
Total Volume	3	3	1	7	0	0	2	2	0	7	1	8	0	0	0	0	17
% App. Total	42.9	42.9	14.3		0	0	100		0	87.5	12.5		0	0	0		
PHF	.750	.750	.250	.583	.000	.000	.500	.500	.000	.438	.250	.500	.000	.000	.000	.000	.607

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:15 AM				07:15 AM				07:15 AM				
+0 mins.	0	**1**	0	1	0	0	0	0	0	1	0	1	0	0	0	0	
+15 mins.	**1**	1	**1**	**3**	0	0	0	0	0	**4**	0	**4**	0	0	0	0	
+30 mins.	1	1	0	2	0	0	**1**	**1**	0	2	**1**	3	0	0	0	0	
+45 mins.	1	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	
Total Volume	3	3	1	7	0	0	2	2	0	7	1	8	0	0	0	0	
% App. Total	42.9	42.9	14.3		0	0	100		0	87.5	12.5		0	0	0		
PHF	.750	.750	.250	.583	.000	.000	.500	.500	.000	.438	.250	.500	.000	.000	.000	.000	

3.1-433

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

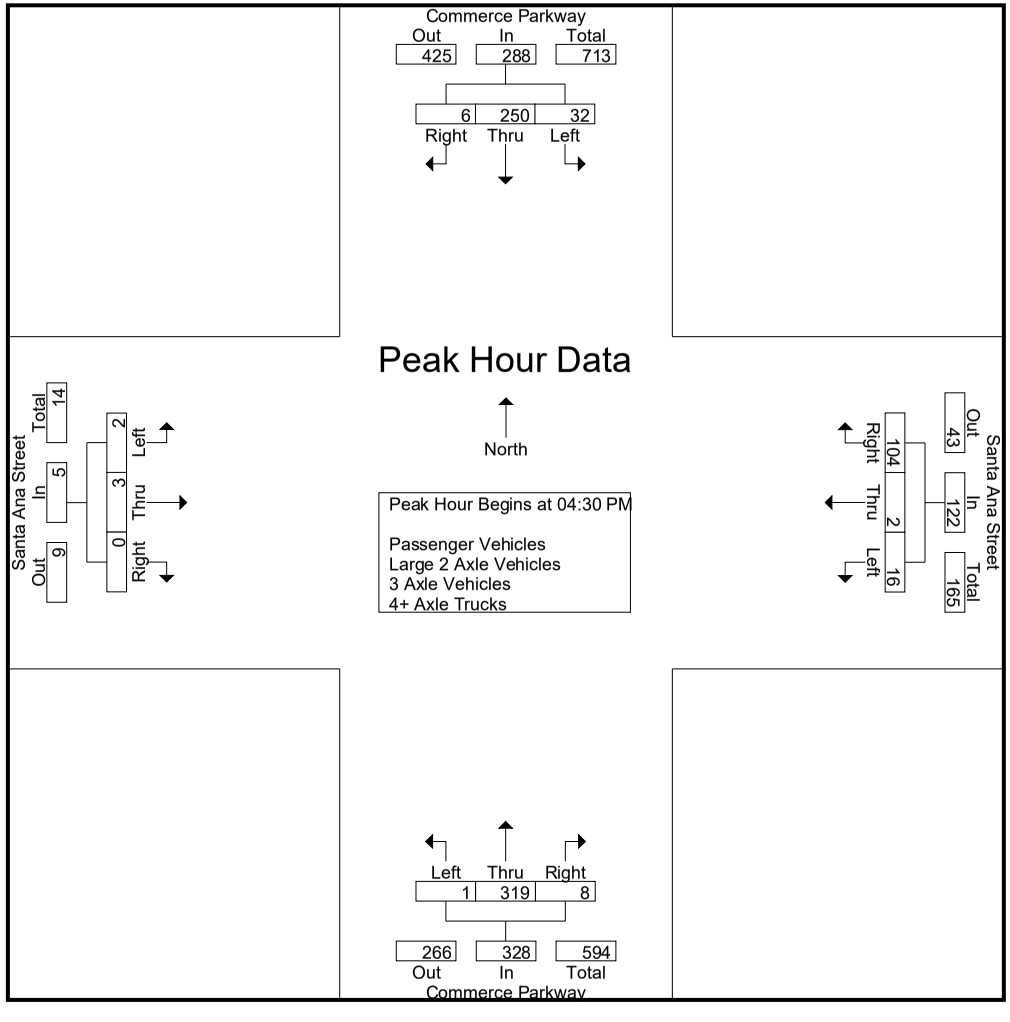
	Commerce Parkway Southbound					Santa Ana Street Westbound					Commerce Parkway Northbound					Santa Ana Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	4	42	0	0	46	5	1	34	29	40	0	69	5	2	74	0	2	0	0	2	31	162	193
04:15 PM	13	59	0	0	72	4	2	28	24	34	0	68	1	0	69	0	1	0	0	1	24	176	200
04:30 PM	8	60	0	0	68	4	1	37	31	42	0	88	1	0	89	2	1	0	0	3	31	202	233
04:45 PM	9	55	0	0	64	3	0	23	22	26	1	70	1	0	72	0	0	0	0	0	22	162	184
Total	34	216	0	0	250	16	4	122	106	142	1	295	8	2	304	2	4	0	0	6	108	702	810
05:00 PM	9	69	3	0	81	6	0	22	21	28	0	85	2	0	87	0	2	0	0	2	21	198	219
05:15 PM	6	66	3	0	75	3	1	22	18	26	0	76	4	1	80	0	0	0	0	0	19	181	200
05:30 PM	8	91	4	0	103	6	1	23	20	30	0	58	3	0	61	2	0	0	0	2	20	196	216
05:45 PM	12	47	0	0	59	5	1	16	13	22	1	42	3	1	46	0	1	0	0	1	14	128	142
Total	35	273	10	0	318	20	3	83	72	106	1	261	12	2	274	2	3	0	0	5	74	703	777
Grand Total	69	489	10	0	568	36	7	205	178	248	2	556	20	4	578	4	7	0	0	11	182	1405	1587
Apprch %	12.1	86.1	1.8			14.5	2.8	82.7			0.3	96.2	3.5			36.4	63.6	0					
Total %	4.9	34.8	0.7		40.4	2.6	0.5	14.6		17.7	0.1	39.6	1.4		41.1	0.3	0.5	0		0.8	11.5	88.5	
Passenger Vehicles	56	457	2		515	26	6	193		396	0	493	10		506	3	4	0		7	0	0	1424
% Passenger Vehicles	81.2	93.5	20	0	90.7	72.2	85.7	94.1	96.1	93	0	88.7	50	75	86.9	75	57.1	0	0	63.6	0	0	89.7
Large 2 Axle Vehicles	6	12	0		18	4	1	7		17	0	21	1		22	0	0	0		0	0	0	57
% Large 2 Axle Vehicles	8.7	2.5	0	0	3.2	11.1	14.3	3.4	2.8	4	0	3.8	5	0	3.8	0	0	0	0	0	0	0	3.6
3 Axle Vehicles	0	6	1		7	2	0	0		2	0	20	4		25	0	0	0		0	0	0	34
% 3 Axle Vehicles	0	1.2	10	0	1.2	5.6	0	0	0	0.5	0	3.6	20	25	4.3	0	0	0	0	0	0	0	2.1
4+ Axle Trucks	7	14	7		28	4	0	5		11	2	22	5		29	1	3	0		4	0	0	72
% 4+ Axle Trucks	10.1	2.9	70	0	4.9	11.1	0	2.4	1.1	2.6	100	4	25	0	5	25	42.9	0	0	36.4	0	0	4.5

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	8	60	0	68	4	**1**	**37**	**42**	0	**88**	1	**89**	**2**	1	0	**3**	**202**
04:45 PM	**9**	55	0	64	3	0	23	26	**1**	70	1	72	0	0	0	0	162
05:00 PM	9	**69**	**3**	**81**	**6**	0	22	28	0	85	2	87	0	**2**	0	2	198
05:15 PM	6	66	3	75	3	1	22	26	0	76	**4**	80	0	0	0	0	181
Total Volume	32	250	6	288	16	2	104	122	1	319	8	328	2	3	0	5	743
% App. Total	11.1	86.8	2.1		13.1	1.6	85.2		0.3	97.3	2.4		40	60	0		
PHF	.889	.906	.500	.889	.667	.500	.703	.726	.250	.906	.500	.921	.250	.375	.000	.417	.920

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:00 PM				04:30 PM				04:00 PM				
+0 mins.	**9**	55	0	64	**5**	1	34	40	0	**88**	1	**89**	0	**2**	0	2	
+15 mins.	9	69	3	81	4	**2**	28	34	**1**	70	1	72	0	1	0	1	
+30 mins.	6	66	3	75	4	1	**37**	**42**	0	85	2	87	**2**	1	0	**3**	
+45 mins.	8	**91**	**4**	**103**	3	0	23	26	0	76	**4**	80	0	0	0	0	
Total Volume	32	281	10	323	16	4	122	142	1	319	8	328	2	4	0	6	
% App. Total	9.9	87	3.1		11.3	2.8	85.9		0.3	97.3	2.4		33.3	66.7	0		
PHF	.889	.772	.625	.784	.800	.500	.824	.845	.250	.906	.500	.921	.250	.500	.000	.500	

3.1-436

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

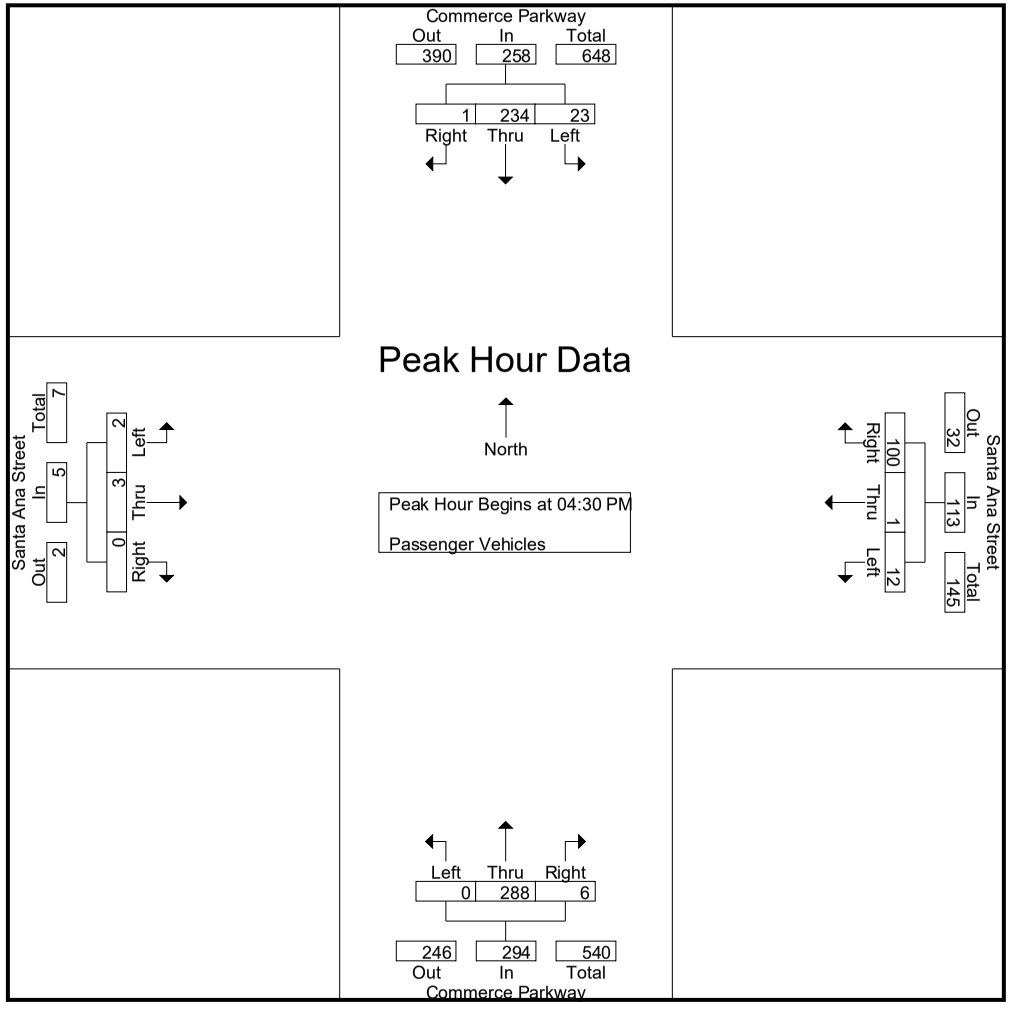
	Commerce Parkway Southbound					Santa Ana Street Westbound					Commerce Parkway Northbound					Santa Ana Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	4	41	0	0	45	1	1	32	28	34	0	59	1	1	60	0	0	0	0	0	29	139	168
04:15 PM	13	57	0	0	70	2	2	27	23	31	0	62	1	0	63	0	0	0	0	0	23	164	187
04:30 PM	8	55	0	0	63	3	0	35	30	38	0	77	1	0	78	2	1	0	0	3	30	182	212
04:45 PM	5	52	0	0	57	2	0	22	21	24	0	65	1	0	66	0	0	0	0	0	21	147	168
Total	30	205	0	0	235	8	3	116	102	127	0	263	4	1	267	2	1	0	0	3	103	632	735
05:00 PM	7	64	1	0	72	4	0	22	21	26	0	79	1	0	80	0	2	0	0	2	21	180	201
05:15 PM	3	63	0	0	66	3	1	21	17	25	0	67	3	1	70	0	0	0	0	0	18	161	179
05:30 PM	5	86	1	0	92	6	1	22	20	29	0	48	1	0	49	1	0	0	0	1	20	171	191
05:45 PM	11	39	0	0	50	5	1	12	11	18	0	36	1	1	37	0	1	0	0	1	12	106	118
Total	26	252	2	0	280	18	3	77	69	98	0	230	6	2	236	1	3	0	0	4	71	618	689
Grand Total	56	457	2	0	515	26	6	193	171	225	0	493	10	3	503	3	4	0	0	7	174	1250	1424
Apprch %	10.9	88.7	0.4			11.6	2.7	85.8			0	98	2			42.9	57.1	0					
Total %	4.5	36.6	0.2		41.2	2.1	0.5	15.4		18	0	39.4	0.8		40.2	0.2	0.3	0		0.6	12.2	87.8	

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**8**	55	0	63	3	0	**35**	**38**	0	77	1	78	**2**	1	0	**3**	**182**
04:45 PM	5	52	0	57	2	0	22	24	0	65	1	66	0	0	0	0	147
05:00 PM	7	**64**	**1**	**72**	**4**	0	22	26	0	**79**	1	**80**	0	**2**	0	2	180
05:15 PM	3	63	0	66	3	**1**	21	25	0	67	**3**	70	0	0	0	0	161
Total Volume	23	234	1	258	12	1	100	113	0	288	6	294	2	3	0	5	670
% App. Total	8.9	90.7	0.4		10.6	0.9	88.5		0	98	2		40	60	0		
PHF	.719	.914	.250	.896	.750	.250	.714	.743	.000	.911	.500	.919	.250	.375	.000	.417	.920

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**8**	55	0	63	3	0	**35**	**38**	0	77	1	78	**2**	1	0	**3**	
+15 mins.	5	52	0	57	2	0	22	24	0	65	1	66	0	0	0	0	
+30 mins.	7	**64**	**1**	**72**	**4**	0	22	26	0	**79**	1	**80**	0	**2**	0	2	
+45 mins.	3	63	0	66	3	**1**	21	25	0	67	**3**	70	0	0	0	0	
Total Volume	23	234	1	258	12	1	100	113	0	288	6	294	2	3	0	5	
% App. Total	8.9	90.7	0.4		10.6	0.9	88.5		0	98	2		40	60	0		
PHF	.719	.914	.250	.896	.750	.250	.714	.743	.000	.911	.500	.919	.250	.375	.000	.417	

3.1-439

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

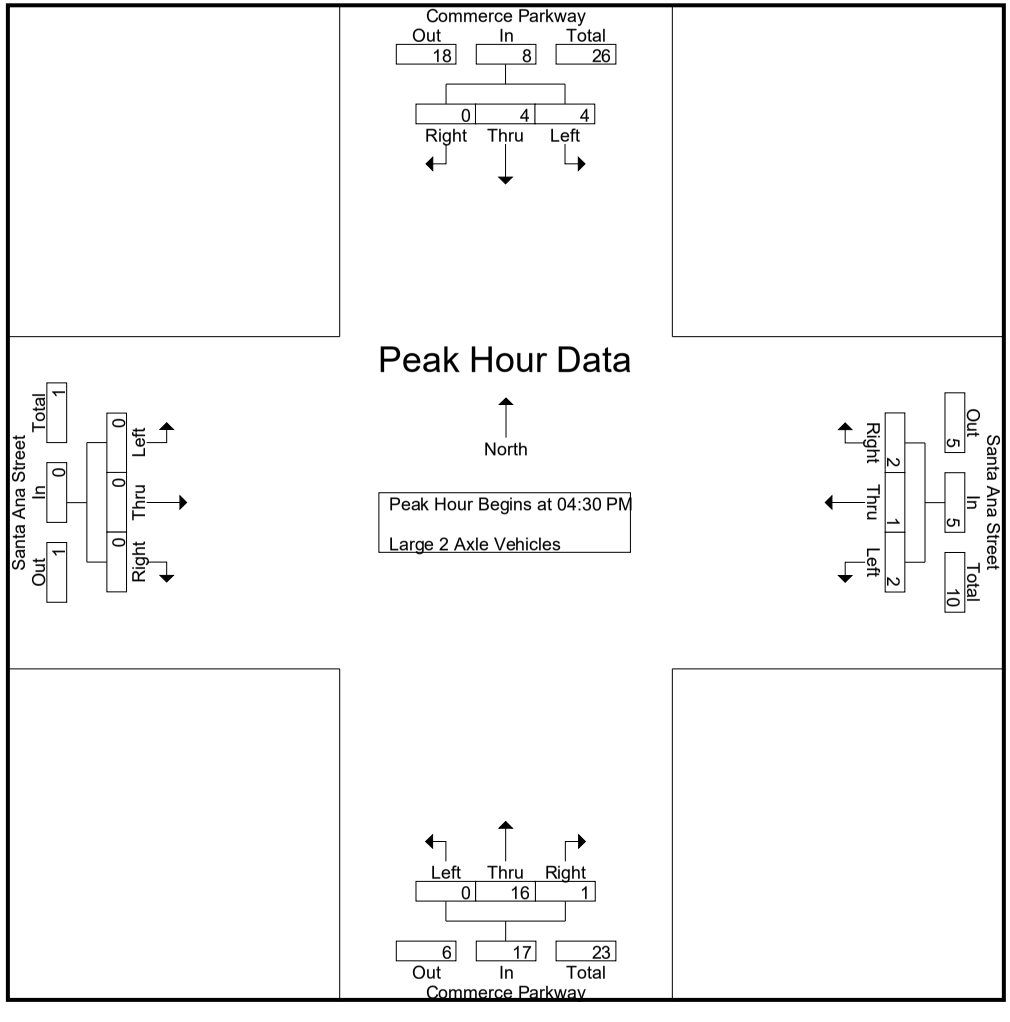
	Commerce Parkway Southbound					Santa Ana Street Westbound					Commerce Parkway Northbound					Santa Ana Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	1	0	0	1	2	0	1	1	3	0	2	0	0	2	0	0	0	0	0	1	6	7
04:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:30 PM	0	2	0	0	2	1	1	1	1	3	0	5	0	0	5	0	0	0	0	0	1	10	11
04:45 PM	2	1	0	0	3	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	1	4	5
Total	2	5	0	0	7	3	1	3	3	7	0	7	0	0	7	0	0	0	0	0	3	21	24
05:00 PM	0	1	0	0	1	1	0	0	0	1	0	4	0	0	4	0	0	0	0	0	0	6	6
05:15 PM	2	0	0	0	2	0	0	0	0	0	0	7	1	0	8	0	0	0	0	0	0	10	10
05:30 PM	1	2	0	0	3	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	5	5
05:45 PM	1	4	0	0	5	0	0	3	2	3	0	2	0	0	2	0	0	0	0	0	2	10	12
Total	4	7	0	0	11	1	0	4	2	5	0	14	1	0	15	0	0	0	0	0	2	31	33
Grand Total	6	12	0	0	18	4	1	7	5	12	0	21	1	0	22	0	0	0	0	0	5	52	57
Apprch %	33.3	66.7	0			33.3	8.3	58.3			0	95.5	4.5			0	0	0					
Total %	11.5	23.1	0		34.6	7.7	1.9	13.5		23.1	0	40.4	1.9		42.3	0	0	0		0	8.8	91.2	

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**2**	0	2	**1**	**1**	**1**	**3**	0	5	0	5	0	0	0	0	**10**
04:45 PM	**2**	1	0	**3**	0	0	1	1	0	0	0	0	0	0	0	0	4
05:00 PM	0	1	0	1	1	0	0	1	0	4	0	4	0	0	0	0	6
05:15 PM	2	0	0	2	0	0	0	0	0	**7**	**1**	**8**	0	0	0	0	10
Total Volume	4	4	0	8	2	1	2	5	0	16	1	17	0	0	0	0	30
% App. Total	50	50	0		40	20	40		0	94.1	5.9		0	0	0		
PHF	.500	.500	.000	.667	.500	.250	.500	.417	.000	.571	.250	.531	.000	.000	.000	.000	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**2**	0	2	**1**	**1**	**1**	**3**	0	5	0	5	0	0	0	0	
+15 mins.	**2**	1	0	**3**	0	0	1	1	0	0	0	0	0	0	0	0	
+30 mins.	0	1	0	1	1	0	0	1	0	4	0	4	0	0	0	0	
+45 mins.	2	0	0	2	0	0	0	0	0	**7**	**1**	**8**	0	0	0	0	
Total Volume	4	4	0	8	2	1	2	5	0	16	1	17	0	0	0	0	
% App. Total	50	50	0		40	20	40		0	94.1	5.9		0	0	0		
PHF	.500	.500	.000	.667	.500	.250	.500	.417	.000	.571	.250	.531	.000	.000	.000	.000	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

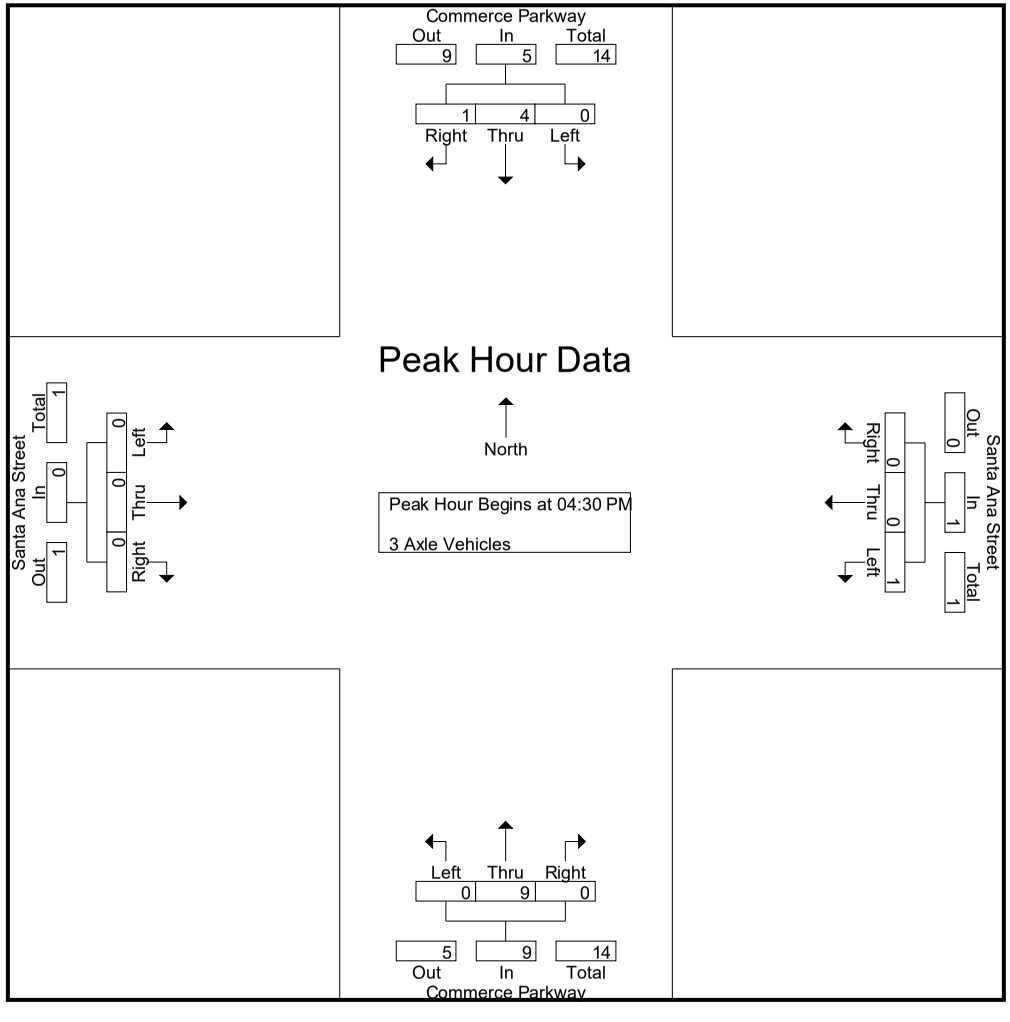
	Commerce Parkway Southbound					Santa Ana Street Westbound					Commerce Parkway Northbound					Santa Ana Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	0	0	1	0	3	2	1	5	0	0	0	0	0	1	6	7
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	2	0	0	2	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	7	7
04:45 PM	0	0	0	0	0	1	0	0	0	1	0	3	0	0	3	0	0	0	0	0	0	4	4
Total	0	2	0	0	2	2	0	0	0	2	0	11	2	1	13	0	0	0	0	0	1	17	18
05:00 PM	0	2	1	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	4	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	7	7
05:45 PM	0	1	0	0	1	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	0	5	5
Total	0	4	1	0	5	0	0	0	0	0	0	9	2	0	11	0	0	0	0	0	0	16	16
Grand Total	0	6	1	0	7	2	0	0	0	2	0	20	4	1	24	0	0	0	0	0	1	33	34
Apprch %	0	85.7	14.3			100	0	0			0	83.3	16.7			0	0	0					
Total %	0	18.2	3		21.2	6.1	0	0		6.1	0	60.6	12.1		72.7	0	0	0		0	2.9	97.1	

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	**2**	0	2	0	0	0	0	0	**5**	0	**5**	0	0	0	0	**7**
04:45 PM	0	0	0	0	**1**	0	0	**1**	0	3	0	3	0	0	0	0	4
05:00 PM	0	2	**1**	**3**	0	0	0	0	0	1	0	1	0	0	0	0	4
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	4	1	5	1	0	0	1	0	9	0	9	0	0	0	0	15
% App. Total	0	80	20		100	0	0		0	100	0		0	0	0		
PHF	.000	.500	.250	.417	.250	.000	.000	.250	.000	.450	.000	.450	.000	.000	.000	.000	.536

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	**2**	0	2	0	0	0	0	0	**5**	0	**5**	0	0	0	0	
+15 mins.	0	0	0	0	**1**	0	0	**1**	0	3	0	3	0	0	0	0	
+30 mins.	0	2	**1**	**3**	0	0	0	0	0	1	0	1	0	0	0	0	
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	4	1	5	1	0	0	1	0	9	0	9	0	0	0	0	
% App. Total	0	80	20		100	0	0		0	100	0		0	0	0		
PHF	.000	.500	.250	.417	.250	.000	.000	.250	.000	.450	.000	.450	.000	.000	.000	.000	

3.1-445

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

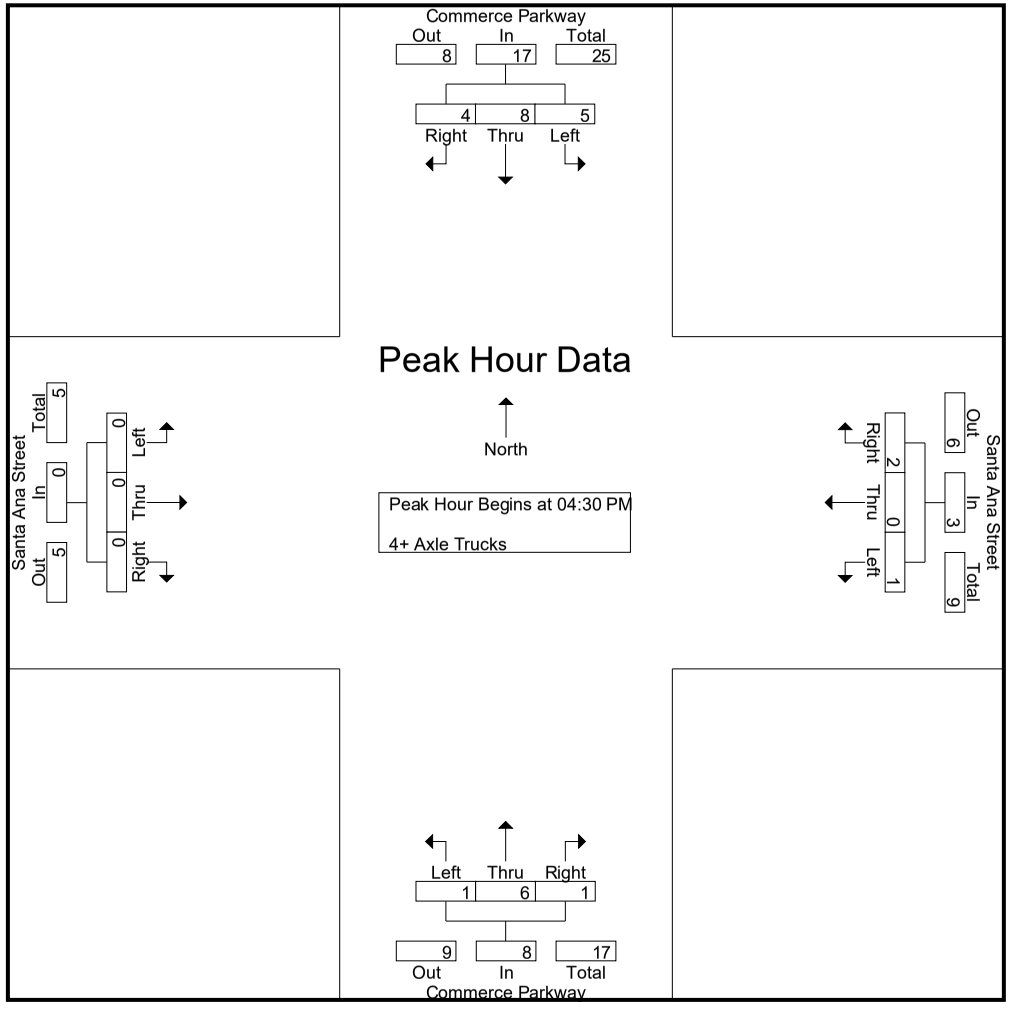
	Commerce Parkway Southbound					Santa Ana Street Westbound					Commerce Parkway Northbound					Santa Ana Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	2	0	5	2	0	7	0	2	0	0	2	0	11	11
04:15 PM	0	1	0	0	1	2	0	1	1	3	0	6	0	0	6	0	1	0	0	1	1	11	12
04:30 PM	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	3	3
04:45 PM	2	2	0	0	4	0	0	0	0	0	1	2	0	0	3	0	0	0	0	0	0	7	7
Total	2	4	0	0	6	3	0	3	1	6	1	14	2	0	17	0	3	0	0	3	1	32	33
05:00 PM	2	2	1	0	5	1	0	0	0	1	0	1	1	0	2	0	0	0	0	0	0	8	8
05:15 PM	1	3	3	0	7	0	0	1	1	1	0	2	0	0	2	0	0	0	0	0	1	10	11
05:30 PM	2	2	3	0	7	0	0	0	0	0	0	3	2	0	5	1	0	0	0	1	0	13	13
05:45 PM	0	3	0	0	3	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0	0	7	7
Total	5	10	7	0	22	1	0	2	1	3	1	8	3	0	12	1	0	0	0	1	1	38	39
Grand Total	7	14	7	0	28	4	0	5	2	9	2	22	5	0	29	1	3	0	0	4	2	70	72
Apprch %	25	50	25			44.4	0	55.6			6.9	75.9	17.2			25	75	0					
Total %	10	20	10		40	5.7	0	7.1		12.9	2.9	31.4	7.1		41.4	1.4	4.3	0		5.7	2.8	97.2	

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	1	0	1	0	0	**1**	**1**	0	1	0	1	0	0	0	0	3
04:45 PM	**2**	2	0	4	0	0	0	0	**1**	**2**	0	**3**	0	0	0	0	7
05:00 PM	2	2	1	5	**1**	0	0	1	0	1	**1**	2	0	0	0	0	8
05:15 PM	1	**3**	**3**	**7**	0	0	1	1	0	2	0	2	0	0	0	0	**10**
Total Volume	5	8	4	17	1	0	2	3	1	6	1	8	0	0	0	0	28
% App. Total	29.4	47.1	23.5		33.3	0	66.7		12.5	75	12.5		0	0	0		
PHF	.625	.667	.333	.607	.250	.000	.500	.750	.250	.750	.250	.667	.000	.000	.000	.000	.700

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street
Weather: Clear

File Name : 15_ONT_Com_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Santa Ana Street Westbound				Commerce Parkway Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	0	1	0	1	0	0	**1**	**1**	0	1	0	1	0	0	0	0	
+15 mins.	**2**	2	0	4	0	0	0	0	**1**	**2**	0	**3**	0	0	0	0	
+30 mins.	2	2	1	5	**1**	0	0	1	0	1	**1**	2	0	0	0	0	
+45 mins.	1	**3**	**3**	**7**	0	0	1	1	0	2	0	2	0	0	0	0	
Total Volume	5	8	4	17	1	0	2	3	1	6	1	8	0	0	0	0	
% App. Total	29.4	47.1	23.5		33.3	0	66.7		12.5	75	12.5		0	0	0		
PHF	.625	.667	.333	.607	.250	.000	.500	.750	.250	.750	.250	.667	.000	.000	.000	.000	

Location: Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Commerce Parkway	East Leg Santa Ana Street	South Leg Commerce Parkway	West Leg Santa Ana Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Commerce Parkway	East Leg Santa Ana Street	South Leg Commerce Parkway	West Leg Santa Ana Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Ontario
N/S: Commerce Parkway
E/W: Santa Ana Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Commerce Parkway			Westbound Santa Ana Street			Northbound Commerce Parkway			Eastbound Santa Ana Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	1	0	1

	Southbound Commerce Parkway			Westbound Santa Ana Street			Northbound Commerce Parkway			Eastbound Santa Ana Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

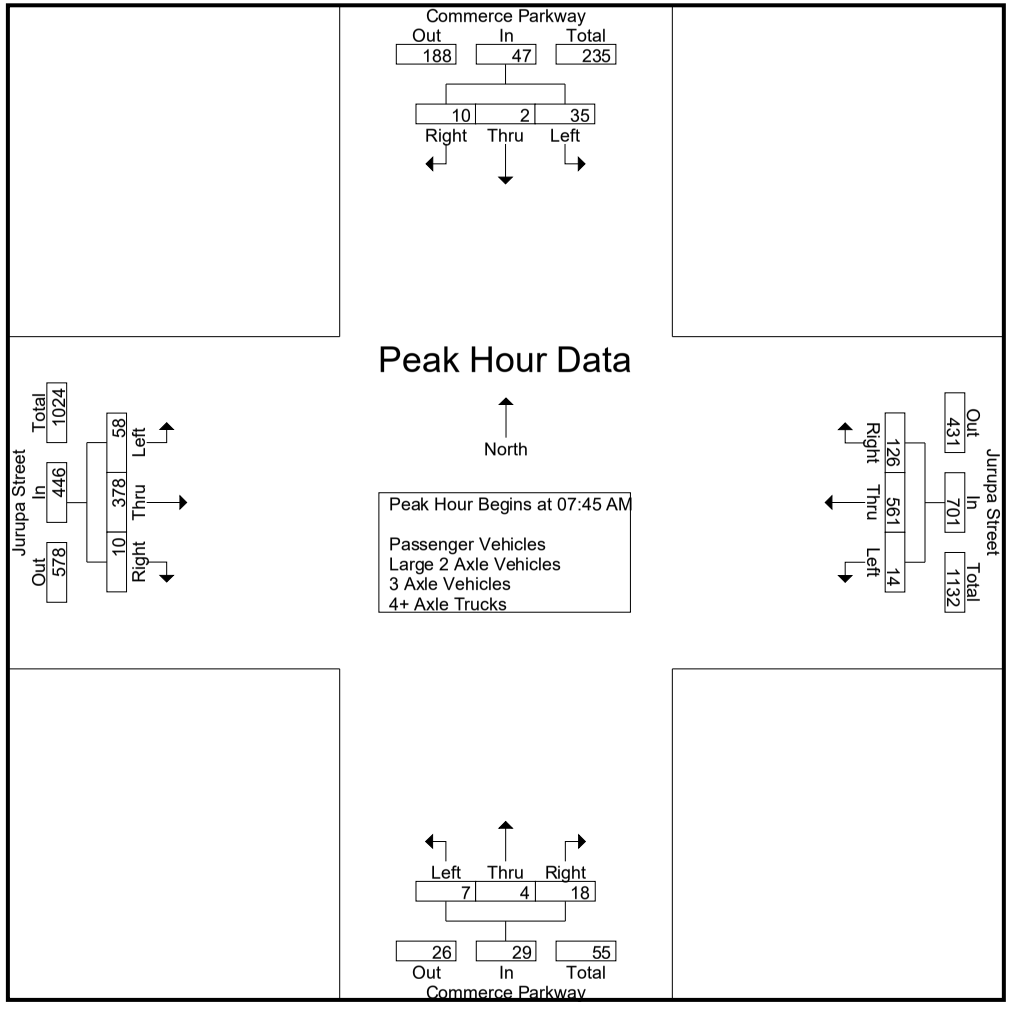
	Commerce Parkway Southbound					Jurupa Street Westbound					Commerce Parkway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	16	0	1	1	17	14	142	37	2	193	1	0	2	1	3	8	98	0	0	106	4	319	323
07:15 AM	13	3	2	2	18	8	115	31	0	154	2	2	3	1	7	12	67	0	0	79	3	258	261
07:30 AM	13	0	0	0	13	5	136	37	0	178	0	1	1	1	2	10	96	0	0	106	1	299	300
07:45 AM	9	0	2	0	11	1	111	30	0	142	1	3	6	3	10	19	101	0	0	120	3	283	286
Total	51	3	5	3	59	28	504	135	2	667	4	6	12	6	22	49	362	0	0	411	11	1159	1170
08:00 AM	9	0	1	1	10	4	148	37	0	189	1	1	2	1	4	7	91	3	1	101	3	304	307
08:15 AM	7	1	3	3	11	3	151	33	0	187	3	0	5	2	8	10	84	3	0	97	5	303	308
08:30 AM	10	1	4	2	15	6	151	26	0	183	2	0	5	4	7	22	102	4	0	128	6	333	339
08:45 AM	9	2	4	1	15	5	99	32	0	136	1	3	2	2	6	12	96	5	2	113	5	270	275
Total	35	4	12	7	51	18	549	128	0	695	7	4	14	9	25	51	373	15	3	439	19	1210	1229
Grand Total	86	7	17	10	110	46	1053	263	2	1362	11	10	26	15	47	100	735	15	3	850	30	2369	2399
Apprch %	78.2	6.4	15.5			3.4	77.3	19.3			23.4	21.3	55.3			11.8	86.5	1.8					
Total %	3.6	0.3	0.7		4.6	1.9	44.4	11.1		57.5	0.5	0.4	1.1		2	4.2	31	0.6		35.9	1.3	98.7	
Passenger Vehicles	78	6	11		102	37	924	238		1201	4	9	13		34	92	575	12		682	0	0	2019
% Passenger Vehicles	90.7	85.7	64.7	70	85	80.4	87.7	90.5	100	88	36.4	90	50	53.3	54.8	92	78.2	80	100	80	0	0	84.2
Large 2 Axle Vehicles	0	0	1		2	0	37	13		50	2	1	4		9	0	58	2		60	0	0	121
% Large 2 Axle Vehicles	0	0	5.9	10	1.7	0	3.5	4.9	0	3.7	18.2	10	15.4	13.3	14.5	0	7.9	13.3	0	7	0	0	5
3 Axle Vehicles	1	0	0		1	1	13	1		15	1	0	1		3	0	21	0		21	0	0	40
% 3 Axle Vehicles	1.2	0	0	0	0.8	2.2	1.2	0.4	0	1.1	9.1	0	3.8	6.7	4.8	0	2.9	0	0	2.5	0	0	1.7
4+ Axle Trucks	7	1	5		15	8	79	11		98	4	0	8		16	8	81	1		90	0	0	219
% 4+ Axle Trucks	8.1	14.3	29.4	20	12.5	17.4	7.5	4.2	0	7.2	36.4	0	30.8	26.7	25.8	8	11	6.7	0	10.6	0	0	9.1

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	9	0	2	11	1	111	30	142	1	**3**	**6**	**10**	19	101	0	120	283
08:00 AM	9	0	1	10	4	148	**37**	**189**	1	1	2	4	7	91	3	101	304
08:15 AM	7	**1**	3	11	3	**151**	33	187	**3**	0	5	8	10	84	3	97	303
08:30 AM	**10**	1	**4**	**15**	**6**	151	26	183	2	0	5	7	**22**	**102**	**4**	**128**	**333**
Total Volume	35	2	10	47	14	561	126	701	7	4	18	29	58	378	10	446	1223
% App. Total	74.5	4.3	21.3		2	80	18		24.1	13.8	62.1		13	84.8	2.2		
PHF	.875	.500	.625	.783	.583	.929	.851	.927	.583	.333	.750	.725	.659	.926	.625	.871	.918

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-452

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	**16**	0	1	17	1	111	30	142	1	**3**	**6**	**10**	19	101	0	120	
+15 mins.	13	**3**	**2**	**18**	4	148	**37**	**189**	1	1	2	4	7	91	3	101	
+30 mins.	13	0	0	13	3	**151**	33	187	**3**	0	5	8	10	84	3	97	
+45 mins.	9	0	2	11	**6**	151	26	183	2	0	5	7	**22**	**102**	**4**	**128**	
Total Volume	51	3	5	59	14	561	126	701	7	4	18	29	58	378	10	446	
% App. Total	86.4	5.1	8.5		2	80	18		24.1	13.8	62.1		13	84.8	2.2		
PHF	.797	.250	.625	.819	.583	.929	.851	.927	.583	.333	.750	.725	.659	.926	.625	.871	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

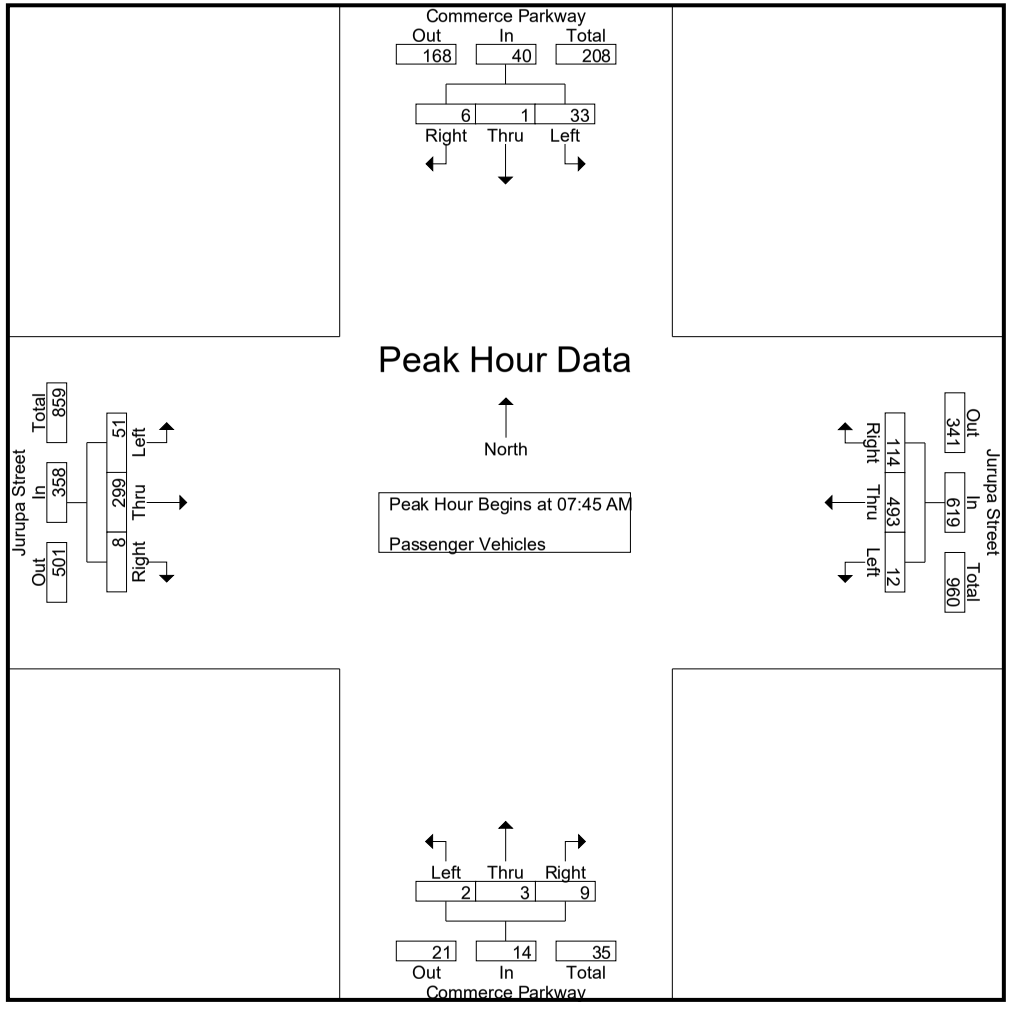
	Commerce Parkway Southbound					Jurupa Street Westbound					Commerce Parkway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	14	0	1	1	15	12	124	34	2	170	1	0	2	1	3	8	78	0	0	86	4	274	278
07:15 AM	12	3	2	2	17	6	103	28	0	137	0	2	1	0	3	12	57	0	0	69	2	226	228
07:30 AM	12	0	0	0	12	4	127	33	0	164	0	1	0	0	1	9	84	0	0	93	0	270	270
07:45 AM	9	0	1	0	10	1	96	27	0	124	1	3	4	2	8	17	83	0	0	100	2	242	244
Total	47	3	4	3	54	23	450	122	2	595	2	6	7	3	15	46	302	0	0	348	8	1012	1020
08:00 AM	9	0	1	1	10	3	133	33	0	169	0	0	0	0	0	7	68	3	1	78	2	257	259
08:15 AM	5	1	1	1	7	2	130	30	0	162	1	0	2	1	3	9	62	2	0	73	2	245	247
08:30 AM	10	0	3	2	13	6	134	24	0	164	0	0	3	3	3	18	86	3	0	107	5	287	292
08:45 AM	7	2	2	0	11	3	77	29	0	109	1	3	1	1	5	12	57	4	2	73	3	198	201
Total	31	3	7	4	41	14	474	116	0	604	2	3	6	5	11	46	273	12	3	331	12	987	999
Grand Total	78	6	11	7	95	37	924	238	2	1199	4	9	13	8	26	92	575	12	3	679	20	1999	2019
Apprch %	82.1	6.3	11.6			3.1	77.1	19.8			15.4	34.6	50			13.5	84.7	1.8					
Total %	3.9	0.3	0.6		4.8	1.9	46.2	11.9		60	0.2	0.5	0.7		1.3	4.6	28.8	0.6		34	1	99	

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	9	0	1	10	1	96	27	124	**1**	**3**	**4**	**8**	17	83	0	100	242
08:00 AM	9	0	1	10	3	133	**33**	**169**	0	0	0	0	7	68	**3**	78	257
08:15 AM	5	**1**	1	7	2	130	30	162	1	0	2	3	9	62	2	73	245
08:30 AM	**10**	0	**3**	**13**	**6**	**134**	24	164	0	0	3	3	**18**	**86**	3	**107**	**287**
Total Volume	33	1	6	40	12	493	114	619	2	3	9	14	51	299	8	358	1031
% App. Total	82.5	2.5	15		1.9	79.6	18.4		14.3	21.4	64.3		14.2	83.5	2.2		
PHF	.825	.250	.500	.769	.500	.920	.864	.916	.500	.250	.563	.438	.708	.869	.667	.836	.898

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	9	0	1	10	1	96	27	124	**1**	**3**	**4**	**8**	17	83	0	100	
+15 mins.	9	0	1	10	3	133	**33**	**169**	0	0	0	0	7	68	**3**	78	
+30 mins.	5	**1**	1	7	2	130	30	162	1	0	2	3	9	62	2	73	
+45 mins.	**10**	0	**3**	**13**	**6**	**134**	24	164	0	0	3	3	**18**	**86**	3	**107**	
Total Volume	33	1	6	40	12	493	114	619	2	3	9	14	51	299	8	358	
% App. Total	82.5	2.5	15		1.9	79.6	18.4		14.3	21.4	64.3		14.2	83.5	2.2		
PHF	.825	.250	.500	.769	.500	.920	.864	.916	.500	.250	.563	.438	.708	.869	.667	.836	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

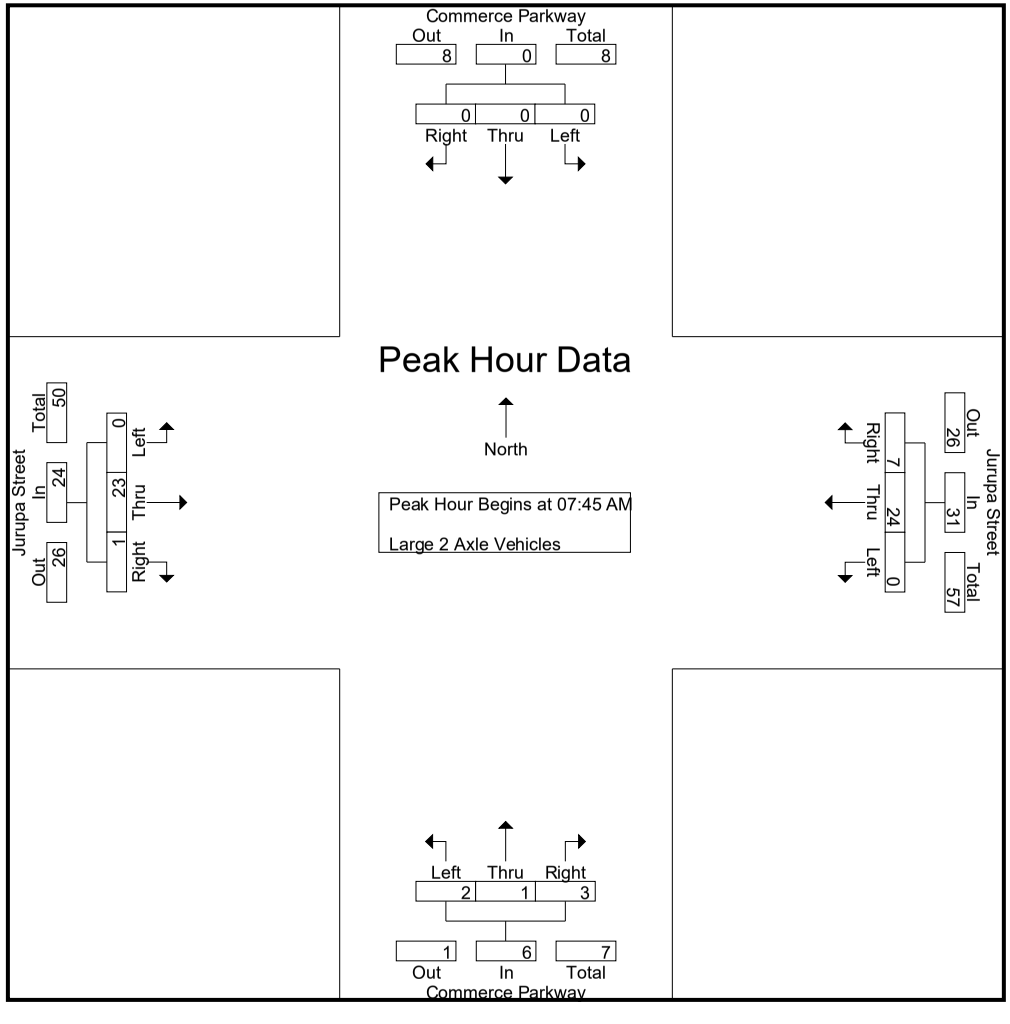
	Commerce Parkway Southbound					Jurupa Street Westbound					Commerce Parkway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	4	2	0	6	0	0	0	0	0	0	6	0	0	6	0	12	12
07:15 AM	0	0	0	0	0	0	2	2	0	4	0	0	0	0	0	0	3	0	0	3	0	7	7
07:30 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	0	0	1	0	3	3
07:45 AM	0	0	0	0	0	0	6	2	0	8	0	0	0	0	0	0	7	0	0	7	0	15	15
Total	0	0	0	0	0	0	13	7	0	20	0	0	0	0	0	0	17	0	0	17	0	37	37
08:00 AM	0	0	0	0	0	0	6	4	0	10	0	1	2	1	3	0	6	0	0	6	1	19	20
08:15 AM	0	0	0	0	0	0	6	0	0	6	1	0	1	0	2	0	8	1	0	9	0	17	17
08:30 AM	0	0	0	0	0	0	6	1	0	7	1	0	0	0	1	0	2	0	0	2	0	10	10
08:45 AM	0	0	1	1	1	0	6	1	0	7	0	0	1	1	1	0	25	1	0	26	2	35	37
Total	0	0	1	1	1	0	24	6	0	30	2	1	4	2	7	0	41	2	0	43	3	81	84
Grand Total	0	0	1	1	1	0	37	13	0	50	2	1	4	2	7	0	58	2	0	60	3	118	121
Apprch %	0	0	100			0	74	26			28.6	14.3	57.1			0	96.7	3.3					
Total %	0	0	0.8		0.8	0	31.4	11		42.4	1.7	0.8	3.4		5.9	0	49.2	1.7		50.8	2.5	97.5	

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	**6**	2	8	0	0	0	0	0	7	0	7	15
08:00 AM	0	0	0	0	0	6	**4**	**10**	0	**1**	**2**	**3**	0	6	0	6	**19**
08:15 AM	0	0	0	0	0	6	0	6	**1**	0	1	2	0	**8**	**1**	**9**	17
08:30 AM	0	0	0	0	0	6	1	7	1	0	0	1	0	2	0	2	10
Total Volume	0	0	0	0	0	24	7	31	2	1	3	6	0	23	1	24	61
% App. Total	0	0	0		0	77.4	22.6		33.3	16.7	50		0	95.8	4.2		
PHF	.000	.000	.000	.000	.000	1.00	.438	.775	.500	.250	.375	.500	.000	.719	.250	.667	.803

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	**6**	2	8	0	0	0	0	0	7	0	7	
+15 mins.	0	0	0	0	0	6	**4**	**10**	0	**1**	**2**	**3**	0	6	0	6	
+30 mins.	0	0	0	0	0	6	0	6	**1**	0	1	2	0	**8**	**1**	**9**	
+45 mins.	0	0	0	0	0	6	1	7	1	0	0	1	0	2	0	2	
Total Volume	0	0	0	0	0	24	7	31	2	1	3	6	0	23	1	24	
% App. Total	0	0	0		0	77.4	22.6		33.3	16.7	50		0	95.8	4.2		
PHF	.000	.000	.000	.000	.000	1.000	.438	.775	.500	.250	.375	.500	.000	.719	.250	.667	

3.1-459

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Commerce Parkway Southbound					Jurupa Street Westbound					Commerce Parkway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	0	8	8
07:15 AM	0	0	0	0	0	1	3	0	0	4	0	0	0	0	0	0	1	0	0	1	0	5	5
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	5	0	0	5	1	6	7
Total	0	0	0	0	0	1	5	0	0	6	0	0	1	1	1	0	13	0	0	13	1	20	21
08:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2	0	3	3
08:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	3	3
08:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
08:45 AM	1	0	0	0	1	0	6	0	0	6	0	0	0	0	0	0	4	0	0	4	0	11	11
Total	1	0	0	0	1	0	8	1	0	9	1	0	0	0	1	0	8	0	0	8	0	19	19
Grand Total	1	0	0	0	1	1	13	1	0	15	1	0	1	1	2	0	21	0	0	21	1	39	40
Apprch %	100	0	0			6.7	86.7	6.7			50	0	50			0	100	0					
Total %	2.6	0	0		2.6	2.6	33.3	2.6		38.5	2.6	0	2.6		5.1	0	53.8	0		53.8	2.5	97.5	

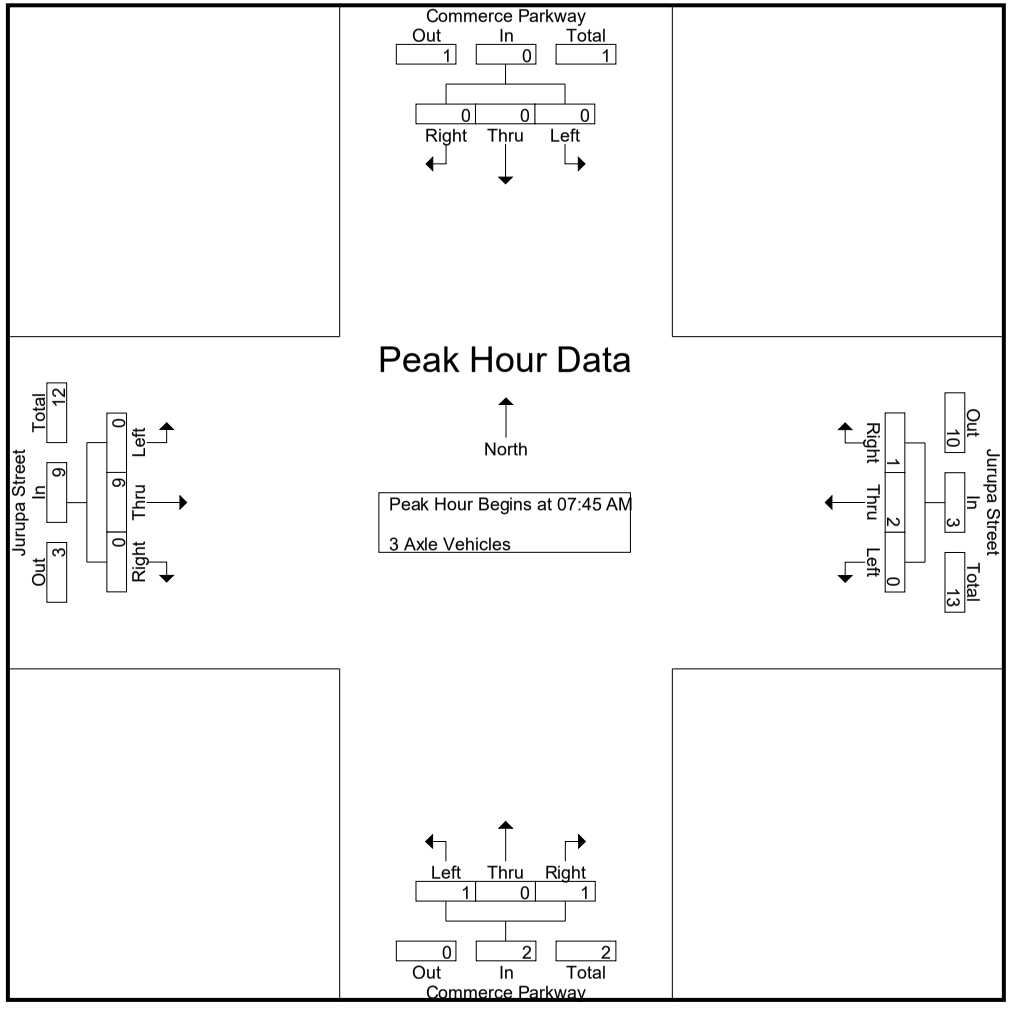
3.1-460

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	0	**1**	**1**	0	**5**	0	**5**	**6**
08:00 AM	0	0	0	0	0	0	0	0	**1**	0	0	1	0	2	0	2	3
08:15 AM	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	1	0	1	3
08:30 AM	0	0	0	0	0	0	**1**	1	0	0	0	0	0	1	0	1	2
Total Volume	0	0	0	0	0	2	1	3	1	0	1	2	0	9	0	9	14
% App. Total	0	0	0		0	66.7	33.3		50	0	50		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.250	.375	.250	.000	.250	.500	.000	.450	.000	.450	.583

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	**1**	**1**	0	**5**	0	**5**	
+15 mins.	0	0	0	0	0	0	0	0	**1**	0	0	1	0	2	0	2	
+30 mins.	0	0	0	0	0	**2**	0	**2**	0	0	0	0	0	1	0	1	
+45 mins.	0	0	0	0	0	0	**1**	1	0	0	0	0	0	1	0	1	
Total Volume	0	0	0	0	0	2	1	3	1	0	1	2	0	9	0	9	
% App. Total	0	0	0		0	66.7	33.3		50	0	50		0	100	0		
PHF	.000	.000	.000	.000	.000	.250	.250	.375	.250	.000	.250	.500	.000	.450	.000	.450	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Commerce Parkway Southbound					Jurupa Street Westbound					Commerce Parkway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	2	0	0	0	2	2	12	1	0	15	0	0	0	0	0	0	8	0	0	8	0	25	25
07:15 AM	1	0	0	0	1	1	7	1	0	9	2	0	2	1	4	0	6	0	0	6	1	20	21
07:30 AM	1	0	0	0	1	1	8	3	0	12	0	0	1	1	1	1	10	0	0	11	1	25	26
07:45 AM	0	0	1	0	1	0	9	1	0	10	0	0	1	0	1	2	6	0	0	8	0	20	20
Total	4	0	1	0	5	4	36	6	0	46	2	0	4	2	6	3	30	0	0	33	2	90	92
08:00 AM	0	0	0	0	0	1	9	0	0	10	0	0	0	0	0	0	15	0	0	15	0	25	25
08:15 AM	2	0	2	2	4	1	13	3	0	17	1	0	2	1	3	1	13	0	0	14	3	38	41
08:30 AM	0	1	1	0	2	0	11	0	0	11	1	0	2	1	3	4	13	1	0	18	1	34	35
08:45 AM	1	0	1	0	2	2	10	2	0	14	0	0	0	0	0	0	10	0	0	10	0	26	26
Total	3	1	4	2	8	4	43	5	0	52	2	0	4	2	6	5	51	1	0	57	4	123	127
Grand Total	7	1	5	2	13	8	79	11	0	98	4	0	8	4	12	8	81	1	0	90	6	213	219
Apprch %	53.8	7.7	38.5			8.2	80.6	11.2			33.3	0	66.7			8.9	90	1.1					
Total %	3.3	0.5	2.3		6.1	3.8	37.1	5.2		46	1.9	0	3.8		5.6	3.8	38	0.5		42.3	2.7	97.3	

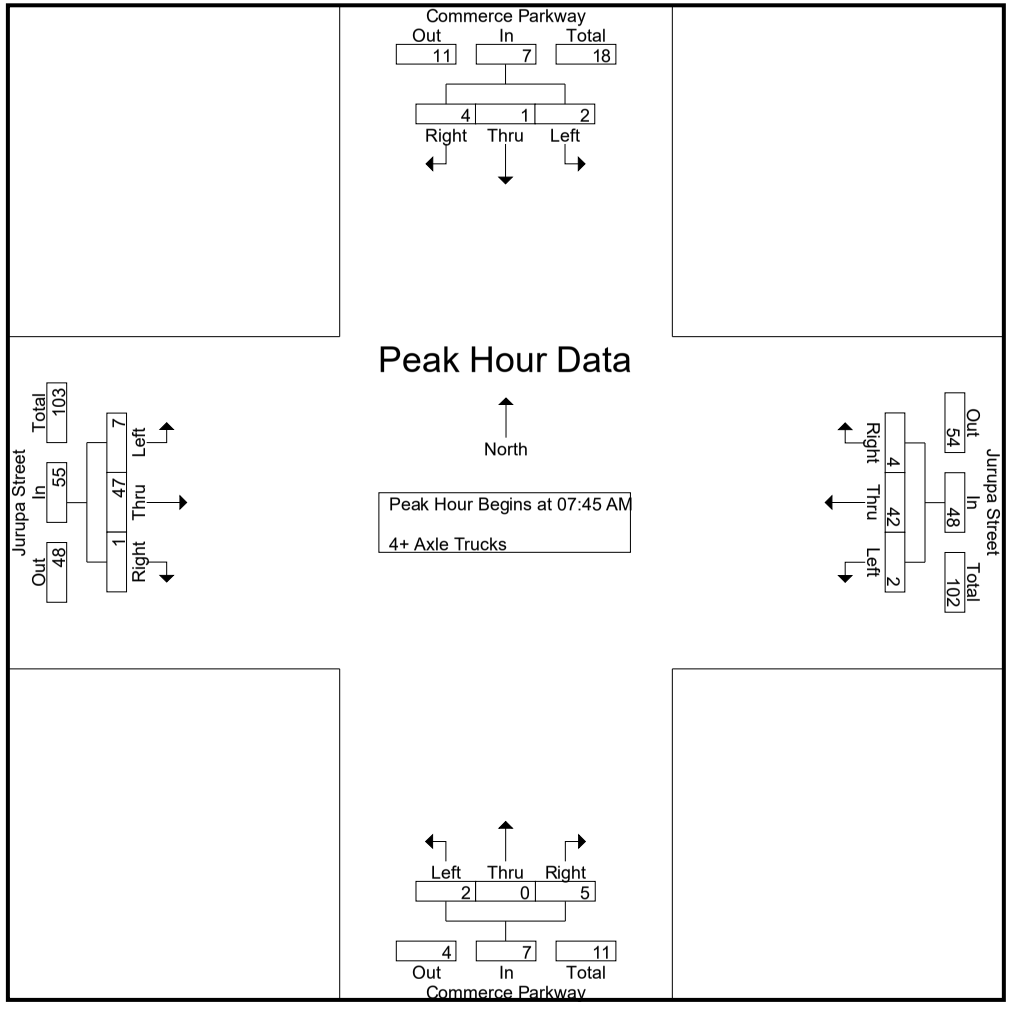
93.1-463

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	1	1	0	9	1	10	0	0	1	1	2	6	0	8	20
08:00 AM	0	0	0	0	**1**	9	0	10	0	0	0	0	0	**15**	0	15	25
08:15 AM	**2**	0	**2**	**4**	1	**13**	**3**	**17**	**1**	0	**2**	**3**	1	13	0	14	**38**
08:30 AM	0	**1**	1	2	0	11	0	11	1	0	2	3	**4**	13	**1**	**18**	34
Total Volume	2	1	4	7	2	42	4	48	2	0	5	7	7	47	1	55	117
% App. Total	28.6	14.3	57.1		4.2	87.5	8.3		28.6	0	71.4		12.7	85.5	1.8		
PHF	.250	.250	.500	.438	.500	.808	.333	.706	.500	.000	.625	.583	.438	.783	.250	.764	.770

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-464

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	0	1	1	0	9	1	10	0	0	1	1	2	6	0	8	
+15 mins.	0	0	0	0	**1**	9	0	10	0	0	0	0	0	**15**	0	15	
+30 mins.	**2**	0	**2**	**4**	1	**13**	**3**	**17**	**1**	0	**2**	**3**	1	13	0	14	
+45 mins.	0	**1**	1	2	0	11	0	11	1	0	2	3	**4**	13	**1**	**18**	
Total Volume	2	1	4	7	2	42	4	48	2	0	5	7	7	47	1	55	
% App. Total	28.6	14.3	57.1		4.2	87.5	8.3		28.6	0	71.4		12.7	85.5	1.8		
PHF	.250	.250	.500	.438	.500	.808	.333	.706	.500	.000	.625	.583	.438	.783	.250	.764	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Commerce Parkway Southbound					Jurupa Street Westbound					Commerce Parkway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	50	4	5	5	59	10	108	51	0	169	1	1	3	1	5	22	110	3	1	135	7	368	375
04:15 PM	50	5	6	5	61	5	119	51	0	175	5	6	11	6	22	20	137	3	0	160	11	418	429
04:30 PM	58	1	9	5	68	2	108	53	0	163	8	19	24	6	51	15	142	2	0	159	11	441	452
04:45 PM	55	5	5	4	65	2	106	49	1	157	1	8	4	1	13	14	153	3	2	170	8	405	413
Total	213	15	25	19	253	19	441	204	1	664	15	34	42	14	91	71	542	11	3	624	37	1632	1669
05:00 PM	60	3	6	0	69	0	113	61	0	174	0	3	9	5	12	20	147	2	0	169	5	424	429
05:15 PM	76	3	5	2	84	0	88	62	6	150	2	4	8	6	14	18	139	2	1	159	15	407	422
05:30 PM	81	1	8	4	90	7	103	48	2	158	0	3	5	4	8	7	158	3	0	168	10	424	434
05:45 PM	58	5	6	2	69	1	103	31	1	135	1	2	4	3	7	10	146	6	0	162	6	373	379
Total	275	12	25	8	312	8	407	202	9	617	3	12	26	18	41	55	590	13	1	658	36	1628	1664
Grand Total	488	27	50	27	565	27	848	406	10	1281	18	46	68	32	132	126	1132	24	4	1282	73	3260	3333
Apprch %	86.4	4.8	8.8			2.1	66.2	31.7			13.6	34.8	51.5			9.8	88.3	1.9					
Total %	15	0.8	1.5		17.3	0.8	26	12.5		39.3	0.6	1.4	2.1		4	3.9	34.7	0.7		39.3	2.2	97.8	
Passenger Vehicles	458	22	38		540	24	674	368		1076	16	42	59		145	91	946	21		1061	0	0	2822
% Passenger Vehicles	93.9	81.5	76	81.5	91.2	88.9	79.5	90.6	100	83.3	88.9	91.3	86.8	87.5	88.4	72.2	83.6	87.5	75	82.5	0	0	84.7
Large 2 Axle Vehicles	15	3	7		28	0	59	13		72	0	1	2		5	8	43	1		52	0	0	157
% Large 2 Axle Vehicles	3.1	11.1	14	11.1	4.7	0	7	3.2	0	5.6	0	2.2	2.9	6.2	3	6.3	3.8	4.2	0	4	0	0	4.7
3 Axle Vehicles	4	0	1		6	0	20	15		35	0	1	3		6	8	17	0		25	0	0	72
% 3 Axle Vehicles	0.8	0	2	3.7	1	0	2.4	3.7	0	2.7	0	2.2	4.4	6.2	3.7	6.3	1.5	0	0	1.9	0	0	2.2
4+ Axle Trucks	11	2	4		18	3	95	10		108	2	2	4		8	19	126	2		148	0	0	282
% 4+ Axle Trucks	2.3	7.4	8	3.7	3	11.1	11.2	2.5	0	8.4	11.1	4.3	5.9	0	4.9	15.1	11.1	8.3	25	11.5	0	0	8.5

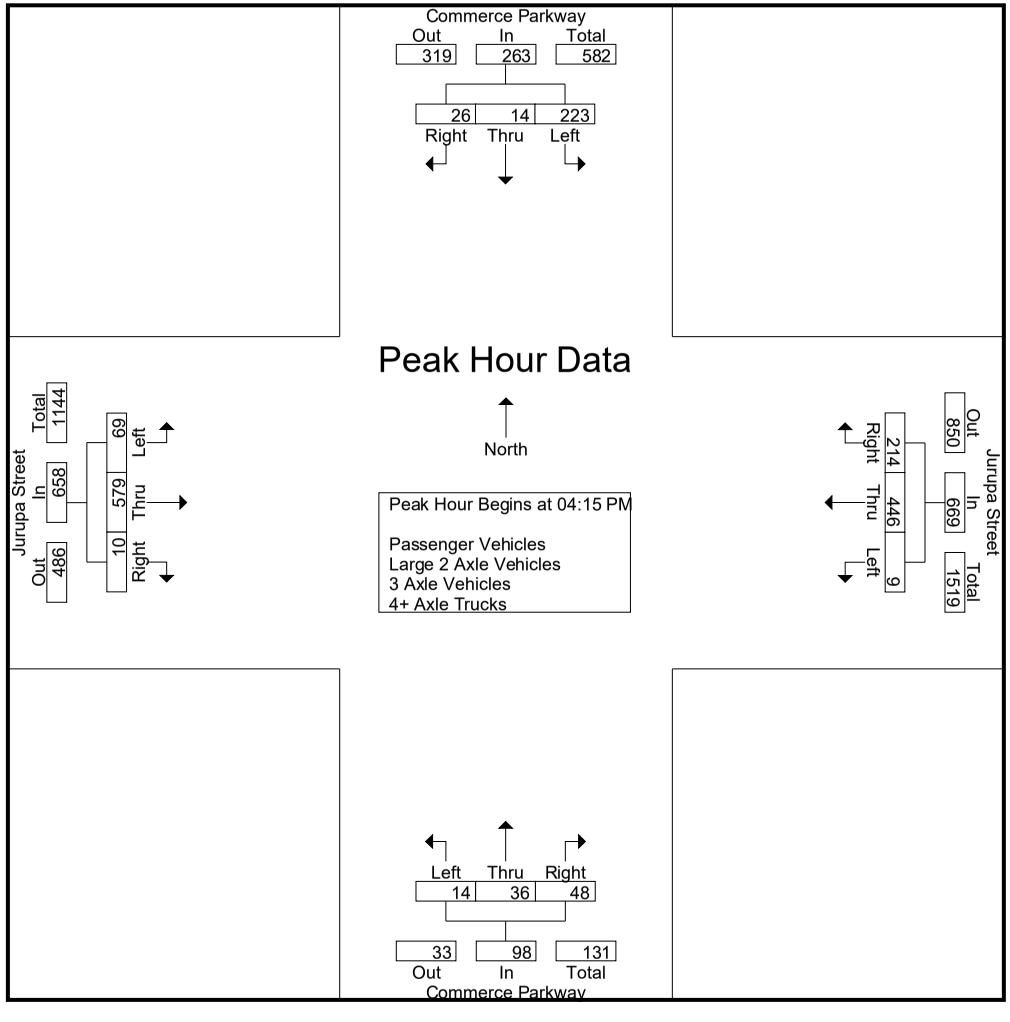
	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	50	**5**	6	61	**5**	**119**	51	**175**	5	6	11	22	**20**	137	**3**	160	418
04:30 PM	58	1	**9**	68	2	108	53	163	**8**	**19**	**24**	**51**	15	142	2	159	**441**
04:45 PM	55	5	5	65	2	106	49	157	1	8	4	13	14	**153**	3	**170**	405
05:00 PM	**60**	3	6	**69**	0	113	**61**	174	0	3	9	12	20	147	2	169	424
Total Volume	223	14	26	263	9	446	214	669	14	36	48	98	69	579	10	658	1688
% App. Total	84.8	5.3	9.9		1.3	66.7	32		14.3	36.7	49		10.5	88	1.5		
PHF	.929	.700	.722	.953	.450	.937	.877	.956	.438	.474	.500	.480	.863	.946	.833	.968	.957

3.1-469

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	05:00 PM				04:15 PM				04:15 PM				04:45 PM				
+0 mins.	60	3	6	69	**5**	**119**	51	**175**	5	6	11	22	14	153	**3**	**170**	
+15 mins.	76	3	5	84	2	108	53	163	**8**	**19**	**24**	**51**	**20**	147	2	169	
+30 mins.	**81**	1	**8**	**90**	2	106	49	157	1	8	4	13	18	139	2	159	
+45 mins.	58	**5**	6	69	0	113	**61**	174	0	3	9	12	7	**158**	3	168	
Total Volume	275	12	25	312	9	446	214	669	14	36	48	98	59	597	10	666	
% App. Total	88.1	3.8	8		1.3	66.7	32		14.3	36.7	49		8.9	89.6	1.5		
PHF	.849	.600	.781	.867	.450	.937	.877	.956	.438	.474	.500	.480	.738	.945	.833	.979	

3.1-468

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Commerce Parkway Southbound					Jurupa Street Westbound					Commerce Parkway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	47	4	3	3	54	9	90	45	0	144	1	1	2	1	4	13	88	3	1	104	5	306	311
04:15 PM	48	5	4	4	57	5	98	47	0	150	5	6	9	5	20	17	113	3	0	133	9	360	369
04:30 PM	52	1	6	4	59	1	87	45	0	133	8	19	23	6	50	12	114	2	0	128	10	370	380
04:45 PM	53	3	4	3	60	2	89	47	1	138	1	5	4	1	10	13	134	1	1	148	6	356	362
Total	200	13	17	14	230	17	364	184	1	565	15	31	38	13	84	55	449	9	2	513	30	1392	1422
05:00 PM	53	3	4	0	60	0	86	59	0	145	0	3	7	3	10	17	123	2	0	142	3	357	360
05:15 PM	75	2	4	2	81	0	68	56	6	124	0	4	8	6	12	13	120	2	1	135	15	352	367
05:30 PM	77	1	8	4	86	6	79	41	2	126	0	3	3	3	6	2	132	3	0	137	9	355	364
05:45 PM	53	3	5	2	61	1	77	28	1	106	1	1	3	3	5	4	122	5	0	131	6	303	309
Total	258	9	21	8	288	7	310	184	9	501	1	11	21	15	33	36	497	12	1	545	33	1367	1400
Grand Total	458	22	38	22	518	24	674	368	10	1066	16	42	59	28	117	91	946	21	3	1058	63	2759	2822
Apprch %	88.4	4.2	7.3			2.3	63.2	34.5			13.7	35.9	50.4			8.6	89.4	2					
Total %	16.6	0.8	1.4		18.8	0.9	24.4	13.3		38.6	0.6	1.5	2.1		4.2	3.3	34.3	0.8		38.3	2.2	97.8	

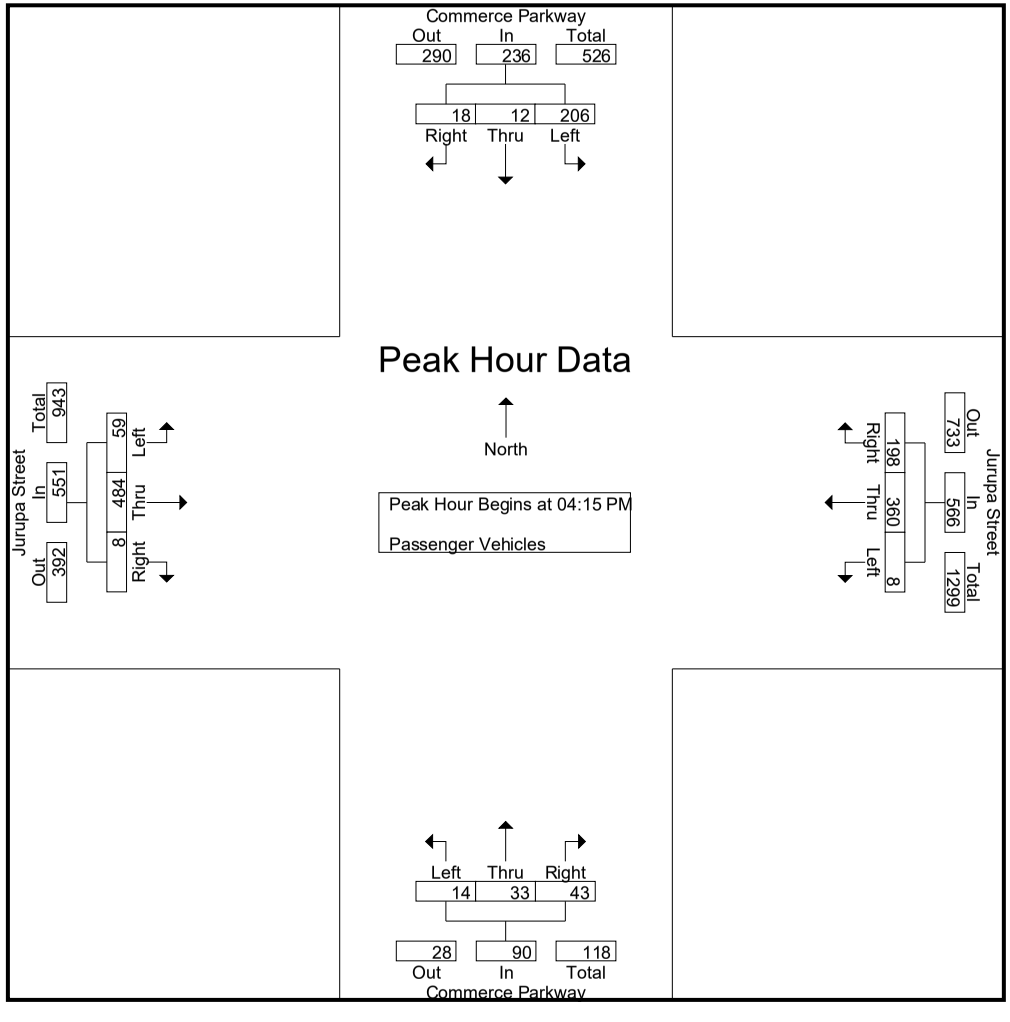
93-1469

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	48	**5**	4	57	**5**	**98**	47	**150**	5	6	9	20	**17**	113	**3**	133	360
04:30 PM	52	1	**6**	59	1	87	45	133	**8**	**19**	**23**	**50**	12	114	2	128	**370**
04:45 PM	**53**	3	4	**60**	2	89	47	138	1	5	4	10	13	**134**	1	**148**	356
05:00 PM	53	3	4	60	0	86	**59**	145	0	3	7	10	17	123	2	142	357
Total Volume	206	12	18	236	8	360	198	566	14	33	43	90	59	484	8	551	1443
% App. Total	87.3	5.1	7.6		1.4	63.6	35		15.6	36.7	47.8		10.7	87.8	1.5		
PHF	.972	.600	.750	.983	.400	.918	.839	.943	.438	.434	.467	.450	.868	.903	.667	.931	.975

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-470

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	48	**5**	4	57	**5**	**98**	47	**150**	5	6	9	20	**17**	113	**3**	133	
+15 mins.	52	1	**6**	59	1	87	45	133	**8**	**19**	**23**	**50**	12	114	2	128	
+30 mins.	**53**	3	4	**60**	2	89	47	138	1	5	4	10	13	**134**	1	**148**	
+45 mins.	53	3	4	60	0	86	**59**	145	0	3	7	10	17	123	2	142	
Total Volume	206	12	18	236	8	360	198	566	14	33	43	90	59	484	8	551	
% App. Total	87.3	5.1	7.6		1.4	63.6	35		15.6	36.7	47.8		10.7	87.8	1.5		
PHF	.972	.600	.750	.983	.400	.918	.839	.943	.438	.434	.467	.450	.868	.903	.667	.931	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

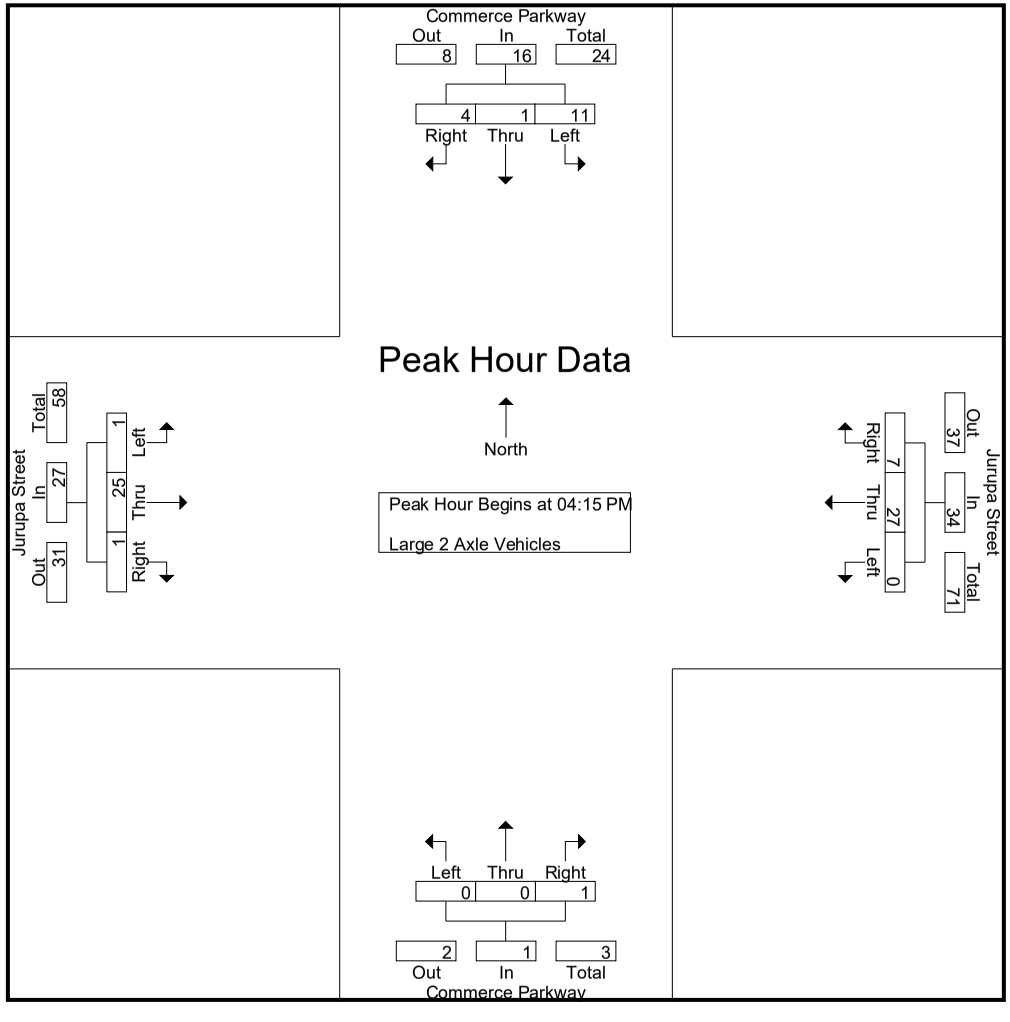
	Commerce Parkway Southbound					Jurupa Street Westbound					Commerce Parkway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	2	0	2	2	4	0	3	1	0	4	0	0	0	0	0	2	4	0	0	6	2	14	16
04:15 PM	1	0	0	0	1	0	5	1	0	6	0	0	1	1	1	0	8	0	0	8	1	16	17
04:30 PM	5	0	3	1	8	0	5	4	0	9	0	0	0	0	0	0	6	0	0	6	1	23	24
04:45 PM	1	1	0	0	2	0	7	0	0	7	0	0	0	0	0	0	7	1	0	8	0	17	17
Total	9	1	5	3	15	0	20	6	0	26	0	0	1	1	1	2	25	1	0	28	4	70	74
05:00 PM	4	0	1	0	5	0	10	2	0	12	0	0	0	0	0	1	4	0	0	5	0	22	22
05:15 PM	0	0	0	0	0	0	7	4	0	11	0	0	0	0	0	3	4	0	0	7	0	18	18
05:30 PM	1	0	0	0	1	0	9	0	0	9	0	0	1	1	1	1	5	0	0	6	1	17	18
05:45 PM	1	2	1	0	4	0	13	1	0	14	0	1	0	0	1	1	5	0	0	6	0	25	25
Total	6	2	2	0	10	0	39	7	0	46	0	1	1	1	2	6	18	0	0	24	1	82	83
Grand Total	15	3	7	3	25	0	59	13	0	72	0	1	2	2	3	8	43	1	0	52	5	152	157
Apprch %	60	12	28			0	81.9	18.1			0	33.3	66.7			15.4	82.7	1.9					
Total %	9.9	2	4.6		16.4	0	38.8	8.6		47.4	0	0.7	1.3		2	5.3	28.3	0.7		34.2	3.2	96.8	

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	0	0	1	0	5	1	6	0	0	**1**	**1**	0	**8**	0	**8**	16
04:30 PM	**5**	0	**3**	**8**	0	5	**4**	9	0	0	0	0	0	6	0	6	**23**
04:45 PM	1	**1**	0	2	0	7	0	7	0	0	0	0	0	7	**1**	8	17
05:00 PM	4	0	1	5	0	**10**	2	**12**	0	0	0	0	**1**	4	0	5	22
Total Volume	11	1	4	16	0	27	7	34	0	0	1	1	1	25	1	27	78
% App. Total	68.8	6.2	25		0	79.4	20.6		0	0	100		3.7	92.6	3.7		
PHF	.550	.250	.333	.500	.000	.675	.438	.708	.000	.000	.250	.250	.250	.781	.250	.844	.848

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-473

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	1	0	0	1	0	5	1	6	0	0	**1**	**1**	0	**8**	0	**8**	
+15 mins.	**5**	0	**3**	**8**	0	5	**4**	9	0	0	0	0	0	6	0	6	
+30 mins.	1	**1**	0	2	0	7	0	7	0	0	0	0	0	7	**1**	8	
+45 mins.	4	0	1	5	0	**10**	2	**12**	0	0	0	0	**1**	4	0	5	
Total Volume	11	1	4	16	0	27	7	34	0	0	1	1	1	25	1	27	
% App. Total	68.8	6.2	25		0	79.4	20.6		0	0	100		3.7	92.6	3.7		
PHF	.550	.250	.333	.500	.000	.675	.438	.708	.000	.000	.250	.250	.250	.781	.250	.844	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Commerce Parkway Southbound					Jurupa Street Westbound					Commerce Parkway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	4	1	0	5	0	0	0	0	0	4	1	0	0	5	0	10	10
04:15 PM	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	0	3	0	0	3	0	7	7
04:30 PM	0	0	0	0	0	0	4	4	0	8	0	0	0	0	0	1	3	0	0	4	0	12	12
04:45 PM	1	0	1	1	2	0	2	2	0	4	0	1	0	0	1	0	1	0	0	1	1	8	9
Total	1	0	1	1	2	0	13	8	0	21	0	1	0	0	1	5	8	0	0	13	1	37	38
05:00 PM	1	0	0	0	1	0	2	0	0	2	0	0	2	2	2	0	4	0	0	4	2	9	11
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	0	0	0	1	0	3	5	0	8	0	0	0	0	0	1	3	0	0	4	0	13	13
05:45 PM	1	0	0	0	1	0	2	2	0	4	0	0	1	0	1	2	2	0	0	4	0	10	10
Total	3	0	0	0	3	0	7	7	0	14	0	0	3	2	3	3	9	0	0	12	2	32	34
Grand Total	4	0	1	1	5	0	20	15	0	35	0	1	3	2	4	8	17	0	0	25	3	69	72
Apprch %	80	0	20			0	57.1	42.9			0	25	75			32	68	0					
Total %	5.8	0	1.4		7.2	0	29	21.7		50.7	0	1.4	4.3		5.8	11.6	24.6	0		36.2	4.2	95.8	

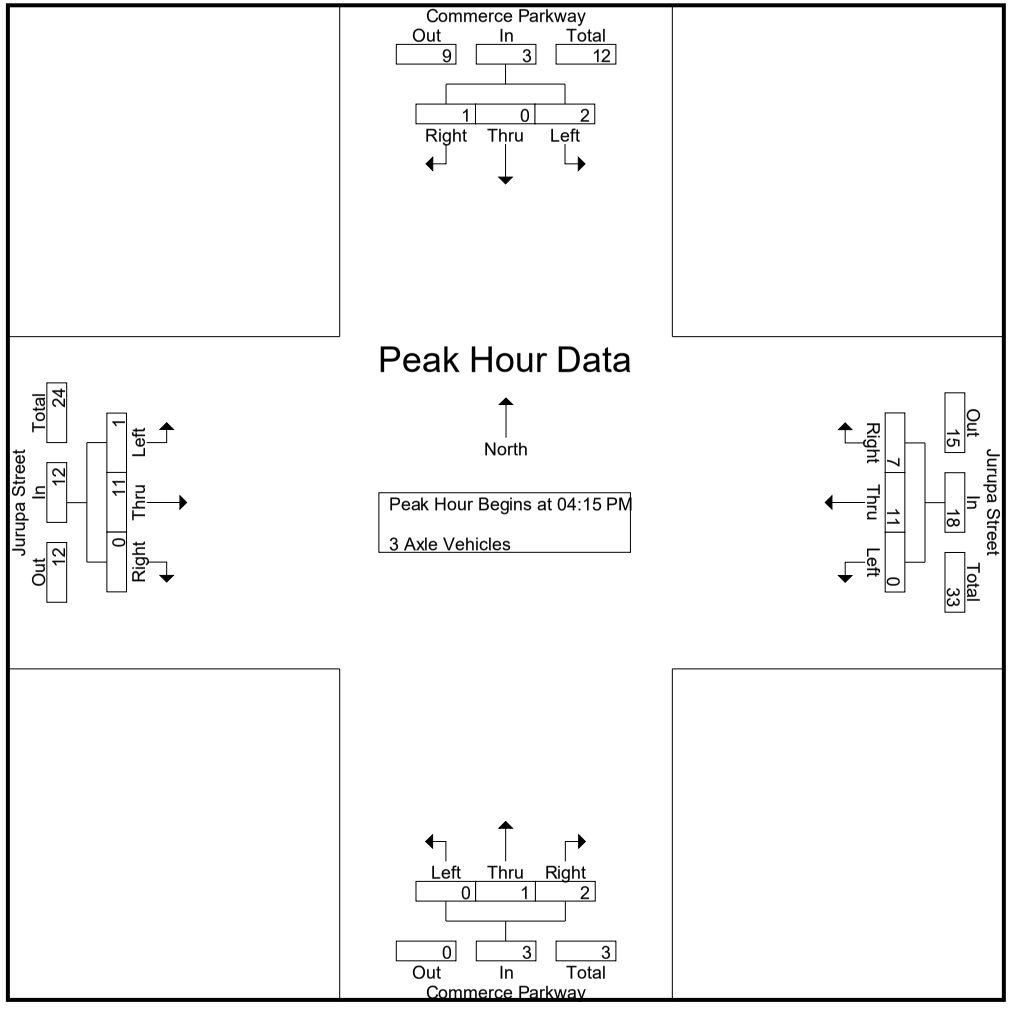
3.1-475

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	3	0	3	7
04:30 PM	0	0	0	0	0	**4**	**4**	**8**	0	0	0	0	**1**	3	0	**4**	**12**
04:45 PM	**1**	0	**1**	**2**	0	2	2	4	0	**1**	0	1	0	1	0	1	8
05:00 PM	1	0	0	1	0	2	0	2	0	0	**2**	**2**	0	**4**	0	4	9
Total Volume	2	0	1	3	0	11	7	18	0	1	2	3	1	11	0	12	36
% App. Total	66.7	0	33.3		0	61.1	38.9		0	33.3	66.7		8.3	91.7	0		
PHF	.500	.000	.250	.375	.000	.688	.438	.563	.000	.250	.250	.375	.250	.688	.000	.750	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	0	0	0	3	1	4	0	0	0	0	0	3	0	3	
+15 mins.	0	0	0	0	0	**4**	**4**	**8**	0	0	0	0	**1**	3	0	**4**	
+30 mins.	**1**	0	**1**	**2**	0	2	2	4	0	**1**	0	1	0	1	0	1	
+45 mins.	1	0	0	1	0	2	0	2	0	0	**2**	**2**	0	**4**	0	4	
Total Volume	2	0	1	3	0	11	7	18	0	1	2	3	1	11	0	12	
% App. Total	66.7	0	33.3		0	61.1	38.9		0	33.3	66.7		8.3	91.7	0		
PHF	.500	.000	.250	.375	.000	.688	.438	.563	.000	.250	.250	.375	.250	.688	.000	.750	

3.1-477

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Commerce Parkway Southbound					Jurupa Street Westbound					Commerce Parkway Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	0	0	0	1	1	11	4	0	16	0	0	1	0	1	3	17	0	0	20	0	38	38
04:15 PM	1	0	2	1	3	0	13	2	0	15	0	0	1	0	1	3	13	0	0	16	1	35	36
04:30 PM	1	0	0	0	1	1	12	0	0	13	0	0	1	0	1	2	19	0	0	21	0	36	36
04:45 PM	0	1	0	0	1	0	8	0	0	8	0	2	0	0	2	1	11	1	1	13	1	24	25
Total	3	1	2	1	6	2	44	6	0	52	0	2	3	0	5	9	60	1	1	70	2	133	135
05:00 PM	2	0	1	0	3	0	15	0	0	15	0	0	0	0	0	2	16	0	0	18	0	36	36
05:15 PM	1	1	1	0	3	0	13	2	0	15	2	0	0	0	2	2	15	0	0	17	0	37	37
05:30 PM	2	0	0	0	2	1	12	2	0	15	0	0	1	0	1	3	18	0	0	21	0	39	39
05:45 PM	3	0	0	0	3	0	11	0	0	11	0	0	0	0	0	3	17	1	0	21	0	35	35
Total	8	1	2	0	11	1	51	4	0	56	2	0	1	0	3	10	66	1	0	77	0	147	147
Grand Total	11	2	4	1	17	3	95	10	0	108	2	2	4	0	8	19	126	2	1	147	2	280	282
Apprch %	64.7	11.8	23.5			2.8	88	9.3			25	25	50			12.9	85.7	1.4					
Total %	3.9	0.7	1.4		6.1	1.1	33.9	3.6		38.6	0.7	0.7	1.4		2.9	6.8	45	0.7		52.5	0.7	99.3	

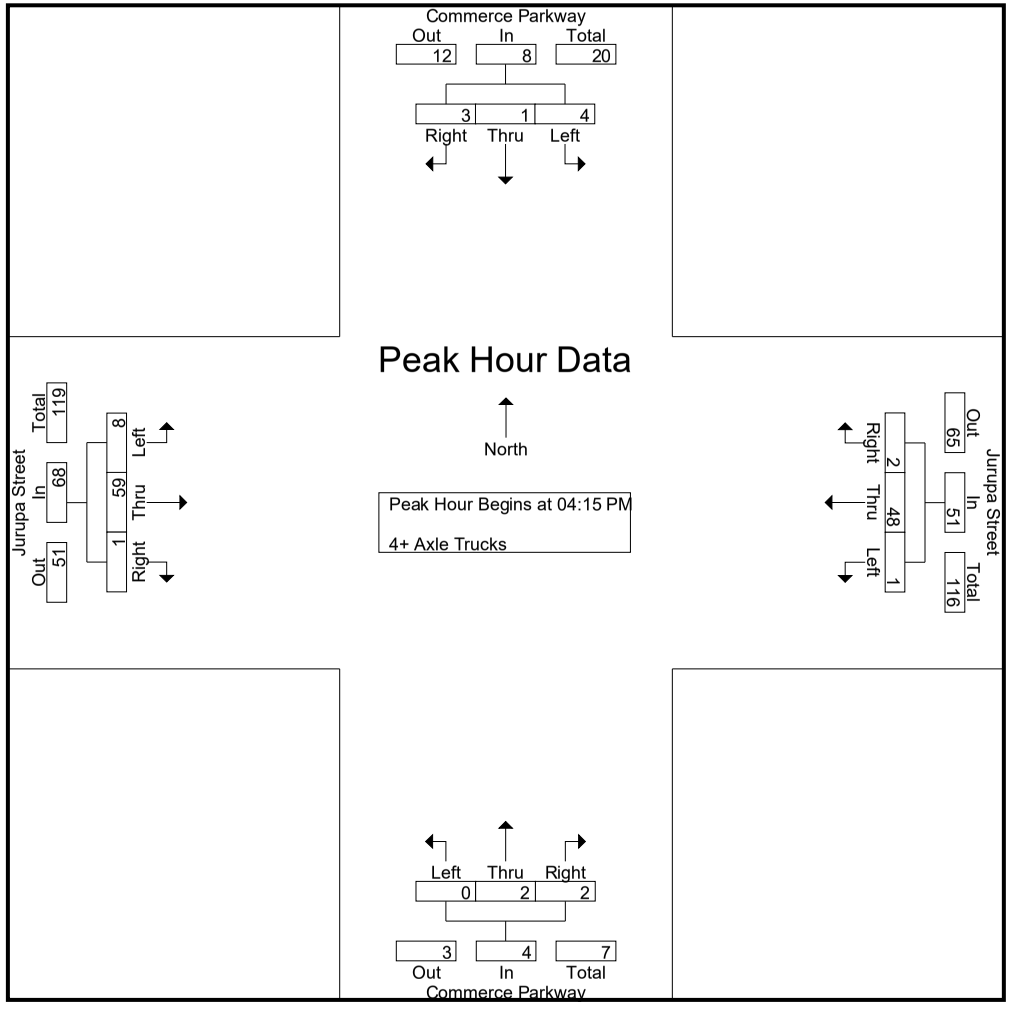
3.1-478

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	1	0	**2**	**3**	0	13	**2**	**15**	0	0	**1**	1	**3**	13	0	16	35
04:30 PM	1	0	0	1	**1**	12	0	13	0	0	1	1	2	**19**	0	**21**	**36**
04:45 PM	0	**1**	0	1	0	8	0	8	0	**2**	0	**2**	1	11	**1**	13	24
05:00 PM	**2**	0	1	3	0	**15**	0	15	0	0	0	0	2	16	0	18	36
Total Volume	4	1	3	8	1	48	2	51	0	2	2	4	8	59	1	68	131
% App. Total	50	12.5	37.5		2	94.1	3.9		0	50	50		11.8	86.8	1.5		
PHF	.500	.250	.375	.667	.250	.800	.250	.850	.000	.250	.500	.500	.667	.776	.250	.810	.910

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-479

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Commerce Parkway
E/W: Jurupa Street
Weather: Clear

File Name : 16_ONT_Com_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Commerce Parkway Southbound				Jurupa Street Westbound				Commerce Parkway Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	1	0	**2**	**3**	0	13	**2**	**15**	0	0	**1**	1	**3**	13	0	16	
+15 mins.	1	0	0	1	**1**	12	0	13	0	0	1	1	2	**19**	0	**21**	
+30 mins.	0	**1**	0	1	0	8	0	8	0	**2**	0	**2**	1	11	**1**	13	
+45 mins.	**2**	0	1	3	0	**15**	0	15	0	0	0	0	2	16	0	18	
Total Volume	4	1	3	8	1	48	2	51	0	2	2	4	8	59	1	68	
% App. Total	50	12.5	37.5		2	94.1	3.9		0	50	50		11.8	86.8	1.5		
PHF	.500	.250	.375	.667	.250	.800	.250	.850	.000	.250	.500	.500	.667	.776	.250	.810	

Location: Ontario
N/S: Commerce Parkway
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Commerce Parkway	East Leg Jurupa Street	South Leg Commerce Parkway	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	1	0	1
7:30 AM	1	0	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	1	0	1	0	2

	North Leg Commerce Parkway	East Leg Jurupa Street	South Leg Commerce Parkway	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Ontario
N/S: Commerce Parkway
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Commerce Parkway			Westbound Jurupa Street			Northbound Commerce Parkway			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	1	0	2

	Southbound Commerce Parkway			Westbound Jurupa Street			Northbound Commerce Parkway			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	0	0	1

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

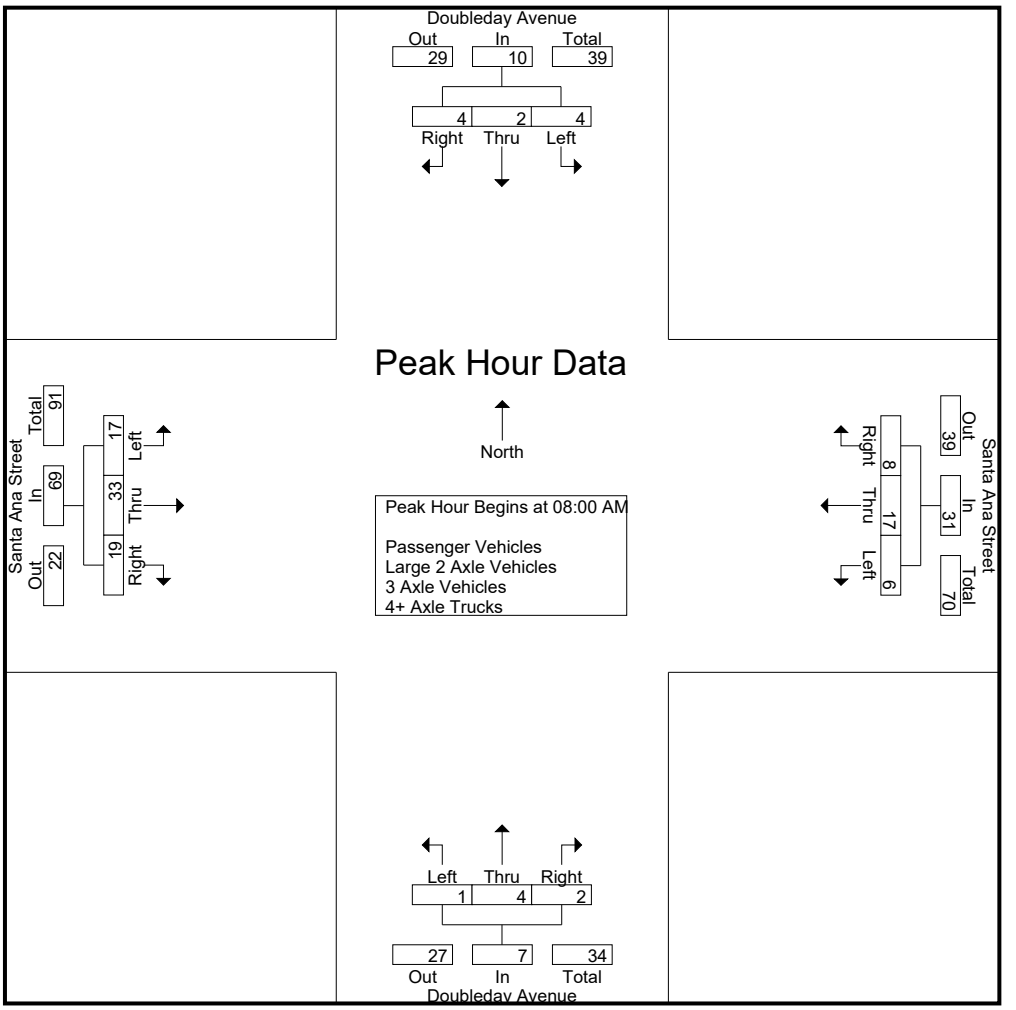
	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	1	0	2	2	1	2	5	1	11	3	15	22
07:15 AM	0	0	0	0	0	8	2	10	1	1	0	2	0	8	1	9	21
07:30 AM	0	0	0	0	0	0	0	0	1	1	0	2	0	8	1	9	11
07:45 AM	0	1	1	2	1	4	1	6	0	1	0	1	2	14	3	19	28
Total	0	1	1	2	2	13	3	18	4	4	2	10	3	41	8	52	82
08:00 AM	0	0	0	0	0	5	2	7	0	0	0	0	5	12	5	22	29
08:15 AM	2	1	2	5	0	5	3	8	0	1	0	1	1	11	2	14	28
08:30 AM	0	0	2	2	4	2	1	7	0	2	1	3	8	6	3	17	29
08:45 AM	2	1	0	3	2	5	2	9	1	1	1	3	3	4	9	16	31
Total	4	2	4	10	6	17	8	31	1	4	2	7	17	33	19	69	117
Grand Total	4	3	5	12	8	30	11	49	5	8	4	17	20	74	27	121	199
Apprch %	33.3	25	41.7		16.3	61.2	22.4		29.4	47.1	23.5		16.5	61.2	22.3		
Total %	2	1.5	2.5	6	4	15.1	5.5	24.6	2.5	4	2	8.5	10.1	37.2	13.6	60.8	
Passenger Vehicles	2	1	1	4	7	25	10	42	3	6	3	12	18	69	26	113	171
% Passenger Vehicles	50	33.3	20	33.3	87.5	83.3	90.9	85.7	60	75	75	70.6	90	93.2	96.3	93.4	85.9
Large 2 Axle Vehicles	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
% Large 2 Axle Vehicles	0	0	0	0	0	10	0	6.1	0	0	0	0	0	2.7	0	1.7	2.5
3 Axle Vehicles	0	0	0	0	1	1	1	3	1	1	0	2	0	0	0	0	5
% 3 Axle Vehicles	0	0	0	0	12.5	3.3	9.1	6.1	20	12.5	0	11.8	0	0	0	0	2.5
4+ Axle Trucks	2	2	4	8	0	1	0	1	1	1	1	3	2	3	1	6	18
% 4+ Axle Trucks	50	66.7	80	66.7	0	3.3	0	2	20	12.5	25	17.6	10	4.1	3.7	5	9

	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	**5**	2	7	0	0	0	0	5	**12**	5	**22**	29
08:15 AM	**2**	**1**	**2**	**5**	0	5	**3**	8	0	1	0	1	1	11	2	14	28
08:30 AM	0	0	2	2	**4**	2	1	7	0	**2**	**1**	**3**	**8**	6	3	17	29
08:45 AM	2	1	0	3	2	5	2	**9**	**1**	1	1	3	3	4	**9**	16	**31**
Total Volume	4	2	4	10	6	17	8	31	1	4	2	7	17	33	19	69	117
% App. Total	40	20	40		19.4	54.8	25.8		14.3	57.1	28.6		24.6	47.8	27.5		
PHF	.500	.500	.500	.500	.375	.850	.667	.861	.250	.500	.500	.583	.531	.688	.528	.784	.944

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				07:00 AM				07:45 AM			
+0 mins.	0	0	0	0	0	**5**	2	7	**2**	**1**	**2**	**5**	2	**14**	3	19
+15 mins.	**2**	**1**	**2**	**5**	0	5	**3**	8	1	1	0	2	5	12	**5**	**22**
+30 mins.	0	0	2	2	**4**	2	1	7	1	1	0	2	1	11	2	14
+45 mins.	2	1	0	3	2	5	2	**9**	0	1	0	1	**8**	6	3	17
Total Volume	4	2	4	10	6	17	8	31	4	4	2	10	16	43	13	72
% App. Total	40	20	40		19.4	54.8	25.8		40	40	20		22.2	59.7	18.1	
PHF	.500	.500	.500	.500	.375	.850	.667	.861	.500	1.000	.250	.500	.500	.768	.650	.818

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

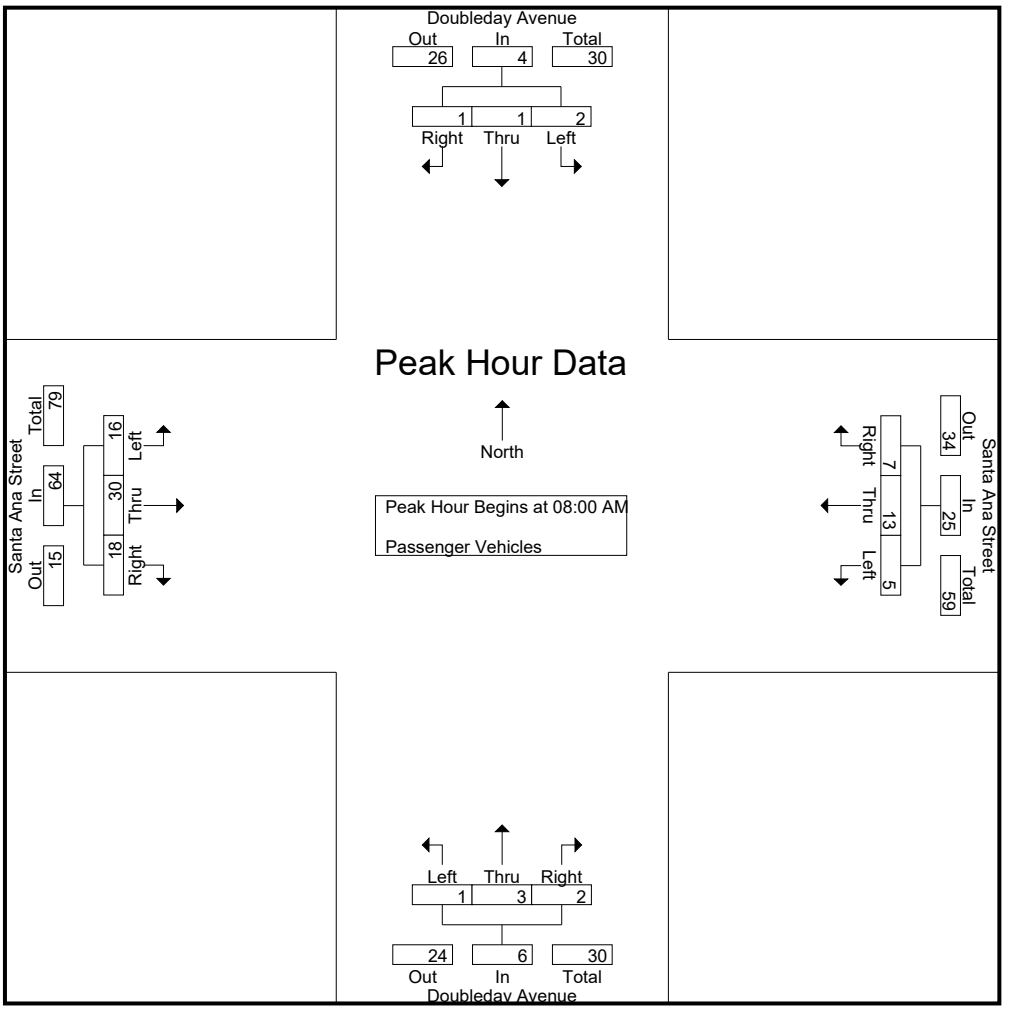
	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	1	1	0	2	1	1	1	3	1	9	3	13	18
07:15 AM	0	0	0	0	0	7	2	9	1	0	0	1	0	8	1	9	19
07:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	8	1	9	10
07:45 AM	0	0	0	0	1	4	1	6	0	1	0	1	1	14	3	18	25
Total	0	0	0	0	2	12	3	17	2	3	1	6	2	39	8	49	72
08:00 AM	0	0	0	0	0	4	1	5	0	0	0	0	5	10	5	20	25
08:15 AM	1	1	0	2	0	5	3	8	0	1	0	1	1	10	2	13	24
08:30 AM	0	0	1	1	3	2	1	6	0	1	1	2	7	6	3	16	25
08:45 AM	1	0	0	1	2	2	2	6	1	1	1	3	3	4	8	15	25
Total	2	1	1	4	5	13	7	25	1	3	2	6	16	30	18	64	99
Grand Total	2	1	1	4	7	25	10	42	3	6	3	12	18	69	26	113	171
Apprch %	50	25	25		16.7	59.5	23.8		25	50	25		15.9	61.1	23		
Total %	1.2	0.6	0.6	2.3	4.1	14.6	5.8	24.6	1.8	3.5	1.8	7	10.5	40.4	15.2	66.1	

	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	4	1	5	0	0	0	0	5	**10**	5	**20**	**25**
08:15 AM	**1**	**1**	0	**2**	0	**5**	**3**	**8**	0	**1**	0	1	1	10	2	13	24
08:30 AM	0	0	**1**	1	**3**	2	1	6	0	1	**1**	2	**7**	6	3	16	25
08:45 AM	1	0	0	1	2	2	2	6	**1**	1	1	**3**	3	4	**8**	15	25
Total Volume	2	1	1	4	5	13	7	25	1	3	2	6	16	30	18	64	99
% App. Total	50	25	25		20	52	28		16.7	50	33.3		25	46.9	28.1		
PHF	.500	.250	.250	.500	.417	.650	.583	.781	.250	.750	.500	.500	.571	.750	.563	.800	.990

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	4	1	5	0	0	0	0	5	**10**	5	**20**
+15 mins.	**1**	**1**	0	**2**	0	**5**	**3**	**8**	0	**1**	0	1	1	10	2	13
+30 mins.	0	0	**1**	1	**3**	2	1	6	0	1	**1**	2	**7**	6	3	16
+45 mins.	1	0	0	1	2	2	2	6	**1**	1	1	**3**	3	4	**8**	15
Total Volume	2	1	1	4	5	13	7	25	1	3	2	6	16	30	18	64
% App. Total	50	25	25		20	52	28		16.7	50	33.3		25	46.9	28.1	
PHF	.500	.250	.250	.500	.417	.650	.583	.781	.250	.750	.500	.500	.571	.750	.563	.800

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

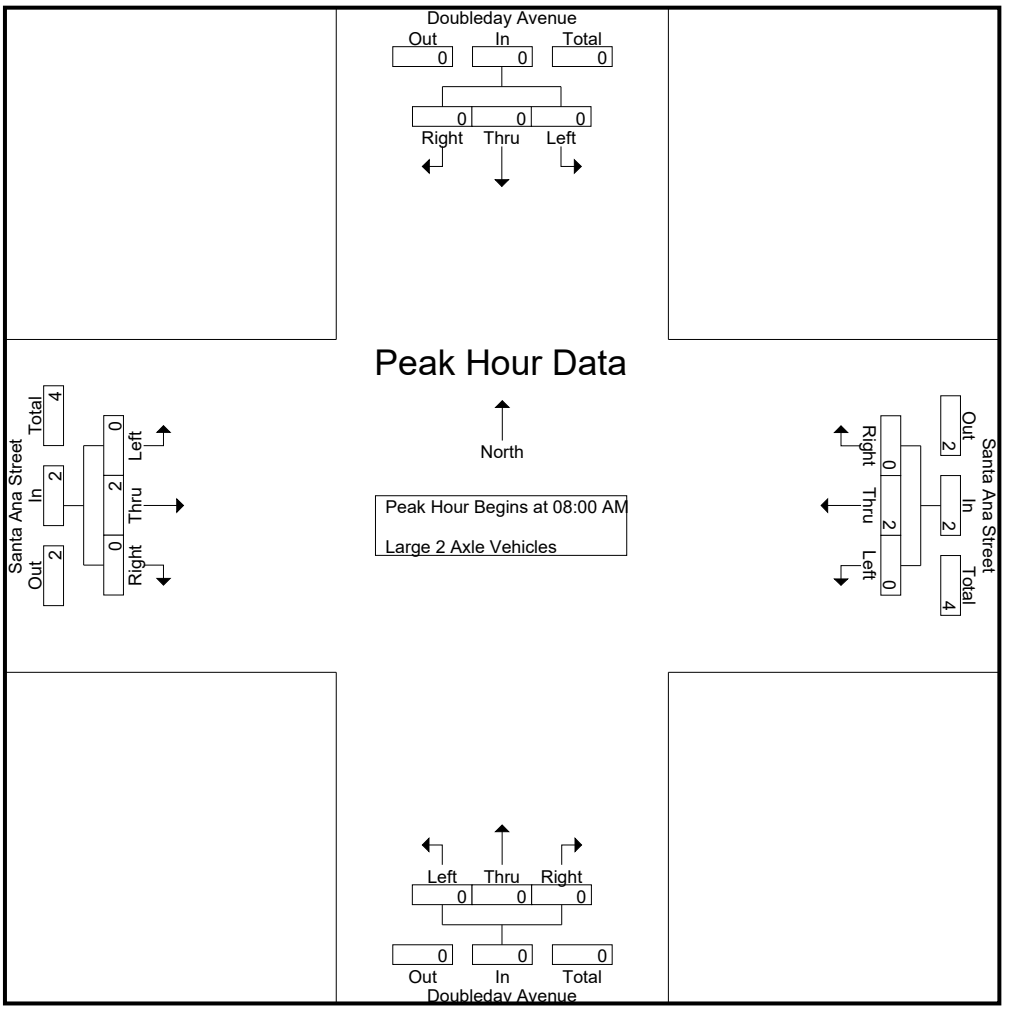
	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Grand Total	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	60	0	60	0	0	0	0	0	40	0	40	

	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	**2**
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.500	.000	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

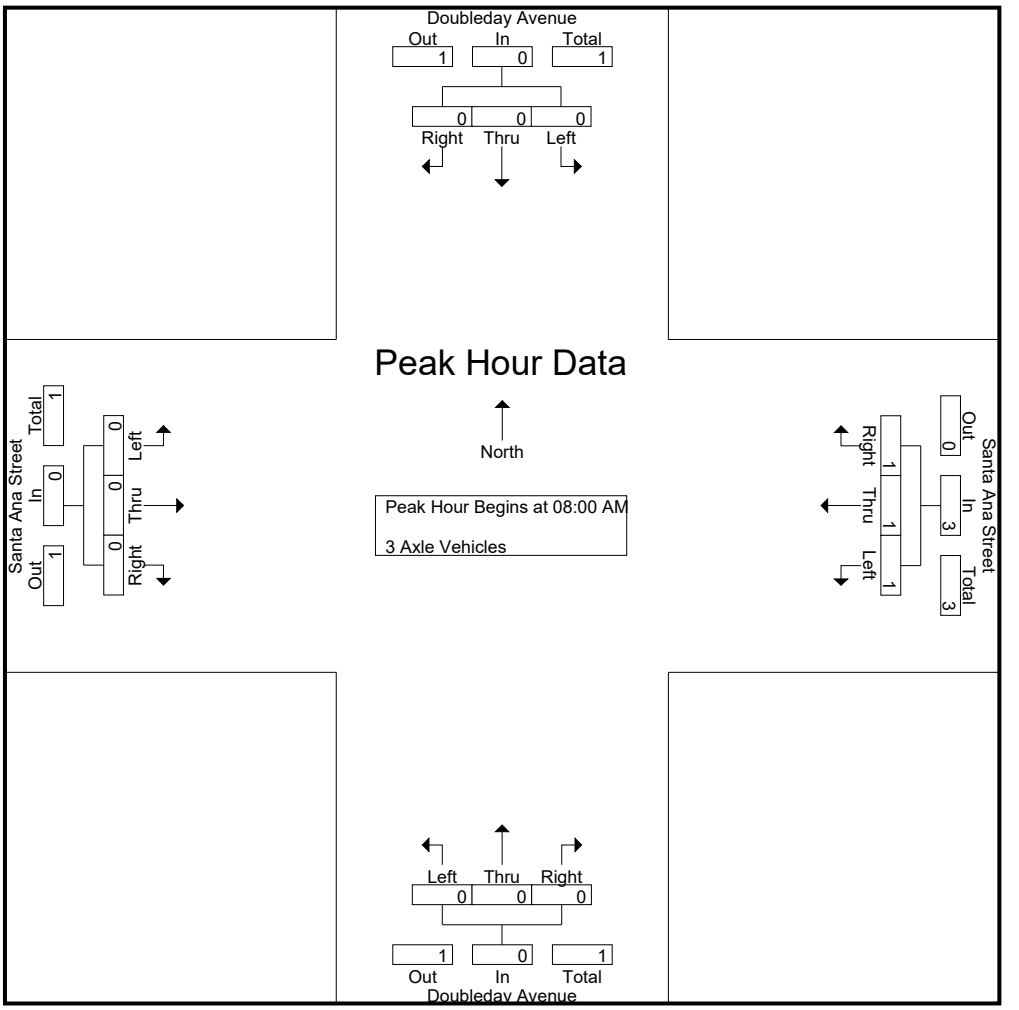
	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	1	1	1	3	0	0	0	0	0	0	0	0	3
Grand Total	0	0	0	0	1	1	1	3	1	1	0	2	0	0	0	0	5
Apprch %	0	0	0		33.3	33.3	33.3		50	50	0		0	0	0		
Total %	0	0	0	0	20	20	20	60	20	20	0	40	0	0	0	0	

	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	0	0	0	**1**
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	**1**	0	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	**1**	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	1	1	1	3	0	0	0	0	0	0	0	0	3
% App. Total	0	0	0		33.3	33.3	33.3		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.250	.250	.250	.750	.000	.000	.000	.000	.000	.000	.000	.000	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	**1**	**1**	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	**1**	0	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	**1**	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	1	1	1	3	0	0	0	0	0	0	0	0
% App. Total	0	0	0		33.3	33.3	33.3		0	0	0		0	0	0	
PHF	.000	.000	.000	.000	.250	.250	.250	.750	.000	.000	.000	.000	.000	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

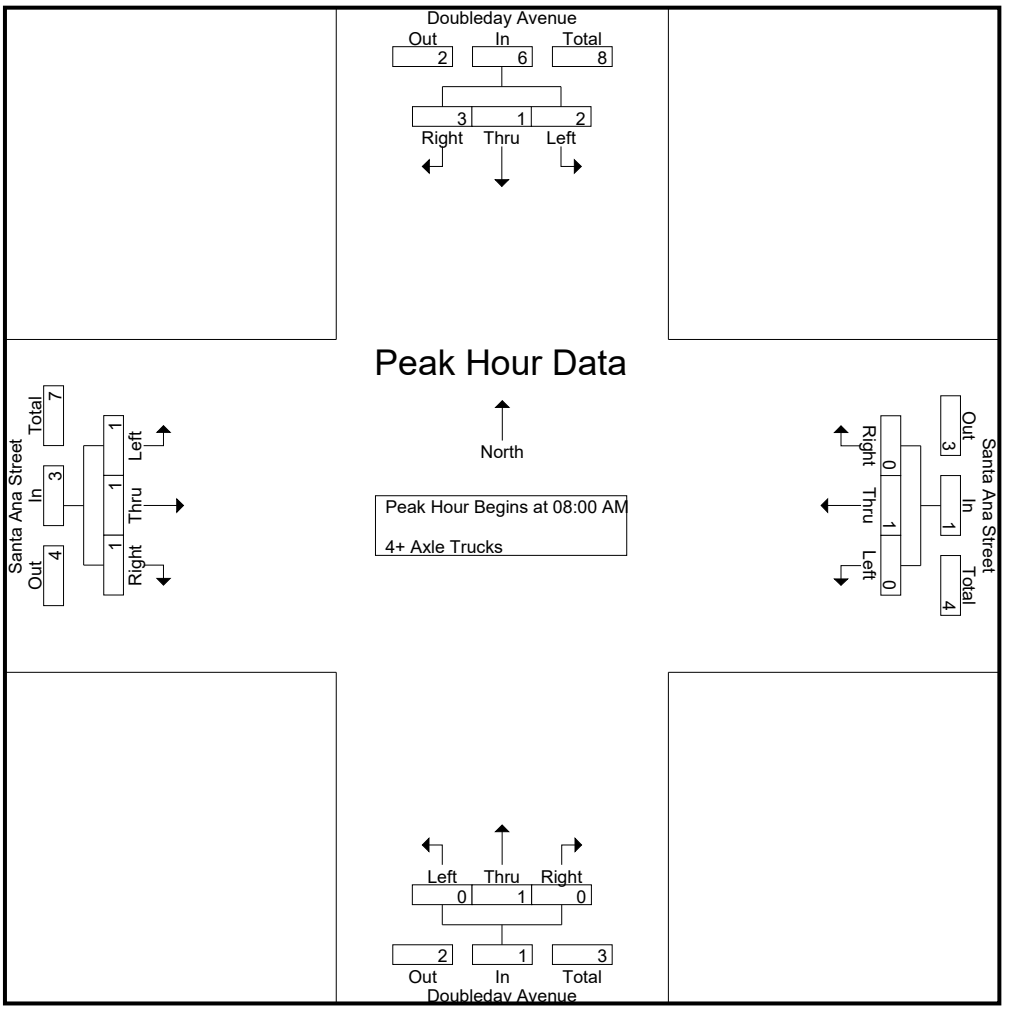
	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	1	0	1	2	0	2	0	2	4
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	1	2	0	0	0	0	0	0	0	0	1	0	0	1	3
Total	0	1	1	2	0	0	0	0	1	0	1	2	1	2	0	3	7
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:15 AM	1	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	3
08:30 AM	0	0	1	1	0	0	0	0	0	1	0	1	1	0	0	1	3
08:45 AM	1	1	0	2	0	1	0	1	0	0	0	0	0	0	1	1	4
Total	2	1	3	6	0	1	0	1	0	1	0	1	1	1	1	3	11
Grand Total	2	2	4	8	0	1	0	1	1	1	1	3	2	3	1	6	18
Apprch %	25	25	50		0	100	0		33.3	33.3	33.3		33.3	50	16.7		
Total %	11.1	11.1	22.2	44.4	0	5.6	0	5.6	5.6	5.6	5.6	16.7	11.1	16.7	5.6	33.3	

	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**	1
08:15 AM	**1**	0	**2**	**3**	0	0	0	0	0	0	0	0	0	0	0	0	3
08:30 AM	0	0	1	1	0	0	0	0	0	**1**	0	**1**	**1**	0	0	1	3
08:45 AM	1	**1**	0	2	0	**1**	0	**1**	0	0	0	0	0	0	**1**	1	**4**
Total Volume	2	1	3	6	0	1	0	1	0	1	0	1	1	1	1	3	11
% App. Total	33.3	16.7	50		0	100	0		0	100	0		33.3	33.3	33.3		
PHF	.500	.250	.375	.500	.000	.250	.000	.250	.000	.250	.000	.250	.250	.250	.250	.750	.688

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 08:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				08:00 AM				08:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	0	**1**
+15 mins.	**1**	0	**2**	**3**	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	1	1	0	0	0	0	0	**1**	0	**1**	**1**	0	0	1
+45 mins.	1	**1**	0	2	0	**1**	0	**1**	0	0	0	0	0	0	**1**	1
Total Volume	2	1	3	6	0	1	0	1	0	1	0	1	1	1	1	3
% App. Total	33.3	16.7	50		0	100	0		0	100	0		33.3	33.3	33.3	
PHF	.500	.250	.375	.500	.000	.250	.000	.250	.000	.250	.000	.250	.250	.250	.250	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

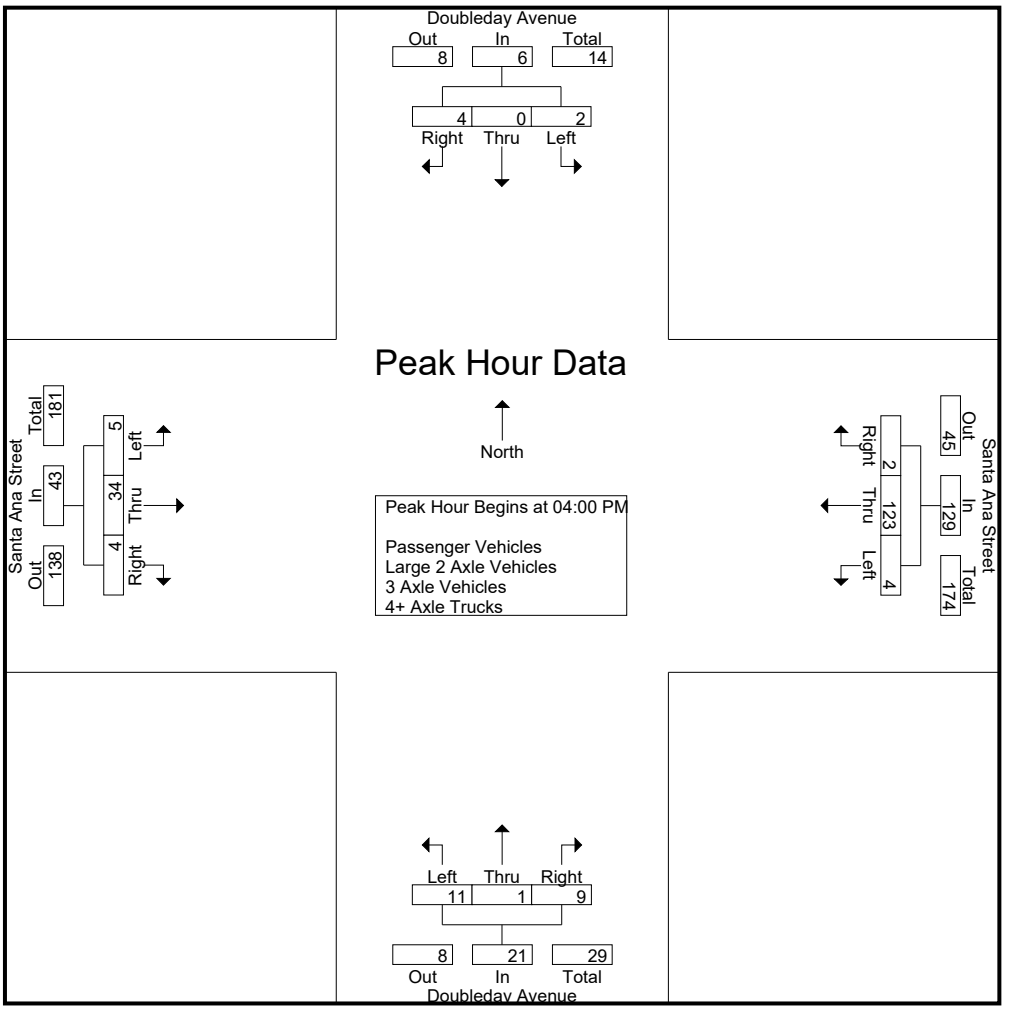
	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	1	2	1	39	1	41	4	0	3	7	2	7	3	12	62
04:15 PM	0	0	2	2	1	24	1	26	3	0	1	4	1	13	0	14	46
04:30 PM	0	0	1	1	0	38	0	38	2	1	2	5	0	8	0	8	52
04:45 PM	1	0	0	1	2	22	0	24	2	0	3	5	2	6	1	9	39
Total	2	0	4	6	4	123	2	129	11	1	9	21	5	34	4	43	199
05:00 PM	0	1	1	2	4	26	1	31	3	0	4	7	4	8	0	12	52
05:15 PM	0	0	1	1	2	18	0	20	4	0	3	7	3	6	1	10	38
05:30 PM	3	0	2	5	3	22	3	28	9	1	6	16	1	8	2	11	60
05:45 PM	0	0	2	2	0	12	0	12	6	2	4	12	1	12	3	16	42
Total	3	1	6	10	9	78	4	91	22	3	17	42	9	34	6	49	192
Grand Total	5	1	10	16	13	201	6	220	33	4	26	63	14	68	10	92	391
Apprch %	31.2	6.2	62.5		5.9	91.4	2.7		52.4	6.3	41.3		15.2	73.9	10.9		
Total %	1.3	0.3	2.6	4.1	3.3	51.4	1.5	56.3	8.4	1	6.6	16.1	3.6	17.4	2.6	23.5	
Passenger Vehicles	4	1	9	14	7	189	3	199	25	1	14	40	8	58	1	67	320
% Passenger Vehicles	80	100	90	87.5	53.8	94	50	90.5	75.8	25	53.8	63.5	57.1	85.3	10	72.8	81.8
Large 2 Axle Vehicles	1	0	0	1	2	7	0	9	4	1	4	9	1	3	3	7	26
% Large 2 Axle Vehicles	20	0	0	6.2	15.4	3.5	0	4.1	12.1	25	15.4	14.3	7.1	4.4	30	7.6	6.6
3 Axle Vehicles	0	0	0	0	2	1	1	4	1	1	4	6	1	0	3	4	14
% 3 Axle Vehicles	0	0	0	0	15.4	0.5	16.7	1.8	3	25	15.4	9.5	7.1	0	30	4.3	3.6
4+ Axle Trucks	0	0	1	1	2	4	2	8	3	1	4	8	4	7	3	14	31
% 4+ Axle Trucks	0	0	10	6.2	15.4	2	33.3	3.6	9.1	25	15.4	12.7	28.6	10.3	30	15.2	7.9

	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**1**	0	1	**2**	1	**39**	**1**	**41**	**4**	0	**3**	**7**	**2**	7	**3**	12	**62**
04:15 PM	0	0	**2**	2	1	24	1	26	3	0	1	4	1	**13**	0	**14**	46
04:30 PM	0	0	1	1	0	38	0	38	2	**1**	2	5	0	8	0	8	52
04:45 PM	1	0	0	1	**2**	22	0	24	2	0	3	5	2	6	1	9	39
Total Volume	2	0	4	6	4	123	2	129	11	1	9	21	5	34	4	43	199
% App. Total	33.3	0	66.7		3.1	95.3	1.6		52.4	4.8	42.9		11.6	79.1	9.3		
PHF	.500	.000	.500	.750	.500	.788	.500	.787	.688	.250	.750	.750	.625	.654	.333	.768	.802

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				05:00 PM				05:00 PM			
+0 mins.	0	**1**	1	2	1	**39**	**1**	**41**	3	0	4	7	**4**	8	0	12
+15 mins.	0	0	1	1	1	24	1	26	4	0	3	7	3	6	1	10
+30 mins.	**3**	0	**2**	**5**	0	38	0	38	**9**	1	**6**	**16**	1	8	2	11
+45 mins.	0	0	2	2	**2**	22	0	24	6	**2**	4	12	1	**12**	**3**	**16**
Total Volume	3	1	6	10	4	123	2	129	22	3	17	42	9	34	6	49
% App. Total	30	10	60		3.1	95.3	1.6		52.4	7.1	40.5		18.4	69.4	12.2	
PHF	.250	.250	.750	.500	.500	.788	.500	.787	.611	.375	.708	.656	.563	.708	.500	.766

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

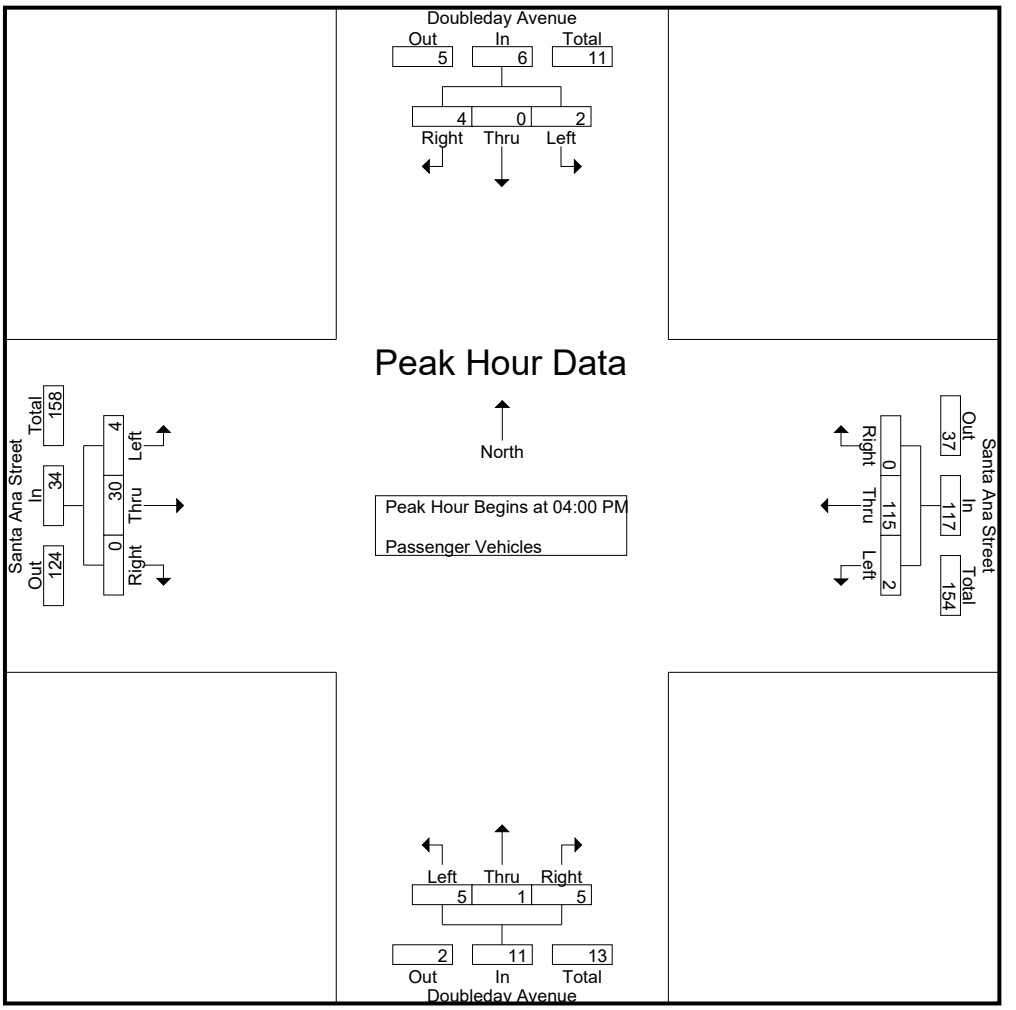
	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	0	1	2	0	35	0	35	2	0	2	4	1	4	0	5	46
04:15 PM	0	0	2	2	1	23	0	24	2	0	1	3	1	13	0	14	43
04:30 PM	0	0	1	1	0	36	0	36	0	1	0	1	0	8	0	8	46
04:45 PM	1	0	0	1	1	21	0	22	1	0	2	3	2	5	0	7	33
Total	2	0	4	6	2	115	0	117	5	1	5	11	4	30	0	34	168
05:00 PM	0	1	0	1	4	24	1	29	3	0	3	6	2	7	0	9	45
05:15 PM	0	0	1	1	1	18	0	19	4	0	1	5	1	4	0	5	30
05:30 PM	2	0	2	4	0	21	2	23	8	0	4	12	0	5	1	6	45
05:45 PM	0	0	2	2	0	11	0	11	5	0	1	6	1	12	0	13	32
Total	2	1	5	8	5	74	3	82	20	0	9	29	4	28	1	33	152
Grand Total	4	1	9	14	7	189	3	199	25	1	14	40	8	58	1	67	320
Apprch %	28.6	7.1	64.3		3.5	95	1.5		62.5	2.5	35		11.9	86.6	1.5		
Total %	1.2	0.3	2.8	4.4	2.2	59.1	0.9	62.2	7.8	0.3	4.4	12.5	2.5	18.1	0.3	20.9	

	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	**1**	0	1	**2**	0	35	0	35	**2**	0	**2**	**4**	1	4	0	5	**46**
04:15 PM	0	0	**2**	2	**1**	23	0	24	2	0	1	3	1	**13**	0	**14**	43
04:30 PM	0	0	1	1	0	**36**	0	**36**	0	**1**	0	1	0	8	0	8	46
04:45 PM	1	0	0	1	1	21	0	22	1	0	2	3	**2**	5	0	7	33
Total Volume	2	0	4	6	2	115	0	117	5	1	5	11	4	30	0	34	168
% App. Total	33.3	0	66.7		1.7	98.3	0		45.5	9.1	45.5		11.8	88.2	0		
PHF	.500	.000	.500	.750	.500	.799	.000	.813	.625	.250	.625	.688	.500	.577	.000	.607	.913

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	**1**	0	1	**2**	0	35	0	35	**2**	0	**2**	**4**	1	4	0	5
+15 mins.	0	0	**2**	2	**1**	23	0	24	2	0	1	3	1	**13**	0	**14**
+30 mins.	0	0	1	1	0	**36**	0	**36**	0	**1**	0	1	0	8	0	8
+45 mins.	1	0	0	1	1	21	0	22	1	0	2	3	**2**	5	0	7
Total Volume	2	0	4	6	2	115	0	117	5	1	5	11	4	30	0	34
% App. Total	33.3	0	66.7		1.7	98.3	0		45.5	9.1	45.5		11.8	88.2	0	
PHF	.500	.000	.500	.750	.500	.799	.000	.813	.625	.250	.625	.688	.500	.577	.000	.607

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

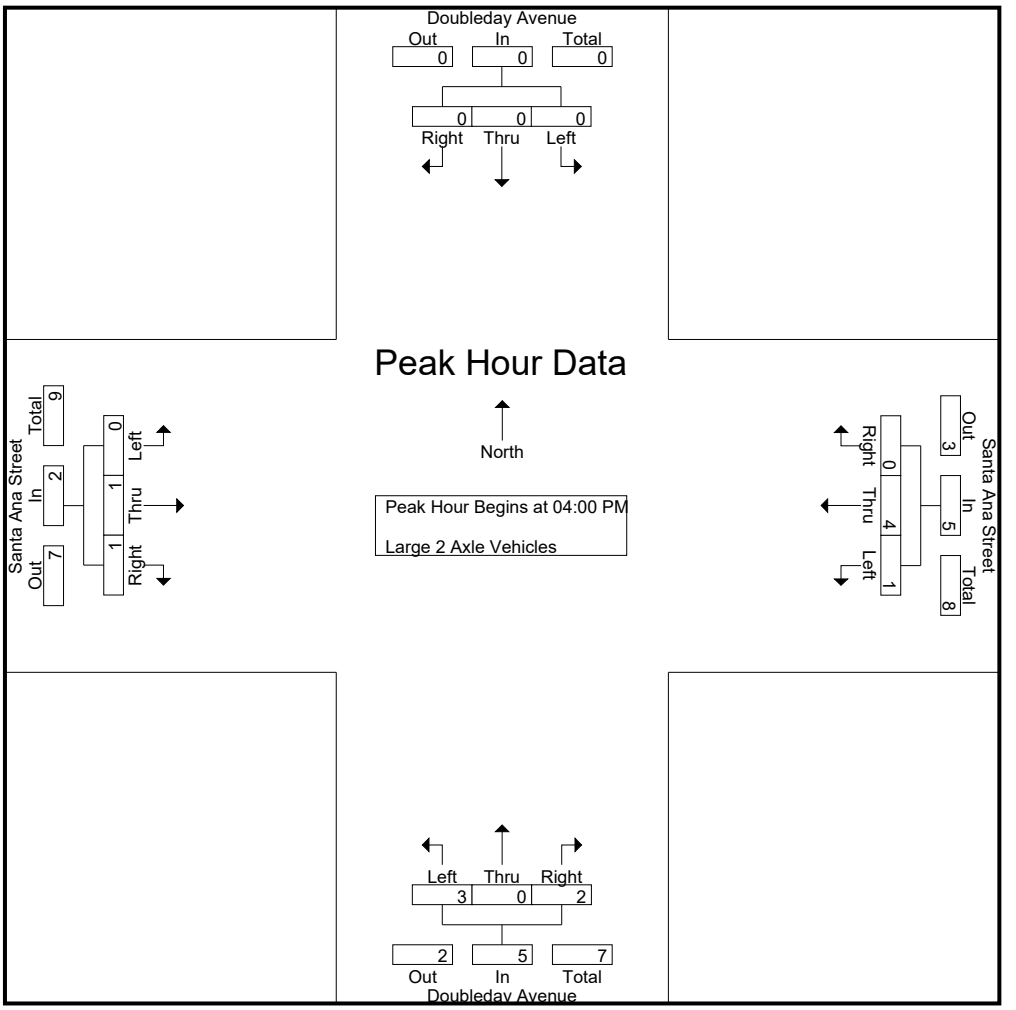
	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	1	1	0	2	2	0	1	3	0	0	0	0	5
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	2	0	2	1	0	1	2	0	0	0	0	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	2	3
Total	0	0	0	0	1	4	0	5	3	0	2	5	0	1	1	2	12
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	3	4
05:30 PM	1	0	0	1	1	1	0	2	0	0	0	0	0	1	0	1	4
05:45 PM	0	0	0	0	0	1	0	1	1	1	1	3	0	0	1	1	5
Total	1	0	0	1	1	3	0	4	1	1	2	4	1	2	2	5	14
Grand Total	1	0	0	1	2	7	0	9	4	1	4	9	1	3	3	7	26
Apprch %	100	0	0		22.2	77.8	0		44.4	11.1	44.4		14.3	42.9	42.9		
Total %	3.8	0	0	3.8	7.7	26.9	0	34.6	15.4	3.8	15.4	34.6	3.8	11.5	11.5	26.9	

	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	**1**	1	0	**2**	**2**	0	**1**	**3**	0	0	0	0	**5**
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	**2**	0	2	1	0	1	2	0	0	0	0	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	**1**	**1**	**2**	3
Total Volume	0	0	0	0	1	4	0	5	3	0	2	5	0	1	1	2	12
% App. Total	0	0	0		20	80	0		60	0	40		0	50	50		
PHF	.000	.000	.000	.000	.250	.500	.000	.625	.375	.000	.500	.417	.000	.250	.250	.250	.600

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	**1**	1	0	**2**	**2**	0	**1**	**3**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	**2**	0	2	1	0	1	2	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	**1**	**1**	**2**
Total Volume	0	0	0	0	1	4	0	5	3	0	2	5	0	1	1	2
% App. Total	0	0	0		20	80	0		60	0	40		0	50	50	
PHF	.000	.000	.000	.000	.250	.500	.000	.625	.375	.000	.500	.417	.000	.250	.250	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

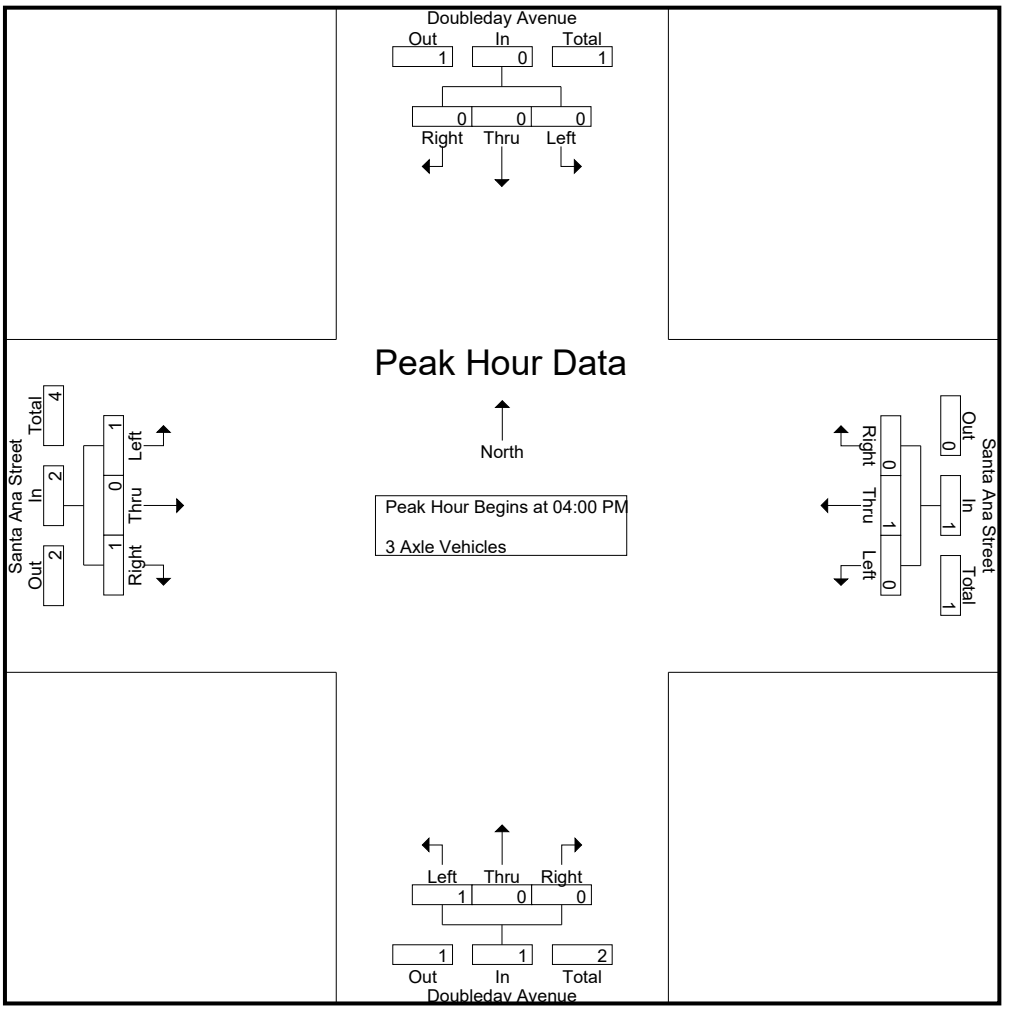
	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	2	3
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
Total	0	0	0	0	0	1	0	1	1	0	0	1	1	0	1	2	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1
05:30 PM	0	0	0	0	2	0	1	3	0	1	2	3	0	0	0	0	6
05:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2	3
Total	0	0	0	0	2	0	1	3	0	1	4	5	0	0	2	2	10
Grand Total	0	0	0	0	2	1	1	4	1	1	4	6	1	0	3	4	14
Apprch %	0	0	0		50	25	25		16.7	16.7	66.7		25	0	75		
Total %	0	0	0	0	14.3	7.1	7.1	28.6	7.1	7.1	28.6	42.9	7.1	0	21.4	28.6	

	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**	0	**1**	**2**	**3**
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	1	1	0	0	1	1	0	1	2	4
% App. Total	0	0	0		0	100	0		100	0	0		50	0	50		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.250	.000	.250	.250	.333

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa PM
Site Code : 05121618
Start Date : 10/26/2021



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**	0	**1**	**2**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	**1**	0	0	**1**	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	1	0	0	1	1	0	1	2
% App. Total	0	0	0		0	100	0		100	0	0		50	0	50	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.250	.000	.000	.250	.250	.000	.250	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

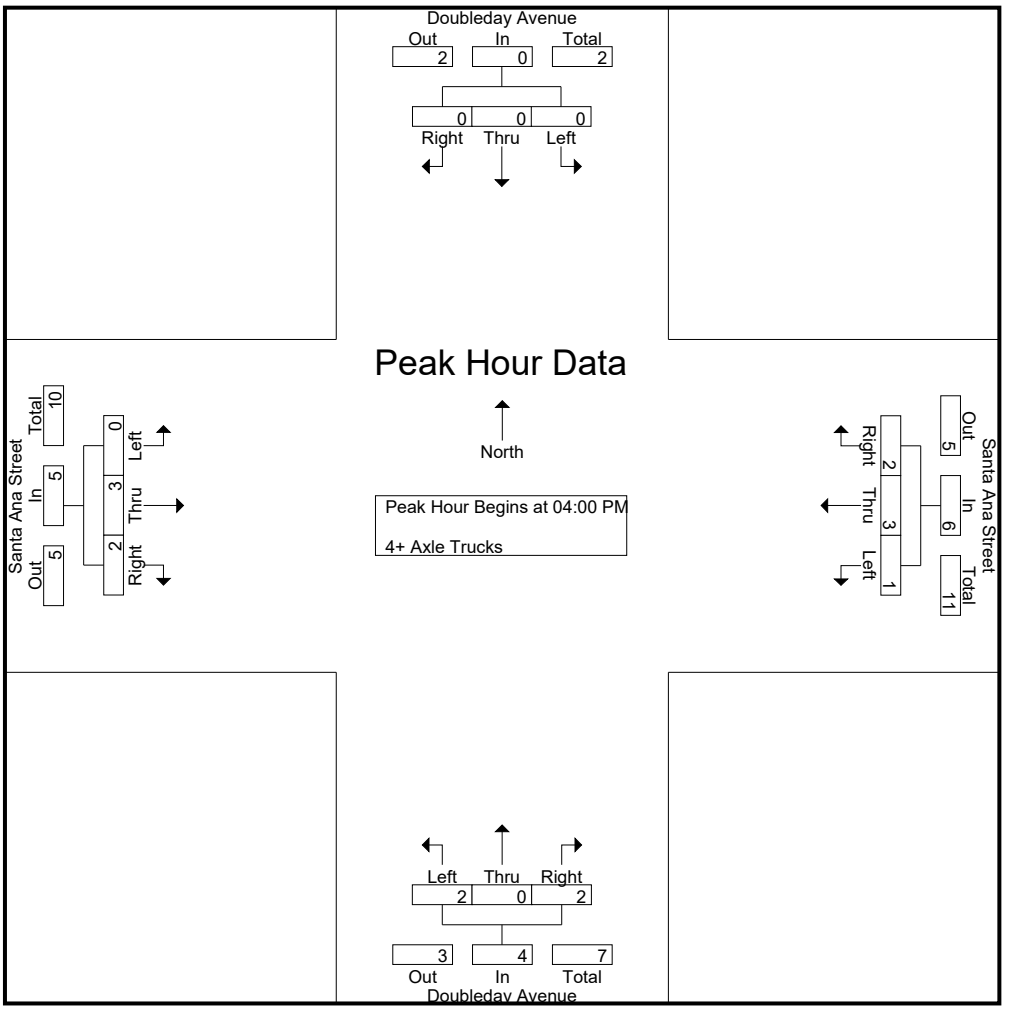
	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	2	1	3	0	0	0	0	0	3	2	5	8
04:15 PM	0	0	0	0	0	1	1	2	1	0	0	1	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	2
04:45 PM	0	0	0	0	1	0	0	1	0	0	1	1	0	0	0	0	2
Total	0	0	0	0	1	3	2	6	2	0	2	4	0	3	2	5	15
05:00 PM	0	0	1	1	0	1	0	1	0	0	1	1	2	1	0	3	6
05:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	1	1	0	2	3
05:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	1	2	1	4	5
05:45 PM	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	2
Total	0	0	1	1	1	1	0	2	1	1	2	4	4	4	1	9	16
Grand Total	0	0	1	1	2	4	2	8	3	1	4	8	4	7	3	14	31
Apprch %	0	0	100		25	50	25		37.5	12.5	50		28.6	50	21.4		
Total %	0	0	3.2	3.2	6.5	12.9	6.5	25.8	9.7	3.2	12.9	25.8	12.9	22.6	9.7	45.2	

	Doubleday Avenue Southbound				Santa Ana Street Westbound				Doubleday Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	**2**	**1**	**3**	0	0	0	0	0	**3**	**2**	**5**	**8**
04:15 PM	0	0	0	0	0	1	1	2	**1**	0	0	1	0	0	0	0	3
04:30 PM	0	0	0	0	0	0	0	0	1	0	**1**	**2**	0	0	0	0	2
04:45 PM	0	0	0	0	**1**	0	0	1	0	0	1	1	0	0	0	0	2
Total Volume	0	0	0	0	1	3	2	6	2	0	2	4	0	3	2	5	15
% App. Total	0	0	0		16.7	50	33.3		50	0	50		0	60	40		
PHF	.000	.000	.000	.000	.250	.375	.500	.500	.500	.000	.500	.500	.000	.250	.250	.250	.469

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 17_ONT_Doub_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	**2**	**1**	**3**	0	0	0	0	0	**3**	**2**	**5**
+15 mins.	0	0	0	0	0	1	1	2	**1**	0	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	1	0	**1**	**2**	0	0	0	0
+45 mins.	0	0	0	0	**1**	0	0	1	0	0	1	1	0	0	0	0
Total Volume	0	0	0	0	1	3	2	6	2	0	2	4	0	3	2	5
% App. Total	0	0	0		16.7	50	33.3		50	0	50		0	60	40	
PHF	.000	.000	.000	.000	.250	.375	.500	.500	.500	.000	.500	.500	.000	.250	.250	.250

Location: Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Doubleday Avenue	East Leg Santa Ana Street	South Leg Doubleday Avenue	West Leg Santa Ana Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Doubleday Avenue	East Leg Santa Ana Street	South Leg Doubleday Avenue	West Leg Santa Ana Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Ontario
N/S: Doubleday Avenue
E/W: Santa Ana Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Doubleday Avenue			Westbound Santa Ana Street			Northbound Doubleday Avenue			Eastbound Santa Ana Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	1	0	1

	Southbound Doubleday Avenue			Westbound Santa Ana Street			Northbound Doubleday Avenue			Eastbound Santa Ana Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

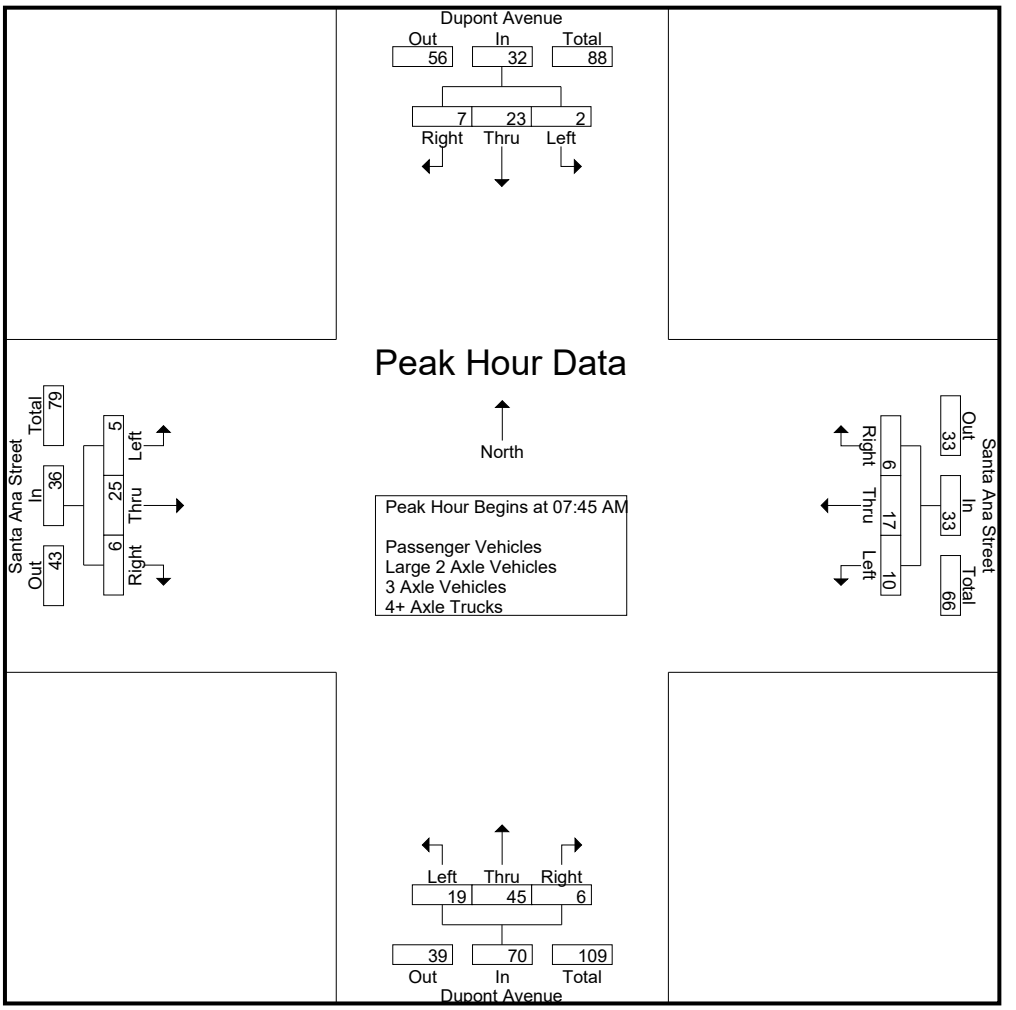
	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound					Santa Ana Street Eastbound						
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	2	2	1	5	0	1	0	1	2	9	1	0	12	4	9	2	15	0	33	33
07:15 AM	2	3	1	6	0	8	2	10	2	7	0	0	9	0	4	4	8	0	33	33
07:30 AM	0	2	0	2	2	0	3	5	2	8	0	0	10	0	2	6	8	0	25	25
07:45 AM	0	6	1	7	4	5	0	9	3	9	2	0	14	3	5	4	12	0	42	42
Total	4	13	3	20	6	14	5	25	9	33	3	0	45	7	20	16	43	0	133	133
08:00 AM	0	8	0	8	4	4	3	11	3	8	2	0	13	1	8	1	10	0	42	42
08:15 AM	0	4	4	8	1	1	1	3	8	18	2	0	28	0	8	0	8	0	47	47
08:30 AM	2	5	2	9	1	7	2	10	5	10	0	0	15	1	4	1	6	0	40	40
08:45 AM	0	0	1	1	0	6	1	7	2	9	3	0	14	1	2	1	4	0	26	26
Total	2	17	7	26	6	18	7	31	18	45	7	0	70	3	22	3	28	0	155	155
Grand Total	6	30	10	46	12	32	12	56	27	78	10	0	115	10	42	19	71	0	288	288
Apprch %	13	65.2	21.7		21.4	57.1	21.4		23.5	67.8	8.7			14.1	59.2	26.8				
Total %	2.1	10.4	3.5	16	4.2	11.1	4.2	19.4	9.4	27.1	3.5		39.9	3.5	14.6	6.6	24.7	0	100	
Passenger Vehicles	1	25	9	35	12	26	10	48	24	60	5		89	9	35	18	62	0	0	234
% Passenger Vehicles	16.7	83.3	90	76.1	100	81.2	83.3	85.7	88.9	76.9	50	0	77.4	90	83.3	94.7	87.3	0	0	81.2
Large 2 Axle Vehicles	2	2	1	5	0	3	0	3	2	9	3		14	0	2	1	3	0	0	25
% Large 2 Axle Vehicles	33.3	6.7	10	10.9	0	9.4	0	5.4	7.4	11.5	30	0	12.2	0	4.8	5.3	4.2	0	0	8.7
3 Axle Vehicles	0	0	0	0	0	2	0	2	0	1	0		1	0	0	0	0	0	0	3
% 3 Axle Vehicles	0	0	0	0	0	6.2	0	3.6	0	1.3	0	0	0.9	0	0	0	0	0	0	1
4+ Axle Trucks	3	3	0	6	0	1	2	3	1	8	2		11	1	5	0	6	0	0	26
% 4+ Axle Trucks	50	10	0	13	0	3.1	16.7	5.4	3.7	10.3	20	0	9.6	10	11.9	0	8.5	0	0	9

	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	6	1	7	**4**	5	0	9	3	9	**2**	14	**3**	5	**4**	**12**	42
08:00 AM	0	**8**	0	8	4	4	**3**	**11**	3	8	2	13	1	**8**	1	10	42
08:15 AM	0	4	**4**	8	1	1	1	3	**8**	**18**	2	**28**	0	8	0	8	**47**
08:30 AM	**2**	5	2	**9**	1	**7**	2	10	5	10	0	15	1	4	1	6	40
Total Volume	2	23	7	32	10	17	6	33	19	45	6	70	5	25	6	36	171
% App. Total	6.2	71.9	21.9		30.3	51.5	18.2		27.1	64.3	8.6		13.9	69.4	16.7		
PHF	.250	.719	.438	.889	.625	.607	.500	.750	.594	.625	.750	.625	.417	.781	.375	.750	.910

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:15 AM				07:45 AM				07:00 AM			
+0 mins.	0	6	1	7	0	**8**	2	10	3	9	**2**	14	**4**	**9**	2	**15**
+15 mins.	0	**8**	0	8	2	0	**3**	5	3	8	2	13	0	4	4	8
+30 mins.	0	4	**4**	8	**4**	5	0	9	**8**	**18**	2	**28**	0	2	**6**	8
+45 mins.	**2**	5	2	**9**	4	4	3	**11**	5	10	0	15	3	5	4	12
Total Volume	2	23	7	32	10	17	8	35	19	45	6	70	7	20	16	43
% App. Total	6.2	71.9	21.9		28.6	48.6	22.9		27.1	64.3	8.6		16.3	46.5	37.2	
PHF	.250	.719	.438	.889	.625	.531	.667	.795	.594	.625	.750	.625	.438	.556	.667	.717

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

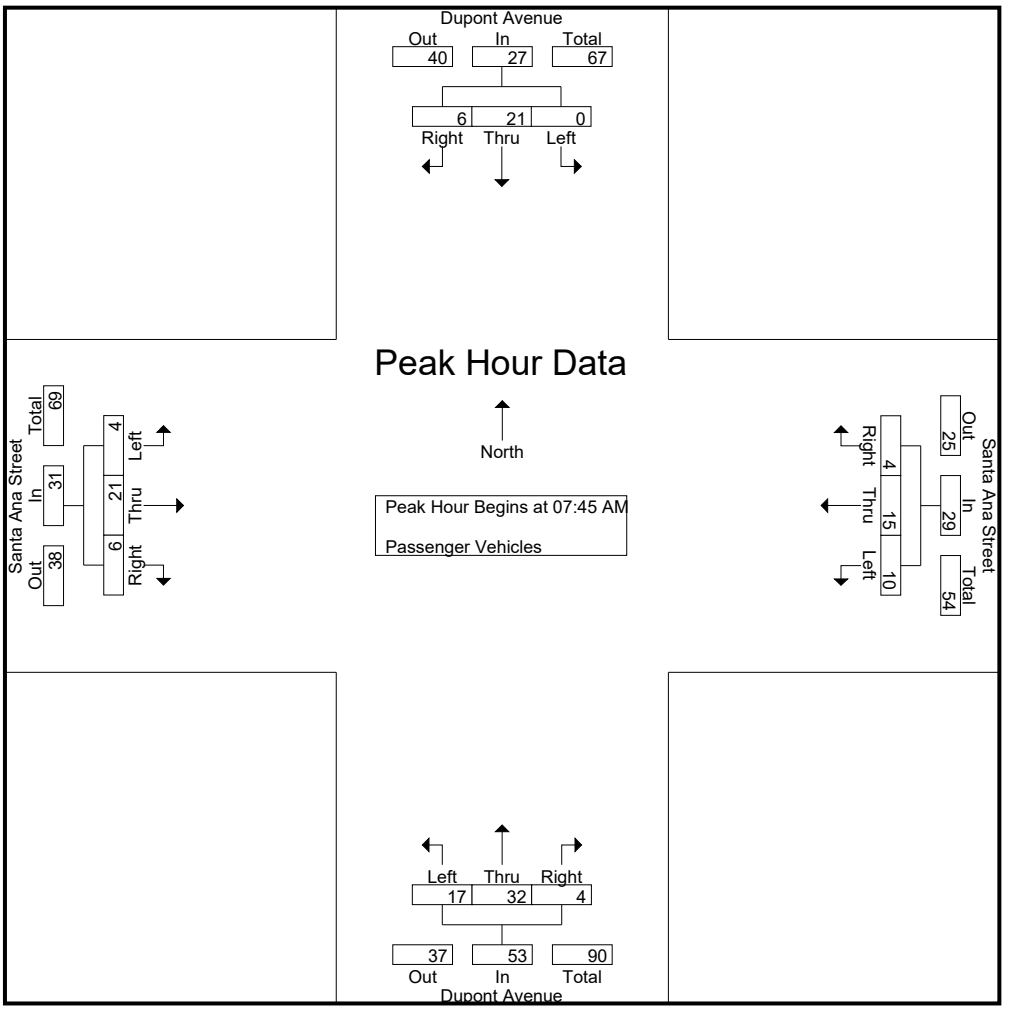
	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound					Santa Ana Street Eastbound						
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	0	1	2	0	1	0	1	2	8	1	0	11	4	6	2	12	0	26	26
07:15 AM	0	2	1	3	0	7	2	9	2	6	0	0	8	0	4	3	7	0	27	27
07:30 AM	0	2	0	2	2	0	3	5	1	7	0	0	8	0	2	6	8	0	23	23
07:45 AM	0	5	1	6	4	5	0	9	3	5	2	0	10	3	5	4	12	0	37	37
Total	1	9	3	13	6	13	5	24	8	26	3	0	37	7	17	15	39	0	113	113
08:00 AM	0	8	0	8	4	3	2	9	3	7	1	0	11	0	6	1	7	0	35	35
08:15 AM	0	4	4	8	1	1	0	2	7	12	1	0	20	0	6	0	6	0	36	36
08:30 AM	0	4	1	5	1	6	2	9	4	8	0	0	12	1	4	1	6	0	32	32
08:45 AM	0	0	1	1	0	3	1	4	2	7	0	0	9	1	2	1	4	0	18	18
Total	0	16	6	22	6	13	5	24	16	34	2	0	52	2	18	3	23	0	121	121
Grand Total	1	25	9	35	12	26	10	48	24	60	5	0	89	9	35	18	62	0	234	234
Apprch %	2.9	71.4	25.7		25	54.2	20.8		27	67.4	5.6			14.5	56.5	29				
Total %	0.4	10.7	3.8	15	5.1	11.1	4.3	20.5	10.3	25.6	2.1		38	3.8	15	7.7	26.5	0	100	

	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	5	1	6	**4**	5	0	**9**	3	5	**2**	10	**3**	5	**4**	**12**	**37**
08:00 AM	0	**8**	0	**8**	4	3	**2**	9	3	7	1	11	0	**6**	1	7	35
08:15 AM	0	4	**4**	8	1	1	0	2	**7**	**12**	1	**20**	0	6	0	6	36
08:30 AM	0	4	1	5	1	**6**	2	9	4	8	0	12	1	4	1	6	32
Total Volume	0	21	6	27	10	15	4	29	17	32	4	53	4	21	6	31	140
% App. Total	0	77.8	22.2		34.5	51.7	13.8		32.1	60.4	7.5		12.9	67.7	19.4		
PHF	.000	.656	.375	.844	.625	.625	.500	.806	.607	.667	.500	.663	.333	.875	.375	.646	.946

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	5	1	6	**4**	5	0	**9**	3	5	**2**	10	**3**	5	**4**	**12**
+15 mins.	0	**8**	0	**8**	4	3	**2**	9	3	7	1	11	0	**6**	1	7
+30 mins.	0	4	**4**	8	1	1	0	2	**7**	**12**	1	**20**	0	6	0	6
+45 mins.	0	4	1	5	1	**6**	2	9	4	8	0	12	1	4	1	6
Total Volume	0	21	6	27	10	15	4	29	17	32	4	53	4	21	6	31
% App. Total	0	77.8	22.2		34.5	51.7	13.8		32.1	60.4	7.5		12.9	67.7	19.4	
PHF	.000	.656	.375	.844	.625	.625	.500	.806	.607	.667	.500	.663	.333	.875	.375	.646

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

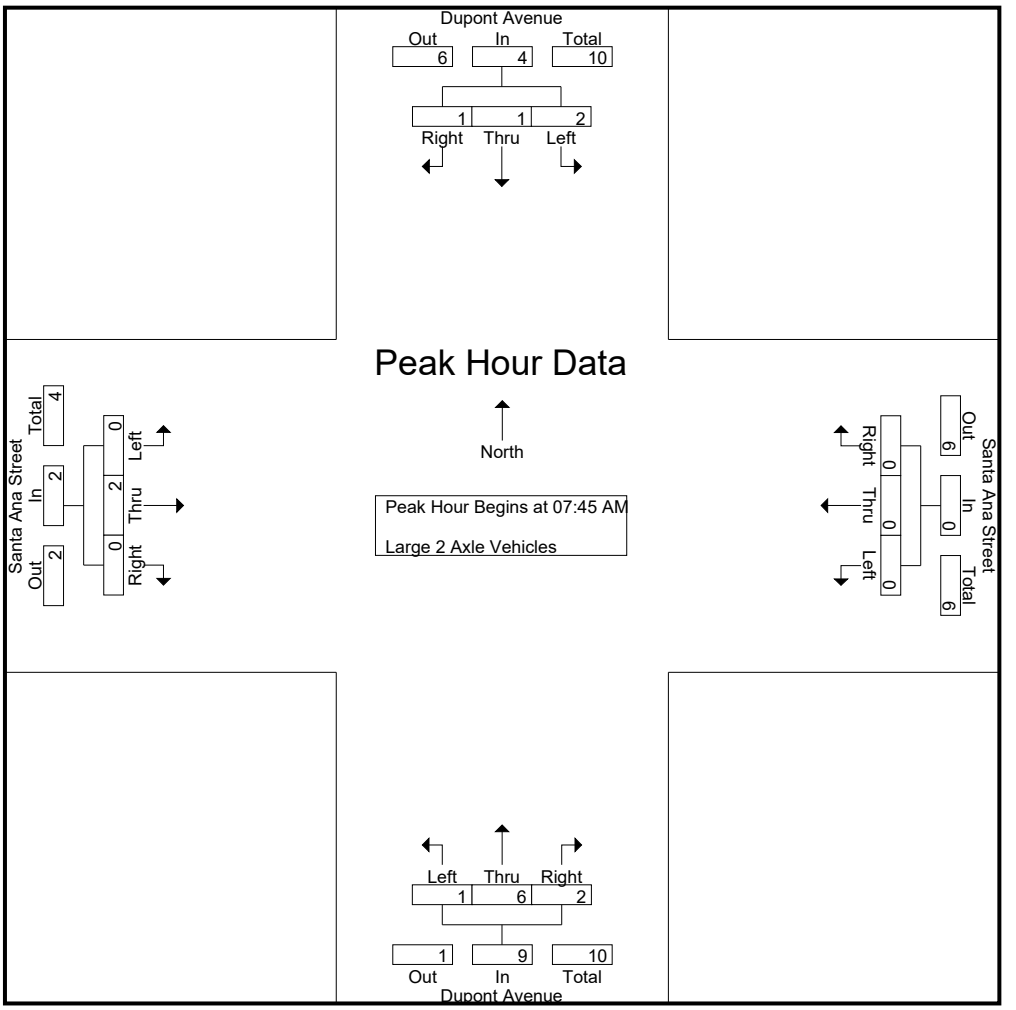
	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound					Santa Ana Street Eastbound						
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	1	1	0	3	3
07:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2	2
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2	2
Total	0	1	0	1	0	1	0	1	1	3	0	0	4	0	0	1	1	0	7	7
08:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	1	0	3	3
08:15 AM	0	0	0	0	0	0	0	0	1	2	1	0	4	0	1	0	1	0	5	5
08:30 AM	2	1	1	4	0	0	0	0	0	1	0	0	1	0	0	0	0	0	5	5
08:45 AM	0	0	0	0	0	2	0	2	0	2	1	0	3	0	0	0	0	0	5	5
Total	2	1	1	4	0	2	0	2	1	6	3	0	10	0	2	0	2	0	18	18
Grand Total	2	2	1	5	0	3	0	3	2	9	3	0	14	0	2	1	3	0	25	25
Apprch %	40	40	20		0	100	0		14.3	64.3	21.4			0	66.7	33.3				
Total %	8	8	4	20	0	12	0	12	8	36	12		56	0	8	4	12	0	100	

	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	**2**	0	2	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	1	**1**	2	0	**1**	0	**1**	3
08:15 AM	0	0	0	0	0	0	0	0	**1**	2	1	**4**	0	1	0	1	**5**
08:30 AM	**2**	**1**	**1**	**4**	0	0	0	0	0	1	0	1	0	0	0	0	5
Total Volume	2	1	1	4	0	0	0	0	1	6	2	9	0	2	0	2	15
% App. Total	50	25	25		0	0	0		11.1	66.7	22.2		0	100	0		
PHF	.250	.250	.250	.250	.000	.000	.000	.000	.250	.750	.500	.563	.000	.500	.000	.500	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**2**	0	2	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	**1**	2	0	**1**	0	**1**
+30 mins.	0	0	0	0	0	0	0	0	**1**	2	1	**4**	0	1	0	1
+45 mins.	**2**	**1**	**1**	**4**	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	2	1	1	4	0	0	0	0	1	6	2	9	0	2	0	2
% App. Total	50	25	25		0	0	0		11.1	66.7	22.2		0	100	0	
PHF	.250	.250	.250	.250	.000	.000	.000	.000	.250	.750	.500	.563	.000	.500	.000	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

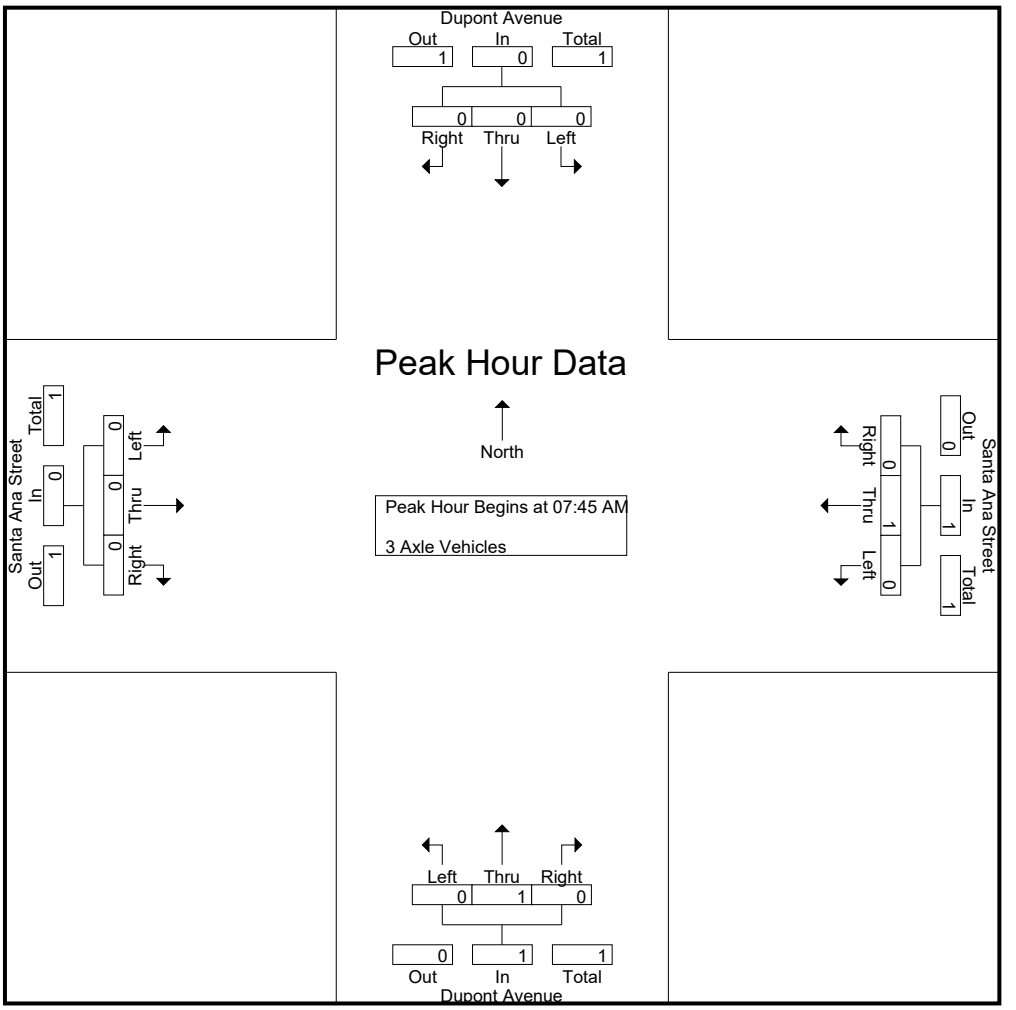
	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound					Santa Ana Street Eastbound						
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2	2
Grand Total	0	0	0	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	3	3
Apprch %	0	0	0		0	100	0		0	100	0			0	0	0				
Total %	0	0	0	0	0	66.7	0	66.7	0	33.3	0		33.3	0	0	0	0	0	100	

	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**1**
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
% App. Total	0	0	0		0	100	0		0	100	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	**1**	0	**1**	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0
% App. Total	0	0	0		0	100	0		0	100	0		0	0	0	
PHF	.000	.000	.000	.000	.000	.250	.000	.250	.000	.250	.000	.250	.000	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

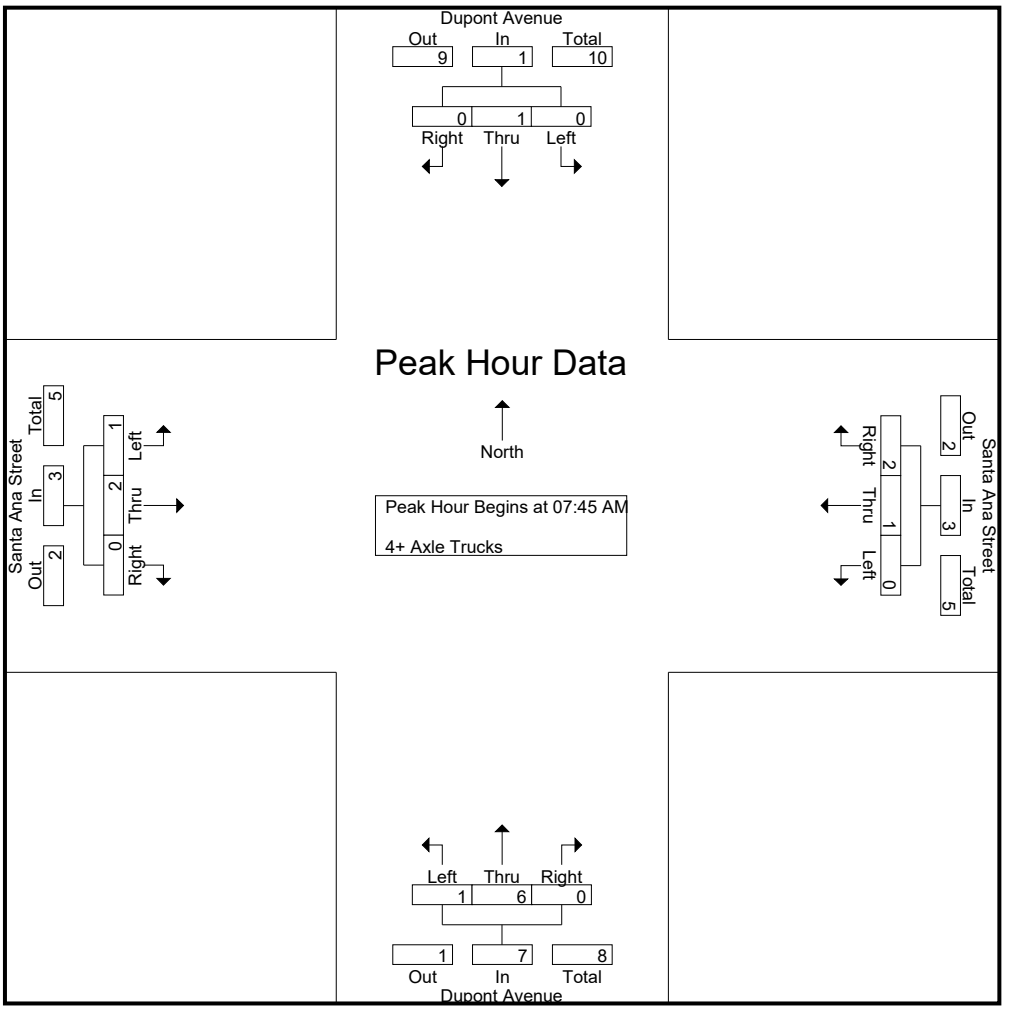
	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound					Santa Ana Street Eastbound						
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	2	0	3	0	0	0	0	0	1	0	0	1	0	3	0	3	0	7	7
07:15 AM	2	0	0	2	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3	3
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	2
Total	3	3	0	6	0	0	0	0	0	3	0	0	3	0	3	0	3	0	12	12
08:00 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	1	1	0	2	0	4	4
08:15 AM	0	0	0	0	0	0	1	1	0	4	0	0	4	0	1	0	1	0	6	6
08:30 AM	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2	2
08:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	2	2
Total	0	0	0	0	0	1	2	3	1	5	2	0	8	1	2	0	3	0	14	14
Grand Total	3	3	0	6	0	1	2	3	1	8	2	0	11	1	5	0	6	0	26	26
Apprch %	50	50	0		0	33.3	66.7		9.1	72.7	18.2			16.7	83.3	0				
Total %	11.5	11.5	0	23.1	0	3.8	7.7	11.5	3.8	30.8	7.7		42.3	3.8	19.2	0	23.1	0	100	

	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**1**	0	**1**	0	0	0	0	0	1	0	1	0	0	0	0	2
08:00 AM	0	0	0	0	0	**1**	**1**	**2**	0	0	0	0	**1**	**1**	0	**2**	4
08:15 AM	0	0	0	0	0	0	1	1	0	**4**	0	**4**	0	1	0	1	**6**
08:30 AM	0	0	0	0	0	0	0	0	**1**	1	0	2	0	0	0	0	2
Total Volume	0	1	0	1	0	1	2	3	1	6	0	7	1	2	0	3	14
% App. Total	0	100	0		0	33.3	66.7		14.3	85.7	0		33.3	66.7	0		
PHF	.000	.250	.000	.250	.000	.250	.500	.375	.250	.375	.000	.438	.250	.500	.000	.375	.583

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	**1**	**1**	**2**	0	0	0	0	**1**	**1**	0	**2**
+30 mins.	0	0	0	0	0	0	1	1	0	**4**	0	**4**	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	**1**	1	0	2	0	0	0	0
Total Volume	0	1	0	1	0	1	2	3	1	6	0	7	1	2	0	3
% App. Total	0	100	0		0	33.3	66.7		14.3	85.7	0		33.3	66.7	0	
PHF	.000	.250	.000	.250	.000	.250	.500	.375	.250	.375	.000	.438	.250	.500	.000	.375

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

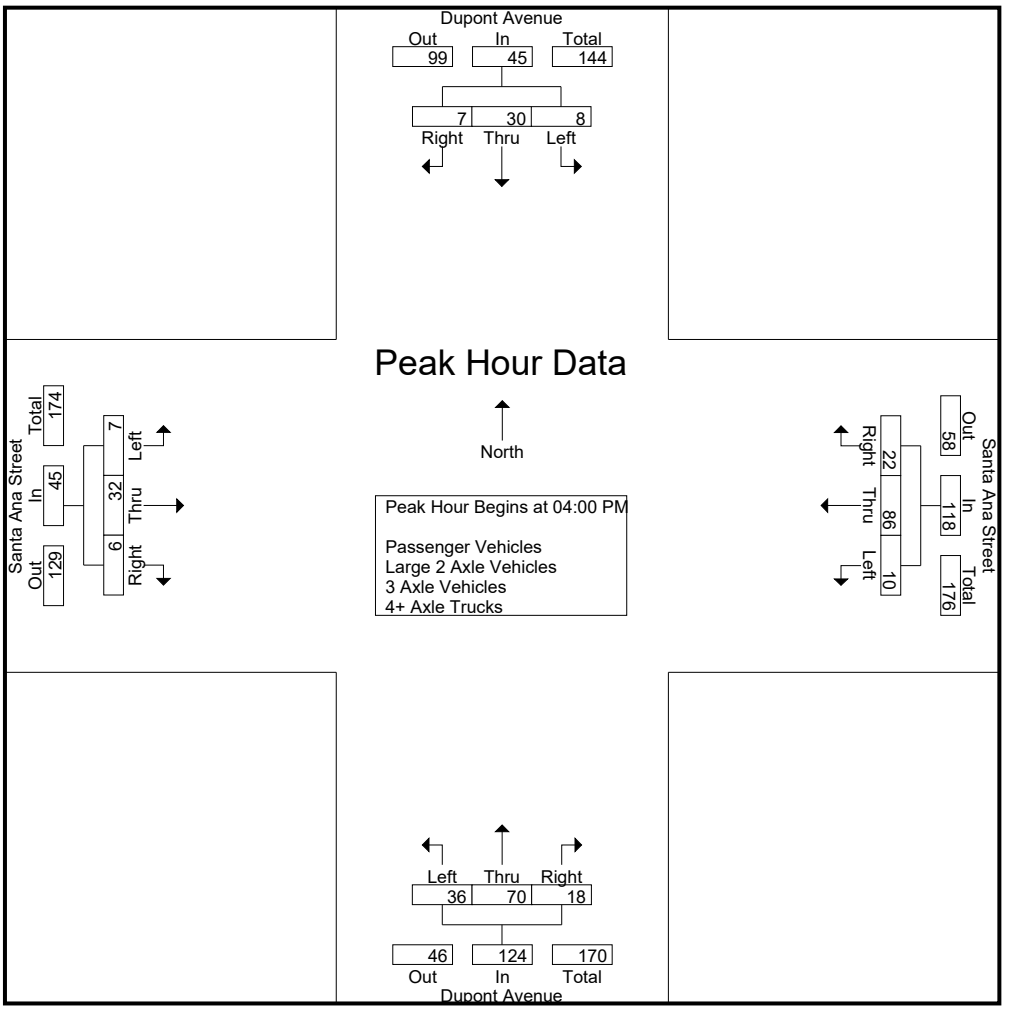
	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	12	3	16	2	27	1	30	6	16	8	30	1	7	3	11	87
04:15 PM	1	2	3	6	0	16	6	22	9	20	2	31	0	13	0	13	72
04:30 PM	2	13	1	16	5	26	5	36	14	24	5	43	5	4	0	9	104
04:45 PM	4	3	0	7	3	17	10	30	7	10	3	20	1	8	3	12	69
Total	8	30	7	45	10	86	22	118	36	70	18	124	7	32	6	45	332
05:00 PM	3	7	1	11	2	20	1	23	6	15	4	25	3	13	5	21	80
05:15 PM	2	8	0	10	2	10	2	14	5	17	2	24	1	8	2	11	59
05:30 PM	10	14	5	29	1	11	2	14	8	7	0	15	2	14	3	19	77
05:45 PM	2	4	3	9	0	6	2	8	2	3	3	8	0	18	0	18	43
Total	17	33	9	59	5	47	7	59	21	42	9	72	6	53	10	69	259
Grand Total	25	63	16	104	15	133	29	177	57	112	27	196	13	85	16	114	591
Apprch %	24	60.6	15.4		8.5	75.1	16.4		29.1	57.1	13.8		11.4	74.6	14		
Total %	4.2	10.7	2.7	17.6	2.5	22.5	4.9	29.9	9.6	19	4.6	33.2	2.2	14.4	2.7	19.3	
Passenger Vehicles	20	43	11	74	10	124	24	158	52	96	19	167	8	74	9	91	490
% Passenger Vehicles	80	68.3	68.8	71.2	66.7	93.2	82.8	89.3	91.2	85.7	70.4	85.2	61.5	87.1	56.2	79.8	82.9
Large 2 Axle Vehicles	1	10	3	14	1	5	3	9	2	7	3	12	2	4	2	8	43
% Large 2 Axle Vehicles	4	15.9	18.8	13.5	6.7	3.8	10.3	5.1	3.5	6.2	11.1	6.1	15.4	4.7	12.5	7	7.3
3 Axle Vehicles	1	0	0	1	1	3	1	5	0	1	2	3	0	3	2	5	14
% 3 Axle Vehicles	4	0	0	1	6.7	2.3	3.4	2.8	0	0.9	7.4	1.5	0	3.5	12.5	4.4	2.4
4+ Axle Trucks	3	10	2	15	3	1	1	5	3	8	3	14	3	4	3	10	44
% 4+ Axle Trucks	12	15.9	12.5	14.4	20	0.8	3.4	2.8	5.3	7.1	11.1	7.1	23.1	4.7	18.8	8.8	7.4

	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	12	**3**	**16**	2	**27**	1	30	6	16	**8**	30	1	7	**3**	11	87
04:15 PM	1	2	3	6	0	16	6	22	9	20	2	31	0	**13**	0	**13**	72
04:30 PM	2	**13**	1	16	**5**	26	5	**36**	**14**	**24**	5	**43**	**5**	4	0	9	**104**
04:45 PM	**4**	3	0	7	3	17	**10**	30	7	10	3	20	1	8	3	12	69
Total Volume	8	30	7	45	10	86	22	118	36	70	18	124	7	32	6	45	332
% App. Total	17.8	66.7	15.6		8.5	72.9	18.6		29	56.5	14.5		15.6	71.1	13.3		
PHF	.500	.577	.583	.703	.500	.796	.550	.819	.643	.729	.563	.721	.350	.615	.500	.865	.798

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:00 PM				05:00 PM			
+0 mins.	3	7	1	11	2	**27**	1	30	6	16	**8**	30	**3**	13	**5**	**21**
+15 mins.	2	8	0	10	0	16	6	22	9	20	2	31	1	8	2	11
+30 mins.	**10**	**14**	**5**	**29**	**5**	26	5	**36**	**14**	**24**	5	**43**	2	14	3	19
+45 mins.	2	4	3	9	3	17	**10**	30	7	10	3	20	0	**18**	0	18
Total Volume	17	33	9	59	10	86	22	118	36	70	18	124	6	53	10	69
% App. Total	28.8	55.9	15.3		8.5	72.9	18.6		29	56.5	14.5		8.7	76.8	14.5	
PHF	.425	.589	.450	.509	.500	.796	.550	.819	.643	.729	.563	.721	.500	.736	.500	.821

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

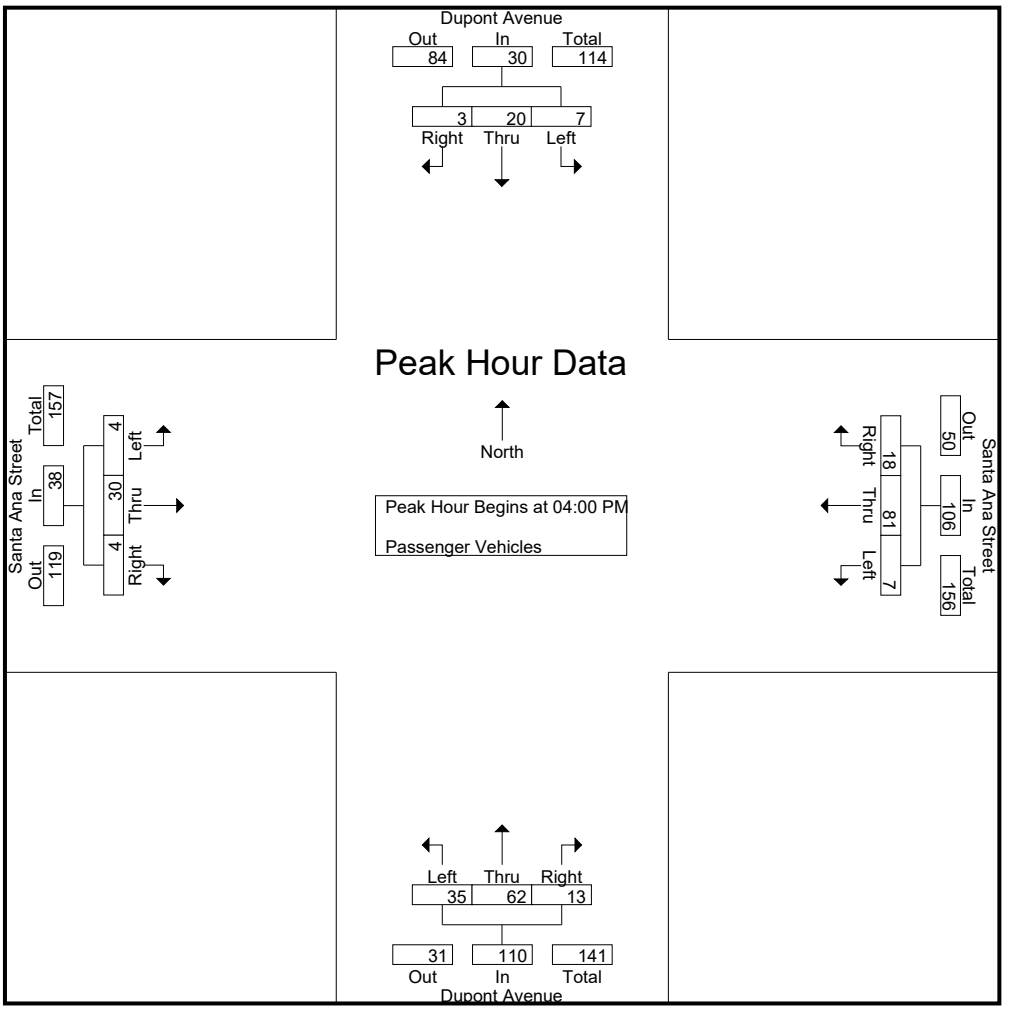
	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	5	1	7	1	27	0	28	6	15	7	28	0	6	2	8	71
04:15 PM	0	2	2	4	0	14	6	20	9	18	1	28	0	13	0	13	65
04:30 PM	2	12	0	14	4	25	4	33	14	21	4	39	4	4	0	8	94
04:45 PM	4	1	0	5	2	15	8	25	6	8	1	15	0	7	2	9	54
Total	7	20	3	30	7	81	18	106	35	62	13	110	4	30	4	38	284
05:00 PM	1	5	1	7	1	19	1	21	4	13	4	21	3	12	4	19	68
05:15 PM	1	4	0	5	1	10	1	12	5	15	1	21	1	6	0	7	45
05:30 PM	10	12	4	26	1	8	2	11	6	4	0	10	0	12	1	13	60
05:45 PM	1	2	3	6	0	6	2	8	2	2	1	5	0	14	0	14	33
Total	13	23	8	44	3	43	6	52	17	34	6	57	4	44	5	53	206
Grand Total	20	43	11	74	10	124	24	158	52	96	19	167	8	74	9	91	490
Apprch %	27	58.1	14.9		6.3	78.5	15.2		31.1	57.5	11.4		8.8	81.3	9.9		
Total %	4.1	8.8	2.2	15.1	2	25.3	4.9	32.2	10.6	19.6	3.9	34.1	1.6	15.1	1.8	18.6	

	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	1	5	1	7	1	**27**	0	28	6	15	**7**	28	0	6	**2**	8	71
04:15 PM	0	2	**2**	4	0	14	6	20	9	18	1	28	0	**13**	0	**13**	65
04:30 PM	2	**12**	0	**14**	**4**	25	4	**33**	**14**	**21**	4	**39**	**4**	4	0	8	**94**
04:45 PM	**4**	1	0	5	2	15	**8**	25	6	8	1	15	0	7	2	9	54
Total Volume	7	20	3	30	7	81	18	106	35	62	13	110	4	30	4	38	284
% App. Total	23.3	66.7	10		6.6	76.4	17		31.8	56.4	11.8		10.5	78.9	10.5		
PHF	.438	.417	.375	.536	.438	.750	.563	.803	.625	.738	.464	.705	.250	.577	.500	.731	.755

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	1	5	1	7	1	**27**	0	28	6	15	**7**	28	0	6	**2**	8
+15 mins.	0	2	**2**	4	0	14	6	20	9	18	1	28	0	**13**	0	**13**
+30 mins.	2	**12**	0	**14**	**4**	25	4	**33**	**14**	**21**	4	**39**	**4**	4	0	8
+45 mins.	**4**	1	0	5	2	15	**8**	25	6	8	1	15	0	7	2	9
Total Volume	7	20	3	30	7	81	18	106	35	62	13	110	4	30	4	38
% App. Total	23.3	66.7	10		6.6	76.4	17		31.8	56.4	11.8		10.5	78.9	10.5	
PHF	.438	.417	.375	.536	.438	.750	.563	.803	.625	.738	.464	.705	.250	.577	.500	.731

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

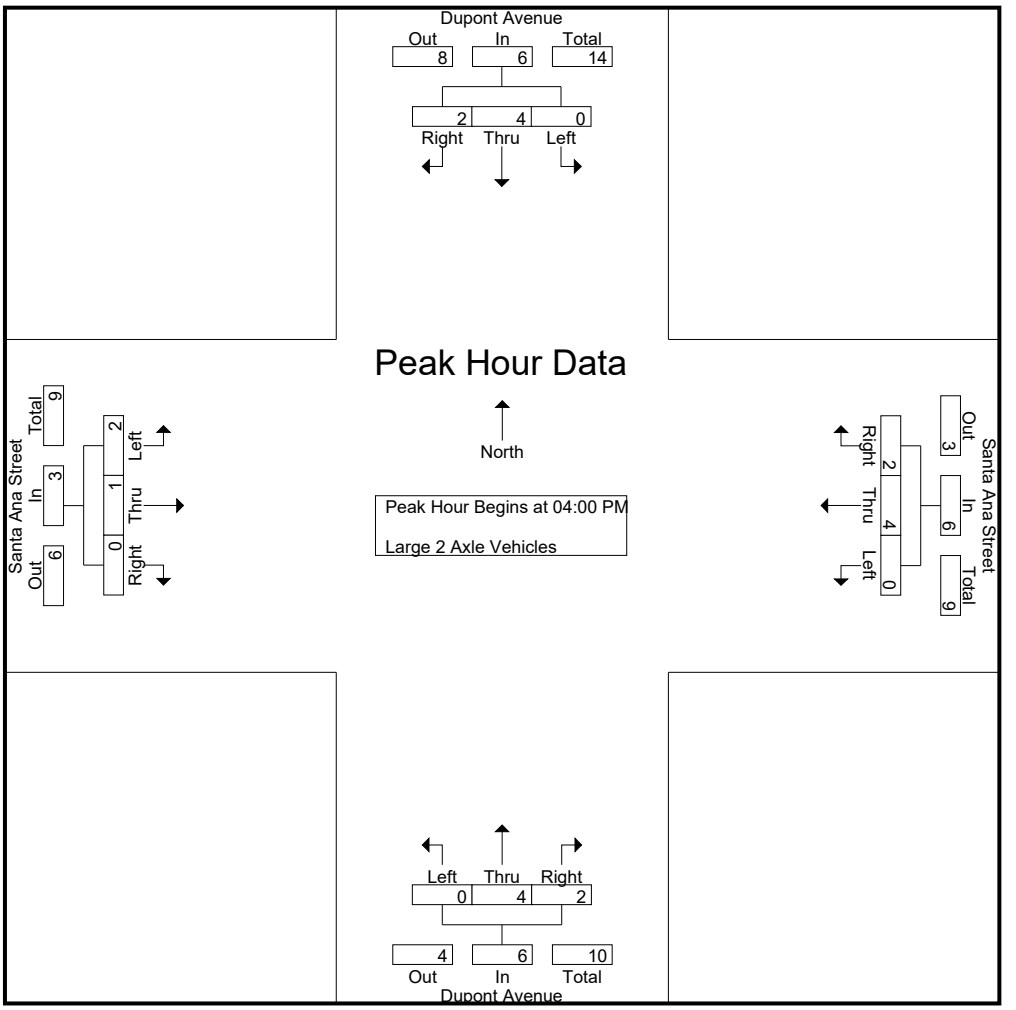
	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	3	1	4	0	0	0	0	0	1	0	1	0	1	0	1	6
04:15 PM	0	0	0	0	0	1	0	1	0	1	1	2	0	0	0	0	3
04:30 PM	0	0	1	1	0	1	0	1	0	1	1	2	1	0	0	1	5
04:45 PM	0	1	0	1	0	2	2	4	0	1	0	1	1	0	0	1	7
Total	0	4	2	6	0	4	2	6	0	4	2	6	2	1	0	3	21
05:00 PM	1	1	0	2	1	1	0	2	0	1	0	1	0	0	0	0	5
05:15 PM	0	2	0	2	0	0	1	1	0	1	1	2	0	0	2	2	7
05:30 PM	0	2	1	3	0	0	0	0	2	1	0	3	0	2	0	2	8
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
Total	1	6	1	8	1	1	1	3	2	3	1	6	0	3	2	5	22
Grand Total	1	10	3	14	1	5	3	9	2	7	3	12	2	4	2	8	43
Apprch %	7.1	71.4	21.4		11.1	55.6	33.3		16.7	58.3	25		25	50	25		
Total %	2.3	23.3	7	32.6	2.3	11.6	7	20.9	4.7	16.3	7	27.9	4.7	9.3	4.7	18.6	

	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**3**	**1**	**4**	0	0	0	0	0	**1**	0	1	0	**1**	0	**1**	6
04:15 PM	0	0	0	0	0	1	0	1	0	1	**1**	**2**	0	0	0	0	3
04:30 PM	0	0	1	1	0	1	0	1	0	1	1	2	**1**	0	0	1	5
04:45 PM	0	1	0	1	0	**2**	**2**	**4**	0	1	0	1	1	0	0	1	**7**
Total Volume	0	4	2	6	0	4	2	6	0	4	2	6	2	1	0	3	21
% App. Total	0	66.7	33.3		0	66.7	33.3		0	66.7	33.3		66.7	33.3	0		
PHF	.000	.333	.500	.375	.000	.500	.250	.375	.000	1.00	.500	.750	.500	.250	.000	.750	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**3**	**1**	**4**	0	0	0	0	0	**1**	0	1	0	**1**	0	**1**
+15 mins.	0	0	0	0	0	1	0	1	0	1	**1**	**2**	0	0	0	0
+30 mins.	0	0	1	1	0	1	0	1	0	1	1	2	**1**	0	0	1
+45 mins.	0	1	0	1	0	**2**	**2**	**4**	0	1	0	1	1	0	0	1
Total Volume	0	4	2	6	0	4	2	6	0	4	2	6	2	1	0	3
% App. Total	0	66.7	33.3		0	66.7	33.3		0	66.7	33.3		66.7	33.3	0	
PHF	.000	.333	.500	.375	.000	.500	.250	.375	.000	1.000	.500	.750	.500	.250	.000	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

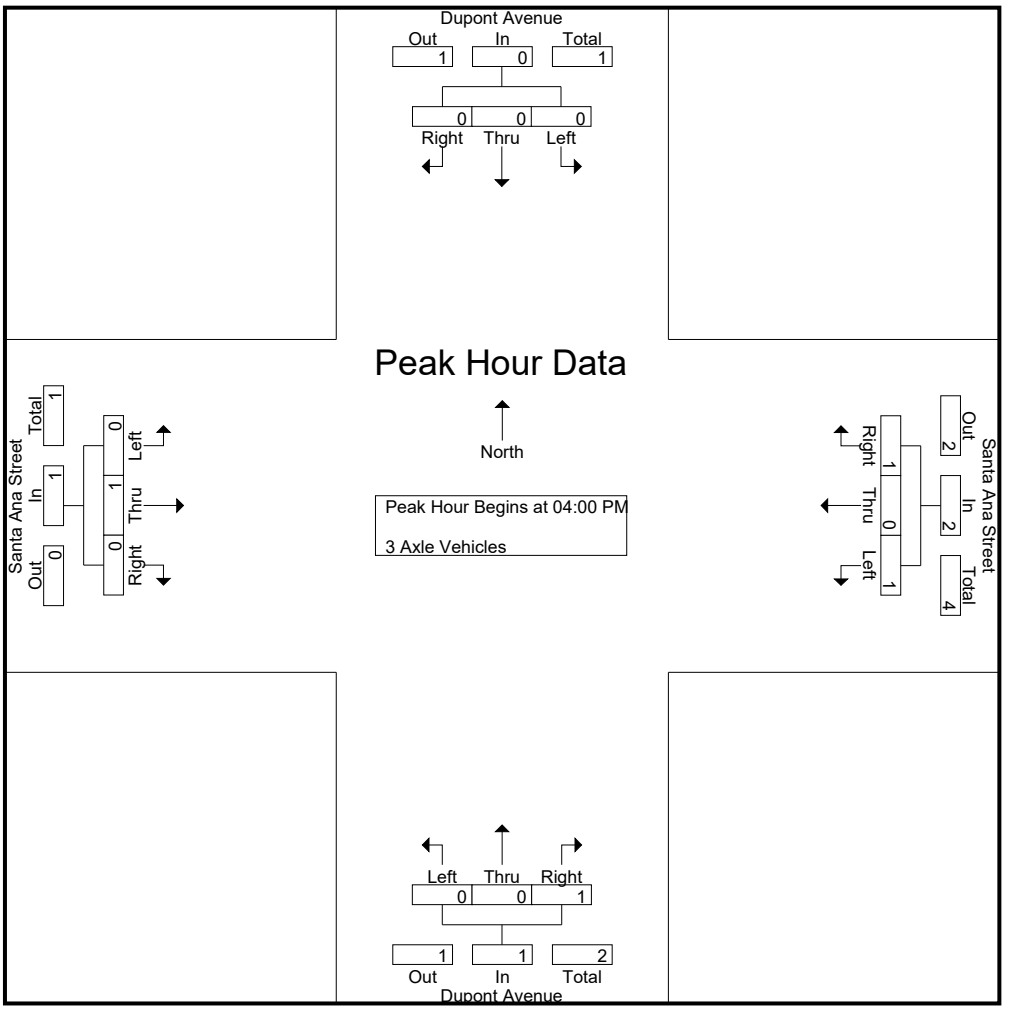
	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	1	0	1	2
Total	0	0	0	0	1	0	1	2	0	0	1	1	0	1	0	1	4
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	3	0	3	0	1	0	1	0	0	2	2	6
05:45 PM	1	0	0	1	0	0	0	0	0	0	1	1	0	2	0	2	4
Total	1	0	0	1	0	3	0	3	0	1	1	2	0	2	2	4	10
Grand Total	1	0	0	1	1	3	1	5	0	1	2	3	0	3	2	5	14
Apprch %	100	0	0		20	60	20		0	33.3	66.7		0	60	40		
Total %	7.1	0	0	7.1	7.1	21.4	7.1	35.7	0	7.1	14.3	21.4	0	21.4	14.3	35.7	

	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	0	**1**	**1**	0	0	**1**	**1**	0	0	0	0	**2**
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	**1**	0	0	1	0	0	0	0	0	**1**	0	**1**	2
Total Volume	0	0	0	0	1	0	1	2	0	0	1	1	0	1	0	1	4
% App. Total	0	0	0		50	0	50		0	0	100		0	100	0		
PHF	.000	.000	.000	.000	.250	.000	.250	.500	.000	.000	.250	.250	.000	.250	.000	.250	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	0	0	0	0	0	**1**	**1**	0	0	**1**	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	**1**	0	0	1	0	0	0	0	0	**1**	0	**1**
Total Volume	0	0	0	0	1	0	1	2	0	0	1	1	0	1	0	1
% App. Total	0	0	0		50	0	50		0	0	100		0	100	0	
PHF	.000	.000	.000	.000	.250	.000	.250	.500	.000	.000	.250	.250	.000	.250	.000	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

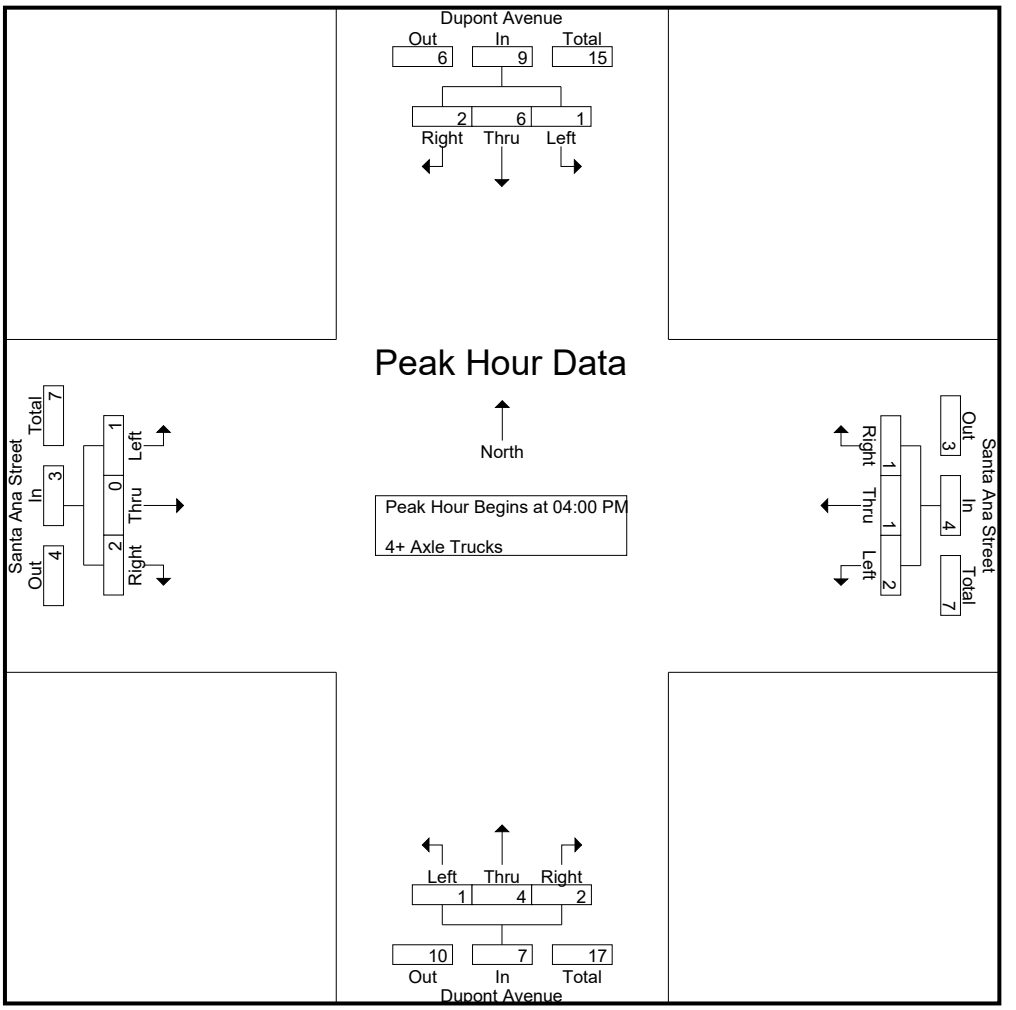
	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	1	5	1	0	0	1	0	0	0	0	1	0	1	2	8
04:15 PM	1	0	1	2	0	1	0	1	0	1	0	1	0	0	0	0	4
04:30 PM	0	1	0	1	1	0	1	2	0	2	0	2	0	0	0	0	5
04:45 PM	0	1	0	1	0	0	0	0	1	1	2	4	0	0	1	1	6
Total	1	6	2	9	2	1	1	4	1	4	2	7	1	0	2	3	23
05:00 PM	1	1	0	2	0	0	0	0	2	1	0	3	0	1	1	2	7
05:15 PM	1	2	0	3	1	0	0	1	0	1	0	1	0	2	0	2	7
05:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	2	3
05:45 PM	0	1	0	1	0	0	0	0	0	1	1	2	0	1	0	1	4
Total	2	4	0	6	1	0	0	1	2	4	1	7	2	4	1	7	21
Grand Total	3	10	2	15	3	1	1	5	3	8	3	14	3	4	3	10	44
Apprch %	20	66.7	13.3		60	20	20		21.4	57.1	21.4		30	40	30		
Total %	6.8	22.7	4.5	34.1	6.8	2.3	2.3	11.4	6.8	18.2	6.8	31.8	6.8	9.1	6.8	22.7	

	Dupont Avenue Southbound				Santa Ana Street Westbound				Dupont Avenue Northbound				Santa Ana Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**4**	**1**	**5**	**1**	0	0	1	0	0	0	0	**1**	0	**1**	**2**	**8**
04:15 PM	**1**	0	1	2	0	**1**	0	1	0	1	0	1	0	0	0	0	4
04:30 PM	0	1	0	1	1	0	**1**	**2**	0	**2**	0	2	0	0	0	0	5
04:45 PM	0	1	0	1	0	0	0	0	**1**	1	**2**	**4**	0	0	1	1	6
Total Volume	1	6	2	9	2	1	1	4	1	4	2	7	1	0	2	3	23
% App. Total	11.1	66.7	22.2		50	25	25		14.3	57.1	28.6		33.3	0	66.7		
PHF	.250	.375	.500	.450	.500	.250	.250	.500	.250	.500	.250	.438	.250	.000	.500	.375	.719

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street
Weather: Clear

File Name : 18_ONT_Dupont_Santa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**4**	**1**	**5**	**1**	0	0	1	0	0	0	0	**1**	0	**1**	**2**
+15 mins.	**1**	0	1	2	0	**1**	0	1	0	1	0	1	0	0	0	0
+30 mins.	0	1	0	1	1	0	**1**	**2**	0	**2**	0	2	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	**1**	1	**2**	**4**	0	0	1	1
Total Volume	1	6	2	9	2	1	1	4	1	4	2	7	1	0	2	3
% App. Total	11.1	66.7	22.2		50	25	25		14.3	57.1	28.6		33.3	0	66.7	
PHF	.250	.375	.500	.450	.500	.250	.250	.500	.250	.500	.250	.438	.250	.000	.500	.375

Location: Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Dupont Avenue	East Leg Santa Ana Street	South Leg Dupont Avenue	West Leg Santa Ana Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Dupont Avenue	East Leg Santa Ana Street	South Leg Dupont Avenue	West Leg Santa Ana Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Ontario
N/S: Dupont Avenue
E/W: Santa Ana Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Dupont Avenue			Westbound Santa Ana Street			Northbound Dupont Avenue			Eastbound Santa Ana Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	1	0	0	1	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	1	0	0	1	0	3

	Southbound Dupont Avenue			Westbound Santa Ana Street			Northbound Dupont Avenue			Eastbound Santa Ana Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

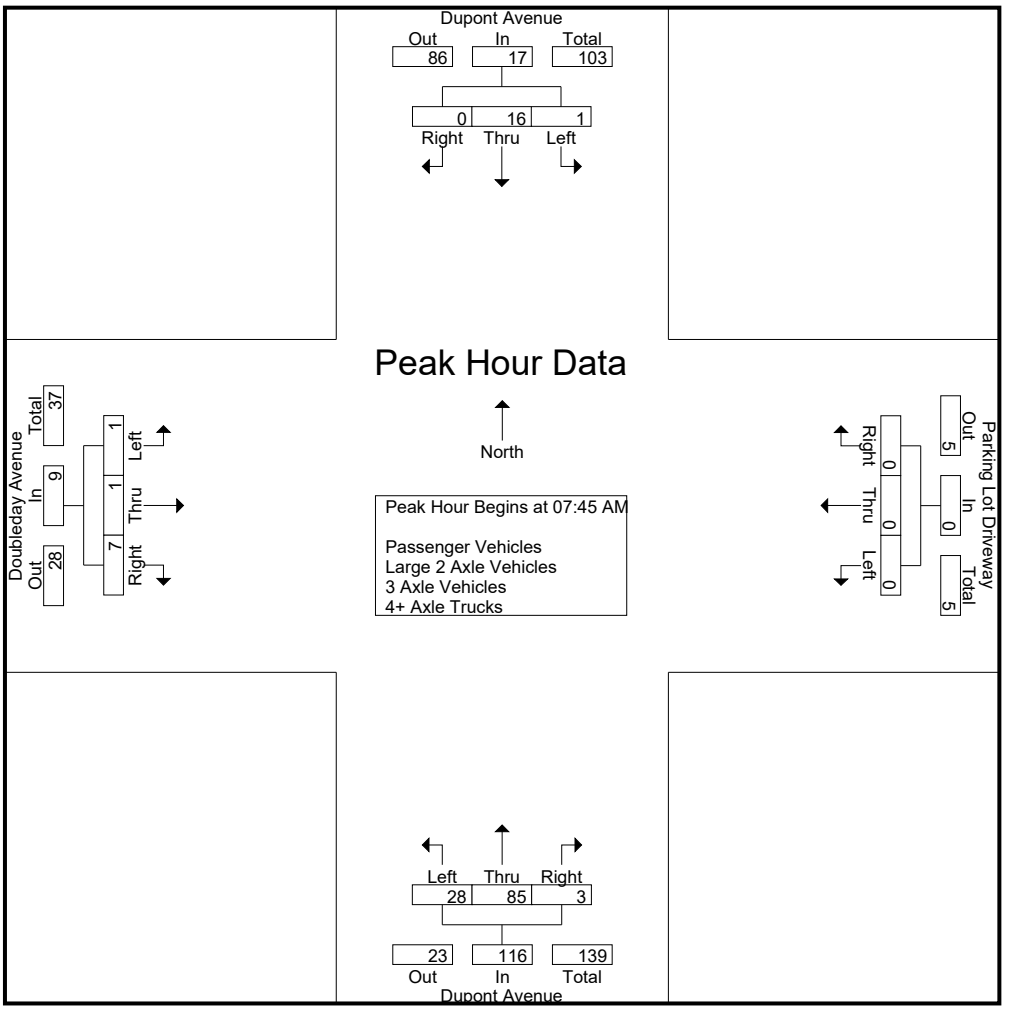
	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	0	0	0	0	9	14	0	23	0	0	2	2	27
07:15 AM	0	4	1	5	0	0	0	0	6	12	0	18	0	0	2	2	25
07:30 AM	0	2	0	2	0	0	0	0	5	16	0	21	0	0	0	0	23
07:45 AM	0	4	0	4	0	0	0	0	6	30	0	36	0	0	2	2	42
Total	0	12	1	13	0	0	0	0	26	72	0	98	0	0	6	6	117
08:00 AM	0	4	0	4	0	0	0	0	9	18	0	27	0	0	2	2	33
08:15 AM	1	2	0	3	0	0	0	0	9	22	2	33	0	0	1	1	37
08:30 AM	0	6	0	6	0	0	0	0	4	15	1	20	1	1	2	4	30
08:45 AM	0	2	0	2	0	0	0	0	4	16	1	21	1	0	5	6	29
Total	1	14	0	15	0	0	0	0	26	71	4	101	2	1	10	13	129
Grand Total	1	26	1	28	0	0	0	0	52	143	4	199	2	1	16	19	246
Apprch %	3.6	92.9	3.6		0	0	0		26.1	71.9	2		10.5	5.3	84.2		
Total %	0.4	10.6	0.4	11.4	0	0	0	0	21.1	58.1	1.6	80.9	0.8	0.4	6.5	7.7	
Passenger Vehicles	1	19	1	21	0	0	0	0	49	118	4	171	2	1	7	10	202
% Passenger Vehicles	100	73.1	100	75	0	0	0	0	94.2	82.5	100	85.9	100	100	43.8	52.6	82.1
Large 2 Axle Vehicles	0	3	0	3	0	0	0	0	0	12	0	12	0	0	1	1	16
% Large 2 Axle Vehicles	0	11.5	0	10.7	0	0	0	0	0	8.4	0	6	0	0	6.2	5.3	6.5
3 Axle Vehicles	0	1	0	1	0	0	0	0	0	3	0	3	0	0	3	3	7
% 3 Axle Vehicles	0	3.8	0	3.6	0	0	0	0	0	2.1	0	1.5	0	0	18.8	15.8	2.8
4+ Axle Trucks	0	3	0	3	0	0	0	0	3	10	0	13	0	0	5	5	21
% 4+ Axle Trucks	0	11.5	0	10.7	0	0	0	0	5.8	7	0	6.5	0	0	31.2	26.3	8.5

	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	4	0	4	0	0	0	0	6	**30**	0	**36**	0	0	**2**	2	**42**
08:00 AM	0	4	0	4	0	0	0	0	**9**	18	0	27	0	0	2	2	33
08:15 AM	**1**	2	0	3	0	0	0	0	9	22	**2**	33	0	0	1	1	37
08:30 AM	0	**6**	0	**6**	0	0	0	0	4	15	1	20	**1**	**1**	2	**4**	30
Total Volume	1	16	0	17	0	0	0	0	28	85	3	116	1	1	7	9	142
% App. Total	5.9	94.1	0		0	0	0		24.1	73.3	2.6		11.1	11.1	77.8		
PHF	.250	.667	.000	.708	.000	.000	.000	.000	.778	.708	.375	.806	.250	.250	.875	.563	.845

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:00 AM				07:30 AM				08:00 AM			
+0 mins.	0	4	0	4	0	0	0	0	5	16	0	21	0	0	2	2
+15 mins.	0	4	0	4	0	0	0	0	6	**30**	0	**36**	0	0	1	1
+30 mins.	**1**	2	0	3	0	0	0	0	**9**	18	0	27	**1**	**1**	2	4
+45 mins.	0	**6**	0	**6**	0	0	0	0	9	22	**2**	33	1	0	**5**	**6**
Total Volume	1	16	0	17	0	0	0	0	29	86	2	117	2	1	10	13
% App. Total	5.9	94.1	0		0	0	0		24.8	73.5	1.7		15.4	7.7	76.9	
PHF	.250	.667	.000	.708	.000	.000	.000	.000	.806	.717	.250	.813	.500	.250	.500	.542

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

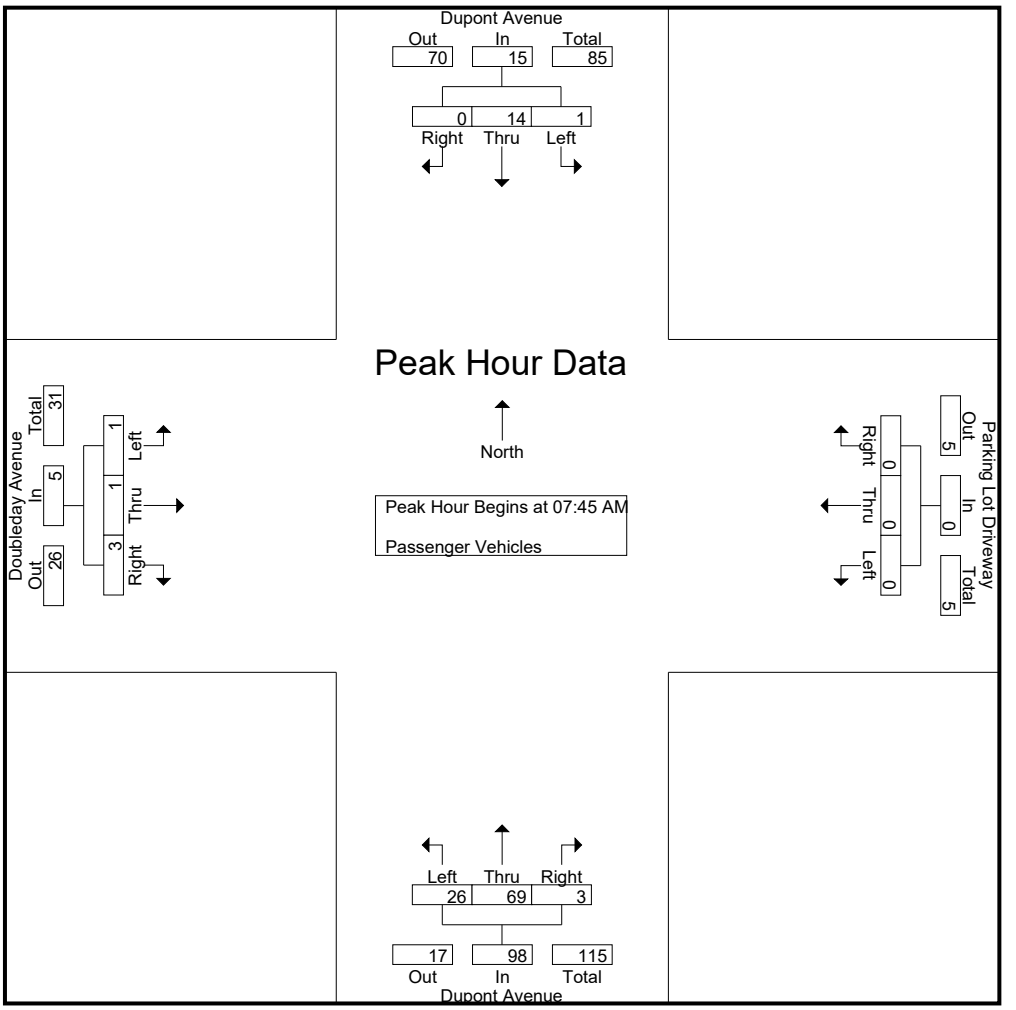
	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	9	12	0	21	0	0	1	1	22
07:15 AM	0	2	1	3	0	0	0	0	6	11	0	17	0	0	1	1	21
07:30 AM	0	1	0	1	0	0	0	0	4	13	0	17	0	0	0	0	18
07:45 AM	0	3	0	3	0	0	0	0	6	25	0	31	0	0	0	0	34
Total	0	6	1	7	0	0	0	0	25	61	0	86	0	0	2	2	95
08:00 AM	0	4	0	4	0	0	0	0	8	17	0	25	0	0	2	2	31
08:15 AM	1	2	0	3	0	0	0	0	8	15	2	25	0	0	0	0	28
08:30 AM	0	5	0	5	0	0	0	0	4	12	1	17	1	1	1	3	25
08:45 AM	0	2	0	2	0	0	0	0	4	13	1	18	1	0	2	3	23
Total	1	13	0	14	0	0	0	0	24	57	4	85	2	1	5	8	107
Grand Total	1	19	1	21	0	0	0	0	49	118	4	171	2	1	7	10	202
Apprch %	4.8	90.5	4.8		0	0	0		28.7	69	2.3		20	10	70		
Total %	0.5	9.4	0.5	10.4	0	0	0	0	24.3	58.4	2	84.7	1	0.5	3.5	5	

	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	3	0	3	0	0	0	0	6	**25**	0	**31**	0	0	0	0	**34**
08:00 AM	0	4	0	4	0	0	0	0	**8**	17	0	25	0	0	**2**	2	31
08:15 AM	**1**	2	0	3	0	0	0	0	8	15	**2**	25	0	0	0	0	28
08:30 AM	0	**5**	0	**5**	0	0	0	0	4	12	1	17	**1**	**1**	1	**3**	25
Total Volume	1	14	0	15	0	0	0	0	26	69	3	98	1	1	3	5	118
% App. Total	6.7	93.3	0		0	0	0		26.5	70.4	3.1		20	20	60		
PHF	.250	.700	.000	.750	.000	.000	.000	.000	.813	.690	.375	.790	.250	.250	.375	.417	.868

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	3	0	3	0	0	0	0	6	**25**	0	**31**	0	0	0	0
+15 mins.	0	4	0	4	0	0	0	0	**8**	17	0	25	0	0	**2**	2
+30 mins.	**1**	2	0	3	0	0	0	0	8	15	**2**	25	0	0	0	0
+45 mins.	0	**5**	0	**5**	0	0	0	0	4	12	1	17	**1**	**1**	1	**3**
Total Volume	1	14	0	15	0	0	0	0	26	69	3	98	1	1	3	5
% App. Total	6.7	93.3	0		0	0	0		26.5	70.4	3.1		20	20	60	
PHF	.250	.700	.000	.750	.000	.000	.000	.000	.813	.690	.375	.790	.250	.250	.375	.417

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

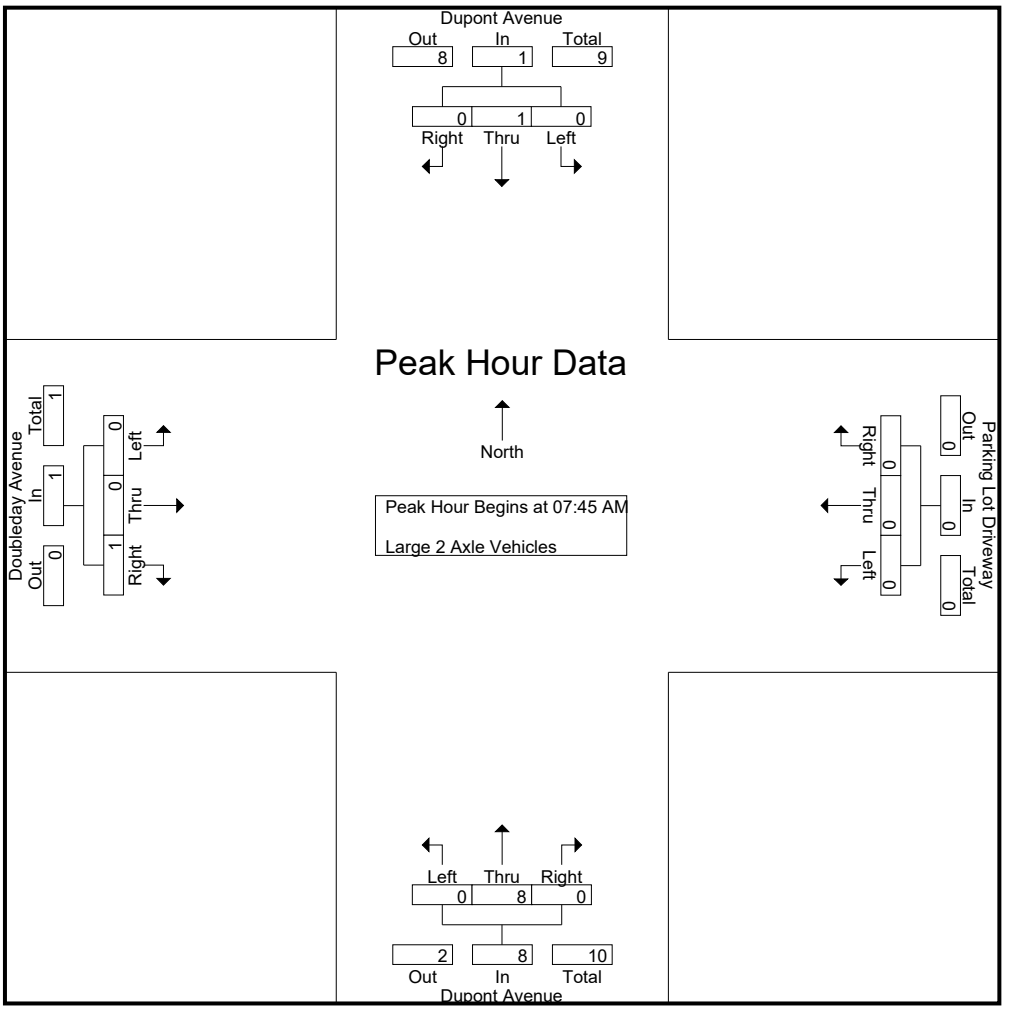
	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
Total	0	2	0	2	0	0	0	0	0	5	0	5	0	0	0	0	7
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
08:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	1	1	3
08:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	1	0	1	0	0	0	0	0	7	0	7	0	0	1	1	9
Grand Total	0	3	0	3	0	0	0	0	0	12	0	12	0	0	1	1	16
Apprch %	0	100	0		0	0	0		0	100	0		0	0	100		
Total %	0	18.8	0	18.8	0	0	0	0	0	75	0	75	0	0	6.2	6.2	

	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	0	0	**3**
08:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
08:30 AM	0	**1**	0	**1**	0	0	0	0	0	1	0	1	0	0	**1**	**1**	3
Total Volume	0	1	0	1	0	0	0	0	0	8	0	8	0	0	1	1	10
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.667	.000	.667	.000	.000	.250	.250	.833

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**3**	0	**3**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0
+45 mins.	0	**1**	0	**1**	0	0	0	0	0	1	0	1	0	0	**1**	**1**
Total Volume	0	1	0	1	0	0	0	0	0	8	0	8	0	0	1	1
% App. Total	0	100	0		0	0	0		0	100	0		0	0	100	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.667	.000	.667	.000	.000	.250	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

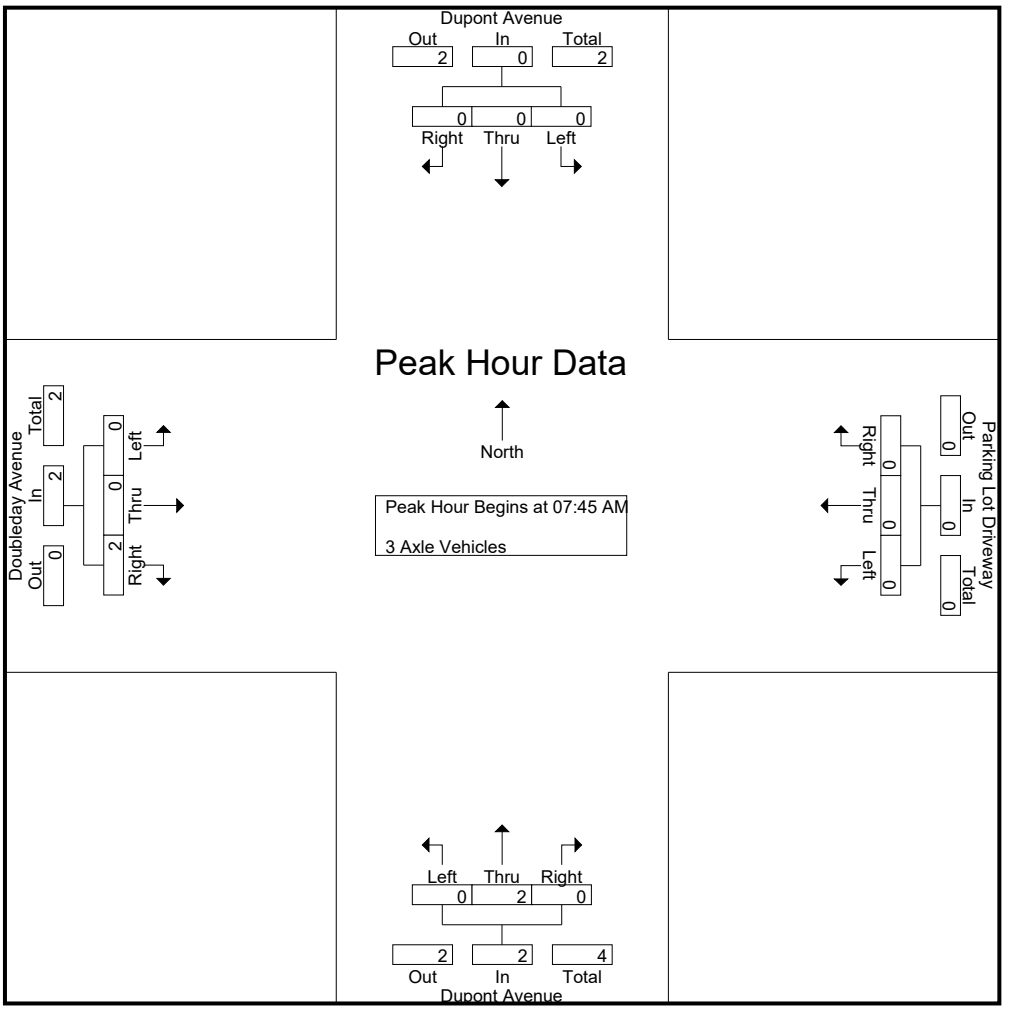
	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
07:15 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	1	1	3
Total	0	1	0	1	0	0	0	0	0	3	0	3	0	0	2	2	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Grand Total	0	1	0	1	0	0	0	0	0	3	0	3	0	0	3	3	7
Apprch %	0	100	0		0	0	0		0	100	0		0	0	100		
Total %	0	14.3	0	14.3	0	0	0	0	0	42.9	0	42.9	0	0	42.9	42.9	

	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	**1**	**1**	**3**
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2	4
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.500	.500	.333

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	**2**	0	**2**	0	0	**1**	**1**
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	2	0	2	0	0	2	2
% App. Total	0	0	0		0	0	0		0	100	0		0	0	100	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.500	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

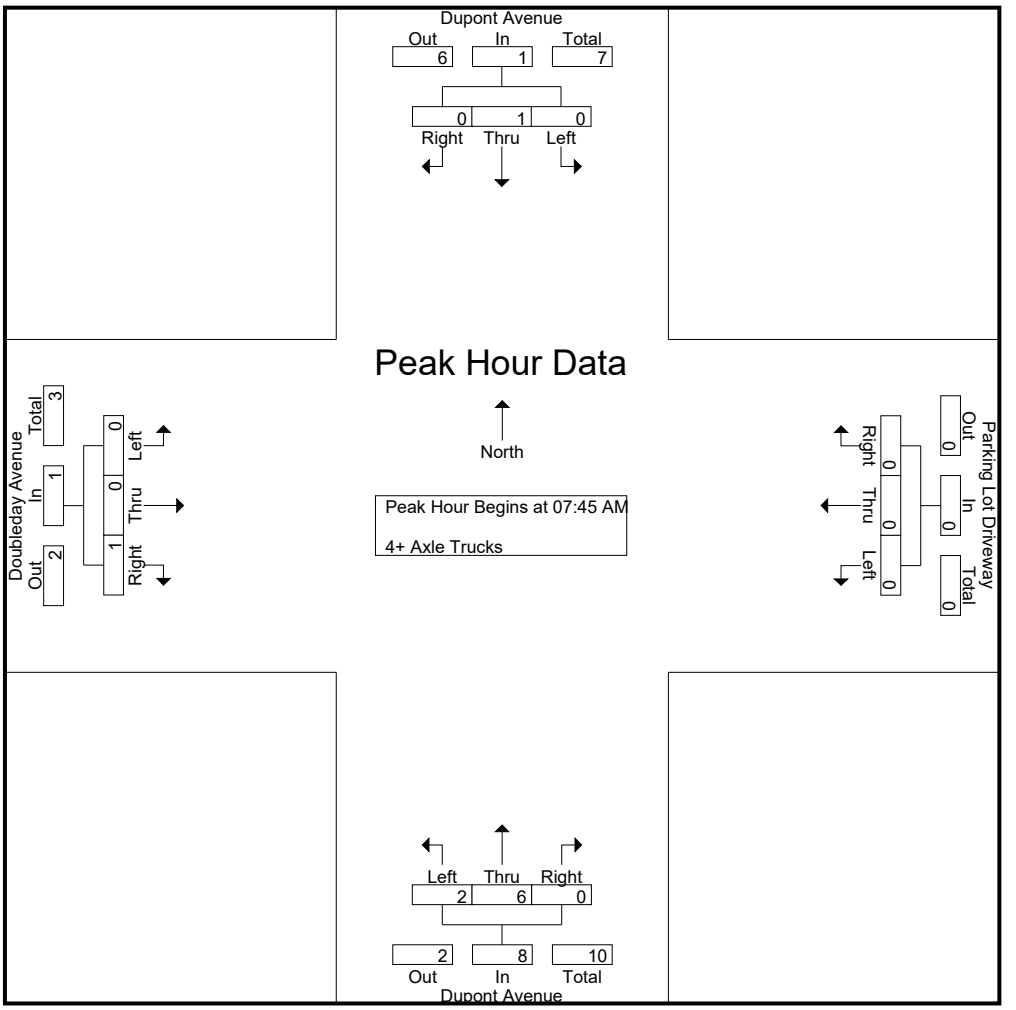
	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
07:15 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	1	1	2
07:30 AM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	2
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Total	0	3	0	3	0	0	0	0	1	3	0	4	0	0	2	2	9
08:00 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	1	4	0	5	0	0	0	0	5
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3	3	4
Total	0	0	0	0	0	0	0	0	2	7	0	9	0	0	3	3	12
Grand Total	0	3	0	3	0	0	0	0	3	10	0	13	0	0	5	5	21
Apprch %	0	100	0		0	0	0		23.1	76.9	0		0	0	100		
Total %	0	14.3	0	14.3	0	0	0	0	14.3	47.6	0	61.9	0	0	23.8	23.8	

	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	**1**	**1**	2
08:00 AM	0	0	0	0	0	0	0	0	**1**	0	0	1	0	0	0	0	1
08:15 AM	0	0	0	0	0	0	0	0	1	**4**	0	**5**	0	0	0	0	**5**
08:30 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total Volume	0	1	0	1	0	0	0	0	2	6	0	8	0	0	1	1	10
% App. Total	0	100	0		0	0	0		25	75	0		0	0	100		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.500	.375	.000	.400	.000	.000	.250	.250	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				07:45 AM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	0	0	0	0	0	**1**	**1**
+15 mins.	0	0	0	0	0	0	0	0	**1**	0	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	1	**4**	0	**5**	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	2	6	0	8	0	0	1	1
% App. Total	0	100	0		0	0	0		25	75	0		0	0	100	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.500	.375	.000	.400	.000	.000	.250	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

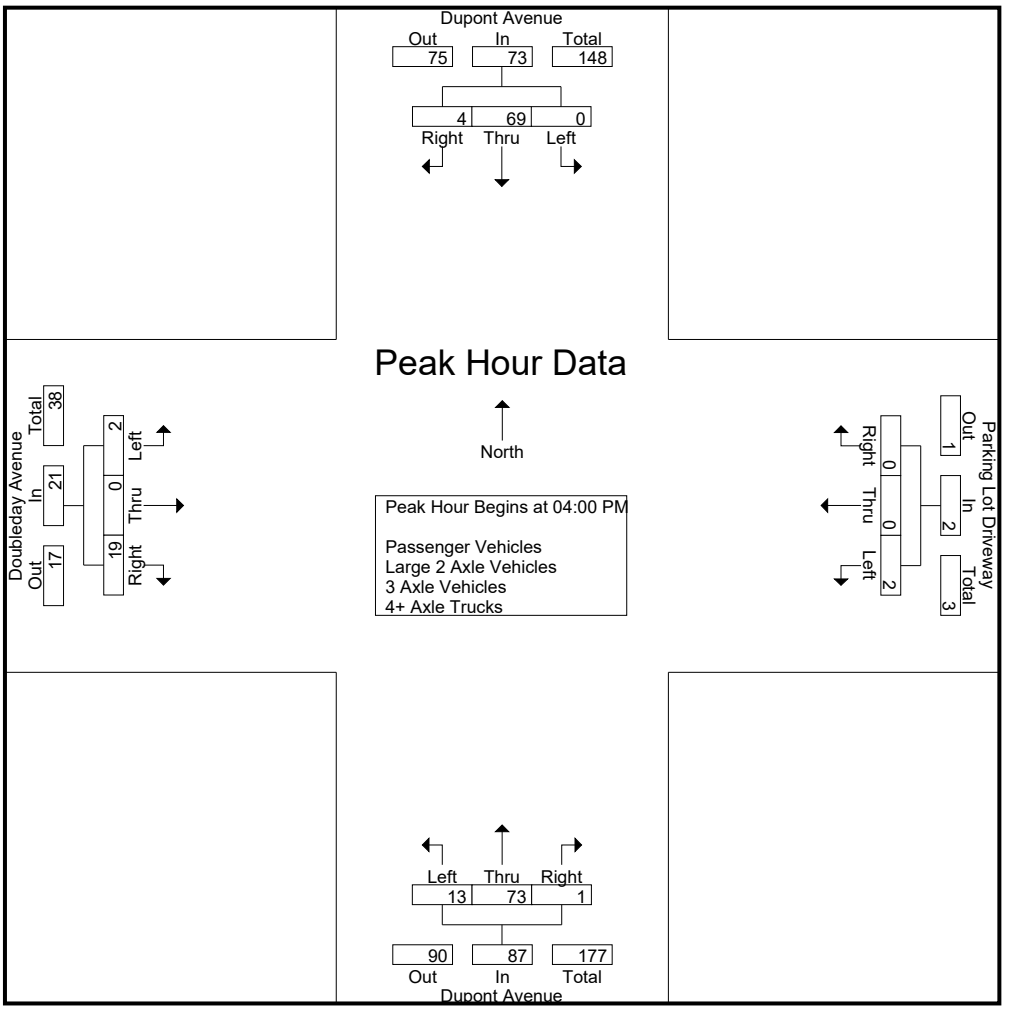
	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	30	3	33	0	0	0	0	2	23	0	25	0	0	2	2	60
04:15 PM	0	8	0	8	1	0	0	1	4	16	0	20	0	0	3	3	32
04:30 PM	0	23	1	24	0	0	0	0	4	17	0	21	0	0	7	7	52
04:45 PM	0	8	0	8	1	0	0	1	3	17	1	21	2	0	7	9	39
Total	0	69	4	73	2	0	0	2	13	73	1	87	2	0	19	21	183
05:00 PM	1	18	0	19	2	1	1	4	1	18	0	19	1	0	4	5	47
05:15 PM	0	17	0	17	0	0	1	1	3	16	0	19	1	0	3	4	41
05:30 PM	0	26	1	27	0	0	0	0	2	9	0	11	1	0	7	8	46
05:45 PM	0	7	0	7	0	0	0	0	4	5	0	9	1	0	1	2	18
Total	1	68	1	70	2	1	2	5	10	48	0	58	4	0	15	19	152
Grand Total	1	137	5	143	4	1	2	7	23	121	1	145	6	0	34	40	335
Apprch %	0.7	95.8	3.5		57.1	14.3	28.6		15.9	83.4	0.7		15	0	85		
Total %	0.3	40.9	1.5	42.7	1.2	0.3	0.6	2.1	6.9	36.1	0.3	43.3	1.8	0	10.1	11.9	
Passenger Vehicles	0	106	1	107	3	1	2	6	11	88	1	100	1	0	24	25	238
% Passenger Vehicles	0	77.4	20	74.8	75	100	100	85.7	47.8	72.7	100	69	16.7	0	70.6	62.5	71
Large 2 Axle Vehicles	1	11	0	12	1	0	0	1	5	9	0	14	0	0	1	1	28
% Large 2 Axle Vehicles	100	8	0	8.4	25	0	0	14.3	21.7	7.4	0	9.7	0	0	2.9	2.5	8.4
3 Axle Vehicles	0	3	1	4	0	0	0	0	2	2	0	4	1	0	1	2	10
% 3 Axle Vehicles	0	2.2	20	2.8	0	0	0	0	8.7	1.7	0	2.8	16.7	0	2.9	5	3
4+ Axle Trucks	0	17	3	20	0	0	0	0	5	22	0	27	4	0	8	12	59
% 4+ Axle Trucks	0	12.4	60	14	0	0	0	0	21.7	18.2	0	18.6	66.7	0	23.5	30	17.6

	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**30**	**3**	**33**	0	0	0	0	2	**23**	0	**25**	0	0	2	2	**60**
04:15 PM	0	8	0	8	**1**	0	0	**1**	**4**	16	0	20	0	0	3	3	32
04:30 PM	0	23	1	24	0	0	0	0	4	17	0	21	0	0	**7**	7	52
04:45 PM	0	8	0	8	1	0	0	1	3	17	**1**	21	**2**	0	7	**9**	39
Total Volume	0	69	4	73	2	0	0	2	13	73	1	87	2	0	19	21	183
% App. Total	0	94.5	5.5		100	0	0		14.9	83.9	1.1		9.5	0	90.5		
PHF	.000	.575	.333	.553	.500	.000	.000	.500	.813	.793	.250	.870	.250	.000	.679	.583	.763

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:15 PM				04:00 PM				04:45 PM			
+0 mins.	0	**30**	**3**	**33**	1	0	0	1	2	**23**	0	**25**	**2**	0	**7**	**9**
+15 mins.	0	8	0	8	0	0	0	0	**4**	16	0	20	1	0	4	5
+30 mins.	0	23	1	24	1	0	0	1	4	17	0	21	1	0	3	4
+45 mins.	0	8	0	8	**2**	**1**	**1**	**4**	3	17	**1**	21	1	0	7	8
Total Volume	0	69	4	73	4	1	1	6	13	73	1	87	5	0	21	26
% App. Total	0	94.5	5.5		66.7	16.7	16.7		14.9	83.9	1.1		19.2	0	80.8	
PHF	.000	.575	.333	.553	.500	.250	.250	.375	.813	.793	.250	.870	.625	.000	.750	.722

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

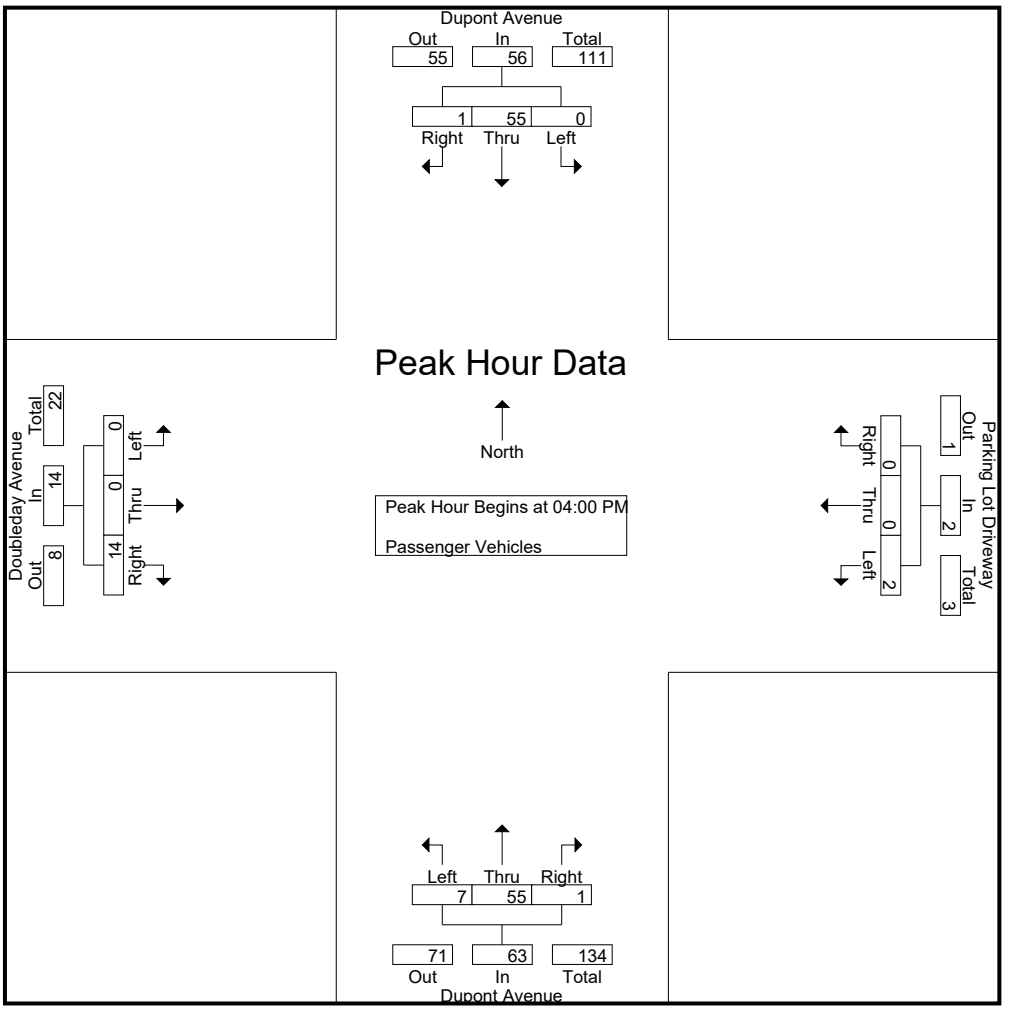
	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	23	1	24	0	0	0	0	0	21	0	21	0	0	0	0	45
04:15 PM	0	5	0	5	1	0	0	1	2	12	0	14	0	0	1	1	21
04:30 PM	0	22	0	22	0	0	0	0	2	12	0	14	0	0	7	7	43
04:45 PM	0	5	0	5	1	0	0	1	3	10	1	14	0	0	6	6	26
Total	0	55	1	56	2	0	0	2	7	55	1	63	0	0	14	14	135
05:00 PM	0	12	0	12	1	1	1	3	1	14	0	15	1	0	3	4	34
05:15 PM	0	12	0	12	0	0	1	1	1	10	0	11	0	0	3	3	27
05:30 PM	0	23	0	23	0	0	0	0	1	6	0	7	0	0	4	4	34
05:45 PM	0	4	0	4	0	0	0	0	1	3	0	4	0	0	0	0	8
Total	0	51	0	51	1	1	2	4	4	33	0	37	1	0	10	11	103
Grand Total	0	106	1	107	3	1	2	6	11	88	1	100	1	0	24	25	238
Apprch %	0	99.1	0.9		50	16.7	33.3		11	88	1		4	0	96		
Total %	0	44.5	0.4	45	1.3	0.4	0.8	2.5	4.6	37	0.4	42	0.4	0	10.1	10.5	

	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**23**	**1**	**24**	0	0	0	0	0	**21**	0	**21**	0	0	0	0	**45**
04:15 PM	0	5	0	5	**1**	0	0	**1**	2	12	0	14	0	0	1	1	21
04:30 PM	0	22	0	22	0	0	0	0	2	12	0	14	0	0	**7**	**7**	43
04:45 PM	0	5	0	5	1	0	0	1	**3**	10	**1**	14	0	0	6	6	26
Total Volume	0	55	1	56	2	0	0	2	7	55	1	63	0	0	14	14	135
% App. Total	0	98.2	1.8		100	0	0		11.1	87.3	1.6		0	0	100		
PHF	.000	.598	.250	.583	.500	.000	.000	.500	.583	.655	.250	.750	.000	.000	.500	.500	.750

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**23**	**1**	**24**	0	0	0	0	0	**21**	0	**21**	0	0	0	0
+15 mins.	0	5	0	5	**1**	0	0	**1**	2	12	0	14	0	0	1	1
+30 mins.	0	22	0	22	0	0	0	0	2	12	0	14	0	0	**7**	**7**
+45 mins.	0	5	0	5	1	0	0	1	**3**	10	**1**	14	0	0	6	6
Total Volume	0	55	1	56	2	0	0	2	7	55	1	63	0	0	14	14
% App. Total	0	98.2	1.8		100	0	0		11.1	87.3	1.6		0	0	100	
PHF	.000	.598	.250	.583	.500	.000	.000	.500	.583	.655	.250	.750	.000	.000	.500	.500

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

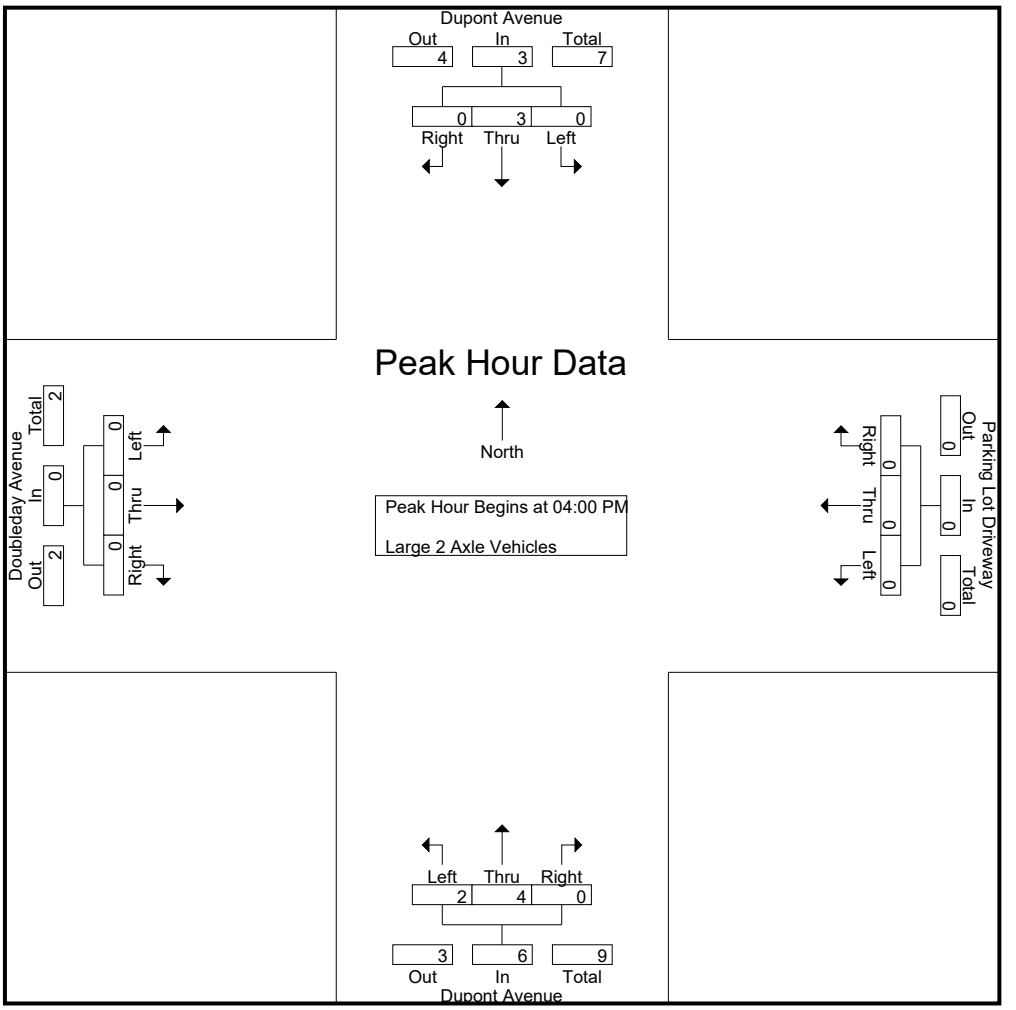
	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	2	0	0	2	0	0	0	0	4
04:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	0	3	0	3	0	0	0	0	2	4	0	6	0	0	0	0	9
05:00 PM	1	3	0	4	1	0	0	1	0	2	0	2	0	0	0	0	7
05:15 PM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	0	0	5
05:30 PM	0	1	0	1	0	0	0	0	1	1	0	2	0	0	0	0	3
05:45 PM	0	1	0	1	0	0	0	0	2	0	0	2	0	0	1	1	4
Total	1	8	0	9	1	0	0	1	3	5	0	8	0	0	1	1	19
Grand Total	1	11	0	12	1	0	0	1	5	9	0	14	0	0	1	1	28
Apprch %	8.3	91.7	0		100	0	0		35.7	64.3	0		0	0	100		
Total %	3.6	39.3	0	42.9	3.6	0	0	3.6	17.9	32.1	0	50	0	0	3.6	3.6	

	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**2**	0	**2**	0	0	0	0	**2**	0	0	**2**	0	0	0	0	**4**
04:15 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	**2**	0	2	0	0	0	0	2
Total Volume	0	3	0	3	0	0	0	0	2	4	0	6	0	0	0	0	9
% App. Total	0	100	0		0	0	0		33.3	66.7	0		0	0	0		
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.250	.500	.000	.750	.000	.000	.000	.000	.563

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**2**	0	**2**	0	0	0	0	**2**	0	0	**2**	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	**2**	0	2	0	0	0	0
Total Volume	0	3	0	3	0	0	0	0	2	4	0	6	0	0	0	0
% App. Total	0	100	0		0	0	0		33.3	66.7	0		0	0	0	
PHF	.000	.375	.000	.375	.000	.000	.000	.000	.250	.500	.000	.750	.000	.000	.000	.000

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

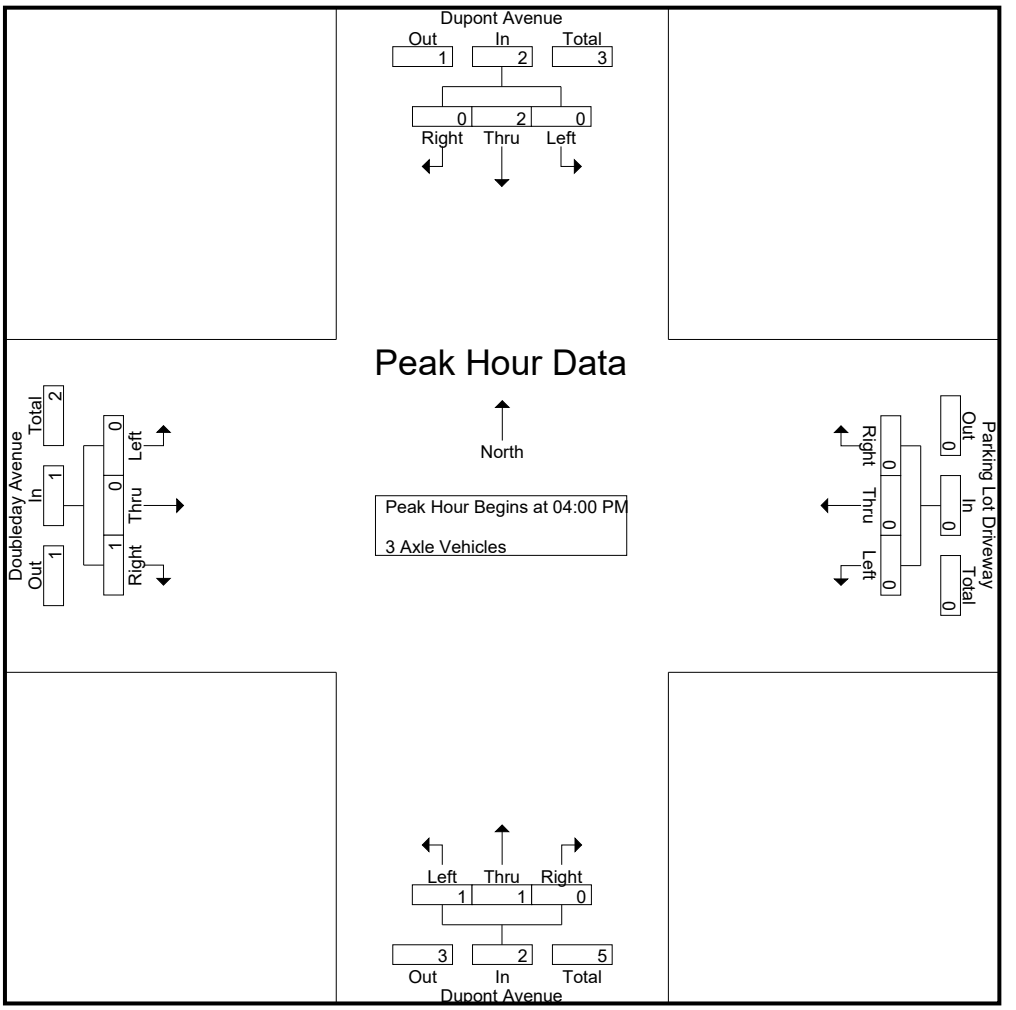
	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
04:30 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	2	0	2	0	0	0	0	1	1	0	2	0	0	1	1	5
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
05:30 PM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	0	1	1	2	0	0	0	0	1	1	0	2	1	0	0	1	5
Grand Total	0	3	1	4	0	0	0	0	2	2	0	4	1	0	1	2	10
Apprch %	0	75	25		0	0	0		50	50	0		50	0	50		
Total %	0	30	10	40	0	0	0	0	20	20	0	40	10	0	10	20	

	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0	**2**
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**	1
04:30 PM	0	0	0	0	0	0	0	0	**1**	0	0	1	0	0	0	0	1
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	1	1	0	2	0	0	1	1	5
% App. Total	0	100	0		0	0	0		50	50	0		0	0	100		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.250	.250	.000	.500	.000	.000	.250	.250	.625

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**1**	0	**1**	0	0	0	0	0	**1**	0	**1**	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**1**	**1**
+30 mins.	0	0	0	0	0	0	0	0	**1**	0	0	1	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	1	1	0	2	0	0	1	1
% App. Total	0	100	0		0	0	0		50	50	0		0	0	100	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.250	.250	.000	.500	.000	.000	.250	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

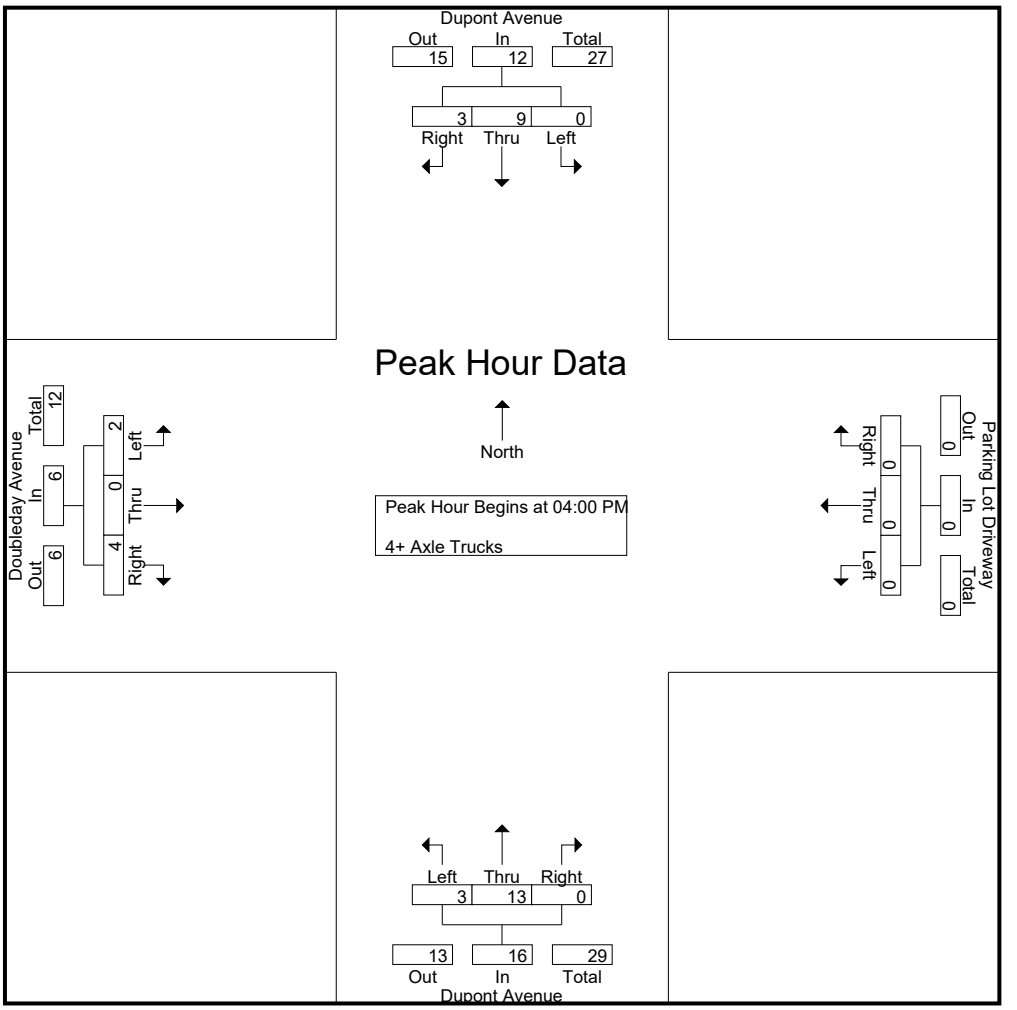
	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	2	6	0	0	0	0	0	1	0	1	0	0	2	2	9
04:15 PM	0	2	0	2	0	0	0	0	2	3	0	5	0	0	1	1	8
04:30 PM	0	1	1	2	0	0	0	0	1	4	0	5	0	0	0	0	7
04:45 PM	0	2	0	2	0	0	0	0	0	5	0	5	2	0	1	3	10
Total	0	9	3	12	0	0	0	0	3	13	0	16	2	0	4	6	34
05:00 PM	0	3	0	3	0	0	0	0	0	2	0	2	0	0	1	1	6
05:15 PM	0	2	0	2	0	0	0	0	1	4	0	5	1	0	0	1	8
05:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	1	0	3	4	6
05:45 PM	0	2	0	2	0	0	0	0	1	2	0	3	0	0	0	0	5
Total	0	8	0	8	0	0	0	0	2	9	0	11	2	0	4	6	25
Grand Total	0	17	3	20	0	0	0	0	5	22	0	27	4	0	8	12	59
Apprch %	0	85	15		0	0	0		18.5	81.5	0		33.3	0	66.7		
Total %	0	28.8	5.1	33.9	0	0	0	0	8.5	37.3	0	45.8	6.8	0	13.6	20.3	

	Dupont Avenue Southbound				Parking Lot Driveway Westbound				Dupont Avenue Northbound				Doubleday Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	**4**	**2**	**6**	0	0	0	0	0	1	0	1	0	0	**2**	2	9
04:15 PM	0	2	0	2	0	0	0	0	**2**	3	0	**5**	0	0	1	1	8
04:30 PM	0	1	1	2	0	0	0	0	1	4	0	5	0	0	0	0	7
04:45 PM	0	2	0	2	0	0	0	0	0	**5**	0	5	**2**	0	1	**3**	**10**
Total Volume	0	9	3	12	0	0	0	0	3	13	0	16	2	0	4	6	34
% App. Total	0	75	25		0	0	0		18.8	81.2	0		33.3	0	66.7		
PHF	.000	.563	.375	.500	.000	.000	.000	.000	.375	.650	.000	.800	.250	.000	.500	.500	.850

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue
Weather: Clear

File Name : 19_ONT_Dupont_Doub PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	**4**	**2**	**6**	0	0	0	0	0	1	0	1	0	0	**2**	2
+15 mins.	0	2	0	2	0	0	0	0	**2**	3	0	**5**	0	0	1	1
+30 mins.	0	1	1	2	0	0	0	0	1	4	0	5	0	0	0	0
+45 mins.	0	2	0	2	0	0	0	0	0	**5**	0	5	**2**	0	1	**3**
Total Volume	0	9	3	12	0	0	0	0	3	13	0	16	2	0	4	6
% App. Total	0	75	25		0	0	0		18.8	81.2	0		33.3	0	66.7	
PHF	.000	.563	.375	.500	.000	.000	.000	.000	.375	.650	.000	.800	.250	.000	.500	.500

Location: Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Dupont Avenue	East Leg Parking Lot Driveway	South Leg Dupont Avenue	West Leg Doubleday Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	1

	North Leg Dupont Avenue	East Leg Parking Lot Driveway	South Leg Dupont Avenue	West Leg Doubleday Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	1	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	2	2

Location: Ontario
N/S: Dupont Avenue
E/W: Doubleday Avenue

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Dupont Avenue			Westbound Parking Lot Driveway			Northbound Dupont Avenue			Eastbound Doubleday Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	1	0	0	0	0	2

	Southbound Dupont Avenue			Westbound Parking Lot Driveway			Northbound Dupont Avenue			Eastbound Doubleday Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Dupont Avenue Southbound					Jurupa Street Westbound					Dupont Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	3	2	1	5	13	198	10	0	221	4	5	9	6	18	9	101	1	0	111	7	355	362
07:15 AM	2	1	3	2	6	12	141	7	0	160	4	2	11	6	17	9	74	5	0	88	8	271	279
07:30 AM	0	0	2	2	2	18	171	7	0	196	3	5	7	5	15	9	97	4	0	110	7	323	330
07:45 AM	1	2	2	1	5	23	151	17	0	191	3	8	8	3	19	12	102	4	1	118	5	333	338
Total	3	6	9	6	18	66	661	41	0	768	14	20	35	20	69	39	374	14	1	427	27	1282	1309
08:00 AM	3	1	3	3	7	13	157	10	0	180	10	6	15	7	31	11	87	3	0	101	10	319	329
08:15 AM	1	0	2	0	3	14	187	21	1	222	2	5	17	9	24	12	71	1	0	84	10	333	343
08:30 AM	0	0	6	6	6	14	167	6	0	187	1	0	11	10	12	14	99	5	0	118	16	323	339
08:45 AM	3	0	4	1	7	13	127	10	2	150	1	6	16	7	23	6	96	3	1	105	11	285	296
Total	7	1	15	10	23	54	638	47	3	739	14	17	59	33	90	43	353	12	1	408	47	1260	1307
Grand Total	10	7	24	16	41	120	1299	88	3	1507	28	37	94	53	159	82	727	26	2	835	74	2542	2616
Apprch %	24.4	17.1	58.5			8	86.2	5.8			17.6	23.3	59.1			9.8	87.1	3.1					
Total %	0.4	0.3	0.9		1.6	4.7	51.1	3.5		59.3	1.1	1.5	3.7		6.3	3.2	28.6	1		32.8	2.8	97.2	
Passenger Vehicles	6	5	16		38	98	1155	77		1331	16	26	51		124	71	568	19		659	0	0	2152
% Passenger Vehicles	60	71.4	66.7	68.8	66.7	81.7	88.9	87.5	33.3	88.1	57.1	70.3	54.3	58.5	58.5	86.6	78.1	73.1	50	78.7	0	0	82.3
Large 2 Axle Vehicles	1	0	2		5	7	32	4		45	12	7	15		43	6	51	1		59	0	0	152
% Large 2 Axle Vehicles	10	0	8.3	12.5	8.8	5.8	2.5	4.5	66.7	3	42.9	18.9	16	17	20.3	7.3	7	3.8	50	7	0	0	5.8
3 Axle Vehicles	2	0	2		6	1	15	1		17	0	1	8		13	0	20	2		22	0	0	58
% 3 Axle Vehicles	20	0	8.3	12.5	10.5	0.8	1.2	1.1	0	1.1	0	2.7	8.5	7.5	6.1	0	2.8	7.7	0	2.6	0	0	2.2
4+ Axle Trucks	1	2	4		8	14	97	6		117	0	3	20		32	5	88	4		97	0	0	254
% 4+ Axle Trucks	10	28.6	16.7	6.2	14	11.7	7.5	6.8	0	7.7	0	8.1	21.3	17	15.1	6.1	12.1	15.4	0	11.6	0	0	9.7

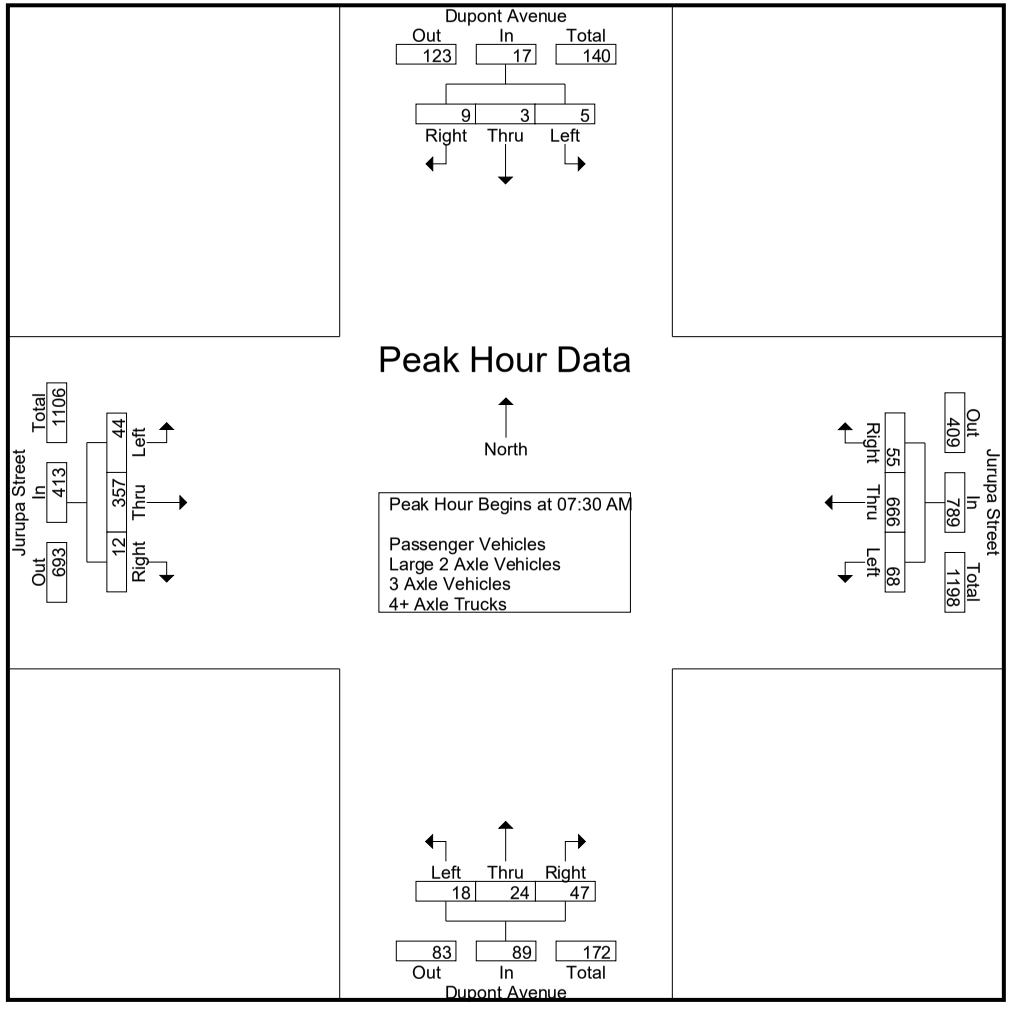
	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	2	2	18	171	7	196	3	5	7	15	9	97	**4**	110	323
07:45 AM	1	**2**	2	5	**23**	151	17	191	3	**8**	8	19	**12**	**102**	4	**118**	**333**
08:00 AM	**3**	1	**3**	**7**	13	157	10	180	**10**	6	15	**31**	11	87	3	101	319
08:15 AM	1	0	2	3	14	**187**	**21**	**222**	2	5	**17**	24	12	71	1	84	333
Total Volume	5	3	9	17	68	666	55	789	18	24	47	89	44	357	12	413	1308
% App. Total	29.4	17.6	52.9		8.6	84.4	7		20.2	27	52.8		10.7	86.4	2.9		
PHF	.417	.375	.750	.607	.739	.890	.655	.889	.450	.750	.691	.718	.917	.875	.750	.875	.982

3.1-54

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	08:00 AM				07:30 AM				08:00 AM				07:00 AM				
+0 mins.	**3**	**1**	3	**7**	18	171	7	196	**10**	**6**	15	**31**	9	101	1	111	
+15 mins.	1	0	2	3	**23**	151	17	191	2	5	**17**	24	9	74	**5**	88	
+30 mins.	0	0	**6**	6	13	157	10	180	1	0	11	12	9	97	4	110	
+45 mins.	3	0	4	7	14	**187**	**21**	**222**	1	6	16	23	**12**	**102**	4	**118**	
Total Volume	7	1	15	23	68	666	55	789	14	17	59	90	39	374	14	427	
% App. Total	30.4	4.3	65.2		8.6	84.4	7		15.6	18.9	65.6		9.1	87.6	3.3		
PHF	.583	.250	.625	.821	.739	.890	.655	.889	.350	.708	.868	.726	.813	.917	.700	.905	

3.1-551

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Dupont Avenue Southbound					Jurupa Street Westbound					Dupont Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	2	0	0	2	13	179	10	0	202	1	4	6	4	11	8	78	1	0	87	4	302	306
07:15 AM	0	1	2	1	3	10	126	7	0	143	2	1	7	5	10	9	62	4	0	75	6	231	237
07:30 AM	0	0	1	1	1	12	156	6	0	174	3	2	3	2	8	8	85	4	0	97	3	280	283
07:45 AM	0	1	1	0	2	18	134	15	0	167	2	6	2	2	10	11	86	1	1	98	3	277	280
Total	0	4	4	2	8	53	595	38	0	686	8	13	18	13	39	36	311	10	1	357	16	1090	1106
08:00 AM	3	1	3	3	7	9	145	9	0	163	4	6	8	4	18	10	64	3	0	77	7	265	272
08:15 AM	0	0	2	0	2	12	160	18	0	190	2	4	8	4	14	8	52	1	0	61	4	267	271
08:30 AM	0	0	5	5	5	11	150	4	0	165	1	0	9	8	10	12	81	5	0	98	13	278	291
08:45 AM	3	0	2	1	5	13	105	8	1	126	1	3	8	2	12	5	60	0	0	65	4	208	212
Total	6	1	12	9	19	45	560	39	1	644	8	13	33	18	54	35	257	9	0	301	28	1018	1046
Grand Total	6	5	16	11	27	98	1155	77	1	1330	16	26	51	31	93	71	568	19	1	658	44	2108	2152
Apprch %	22.2	18.5	59.3			7.4	86.8	5.8			17.2	28	54.8			10.8	86.3	2.9					
Total %	0.3	0.2	0.8		1.3	4.6	54.8	3.7		63.1	0.8	1.2	2.4		4.4	3.4	26.9	0.9		31.2	2	98	

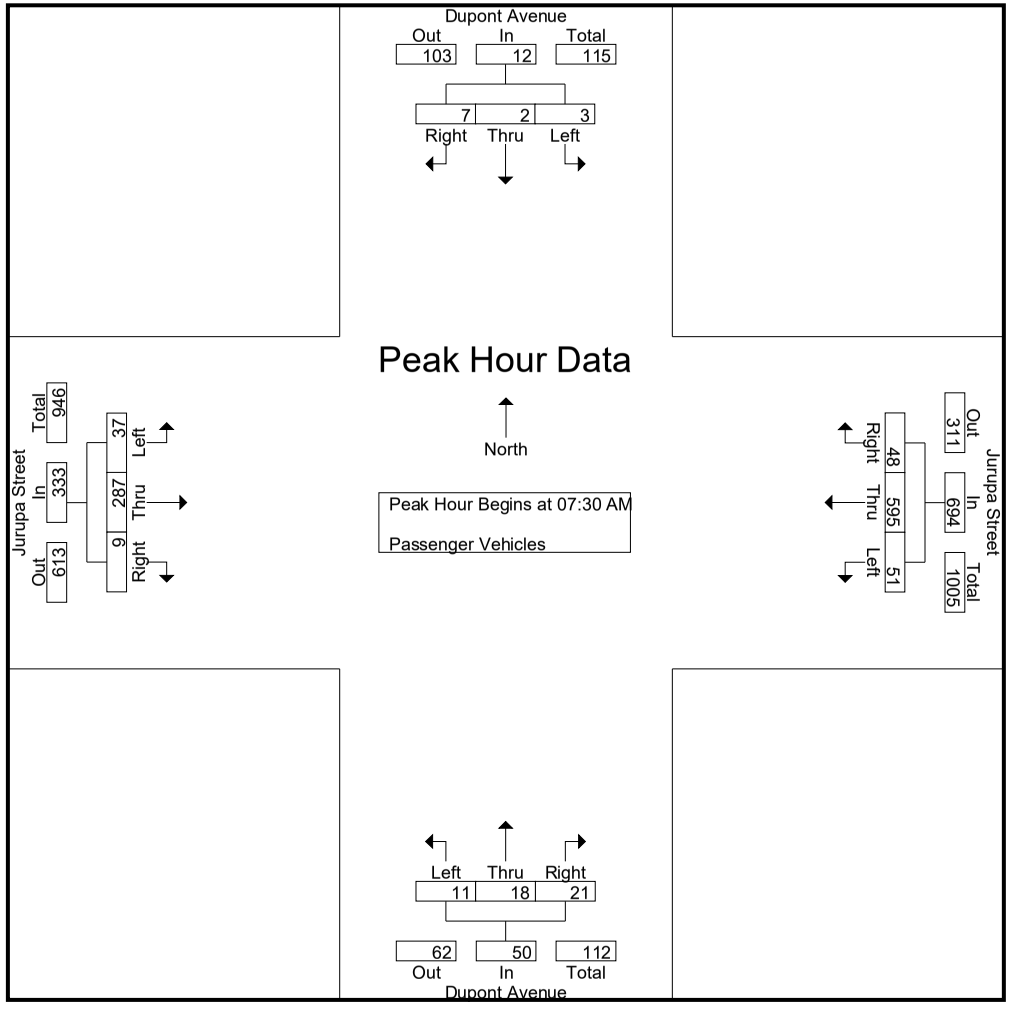
3.1-552

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	1	1	12	156	6	174	3	2	3	8	8	85	**4**	97	**280**
07:45 AM	0	**1**	1	2	**18**	134	15	167	2	**6**	2	10	**11**	**86**	1	**98**	277
08:00 AM	**3**	1	**3**	**7**	9	145	9	163	**4**	6	**8**	**18**	10	64	3	77	265
08:15 AM	0	0	2	2	12	**160**	**18**	**190**	2	4	8	14	8	52	1	61	267
Total Volume	3	2	7	12	51	595	48	694	11	18	21	50	37	287	9	333	1089
% App. Total	25	16.7	58.3		7.3	85.7	6.9		22	36	42		11.1	86.2	2.7		
PHF	.250	.500	.583	.429	.708	.930	.667	.913	.688	.750	.656	.694	.841	.834	.563	.849	.972

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	1	1	12	156	6	174	3	2	3	8	8	85	**4**	97	
+15 mins.	0	**1**	1	2	**18**	134	15	167	2	**6**	2	10	**11**	**86**	1	**98**	
+30 mins.	**3**	1	**3**	**7**	9	145	9	163	**4**	6	**8**	**18**	10	64	3	77	
+45 mins.	0	0	2	2	12	**160**	**18**	**190**	2	4	8	14	8	52	1	61	
Total Volume	3	2	7	12	51	595	48	694	11	18	21	50	37	287	9	333	
% App. Total	25	16.7	58.3		7.3	85.7	6.9		22	36	42		11.1	86.2	2.7		
PHF	.250	.500	.583	.429	.708	.930	.667	.913	.688	.750	.656	.694	.841	.834	.563	.849	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Dupont Avenue Southbound					Jurupa Street Westbound					Dupont Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	2	0	0	2	3	0	2	1	5	0	7	0	0	7	1	14	15
07:15 AM	1	0	0	0	1	0	3	0	0	3	2	0	2	1	4	0	4	0	0	4	1	12	13
07:30 AM	0	0	1	1	1	1	4	0	0	5	0	2	1	1	3	1	0	0	0	1	2	10	12
07:45 AM	0	0	0	0	0	2	5	1	0	8	1	2	3	1	6	1	6	0	0	7	1	21	22
Total	1	0	1	1	2	3	14	1	0	18	6	4	8	4	18	2	17	0	0	19	5	57	62
08:00 AM	0	0	0	0	0	2	4	0	0	6	6	0	2	0	8	1	6	0	0	7	0	21	21
08:15 AM	0	0	0	0	0	2	6	1	1	9	0	0	3	3	3	1	3	0	0	4	4	16	20
08:30 AM	0	0	1	1	1	0	5	1	0	6	0	0	0	0	0	1	2	0	0	3	1	10	11
08:45 AM	0	0	0	0	0	0	3	1	1	4	0	3	2	2	5	1	23	1	1	25	4	34	38
Total	0	0	1	1	1	4	18	3	2	25	6	3	7	5	16	4	34	1	1	39	9	81	90
Grand Total	1	0	2	2	3	7	32	4	2	43	12	7	15	9	34	6	51	1	1	58	14	138	152
Apprch %	33.3	0	66.7			16.3	74.4	9.3			35.3	20.6	44.1			10.3	87.9	1.7					
Total %	0.7	0	1.4		2.2	5.1	23.2	2.9		31.2	8.7	5.1	10.9		24.6	4.3	37	0.7		42	9.2	90.8	

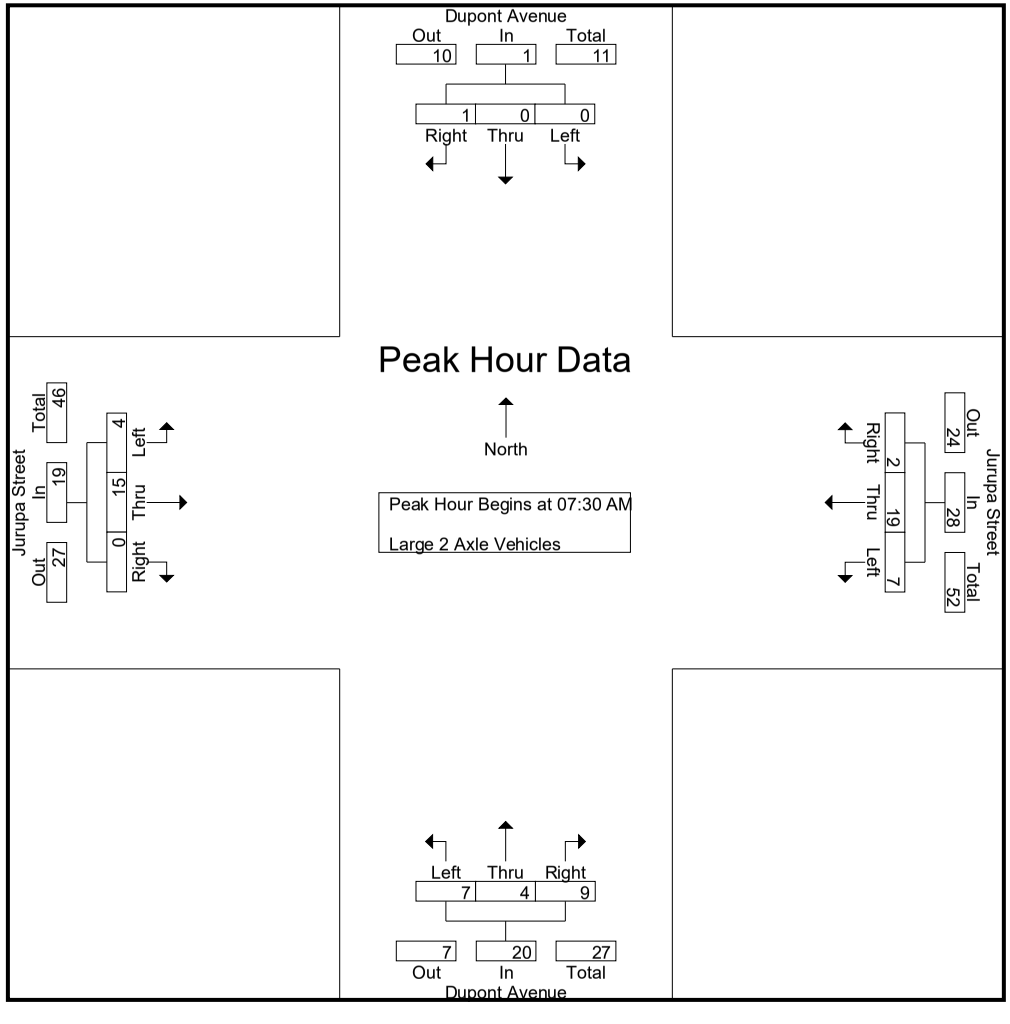
03.1-555

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	**1**	**1**	1	4	0	5	0	**2**	1	3	**1**	0	0	1	10
07:45 AM	0	0	0	0	**2**	5	**1**	8	1	2	**3**	6	1	**6**	0	**7**	**21**
08:00 AM	0	0	0	0	2	4	0	6	**6**	0	2	**8**	1	6	0	7	21
08:15 AM	0	0	0	0	2	**6**	1	**9**	0	0	3	3	1	3	0	4	16
Total Volume	0	0	1	1	7	19	2	28	7	4	9	20	4	15	0	19	68
% App. Total	0	0	100		25	67.9	7.1		35	20	45		21.1	78.9	0		
PHF	.000	.000	.250	.250	.875	.792	.500	.778	.292	.500	.750	.625	1.00	.625	.000	.679	.810

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	**1**	**1**	1	4	0	5	0	**2**	1	3	**1**	0	0	1	
+15 mins.	0	0	0	0	**2**	5	**1**	8	1	2	**3**	6	1	**6**	0	**7**	
+30 mins.	0	0	0	0	2	4	0	6	**6**	0	2	**8**	1	6	0	7	
+45 mins.	0	0	0	0	2	**6**	1	**9**	0	0	3	3	1	3	0	4	
Total Volume	0	0	1	1	7	19	2	28	7	4	9	20	4	15	0	19	
% App. Total	0	0	100		25	67.9	7.1		35	20	45		21.1	78.9	0		
PHF	.000	.000	.250	.250	.875	.792	.500	.778	.292	.500	.750	.625	1.000	.625	.000	.679	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Dupont Avenue Southbound					Jurupa Street Westbound					Dupont Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	1	1	1	0	1	0	0	1	0	1	0	0	1	0	5	0	0	5	1	8	9
07:15 AM	0	0	1	1	1	0	3	0	0	3	0	0	0	0	0	0	1	0	0	1	1	5	6
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1
07:45 AM	1	0	0	0	1	0	1	1	0	2	0	0	1	0	1	0	5	1	0	6	0	10	10
Total	1	0	2	2	3	0	5	1	0	6	0	1	1	0	2	0	12	1	0	13	2	24	26
08:00 AM	0	0	0	0	0	1	0	0	0	1	0	0	2	0	2	0	2	0	0	2	0	5	5
08:15 AM	1	0	0	0	1	0	4	0	0	4	0	0	1	1	1	0	2	0	0	2	1	8	9
08:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	0	1	0	0	1	1	3	4
08:45 AM	0	0	0	0	0	0	5	0	0	5	0	0	3	2	3	0	3	1	0	4	2	12	14
Total	1	0	0	0	1	1	10	0	0	11	0	0	7	4	7	0	8	1	0	9	4	28	32
Grand Total	2	0	2	2	4	1	15	1	0	17	0	1	8	4	9	0	20	2	0	22	6	52	58
Apprch %	50	0	50			5.9	88.2	5.9			0	11.1	88.9			0	90.9	9.1					
Total %	3.8	0	3.8		7.7	1.9	28.8	1.9		32.7	0	1.9	15.4		17.3	0	38.5	3.8		42.3	10.3	89.7	

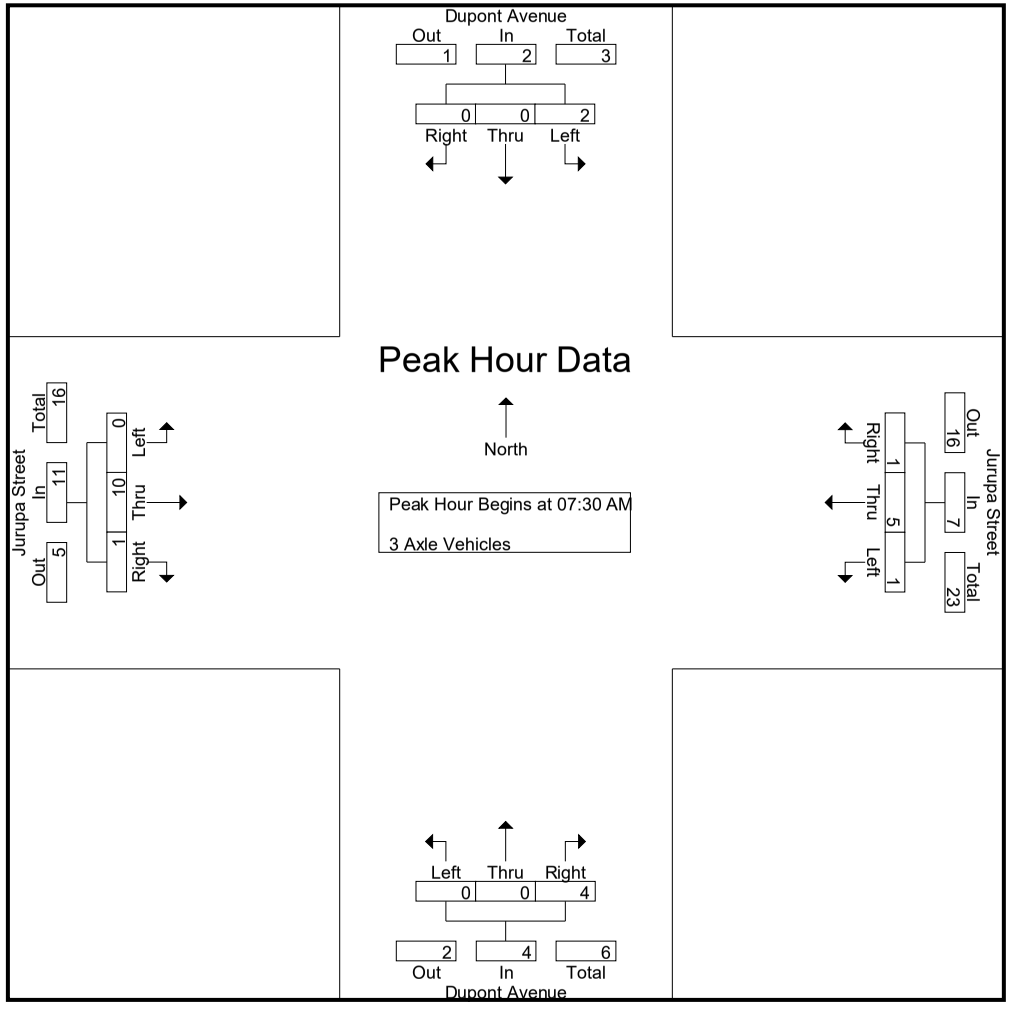
3.1-558

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:45 AM	**1**	0	0	**1**	0	1	**1**	2	0	0	1	1	0	**5**	**1**	**6**	**10**
08:00 AM	0	0	0	0	**1**	0	0	1	0	0	**2**	**2**	0	2	0	2	5
08:15 AM	1	0	0	1	0	**4**	0	**4**	0	0	1	1	0	2	0	2	8
Total Volume	2	0	0	2	1	5	1	7	0	0	4	4	0	10	1	11	24
% App. Total	100	0	0		14.3	71.4	14.3		0	0	100		0	90.9	9.1		
PHF	.500	.000	.000	.500	.250	.313	.250	.438	.000	.000	.500	.500	.000	.500	.250	.458	.600

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+15 mins.	**1**	0	0	**1**	0	1	**1**	2	0	0	1	1	0	**5**	**1**	**6**	
+30 mins.	0	0	0	0	**1**	0	0	1	0	0	**2**	**2**	0	2	0	2	
+45 mins.	1	0	0	1	0	**4**	0	**4**	0	0	1	1	0	2	0	2	
Total Volume	2	0	0	2	1	5	1	7	0	0	4	4	0	10	1	11	
% App. Total	100	0	0		14.3	71.4	14.3		0	0	100		0	90.9	9.1		
PHF	.500	.000	.000	.500	.250	.313	.250	.438	.000	.000	.500	.500	.000	.500	.250	.458	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

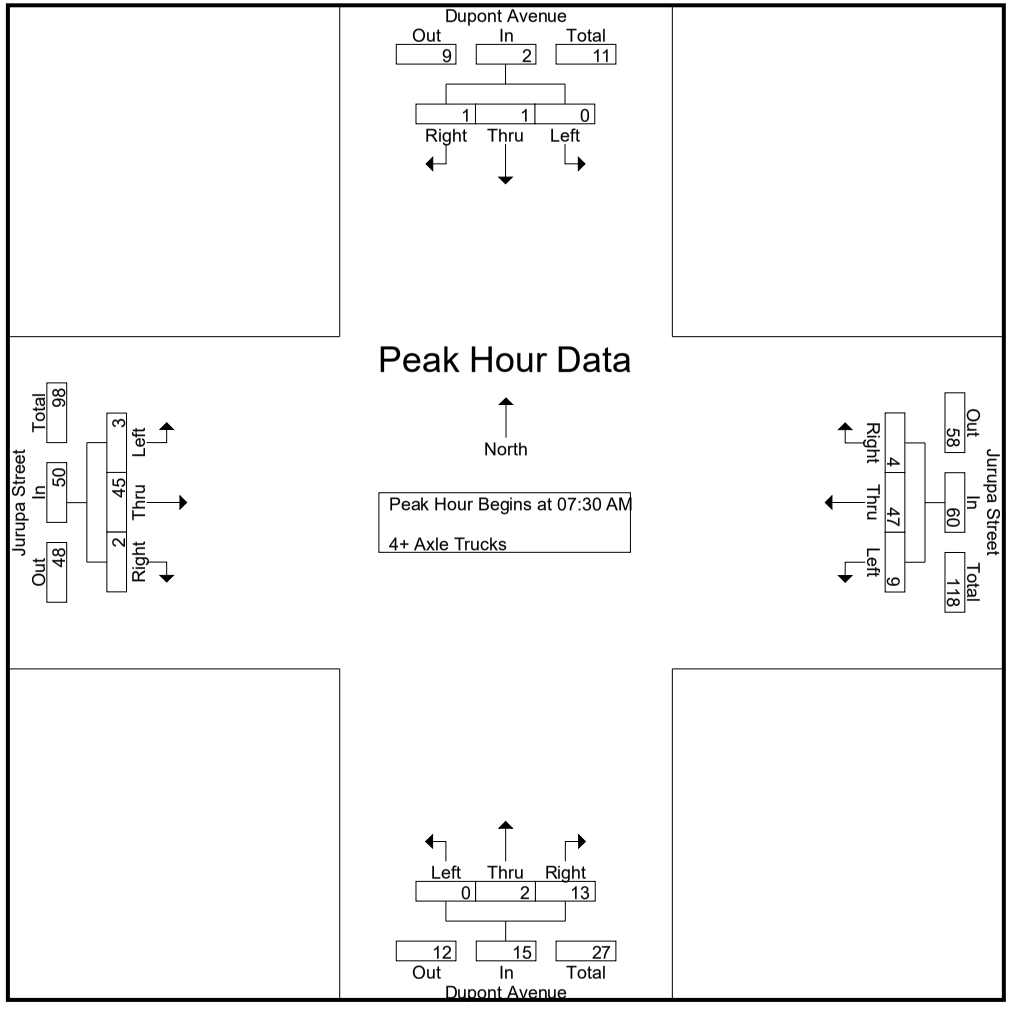
	Dupont Avenue Southbound					Jurupa Street Westbound					Dupont Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	1	1	0	2	0	16	0	0	16	0	0	1	1	1	1	11	0	0	12	1	31	32
07:15 AM	1	0	0	0	1	2	9	0	0	11	0	1	2	0	3	0	7	1	0	8	0	23	23
07:30 AM	0	0	0	0	0	5	11	1	0	17	0	1	3	2	4	0	11	0	0	11	2	32	34
07:45 AM	0	1	1	1	2	3	11	0	0	14	0	0	2	0	2	0	5	2	0	7	1	25	26
Total	1	2	2	1	5	10	47	1	0	58	0	2	8	3	10	1	34	3	0	38	4	111	115
08:00 AM	0	0	0	0	0	1	8	1	0	10	0	0	3	3	3	0	15	0	0	15	3	28	31
08:15 AM	0	0	0	0	0	0	17	2	0	19	0	1	5	1	6	3	14	0	0	17	1	42	43
08:30 AM	0	0	0	0	0	3	11	1	0	15	0	0	1	1	1	1	15	0	0	16	1	32	33
08:45 AM	0	0	2	0	2	0	14	1	0	15	0	0	3	1	3	0	10	1	0	11	1	31	32
Total	0	0	2	0	2	4	50	5	0	59	0	1	12	6	13	4	54	1	0	59	6	133	139
Grand Total	1	2	4	1	7	14	97	6	0	117	0	3	20	9	23	5	88	4	0	97	10	244	254
Apprch %	14.3	28.6	57.1			12	82.9	5.1			0	13	87			5.2	90.7	4.1					
Total %	0.4	0.8	1.6		2.9	5.7	39.8	2.5		48	0	1.2	8.2		9.4	2	36.1	1.6		39.8	3.9	96.1	

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	**5**	11	1	17	0	**1**	3	4	0	11	0	11	32
07:45 AM	0	**1**	**1**	**2**	3	11	0	14	0	0	2	2	0	5	**2**	7	25
08:00 AM	0	0	0	0	1	8	1	10	0	0	3	3	0	**15**	0	15	28
08:15 AM	0	0	0	0	0	**17**	**2**	**19**	0	1	**5**	**6**	**3**	14	0	**17**	**42**
Total Volume	0	1	1	2	9	47	4	60	0	2	13	15	3	45	2	50	127
% App. Total	0	50	50		15	78.3	6.7		0	13.3	86.7		6	90	4		
PHF	.000	.250	.250	.250	.450	.691	.500	.789	.000	.500	.650	.625	.250	.750	.250	.735	.756

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	0	0	0	0	**5**	11	1	17	0	**1**	3	4	0	11	0	11	
+15 mins.	0	**1**	**1**	**2**	3	11	0	14	0	0	2	2	0	5	**2**	7	
+30 mins.	0	0	0	0	1	8	1	10	0	0	3	3	0	**15**	0	15	
+45 mins.	0	0	0	0	0	**17**	**2**	**19**	0	1	**5**	**6**	**3**	14	0	**17**	
Total Volume	0	1	1	2	9	47	4	60	0	2	13	15	3	45	2	50	
% App. Total	0	50	50		15	78.3	6.7		0	13.3	86.7		6	90	4		
PHF	.000	.250	.250	.250	.450	.691	.500	.789	.000	.500	.650	.625	.250	.750	.250	.735	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Dupont Avenue Southbound					Jurupa Street Westbound					Dupont Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	13	6	11	3	30	12	142	5	1	159	14	10	17	8	41	9	136	1	0	146	12	376	388
04:15 PM	8	2	4	3	14	11	156	11	3	178	9	4	14	6	27	4	178	4	0	186	12	405	417
04:30 PM	13	4	13	10	30	7	134	6	1	147	15	6	29	9	50	11	215	1	0	227	20	454	474
04:45 PM	6	6	3	2	15	14	153	8	2	175	6	5	16	4	27	8	196	5	1	209	9	426	435
Total	40	18	31	18	89	44	585	30	7	659	44	25	76	27	145	32	725	11	1	768	53	1661	1714
05:00 PM	10	3	10	7	23	9	145	8	0	162	8	3	18	8	29	10	187	1	0	198	15	412	427
05:15 PM	10	6	7	4	23	7	128	2	1	137	4	6	12	4	22	9	212	1	0	222	9	404	413
05:30 PM	10	8	14	11	32	8	154	2	1	164	2	2	13	8	17	7	220	2	1	229	21	442	463
05:45 PM	1	4	3	2	8	13	119	1	0	133	7	4	12	4	23	4	192	1	0	197	6	361	367
Total	31	21	34	24	86	37	546	13	2	596	21	15	55	24	91	30	811	5	1	846	51	1619	1670
Grand Total	71	39	65	42	175	81	1131	43	9	1255	65	40	131	51	236	62	1536	16	2	1614	104	3280	3384
Apprch %	40.6	22.3	37.1			6.5	90.1	3.4			27.5	16.9	55.5			3.8	95.2	1					
Total %	2.2	1.2	2		5.3	2.5	34.5	1.3		38.3	2	1.2	4		7.2	1.9	46.8	0.5		49.2	3.1	96.9	
Passenger Vehicles	64	19	54		174	53	937	28		1023	56	27	96		226	44	1346	9		1400	0	0	2823
% Passenger Vehicles	90.1	48.7	83.1	88.1	80.2	65.4	82.8	65.1	55.6	80.9	86.2	67.5	73.3	92.2	78.7	71	87.6	56.2	50	86.6	0	0	83.4
Large 2 Axle Vehicles	0	7	4		14	6	59	5		72	7	3	2		14	6	40	4		50	0	0	150
% Large 2 Axle Vehicles	0	17.9	6.2	7.1	6.5	7.4	5.2	11.6	22.2	5.7	10.8	7.5	1.5	3.9	4.9	9.7	2.6	25	0	3.1	0	0	4.4
3 Axle Vehicles	0	0	1		2	1	31	0		32	0	1	6		7	2	19	0		21	0	0	62
% 3 Axle Vehicles	0	0	1.5	2.4	0.9	1.2	2.7	0	0	2.5	0	2.5	4.6	0	2.4	3.2	1.2	0	0	1.3	0	0	1.8
4+ Axle Trucks	7	13	6		27	21	104	10		137	2	9	27		40	10	131	3		145	0	0	349
% 4+ Axle Trucks	9.9	33.3	9.2	2.4	12.4	25.9	9.2	23.3	22.2	10.8	3.1	22.5	20.6	3.9	13.9	16.1	8.5	18.8	50	9	0	0	10.3

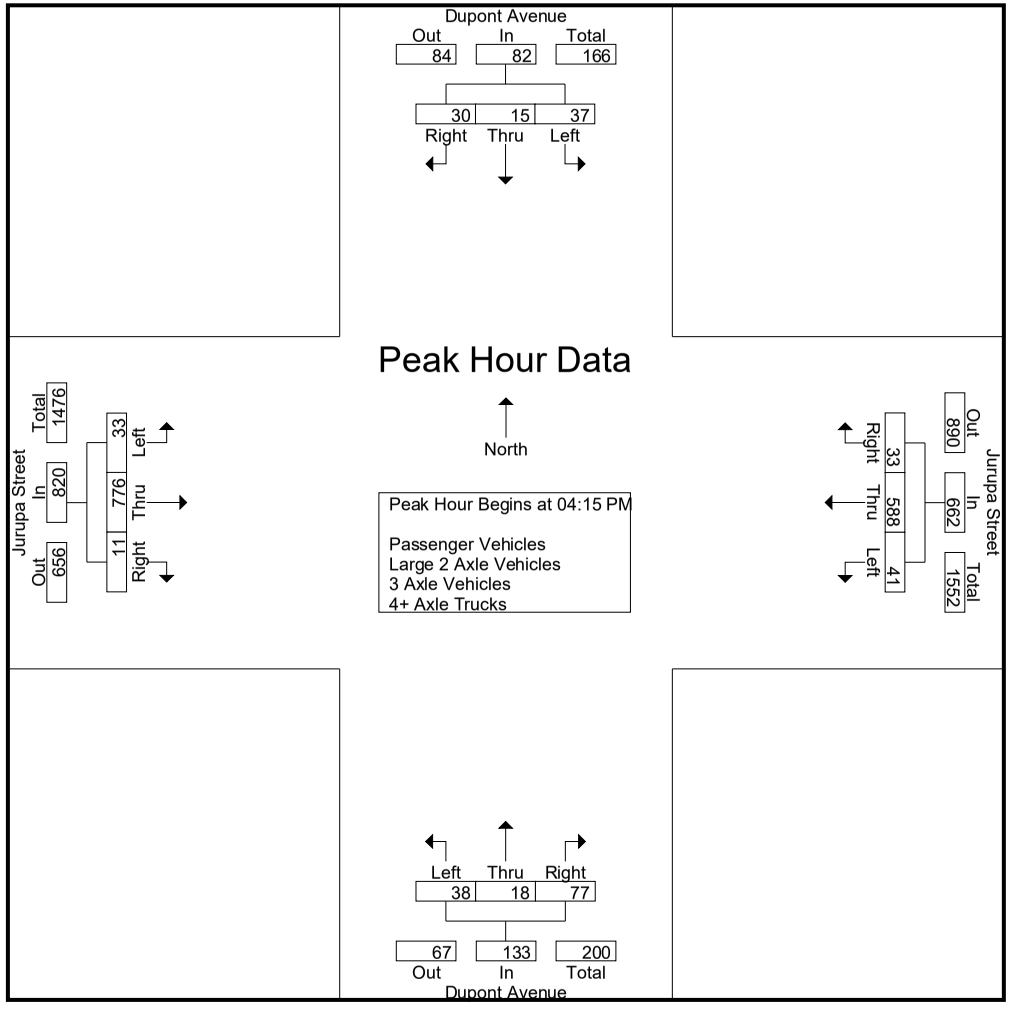
	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	8	2	4	14	11	**156**	**11**	**178**	9	4	14	27	4	178	4	186	405
04:30 PM	**13**	4	**13**	**30**	7	134	6	147	**15**	**6**	**29**	**50**	**11**	**215**	1	**227**	**454**
04:45 PM	6	**6**	3	15	**14**	153	8	175	6	5	16	27	8	196	**5**	209	426
05:00 PM	10	3	10	23	9	145	8	162	8	3	18	29	10	187	1	198	412
Total Volume	37	15	30	82	41	588	33	662	38	18	77	133	33	776	11	820	1697
% App. Total	45.1	18.3	36.6		6.2	88.8	5		28.6	13.5	57.9		4	94.6	1.3		
PHF	.712	.625	.577	.683	.732	.942	.750	.930	.633	.750	.664	.665	.750	.902	.550	.903	.934

3.1-564

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:15 PM				04:00 PM				04:45 PM				
+0 mins.	6	6	3	15	11	**156**	**11**	**178**	14	**10**	17	41	8	196	**5**	209	
+15 mins.	**10**	3	10	23	7	134	6	147	9	4	14	27	**10**	187	1	198	
+30 mins.	10	6	7	23	**14**	153	8	175	**15**	6	**29**	**50**	9	212	1	222	
+45 mins.	10	**8**	**14**	**32**	9	145	8	162	6	5	16	27	7	**220**	2	**229**	
Total Volume	36	23	34	93	41	588	33	662	44	25	76	145	34	815	9	858	
% App. Total	38.7	24.7	36.6		6.2	88.8	5		30.3	17.2	52.4		4	95	1		
PHF	.900	.719	.607	.727	.732	.942	.750	.930	.733	.625	.655	.725	.850	.926	.450	.937	

3.1-566

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

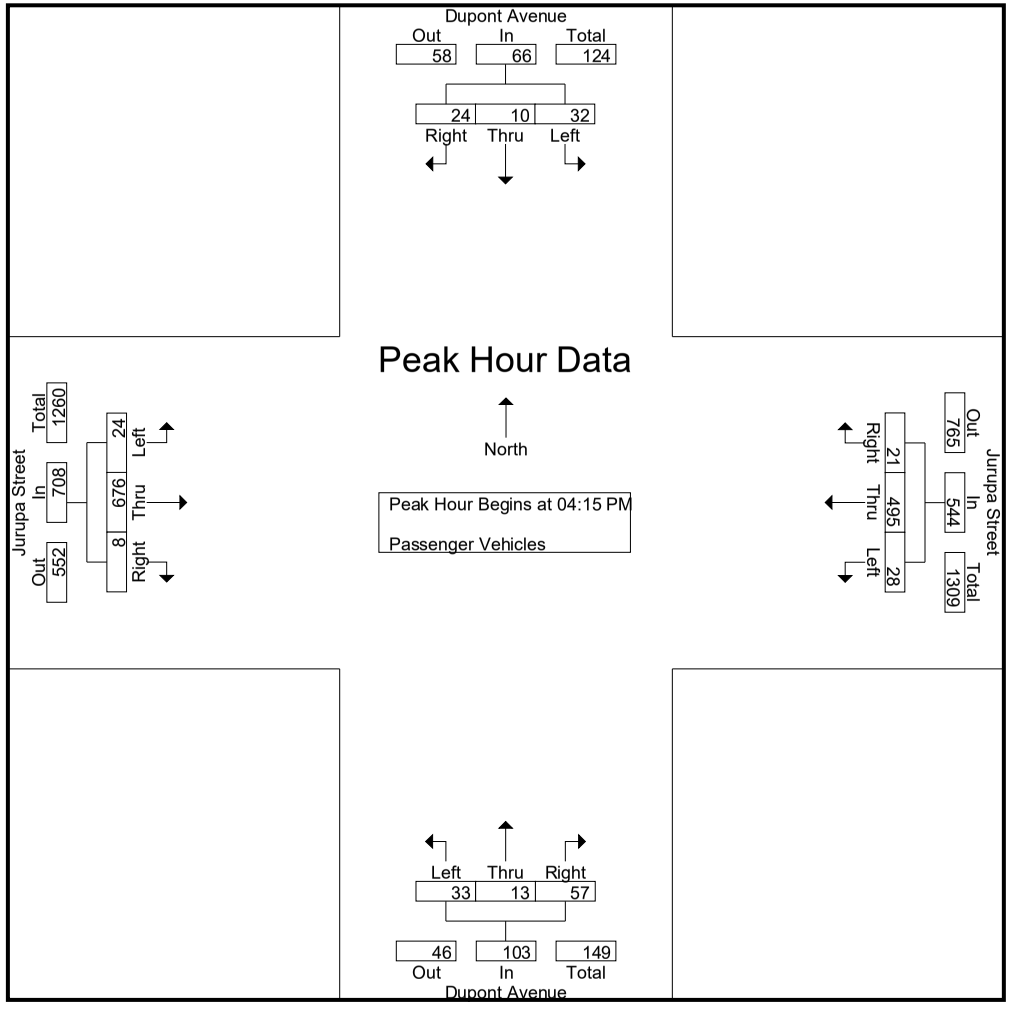
	Dupont Avenue Southbound					Jurupa Street Westbound					Dupont Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	13	1	9	3	23	6	119	4	0	129	14	8	10	7	32	8	113	0	0	121	10	305	315
04:15 PM	8	0	1	1	9	7	135	7	3	149	9	3	9	6	21	3	153	3	0	159	10	338	348
04:30 PM	13	4	12	9	29	5	108	4	1	117	12	5	26	9	43	6	188	0	0	194	19	383	402
04:45 PM	5	4	3	2	12	11	130	5	0	146	6	3	10	3	19	7	178	4	1	189	6	366	372
Total	39	9	25	15	73	29	492	20	4	541	41	19	55	25	115	24	632	7	1	663	45	1392	1437
05:00 PM	6	2	8	5	16	5	122	5	0	132	6	2	12	8	20	8	157	1	0	166	13	334	347
05:15 PM	10	2	5	4	17	6	109	2	1	117	4	3	10	3	17	6	194	1	0	201	8	352	360
05:30 PM	8	6	13	11	27	6	120	1	0	127	2	2	10	7	14	3	195	0	0	198	18	366	384
05:45 PM	1	0	3	2	4	7	94	0	0	101	3	1	9	4	13	3	168	0	0	171	6	289	295
Total	25	10	29	22	64	24	445	8	1	477	15	8	41	22	64	20	714	2	0	736	45	1341	1386
Grand Total	64	19	54	37	137	53	937	28	5	1018	56	27	96	47	179	44	1346	9	1	1399	90	2733	2823
Apprch %	46.7	13.9	39.4			5.2	92	2.8			31.3	15.1	53.6			3.1	96.2	0.6					
Total %	2.3	0.7	2		5	1.9	34.3	1		37.2	2	1	3.5		6.5	1.6	49.2	0.3		51.2	3.2	96.8	

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	8	0	1	9	7	**135**	**7**	**149**	9	3	9	21	3	153	3	159	338
04:30 PM	**13**	**4**	**12**	**29**	5	108	4	117	**12**	**5**	**26**	**43**	6	**188**	0	**194**	**383**
04:45 PM	5	4	3	12	**11**	130	5	146	6	3	10	19	7	178	**4**	189	366
05:00 PM	6	2	8	16	5	122	5	132	6	2	12	20	**8**	157	1	166	334
Total Volume	32	10	24	66	28	495	21	544	33	13	57	103	24	676	8	708	1421
% App. Total	48.5	15.2	36.4		5.1	91	3.9		32	12.6	55.3		3.4	95.5	1.1		
PHF	.615	.625	.500	.569	.636	.917	.750	.913	.688	.650	.548	.599	.750	.899	.500	.912	.928

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	8	0	1	9	7	**135**	**7**	**149**	9	3	9	21	3	153	3	159	
+15 mins.	**13**	**4**	**12**	**29**	5	108	4	117	**12**	**5**	**26**	**43**	6	**188**	0	**194**	
+30 mins.	5	4	3	12	**11**	130	5	146	6	3	10	19	7	178	**4**	189	
+45 mins.	6	2	8	16	5	122	5	132	6	2	12	20	**8**	157	1	166	
Total Volume	32	10	24	66	28	495	21	544	33	13	57	103	24	676	8	708	
% App. Total	48.5	15.2	36.4		5.1	91	3.9		32	12.6	55.3		3.4	95.5	1.1		
PHF	.615	.625	.500	.569	.636	.917	.750	.913	.688	.650	.548	.599	.750	.899	.500	.912	

3.1-569

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Dupont Avenue Southbound					Jurupa Street Westbound					Dupont Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	2	0	0	2	1	4	1	1	6	0	0	0	0	0	1	5	0	0	6	1	14	15
04:15 PM	0	0	1	1	1	0	3	1	0	4	0	0	0	0	0	0	7	1	0	8	1	13	14
04:30 PM	0	0	0	0	0	0	7	0	0	7	2	0	0	0	2	0	7	1	0	8	0	17	17
04:45 PM	0	0	0	0	0	1	8	0	0	9	0	1	1	1	2	1	5	1	0	7	1	18	19
Total	0	2	1	1	3	2	22	2	1	26	2	1	1	1	4	2	24	3	0	29	3	62	65
05:00 PM	0	0	2	2	2	1	8	1	0	10	2	0	0	0	2	2	4	0	0	6	2	20	22
05:15 PM	0	3	1	0	4	1	8	0	0	9	0	1	1	1	2	0	5	0	0	5	1	20	21
05:30 PM	0	1	0	0	1	1	8	1	1	10	0	0	0	0	0	2	3	1	0	6	1	17	18
05:45 PM	0	1	0	0	1	1	13	1	0	15	3	1	0	0	4	0	4	0	0	4	0	24	24
Total	0	5	3	2	8	4	37	3	1	44	5	2	1	1	8	4	16	1	0	21	4	81	85
Grand Total	0	7	4	3	11	6	59	5	2	70	7	3	2	2	12	6	40	4	0	50	7	143	150
Apprch %	0	63.6	36.4			8.6	84.3	7.1			58.3	25	16.7			12	80	8					
Total %	0	4.9	2.8		7.7	4.2	41.3	3.5		49	4.9	2.1	1.4		8.4	4.2	28	2.8		35	4.7	95.3	

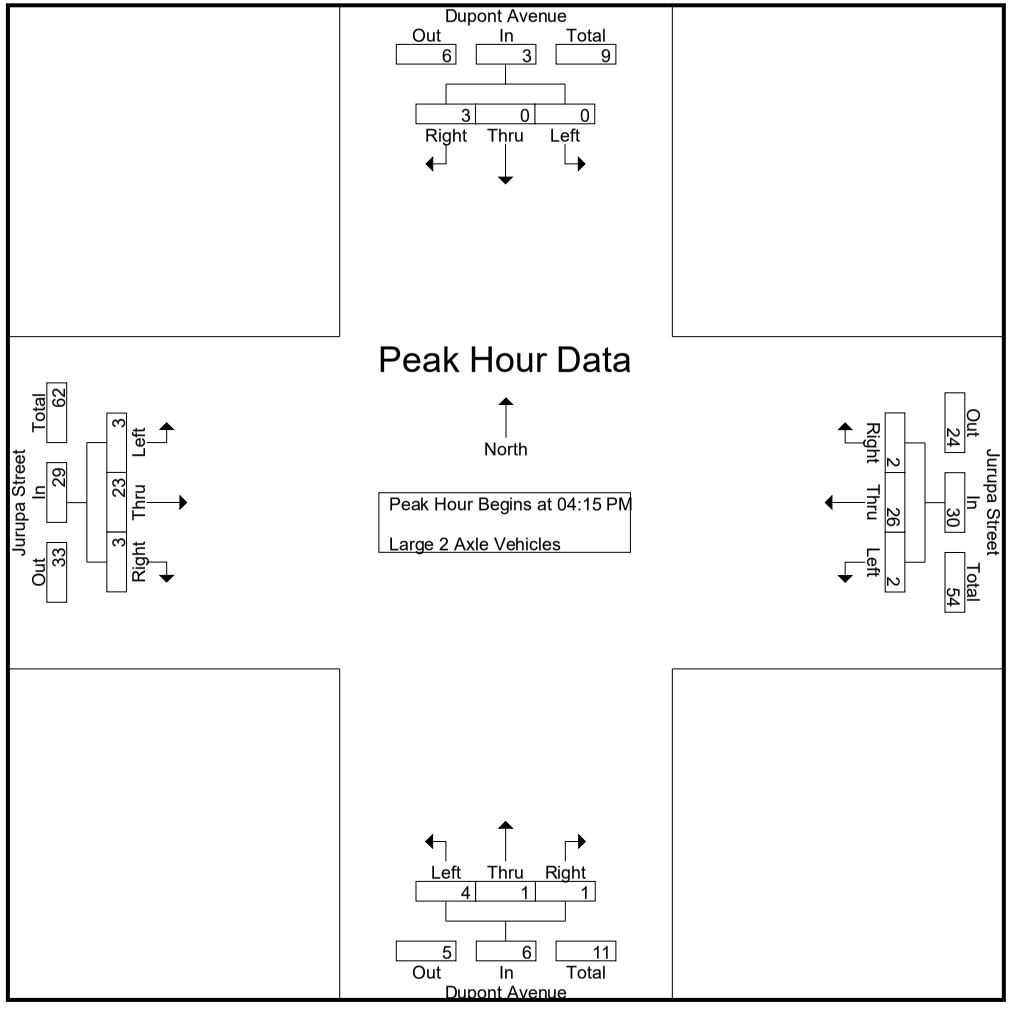
3.1-570

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	1	1	0	3	**1**	4	0	0	0	0	0	**7**	**1**	**8**	13
04:30 PM	0	0	0	0	0	7	0	7	**2**	0	0	**2**	0	7	1	8	17
04:45 PM	0	0	0	0	**1**	**8**	0	9	0	**1**	**1**	2	1	5	1	7	18
05:00 PM	0	0	**2**	**2**	1	8	1	**10**	2	0	0	2	**2**	4	0	6	**20**
Total Volume	0	0	3	3	2	26	2	30	4	1	1	6	3	23	3	29	68
% App. Total	0	0	100		6.7	86.7	6.7		66.7	16.7	16.7		10.3	79.3	10.3		
PHF	.000	.000	.375	.375	.500	.813	.500	.750	.500	.250	.250	.750	.375	.821	.750	.906	.850

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	1	1	0	3	**1**	4	0	0	0	0	0	**7**	**1**	**8**	
+15 mins.	0	0	0	0	0	7	0	7	**2**	0	0	**2**	0	7	1	8	
+30 mins.	0	0	0	0	**1**	**8**	0	9	0	**1**	**1**	2	1	5	1	7	
+45 mins.	0	0	**2**	**2**	1	8	1	**10**	2	0	0	2	**2**	4	0	6	
Total Volume	0	0	3	3	2	26	2	30	4	1	1	6	3	23	3	29	
% App. Total	0	0	100		6.7	86.7	6.7		66.7	16.7	16.7		10.3	79.3	10.3		
PHF	.000	.000	.375	.375	.500	.813	.500	.750	.500	.250	.250	.750	.375	.821	.750	.906	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

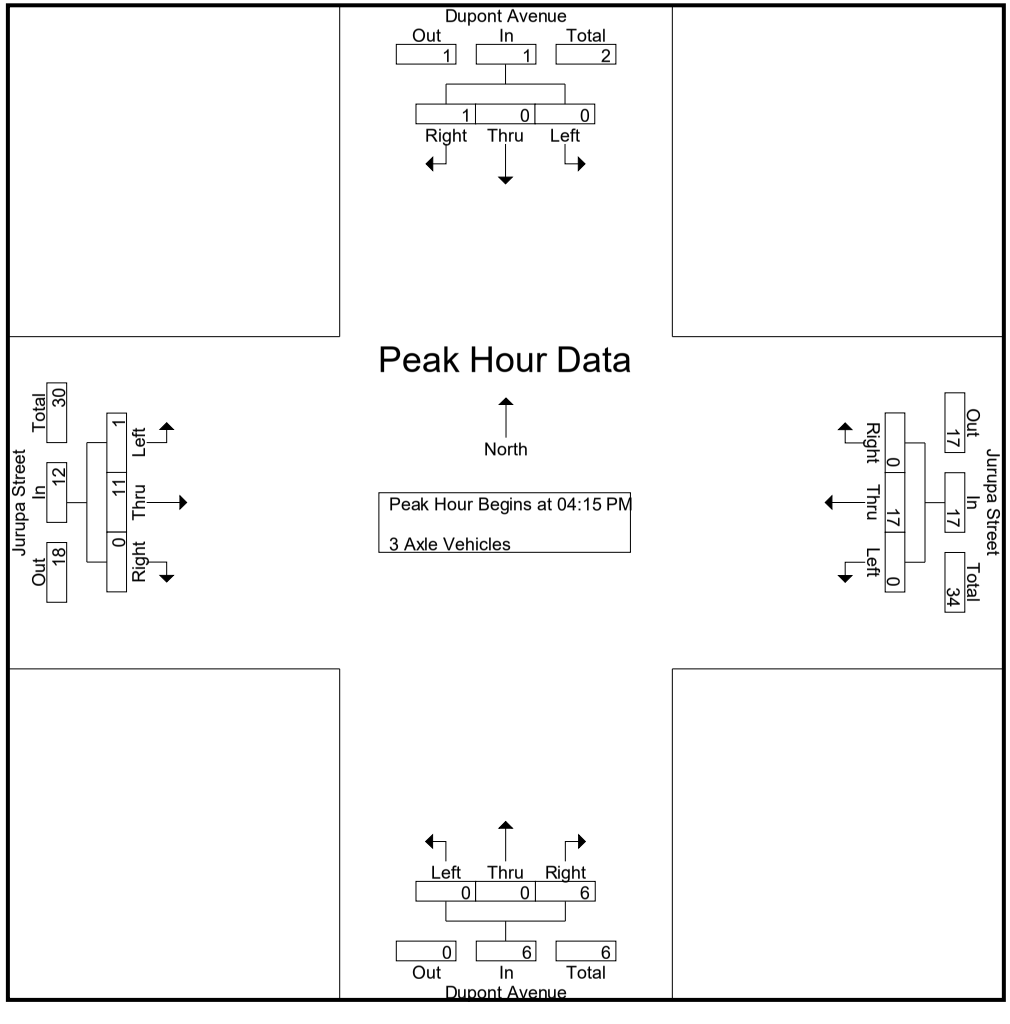
	Dupont Avenue Southbound					Jurupa Street Westbound					Dupont Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	1	4	0	0	5	0	1	0	0	1	0	1	0	0	1	0	7	7
04:15 PM	0	0	1	1	1	0	4	0	0	4	0	0	1	0	1	0	3	0	0	3	1	9	10
04:30 PM	0	0	0	0	0	0	7	0	0	7	0	0	2	0	2	1	1	0	0	2	0	11	11
04:45 PM	0	0	0	0	0	0	5	0	0	5	0	0	1	0	1	0	2	0	0	2	0	8	8
Total	0	0	1	1	1	1	20	0	0	21	0	1	4	0	5	1	7	0	0	8	1	35	36
05:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	0	5	0	0	5	0	8	8
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	7	0	0	7	0	0	0	0	0	1	3	0	0	4	0	11	11
05:45 PM	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	0	7	7
Total	0	0	0	0	0	0	11	0	0	11	0	0	2	0	2	1	12	0	0	13	0	26	26
Grand Total	0	0	1	1	1	1	31	0	0	32	0	1	6	0	7	2	19	0	0	21	1	61	62
Apprch %	0	0	100			3.1	96.9	0			0	14.3	85.7			9.5	90.5	0					
Total %	0	0	1.6		1.6	1.6	50.8	0		52.5	0	1.6	9.8		11.5	3.3	31.1	0		34.4	1.6	98.4	

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	0	**1**	**1**	0	4	0	4	0	0	1	1	0	3	0	3	9
04:30 PM	0	0	0	0	0	**7**	0	**7**	0	0	**2**	**2**	**1**	1	0	2	**11**
04:45 PM	0	0	0	0	0	5	0	5	0	0	1	1	0	2	0	2	8
05:00 PM	0	0	0	0	0	1	0	1	0	0	2	2	0	**5**	0	**5**	8
Total Volume	0	0	1	1	0	17	0	17	0	0	6	6	1	11	0	12	36
% App. Total	0	0	100		0	100	0		0	0	100		8.3	91.7	0		
PHF	.000	.000	.250	.250	.000	.607	.000	.607	.000	.000	.750	.750	.250	.550	.000	.600	.818

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	**1**	**1**	0	4	0	4	0	0	1	1	0	3	0	3	
+15 mins.	0	0	0	0	0	**7**	0	**7**	0	0	**2**	**2**	**1**	1	0	2	
+30 mins.	0	0	0	0	0	5	0	5	0	0	1	1	0	2	0	2	
+45 mins.	0	0	0	0	0	1	0	1	0	0	2	2	0	**5**	0	**5**	
Total Volume	0	0	1	1	0	17	0	17	0	0	6	6	1	11	0	12	
% App. Total	0	0	100		0	100	0		0	0	100		8.3	91.7	0		
PHF	.000	.000	.250	.250	.000	.607	.000	.607	.000	.000	.750	.750	.250	.550	.000	.600	

3.1-575

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

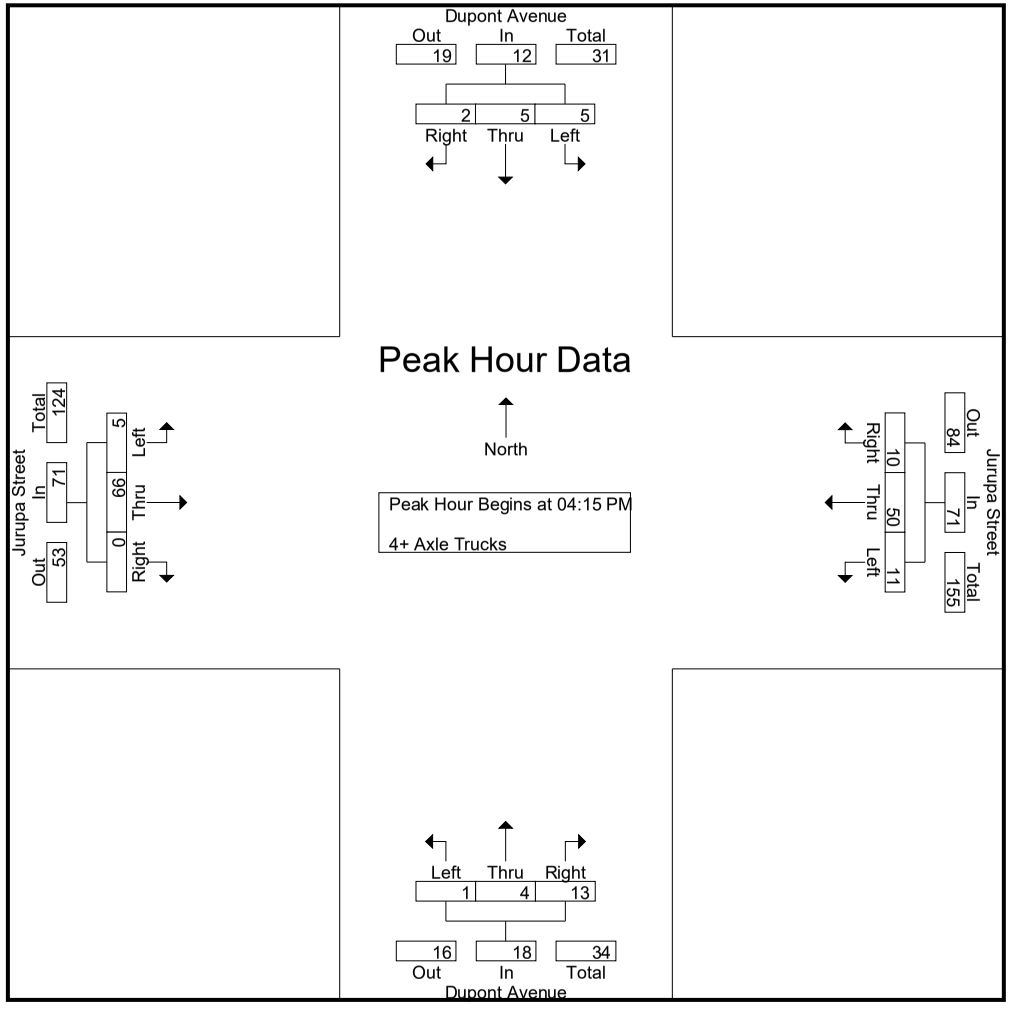
	Dupont Avenue Southbound					Jurupa Street Westbound					Dupont Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	3	2	0	5	4	15	0	0	19	0	1	7	1	8	0	17	1	0	18	1	50	51
04:15 PM	0	2	1	0	3	4	14	3	0	21	0	1	4	0	5	1	15	0	0	16	0	45	45
04:30 PM	0	0	1	1	1	2	12	2	0	16	1	1	1	0	3	4	19	0	0	23	1	43	44
04:45 PM	1	2	0	0	3	2	10	3	2	15	0	1	4	0	5	0	11	0	0	11	2	34	36
Total	1	7	4	1	12	12	51	8	2	71	1	4	16	1	21	5	62	1	0	68	4	172	176
05:00 PM	4	1	0	0	5	3	14	2	0	19	0	1	4	0	5	0	21	0	0	21	0	50	50
05:15 PM	0	1	1	0	2	0	11	0	0	11	0	2	1	0	3	3	13	0	0	16	0	32	32
05:30 PM	2	1	1	0	4	1	19	0	0	20	0	0	3	1	3	1	19	1	1	21	2	48	50
05:45 PM	0	3	0	0	3	5	9	0	0	14	1	2	3	0	6	1	16	1	0	18	0	41	41
Total	6	6	2	0	14	9	53	2	0	64	1	5	11	1	17	5	69	2	1	76	2	171	173
Grand Total	7	13	6	1	26	21	104	10	2	135	2	9	27	2	38	10	131	3	1	144	6	343	349
Apprch %	26.9	50	23.1			15.6	77	7.4			5.3	23.7	71.1			6.9	91	2.1					
Total %	2	3.8	1.7		7.6	6.1	30.3	2.9		39.4	0.6	2.6	7.9		11.1	2.9	38.2	0.9		42	1.7	98.3	

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	0	**2**	**1**	3	**4**	**14**	**3**	**21**	0	**1**	**4**	**5**	1	15	0	16	45
04:30 PM	0	0	1	1	2	12	2	16	**1**	1	1	3	**4**	19	0	**23**	43
04:45 PM	1	2	0	3	2	10	3	15	0	1	4	5	0	11	0	11	34
05:00 PM	**4**	1	0	**5**	3	14	2	19	0	1	4	5	0	**21**	0	21	**50**
Total Volume	5	5	2	12	11	50	10	71	1	4	13	18	5	66	0	71	172
% App. Total	41.7	41.7	16.7		15.5	70.4	14.1		5.6	22.2	72.2		7	93	0		
PHF	.313	.625	.500	.600	.688	.893	.833	.845	.250	1.00	.813	.900	.313	.786	.000	.772	.860

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Dupont Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 20_ONT_Dupont_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Dupont Avenue Southbound				Jurupa Street Westbound				Dupont Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:15 PM				04:15 PM				04:15 PM				04:15 PM				
+0 mins.	0	**2**	**1**	3	**4**	**14**	**3**	**21**	0	**1**	**4**	**5**	1	15	0	16	
+15 mins.	0	0	1	1	2	12	2	16	**1**	1	1	3	**4**	19	0	**23**	
+30 mins.	1	2	0	3	2	10	3	15	0	1	4	5	0	11	0	11	
+45 mins.	**4**	1	0	**5**	3	14	2	19	0	1	4	5	0	**21**	0	21	
Total Volume	5	5	2	12	11	50	10	71	1	4	13	18	5	66	0	71	
% App. Total	41.7	41.7	16.7		15.5	70.4	14.1		5.6	22.2	72.2		7	93	0		
PHF	.313	.625	.500	.600	.688	.893	.833	.845	.250	1.000	.813	.900	.313	.786	.000	.772	

3.1-578

Location: Ontario
N/S: Dupont Avenue
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Dupont Avenue	East Leg Jurupa Street	South Leg Dupont Avenue	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	1	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	1

	North Leg Dupont Avenue	East Leg Jurupa Street	South Leg Dupont Avenue	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	1

Location: Ontario
N/S: Dupont Avenue
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Dupont Avenue			Westbound Jurupa Street			Northbound Dupont Avenue			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	1	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	0	0	0	0	0	1	0	0	2

	Southbound Dupont Avenue			Westbound Jurupa Street			Northbound Dupont Avenue			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	2	0	3

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

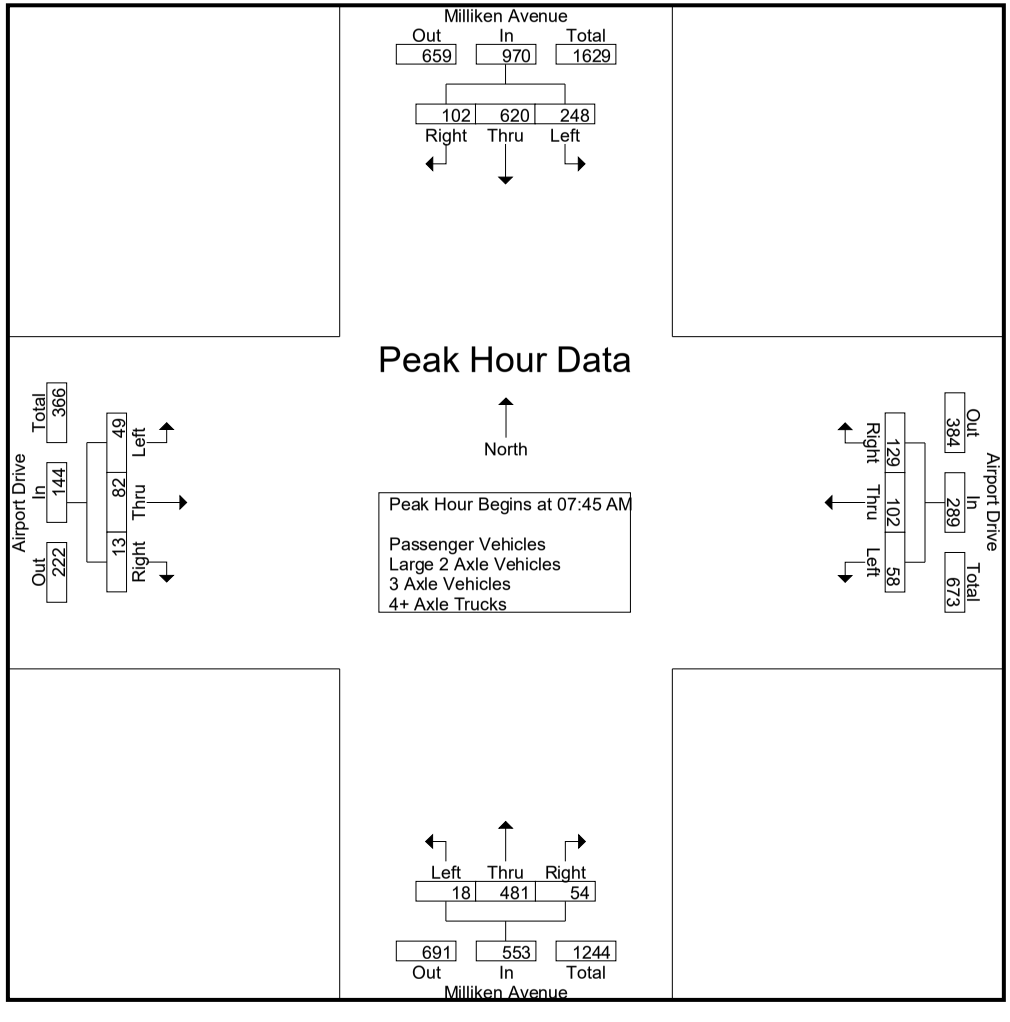
	Milliken Avenue Southbound					Airport Drive Westbound					Milliken Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	39	120	30	12	189	8	24	15	12	47	6	75	5	3	86	5	14	2	2	21	29	343	372
07:15 AM	36	103	21	7	160	4	20	24	15	48	6	88	6	3	100	10	21	4	4	35	29	343	372
07:30 AM	58	131	18	8	207	10	14	22	10	46	11	111	9	3	131	13	12	1	1	26	22	410	432
07:45 AM	82	182	31	16	295	11	27	29	19	67	5	142	16	1	163	9	30	4	3	43	39	568	607
Total	215	536	100	43	851	33	85	90	56	208	28	416	36	10	480	37	77	11	10	125	119	1664	1783
08:00 AM	59	134	31	10	224	18	20	28	25	66	2	102	20	8	124	16	15	3	3	34	46	448	494
08:15 AM	53	122	24	12	199	7	28	27	14	62	5	110	12	5	127	9	20	5	4	34	35	422	457
08:30 AM	54	182	16	4	252	22	27	45	29	94	6	127	6	0	139	15	17	1	1	33	34	518	552
08:45 AM	56	131	22	6	209	16	32	24	6	72	5	136	22	1	163	14	12	4	4	30	17	474	491
Total	222	569	93	32	884	63	107	124	74	294	18	475	60	14	553	54	64	13	12	131	132	1862	1994
Grand Total	437	1105	193	75	1735	96	192	214	130	502	46	891	96	24	1033	91	141	24	22	256	251	3526	3777
Apprch %	25.2	63.7	11.1			19.1	38.2	42.6			4.5	86.3	9.3			35.5	55.1	9.4					
Total %	12.4	31.3	5.5		49.2	2.7	5.4	6.1		14.2	1.3	25.3	2.7		29.3	2.6	4	0.7		7.3	6.6	93.4	
Passenger Vehicles	354	881	155		1449	60	158	129		426	32	743	77		871	67	115	17		214	0	0	2960
% Passenger Vehicles	81	79.7	80.3	78.7	80.1	62.5	82.3	60.3	60.8	67.4	69.6	83.4	80.2	79.2	82.4	73.6	81.6	70.8	68.2	77	0	0	78.4
Large 2 Axle Vehicles	10	41	8		62	12	9	21		56	3	32	4		39	4	10	2		18	0	0	175
% Large 2 Axle Vehicles	2.3	3.7	4.1	4	3.4	12.5	4.7	9.8	10.8	8.9	6.5	3.6	4.2	0	3.7	4.4	7.1	8.3	9.1	6.5	0	0	4.6
3 Axle Vehicles	10	24	5		41	7	8	13		35	3	18	4		26	3	1	2		8	0	0	110
% 3 Axle Vehicles	2.3	2.2	2.6	2.7	2.3	7.3	4.2	6.1	5.4	5.5	6.5	2	4.2	4.2	2.5	3.3	0.7	8.3	9.1	2.9	0	0	2.9
4+ Axle Trucks	63	159	25		258	17	17	51		115	8	98	11		121	17	15	3		38	0	0	532
% 4+ Axle Trucks	14.4	14.4	13	14.7	14.3	17.7	8.9	23.8	23.1	18.2	17.4	11	11.5	16.7	11.4	18.7	10.6	12.5	13.6	13.7	0	0	14.1

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**82**	**182**	**31**	**295**	11	27	29	67	5	**142**	16	**163**	9	**30**	4	**43**	**568**
08:00 AM	59	134	31	224	18	20	28	66	2	102	**20**	124	**16**	15	3	34	448
08:15 AM	53	122	24	199	7	**28**	27	62	5	110	12	127	9	20	**5**	34	422
08:30 AM	54	182	16	252	**22**	27	**45**	**94**	**6**	127	6	139	15	17	1	33	518
Total Volume	248	620	102	970	58	102	129	289	18	481	54	553	49	82	13	144	1956
% App. Total	25.6	63.9	10.5		20.1	35.3	44.6		3.3	87	9.8		34	56.9	9		
PHF	.756	.852	.823	.822	.659	.911	.717	.769	.750	.847	.675	.848	.766	.683	.650	.837	.861

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				08:00 AM				07:45 AM				07:45 AM				
+0 mins.	**82**	**182**	**31**	**295**	18	20	28	66	5	**142**	16	**163**	9	**30**	4	**43**	
+15 mins.	59	134	31	224	7	28	27	62	2	102	**20**	124	**16**	15	3	34	
+30 mins.	53	122	24	199	**22**	27	**45**	**94**	5	110	12	127	9	20	**5**	34	
+45 mins.	54	182	16	252	16	**32**	24	72	**6**	127	6	139	15	17	1	33	
Total Volume	248	620	102	970	63	107	124	294	18	481	54	553	49	82	13	144	
% App. Total	25.6	63.9	10.5		21.4	36.4	42.2		3.3	87	9.8		34	56.9	9		
PHF	.756	.852	.823	.822	.716	.836	.689	.782	.750	.847	.675	.848	.766	.683	.650	.837	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Milliken Avenue Southbound					Airport Drive Westbound					Milliken Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	34	93	23	9	150	5	20	6	4	31	3	60	3	1	66	5	12	2	2	19	16	266	282
07:15 AM	27	75	18	7	120	2	18	17	10	37	5	72	5	3	82	8	17	3	3	28	23	267	290
07:30 AM	48	93	14	7	155	3	13	11	6	27	5	92	6	3	103	9	10	0	0	19	16	304	320
07:45 AM	71	150	23	10	244	7	25	19	13	51	5	126	14	1	145	7	27	3	2	37	26	477	503
Total	180	411	78	33	669	17	76	53	33	146	18	350	28	8	396	29	66	8	7	103	81	1314	1395
08:00 AM	49	106	25	7	180	14	14	19	18	47	1	88	17	7	106	11	11	1	1	23	33	356	389
08:15 AM	43	103	21	10	167	5	24	15	8	44	5	90	10	4	105	7	17	3	2	27	24	343	367
08:30 AM	37	150	13	3	200	16	18	27	16	61	5	104	4	0	113	13	13	1	1	27	20	401	421
08:45 AM	45	111	18	6	174	8	26	15	4	49	3	111	18	0	132	7	8	4	4	19	14	374	388
Total	174	470	77	26	721	43	82	76	46	201	14	393	49	11	456	38	49	9	8	96	91	1474	1565
Grand Total	354	881	155	59	1390	60	158	129	79	347	32	743	77	19	852	67	115	17	15	199	172	2788	2960
Apprch %	25.5	63.4	11.2			17.3	45.5	37.2			3.8	87.2	9			33.7	57.8	8.5					
Total %	12.7	31.6	5.6		49.9	2.2	5.7	4.6		12.4	1.1	26.6	2.8		30.6	2.4	4.1	0.6		7.1	5.8	94.2	

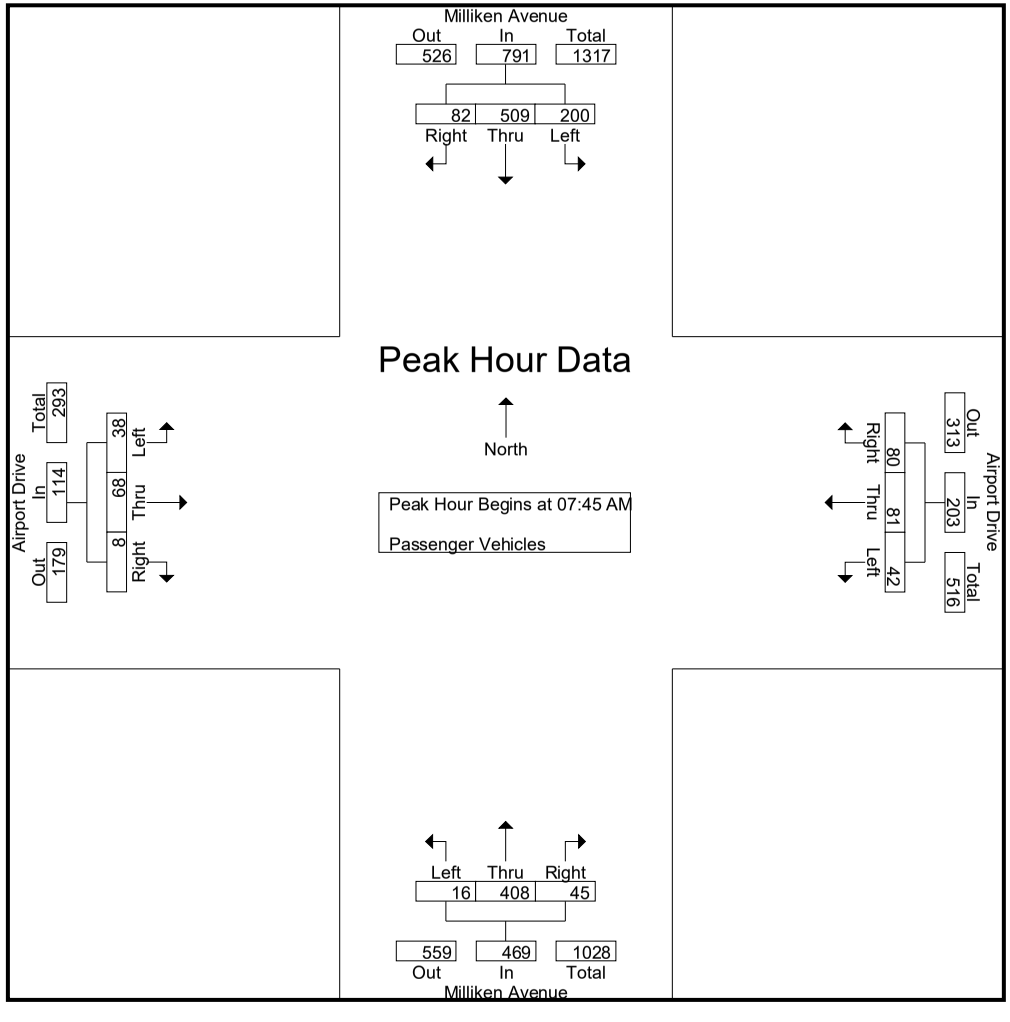
3.1-584

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**71**	**150**	23	**244**	7	**25**	19	51	**5**	**126**	14	**145**	7	**27**	**3**	**37**	**477**
08:00 AM	49	106	**25**	180	14	14	19	47	1	88	**17**	106	11	11	1	23	356
08:15 AM	43	103	21	167	5	24	15	44	5	90	10	105	7	17	3	27	343
08:30 AM	37	150	13	200	**16**	18	**27**	**61**	5	104	4	113	**13**	13	1	27	401
Total Volume	200	509	82	791	42	81	80	203	16	408	45	469	38	68	8	114	1577
% App. Total	25.3	64.3	10.4		20.7	39.9	39.4		3.4	87	9.6		33.3	59.6	7		
PHF	.704	.848	.820	.810	.656	.810	.741	.832	.800	.810	.662	.809	.731	.630	.667	.770	.827

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	**71**	**150**	23	**244**	7	**25**	19	51	**5**	**126**	14	**145**	7	**27**	**3**	**37**	
+15 mins.	49	106	**25**	180	14	14	19	47	1	88	**17**	106	11	11	1	23	
+30 mins.	43	103	21	167	5	24	15	44	5	90	10	105	7	17	3	27	
+45 mins.	37	150	13	200	**16**	18	**27**	**61**	5	104	4	113	**13**	13	1	27	
Total Volume	200	509	82	791	42	81	80	203	16	408	45	469	38	68	8	114	
% App. Total	25.3	64.3	10.4		20.7	39.9	39.4		3.4	87	9.6		33.3	59.6	7		
PHF	.704	.848	.820	.810	.656	.810	.741	.832	.800	.810	.662	.809	.731	.630	.667	.770	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Milliken Avenue Southbound					Airport Drive Westbound					Milliken Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	2	0	0	2	1	1	4	3	6	1	3	0	0	4	0	2	0	0	2	3	14	17
07:15 AM	1	2	0	0	3	0	0	3	2	3	0	0	1	0	1	0	0	1	1	1	3	8	11
07:30 AM	1	5	0	0	6	5	0	3	1	8	1	4	0	0	5	0	1	0	0	1	1	20	21
07:45 AM	0	6	2	1	8	3	0	2	2	5	0	5	0	0	5	1	2	0	0	3	3	21	24
Total	2	15	2	1	19	9	1	12	8	22	2	12	1	0	15	1	5	1	1	7	10	63	73
08:00 AM	2	4	3	2	9	0	2	2	1	4	0	4	0	0	4	0	2	0	0	2	3	19	22
08:15 AM	2	6	0	0	8	1	0	1	0	2	0	6	0	0	6	1	1	1	1	3	1	19	20
08:30 AM	3	9	1	0	13	2	4	5	4	11	0	3	0	0	3	0	1	0	0	1	4	28	32
08:45 AM	1	7	2	0	10	0	2	1	1	3	1	7	3	0	11	2	1	0	0	3	1	27	28
Total	8	26	6	2	40	3	8	9	6	20	1	20	3	0	24	3	5	1	1	9	9	93	102
Grand Total	10	41	8	3	59	12	9	21	14	42	3	32	4	0	39	4	10	2	2	16	19	156	175
Apprch %	16.9	69.5	13.6			28.6	21.4	50			7.7	82.1	10.3			25	62.5	12.5					
Total %	6.4	26.3	5.1		37.8	7.7	5.8	13.5		26.9	1.9	20.5	2.6		25	2.6	6.4	1.3		10.3	10.9	89.1	

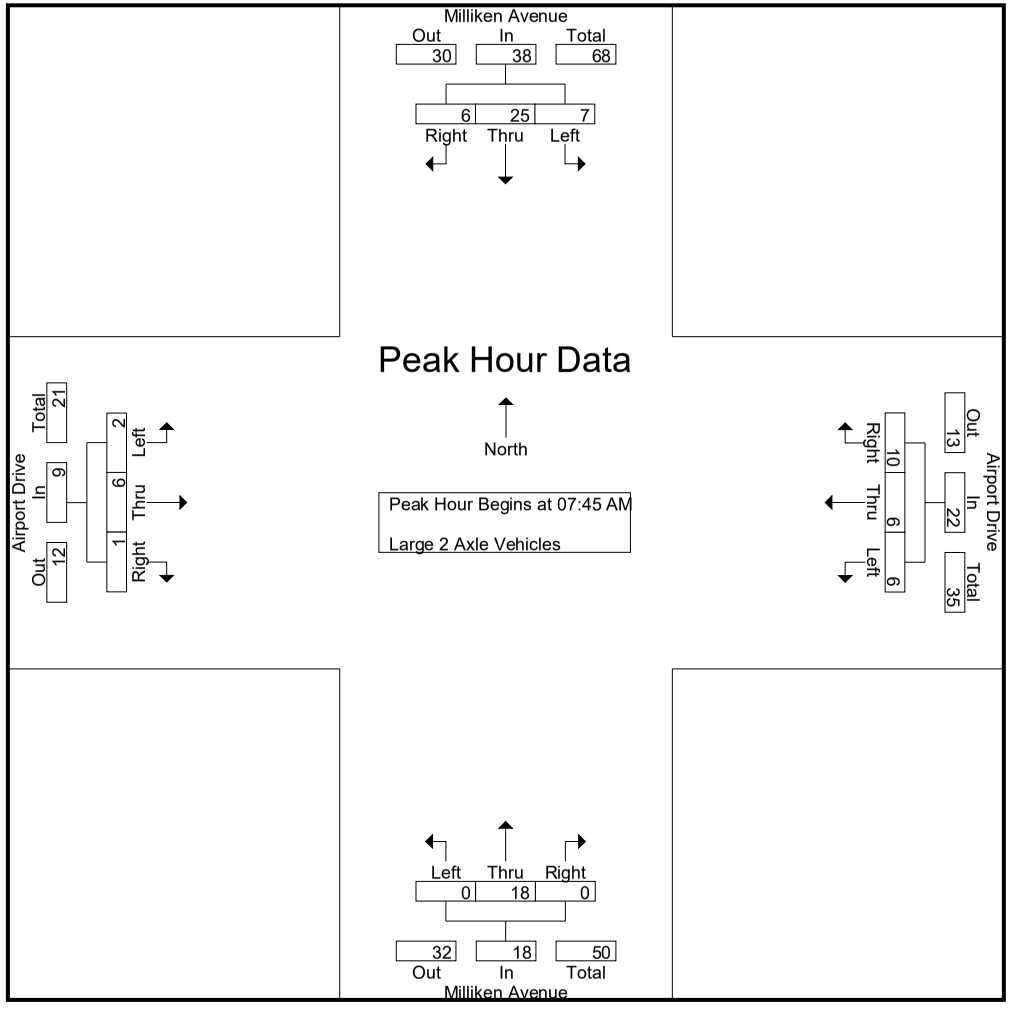
3.1-587

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	6	2	8	**3**	0	2	5	0	5	0	5	**1**	**2**	0	**3**	21
08:00 AM	2	4	**3**	9	0	2	2	4	0	4	0	4	0	2	0	2	19
08:15 AM	2	6	0	8	1	0	1	2	0	**6**	0	**6**	1	1	**1**	3	19
08:30 AM	**3**	**9**	1	**13**	2	**4**	**5**	**11**	0	3	0	3	0	1	0	1	**28**
Total Volume	7	25	6	38	6	6	10	22	0	18	0	18	2	6	1	9	87
% App. Total	18.4	65.8	15.8		27.3	27.3	45.5		0	100	0		22.2	66.7	11.1		
PHF	.583	.694	.500	.731	.500	.375	.500	.500	.000	.750	.000	.750	.500	.750	.250	.750	.777

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	6	2	8	**3**	0	2	5	0	5	0	5	**1**	**2**	0	**3**	
+15 mins.	2	4	**3**	9	0	2	2	4	0	4	0	4	0	2	0	2	
+30 mins.	2	6	0	8	1	0	1	2	0	**6**	0	**6**	1	1	**1**	3	
+45 mins.	**3**	**9**	1	**13**	2	**4**	**5**	**11**	0	3	0	3	0	1	0	1	
Total Volume	7	25	6	38	6	6	10	22	0	18	0	18	2	6	1	9	
% App. Total	18.4	65.8	15.8		27.3	27.3	45.5		0	100	0		22.2	66.7	11.1		
PHF	.583	.694	.500	.731	.500	.375	.500	.500	.000	.750	.000	.750	.500	.750	.250	.750	

3.1-589

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Milliken Avenue Southbound					Airport Drive Westbound					Milliken Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	3	1	1	5	1	1	0	0	2	1	2	1	1	4	0	0	0	0	0	2	11	13
07:15 AM	2	5	0	0	7	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	0	10	10
07:30 AM	3	3	0	0	6	0	1	2	1	3	0	5	1	0	6	1	0	1	1	2	2	17	19
07:45 AM	0	2	1	0	3	0	0	1	1	1	0	2	1	0	3	1	0	1	1	2	2	9	11
Total	6	13	2	1	21	2	2	3	2	7	2	10	3	1	15	2	0	2	2	4	6	47	53
08:00 AM	1	2	1	0	4	2	1	3	3	6	0	2	1	0	3	1	0	0	0	1	3	14	17
08:15 AM	0	4	0	0	4	0	3	4	0	7	0	1	0	0	1	0	0	0	0	0	0	12	12
08:30 AM	2	5	1	1	8	3	1	2	2	6	1	1	0	0	2	0	0	0	0	0	3	16	19
08:45 AM	1	0	1	0	2	0	1	1	0	2	0	4	0	0	4	0	1	0	0	1	0	9	9
Total	4	11	3	1	18	5	6	10	5	21	1	8	1	0	10	1	1	0	0	2	6	51	57
Grand Total	10	24	5	2	39	7	8	13	7	28	3	18	4	1	25	3	1	2	2	6	12	98	110
Apprch %	25.6	61.5	12.8			25	28.6	46.4			12	72	16			50	16.7	33.3					
Total %	10.2	24.5	5.1		39.8	7.1	8.2	13.3		28.6	3.1	18.4	4.1		25.5	3.1	1	2		6.1	10.9	89.1	

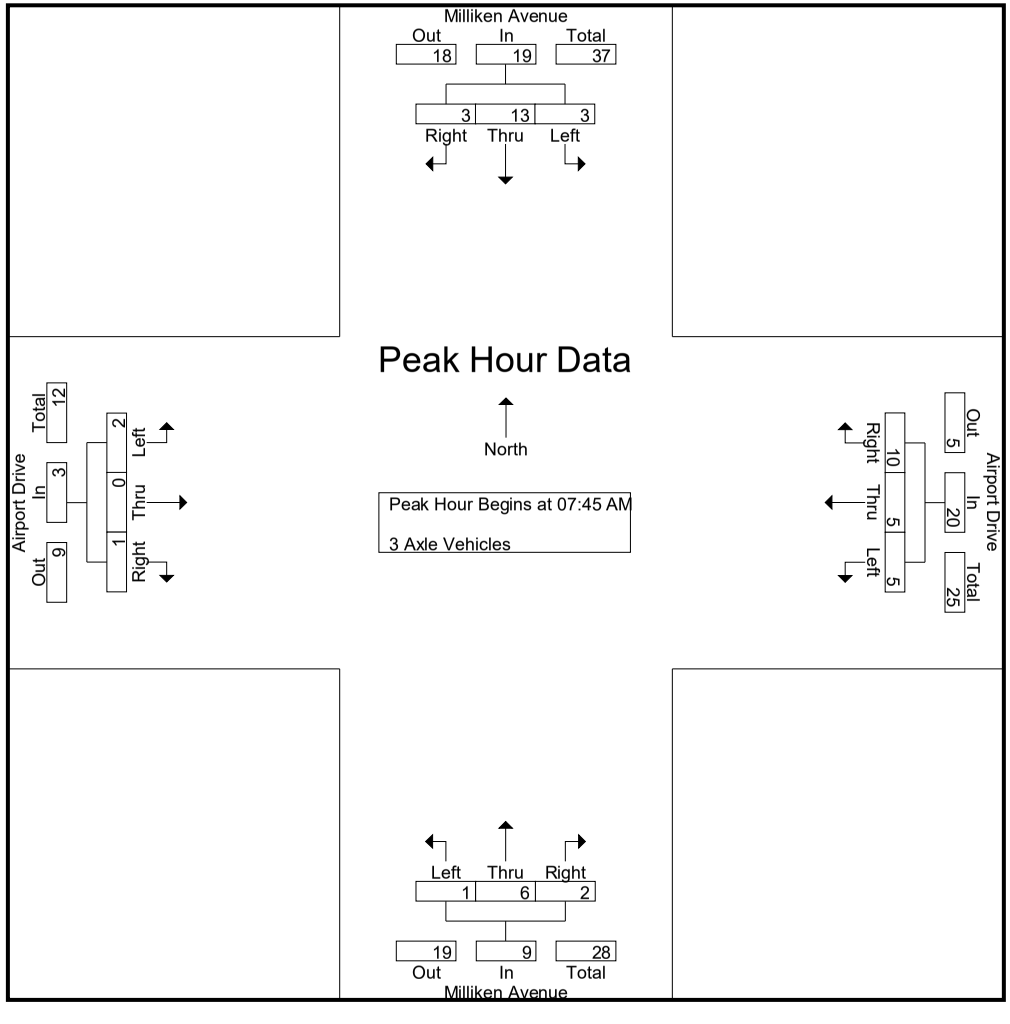
3.1-590

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	2	**1**	3	0	0	1	1	0	**2**	**1**	**3**	**1**	0	**1**	**2**	9
08:00 AM	1	2	1	4	2	1	3	6	0	2	1	3	1	0	0	1	14
08:15 AM	0	4	0	4	0	**3**	**4**	**7**	0	1	0	1	0	0	0	0	12
08:30 AM	**2**	**5**	1	**8**	**3**	1	2	6	**1**	1	0	2	0	0	0	0	**16**
Total Volume	3	13	3	19	5	5	10	20	1	6	2	9	2	0	1	3	51
% App. Total	15.8	68.4	15.8		25	25	50		11.1	66.7	22.2		66.7	0	33.3		
PHF	.375	.650	.750	.594	.417	.417	.625	.714	.250	.750	.500	.750	.500	.000	.250	.375	.797

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	2	**1**	3	0	0	1	1	0	**2**	**1**	**3**	**1**	0	**1**	**2**	
+15 mins.	1	2	1	4	2	1	3	6	0	2	1	3	1	0	0	1	
+30 mins.	0	4	0	4	0	**3**	**4**	**7**	0	1	0	1	0	0	0	0	
+45 mins.	**2**	**5**	1	**8**	**3**	1	2	6	**1**	1	0	2	0	0	0	0	
Total Volume	3	13	3	19	5	5	10	20	1	6	2	9	2	0	1	3	
% App. Total	15.8	68.4	15.8		25	25	50		11.1	66.7	22.2		66.7	0	33.3		
PHF	.375	.650	.750	.594	.417	.417	.625	.714	.250	.750	.500	.750	.500	.000	.250	.375	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

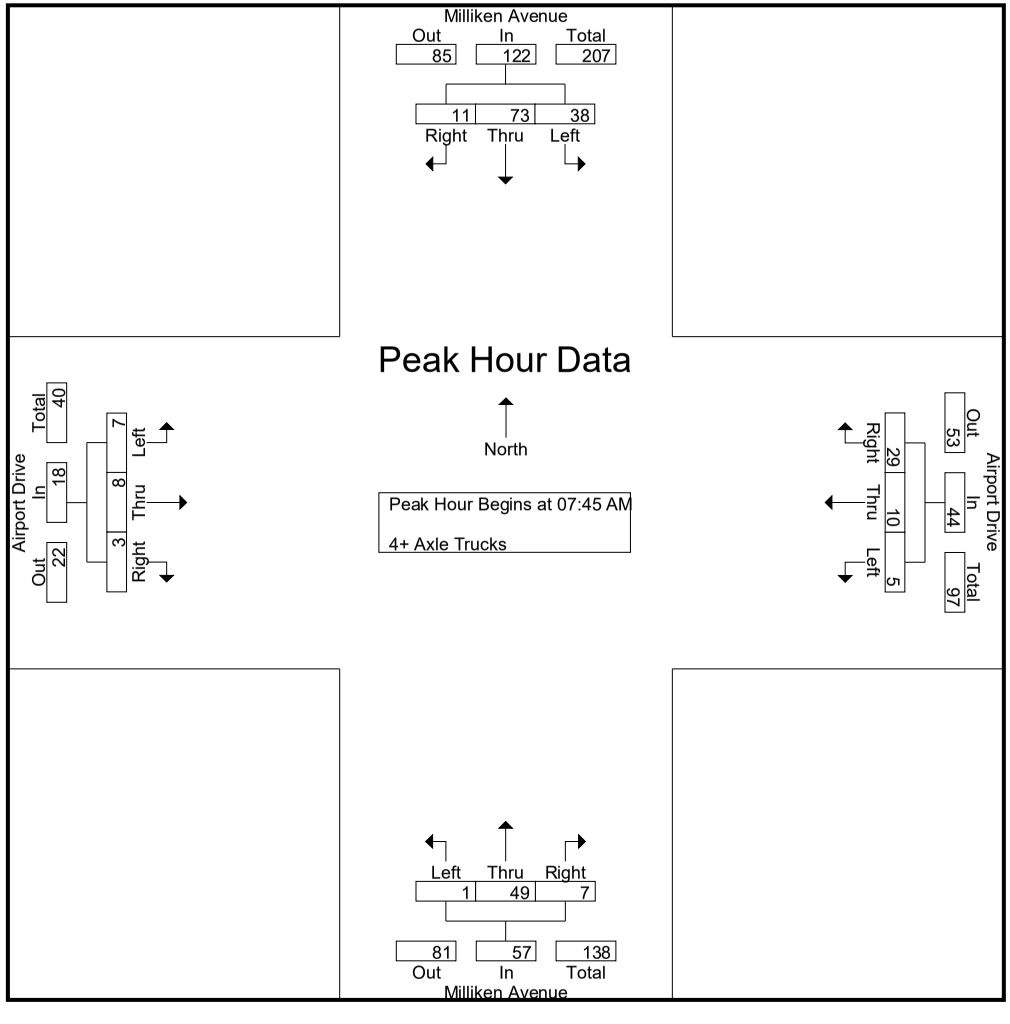
	Milliken Avenue Southbound					Airport Drive Westbound					Milliken Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	4	22	6	2	32	1	2	5	5	8	1	10	1	1	12	0	0	0	0	0	8	52	60
07:15 AM	6	21	3	0	30	1	2	4	3	7	0	15	0	0	15	2	4	0	0	6	3	58	61
07:30 AM	6	30	4	1	40	2	0	6	2	8	5	10	2	0	17	3	1	0	0	4	3	69	72
07:45 AM	11	24	5	5	40	1	2	7	3	10	0	9	1	0	10	0	1	0	0	1	8	61	69
Total	27	97	18	8	142	5	6	22	13	33	6	44	4	1	54	5	6	0	0	11	22	240	262
08:00 AM	7	22	2	1	31	2	3	4	3	9	1	8	2	1	11	4	2	2	2	8	7	59	66
08:15 AM	8	9	3	2	20	1	1	7	6	9	0	13	2	1	15	1	2	1	1	4	10	48	58
08:30 AM	12	18	1	0	31	1	4	11	7	16	0	19	2	0	21	2	3	0	0	5	7	73	80
08:45 AM	9	13	1	0	23	8	3	7	1	18	1	14	1	1	16	5	2	0	0	7	2	64	66
Total	36	62	7	3	105	12	11	29	17	52	2	54	7	3	63	12	9	3	3	24	26	244	270
Grand Total	63	159	25	11	247	17	17	51	30	85	8	98	11	4	117	17	15	3	3	35	48	484	532
Apprch %	25.5	64.4	10.1			20	20	60			6.8	83.8	9.4			48.6	42.9	8.6					
Total %	13	32.9	5.2		51	3.5	3.5	10.5		17.6	1.7	20.2	2.3		24.2	3.5	3.1	0.6		7.2	9	91	

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	11	**24**	**5**	**40**	1	2	7	10	0	9	1	10	0	1	0	1	61
08:00 AM	7	22	2	31	**2**	3	4	9	**1**	8	**2**	11	**4**	2	**2**	**8**	59
08:15 AM	8	9	3	20	1	1	7	9	0	13	2	15	1	2	1	4	48
08:30 AM	**12**	18	1	31	1	**4**	**11**	**16**	0	**19**	2	**21**	2	**3**	0	5	**73**
Total Volume	38	73	11	122	5	10	29	44	1	49	7	57	7	8	3	18	241
% App. Total	31.1	59.8	9		11.4	22.7	65.9		1.8	86	12.3		38.9	44.4	16.7		
PHF	.792	.760	.550	.763	.625	.625	.659	.688	.250	.645	.875	.679	.438	.667	.375	.563	.825

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	11	**24**	**5**	**40**	1	2	7	10	0	9	1	10	0	1	0	1	
+15 mins.	7	22	2	31	**2**	3	4	9	**1**	8	**2**	11	**4**	2	**2**	**8**	
+30 mins.	8	9	3	20	1	1	7	9	0	13	2	15	1	2	1	4	
+45 mins.	**12**	18	1	31	1	**4**	**11**	**16**	0	**19**	2	**21**	2	**3**	0	5	
Total Volume	38	73	11	122	5	10	29	44	1	49	7	57	7	8	3	18	
% App. Total	31.1	59.8	9		11.4	22.7	65.9		1.8	86	12.3		38.9	44.4	16.7		
PHF	.792	.760	.550	.763	.625	.625	.659	.688	.250	.645	.875	.679	.438	.667	.375	.563	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Milliken Avenue Southbound					Airport Drive Westbound					Milliken Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	27	157	13	4	197	20	65	96	48	181	9	145	6	0	160	61	54	11	7	126	59	664	723
04:15 PM	34	224	23	9	281	18	55	83	39	156	9	183	8	1	200	50	39	10	6	99	55	736	791
04:30 PM	29	142	17	7	188	16	84	89	22	189	6	143	5	0	154	74	34	6	4	114	33	645	678
04:45 PM	24	170	26	15	220	22	66	74	26	162	12	203	5	2	220	53	53	4	3	110	46	712	758
Total	114	693	79	35	886	76	270	342	135	688	36	674	24	3	734	238	180	31	20	449	193	2757	2950
05:00 PM	27	179	31	12	237	18	66	84	43	168	8	193	16	3	217	54	39	7	6	100	64	722	786
05:15 PM	28	226	13	7	267	16	51	63	23	130	5	182	7	0	194	50	61	10	7	121	37	712	749
05:30 PM	31	190	17	13	238	9	40	58	29	107	5	249	13	2	267	36	50	10	5	96	49	708	757
05:45 PM	16	172	26	12	214	9	37	65	28	111	4	230	6	0	240	35	42	8	3	85	43	650	693
Total	102	767	87	44	956	52	194	270	123	516	22	854	42	5	918	175	192	35	21	402	193	2792	2985
Grand Total	216	1460	166	79	1842	128	464	612	258	1204	58	1528	66	8	1652	413	372	66	41	851	386	5549	5935
Apprch %	11.7	79.3	9			10.6	38.5	50.8			3.5	92.5	4			48.5	43.7	7.8					
Total %	3.9	26.3	3		33.2	2.3	8.4	11		21.7	1	27.5	1.2		29.8	7.4	6.7	1.2		15.3	6.5	93.5	
Passenger Vehicles	171	1329	135		1704	99	419	555		1304	52	1364	46		1468	372	320	58		785	0	0	5261
% Passenger Vehicles	79.2	91	81.3	87.3	88.7	77.3	90.3	90.7	89.5	89.2	89.7	89.3	69.7	75	88.4	90.1	86	87.9	85.4	88	0	0	88.6
Large 2 Axle Vehicles	12	31	9		56	8	20	19		59	2	29	5		36	8	23	1		33	0	0	184
% Large 2 Axle Vehicles	5.6	2.1	5.4	5.1	2.9	6.2	4.3	3.1	4.7	4	3.4	1.9	7.6	0	2.2	1.9	6.2	1.5	2.4	3.7	0	0	3.1
3 Axle Vehicles	7	32	2		42	4	4	7		17	0	24	2		26	7	5	2		15	0	0	100
% 3 Axle Vehicles	3.2	2.2	1.2	1.3	2.2	3.1	0.9	1.1	0.8	1.2	0	1.6	3	0	1.6	1.7	1.3	3	2.4	1.7	0	0	1.7
4+ Axle Trucks	26	68	20		119	17	21	31		82	4	111	13		130	26	24	5		59	0	0	390
% 4+ Axle Trucks	12	4.7	12	6.3	6.2	13.3	4.5	5.1	5	5.6	6.9	7.3	19.7	25	7.8	6.3	6.5	7.6	9.8	6.6	0	0	6.6

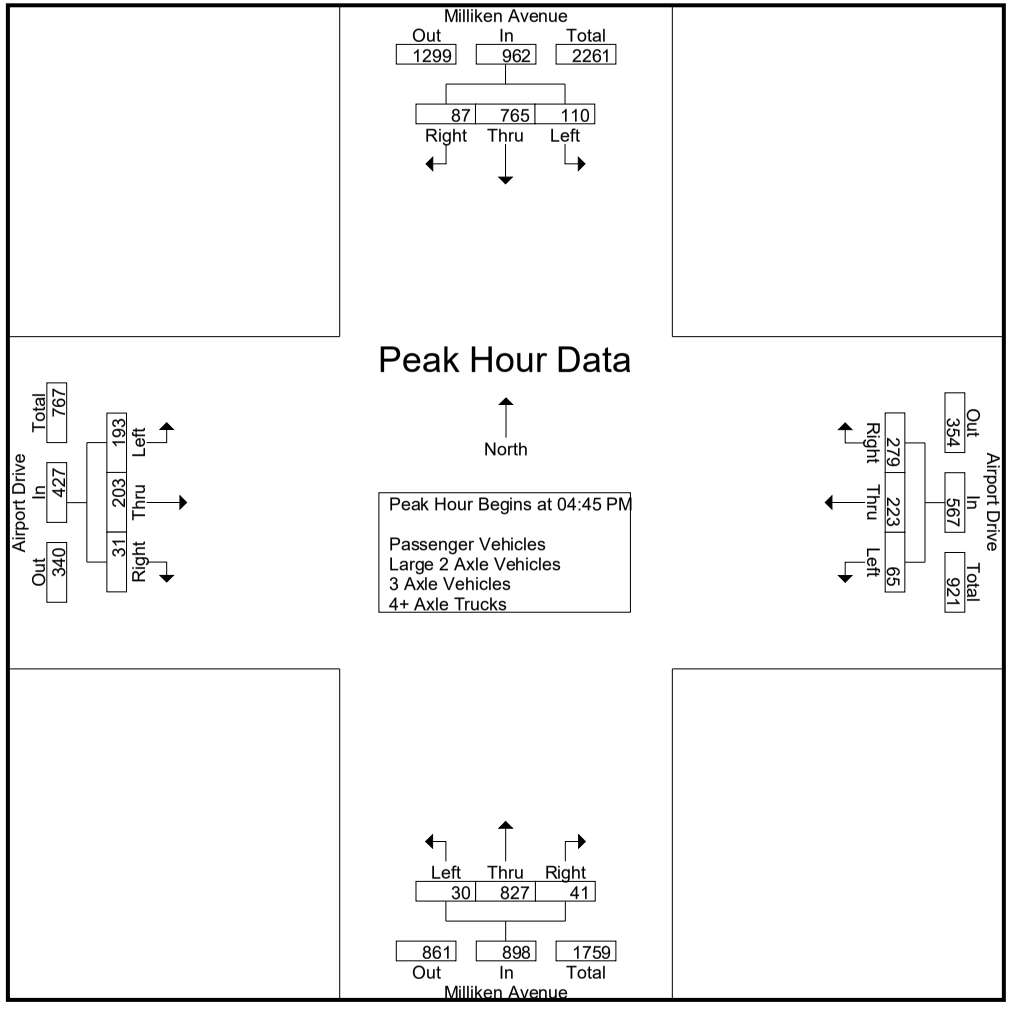
	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	24	170	26	220	**22**	**66**	74	162	**12**	203	5	220	53	53	4	110	712
05:00 PM	27	179	**31**	237	18	66	**84**	**168**	8	193	**16**	217	**54**	39	7	100	**722**
05:15 PM	28	**226**	13	**267**	16	51	63	130	5	182	7	194	50	**61**	**10**	**121**	712
05:30 PM	**31**	190	17	238	9	40	58	107	5	**249**	13	**267**	36	50	10	96	708
Total Volume	110	765	87	962	65	223	279	567	30	827	41	898	193	203	31	427	2854
% App. Total	11.4	79.5	9		11.5	39.3	49.2		3.3	92.1	4.6		45.2	47.5	7.3		
PHF	.887	.846	.702	.901	.739	.845	.830	.844	.625	.830	.641	.841	.894	.832	.775	.882	.988

3.1-59

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:00 PM				05:00 PM				04:00 PM				
+0 mins.	24	170	26	220	20	65	**96**	181	**8**	193	**16**	217	61	**54**	**11**	**126**	
+15 mins.	27	179	**31**	237	18	55	83	156	5	182	7	194	50	39	10	99	
+30 mins.	28	**226**	13	**267**	16	**84**	89	**189**	5	**249**	13	**267**	**74**	34	6	114	
+45 mins.	**31**	190	17	238	**22**	66	74	162	4	230	6	240	53	53	4	110	
Total Volume	110	765	87	962	76	270	342	688	22	854	42	918	238	180	31	449	
% App. Total	11.4	79.5	9		11	39.2	49.7		2.4	93	4.6		53	40.1	6.9		
PHF	.887	.846	.702	.901	.864	.804	.891	.910	.688	.857	.656	.860	.804	.833	.705	.891	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Milliken Avenue Southbound					Airport Drive Westbound					Milliken Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	17	135	9	3	161	16	57	88	42	161	9	120	4	0	133	55	45	7	5	107	50	562	612
04:15 PM	26	213	22	9	261	14	49	76	36	139	7	167	6	1	180	46	34	8	4	88	50	668	718
04:30 PM	22	128	11	6	161	11	82	82	20	175	5	125	4	0	134	67	27	5	3	99	29	569	598
04:45 PM	22	149	19	12	190	16	56	64	22	136	11	187	4	1	202	49	43	3	2	95	37	623	660
Total	87	625	61	30	773	57	244	310	120	611	32	599	18	2	649	217	149	23	14	389	166	2422	2588
05:00 PM	21	164	25	11	210	15	61	75	41	151	7	174	11	2	192	51	35	7	6	93	60	646	706
05:15 PM	22	210	12	7	244	14	43	58	20	115	4	158	6	0	168	43	53	10	7	106	34	633	667
05:30 PM	27	175	16	12	218	5	38	51	25	94	5	235	9	2	249	31	45	10	5	86	44	647	691
05:45 PM	14	155	21	9	190	8	33	61	25	102	4	198	2	0	204	30	38	8	3	76	37	572	609
Total	84	704	74	39	862	42	175	245	111	462	20	765	28	4	813	155	171	35	21	361	175	2498	2673
Grand Total	171	1329	135	69	1635	99	419	555	231	1073	52	1364	46	6	1462	372	320	58	35	750	341	4920	5261
Apprch %	10.5	81.3	8.3			9.2	39	51.7			3.6	93.3	3.1			49.6	42.7	7.7					
Total %	3.5	27	2.7		33.2	2	8.5	11.3		21.8	1.1	27.7	0.9		29.7	7.6	6.5	1.2		15.2	6.5	93.5	

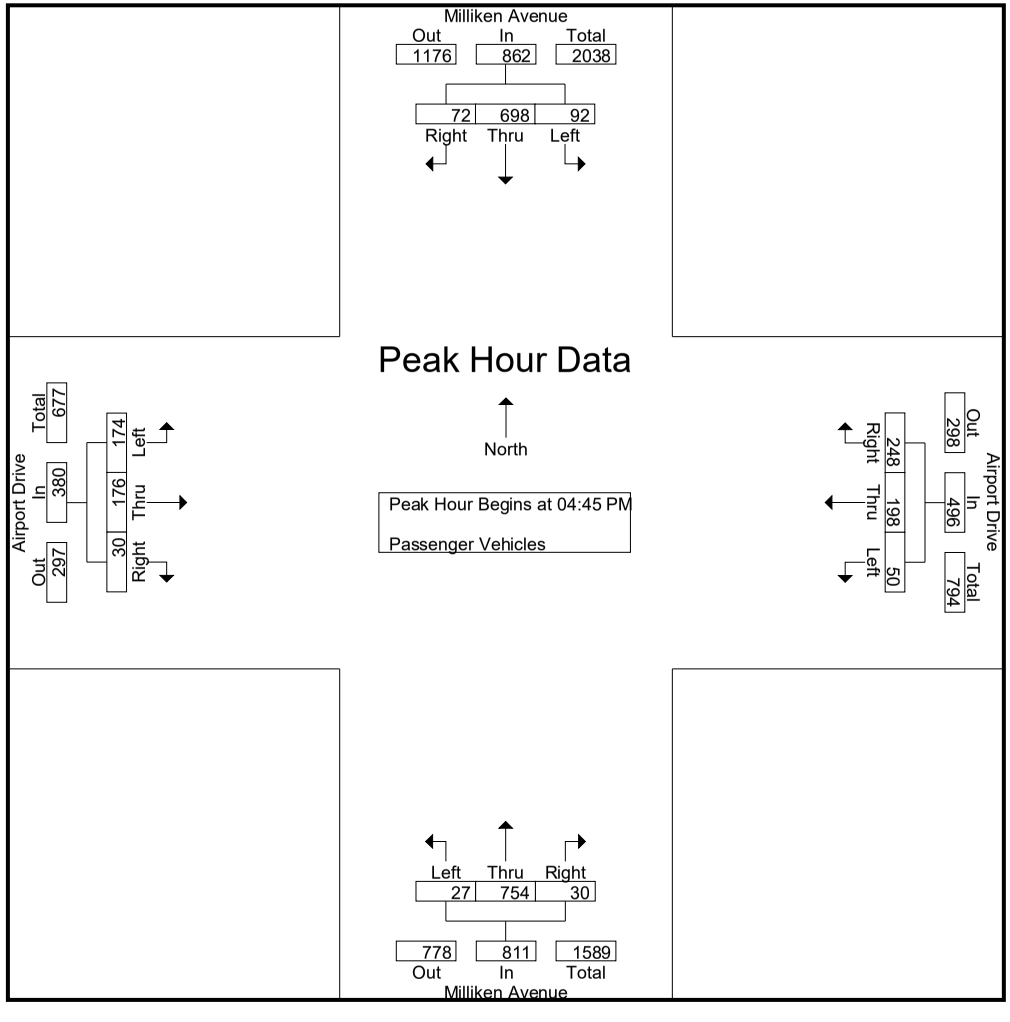
3.1-599

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	22	149	19	190	**16**	56	64	136	**11**	187	4	202	49	43	3	95	623
05:00 PM	21	164	**25**	210	15	**61**	**75**	**151**	7	174	**11**	192	**51**	35	7	93	646
05:15 PM	22	**210**	12	**244**	14	43	58	115	4	158	6	168	43	**53**	**10**	**106**	633
05:30 PM	**27**	175	16	218	5	38	51	94	5	**235**	9	**249**	31	45	10	86	**647**
Total Volume	92	698	72	862	50	198	248	496	27	754	30	811	174	176	30	380	2549
% App. Total	10.7	81	8.4		10.1	39.9	50		3.3	93	3.7		45.8	46.3	7.9		
PHF	.852	.831	.720	.883	.781	.811	.827	.821	.614	.802	.682	.814	.853	.830	.750	.896	.985

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	22	149	19	190	**16**	56	64	136	**11**	187	4	202	49	43	3	95	
+15 mins.	21	164	**25**	210	15	**61**	**75**	**151**	7	174	**11**	192	**51**	35	7	93	
+30 mins.	22	**210**	12	**244**	14	43	58	115	4	158	6	168	43	**53**	**10**	**106**	
+45 mins.	**27**	175	16	218	5	38	51	94	5	**235**	9	**249**	31	45	10	86	
Total Volume	92	698	72	862	50	198	248	496	27	754	30	811	174	176	30	380	
% App. Total	10.7	81	8.4		10.1	39.9	50		3.3	93	3.7		45.8	46.3	7.9		
PHF	.852	.831	.720	.883	.781	.811	.827	.821	.614	.802	.682	.814	.853	.830	.750	.896	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Milliken Avenue Southbound					Airport Drive Westbound					Milliken Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	5	6	2	0	13	1	3	5	4	9	0	8	1	0	9	1	2	0	0	3	4	34	38
04:15 PM	3	1	1	0	5	0	2	5	3	7	0	1	2	0	3	0	1	0	0	1	3	16	19
04:30 PM	2	5	1	0	8	3	1	0	0	4	0	2	0	0	2	2	3	1	1	6	1	20	21
04:45 PM	0	4	1	1	5	1	4	2	0	7	1	2	0	0	3	1	7	0	0	8	1	23	24
Total	10	16	5	1	31	5	10	12	7	27	1	13	3	0	17	4	13	1	1	18	9	93	102
05:00 PM	1	1	2	1	4	3	3	1	1	7	1	3	2	0	6	1	2	0	0	3	2	20	22
05:15 PM	0	5	0	0	5	0	3	2	1	5	0	5	0	0	5	3	4	0	0	7	1	22	23
05:30 PM	1	5	0	0	6	0	2	3	2	5	0	2	0	0	2	0	3	0	0	3	2	16	18
05:45 PM	0	4	2	2	6	0	2	1	1	3	0	6	0	0	6	0	1	0	0	1	3	16	19
Total	2	15	4	3	21	3	10	7	5	20	1	16	2	0	19	4	10	0	0	14	8	74	82
Grand Total	12	31	9	4	52	8	20	19	12	47	2	29	5	0	36	8	23	1	1	32	17	167	184
Apprch %	23.1	59.6	17.3			17	42.6	40.4			5.6	80.6	13.9			25	71.9	3.1					
Total %	7.2	18.6	5.4		31.1	4.8	12	11.4		28.1	1.2	17.4	3		21.6	4.8	13.8	0.6		19.2	9.2	90.8	

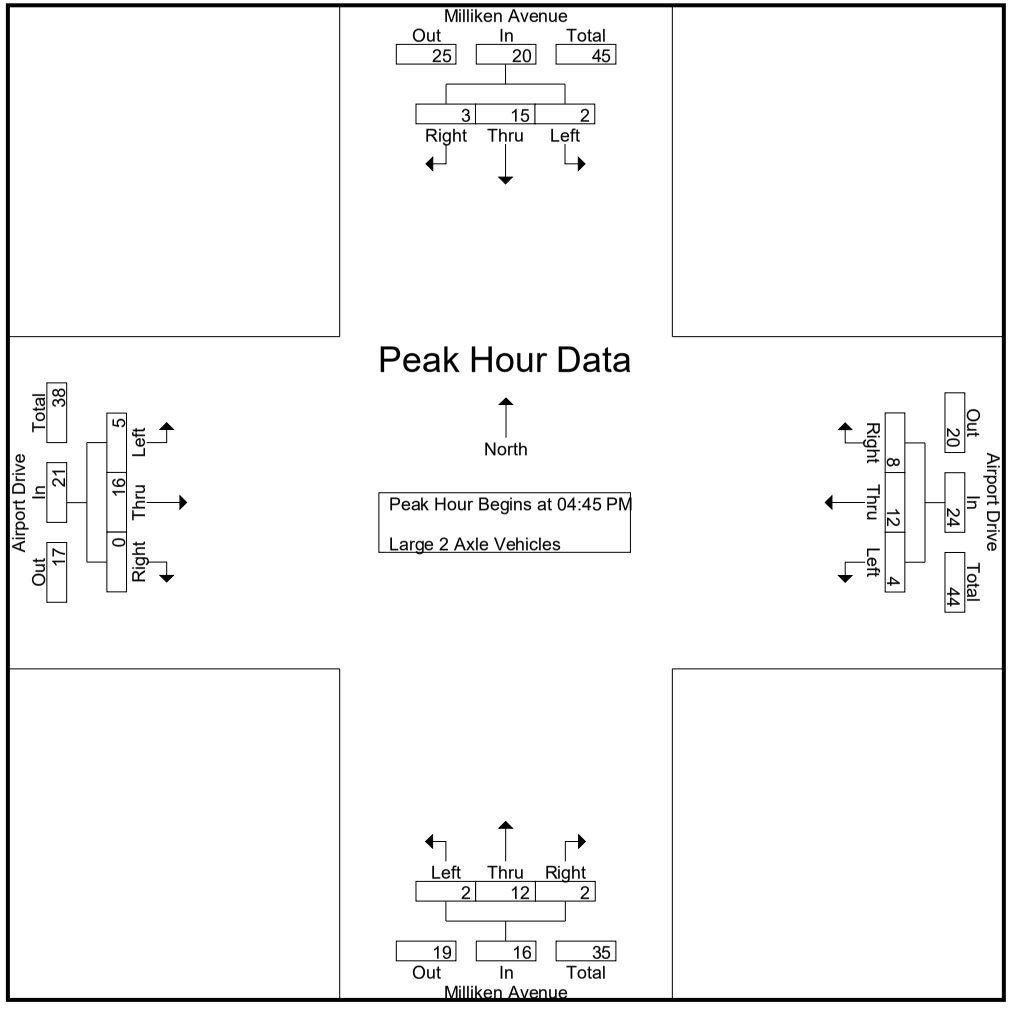
3.1-602

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	4	1	5	1	**4**	2	**7**	**1**	2	0	3	1	**7**	0	**8**	**23**
05:00 PM	**1**	1	**2**	4	**3**	3	1	7	1	3	**2**	**6**	1	2	0	3	20
05:15 PM	0	**5**	0	5	0	3	2	5	0	**5**	0	5	**3**	4	0	7	22
05:30 PM	1	5	0	**6**	0	2	**3**	5	0	2	0	2	0	3	0	3	16
Total Volume	2	15	3	20	4	12	8	24	2	12	2	16	5	16	0	21	81
% App. Total	10	75	15		16.7	50	33.3		12.5	75	12.5		23.8	76.2	0		
PHF	.500	.750	.375	.833	.333	.750	.667	.857	.500	.600	.250	.667	.417	.571	.000	.656	.880

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	4	1	5	1	**4**	2	**7**	**1**	2	0	3	1	**7**	0	**8**	
+15 mins.	**1**	1	**2**	4	**3**	3	1	7	1	3	**2**	**6**	1	2	0	3	
+30 mins.	0	**5**	0	5	0	3	2	5	0	**5**	0	5	**3**	4	0	7	
+45 mins.	1	5	0	**6**	0	2	**3**	5	0	2	0	2	0	3	0	3	
Total Volume	2	15	3	20	4	12	8	24	2	12	2	16	5	16	0	21	
% App. Total	10	75	15		16.7	50	33.3		12.5	75	12.5		23.8	76.2	0		
PHF	.500	.750	.375	.833	.333	.750	.667	.857	.500	.600	.250	.667	.417	.571	.000	.656	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Milliken Avenue Southbound					Airport Drive Westbound					Milliken Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	3	0	0	3	1	2	1	1	4	0	2	0	0	2	3	1	2	1	6	2	15	17
04:15 PM	1	4	0	0	5	0	1	0	0	1	0	3	0	0	3	1	0	0	0	1	0	10	10
04:30 PM	1	2	0	0	3	0	0	0	0	0	0	3	0	0	3	1	2	0	0	3	0	9	9
04:45 PM	1	3	1	0	5	1	0	1	0	2	0	2	0	0	2	0	1	0	0	1	0	10	10
Total	3	12	1	0	16	2	3	2	1	7	0	10	0	0	10	5	4	2	1	11	2	44	46
05:00 PM	2	4	0	0	6	0	0	2	0	2	0	2	0	0	2	0	0	0	0	0	0	10	10
05:15 PM	1	5	0	0	6	0	1	1	0	2	0	5	0	0	5	0	1	0	0	1	0	14	14
05:30 PM	0	6	1	1	7	2	0	2	1	4	0	3	0	0	3	0	0	0	0	0	2	14	16
05:45 PM	1	5	0	0	6	0	0	0	0	0	0	4	2	0	6	2	0	0	0	2	0	14	14
Total	4	20	1	1	25	2	1	5	1	8	0	14	2	0	16	2	1	0	0	3	2	52	54
Grand Total	7	32	2	1	41	4	4	7	2	15	0	24	2	0	26	7	5	2	1	14	4	96	100
Apprch %	17.1	78	4.9			26.7	26.7	46.7			0	92.3	7.7			50	35.7	14.3					
Total %	7.3	33.3	2.1		42.7	4.2	4.2	7.3		15.6	0	25	2.1		27.1	7.3	5.2	2.1		14.6	4	96	

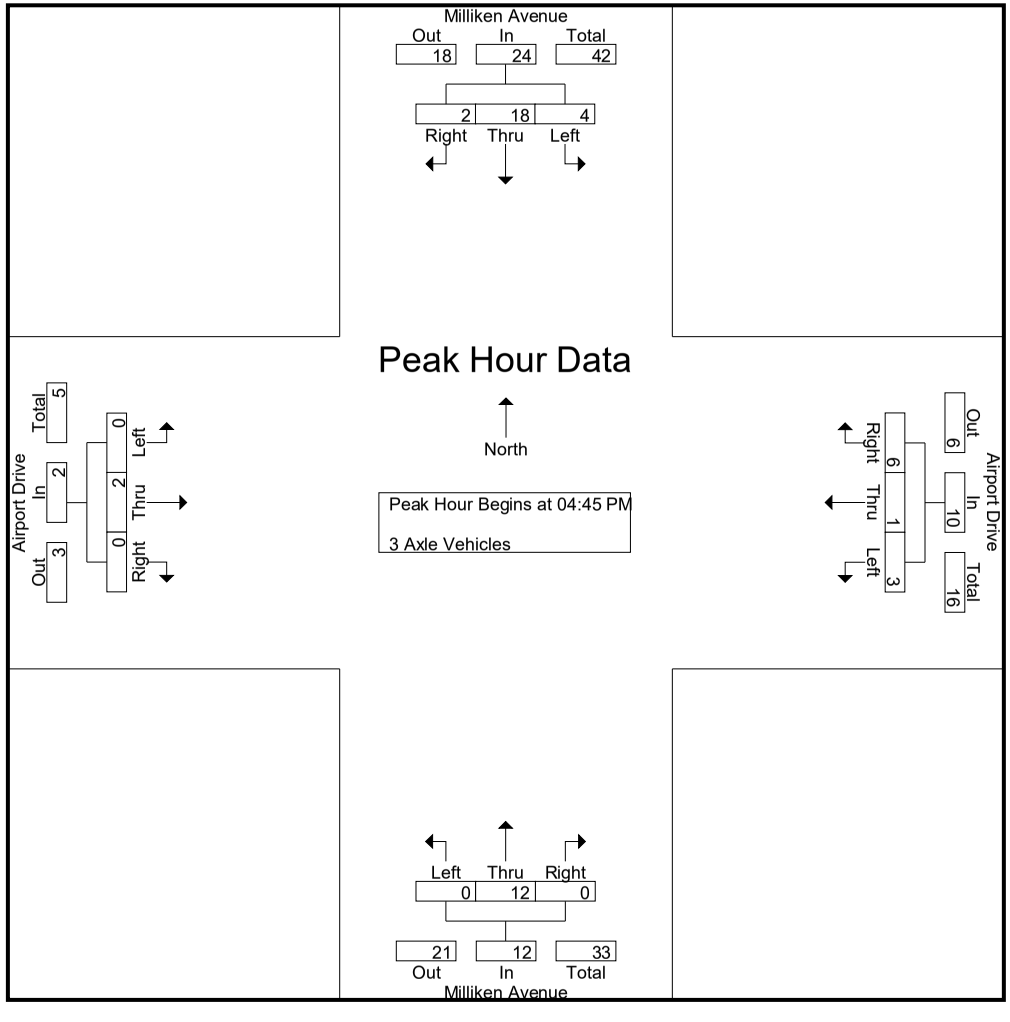
3.1-605

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	3	**1**	5	1	0	1	2	0	2	0	2	0	**1**	0	**1**	10
05:00 PM	**2**	4	0	6	0	0	**2**	2	0	2	0	2	0	0	0	0	10
05:15 PM	1	5	0	6	0	**1**	1	2	0	**5**	0	**5**	0	1	0	1	**14**
05:30 PM	0	**6**	1	**7**	**2**	0	2	**4**	0	3	0	3	0	0	0	0	14
Total Volume	4	18	2	24	3	1	6	10	0	12	0	12	0	2	0	2	48
% App. Total	16.7	75	8.3		30	10	60		0	100	0		0	100	0		
PHF	.500	.750	.500	.857	.375	.250	.750	.625	.000	.600	.000	.600	.000	.500	.000	.500	.857

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	1	3	**1**	5	1	0	1	2	0	2	0	2	0	**1**	0	**1**	
+15 mins.	**2**	4	0	6	0	0	**2**	2	0	2	0	2	0	0	0	0	
+30 mins.	1	5	0	6	0	**1**	1	2	0	**5**	0	**5**	0	1	0	1	
+45 mins.	0	**6**	1	**7**	**2**	0	2	**4**	0	3	0	3	0	0	0	0	
Total Volume	4	18	2	24	3	1	6	10	0	12	0	12	0	2	0	2	
% App. Total	16.7	75	8.3		30	10	60		0	100	0		0	100	0		
PHF	.500	.750	.500	.857	.375	.250	.750	.625	.000	.600	.000	.600	.000	.500	.000	.500	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Milliken Avenue Southbound					Airport Drive Westbound					Milliken Avenue Northbound					Airport Drive Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	5	13	2	1	20	2	3	2	1	7	0	15	1	0	16	2	6	2	1	10	3	53	56
04:15 PM	4	6	0	0	10	4	3	2	0	9	2	12	0	0	14	3	4	2	2	9	2	42	44
04:30 PM	4	7	5	1	16	2	1	7	2	10	1	13	1	0	15	4	2	0	0	6	3	47	50
04:45 PM	1	14	5	2	20	4	6	7	4	17	0	12	1	1	13	3	2	1	1	6	8	56	64
Total	14	40	12	4	66	12	13	18	7	43	3	52	3	1	58	12	14	5	4	31	16	198	214
05:00 PM	3	10	4	0	17	0	2	6	1	8	0	14	3	1	17	2	2	0	0	4	2	46	48
05:15 PM	5	6	1	0	12	2	4	2	2	8	1	14	1	0	16	4	3	0	0	7	2	43	45
05:30 PM	3	4	0	0	7	2	0	2	1	4	0	9	4	0	13	5	2	0	0	7	1	31	32
05:45 PM	1	8	3	1	12	1	2	3	2	6	0	22	2	0	24	3	3	0	0	6	3	48	51
Total	12	28	8	1	48	5	8	13	6	26	1	59	10	1	70	14	10	0	0	24	8	168	176
Grand Total	26	68	20	5	114	17	21	31	13	69	4	111	13	2	128	26	24	5	4	55	24	366	390
Apprch %	22.8	59.6	17.5			24.6	30.4	44.9			3.1	86.7	10.2			47.3	43.6	9.1					
Total %	7.1	18.6	5.5		31.1	4.6	5.7	8.5		18.9	1.1	30.3	3.6		35	7.1	6.6	1.4		15	6.2	93.8	

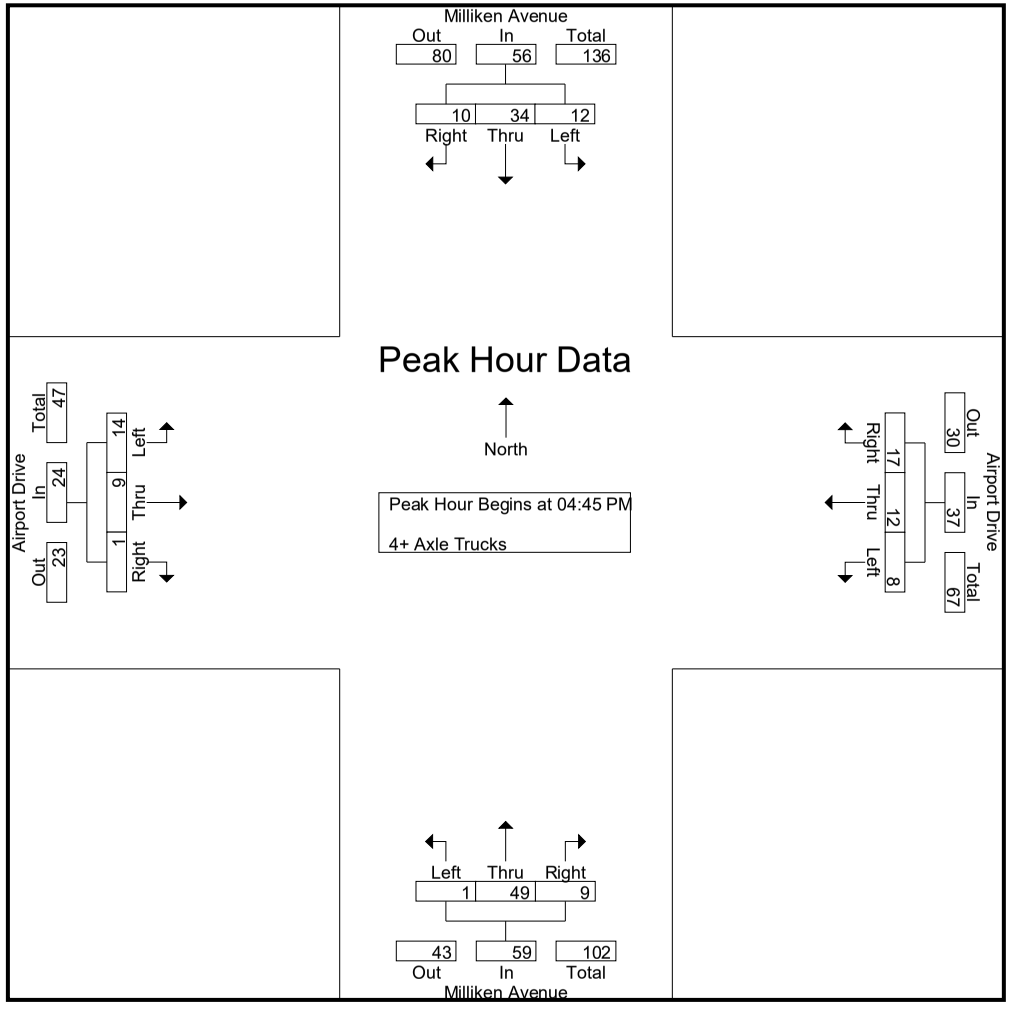
3.1-608

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	1	**14**	**5**	**20**	**4**	**6**	**7**	**17**	0	12	1	13	3	2	**1**	6	**56**
05:00 PM	3	10	4	17	0	2	6	8	0	**14**	3	**17**	2	2	0	4	46
05:15 PM	**5**	6	1	12	2	4	2	8	**1**	14	1	16	4	**3**	0	**7**	43
05:30 PM	3	4	0	7	2	0	2	4	0	9	**4**	13	**5**	2	0	7	31
Total Volume	12	34	10	56	8	12	17	37	1	49	9	59	14	9	1	24	176
% App. Total	21.4	60.7	17.9		21.6	32.4	45.9		1.7	83.1	15.3		58.3	37.5	4.2		
PHF	.600	.607	.500	.700	.500	.500	.607	.544	.250	.875	.563	.868	.700	.750	.250	.857	.786

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-609

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Airport Drive
Weather: Clear

File Name : 21_ONT_Mill_Air PM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Airport Drive Westbound				Milliken Avenue Northbound				Airport Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	1	**14**	**5**	**20**	**4**	**6**	**7**	**17**	0	12	1	13	3	2	**1**	6	
+15 mins.	3	10	4	17	0	2	6	8	0	**14**	3	**17**	2	2	0	4	
+30 mins.	**5**	6	1	12	2	4	2	8	**1**	14	1	16	4	**3**	0	**7**	
+45 mins.	3	4	0	7	2	0	2	4	0	9	**4**	13	**5**	2	0	7	
Total Volume	12	34	10	56	8	12	17	37	1	49	9	59	14	9	1	24	
% App. Total	21.4	60.7	17.9		21.6	32.4	45.9		1.7	83.1	15.3		58.3	37.5	4.2		
PHF	.600	.607	.500	.700	.500	.500	.607	.544	.250	.875	.563	.868	.700	.750	.250	.857	

Location: Ontario
N/S: Milliken Avenue
E/W: Airport Drive

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Milliken Avenue	East Leg Airport Drive	South Leg Milliken Avenue	West Leg Airport Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	1	0	0	1
8:00 AM	1	0	0	1	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	1	1
8:45 AM	0	0	0	1	1
TOTAL VOLUMES:	1	1	0	3	5

	North Leg Milliken Avenue	East Leg Airport Drive	South Leg Milliken Avenue	West Leg Airport Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	2	0	0	0	2
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	2	0	0	2
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	2	2	0	0	4

Location: Ontario
N/S: Milliken Avenue
E/W: Airport Drive

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Milliken Avenue			Westbound Airport Drive			Northbound Milliken Avenue			Eastbound Airport Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	1	0	0	0	0	0	0	0	0	1	0	2
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
TOTAL VOLUMES:	2	1	0	0	0	1	0	0	0	0	1	0	5

	Southbound Milliken Avenue			Westbound Airport Drive			Northbound Milliken Avenue			Eastbound Airport Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	1	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	1	0	0	0	1	3

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Milliken Avenue Southbound					Jurupa Street Westbound					Milliken Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	20	72	8	4	100	20	86	13	5	119	85	172	21	2	278	28	84	40	22	152	33	649	682
07:15 AM	17	57	14	5	88	26	65	15	9	106	76	133	14	8	223	25	93	38	22	156	44	573	617
07:30 AM	22	68	7	5	97	17	60	9	5	86	91	160	21	3	272	34	135	49	22	218	35	673	708
07:45 AM	22	75	7	5	104	14	78	12	7	104	93	151	17	1	261	51	149	57	30	257	43	726	769
Total	81	272	36	19	389	77	289	49	26	415	345	616	73	14	1034	138	461	184	96	783	155	2621	2776
08:00 AM	27	72	10	8	109	12	90	11	4	113	88	153	18	5	259	44	138	60	29	242	46	723	769
08:15 AM	17	61	15	7	93	16	70	9	6	95	85	190	18	3	293	41	139	43	22	223	38	704	742
08:30 AM	25	63	16	15	104	27	97	12	7	136	81	153	28	8	262	43	147	56	21	246	51	748	799
08:45 AM	26	86	11	8	123	12	95	10	3	117	68	127	31	5	226	44	132	28	11	204	27	670	697
Total	95	282	52	38	429	67	352	42	20	461	322	623	95	21	1040	172	556	187	83	915	162	2845	3007
Grand Total	176	554	88	57	818	144	641	91	46	876	667	1239	168	35	2074	310	1017	371	179	1698	317	5466	5783
Apprch %	21.5	67.7	10.8			16.4	73.2	10.4			32.2	59.7	8.1			18.3	59.9	21.8					
Total %	3.2	10.1	1.6		15	2.6	11.7	1.7		16	12.2	22.7	3.1		37.9	5.7	18.6	6.8		31.1	5.5	94.5	
Passenger Vehicles	122	416	70		656	76	453	58		619	576	1109	138		1854	284	894	294		1622	0	0	4751
% Passenger Vehicles	69.3	75.1	79.5	84.2	75	52.8	70.7	63.7	69.6	67.1	86.4	89.5	82.1	88.6	87.9	91.6	87.9	79.2	83.8	86.4	0	0	82.2
Large 2 Axle Vehicles	19	44	6		72	26	41	8		79	20	34	5		59	11	33	19		72	0	0	282
% Large 2 Axle Vehicles	10.8	7.9	6.8	5.3	8.2	18.1	6.4	8.8	8.7	8.6	3	2.7	3	0	2.8	3.5	3.2	5.1	5	3.8	0	0	4.9
3 Axle Vehicles	8	22	1		32	12	24	3		42	16	9	1		26	1	18	14		40	0	0	140
% 3 Axle Vehicles	4.5	4	1.1	1.8	3.7	8.3	3.7	3.3	6.5	4.6	2.4	0.7	0.6	0	1.2	0.3	1.8	3.8	3.9	2.1	0	0	2.4
4+ Axle Trucks	27	72	11		115	30	123	22		182	55	87	24		170	14	72	44		143	0	0	610
% 4+ Axle Trucks	15.3	13	12.5	8.8	13.1	20.8	19.2	24.2	15.2	19.7	8.2	7	14.3	11.4	8.1	4.5	7.1	11.9	7.3	7.6	0	0	10.5

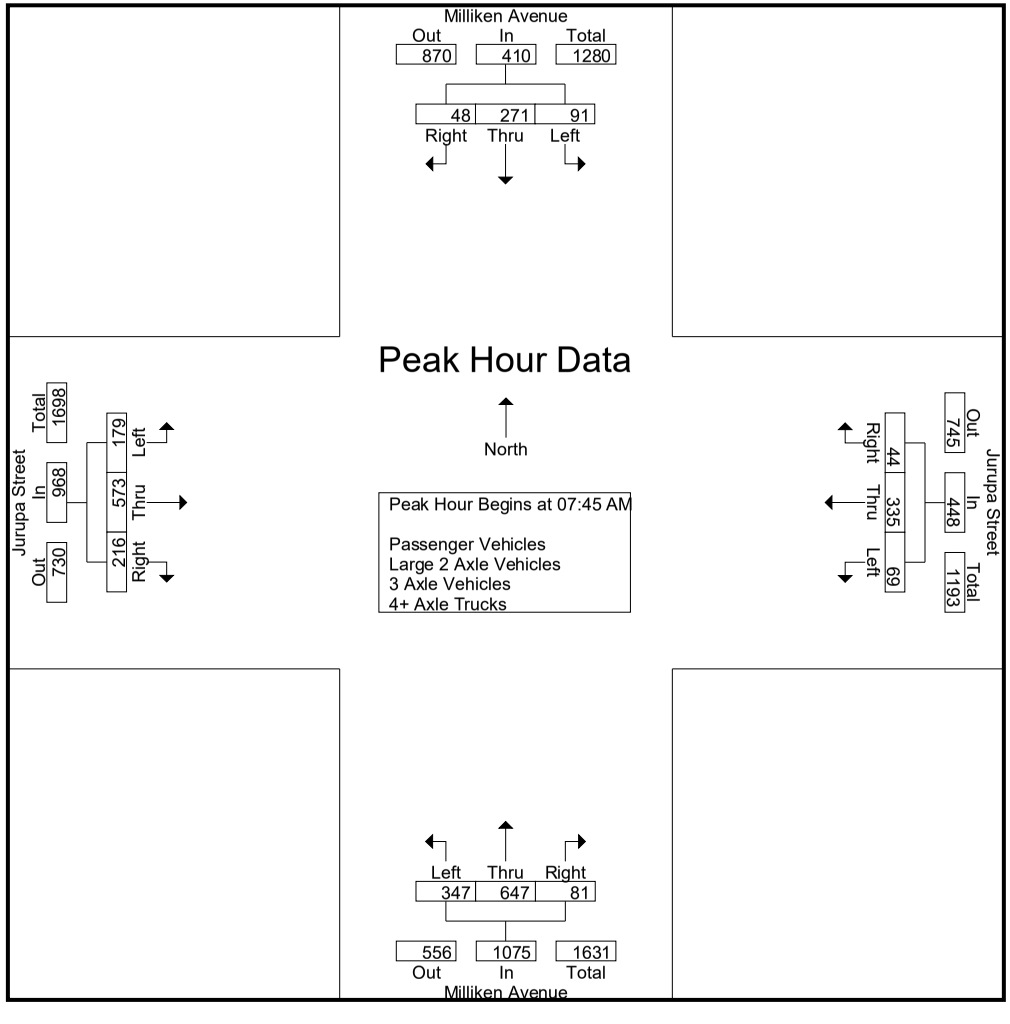
3.1-613

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	22	**75**	7	104	14	78	**12**	104	**93**	151	17	261	**51**	**149**	57	**257**	726
08:00 AM	**27**	72	10	**109**	12	90	11	113	88	153	18	259	44	138	**60**	242	723
08:15 AM	17	61	15	93	16	70	9	95	85	**190**	18	**293**	41	139	43	223	704
08:30 AM	25	63	**16**	104	**27**	**97**	12	**136**	81	153	**28**	262	43	147	56	246	**748**
Total Volume	91	271	48	410	69	335	44	448	347	647	81	1075	179	573	216	968	2901
% App. Total	22.2	66.1	11.7		15.4	74.8	9.8		32.3	60.2	7.5		18.5	59.2	22.3		
PHF	.843	.903	.750	.940	.639	.863	.917	.824	.933	.851	.723	.917	.877	.961	.900	.942	.970

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	08:00 AM				08:00 AM				07:30 AM				07:45 AM				
+0 mins.	**27**	72	10	109	12	90	11	113	91	160	**21**	272	**51**	**149**	57	**257**	
+15 mins.	17	61	15	93	16	70	9	95	**93**	151	17	261	44	138	**60**	242	
+30 mins.	25	63	**16**	104	**27**	**97**	**12**	**136**	88	153	18	259	41	139	43	223	
+45 mins.	26	**86**	11	**123**	12	95	10	117	85	**190**	18	**293**	43	147	56	246	
Total Volume	95	282	52	429	67	352	42	461	357	654	74	1085	179	573	216	968	
% App. Total	22.1	65.7	12.1		14.5	76.4	9.1		32.9	60.3	6.8		18.5	59.2	22.3		
PHF	.880	.820	.813	.872	.620	.907	.875	.847	.960	.861	.881	.926	.877	.961	.900	.942	

3.1-615

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Milliken Avenue Southbound					Jurupa Street Westbound					Milliken Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	13	54	6	3	73	8	58	9	4	75	76	157	20	2	253	28	73	36	21	137	30	538	568
07:15 AM	13	49	9	3	71	12	48	10	7	70	65	121	12	7	198	25	77	30	18	132	35	471	506
07:30 AM	16	57	6	4	79	8	30	5	3	43	82	145	15	2	242	31	120	41	19	192	28	556	584
07:45 AM	16	59	7	5	82	8	61	9	5	78	85	133	13	1	231	47	136	49	28	232	39	623	662
Total	58	219	28	15	305	36	197	33	19	266	308	556	60	12	924	131	406	156	86	693	132	2188	2320
08:00 AM	19	51	7	6	77	6	59	6	3	71	71	142	14	4	227	40	127	47	24	214	37	589	626
08:15 AM	10	40	10	6	60	13	51	5	4	69	78	166	16	2	260	35	122	36	20	193	32	582	614
08:30 AM	20	51	15	14	86	15	71	8	4	94	66	137	24	8	227	40	126	38	13	204	39	611	650
08:45 AM	15	55	10	7	80	6	75	6	2	87	53	108	24	5	185	38	113	17	7	168	21	520	541
Total	64	197	42	33	303	40	256	25	13	321	268	553	78	19	899	153	488	138	64	779	129	2302	2431
Grand Total	122	416	70	48	608	76	453	58	32	587	576	1109	138	31	1823	284	894	294	150	1472	261	4490	4751
Apprch %	20.1	68.4	11.5			12.9	77.2	9.9			31.6	60.8	7.6			19.3	60.7	20					
Total %	2.7	9.3	1.6		13.5	1.7	10.1	1.3		13.1	12.8	24.7	3.1		40.6	6.3	19.9	6.5		32.8	5.5	94.5	

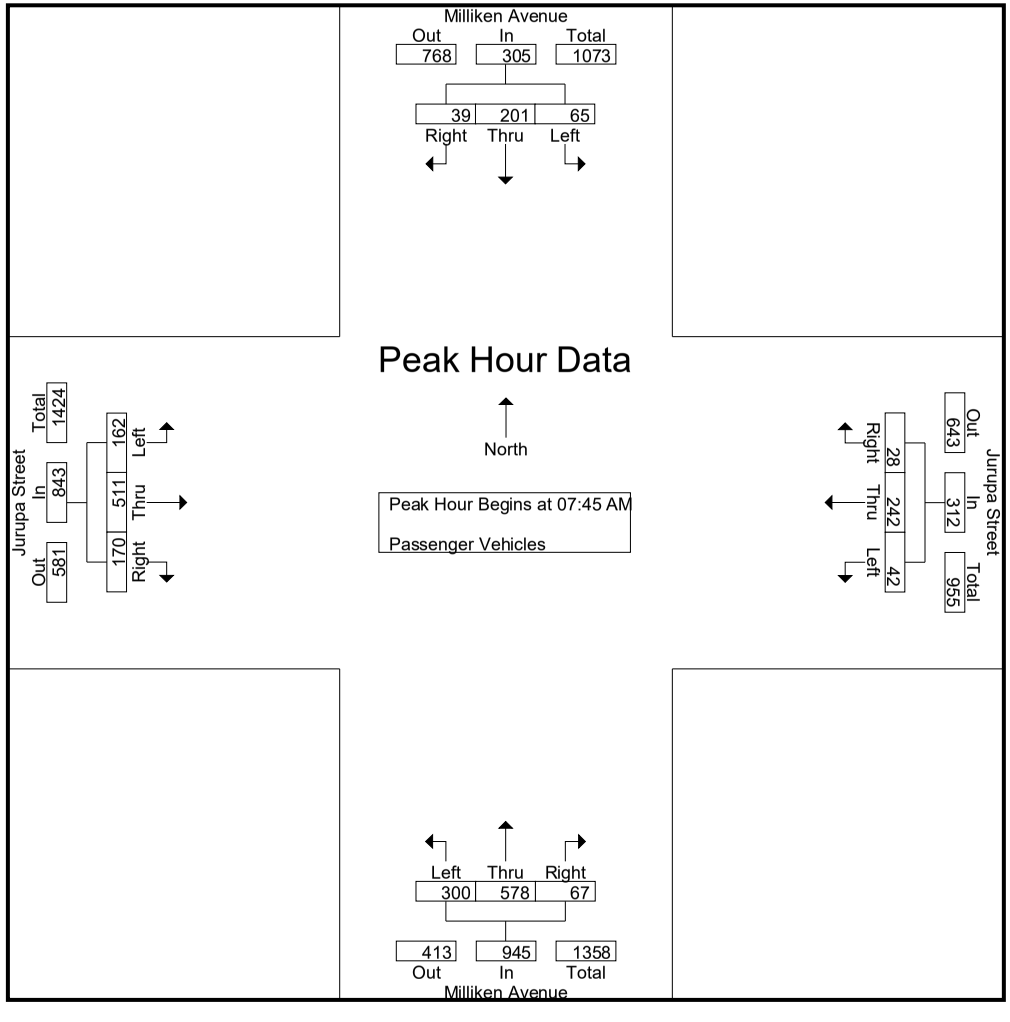
3.1-616

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	16	**59**	7	82	8	61	**9**	78	**85**	133	13	231	**47**	**136**	**49**	**232**	**623**
08:00 AM	19	51	7	77	6	59	6	71	71	142	14	227	40	127	47	214	589
08:15 AM	10	40	10	60	13	51	5	69	78	**166**	16	**260**	35	122	36	193	582
08:30 AM	**20**	51	**15**	**86**	**15**	**71**	8	**94**	66	137	**24**	227	40	126	38	204	611
Total Volume	65	201	39	305	42	242	28	312	300	578	67	945	162	511	170	843	2405
% App. Total	21.3	65.9	12.8		13.5	77.6	9		31.7	61.2	7.1		19.2	60.6	20.2		
PHF	.813	.852	.650	.887	.700	.852	.778	.830	.882	.870	.698	.909	.862	.939	.867	.908	.965

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	16	**59**	7	82	8	61	**9**	78	**85**	133	13	231	**47**	**136**	**49**	**232**	
+15 mins.	19	51	7	77	6	59	6	71	71	142	14	227	40	127	47	214	
+30 mins.	10	40	10	60	13	51	5	69	78	**166**	16	**260**	35	122	36	193	
+45 mins.	**20**	51	**15**	**86**	**15**	**71**	8	**94**	66	137	**24**	227	40	126	38	204	
Total Volume	65	201	39	305	42	242	28	312	300	578	67	945	162	511	170	843	
% App. Total	21.3	65.9	12.8		13.5	77.6	9		31.7	61.2	7.1		19.2	60.6	20.2		
PHF	.813	.852	.650	.887	.700	.852	.778	.830	.882	.870	.698	.909	.862	.939	.867	.908	

3.1-618

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Milliken Avenue Southbound					Jurupa Street Westbound					Milliken Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	1	7	2	1	10	3	5	1	0	9	3	0	0	0	3	0	5	0	0	5	1	27	28
07:15 AM	1	4	1	1	6	1	4	1	0	6	4	2	0	0	6	0	4	1	1	5	2	23	25
07:30 AM	2	0	0	0	2	4	6	1	1	11	2	3	1	0	6	1	4	0	0	5	1	24	25
07:45 AM	5	5	0	0	10	2	4	0	0	6	1	7	2	0	10	1	1	2	0	4	0	30	30
Total	9	16	3	2	28	10	19	3	1	32	10	12	3	0	25	2	14	3	1	19	4	104	108
08:00 AM	2	6	1	1	9	2	9	2	1	13	4	4	0	0	8	2	4	5	3	11	5	41	46
08:15 AM	1	8	2	0	11	2	2	2	1	6	2	9	1	0	12	2	5	3	1	10	2	39	41
08:30 AM	1	0	0	0	1	7	6	1	1	14	1	6	0	0	7	1	5	2	2	8	3	30	33
08:45 AM	6	14	0	0	20	5	5	0	0	10	3	3	1	0	7	4	5	6	2	15	2	52	54
Total	10	28	3	1	41	16	22	5	3	43	10	22	2	0	34	9	19	16	8	44	12	162	174
Grand Total	19	44	6	3	69	26	41	8	4	75	20	34	5	0	59	11	33	19	9	63	16	266	282
Apprch %	27.5	63.8	8.7			34.7	54.7	10.7			33.9	57.6	8.5			17.5	52.4	30.2					
Total %	7.1	16.5	2.3		25.9	9.8	15.4	3		28.2	7.5	12.8	1.9		22.2	4.1	12.4	7.1		23.7	5.7	94.3	

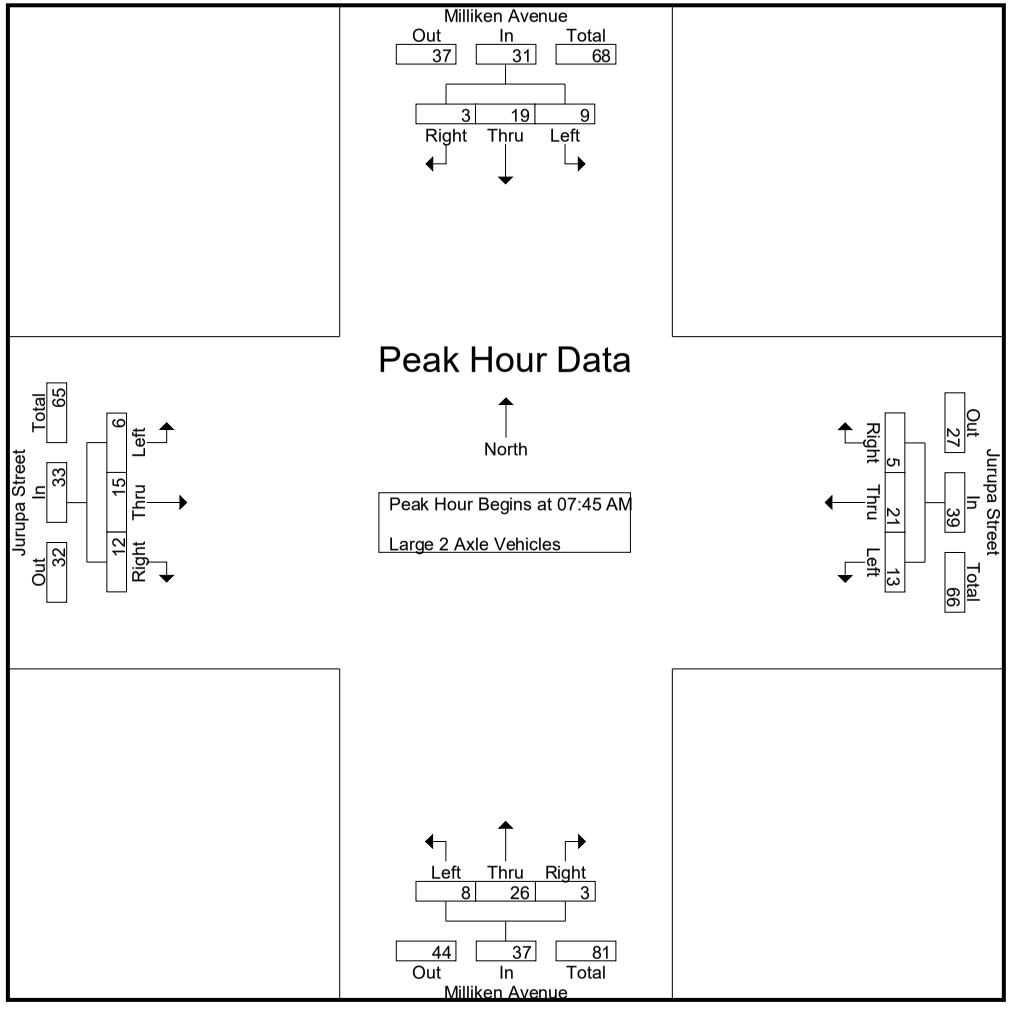
3.1-619

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**5**	5	0	10	2	4	0	6	1	7	**2**	10	1	1	2	4	30
08:00 AM	2	6	1	9	2	**9**	**2**	13	**4**	4	0	8	**2**	4	**5**	**11**	**41**
08:15 AM	1	**8**	**2**	**11**	2	2	2	6	2	**9**	1	**12**	2	**5**	3	10	39
08:30 AM	1	0	0	1	**7**	6	1	**14**	1	6	0	7	1	5	2	8	30
Total Volume	9	19	3	31	13	21	5	39	8	26	3	37	6	15	12	33	140
% App. Total	29	61.3	9.7		33.3	53.8	12.8		21.6	70.3	8.1		18.2	45.5	36.4		
PHF	.450	.594	.375	.705	.464	.583	.625	.696	.500	.722	.375	.771	.750	.750	.600	.750	.854

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	**5**	5	0	10	2	4	0	6	1	7	**2**	10	1	1	2	4	
+15 mins.	2	6	1	9	2	**9**	**2**	13	**4**	4	0	8	**2**	4	**5**	**11**	
+30 mins.	1	**8**	**2**	**11**	2	2	2	6	2	**9**	1	**12**	2	**5**	3	10	
+45 mins.	1	0	0	1	**7**	6	1	**14**	1	6	0	7	1	5	2	8	
Total Volume	9	19	3	31	13	21	5	39	8	26	3	37	6	15	12	33	
% App. Total	29	61.3	9.7		33.3	53.8	12.8		21.6	70.3	8.1		18.2	45.5	36.4		
PHF	.450	.594	.375	.705	.464	.583	.625	.696	.500	.722	.375	.771	.750	.750	.600	.750	

3.1-621

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Milliken Avenue Southbound					Jurupa Street Westbound					Milliken Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	3	4	0	0	7	6	5	0	0	11	1	1	0	0	2	0	3	0	0	3	0	23	23
07:15 AM	1	0	0	0	1	1	2	2	2	5	2	1	0	0	3	0	2	2	2	4	4	13	17
07:30 AM	1	0	0	0	1	1	3	0	0	4	0	0	0	0	0	0	3	2	1	5	1	10	11
07:45 AM	0	6	0	0	6	2	0	0	0	2	3	2	0	0	5	0	2	1	0	3	0	16	16
Total	5	10	0	0	15	10	10	2	2	22	6	4	0	0	10	0	10	5	3	15	5	62	67
08:00 AM	2	3	0	0	5	0	4	0	0	4	3	1	0	0	4	0	1	2	0	3	0	16	16
08:15 AM	0	2	0	0	2	0	3	1	1	4	0	1	0	0	1	0	1	1	1	2	2	9	11
08:30 AM	0	2	0	0	2	2	5	0	0	7	4	0	1	0	5	1	4	5	2	10	2	24	26
08:45 AM	1	5	1	1	7	0	2	0	0	2	3	3	0	0	6	0	2	1	1	3	2	18	20
Total	3	12	1	1	16	2	14	1	1	17	10	5	1	0	16	1	8	9	4	18	6	67	73
Grand Total	8	22	1	1	31	12	24	3	3	39	16	9	1	0	26	1	18	14	7	33	11	129	140
Apprch %	25.8	71	3.2			30.8	61.5	7.7			61.5	34.6	3.8			3	54.5	42.4					
Total %	6.2	17.1	0.8		24	9.3	18.6	2.3		30.2	12.4	7	0.8		20.2	0.8	14	10.9		25.6	7.9	92.1	

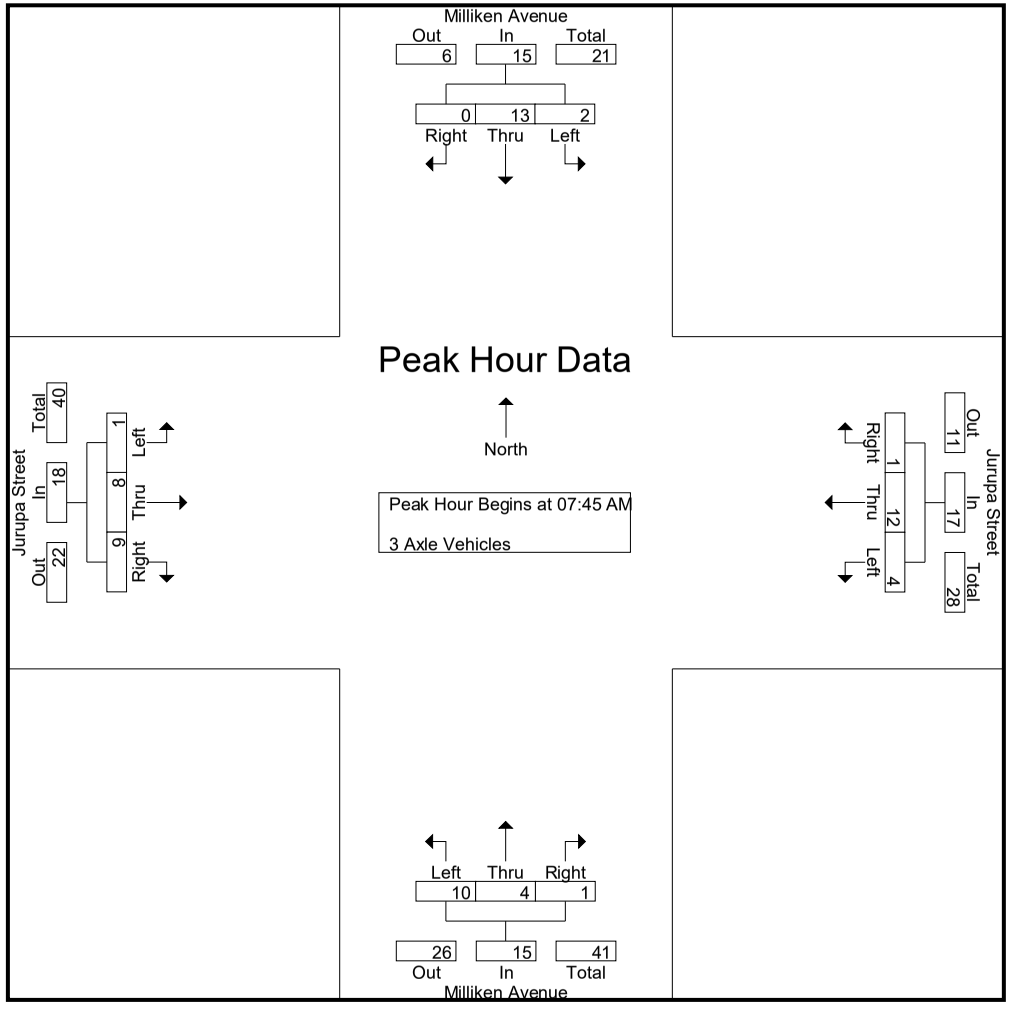
3.1-622

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	**6**	0	**6**	**2**	0	0	2	3	**2**	0	**5**	0	2	1	3	16
08:00 AM	**2**	3	0	5	0	4	0	4	3	1	0	4	0	1	2	3	16
08:15 AM	0	2	0	2	0	3	**1**	4	0	1	0	1	0	1	1	2	9
08:30 AM	0	2	0	2	2	**5**	0	**7**	**4**	0	**1**	5	**1**	**4**	**5**	**10**	**24**
Total Volume	2	13	0	15	4	12	1	17	10	4	1	15	1	8	9	18	65
% App. Total	13.3	86.7	0		23.5	70.6	5.9		66.7	26.7	6.7		5.6	44.4	50		
PHF	.250	.542	.000	.625	.500	.600	.250	.607	.625	.500	.250	.750	.250	.500	.450	.450	.677

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	**6**	0	**6**	**2**	0	0	2	3	**2**	0	**5**	0	2	1	3	
+15 mins.	**2**	3	0	5	0	4	0	4	3	1	0	4	0	1	2	3	
+30 mins.	0	2	0	2	0	3	**1**	4	0	1	0	1	0	1	1	2	
+45 mins.	0	2	0	2	2	**5**	0	**7**	**4**	0	**1**	5	**1**	**4**	**5**	**10**	
Total Volume	2	13	0	15	4	12	1	17	10	4	1	15	1	8	9	18	
% App. Total	13.3	86.7	0		23.5	70.6	5.9		66.7	26.7	6.7		5.6	44.4	50		
PHF	.250	.542	.000	.625	.500	.600	.250	.607	.625	.500	.250	.750	.250	.500	.450	.450	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Milliken Avenue Southbound					Jurupa Street Westbound					Milliken Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	3	7	0	0	10	3	18	3	1	24	5	14	1	0	20	0	3	4	1	7	2	61	63
07:15 AM	2	4	4	1	10	12	11	2	0	25	5	9	2	1	16	0	10	5	1	15	3	66	69
07:30 AM	3	11	1	1	15	4	21	3	1	28	7	12	5	1	24	2	8	6	2	16	5	83	88
07:45 AM	1	5	0	0	6	2	13	3	2	18	4	9	2	0	15	3	10	5	2	18	4	57	61
Total	9	27	5	2	41	21	63	11	4	95	21	44	10	2	75	5	31	20	6	56	14	267	281
08:00 AM	4	12	2	1	18	4	18	3	0	25	10	6	4	1	20	2	6	6	2	14	4	77	81
08:15 AM	6	11	3	1	20	1	14	1	0	16	5	14	1	1	20	4	11	3	0	18	2	74	76
08:30 AM	4	10	1	1	15	3	15	3	2	21	10	10	3	0	23	1	12	11	4	24	7	83	90
08:45 AM	4	12	0	0	16	1	13	4	1	18	9	13	6	0	28	2	12	4	1	18	2	80	82
Total	18	45	6	3	69	9	60	11	3	80	34	43	14	2	91	9	41	24	7	74	15	314	329
Grand Total	27	72	11	5	110	30	123	22	7	175	55	87	24	4	166	14	72	44	13	130	29	581	610
Apprch %	24.5	65.5	10			17.1	70.3	12.6			33.1	52.4	14.5			10.8	55.4	33.8					
Total %	4.6	12.4	1.9		18.9	5.2	21.2	3.8		30.1	9.5	15	4.1		28.6	2.4	12.4	7.6		22.4	4.8	95.2	

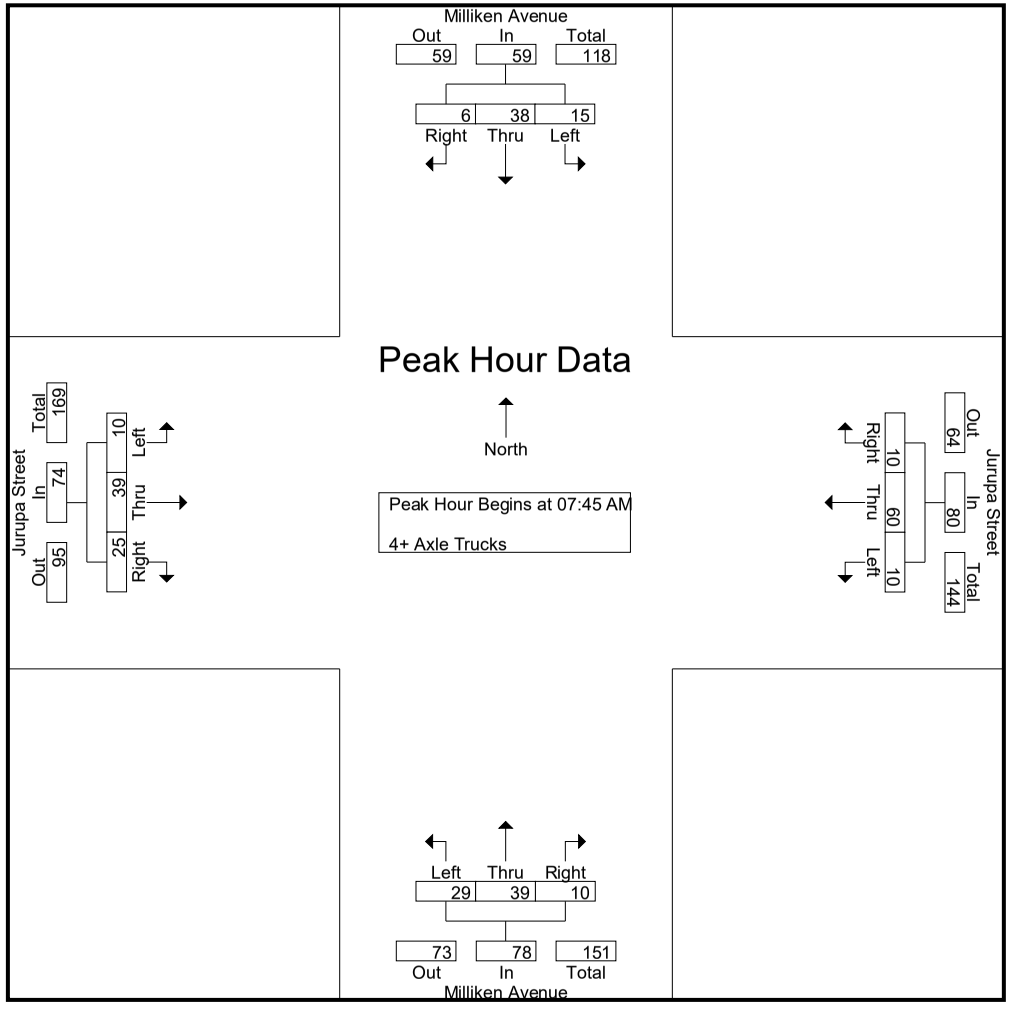
3.1-625

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	1	5	0	6	2	13	**3**	18	4	9	2	15	3	10	5	18	57
08:00 AM	4	**12**	2	18	**4**	**18**	3	**25**	**10**	6	**4**	20	2	6	6	14	77
08:15 AM	**6**	11	**3**	**20**	1	14	1	16	5	**14**	1	20	**4**	11	3	18	74
08:30 AM	4	10	1	15	3	15	3	21	10	10	3	**23**	1	**12**	**11**	**24**	**83**
Total Volume	15	38	6	59	10	60	10	80	29	39	10	78	10	39	25	74	291
% App. Total	25.4	64.4	10.2		12.5	75	12.5		37.2	50	12.8		13.5	52.7	33.8		
PHF	.625	.792	.500	.738	.625	.833	.833	.800	.725	.696	.625	.848	.625	.813	.568	.771	.877

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	1	5	0	6	2	13	**3**	18	4	9	2	15	3	10	5	18	
+15 mins.	4	**12**	2	18	**4**	**18**	3	**25**	**10**	6	**4**	20	2	6	6	14	
+30 mins.	**6**	11	**3**	**20**	1	14	1	16	5	**14**	1	20	**4**	11	3	18	
+45 mins.	4	10	1	15	3	15	3	21	10	10	3	**23**	1	**12**	**11**	**24**	
Total Volume	15	38	6	59	10	60	10	80	29	39	10	78	10	39	25	74	
% App. Total	25.4	64.4	10.2		12.5	75	12.5		37.2	50	12.8		13.5	52.7	33.8		
PHF	.625	.792	.500	.738	.625	.833	.833	.800	.725	.696	.625	.848	.625	.813	.568	.771	

3.1-627

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Milliken Avenue Southbound					Jurupa Street Westbound					Milliken Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	55	185	20	17	260	83	109	19	4	211	40	127	80	43	247	26	129	26	10	181	74	899	973
04:15 PM	49	186	18	9	253	90	103	16	3	209	37	131	76	26	244	23	145	34	17	202	55	908	963
04:30 PM	42	142	12	11	196	84	110	15	3	209	29	146	65	22	240	34	172	33	16	239	52	884	936
04:45 PM	44	161	19	12	224	100	113	16	7	229	46	118	74	31	238	19	152	39	23	210	73	901	974
Total	190	674	69	49	933	357	435	66	17	858	152	522	295	122	969	102	598	132	66	832	254	3592	3846
05:00 PM	43	204	13	7	260	83	120	18	2	221	29	158	87	37	274	27	157	50	21	234	67	989	1056
05:15 PM	73	252	8	6	333	72	72	24	2	168	42	184	71	17	297	23	147	46	17	216	42	1014	1056
05:30 PM	49	197	10	6	256	60	113	20	5	193	35	196	51	29	282	19	180	64	28	263	68	994	1062
05:45 PM	22	179	12	8	213	81	94	19	13	194	23	176	49	23	248	19	172	47	29	238	73	893	966
Total	187	832	43	27	1062	296	399	81	22	776	129	714	258	106	1101	88	656	207	95	951	250	3890	4140
Grand Total	377	1506	112	76	1995	653	834	147	39	1634	281	1236	553	228	2070	190	1254	339	161	1783	504	7482	7986
Apprch %	18.9	75.5	5.6			40	51	9			13.6	59.7	26.7			10.7	70.3	19					
Total %	5	20.1	1.5		26.7	8.7	11.1	2		21.8	3.8	16.5	7.4		27.7	2.5	16.8	4.5		23.8	6.3	93.7	
Passenger Vehicles	338	1382	90		1870	538	659	123		1354	240	1080	454		1962	148	1095	307		1696	0	0	6882
% Passenger Vehicles	89.7	91.8	80.4	78.9	90.3	82.4	79	83.7	87.2	80.9	85.4	87.4	82.1	82.5	85.4	77.9	87.3	90.6	90.7	87.2	0	0	86.2
Large 2 Axle Vehicles	13	29	9		57	42	49	10		103	15	41	15		77	6	30	12		56	0	0	293
% Large 2 Axle Vehicles	3.4	1.9	8	7.9	2.8	6.4	5.9	6.8	5.1	6.2	5.3	3.3	2.7	2.6	3.4	3.2	2.4	3.5	5	2.9	0	0	3.7
3 Axle Vehicles	5	26	5		41	28	17	4		50	11	15	12		44	8	17	5		31	0	0	166
% 3 Axle Vehicles	1.3	1.7	4.5	6.6	2	4.3	2	2.7	2.6	3	3.9	1.2	2.2	2.6	1.9	4.2	1.4	1.5	0.6	1.6	0	0	2.1
4+ Axle Trucks	21	69	8		103	45	109	10		166	15	100	72		215	28	112	15		161	0	0	645
% 4+ Axle Trucks	5.6	4.6	7.1	6.6	5	6.9	13.1	6.8	5.1	9.9	5.3	8.1	13	12.3	9.4	14.7	8.9	4.4	3.7	8.3	0	0	8.1

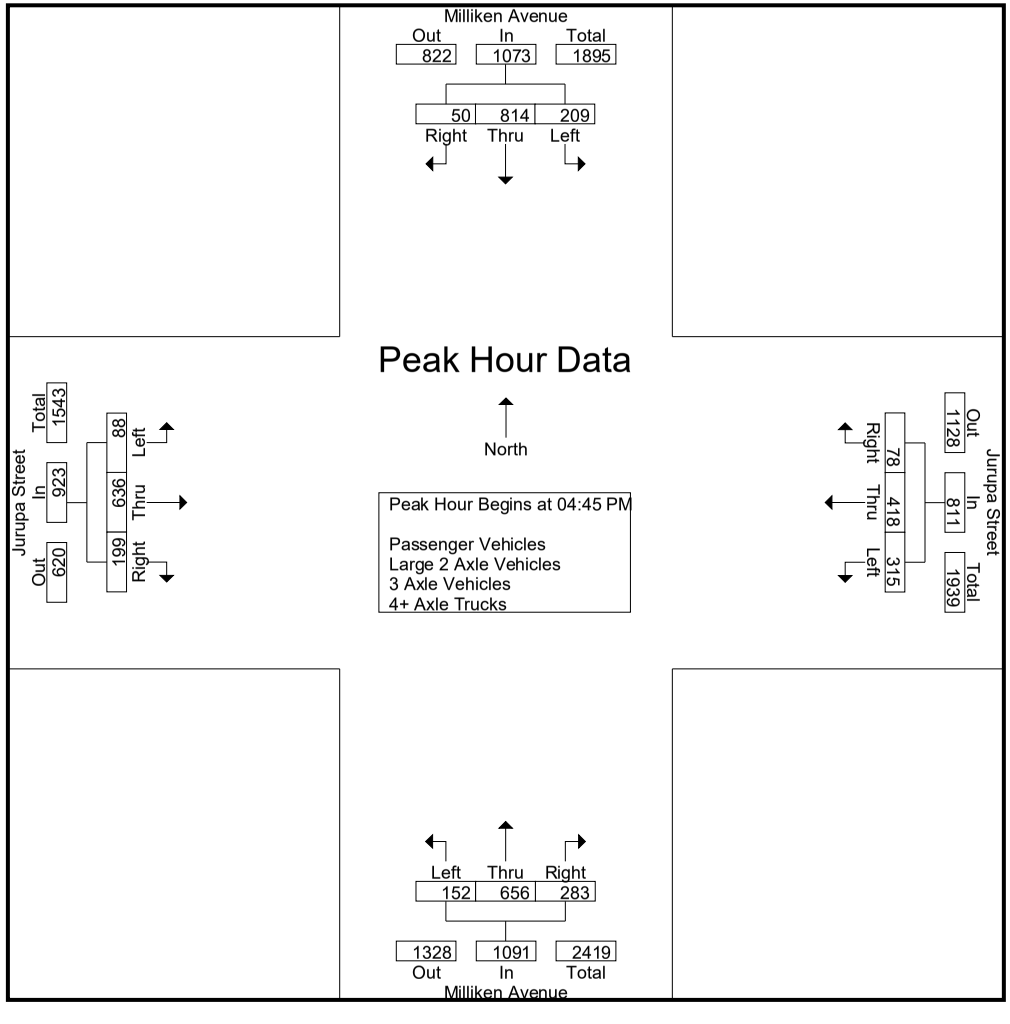
	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	44	161	**19**	224	**100**	113	16	**229**	**46**	118	74	238	19	152	39	210	901
05:00 PM	43	204	13	260	83	**120**	18	221	29	158	**87**	274	**27**	157	50	234	989
05:15 PM	**73**	**252**	8	**333**	72	72	**24**	168	42	184	71	**297**	23	147	46	216	**1014**
05:30 PM	49	197	10	256	60	113	20	193	35	**196**	51	282	19	**180**	**64**	**263**	994
Total Volume	209	814	50	1073	315	418	78	811	152	656	283	1091	88	636	199	923	3898
% App. Total	19.5	75.9	4.7		38.8	51.5	9.6		13.9	60.1	25.9		9.5	68.9	21.6		
PHF	.716	.808	.658	.806	.788	.871	.813	.885	.826	.837	.813	.918	.815	.883	.777	.877	.961

3.1-628

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:15 PM				05:00 PM				05:00 PM				
+0 mins.	44	161	**19**	224	90	103	16	209	29	158	**87**	274	**27**	157	50	234	
+15 mins.	43	204	13	260	84	110	15	209	**42**	184	71	**297**	23	147	46	216	
+30 mins.	**73**	**252**	8	**333**	**100**	113	16	**229**	35	**196**	51	282	19	**180**	**64**	**263**	
+45 mins.	49	197	10	256	83	**120**	**18**	221	23	176	49	248	19	172	47	238	
Total Volume	209	814	50	1073	357	446	65	868	129	714	258	1101	88	656	207	951	
% App. Total	19.5	75.9	4.7		41.1	51.4	7.5		11.7	64.9	23.4		9.3	69	21.8		
PHF	.716	.808	.658	.806	.893	.929	.903	.948	.768	.911	.741	.927	.815	.911	.809	.904	

3.1-630

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Milliken Avenue Southbound					Jurupa Street Westbound					Milliken Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	49	164	12	11	225	68	91	17	3	176	36	102	69	39	207	19	113	23	10	155	63	763	826
04:15 PM	42	173	17	8	232	74	89	14	3	177	26	109	59	20	194	16	124	29	15	169	46	772	818
04:30 PM	38	133	10	9	181	63	87	12	2	162	26	125	51	18	202	30	143	31	16	204	45	749	794
04:45 PM	35	136	15	9	186	86	88	15	7	189	42	110	63	28	215	16	136	33	20	185	64	775	839
Total	164	606	54	37	824	291	355	58	15	704	130	446	242	105	818	81	516	116	61	713	218	3059	3277
05:00 PM	37	193	13	7	243	71	95	13	2	179	25	139	72	32	236	21	131	46	18	198	59	856	915
05:15 PM	69	237	7	6	313	62	58	20	1	140	38	164	64	15	266	17	132	43	16	192	38	911	949
05:30 PM	48	182	8	4	238	49	81	17	4	147	28	177	44	23	249	15	162	60	24	237	55	871	926
05:45 PM	20	164	8	6	192	65	70	15	12	150	19	154	32	13	205	14	154	42	27	210	58	757	815
Total	174	776	36	23	986	247	304	65	19	616	110	634	212	83	956	67	579	191	85	837	210	3395	3605
Grand Total	338	1382	90	60	1810	538	659	123	34	1320	240	1080	454	188	1774	148	1095	307	146	1550	428	6454	6882
Apprch %	18.7	76.4	5			40.8	49.9	9.3			13.5	60.9	25.6			9.5	70.6	19.8					
Total %	5.2	21.4	1.4		28	8.3	10.2	1.9		20.5	3.7	16.7	7		27.5	2.3	17	4.8		24	6.2	93.8	

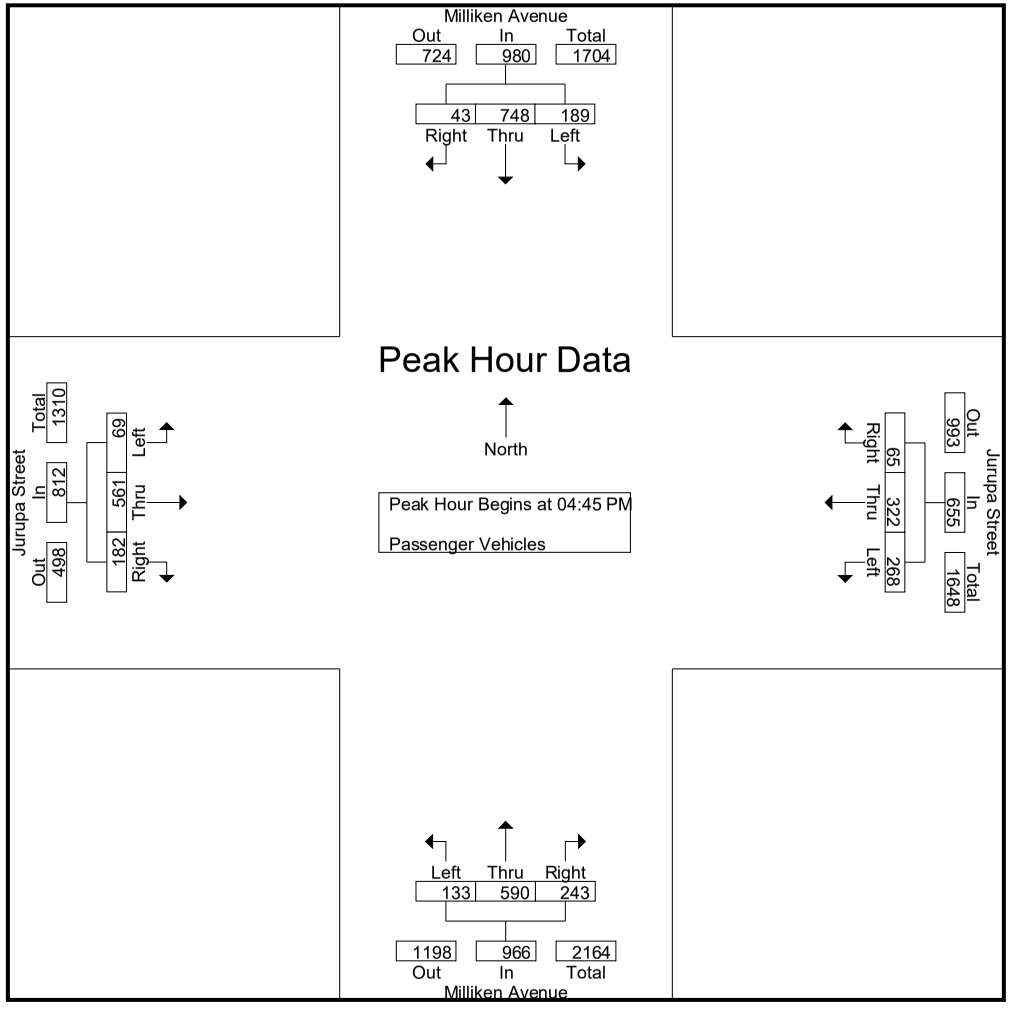
3.1-631

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	35	136	**15**	186	**86**	88	15	**189**	**42**	110	63	215	16	136	33	185	775
05:00 PM	37	193	13	243	71	**95**	13	179	25	139	**72**	236	**21**	131	46	198	856
05:15 PM	**69**	**237**	7	**313**	62	58	**20**	140	38	164	64	**266**	17	132	43	192	**911**
05:30 PM	48	182	8	238	49	81	17	147	28	**177**	44	249	15	**162**	**60**	**237**	871
Total Volume	189	748	43	980	268	322	65	655	133	590	243	966	69	561	182	812	3413
% App. Total	19.3	76.3	4.4		40.9	49.2	9.9		13.8	61.1	25.2		8.5	69.1	22.4		
PHF	.685	.789	.717	.783	.779	.847	.813	.866	.792	.833	.844	.908	.821	.866	.758	.857	.937

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	35	136	**15**	186	**86**	88	15	**189**	**42**	110	63	215	16	136	33	185	
+15 mins.	37	193	13	243	71	**95**	13	179	25	139	**72**	236	**21**	131	46	198	
+30 mins.	**69**	**237**	7	**313**	62	58	**20**	140	38	164	64	**266**	17	132	43	192	
+45 mins.	48	182	8	238	49	81	17	147	28	**177**	44	249	15	**162**	**60**	**237**	
Total Volume	189	748	43	980	268	322	65	655	133	590	243	966	69	561	182	812	
% App. Total	19.3	76.3	4.4		40.9	49.2	9.9		13.8	61.1	25.2		8.5	69.1	22.4		
PHF	.685	.789	.717	.783	.779	.847	.813	.866	.792	.833	.844	.908	.821	.866	.758	.857	

3.1-633

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Milliken Avenue Southbound					Jurupa Street Westbound					Milliken Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	4	4	3	3	11	6	4	1	0	11	1	9	3	1	13	3	1	1	0	5	4	40	44
04:15 PM	2	4	0	0	6	6	3	1	0	10	2	4	4	2	10	2	5	4	2	11	4	37	41
04:30 PM	2	2	0	0	4	12	5	2	0	19	1	6	5	1	12	1	7	0	0	8	1	43	44
04:45 PM	2	7	2	1	11	5	5	0	0	10	2	3	1	0	6	0	4	2	1	6	2	33	35
Total	10	17	5	4	32	29	17	4	0	50	6	22	13	4	41	6	17	7	3	30	11	153	164
05:00 PM	1	3	0	0	4	4	6	2	0	12	3	8	1	1	12	0	4	2	2	6	3	34	37
05:15 PM	1	2	1	0	4	2	4	1	1	7	4	4	0	0	8	0	5	0	0	5	1	24	25
05:30 PM	0	5	0	0	5	1	11	0	0	12	0	4	1	1	5	0	2	2	2	4	3	26	29
05:45 PM	1	2	3	2	6	6	11	3	1	20	2	3	0	0	5	0	2	1	1	3	4	34	38
Total	3	12	4	2	19	13	32	6	2	51	9	19	2	2	30	0	13	5	5	18	11	118	129
Grand Total	13	29	9	6	51	42	49	10	2	101	15	41	15	6	71	6	30	12	8	48	22	271	293
Apprch %	25.5	56.9	17.6			41.6	48.5	9.9			21.1	57.7	21.1			12.5	62.5	25					
Total %	4.8	10.7	3.3		18.8	15.5	18.1	3.7		37.3	5.5	15.1	5.5		26.2	2.2	11.1	4.4		17.7	7.5	92.5	

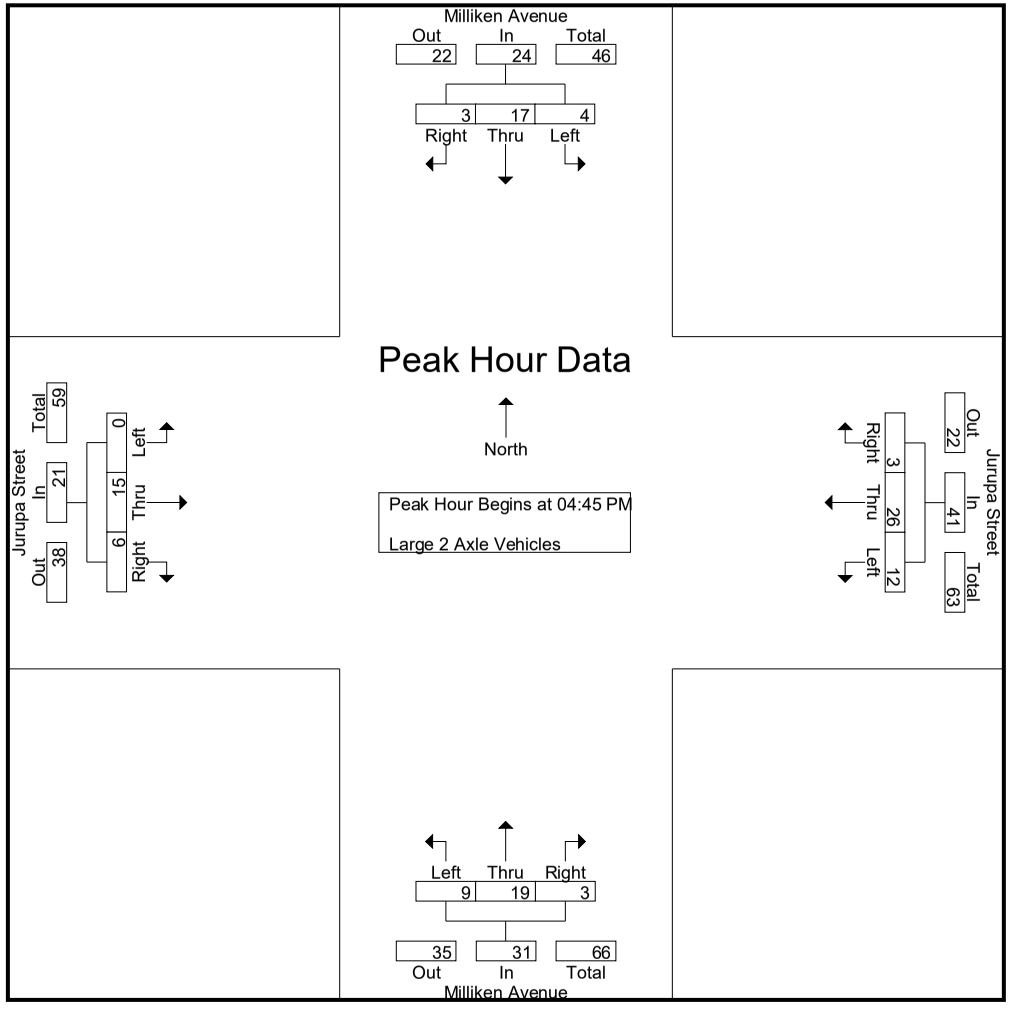
3.1-634

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**2**	**7**	**2**	**11**	**5**	5	0	10	2	3	**1**	6	0	4	**2**	**6**	33
05:00 PM	1	3	0	4	4	6	**2**	**12**	3	**8**	1	**12**	0	4	2	6	**34**
05:15 PM	1	2	1	4	2	4	1	7	**4**	4	0	8	0	**5**	0	5	24
05:30 PM	0	5	0	5	1	**11**	0	12	0	4	1	5	0	2	2	4	26
Total Volume	4	17	3	24	12	26	3	41	9	19	3	31	0	15	6	21	117
% App. Total	16.7	70.8	12.5		29.3	63.4	7.3		29	61.3	9.7		0	71.4	28.6		
PHF	.500	.607	.375	.545	.600	.591	.375	.854	.563	.594	.750	.646	.000	.750	.750	.875	.860

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	**2**	**7**	**2**	**11**	**5**	5	0	10	2	3	**1**	6	0	4	**2**	**6**	
+15 mins.	1	3	0	4	4	6	**2**	**12**	3	**8**	1	**12**	0	4	2	6	
+30 mins.	1	2	1	4	2	4	1	7	**4**	4	0	8	0	**5**	0	5	
+45 mins.	0	5	0	5	1	**11**	0	12	0	4	1	5	0	2	2	4	
Total Volume	4	17	3	24	12	26	3	41	9	19	3	31	0	15	6	21	
% App. Total	16.7	70.8	12.5		29.3	63.4	7.3		29	61.3	9.7		0	71.4	28.6		
PHF	.500	.607	.375	.545	.600	.591	.375	.854	.563	.594	.750	.646	.000	.750	.750	.875	

3.1-636

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021

Groups Printed- 3 Axle Vehicles

	Milliken Avenue Southbound					Jurupa Street Westbound					Milliken Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	4	2	2	7	3	1	1	1	5	1	0	0	0	1	0	0	0	0	0	3	13	16
04:15 PM	0	3	1	1	4	5	2	0	0	7	0	0	1	1	1	2	2	0	0	4	2	16	18
04:30 PM	1	1	1	1	3	3	3	0	0	6	2	4	3	2	9	0	4	1	0	5	3	23	26
04:45 PM	1	2	1	1	4	4	5	1	0	10	1	1	2	1	4	0	2	2	0	4	2	22	24
Total	3	10	5	5	18	15	11	2	1	28	4	5	6	4	15	2	8	3	0	13	10	74	84
05:00 PM	0	2	0	0	2	4	1	1	0	6	1	1	3	0	5	3	5	1	1	9	1	22	23
05:15 PM	1	4	0	0	5	5	0	1	0	6	0	3	2	1	5	0	1	0	0	1	1	17	18
05:30 PM	0	6	0	0	6	2	4	0	0	6	4	3	0	0	7	1	2	0	0	3	0	22	22
05:45 PM	1	4	0	0	5	2	1	0	0	3	2	3	1	1	6	2	1	1	0	4	1	18	19
Total	2	16	0	0	18	13	6	2	0	21	7	10	6	2	23	6	9	2	1	17	3	79	82
Grand Total	5	26	5	5	36	28	17	4	1	49	11	15	12	6	38	8	17	5	1	30	13	153	166
Apprch %	13.9	72.2	13.9			57.1	34.7	8.2			28.9	39.5	31.6			26.7	56.7	16.7					
Total %	3.3	17	3.3		23.5	18.3	11.1	2.6		32	7.2	9.8	7.8		24.8	5.2	11.1	3.3		19.6	7.8	92.2	

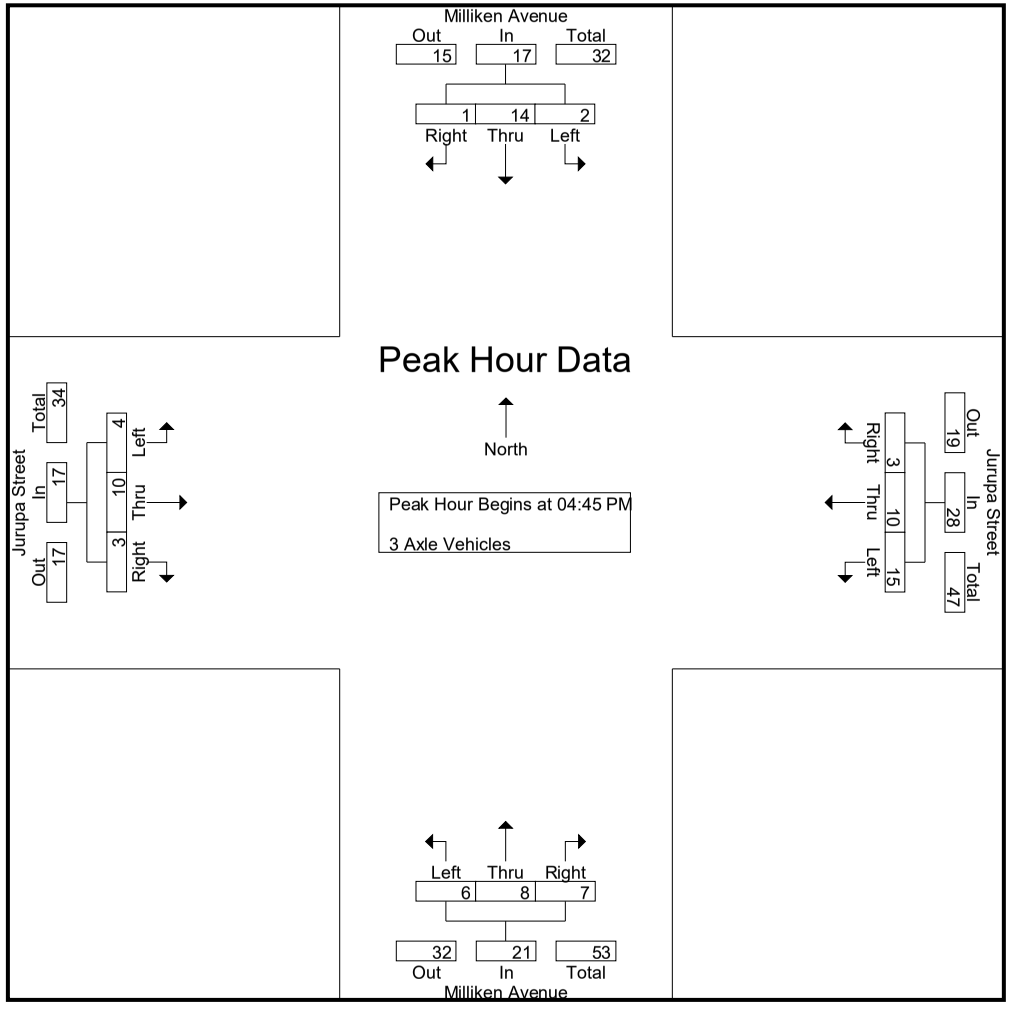
3.1-637

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**1**	2	**1**	4	4	**5**	**1**	**10**	1	1	2	4	0	2	**2**	4	**22**
05:00 PM	0	2	0	2	4	1	1	6	1	1	**3**	5	**3**	**5**	1	**9**	22
05:15 PM	1	4	0	5	**5**	0	1	6	0	**3**	2	5	0	1	0	1	17
05:30 PM	0	**6**	0	**6**	2	4	0	6	**4**	3	0	**7**	1	2	0	3	22
Total Volume	2	14	1	17	15	10	3	28	6	8	7	21	4	10	3	17	83
% App. Total	11.8	82.4	5.9		53.6	35.7	10.7		28.6	38.1	33.3		23.5	58.8	17.6		
PHF	.500	.583	.250	.708	.750	.500	.750	.700	.375	.667	.583	.750	.333	.500	.375	.472	.943

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	**1**	2	**1**	4	4	**5**	**1**	**10**	1	1	2	4	0	2	**2**	4	
+15 mins.	0	2	0	2	4	1	1	6	1	1	**3**	5	**3**	**5**	1	**9**	
+30 mins.	1	4	0	5	**5**	0	1	6	0	**3**	2	5	0	1	0	1	
+45 mins.	0	**6**	0	**6**	2	4	0	6	**4**	3	0	**7**	1	2	0	3	
Total Volume	2	14	1	17	15	10	3	28	6	8	7	21	4	10	3	17	
% App. Total	11.8	82.4	5.9		53.6	35.7	10.7		28.6	38.1	33.3		23.5	58.8	17.6		
PHF	.500	.583	.250	.708	.750	.500	.750	.700	.375	.667	.583	.750	.333	.500	.375	.472	

3.1-639

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Milliken Avenue Southbound					Jurupa Street Westbound					Milliken Avenue Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	13	3	1	17	6	13	0	0	19	2	16	8	3	26	4	15	2	0	21	4	83	87
04:15 PM	5	6	0	0	11	5	9	1	0	15	9	18	12	3	39	3	14	1	0	18	3	83	86
04:30 PM	1	6	1	1	8	6	15	1	1	22	0	11	6	1	17	3	18	1	0	22	3	69	72
04:45 PM	6	16	1	1	23	5	15	0	0	20	1	4	8	2	13	3	10	2	2	15	5	71	76
Total	13	41	5	3	59	22	52	2	1	76	12	49	34	9	95	13	57	6	2	76	15	306	321
05:00 PM	5	6	0	0	11	4	18	2	0	24	0	10	11	4	21	3	17	1	0	21	4	77	81
05:15 PM	2	9	0	0	11	3	10	2	0	15	0	13	5	1	18	6	9	3	1	18	2	62	64
05:30 PM	1	4	2	2	7	8	17	3	1	28	3	12	6	5	21	3	14	2	2	19	10	75	85
05:45 PM	0	9	1	0	10	8	12	1	0	21	0	16	16	9	32	3	15	3	1	21	10	84	94
Total	8	28	3	2	39	23	57	8	1	88	3	51	38	19	92	15	55	9	4	79	26	298	324
Grand Total	21	69	8	5	98	45	109	10	2	164	15	100	72	28	187	28	112	15	6	155	41	604	645
Apprch %	21.4	70.4	8.2			27.4	66.5	6.1			8	53.5	38.5			18.1	72.3	9.7					
Total %	3.5	11.4	1.3		16.2	7.5	18	1.7		27.2	2.5	16.6	11.9		31	4.6	18.5	2.5		25.7	6.4	93.6	

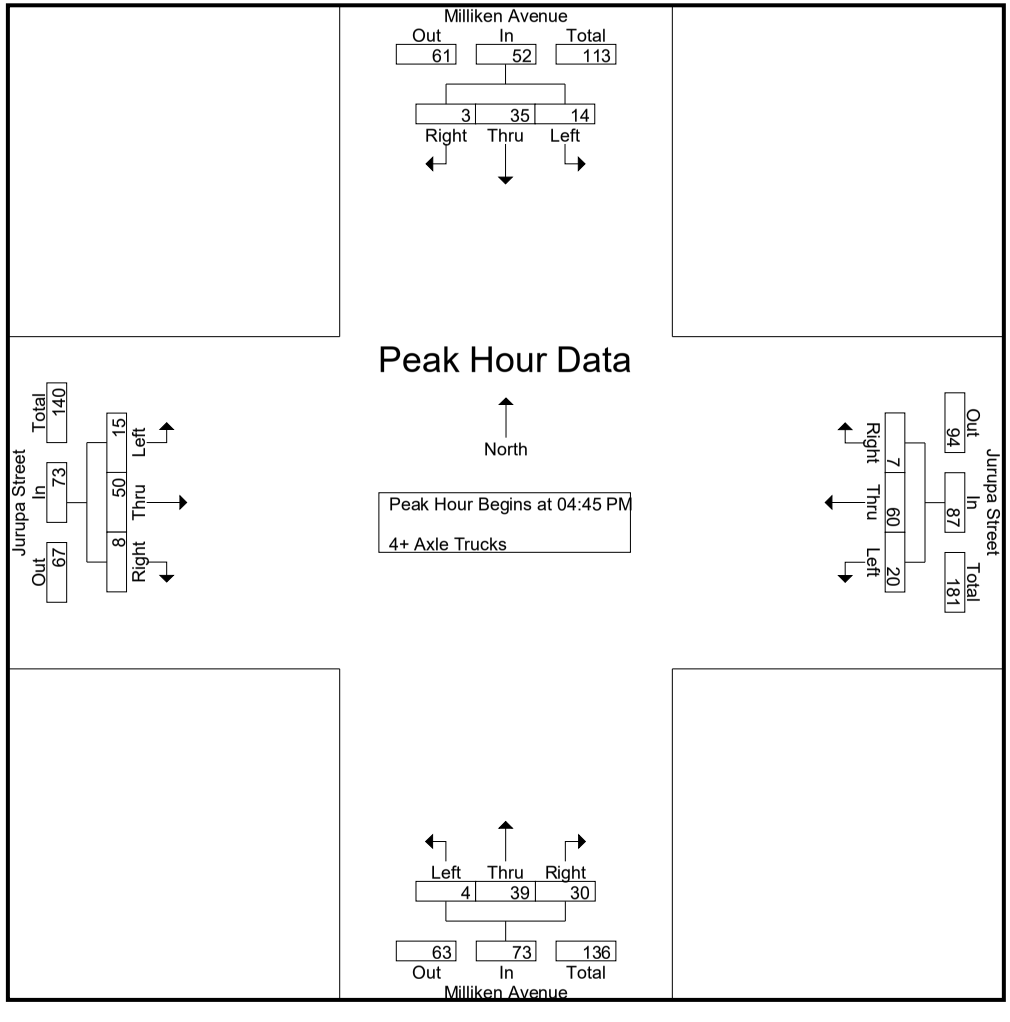
3.1-640

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	**6**	**16**	1	**23**	5	15	0	20	1	4	8	13	3	10	2	15	71
05:00 PM	5	6	0	11	4	**18**	2	24	0	10	**11**	**21**	3	**17**	1	**21**	**77**
05:15 PM	2	9	0	11	3	10	2	15	0	**13**	5	18	**6**	9	**3**	18	62
05:30 PM	1	4	**2**	7	**8**	17	**3**	**28**	**3**	12	6	21	3	14	2	19	75
Total Volume	14	35	3	52	20	60	7	87	4	39	30	73	15	50	8	73	285
% App. Total	26.9	67.3	5.8		23	69	8		5.5	53.4	41.1		20.5	68.5	11		
PHF	.583	.547	.375	.565	.625	.833	.583	.777	.333	.750	.682	.869	.625	.735	.667	.869	.925

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Jurupa Street
Weather: Clear

File Name : 22_ONT_Mill_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Jurupa Street Westbound				Milliken Avenue Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	**6**	**16**	1	**23**	5	15	0	20	1	4	8	13	3	10	2	15	
+15 mins.	5	6	0	11	4	**18**	2	24	0	10	**11**	**21**	3	**17**	1	**21**	
+30 mins.	2	9	0	11	3	10	2	15	0	**13**	5	18	**6**	9	**3**	18	
+45 mins.	1	4	**2**	7	**8**	17	**3**	**28**	**3**	12	6	21	3	14	2	19	
Total Volume	14	35	3	52	20	60	7	87	4	39	30	73	15	50	8	73	
% App. Total	26.9	67.3	5.8		23	69	8		5.5	53.4	41.1		20.5	68.5	11		
PHF	.583	.547	.375	.565	.625	.833	.583	.777	.333	.750	.682	.869	.625	.735	.667	.869	

Location: Ontario
N/S: Milliken Avenue
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Milliken Avenue	East Leg Jurupa Street	South Leg Milliken Avenue	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	1	0	0	1	2
7:30 AM	0	1	1	0	2
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	1	2	1	1	5

	North Leg Milliken Avenue	East Leg Jurupa Street	South Leg Milliken Avenue	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	1	0	1
4:45 PM	0	0	1	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	2	0	2

Location: Ontario
N/S: Milliken Avenue
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Milliken Avenue			Westbound Jurupa Street			Northbound Milliken Avenue			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Milliken Avenue			Westbound Jurupa Street			Northbound Milliken Avenue			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Milliken Avenue Southbound					Mission Boulevard Westbound					Milliken Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	16	89	70	0	175	3	2	25	9	30	91	156	2	0	249	36	0	12	2	48	11	502	513
07:15 AM	12	76	68	0	156	3	1	35	10	39	82	165	5	3	252	35	0	4	2	39	15	486	501
07:30 AM	12	79	67	0	158	4	2	42	6	48	71	224	4	0	299	27	0	6	1	33	7	538	545
07:45 AM	10	81	78	0	169	3	2	55	9	60	85	256	1	0	342	61	1	12	6	74	15	645	660
Total	50	325	283	0	658	13	7	157	34	177	329	801	12	3	1142	159	1	34	11	194	48	2171	2219
08:00 AM	18	105	72	0	195	2	1	46	18	49	67	257	3	0	327	27	0	9	0	36	18	607	625
08:15 AM	19	73	57	0	149	3	1	39	13	43	50	231	2	0	283	34	0	8	1	42	14	517	531
08:30 AM	15	85	47	0	147	3	4	39	20	46	63	241	2	1	306	30	1	10	1	41	22	540	562
08:45 AM	19	92	49	0	160	5	0	28	16	33	39	224	1	0	264	53	1	6	0	60	16	517	533
Total	71	355	225	0	651	13	6	152	67	171	219	953	8	1	1180	144	2	33	2	179	70	2181	2251
Grand Total	121	680	508	0	1309	26	13	309	101	348	548	1754	20	4	2322	303	3	67	13	373	118	4352	4470
Apprch %	9.2	51.9	38.8			7.5	3.7	88.8			23.6	75.5	0.9			81.2	0.8	18					
Total %	2.8	15.6	11.7		30.1	0.6	0.3	7.1		8	12.6	40.3	0.5		53.4	7	0.1	1.5		8.6	2.6	97.4	
Passenger Vehicles	70	427	406		903	15	7	267		383	513	1501	15		2033	227	2	57		297	0	0	3616
% Passenger Vehicles	57.9	62.8	79.9	0	69	57.7	53.8	86.4	93.1	85.3	93.6	85.6	75	100	87.4	74.9	66.7	85.1	84.6	76.9	0	0	80.9
Large 2 Axle Vehicles	5	40	32		77	1	1	5		11	11	50	0		61	22	1	0		23	0	0	172
% Large 2 Axle Vehicles	4.1	5.9	6.3	0	5.9	3.8	7.7	1.6	4	2.4	2	2.9	0	0	2.6	7.3	33.3	0	0	6	0	0	3.8
3 Axle Vehicles	10	29	16		55	2	1	9		14	3	54	1		58	16	0	2		18	0	0	145
% 3 Axle Vehicles	8.3	4.3	3.1	0	4.2	7.7	7.7	2.9	2	3.1	0.5	3.1	5	0	2.5	5.3	0	3	0	4.7	0	0	3.2
4+ Axle Trucks	36	184	54		274	8	4	28		41	21	149	4		174	38	0	8		48	0	0	537
% 4+ Axle Trucks	29.8	27.1	10.6	0	20.9	30.8	30.8	9.1	1	9.1	3.8	8.5	20	0	7.5	12.5	0	11.9	15.4	12.4	0	0	12

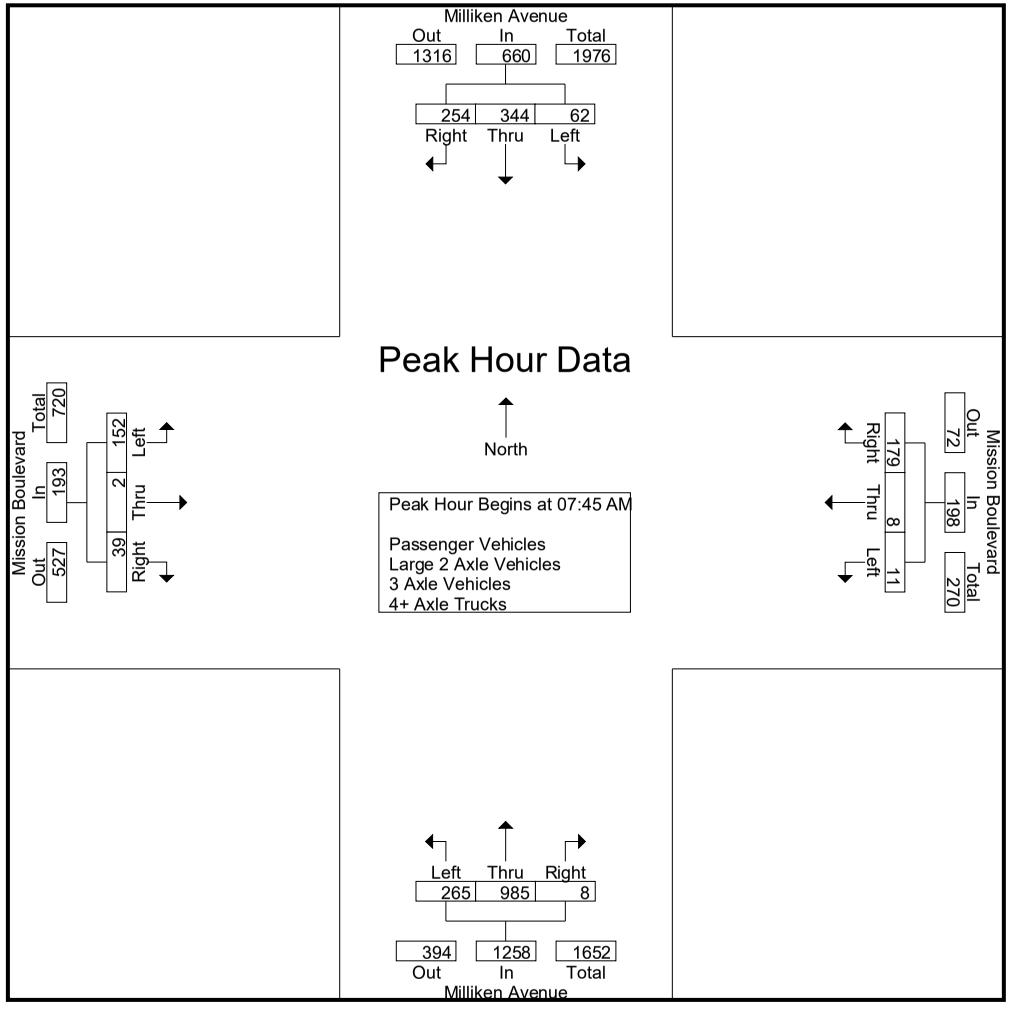
3.1-645

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	10	81	**78**	169	**3**	2	**55**	**60**	**85**	256	1	**342**	**61**	**1**	**12**	**74**	**645**
08:00 AM	18	**105**	72	**195**	2	1	46	49	67	**257**	**3**	327	27	0	9	36	607
08:15 AM	**19**	73	57	149	3	1	39	43	50	231	2	283	34	0	8	42	517
08:30 AM	15	85	47	147	3	**4**	39	46	63	241	2	306	30	1	10	41	540
Total Volume	62	344	254	660	11	8	179	198	265	985	8	1258	152	2	39	193	2309
% App. Total	9.4	52.1	38.5		5.6	4	90.4		21.1	78.3	0.6		78.8	1	20.2		
PHF	.816	.819	.814	.846	.917	.500	.814	.825	.779	.958	.667	.920	.623	.500	.813	.652	.895

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-646

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:15 AM				07:30 AM				07:45 AM				07:00 AM				
+0 mins.	12	76	68	156	**4**	**2**	42	48	**85**	256	1	**342**	36	0	**12**	48	
+15 mins.	12	79	67	158	3	2	**55**	**60**	67	**257**	**3**	327	35	0	4	39	
+30 mins.	10	81	**78**	169	2	1	46	49	50	231	2	283	27	0	6	33	
+45 mins.	**18**	**105**	72	**195**	3	1	39	43	63	241	2	306	**61**	**1**	12	**74**	
Total Volume	52	341	285	678	12	6	182	200	265	985	8	1258	159	1	34	194	
% App. Total	7.7	50.3	42		6	3	91		21.1	78.3	0.6		82	0.5	17.5		
PHF	.722	.812	.913	.869	.750	.750	.827	.833	.779	.958	.667	.920	.652	.250	.708	.655	

3.1-647

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Milliken Avenue Southbound					Mission Boulevard Westbound					Milliken Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	9	51	63	0	123	2	2	22	9	26	84	136	2	0	222	31	0	10	2	41	11	412	423
07:15 AM	11	47	56	0	114	2	1	29	7	32	80	127	5	3	212	26	0	3	2	29	12	387	399
07:30 AM	6	46	54	0	106	1	1	38	6	40	69	193	3	0	265	23	0	6	1	29	7	440	447
07:45 AM	6	52	65	0	123	1	1	47	8	49	83	235	1	0	319	49	1	10	4	60	12	551	563
Total	32	196	238	0	466	6	5	136	30	147	316	691	11	3	1018	129	1	29	9	159	42	1790	1832
08:00 AM	7	70	55	0	132	1	0	39	17	40	60	220	2	0	282	18	0	8	0	26	17	480	497
08:15 AM	12	40	43	0	95	2	0	36	13	38	46	201	1	0	248	27	0	7	1	34	14	415	429
08:30 AM	7	57	35	0	99	2	2	33	18	37	57	201	1	1	259	21	1	10	1	32	20	427	447
08:45 AM	12	64	35	0	111	4	0	23	16	27	34	188	0	0	222	32	0	3	0	35	16	395	411
Total	38	231	168	0	437	9	2	131	64	142	197	810	4	1	1011	98	1	28	2	127	67	1717	1784
Grand Total	70	427	406	0	903	15	7	267	94	289	513	1501	15	4	2029	227	2	57	11	286	109	3507	3616
Apprch %	7.8	47.3	45			5.2	2.4	92.4			25.3	74	0.7			79.4	0.7	19.9					
Total %	2	12.2	11.6		25.7	0.4	0.2	7.6		8.2	14.6	42.8	0.4		57.9	6.5	0.1	1.6		8.2	3	97	

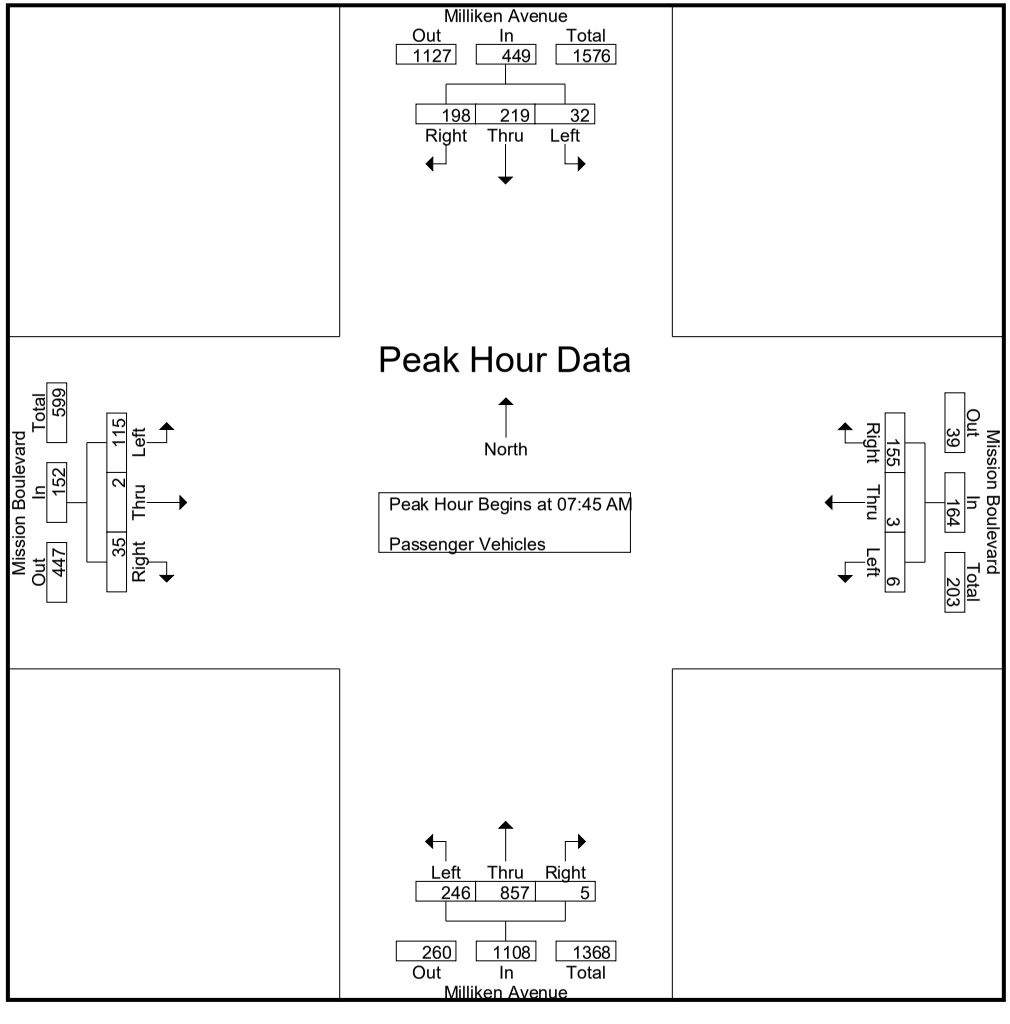
03.1-648

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	6	52	**65**	123	1	1	**47**	**49**	**83**	**235**	1	**319**	**49**	**1**	**10**	**60**	**551**
08:00 AM	7	**70**	55	**132**	1	0	39	40	60	220	**2**	282	18	0	8	26	480
08:15 AM	**12**	40	43	95	**2**	0	36	38	46	201	1	248	27	0	7	34	415
08:30 AM	7	57	35	99	2	**2**	33	37	57	201	1	259	21	1	10	32	427
Total Volume	32	219	198	449	6	3	155	164	246	857	5	1108	115	2	35	152	1873
% App. Total	7.1	48.8	44.1		3.7	1.8	94.5		22.2	77.3	0.5		75.7	1.3	23		
PHF	.667	.782	.762	.850	.750	.375	.824	.837	.741	.912	.625	.868	.587	.500	.875	.633	.850

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	6	52	**65**	123	1	1	**47**	**49**	**83**	**235**	1	**319**	**49**	**1**	**10**	**60**	
+15 mins.	7	**70**	55	**132**	1	0	39	40	60	220	**2**	282	18	0	8	26	
+30 mins.	**12**	40	43	95	**2**	0	36	38	46	201	1	248	27	0	7	34	
+45 mins.	7	57	35	99	2	**2**	33	37	57	201	1	259	21	1	10	32	
Total Volume	32	219	198	449	6	3	155	164	246	857	5	1108	115	2	35	152	
% App. Total	7.1	48.8	44.1		3.7	1.8	94.5		22.2	77.3	0.5		75.7	1.3	23		
PHF	.667	.782	.762	.850	.750	.375	.824	.837	.741	.912	.625	.868	.587	.500	.875	.633	

3.1-650

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021

Groups Printed- Large 2 Axle Vehicles

	Milliken Avenue Southbound					Mission Boulevard Westbound					Milliken Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	11	1	0	12	0	0	0	0	0	4	5	0	0	9	0	0	0	0	0	0	21	21
07:15 AM	0	2	3	0	5	0	0	1	1	1	1	6	0	0	7	3	0	0	0	3	1	16	17
07:30 AM	0	5	3	0	8	0	0	0	0	0	1	7	0	0	8	0	0	0	0	0	0	16	16
07:45 AM	0	3	5	0	8	0	0	2	1	2	0	5	0	0	5	2	0	0	0	2	1	17	18
Total	0	21	12	0	33	0	0	3	2	3	6	23	0	0	29	5	0	0	0	5	2	70	72
08:00 AM	4	7	6	0	17	0	1	1	1	2	2	9	0	0	11	5	0	0	0	5	1	35	36
08:15 AM	1	4	6	0	11	0	0	0	0	0	1	2	0	0	3	2	0	0	0	2	0	16	16
08:30 AM	0	5	3	0	8	0	0	1	1	1	1	6	0	0	7	2	0	0	0	2	1	18	19
08:45 AM	0	3	5	0	8	1	0	0	0	1	1	10	0	0	11	8	1	0	0	9	0	29	29
Total	5	19	20	0	44	1	1	2	2	4	5	27	0	0	32	17	1	0	0	18	2	98	100
Grand Total	5	40	32	0	77	1	1	5	4	7	11	50	0	0	61	22	1	0	0	23	4	168	172
Apprch %	6.5	51.9	41.6			14.3	14.3	71.4			18	82	0			95.7	4.3	0					
Total %	3	23.8	19		45.8	0.6	0.6	3		4.2	6.5	29.8	0		36.3	13.1	0.6	0		13.7	2.3	97.7	

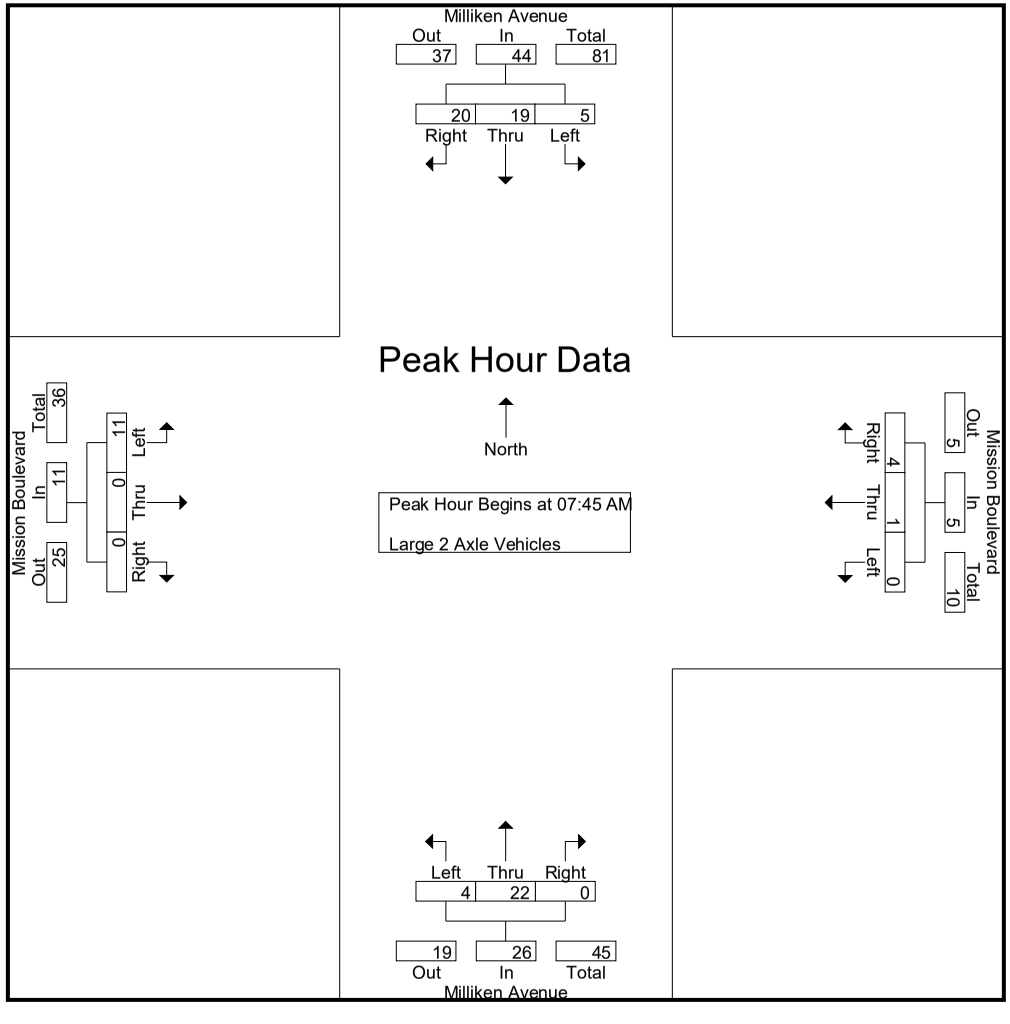
3.1-651

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	3	5	8	0	0	**2**	**2**	0	5	0	5	2	0	0	2	17
08:00 AM	**4**	**7**	**6**	**17**	0	**1**	1	2	**2**	**9**	0	**11**	**5**	0	0	**5**	**35**
08:15 AM	1	4	6	11	0	0	0	0	1	2	0	3	2	0	0	2	16
08:30 AM	0	5	3	8	0	0	1	1	1	6	0	7	2	0	0	2	18
Total Volume	5	19	20	44	0	1	4	5	4	22	0	26	11	0	0	11	86
% App. Total	11.4	43.2	45.5		0	20	80		15.4	84.6	0		100	0	0		
PHF	.313	.679	.833	.647	.000	.250	.500	.625	.500	.611	.000	.591	.550	.000	.000	.550	.614

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	3	5	8	0	0	**2**	**2**	0	5	0	5	2	0	0	2	
+15 mins.	**4**	**7**	**6**	**17**	0	**1**	1	2	**2**	**9**	0	**11**	**5**	0	0	**5**	
+30 mins.	1	4	6	11	0	0	0	0	1	2	0	3	2	0	0	2	
+45 mins.	0	5	3	8	0	0	1	1	1	6	0	7	2	0	0	2	
Total Volume	5	19	20	44	0	1	4	5	4	22	0	26	11	0	0	11	
% App. Total	11.4	43.2	45.5		0	20	80		15.4	84.6	0		100	0	0		
PHF	.313	.679	.833	.647	.000	.250	.500	.625	.500	.611	.000	.591	.550	.000	.000	.550	

3.1-653

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Milliken Avenue Southbound					Mission Boulevard Westbound					Milliken Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	2	4	2	0	8	0	0	0	0	0	1	6	0	0	7	3	0	1	0	4	0	19	19
07:15 AM	0	5	2	0	7	0	0	1	1	1	0	11	0	0	11	1	0	1	0	2	1	21	22
07:30 AM	1	1	1	0	3	0	0	2	0	2	1	10	1	0	12	1	0	0	0	1	0	18	18
07:45 AM	0	1	2	0	3	1	1	2	0	4	0	6	0	0	6	2	0	0	0	2	0	15	15
Total	3	11	7	0	21	1	1	5	1	7	2	33	1	0	36	7	0	2	0	9	1	73	74
08:00 AM	3	2	3	0	8	1	0	3	0	4	1	4	0	0	5	2	0	0	0	2	0	19	19
08:15 AM	1	7	2	0	10	0	0	0	0	0	0	5	0	0	5	2	0	0	0	2	0	17	17
08:30 AM	2	7	2	0	11	0	0	0	1	0	0	8	0	0	8	2	0	0	0	2	1	21	22
08:45 AM	1	2	2	0	5	0	0	1	0	1	0	4	0	0	4	3	0	0	0	3	0	13	13
Total	7	18	9	0	34	1	0	4	1	5	1	21	0	0	22	9	0	0	0	9	1	70	71
Grand Total	10	29	16	0	55	2	1	9	2	12	3	54	1	0	58	16	0	2	0	18	2	143	145
Apprch %	18.2	52.7	29.1			16.7	8.3	75			5.2	93.1	1.7			88.9	0	11.1					
Total %	7	20.3	11.2		38.5	1.4	0.7	6.3		8.4	2.1	37.8	0.7		40.6	11.2	0	1.4		12.6	1.4	98.6	

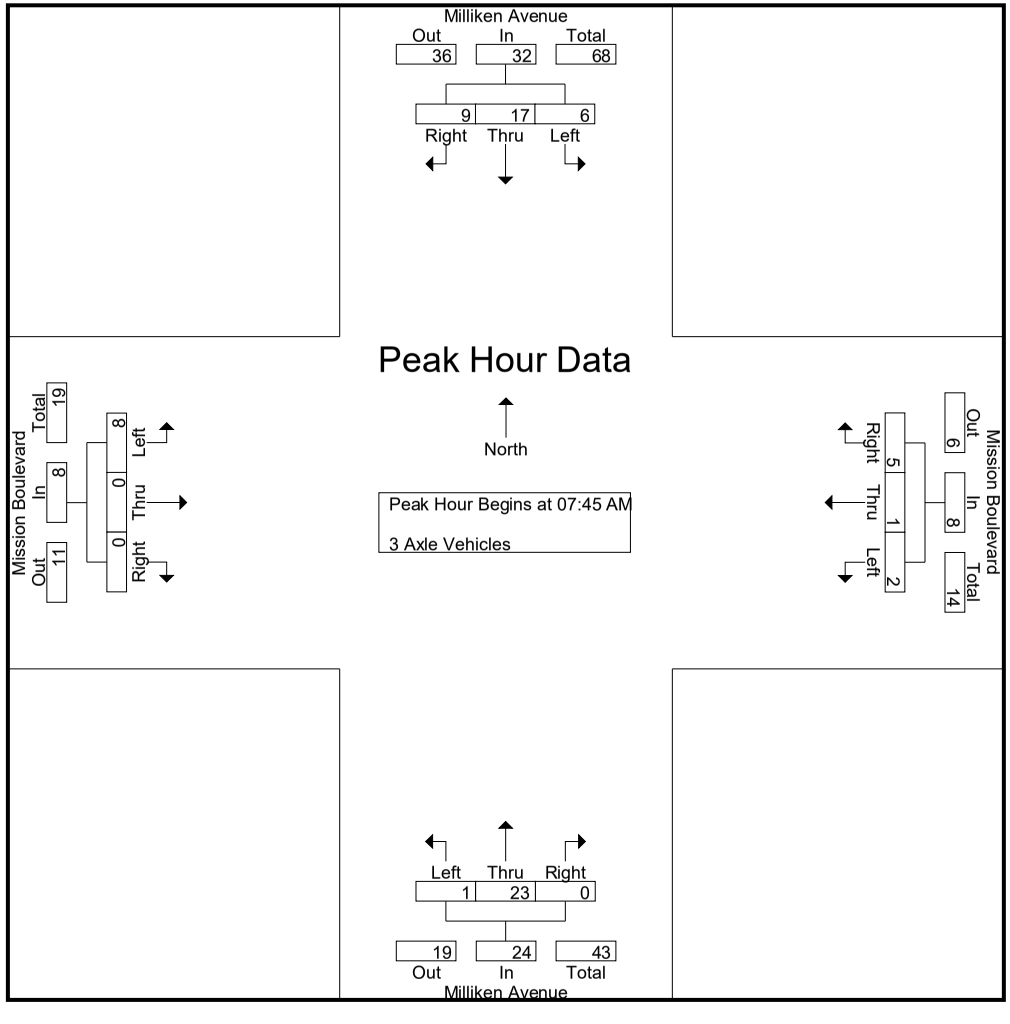
3.1-654

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	1	2	3	**1**	**1**	2	**4**	0	6	0	6	**2**	0	0	**2**	15
08:00 AM	**3**	2	**3**	8	1	0	**3**	4	**1**	4	0	5	2	0	0	2	19
08:15 AM	1	**7**	2	10	0	0	0	0	0	5	0	5	2	0	0	2	17
08:30 AM	2	7	2	**11**	0	0	0	0	0	**8**	0	**8**	2	0	0	2	**21**
Total Volume	6	17	9	32	2	1	5	8	1	23	0	24	8	0	0	8	72
% App. Total	18.8	53.1	28.1		25	12.5	62.5		4.2	95.8	0		100	0	0		
PHF	.500	.607	.750	.727	.500	.250	.417	.500	.250	.719	.000	.750	1.00	.000	.000	1.00	.857

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	0	1	2	3	**1**	**1**	2	**4**	0	6	0	6	**2**	0	0	**2**	
+15 mins.	**3**	2	**3**	8	1	0	**3**	4	**1**	4	0	5	2	0	0	2	
+30 mins.	1	**7**	2	10	0	0	0	0	0	5	0	5	2	0	0	2	
+45 mins.	2	7	2	**11**	0	0	0	0	0	**8**	0	**8**	2	0	0	2	
Total Volume	6	17	9	32	2	1	5	8	1	23	0	24	8	0	0	8	
% App. Total	18.8	53.1	28.1		25	12.5	62.5		4.2	95.8	0		100	0	0		
PHF	.500	.607	.750	.727	.500	.250	.417	.500	.250	.719	.000	.750	1.000	.000	.000	1.000	

3.1-656

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Milliken Avenue Southbound					Mission Boulevard Westbound					Milliken Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	5	23	4	0	32	1	0	3	0	4	2	9	0	0	11	2	0	1	0	3	0	50	50
07:15 AM	1	22	7	0	30	1	0	4	1	5	1	21	0	0	22	5	0	0	0	5	1	62	63
07:30 AM	5	27	9	0	41	3	1	2	0	6	0	14	0	0	14	3	0	0	0	3	0	64	64
07:45 AM	4	25	6	0	35	1	0	4	0	5	2	10	0	0	12	8	0	2	2	10	2	62	64
Total	15	97	26	0	138	6	1	13	1	20	5	54	0	0	59	18	0	3	2	21	3	238	241
08:00 AM	4	26	8	0	38	0	0	3	0	3	4	24	1	0	29	2	0	1	0	3	0	73	73
08:15 AM	5	22	6	0	33	1	1	3	0	5	3	23	1	0	27	3	0	1	0	4	0	69	69
08:30 AM	6	16	7	0	29	1	2	5	0	8	5	26	1	0	32	5	0	0	0	5	0	74	74
08:45 AM	6	23	7	0	36	0	0	4	0	4	4	22	1	0	27	10	0	3	0	13	0	80	80
Total	21	87	28	0	136	2	3	15	0	20	16	95	4	0	115	20	0	5	0	25	0	296	296
Grand Total	36	184	54	0	274	8	4	28	1	40	21	149	4	0	174	38	0	8	2	46	3	534	537
Apprch %	13.1	67.2	19.7			20	10	70			12.1	85.6	2.3			82.6	0	17.4					
Total %	6.7	34.5	10.1		51.3	1.5	0.7	5.2		7.5	3.9	27.9	0.7		32.6	7.1	0	1.5		8.6	0.6	99.4	

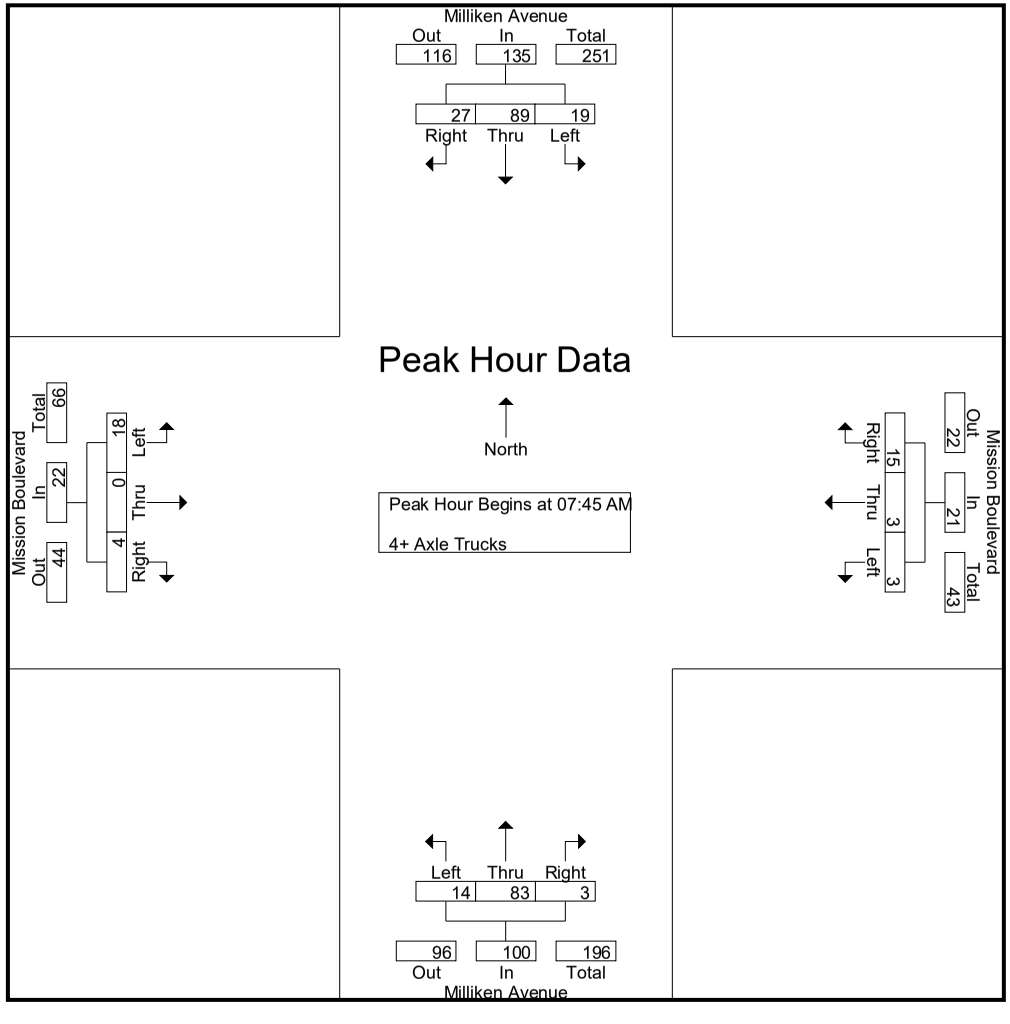
CJ1-657

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	4	25	6	35	**1**	0	4	5	2	10	0	12	**8**	0	**2**	**10**	62
08:00 AM	4	**26**	**8**	**38**	0	0	3	3	4	24	**1**	29	2	0	1	3	73
08:15 AM	5	22	6	33	1	1	3	5	3	23	1	27	3	0	1	4	69
08:30 AM	**6**	16	7	29	1	**2**	**5**	**8**	**5**	**26**	1	**32**	5	0	0	5	**74**
Total Volume	19	89	27	135	3	3	15	21	14	83	3	100	18	0	4	22	278
% App. Total	14.1	65.9	20		14.3	14.3	71.4		14	83	3		81.8	0	18.2		
PHF	.792	.856	.844	.888	.750	.375	.750	.656	.700	.798	.750	.781	.563	.000	.500	.550	.939

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:45 AM to 08:30 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:45 AM				07:45 AM				07:45 AM				07:45 AM				
+0 mins.	4	25	6	35	**1**	0	4	5	2	10	0	12	**8**	0	**2**	**10**	
+15 mins.	4	**26**	**8**	**38**	0	0	3	3	4	24	**1**	29	2	0	1	3	
+30 mins.	5	22	6	33	1	1	3	5	3	23	1	27	3	0	1	4	
+45 mins.	**6**	16	7	29	1	**2**	**5**	**8**	**5**	**26**	1	**32**	5	0	0	5	
Total Volume	19	89	27	135	3	3	15	21	14	83	3	100	18	0	4	22	
% App. Total	14.1	65.9	20		14.3	14.3	71.4		14	83	3		81.8	0	18.2		
PHF	.792	.856	.844	.888	.750	.375	.750	.656	.700	.798	.750	.781	.563	.000	.500	.550	

3.1-659

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Milliken Avenue Southbound					Mission Boulevard Westbound					Milliken Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	45	225	92	0	362	4	1	25	9	30	37	133	3	0	173	125	1	14	0	140	9	705	714
04:15 PM	49	300	74	0	423	3	2	22	12	27	35	161	5	0	201	112	0	19	5	131	17	782	799
04:30 PM	50	288	81	0	419	5	0	24	8	29	50	159	3	0	212	89	1	31	0	121	8	781	789
04:45 PM	47	258	82	0	387	2	2	29	11	33	47	149	3	0	199	122	0	14	3	136	14	755	769
Total	191	1071	329	0	1591	14	5	100	40	119	169	602	14	0	785	448	2	78	8	528	48	3023	3071
05:00 PM	50	263	75	0	388	4	2	29	11	35	30	157	2	1	189	121	0	6	1	127	13	739	752
05:15 PM	68	288	86	0	442	2	0	21	5	23	34	194	2	0	230	97	0	21	3	118	8	813	821
05:30 PM	57	274	85	0	416	2	1	28	11	31	42	188	0	0	230	61	0	25	2	86	13	763	776
05:45 PM	33	251	64	0	348	2	1	18	5	21	62	183	1	0	246	76	0	12	0	88	5	703	708
Total	208	1076	310	0	1594	10	4	96	32	110	168	722	5	1	895	355	0	64	6	419	39	3018	3057
Grand Total	399	2147	639	0	3185	24	9	196	72	229	337	1324	19	1	1680	803	2	142	14	947	87	6041	6128
Apprch %	12.5	67.4	20.1			10.5	3.9	85.6			20.1	78.8	1.1			84.8	0.2	15					
Total %	6.6	35.5	10.6		52.7	0.4	0.1	3.2		3.8	5.6	21.9	0.3		27.8	13.3	0	2.4		15.7	1.4	98.6	
Passenger Vehicles	358	1936	517		2811	22	8	154		250	317	1045	8		1370	677	2	131		823	0	0	5254
% Passenger Vehicles	89.7	90.2	80.9	0	88.3	91.7	88.9	78.6	91.7	83.1	94.1	78.9	42.1	0	81.5	84.3	100	92.3	92.9	85.6	0	0	85.7
Large 2 Axle Vehicles	5	50	44		99	1	0	6		10	8	56	1		65	31	0	3		34	0	0	208
% Large 2 Axle Vehicles	1.3	2.3	6.9	0	3.1	4.2	0	3.1	4.2	3.3	2.4	4.2	5.3	0	3.9	3.9	0	2.1	0	3.5	0	0	3.4
3 Axle Vehicles	12	38	26		76	0	1	11		15	4	43	0		47	27	0	2		30	0	0	168
% 3 Axle Vehicles	3	1.8	4.1	0	2.4	0	11.1	5.6	4.2	5	1.2	3.2	0	0	2.8	3.4	0	1.4	7.1	3.1	0	0	2.7
4+ Axle Trucks	24	123	52		199	1	0	25		26	8	180	10		199	68	0	6		74	0	0	498
% 4+ Axle Trucks	6	5.7	8.1	0	6.2	4.2	0	12.8	0	8.6	2.4	13.6	52.6	100	11.8	8.5	0	4.2	0	7.7	0	0	8.1

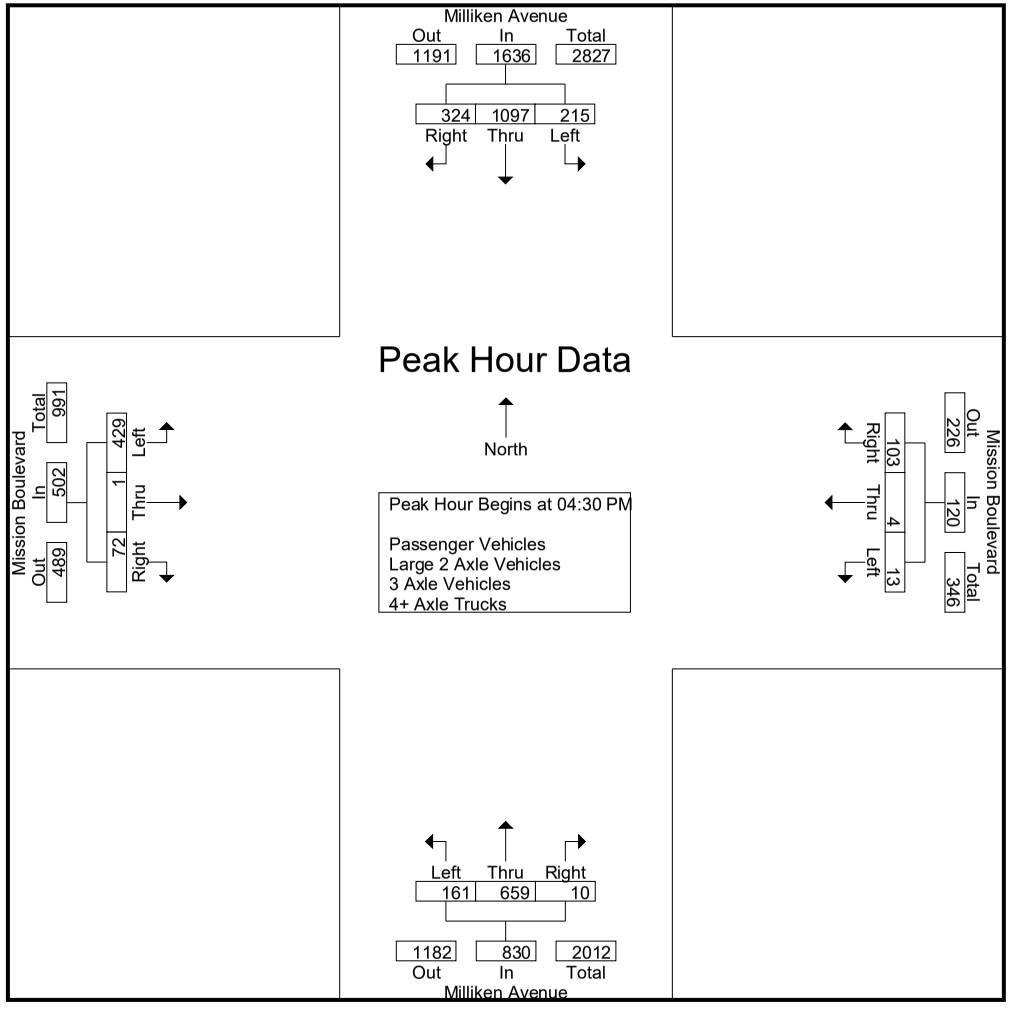
3.1-660

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	50	**288**	81	419	**5**	0	24	29	**50**	159	**3**	212	89	**1**	**31**	121	781
04:45 PM	47	258	82	387	2	**2**	**29**	33	47	149	3	199	**122**	0	14	**136**	755
05:00 PM	50	263	75	388	4	2	29	**35**	30	157	2	189	121	0	6	127	739
05:15 PM	**68**	288	**86**	**442**	2	0	21	23	34	**194**	2	**230**	97	0	21	118	**813**
Total Volume	215	1097	324	1636	13	4	103	120	161	659	10	830	429	1	72	502	3088
% App. Total	13.1	67.1	19.8		10.8	3.3	85.8		19.4	79.4	1.2		85.5	0.2	14.3		
PHF	.790	.952	.942	.925	.650	.500	.888	.857	.805	.849	.833	.902	.879	.250	.581	.923	.950

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-661

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:15 PM				05:00 PM				04:00 PM				
+0 mins.	50	**288**	81	419	3	**2**	22	27	30	157	**2**	189	**125**	**1**	14	**140**	
+15 mins.	47	258	82	387	**5**	0	24	29	34	**194**	2	230	112	0	19	131	
+30 mins.	50	263	75	388	2	2	**29**	33	42	188	0	230	89	1	**31**	121	
+45 mins.	**68**	288	**86**	**442**	4	2	29	**35**	**62**	183	1	**246**	122	0	14	136	
Total Volume	215	1097	324	1636	14	6	104	124	168	722	5	895	448	2	78	528	
% App. Total	13.1	67.1	19.8		11.3	4.8	83.9		18.8	80.7	0.6		84.8	0.4	14.8		
PHF	.790	.952	.942	.925	.700	.750	.897	.886	.677	.930	.625	.910	.896	.500	.629	.943	

3.1-662

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	Milliken Avenue Southbound					Mission Boulevard Westbound					Milliken Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	36	198	73	0	307	4	1	19	9	24	33	109	0	0	142	108	1	12	0	121	9	594	603
04:15 PM	41	271	60	0	372	3	2	17	11	22	33	116	2	0	151	94	0	18	5	112	16	657	673
04:30 PM	45	267	66	0	378	5	0	17	7	22	46	130	2	0	178	76	1	29	0	106	7	684	691
04:45 PM	42	223	62	0	327	1	2	21	10	24	45	111	2	0	158	102	0	12	2	114	12	623	635
Total	164	959	261	0	1384	13	5	74	37	92	157	466	6	0	629	380	2	71	7	453	44	2558	2602
05:00 PM	43	238	65	0	346	3	1	24	10	28	29	128	0	0	157	101	0	5	1	106	11	637	648
05:15 PM	66	268	76	0	410	2	0	18	5	20	32	159	1	0	192	84	0	20	3	104	8	726	734
05:30 PM	55	250	66	0	371	2	1	25	11	28	39	155	0	0	194	49	0	23	2	72	13	665	678
05:45 PM	30	221	49	0	300	2	1	13	3	16	60	137	1	0	198	63	0	12	0	75	3	589	592
Total	194	977	256	0	1427	9	3	80	29	92	160	579	2	0	741	297	0	60	6	357	35	2617	2652
Grand Total	358	1936	517	0	2811	22	8	154	66	184	317	1045	8	0	1370	677	2	131	13	810	79	5175	5254
Apprch %	12.7	68.9	18.4			12	4.3	83.7			23.1	76.3	0.6			83.6	0.2	16.2					
Total %	6.9	37.4	10		54.3	0.4	0.2	3		3.6	6.1	20.2	0.2		26.5	13.1	0	2.5		15.7	1.5	98.5	

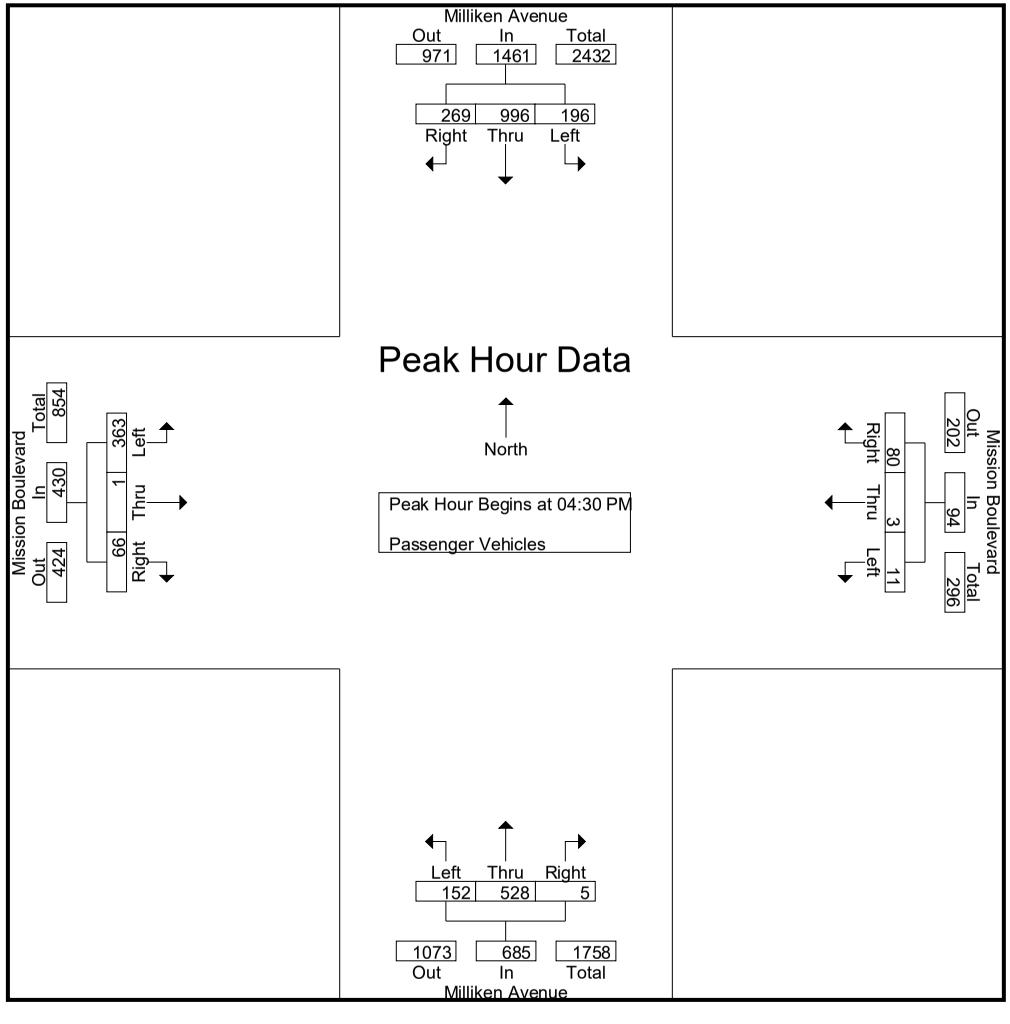
3.1-663

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	45	267	66	378	**5**	0	17	22	**46**	130	**2**	178	76	**1**	**29**	106	684
04:45 PM	42	223	62	327	1	**2**	21	24	45	111	2	158	**102**	0	12	**114**	623
05:00 PM	43	238	65	346	3	1	**24**	**28**	29	128	0	157	101	0	5	106	637
05:15 PM	**66**	**268**	**76**	**410**	2	0	18	20	32	**159**	1	**192**	84	0	20	104	**726**
Total Volume	196	996	269	1461	11	3	80	94	152	528	5	685	363	1	66	430	2670
% App. Total	13.4	68.2	18.4		11.7	3.2	85.1		22.2	77.1	0.7		84.4	0.2	15.3		
PHF	.742	.929	.885	.891	.550	.375	.833	.839	.826	.830	.625	.892	.890	.250	.569	.943	.919

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-664

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	45	267	66	378	**5**	0	17	22	**46**	130	**2**	178	76	**1**	**29**	106	
+15 mins.	42	223	62	327	1	**2**	21	24	45	111	2	158	**102**	0	12	**114**	
+30 mins.	43	238	65	346	3	1	**24**	**28**	29	128	0	157	101	0	5	106	
+45 mins.	**66**	**268**	**76**	**410**	2	0	18	20	32	**159**	1	**192**	84	0	20	104	
Total Volume	196	996	269	1461	11	3	80	94	152	528	5	685	363	1	66	430	
% App. Total	13.4	68.2	18.4		11.7	3.2	85.1		22.2	77.1	0.7		84.4	0.2	15.3		
PHF	.742	.929	.885	.891	.550	.375	.833	.839	.826	.830	.625	.892	.890	.250	.569	.943	

3.1-665

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	Milliken Avenue Southbound					Mission Boulevard Westbound					Milliken Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	5	3	0	9	0	0	0	0	0	2	3	0	0	5	5	0	2	0	7	0	21	21
04:15 PM	0	6	6	0	12	0	0	0	0	0	0	13	1	0	14	7	0	0	0	7	0	33	33
04:30 PM	2	4	5	0	11	0	0	3	1	3	1	4	0	0	5	1	0	0	0	1	1	20	21
04:45 PM	1	14	10	0	25	0	0	1	0	1	1	5	0	0	6	3	0	0	0	3	0	35	35
Total	4	29	24	0	57	0	0	4	1	4	4	25	1	0	30	16	0	2	0	18	1	109	110
05:00 PM	0	2	4	0	6	1	0	1	1	2	1	8	0	0	9	7	0	0	0	7	1	24	25
05:15 PM	1	5	4	0	10	0	0	0	0	0	0	9	0	0	9	3	0	1	0	4	0	23	23
05:30 PM	0	5	6	0	11	0	0	0	0	0	1	11	0	0	12	3	0	0	0	3	0	26	26
05:45 PM	0	9	6	0	15	0	0	1	1	1	2	3	0	0	5	2	0	0	0	2	1	23	24
Total	1	21	20	0	42	1	0	2	2	3	4	31	0	0	35	15	0	1	0	16	2	96	98
Grand Total	5	50	44	0	99	1	0	6	3	7	8	56	1	0	65	31	0	3	0	34	3	205	208
Apprch %	5.1	50.5	44.4			14.3	0	85.7			12.3	86.2	1.5			91.2	0	8.8					
Total %	2.4	24.4	21.5		48.3	0.5	0	2.9		3.4	3.9	27.3	0.5		31.7	15.1	0	1.5		16.6	1.4	98.6	

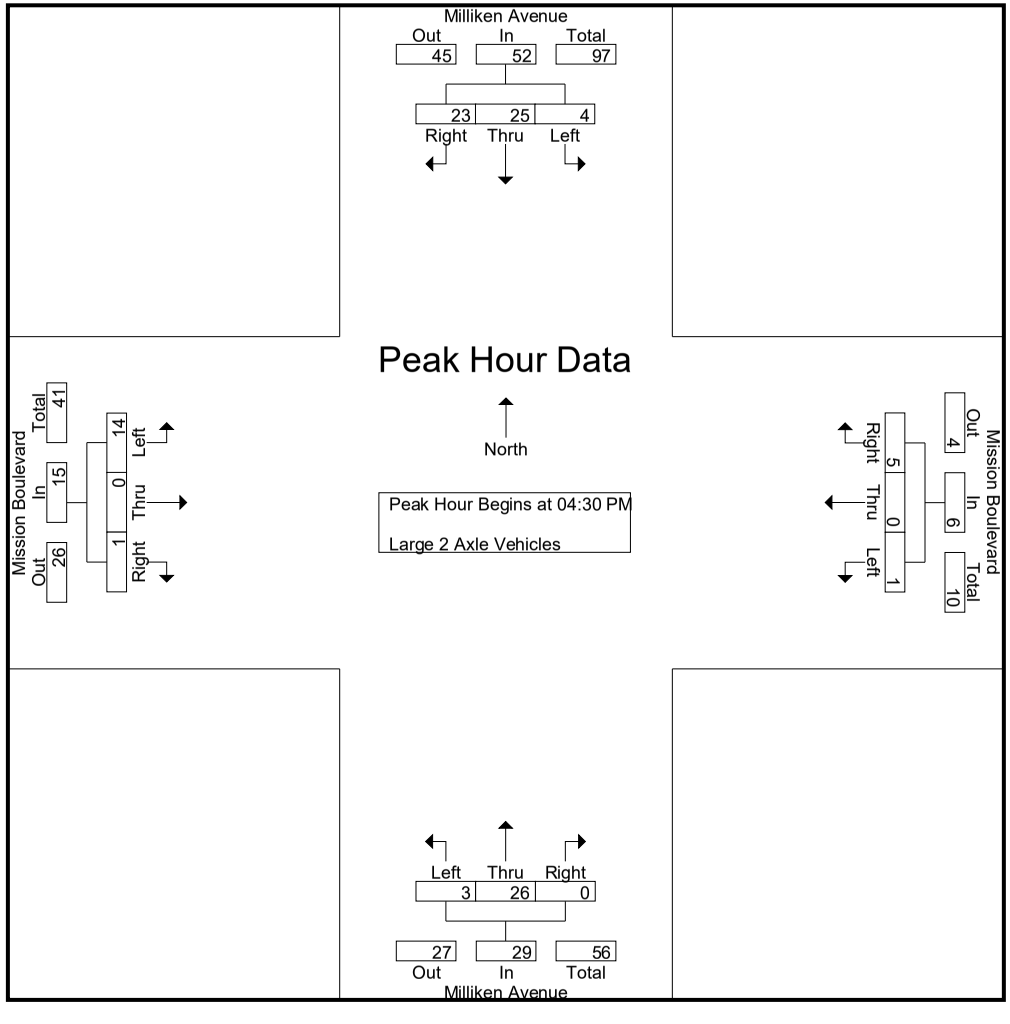
3.1-666

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**2**	4	5	11	0	0	**3**	**3**	**1**	4	0	5	1	0	0	1	20
04:45 PM	1	**14**	**10**	**25**	0	0	1	1	1	5	0	6	3	0	0	3	**35**
05:00 PM	0	2	4	6	**1**	0	1	2	1	8	0	**9**	**7**	0	0	**7**	24
05:15 PM	1	5	4	10	0	0	0	0	0	**9**	0	9	3	0	**1**	4	23
Total Volume	4	25	23	52	1	0	5	6	3	26	0	29	14	0	1	15	102
% App. Total	7.7	48.1	44.2		16.7	0	83.3		10.3	89.7	0		93.3	0	6.7		
PHF	.500	.446	.575	.520	.250	.000	.417	.500	.750	.722	.000	.806	.500	.000	.250	.536	.729

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-667

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**2**	4	5	11	0	0	**3**	**3**	**1**	4	0	5	1	0	0	1	
+15 mins.	1	**14**	**10**	**25**	0	0	1	1	1	5	0	6	3	0	0	3	
+30 mins.	0	2	4	6	**1**	0	1	2	1	8	0	**9**	**7**	0	0	**7**	
+45 mins.	1	5	4	10	0	0	0	0	0	**9**	0	9	3	0	**1**	4	
Total Volume	4	25	23	52	1	0	5	6	3	26	0	29	14	0	1	15	
% App. Total	7.7	48.1	44.2		16.7	0	83.3		10.3	89.7	0		93.3	0	6.7		
PHF	.500	.446	.575	.520	.250	.000	.417	.500	.750	.722	.000	.806	.500	.000	.250	.536	

3.1-668

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	Milliken Avenue Southbound					Mission Boulevard Westbound					Milliken Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	3	4	4	0	11	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	0	15	15
04:15 PM	1	9	7	0	17	0	0	1	1	1	0	4	0	0	4	2	0	0	0	2	1	24	25
04:30 PM	2	4	4	0	10	0	0	1	0	1	2	9	0	0	11	6	0	0	0	6	0	28	28
04:45 PM	2	4	1	0	7	0	0	5	1	5	0	10	0	0	10	4	0	1	1	5	2	27	29
Total	8	21	16	0	45	0	0	8	2	8	2	26	0	0	28	12	0	1	1	13	3	94	97
05:00 PM	1	6	1	0	8	0	1	1	0	2	0	4	0	0	4	4	0	1	0	5	0	19	19
05:15 PM	0	2	4	0	6	0	0	0	0	0	2	5	0	0	7	4	0	0	0	4	0	17	17
05:30 PM	1	5	2	0	8	0	0	0	0	0	0	3	0	0	3	3	0	0	0	3	0	14	14
05:45 PM	2	4	3	0	9	0	0	2	1	2	0	5	0	0	5	4	0	0	0	4	1	20	21
Total	4	17	10	0	31	0	1	3	1	4	2	17	0	0	19	15	0	1	0	16	1	70	71
Grand Total	12	38	26	0	76	0	1	11	3	12	4	43	0	0	47	27	0	2	1	29	4	164	168
Apprch %	15.8	50	34.2			0	8.3	91.7			8.5	91.5	0			93.1	0	6.9					
Total %	7.3	23.2	15.9		46.3	0	0.6	6.7		7.3	2.4	26.2	0		28.7	16.5	0	1.2		17.7	2.4	97.6	

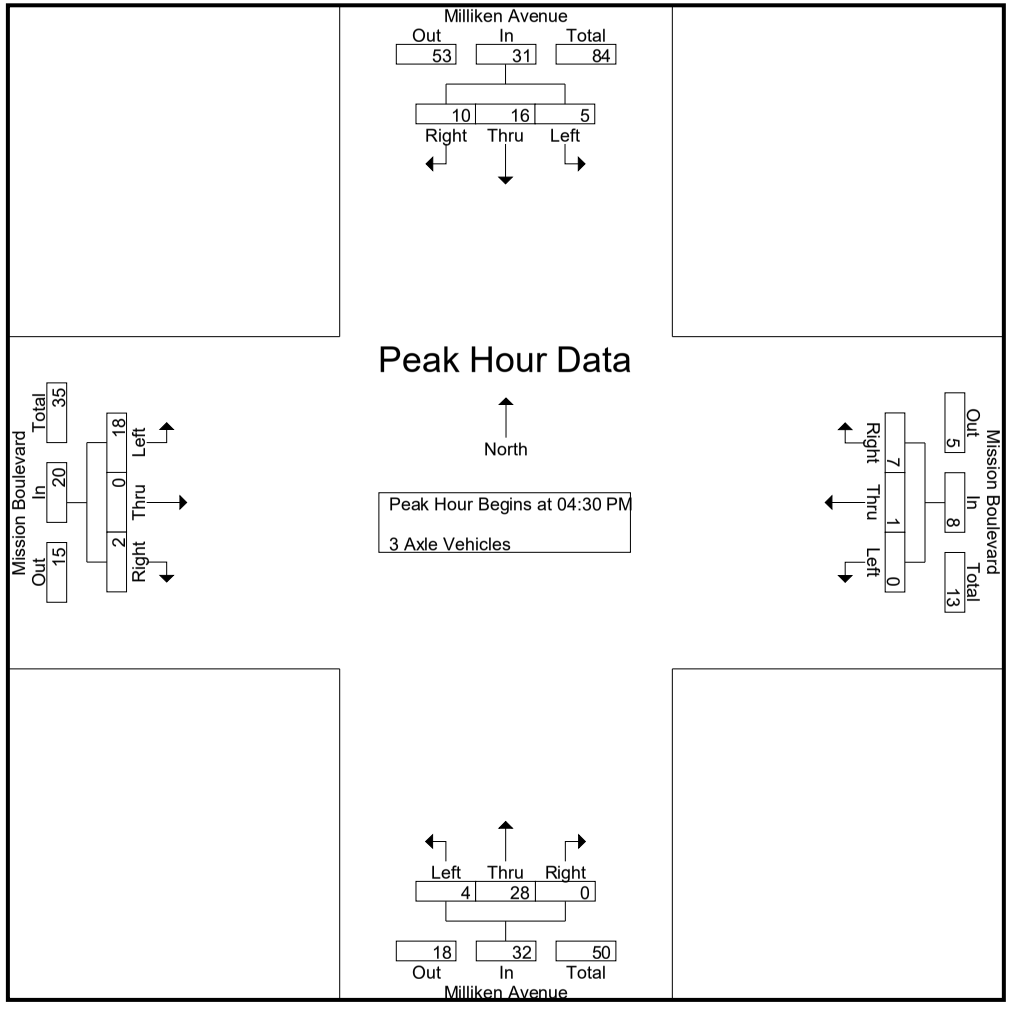
3.1-669

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**2**	4	**4**	**10**	0	0	1	1	**2**	9	0	**11**	**6**	0	0	**6**	**28**
04:45 PM	2	4	1	7	0	0	**5**	**5**	0	**10**	0	10	4	0	**1**	5	27
05:00 PM	1	**6**	1	8	0	**1**	1	2	0	4	0	4	4	0	1	5	19
05:15 PM	0	2	4	6	0	0	0	0	2	5	0	7	4	0	0	4	17
Total Volume	5	16	10	31	0	1	7	8	4	28	0	32	18	0	2	20	91
% App. Total	16.1	51.6	32.3		0	12.5	87.5		12.5	87.5	0		90	0	10		
PHF	.625	.667	.625	.775	.000	.250	.350	.400	.500	.700	.000	.727	.750	.000	.500	.833	.813

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-670

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**2**	4	**4**	**10**	0	0	1	1	**2**	9	0	**11**	**6**	0	0	**6**	
+15 mins.	2	4	1	7	0	0	**5**	**5**	0	**10**	0	10	4	0	**1**	5	
+30 mins.	1	**6**	1	8	0	**1**	1	2	0	4	0	4	4	0	1	5	
+45 mins.	0	2	4	6	0	0	0	0	2	5	0	7	4	0	0	4	
Total Volume	5	16	10	31	0	1	7	8	4	28	0	32	18	0	2	20	
% App. Total	16.1	51.6	32.3		0	12.5	87.5		12.5	87.5	0		90	0	10		
PHF	.625	.667	.625	.775	.000	.250	.350	.400	.500	.700	.000	.727	.750	.000	.500	.833	

3.1-671

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	Milliken Avenue Southbound					Mission Boulevard Westbound					Milliken Avenue Northbound					Mission Boulevard Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	5	18	12	0	35	0	0	5	0	5	2	18	3	0	23	12	0	0	0	12	0	75	75
04:15 PM	7	14	1	0	22	0	0	4	0	4	2	28	2	0	32	9	0	1	0	10	0	68	68
04:30 PM	1	13	6	0	20	0	0	3	0	3	1	16	1	0	18	6	0	2	0	8	0	49	49
04:45 PM	2	17	9	0	28	1	0	2	0	3	1	23	1	0	25	13	0	1	0	14	0	70	70
Total	15	62	28	0	105	1	0	14	0	15	6	85	7	0	98	40	0	4	0	44	0	262	262
05:00 PM	6	17	5	0	28	0	0	3	0	3	0	17	2	1	19	9	0	0	0	9	1	59	60
05:15 PM	1	13	2	0	16	0	0	3	0	3	0	21	1	0	22	6	0	0	0	6	0	47	47
05:30 PM	1	14	11	0	26	0	0	3	0	3	2	19	0	0	21	6	0	2	0	8	0	58	58
05:45 PM	1	17	6	0	24	0	0	2	0	2	0	38	0	0	38	7	0	0	0	7	0	71	71
Total	9	61	24	0	94	0	0	11	0	11	2	95	3	1	100	28	0	2	0	30	1	235	236
Grand Total	24	123	52	0	199	1	0	25	0	26	8	180	10	1	198	68	0	6	0	74	1	497	498
Apprch %	12.1	61.8	26.1			3.8	0	96.2			4	90.9	5.1			91.9	0	8.1					
Total %	4.8	24.7	10.5		40	0.2	0	5		5.2	1.6	36.2	2		39.8	13.7	0	1.2		14.9	0.2	99.8	

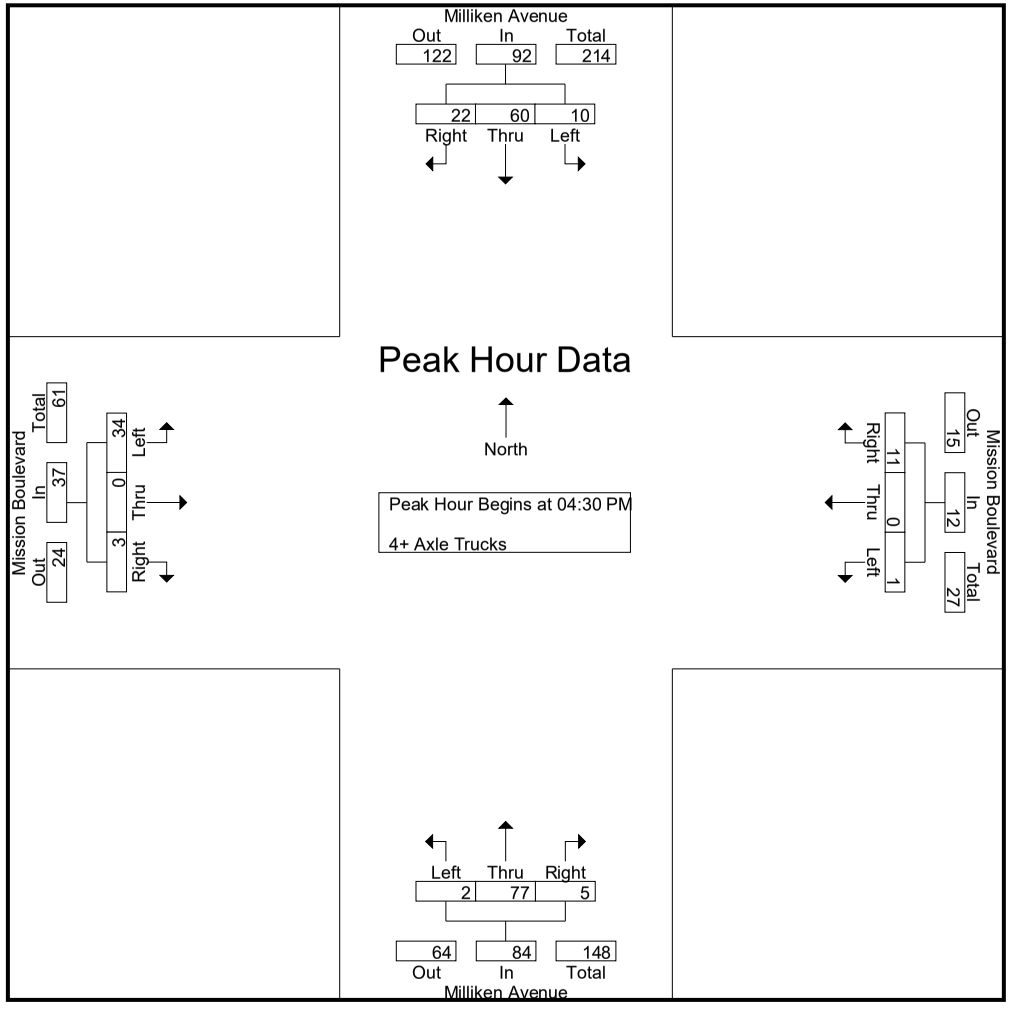
G3.1-672

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	13	6	20	0	0	**3**	**3**	**1**	16	1	18	6	0	**2**	8	49
04:45 PM	2	**17**	**9**	**28**	**1**	0	2	3	1	**23**	1	**25**	**13**	0	1	**14**	**70**
05:00 PM	**6**	17	5	28	0	0	3	3	0	17	**2**	19	9	0	0	9	59
05:15 PM	1	13	2	16	0	0	3	3	0	21	1	22	6	0	0	6	47
Total Volume	10	60	22	92	1	0	11	12	2	77	5	84	34	0	3	37	225
% App. Total	10.9	65.2	23.9		8.3	0	91.7		2.4	91.7	6		91.9	0	8.1		
PHF	.417	.882	.611	.821	.250	.000	.917	1.00	.500	.837	.625	.840	.654	.000	.375	.661	.804

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard
Weather: Clear

File Name : 23_ONT_Mill_Miss PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	Milliken Avenue Southbound				Mission Boulevard Westbound				Milliken Avenue Northbound				Mission Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	1	13	6	20	0	0	**3**	**3**	**1**	16	1	18	6	0	**2**	8	
+15 mins.	2	**17**	**9**	**28**	**1**	0	2	3	1	**23**	1	**25**	**13**	0	1	**14**	
+30 mins.	**6**	17	5	28	0	0	3	3	0	17	**2**	19	9	0	0	9	
+45 mins.	1	13	2	16	0	0	3	3	0	21	1	22	6	0	0	6	
Total Volume	10	60	22	92	1	0	11	12	2	77	5	84	34	0	3	37	
% App. Total	10.9	65.2	23.9		8.3	0	91.7		2.4	91.7	6		91.9	0	8.1		
PHF	.417	.882	.611	.821	.250	.000	.917	1.000	.500	.837	.625	.840	.654	.000	.375	.661	

3.1-674

Location: Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg Milliken Avenue	East Leg Mission Boulevard	South Leg Milliken Avenue	West Leg Mission Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Milliken Avenue	East Leg Mission Boulevard	South Leg Milliken Avenue	West Leg Mission Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Ontario
N/S: Milliken Avenue
E/W: Mission Boulevard

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound Milliken Avenue			Westbound Mission Boulevard			Northbound Milliken Avenue			Eastbound Mission Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Milliken Avenue			Westbound Mission Boulevard			Northbound Milliken Avenue			Eastbound Mission Boulevard			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	2	0	0	0	1	0	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	1	0	0	0	0	0	0	3

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-15 Southbound Off Ramp Southbound					Jurupa Street Westbound					I-15 Southbound On Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	118	0	183	29	301	23	130	0	0	153	0	0	0	0	0	0	113	30	13	143	42	597	639
07:15 AM	98	1	181	32	280	45	110	0	0	155	0	0	0	0	0	0	83	31	20	114	52	549	601
07:30 AM	108	1	192	34	301	49	127	0	0	176	0	0	0	0	0	0	104	32	14	136	48	613	661
07:45 AM	118	0	219	46	337	53	128	0	0	181	0	0	0	0	0	0	126	31	17	157	63	675	738
Total	442	2	775	141	1219	170	495	0	0	665	0	0	0	0	0	0	426	124	64	550	205	2434	2639
08:00 AM	84	2	174	39	260	47	97	0	0	144	0	0	0	0	0	0	126	28	10	154	49	558	607
08:15 AM	112	0	226	49	338	38	118	0	0	156	0	0	0	0	0	0	97	20	6	117	55	611	666
08:30 AM	110	0	176	30	286	48	101	0	0	149	0	0	0	0	0	0	115	45	18	160	48	595	643
08:45 AM	95	1	137	30	233	49	120	0	0	169	0	0	0	0	0	0	107	21	8	128	38	530	568
Total	401	3	713	148	1117	182	436	0	0	618	0	0	0	0	0	0	445	114	42	559	190	2294	2484
Grand Total	843	5	1488	289	2336	352	931	0	0	1283	0	0	0	0	0	0	871	238	106	1109	395	4728	5123
Apprch %	36.1	0.2	63.7			27.4	72.6	0			0	0	0			0	78.5	21.5					
Total %	17.8	0.1	31.5		49.4	7.4	19.7	0		27.1	0	0	0		0	0	18.4	5		23.5	7.7	92.3	
Passenger Vehicles	761	3	1375		2409	146	780	0		926	0	0	0		0	0	644	161		888	0	0	4223
% Passenger Vehicles	90.3	60	92.4	93.4	91.8	41.5	83.8	0	0	72.2	0	0	0	0	0	0	73.9	67.6	78.3	73.1	0	0	82.4
Large 2 Axle Vehicles	24	0	25		58	32	46	0		78	0	0	0		0	0	63	26		99	0	0	235
% Large 2 Axle Vehicles	2.8	0	1.7	3.1	2.2	9.1	4.9	0	0	6.1	0	0	0	0	0	0	7.2	10.9	9.4	8.1	0	0	4.6
3 Axle Vehicles	4	0	15		20	21	13	0		34	0	0	0		0	0	50	3		54	0	0	108
% 3 Axle Vehicles	0.5	0	1	0.3	0.8	6	1.4	0	0	2.7	0	0	0	0	0	0	5.7	1.3	0.9	4.4	0	0	2.1
4+ Axle Trucks	54	2	73		138	153	92	0		245	0	0	0		0	0	114	48		174	0	0	557
% 4+ Axle Trucks	6.4	40	4.9	3.1	5.3	43.5	9.9	0	0	19.1	0	0	0	0	0	0	13.1	20.2	11.3	14.3	0	0	10.9

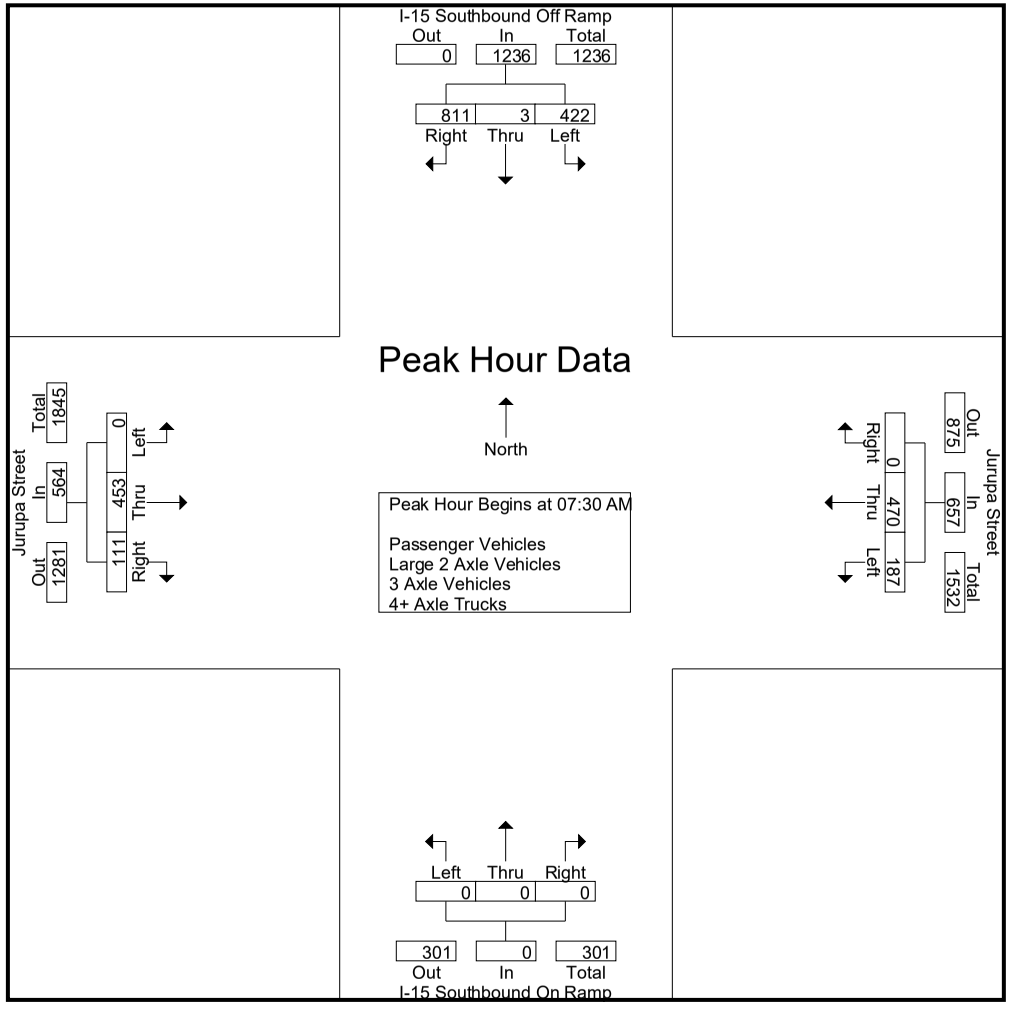
3.1-67

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	108	1	192	301	49	127	0	176	0	0	0	0	0	104	**32**	136	613
07:45 AM	**118**	0	219	337	**53**	**128**	0	**181**	0	0	0	0	0	**126**	31	**157**	**675**
08:00 AM	84	**2**	174	260	47	97	0	144	0	0	0	0	0	126	28	154	558
08:15 AM	112	0	**226**	**338**	38	118	0	156	0	0	0	0	0	97	20	117	611
Total Volume	422	3	811	1236	187	470	0	657	0	0	0	0	0	453	111	564	2457
% App. Total	34.1	0.2	65.6		28.5	71.5	0		0	0	0		0	80.3	19.7		
PHF	.894	.375	.897	.914	.882	.918	.000	.907	.000	.000	.000	.000	.000	.899	.867	.898	.910

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-678

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:00 AM				07:00 AM				07:45 AM				
+0 mins.	108	1	192	301	23	**130**	0	153	0	0	0	0	0	**126**	31	157	
+15 mins.	**118**	0	219	337	45	110	0	155	0	0	0	0	0	126	28	154	
+30 mins.	84	**2**	174	260	49	127	0	176	0	0	0	0	0	97	20	117	
+45 mins.	112	0	**226**	**338**	**53**	128	0	**181**	0	0	0	0	0	115	**45**	**160**	
Total Volume	422	3	811	1236	170	495	0	665	0	0	0	0	0	464	124	588	
% App. Total	34.1	0.2	65.6		25.6	74.4	0		0	0	0		0	78.9	21.1		
PHF	.894	.375	.897	.914	.802	.952	.000	.919	.000	.000	.000	.000	.000	.921	.689	.919	

3.1-679

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	I-15 Southbound Off Ramp Southbound					Jurupa Street Westbound					I-15 Southbound On Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	110	0	174	28	284	14	117	0	0	131	0	0	0	0	0	0	80	19	11	99	39	514	553
07:15 AM	85	0	166	29	251	23	94	0	0	117	0	0	0	0	0	0	69	18	12	87	41	455	496
07:30 AM	97	1	184	32	282	10	103	0	0	113	0	0	0	0	0	0	83	20	11	103	43	498	541
07:45 AM	107	0	205	41	312	22	110	0	0	132	0	0	0	0	0	0	100	24	15	124	56	568	624
Total	399	1	729	130	1129	69	424	0	0	493	0	0	0	0	0	0	332	81	49	413	179	2035	2214
08:00 AM	80	2	159	39	241	14	81	0	0	95	0	0	0	0	0	0	90	15	7	105	46	441	487
08:15 AM	99	0	207	44	306	16	100	0	0	116	0	0	0	0	0	0	70	18	6	88	50	510	560
08:30 AM	98	0	159	28	257	22	81	0	0	103	0	0	0	0	0	0	82	31	14	113	42	473	515
08:45 AM	85	0	121	29	206	25	94	0	0	119	0	0	0	0	0	0	70	16	7	86	36	411	447
Total	362	2	646	140	1010	77	356	0	0	433	0	0	0	0	0	0	312	80	34	392	174	1835	2009
Grand Total	761	3	1375	270	2139	146	780	0	0	926	0	0	0	0	0	0	644	161	83	805	353	3870	4223
Apprch %	35.6	0.1	64.3			15.8	84.2	0			0	0	0			0	80	20					
Total %	19.7	0.1	35.5		55.3	3.8	20.2	0		23.9	0	0	0		0	0	16.6	4.2		20.8	8.4	91.6	

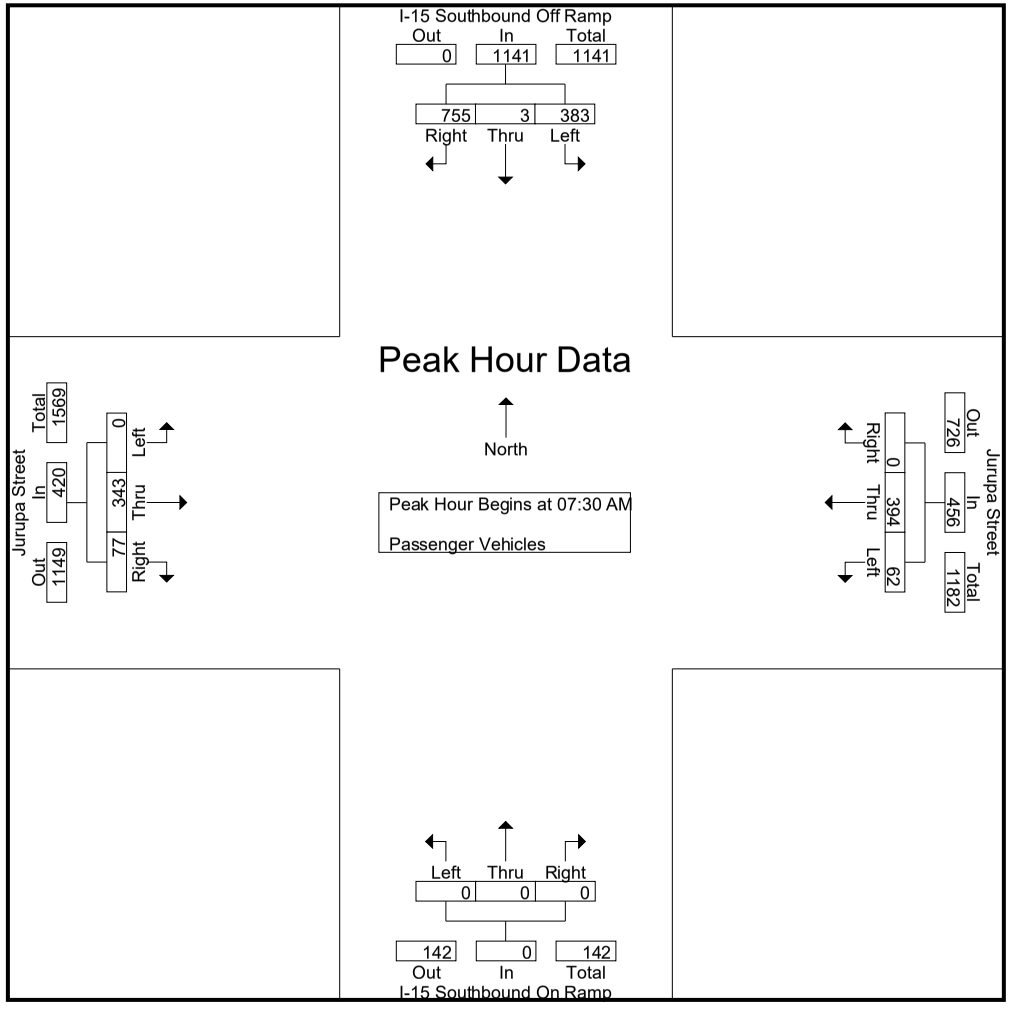
	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	97	1	184	282	10	103	0	113	0	0	0	0	0	83	20	103	498
07:45 AM	**107**	0	205	**312**	**22**	**110**	0	**132**	0	0	0	0	0	**100**	**24**	**124**	**568**
08:00 AM	80	**2**	159	241	14	81	0	95	0	0	0	0	0	90	15	105	441
08:15 AM	99	0	**207**	306	16	100	0	116	0	0	0	0	0	70	18	88	510
Total Volume	383	3	755	1141	62	394	0	456	0	0	0	0	0	343	77	420	2017
% App. Total	33.6	0.3	66.2		13.6	86.4	0		0	0	0		0	81.7	18.3		
PHF	.895	.375	.912	.914	.705	.895	.000	.864	.000	.000	.000	.000	.000	.858	.802	.847	.888

3.1-680

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	97	1	184	282	10	103	0	113	0	0	0	0	0	83	20	103	
+15 mins.	**107**	0	205	**312**	**22**	**110**	0	**132**	0	0	0	0	0	**100**	**24**	**124**	
+30 mins.	80	**2**	159	241	14	81	0	95	0	0	0	0	0	90	15	105	
+45 mins.	99	0	**207**	306	16	100	0	116	0	0	0	0	0	70	18	88	
Total Volume	383	3	755	1141	62	394	0	456	0	0	0	0	0	343	77	420	
% App. Total	33.6	0.3	66.2		13.6	86.4	0		0	0	0		0	81.7	18.3		
PHF	.895	.375	.912	.914	.705	.895	.000	.864	.000	.000	.000	.000	.000	.858	.802	.847	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	I-15 Southbound Off Ramp Southbound					Jurupa Street Westbound					I-15 Southbound On Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	2	0	2	0	4	0	1	0	0	1	0	0	0	0	0	0	10	5	2	15	2	20	22
07:15 AM	4	0	6	2	10	8	2	0	0	10	0	0	0	0	0	0	4	2	1	6	3	26	29
07:30 AM	2	0	2	2	4	11	8	0	0	19	0	0	0	0	0	0	1	3	1	4	3	27	30
07:45 AM	3	0	2	1	5	4	7	0	0	11	0	0	0	0	0	0	6	3	1	9	2	25	27
Total	11	0	12	5	23	23	18	0	0	41	0	0	0	0	0	0	21	13	5	34	10	98	108
08:00 AM	2	0	4	0	6	2	8	0	0	10	0	0	0	0	0	0	9	6	2	15	2	31	33
08:15 AM	6	0	4	3	10	1	6	0	0	7	0	0	0	0	0	0	13	0	0	13	3	30	33
08:30 AM	3	0	3	1	6	1	4	0	0	5	0	0	0	0	0	0	4	5	3	9	4	20	24
08:45 AM	2	0	2	0	4	5	10	0	0	15	0	0	0	0	0	0	16	2	0	18	0	37	37
Total	13	0	13	4	26	9	28	0	0	37	0	0	0	0	0	0	42	13	5	55	9	118	127
Grand Total	24	0	25	9	49	32	46	0	0	78	0	0	0	0	0	0	63	26	10	89	19	216	235
Apprch %	49	0	51			41	59	0			0	0	0			0	70.8	29.2					
Total %	11.1	0	11.6		22.7	14.8	21.3	0		36.1	0	0	0		0	0	29.2	12		41.2	8.1	91.9	

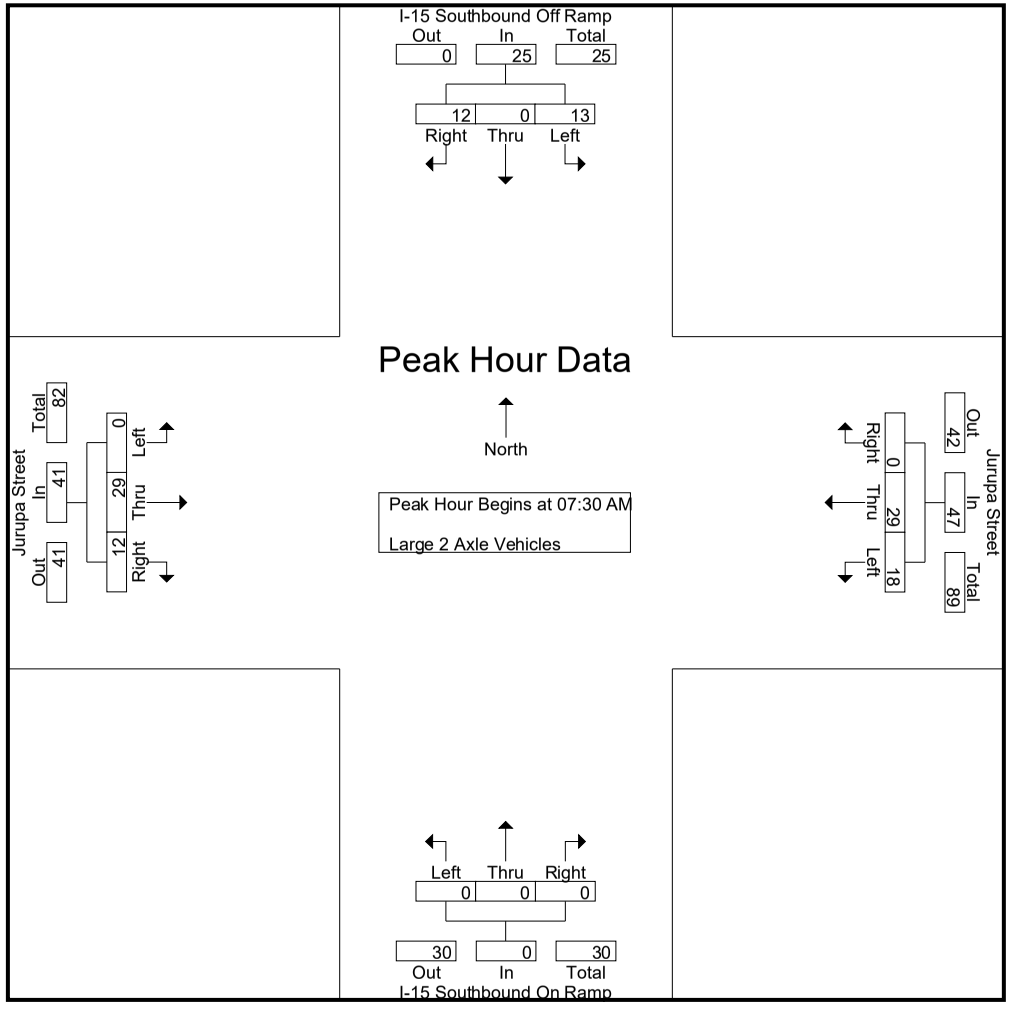
3.1-683

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	0	2	4	**11**	**8**	0	**19**	0	0	0	0	0	1	3	4	27
07:45 AM	3	0	2	5	4	7	0	11	0	0	0	0	0	6	3	9	25
08:00 AM	2	0	**4**	6	2	8	0	10	0	0	0	0	0	9	**6**	**15**	**31**
08:15 AM	**6**	0	4	**10**	1	6	0	7	0	0	0	0	0	**13**	0	13	30
Total Volume	13	0	12	25	18	29	0	47	0	0	0	0	0	29	12	41	113
% App. Total	52	0	48		38.3	61.7	0		0	0	0		0	70.7	29.3		
PHF	.542	.000	.750	.625	.409	.906	.000	.618	.000	.000	.000	.000	.000	.558	.500	.683	.911

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	2	0	2	4	**11**	**8**	0	**19**	0	0	0	0	0	1	3	4	
+15 mins.	3	0	2	5	4	7	0	11	0	0	0	0	0	6	3	9	
+30 mins.	2	0	**4**	6	2	8	0	10	0	0	0	0	0	9	**6**	**15**	
+45 mins.	**6**	0	4	**10**	1	6	0	7	0	0	0	0	0	**13**	0	13	
Total Volume	13	0	12	25	18	29	0	47	0	0	0	0	0	29	12	41	
% App. Total	52	0	48		38.3	61.7	0		0	0	0		0	70.7	29.3		
PHF	.542	.000	.750	.625	.409	.906	.000	.618	.000	.000	.000	.000	.000	.558	.500	.683	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	I-15 Southbound Off Ramp Southbound					Jurupa Street Westbound					I-15 Southbound On Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	2	0	2	2	0	0	0	2	0	0	0	0	0	0	9	0	0	9	0	13	13
07:15 AM	0	0	1	0	1	2	2	0	0	4	0	0	0	0	0	0	3	0	0	3	0	8	8
07:30 AM	2	0	0	0	2	2	1	0	0	3	0	0	0	0	0	0	3	0	0	3	0	8	8
07:45 AM	0	0	2	0	2	3	2	0	0	5	0	0	0	0	0	0	7	1	1	8	1	15	16
Total	2	0	5	0	7	9	5	0	0	14	0	0	0	0	0	0	22	1	1	23	1	44	45
08:00 AM	1	0	2	0	3	4	0	0	0	4	0	0	0	0	0	0	10	1	0	11	0	18	18
08:15 AM	1	0	1	0	2	3	2	0	0	5	0	0	0	0	0	0	3	0	0	3	0	10	10
08:30 AM	0	0	4	1	4	3	3	0	0	6	0	0	0	0	0	0	8	1	0	9	1	19	20
08:45 AM	0	0	3	0	3	2	3	0	0	5	0	0	0	0	0	0	7	0	0	7	0	15	15
Total	2	0	10	1	12	12	8	0	0	20	0	0	0	0	0	0	28	2	0	30	1	62	63
Grand Total	4	0	15	1	19	21	13	0	0	34	0	0	0	0	0	0	50	3	1	53	2	106	108
Apprch %	21.1	0	78.9			61.8	38.2	0			0	0	0			0	94.3	5.7					
Total %	3.8	0	14.2		17.9	19.8	12.3	0		32.1	0	0	0		0	0	47.2	2.8		50	1.9	98.1	

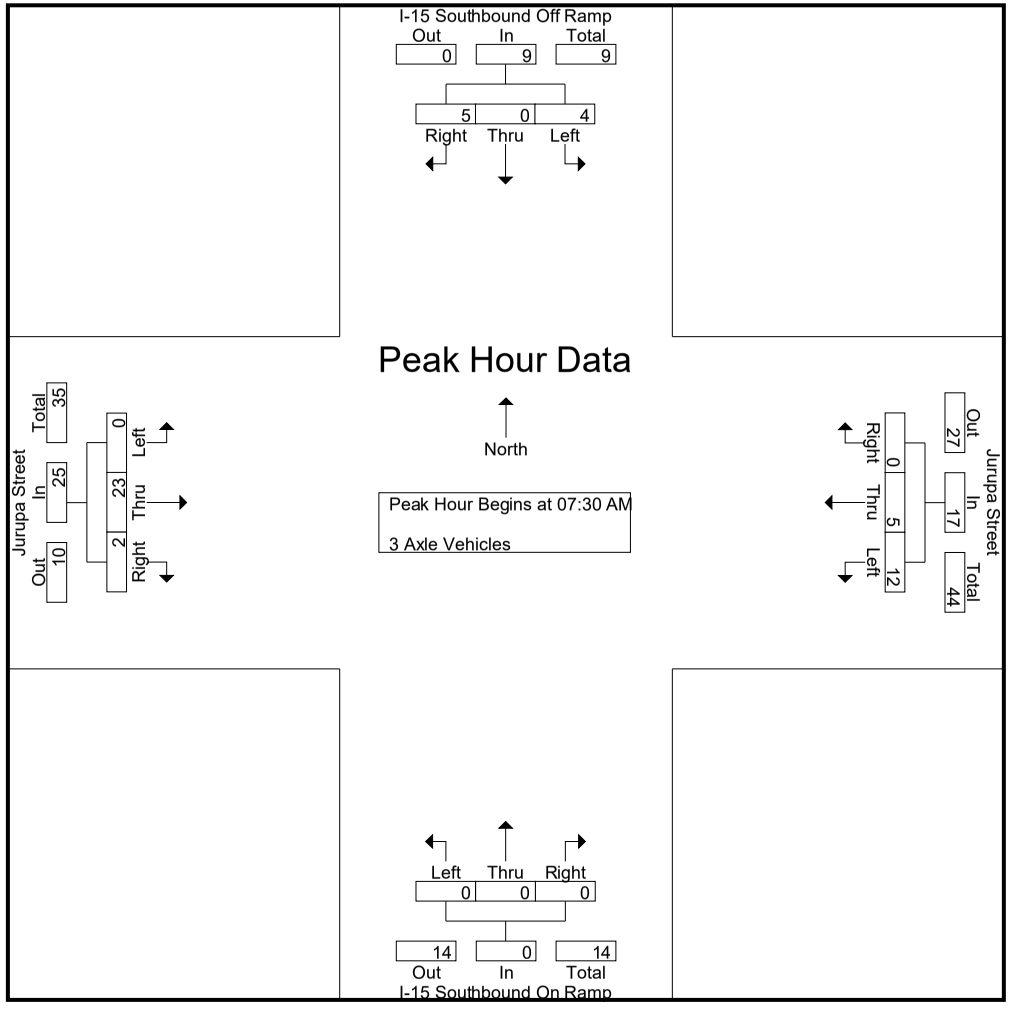
3.1-686

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	**2**	0	0	2	2	1	0	3	0	0	0	0	0	3	0	3	8
07:45 AM	0	0	**2**	2	3	**2**	0	**5**	0	0	0	0	0	7	**1**	8	15
08:00 AM	1	0	2	**3**	**4**	0	0	4	0	0	0	0	0	**10**	1	**11**	**18**
08:15 AM	1	0	1	2	3	2	0	5	0	0	0	0	0	3	0	3	10
Total Volume	4	0	5	9	12	5	0	17	0	0	0	0	0	23	2	25	51
% App. Total	44.4	0	55.6		70.6	29.4	0		0	0	0		0	92	8		
PHF	.500	.000	.625	.750	.750	.625	.000	.850	.000	.000	.000	.000	.000	.575	.500	.568	.708

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	**2**	0	0	2	2	1	0	3	0	0	0	0	0	3	0	3	
+15 mins.	0	0	**2**	2	3	**2**	0	**5**	0	0	0	0	0	7	**1**	8	
+30 mins.	1	0	2	**3**	**4**	0	0	4	0	0	0	0	0	**10**	1	**11**	
+45 mins.	1	0	1	2	3	2	0	5	0	0	0	0	0	3	0	3	
Total Volume	4	0	5	9	12	5	0	17	0	0	0	0	0	23	2	25	
% App. Total	44.4	0	55.6		70.6	29.4	0		0	0	0		0	92	8		
PHF	.500	.000	.625	.750	.750	.625	.000	.850	.000	.000	.000	.000	.000	.575	.500	.568	

3.1-688

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	I-15 Southbound Off Ramp Southbound					Jurupa Street Westbound					I-15 Southbound On Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	6	0	5	1	11	7	12	0	0	19	0	0	0	0	0	0	14	6	0	20	1	50	51
07:15 AM	9	1	8	1	18	12	12	0	0	24	0	0	0	0	0	0	7	11	7	18	8	60	68
07:30 AM	7	0	6	0	13	26	15	0	0	41	0	0	0	0	0	0	17	9	2	26	2	80	82
07:45 AM	8	0	10	4	18	24	9	0	0	33	0	0	0	0	0	0	13	3	0	16	4	67	71
Total	30	1	29	6	60	69	48	0	0	117	0	0	0	0	0	0	51	29	9	80	15	257	272
08:00 AM	1	0	9	0	10	27	8	0	0	35	0	0	0	0	0	0	17	6	1	23	1	68	69
08:15 AM	6	0	14	2	20	18	10	0	0	28	0	0	0	0	0	0	11	2	0	13	2	61	63
08:30 AM	9	0	10	0	19	22	13	0	0	35	0	0	0	0	0	0	21	8	1	29	1	83	84
08:45 AM	8	1	11	1	20	17	13	0	0	30	0	0	0	0	0	0	14	3	1	17	2	67	69
Total	24	1	44	3	69	84	44	0	0	128	0	0	0	0	0	0	63	19	3	82	6	279	285
Grand Total	54	2	73	9	129	153	92	0	0	245	0	0	0	0	0	0	114	48	12	162	21	536	557
Apprch %	41.9	1.6	56.6			62.4	37.6	0			0	0	0			0	70.4	29.6					
Total %	10.1	0.4	13.6		24.1	28.5	17.2	0		45.7	0	0	0		0	0	21.3	9		30.2	3.8	96.2	

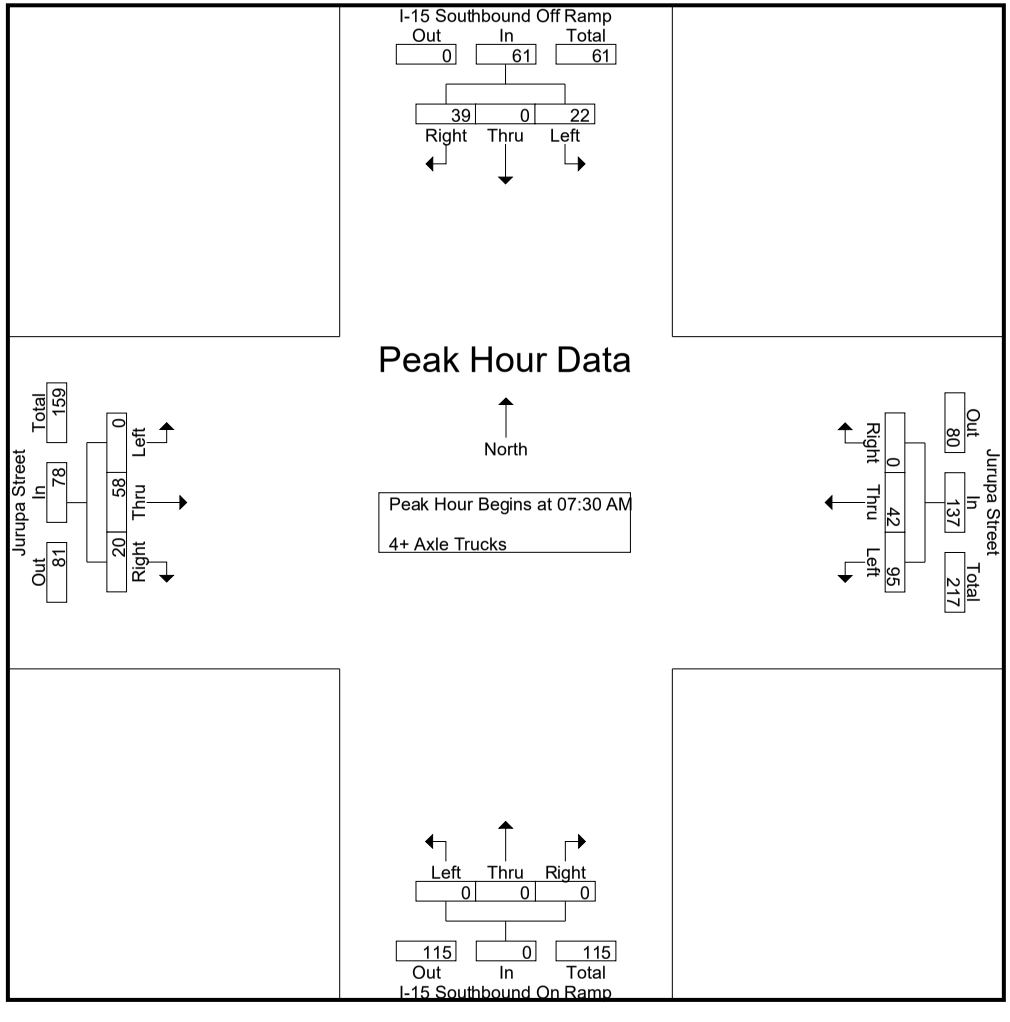
3.1-689

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	7	0	6	13	26	**15**	0	**41**	0	0	0	0	0	**17**	**9**	**26**	**80**
07:45 AM	**8**	0	10	18	24	9	0	33	0	0	0	0	0	13	3	16	67
08:00 AM	1	0	9	10	**27**	8	0	35	0	0	0	0	0	17	6	23	68
08:15 AM	6	0	**14**	**20**	18	10	0	28	0	0	0	0	0	11	2	13	61
Total Volume	22	0	39	61	95	42	0	137	0	0	0	0	0	58	20	78	276
% App. Total	36.1	0	63.9		69.3	30.7	0		0	0	0		0	74.4	25.6		
PHF	.688	.000	.696	.763	.880	.700	.000	.835	.000	.000	.000	.000	.000	.853	.556	.750	.863

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:30 AM				07:30 AM				07:30 AM				07:30 AM				
+0 mins.	7	0	6	13	26	**15**	0	**41**	0	0	0	0	0	**17**	**9**	**26**	
+15 mins.	**8**	0	10	18	24	9	0	33	0	0	0	0	0	13	3	16	
+30 mins.	1	0	9	10	**27**	8	0	35	0	0	0	0	0	17	6	23	
+45 mins.	6	0	**14**	**20**	18	10	0	28	0	0	0	0	0	11	2	13	
Total Volume	22	0	39	61	95	42	0	137	0	0	0	0	0	58	20	78	
% App. Total	36.1	0	63.9		69.3	30.7	0		0	0	0		0	74.4	25.6		
PHF	.688	.000	.696	.763	.880	.700	.000	.835	.000	.000	.000	.000	.000	.853	.556	.750	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

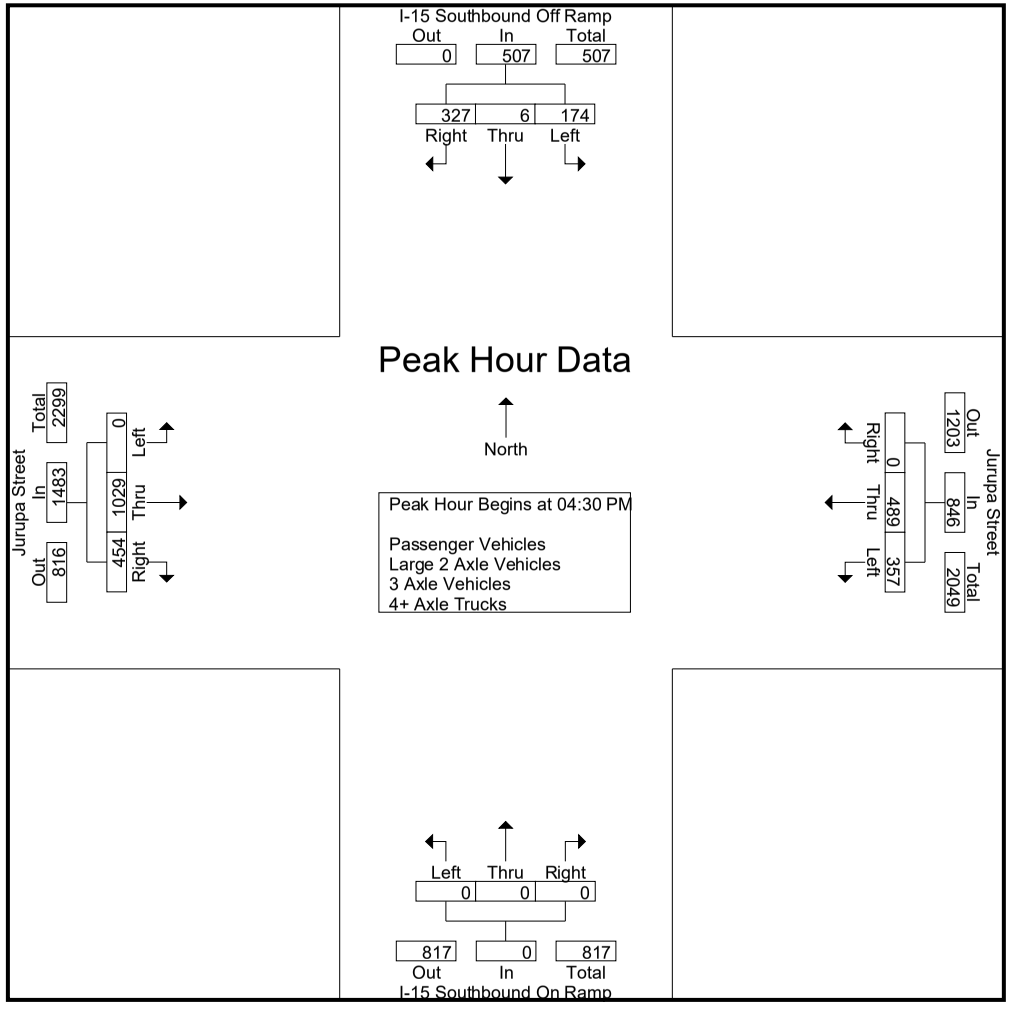
	I-15 Southbound Off Ramp Southbound					Jurupa Street Westbound					I-15 Southbound On Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	54	0	88	33	142	109	114	0	0	223	0	0	0	0	0	0	251	110	45	361	78	726	804
04:15 PM	35	2	61	24	98	96	122	0	0	218	0	0	0	0	0	0	261	95	44	356	68	672	740
04:30 PM	41	0	91	32	132	103	128	0	0	231	0	0	0	0	0	0	266	121	51	387	83	750	833
04:45 PM	46	3	85	25	134	80	121	0	0	201	0	0	0	0	0	0	244	74	37	318	62	653	715
Total	176	5	325	114	506	388	485	0	0	873	0	0	0	0	0	0	1022	400	177	1422	291	2801	3092
05:00 PM	45	3	77	26	125	105	117	0	0	222	0	0	0	0	0	0	245	112	50	357	76	704	780
05:15 PM	42	0	74	26	116	69	123	0	0	192	0	0	0	0	0	0	274	147	43	421	69	729	798
05:30 PM	37	3	60	27	100	93	160	0	0	253	0	0	0	0	0	0	226	129	48	355	75	708	783
05:45 PM	32	1	80	30	113	62	99	0	0	161	0	0	0	0	0	0	231	95	44	326	74	600	674
Total	156	7	291	109	454	329	499	0	0	828	0	0	0	0	0	0	976	483	185	1459	294	2741	3035
Grand Total	332	12	616	223	960	717	984	0	0	1701	0	0	0	0	0	0	1998	883	362	2881	585	5542	6127
Apprch %	34.6	1.2	64.2			42.2	57.8	0			0	0	0			0	69.4	30.6					
Total %	6	0.2	11.1		17.3	12.9	17.8	0		30.7	0	0	0		0	0	36.1	15.9		52	9.5	90.5	
Passenger Vehicles	291	11	489		972	633	792	0		1425	0	0	0		0	0	1733	842		2924	0	0	5321
% Passenger Vehicles	87.7	91.7	79.4	81.2	82.2	88.3	80.5	0	0	83.8	0	0	0	0	0	0	86.7	95.4	96.4	90.2	0	0	86.8
Large 2 Axle Vehicles	8	0	42		73	14	61	0		75	0	0	0		0	0	50	9		62	0	0	210
% Large 2 Axle Vehicles	2.4	0	6.8	10.3	6.2	2	6.2	0	0	4.4	0	0	0	0	0	0	2.5	1	0.8	1.9	0	0	3.4
3 Axle Vehicles	8	1	19		33	11	23	0		34	0	0	0		0	0	38	5		44	0	0	111
% 3 Axle Vehicles	2.4	8.3	3.1	2.2	2.8	1.5	2.3	0	0	2	0	0	0	0	0	0	1.9	0.6	0.3	1.4	0	0	1.8
4+ Axle Trucks	25	0	66		105	59	108	0		167	0	0	0		0	0	177	27		213	0	0	485
% 4+ Axle Trucks	7.5	0	10.7	6.3	8.9	8.2	11	0	0	9.8	0	0	0	0	0	0	8.9	3.1	2.5	6.6	0	0	7.9

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	41	0	**91**	132	103	**128**	0	**231**	0	0	0	0	0	266	121	387	**750**
04:45 PM	**46**	**3**	85	**134**	80	121	0	201	0	0	0	0	0	244	74	318	653
05:00 PM	45	3	77	125	**105**	117	0	222	0	0	0	0	0	245	112	357	704
05:15 PM	42	0	74	116	69	123	0	192	0	0	0	0	0	**274**	**147**	**421**	729
Total Volume	174	6	327	507	357	489	0	846	0	0	0	0	0	1029	454	1483	2836
% App. Total	34.3	1.2	64.5		42.2	57.8	0		0	0	0		0	69.4	30.6		
PHF	.946	.500	.898	.946	.850	.955	.000	.916	.000	.000	.000	.000	.000	.939	.772	.881	.945

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-693

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:00 PM				04:00 PM				04:30 PM				
+0 mins.	41	0	**91**	132	**109**	114	0	223	0	0	0	0	0	266	121	387	
+15 mins.	**46**	**3**	85	**134**	96	122	0	218	0	0	0	0	0	244	74	318	
+30 mins.	45	3	77	125	103	**128**	0	**231**	0	0	0	0	0	245	112	357	
+45 mins.	42	0	74	116	80	121	0	201	0	0	0	0	0	**274**	**147**	**421**	
Total Volume	174	6	327	507	388	485	0	873	0	0	0	0	0	1029	454	1483	
% App. Total	34.3	1.2	64.5		44.4	55.6	0		0	0	0		0	69.4	30.6		
PHF	.946	.500	.898	.946	.890	.947	.000	.945	.000	.000	.000	.000	.000	.939	.772	.881	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	I-15 Southbound Off Ramp Southbound					Jurupa Street Westbound					I-15 Southbound On Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	50	0	72	29	122	104	98	0	0	202	0	0	0	0	0	0	215	109	45	324	74	648	722
04:15 PM	32	2	50	21	84	84	96	0	0	180	0	0	0	0	0	0	225	86	40	311	61	575	636
04:30 PM	34	0	69	24	103	90	102	0	0	192	0	0	0	0	0	0	229	116	50	345	74	640	714
04:45 PM	40	2	66	17	108	69	105	0	0	174	0	0	0	0	0	0	219	67	35	286	52	568	620
Total	156	4	257	91	417	347	401	0	0	748	0	0	0	0	0	0	888	378	170	1266	261	2431	2692
05:00 PM	39	3	56	19	98	92	91	0	0	183	0	0	0	0	0	0	204	107	50	311	69	592	661
05:15 PM	34	0	64	24	98	63	104	0	0	167	0	0	0	0	0	0	250	141	40	391	64	656	720
05:30 PM	34	3	49	22	86	79	116	0	0	195	0	0	0	0	0	0	198	123	47	321	69	602	671
05:45 PM	28	1	63	25	92	52	80	0	0	132	0	0	0	0	0	0	193	93	42	286	67	510	577
Total	135	7	232	90	374	286	391	0	0	677	0	0	0	0	0	0	845	464	179	1309	269	2360	2629
Grand Total	291	11	489	181	791	633	792	0	0	1425	0	0	0	0	0	0	1733	842	349	2575	530	4791	5321
Apprch %	36.8	1.4	61.8			44.4	55.6	0			0	0	0			0	67.3	32.7					
Total %	6.1	0.2	10.2		16.5	13.2	16.5	0		29.7	0	0	0		0	0	36.2	17.6		53.7	10	90	

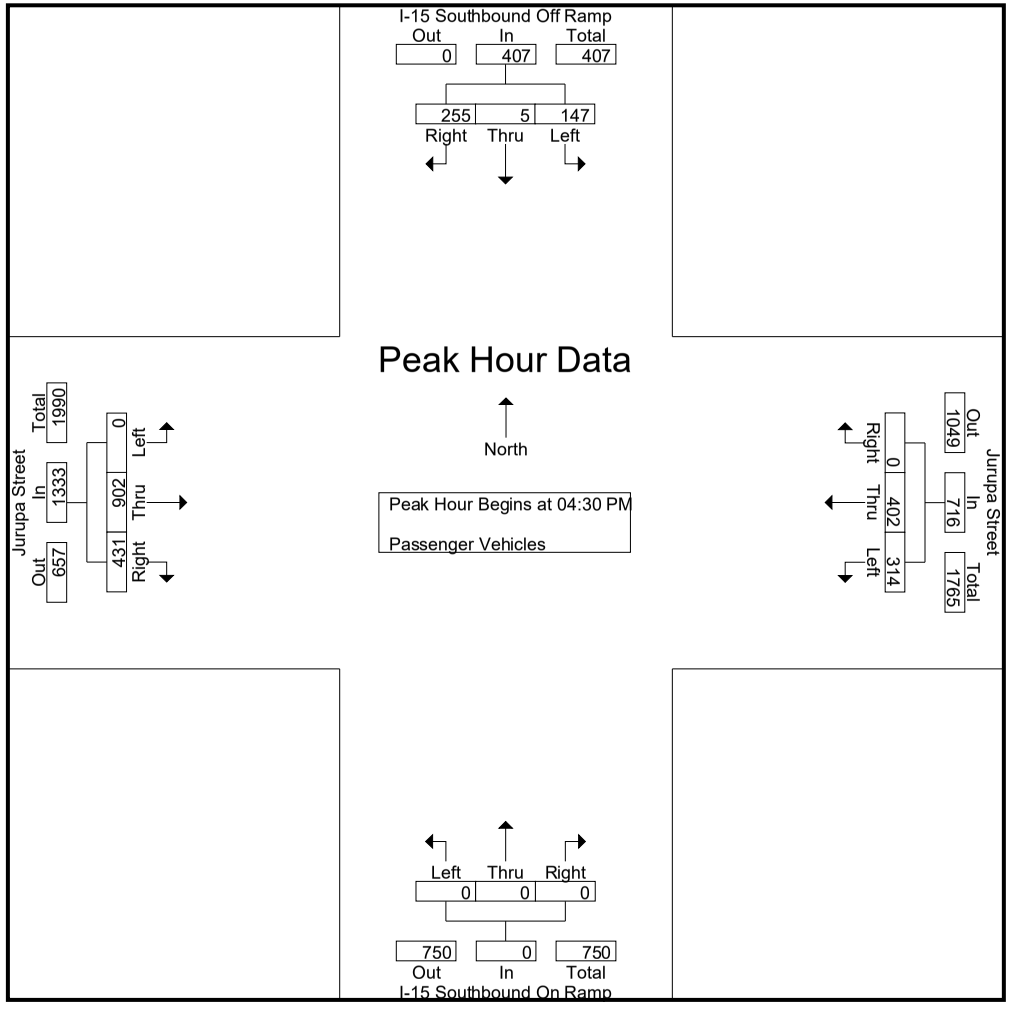
3.1-695

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	34	0	**69**	103	90	102	0	**192**	0	0	0	0	0	229	116	345	640
04:45 PM	**40**	2	66	**108**	69	**105**	0	174	0	0	0	0	0	219	67	286	568
05:00 PM	39	**3**	56	98	**92**	91	0	183	0	0	0	0	0	204	107	311	592
05:15 PM	34	0	64	98	63	104	0	167	0	0	0	0	0	**250**	**141**	**391**	**656**
Total Volume	147	5	255	407	314	402	0	716	0	0	0	0	0	902	431	1333	2456
% App. Total	36.1	1.2	62.7		43.9	56.1	0		0	0	0		0	67.7	32.3		
PHF	.919	.417	.924	.942	.853	.957	.000	.932	.000	.000	.000	.000	.000	.902	.764	.852	.936

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-696

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	34	0	**69**	103	90	102	0	**192**	0	0	0	0	0	229	116	345	
+15 mins.	**40**	2	66	**108**	69	**105**	0	174	0	0	0	0	0	219	67	286	
+30 mins.	39	**3**	56	98	**92**	91	0	183	0	0	0	0	0	204	107	311	
+45 mins.	34	0	64	98	63	104	0	167	0	0	0	0	0	**250**	**141**	**391**	
Total Volume	147	5	255	407	314	402	0	716	0	0	0	0	0	902	431	1333	
% App. Total	36.1	1.2	62.7		43.9	56.1	0		0	0	0		0	67.7	32.3		
PHF	.919	.417	.924	.942	.853	.957	.000	.932	.000	.000	.000	.000	.000	.902	.764	.852	

3.1-697

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

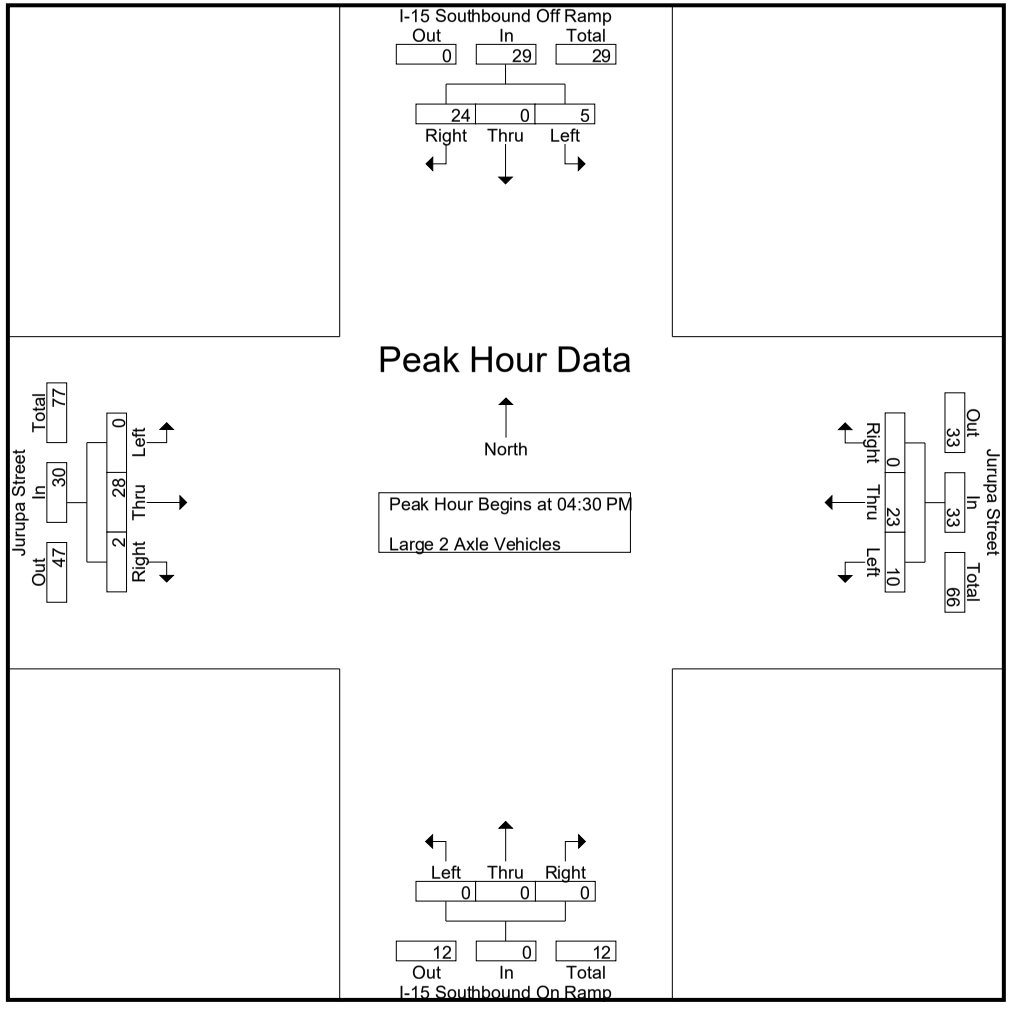
	I-15 Southbound Off Ramp Southbound					Jurupa Street Westbound					I-15 Southbound On Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	0	4	2	5	0	5	0	0	5	0	0	0	0	0	0	11	0	0	11	2	21	23
04:15 PM	1	0	2	2	3	2	11	0	0	13	0	0	0	0	0	0	4	3	2	7	4	23	27
04:30 PM	2	0	9	4	11	4	11	0	0	15	0	0	0	0	0	0	12	0	0	12	4	38	42
04:45 PM	1	0	6	3	7	2	3	0	0	5	0	0	0	0	0	0	6	1	0	7	3	19	22
Total	5	0	21	11	26	8	30	0	0	38	0	0	0	0	0	0	33	4	2	37	13	101	114
05:00 PM	1	0	7	6	8	2	5	0	0	7	0	0	0	0	0	0	5	1	0	6	6	21	27
05:15 PM	1	0	2	0	3	2	4	0	0	6	0	0	0	0	0	0	5	0	0	5	0	14	14
05:30 PM	0	0	2	2	2	2	15	0	0	17	0	0	0	0	0	0	4	3	0	7	2	26	28
05:45 PM	1	0	10	4	11	0	7	0	0	7	0	0	0	0	0	0	3	1	1	4	5	22	27
Total	3	0	21	12	24	6	31	0	0	37	0	0	0	0	0	0	17	5	1	22	13	83	96
Grand Total	8	0	42	23	50	14	61	0	0	75	0	0	0	0	0	0	50	9	3	59	26	184	210
Apprch %	16	0	84			18.7	81.3	0			0	0	0			0	84.7	15.3					
Total %	4.3	0	22.8		27.2	7.6	33.2	0		40.8	0	0	0		0	0	27.2	4.9		32.1	12.4	87.6	

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**2**	0	**9**	**11**	**4**	**11**	0	**15**	0	0	0	0	0	**12**	0	**12**	**38**
04:45 PM	1	0	6	7	2	3	0	5	0	0	0	0	0	6	**1**	7	19
05:00 PM	1	0	7	8	2	5	0	7	0	0	0	0	0	5	1	6	21
05:15 PM	1	0	2	3	2	4	0	6	0	0	0	0	0	5	0	5	14
Total Volume	5	0	24	29	10	23	0	33	0	0	0	0	0	28	2	30	92
% App. Total	17.2	0	82.8		30.3	69.7	0		0	0	0		0	93.3	6.7		
PHF	.625	.000	.667	.659	.625	.523	.000	.550	.000	.000	.000	.000	.000	.583	.500	.625	.605

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	**2**	0	**9**	**11**	**4**	**11**	0	**15**	0	0	0	0	0	**12**	0	**12**	
+15 mins.	1	0	6	7	2	3	0	5	0	0	0	0	0	6	**1**	7	
+30 mins.	1	0	7	8	2	5	0	7	0	0	0	0	0	5	1	6	
+45 mins.	1	0	2	3	2	4	0	6	0	0	0	0	0	5	0	5	
Total Volume	5	0	24	29	10	23	0	33	0	0	0	0	0	28	2	30	
% App. Total	17.2	0	82.8		30.3	69.7	0		0	0	0		0	93.3	6.7		
PHF	.625	.000	.667	.659	.625	.523	.000	.550	.000	.000	.000	.000	.000	.583	.500	.625	

3.1-700

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	I-15 Southbound Off Ramp Southbound					Jurupa Street Westbound					I-15 Southbound On Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	1	0	1	1	2	2	4	0	0	6	0	0	0	0	0	0	4	0	0	4	1	12	13
04:15 PM	1	0	2	0	3	0	4	0	0	4	0	0	0	0	0	0	3	0	0	3	0	10	10
04:30 PM	1	0	3	0	4	1	3	0	0	4	0	0	0	0	0	0	9	2	0	11	0	19	19
04:45 PM	2	1	5	1	8	3	3	0	0	6	0	0	0	0	0	0	2	2	1	4	2	18	20
Total	5	1	11	2	17	6	14	0	0	20	0	0	0	0	0	0	18	4	1	22	3	59	62
05:00 PM	0	0	1	0	1	1	5	0	0	6	0	0	0	0	0	0	8	0	0	8	0	15	15
05:15 PM	1	0	3	1	4	1	1	0	0	2	0	0	0	0	0	0	5	1	0	6	1	12	13
05:30 PM	1	0	3	1	4	1	3	0	0	4	0	0	0	0	0	0	2	0	0	2	1	10	11
05:45 PM	1	0	1	1	2	2	0	0	0	2	0	0	0	0	0	0	5	0	0	5	1	9	10
Total	3	0	8	3	11	5	9	0	0	14	0	0	0	0	0	0	20	1	0	21	3	46	49
Grand Total	8	1	19	5	28	11	23	0	0	34	0	0	0	0	0	0	38	5	1	43	6	105	111
Apprch %	28.6	3.6	67.9			32.4	67.6	0			0	0	0			0	88.4	11.6					
Total %	7.6	1	18.1		26.7	10.5	21.9	0		32.4	0	0	0		0	0	36.2	4.8		41	5.4	94.6	

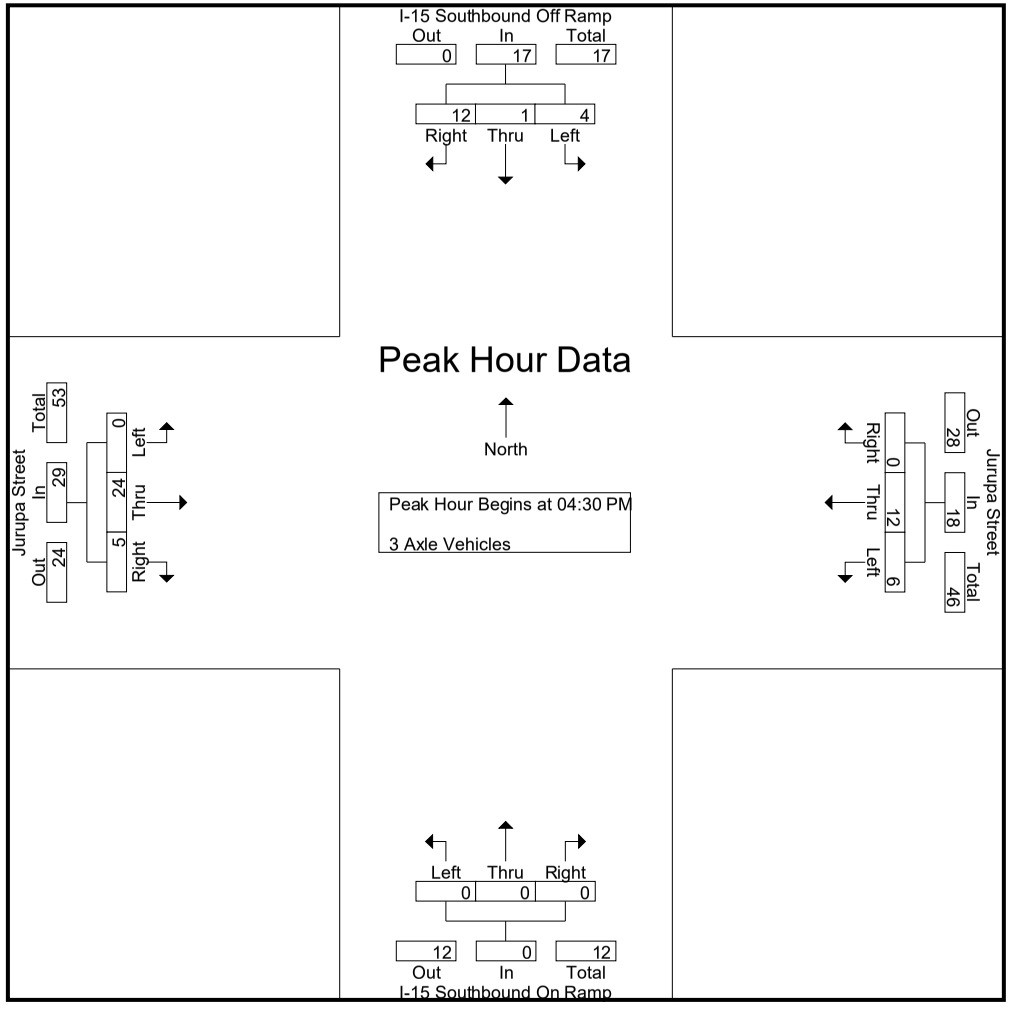
3.1-701

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	1	0	3	4	1	3	0	4	0	0	0	0	0	**9**	**2**	**11**	**19**
04:45 PM	**2**	**1**	**5**	**8**	**3**	3	0	**6**	0	0	0	0	0	2	2	4	18
05:00 PM	0	0	1	1	1	**5**	0	6	0	0	0	0	0	8	0	8	15
05:15 PM	1	0	3	4	1	1	0	2	0	0	0	0	0	5	1	6	12
Total Volume	4	1	12	17	6	12	0	18	0	0	0	0	0	24	5	29	64
% App. Total	23.5	5.9	70.6		33.3	66.7	0		0	0	0		0	82.8	17.2		
PHF	.500	.250	.600	.531	.500	.600	.000	.750	.000	.000	.000	.000	.000	.667	.625	.659	.842

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-702

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	1	0	3	4	1	3	0	4	0	0	0	0	0	**9**	**2**	**11**	
+15 mins.	**2**	**1**	**5**	**8**	**3**	3	0	**6**	0	0	0	0	0	2	2	4	
+30 mins.	0	0	1	1	1	**5**	0	6	0	0	0	0	0	8	0	8	
+45 mins.	1	0	3	4	1	1	0	2	0	0	0	0	0	5	1	6	
Total Volume	4	1	12	17	6	12	0	18	0	0	0	0	0	24	5	29	
% App. Total	23.5	5.9	70.6		33.3	66.7	0		0	0	0		0	82.8	17.2		
PHF	.500	.250	.600	.531	.500	.600	.000	.750	.000	.000	.000	.000	.000	.667	.625	.659	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	I-15 Southbound Off Ramp Southbound					Jurupa Street Westbound					I-15 Southbound On Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	2	0	11	1	13	3	7	0	0	10	0	0	0	0	0	0	21	1	0	22	1	45	46
04:15 PM	1	0	7	1	8	10	11	0	0	21	0	0	0	0	0	0	29	6	2	35	3	64	67
04:30 PM	4	0	10	4	14	8	12	0	0	20	0	0	0	0	0	0	16	3	1	19	5	53	58
04:45 PM	3	0	8	4	11	6	10	0	0	16	0	0	0	0	0	0	17	4	1	21	5	48	53
Total	10	0	36	10	46	27	40	0	0	67	0	0	0	0	0	0	83	14	4	97	14	210	224
05:00 PM	5	0	13	1	18	10	16	0	0	26	0	0	0	0	0	0	28	4	0	32	1	76	77
05:15 PM	6	0	5	1	11	3	14	0	0	17	0	0	0	0	0	0	14	5	3	19	4	47	51
05:30 PM	2	0	6	2	8	11	26	0	0	37	0	0	0	0	0	0	22	3	1	25	3	70	73
05:45 PM	2	0	6	0	8	8	12	0	0	20	0	0	0	0	0	0	30	1	1	31	1	59	60
Total	15	0	30	4	45	32	68	0	0	100	0	0	0	0	0	0	94	13	5	107	9	252	261
Grand Total	25	0	66	14	91	59	108	0	0	167	0	0	0	0	0	0	177	27	9	204	23	462	485
Apprch %	27.5	0	72.5			35.3	64.7	0			0	0	0			0	86.8	13.2			4.7	95.3	
Total %	5.4	0	14.3		19.7	12.8	23.4	0		36.1	0	0	0		0	0	38.3	5.8		44.2			

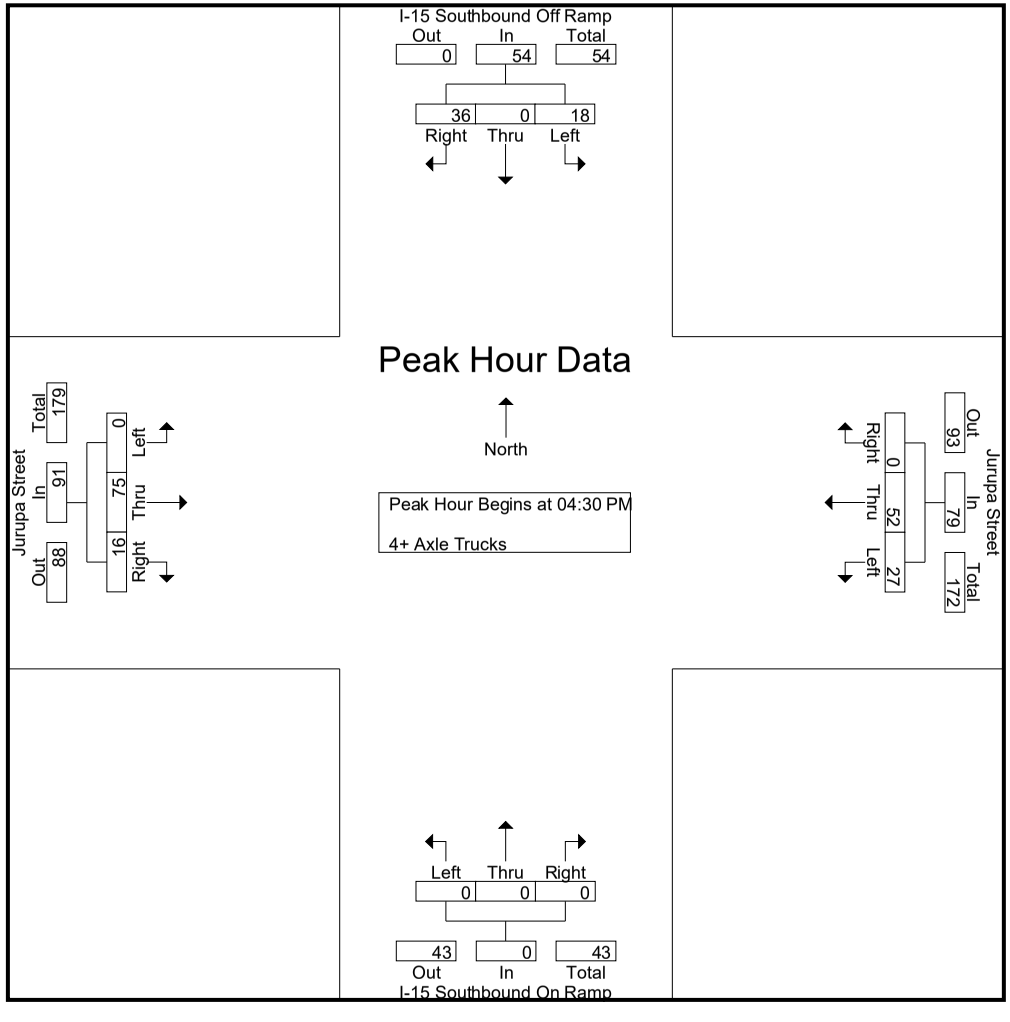
03.1-704

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	4	0	10	14	8	12	0	20	0	0	0	0	0	16	3	19	53
04:45 PM	3	0	8	11	6	10	0	16	0	0	0	0	0	17	4	21	48
05:00 PM	5	0	**13**	**18**	**10**	**16**	0	**26**	0	0	0	0	0	**28**	4	**32**	**76**
05:15 PM	**6**	0	5	11	3	14	0	17	0	0	0	0	0	14	**5**	19	47
Total Volume	18	0	36	54	27	52	0	79	0	0	0	0	0	75	16	91	224
% App. Total	33.3	0	66.7		34.2	65.8	0		0	0	0		0	82.4	17.6		
PHF	.750	.000	.692	.750	.675	.813	.000	.760	.000	.000	.000	.000	.000	.670	.800	.711	.737

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Southbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 24_ONT_15S_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Southbound Off Ramp Southbound				Jurupa Street Westbound				I-15 Southbound On Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:30 PM				04:30 PM				04:30 PM				04:30 PM				
+0 mins.	4	0	10	14	8	12	0	20	0	0	0	0	0	16	3	19	
+15 mins.	3	0	8	11	6	10	0	16	0	0	0	0	0	17	4	21	
+30 mins.	5	0	**13**	**18**	**10**	**16**	0	**26**	0	0	0	0	0	**28**	4	**32**	
+45 mins.	**6**	0	5	11	3	14	0	17	0	0	0	0	0	14	**5**	19	
Total Volume	18	0	36	54	27	52	0	79	0	0	0	0	0	75	16	91	
% App. Total	33.3	0	66.7		34.2	65.8	0		0	0	0		0	82.4	17.6		
PHF	.750	.000	.692	.750	.675	.813	.000	.760	.000	.000	.000	.000	.000	.670	.800	.711	

3.1-706

Location: Ontario
N/S: I-15 SB Ramps
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg I-15 SB Ramps	East Leg Jurupa Street	South Leg I-15 SB Ramps	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg I-15 SB Ramps	East Leg Jurupa Street	South Leg I-15 SB Ramps	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	1	0	1	0	2
TOTAL VOLUMES:	1	0	1	0	2

Location: Ontario
N/S: I-15 SB Ramps
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound I-15 SB Ramps			Westbound Jurupa Street			Northbound I-15 SB Ramps			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	1	0	2

	Southbound I-15 SB Ramps			Westbound Jurupa Street			Northbound I-15 SB Ramps			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-15 Northbound On Ramp Southbound					Jurupa Street Westbound					I-15 Northbound Off Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	105	62	18	167	71	0	97	43	168	67	185	0	0	252	61	587	648
07:15 AM	0	0	0	0	0	0	115	59	19	174	41	0	93	38	134	54	130	0	0	184	57	492	549
07:30 AM	0	0	0	0	0	0	121	78	19	199	55	0	82	32	137	49	156	0	0	205	51	541	592
07:45 AM	0	0	0	0	0	0	121	56	21	177	44	0	114	43	158	87	166	0	0	253	64	588	652
Total	0	0	0	0	0	0	462	255	77	717	211	0	386	156	597	257	637	0	0	894	233	2208	2441
08:00 AM	0	0	0	0	0	0	96	56	24	152	41	0	94	40	135	69	156	0	0	225	64	512	576
08:15 AM	0	0	0	0	0	0	122	47	21	169	39	0	93	28	132	56	168	0	0	224	49	525	574
08:30 AM	0	0	0	0	0	0	108	50	25	158	38	1	91	52	130	49	150	0	0	199	77	487	564
08:45 AM	0	0	0	0	0	0	115	55	17	170	40	0	90	37	130	62	156	0	0	218	54	518	572
Total	0	0	0	0	0	0	441	208	87	649	158	1	368	157	527	236	630	0	0	866	244	2042	2286
Grand Total	0	0	0	0	0	0	903	463	164	1366	369	1	754	313	1124	493	1267	0	0	1760	477	4250	4727
Apprch %	0	0	0			0	66.1	33.9			32.8	0.1	67.1			28	72	0					
Total %	0	0	0		0	0	21.2	10.9		32.1	8.7	0	17.7		26.4	11.6	29.8	0		41.4	10.1	89.9	
Passenger Vehicles	0	0	0		0	0	587	341		1052	315	0	577		1160	346	1095	0		1441	0	0	3653
% Passenger Vehicles	0	0	0	0	0	0	65	73.7	75.6	68.8	85.4	0	76.5	85.6	80.7	70.2	86.4	0	0	81.9	0	0	77.3
Large 2 Axle Vehicles	0	0	0		0	0	63	23		95	19	0	20		42	39	44	0		83	0	0	220
% Large 2 Axle Vehicles	0	0	0	0	0	0	7	5	5.5	6.2	5.1	0	2.7	1	2.9	7.9	3.5	0	0	4.7	0	0	4.7
3 Axle Vehicles	0	0	0		0	0	36	14		57	2	0	20		29	38	23	0		61	0	0	147
% 3 Axle Vehicles	0	0	0	0	0	0	4	3	4.3	3.7	0.5	0	2.7	2.2	2	7.7	1.8	0	0	3.5	0	0	3.1
4+ Axle Trucks	0	0	0		0	0	217	85		326	33	1	137		206	70	105	0		175	0	0	707
% 4+ Axle Trucks	0	0	0	0	0	0	24	18.4	14.6	21.3	8.9	100	18.2	11.2	14.3	14.2	8.3	0	0	9.9	0	0	15

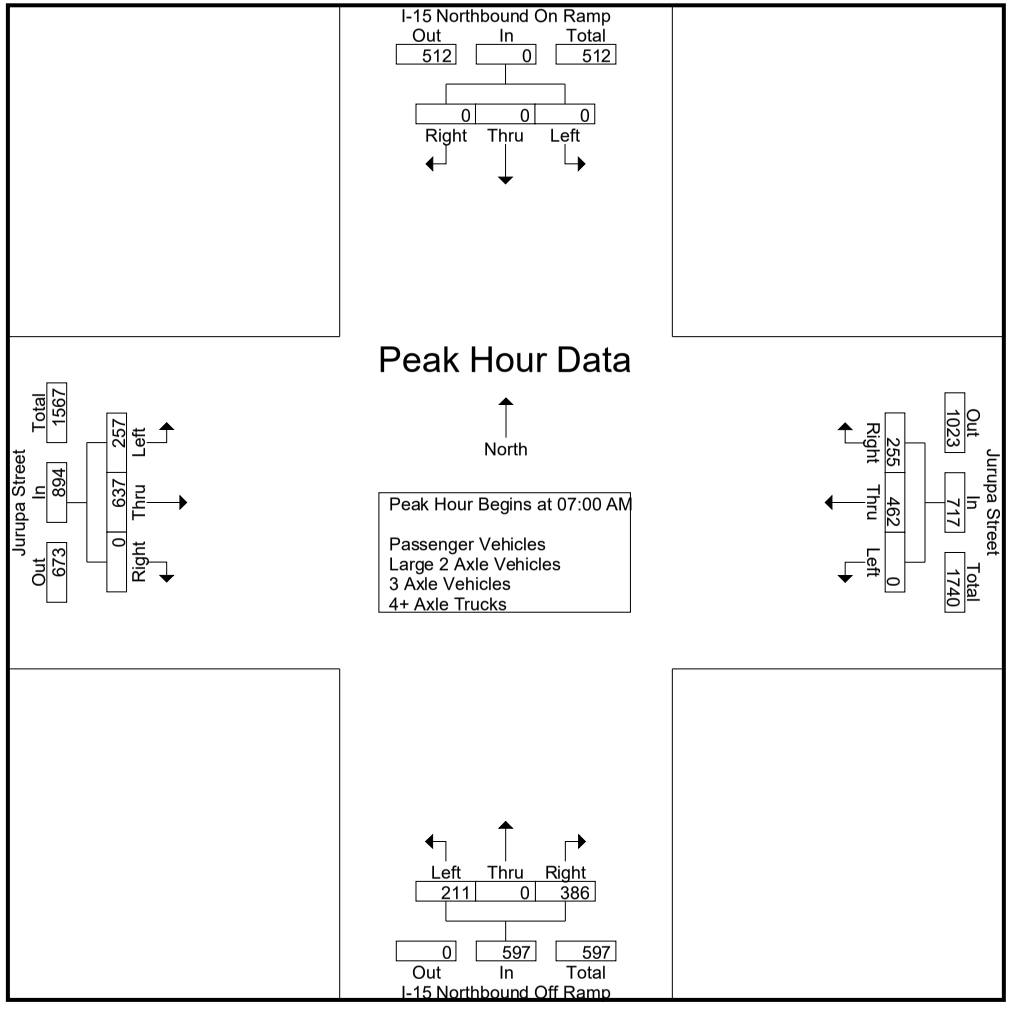
	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	105	62	167	**71**	0	97	**168**	67	**185**	0	252	587
07:15 AM	0	0	0	0	0	115	59	174	41	0	93	134	54	130	0	184	492
07:30 AM	0	0	0	0	0	**121**	**78**	**199**	55	0	82	137	49	156	0	205	541
07:45 AM	0	0	0	0	0	121	56	177	44	0	**114**	158	**87**	166	0	**253**	**588**
Total Volume	0	0	0	0	0	462	255	717	211	0	386	597	257	637	0	894	2208
% App. Total	0	0	0		0	64.4	35.6		35.3	0	64.7		28.7	71.3	0		
PHF	.000	.000	.000	.000	.000	.955	.817	.901	.743	.000	.846	.888	.739	.861	.000	.883	.939

3.1-706

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:30 AM				
+0 mins.	0	0	0	0	0	105	62	167	**71**	0	97	**168**	49	156	0	205	
+15 mins.	0	0	0	0	0	115	59	174	41	0	93	134	**87**	166	0	**253**	
+30 mins.	0	0	0	0	0	**121**	**78**	**199**	55	0	82	137	69	156	0	225	
+45 mins.	0	0	0	0	0	121	56	177	44	0	**114**	158	56	**168**	0	224	
Total Volume	0	0	0	0	0	462	255	717	211	0	386	597	261	646	0	907	
% App. Total	0	0	0		0	64.4	35.6		35.3	0	64.7		28.8	71.2	0		
PHF	.000	.000	.000	.000	.000	.955	.817	.901	.743	.000	.846	.888	.750	.961	.000	.896	

3.1-711

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021

Groups Printed- Passenger Vehicles

	I-15 Northbound On Ramp Southbound					Jurupa Street Westbound					I-15 Northbound Off Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	80	48	11	128	64	0	80	37	144	43	161	0	0	204	48	476	524
07:15 AM	0	0	0	0	0	0	78	51	17	129	35	0	73	36	108	44	114	0	0	158	53	395	448
07:30 AM	0	0	0	0	0	0	67	58	14	125	46	0	64	30	110	34	141	0	0	175	44	410	454
07:45 AM	0	0	0	0	0	0	76	39	14	115	39	0	90	37	129	65	145	0	0	210	51	454	505
Total	0	0	0	0	0	0	301	196	56	497	184	0	307	140	491	186	561	0	0	747	196	1735	1931
08:00 AM	0	0	0	0	0	0	54	43	19	97	37	0	75	34	112	50	134	0	0	184	53	393	446
08:15 AM	0	0	0	0	0	0	84	35	20	119	35	0	70	22	105	39	144	0	0	183	42	407	449
08:30 AM	0	0	0	0	0	0	72	32	18	104	27	0	74	47	101	34	126	0	0	160	65	365	430
08:45 AM	0	0	0	0	0	0	76	35	11	111	32	0	51	25	83	37	130	0	0	167	36	361	397
Total	0	0	0	0	0	0	286	145	68	431	131	0	270	128	401	160	534	0	0	694	196	1526	1722
Grand Total	0	0	0	0	0	0	587	341	124	928	315	0	577	268	892	346	1095	0	0	1441	392	3261	3653
Apprch %	0	0	0			0	63.3	36.7			35.3	0	64.7			24	76	0					
Total %	0	0	0		0	0	18	10.5		28.5	9.7	0	17.7		27.4	10.6	33.6	0		44.2	10.7	89.3	

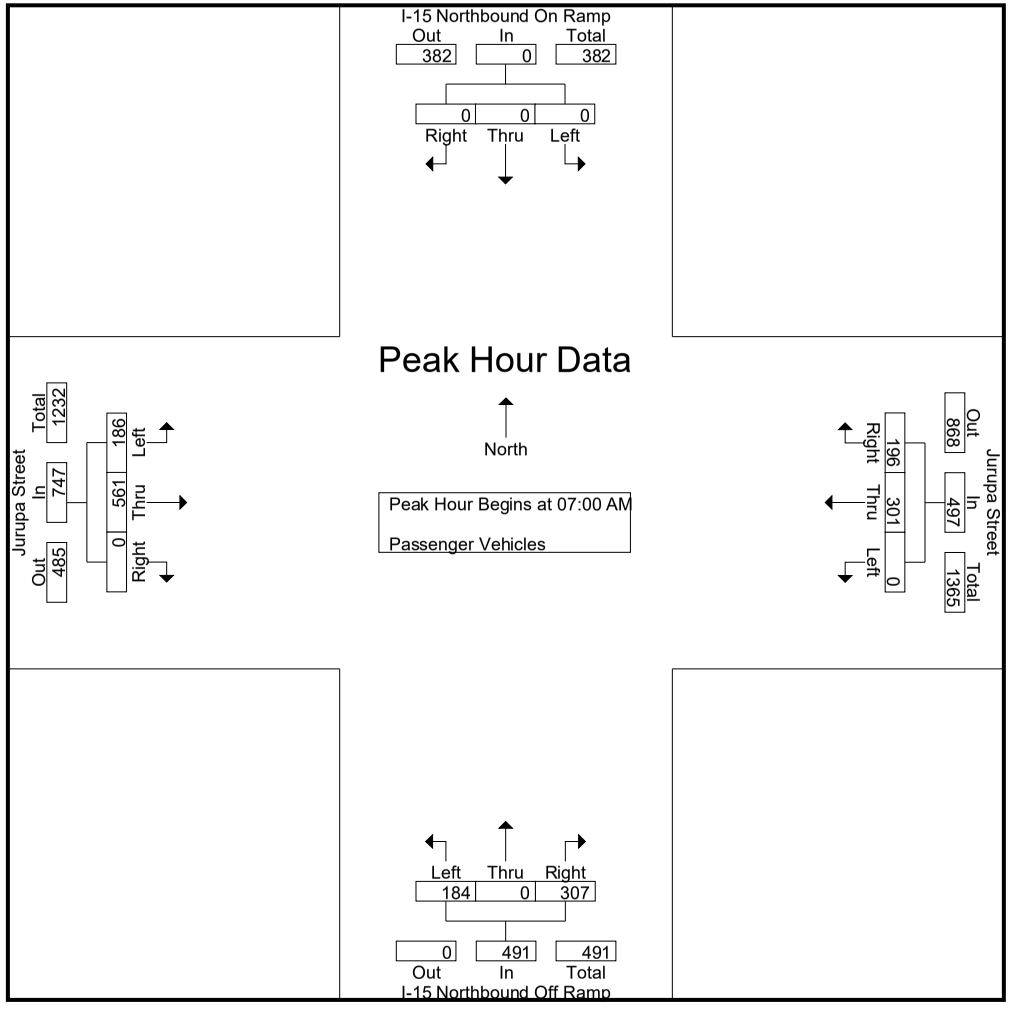
08.1-712

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	**80**	48	128	**64**	0	80	**144**	43	**161**	0	204	**476**
07:15 AM	0	0	0	0	0	78	51	**129**	35	0	73	108	44	114	0	158	395
07:30 AM	0	0	0	0	0	67	**58**	125	46	0	64	110	34	141	0	175	410
07:45 AM	0	0	0	0	0	76	39	115	39	0	**90**	129	**65**	145	0	**210**	454
Total Volume	0	0	0	0	0	301	196	497	184	0	307	491	186	561	0	747	1735
% App. Total	0	0	0		0	60.6	39.4		37.5	0	62.5		24.9	75.1	0		
PHF	.000	.000	.000	.000	.000	.941	.845	.963	.719	.000	.853	.852	.715	.871	.000	.889	.911

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



3.1-713

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	**80**	48	128	**64**	0	80	**144**	43	**161**	0	204	
+15 mins.	0	0	0	0	0	78	51	**129**	35	0	73	108	44	114	0	158	
+30 mins.	0	0	0	0	0	67	**58**	125	46	0	64	110	34	141	0	175	
+45 mins.	0	0	0	0	0	76	39	115	39	0	**90**	129	**65**	145	0	**210**	
Total Volume	0	0	0	0	0	301	196	497	184	0	307	491	186	561	0	747	
% App. Total	0	0	0		0	60.6	39.4		37.5	0	62.5		24.9	75.1	0		
PHF	.000	.000	.000	.000	.000	.941	.845	.963	.719	.000	.853	.852	.715	.871	.000	.889	

3.1-714

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

	I-15 Northbound On Ramp Southbound					Jurupa Street Westbound					I-15 Northbound Off Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	2	3	1	5	2	0	4	1	6	6	9	0	0	15	2	26	28
07:15 AM	0	0	0	0	0	0	7	1	0	8	2	0	4	0	6	2	4	0	0	6	0	20	20
07:30 AM	0	0	0	0	0	0	14	3	1	17	6	0	2	0	8	1	2	0	0	3	1	28	29
07:45 AM	0	0	0	0	0	0	9	5	3	14	2	0	1	1	3	6	3	0	0	9	4	26	30
Total	0	0	0	0	0	0	32	12	5	44	12	0	11	2	23	15	18	0	0	33	7	100	107
08:00 AM	0	0	0	0	0	0	13	3	2	16	1	0	2	0	3	4	7	0	0	11	2	30	32
08:15 AM	0	0	0	0	0	0	5	0	0	5	1	0	3	0	4	8	7	0	0	15	0	24	24
08:30 AM	0	0	0	0	0	0	2	4	0	6	2	0	1	0	3	2	4	0	0	6	0	15	15
08:45 AM	0	0	0	0	0	0	11	4	2	15	3	0	3	1	6	10	8	0	0	18	3	39	42
Total	0	0	0	0	0	0	31	11	4	42	7	0	9	1	16	24	26	0	0	50	5	108	113
Grand Total	0	0	0	0	0	0	63	23	9	86	19	0	20	3	39	39	44	0	0	83	12	208	220
Apprch %	0	0	0			0	73.3	26.7			48.7	0	51.3			47	53	0					
Total %	0	0	0		0	0	30.3	11.1		41.3	9.1	0	9.6		18.8	18.8	21.2	0		39.9	5.5	94.5	

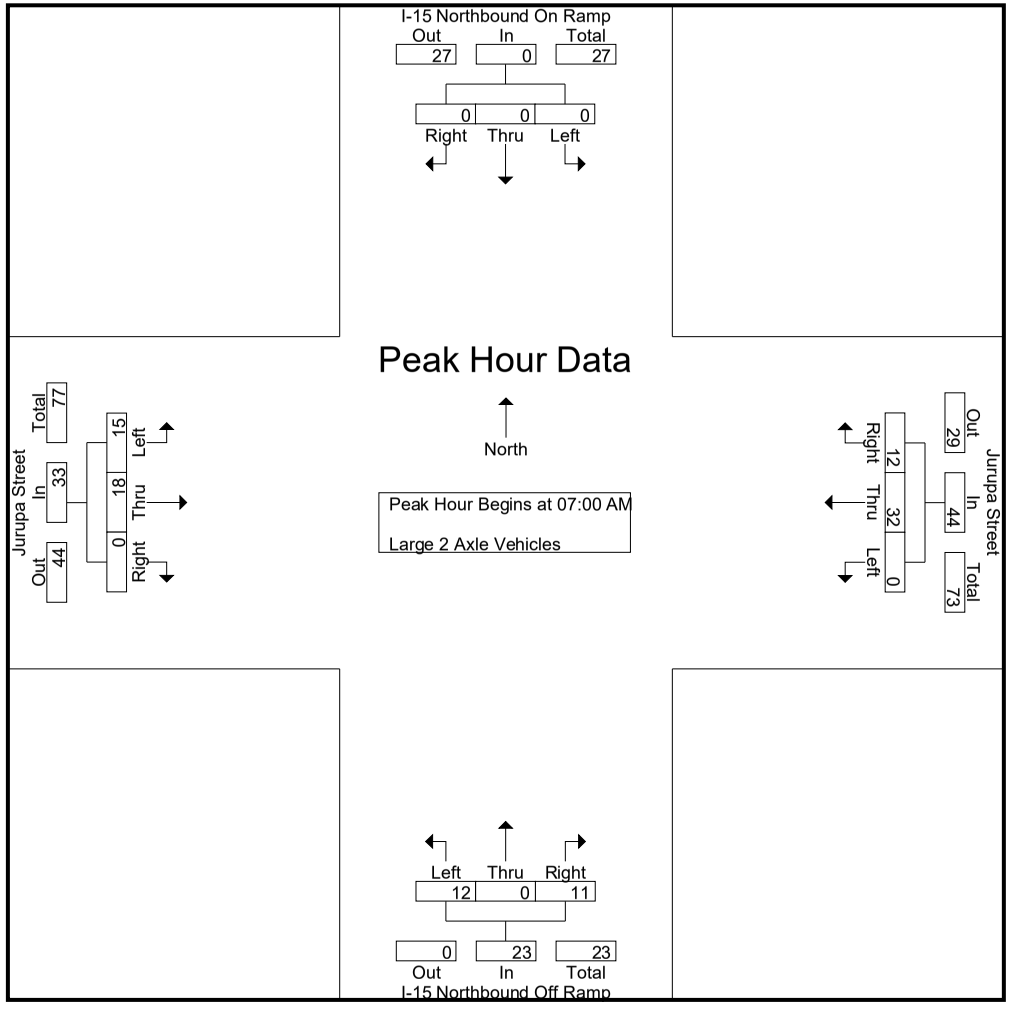
03.1-715

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	2	3	5	2	0	**4**	6	**6**	**9**	0	**15**	26
07:15 AM	0	0	0	0	0	7	1	8	2	0	4	6	2	4	0	6	20
07:30 AM	0	0	0	0	0	**14**	3	**17**	**6**	0	2	**8**	1	2	0	3	**28**
07:45 AM	0	0	0	0	0	9	**5**	14	2	0	1	3	6	3	0	9	26
Total Volume	0	0	0	0	0	32	12	44	12	0	11	23	15	18	0	33	100
% App. Total	0	0	0		0	72.7	27.3		52.2	0	47.8		45.5	54.5	0		
PHF	.000	.000	.000	.000	.000	.571	.600	.647	.500	.000	.688	.719	.625	.500	.000	.550	.893

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	2	3	5	2	0	**4**	6	**6**	**9**	0	**15**	
+15 mins.	0	0	0	0	0	7	1	8	2	0	4	6	2	4	0	6	
+30 mins.	0	0	0	0	0	**14**	3	**17**	**6**	0	2	**8**	1	2	0	3	
+45 mins.	0	0	0	0	0	9	**5**	14	2	0	1	3	6	3	0	9	
Total Volume	0	0	0	0	0	32	12	44	12	0	11	23	15	18	0	33	
% App. Total	0	0	0		0	72.7	27.3		52.2	0	47.8		45.5	54.5	0		
PHF	.000	.000	.000	.000	.000	.571	.600	.647	.500	.000	.688	.719	.625	.500	.000	.550	

3.1-717

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	I-15 Northbound On Ramp Southbound					Jurupa Street Westbound					I-15 Northbound Off Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	3	1	1	4	0	0	4	1	4	8	3	0	0	11	2	19	21
07:15 AM	0	0	0	0	0	0	5	0	0	5	0	0	1	1	1	1	2	0	0	3	1	9	10
07:30 AM	0	0	0	0	0	0	3	3	2	6	0	0	1	0	1	5	0	0	0	5	2	12	14
07:45 AM	0	0	0	0	0	0	6	1	0	7	0	0	1	1	1	7	1	0	0	8	1	16	17
Total	0	0	0	0	0	0	17	5	3	22	0	0	7	3	7	21	6	0	0	27	6	56	62
08:00 AM	0	0	0	0	0	0	4	4	3	8	0	0	0	0	0	7	4	0	0	11	3	19	22
08:15 AM	0	0	0	0	0	0	4	1	0	5	0	0	4	0	4	3	3	0	0	6	0	15	15
08:30 AM	0	0	0	0	0	0	6	2	1	8	1	0	5	3	6	1	8	0	0	9	4	23	27
08:45 AM	0	0	0	0	0	0	5	2	0	7	1	0	4	1	5	6	2	0	0	8	1	20	21
Total	0	0	0	0	0	0	19	9	4	28	2	0	13	4	15	17	17	0	0	34	8	77	85
Grand Total	0	0	0	0	0	0	36	14	7	50	2	0	20	7	22	38	23	0	0	61	14	133	147
Apprch %	0	0	0			0	72	28			9.1	0	90.9			62.3	37.7	0					
Total %	0	0	0		0	0	27.1	10.5		37.6	1.5	0	15		16.5	28.6	17.3	0		45.9	9.5	90.5	

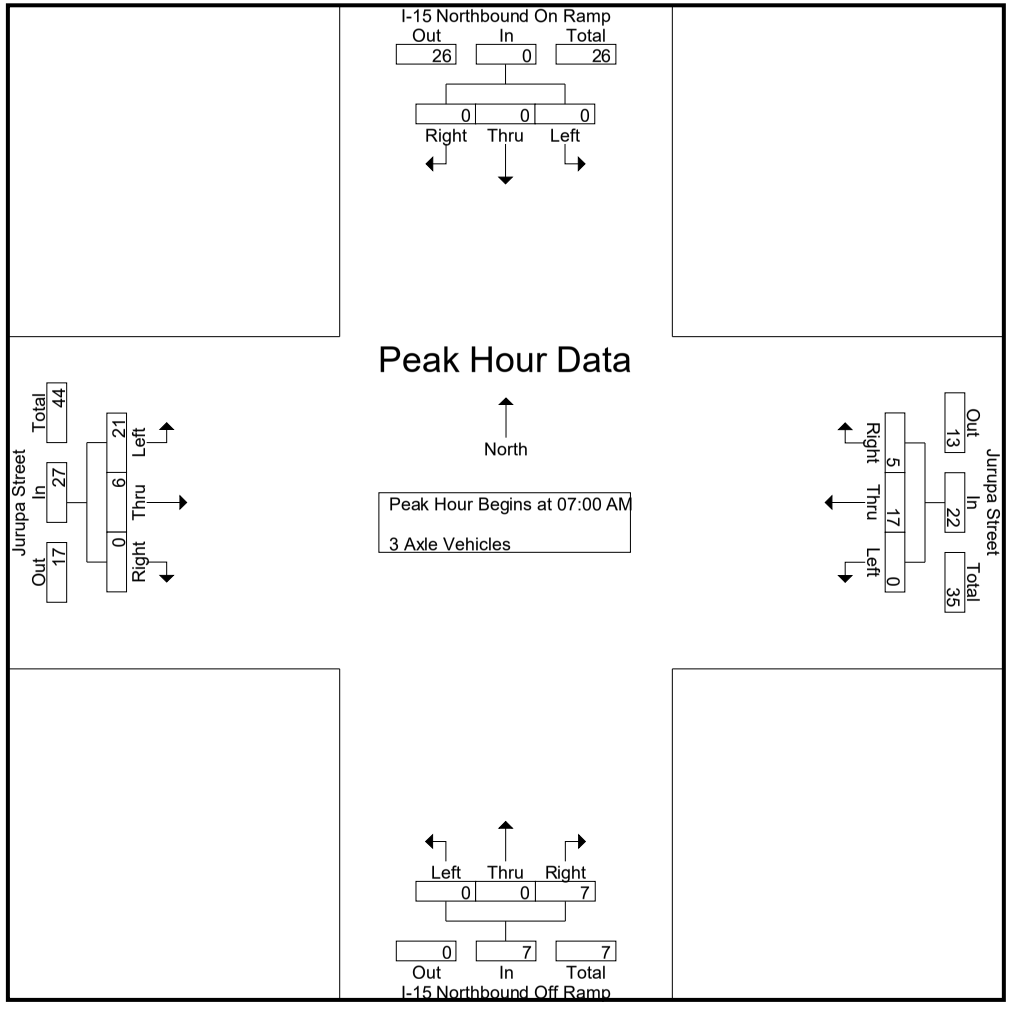
3.1-718

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	3	1	4	0	0	**4**	**4**	**8**	**3**	0	**11**	**19**
07:15 AM	0	0	0	0	0	5	0	5	0	0	1	1	1	2	0	3	9
07:30 AM	0	0	0	0	0	3	**3**	6	0	0	1	1	5	0	0	5	12
07:45 AM	0	0	0	0	0	**6**	1	**7**	0	0	1	1	7	1	0	8	16
Total Volume	0	0	0	0	0	17	5	22	0	0	7	7	21	6	0	27	56
% App. Total	0	0	0		0	77.3	22.7		0	0	100		77.8	22.2	0		
PHF	.000	.000	.000	.000	.000	.708	.417	.786	.000	.000	.438	.438	.656	.500	.000	.614	.737

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	3	1	4	0	0	**4**	**4**	**8**	**3**	0	**11**	
+15 mins.	0	0	0	0	0	5	0	5	0	0	1	1	1	2	0	3	
+30 mins.	0	0	0	0	0	3	**3**	6	0	0	1	1	5	0	0	5	
+45 mins.	0	0	0	0	0	**6**	1	**7**	0	0	1	1	7	1	0	8	
Total Volume	0	0	0	0	0	17	5	22	0	0	7	7	21	6	0	27	
% App. Total	0	0	0		0	77.3	22.7		0	0	100		77.8	22.2	0		
PHF	.000	.000	.000	.000	.000	.708	.417	.786	.000	.000	.438	.438	.656	.500	.000	.614	

3.1-720

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	I-15 Northbound On Ramp Southbound					Jurupa Street Westbound					I-15 Northbound Off Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
07:00 AM	0	0	0	0	0	0	20	10	5	30	5	0	9	4	14	10	12	0	0	22	9	66	75
07:15 AM	0	0	0	0	0	0	25	7	2	32	4	0	15	1	19	7	10	0	0	17	3	68	71
07:30 AM	0	0	0	0	0	0	37	14	2	51	3	0	15	2	18	9	13	0	0	22	4	91	95
07:45 AM	0	0	0	0	0	0	30	11	4	41	3	0	22	4	25	9	17	0	0	26	8	92	100
Total	0	0	0	0	0	0	112	42	13	154	15	0	61	11	76	35	52	0	0	87	24	317	341
08:00 AM	0	0	0	0	0	0	25	6	0	31	3	0	17	6	20	8	11	0	0	19	6	70	76
08:15 AM	0	0	0	0	0	0	29	11	1	40	3	0	16	6	19	6	14	0	0	20	7	79	86
08:30 AM	0	0	0	0	0	0	28	12	6	40	8	1	11	2	20	12	12	0	0	24	8	84	92
08:45 AM	0	0	0	0	0	0	23	14	4	37	4	0	32	10	36	9	16	0	0	25	14	98	112
Total	0	0	0	0	0	0	105	43	11	148	18	1	76	24	95	35	53	0	0	88	35	331	366
Grand Total	0	0	0	0	0	0	217	85	24	302	33	1	137	35	171	70	105	0	0	175	59	648	707
Apprch %	0	0	0			0	71.9	28.1			19.3	0.6	80.1			40	60	0					
Total %	0	0	0		0	0	33.5	13.1		46.6	5.1	0.2	21.1		26.4	10.8	16.2	0		27	8.3	91.7	

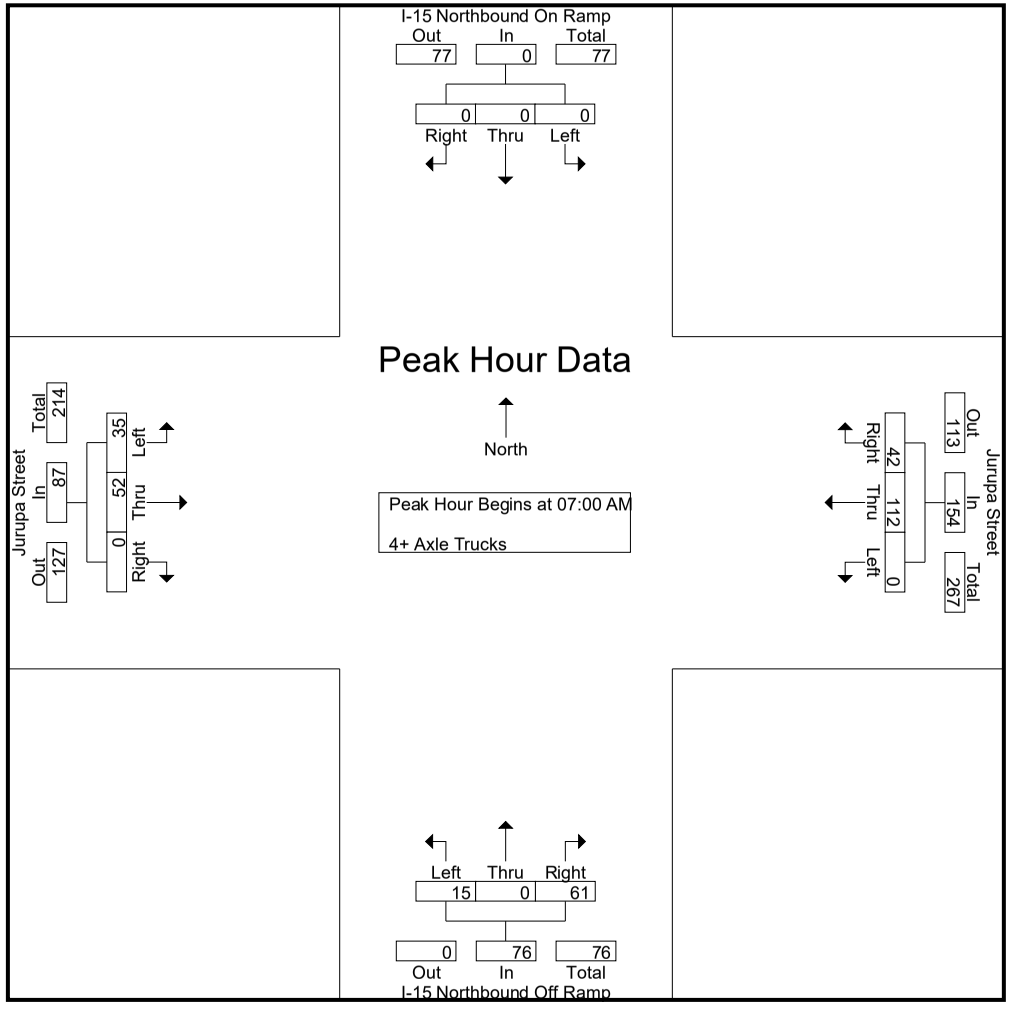
3.1-721

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	20	10	30	**5**	0	9	14	**10**	12	0	22	66
07:15 AM	0	0	0	0	0	25	7	32	4	0	15	19	7	10	0	17	68
07:30 AM	0	0	0	0	0	**37**	**14**	**51**	3	0	15	18	9	13	0	22	91
07:45 AM	0	0	0	0	0	30	11	41	3	0	**22**	**25**	9	**17**	0	**26**	**92**
Total Volume	0	0	0	0	0	112	42	154	15	0	61	76	35	52	0	87	317
% App. Total	0	0	0		0	72.7	27.3		19.7	0	80.3		40.2	59.8	0		
PHF	.000	.000	.000	.000	.000	.757	.750	.755	.750	.000	.693	.760	.875	.765	.000	.837	.861

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa AM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	20	10	30	**5**	0	9	14	**10**	12	0	22	
+15 mins.	0	0	0	0	0	25	7	32	4	0	15	19	7	10	0	17	
+30 mins.	0	0	0	0	0	**37**	**14**	**51**	3	0	15	18	9	13	0	22	
+45 mins.	0	0	0	0	0	30	11	41	3	0	**22**	**25**	9	**17**	0	**26**	
Total Volume	0	0	0	0	0	112	42	154	15	0	61	76	35	52	0	87	
% App. Total	0	0	0		0	72.7	27.3		19.7	0	80.3		40.2	59.8	0		
PHF	.000	.000	.000	.000	.000	.757	.750	.755	.750	.000	.693	.760	.875	.765	.000	.837	

3.1-723

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	I-15 Northbound On Ramp Southbound					Jurupa Street Westbound					I-15 Northbound Off Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	217	138	29	355	13	0	37	21	50	115	182	0	0	297	50	702	752
04:15 PM	0	0	0	0	0	0	203	81	24	284	29	0	46	28	75	105	208	0	0	313	52	672	724
04:30 PM	0	0	0	0	0	0	194	115	43	309	15	1	60	38	76	121	173	0	0	294	81	679	760
04:45 PM	0	0	0	0	0	0	194	103	31	297	20	0	52	27	72	134	159	0	0	293	58	662	720
Total	0	0	0	0	0	0	808	437	127	1245	77	1	195	114	273	475	722	0	0	1197	241	2715	2956
05:00 PM	0	0	0	0	0	0	209	98	23	307	24	0	40	24	64	121	187	0	0	308	47	679	726
05:15 PM	0	0	0	0	0	0	154	85	18	239	15	0	45	31	60	102	207	0	0	309	49	608	657
05:30 PM	0	0	0	0	0	0	234	73	28	307	24	0	39	24	63	108	168	0	0	276	52	646	698
05:45 PM	0	0	0	0	0	0	142	75	12	217	24	0	40	21	64	88	186	0	0	274	33	555	588
Total	0	0	0	0	0	0	739	331	81	1070	87	0	164	100	251	419	748	0	0	1167	181	2488	2669
Grand Total	0	0	0	0	0	0	1547	768	208	2315	164	1	359	214	524	894	1470	0	0	2364	422	5203	5625
Apprch %	0	0	0			0	66.8	33.2			31.3	0.2	68.5			37.8	62.2	0					
Total %	0	0	0		0	0	29.7	14.8		44.5	3.2	0	6.9		10.1	17.2	28.3	0		45.4	7.5	92.5	
Passenger Vehicles	0	0	0		0	0	1316	705		2214	133	1	220		503	801	1257	0		2058	0	0	4775
% Passenger Vehicles	0	0	0	0	0	0	85.1	91.8	92.8	87.8	81.1	100	61.3	69.6	68.2	89.6	85.5	0	0	87.1	0	0	84.9
Large 2 Axle Vehicles	0	0	0		0	0	55	6		61	10	0	16		36	13	39	0		52	0	0	149
% Large 2 Axle Vehicles	0	0	0	0	0	0	3.6	0.8	0	2.4	6.1	0	4.5	4.7	4.9	1.5	2.7	0	0	2.2	0	0	2.6
3 Axle Vehicles	0	0	0		0	0	32	11		46	2	0	15		23	14	31	0		45	0	0	114
% 3 Axle Vehicles	0	0	0	0	0	0	2.1	1.4	1.4	1.8	1.2	0	4.2	2.8	3.1	1.6	2.1	0	0	1.9	0	0	2
4+ Axle Trucks	0	0	0		0	0	144	46		202	19	0	108		176	66	143	0		209	0	0	587
% 4+ Axle Trucks	0	0	0	0	0	0	9.3	6	5.8	8	11.6	0	30.1	22.9	23.8	7.4	9.7	0	0	8.8	0	0	10.4

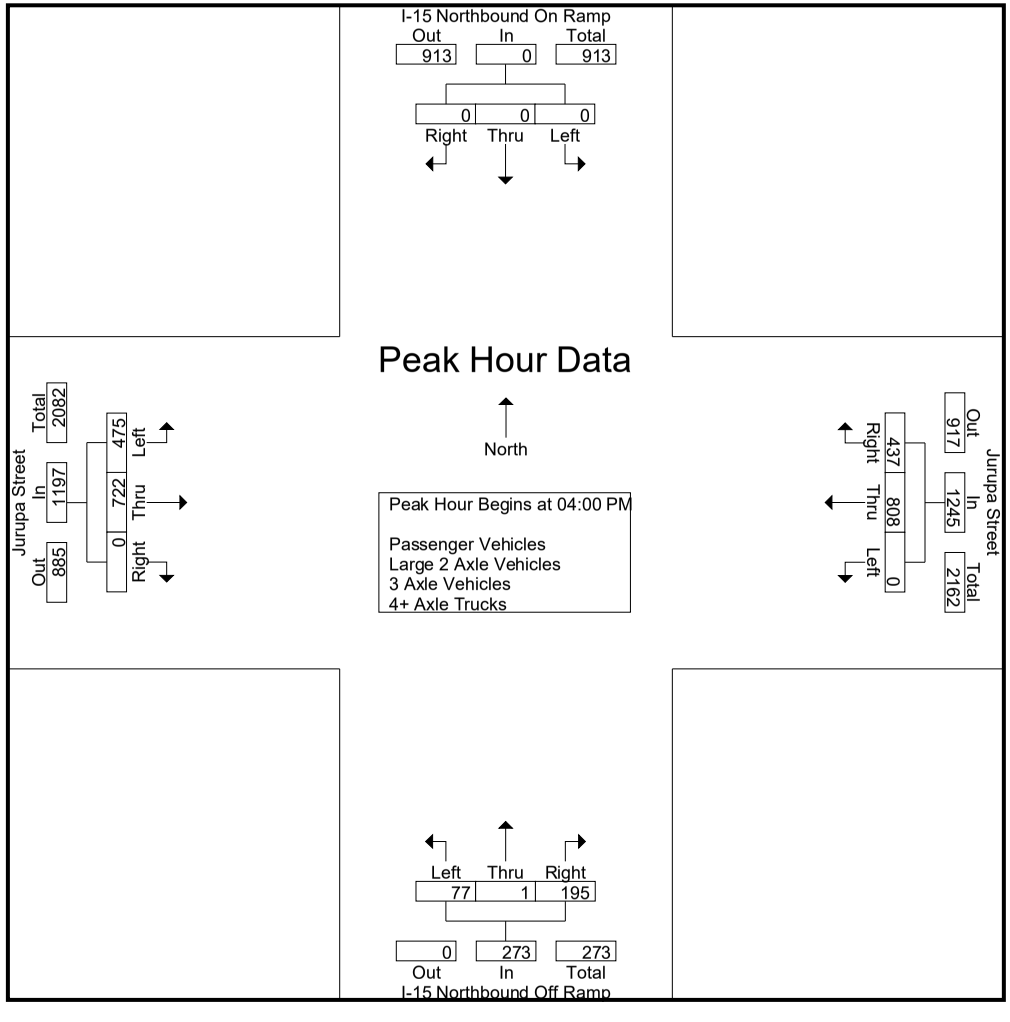
3.1-724

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	**217**	**138**	**355**	13	0	37	50	115	182	0	297	**702**
04:15 PM	0	0	0	0	0	203	81	284	**29**	0	46	75	105	**208**	0	**313**	672
04:30 PM	0	0	0	0	0	194	115	309	15	**1**	**60**	**76**	121	173	0	294	679
04:45 PM	0	0	0	0	0	194	103	297	20	0	52	72	**134**	159	0	293	662
Total Volume	0	0	0	0	0	808	437	1245	77	1	195	273	475	722	0	1197	2715
% App. Total	0	0	0		0	64.9	35.1		28.2	0.4	71.4		39.7	60.3	0		
PHF	.000	.000	.000	.000	.000	.931	.792	.877	.664	.250	.813	.898	.886	.868	.000	.956	.967

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:15 PM				04:15 PM				
+0 mins.	0	0	0	0	0	**217**	**138**	**355**	**29**	0	46	75	105	**208**	0	**313**	
+15 mins.	0	0	0	0	0	203	81	284	15	**1**	**60**	**76**	121	173	0	294	
+30 mins.	0	0	0	0	0	194	115	309	20	0	52	72	**134**	159	0	293	
+45 mins.	0	0	0	0	0	194	103	297	24	0	40	64	121	187	0	308	
Total Volume	0	0	0	0	0	808	437	1245	88	1	198	287	481	727	0	1208	
% App. Total	0	0	0		0	64.9	35.1		30.7	0.3	69		39.8	60.2	0		
PHF	.000	.000	.000	.000	.000	.931	.792	.877	.759	.250	.825	.944	.897	.874	.000	.965	

3.1-726

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Passenger Vehicles

	I-15 Northbound On Ramp Southbound					Jurupa Street Westbound					I-15 Northbound Off Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	198	125	25	323	11	0	24	18	35	105	151	0	0	256	43	614	657
04:15 PM	0	0	0	0	0	0	173	72	21	245	20	0	32	21	52	96	179	0	0	275	42	572	614
04:30 PM	0	0	0	0	0	0	168	110	42	278	12	1	36	24	49	105	147	0	0	252	66	579	645
04:45 PM	0	0	0	0	0	0	170	99	30	269	17	0	29	13	46	125	137	0	0	262	43	577	620
Total	0	0	0	0	0	0	709	406	118	1115	60	1	121	76	182	431	614	0	0	1045	194	2342	2536
05:00 PM	0	0	0	0	0	0	176	86	23	262	18	0	24	16	42	106	152	0	0	258	39	562	601
05:15 PM	0	0	0	0	0	0	137	82	16	219	12	0	29	25	41	96	181	0	0	277	41	537	578
05:30 PM	0	0	0	0	0	0	180	64	26	244	21	0	23	18	44	96	147	0	0	243	44	531	575
05:45 PM	0	0	0	0	0	0	114	67	10	181	22	0	23	14	45	72	163	0	0	235	24	461	485
Total	0	0	0	0	0	0	607	299	75	906	73	0	99	73	172	370	643	0	0	1013	148	2091	2239
Grand Total	0	0	0	0	0	0	1316	705	193	2021	133	1	220	149	354	801	1257	0	0	2058	342	4433	4775
Apprch %	0	0	0			0	65.1	34.9			37.6	0.3	62.1			38.9	61.1	0					
Total %	0	0	0		0	0	29.7	15.9		45.6	3	0	5		8	18.1	28.4	0		46.4	7.2	92.8	

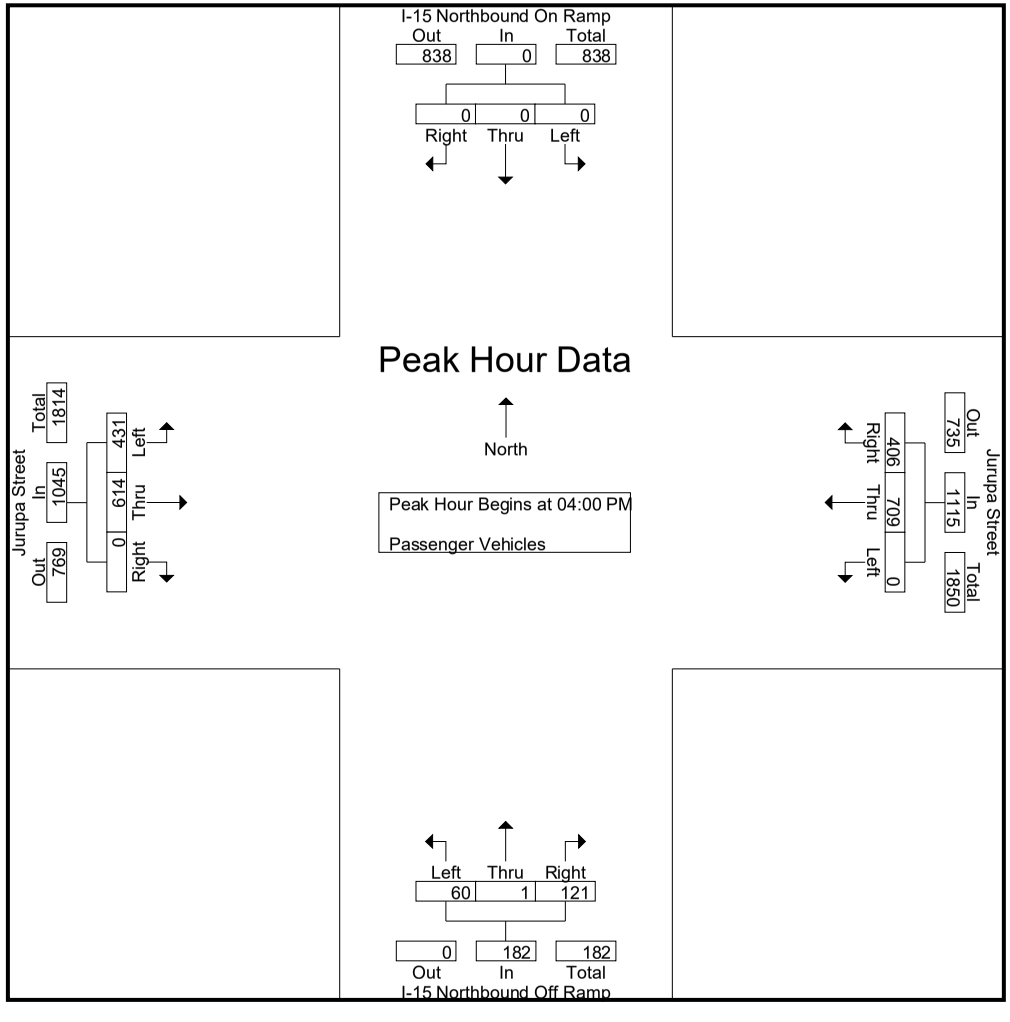
8.1-727

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	**198**	**125**	**323**	11	0	24	35	105	151	0	256	**614**
04:15 PM	0	0	0	0	0	173	72	245	**20**	0	32	**52**	96	**179**	0	**275**	572
04:30 PM	0	0	0	0	0	168	110	278	12	**1**	**36**	49	105	147	0	252	579
04:45 PM	0	0	0	0	0	170	99	269	17	0	29	46	**125**	137	0	262	577
Total Volume	0	0	0	0	0	709	406	1115	60	1	121	182	431	614	0	1045	2342
% App. Total	0	0	0		0	63.6	36.4		33	0.5	66.5		41.2	58.8	0		
PHF	.000	.000	.000	.000	.000	.895	.812	.863	.750	.250	.840	.875	.862	.858	.000	.950	.954

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	0	0	0	0	**198**	**125**	**323**	11	0	24	35	105	151	0	256	
+15 mins.	0	0	0	0	0	173	72	245	**20**	0	32	**52**	96	**179**	0	**275**	
+30 mins.	0	0	0	0	0	168	110	278	12	**1**	**36**	49	105	147	0	252	
+45 mins.	0	0	0	0	0	170	99	269	17	0	29	46	**125**	137	0	262	
Total Volume	0	0	0	0	0	709	406	1115	60	1	121	182	431	614	0	1045	
% App. Total	0	0	0		0	63.6	36.4		33	0.5	66.5		41.2	58.8	0		
PHF	.000	.000	.000	.000	.000	.895	.812	.863	.750	.250	.840	.875	.862	.858	.000	.950	

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- Large 2 Axle Vehicles

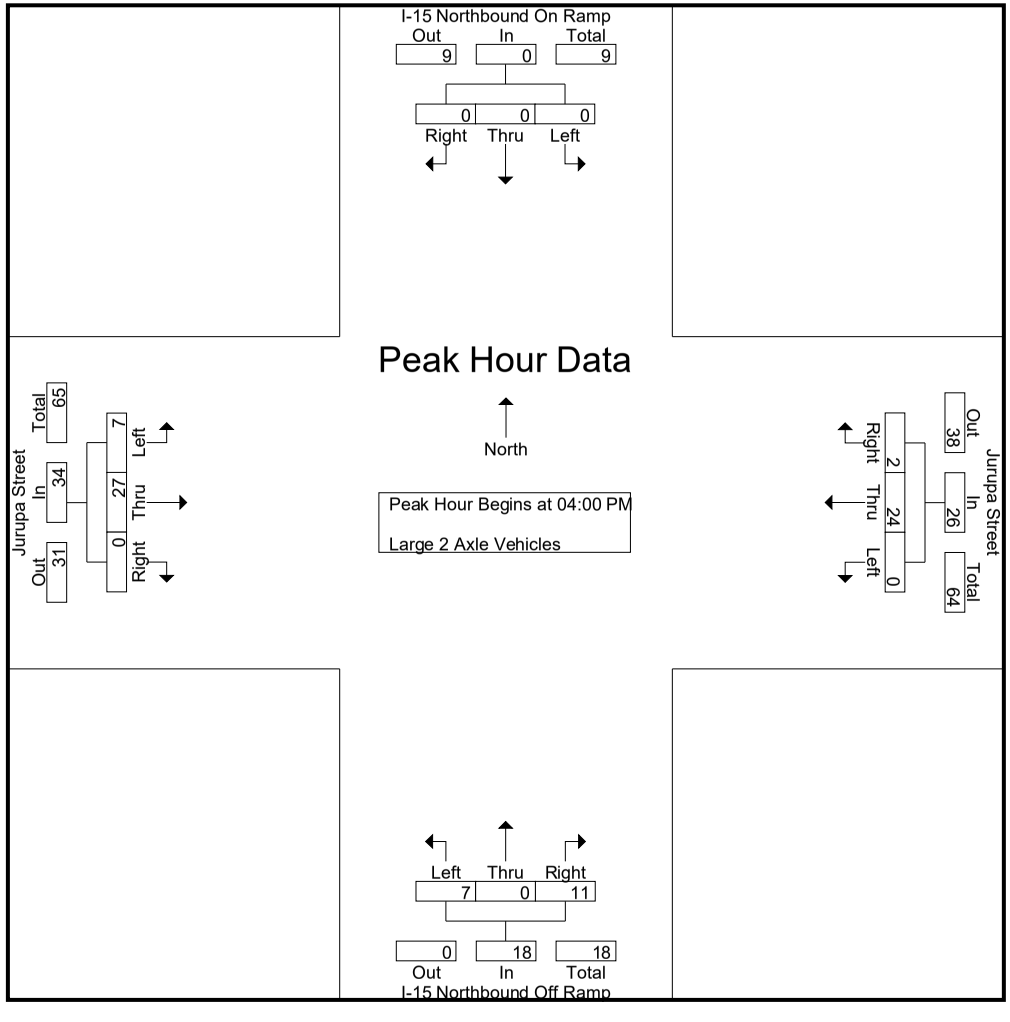
	I-15 Northbound On Ramp Southbound					Jurupa Street Westbound					I-15 Northbound Off Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	7	2	0	9	0	0	0	0	0	1	9	0	0	10	0	19	19
04:15 PM	0	0	0	0	0	0	5	0	0	5	6	0	1	1	7	0	4	0	0	4	1	16	17
04:30 PM	0	0	0	0	0	0	8	0	0	8	0	0	8	6	8	6	8	0	0	14	6	30	36
04:45 PM	0	0	0	0	0	0	4	0	0	4	1	0	2	1	3	0	6	0	0	6	1	13	14
Total	0	0	0	0	0	0	24	2	0	26	7	0	11	8	18	7	27	0	0	34	8	78	86
05:00 PM	0	0	0	0	0	0	6	2	0	8	1	0	0	0	1	2	4	0	0	6	0	15	15
05:15 PM	0	0	0	0	0	0	4	1	0	5	1	0	2	1	3	2	5	0	0	7	1	15	16
05:30 PM	0	0	0	0	0	0	15	1	0	16	0	0	0	0	0	1	2	0	0	3	0	19	19
05:45 PM	0	0	0	0	0	0	6	0	0	6	1	0	3	1	4	1	1	0	0	2	1	12	13
Total	0	0	0	0	0	0	31	4	0	35	3	0	5	2	8	6	12	0	0	18	2	61	63
Grand Total	0	0	0	0	0	0	55	6	0	61	10	0	16	10	26	13	39	0	0	52	10	139	149
Apprch %	0	0	0			0	90.2	9.8			38.5	0	61.5			25	75	0					
Total %	0	0	0		0	0	39.6	4.3		43.9	7.2	0	11.5		18.7	9.4	28.1	0		37.4	6.7	93.3	

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	7	**2**	**9**	0	0	0	0	1	**9**	0	10	19
04:15 PM	0	0	0	0	0	5	0	5	**6**	0	1	7	0	4	0	4	16
04:30 PM	0	0	0	0	0	**8**	0	8	0	0	**8**	**8**	**6**	8	0	**14**	**30**
04:45 PM	0	0	0	0	0	4	0	4	1	0	2	3	0	6	0	6	13
Total Volume	0	0	0	0	0	24	2	26	7	0	11	18	7	27	0	34	78
% App. Total	0	0	0		0	92.3	7.7		38.9	0	61.1		20.6	79.4	0		
PHF	.000	.000	.000	.000	.000	.750	.250	.722	.292	.000	.344	.563	.292	.750	.000	.607	.650

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	0	0	0	0	7	**2**	**9**	0	0	0	0	1	**9**	0	10	
+15 mins.	0	0	0	0	0	5	0	5	**6**	0	1	7	0	4	0	4	
+30 mins.	0	0	0	0	0	**8**	0	8	0	0	**8**	**8**	**6**	8	0	**14**	
+45 mins.	0	0	0	0	0	4	0	4	1	0	2	3	0	6	0	6	
Total Volume	0	0	0	0	0	24	2	26	7	0	11	18	7	27	0	34	
% App. Total	0	0	0		0	92.3	7.7		38.9	0	61.1		20.6	79.4	0		
PHF	.000	.000	.000	.000	.000	.750	.250	.722	.292	.000	.344	.563	.292	.750	.000	.607	

3.1-732

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 3 Axle Vehicles

	I-15 Northbound On Ramp Southbound					Jurupa Street Westbound					I-15 Northbound Off Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	3	3	2	6	1	0	3	1	4	2	4	0	0	6	3	16	19
04:15 PM	0	0	0	0	0	0	5	0	0	5	0	0	3	2	3	1	4	0	0	5	2	13	15
04:30 PM	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	2	4	0	0	6	0	12	12
04:45 PM	0	0	0	0	0	0	6	1	0	7	0	0	1	0	1	4	2	0	0	6	0	14	14
Total	0	0	0	0	0	0	19	5	2	24	1	0	7	3	8	9	14	0	0	23	5	55	60
05:00 PM	0	0	0	0	0	0	5	1	0	6	1	0	1	1	2	3	6	0	0	9	1	17	18
05:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	4	1	4	0	4	0	0	4	1	9	10
05:30 PM	0	0	0	0	0	0	5	1	0	6	0	0	0	0	0	1	1	0	0	2	0	8	8
05:45 PM	0	0	0	0	0	0	2	4	1	6	0	0	3	1	3	1	6	0	0	7	2	16	18
Total	0	0	0	0	0	0	13	6	1	19	1	0	8	3	9	5	17	0	0	22	4	50	54
Grand Total	0	0	0	0	0	0	32	11	3	43	2	0	15	6	17	14	31	0	0	45	9	105	114
Apprch %	0	0	0			0	74.4	25.6			11.8	0	88.2			31.1	68.9	0					
Total %	0	0	0		0	0	30.5	10.5		41	1.9	0	14.3		16.2	13.3	29.5	0		42.9	7.9	92.1	

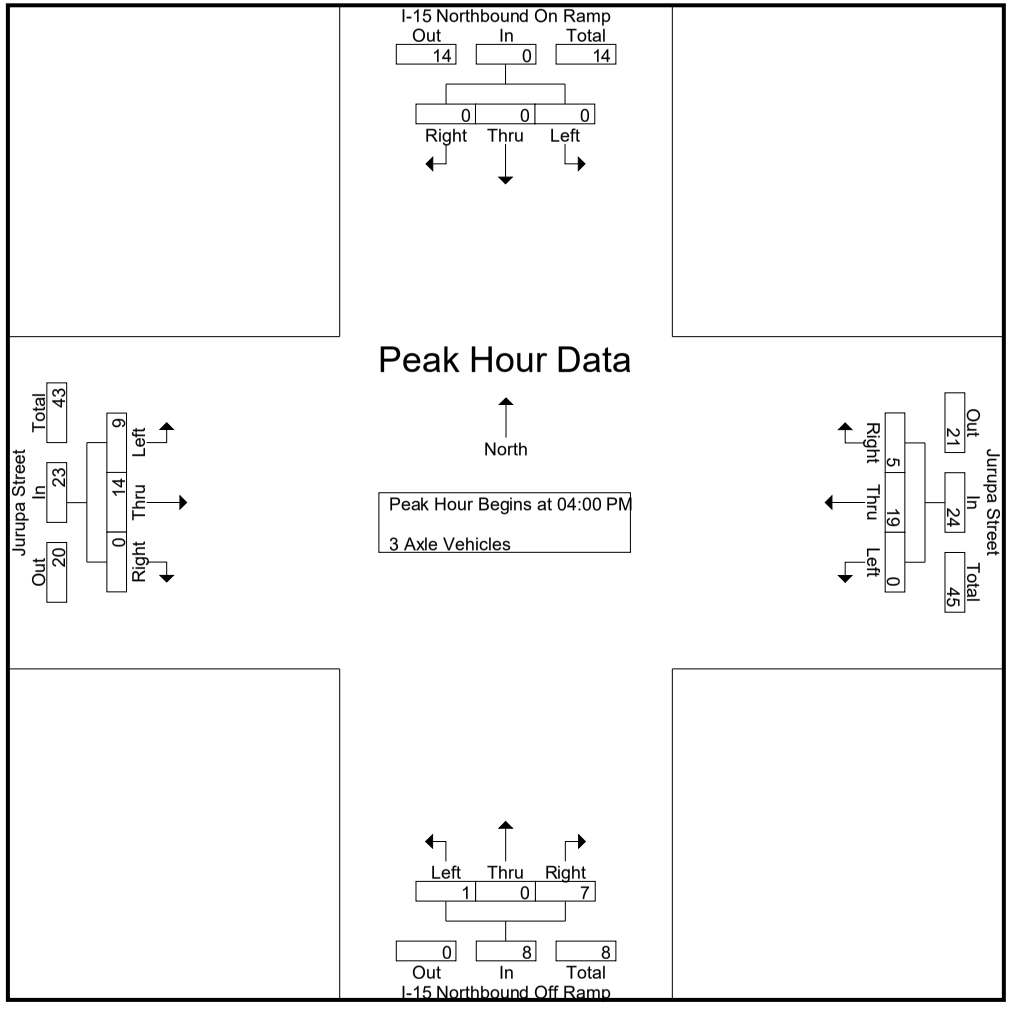
8.1-733

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	3	**3**	6	**1**	0	**3**	**4**	2	**4**	0	**6**	**16**
04:15 PM	0	0	0	0	0	5	0	5	0	0	3	3	1	4	0	5	13
04:30 PM	0	0	0	0	0	5	1	6	0	0	0	0	2	4	0	6	12
04:45 PM	0	0	0	0	0	**6**	1	**7**	0	0	1	1	**4**	2	0	6	14
Total Volume	0	0	0	0	0	19	5	24	1	0	7	8	9	14	0	23	55
% App. Total	0	0	0		0	79.2	20.8		12.5	0	87.5		39.1	60.9	0		
PHF	.000	.000	.000	.000	.000	.792	.417	.857	.250	.000	.583	.500	.563	.875	.000	.958	.859

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	0	0	0	0	3	**3**	6	**1**	0	**3**	**4**	2	**4**	0	**6**	
+15 mins.	0	0	0	0	0	5	0	5	0	0	3	3	1	4	0	5	
+30 mins.	0	0	0	0	0	5	1	6	0	0	0	0	2	4	0	6	
+45 mins.	0	0	0	0	0	**6**	1	**7**	0	0	1	1	**4**	2	0	6	
Total Volume	0	0	0	0	0	19	5	24	1	0	7	8	9	14	0	23	
% App. Total	0	0	0		0	79.2	20.8		12.5	0	87.5		39.1	60.9	0		
PHF	.000	.000	.000	.000	.000	.792	.417	.857	.250	.000	.583	.500	.563	.875	.000	.958	

3.1-735

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 1

Groups Printed- 4+ Axle Trucks

	I-15 Northbound On Ramp Southbound					Jurupa Street Westbound					I-15 Northbound Off Ramp Northbound					Jurupa Street Eastbound							
Start Time	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Exclu. Total	Inclu. Total	Int. Total
04:00 PM	0	0	0	0	0	0	9	8	2	17	1	0	10	2	11	7	18	0	0	25	4	53	57
04:15 PM	0	0	0	0	0	0	20	9	3	29	3	0	10	4	13	8	21	0	0	29	7	71	78
04:30 PM	0	0	0	0	0	0	13	4	1	17	3	0	16	8	19	8	14	0	0	22	9	58	67
04:45 PM	0	0	0	0	0	0	14	3	1	17	2	0	20	13	22	5	14	0	0	19	14	58	72
Total	0	0	0	0	0	0	56	24	7	80	9	0	56	27	65	28	67	0	0	95	34	240	274
05:00 PM	0	0	0	0	0	0	22	9	0	31	4	0	15	7	19	10	25	0	0	35	7	85	92
05:15 PM	0	0	0	0	0	0	12	2	2	14	2	0	10	4	12	4	17	0	0	21	6	47	53
05:30 PM	0	0	0	0	0	0	34	7	2	41	3	0	16	6	19	10	18	0	0	28	8	88	96
05:45 PM	0	0	0	0	0	0	20	4	1	24	1	0	11	5	12	14	16	0	0	30	6	66	72
Total	0	0	0	0	0	0	88	22	5	110	10	0	52	22	62	38	76	0	0	114	27	286	313
Grand Total	0	0	0	0	0	0	144	46	12	190	19	0	108	49	127	66	143	0	0	209	61	526	587
Apprch %	0	0	0			0	75.8	24.2			15	0	85			31.6	68.4	0					
Total %	0	0	0		0	0	27.4	8.7		36.1	3.6	0	20.5		24.1	12.5	27.2	0		39.7	10.4	89.6	

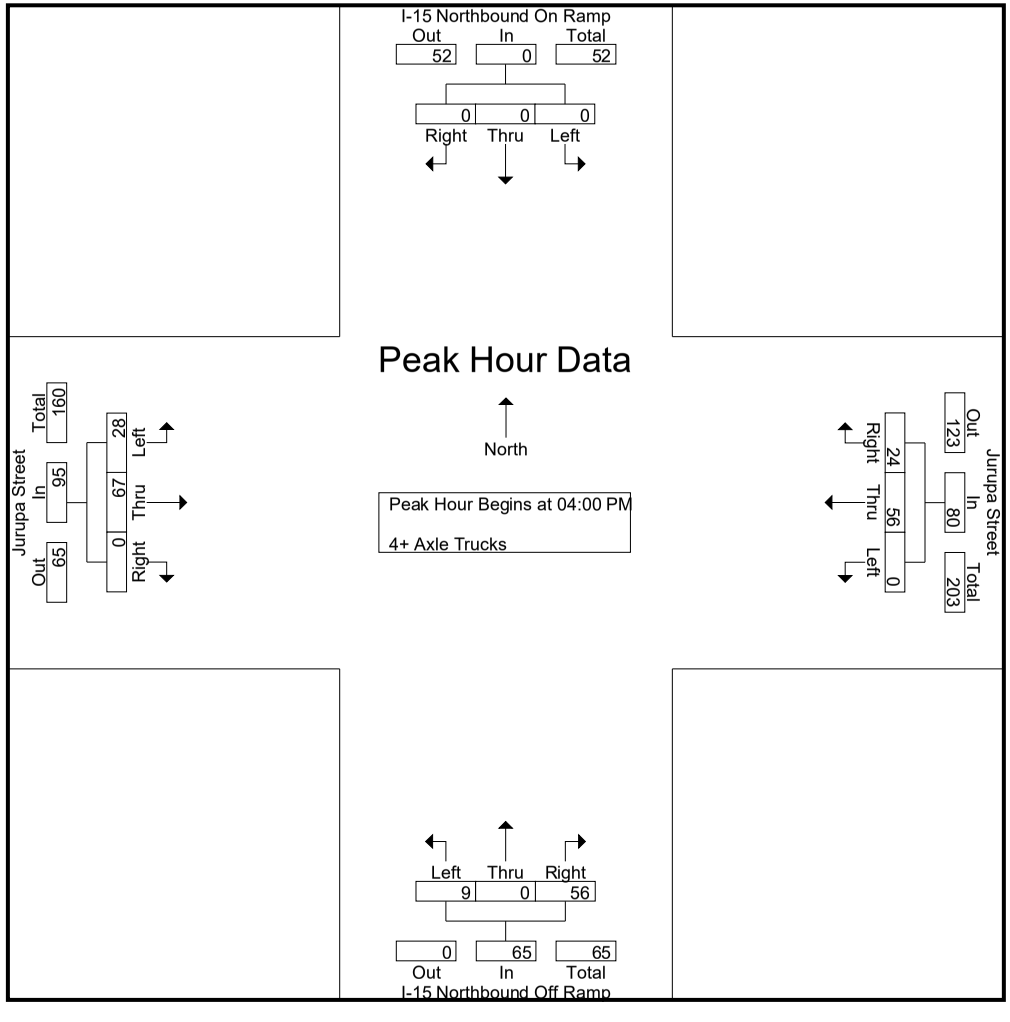
03.1-736

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	0	0	0	0	9	8	17	1	0	10	11	7	18	0	25	53
04:15 PM	0	0	0	0	0	**20**	**9**	**29**	**3**	0	10	13	**8**	**21**	0	**29**	**71**
04:30 PM	0	0	0	0	0	13	4	17	3	0	16	19	8	14	0	22	58
04:45 PM	0	0	0	0	0	14	3	17	2	0	**20**	**22**	5	14	0	19	58
Total Volume	0	0	0	0	0	56	24	80	9	0	56	65	28	67	0	95	240
% App. Total	0	0	0		0	70	30		13.8	0	86.2		29.5	70.5	0		
PHF	.000	.000	.000	.000	.000	.700	.667	.690	.750	.000	.700	.739	.875	.798	.000	.819	.845

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 2



Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951)268-6268

City of Ontario
N/S: I-15 Northbound Ramps
E/W: Jurupa Street
Weather: Clear

File Name : 25_ONT_15N_Jurupa PM
Site Code : 05121618
Start Date : 10/26/2021
Page No : 3

	I-15 Northbound On Ramp Southbound				Jurupa Street Westbound				I-15 Northbound Off Ramp Northbound				Jurupa Street Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:00 PM				04:00 PM				
+0 mins.	0	0	0	0	0	9	8	17	1	0	10	11	7	18	0	25	
+15 mins.	0	0	0	0	0	**20**	**9**	**29**	**3**	0	10	13	**8**	**21**	0	**29**	
+30 mins.	0	0	0	0	0	13	4	17	3	0	16	19	8	14	0	22	
+45 mins.	0	0	0	0	0	14	3	17	2	0	**20**	**22**	5	14	0	19	
Total Volume	0	0	0	0	0	56	24	80	9	0	56	65	28	67	0	95	
% App. Total	0	0	0		0	70	30		13.8	0	86.2		29.5	70.5	0		
PHF	.000	.000	.000	.000	.000	.700	.667	.690	.750	.000	.700	.739	.875	.798	.000	.819	

3.1-738

Location: Ontario
N/S: I-15 NB Ramps
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

PEDESTRIANS

	North Leg I-15 NB Ramps	East Leg Jurupa Street	South Leg I-15 NB Ramps	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg I-15 NB Ramps	East Leg Jurupa Street	South Leg I-15 NB Ramps	West Leg Jurupa Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	2	0	2
5:45 PM	1	0	0	0	1
TOTAL VOLUMES:	1	0	2	0	3

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
951-268-6268

Location: Ontario
N/S: I-15 NB Ramps
E/W: Jurupa Street

Date: 10/26/2021
Day: Tuesday

BICYCLES

	Southbound I-15 NB Ramps			Westbound Jurupa Street			Northbound I-15 NB Ramps			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	1	0	2

	Southbound I-15 NB Ramps			Westbound Jurupa Street			Northbound I-15 NB Ramps			Eastbound Jurupa Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Airport Drive
W/ Commerce Parkway
24 Hour Directional Classification Count

ONT002
Site Code: 051-21618

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/26/21	0	26	2	0	1	1	0	1	10	0	0	0	0	41
01:00	0	21	6	0	3	2	0	4	**15**	0	0	0	0	51
02:00	0	40	4	0	0	2	0	**5**	11	0	0	0	0	62
03:00	0	71	8	0	0	6	0	0	13	0	0	0	0	98
04:00	0	141	16	0	3	**9**	0	2	9	0	0	0	0	180
05:00	**1**	**187**	18	0	2	3	0	2	3	0	0	0	0	**216**
06:00	0	152	21	**1**	4	1	0	1	7	0	0	0	0	187
07:00	0	152	**33**	0	8	3	0	4	10	0	0	0	0	210
08:00	0	133	29	0	6	2	0	1	15	0	0	0	0	186
09:00	0	91	28	0	5	1	0	1	10	0	0	0	0	136
10:00	0	87	23	0	**9**	8	0	0	10	0	0	0	0	137
11:00	0	100	19	0	7	3	0	1	7	0	0	0	0	137
12 PM	0	133	23	0	10	4	0	2	7	0	0	0	0	179
13:00	0	142	25	0	17	6	0	0	12	0	0	0	0	202
14:00	0	212	28	0	18	6	0	2	13	0	0	0	0	279
15:00	0	249	**69**	0	14	6	0	**4**	13	1	0	0	0	356
16:00	**1**	317	60	0	**23**	**7**	0	2	11	**4**	0	0	0	425
17:00	0	**392**	67	0	18	6	0	2	**17**	0	0	0	0	**502**
18:00	0	196	18	0	12	1	0	2	16	0	0	0	0	245
19:00	0	58	7	0	1	2	0	4	7	0	0	0	0	79
20:00	0	46	6	0	2	2	0	1	14	0	0	0	0	71
21:00	0	86	12	0	3	3	0	2	13	0	0	0	0	119
22:00	0	80	12	0	3	5	0	2	9	0	0	0	0	111
23:00	0	41	5	0	0	3	0	1	16	0	0	0	0	66
Total	2	3153	539	1	169	92	0	46	268	5	0	0	0	4275
Percent	0.0%	73.8%	12.6%	0.0%	4.0%	2.2%	0.0%	1.1%	6.3%	0.1%	0.0%	0.0%	0.0%	
AM Peak	05:00	05:00	07:00	06:00	10:00	04:00		02:00	01:00					05:00
Vol.	1	187	33	1	9	9		5	15					216
PM Peak	16:00	17:00	15:00		16:00	16:00		15:00	17:00	16:00				17:00
Vol.	1	392	69		23	7		4	17	4				502
Grand Total	2	3153	539	1	169	92	0	46	268	5	0	0	0	4275
Percent	0.0%	73.8%	12.6%	0.0%	4.0%	2.2%	0.0%	1.1%	6.3%	0.1%	0.0%	0.0%	0.0%	

3.1-741

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Airport Drive
W/ Commerce Parkway
24 Hour Directional Classification Count

ONT002
Site Code: 051-21618

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/26/21	**1**	34	5	0	0	3	0	1	12	0	0	0	0	56
01:00	0	27	2	0	0	1	0	1	7	0	0	0	0	38
02:00	0	41	3	0	0	2	0	4	9	0	0	0	0	59
03:00	0	60	6	0	2	9	0	1	7	0	0	0	0	85
04:00	0	72	8	0	9	**16**	0	0	8	0	0	0	0	113
05:00	0	109	15	0	11	7	0	3	16	0	0	0	0	161
06:00	0	187	28	0	11	2	0	3	15	0	0	0	0	246
07:00	0	233	37	0	12	7	0	4	20	0	0	0	0	313
08:00	0	205	**46**	0	**19**	7	0	**6**	24	0	0	0	0	307
09:00	0	**234**	35	**1**	14	11	0	5	**37**	0	0	0	0	**337**
10:00	1	159	23	0	19	7	0	0	31	0	0	0	0	240
11:00	0	218	29	0	14	9	0	0	31	0	0	0	0	301
12 PM	**1**	228	43	0	21	7	0	5	**29**	0	0	0	0	334
13:00	1	291	32	0	**24**	5	0	**7**	19	0	**1**	0	0	380
14:00	1	546	78	1	23	**15**	0	4	18	0	0	0	0	686
15:00	0	542	**96**	**3**	17	11	0	5	29	0	0	0	0	703
16:00	0	**665**	93	1	23	10	0	7	22	0	0	0	0	**821**
17:00	0	517	80	0	20	9	0	4	14	0	0	0	0	644
18:00	1	220	28	0	6	1	0	4	17	0	0	0	0	277
19:00	0	68	13	0	3	1	0	3	18	0	1	0	0	107
20:00	0	73	8	0	1	0	0	1	10	0	0	0	0	93
21:00	0	60	10	0	1	1	0	0	9	0	0	0	0	81
22:00	0	67	6	0	1	3	0	2	8	0	0	0	0	87
23:00	0	45	6	0	2	1	0	1	7	0	1	0	0	63
Total	6	4901	730	6	253	145	0	71	417	0	3	0	0	6532
Percent	0.1%	75.0%	11.2%	0.1%	3.9%	2.2%	0.0%	1.1%	6.4%	0.0%	0.0%	0.0%	0.0%	
AM Peak	00:00	09:00	08:00	09:00	08:00	04:00		08:00	09:00					09:00
Vol.	1	234	46	1	19	16		6	37					337
PM Peak	12:00	16:00	15:00	15:00	13:00	14:00		13:00	12:00		13:00			16:00
Vol.	1	665	96	3	24	15		7	29		1			821
Grand Total	6	4901	730	6	253	145	0	71	417	0	3	0	0	6532
Percent	0.1%	75.0%	11.2%	0.1%	3.9%	2.2%	0.0%	1.1%	6.4%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Airport Drive
W/ Commerce Parkway
24 Hour Directional Classification Count

ONT002
Site Code: 051-21618

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/26/21	**1**	60	7	0	1	4	0	2	22	0	0	0	0	97
01:00	0	48	8	0	3	3	0	5	22	0	0	0	0	89
02:00	0	81	7	0	0	4	0	**9**	20	0	0	0	0	121
03:00	0	131	14	0	2	15	0	1	20	0	0	0	0	183
04:00	0	213	24	0	12	**25**	0	2	17	0	0	0	0	293
05:00	1	296	33	0	13	10	0	5	19	0	0	0	0	377
06:00	0	339	49	**1**	15	3	0	4	22	0	0	0	0	433
07:00	0	**385**	70	0	20	10	0	8	30	0	0	0	0	**523**
08:00	0	338	**75**	0	25	9	0	7	39	0	0	0	0	493
09:00	0	325	63	1	19	12	0	6	**47**	0	0	0	0	473
10:00	1	246	46	0	**28**	15	0	0	41	0	0	0	0	377
11:00	0	318	48	0	21	12	0	1	38	0	0	0	0	438
12 PM	**1**	361	66	0	31	11	0	7	36	0	0	0	0	513
13:00	1	433	57	0	41	11	0	7	31	0	**1**	0	0	582
14:00	1	758	106	1	41	**21**	0	6	31	0	0	0	0	965
15:00	0	791	**165**	**3**	31	17	0	**9**	**42**	1	0	0	0	1059
16:00	1	**982**	153	1	**46**	17	0	9	33	**4**	0	0	0	**1246**
17:00	0	909	147	0	38	15	0	6	31	0	0	0	0	1146
18:00	1	416	46	0	18	2	0	6	33	0	0	0	0	522
19:00	0	126	20	0	4	3	0	7	25	0	1	0	0	186
20:00	0	119	14	0	3	2	0	2	24	0	0	0	0	164
21:00	0	146	22	0	4	4	0	2	22	0	0	0	0	200
22:00	0	147	18	0	4	8	0	4	17	0	0	0	0	198
23:00	0	86	11	0	2	4	0	2	23	0	1	0	0	129
Total	8	8054	1269	7	422	237	0	117	685	5	3	0	0	10807
Percent	0.1%	74.5%	11.7%	0.1%	3.9%	2.2%	0.0%	1.1%	6.3%	0.0%	0.0%	0.0%	0.0%	
AM Peak	00:00	07:00	08:00	06:00	10:00	04:00		02:00	09:00					07:00
Vol.	1	385	75	1	28	25		9	47					523
PM Peak	12:00	16:00	15:00	15:00	16:00	14:00		15:00	15:00	16:00	13:00			16:00
Vol.	1	982	165	3	46	21		9	42	4	1			1246
Grand Total	8	8054	1269	7	422	237	0	117	685	5	3	0	0	10807
Percent	0.1%	74.5%	11.7%	0.1%	3.9%	2.2%	0.0%	1.1%	6.3%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Haven Avenue
N/ Airport Drive
24 Hour Directional Classification Count

ONT001
Site Code: 051-21618

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/18/21	0	289	14	0	4	8	0	7	20	0	0	0	0	342
01:00	1	261	13	0	6	**18**	0	6	10	0	3	0	0	318
02:00	0	245	13	0	4	10	0	**17**	29	0	2	0	0	320
03:00	0	199	21	0	6	10	0	3	29	0	1	0	0	269
04:00	0	306	25	0	18	4	0	6	43	0	0	0	0	402
05:00	1	447	51	1	16	6	0	7	28	0	1	0	0	558
06:00	1	536	107	1	29	11	0	9	45	0	0	0	0	739
07:00	0	1013	164	4	56	13	0	14	51	0	0	0	0	1315
08:00	0	1222	184	**5**	63	13	0	13	66	0	0	0	0	1566
09:00	**2**	1080	136	1	**105**	17	0	6	40	0	0	0	0	1387
10:00	1	1025	149	1	54	12	0	8	67	0	1	0	0	1318
11:00	2	**1322**	**207**	2	51	18	**1**	8	**71**	0	**4**	0	0	**1686**
12 PM	2	1384	218	3	38	12	1	6	**91**	0	0	**1**	0	1756
13:00	2	1250	218	2	**44**	**23**	0	7	69	0	0	0	0	1615
14:00	**6**	1332	245	2	44	6	0	6	78	0	1	0	0	1720
15:00	3	1853	268	**8**	27	18	0	9	79	0	0	0	0	2265
16:00	4	2076	**325**	5	32	10	**2**	12	72	0	1	0	0	**2539**
17:00	3	**2164**	235	2	18	6	0	11	51	0	**2**	0	0	2492
18:00	2	1245	147	2	13	13	0	12	50	0	0	0	0	1484
19:00	1	779	73	2	10	13	0	7	27	0	0	0	0	912
20:00	5	662	38	1	5	20	0	**13**	28	0	1	0	0	773
21:00	2	521	41	1	7	16	0	8	25	0	1	0	0	622
22:00	1	450	37	1	5	8	0	11	29	0	0	0	0	542
23:00	0	414	32	0	6	6	0	6	21	0	1	0	0	486
Total	39	22075	2961	44	661	291	4	212	1119	0	19	1	0	27426
Percent	0.1%	80.5%	10.8%	0.2%	2.4%	1.1%	0.0%	0.8%	4.1%	0.0%	0.1%	0.0%	0.0%	
AM Peak	09:00	11:00	11:00	08:00	09:00	01:00	11:00	02:00	11:00		11:00			11:00
Vol.	2	1322	207	5	105	18	1	17	71		4			1686
PM Peak	14:00	17:00	16:00	15:00	13:00	13:00	16:00	20:00	12:00		17:00	12:00		16:00
Vol.	6	2164	325	8	44	23	2	13	91		2	1		2539
Grand Total	39	22075	2961	44	661	291	4	212	1119	0	19	1	0	27426
Percent	0.1%	80.5%	10.8%	0.2%	2.4%	1.1%	0.0%	0.8%	4.1%	0.0%	0.1%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Haven Avenue
N/ Airport Drive
24 Hour Directional Classification Count

ONT001
Site Code: 051-21618

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/18/21	1	149	11	0	3	2	0	3	21	0	0	0	0	190
01:00	1	217	21	0	2	12	0	6	17	0	0	0	0	276
02:00	0	204	25	1	4	5	1	5	28	0	0	**1**	0	274
03:00	1	296	36	0	13	6	**2**	4	14	0	0	0	0	372
04:00	2	525	65	1	19	7	0	4	22	0	0	0	0	645
05:00	3	584	99	2	9	5	1	3	18	0	**1**	0	0	725
06:00	1	614	99	1	13	10	2	11	30	0	0	0	0	781
07:00	**7**	925	136	5	21	14	0	7	36	0	0	1	0	1152
08:00	2	**938**	**154**	**6**	**38**	**17**	0	3	54	0	0	0	0	**1212**
09:00	0	774	106	2	38	10	0	8	51	0	1	0	0	990
10:00	2	685	120	1	26	17	2	15	**68**	0	0	0	0	936
11:00	1	852	146	1	29	15	1	**17**	52	0	0	1	0	1115
12 PM	**6**	888	130	1	35	16	0	9	46	**1**	1	**1**	0	1134
13:00	4	855	165	3	28	10	0	16	61	0	**3**	0	0	1145
14:00	4	1085	**191**	**5**	46	17	0	14	58	1	1	0	0	1422
15:00	1	**1414**	168	2	30	**20**	0	**18**	**65**	0	1	0	0	**1719**
16:00	4	1232	188	2	**51**	9	0	13	40	0	0	0	0	1539
17:00	4	1263	125	2	49	12	0	16	29	0	0	1	0	1501
18:00	2	764	75	1	36	5	**1**	13	36	0	1	0	0	934
19:00	0	640	68	1	13	2	0	8	61	0	1	0	0	794
20:00	4	684	72	1	11	7	0	6	41	0	0	0	0	826
21:00	0	519	41	1	11	8	0	7	27	0	0	0	0	614
22:00	2	375	19	1	6	13	0	7	25	0	0	0	0	448
23:00	0	295	19	0	5	4	0	5	21	0	1	0	0	350
Total	52	16777	2279	40	536	243	10	218	921	2	11	5	0	21094
Percent	0.2%	79.5%	10.8%	0.2%	2.5%	1.2%	0.0%	1.0%	4.4%	0.0%	0.1%	0.0%	0.0%	
AM Peak	07:00	08:00	08:00	08:00	08:00	08:00	03:00	11:00	10:00		05:00	02:00		08:00
Vol.	7	938	154	6	38	17	2	17	68		1	1		1212
PM Peak	12:00	15:00	14:00	14:00	16:00	15:00	18:00	15:00	15:00	12:00	13:00	12:00		15:00
Vol.	6	1414	191	5	51	20	1	18	65	1	3	1		1719
Grand Total	52	16777	2279	40	536	243	10	218	921	2	11	5	0	21094
Percent	0.2%	79.5%	10.8%	0.2%	2.5%	1.2%	0.0%	1.0%	4.4%	0.0%	0.1%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Haven Avenue
N/ Airport Drive
24 Hour Directional Classification Count
Northbound, Southbound

ONT001
Site Code: 051-21618

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/18/21	1	438	25	0	7	10	0	10	41	0	0	0	0	532
01:00	2	478	34	0	8	30	0	12	27	0	3	0	0	594
02:00	0	449	38	1	8	15	1	22	57	0	2	**1**	0	594
03:00	1	495	57	0	19	16	**2**	7	43	0	1	0	0	641
04:00	2	831	90	1	37	11	0	10	65	0	0	0	0	1047
05:00	4	1031	150	3	25	11	1	10	46	0	2	0	0	1283
06:00	2	1150	206	2	42	21	2	20	75	0	0	0	0	1520
07:00	**7**	1938	300	9	77	27	0	21	87	0	0	1	0	2467
08:00	2	2160	338	**11**	101	30	0	16	120	0	0	0	0	2778
09:00	2	1854	242	3	**143**	27	0	14	91	0	1	0	0	2377
10:00	3	1710	269	2	80	29	2	23	**135**	0	1	0	0	2254
11:00	3	**2174**	**353**	3	80	**33**	2	**25**	123	0	**4**	1	0	**2801**
12 PM	8	2272	348	4	73	28	1	15	137	**1**	1	**2**	0	2890
13:00	6	2105	383	5	72	33	0	23	130	0	**3**	0	0	2760
14:00	**10**	2417	436	7	**90**	23	0	20	136	1	2	0	0	3142
15:00	4	3267	436	**10**	57	**38**	0	**27**	**144**	0	1	0	0	3984
16:00	8	3308	**513**	7	83	19	**2**	25	112	0	1	0	0	**4078**
17:00	7	**3427**	360	4	67	18	0	27	80	0	2	1	0	3993
18:00	4	2009	222	3	49	18	1	25	86	0	1	0	0	2418
19:00	1	1419	141	3	23	15	0	15	88	0	1	0	0	1706
20:00	9	1346	110	2	16	27	0	19	69	0	1	0	0	1599
21:00	2	1040	82	2	18	24	0	15	52	0	1	0	0	1236
22:00	3	825	56	2	11	21	0	18	54	0	0	0	0	990
23:00	0	709	51	0	11	10	0	11	42	0	2	0	0	836
Total	91	38852	5240	84	1197	534	14	430	2040	2	30	6	0	48520
Percent	0.2%	80.1%	10.8%	0.2%	2.5%	1.1%	0.0%	0.9%	4.2%	0.0%	0.1%	0.0%	0.0%	
AM Peak	07:00	11:00	11:00	08:00	09:00	11:00	03:00	11:00	10:00		11:00	02:00		11:00
Vol.	7	2174	353	11	143	33	2	25	135		4	1		2801
PM Peak	14:00	17:00	16:00	15:00	14:00	15:00	16:00	15:00	15:00	12:00	13:00	12:00		16:00
Vol.	10	3427	513	10	90	38	2	27	144	1	3	2		4078
Grand Total	91	38852	5240	84	1197	534	14	430	2040	2	30	6	0	48520
Percent	0.2%	80.1%	10.8%	0.2%	2.5%	1.1%	0.0%	0.9%	4.2%	0.0%	0.1%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Jurupa Street
E/ Haven Avenue
24 Hour Directional Classification Count

ONT003
Site Code: 051-21618

Eastbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/18/21	**3**	271	58	**1**	33	**19**	0	12	47	0	0	**1**	0	445
01:00	1	352	67	1	23	14	**2**	15	44	0	**1**	0	0	520
02:00	2	344	75	1	**45**	12	0	17	**51**	0	0	0	0	547
03:00	0	408	**77**	0	30	16	0	16	49	0	0	0	0	596
04:00	1	419	71	0	27	12	0	**22**	37	0	1	0	0	590
05:00	0	**456**	56	0	27	13	0	14	44	**1**	1	0	0	**612**
06:00	0	273	42	0	22	14	0	22	33	0	1	0	0	407
07:00	1	208	29	0	8	12	0	11	32	0	0	0	0	301
08:00	0	215	24	0	4	8	0	15	25	0	0	0	0	291
09:00	0	168	15	0	0	5	0	9	30	0	0	0	0	227
10:00	0	137	18	0	2	8	0	7	30	0	1	0	0	203
11:00	0	92	12	0	5	4	0	10	17	0	1	1	0	142
12 PM	0	105	13	0	2	9	0	7	23	0	**3**	0	0	162
13:00	1	150	18	0	1	7	0	7	27	0	2	**1**	0	214
14:00	0	178	14	0	1	6	**1**	12	25	0	2	1	0	240
15:00	0	131	14	0	0	5	1	8	12	0	1	0	0	172
16:00	0	119	4	0	2	3	0	8	14	0	0	0	0	150
17:00	1	152	18	0	7	5	1	7	18	0	0	0	0	209
18:00	0	187	32	0	16	7	0	7	19	0	1	0	0	269
19:00	0	217	39	0	12	6	1	4	24	0	0	0	0	303
20:00	0	**258**	46	0	13	12	1	10	31	0	0	0	0	371
21:00	**4**	199	31	0	**83**	12	0	10	42	0	0	0	0	**381**
22:00	1	190	**50**	0	21	**14**	0	11	**53**	**1**	0	0	0	341
23:00	0	221	41	0	34	6	0	**18**	47	0	0	1	0	368
Total	15	5450	864	3	418	229	7	279	774	2	15	5	0	8061
Percent	0.2%	67.6%	10.7%	0.0%	5.2%	2.8%	0.1%	3.5%	9.6%	0.0%	0.2%	0.1%	0.0%	
AM Peak	00:00	05:00	03:00	00:00	02:00	00:00	01:00	04:00	02:00	05:00	01:00	00:00		05:00
Vol.	3	456	77	1	45	19	2	22	51	1	1	1		612
PM Peak	21:00	20:00	22:00		21:00	22:00	14:00	23:00	22:00	22:00	12:00	13:00		21:00
Vol.	4	258	50		83	14	1	18	53	1	3	1		381
Grand Total	15	5450	864	3	418	229	7	279	774	2	15	5	0	8061
Percent	0.2%	67.6%	10.7%	0.0%	5.2%	2.8%	0.1%	3.5%	9.6%	0.0%	0.2%	0.1%	0.0%	

3.1-747

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Jurupa Street
E/ Haven Avenue
24 Hour Directional Classification Count

ONT003
Site Code: 051-21618

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/18/21	**1**	223	54	**1**	33	12	0	8	36	0	0	0	0	368
01:00	1	250	**62**	0	17	**18**	0	13	38	0	0	0	0	399
02:00	0	276	50	1	35	10	0	10	**46**	0	0	0	0	428
03:00	0	374	61	1	28	8	0	12	31	0	0	0	0	515
04:00	0	384	62	0	31	8	0	14	40	0	0	0	0	539
05:00	1	**392**	56	0	**43**	14	0	16	37	0	1	0	0	**560**
06:00	0	235	33	0	42	6	0	**21**	25	0	0	0	0	362
07:00	0	147	5	0	8	6	1	7	26	0	0	0	0	200
08:00	0	199	15	0	5	4	6	4	22	0	0	0	0	255
09:00	0	110	7	0	3	6	8	5	16	0	0	0	0	155
10:00	1	70	2	0	1	7	**12**	4	27	0	**2**	0	0	126
11:00	0	66	6	0	4	8	4	5	21	0	1	**1**	0	116
12 PM	0	58	4	1	2	10	7	5	21	0	2	0	0	110
13:00	0	102	6	1	2	4	**11**	3	14	0	**4**	0	0	147
14:00	1	101	9	0	4	6	2	4	13	0	1	0	0	141
15:00	0	118	17	0	4	7	1	2	12	0	0	0	0	161
16:00	1	123	27	0	11	3	0	2	13	0	0	**1**	0	181
17:00	1	253	58	0	7	3	0	0	11	0	0	0	0	333
18:00	1	255	53	0	8	7	0	3	32	0	0	0	0	359
19:00	0	**327**	63	0	14	11	0	4	38	0	1	0	0	**458**
20:00	0	252	**78**	**4**	11	**14**	0	10	**49**	0	0	0	0	418
21:00	**2**	256	66	0	**36**	14	0	13	36	0	2	0	0	425
22:00	1	206	47	0	26	4	0	**20**	36	0	0	0	0	340
23:00	0	242	40	0	25	10	1	9	36	0	0	0	0	363
Total	11	5019	881	9	400	200	53	194	676	0	14	2	0	7459
Percent	0.1%	67.3%	11.8%	0.1%	5.4%	2.7%	0.7%	2.6%	9.1%	0.0%	0.2%	0.0%	0.0%	
AM Peak	00:00	05:00	01:00	00:00	05:00	01:00	10:00	06:00	02:00		10:00	11:00		05:00
Vol.	1	392	62	1	43	18	12	21	46		2	1		560
PM Peak	21:00	19:00	20:00	20:00	21:00	20:00	13:00	22:00	20:00		13:00	16:00		19:00
Vol.	2	327	78	4	36	14	11	20	49		4	1		458
Grand Total	11	5019	881	9	400	200	53	194	676	0	14	2	0	7459
Percent	0.1%	67.3%	11.8%	0.1%	5.4%	2.7%	0.7%	2.6%	9.1%	0.0%	0.2%	0.0%	0.0%	

3.1-748

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Jurupa Street
E/ Haven Avenue
24 Hour Directional Classification Count

ONT003
Site Code: 051-21618

Eastbound, Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/18/21	**4**	494	112	**2**	66	31	0	20	83	0	0	1	0	813
01:00	2	602	129	1	40	**32**	2	28	82	0	1	0	0	919
02:00	2	620	125	2	**80**	22	0	27	**97**	0	0	0	0	975
03:00	0	782	**138**	1	58	24	0	28	80	0	0	0	0	1111
04:00	1	803	133	0	58	20	0	36	77	0	1	0	0	1129
05:00	1	**848**	112	0	70	27	0	30	81	**1**	2	0	0	**1172**
06:00	0	508	75	0	64	20	0	**43**	58	0	1	0	0	769
07:00	1	355	34	0	16	18	1	18	58	0	0	0	0	501
08:00	0	414	39	0	9	12	6	19	47	0	0	0	0	546
09:00	0	278	22	0	3	11	8	14	46	0	0	0	0	382
10:00	1	207	20	0	3	15	**12**	11	57	0	**3**	0	0	329
11:00	0	158	18	0	9	12	4	15	38	0	2	**2**	0	258
12 PM	0	163	17	1	4	19	7	12	44	0	5	0	0	272
13:00	1	252	24	1	3	11	**11**	10	41	0	**6**	**1**	0	361
14:00	1	279	23	0	5	12	3	16	38	0	3	1	0	381
15:00	0	249	31	0	4	12	2	10	24	0	1	0	0	333
16:00	1	242	31	0	13	6	0	10	27	0	0	1	0	331
17:00	2	405	76	0	14	8	1	7	29	0	0	0	0	542
18:00	1	442	85	0	24	14	0	10	51	0	1	0	0	628
19:00	0	**544**	102	0	26	17	1	8	62	0	1	0	0	761
20:00	0	510	**124**	**4**	24	**26**	1	20	80	0	0	0	0	789
21:00	**6**	455	97	0	**119**	26	0	23	78	0	2	0	0	**806**
22:00	2	396	97	0	47	18	0	**31**	**89**	**1**	0	0	0	681
23:00	0	463	81	0	59	16	1	27	83	0	0	1	0	731
Total	26	10469	1745	12	818	429	60	473	1450	2	29	7	0	15520
Percent	0.2%	67.5%	11.2%	0.1%	5.3%	2.8%	0.4%	3.0%	9.3%	0.0%	0.2%	0.0%	0.0%	
AM Peak	00:00	05:00	03:00	00:00	02:00	01:00	10:00	06:00	02:00	05:00	10:00	11:00		05:00
Vol.	4	848	138	2	80	32	12	43	97	1	3	2		1172
PM Peak	21:00	19:00	20:00	20:00	21:00	20:00	13:00	22:00	22:00	22:00	13:00	13:00		21:00
Vol.	6	544	124	4	119	26	11	31	89	1	6	1		806
Grand Total	26	10469	1745	12	818	429	60	473	1450	2	29	7	0	15520
Percent	0.2%	67.5%	11.2%	0.1%	5.3%	2.8%	0.4%	3.0%	9.3%	0.0%	0.2%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Milliken Avenue
N/ Jurupa Street
24 Hour Directional Classification Count

ONT004
Site Code: 051-21618

Northbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/26/21	0	60	5	0	1	4	0	0	18	0	1	0	0	89
01:00	0	39	3	0	3	2	0	2	17	0	**3**	0	0	69
02:00	0	44	5	0	3	5	0	0	18	0	0	0	0	75
03:00	1	55	17	0	4	4	0	1	13	0	0	0	0	95
04:00	0	103	9	0	14	6	0	0	13	0	0	0	0	145
05:00	0	155	18	1	11	5	0	2	18	0	0	0	0	210
06:00	0	217	35	1	11	8	0	5	35	0	0	0	0	312
07:00	0	482	56	1	19	11	0	3	41	0	0	0	0	613
08:00	0	**595**	67	1	25	8	**1**	7	62	0	0	0	0	**766**
09:00	1	329	65	1	**42**	**17**	0	3	68	**1**	0	0	0	527
10:00	1	314	66	**2**	40	14	0	**19**	69	0	0	0	0	525
11:00	**2**	438	**98**	2	33	14	0	10	**79**	0	1	0	0	677
12 PM	1	417	84	1	39	11	**1**	16	84	0	0	0	0	654
13:00	**2**	404	72	1	30	18	0	10	78	0	0	0	0	615
14:00	0	513	108	**2**	**46**	22	1	10	**92**	0	0	0	0	794
15:00	1	533	**113**	2	35	**27**	1	**21**	65	0	0	0	0	798
16:00	1	544	87	1	25	8	0	16	47	0	0	0	0	729
17:00	0	**697**	81	2	25	14	0	11	67	0	0	0	0	**897**
18:00	0	334	48	2	6	9	0	5	76	0	0	0	0	480
19:00	0	162	19	0	6	5	0	3	24	0	0	0	0	219
20:00	1	81	10	2	2	8	0	2	21	0	0	**1**	0	128
21:00	0	77	6	1	3	10	0	3	20	0	0	0	0	120
22:00	1	66	9	0	2	5	0	1	21	0	0	0	0	105
23:00	0	45	4	0	1	7	0	0	19	0	0	0	0	76
Total	12	6704	1085	23	426	242	4	150	1065	1	5	1	0	9718
Percent	0.1%	69.0%	11.2%	0.2%	4.4%	2.5%	0.0%	1.5%	11.0%	0.0%	0.1%	0.0%	0.0%	
AM Peak	11:00	08:00	11:00	10:00	09:00	09:00	08:00	10:00	11:00	09:00	01:00			08:00
Vol.	2	595	98	2	42	17	1	19	79	1	3			766
PM Peak	13:00	17:00	15:00	14:00	14:00	15:00	12:00	15:00	14:00			20:00		17:00
Vol.	2	697	113	2	46	27	1	21	92			1		897
Grand Total	12	6704	1085	23	426	242	4	150	1065	1	5	1	0	9718
Percent	0.1%	69.0%	11.2%	0.2%	4.4%	2.5%	0.0%	1.5%	11.0%	0.0%	0.1%	0.0%	0.0%	

3.1-750

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Milliken Avenue
N/ Jurupa Street
24 Hour Directional Classification Count

ONT004
Site Code: 051-21618

Southbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/26/21	0	42	5	0	1	7	0	0	7	0	0	0	0	62
01:00	0	26	6	0	1	2	0	0	14	0	0	0	0	49
02:00	0	46	4	0	0	4	0	1	11	0	0	0	0	66
03:00	0	42	7	0	3	3	0	2	22	0	0	0	0	79
04:00	0	66	10	1	2	2	0	2	18	0	0	0	0	101
05:00	0	126	27	0	9	5	0	2	21	0	0	0	0	190
06:00	0	168	28	1	15	11	0	2	37	0	0	0	0	262
07:00	0	231	51	**2**	22	**20**	**4**	4	**93**	0	**2**	0	0	429
08:00	0	**268**	**67**	1	33	16	0	6	76	0	1	0	0	**468**
09:00	0	216	50	1	33	16	0	5	64	0	0	0	0	385
10:00	0	215	61	0	**34**	15	0	5	55	0	0	0	0	385
11:00	**3**	244	66	2	31	12	1	**7**	63	**1**	0	0	0	430
12 PM	0	356	78	0	31	17	0	18	58	0	0	0	0	558
13:00	0	387	103	1	31	18	0	**19**	55	0	0	0	0	614
14:00	0	545	106	2	**44**	**29**	0	13	**77**	0	0	0	0	816
15:00	3	665	**130**	2	35	17	0	10	45	0	0	0	0	907
16:00	2	768	120	**4**	20	20	0	10	51	0	0	0	0	995
17:00	**5**	**864**	96	1	20	16	0	10	30	0	0	0	0	**1042**
18:00	1	457	66	1	17	14	0	9	28	0	0	0	0	593
19:00	0	328	29	2	3	11	0	3	29	0	0	0	0	405
20:00	0	195	23	2	7	12	0	0	15	0	0	0	0	254
21:00	0	136	17	0	2	4	0	0	20	0	0	0	0	179
22:00	1	95	13	0	1	8	0	1	18	0	0	0	0	137
23:00	0	67	8	0	0	2	0	1	10	0	0	0	0	88
Total	15	6553	1171	23	395	281	5	130	917	1	3	0	0	9494
Percent	0.2%	69.0%	12.3%	0.2%	4.2%	3.0%	0.1%	1.4%	9.7%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	08:00	07:00	10:00	07:00	07:00	11:00	07:00	11:00	07:00			08:00
Vol.	3	268	67	2	34	20	4	7	93	1	2			468
PM Peak	17:00	17:00	15:00	16:00	14:00	14:00		13:00	14:00					17:00
Vol.	5	864	130	4	44	29		19	77					1042
Grand Total	15	6553	1171	23	395	281	5	130	917	1	3	0	0	9494
Percent	0.2%	69.0%	12.3%	0.2%	4.2%	3.0%	0.1%	1.4%	9.7%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Ontario
Milliken Avenue
N/ Jurupa Street
24 Hour Directional Classification Count
Northbound, Southbound

ONT004
Site Code: 051-21618

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/26/21	0	102	10	0	2	11	0	0	25	0	1	0	0	151
01:00	0	65	9	0	4	4	0	2	31	0	**3**	0	0	118
02:00	0	90	9	0	3	9	0	1	29	0	0	0	0	141
03:00	1	97	24	0	7	7	0	3	35	0	0	0	0	174
04:00	0	169	19	1	16	8	0	2	31	0	0	0	0	246
05:00	0	281	45	1	20	10	0	4	39	0	0	0	0	400
06:00	0	385	63	2	26	19	0	7	72	0	0	0	0	574
07:00	0	713	107	3	41	31	**4**	7	134	0	2	0	0	1042
08:00	0	**863**	134	2	58	24	1	13	138	0	1	0	0	**1234**
09:00	1	545	115	2	**75**	**33**	0	8	132	**1**	0	0	0	912
10:00	1	529	127	2	74	29	0	**24**	124	0	0	0	0	910
11:00	**5**	682	**164**	**4**	64	26	1	17	**142**	1	1	0	0	1107
12 PM	1	773	162	1	70	28	**1**	**34**	142	0	0	0	0	1212
13:00	2	791	175	2	61	36	0	29	133	0	0	0	0	1229
14:00	0	1058	214	4	**90**	**51**	1	23	**169**	0	0	0	0	1610
15:00	4	1198	**243**	4	70	44	1	31	110	0	0	0	0	1705
16:00	3	1312	207	**5**	45	28	0	26	98	0	0	0	0	1724
17:00	**5**	**1561**	177	3	45	30	0	21	97	0	0	0	0	**1939**
18:00	1	791	114	3	23	23	0	14	104	0	0	0	0	1073
19:00	0	490	48	2	9	16	0	6	53	0	0	0	0	624
20:00	1	276	33	4	9	20	0	2	36	0	0	**1**	0	382
21:00	0	213	23	1	5	14	0	3	40	0	0	0	0	299
22:00	2	161	22	0	3	13	0	2	39	0	0	0	0	242
23:00	0	112	12	0	1	9	0	1	29	0	0	0	0	164
Total	27	13257	2256	46	821	523	9	280	1982	2	8	1	0	19212
Percent	0.1%	69.0%	11.7%	0.2%	4.3%	2.7%	0.0%	1.5%	10.3%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	11:00	11:00	09:00	09:00	07:00	10:00	11:00	09:00	01:00			08:00
Vol.	5	863	164	4	75	33	4	24	142	1	3			1234
PM Peak	17:00	17:00	15:00	16:00	14:00	14:00	12:00	12:00	14:00			20:00		17:00
Vol.	5	1561	243	5	90	51	1	34	169			1		1939
Grand Total	27	13257	2256	46	821	523	9	280	1982	2	8	1	0	19212
Percent	0.1%	69.0%	11.7%	0.2%	4.3%	2.7%	0.0%	1.5%	10.3%	0.0%	0.0%	0.0%	0.0%	

3.1-752

APPENDIX 3.2:

EXISTING (2021) CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Volume Development - AM Peak Hour

1: Haven Av. & Inland Empire Bl.

	PHF:	0.923		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**375**	**1,784**	**332**	**41**	**1,464**	**81**	**72**	**99**	**266**	**119**	**93**	**17**	**4,740**

2: Haven Av. & I-10 WB Ramps

	PHF:	0.922		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**1,905**	**432**	**0**	**1,334**	**548**	**0**	**0**	**0**	**486**	**0**	**585**	**5,289**

3: Haven Av. & I-10 EB Ramps

	PHF:	0.939		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**1,446**	**343**	**0**	**1,369**	**451**	**891**	**0**	**531**	**0**	**0**	**0**	**5,029**

4: Haven Av. & E. Guasti Rd.

	PHF:	0.978		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**157**	**1,575**	**100**	**202**	**1,427**	**272**	**82**	**26**	**35**	**57**	**37**	**131**	**4,099**

5: Haven Av. & E. Airport Dr.

	PHF:	0.911		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**404**	**1,341**	**203**	**168**	**1,124**	**124**	**95**	**147**	**218**	**55**	**161**	**170**	**4,208**

6: Haven Av. & Driveway 1

	PHF:									Count Date:		1/0/1900	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**1,948**	**0**	**0**	**1,396**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,344**

7: Haven Av. & Driveway 2

	PHF:									Count Date:		1/0/1900	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**1,948**	**0**	**0**	**1,396**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3,344**

8: Haven Av. & La Salle St.

	PHF:	0.935		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**1,946**	**7**	**0**	**1,475**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3,430**

9: Haven Av. & Jurupa Av.

	PHF:	0.946		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**96**	**1,555**	**194**	**77**	**974**	**424**	**330**	**184**	**112**	**239**	**284**	**69**	**4,535**

10: Haven Av. & Mission Bl.

	PHF:	0.940		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**97**	**1,550**	**14**	**138**	**1,242**	**195**	**202**	**245**	**118**	**54**	**586**	**590**	**5,029**

Volume Development - AM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.950 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**300**	**1,454**	**0**	**0**	**760**	**518**	**0**	**0**	**0**	**134**	**9**	**461**	**3,634**

12: Haven Av. & SR-60 EB Ramps

PHF: 0.950 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**948**	**266**	**338**	**556**	**0**	**806**	**7**	**198**	**0**	**0**	**0**	**3,117**

13: Driveway 3 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**518**	**0**	**0**	**386**	**0**	**904**

14: Driveway 4 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**518**	**0**	**0**	**386**	**0**	**904**

15: Driveway 5 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**518**	**0**	**0**	**386**	**0**	**904**

16: Driveway 6 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**2**	**0**	**9**

17: Driveway 7 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**2**	**0**	**9**

18: Driveway 8 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**2**	**0**	**9**

19: Driveway 9 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**	**0**	**0**	**43**	**0**	**62**

20: Driveway 10 & Jurupa Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**455**	**0**	**0**	**591**	**0**	**1,046**

Volume Development - AM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**455**	**0**	**0**	**591**	**0**	**1,046**

22: Carnegie Av. & E. Airport Dr.

PHF: 0.834 7:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**16**	**10**	**0**	**19**	**26**	**161**	**149**	**102**	**5**	**2**	**187**	**27**	**701**

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**26**	**0**	**0**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**59**

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**26**	**0**	**0**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**59**

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**26**	**0**	**0**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**59**

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.641 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**21**	**4**	**17**	**16**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**65**

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**25**	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**43**

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**25**	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**43**

29: Carnegie Av. & La Salle St.

PHF: 0.917 8:00am Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**37**	**17**	**0**	**0**	**12**	**6**	**8**	**0**	**11**	**0**	**0**	**0**	**91**

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**54**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**77**

Volume Development - AM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.902 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**8**	**0**	**3**	**6**	**0**	**21**	**55**	**571**	**3**	**6**	**663**	**28**	**1,361**

32: Driveway 19 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**7**	**0**	**28**

33: Driveway 20 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**7**	**0**	**28**

34: Commerce Pkwy. & Driveway 21

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**217**	**0**	**0**	**115**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**332**

35: Commerce Pkwy. & Driveway 22

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**217**	**0**	**0**	**115**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**332**

36: Commerce Pkwy. & Driveway 23

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**217**	**0**	**0**	**115**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**332**

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.948 7:15am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**187**	**23**	**47**	**66**	**3**	**0**	**20**	**1**	**0**	**4**	**30**	**379**

38: Commerce Pkwy. & Driveway 24

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**210**	**0**	**0**	**67**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**276**

39: Commerce Pkwy. & Driveway 25

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**210**	**0**	**0**	**67**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**276**

40: Commerce Pkwy. & Driveway 26

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**210**	**0**	**0**	**67**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**276**

Volume Development - AM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.918 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**13**	**5**	**31**	**39**	**4**	**18**	**72**	**494**	**13**	**18**	**666**	**139**	**1,510**

42: Driveway 27 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**89**	**0**	**0**	**34**	**0**	**123**

43: Driveway 28 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**89**	**0**	**0**	**34**	**0**	**123**

44: Double Day Av. & Driveway 29

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**38**	**0**	**0**	**22**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**60**

45: Double Day Av. & Santa Ana St.

PHF: 0.944 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**1**	**6**	**2**	**8**	**4**	**10**	**23**	**41**	**25**	**7**	**23**	**9**	**159**

46: Driveway 30 & Double Day Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**32**	**0**	**46**

47: Dupont Av. & Santa Ana St.

PHF: 0.910 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**22**	**61**	**7**	**3**	**26**	**8**	**7**	**30**	**6**	**10**	**20**	**10**	**209**

48: Dupont Av. & Double Day Av.

PHF: 0.845 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**32**	**103**	**3**	**1**	**19**	**0**	**1**	**1**	**12**	**0**	**0**	**0**	**171**

49: Dupont Av. & Driveway 31

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**147**	**0**	**0**	**24**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**171**

50: Dupont Av. & Jurupa Av.

PHF: 0.982 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**22**	**30**	**82**	**7**	**5**	**12**	**52**	**465**	**17**	**91**	**775**	**65**	**1,620**

Volume Development - AM Peak Hour

51: Milliken Av. & E. Airport Dr.

	PHF:	0.861		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**21**	**594**	**70**	**331**	**792**	**130**	**66**	**101**	**21**	**76**	**130**	**202**	**2,533**

52: Milliken Av. & Jurupa Av.

	PHF:	0.970		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**419**	**742**	**104**	**128**	**370**	**62**	**203**	**667**	**281**	**100**	**478**	**68**	**3,618**

53: Milliken Av. & Mission Bl.

	PHF:	0.895		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**296**	**1,185**	**14**	**109**	**549**	**327**	**202**	**2**	**47**	**19**	**16**	**216**	**2,980**

54: I-15 SB Ramps & Jurupa Av.

	PHF:	0.910		7:30am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**490**	**3**	**900**	**0**	**627**	**159**	**403**	**585**	**0**	**3,166**

55: I-15 NB Ramps & Jurupa Av.

	PHF:	0.939		7:00am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**249**	**0**	**521**	**0**	**0**	**0**	**358**	**759**	**0**	**0**	**739**	**350**	**2,974**

Volume Development - PM Peak Hour

1: Haven Av. & Inland Empire Bl.

	PHF:	0.960		4:30pm						Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**331**	**1,843**	**427**	**39**	**1,681**	**66**	**189**	**335**	**374**	**336**	**226**	**39**	**5,883**

2: Haven Av. & I-10 WB Ramps

	PHF:	0.979		4:30pm						Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**2,281**	**870**	**0**	**1,703**	**714**	**0**	**0**	**0**	**219**	**0**	**319**	**6,104**

3: Haven Av. & I-10 EB Ramps

	PHF:	0.975		4:30pm						Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**2,622**	**712**	**0**	**1,571**	**351**	**529**	**0**	**243**	**0**	**0**	**0**	**6,027**

4: Haven Av. & E. Guasti Rd.

	PHF:	0.975		4:30pm						Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**63**	**2,728**	**105**	**162**	**1,541**	**110**	**383**	**45**	**208**	**80**	**19**	**223**	**5,667**

5: Haven Av. & E. Airport Dr.

	PHF:	0.985		4:30pm						Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**488**	**2,123**	**18**	**183**	**1,405**	**172**	**288**	**456**	**599**	**25**	**579**	**473**	**6,805**

6: Haven Av. & Driveway 1

	PHF:									Count Date:			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**2,628**	**0**	**0**	**2,028**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,656**

7: Haven Av. & Driveway 2

	PHF:									Count Date:			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**2,628**	**0**	**0**	**2,028**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4,656**

8: Haven Av. & La Salle St.

	PHF:	0.968		4:15pm						Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**2,610**	**6**	**0**	**2,040**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**4,674**

9: Haven Av. & Jurupa Av.

	PHF:	0.982		4:30pm						Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**66**	**1,959**	**308**	**202**	**1,511**	**328**	**452**	**328**	**65**	**245**	**266**	**205**	**5,933**

10: Haven Av. & Mission Bl.

	PHF:	0.962		4:00pm						Count Date:	10/26/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**101**	**1,436**	**57**	**302**	**1,259**	**130**	**519**	**655**	**109**	**37**	**449**	**422**	**5,472**

Volume Development - PM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.962 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**142**	**800**	**0**	**0**	**1,199**	**457**	**0**	**0**	**0**	**276**	**9**	**509**	**3,391**

12: Haven Av. & SR-60 EB Ramps

PHF: 0.933 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**602**	**195**	**609**	**866**	**0**	**340**	**7**	**154**	**0**	**0**	**0**	**2,773**

13: Driveway 3 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**656**	**0**	**0**	**1,077**	**0**	**1,732**

14: Driveway 4 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**656**	**0**	**0**	**1,077**	**0**	**1,732**

15: Driveway 5 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**656**	**0**	**0**	**1,077**	**0**	**1,732**

16: Driveway 6 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**18**	**0**	**24**

17: Driveway 7 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**18**	**0**	**24**

18: Driveway 8 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**18**	**0**	**24**

19: Driveway 9 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**0**	**78**	**0**	**102**

20: Driveway 10 & Jurupa Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**838**	**0**	**0**	**716**	**0**	**1,553**

Volume Development - PM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**838**	**0**	**0**	**716**	**0**	**1,553**

22: Carnegie Av. & E. Airport Dr.

PHF: 0.882 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**37**	**17**	**18**	**49**	**29**	**457**	**248**	**289**	**2**	**1**	**385**	**78**	**1,609**

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**72**	**0**	**0**	**32**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**104**

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**72**	**0**	**0**	**32**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**104**

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**72**	**0**	**0**	**32**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**104**

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.786 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**54**	**5**	**2**	**30**	**0**	**0**	**0**	**0**	**3**	**0**	**18**	**112**

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**59**	**0**	**0**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**59**	**0**	**0**	**33**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**92**

29: Carnegie Av. & La Salle St.

PHF: 0.944 Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**65**	**41**	**0**	**0**	**19**	**14**	**18**	**0**	**6**	**0**	**0**	**0**	**162**

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**106**	**0**	**0**	**25**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**130**

Volume Development - PM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**6**	**0**	**2**	**13**	**0**	**34**	**81**	**819**	**18**	**4**	**599**	**16**	**1,589**

32: Driveway 19 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**21**	**0**	**28**

33: Driveway 20 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**21**	**0**	**28**

34: Commerce Pkwy. & Driveway 21

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**481**	**0**	**0**	**331**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**812**

35: Commerce Pkwy. & Driveway 22

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**481**	**0**	**0**	**331**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**812**

36: Commerce Pkwy. & Driveway 23

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**481**	**0**	**0**	**331**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**812**

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.920 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**3**	**348**	**11**	**44**	**272**	**15**	**2**	**5**	**0**	**20**	**3**	**131**	**853**

38: Commerce Pkwy. & Driveway 24

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**362**	**0**	**0**	**292**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**654**

39: Commerce Pkwy. & Driveway 25

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**362**	**0**	**0**	**292**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**654**

40: Commerce Pkwy. & Driveway 26

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**362**	**0**	**0**	**292**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**654**

Volume Development - PM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**14**	**41**	**55**	**239**	**17**	**35**	**88**	**733**	**13**	**11**	**569**	**229**	**2,041**

42: Driveway 27 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**60**	**0**	**0**	**154**	**0**	**213**

43: Driveway 28 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**60**	**0**	**0**	**154**	**0**	**213**

44: Double Day Av. & Driveway 29

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**13**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**

45: Double Day Av. & Santa Ana St.

PHF: 0.802 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**18**	**1**	**14**	**2**	**0**	**4**	**6**	**44**	**10**	**7**	**132**	**6**	**243**

46: Driveway 30 & Double Day Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**34**	**0**	**0**	**31**	**0**	**65**

47: Dupont Av. & Santa Ana St.

PHF: 0.798 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**38**	**80**	**24**	**10**	**44**	**12**	**10**	**34**	**10**	**15**	**90**	**26**	**393**

48: Dupont Av. & Double Day Av.

PHF: 0.763 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**21**	**102**	**1**	**0**	**91**	**10**	**6**	**0**	**28**	**2**	**0**	**0**	**261**

49: Dupont Av. & Driveway 31

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**126**	**0**	**0**	**109**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**235**

50: Dupont Av. & Jurupa Av.

PHF: 0.934 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**42**	**27**	**110**	**47**	**25**	**37**	**46**	**931**	**13**	**64**	**718**	**54**	**2,111**

Volume Development - PM Peak Hour

51: Milliken Av. & E. Airport Dr.

PHF: 0.988 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**33**	**943**	**60**	**139**	**859**	**111**	**224**	**231**	**33**	**86**	**254**	**323**	**3,295**

52: Milliken Av. & Jurupa Av.

PHF: 0.961 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**171**	**752**	**352**	**241**	**907**	**59**	**122**	**754**	**221**	**376**	**561**	**97**	**4,610**

53: Milliken Av. & Mission Bl.

PHF: 0.950 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**171**	**854**	**20**	**242**	**1,246**	**390**	**522**	**1**	**81**	**16**	**5**	**135**	**3,680**

54: I-15 SB Ramps & Jurupa Av.

PHF: 0.945 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**0**	**0**	**0**	**217**	**7**	**423**	**0**	**1,222**	**492**	**438**	**642**	**0**	**3,440**

55: I-15 NB Ramps & Jurupa Av.

PHF: 0.967 4:00pm Count Date: 10/26/2021

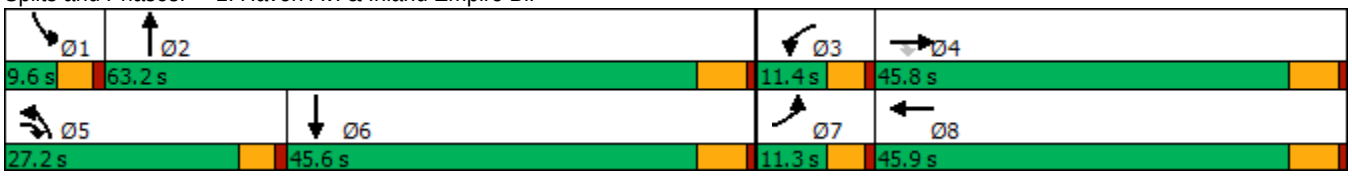
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
Existing PCE:	**104**	**1**	**320**	**0**	**0**	**0**	**548**	**891**	**0**	**0**	**976**	**491**	**3,329**

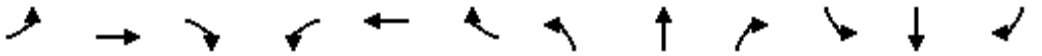
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	99	266	119	93	17	375	1784	332	41	1464	81
Future Volume (vph)	72	99	266	119	93	17	375	1784	332	41	1464	81
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	11.3	45.8	27.2	11.4	45.9		27.2	63.2		9.6	45.6	
Total Split (%)	8.7%	35.2%	20.9%	8.8%	35.3%		20.9%	48.6%		7.4%	35.1%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 95.7
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	99	266	119	93	17	375	1784	332	41	1464	81
Future Volume (veh/h)	72	99	266	119	93	17	375	1784	332	41	1464	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1500	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	78	108	116	129	101	0	408	1939	0	45	1591	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	151	480	465	236	505		489	3122		116	2342	
Arrive On Green	0.05	0.14	0.14	0.06	0.15	0.00	0.17	0.50	0.00	0.04	0.38	0.00
Sat Flow, veh/h	2956	3420	1512	4029	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	78	108	116	129	101	0	408	1939	0	45	1591	0
Grp Sat Flow(s),veh/h/ln	1478	1710	1512	1343	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	2.1	2.3	4.7	2.5	2.1	0.0	10.8	18.3	0.0	1.2	17.4	0.0
Cycle Q Clear(g_c), s	2.1	2.3	4.7	2.5	2.1	0.0	10.8	18.3	0.0	1.2	17.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	480	465	236	505		489	3122		116	2342	
V/C Ratio(X)	0.52	0.22	0.25	0.55	0.20		0.83	0.62		0.39	0.68	
Avail Cap(c_a), veh/h	245	1694	1001	339	1698		827	4400		183	3051	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.3	30.8	21.1	37.0	30.2	0.0	32.6	14.5	0.0	37.8	21.0	0.0
Incr Delay (d2), s/veh	1.0	0.2	0.3	0.7	0.2	0.0	1.5	0.2	0.0	0.8	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.9	1.5	0.8	0.8	0.0	3.7	5.4	0.0	0.4	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.4	31.1	21.4	37.7	30.4	0.0	34.1	14.7	0.0	38.6	21.4	0.0
LnGrp LOS	D	C	C	D	C		C	B		D	C	
Approach Vol, veh/h		302			230	A		2347	A		1636	A
Approach Delay, s/veh		29.2			34.5			18.0			21.9	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	46.5	9.3	17.1	18.0	36.4	8.7	17.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	57.4	6.8	40.0	22.6	39.8	6.7	40.1
Max Q Clear Time (g_c+I1), s	3.2	20.3	4.5	6.7	12.8	19.4	4.1	4.1
Green Ext Time (p_c), s	0.0	19.6	0.0	1.0	0.6	11.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Notes

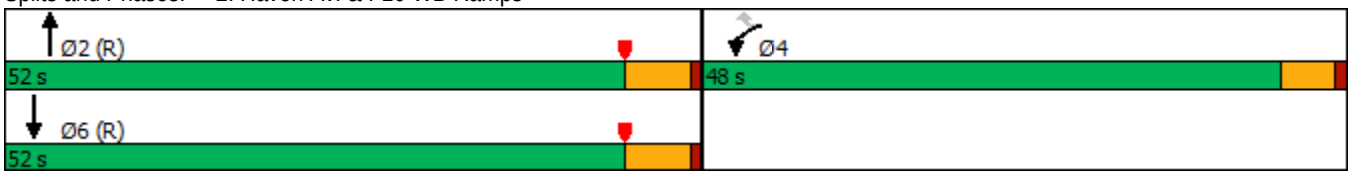
Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	486	585	1905	432	1334
Future Volume (vph)	486	585	1905	432	1334
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	48.0	48.0	52.0		52.0
Total Split (%)	48.0%	48.0%	52.0%		52.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	486	585	1905	432	0	1334
Future Volume (veh/h)	486	585	1905	432	0	1334
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	0	1800
Adj Flow Rate, veh/h	675	343	2071	0	0	1450
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	825	388	3940		0	3940
Arrive On Green	0.25	0.25	1.00	0.00	0.00	0.64
Sat Flow, veh/h	3238	1525	6444	1525	0	6696
Grp Volume(v), veh/h	675	343	2071	0	0	1450
Grp Sat Flow(s),veh/h/ln	1619	1525	1548	1525	0	1548
Q Serve(g_s), s	19.6	21.6	0.0	0.0	0.0	11.1
Cycle Q Clear(g_c), s	19.6	21.6	0.0	0.0	0.0	11.1
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	825	388	3940		0	3940
V/C Ratio(X)	0.82	0.88	0.53		0.00	0.37
Avail Cap(c_a), veh/h	1389	654	3940		0	3940
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.73	0.00	0.00	0.70
Uniform Delay (d), s/veh	35.1	35.8	0.0	0.0	0.0	8.6
Incr Delay (d2), s/veh	0.8	4.0	0.4	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	8.0	0.1	0.0	0.0	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.9	39.9	0.4	0.0	0.0	8.8
LnGrp LOS	D	D	A		A	A
Approach Vol, veh/h	1018		2071	A		1450
Approach Delay, s/veh	37.2		0.4			8.8
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		69.4		30.6		69.4
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		46.2		42.9		46.2
Max Q Clear Time (g_c+I1), s		2.0		23.6		13.1
Green Ext Time (p_c), s		14.6		1.8		7.6

Intersection Summary	
HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Notes

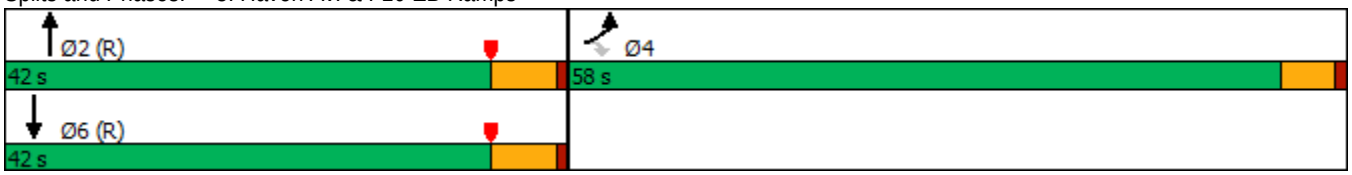
User approved volume balancing among the lanes for turning movement.

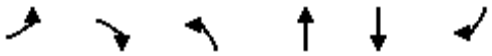
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	891	531	1446	1369	451
Future Volume (vph)	891	531	1446	1369	451
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	58.0	58.0	42.0	42.0	
Total Split (%)	58.0%	58.0%	42.0%	42.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	891	531	0	1446	1369	451
Future Volume (veh/h)	891	531	0	1446	1369	451
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	948	471	0	1538	1456	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1173	552	0	3275	3275	
Arrive On Green	0.36	0.36	0.00	0.53	1.00	0.00
Sat Flow, veh/h	3238	1525	0	6696	6444	1525
Grp Volume(v), veh/h	948	471	0	1538	1456	0
Grp Sat Flow(s),veh/h/ln	1619	1525	0	1548	1548	1525
Q Serve(g_s), s	26.4	28.5	0.0	15.6	0.0	0.0
Cycle Q Clear(g_c), s	26.4	28.5	0.0	15.6	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1173	552	0	3275	3275	
V/C Ratio(X)	0.81	0.85	0.00	0.47	0.44	
Avail Cap(c_a), veh/h	1713	807	0	3275	3275	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.77	0.82	0.00
Uniform Delay (d), s/veh	28.8	29.4	0.0	14.8	0.0	0.0
Incr Delay (d2), s/veh	1.9	6.0	0.0	0.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	10.6	0.0	5.0	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.7	35.4	0.0	15.1	0.4	0.0
LnGrp LOS	C	D	A	B	A	
Approach Vol, veh/h	1419			1538	1456	A
Approach Delay, s/veh	32.2			15.1	0.4	
Approach LOS	C			B	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		58.7		41.3		58.7
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		36.2		52.9		36.2
Max Q Clear Time (g_c+I1), s		17.6		30.5		2.0
Green Ext Time (p_c), s		7.0		5.7		7.7

Intersection Summary		
HCM 6th Ctrl Delay	15.8	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

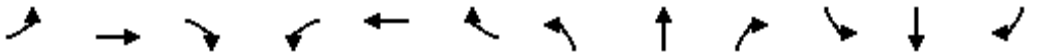
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	26	35	57	37	131	157	1575	100	202	1427	272
Future Volume (vph)	82	26	35	57	37	131	157	1575	100	202	1427	272
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	12.0	48.2	48.2	11.0	47.2	47.2	17.0	51.8	51.8	19.0	53.8	53.8
Total Split (%)	9.2%	37.1%	37.1%	8.5%	36.3%	36.3%	13.1%	39.8%	39.8%	14.6%	41.4%	41.4%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 88.4
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	26	35	57	37	131	157	1575	100	202	1427	272
Future Volume (veh/h)	82	26	35	57	37	131	157	1575	100	202	1427	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	84	27	19	58	38	68	160	1607	68	206	1456	174
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	293	245	138	278	414	231	2559	629	283	2667	648
Arrive On Green	0.05	0.16	0.16	0.05	0.15	0.15	0.08	0.41	0.41	0.10	0.43	0.43
Sat Flow, veh/h	2956	1800	1506	2956	1800	2685	2956	6192	1522	2956	6192	1505
Grp Volume(v), veh/h	84	27	19	58	38	68	160	1607	68	206	1456	174
Grp Sat Flow(s),veh/h/ln	1478	1800	1506	1478	1800	1342	1478	1548	1522	1478	1548	1505
Q Serve(g_s), s	2.1	1.0	0.8	1.4	1.4	1.7	4.0	15.5	2.1	5.1	13.2	5.6
Cycle Q Clear(g_c), s	2.1	1.0	0.8	1.4	1.4	1.7	4.0	15.5	2.1	5.1	13.2	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	293	245	138	278	414	231	2559	629	283	2667	648
V/C Ratio(X)	0.52	0.09	0.08	0.42	0.14	0.16	0.69	0.63	0.11	0.73	0.55	0.27
Avail Cap(c_a), veh/h	291	1005	841	251	981	1463	487	3786	931	566	3950	960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	26.8	26.7	34.9	27.5	27.6	33.8	17.5	13.6	33.1	15.9	13.8
Incr Delay (d2), s/veh	0.9	0.1	0.1	0.8	0.2	0.2	1.4	0.3	0.1	1.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.4	0.3	0.5	0.6	0.5	1.4	4.8	0.6	1.7	4.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	26.9	26.9	35.6	27.7	27.8	35.2	17.7	13.6	34.4	16.1	14.0
LnGrp LOS	D	C	C	D	C	C	D	B	B	C	B	B
Approach Vol, veh/h		130			164			1835			1836	
Approach Delay, s/veh		32.5			30.5			19.1			18.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	36.9	8.1	18.4	10.5	38.2	8.7	17.8
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	14.4	46.0	6.4	42.0	12.4	48.0	7.4	41.0
Max Q Clear Time (g_c+I1), s	7.1	17.5	3.4	3.0	6.0	15.2	4.1	3.7
Green Ext Time (p_c), s	0.2	13.6	0.0	0.1	0.1	13.3	0.0	0.4

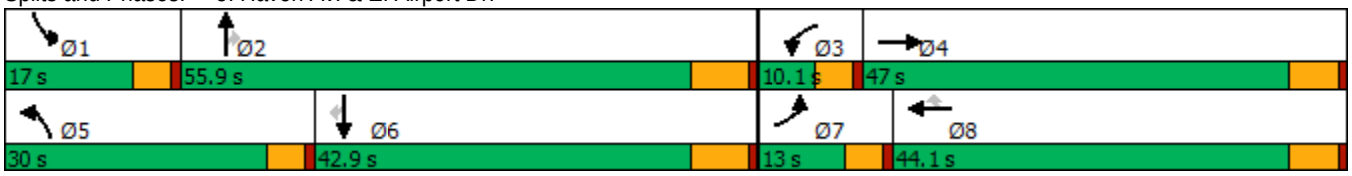
Intersection Summary	
HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B

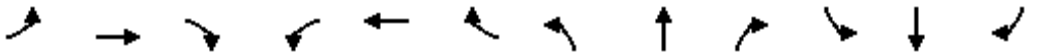
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	95	147	55	161	170	404	1341	203	168	1124	124
Future Volume (vph)	95	147	55	161	170	404	1341	203	168	1124	124
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	13.0	47.0	10.1	44.1	44.1	30.0	55.9	55.9	17.0	42.9	42.9
Total Split (%)	10.0%	36.2%	7.8%	33.9%	33.9%	23.1%	43.0%	43.0%	13.1%	33.0%	33.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 90.7
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	147	218	55	161	170	404	1341	203	168	1124	124
Future Volume (veh/h)	95	147	218	55	161	170	404	1341	203	168	1124	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	104	162	148	60	177	107	444	1474	187	185	1235	101
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	180	266	227	144	478	213	538	2541	626	262	1964	483
Arrive On Green	0.06	0.15	0.15	0.05	0.14	0.14	0.18	0.41	0.41	0.09	0.32	0.32
Sat Flow, veh/h	2956	1751	1491	2956	3420	1525	2956	6192	1525	2956	6192	1524
Grp Volume(v), veh/h	104	158	152	60	177	107	444	1474	187	185	1235	101
Grp Sat Flow(s),veh/h/ln	1478	1710	1532	1478	1710	1525	1478	1548	1525	1478	1548	1524
Q Serve(g_s), s	2.5	6.2	6.7	1.4	3.4	4.6	10.4	13.2	5.9	4.4	12.2	3.5
Cycle Q Clear(g_c), s	2.5	6.2	6.7	1.4	3.4	4.6	10.4	13.2	5.9	4.4	12.2	3.5
Prop In Lane	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	260	233	144	478	213	538	2541	626	262	1964	483
V/C Ratio(X)	0.58	0.61	0.65	0.42	0.37	0.50	0.83	0.58	0.30	0.71	0.63	0.21
Avail Cap(c_a), veh/h	347	984	881	227	1830	816	1049	4273	1053	512	3148	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.7	28.4	28.6	33.1	27.9	28.5	28.2	16.3	14.2	31.7	20.9	17.9
Incr Delay (d2), s/veh	1.1	2.3	3.1	0.7	0.5	1.8	1.3	0.2	0.3	1.3	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.5	2.4	0.5	1.3	1.7	3.3	3.8	1.8	1.4	3.7	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.8	30.6	31.7	33.8	28.4	30.3	29.4	16.5	14.4	33.0	21.2	18.1
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	C	B
Approach Vol, veh/h		414			344			2105			1521	
Approach Delay, s/veh		31.8			29.9			19.1			22.4	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	35.9	8.1	16.7	17.6	29.2	9.0	15.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	49.4	5.5	41.2	25.4	36.4	8.4	38.3
Max Q Clear Time (g_c+I1), s	6.4	15.2	3.4	8.7	12.4	14.2	4.5	6.6
Green Ext Time (p_c), s	0.1	12.9	0.0	1.7	0.7	8.4	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	1460	7	0	1106
Future Vol, veh/h	0	1	1460	7	0	1106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1	1553	7	0	1177

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	780	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	294	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	294	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.3	0	0
HCM LOS	C		

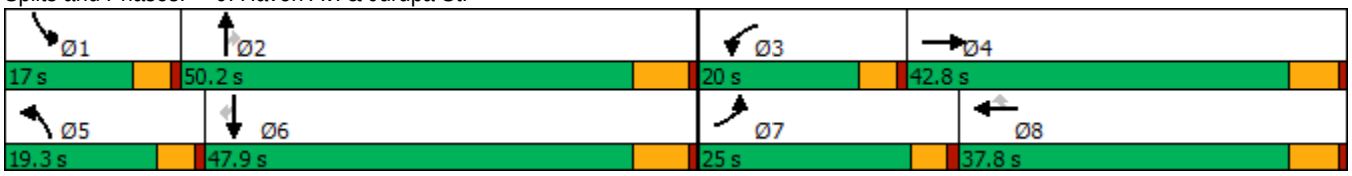
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	294	-
HCM Lane V/C Ratio	-	-	0.004	-
HCM Control Delay (s)	-	-	17.3	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0	-

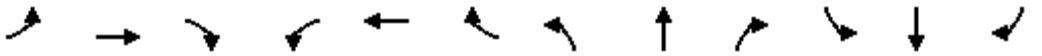
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	330	184	239	284	69	96	1555	194	77	974	424
Future Volume (vph)	330	184	239	284	69	96	1555	194	77	974	424
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	25.0	42.8	20.0	37.8	37.8	19.3	50.2	50.2	17.0	47.9	47.9
Total Split (%)	19.2%	32.9%	15.4%	29.1%	29.1%	14.8%	38.6%	38.6%	13.1%	36.8%	36.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 100.2
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	184	112	239	284	69	96	1555	194	77	974	424
Future Volume (veh/h)	330	184	112	239	284	69	96	1555	194	77	974	424
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	347	194	93	252	299	47	101	1637	89	81	1025	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	427	552	240	327	448	200	126	2443	602	101	2348	
Arrive On Green	0.14	0.16	0.16	0.11	0.13	0.13	0.08	0.39	0.39	0.06	0.38	0.00
Sat Flow, veh/h	2956	3352	1456	2956	3420	1525	1619	6192	1525	1619	6192	1525
Grp Volume(v), veh/h	347	189	98	252	299	47	101	1637	89	81	1025	0
Grp Sat Flow(s),veh/h/ln	1478	1638	1532	1478	1710	1525	1619	1548	1525	1619	1548	1525
Q Serve(g_s), s	9.1	4.1	4.6	6.7	6.7	2.2	4.9	17.5	3.0	4.0	9.9	0.0
Cycle Q Clear(g_c), s	9.1	4.1	4.6	6.7	6.7	2.2	4.9	17.5	3.0	4.0	9.9	0.0
Prop In Lane	1.00		0.95	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	427	540	252	327	448	200	126	2443	602	101	2348	
V/C Ratio(X)	0.81	0.35	0.39	0.77	0.67	0.24	0.80	0.67	0.15	0.80	0.44	
Avail Cap(c_a), veh/h	751	1510	706	567	1363	608	296	3370	830	250	3193	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.3	29.7	29.9	34.7	33.2	31.3	36.4	20.0	15.6	37.1	18.5	0.0
Incr Delay (d2), s/veh	1.5	0.4	1.0	1.5	1.7	0.6	4.4	0.3	0.1	5.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	1.5	1.6	2.3	2.7	0.8	1.9	5.3	1.0	1.6	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.8	30.1	30.9	36.2	34.9	31.9	40.8	20.3	15.7	42.6	18.7	0.0
LnGrp LOS	C	C	C	D	C	C	D	C	B	D	B	
Approach Vol, veh/h		634			598			1827			1106	A
Approach Delay, s/veh		32.8			35.2			21.2			20.4	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	38.2	13.5	19.0	10.8	36.9	16.2	16.3
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	43.7	15.4	37.0	14.7	41.4	20.4	32.0
Max Q Clear Time (g_c+I1), s	6.0	19.5	8.7	6.6	6.9	11.9	11.1	8.7
Green Ext Time (p_c), s	0.0	12.2	0.3	1.7	0.1	7.0	0.5	1.8

Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Notes

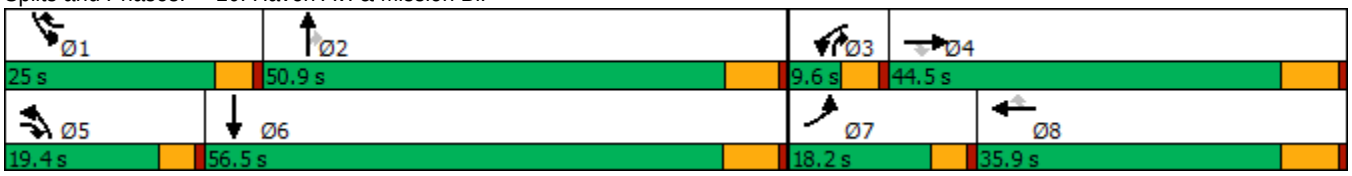
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

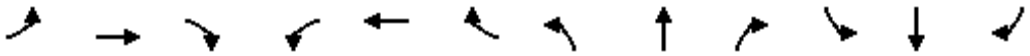
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	202	245	118	54	586	590	97	1550	14	138	1242
Future Volume (vph)	202	245	118	54	586	590	97	1550	14	138	1242
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	18.2	44.5	19.4	9.6	35.9	25.0	19.4	50.9	9.6	25.0	56.5
Total Split (%)	14.0%	34.2%	14.9%	7.4%	27.6%	19.2%	14.9%	39.2%	7.4%	19.2%	43.5%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 117.7
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	245	118	54	586	590	97	1550	14	138	1242	195
Future Volume (veh/h)	202	245	118	54	586	590	97	1550	14	138	1242	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	215	261	103	57	623	463	103	1649	10	147	1321	191
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	264	1485	578	106	1222	541	125	1809	607	172	1722	249
Arrive On Green	0.09	0.30	0.30	0.04	0.25	0.25	0.08	0.37	0.37	0.11	0.40	0.40
Sat Flow, veh/h	2956	4914	1522	2956	4914	1525	1619	4914	1501	1619	4336	627
Grp Volume(v), veh/h	215	261	103	57	623	463	103	1649	10	147	998	514
Grp Sat Flow(s),veh/h/ln	1478	1638	1522	1478	1638	1525	1619	1638	1501	1619	1638	1687
Q Serve(g_s), s	8.4	4.6	5.3	2.2	12.9	29.4	7.4	37.7	0.5	10.6	31.2	31.2
Cycle Q Clear(g_c), s	8.4	4.6	5.3	2.2	12.9	29.4	7.4	37.7	0.5	10.6	31.2	31.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	264	1485	578	106	1222	541	125	1809	607	172	1301	670
V/C Ratio(X)	0.82	0.18	0.18	0.54	0.51	0.86	0.82	0.91	0.02	0.86	0.77	0.77
Avail Cap(c_a), veh/h	340	1580	607	125	1222	541	203	1858	622	279	1386	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	30.4	24.4	56.0	38.2	35.3	53.7	35.5	21.1	51.9	30.9	30.9
Incr Delay (d2), s/veh	8.8	0.1	0.1	1.6	0.4	12.7	5.9	7.2	0.0	7.2	2.5	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	1.7	1.8	0.8	5.0	13.3	3.1	15.2	0.2	4.4	11.8	12.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.7	30.5	24.6	57.6	38.6	48.0	59.7	42.7	21.2	59.1	33.4	35.7
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	C	D
Approach Vol, veh/h		579			1143			1762			1659	
Approach Delay, s/veh		41.0			43.4			43.5			36.4	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	50.0	8.8	42.2	13.7	53.4	15.1	35.9
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	20.4	* 45	5.0	38.0	14.8	50.0	13.6	29.4
Max Q Clear Time (g_c+I1), s	12.6	39.7	4.2	7.3	9.4	33.2	10.4	31.4
Green Ext Time (p_c), s	0.1	3.8	0.0	1.8	0.0	8.4	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.9
HCM 6th LOS	D

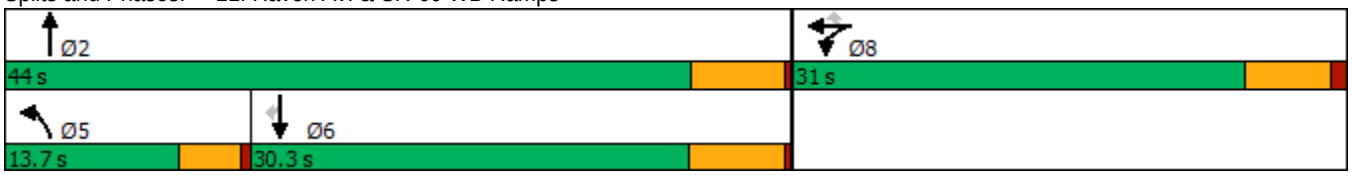
Notes

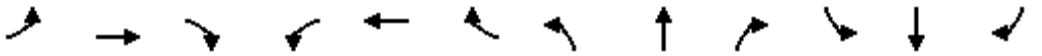
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	134	9	461	300	1454	760	518
Future Volume (vph)	134	9	461	300	1454	760	518
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.5	35.2	28.3	28.3
Total Split (s)	31.0	31.0	31.0	13.7	44.0	30.3	30.3
Total Split (%)	41.3%	41.3%	41.3%	18.3%	58.7%	40.4%	40.4%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 64.4
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	134	9	461	300	1454	0	0	760	518
Future Volume (veh/h)	0	0	0	134	9	461	300	1454	0	0	760	518
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	1600	1800	0	0	1800	1800
Adj Flow Rate, veh/h				147	0	258	316	1531	0	0	800	380
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				715	0	337	430	2704	0	0	1601	497
Arrive On Green				0.22	0.00	0.22	0.15	0.55	0.00	0.00	0.33	0.33
Sat Flow, veh/h				3238	0	1525	2956	5076	0	0	5076	1525
Grp Volume(v), veh/h				147	0	258	316	1531	0	0	800	380
Grp Sat Flow(s),veh/h/ln				1619	0	1525	1478	1638	0	0	1638	1525
Q Serve(g_s), s				1.9	0.0	8.0	5.2	10.3	0.0	0.0	6.6	11.3
Cycle Q Clear(g_c), s				1.9	0.0	8.0	5.2	10.3	0.0	0.0	6.6	11.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				715	0	337	430	2704	0	0	1601	497
V/C Ratio(X)				0.21	0.00	0.77	0.73	0.57	0.00	0.00	0.50	0.76
Avail Cap(c_a), veh/h				1611	0	759	566	3717	0	0	2378	738
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.1	0.0	18.5	20.7	7.4	0.0	0.0	13.7	15.3
Incr Delay (d2), s/veh				0.1	0.0	3.7	3.5	0.1	0.0	0.0	0.1	1.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	0.0	2.6	1.7	1.9	0.0	0.0	1.8	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				16.2	0.0	22.2	24.2	7.5	0.0	0.0	13.8	16.6
LnGrp LOS				B	A	C	C	A	A	A	B	B
Approach Vol, veh/h					405			1847			1180	
Approach Delay, s/veh					20.0			10.4			14.7	
Approach LOS					C			B			B	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	33.7		11.4	22.3		17.0						
Change Period (Y+Rc), s	* 5.8		4.0	5.8		5.8						
Max Green Setting (Gmax), s	* 38		9.7	24.5		25.2						
Max Q Clear Time (g_c+I1), s	12.3		7.2	13.3		10.0						
Green Ext Time (p_c), s	7.5		0.3	3.2		1.2						

Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

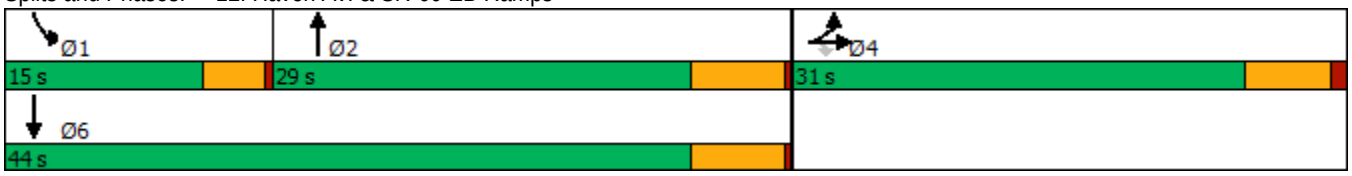
User approved volume balancing among the lanes for turning movement.

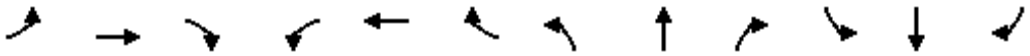
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	806	7	198	948	338	556
Future Volume (vph)	806	7	198	948	338	556
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.6	29.7
Total Split (s)	31.0	31.0	31.0	29.0	15.0	44.0
Total Split (%)	41.3%	41.3%	41.3%	38.7%	20.0%	58.7%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 71.3
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	806	7	198	0	0	0	0	948	266	338	556	0
Future Volume (veh/h)	806	7	198	0	0	0	0	948	266	338	556	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800				0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h	853	0	67				0	998	216	356	585	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	1006	0	474				0	1219	263	443	2522	0
Arrive On Green	0.31	0.00	0.31				0.00	0.30	0.30	0.15	0.51	0.00
Sat Flow, veh/h	3238	0	1525				0	4197	871	2956	5076	0
Grp Volume(v), veh/h	853	0	67				0	810	404	356	585	0
Grp Sat Flow(s),veh/h/ln	1619	0	1525				0	1638	1630	1478	1638	0
Q Serve(g_s), s	16.1	0.0	2.1				0.0	15.0	15.0	7.6	4.3	0.0
Cycle Q Clear(g_c), s	16.1	0.0	2.1				0.0	15.0	15.0	7.6	4.3	0.0
Prop In Lane	1.00		1.00				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	1006	0	474				0	990	492	443	2522	0
V/C Ratio(X)	0.85	0.00	0.14				0.00	0.82	0.82	0.80	0.23	0.00
Avail Cap(c_a), veh/h	1250	0	589				0	1169	582	498	2883	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.1	0.0	16.2				0.0	21.1	21.1	26.8	8.8	0.0
Incr Delay (d2), s/veh	4.7	0.0	0.1				0.0	3.4	6.8	8.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	0.6				0.0	5.2	5.7	2.9	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	0.0	16.4				0.0	24.5	27.9	35.2	8.8	0.0
LnGrp LOS	C	A	B				A	C	C	D	A	A
Approach Vol, veh/h		920						1214			941	
Approach Delay, s/veh		25.1						25.6			18.8	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	13.8	25.4		26.1		39.2						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	11.0	23.3		25.2		38.3						
Max Q Clear Time (g_c+I1), s	9.6	17.0		18.1		6.3						
Green Ext Time (p_c), s	0.2	2.7		2.2		2.3						

Intersection Summary			
HCM 6th Ctrl Delay			23.4
HCM 6th LOS			C

Notes

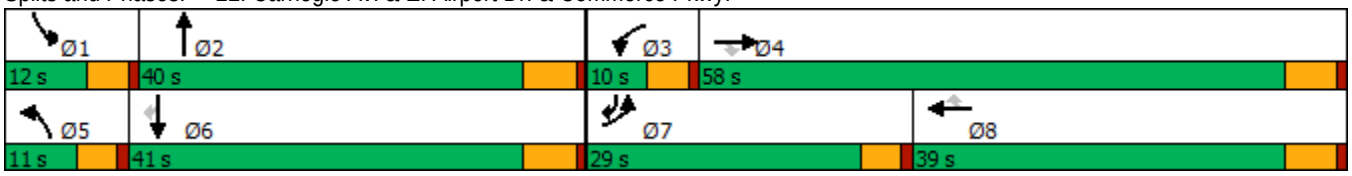
User approved volume balancing among the lanes for turning movement.

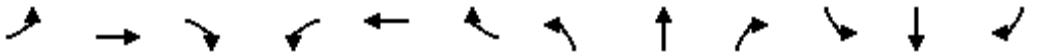
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	149	102	5	2	187	27	16	10	19	26	161
Future Volume (vph)	149	102	5	2	187	27	16	10	19	26	161
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	29.0	58.0	58.0	10.0	39.0	39.0	11.0	40.0	12.0	41.0	29.0
Total Split (%)	24.2%	48.3%	48.3%	8.3%	32.5%	32.5%	9.2%	33.3%	10.0%	34.2%	24.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 49.5
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	102	5	2	187	27	16	10	0	19	26	161
Future Volume (veh/h)	149	102	5	2	187	27	16	10	0	19	26	161
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1700
Adj Flow Rate, veh/h	180	123	5	2	225	21	19	12	0	23	31	135
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	226	1175	524	4	707	315	38	661	0	45	675	854
Arrive On Green	0.14	0.34	0.34	0.00	0.21	0.21	0.02	0.19	0.00	0.03	0.20	0.20
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	3510	0	1619	3420	2536
Grp Volume(v), veh/h	180	123	5	2	225	21	19	12	0	23	31	135
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	0	1619	1710	1268
Q Serve(g_s), s	5.2	1.2	0.1	0.1	2.7	0.5	0.6	0.1	0.0	0.7	0.4	1.8
Cycle Q Clear(g_c), s	5.2	1.2	0.1	0.1	2.7	0.5	0.6	0.1	0.0	0.7	0.4	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	1175	524	4	707	315	38	661	0	45	675	854
V/C Ratio(X)	0.80	0.10	0.01	0.45	0.32	0.07	0.50	0.02	0.00	0.52	0.05	0.16
Avail Cap(c_a), veh/h	822	3717	1658	182	2364	1054	216	2435	0	249	2506	2212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	10.7	10.4	23.9	16.2	15.3	23.2	15.7	0.0	23.0	15.6	11.2
Incr Delay (d2), s/veh	2.4	0.0	0.0	24.3	0.3	0.1	3.8	0.0	0.0	3.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.3	0.0	0.0	0.9	0.2	0.2	0.0	0.0	0.3	0.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	10.8	10.4	48.2	16.4	15.4	27.0	15.7	0.0	26.5	15.6	11.2
LnGrp LOS	C	B	B	D	B	B	C	B	A	C	B	B
Approach Vol, veh/h		308			248			31			189	
Approach Delay, s/veh		17.6			16.6			22.6			13.8	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	15.1	4.7	22.3	5.7	15.3	11.3	15.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	34.2	5.4	52.2	6.4	35.2	24.4	33.2
Max Q Clear Time (g_c+I1), s	2.7	2.1	2.1	3.2	2.6	3.8	7.2	4.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	0.7	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	16.6
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	5	21	4	17	16
Future Vol, veh/h	2	5	21	4	17	16
Peak Hour Factor	0.64	0.64	0.64	0.64	0.64	0.64
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	8	33	6	27	25
Number of Lanes	2	1	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	3	0
HCM Control Delay	6.5	7.3	7.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	21%	0%	100%	0%	0%
Vol Thru, %	100%	64%	0%	0%	0%	0%	100%	100%
Vol Right, %	0%	36%	0%	79%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	14	11	1	3	3	17	8	8
LT Vol	0	0	1	1	0	17	0	0
Through Vol	14	7	0	0	0	0	8	8
RT Vol	0	4	0	2	3	0	0	0
Lane Flow Rate	22	17	2	5	4	27	12	12
Geometry Grp	8	8	7	7	7	8	8	8
Degree of Util (X)	0.028	0.021	0.003	0.006	0.002	0.037	0.016	0.01
Departure Headway (Hd)	4.587	4.332	5.146	4.198	2.246	5.071	4.57	2.87
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	780	826	692	846	1563	707	783	1243
Service Time	2.316	2.062	2.903	1.956	0.003	2.797	2.297	0.597
HCM Lane V/C Ratio	0.028	0.021	0.003	0.006	0.003	0.038	0.015	0.01
HCM Control Delay	7.4	7.2	7.9	7	5	8	7.4	5.6
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0	0	0	0.1	0	0

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	11	37	17	12	6
Future Vol, veh/h	8	11	37	17	12	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	12	40	18	13	7
Number of Lanes	1	1	1	2	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	7.3	7.6	7.2
HCM LOS	A	A	A

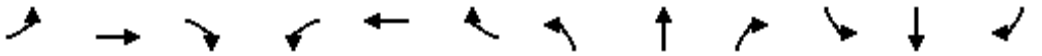
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	40%
Vol Right, %	0%	0%	0%	0%	100%	0%	60%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	9	9	8	11	8	10
LT Vol	37	0	0	8	0	0	0
Through Vol	0	9	9	0	0	8	4
RT Vol	0	0	0	0	11	0	6
Lane Flow Rate	40	9	9	9	12	9	11
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.057	0.012	0.007	0.012	0.013	0.011	0.013
Departure Headway (Hd)	5.069	4.568	2.868	5.141	3.942	4.618	4.198
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	708	784	1246	692	900	771	848
Service Time	2.791	2.29	0.589	2.902	1.702	2.367	1.947
HCM Lane V/C Ratio	0.056	0.011	0.007	0.013	0.013	0.012	0.013
HCM Control Delay	8.1	7.3	5.6	8	6.8	7.4	7
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0	0	0	0	0	0

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	55	571	6	663	28	8	3	6	21
Future Volume (vph)	55	571	6	663	28	8	3	6	21
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	81.0	81.0	81.0	81.0	81.0	39.0	39.0	39.0	39.0
Total Split (%)	67.5%	67.5%	67.5%	67.5%	67.5%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 26.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	571	3	6	663	28	8	0	3	6	0	21
Future Volume (veh/h)	55	571	3	6	663	28	8	0	3	6	0	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	61	634	3	7	737	31	9	0	2	7	0	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	524	2441	12	605	1654	729	351	77	65	352	77	65
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.04	0.00	0.04	0.04	0.00	0.04
Sat Flow, veh/h	672	5047	24	759	3420	1506	1344	1800	1523	1348	1800	1525
Grp Volume(v), veh/h	61	411	226	7	737	31	9	0	2	7	0	13
Grp Sat Flow(s),veh/h/ln	672	1638	1795	759	1710	1506	1344	1800	1523	1348	1800	1525
Q Serve(g_s), s	1.6	1.8	1.8	0.1	3.5	0.3	0.2	0.0	0.0	0.1	0.0	0.2
Cycle Q Clear(g_c), s	5.1	1.8	1.8	2.0	3.5	0.3	0.2	0.0	0.0	0.1	0.0	0.2
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	524	1585	868	605	1654	729	351	77	65	352	77	65
V/C Ratio(X)	0.12	0.26	0.26	0.01	0.45	0.04	0.03	0.00	0.03	0.02	0.00	0.20
Avail Cap(c_a), veh/h	2261	10056	5510	2567	10498	4624	2181	2528	2139	2121	2439	2067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.8	3.7	3.7	4.3	4.2	3.3	11.3	0.0	11.2	11.3	0.0	11.3
Incr Delay (d2), s/veh	0.1	0.1	0.2	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.9	3.8	3.9	4.3	4.4	3.4	11.3	0.0	11.4	11.3	0.0	12.8
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	B
Approach Vol, veh/h		698			775			11			20	
Approach Delay, s/veh		4.0			4.3			11.3			12.3	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		6.8		17.6		6.8		17.6				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 34		75.2		33.2		75.2				
Max Q Clear Time (g_c+I1), s		2.2		7.1		2.2		5.5				
Green Ext Time (p_c), s		0.0		4.7		0.0		5.5				

Intersection Summary												
HCM 6th Ctrl Delay			4.3									
HCM 6th LOS			A									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	20	1	0	4	30	0	187	23	47	66	3
Future Vol, veh/h	0	20	1	0	4	30	0	187	23	47	66	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	21	1	0	4	32	0	197	24	49	69	3
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.3	7.7	8.5	8.4
HCM LOS	A	A	A	A

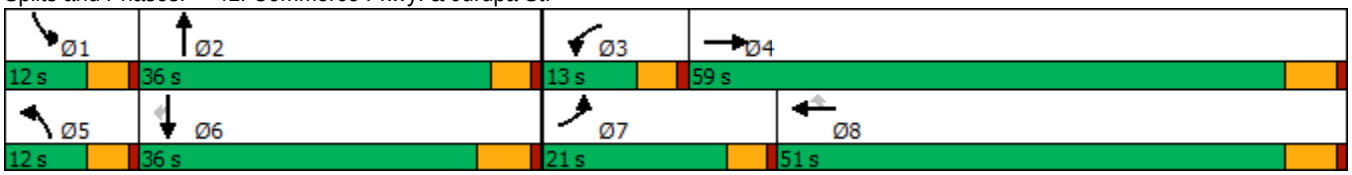
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	73%	100%	100%	87%	100%	100%	4%	0%	100%	88%
Vol Right, %	0%	0%	27%	0%	0%	13%	0%	0%	96%	0%	0%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	125	85	0	13	8	0	3	31	47	44	25
LT Vol	0	0	0	0	0	0	0	0	0	47	0	0
Through Vol	0	125	62	0	13	7	0	3	1	0	44	22
RT Vol	0	0	23	0	0	1	0	0	30	0	0	3
Lane Flow Rate	0	131	90	0	14	8	0	3	33	49	46	26
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.179	0.118	0	0.021	0.012	0	0.004	0.044	0.077	0.065	0.037
Departure Headway (Hd)	4.912	4.912	4.723	5.46	5.46	5.368	5.438	5.438	4.766	5.586	5.085	5.001
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	732	760	0	656	667	0	658	751	643	705	717
Service Time	2.633	2.633	2.444	3.193	3.193	3.102	3.17	3.17	2.498	3.31	2.808	2.724
HCM Lane V/C Ratio	0	0.179	0.118	0	0.021	0.012	0	0.005	0.044	0.076	0.065	0.036
HCM Control Delay	7.6	8.7	8.1	8.2	8.3	8.2	8.2	8.2	7.7	8.8	8.2	7.9
HCM Lane LOS	N	A	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.6	0.4	0	0.1	0	0	0	0.1	0.2	0.2	0.1

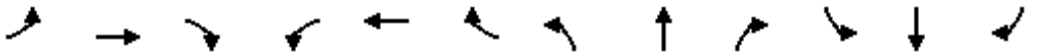
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	72	494	18	666	139	13	5	39	4	18
Future Volume (vph)	72	494	18	666	139	13	5	39	4	18
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	21.0	59.0	13.0	51.0	51.0	12.0	36.0	12.0	36.0	36.0
Total Split (%)	17.5%	49.2%	10.8%	42.5%	42.5%	10.0%	30.0%	10.0%	30.0%	30.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 57.3
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	494	13	18	666	139	13	5	31	39	4	18
Future Volume (veh/h)	72	494	13	18	666	139	13	5	31	39	4	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	78	537	13	20	724	0	14	5	23	42	4	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	110	1839	44	40	1126		29	33	151	133	260	220
Arrive On Green	0.07	0.37	0.37	0.02	0.33	0.00	0.02	0.12	0.12	0.04	0.14	0.14
Sat Flow, veh/h	1619	4935	119	1619	3420	1525	1619	280	1288	2956	1800	1525
Grp Volume(v), veh/h	78	356	194	20	724	0	14	0	28	42	4	13
Grp Sat Flow(s),veh/h/ln	1619	1638	1779	1619	1710	1525	1619	0	1568	1478	1800	1525
Q Serve(g_s), s	2.2	3.6	3.6	0.6	8.5	0.0	0.4	0.0	0.8	0.6	0.1	0.3
Cycle Q Clear(g_c), s	2.2	3.6	3.6	0.6	8.5	0.0	0.4	0.0	0.8	0.6	0.1	0.3
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.82	1.00		1.00
Lane Grp Cap(c), veh/h	110	1221	663	40	1126		29	0	184	133	260	220
V/C Ratio(X)	0.71	0.29	0.29	0.51	0.64		0.49	0.00	0.15	0.32	0.02	0.06
Avail Cap(c_a), veh/h	563	3695	2006	288	3278		254	0	1044	464	1153	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	10.4	10.4	22.7	13.5	0.0	22.9	0.0	18.7	21.8	17.3	17.4
Incr Delay (d2), s/veh	3.1	0.1	0.2	3.7	0.6	0.0	4.7	0.0	0.4	0.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.9	1.1	0.2	2.5	0.0	0.2	0.0	0.3	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.7	10.5	10.7	26.4	14.1	0.0	27.6	0.0	19.1	22.3	17.3	17.5
LnGrp LOS	C	B	B	C	B		C	A	B	C	B	B
Approach Vol, veh/h		628			744	A		42			59	
Approach Delay, s/veh		12.3			14.4			21.9			20.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	11.3	5.8	23.4	5.4	12.6	7.8	21.3
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	* 31	8.4	53.2	7.4	30.2	16.4	45.2
Max Q Clear Time (g_c+I1), s	2.6	2.8	2.6	5.6	2.4	2.3	4.2	10.5
Green Ext Time (p_c), s	0.0	0.1	0.0	3.4	0.0	0.0	0.1	5.0

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	41	25	7	23	9	1	6	2	8	4	10
Future Vol, veh/h	23	41	25	7	23	9	1	6	2	8	4	10
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	24	44	27	7	24	10	1	6	2	9	4	11
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.5	7.5	7.5	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	50%	0%	100%	35%	0%	100%	46%	0%	100%	12%
Vol Right, %	0%	0%	50%	0%	0%	65%	0%	0%	54%	0%	0%	88%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	4	4	23	27	39	7	15	17	8	3	11
LT Vol	1	0	0	23	0	0	7	0	0	8	0	0
Through Vol	0	4	2	0	27	14	0	15	8	0	3	1
RT Vol	0	0	2	0	0	25	0	0	9	0	0	10
Lane Flow Rate	1	4	4	24	29	41	7	16	18	9	3	12
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.002	0.006	0.005	0.035	0.037	0.048	0.011	0.021	0.021	0.013	0.004	0.014
Departure Headway (Hd)	5.385	4.885	4.535	5.117	4.617	4.165	5.187	4.687	4.309	5.361	4.861	4.243
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	668	737	794	697	772	855	684	756	821	672	741	849
Service Time	3.087	2.587	2.237	2.867	2.367	1.914	2.963	2.463	2.085	3.061	2.561	1.943
HCM Lane V/C Ratio	0.001	0.005	0.005	0.034	0.038	0.048	0.01	0.021	0.022	0.013	0.004	0.014
HCM Control Delay	8.1	7.6	7.3	8.1	7.5	7.1	8	7.6	7.2	8.1	7.6	7
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0	0	0.1	0.1	0.2	0	0.1	0.1	0	0	0

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	30	6	10	20	10	22	61	7	3	26	8
Future Vol, veh/h	7	30	6	10	20	10	22	61	7	3	26	8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	33	7	11	22	11	24	67	8	3	29	9
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.8	7.8	7.8	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	74%	0%	100%	62%	0%	100%	40%	0%	100%	52%
Vol Right, %	0%	0%	26%	0%	0%	38%	0%	0%	60%	0%	0%	48%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	41	27	7	20	16	10	13	17	3	17	17
LT Vol	22	0	0	7	0	0	10	0	0	3	0	0
Through Vol	0	41	20	0	20	10	0	13	7	0	17	9
RT Vol	0	0	7	0	0	6	0	0	10	0	0	8
Lane Flow Rate	24	45	30	8	22	18	11	15	18	3	19	18
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.036	0.06	0.039	0.012	0.03	0.023	0.017	0.02	0.023	0.005	0.026	0.023
Departure Headway (Hd)	5.328	4.828	4.648	5.448	4.948	4.686	5.454	4.954	4.534	5.429	4.929	4.593
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	676	746	775	660	726	767	659	725	792	661	729	782
Service Time	3.028	2.528	2.348	3.159	2.659	2.396	3.166	2.666	2.246	3.143	2.643	2.307
HCM Lane V/C Ratio	0.036	0.06	0.039	0.012	0.03	0.023	0.017	0.021	0.023	0.005	0.026	0.023
HCM Control Delay	8.2	7.8	7.5	8.2	7.8	7.5	8.3	7.8	7.4	8.2	7.8	7.4
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	12	32	103	19	0
Future Vol, veh/h	1	12	32	103	19	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	14	38	123	23	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	161	12	23	0	-	0
Stage 1	23	-	-	-	-	-
Stage 2	138	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	820	1072	1605	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	800	1072	1605	-	-	-
Mov Cap-2 Maneuver	826	-	-	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	880	-	-	-	-	-

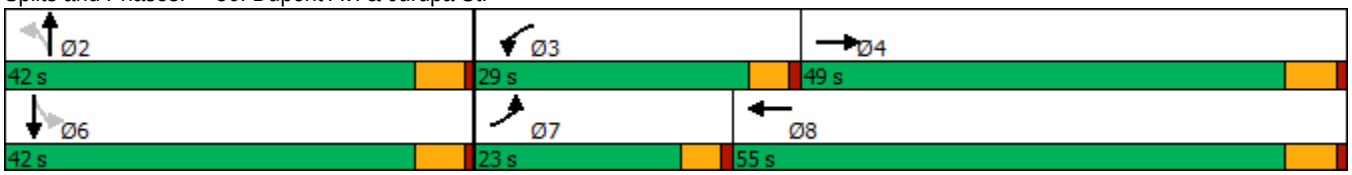
Approach	EB	NB	SB
HCM Control Delay, s	8.5	1.7	0
HCM LOS	A		

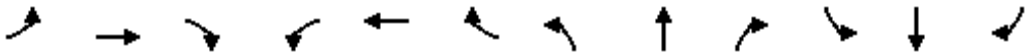
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1605	-	826	1072	-	-
HCM Lane V/C Ratio	0.024	-	0.001	0.013	-	-
HCM Control Delay (s)	7.3	-	9.4	8.4	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	52	465	91	775	22	30	7	5
Future Volume (vph)	52	465	91	775	22	30	7	5
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	23.0	49.0	29.0	55.0	42.0	42.0	42.0	42.0
Total Split (%)	19.2%	40.8%	24.2%	45.8%	35.0%	35.0%	35.0%	35.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 46.9
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	465	17	91	775	65	22	30	82	7	5	12
Future Volume (veh/h)	52	465	17	91	775	65	22	30	82	7	5	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	53	474	16	93	791	65	22	31	60	7	5	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	91	1536	52	132	1575	129	445	334	298	389	334	298
Arrive On Green	0.06	0.31	0.31	0.08	0.34	0.34	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1619	4882	164	1619	4629	379	1347	1710	1525	1253	1710	1525
Grp Volume(v), veh/h	53	317	173	93	559	297	22	31	60	7	5	6
Grp Sat Flow(s),veh/h/ln	1619	1638	1770	1619	1638	1732	1347	1710	1525	1253	1710	1525
Q Serve(g_s), s	1.2	2.8	2.9	2.2	5.2	5.3	0.5	0.6	1.3	0.2	0.1	0.1
Cycle Q Clear(g_c), s	1.2	2.8	2.9	2.2	5.2	5.3	0.6	0.6	1.3	1.5	0.1	0.1
Prop In Lane	1.00		0.09	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	91	1031	557	132	1115	589	445	334	298	389	334	298
V/C Ratio(X)	0.58	0.31	0.31	0.70	0.50	0.50	0.05	0.09	0.20	0.02	0.01	0.02
Avail Cap(c_a), veh/h	770	3658	1977	1021	4166	2202	1456	1618	1443	1330	1618	1443
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.8	10.1	10.1	17.3	10.2	10.2	12.8	12.8	13.0	13.7	12.6	12.6
Incr Delay (d2), s/veh	2.2	0.2	0.3	2.5	0.4	0.7	0.0	0.1	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	0.8	0.7	1.2	1.4	0.1	0.2	0.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.0	10.2	10.4	19.8	10.5	10.8	12.9	12.9	13.4	13.7	12.6	12.6
LnGrp LOS	C	B	B	B	B	B	B	B	B	B	B	B
Approach Vol, veh/h		543			949			113			18	
Approach Delay, s/veh		11.2			11.5			13.1			13.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.0	7.8	18.0		13.0	6.8	19.0				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		36.6	24.4	43.2		36.6	18.4	49.2				
Max Q Clear Time (g_c+I1), s		3.3	4.2	4.9		3.5	3.2	7.3				
Green Ext Time (p_c), s		0.5	0.1	3.0		0.0	0.0	5.8				

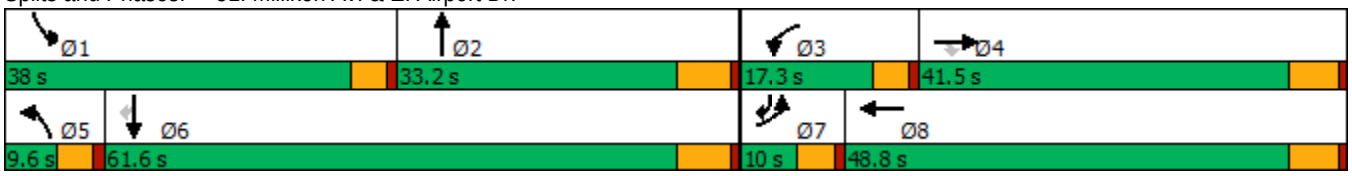
Intersection Summary												
HCM 6th Ctrl Delay			11.6									
HCM 6th LOS			B									

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	66	101	21	76	130	21	594	331	792	130
Future Volume (vph)	66	101	21	76	130	21	594	331	792	130
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	10.0	41.5	41.5	17.3	48.8	9.6	33.2	38.0	61.6	10.0
Total Split (%)	7.7%	31.9%	31.9%	13.3%	37.5%	7.4%	25.5%	29.2%	47.4%	7.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 96.5
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	101	21	76	130	202	21	594	70	331	792	130
Future Volume (veh/h)	66	101	21	76	130	202	21	594	70	331	792	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	77	117	11	88	151	134	24	691	65	385	921	102
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	493	220	110	279	230	79	1028	96	428	2273	789
Arrive On Green	0.06	0.14	0.14	0.07	0.16	0.16	0.03	0.22	0.22	0.26	0.46	0.46
Sat Flow, veh/h	2956	3420	1525	1619	1778	1465	2956	4572	427	1619	4914	1523
Grp Volume(v), veh/h	77	117	11	88	145	140	24	494	262	385	921	102
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1619	1710	1533	1478	1638	1722	1619	1638	1523
Q Serve(g_s), s	1.8	2.1	0.4	3.8	5.5	6.0	0.6	9.8	9.9	16.3	8.8	2.5
Cycle Q Clear(g_c), s	1.8	2.1	0.4	3.8	5.5	6.0	0.6	9.8	9.9	16.3	8.8	2.5
Prop In Lane	1.00		1.00	1.00		0.96	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	163	493	220	110	268	240	79	737	387	428	2273	789
V/C Ratio(X)	0.47	0.24	0.05	0.80	0.54	0.58	0.31	0.67	0.68	0.90	0.41	0.13
Avail Cap(c_a), veh/h	225	1722	768	290	1037	930	209	1248	656	763	3841	1275
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	26.9	26.2	32.6	27.5	27.7	33.9	25.1	25.1	25.2	12.6	8.8
Incr Delay (d2), s/veh	0.8	0.2	0.1	5.0	1.7	2.2	0.8	1.1	2.1	3.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8	0.2	1.5	2.2	2.2	0.2	3.4	3.8	5.8	2.6	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	27.1	26.2	37.6	29.2	30.0	34.7	26.1	27.2	28.3	12.7	8.9
LnGrp LOS	C	C	C	D	C	C	C	C	C	C	B	A
Approach Vol, veh/h		205			373			780			1408	
Approach Delay, s/veh		29.4			31.5			26.8			16.7	
Approach LOS		C			C			C			B	

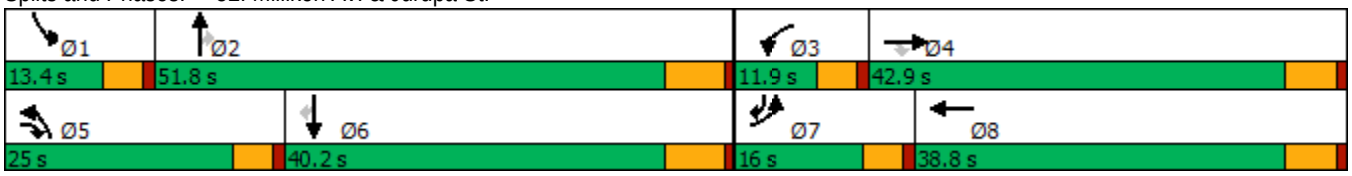
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.3	22.1	9.4	16.0	6.5	39.0	8.5	16.9
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	33.4	27.0	12.7	35.7	5.0	55.4	5.4	43.0
Max Q Clear Time (g_c+I1), s	18.3	11.9	5.8	4.1	2.6	10.8	3.8	8.0
Green Ext Time (p_c), s	0.5	3.8	0.0	0.7	0.0	7.1	0.0	1.6

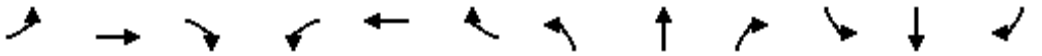
Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	203	667	281	100	478	419	742	104	128	370	62
Future Volume (vph)	203	667	281	100	478	419	742	104	128	370	62
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	16.0	42.9	25.0	11.9	38.8	25.0	51.8	51.8	13.4	40.2	16.0
Total Split (%)	13.3%	35.8%	20.8%	9.9%	32.3%	20.8%	43.2%	43.2%	11.2%	33.5%	13.3%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 80.8
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	667	281	100	478	68	419	742	104	128	370	62
Future Volume (veh/h)	203	667	281	100	478	68	419	742	104	128	370	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	209	688	185	103	493	45	432	765	89	132	381	28
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	298	1189	647	199	957	86	539	1338	415	216	801	402
Arrive On Green	0.10	0.24	0.24	0.07	0.21	0.21	0.18	0.27	0.27	0.07	0.16	0.16
Sat Flow, veh/h	2956	4914	1525	2956	4588	414	2956	4914	1525	2956	4914	1525
Grp Volume(v), veh/h	209	688	185	103	350	188	432	765	89	132	381	28
Grp Sat Flow(s),veh/h/ln	1478	1638	1525	1478	1638	1726	1478	1638	1525	1478	1638	1525
Q Serve(g_s), s	4.2	7.6	4.9	2.1	5.8	5.9	8.6	8.2	2.8	2.7	4.3	0.8
Cycle Q Clear(g_c), s	4.2	7.6	4.9	2.1	5.8	5.9	8.6	8.2	2.8	2.7	4.3	0.8
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	1189	647	199	683	360	539	1338	415	216	801	402
V/C Ratio(X)	0.70	0.58	0.29	0.52	0.51	0.52	0.80	0.57	0.21	0.61	0.48	0.07
Avail Cap(c_a), veh/h	549	2971	1200	352	1762	928	983	3652	1134	424	2723	999
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	20.5	11.6	27.6	21.5	21.6	24.0	19.2	17.3	27.6	23.3	16.9
Incr Delay (d2), s/veh	1.1	0.4	0.2	0.8	0.6	1.2	1.1	0.4	0.3	1.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.5	1.4	0.7	2.0	2.2	2.6	2.6	0.9	0.9	1.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.8	20.9	11.8	28.4	22.1	22.7	25.1	19.6	17.5	28.7	23.7	17.0
LnGrp LOS	C	C	B	C	C	C	C	B	B	C	C	B
Approach Vol, veh/h		1082			641			1286			541	
Approach Delay, s/veh		20.7			23.3			21.3			24.6	
Approach LOS		C			C			C			C	

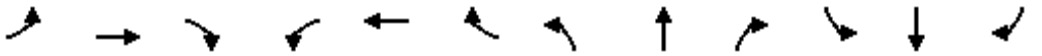
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	22.9	8.7	20.6	15.8	16.2	10.8	18.6
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	8.8	45.6	7.3	37.1	20.4	34.0	11.4	33.0
Max Q Clear Time (g_c+I1), s	4.7	10.2	4.1	9.6	10.6	6.3	6.2	7.9
Green Ext Time (p_c), s	0.1	5.5	0.0	5.3	0.6	2.4	0.2	3.1

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	202	2	19	16	216	296	1185	109	549	327
Future Volume (vph)	202	2	19	16	216	296	1185	109	549	327
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	21.0	33.0	12.0	24.0	24.0	27.0	59.0	16.0	48.0	48.0
Total Split (%)	17.5%	27.5%	10.0%	20.0%	20.0%	22.5%	49.2%	13.3%	40.0%	40.0%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 85.3
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	2	47	19	16	216	296	1185	14	109	549	327
Future Volume (veh/h)	202	2	47	19	16	216	296	1185	14	109	549	327
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	224	2	43	21	0	185	329	1317	15	121	610	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	307	15	322	39	0	425	420	1931	22	189	1510	
Arrive On Green	0.10	0.22	0.22	0.02	0.00	0.14	0.14	0.39	0.39	0.06	0.31	0.00
Sat Flow, veh/h	2956	68	1468	1619	0	3051	2956	5009	57	2956	4914	1525
Grp Volume(v), veh/h	224	0	45	21	0	185	329	861	471	121	610	0
Grp Sat Flow(s),veh/h/ln	1478	0	1536	1619	0	1525	1478	1638	1790	1478	1638	1525
Q Serve(g_s), s	5.2	0.0	1.7	0.9	0.0	4.0	7.7	15.6	15.6	2.8	7.0	0.0
Cycle Q Clear(g_c), s	5.2	0.0	1.7	0.9	0.0	4.0	7.7	15.6	15.6	2.8	7.0	0.0
Prop In Lane	1.00		0.96	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	307	0	337	39	0	425	420	1263	690	189	1510	
V/C Ratio(X)	0.73	0.00	0.13	0.54	0.00	0.43	0.78	0.68	0.68	0.64	0.40	
Avail Cap(c_a), veh/h	681	0	571	168	0	750	930	2429	1327	473	2884	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.9	0.0	22.4	34.4	0.0	28.1	29.5	18.2	18.2	32.5	19.5	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.2	4.4	0.0	0.7	1.2	0.7	1.2	1.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.5	0.4	0.0	1.3	2.5	5.0	5.6	1.0	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	0.0	22.5	38.7	0.0	28.8	30.7	18.9	19.4	33.9	19.7	0.0
LnGrp LOS	C	A	C	D	A	C	C	B	B	C	B	
Approach Vol, veh/h		269			206			1661			731	A
Approach Delay, s/veh		30.6			29.8			21.4			22.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	33.7	6.3	22.1	14.7	28.1	12.0	16.4
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	11.4	52.8	7.4	26.5	22.4	41.8	16.4	17.5
Max Q Clear Time (g_c+I1), s	4.8	17.6	2.9	3.7	9.7	9.0	7.2	6.0
Green Ext Time (p_c), s	0.1	9.8	0.0	0.1	0.5	4.0	0.2	0.5

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Notes

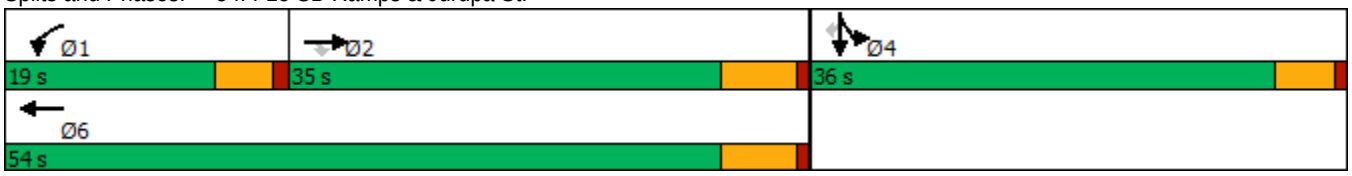
User approved volume balancing among the lanes for turning movement.

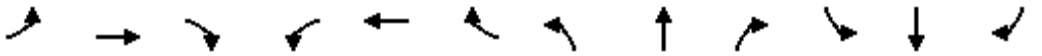
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	627	159	403	585	490	3	900
Future Volume (vph)	627	159	403	585	490	3	900
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	35.0	35.0	19.0	54.0	36.0	36.0	36.0
Total Split (%)	38.9%	38.9%	21.1%	60.0%	40.0%	40.0%	40.0%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 78.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	627	159	403	585	0	0	0	0	490	3	900
Future Volume (veh/h)	0	627	159	403	585	0	0	0	0	490	3	900
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1800	1800	1600	1800	0				1700	1800	1800
Adj Flow Rate, veh/h	0	689	123	443	643	0				360	0	997
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1086	307	526	2225	0				623	0	1174
Arrive On Green	0.00	0.20	0.20	0.18	0.45	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	5400	1525	2956	5076	0				1619	0	3051
Grp Volume(v), veh/h	0	689	123	443	643	0				360	0	997
Grp Sat Flow(s),veh/h/ln	0	1800	1525	1478	1638	0				1619	0	1525
Q Serve(g_s), s	0.0	7.9	4.7	9.8	5.6	0.0				11.9	0.0	20.2
Cycle Q Clear(g_c), s	0.0	7.9	4.7	9.8	5.6	0.0				11.9	0.0	20.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1086	307	526	2225	0				623	0	1174
V/C Ratio(X)	0.00	0.63	0.40	0.84	0.29	0.00				0.58	0.00	0.85
Avail Cap(c_a), veh/h	0	2312	653	611	3482	0				741	0	1396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	24.8	23.5	26.9	11.7	0.0				16.5	0.0	19.0
Incr Delay (d2), s/veh	0.0	0.5	0.6	8.1	0.1	0.0				0.9	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.1	1.6	3.7	1.7	0.0				3.8	0.0	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.2	24.1	35.0	11.7	0.0				17.3	0.0	23.5
LnGrp LOS	A	C	C	D	B	A				B	A	C
Approach Vol, veh/h		812			1086						1357	
Approach Delay, s/veh		25.1			21.2						21.9	
Approach LOS		C			C						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.0	19.6		31.1		36.7
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0
Max Green Setting (Gmax), s	14.0	29.0		31.0		48.0
Max Q Clear Time (g_c+I1), s	11.8	9.9		22.2		7.6
Green Ext Time (p_c), s	0.2	3.7		3.8		3.6

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

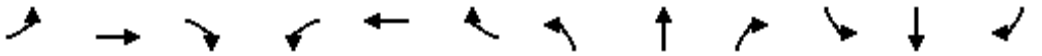
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	358	759	739	350	249	0	521
Future Volume (vph)	358	759	739	350	249	0	521
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	23.0	57.0	34.0	34.0	33.0	33.0	33.0
Total Split (%)	25.6%	63.3%	37.8%	37.8%	36.7%	36.7%	36.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 64.8
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	759	0	0	739	350	249	0	521	0	0	0
Future Volume (veh/h)	358	759	0	0	739	350	249	0	521	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1600	1800	1800			
Adj Flow Rate, veh/h	381	807	0	0	786	290	177	0	483			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	512	2773	0	0	1469	456	352	0	706			
Arrive On Green	0.17	0.56	0.00	0.00	0.30	0.30	0.23	0.00	0.23			
Sat Flow, veh/h	2956	5076	0	0	5076	1525	1524	0	3051			
Grp Volume(v), veh/h	381	807	0	0	786	290	177	0	483			
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1525	1524	0	1525			
Q Serve(g_s), s	6.1	4.3	0.0	0.0	6.7	8.2	5.0	0.0	7.2			
Cycle Q Clear(g_c), s	6.1	4.3	0.0	0.0	6.7	8.2	5.0	0.0	7.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	512	2773	0	0	1469	456	352	0	706			
V/C Ratio(X)	0.74	0.29	0.00	0.00	0.54	0.64	0.50	0.00	0.68			
Avail Cap(c_a), veh/h	1090	5112	0	0	2846	884	852	0	1706			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.6	5.7	0.0	0.0	14.6	15.1	16.7	0.0	17.5			
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.2	1.1	1.1	0.0	1.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.8	0.8	0.0	0.0	2.0	2.3	1.5	0.0	2.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	5.7	0.0	0.0	14.8	16.2	17.8	0.0	18.7			
LnGrp LOS	C	A	A	A	B	B	B	A	B			
Approach Vol, veh/h		1188			1076			660				
Approach Delay, s/veh		10.4			15.2			18.5				
Approach LOS		B			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		33.3			13.2	20.0		16.6				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		51.9			18.4	28.9		27.9				
Max Q Clear Time (g_c+I1), s		6.3			8.1	10.2		9.2				
Green Ext Time (p_c), s		4.7			0.5	4.7		2.3				

Intersection Summary	
HCM 6th Ctrl Delay	14.0
HCM 6th LOS	B

Notes

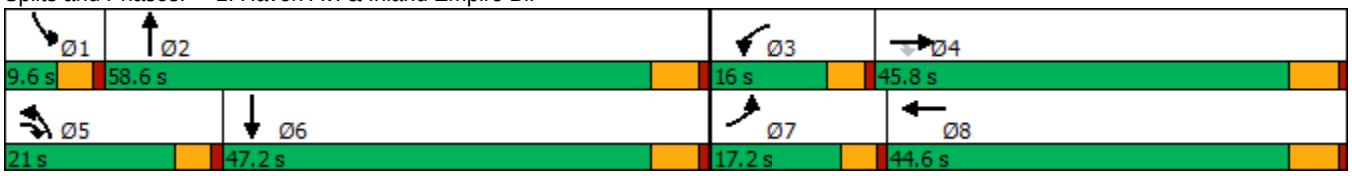
User approved volume balancing among the lanes for turning movement.

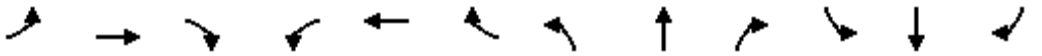
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	189	335	374	336	226	39	331	1843	427	39	1681	66
Future Volume (vph)	189	335	374	336	226	39	331	1843	427	39	1681	66
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	17.2	45.8	21.0	16.0	44.6		21.0	58.6		9.6	47.2	
Total Split (%)	13.2%	35.2%	16.2%	12.3%	34.3%		16.2%	45.1%		7.4%	36.3%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 107.2
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	335	374	336	226	39	331	1843	427	39	1681	66
Future Volume (veh/h)	189	335	374	336	226	39	331	1843	427	39	1681	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1500	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	197	349	216	350	235	0	345	1920	0	41	1751	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	257	565	461	431	633		406	2952		102	2316	
Arrive On Green	0.09	0.17	0.17	0.11	0.19	0.00	0.14	0.48	0.00	0.03	0.37	0.00
Sat Flow, veh/h	2956	3420	1525	4029	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	197	349	216	350	235	0	345	1920	0	41	1751	0
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1343	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	6.3	9.1	11.1	8.2	5.8	0.0	10.9	22.6	0.0	1.3	23.7	0.0
Cycle Q Clear(g_c), s	6.3	9.1	11.1	8.2	5.8	0.0	10.9	22.6	0.0	1.3	23.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	257	565	461	431	633		406	2952		102	2316	
V/C Ratio(X)	0.77	0.62	0.47	0.81	0.37		0.85	0.65		0.40	0.76	
Avail Cap(c_a), veh/h	388	1424	845	478	1381		505	3404		154	2669	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.9	37.3	27.2	41.9	34.2	0.0	40.5	19.1	0.0	45.4	26.2	0.0
Incr Delay (d2), s/veh	2.1	1.1	0.7	8.4	0.4	0.0	9.2	0.4	0.0	0.9	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.7	3.9	2.9	2.3	0.0	4.3	7.3	0.0	0.5	8.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.0	38.4	28.0	50.3	34.6	0.0	49.7	19.4	0.0	46.3	27.3	0.0
LnGrp LOS	D	D	C	D	C		D	B		D	C	
Approach Vol, veh/h		762			585	A		2265	A		1792	A
Approach Delay, s/veh		37.1			44.0			24.0			27.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	51.6	14.9	21.7	17.8	41.7	12.9	23.6
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	52.8	11.4	40.0	16.4	41.4	12.6	38.8
Max Q Clear Time (g_c+I1), s	3.3	24.6	10.2	13.1	12.9	25.7	8.3	7.8
Green Ext Time (p_c), s	0.0	16.6	0.1	2.8	0.2	10.2	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	29.3
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	219	319	2281	870	1703
Future Volume (vph)	219	319	2281	870	1703
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	33.0	33.0	67.0		67.0
Total Split (%)	33.0%	33.0%	67.0%		67.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	219	319	2281	870	0	1703
Future Volume (veh/h)	219	319	2281	870	0	1703
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	0	1800
Adj Flow Rate, veh/h	308	157	2328	0	0	1738
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	413	194	4728		0	4728
Arrive On Green	0.13	0.13	1.00	0.00	0.00	0.76
Sat Flow, veh/h	3238	1525	6444	1525	0	6696
Grp Volume(v), veh/h	308	157	2328	0	0	1738
Grp Sat Flow(s),veh/h/ln	1619	1525	1548	1525	0	1548
Q Serve(g_s), s	9.2	10.0	0.0	0.0	0.0	9.2
Cycle Q Clear(g_c), s	9.2	10.0	0.0	0.0	0.0	9.2
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	413	194	4728		0	4728
V/C Ratio(X)	0.75	0.81	0.49		0.00	0.37
Avail Cap(c_a), veh/h	903	426	4728		0	4728
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.67	0.00	0.00	0.58
Uniform Delay (d), s/veh	42.1	42.4	0.0	0.0	0.0	3.9
Incr Delay (d2), s/veh	1.0	3.0	0.2	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.8	0.1	0.0	0.0	1.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.1	45.4	0.2	0.0	0.0	4.0
LnGrp LOS	D	D	A		A	A
Approach Vol, veh/h	465		2328	A		1738
Approach Delay, s/veh	43.9		0.2			4.0
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		82.2		17.8		82.2
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		2.0		12.0		11.2
Green Ext Time (p_c), s		19.8		0.7		10.8

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Notes

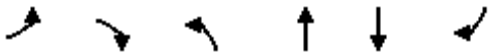
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	529	243	2622	1571	351
Future Volume (vph)	529	243	2622	1571	351
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	33.0	33.0	67.0	67.0	
Total Split (%)	33.0%	33.0%	67.0%	67.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	529	243	0	2622	1571	351
Future Volume (veh/h)	529	243	0	2622	1571	351
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	545	172	0	2703	1620	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	650	306	0	4273	4273	
Arrive On Green	0.20	0.20	0.00	0.69	1.00	0.00
Sat Flow, veh/h	3238	1525	0	6696	6444	1525
Grp Volume(v), veh/h	545	172	0	2703	1620	0
Grp Sat Flow(s),veh/h/ln	1619	1525	0	1548	1548	1525
Q Serve(g_s), s	16.2	10.2	0.0	24.0	0.0	0.0
Cycle Q Clear(g_c), s	16.2	10.2	0.0	24.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	650	306	0	4273	4273	
V/C Ratio(X)	0.84	0.56	0.00	0.63	0.38	
Avail Cap(c_a), veh/h	903	426	0	4273	4273	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.31	0.89	0.00
Uniform Delay (d), s/veh	38.4	36.0	0.0	8.5	0.0	0.0
Incr Delay (d2), s/veh	5.1	1.6	0.0	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	3.7	0.0	6.1	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.5	37.6	0.0	8.7	0.2	0.0
LnGrp LOS	D	D	A	A	A	
Approach Vol, veh/h	717			2703	1620	A
Approach Delay, s/veh	42.0			8.7	0.2	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		74.8		25.2		74.8
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		26.0		18.2		2.0
Green Ext Time (p_c), s		21.3		1.9		9.6

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

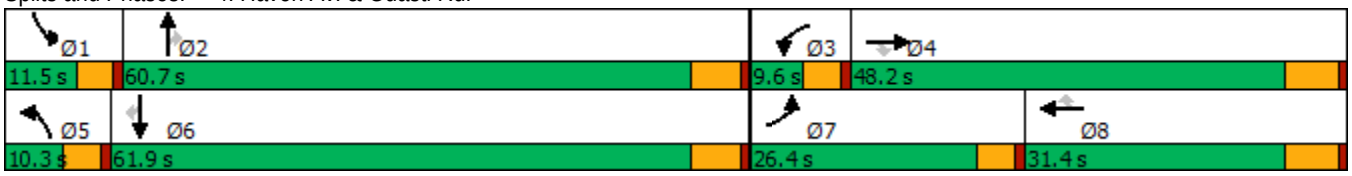
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	383	45	208	80	19	223	63	2728	105	162	1541	110
Future Volume (vph)	383	45	208	80	19	223	63	2728	105	162	1541	110
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	26.4	48.2	48.2	9.6	31.4	31.4	10.3	60.7	60.7	11.5	61.9	61.9
Total Split (%)	20.3%	37.1%	37.1%	7.4%	24.2%	24.2%	7.9%	46.7%	46.7%	8.8%	47.6%	47.6%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 115.1
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	383	45	208	80	19	223	63	2728	105	162	1541	110
Future Volume (veh/h)	383	45	208	80	19	223	63	2728	105	162	1541	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	395	46	86	82	20	150	65	2812	72	167	1589	89
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	451	364	308	124	165	246	116	3089	761	187	3236	797
Arrive On Green	0.15	0.20	0.20	0.04	0.09	0.09	0.04	0.50	0.50	0.06	0.52	0.52
Sat Flow, veh/h	2956	1800	1525	2956	1800	2685	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	395	46	86	82	20	150	65	2812	72	167	1589	89
Grp Sat Flow(s),veh/h/ln	1478	1800	1525	1478	1800	1342	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	14.3	2.3	5.2	3.0	1.1	5.9	2.4	45.6	2.7	6.1	18.0	3.2
Cycle Q Clear(g_c), s	14.3	2.3	5.2	3.0	1.1	5.9	2.4	45.6	2.7	6.1	18.0	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	451	364	308	124	165	246	116	3089	761	187	3236	797
V/C Ratio(X)	0.88	0.13	0.28	0.66	0.12	0.61	0.56	0.91	0.09	0.90	0.49	0.11
Avail Cap(c_a), veh/h	589	691	586	135	415	619	154	3109	766	187	3236	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	35.7	36.9	51.6	45.6	47.8	51.6	25.1	14.4	50.9	16.8	13.2
Incr Delay (d2), s/veh	9.5	0.2	0.5	7.5	0.3	2.5	1.6	4.5	0.1	37.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	1.0	1.9	1.2	0.5	2.0	0.9	16.0	0.9	3.2	5.9	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	54.8	35.9	37.4	59.1	46.0	50.2	53.1	29.7	14.5	88.0	16.9	13.3
LnGrp LOS	D	D	D	E	D	D	D	C	B	F	B	B
Approach Vol, veh/h		527			252			2949			1845	
Approach Delay, s/veh		50.3			52.8			29.8			23.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	60.3	9.2	28.3	8.9	62.9	21.3	16.2
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	6.9	54.9	5.0	42.0	5.7	56.1	21.8	25.2
Max Q Clear Time (g_c+I1), s	8.1	47.6	5.0	7.2	4.4	20.0	16.3	7.9
Green Ext Time (p_c), s	0.0	7.0	0.0	0.5	0.0	15.0	0.4	0.5

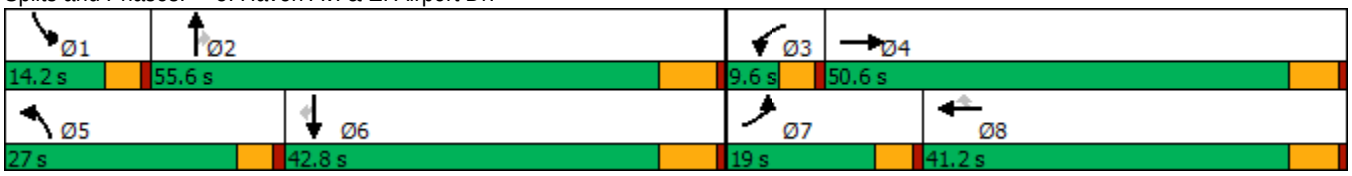
Intersection Summary	
HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C

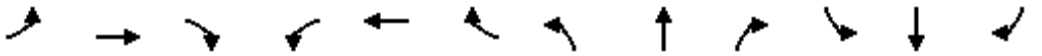
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	288	456	25	579	473	488	2123	18	183	1405	172
Future Volume (vph)	288	456	25	579	473	488	2123	18	183	1405	172
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	19.0	50.6	9.6	41.2	41.2	27.0	55.6	55.6	14.2	42.8	42.8
Total Split (%)	14.6%	38.9%	7.4%	31.7%	31.7%	20.8%	42.8%	42.8%	10.9%	32.9%	32.9%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 125.9
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	456	599	25	579	473	488	2123	18	183	1405	172
Future Volume (veh/h)	288	456	599	25	579	473	488	2123	18	183	1405	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	294	465	466	26	591	403	498	2166	16	187	1434	135
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	328	617	550	69	934	417	511	2327	573	219	1715	423
Arrive On Green	0.11	0.36	0.36	0.02	0.27	0.27	0.17	0.38	0.38	0.07	0.28	0.28
Sat Flow, veh/h	2956	1710	1524	2956	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	294	465	466	26	591	403	498	2166	16	187	1434	135
Grp Sat Flow(s),veh/h/ln	1478	1710	1524	1478	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	12.7	30.9	36.5	1.1	19.7	33.8	21.7	43.5	0.9	8.1	28.2	9.1
Cycle Q Clear(g_c), s	12.7	30.9	36.5	1.1	19.7	33.8	21.7	43.5	0.9	8.1	28.2	9.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	328	617	550	69	934	417	511	2327	573	219	1715	423
V/C Ratio(X)	0.90	0.75	0.85	0.38	0.63	0.97	0.97	0.93	0.03	0.85	0.84	0.32
Avail Cap(c_a), veh/h	328	617	550	114	934	417	511	2346	578	219	1734	427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	36.4	38.1	62.3	41.4	46.5	53.3	38.8	25.5	59.3	44.1	37.2
Incr Delay (d2), s/veh	24.8	5.2	11.8	1.2	1.4	35.5	33.1	7.4	0.0	25.4	3.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	13.3	14.9	0.4	8.3	16.5	10.1	16.6	0.3	3.7	10.7	3.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	81.6	41.6	49.9	63.6	42.8	82.0	86.4	46.2	25.5	84.7	47.8	37.6
LnGrp LOS	F	D	D	E	D	F	F	D	C	F	D	D
Approach Vol, veh/h		1225			1020			2680			1756	
Approach Delay, s/veh		54.4			58.8			53.6			50.9	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	55.2	7.6	52.6	27.0	42.4	19.0	41.2
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	9.6	49.1	5.0	44.8	22.4	36.3	14.4	35.4
Max Q Clear Time (g_c+I1), s	10.1	45.5	3.1	38.5	23.7	30.2	14.7	35.8
Green Ext Time (p_c), s	0.0	3.2	0.0	2.9	0.0	4.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	53.8
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	18	1958	6	0	1530
Future Vol, veh/h	0	18	1958	6	0	1530
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	19	2019	6	0	1577

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1013	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	206	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	206	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

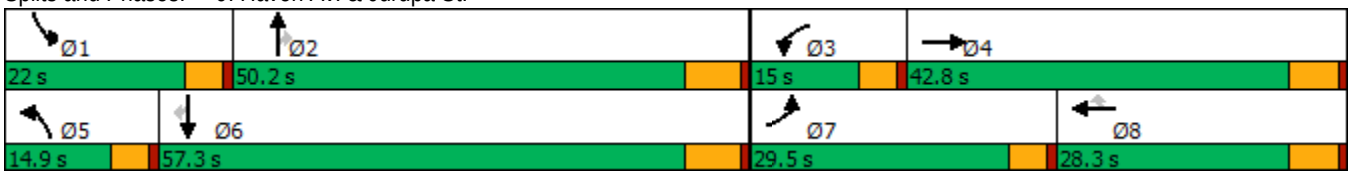
Approach	WB	NB	SB
HCM Control Delay, s	24.2	0	0
HCM LOS	C		

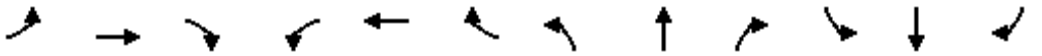
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	206	-
HCM Lane V/C Ratio	-	-	0.09	-
HCM Control Delay (s)	-	-	24.2	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.3	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	452	328	245	266	205	66	1959	308	202	1511	328
Future Volume (vph)	452	328	245	266	205	66	1959	308	202	1511	328
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	29.5	42.8	15.0	28.3	28.3	14.9	50.2	50.2	22.0	57.3	57.3
Total Split (%)	22.7%	32.9%	11.5%	21.8%	21.8%	11.5%	38.6%	38.6%	16.9%	44.1%	44.1%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 120.1
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	452	328	65	245	266	205	66	1959	308	202	1511	328
Future Volume (veh/h)	452	328	65	245	266	205	66	1959	308	202	1511	328
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	461	335	53	250	271	151	67	1999	220	206	1542	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	515	899	138	268	430	192	84	2292	563	231	2855	
Arrive On Green	0.17	0.21	0.21	0.09	0.13	0.13	0.05	0.37	0.37	0.14	0.46	0.00
Sat Flow, veh/h	2956	4294	661	2956	3420	1525	1619	6192	1522	1619	6192	1525
Grp Volume(v), veh/h	461	253	135	250	271	151	67	1999	220	206	1542	0
Grp Sat Flow(s),veh/h/ln	1478	1638	1679	1478	1710	1525	1619	1548	1522	1619	1548	1525
Q Serve(g_s), s	17.5	7.6	7.9	9.6	8.6	11.0	4.7	34.5	12.2	14.3	20.5	0.0
Cycle Q Clear(g_c), s	17.5	7.6	7.9	9.6	8.6	11.0	4.7	34.5	12.2	14.3	20.5	0.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	515	686	351	268	430	192	84	2292	563	231	2855	
V/C Ratio(X)	0.90	0.37	0.38	0.93	0.63	0.79	0.80	0.87	0.39	0.89	0.54	
Avail Cap(c_a), veh/h	641	1056	541	268	670	299	145	2358	579	245	2855	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.4	38.9	39.0	51.8	47.6	48.7	53.8	33.6	26.6	48.3	22.2	0.0
Incr Delay (d2), s/veh	11.6	0.3	0.7	37.0	1.5	7.2	6.5	3.8	0.4	28.7	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	3.0	3.2	4.8	3.7	4.5	2.0	12.5	4.3	7.3	6.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.9	39.2	39.7	88.8	49.2	55.9	60.4	37.4	27.0	77.0	22.4	0.0
LnGrp LOS	E	D	D	F	D	E	E	D	C	E	C	
Approach Vol, veh/h		849			672			2286			1748	A
Approach Delay, s/veh		49.4			65.4			37.1			28.8	
Approach LOS		D			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	49.0	15.0	29.8	10.5	59.4	24.6	20.2
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	17.4	43.7	10.4	37.0	10.3	50.8	24.9	22.5
Max Q Clear Time (g_c+I1), s	16.3	36.5	11.6	9.9	6.7	22.5	19.5	13.0
Green Ext Time (p_c), s	0.0	6.0	0.0	2.2	0.0	11.8	0.5	1.4

Intersection Summary	
HCM 6th Ctrl Delay	39.8
HCM 6th LOS	D

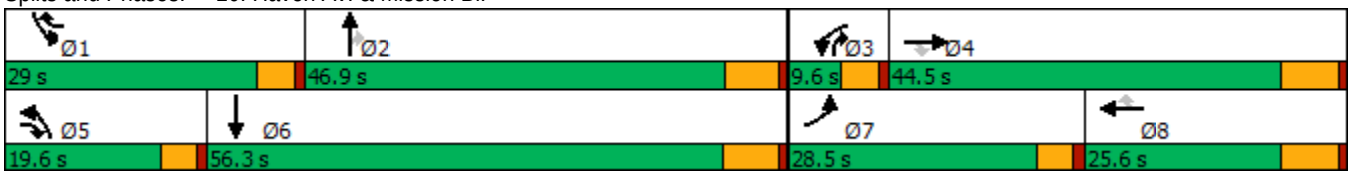
Notes

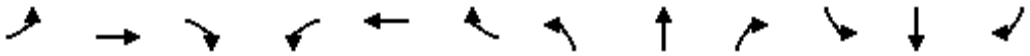
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	519	655	109	37	449	422	101	1436	57	302	1259
Future Volume (vph)	519	655	109	37	449	422	101	1436	57	302	1259
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	28.5	44.5	19.6	9.6	25.6	29.0	19.6	46.9	9.6	29.0	56.3
Total Split (%)	21.9%	34.2%	15.1%	7.4%	19.7%	22.3%	15.1%	36.1%	7.4%	22.3%	43.3%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 127.8
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	519	655	109	37	449	422	101	1436	57	302	1259	130
Future Volume (veh/h)	519	655	109	37	449	422	101	1436	57	302	1259	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	541	682	69	39	468	326	105	1496	39	315	1311	124
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	542	1479	577	86	720	509	126	1535	520	303	1924	182
Arrive On Green	0.18	0.30	0.30	0.03	0.15	0.15	0.08	0.31	0.31	0.19	0.42	0.42
Sat Flow, veh/h	2956	4914	1524	2956	4914	1525	1619	4914	1524	1619	4561	431
Grp Volume(v), veh/h	541	682	69	39	468	326	105	1496	39	315	942	493
Grp Sat Flow(s),veh/h/ln	1478	1638	1524	1478	1638	1525	1619	1638	1524	1619	1638	1716
Q Serve(g_s), s	23.8	14.7	3.8	1.7	11.7	19.1	8.3	39.2	2.3	24.4	30.4	30.4
Cycle Q Clear(g_c), s	23.8	14.7	3.8	1.7	11.7	19.1	8.3	39.2	2.3	24.4	30.4	30.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	542	1479	577	86	720	509	126	1535	520	303	1382	724
V/C Ratio(X)	1.00	0.46	0.12	0.45	0.65	0.64	0.83	0.97	0.07	1.04	0.68	0.68
Avail Cap(c_a), veh/h	542	1479	577	113	720	509	186	1535	520	303	1382	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	37.0	26.3	62.2	52.4	36.8	59.2	44.3	29.0	52.9	30.6	30.6
Incr Delay (d2), s/veh	38.0	0.2	0.1	1.4	2.1	2.7	12.1	17.2	0.1	62.2	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	5.6	1.3	0.6	4.8	8.7	3.7	17.6	0.8	14.7	11.5	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.2	37.2	26.4	63.6	54.5	39.5	71.3	61.5	29.1	115.1	32.0	33.2
LnGrp LOS	F	D	C	E	D	D	E	E	C	F	C	C
Approach Vol, veh/h		1292			833			1640			1750	
Approach Delay, s/veh		59.2			49.0			61.4			47.3	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.0	47.2	8.4	45.7	14.7	61.5	28.5	25.6
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	24.4	* 41	5.0	38.0	15.0	49.8	23.9	19.1
Max Q Clear Time (g_c+I1), s	26.4	41.2	3.7	16.7	10.3	32.4	25.8	21.1
Green Ext Time (p_c), s	0.0	0.0	0.0	4.2	0.0	8.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.5
HCM 6th LOS	D

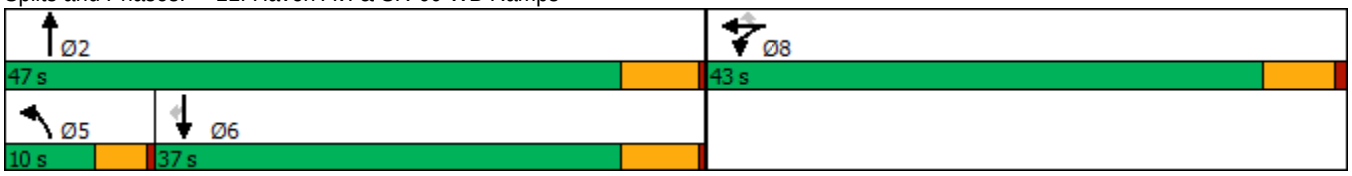
Notes

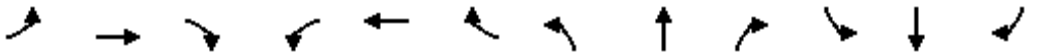
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	276	9	509	142	800	1199	457
Future Volume (vph)	276	9	509	142	800	1199	457
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.0	34.7	27.8	27.8
Total Split (s)	43.0	43.0	43.0	10.0	47.0	37.0	37.0
Total Split (%)	47.8%	47.8%	47.8%	11.1%	52.2%	41.1%	41.1%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 77.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	276	9	509	142	800	0	0	1199	457
Future Volume (veh/h)	0	0	0	276	9	509	142	800	0	0	1199	457
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	1600	1800	0	0	1800	1800
Adj Flow Rate, veh/h				294	0	241	148	833	0	0	1249	309
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				722	0	340	260	2662	0	0	1830	561
Arrive On Green				0.22	0.00	0.22	0.09	0.54	0.00	0.00	0.37	0.37
Sat Flow, veh/h				3238	0	1525	2956	5076	0	0	5076	1506
Grp Volume(v), veh/h				294	0	241	148	833	0	0	1249	309
Grp Sat Flow(s),veh/h/ln				1619	0	1525	1478	1638	0	0	1638	1506
Q Serve(g_s), s				3.8	0.0	7.2	2.4	4.6	0.0	0.0	10.5	8.0
Cycle Q Clear(g_c), s				3.8	0.0	7.2	2.4	4.6	0.0	0.0	10.5	8.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				722	0	340	260	2662	0	0	1830	561
V/C Ratio(X)				0.41	0.00	0.71	0.57	0.31	0.00	0.00	0.68	0.55
Avail Cap(c_a), veh/h				2443	0	1151	360	4117	0	0	3110	953
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.4	0.0	17.7	21.6	6.2	0.0	0.0	13.0	12.2
Incr Delay (d2), s/veh				0.4	0.0	2.7	1.9	0.0	0.0	0.0	0.2	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	0.0	2.3	0.7	0.8	0.0	0.0	2.7	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				16.7	0.0	20.4	23.5	6.3	0.0	0.0	13.2	12.5
LnGrp LOS				B	A	C	C	A	A	A	B	B
Approach Vol, veh/h					535			981			1558	
Approach Delay, s/veh					18.4			8.9			13.1	
Approach LOS					B			A			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		32.5			8.3	24.2		16.8				
Change Period (Y+Rc), s		* 5.8			4.0	5.8		5.8				
Max Green Setting (Gmax), s		* 41			6.0	31.2		37.2				
Max Q Clear Time (g_c+I1), s		6.6			4.4	12.5		9.2				
Green Ext Time (p_c), s		3.5			0.1	5.8		1.8				

Intersection Summary			
HCM 6th Ctrl Delay		12.6	
HCM 6th LOS		B	

Notes

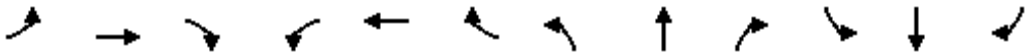
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	340	7	154	602	609	866
Future Volume (vph)	340	7	154	602	609	866
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.0	29.7
Total Split (s)	27.0	27.0	27.0	32.0	31.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	35.6%	34.4%	70.0%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 67.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	7	154	0	0	0	0	602	195	609	866	0
Future Volume (veh/h)	340	7	154	0	0	0	0	602	195	609	866	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800				0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h	372	0	56				0	647	149	655	931	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	553	0	260				0	968	220	839	2968	0
Arrive On Green	0.17	0.00	0.17				0.00	0.24	0.24	0.28	0.60	0.00
Sat Flow, veh/h	3238	0	1525				0	4166	908	2956	5076	0
Grp Volume(v), veh/h	372	0	56				0	527	269	655	931	0
Grp Sat Flow(s),veh/h/ln	1619	0	1525				0	1638	1637	1478	1638	0
Q Serve(g_s), s	5.5	0.0	1.6				0.0	7.4	7.6	10.4	4.7	0.0
Cycle Q Clear(g_c), s	5.5	0.0	1.6				0.0	7.4	7.6	10.4	4.7	0.0
Prop In Lane	1.00		1.00				0.00		0.55	1.00		0.00
Lane Grp Cap(c), veh/h	553	0	260				0	792	396	839	2968	0
V/C Ratio(X)	0.67	0.00	0.22				0.00	0.67	0.68	0.78	0.31	0.00
Avail Cap(c_a), veh/h	1346	0	634				0	1689	844	1565	5519	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.8	0.0	18.2				0.0	17.5	17.5	16.8	4.9	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.4				0.0	0.4	0.8	1.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.5				0.0	2.2	2.3	2.9	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	0.0	18.6				0.0	17.8	18.3	18.4	5.0	0.0
LnGrp LOS	C	A	B				A	B	B	B	A	A
Approach Vol, veh/h		428						796			1586	
Approach Delay, s/veh		20.9						18.0			10.5	
Approach LOS		C						B			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	18.5	18.0		14.5		36.5						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	27.0	26.3		21.2		57.3						
Max Q Clear Time (g_c+I1), s	12.4	9.6		7.5		6.7						
Green Ext Time (p_c), s	2.1	2.7		1.2		4.1						

Intersection Summary												
HCM 6th Ctrl Delay			14.2									
HCM 6th LOS			B									

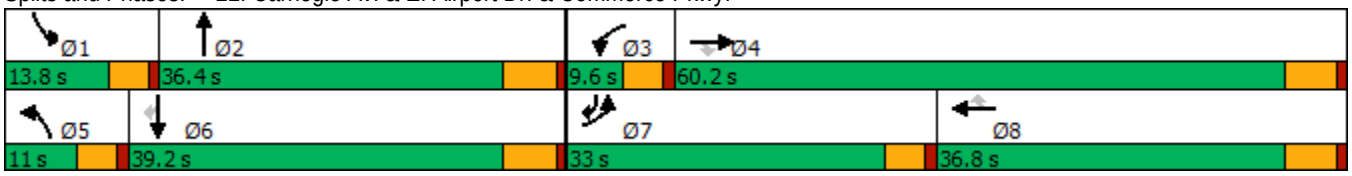
Notes

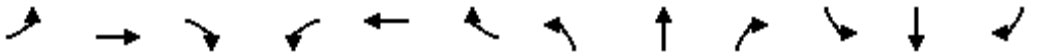
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	248	289	2	1	385	78	37	17	49	29	457
Future Volume (vph)	248	289	2	1	385	78	37	17	49	29	457
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	33.0	60.2	60.2	9.6	36.8	36.8	11.0	36.4	13.8	39.2	33.0
Total Split (%)	27.5%	50.2%	50.2%	8.0%	30.7%	30.7%	9.2%	30.3%	11.5%	32.7%	27.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 66.3
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	289	2	1	385	78	37	17	18	49	29	457
Future Volume (veh/h)	248	289	2	1	385	78	37	17	18	49	29	457
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1700
Adj Flow Rate, veh/h	282	328	2	1	438	56	42	19	20	56	33	307
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	334	1387	619	3	687	306	69	300	268	84	631	991
Arrive On Green	0.21	0.41	0.41	0.00	0.20	0.20	0.04	0.18	0.18	0.05	0.18	0.18
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	1710	1525	1619	3420	2536
Grp Volume(v), veh/h	282	328	2	1	438	56	42	19	20	56	33	307
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1525	1619	1710	1268
Q Serve(g_s), s	9.5	3.6	0.0	0.0	6.7	1.7	1.4	0.5	0.6	1.9	0.5	4.8
Cycle Q Clear(g_c), s	9.5	3.6	0.0	0.0	6.7	1.7	1.4	0.5	0.6	1.9	0.5	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	334	1387	619	3	687	306	69	300	268	84	631	991
V/C Ratio(X)	0.85	0.24	0.00	0.35	0.64	0.18	0.61	0.06	0.07	0.67	0.05	0.31
Avail Cap(c_a), veh/h	809	3272	1459	142	1865	832	182	920	821	262	2009	2012
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.7	11.1	10.1	28.4	20.8	18.9	26.8	19.5	19.6	26.5	19.1	12.0
Incr Delay (d2), s/veh	2.3	0.1	0.0	25.3	1.0	0.3	3.2	0.1	0.1	3.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	1.1	0.0	0.0	2.4	0.5	0.6	0.2	0.2	0.7	0.2	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	11.2	10.1	53.6	21.8	19.1	29.9	19.6	19.7	29.9	19.1	12.2
LnGrp LOS	C	B	B	D	C	B	C	B	B	C	B	B
Approach Vol, veh/h		612			495			81			396	
Approach Delay, s/veh		17.1			21.6			25.0			15.3	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	15.8	4.7	28.9	7.0	16.3	16.3	17.2
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	9.2	30.6	5.0	54.4	6.4	33.4	28.4	31.0
Max Q Clear Time (g_c+I1), s	3.9	2.6	2.0	5.6	3.4	6.8	11.5	8.7
Green Ext Time (p_c), s	0.0	0.1	0.0	2.1	0.0	1.4	0.3	2.7

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	18	54	5	2	30
Future Vol, veh/h	3	18	54	5	2	30
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	23	68	6	3	38
Number of Lanes	2	1	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	3	0
HCM Control Delay	6.2	7.5	6.7
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	10%	0%	100%	0%	0%
Vol Thru, %	100%	78%	0%	0%	0%	0%	100%	100%
Vol Right, %	0%	22%	0%	90%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	23	2	10	9	2	15	15
LT Vol	0	0	2	1	0	2	0	0
Through Vol	36	18	0	0	0	0	15	15
RT Vol	0	5	0	9	9	0	0	0
Lane Flow Rate	46	29	3	13	11	3	19	19
Geometry Grp	8	8	7	7	7	8	8	8
Degree of Util (X)	0.058	0.036	0.004	0.014	0.007	0.004	0.025	0.016
Departure Headway (Hd)	4.602	4.45	5.187	4.107	2.287	5.15	4.649	2.948
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	780	806	685	863	1531	693	767	1203
Service Time	2.32	2.168	2.952	1.872	0.052	2.894	2.394	0.693
HCM Lane V/C Ratio	0.059	0.036	0.004	0.015	0.007	0.004	0.025	0.016
HCM Control Delay	7.6	7.3	8	6.9	5.1	7.9	7.5	5.7
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0	0	0	0	0.1	0

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	6	65	41	19	14
Future Vol, veh/h	18	6	65	41	19	14
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	19	6	69	44	20	15
Number of Lanes	1	1	1	2	2	0

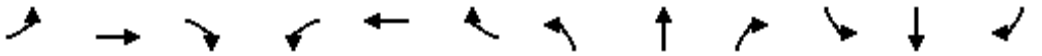
Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	7.9	7.7	7.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	31%
Vol Right, %	0%	0%	0%	0%	100%	0%	69%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	65	21	21	18	6	13	20
LT Vol	65	0	0	18	0	0	0
Through Vol	0	21	21	0	0	13	6
RT Vol	0	0	0	0	6	0	14
Lane Flow Rate	69	22	22	19	6	13	22
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.098	0.028	0.018	0.029	0.007	0.018	0.025
Departure Headway (Hd)	5.097	4.597	2.896	5.372	4.172	4.696	4.213
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	701	776	1224	670	863	752	836
Service Time	2.843	2.343	0.641	3.072	1.872	2.49	2.007
HCM Lane V/C Ratio	0.098	0.028	0.018	0.028	0.007	0.017	0.026
HCM Control Delay	8.4	7.5	5.7	8.2	6.9	7.6	7.1
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.1	0.1	0.1	0	0.1	0.1

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	81	819	4	599	16	6	2	13	34
Future Volume (vph)	81	819	4	599	16	6	2	13	34
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	79.0	79.0	79.0	79.0	79.0	41.0	41.0	41.0	41.0
Total Split (%)	65.8%	65.8%	65.8%	65.8%	65.8%	34.2%	34.2%	34.2%	34.2%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 28.7
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	819	18	4	599	16	6	0	2	13	0	34
Future Volume (veh/h)	81	819	18	4	599	16	6	0	2	13	0	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	84	853	19	4	624	16	6	0	0	14	0	10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	587	2573	57	531	1779	784	325	67	57	326	67	57
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.04	0.00	0.00	0.04	0.00	0.04
Sat Flow, veh/h	757	4946	110	610	3420	1506	1348	1800	1525	1360	1800	1525
Grp Volume(v), veh/h	84	565	307	4	624	16	6	0	0	14	0	10
Grp Sat Flow(s),veh/h/ln	757	1638	1780	610	1710	1506	1348	1800	1525	1360	1800	1525
Q Serve(g_s), s	1.9	2.6	2.6	0.1	2.8	0.1	0.1	0.0	0.0	0.3	0.0	0.2
Cycle Q Clear(g_c), s	4.7	2.6	2.6	2.7	2.8	0.1	0.1	0.0	0.0	0.3	0.0	0.2
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	587	1704	926	531	1779	784	325	67	57	326	67	57
V/C Ratio(X)	0.14	0.33	0.33	0.01	0.35	0.02	0.02	0.00	0.00	0.04	0.00	0.18
Avail Cap(c_a), veh/h	2307	9146	4970	1915	9548	4206	2146	2499	2118	2100	2417	2048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.1	3.6	3.6	4.4	3.7	3.1	12.2	0.0	0.0	12.3	0.0	12.2
Incr Delay (d2), s/veh	0.1	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.2	3.8	3.9	4.4	3.8	3.1	12.2	0.0	0.0	12.3	0.0	13.7
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	B
Approach Vol, veh/h		956			644			6			24	
Approach Delay, s/veh		3.9			3.8			12.2			12.9	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		6.8		19.4		6.8		19.4				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 36		73.2		35.2		73.2				
Max Q Clear Time (g_c+I1), s		2.1		6.7		2.3		4.8				
Green Ext Time (p_c), s		0.0		6.9		0.0		4.4				

Intersection Summary												
HCM 6th Ctrl Delay			4.0									
HCM 6th LOS			A									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	5	0	20	3	131	3	348	11	44	272	15
Future Vol, veh/h	2	5	0	20	3	131	3	348	11	44	272	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	5	0	22	3	142	3	378	12	48	296	16
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	9.2	10.3	11.7	10.7
HCM LOS	A	B	B	B

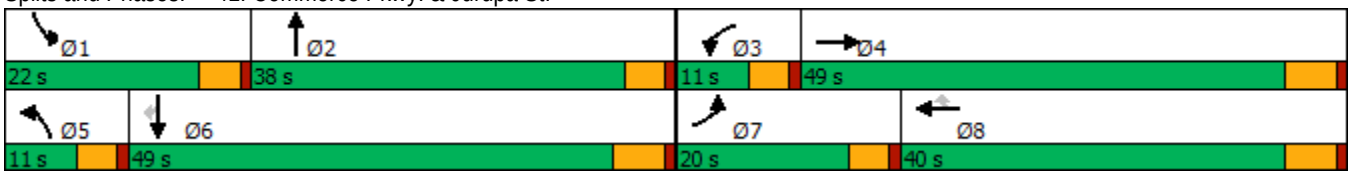
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	91%	0%	100%	100%	0%	100%	1%	0%	100%	86%
Vol Right, %	0%	0%	9%	0%	0%	0%	0%	0%	99%	0%	0%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	232	127	2	3	3	20	2	132	44	181	106
LT Vol	3	0	0	2	0	0	20	0	0	44	0	0
Through Vol	0	232	116	0	3	3	0	2	1	0	181	91
RT Vol	0	0	11	0	0	0	0	0	131	0	0	15
Lane Flow Rate	3	252	138	2	3	3	22	2	143	48	197	115
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.006	0.409	0.222	0.004	0.005	0.004	0.043	0.004	0.233	0.085	0.323	0.185
Departure Headway (Hd)	6.337	5.837	5.777	7.411	6.911	5.211	7.041	6.541	5.846	6.403	5.903	5.804
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	566	618	623	483	518	685	509	547	614	561	609	619
Service Time	4.066	3.566	3.506	5.157	4.657	2.957	4.777	4.277	3.582	4.132	3.632	3.533
HCM Lane V/C Ratio	0.005	0.408	0.222	0.004	0.006	0.004	0.043	0.004	0.233	0.086	0.323	0.186
HCM Control Delay	9.1	12.6	10.2	10.2	9.7	8	10.1	9.3	10.4	9.7	11.4	9.9
HCM Lane LOS	A	B	B	B	A	A	B	A	B	A	B	A
HCM 95th-tile Q	0	2	0.8	0	0	0	0.1	0	0.9	0.3	1.4	0.7

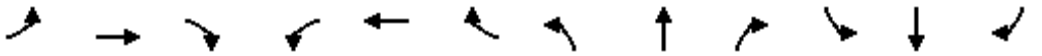
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	88	733	11	569	229	14	41	239	17	35
Future Volume (vph)	88	733	11	569	229	14	41	239	17	35
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	20.0	49.0	11.0	40.0	40.0	11.0	38.0	22.0	49.0	49.0
Total Split (%)	16.7%	40.8%	9.2%	33.3%	33.3%	9.2%	31.7%	18.3%	40.8%	40.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 71.3
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	733	13	11	569	229	14	41	55	239	17	35
Future Volume (veh/h)	88	733	13	11	569	229	14	41	55	239	17	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	92	764	12	11	593	0	15	43	38	249	18	21
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	114	1581	25	23	892		30	142	125	358	474	402
Arrive On Green	0.07	0.32	0.32	0.01	0.26	0.00	0.02	0.16	0.16	0.12	0.26	0.26
Sat Flow, veh/h	1619	4984	78	1619	3420	1525	1619	881	779	2956	1800	1525
Grp Volume(v), veh/h	92	502	274	11	593	0	15	0	81	249	18	21
Grp Sat Flow(s),veh/h/ln	1619	1638	1786	1619	1710	1525	1619	0	1660	1478	1800	1525
Q Serve(g_s), s	3.0	6.6	6.7	0.4	8.3	0.0	0.5	0.0	2.3	4.4	0.4	0.6
Cycle Q Clear(g_c), s	3.0	6.6	6.7	0.4	8.3	0.0	0.5	0.0	2.3	4.4	0.4	0.6
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	114	1039	567	23	892		30	0	267	358	474	402
V/C Ratio(X)	0.81	0.48	0.48	0.48	0.66		0.50	0.00	0.30	0.70	0.04	0.05
Avail Cap(c_a), veh/h	463	2630	1434	193	2174		193	0	1030	956	1445	1225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	14.8	14.8	26.3	17.8	0.0	26.2	0.0	19.9	22.7	14.7	14.8
Incr Delay (d2), s/veh	5.0	0.3	0.6	5.8	0.9	0.0	4.6	0.0	0.6	0.9	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	2.0	2.2	0.2	2.8	0.0	0.2	0.0	0.9	1.3	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.6	15.2	15.5	32.1	18.6	0.0	30.8	0.0	20.5	23.6	14.8	14.9
LnGrp LOS	C	B	B	C	B		C	A	C	C	B	B
Approach Vol, veh/h		868			604	A		96			288	
Approach Delay, s/veh		16.8			18.9			22.1			22.4	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	14.5	5.4	22.9	5.6	20.0	8.4	19.8
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	17.4	* 33	6.4	43.2	6.4	43.2	15.4	34.2
Max Q Clear Time (g_c+I1), s	6.4	4.3	2.4	8.7	2.5	2.6	5.0	10.3
Green Ext Time (p_c), s	0.3	0.4	0.0	5.0	0.0	0.1	0.1	3.7

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	44	10	7	132	6	18	1	14	2	0	4
Future Vol, veh/h	6	44	10	7	132	6	18	1	14	2	0	4
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	55	13	9	165	8	23	1	18	3	0	5
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.9	8.1	8	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	2%	0%	100%	59%	0%	100%	88%	0%	100%	0%
Vol Right, %	0%	0%	98%	0%	0%	41%	0%	0%	12%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	1	14	6	29	25	7	88	50	2	0	4
LT Vol	18	0	0	6	0	0	7	0	0	2	0	0
Through Vol	0	1	0	0	29	15	0	88	44	0	0	0
RT Vol	0	0	14	0	0	10	0	0	6	0	0	4
Lane Flow Rate	22	1	18	8	37	31	9	110	62	2	0	5
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.035	0.001	0.022	0.011	0.051	0.04	0.013	0.146	0.082	0.004	0	0.006
Departure Headway (Hd)	5.653	5.154	4.471	5.477	4.977	4.693	5.291	4.79	4.706	5.726	5.226	4.526
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	635	697	803	656	722	766	681	754	766	627	0	792
Service Time	3.368	2.868	2.186	3.188	2.688	2.404	2.991	2.49	2.406	3.444	2.944	2.244
HCM Lane V/C Ratio	0.035	0.001	0.022	0.012	0.051	0.04	0.013	0.146	0.081	0.003	0	0.006
HCM Control Delay	8.6	7.9	7.3	8.2	8	7.6	8.1	8.3	7.8	8.5	7.9	7.3
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	N	A
HCM 95th-tile Q	0.1	0	0.1	0	0.2	0.1	0	0.5	0.3	0	0	0

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	34	10	15	90	26	38	80	24	10	44	12
Future Vol, veh/h	10	34	10	15	90	26	38	80	24	10	44	12
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	43	13	19	113	33	48	100	30	13	55	15
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.4	8.5	8.6	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	53%	0%	100%	53%	0%	100%	54%	0%	100%	55%
Vol Right, %	0%	0%	47%	0%	0%	47%	0%	0%	46%	0%	0%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	53	51	10	23	21	15	60	56	10	29	27
LT Vol	38	0	0	10	0	0	15	0	0	10	0	0
Through Vol	0	53	27	0	23	11	0	60	30	0	29	15
RT Vol	0	0	24	0	0	10	0	0	26	0	0	12
Lane Flow Rate	48	67	63	12	28	27	19	75	70	12	37	33
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.076	0.098	0.087	0.021	0.043	0.038	0.03	0.111	0.097	0.021	0.056	0.048
Departure Headway (Hd)	5.787	5.287	4.955	6.009	5.509	5.181	5.832	5.332	5.007	5.965	5.465	5.15
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	618	677	721	594	648	688	613	671	714	599	653	693
Service Time	3.529	3.029	2.697	3.762	3.262	2.934	3.576	3.076	2.751	3.713	3.213	2.898
HCM Lane V/C Ratio	0.078	0.099	0.087	0.02	0.043	0.039	0.031	0.112	0.098	0.02	0.057	0.048
HCM Control Delay	9	8.6	8.2	8.9	8.5	8.1	8.8	8.7	8.3	8.8	8.5	8.2
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.4	0.3	0.1	0.2	0.2

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	28	21	102	91	10
Future Vol, veh/h	6	28	21	102	91	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	37	28	134	120	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	250	67	133	0	-	0
Stage 1	127	-	-	-	-	-
Stage 2	123	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	723	989	1464	-	-	-
Stage 1	891	-	-	-	-	-
Stage 2	895	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	709	989	1464	-	-	-
Mov Cap-2 Maneuver	783	-	-	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	895	-	-	-	-	-

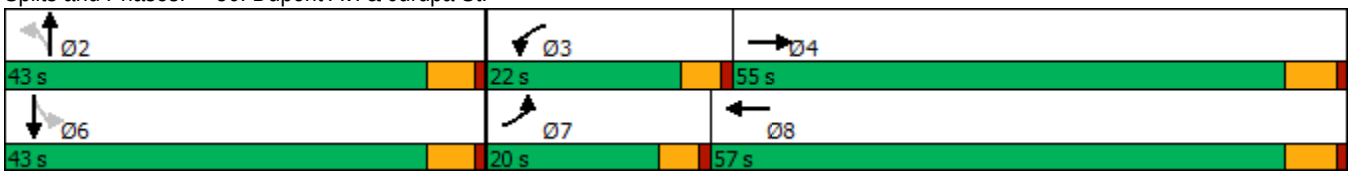
Approach	EB	NB	SB
HCM Control Delay, s	8.9	1.3	0
HCM LOS	A		

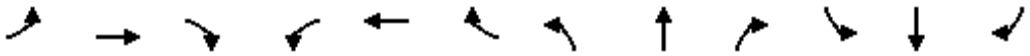
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1464	-	783	989	-	-
HCM Lane V/C Ratio	0.019	-	0.01	0.037	-	-
HCM Control Delay (s)	7.5	-	9.6	8.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	46	931	64	718	42	27	47	25
Future Volume (vph)	46	931	64	718	42	27	47	25
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	20.0	55.0	22.0	57.0	43.0	43.0	43.0	43.0
Total Split (%)	16.7%	45.8%	18.3%	47.5%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 49.8
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	931	13	64	718	54	42	27	110	47	25	37
Future Volume (veh/h)	46	931	13	64	718	54	42	27	110	47	25	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	49	1001	13	69	772	52	45	29	89	51	27	16
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	83	1825	24	104	1779	119	429	368	329	366	461	250
Arrive On Green	0.05	0.37	0.37	0.06	0.38	0.38	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1619	4999	65	1619	4699	315	1308	1710	1525	1222	2140	1161
Grp Volume(v), veh/h	49	656	358	69	537	287	45	29	89	51	21	22
Grp Sat Flow(s),veh/h/ln	1619	1638	1788	1619	1638	1739	1308	1710	1525	1222	1710	1591
Q Serve(g_s), s	1.3	7.1	7.1	1.9	5.4	5.5	1.3	0.6	2.2	1.6	0.4	0.5
Cycle Q Clear(g_c), s	1.3	7.1	7.1	1.9	5.4	5.5	1.7	0.6	2.2	3.8	0.4	0.5
Prop In Lane	1.00		0.04	1.00		0.18	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	83	1196	653	104	1240	658	429	368	329	366	368	343
V/C Ratio(X)	0.59	0.55	0.55	0.66	0.43	0.44	0.10	0.08	0.27	0.14	0.06	0.06
Avail Cap(c_a), veh/h	560	3623	1978	633	3770	2001	1253	1445	1289	1135	1445	1345
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	11.2	11.2	20.3	10.3	10.3	14.6	13.9	14.5	16.1	13.9	13.9
Incr Delay (d2), s/veh	2.5	0.4	0.7	2.7	0.2	0.5	0.1	0.1	0.4	0.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.8	2.1	0.7	1.4	1.5	0.3	0.2	0.6	0.4	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	11.6	11.9	23.0	10.5	10.7	14.7	14.0	15.0	16.3	13.9	14.0
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1063			893			163			94	
Approach Delay, s/veh		12.3			11.6			14.7			15.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.0	7.5	22.0		15.0	6.9	22.6				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		37.6	17.4	49.2		37.6	15.4	51.2				
Max Q Clear Time (g_c+I1), s		4.2	3.9	9.1		5.8	3.3	7.5				
Green Ext Time (p_c), s		0.8	0.0	7.2		0.4	0.0	5.6				

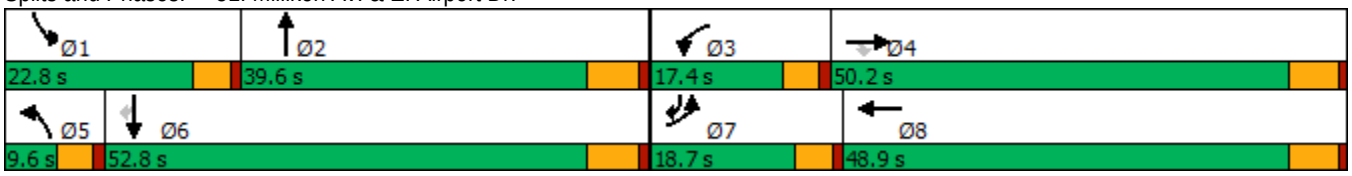
Intersection Summary												
HCM 6th Ctrl Delay			12.3									
HCM 6th LOS			B									

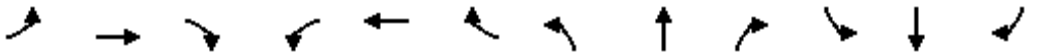
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	224	231	33	86	254	33	943	139	859	111
Future Volume (vph)	224	231	33	86	254	33	943	139	859	111
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	18.7	50.2	50.2	17.4	48.9	9.6	39.6	22.8	52.8	18.7
Total Split (%)	14.4%	38.6%	38.6%	13.4%	37.6%	7.4%	30.5%	17.5%	40.6%	14.4%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 92.6
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	231	33	86	254	323	33	943	60	139	859	111
Future Volume (veh/h)	224	231	33	86	254	323	33	943	60	139	859	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	226	233	12	87	257	204	33	953	54	140	868	65
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	308	815	364	109	371	284	100	1372	78	173	1779	711
Arrive On Green	0.10	0.24	0.24	0.07	0.20	0.20	0.03	0.29	0.29	0.11	0.36	0.36
Sat Flow, veh/h	2956	3420	1525	1619	1845	1411	2956	4754	269	1619	4914	1525
Grp Volume(v), veh/h	226	233	12	87	238	223	33	656	351	140	868	65
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1619	1710	1546	1478	1638	1747	1619	1638	1525
Q Serve(g_s), s	5.3	3.9	0.4	3.8	9.1	9.6	0.8	12.6	12.7	6.0	9.7	1.7
Cycle Q Clear(g_c), s	5.3	3.9	0.4	3.8	9.1	9.6	0.8	12.6	12.7	6.0	9.7	1.7
Prop In Lane	1.00		1.00	1.00		0.91	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	308	815	364	109	344	311	100	946	504	173	1779	711
V/C Ratio(X)	0.73	0.29	0.03	0.80	0.69	0.72	0.33	0.69	0.70	0.81	0.49	0.09
Avail Cap(c_a), veh/h	588	2141	955	292	1039	939	208	1543	823	415	3228	1161
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	22.1	20.7	32.6	26.3	26.5	33.5	22.4	22.5	31.0	17.5	10.6
Incr Delay (d2), s/veh	1.3	0.2	0.0	5.1	2.5	3.1	0.7	0.9	1.7	3.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.5	0.1	1.5	3.6	3.4	0.3	4.3	4.7	2.3	3.1	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.1	22.3	20.8	37.7	28.8	29.6	34.2	23.4	24.2	34.3	17.7	10.6
LnGrp LOS	C	C	C	D	C	C	C	C	C	C	B	B
Approach Vol, veh/h		471			548			1040			1073	
Approach Delay, s/veh		26.9			30.5			24.0			19.5	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	26.7	9.4	22.7	7.0	31.9	12.0	20.1
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	18.2	33.4	12.8	44.4	5.0	46.6	14.1	43.1
Max Q Clear Time (g_c+I1), s	8.0	14.7	5.8	5.9	2.8	11.7	7.3	11.6
Green Ext Time (p_c), s	0.1	5.7	0.0	1.4	0.0	6.3	0.2	2.7

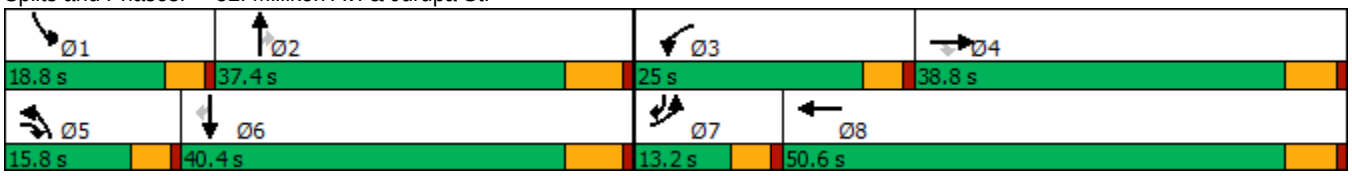
Intersection Summary	
HCM 6th Ctrl Delay	24.0
HCM 6th LOS	C

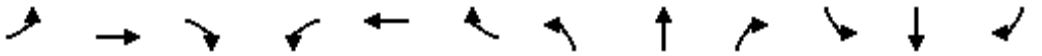
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	122	754	221	376	561	171	752	352	241	907	59
Future Volume (vph)	122	754	221	376	561	171	752	352	241	907	59
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	13.2	38.8	15.8	25.0	50.6	15.8	37.4	37.4	18.8	40.4	13.2
Total Split (%)	11.0%	32.3%	13.2%	20.8%	42.2%	13.2%	31.2%	31.2%	15.7%	33.7%	11.0%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 98.8
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	754	221	376	561	97	171	752	352	241	907	59
Future Volume (veh/h)	122	754	221	376	561	97	171	752	352	241	907	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	127	785	137	392	584	84	178	783	248	251	945	29
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	187	1155	484	469	1437	204	245	1183	367	322	1312	504
Arrive On Green	0.06	0.24	0.24	0.16	0.33	0.33	0.08	0.24	0.24	0.11	0.27	0.27
Sat Flow, veh/h	2956	4914	1523	2956	4348	617	2956	4914	1525	2956	4914	1525
Grp Volume(v), veh/h	127	785	137	392	438	230	178	783	248	251	945	29
Grp Sat Flow(s),veh/h/ln	1478	1638	1523	1478	1638	1689	1478	1638	1525	1478	1638	1525
Q Serve(g_s), s	3.5	12.0	5.6	10.6	8.5	8.7	4.9	11.9	12.2	6.8	14.4	1.1
Cycle Q Clear(g_c), s	3.5	12.0	5.6	10.6	8.5	8.7	4.9	11.9	12.2	6.8	14.4	1.1
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	1155	484	469	1083	558	245	1183	367	322	1312	504
V/C Ratio(X)	0.68	0.68	0.28	0.84	0.40	0.41	0.73	0.66	0.68	0.78	0.72	0.06
Avail Cap(c_a), veh/h	308	1961	735	729	1775	915	400	1854	576	508	2033	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	28.8	21.1	33.7	21.4	21.5	37.0	28.3	28.5	35.9	27.5	18.9
Incr Delay (d2), s/veh	1.6	0.7	0.3	2.8	0.2	0.5	1.5	0.6	2.2	1.6	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	4.4	1.9	3.7	3.0	3.2	1.7	4.3	4.3	2.4	5.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.5	29.5	21.4	36.5	21.6	21.9	38.5	29.0	30.6	37.4	28.3	18.9
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	B
Approach Vol, veh/h		1049			1060			1209			1225	
Approach Delay, s/veh		29.7			27.2			30.7			29.9	
Approach LOS		C			C			C			C	

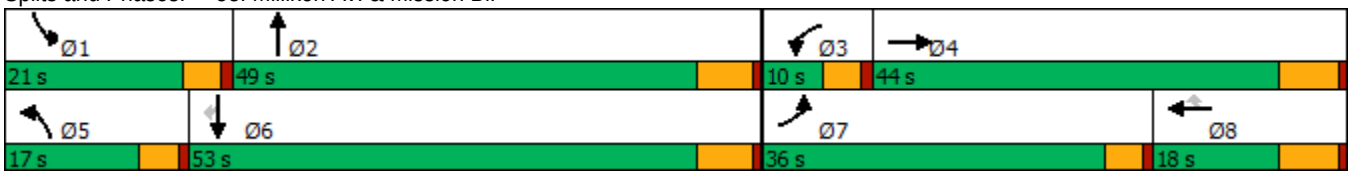
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	26.1	17.7	25.2	11.5	28.3	9.8	33.1
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	14.2	31.2	20.4	33.0	11.2	34.2	8.6	44.8
Max Q Clear Time (g_c+I1), s	8.8	14.2	12.6	14.0	6.9	16.4	5.5	10.7
Green Ext Time (p_c), s	0.2	5.3	0.5	5.2	0.1	5.6	0.1	4.3

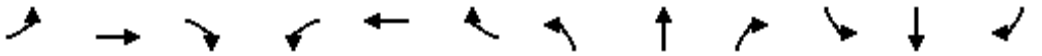
Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	522	1	16	5	135	171	854	242	1246	390
Future Volume (vph)	522	1	16	5	135	171	854	242	1246	390
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	36.0	44.0	10.0	18.0	18.0	17.0	49.0	21.0	53.0	53.0
Total Split (%)	29.0%	35.5%	8.1%	14.5%	14.5%	13.7%	39.5%	16.9%	42.7%	42.7%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 124
Actuated Cycle Length: 103.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	522	1	81	16	5	135	171	854	20	242	1246	390
Future Volume (veh/h)	522	1	81	16	5	135	171	854	20	242	1246	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	549	1	78	17	0	108	180	899	21	255	1312	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	625	6	455	31	0	333	242	1630	38	321	1753	
Arrive On Green	0.21	0.30	0.30	0.02	0.00	0.11	0.08	0.33	0.33	0.11	0.36	0.00
Sat Flow, veh/h	2956	19	1509	1619	0	3051	2956	4940	115	2956	4914	1525
Grp Volume(v), veh/h	549	0	79	17	0	108	180	596	324	255	1312	0
Grp Sat Flow(s),veh/h/ln	1478	0	1528	1619	0	1525	1478	1638	1779	1478	1638	1525
Q Serve(g_s), s	16.4	0.0	3.5	0.9	0.0	3.0	5.4	13.6	13.6	7.7	21.3	0.0
Cycle Q Clear(g_c), s	16.4	0.0	3.5	0.9	0.0	3.0	5.4	13.6	13.6	7.7	21.3	0.0
Prop In Lane	1.00		0.99	1.00		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	625	0	461	31	0	333	242	1081	587	321	1753	
V/C Ratio(X)	0.88	0.00	0.17	0.55	0.00	0.32	0.74	0.55	0.55	0.79	0.75	
Avail Cap(c_a), veh/h	1020	0	630	96	0	386	403	1541	837	533	2528	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.8	0.0	23.4	44.2	0.0	37.4	40.8	25.0	25.0	39.5	25.7	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.2	5.5	0.0	0.6	1.7	0.4	0.8	1.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	1.2	0.4	0.0	1.1	1.9	4.9	5.3	2.7	7.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	0.0	23.6	49.7	0.0	38.0	42.5	25.4	25.8	41.2	26.4	0.0
LnGrp LOS	D	A	C	D	A	D	D	C	C	D	C	
Approach Vol, veh/h		628			125			1100			1567	A
Approach Delay, s/veh		36.0			39.6			28.3			28.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	36.2	6.3	33.9	12.1	38.7	23.8	16.4
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	16.4	42.8	5.4	37.5	12.4	46.8	31.4	11.5
Max Q Clear Time (g_c+I1), s	9.7	15.6	2.9	5.5	7.4	23.3	18.4	5.0
Green Ext Time (p_c), s	0.3	5.7	0.0	0.4	0.1	9.1	0.9	0.1

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Notes

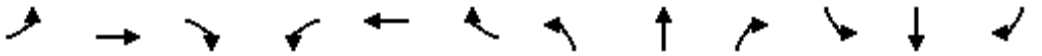
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1222	492	438	642	217	7	423
Future Volume (vph)	1222	492	438	642	217	7	423
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	43.0	43.0	23.0	66.0	24.0	24.0	24.0
Total Split (%)	47.8%	47.8%	25.6%	73.3%	26.7%	26.7%	26.7%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 80.5
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1222	492	438	642	0	0	0	0	217	7	423
Future Volume (veh/h)	0	1222	492	438	642	0	0	0	0	217	7	423
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1800	1800	1600	1800	0				1700	1800	1800
Adj Flow Rate, veh/h	0	1300	330	466	683	0				156	0	419
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1993	563	567	3146	0				300	0	565
Arrive On Green	0.00	0.37	0.37	0.19	0.64	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	5400	1525	2956	5076	0				1619	0	3051
Grp Volume(v), veh/h	0	1300	330	466	683	0				156	0	419
Grp Sat Flow(s),veh/h/ln	0	1800	1525	1478	1638	0				1619	0	1525
Q Serve(g_s), s	0.0	12.6	11.0	9.5	3.7	0.0				5.5	0.0	8.2
Cycle Q Clear(g_c), s	0.0	12.6	11.0	9.5	3.7	0.0				5.5	0.0	8.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1993	563	567	3146	0				300	0	565
V/C Ratio(X)	0.00	0.65	0.59	0.82	0.22	0.00				0.52	0.00	0.74
Avail Cap(c_a), veh/h	0	3172	896	845	4681	0				488	0	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.5	16.0	24.4	4.7	0.0				23.1	0.0	24.2
Incr Delay (d2), s/veh	0.0	0.3	0.7	2.5	0.0	0.0				1.4	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.3	3.3	3.1	0.7	0.0				2.0	0.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	16.8	16.7	26.9	4.8	0.0				24.5	0.0	26.2
LnGrp LOS	A	B	B	C	A	A				C	A	C
Approach Vol, veh/h		1630			1149						575	
Approach Delay, s/veh		16.8			13.7						25.7	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.1	29.3		16.7		46.3
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0
Max Green Setting (Gmax), s	18.0	37.0		19.0		60.0
Max Q Clear Time (g_c+I1), s	11.5	14.6		10.2		5.7
Green Ext Time (p_c), s	0.5	8.7		1.5		3.9

Intersection Summary	
HCM 6th Ctrl Delay	17.3
HCM 6th LOS	B

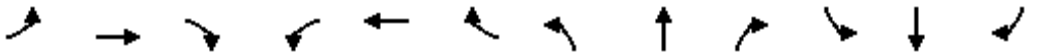
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	548	891	976	491	104	1	320
Future Volume (vph)	548	891	976	491	104	1	320
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	28.0	69.0	41.0	41.0	21.0	21.0	21.0
Total Split (%)	31.1%	76.7%	45.6%	45.6%	23.3%	23.3%	23.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 66.8
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	548	891	0	0	976	491	104	1	320	0	0	0
Future Volume (veh/h)	548	891	0	0	976	491	104	1	320	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800			
Adj Flow Rate, veh/h	565	919	0	0	1006	375	72	0	251			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	692	3364	0	0	1800	559	208	0	392			
Arrive On Green	0.23	0.68	0.00	0.00	0.37	0.37	0.13	0.00	0.13			
Sat Flow, veh/h	2956	5076	0	0	5076	1525	1619	0	3051			
Grp Volume(v), veh/h	565	919	0	0	1006	375	72	0	251			
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1525	1619	0	1525			
Q Serve(g_s), s	9.9	4.0	0.0	0.0	8.9	11.3	2.2	0.0	4.3			
Cycle Q Clear(g_c), s	9.9	4.0	0.0	0.0	8.9	11.3	2.2	0.0	4.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	692	3364	0	0	1800	559	208	0	392			
V/C Ratio(X)	0.82	0.27	0.00	0.00	0.56	0.67	0.35	0.00	0.64			
Avail Cap(c_a), veh/h	1268	5754	0	0	3233	1004	472	0	889			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.8	3.3	0.0	0.0	13.8	14.5	21.7	0.0	22.6			
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.0	0.2	1.0	1.0	0.0	1.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.9	0.5	0.0	0.0	2.6	3.2	0.8	0.0	1.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	3.4	0.0	0.0	14.0	15.6	22.7	0.0	24.3			
LnGrp LOS	C	A	A	A	B	B	C	A	C			
Approach Vol, veh/h		1484			1381			323				
Approach Delay, s/veh		10.0			14.4			24.0				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		42.5			17.4	25.1		12.1				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		63.9			23.4	35.9		15.9				
Max Q Clear Time (g_c+I1), s		6.0			11.9	13.3		6.3				
Green Ext Time (p_c), s		5.6			0.9	6.7		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

APPENDIX 3.3:

EXISTING (2021) CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

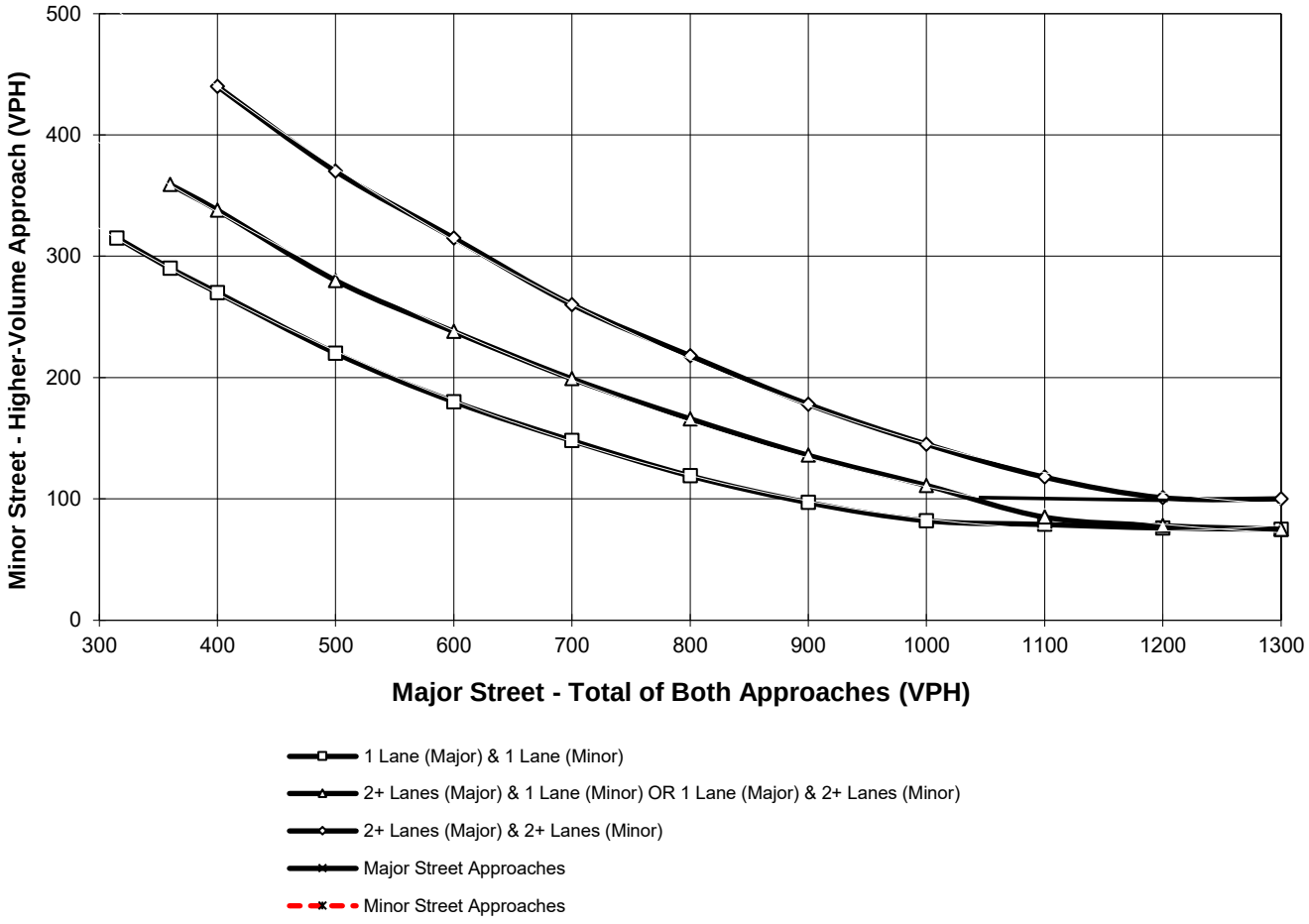
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **91**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 15/Santa Ana St** High Volume Approach (VPH) = **21**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

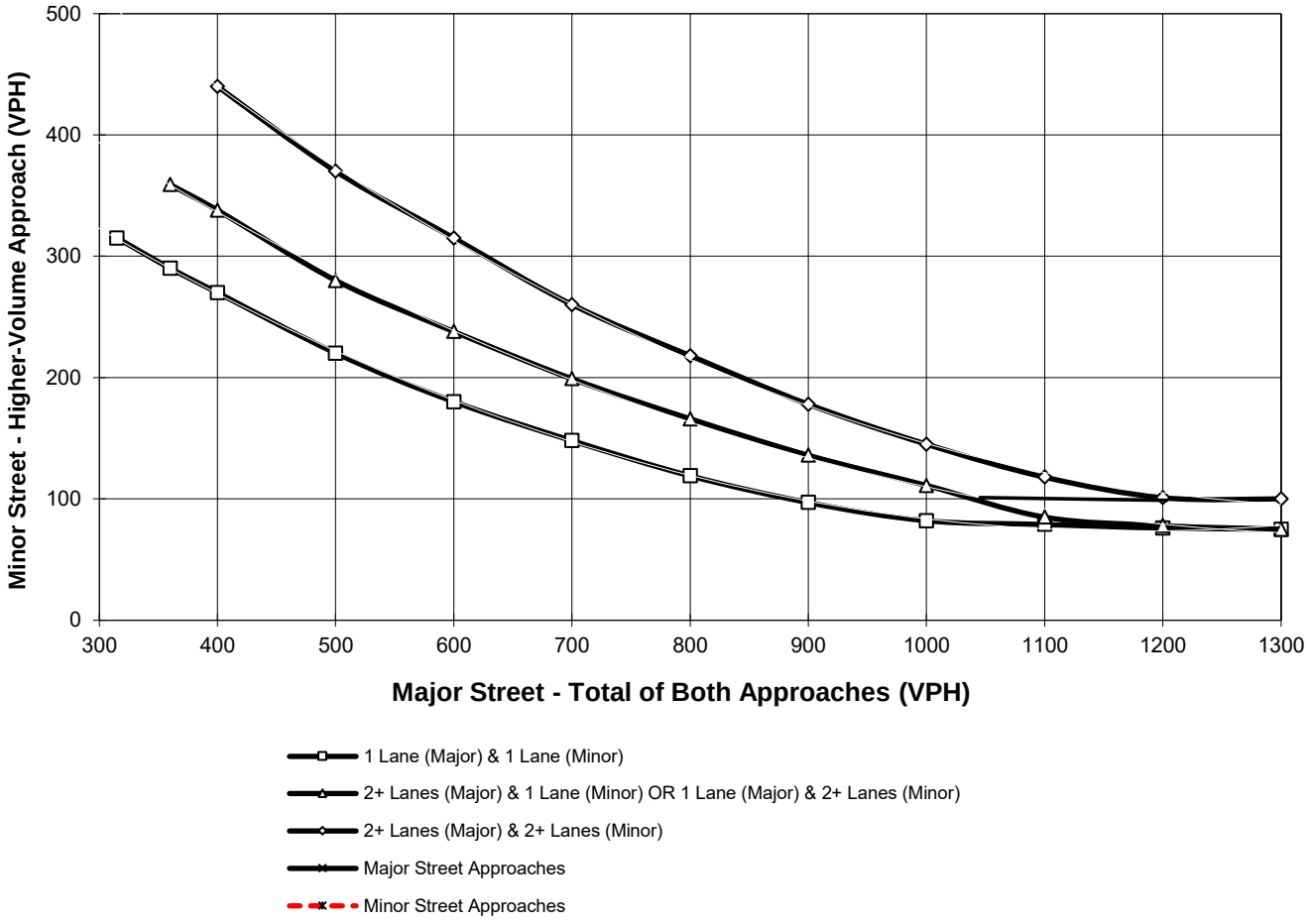
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **139**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **La Salle Street** High Volume Approach (VPH) = **24**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

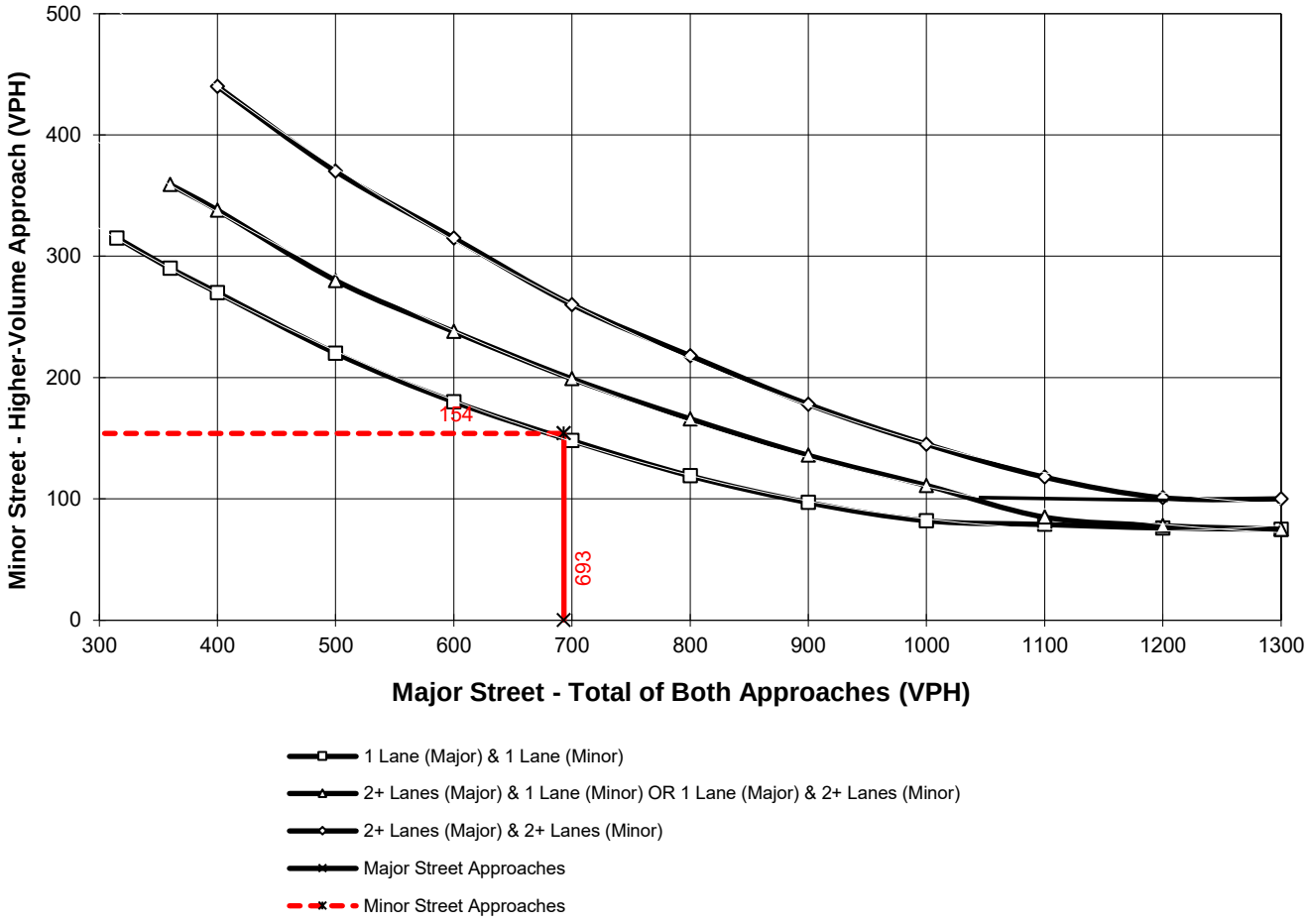
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Existing (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Commerce Parkway** Total of Both Approaches (VPH) = **693**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Santa Ana Street** High Volume Approach (VPH) = **154**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

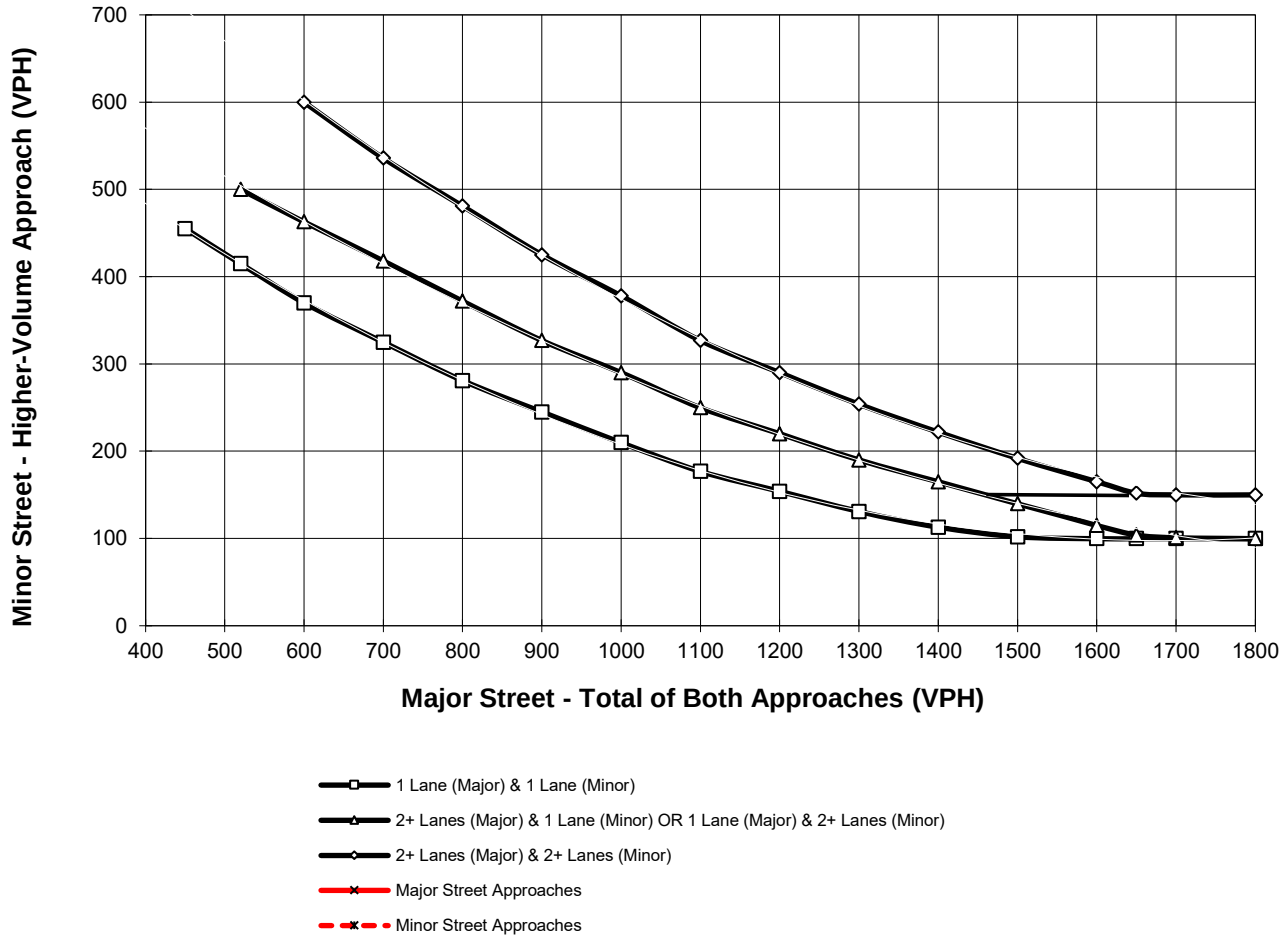
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Santa Ana Street** Total of Both Approaches (VPH) = **205**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue** High Volume Approach (VPH) = **33**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

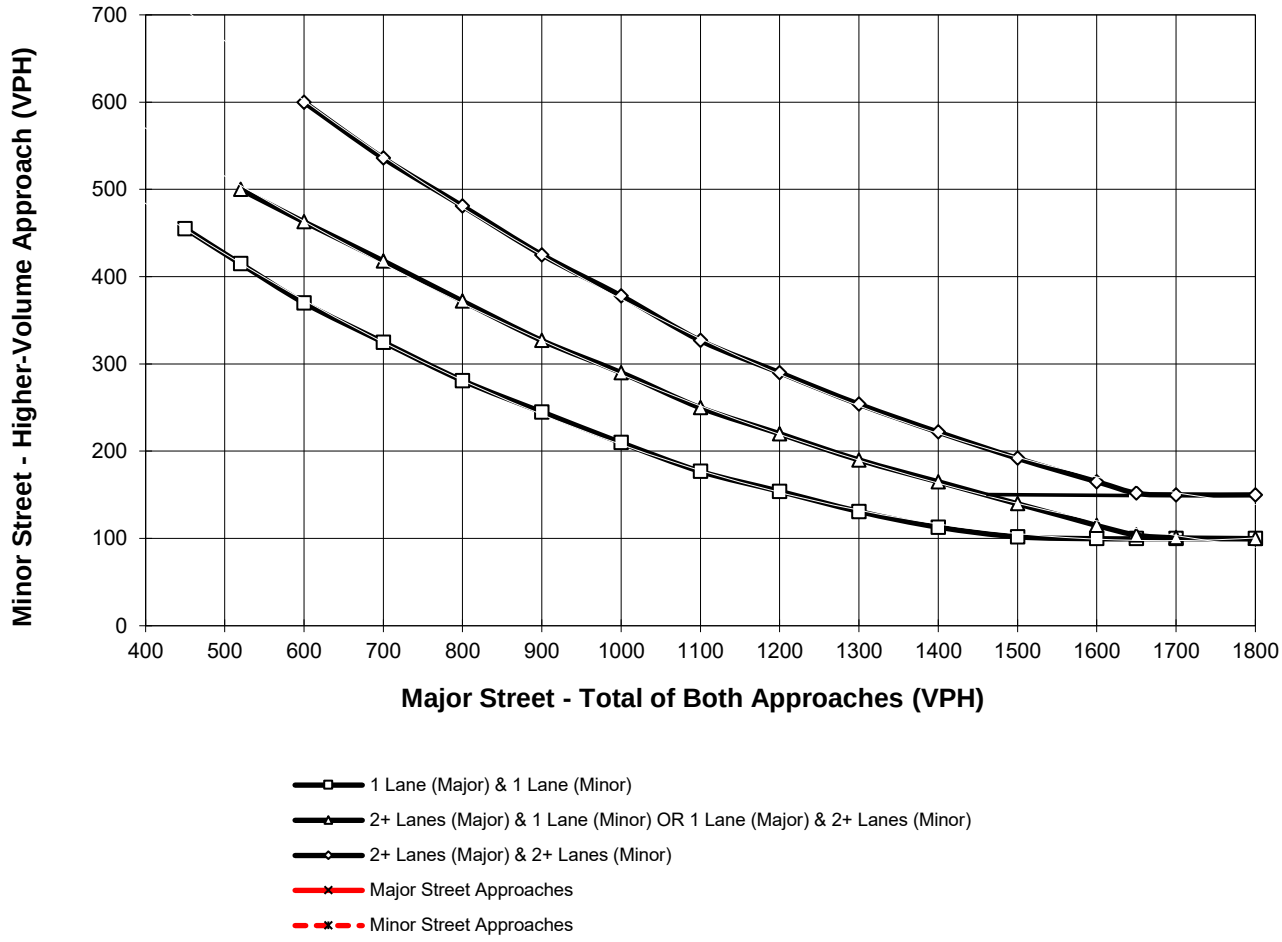
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue**
Total of Both Approaches (VPH) = **208**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Santa Ana Street**
High Volume Approach (VPH) = **131**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

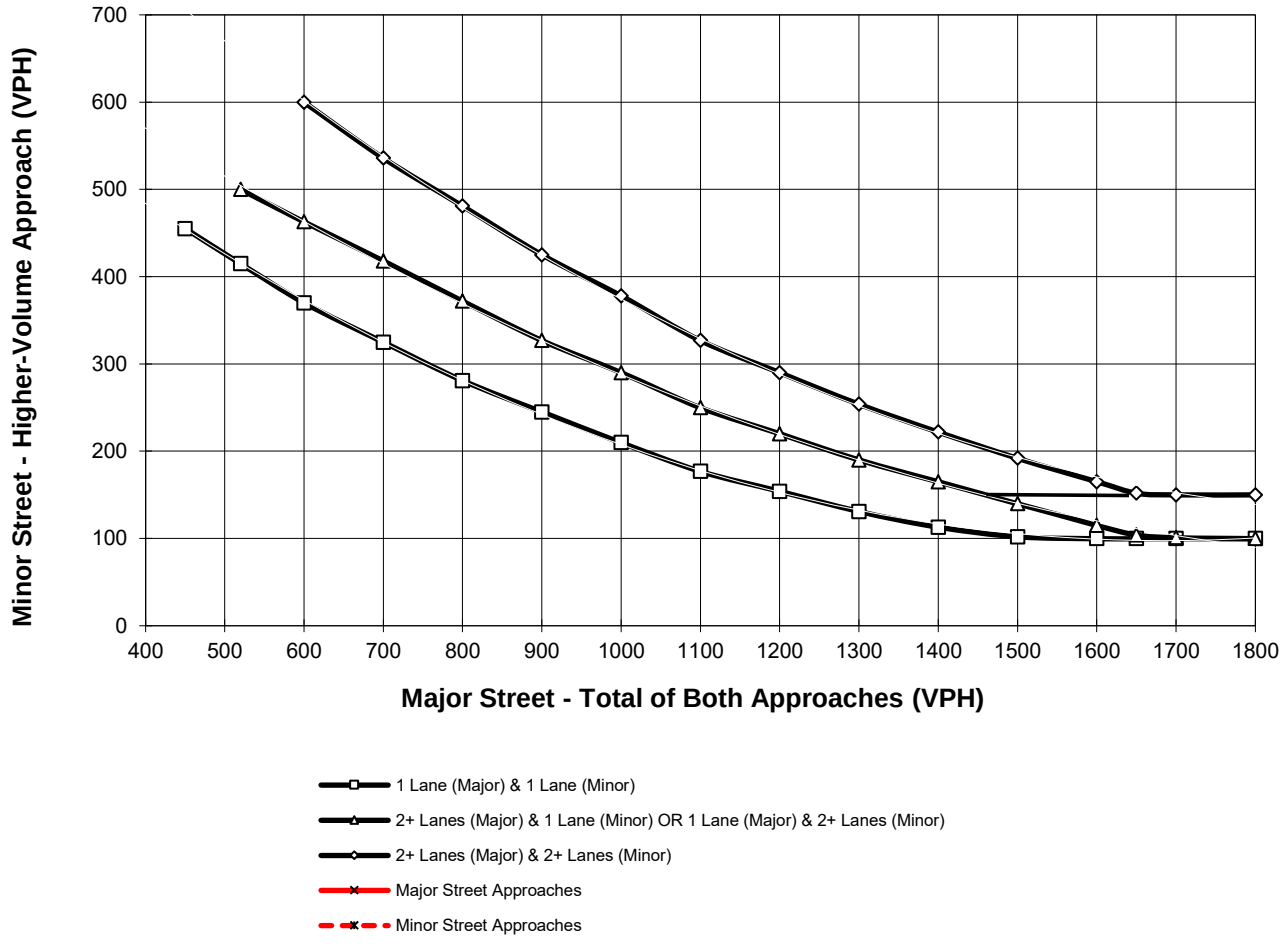
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Existing (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue**
Total of Both Approaches (VPH) = **225**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue**
High Volume Approach (VPH) = **34**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 4.1:

DETAILED TRIP GENERATION SUMMARY BY BUILDING

This Page Intentionally Left Blank

Table 4A-0

Project Trip Generation Summary (All Buildings)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	3,640.083	TSF							
Passenger Cars:			383	91	473	215	331	546	5,756
2-axle Trucks:			8	5	13	1	1	7	144
3-axle Trucks:			8	8	15	1	1	8	178
4+-axle Trucks:			23	23	47	10	12	23	526
Total Truck Trips (Actual Vehicles):			39	36	75	12	14	26	848
Total Trips (Actual Vehicles)[2]			**422**	**127**	**548**	**227**	**345**	**572**	**6,604**
High-Cube Cold Storage (15%)	642.368	TSF							
Passenger Cars:			40	11	51	16	42	58	1,072
2-axle Trucks:			0	5	5	1	1	2	170
3-axle Trucks:			0	0	0	0	0	0	58
4+-axle Trucks:			1	8	9	6	6	12	76
Total Truck Trips (Actual Vehicles):			1	13	14	7	7	14	304
Total Trips (Actual Vehicles)[2]			**41**	**24**	**65**	**23**	**49**	**72**	**1,376**
Passenger Car Total			423	102	524	231	373	604	6,828
Truck Total (Actual Vehicles)			40	49	89	19	21	40	1,152
Buildings 1-9 Total Trips (Actual Vehicles)[2]			**463**	**151**	**613**	**250**	**394**	**644**	**7,980**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	3,640.083	TSF							
Passenger Cars:			383	91	473	215	331	546	5,756
2-axle Trucks:			10	8	18	6	1	9	214
3-axle Trucks:			18	18	38	9	9	18	438
4+-axle Trucks:			66	70	139	33	36	69	1,576
Total Truck Trips (PCE):			94	96	190	48	46	94	2,228
Total Trips (PCE)[2]			**477**	**187**	**663**	**263**	**377**	**640**	**7,984**
High-Cube Cold Storage (15%)	642.368	TSF							
Passenger Cars:			40	11	51	16	42	58	1,072
2-axle Trucks:			1	8	9	5	6	11	256
3-axle Trucks:			0	1	1	1	0	1	114
4+-axle Trucks:			9	23	32	16	16	32	220
Total Truck Trips (PCE):			10	32	42	22	22	44	590
Total Trips (PCE)[2]			**50**	**43**	**93**	**38**	**64**	**102**	**1,662**
Passenger Car Total			423	102	524	231	373	604	6,828
Truck Total (PCE)			104	128	232	70	68	138	2,818
Buildings 1-9 Total Trips (PCE)[2]			**527**	**230**	**756**	**301**	**441**	**742**	**9,646**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table 4A-1

Project Trip Generation Summary (Building 1)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	306.561	TSF							
Passenger Cars:			32	8	40	18	28	46	484
2-axle Trucks:			1	0	1	0	0	1	12
3-axle Trucks:			1	1	1	0	0	1	16
4+-axle Trucks:			2	2	4	1	1	2	44
Total Truck Trips (Actual Vehicles):			4	3	7	1	1	2	72
Total Trips (Actual Vehicles)[2]			**36**	**11**	**47**	**19**	**29**	**48**	**556**
High-Cube Cold Storage (15%)	54.099	TSF							
Passenger Cars:			3	1	4	1	4	5	90
2-axle Trucks:			0	0	0	0	0	0	14
3-axle Trucks:			0	0	0	0	0	0	4
4+-axle Trucks:			0	1	1	0	0	0	6
Total Truck Trips (Actual Vehicles):			0	1	1	0	0	0	24
Total Trips (Actual Vehicles)[2]			**3**	**2**	**5**	**1**	**4**	**5**	**114**
Passenger Car Total			35	9	44	19	32	51	574
Truck Total (Actual Vehicles)			4	4	8	1	1	2	96
Building 1 Total Trips (Actual Vehicles)[2]			**39**	**13**	**52**	**20**	**33**	**53**	**670**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	306.561	TSF							
Passenger Cars:			32	8	40	18	28	46	484
2-axle Trucks:			1	1	2	0	0	1	18
3-axle Trucks:			2	2	3	1	1	2	36
4+-axle Trucks:			6	6	12	3	3	6	132
Total Truck Trips (PCE):			9	9	18	4	4	8	186
Total Trips (PCE)[2]			**41**	**17**	**58**	**22**	**32**	**54**	**670**
High-Cube Cold Storage (15%)	54.099	TSF							
Passenger Cars:			3	1	4	1	4	5	90
2-axle Trucks:			0	1	1	0	0	0	22
3-axle Trucks:			0	0	0	0	0	0	10
4+-axle Trucks:			1	2	3	1	1	2	18
Total Truck Trips (PCE):			1	3	4	1	1	2	50
Total Trips (PCE)[2]			**4**	**4**	**8**	**2**	**5**	**7**	**140**
Passenger Car Total			35	9	44	19	32	51	574
Truck Total (PCE)			10	12	22	5	5	10	236
Building 1 Total Trips (PCE)[2]			**45**	**21**	**66**	**24**	**37**	**61**	**810**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table 4A-2

Project Trip Generation Summary (Building 2)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	788.265	TSF							
Passenger Cars:			83	20	102	47	72	118	1,246
2-axle Trucks:			2	1	3	1	1	1	30
3-axle Trucks:			2	2	3	1	1	2	38
4+-axle Trucks:			5	5	10	2	3	5	114
Total Truck Trips (Actual Vehicles):			9	8	17	4	5	9	182
Total Trips (Actual Vehicles)[2]			**92**	**28**	**119**	**51**	**77**	**127**	**1,428**
High-Cube Cold Storage (15%)	139.106	TSF							
Passenger Cars:			9	3	12	3	9	12	232
2-axle Trucks:			0	1	1	1	1	2	36
3-axle Trucks:			0	0	0	0	0	0	12
4+-axle Trucks:			1	2	3	1	1	2	16
Total Truck Trips (Actual Vehicles):			1	3	4	2	2	4	64
Total Trips (Actual Vehicles)[2]			**10**	**6**	**16**	**5**	**11**	**16**	**296**
Passenger Car Total			92	23	114	50	81	130	1,478
Truck Total (Actual Vehicles)			10	11	21	6	7	13	246
Building 2 Total Trips (Actual Vehicles)[2]			**102**	**34**	**135**	**56**	**88**	**143**	**1,724**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	788.265	TSF							
Passenger Cars:			83	20	102	47	72	118	1,246
2-axle Trucks:			2	2	4	1	1	2	46
3-axle Trucks:			4	4	8	2	2	4	94
4+-axle Trucks:			14	15	30	7	8	15	340
Total Truck Trips (PCE):			20	21	41	10	11	21	480
Total Trips (PCE)[2]			**103**	**41**	**143**	**57**	**83**	**139**	**1,726**
High-Cube Cold Storage (15%)	139.106	TSF							
Passenger Cars:			9	3	12	3	9	12	232
2-axle Trucks:			1	2	3	1	1	2	54
3-axle Trucks:			0	1	1	1	0	1	24
4+-axle Trucks:			2	5	7	3	3	6	48
Total Truck Trips (PCE):			3	8	11	5	4	9	126
Total Trips (PCE)[2]			**12**	**11**	**23**	**8**	**13**	**21**	**358**
Passenger Car Total			92	23	114	50	81	130	1,478
Truck Total (PCE)			23	29	52	15	15	30	606
Building 2 Total Trips (PCE)[2]			**115**	**52**	**166**	**65**	**96**	**160**	**2,084**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table 4A-3

Project Trip Generation Summary (Building 3)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	466.421	TSF							
Passenger Cars:			49	12	61	28	42	70	738
2-axle Trucks:			1	1	2	0	0	1	18
3-axle Trucks:			1	1	2	0	0	1	22
4+-axle Trucks:			3	3	6	1	2	3	68
Total Truck Trips (Actual Vehicles):			5	5	10	1	2	3	108
Total Trips (Actual Vehicles)[2]			**54**	**17**	**71**	**29**	**44**	**73**	**846**
High-Cube Cold Storage (15%)	82.310	TSF							
Passenger Cars:			5	1	6	2	5	7	138
2-axle Trucks:			0	1	1	0	0	0	22
3-axle Trucks:			0	0	0	0	0	0	8
4+-axle Trucks:			0	1	1	1	1	2	10
Total Truck Trips (Actual Vehicles):			0	2	2	1	1	2	40
Total Trips (Actual Vehicles)[2]			**5**	**3**	**8**	**3**	**6**	**9**	**178**
Passenger Car Total			54	13	67	30	47	77	876
Truck Total (Actual Vehicles)			5	7	12	2	3	5	148
Building 3 Total Trips (Actual Vehicles)[2]			**59**	**20**	**79**	**32**	**50**	**82**	**1,024**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	466.421	TSF							
Passenger Cars:			49	12	61	28	42	70	738
2-axle Trucks:			1	1	2	1	0	1	28
3-axle Trucks:			2	2	5	1	1	2	56
4+-axle Trucks:			8	9	18	4	5	9	202
Total Truck Trips (PCE):			11	12	23	6	6	12	286
Total Trips (PCE)[2]			**60**	**24**	**84**	**34**	**48**	**82**	**1,024**
High-Cube Cold Storage (15%)	82.310	TSF							
Passenger Cars:			5	1	6	2	5	7	138
2-axle Trucks:			0	1	1	1	1	2	32
3-axle Trucks:			0	0	0	0	0	0	14
4+-axle Trucks:			1	3	4	2	2	4	28
Total Truck Trips (PCE):			1	4	5	3	3	6	74
Total Trips (PCE)[2]			**6**	**5**	**11**	**5**	**8**	**13**	**212**
Passenger Car Total			54	13	67	30	47	77	876
Truck Total (PCE)			12	16	28	9	9	18	360
Building 3 Total Trips (PCE)[2]			**66**	**29**	**95**	**39**	**56**	**95**	**1,236**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table 4A-4

Project Trip Generation Summary (Building 4)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	225.420	TSF							
Passenger Cars:			24	6	29	13	21	34	356
2-axle Trucks:			0	0	1	0	0	0	10
3-axle Trucks:			0	0	1	0	0	0	12
4+-axle Trucks:			1	1	3	1	1	1	32
Total Truck Trips (Actual Vehicles):			1	1	2	1	1	2	54
Total Trips (Actual Vehicles)[2]			**25**	**7**	**31**	**14**	**22**	**36**	**410**
High-Cube Cold Storage (15%)	39.780	TSF							
Passenger Cars:			2	1	3	1	3	4	66
2-axle Trucks:			0	0	0	0	0	0	10
3-axle Trucks:			0	0	0	0	0	0	4
4+-axle Trucks:			0	0	0	0	0	0	4
Total Truck Trips (Actual Vehicles):			0	0	0	0	0	0	18
Total Trips (Actual Vehicles)[2]			**2**	**1**	**3**	**1**	**3**	**4**	**84**
Passenger Car Total			26	7	32	14	24	38	422
Truck Total (Actual Vehicles)			1	1	2	1	1	2	72
Building 4 Total Trips (Actual Vehicles)[2]			**27**	**8**	**34**	**15**	**25**	**40**	**494**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	225.420	TSF							
Passenger Cars:			24	6	29	13	21	34	356
2-axle Trucks:			1	0	1	0	0	1	14
3-axle Trucks:			1	1	2	1	1	1	28
4+-axle Trucks:			4	4	8	2	2	4	98
Total Truck Trips (PCE):			6	5	11	3	3	6	140
Total Trips (PCE)[2]			**30**	**11**	**40**	**16**	**24**	**40**	**496**
High-Cube Cold Storage (15%)	39.780	TSF							
Passenger Cars:			2	1	3	1	3	4	66
2-axle Trucks:			0	0	0	0	0	0	16
3-axle Trucks:			0	0	0	0	0	0	8
4+-axle Trucks:			1	1	2	1	1	2	14
Total Truck Trips (PCE):			1	1	2	1	1	2	38
Total Trips (PCE)[2]			**3**	**2**	**5**	**2**	**4**	**6**	**104**
Passenger Car Total			26	7	32	14	24	38	422
Truck Total (PCE)			7	6	13	4	4	8	178
Building 4 Total Trips (PCE)[2]			**33**	**13**	**45**	**18**	**28**	**46**	**600**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table 4A-5

Project Trip Generation Summary (Building 5)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	361.743	TSF							
Passenger Cars:			38	9	47	21	33	54	572
2-axle Trucks:			1	0	1	0	0	1	14
3-axle Trucks:			1	1	1	0	0	1	18
4+-axle Trucks:			2	2	5	1	1	2	52
Total Truck Trips (Actual Vehicles):			4	3	7	1	1	2	84
Total Trips (Actual Vehicles)[2]			**42**	**12**	**54**	**22**	**34**	**56**	**656**
High-Cube Cold Storage (15%)	63.837	TSF							
Passenger Cars:			4	1	5	2	4	6	106
2-axle Trucks:			0	0	0	0	0	0	18
3-axle Trucks:			0	0	0	0	0	0	6
4+-axle Trucks:			0	1	1	1	1	2	8
Total Truck Trips (Actual Vehicles):			0	1	1	1	1	2	32
Total Trips (Actual Vehicles)[2]			**4**	**2**	**6**	**3**	**5**	**8**	**138**
Passenger Car Total			42	10	52	23	37	60	678
Truck Total (Actual Vehicles)			4	4	8	2	2	4	116
Building 5 Total Trips (Actual Vehicles)[2]			**46**	**14**	**60**	**25**	**39**	**64**	**794**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	361.743	TSF							
Passenger Cars:			38	9	47	21	33	54	572
2-axle Trucks:			1	1	2	1	0	1	22
3-axle Trucks:			2	2	4	1	1	2	44
4+-axle Trucks:			7	7	14	3	4	7	156
Total Truck Trips (PCE):			10	10	20	5	5	10	222
Total Trips (PCE)[2]			**48**	**19**	**67**	**26**	**38**	**64**	**794**
High-Cube Cold Storage (15%)	63.837	TSF							
Passenger Cars:			4	1	5	2	4	6	106
2-axle Trucks:			0	1	1	0	1	1	26
3-axle Trucks:			0	0	0	0	0	0	12
4+-axle Trucks:			1	2	3	2	2	4	22
Total Truck Trips (PCE):			1	3	4	2	3	5	60
Total Trips (PCE)[2]			**5**	**4**	**9**	**4**	**7**	**11**	**166**
Passenger Car Total			42	10	52	23	37	60	678
Truck Total (PCE)			11	13	24	7	8	15	282
Building 5 Total Trips (PCE)[2]			**53**	**23**	**76**	**30**	**45**	**75**	**960**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Project Trip Generation Summary (Building 6)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	418.319	TSF							
Passenger Cars:			44	10	54	25	38	63	662
2-axle Trucks:			1	1	1	0	0	1	16
3-axle Trucks:			1	1	2	0	0	1	20
4+-axle Trucks:			3	3	5	1	1	3	60
Total Truck Trips (Actual Vehicles):			5	5	10	1	1	2	96
Total Trips (Actual Vehicles)[2]			**49**	**15**	**64**	**26**	**39**	**65**	**758**
High-Cube Cold Storage (15%)	73.821	TSF							
Passenger Cars:			5	1	6	2	5	7	124
2-axle Trucks:			0	1	1	0	0	0	20
3-axle Trucks:			0	0	0	0	0	0	6
4+-axle Trucks:			0	1	1	1	1	2	8
Total Truck Trips (Actual Vehicles):			0	2	2	1	1	2	34
Total Trips (Actual Vehicles)[2]			**5**	**3**	**8**	**3**	**6**	**9**	**158**
Passenger Car Total			49	11	60	27	43	70	786
Truck Total (Actual Vehicles)			5	7	12	2	2	4	130
Building 6 Total Trips (Actual Vehicles)[2]			**54**	**18**	**72**	**29**	**45**	**74**	**916**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	418.319	TSF							
Passenger Cars:			44	10	54	25	38	63	662
2-axle Trucks:			1	1	2	1	0	1	24
3-axle Trucks:			2	2	4	1	1	2	50
4+-axle Trucks:			8	8	16	4	4	8	182
Total Truck Trips (PCE):			11	11	22	6	5	11	256
Total Trips (PCE)[2]			**55**	**21**	**76**	**31**	**43**	**74**	**918**
High-Cube Cold Storage (15%)	73.821	TSF							
Passenger Cars:			5	1	6	2	5	7	124
2-axle Trucks:			0	1	1	1	1	2	30
3-axle Trucks:			0	0	0	0	0	0	12
4+-axle Trucks:			1	3	4	2	2	4	26
Total Truck Trips (PCE):			1	4	5	3	3	6	68
Total Trips (PCE)[2]			**6**	**5**	**11**	**5**	**8**	**13**	**192**
Passenger Car Total			49	11	60	27	43	70	786
Truck Total (PCE)			12	15	27	9	8	17	324
Building 6 Total Trips (PCE)[2]			**61**	**26**	**87**	**36**	**51**	**87**	**1,110**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table 4A-7

Project Trip Generation Summary (Building 7)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	174.675	TSF							
Passenger Cars:			18	4	23	10	16	26	276
2-axle Trucks:			0	0	1	0	0	0	8
3-axle Trucks:			0	0	1	0	0	0	8
4+-axle Trucks:			1	1	2	1	1	1	26
Total Truck Trips (Actual Vehicles):			1	1	2	1	1	2	42
Total Trips (Actual Vehicles)[2]			**19**	**5**	**25**	**11**	**17**	**28**	**318**
High-Cube Cold Storage (15%)	30.825	TSF							
Passenger Cars:			2	1	3	1	2	3	52
2-axle Trucks:			0	0	0	0	0	0	8
3-axle Trucks:			0	0	0	0	0	0	4
4+-axle Trucks:			0	0	0	0	0	0	4
Total Truck Trips (Actual Vehicles):			0	0	0	0	0	0	16
Total Trips (Actual Vehicles)[2]			**2**	**1**	**3**	**1**	**2**	**3**	**68**
Passenger Car Total			20	5	26	11	18	29	328
Truck Total (Actual Vehicles)			1	1	2	1	1	2	58
Building 7 Total Trips (Actual Vehicles)[2]			**21**	**6**	**28**	**12**	**19**	**31**	**386**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	174.675	TSF							
Passenger Cars:			18	4	23	10	16	26	276
2-axle Trucks:			1	0	1	0	0	0	10
3-axle Trucks:			1	1	2	0	0	1	22
4+-axle Trucks:			3	3	7	2	2	3	76
Total Truck Trips (PCE):			5	4	9	2	2	4	108
Total Trips (PCE)[2]			**23**	**8**	**32**	**12**	**18**	**30**	**384**
High-Cube Cold Storage (15%)	30.825	TSF							
Passenger Cars:			2	1	3	1	2	3	52
2-axle Trucks:			0	0	0	0	0	0	12
3-axle Trucks:			0	0	0	0	0	0	6
4+-axle Trucks:			0	1	1	1	1	2	10
Total Truck Trips (PCE):			0	1	1	1	1	2	28
Total Trips (PCE)[2]			**2**	**2**	**4**	**2**	**3**	**5**	**80**
Passenger Car Total			20	5	26	11	18	29	328
Truck Total (PCE)			5	5	10	3	3	6	136
Building 7 Total Trips (PCE)[2]			**25**	**10**	**36**	**14**	**21**	**35**	**464**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table 4A-8

Project Trip Generation Summary (Building 8)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	455.048	TSF							
Passenger Cars:			48	11	59	27	41	68	720
2-axle Trucks:			1	1	2	0	0	1	18
3-axle Trucks:			1	1	2	0	0	1	22
4+-axle Trucks:			3	3	6	1	1	3	66
Total Truck Trips (Actual Vehicles):			5	5	10	1	1	2	106
Total Trips (Actual Vehicles)[2]			**53**	**16**	**69**	**28**	**42**	**70**	**826**
High-Cube Cold Storage (15%)	80.303	TSF							
Passenger Cars:			5	1	6	2	5	7	134
2-axle Trucks:			0	1	1	0	0	0	22
3-axle Trucks:			0	0	0	0	0	0	8
4+-axle Trucks:			0	1	1	1	1	2	10
Total Truck Trips (Actual Vehicles):			0	2	2	1	1	2	40
Total Trips (Actual Vehicles)[2]			**5**	**3**	**8**	**3**	**6**	**9**	**174**
Passenger Car Total			53	12	65	29	46	75	854
Truck Total (Actual Vehicles)			5	7	12	2	2	4	146
Building 8 Total Trips (Actual Vehicles)[2]			**58**	**19**	**77**	**31**	**48**	**79**	**1,000**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	455.048	TSF							
Passenger Cars:			48	11	59	27	41	68	720
2-axle Trucks:			1	1	2	1	0	1	26
3-axle Trucks:			2	2	5	1	1	2	54
4+-axle Trucks:			8	9	17	4	4	9	198
Total Truck Trips (PCE):			11	12	23	6	5	11	278
Total Trips (PCE)[2]			**59**	**23**	**82**	**33**	**46**	**79**	**998**
High-Cube Cold Storage (15%)	80.303	TSF							
Passenger Cars:			5	1	6	2	5	7	134
2-axle Trucks:			0	1	1	1	1	2	32
3-axle Trucks:			0	0	0	0	0	0	14
4+-axle Trucks:			1	3	4	2	2	4	28
Total Truck Trips (PCE):			1	4	5	3	3	6	74
Total Trips (PCE)[2]			**6**	**5**	**11**	**5**	**8**	**13**	**208**
Passenger Car Total			53	12	65	29	46	75	854
Truck Total (PCE)			12	16	28	9	8	17	352
Building 8 Total Trips (PCE)[2]			**65**	**28**	**93**	**38**	**54**	**92**	**1,206**

[1] TSF = thousand square feet

[2] Total Trips = Passenger Cars + Truck Trips.

Table 4A-9

Project Trip Generation Summary (Building 9)

Land Use	Quantity	Units[1]	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Daily
Actual Vehicles:									
High-Cube Fulfillment (Non-Sort Facility) (85%)	443.632	TSF							
Passenger Cars:			47	11	58	26	40	67	702
2-axle Trucks:			1	1	1	0	0	1	18
3-axle Trucks:			1	1	2	0	0	1	22
4+-axle Trucks:			3	3	6	1	1	3	64
Total Truck Trips (Actual Vehicles):			5	5	10	1	1	2	104
Total Trips (Actual Vehicles)[2]			**52**	**16**	**68**	**27**	**41**	**69**	**806**
High-Cube Cold Storage (15%)	78.288	TSF							
Passenger Cars:			5	1	6	2	5	7	130
2-axle Trucks:			0	1	1	0	0	0	20
3-axle Trucks:			0	0	0	0	0	0	6
4+-axle Trucks:			0	1	1	1	1	2	10
Total Truck Trips (Actual Vehicles):			0	2	2	1	1	2	36
Total Trips (Actual Vehicles)[2]			**5**	**3**	**8**	**3**	**6**	**9**	**166**
Passenger Car Total			52	12	64	28	45	74	832
Truck Total (Actual Vehicles)			5	7	12	2	2	4	140
Building 9 Total Trips (Actual Vehicles)[2]			**57**	**19**	**76**	**30**	**47**	**78**	**972**
Passenger Car Equivalent (PCE):									
High-Cube Fulfillment (Non-Sort Facility) (85%)	443.632	TSF							
Passenger Cars:			47	11	58	26	40	67	702
2-axle Trucks:			1	1	2	1	0	1	26
3-axle Trucks:			2	2	5	1	1	2	54
4+-axle Trucks:			8	9	17	4	4	8	192
Total Truck Trips (PCE):			11	12	23	6	5	11	272
Total Trips (PCE)[2]			**58**	**23**	**81**	**32**	**45**	**78**	**974**
High-Cube Cold Storage (15%)	78.288	TSF							
Passenger Cars:			5	1	6	2	5	7	130
2-axle Trucks:			0	1	1	1	1	2	32
3-axle Trucks:			0	0	0	0	0	0	14
4+-axle Trucks:			1	3	4	2	2	4	26
Total Truck Trips (PCE):			1	4	5	3	3	6	72
Total Trips (PCE)[2]			**6**	**5**	**11**	**5**	**8**	**13**	**202**
Passenger Car Total			52	12	64	28	45	74	832
Truck Total (PCE)			12	16	28	9	8	17	344
Building 9 Total Trips (PCE)[2]			**64**	**28**	**92**	**37**	**53**	**91**	**1,176**

[1] TSF = thousand square feet

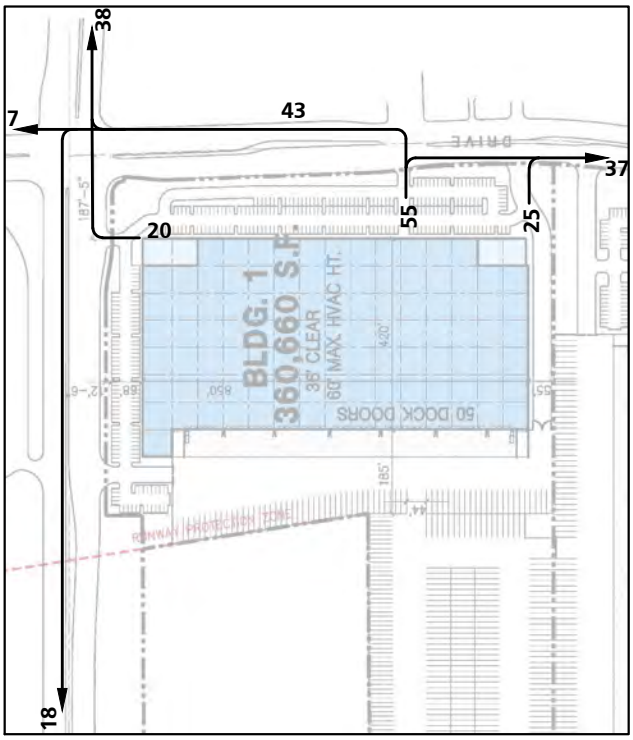
[2] Total Trips = Passenger Cars + Truck Trips.

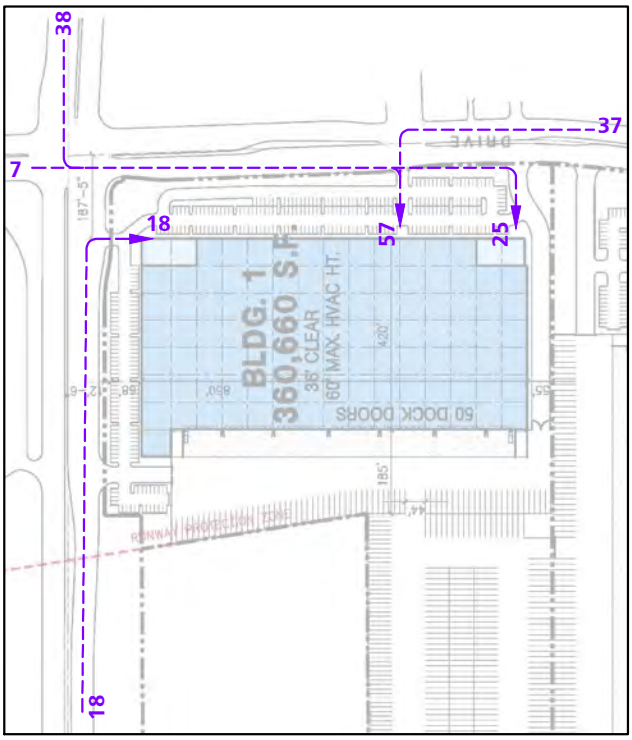
APPENDIX 4.2:

DETAILED TRIP DISTRIBUTIONS BY BUILDING

This Page Intentionally Left Blank

Cars





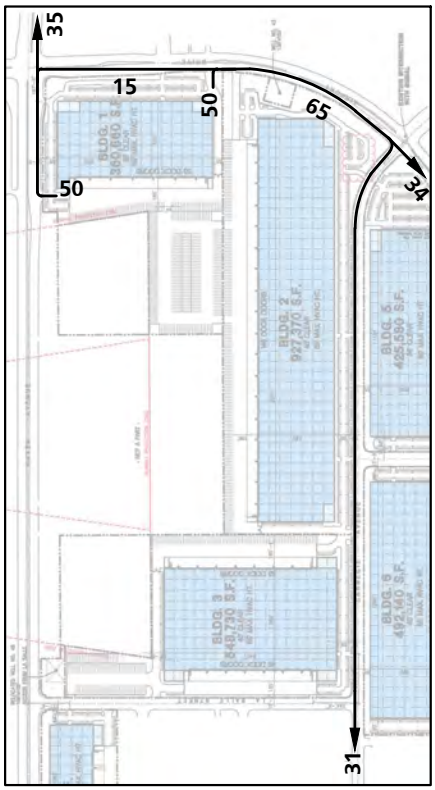
N

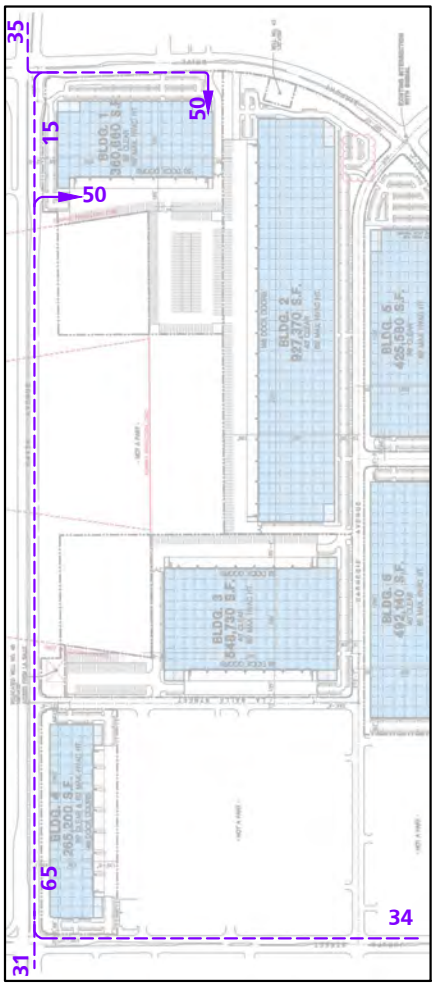
10 = *Percent To/From Project*

= *Outbound*

= *Inbound*

Trucks





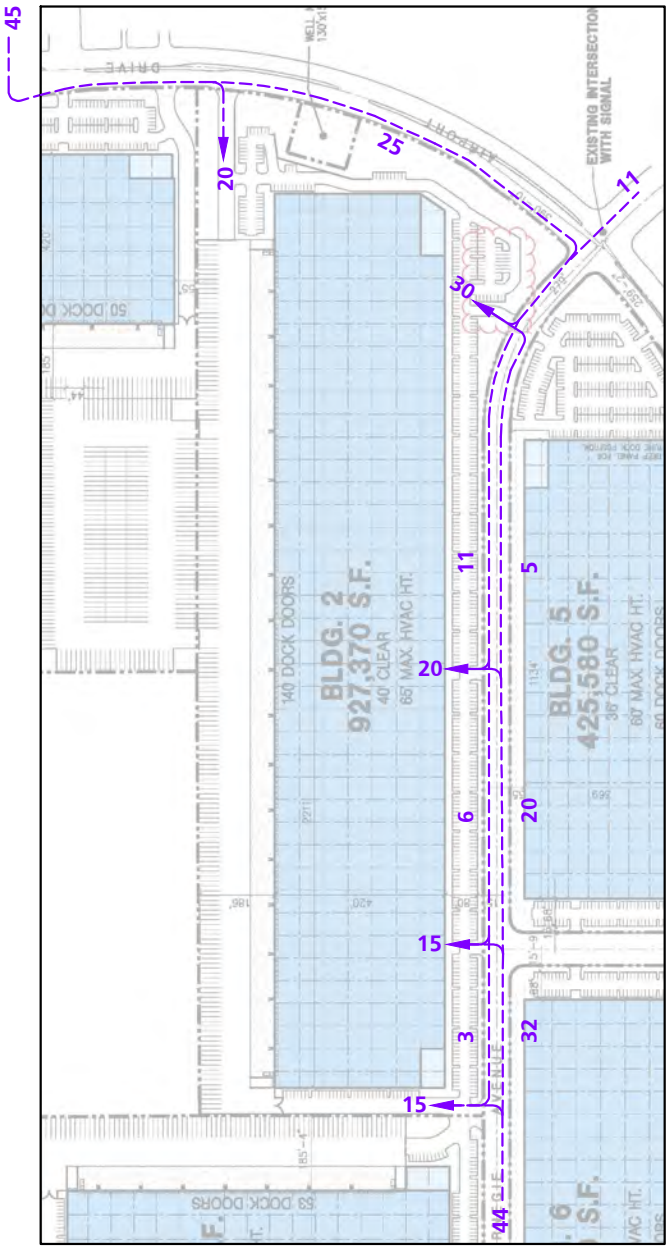
10 = *Percent To/From Project*

= *Outbound*

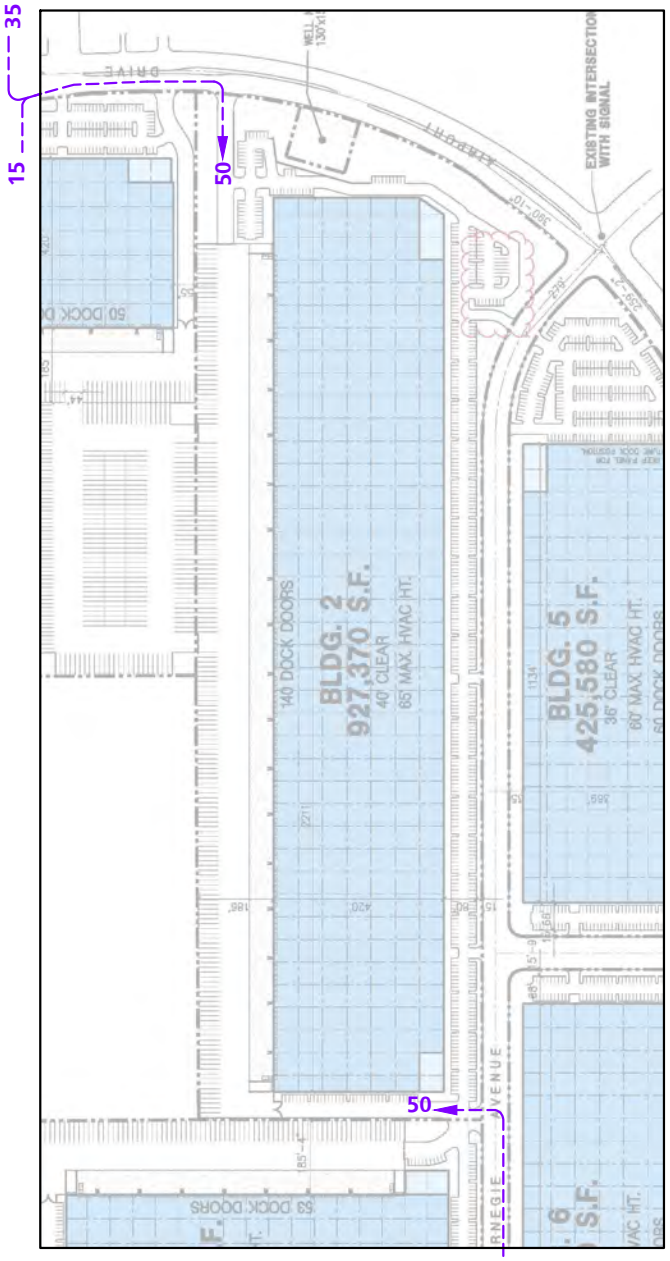
= *Inbound*

N

Cars



Trucks

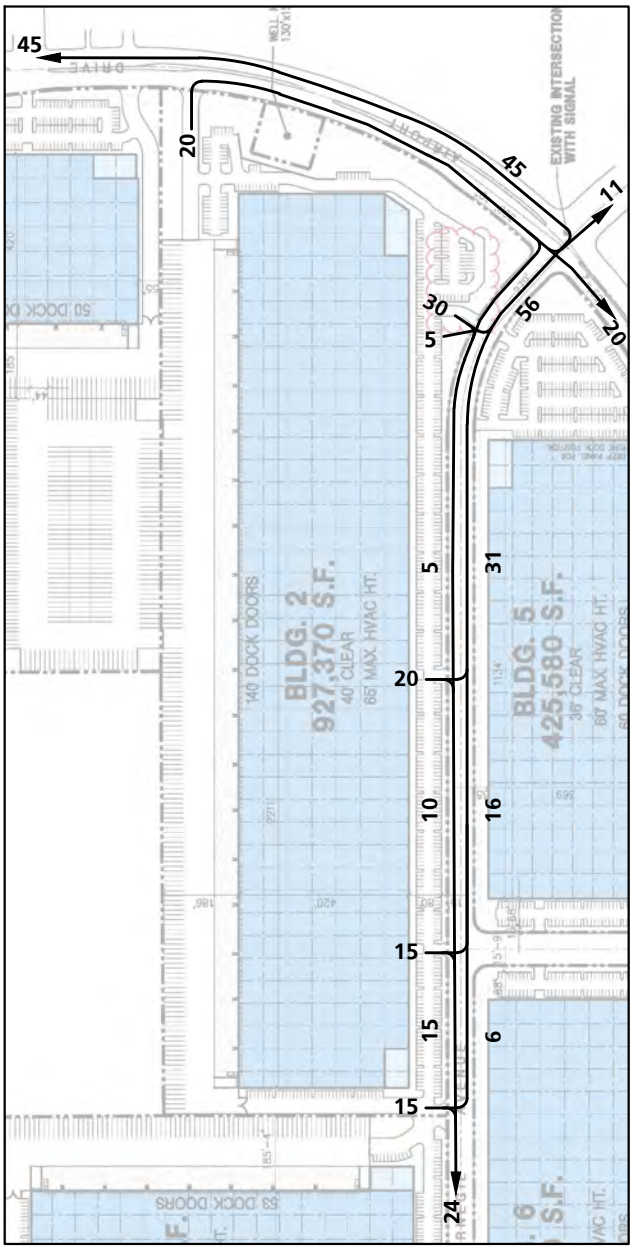


10 = *Percent To Project*

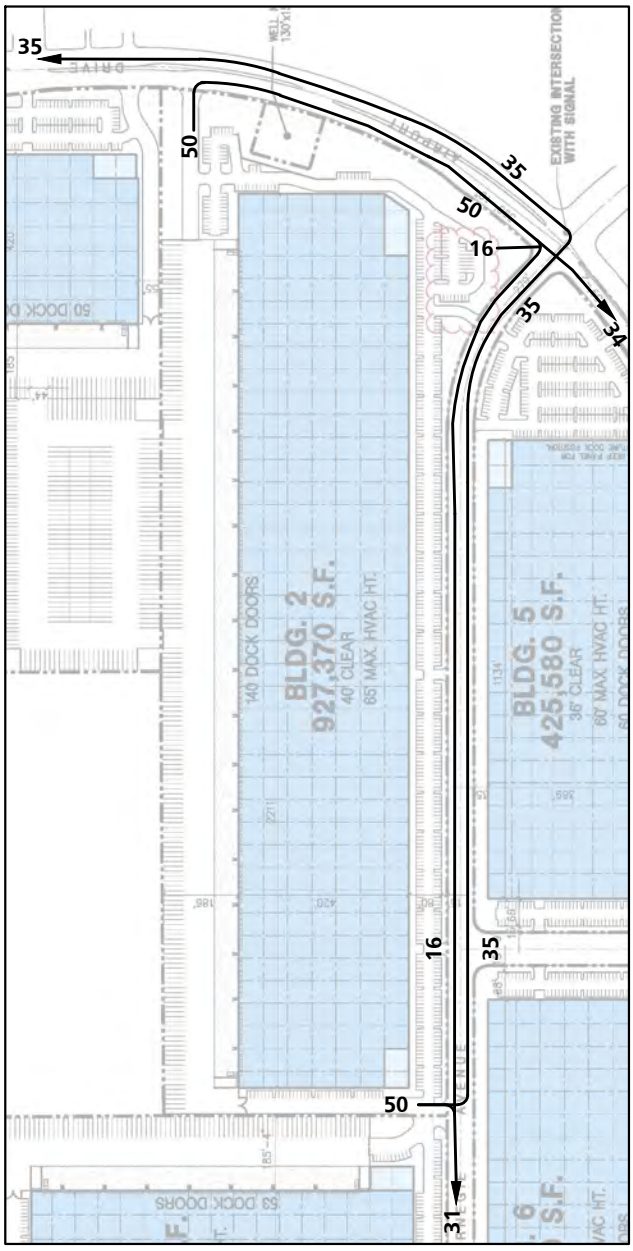
= *Inbound*

N

Cars



Trucks

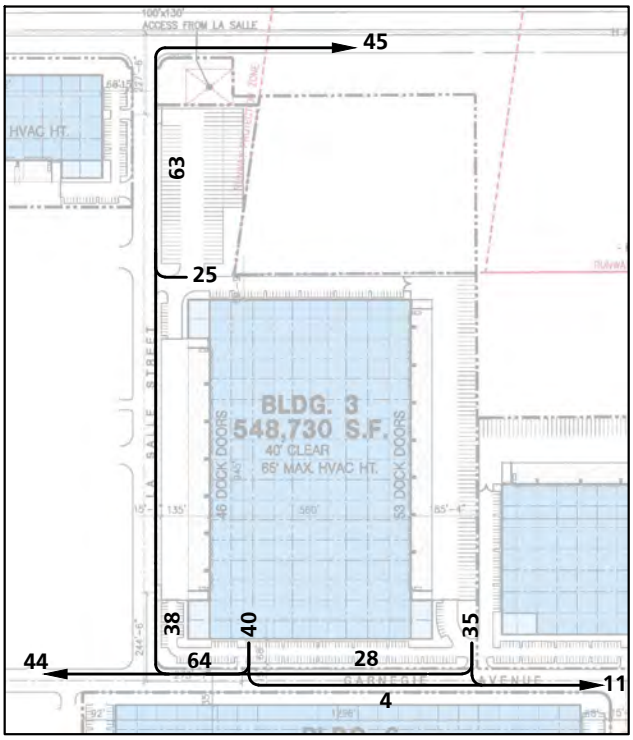


10 = *Percent To/From Project*

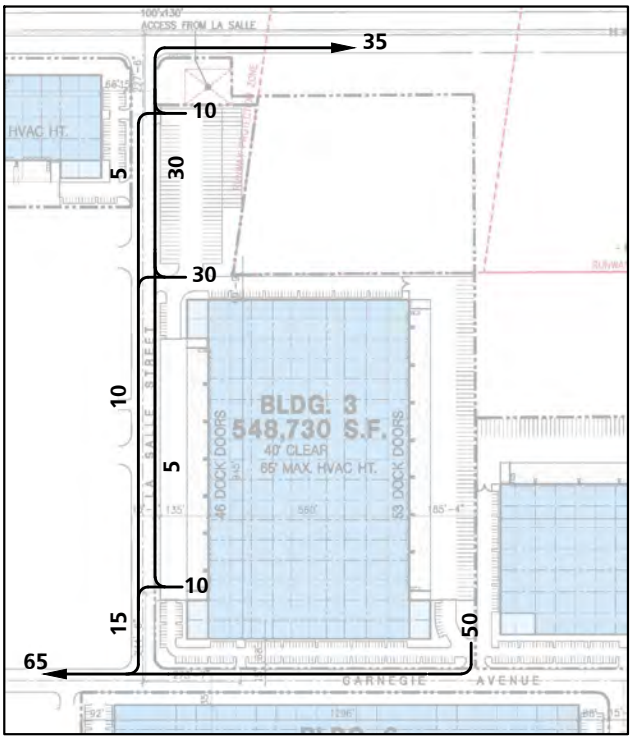
= *Outbound*

N

Cars



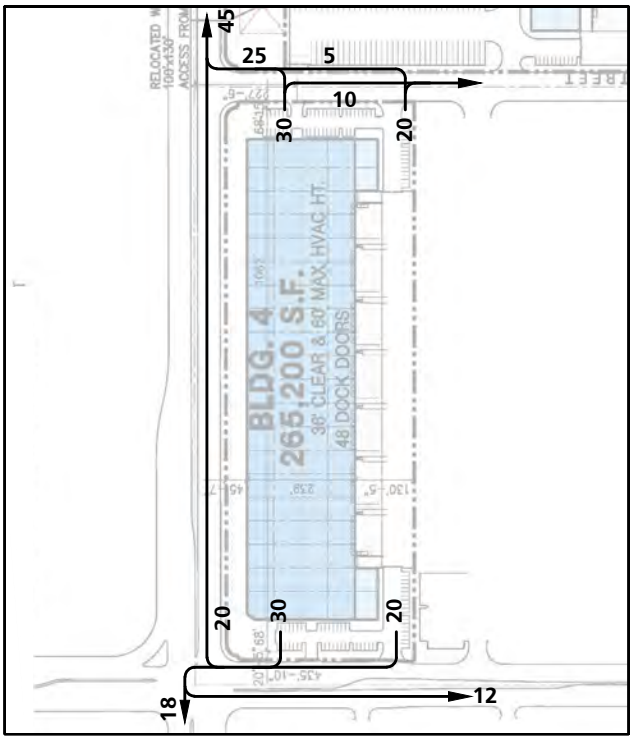
Trucks



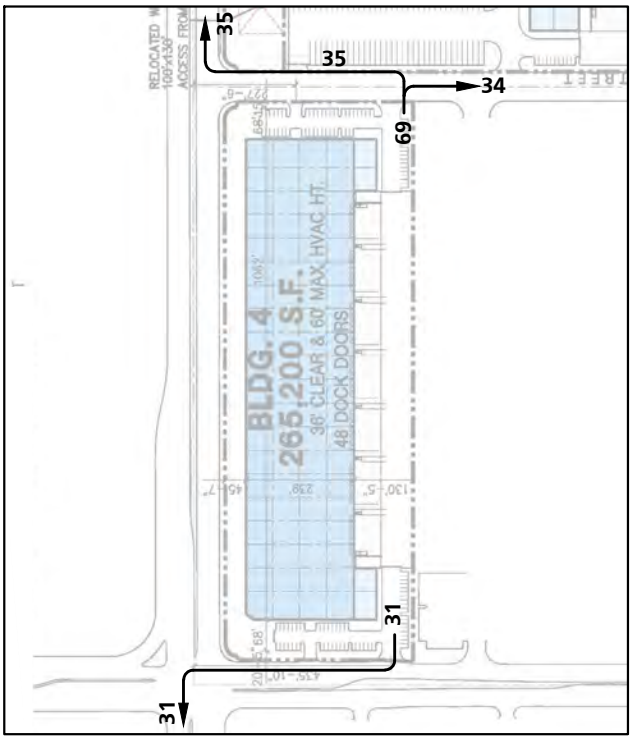
N

10 *= Percent To/From Project*

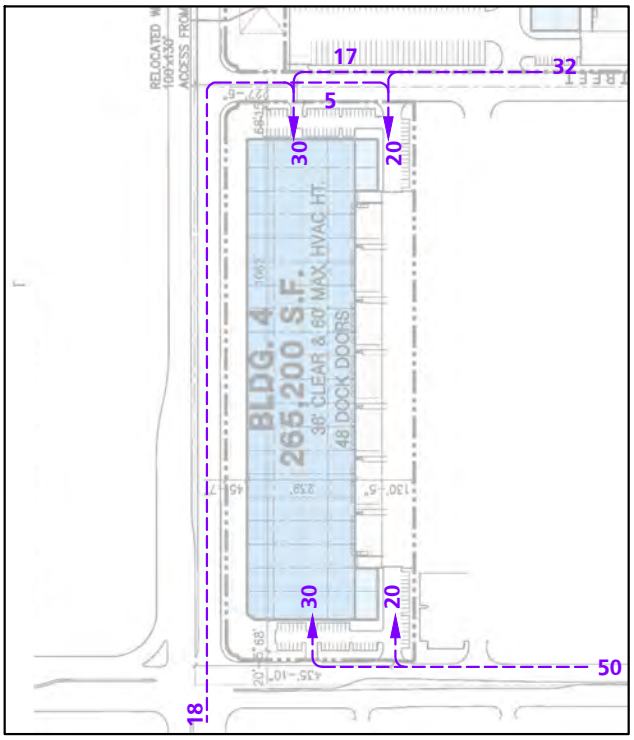
Cars



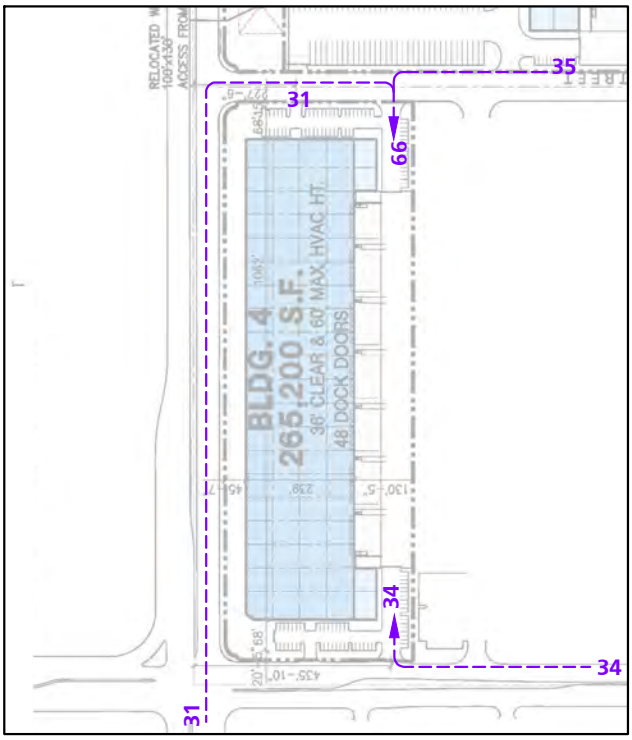
Trucks



Cars



Trucks

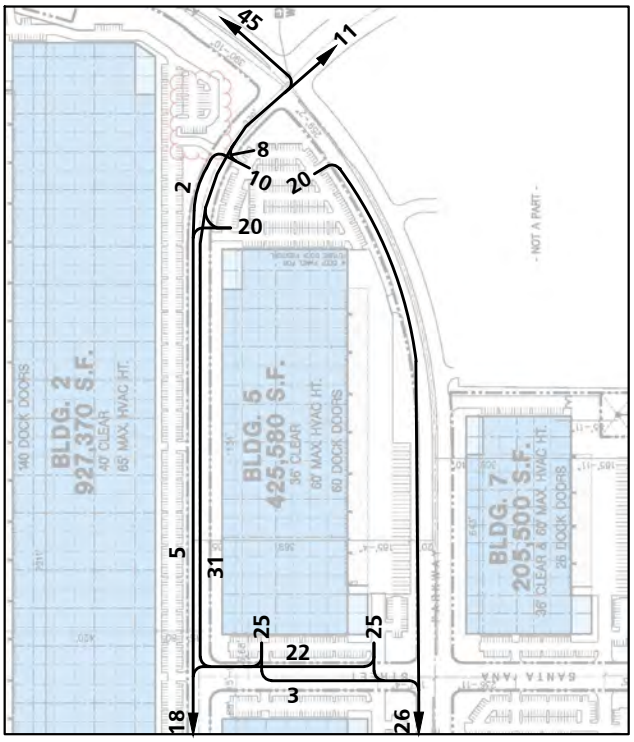


10 = *Percent To/From Project*

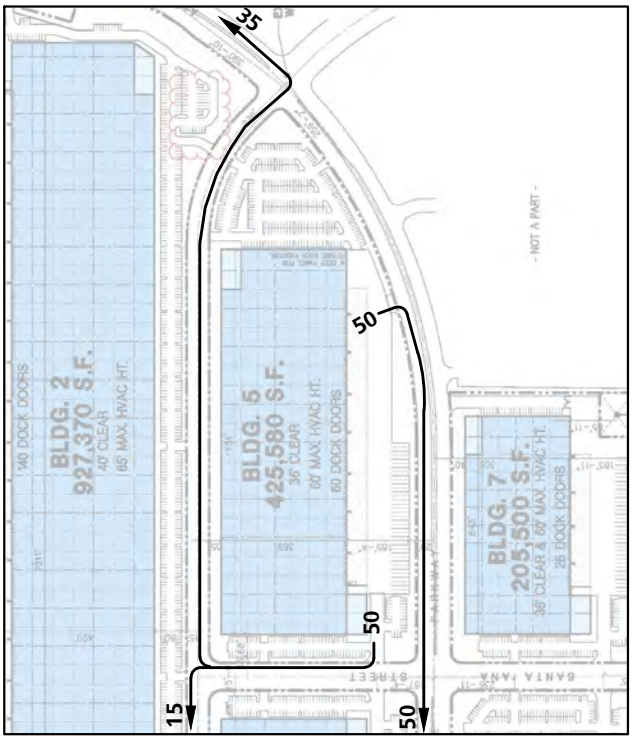
= *Outbound*

= *Inbound*

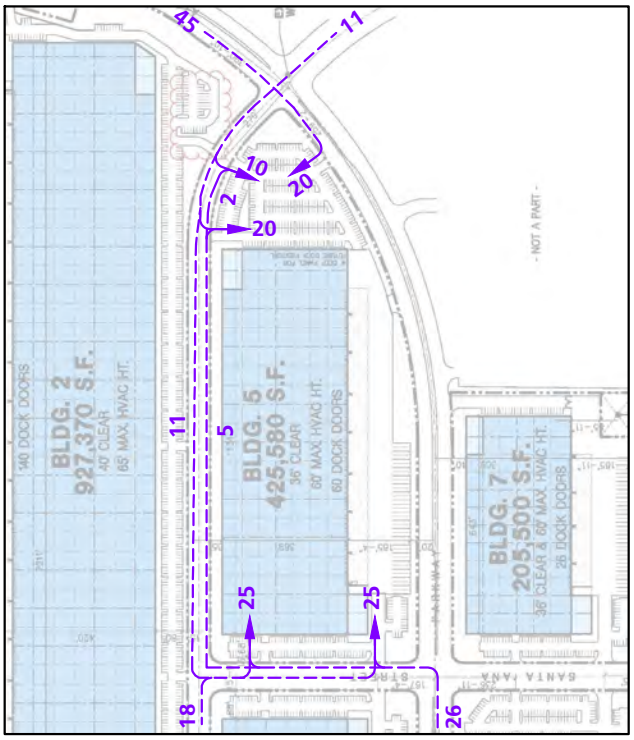
Cars



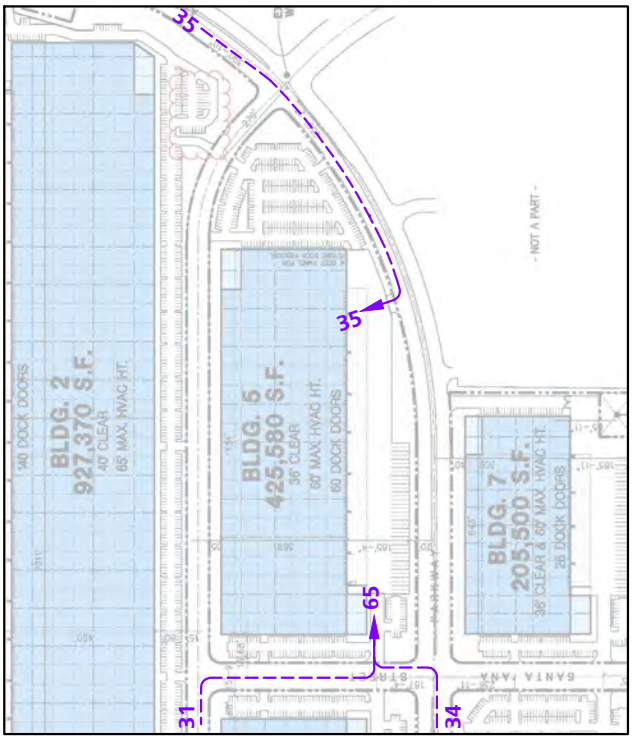
Trucks



Cars



Trucks

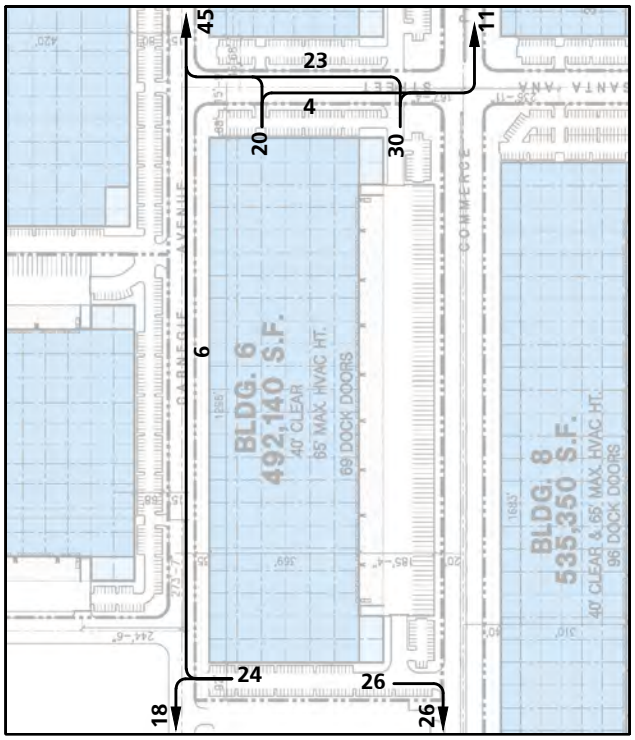


10 = *Percent To/From Project*

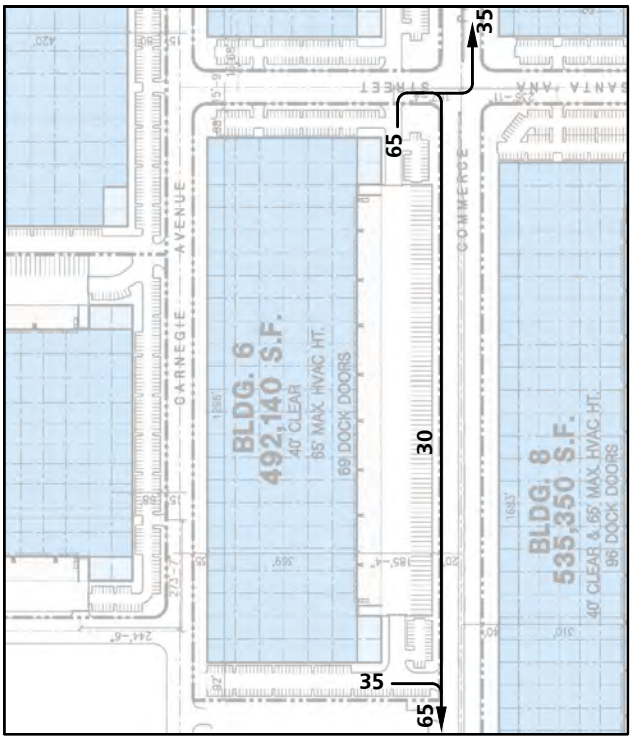
= *Outbound*

= *Inbound*

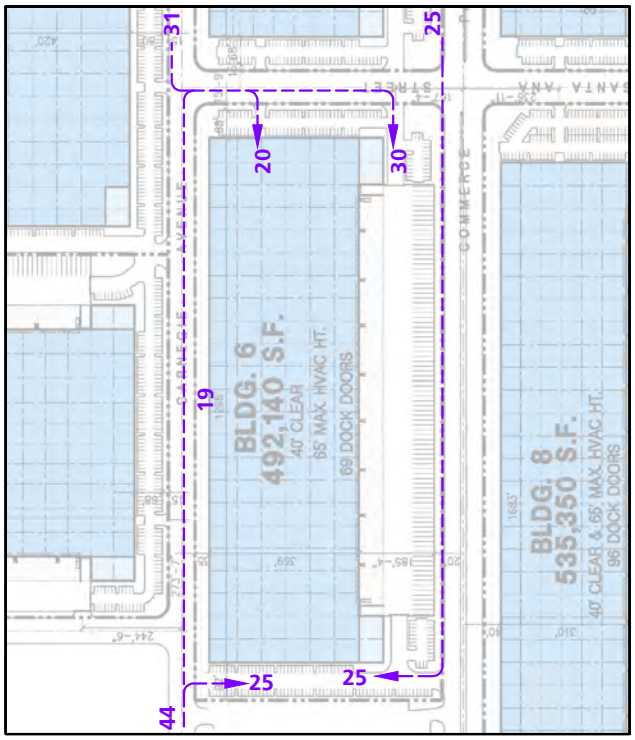
Cars



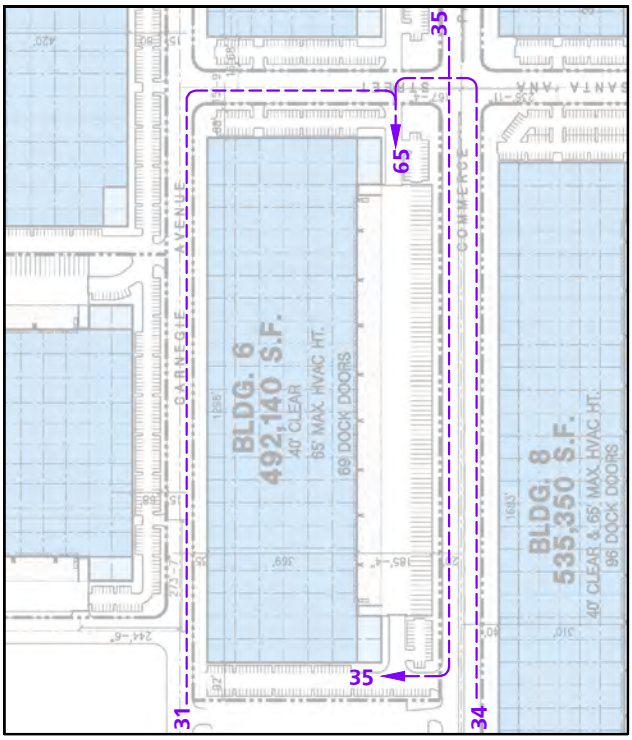
Trucks



Cars



Trucks



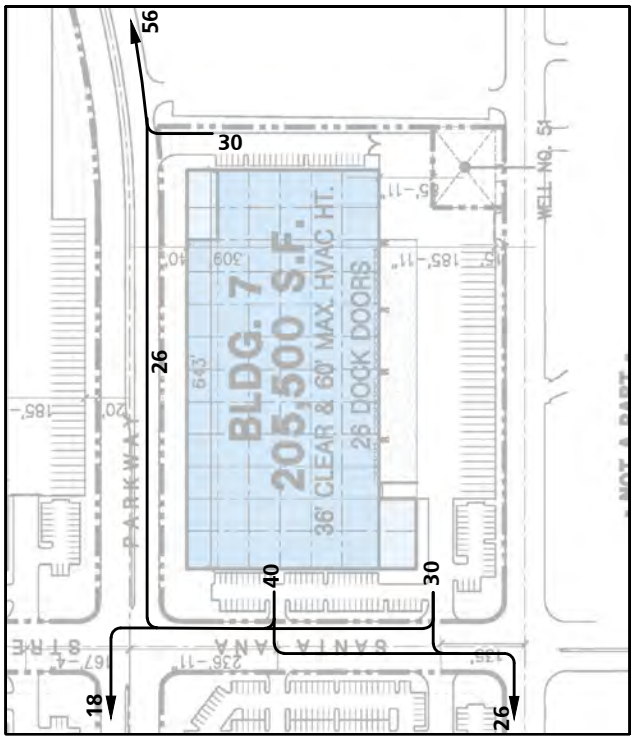
N

10 = *Percent To/From Project*

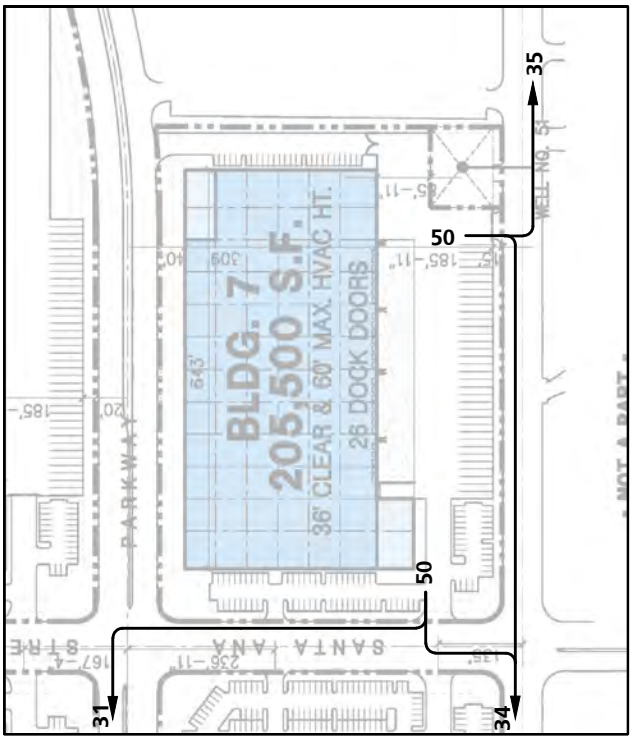
= *Outbound*

= *Inbound*

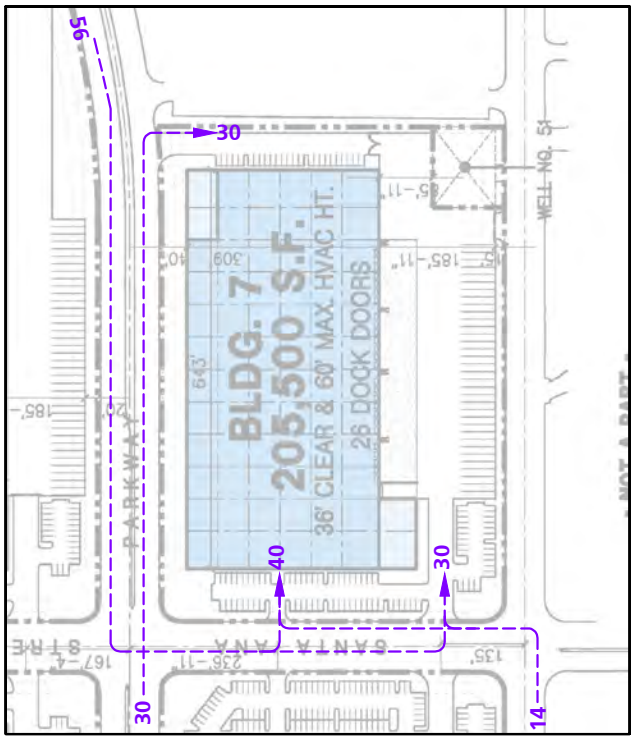
Cars



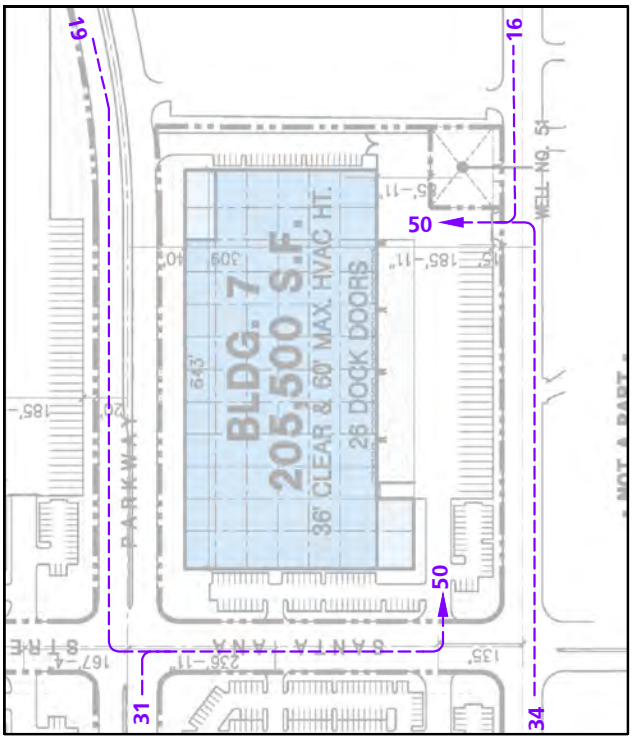
Trucks



Cars



Trucks



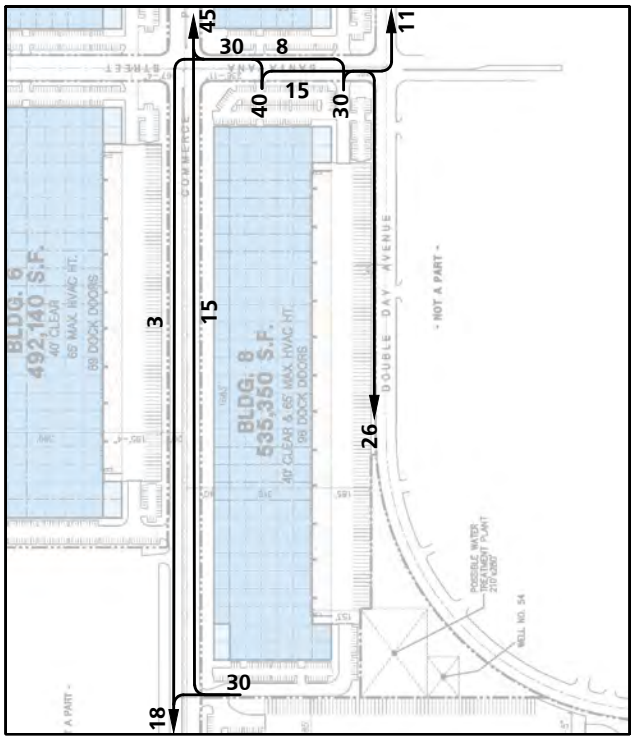
N

10 = *Percent To/From Project*

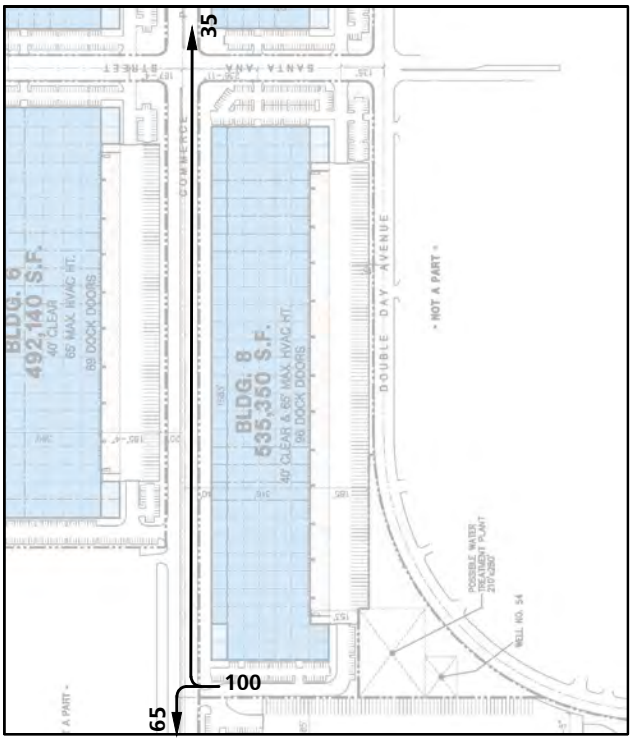
= *Outbound*

= *Inbound*

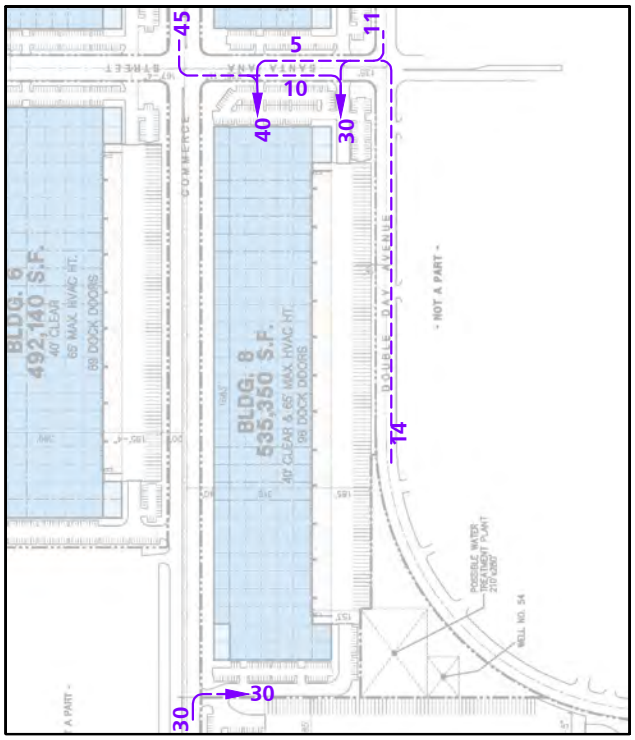
Cars



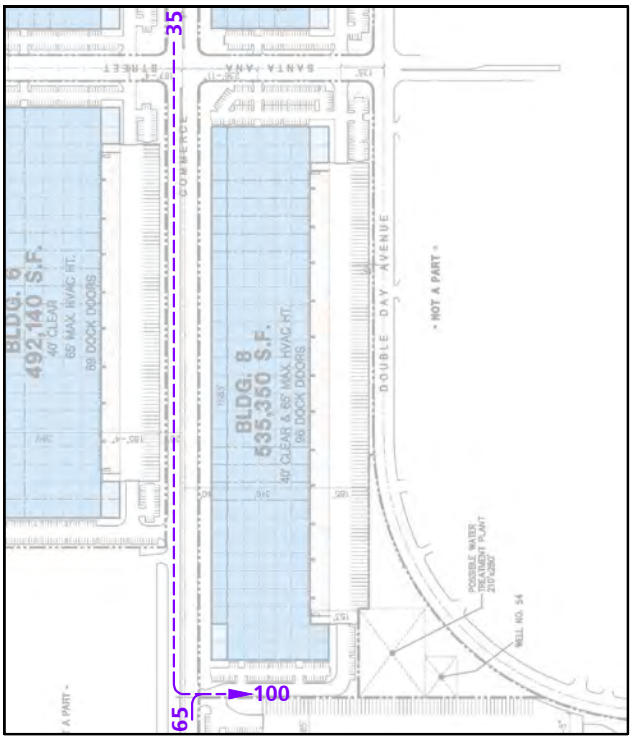
Trucks



Cars



Trucks



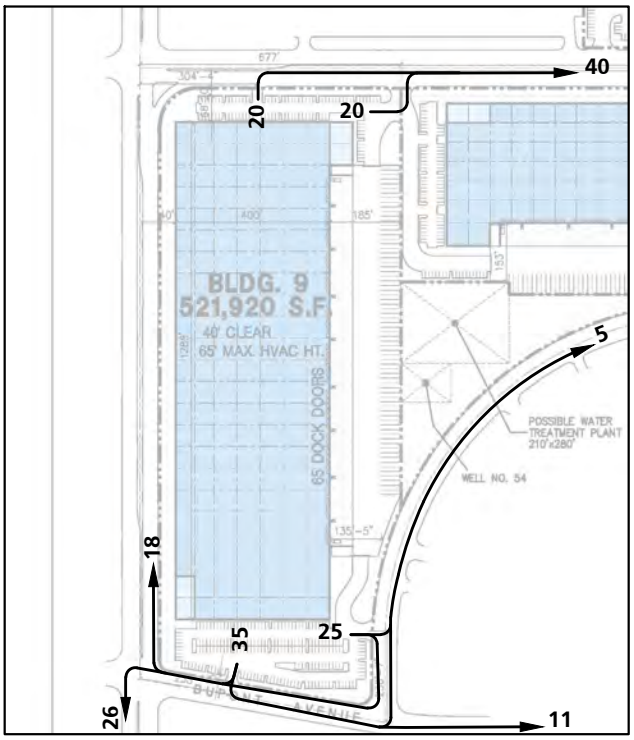
N

10 = *Percent To/From Project*

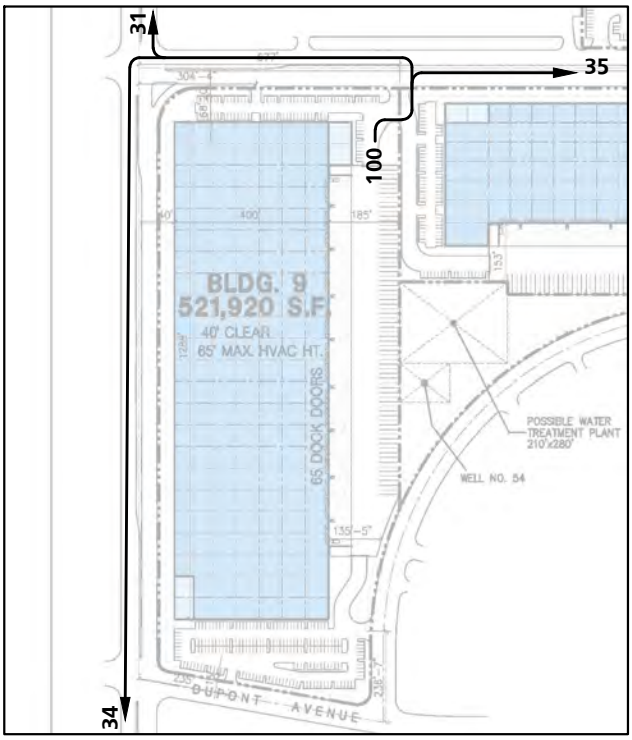
= *Outbound*

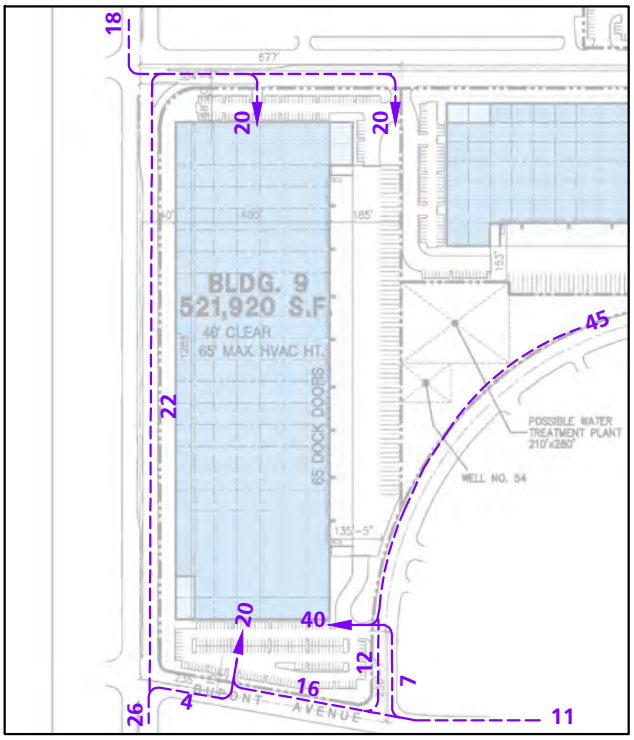
= *Inbound*

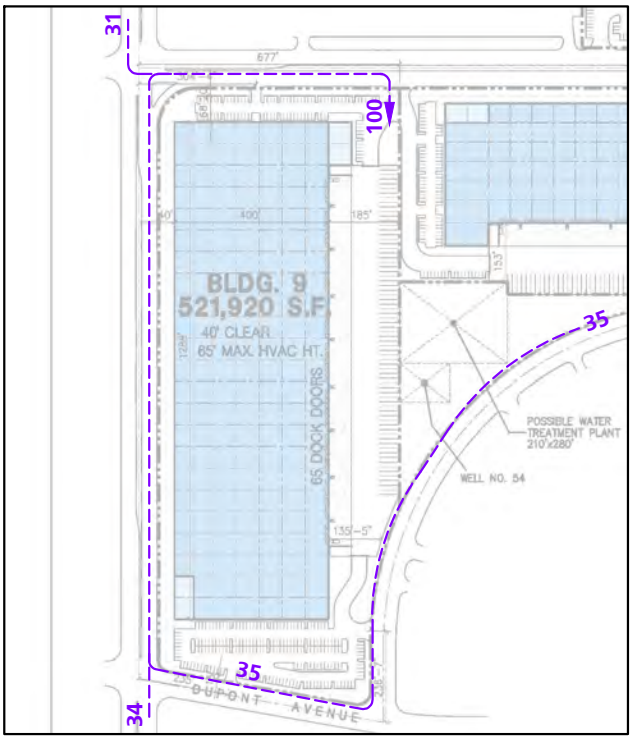
Cars



Trucks







N

10 = *Percent To/From Project*

= *Outbound*

= *Inbound*

This Page Intentionally Left Blank

APPENDIX 4.3:

POST PROCESSING WORKSHEETS

This Page Intentionally Left Blank

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Haven Av. & Inland Empire Bl.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	375	483	108	29%	331	432	102	31%
	Through	1,784	1,876	93	5%	1,843	2,390	548	30%
	Right	332	295	-37	-11%	427	581	155	36%
	NB Total	2,490	2,654	164	7%	2,600	3,403	804	31%
SOUTH BOUND	Left	41	55	14	34%	39	44	5	13%
	Through	1,464	1,808	344	23%	1,681	1,673	-8	0%
	Right	81	155	75	93%	66	70	5	7%
	SB Total	1,586	2,018	433	27%	1,786	1,787	2	0%
EAST BOUND	Left	72	112	40	56%	189	223	34	18%
	Through	99	130	32	32%	335	414	80	24%
	Right	266	326	60	23%	374	413	40	11%
	EB Total	437	568	132	30%	897	1,050	153	17%
WEST BOUND	Left	119	116	-3	-2%	336	325	-11	-3%
	Through	93	142	50	54%	226	234	9	4%
	Right	17	21	4	24%	39	40	1	3%
	WB Total	228	279	51	22%	601	599	-2	0%
TOTAL ENTERING VOLUME		4,740	5,519	779	16%	5,883	6,839	957	16%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	2,018	1,787			
North Leg	Outbound	2,009	2,653			
North Leg	**TOTAL**	**4,027**	**4,440**	**8%**	**9%**	**50,041**
South Leg	Inbound	2,654	3,403			
South Leg	Outbound	2,250	2,411			
South Leg	**TOTAL**	**4,904**	**5,814**	**9%**	**11%**	**54,006**
East Leg	Inbound	279	599			
East Leg	Outbound	480	1,039			
East Leg	**TOTAL**	**759**	**1,638**	**6%**	**12%**	**13,710**
West Leg	Inbound	568	1,050			
West Leg	Outbound	780	736			
West Leg	**TOTAL**	**1,348**	**1,786**	**6%**	**9%**	**20,799**
OVERALL TOTAL		***11,038***	***13,678***	**8%**	***10%***	***138,555***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[01 Haven Av. & Inland Empire Bl..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Haven Av. & I-10 WB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,905	2,046	141	7%	2,281	3,042	761	33%
	Right	432	430	-2	0%	870	919	50	6%
	NB Total	2,337	2,476	140	6%	3,151	3,961	811	26%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,334	1,751	418	31%	1,703	1,702	-1	0%
	Right	548	590	42	8%	714	727	14	2%
	SB Total	1,882	2,341	460	24%	2,416	2,429	13	1%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	486	859	374	77%	219	268	49	22%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	585	594	9	2%	319	392	74	23%
	WB Total	1,071	1,453	383	36%	538	660	123	23%
TOTAL ENTERING VOLUME		5,289	6,270	981.5	19%	6,104	7,050	946	15%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	2,341	2,429			
North Leg	Outbound	2,640	3,434			
North Leg	**TOTAL**	**4,981**	**5,863**	**9%**	**11%**	**54,006**
South Leg	Inbound	2,476	3,961			
South Leg	Outbound	2,610	1,970			
South Leg	**TOTAL**	**5,086**	**5,931**	**10%**	**11%**	**53,256**
East Leg	Inbound	1,453	660			
East Leg	Outbound	430	919			
East Leg	**TOTAL**	**1,883**	**1,579**	**12%**	**10%**	**16,180**
West Leg	Inbound	0	0			
West Leg	Outbound	590	727			
West Leg	**TOTAL**	**590**	**727**	**12%**	**14%**	**5,063**
OVERALL TOTAL		***12,540***	***14,100***	**10%**	***11%***	***128,504***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[02 Haven Av. & I-10 WB Ramps.xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Haven Av. & I-10 EB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,446	1,657	212	15%	2,622	3,144	523	20%
	Right	343	430	88	26%	712	750	38	5%
	NB Total	1,788	2,087	299	17%	3,334	3,894	561	17%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,369	2,174	806	59%	1,571	1,714	144	9%
	Right	451	450	-1	0%	351	350	-1	0%
	SB Total	1,819	2,624	805	44%	1,922	2,064	143	7%
EAST BOUND	Left	891	843	-48	-5%	529	826	297	56%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	531	696	165	31%	243	626	384	158%
	EB Total	1,422	1,539	117	8%	772	1,452	681	88%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		5,029	6,250	1221	24%	6,027	7,410	1384	23%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	2,624	2,064			
North Leg	Outbound	2,500	3,970			
North Leg	**TOTAL**	**5,124**	**6,034**	**10%**	**11%**	**53,256**
South Leg	Inbound	2,087	3,894			
South Leg	Outbound	2,870	2,340			
South Leg	**TOTAL**	**4,957**	**6,234**	**8%**	**10%**	**60,087**
East Leg	Inbound	0	0			
East Leg	Outbound	430	750			
East Leg	**TOTAL**	**430**	**750**	**8%**	**15%**	**5,170**
West Leg	Inbound	1,539	1,452			
West Leg	Outbound	450	350			
West Leg	**TOTAL**	**1,989**	**1,802**	**14%**	**12%**	**14,705**
OVERALL TOTAL		***12,500***	***14,820***	**9%**	***11%***	***133,219***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[03 Haven Av. & I-10 EB Ramps.xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Haven Av. & E. Guasti Rd.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	157	149	-8	-5%	63	60	-3	-5%
	Through	1,575	1,803	228	14%	2,728	3,156	429	16%
	Right	100	94	-6	-6%	105	101	-4	-4%
	NB Total	1,832	2,046	215	12%	2,896	3,317	422	15%
SOUTH BOUND	Left	202	216	15	7%	162	171	9	6%
	Through	1,427	2,378	952	67%	1,541	2,057	516	33%
	Right	272	291	20	7%	110	115	5	5%
	SB Total	1,900	2,885	986	52%	1,813	2,343	530	29%
EAST BOUND	Left	82	77	-5	-6%	383	383	0	0%
	Through	26	20	-6	-23%	45	38	-7	-16%
	Right	35	42	8	22%	208	219	11	5%
	EB Total	143	139	-4	-2%	636	640	4	1%
WEST BOUND	Left	57	75	18	32%	80	84	4	5%
	Through	37	31	-6	-16%	19	15	-4	-21%
	Right	131	134	3	2%	223	221	-2	-1%
	WB Total	225	240	15	7%	322	320	-2	-1%
TOTAL ENTERING VOLUME		4,099	5,310	1211.5	30%	5,667	6,620	954	17%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	2,885	2,343			
North Leg	Outbound	2,014	3,760			
North Leg	**TOTAL**	**4,899**	**6,103**	**9%**	**11%**	**54,917**
South Leg	Inbound	2,046	3,317			
South Leg	Outbound	2,495	2,360			
South Leg	**TOTAL**	**4,541**	**5,677**	**8%**	**10%**	**55,407**
East Leg	Inbound	240	320			
East Leg	Outbound	330	310			
East Leg	**TOTAL**	**570**	**630**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	139	640			
West Leg	Outbound	471	190			
West Leg	**TOTAL**	**610**	**830**	**125%**	**169%**	**490**
OVERALL TOTAL		***10,620***	***13,240***	**10%**	***12%***	***110,814***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[04 Haven Av. & E. Guasti Rd..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Haven Av. & E. Airport Dr.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	404	476	72	18%	488	626	139	28%
	Through	1,341	1,579	238	18%	2,123	2,315	192	9%
	Right	203	207	4	2%	18	18	1	3%
	NB Total	1,948	2,262	314	16%	2,628	2,959	331	13%
SOUTH BOUND	Left	168	240	73	43%	183	296	114	62%
	Through	1,124	1,722	599	53%	1,405	1,736	332	24%
	Right	124	205	81	65%	172	347	176	102%
	SB Total	1,415	2,167	752	53%	1,759	2,379	621	35%
EAST BOUND	Left	95	239	145	153%	288	385	97	34%
	Through	147	322	175	119%	456	576	121	26%
	Right	218	509	292	134%	599	575	-24	-4%
	EB Total	459	1,070	611	133%	1,342	1,536	194	14%
WEST BOUND	Left	55	79	24	44%	25	19	-6	-24%
	Through	161	249	88	55%	579	707	128	22%
	Right	170	263	93	55%	473	490	18	4%
	WB Total	386	591	205	53%	1,077	1,216	140	13%
TOTAL ENTERING VOLUME		4,208	6,090	1882	45%	6,805	8,090	1285	19%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	2,167	2,379			
North Leg	Outbound	2,081	3,190			
North Leg	**TOTAL**	**4,248**	**5,569**	**7%**	**10%**	**57,241**
South Leg	Inbound	2,262	2,959			
South Leg	Outbound	2,310	2,330			
South Leg	**TOTAL**	**4,572**	**5,289**	**7%**	**8%**	**65,893**
East Leg	Inbound	591	1,216			
East Leg	Outbound	769	890			
East Leg	**TOTAL**	**1,360**	**2,106**	**8%**	**12%**	**16,993**
West Leg	Inbound	1,070	1,536			
West Leg	Outbound	930	1,680			
West Leg	**TOTAL**	**2,000**	**3,216**	**7%**	**11%**	**29,206**
OVERALL TOTAL		***12,180***	***16,180***	**7%**	***10%***	***169,333***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[05 Haven Av. & E. Airport Dr..xls]Output (3)

Project: California Logistics Center
Scenario: Horizon Year (2040)

Job #: 14274
Analyst: RV
Date: 1/3/22

LOCATION: Haven Av. & Jurupa Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	96	133	37	39%	66	119	53	80%
	Through	1,555	1,648	94	6%	1,959	2,112	153	8%
	Right	194	189	-5	-3%	308	561	254	82%
	NB Total	1,845	1,970	126	7%	2,333	2,792	460	20%
SOUTH BOUND	Left	77	110	33	43%	202	282	80	40%
	Through	974	1,417	443	45%	1,511	1,615	105	7%
	Right	424	860	437	103%	328	452	125	38%
	SB Total	1,475	2,387	913	62%	2,040	2,349	309	15%
EAST BOUND	Left	330	547	218	66%	452	612	160	35%
	Through	184	280	97	53%	328	751	423	129%
	Right	112	173	62	55%	65	114	49	75%
	EB Total	625	1,000	376	60%	845	1,477	632	75%
WEST BOUND	Left	239	240	2	1%	245	316	71	29%
	Through	284	398	115	40%	266	442	177	66%
	Right	69	74	5	7%	205	204	-1	0%
	WB Total	591	712	121	20%	716	962	247	34%
TOTAL ENTERING VOLUME		4,535	6,069	1534.5	34%	5,933	7,580	1647	28%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	2,387	2,349			
North Leg	Outbound	2,269	2,928			
North Leg	**TOTAL**	**4,656**	**5,277**	**7%**	**8%**	**65,810**
South Leg	Inbound	1,970	2,792			
South Leg	Outbound	1,830	2,045			
South Leg	**TOTAL**	**3,800**	**4,837**	**7%**	**9%**	**53,757**
East Leg	Inbound	712	962			
East Leg	Outbound	579	1,594			
East Leg	**TOTAL**	**1,291**	**2,556**	**6%**	**12%**	**20,728**
West Leg	Inbound	1,000	1,477			
West Leg	Outbound	1,391	1,013			
West Leg	**TOTAL**	**2,391**	**2,490**	**7%**	**7%**	**36,042**
OVERALL TOTAL		***12,138***	***15,160***	**7%**	***9%***	***176,337***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[09 Haven Av. & Jurupa Av..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Haven Av. & Mission Bl.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	97	144	48	49%	101	225	125	124%
	Through	1,550	1,685	136	9%	1,436	1,854	418	29%
	Right	14	33	20	144%	57	105	48	84%
	NB Total	1,660	1,862	203	12%	1,594	2,184	591	37%
SOUTH BOUND	Left	138	331	193	140%	302	318	16	5%
	Through	1,242	1,544	302	24%	1,259	1,435	177	14%
	Right	195	285	90	46%	130	167	37	28%
	SB Total	1,575	2,160	585	37%	1,691	1,920	230	14%
EAST BOUND	Left	202	164	-38	-19%	519	568	50	10%
	Through	245	447	202	82%	655	1,020	366	56%
	Right	118	111	-7	-6%	109	183	75	69%
	EB Total	564	722	158	28%	1,282	1,771	490	38%
WEST BOUND	Left	54	68	14	26%	37	64	28	75%
	Through	586	863	277	47%	449	890	442	98%
	Right	590	635	45	8%	422	482	61	14%
	WB Total	1,230	1,566	336	27%	907	1,436	530	58%
TOTAL ENTERING VOLUME		5,029	6,310	1281.5	25%	5,472	7,311	1839	34%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	2,160	1,920			
North Leg	Outbound	2,484	2,904			
North Leg	**TOTAL**	**4,644**	**4,824**	**8%**	**9%**	**55,446**
South Leg	Inbound	1,862	2,184			
South Leg	Outbound	1,723	1,682			
South Leg	**TOTAL**	**3,585**	**3,866**	**8%**	**9%**	**44,119**
East Leg	Inbound	1,566	1,436			
East Leg	Outbound	811	1,443			
East Leg	**TOTAL**	**2,377**	**2,879**	**7%**	**9%**	**31,955**
West Leg	Inbound	722	1,771			
West Leg	Outbound	1,292	1,282			
West Leg	**TOTAL**	**2,014**	**3,053**	**8%**	**12%**	**25,474**
OVERALL TOTAL		***12,620***	***14,622***	**8%**	***9%***	***156,994***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[10 Haven Av. & Mission Bl..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Haven Av. & SR-60 WB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	300	292	-8	-3%	142	174	32	23%
	Through	1,454	1,707	254	17%	800	1,205	405	51%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	1,754	1,999	246	14%	942	1,379	437	46%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	760	1,100	341	45%	1,199	1,524	325	27%
	Right	518	560	43	8%	457	417	-40	-9%
	SB Total	1,277	1,660	383	30%	1,656	1,941	285	17%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	134	150	16	12%	276	396	121	44%
	Through	9	8	-1	-11%	9	9	1	6%
	Right	461	463	3	1%	509	645	137	27%
	WB Total	604	621	18	3%	793	1,050	258	32%
TOTAL ENTERING VOLUME		3,634	4,280	646	18%	3,391	4,370	980	29%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,660	1,941			
North Leg	Outbound	2,170	1,850			
North Leg	**TOTAL**	**3,830**	**3,791**	**9%**	**9%**	**43,782**
South Leg	Inbound	1,999	1,379			
South Leg	Outbound	1,250	1,920			
South Leg	**TOTAL**	**3,249**	**3,299**	**8%**	**8%**	**38,850**
East Leg	Inbound	621	1,050			
East Leg	Outbound	0	0			
East Leg	**TOTAL**	**621**	**1,050**	**6%**	**10%**	**10,902**
West Leg	Inbound	0	0			
West Leg	Outbound	860	600			
West Leg	**TOTAL**	**860**	**600**	**18%**	**13%**	**4,700**
OVERALL TOTAL		***8,560***	***8,740***	**9%**	***9%***	***98,234***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[11 Haven Av. & SR-60 WB Ramps.xls]Output (3)

Project: California Logistics Center
Scenario: Horizon Year (2040)

Job #: 14274
Analyst: RV
Date: 1/3/22

LOCATION: Haven Av. & SR-60 EB Ramps
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	948	1,285	338	36%	602	1,072	470	78%
	Right	266	354	89	33%	195	230	35	18%
	NB Total	1,213	1,639	426	35%	797	1,302	505	63%
SOUTH BOUND	Left	338	413	76	22%	609	615	6	1%
	Through	556	839	283	51%	866	1,302	437	50%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	894	1,252	359	40%	1,475	1,917	443	30%
EAST BOUND	Left	806	720	-86	-11%	340	308	-32	-9%
	Through	7	6	-1	-8%	7	4	-3	-43%
	Right	198	214	17	8%	154	138	-16	-10%
	EB Total	1,010	940	-70	-7%	501	450	-51	-10%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
TOTAL ENTERING VOLUME		3,117	3,831	714.5	23%	2,773	3,669	897	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,252	1,917			
North Leg	Outbound	2,005	1,380			
North Leg	**TOTAL**	**3,257**	**3,297**	**8%**	**8%**	**38,850**
South Leg	Inbound	1,639	1,302			
South Leg	Outbound	1,053	1,440			
South Leg	**TOTAL**	**2,692**	**2,742**	**8%**	**8%**	**35,783**
East Leg	Inbound	0	0			
East Leg	Outbound	773	849			
East Leg	**TOTAL**	**773**	**849**	**8%**	**9%**	**9,402**
West Leg	Inbound	940	450			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**940**	**450**	**24%**	**11%**	**3,928**
OVERALL TOTAL		***7,662***	***7,338***	**9%**	***8%***	***87,964***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[12 Haven Av. & SR-60 EB Ramps.xls]Output (3)

Project: California Logistics Center
Scenario: Horizon Year (2040)

Job #: 14274
Analyst: RV
Date: 1/3/22

LOCATION: Carnegie Av. & E. Airport Dr.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	16	64	48	300%	37	185	148	400%
	Through	10	37	27	270%	17	220	203	1194%
	Right	0	0	0	#DIV/0!	18	146	128	711%
	NB Total	26	101	75	288%	72	551	479	665%
SOUTH BOUND	Left	19	62	43	226%	49	68	19	39%
	Through	26	38	12	46%	29	238	209	721%
	Right	161	173	13	8%	457	393	-64	-14%
	SB Total	206	273	68	33%	535	699	164	31%
EAST BOUND	Left	149	158	10	6%	248	438	191	77%
	Through	102	348	247	243%	289	320	31	11%
	Right	5	7	3	56%	2	13	11	550%
	EB Total	255	513	259	102%	539	771	233	43%
WEST BOUND	Left	2	5	3	150%	1	11	10	1000%
	Through	187	333	147	79%	385	440	55	14%
	Right	27	45	19	70%	78	229	152	195%
	WB Total	215	383	168	78%	464	680	217	47%
TOTAL ENTERING VOLUME		701	1,270	569	81%	1,609	2,701	1092	68%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	273	699			
North Leg	Outbound	240	887			
North Leg	**TOTAL**	**513**	**1,586**	**4%**	**12%**	**13,604**
South Leg	Inbound	101	551			
South Leg	Outbound	50	262			
South Leg	**TOTAL**	**151**	**813**	**4%**	**21%**	**3,928**
East Leg	Inbound	383	680			
East Leg	Outbound	410	534			
East Leg	**TOTAL**	**793**	**1,214**	**11%**	**17%**	**7,328**
West Leg	Inbound	513	771			
West Leg	Outbound	570	1,018			
West Leg	**TOTAL**	**1,083**	**1,789**	**6%**	**11%**	**16,993**
OVERALL TOTAL		***2,540***	***5,402***	**6%**	***13%***	***41,853***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[22 Carnegie Av. & E. Airport Dr..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Carnegie Av. & Driveway 15/Santa Ana St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	21	100	79	376%	54	532	478	885%
	Right	4	9	5	125%	5	7	2	40%
	NB Total	25	109	84	336%	59	539	480	814%
SOUTH BOUND	Left	17	12	-5	-27%	2	3	1	50%
	Through	16	39	23	144%	30	258	228	760%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	33	51	19	57%	32	261	229	716%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
WEST BOUND	Left	2	4	2	100%	3	2	-1	-20%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	5	6	1	20%	18	18	0	0%
	WB Total	7	10	3	43%	21	20	-1	-2%
TOTAL ENTERING VOLUME		65	170	105.5	164%	112	820	709	635%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	51	261			
North Leg	Outbound	106	550			
North Leg	**TOTAL**	**157**	**811**	**5%**	**24%**	**3,335**
South Leg	Inbound	109	539			
South Leg	Outbound	43	260			
South Leg	**TOTAL**	**152**	**799**	**5%**	**24%**	**3,335**
East Leg	Inbound	10	20			
East Leg	Outbound	21	10			
East Leg	**TOTAL**	**31**	**30**	**#DIV/0!**	**#DIV/0!**	**-**
West Leg	Inbound	0	0			
West Leg	Outbound	0	0			
West Leg	**TOTAL**	**0**	**0**	**#DIV/0!**	**#DIV/0!**	**-**
OVERALL TOTAL		***340***	***1,640***	**5%**	***25%***	***6,671***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[26 Carnegie Av. & Driveway 15Santa Ana St..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Carnegie Av. & Jurupa Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	8	8	0	0%	6	9	4	64%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	3	2	-1	-20%	2	1	-1	-50%
	NB Total	11	10	-1	-5%	8	10	3	33%
SOUTH BOUND	Left	6	6	1	9%	13	36	24	188%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	21	34	14	66%	34	254	220	647%
	SB Total	26	40	14	54%	47	290	244	524%
EAST BOUND	Left	55	117	63	115%	81	540	459	567%
	Through	571	622	52	9%	819	1,077	259	32%
	Right	3	4	1	33%	18	19	2	9%
	EB Total	628	743	115	18%	917	1,636	719	78%
WEST BOUND	Left	6	6	0	0%	4	1	-3	-71%
	Through	663	767	105	16%	599	621	23	4%
	Right	28	43	15	54%	16	32	16	100%
	WB Total	697	816	120	17%	618	654	36	6%
TOTAL ENTERING VOLUME		1,361	1,609	248	18%	1,589	2,590	1001	63%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	40	290			
North Leg	Outbound	160	572			
North Leg	**TOTAL**	**200**	**862**	**6%**	**26%**	**3,335**
South Leg	Inbound	10	10			
South Leg	Outbound	10	20			
South Leg	**TOTAL**	**20**	**30**	**#DIV/0!**	**#DIV/0!**	**-**
East Leg	Inbound	816	654			
East Leg	Outbound	630	1,114			
East Leg	**TOTAL**	**1,446**	**1,768**	**8%**	**10%**	**17,392**
West Leg	Inbound	743	1,636			
West Leg	Outbound	809	884			
West Leg	**TOTAL**	**1,552**	**2,520**	**7%**	**12%**	**20,728**
OVERALL TOTAL		***3,218***	***5,180***	**8%**	***12%***	***41,455***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[31 Carnegie Av. & Jurupa Av..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Commerce Pkwy. & Santa Ana St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	3	3	0	0%
	Through	187	348	162	87%	348	523	175	50%
	Right	23	23	0	0%	11	18	8	71%
	NB Total	210	371	162	77%	362	544	183	50%
SOUTH BOUND	Left	47	99	53	113%	44	84	40	91%
	Through	66	314	249	379%	272	434	162	60%
	Right	3	6	3	100%	15	15	0	0%
	SB Total	115	419	304	264%	331	533	202	61%
EAST BOUND	Left	0	0	0	#DIV/0!	2	3	1	50%
	Through	20	18	-2	-8%	5	8	3	60%
	Right	1	2	1	100%	0	0	0	#DIV/0!
	EB Total	21	20	-1	-2%	7	11	4	57%
WEST BOUND	Left	0	0	0	#DIV/0!	20	26	6	30%
	Through	4	6	2	50%	3	2	-1	-20%
	Right	30	85	55	183%	131	175	44	34%
	WB Total	34	91	57	168%	154	203	50	32%
TOTAL ENTERING VOLUME		379	901	522	138%	853	1,291	438	51%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	419	533			
North Leg	Outbound	433	701			
North Leg	**TOTAL**	**852**	**1,234**	**12%**	**17%**	**7,328**
South Leg	Inbound	371	544			
South Leg	Outbound	316	460			
South Leg	**TOTAL**	**687**	**1,004**	**11%**	**16%**	**6,248**
East Leg	Inbound	91	203			
East Leg	Outbound	140	110			
East Leg	**TOTAL**	**231**	**313**	**8%**	**11%**	**2,843**
West Leg	Inbound	20	11			
West Leg	Outbound	12	20			
West Leg	**TOTAL**	**32**	**31**	**#DIV/0!**	**#DIV/0!**	**-**
OVERALL TOTAL		***1,802***	***2,582***	**11%**	***16%***	***16,419***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[37 Commerce Pkwy. & Santa Ana St..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Commerce Pkwy. & Jurupa Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	13	8	-5	-38%	14	9	-5	-36%
	Through	5	5	1	11%	41	42	1	2%
	Right	31	41	11	34%	55	59	5	8%
	NB Total	48	54	6	13%	110	110	1	0%
SOUTH BOUND	Left	39	223	184	472%	239	407	169	71%
	Through	4	11	7	175%	17	18	2	9%
	Right	18	47	29	161%	35	38	3	9%
	SB Total	61	281	220	361%	290	463	173	60%
EAST BOUND	Left	72	78	6	8%	88	113	26	29%
	Through	494	597	103	21%	733	1,002	269	37%
	Right	13	7	-6	-44%	13	11	-2	-12%
	EB Total	579	682	104	18%	833	1,126	293	35%
WEST BOUND	Left	18	22	4	22%	11	12	1	9%
	Through	666	755	90	13%	569	610	41	7%
	Right	139	307	169	122%	229	368	140	61%
	WB Total	822	1,084	262	32%	809	990	182	22%
TOTAL ENTERING VOLUME		1,510	2,101	591.5	39%	2,041	2,689	648	32%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	281	463			
North Leg	Outbound	390	523			
North Leg	**TOTAL**	**671**	**986**	**11%**	**16%**	**6,248**
South Leg	Inbound	54	110			
South Leg	Outbound	40	41			
South Leg	**TOTAL**	**94**	**151**	**#DIV/0!**	**#DIV/0!**	**-**
East Leg	Inbound	1,084	990			
East Leg	Outbound	861	1,468			
East Leg	**TOTAL**	**1,945**	**2,458**	**9%**	**11%**	**22,414**
West Leg	Inbound	682	1,126			
West Leg	Outbound	810	657			
West Leg	**TOTAL**	**1,492**	**1,783**	**8%**	**10%**	**17,901**
OVERALL TOTAL		***4,202***	***5,378***	**9%**	***12%***	***46,563***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[41 Commerce Pkwy. & Jurupa Av..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Dupont Av. & Santa Ana St.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	22	33	12	53%	38	46	8	21%
	Through	61	52	-9	-15%	80	81	1	1%
	Right	7	4	-3	-43%	24	33	9	38%
	NB Total	90	89	-1	-1%	142	160	18	13%
SOUTH BOUND	Left	3	3	0	0%	10	15	5	50%
	Through	26	32	7	25%	44	50	6	14%
	Right	8	16	9	113%	12	15	3	25%
	SB Total	36	51	15	42%	66	80	14	21%
EAST BOUND	Left	7	14	7	100%	10	14	4	40%
	Through	30	43	13	43%	34	62	29	85%
	Right	6	13	7	117%	10	14	4	40%
	EB Total	43	70	27	63%	54	90	37	68%
WEST BOUND	Left	10	15	5	50%	15	16	1	7%
	Through	20	51	31	155%	90	108	18	20%
	Right	10	14	4	40%	26	26	0	0%
	WB Total	40	80	40	100%	131	150	19	15%
TOTAL ENTERING VOLUME		209	290	81.5	39%	393	480	88	22%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	51	80			
North Leg	Outbound	80	121			
North Leg	**TOTAL**	**131**	**201**	**19%**	**29%**	**690**
South Leg	Inbound	89	160			
South Leg	Outbound	60	80			
South Leg	**TOTAL**	**149**	**240**	**9%**	**14%**	**1,720**
East Leg	Inbound	80	150			
East Leg	Outbound	50	110			
East Leg	**TOTAL**	**130**	**260**	**8%**	**15%**	**1,731**
West Leg	Inbound	70	90			
West Leg	Outbound	100	169			
West Leg	**TOTAL**	**170**	**259**	**8%**	**12%**	**2,165**
OVERALL TOTAL		***580***	***960***	**9%**	***15%***	***6,307***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[47 Dupont Av. & Santa Ana St..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Dupont Av. & Jurupa Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	22	21	-1	-2%	42	45	3	7%
	Through	30	29	-1	-3%	27	27	1	2%
	Right	82	81	-1	-1%	110	109	-1	0%
	NB Total	133	131	-2	-2%	178	181	3	2%
SOUTH BOUND	Left	7	9	2	29%	47	66	19	40%
	Through	5	5	0	0%	25	29	4	16%
	Right	12	15	4	30%	37	55	19	51%
	SB Total	24	29	6	23%	109	150	42	38%
EAST BOUND	Left	52	75	23	44%	46	63	18	38%
	Through	465	700	236	51%	931	1,281	351	38%
	Right	17	20	3	18%	13	14	2	12%
	EB Total	534	795	262	49%	989	1,358	370	37%
WEST BOUND	Left	91	85	-6	-6%	64	58	-6	-9%
	Through	775	943	169	22%	718	854	136	19%
	Right	65	76	11	17%	54	61	7	13%
	WB Total	930	1,104	174	19%	836	973	137	16%
TOTAL ENTERING VOLUME		1,620	2,059	439	27%	2,111	2,662	551	26%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	29	150			
North Leg	Outbound	180	151			
North Leg	**TOTAL**	**209**	**301**	**8%**	**12%**	**2,498**
South Leg	Inbound	131	181			
South Leg	Outbound	110	101			
South Leg	**TOTAL**	**241**	**282**	**#DIV/0!**	**#DIV/0!**	**-**
East Leg	Inbound	1,104	973			
East Leg	Outbound	790	1,456			
East Leg	**TOTAL**	**1,894**	**2,429**	**8%**	**10%**	**23,867**
West Leg	Inbound	795	1,358			
West Leg	Outbound	979	954			
West Leg	**TOTAL**	**1,774**	**2,312**	**7%**	**9%**	**24,966**
OVERALL TOTAL		***4,118***	***5,324***	**8%**	***10%***	***51,330***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[50 Dupont Av. & Jurupa Av..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: Milliken Av. & E. Airport Dr.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	21	27	6	29%	33	57	24	73%
	Through	594	592	-2	0%	943	1,198	255	27%
	Right	70	68	-2	-3%	60	77	17	28%
	NB Total	685	687	2	0%	1,036	1,332	296	29%
SOUTH BOUND	Left	331	352	22	7%	139	179	40	29%
	Through	792	1,272	481	61%	859	875	17	2%
	Right	130	180	50	38%	111	194	84	76%
	SB Total	1,252	1,804	552	44%	1,108	1,248	140	13%
EAST BOUND	Left	66	81	15	23%	224	478	255	114%
	Through	101	121	20	20%	231	496	265	115%
	Right	21	37	17	80%	33	56	23	70%
	EB Total	188	239	52	27%	488	1,030	543	111%
WEST BOUND	Left	76	105	29	38%	86	61	-25	-29%
	Through	130	155	25	19%	254	310	56	22%
	Right	202	190	-12	-6%	323	288	-35	-11%
	WB Total	408	450	42	10%	663	659	-4	-1%
TOTAL ENTERING VOLUME		2,533	3,180	647.5	26%	3,295	4,269	975	30%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,804	1,248			
North Leg	Outbound	863	1,964			
North Leg	**TOTAL**	**2,667**	**3,212**	**5%**	**6%**	**51,491**
South Leg	Inbound	687	1,332			
South Leg	Outbound	1,414	992			
South Leg	**TOTAL**	**2,101**	**2,324**	**7%**	**8%**	**29,319**
East Leg	Inbound	450	659			
East Leg	Outbound	541	752			
East Leg	**TOTAL**	**991**	**1,411**	**5%**	**7%**	**19,377**
West Leg	Inbound	239	1,030			
West Leg	Outbound	362	561			
West Leg	**TOTAL**	**601**	**1,591**	**5%**	**12%**	**13,140**
OVERALL TOTAL		***6,360***	***8,538***	**6%**	***8%***	***113,327***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[51 Milliken Av. & E. Airport Dr..xls]Output (3)

Project: California Logistics Center
Scenario: Horizon Year (2040)

Job #: 14274
Analyst: RV
Date: 1/3/22

LOCATION: Milliken Av. & Jurupa Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	419	390	-29	-7%	171	206	36	21%
	Through	742	761	19	3%	752	1,029	278	37%
	Right	104	194	91	87%	352	636	285	81%
	NB Total	1,265	1,345	81	6%	1,274	1,871	598	47%
SOUTH BOUND	Left	128	268	141	110%	241	287	46	19%
	Through	370	801	432	117%	907	906	-1	0%
	Right	62	64	3	4%	59	47	-12	-20%
	SB Total	559	1,133	575	103%	1,206	1,240	34	3%
EAST BOUND	Left	203	145	-58	-29%	122	131	9	7%
	Through	667	870	204	31%	754	1,067	314	42%
	Right	281	378	97	35%	221	262	41	19%
	EB Total	1,151	1,393	243	21%	1,097	1,460	364	33%
WEST BOUND	Left	100	294	195	195%	376	562	186	49%
	Through	478	678	201	42%	561	668	107	19%
	Right	68	106	39	57%	97	130	34	35%
	WB Total	645	1,078	434	67%	1,034	1,360	327	32%
TOTAL ENTERING VOLUME		3,618	4,949	1331	37%	4,610	5,931	1322	29%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,133	1,240			
North Leg	Outbound	1,012	1,290			
North Leg	**TOTAL**	**2,145**	**2,530**	**8%**	**9%**	**27,207**
South Leg	Inbound	1,345	1,871			
South Leg	Outbound	1,473	1,730			
South Leg	**TOTAL**	**2,818**	**3,601**	**8%**	**11%**	**34,107**
East Leg	Inbound	1,078	1,360			
East Leg	Outbound	1,332	1,990			
East Leg	**TOTAL**	**2,410**	**3,350**	**7%**	**9%**	**36,280**
West Leg	Inbound	1,393	1,460			
West Leg	Outbound	1,132	921			
West Leg	**TOTAL**	**2,525**	**2,381**	**11%**	**10%**	**23,867**
OVERALL TOTAL		***9,898***	***11,862***	**8%**	***10%***	***121,461***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[52 Milliken Av. & Jurupa Av..xls]Output (3)

Project: California Logistics Center
Scenario: Horizon Year (2040)

Job #: 14274
Analyst: RV
Date: 1/3/22

LOCATION: Milliken Av. & Mission Bl.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	296	630	334	113%	171	706	536	314%
	Through	1,185	1,038	-147	-12%	854	1,010	156	18%
	Right	14	77	63	450%	20	71	51	255%
	NB Total	1,495	1,745	250	17%	1,045	1,787	743	71%
SOUTH BOUND	Left	109	437	329	303%	242	314	72	30%
	Through	549	880	332	60%	1,246	1,232	-14	-1%
	Right	327	509	182	56%	390	591	202	52%
	SB Total	984	1,826	842	86%	1,877	2,137	260	14%
EAST BOUND	Left	202	461	260	129%	522	889	367	70%
	Through	2	29	27	1350%	1	5	4	400%
	Right	47	269	222	472%	81	313	233	289%
	EB Total	251	759	509	203%	604	1,207	604	100%
WEST BOUND	Left	19	49	30	158%	16	105	90	577%
	Through	16	39	24	152%	5	52	47	940%
	Right	216	222	6	3%	135	401	267	198%
	WB Total	251	310	60	24%	155	558	403	260%
TOTAL ENTERING VOLUME		2,980	4,640	1660	56%	3,680	5,689	2009	55%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,826	2,137			
North Leg	Outbound	1,721	2,300			
North Leg	**TOTAL**	**3,547**	**4,437**	**9%**	**11%**	**39,809**
South Leg	Inbound	1,745	1,787			
South Leg	Outbound	1,198	1,650			
South Leg	**TOTAL**	**2,943**	**3,437**	**9%**	**11%**	**32,054**
East Leg	Inbound	310	558			
East Leg	Outbound	543	390			
East Leg	**TOTAL**	**853**	**948**	**3%**	**3%**	**34,001**
West Leg	Inbound	759	1,207			
West Leg	Outbound	1,178	1,349			
West Leg	**TOTAL**	**1,937**	**2,556**	**5%**	**7%**	**37,625**
OVERALL TOTAL		***9,280***	***11,378***	**6%**	***8%***	***143,490***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[53 Milliken Av. & Mission Bl..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: I-15 SB Ramps & Jurupa Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	NB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
SOUTH BOUND	Left	477	393	-84	-18%	217	228	12	5%
	Through	3	4	1	33%	7	6	-1	-14%
	Right	900	1,163	263	29%	423	478	55	13%
	SB Total	1,380	1,560	181	13%	647	712	66	10%
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	607	827	221	36%	1,217	1,782	565	46%
	Right	159	333	174	109%	492	553	61	12%
	EB Total	766	1,160	395	52%	1,709	2,335	626	37%
WEST BOUND	Left	398	474	76	19%	422	432	10	2%
	Through	574	697	124	22%	617	882	266	43%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	WB Total	972	1,171	200	21%	1,039	1,314	276	27%
TOTAL ENTERING VOLUME		3,117	3,891	774.5	25%	3,394	4,361	967	28%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	1,560	712			
North Leg	Outbound	0	0			
North Leg	**TOTAL**	**1,560**	**712**	**16%**	**7%**	**10,015**
South Leg	Inbound	0	0			
South Leg	Outbound	811	991			
South Leg	**TOTAL**	**811**	**991**	**10%**	**12%**	**8,367**
East Leg	Inbound	1,171	1,314			
East Leg	Outbound	1,220	2,010			
East Leg	**TOTAL**	**2,391**	**3,324**	**8%**	**11%**	**31,437**
West Leg	Inbound	1,160	2,335			
West Leg	Outbound	1,860	1,360			
West Leg	**TOTAL**	**3,020**	**3,695**	**8%**	**10%**	**38,281**
OVERALL TOTAL		***7,782***	***8,722***	**9%**	***10%***	***88,101***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[54 I-15 SB Ramps & Jurupa Av..xls]Output (3)

Project:	California Logistics Center	Job #:	14274
Scenario:	Horizon Year (2040)	Analyst:	RV
		Date:	1/3/22

LOCATION: I-15 NB Ramps & Jurupa Av.
FORECAST YEAR: 2040

INDIVIDUAL TURN VOLUME GROWTH REVIEW

		AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
APPROACH	TURNING MOVEMENT	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	247	347	100	40%	100	192	93	93%
	Through	0	0	0	#DIV/0!	1	1	0	0%
	Right	521	513	-8	-1%	320	466	147	46%
	NB Total	768	860	93	12%	420	659	239	57%
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	SB Total	0	0	0	#DIV/0!	0	0	0	#DIV/0!
EAST BOUND	Left	356	433	78	22%	544	723	180	33%
	Through	756	807	51	7%	884	1,274	391	44%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	EB Total	1,112	1,240	129	12%	1,427	1,997	570	40%
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	719	813	94	13%	951	1,128	177	19%
	Right	350	317	-33	-9%	491	405	-86	-18%
	WB Total	1,069	1,130	61	6%	1,442	1,533	91	6%
TOTAL ENTERING VOLUME		2,948	3,230	282	10%	3,289	4,189	900	27%

FORECAST PEAK HOUR TO ADT COMPARISON

		VOLUMES		PERCENT OF ADT		
		AM	PM	AM	PM	ADT
North Leg	Inbound	0	0			
North Leg	Outbound	750	1,129			
North Leg	**TOTAL**	**750**	**1,129**	**9%**	**14%**	**8,274**
South Leg	Inbound	860	659			
South Leg	Outbound	0	0			
South Leg	**TOTAL**	**860**	**659**	**9%**	**7%**	**9,431**
East Leg	Inbound	1,130	1,533			
East Leg	Outbound	1,320	1,740			
East Leg	**TOTAL**	**2,450**	**3,273**	**9%**	**13%**	**25,946**
West Leg	Inbound	1,240	1,997			
West Leg	Outbound	1,160	1,320			
West Leg	**TOTAL**	**2,400**	**3,317**	**8%**	**11%**	**31,437**
OVERALL TOTAL		***6,460***	***8,378***	**9%**	***11%***	***75,088***

Z:\Shared\UcJobs_14100-14500_14200\14274\02_LOS\Post Processing\[55 I-15 NB Ramps & Jurupa Av..xls]Output (3)

This Page Intentionally Left Blank

APPENDIX 5.1:

E+P CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Volume Development - AM Peak Hour

1: Haven Av. & Inland Empire Bl.

	PHF:	0.923		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	376	1,791	332	41	1,494	81	72	99	270	119	93	17	4,782

2: Haven Av. & I-10 WB Ramps

	PHF:	0.922		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	1,913	491	0	1,368	548	0	0	0	534	0	585	5,438

3: Haven Av. & I-10 EB Ramps

	PHF:	0.939		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	1,513	360	0	1,450	451	891	0	647	0	0	0	5,310

4: Haven Av. & E. Guasti Rd.

	PHF:	0.978		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	157	1,659	100	202	1,624	272	82	26	35	57	37	131	4,380

5: Haven Av. & E. Airport Dr.

	PHF:	0.911		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	405	1,362	210	365	1,124	124	95	177	218	57	167	232	4,534

6: Haven Av. & Driveway 1

	PHF:									Count Date:		1/0/1900	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	1,976	6	0	1,398	0	0	0	0	0	0	2	3,382

7: Haven Av. & Driveway 2

	PHF:									Count Date:		1/0/1900	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	1,976	5	0	1,398	0	0	0	0	0	0	6	3,385

8: Haven Av. & La Salle St.

	PHF:	0.935		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	1,964	26	0	1,477	0	0	0	0	0	0	17	3,484

9: Haven Av. & Jurupa Av.

	PHF:	0.946		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	96	1,584	252	77	975	424	333	202	112	292	289	74	4,707

10: Haven Av. & Mission Bl.

	PHF:	0.940		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	97	1,637	14	138	1,295	195	202	245	118	54	586	590	5,169

Volume Development - AM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.950 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	300	1,541	0	0	760	571	0	0	0	134	9	461	3,774

12: Haven Av. & SR-60 EB Ramps

PHF: 0.950 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	948	266	338	556	0	893	7	198	0	0	0	3,204

13: Driveway 3 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	4	0	1	0	0	0	0	744	7	13	452	0	1,221

14: Driveway 4 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	8	0	0	0	0	732	14	0	465	0	1,219

15: Driveway 5 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	19	0	0	0	0	710	30	0	465	0	1,224

16: Driveway 6 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	1	0	1	1	0	1	1	22	3	4	15	1	50

17: Driveway 7 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	2	0	3	0	0	0	0	20	3	6	18	0	52

18: Driveway 8 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	0	1	0	7	3	21	0	0	17	14	63

19: Driveway 9 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	0	1	0	1	1	33	0	0	72	1	109

20: Driveway 10 & Jurupa Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	0	0	0	2	0	532	0	0	651	8	1,193

Volume Development - AM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	0	0	0	3	0	532	0	0	655	8	1,198

22: Carnegie Av. & E. Airport Dr.

PHF: 0.834 7:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	71	16	0	27	50	167	151	205	111	2	205	29	1,031

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	5	81	1	3	136	23	6	0	1	0	0	1	257

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	84	1	7	131	0	0	0	0	0	0	2	225

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	14	82	0	0	126	5	3	0	1	0	0	0	231

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.641 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	11	63	30	41	84	3	2	0	1	7	0	31	273

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	40	91	0	0	81	11	12	0	18	0	0	0	253

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	9	130	0	0	86	13	1	0	5	0	0	0	244

29: Carnegie Av. & La Salle St.

PHF: 0.917 8:00am Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	39	121	0	0	58	33	17	0	16	0	0	0	284

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	160	12	0	74	0	0	0	0	2	0	1	249

Volume Development - AM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.902 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	8	0	3	22	0	59	101	602	3	6	697	100	1,598

32: Driveway 19 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	2	0	0	0	0	2	6	55	10	0	34	5	114

33: Driveway 20 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	3	0	11	0	0	9	10	27	18	4	27	8	117

34: Commerce Pkwy. & Driveway 21

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	236	0	0	217	8	0	0	2	0	0	0	463

35: Commerce Pkwy. & Driveway 22

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	236	0	0	216	4	0	0	7	0	0	0	463

36: Commerce Pkwy. & Driveway 23

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	235	6	0	222	0	0	0	0	0	0	2	465

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.948 7:15am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	30	200	23	111	110	3	6	22	10	1	6	35	555

38: Commerce Pkwy. & Driveway 24

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	253	0	0	105	16	0	0	8	0	0	0	381

39: Commerce Pkwy. & Driveway 25

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	237	46	4	109	0	0	0	0	23	0	15	433

40: Commerce Pkwy. & Driveway 26

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	281	10	0	131	0	0	0	0	0	0	2	423

Volume Development - AM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.918 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	13	5	31	83	4	38	102	510	13	18	752	190	1,757

42: Driveway 27 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	3	0	2	1	0	1	6	129	19	3	38	2	204

43: Driveway 28 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	1	0	3	2	0	3	7	119	5	11	39	1	191

44: Double Day Av. & Driveway 29

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	2	39	0	0	28	1	2	0	1	0	0	0	73

45: Double Day Av. & Santa Ana St.

PHF: 0.944 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	12	8	2	8	5	16	24	41	58	7	23	9	213

46: Driveway 30 & Double Day Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	3	0	0	0	0	31	17	4	44	0	99

47: Dupont Av. & Santa Ana St.

PHF: 0.910 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	22	62	7	3	32	8	7	30	6	10	20	10	216

48: Dupont Av. & Double Day Av.

PHF: 0.845 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	44	104	3	1	21	4	1	1	31	0	0	0	209

49: Dupont Av. & Driveway 31

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	2	159	0	0	37	8	2	0	3	0	0	0	211

50: Dupont Av. & Jurupa Av.

PHF: 0.982 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	22	30	82	16	5	18	52	526	17	91	906	79	1,841

Volume Development - AM Peak Hour

51: Milliken Av. & E. Airport Dr.

PHF: 0.861 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	21	594	70	331	792	160	73	105	21	76	147	202	2,591

52: Milliken Av. & Jurupa Av.

PHF: 0.970 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	461	742	104	128	370	62	203	723	295	100	581	68	3,833

53: Milliken Av. & Mission Bl.

PHF: 0.895 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	296	1,208	14	116	557	327	202	2	47	19	16	235	3,037

54: I-15 SB Ramps & Jurupa Av.

PHF: 0.910 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	0	490	3	916	0	652	190	403	673	0	3,326

55: I-15 NB Ramps & Jurupa Av.

PHF: 0.939 7:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	319	0	521	0	0	0	377	764	0	0	757	350	3,086

Volume Development - PM Peak Hour

1: Haven Av. & Inland Empire Bl.

	PHF:	0.960		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	335	1,869	427	39	1,697	66	189	335	376	336	226	39	5,931

2: Haven Av. & I-10 WB Ramps

	PHF:	0.979		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	2,311	965	0	1,721	714	0	0	0	246	0	319	6,274

3: Haven Av. & I-10 EB Ramps

	PHF:	0.975		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	2,747	753	0	1,616	351	529	0	310	0	0	0	6,305

4: Haven Av. & E. Guasti Rd.

	PHF:	0.975		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	63	2,894	105	162	1,653	110	383	45	208	80	19	223	5,945

5: Haven Av. & E. Airport Dr.

	PHF:	0.985		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	493	2,163	22	295	1,405	172	288	472	599	31	600	599	7,135

6: Haven Av. & Driveway 1

	PHF:									Count Date:			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	2,670	3	0	2,034	0	0	0	0	0	0	6	4,713

7: Haven Av. & Driveway 2

	PHF:									Count Date:			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	2,671	3	0	2,034	0	0	0	0	0	0	2	4,710

8: Haven Av. & La Salle St.

	PHF:	0.968		4:15pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	2,624	17	0	2,046	0	0	0	0	0	0	50	4,737

9: Haven Av. & Jurupa Av.

	PHF:	0.982		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	66	1,976	343	202	1,515	330	454	338	65	313	283	211	6,094

10: Haven Av. & Mission Bl.

	PHF:	0.962		4:00pm						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	101	1,488	57	302	1,329	130	519	655	109	37	449	422	5,594

Volume Development - PM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.962 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	142	852	0	0	1,199	527	0	0	0	276	9	509	3,513

12: Haven Av. & SR-60 EB Ramps

PHF: 0.933 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	602	195	609	866	0	392	7	154	0	0	0	2,825

13: Driveway 3 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	14	0	4	0	0	0	0	784	4	7	1,216	0	2,028

14: Driveway 4 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	10	0	0	0	0	781	7	0	1,223	0	2,020

15: Driveway 5 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	24	0	0	0	0	774	17	0	1,223	0	2,037

16: Driveway 6 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	5	0	2	0	0	0	0	15	2	2	44	0	70

17: Driveway 7 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	3	0	5	0	0	0	0	16	2	3	45	0	74

18: Driveway 8 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	0	0	0	14	2	19	0	0	34	8	77

19: Driveway 9 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	0	0	0	0	0	37	0	0	102	0	139

20: Driveway 10 & Jurupa Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	0	0	0	7	0	886	0	0	801	4	1,697

Volume Development - PM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	0	0	0	6	0	886	0	0	799	4	1,694

22: Carnegie Av. & E. Airport Dr.

PHF: 0.882 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	130	38	18	53	42	460	252	360	68	1	435	85	1,941

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	3	163	0	2	97	13	20	0	4	1	0	3	306

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	159	1	4	98	0	0	0	0	1	0	6	269

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	8	148	0	0	96	2	12	0	4	0	0	0	270

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.786 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	6	90	20	16	83	2	8	0	4	10	0	58	297

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	23	102	0	0	90	7	13	0	27	0	0	0	262

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	5	124	0	0	110	7	2	0	17	0	0	0	265

29: Carnegie Av. & La Salle St.

PHF: 0.944 Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	67	103	0	0	90	37	25	0	12	0	0	0	333

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	167	7	0	102	0	0	0	0	8	0	3	286

Volume Development - PM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	6	0	2	46	0	86	108	840	18	4	634	57	1,798

32: Driveway 19 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	7	0	2	1	0	8	3	28	5	0	53	3	110

33: Driveway 20 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	10	0	8	1	0	12	6	14	11	3	34	5	104

34: Commerce Pkwy. & Driveway 21

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	537	0	0	402	5	0	0	7	0	0	0	951

35: Commerce Pkwy. & Driveway 22

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	537	0	0	407	2	0	0	4	0	0	0	950

36: Commerce Pkwy. & Driveway 23

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	532	3	0	411	0	0	0	0	0	0	5	951

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.920 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	20	376	11	80	316	15	10	6	8	25	6	149	1,021

38: Commerce Pkwy. & Driveway 24

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	407	0	0	339	10	0	0	14	0	0	0	770

39: Commerce Pkwy. & Driveway 25

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	386	29	3	350	0	0	0	0	17	0	22	807

40: Commerce Pkwy. & Driveway 26

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	406	6	0	367	0	0	0	0	0	0	9	788

Volume Development - PM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	14	41	55	294	17	55	106	769	13	11	625	261	2,258

42: Driveway 27 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	11	0	7	3	0	4	4	83	10	1	164	1	287

43: Driveway 28 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	4	0	10	3	0	4	4	85	3	6	159	1	278

44: Double Day Av. & Driveway 29

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	1	18	0	0	9	0	1	0	0	0	0	0	29

45: Double Day Av. & Santa Ana St.

PHF: 0.802 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	26	2	14	2	0	7	11	44	43	7	132	6	293

46: Driveway 30 & Double Day Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	1	0	10	0	0	0	0	58	9	2	39	0	119

47: Dupont Av. & Santa Ana St.

PHF: 0.798 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	38	85	24	10	47	12	10	34	10	15	90	26	401

48: Dupont Av. & Double Day Av.

PHF: 0.763 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	29	107	1	0	92	12	6	0	63	2	0	0	312

49: Dupont Av. & Driveway 31

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	1	133	0	0	140	4	6	0	9	0	0	0	293

50: Dupont Av. & Jurupa Av.

PHF: 0.934 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	42	27	110	76	25	48	46	1,022	13	64	794	62	2,326

Volume Development - PM Peak Hour

51: Milliken Av. & E. Airport Dr.

PHF: 0.988 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	33	943	60	139	859	127	250	246	33	86	263	323	3,361

52: Milliken Av. & Jurupa Av.

PHF: 0.961 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	195	752	352	241	907	59	122	838	257	376	621	97	4,814

53: Milliken Av. & Mission Bl.

PHF: 0.950 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	171	867	20	258	1,266	390	522	1	81	16	5	146	3,740

54: I-15 SB Ramps & Jurupa Av.

PHF: 0.945 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	0	0	0	217	7	434	0	1,248	550	438	692	0	3,585

55: I-15 NB Ramps & Jurupa Av.

PHF: 0.967 4:00pm Count Date: 10/26/2021

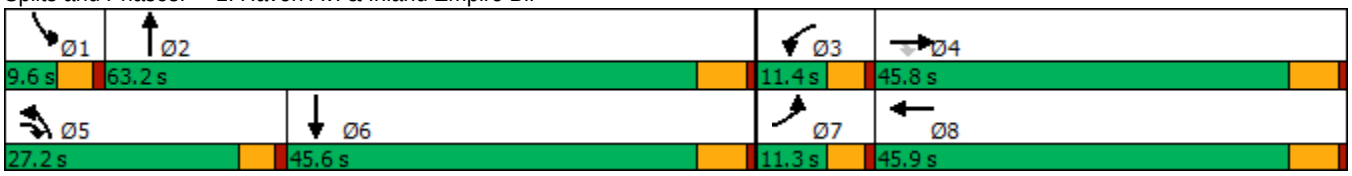
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
E+P:	144	1	320	0	0	0	558	907	0	0	986	491	3,405

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	99	270	119	93	17	376	1791	332	41	1494	81
Future Volume (vph)	72	99	270	119	93	17	376	1791	332	41	1494	81
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	11.3	45.8	27.2	11.4	45.9		27.2	63.2		9.6	45.6	
Total Split (%)	8.7%	35.2%	20.9%	8.8%	35.3%		20.9%	48.6%		7.4%	35.1%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 96.3
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	99	270	119	93	17	376	1791	332	41	1494	81
Future Volume (veh/h)	72	99	270	119	93	17	376	1791	332	41	1494	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1500	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	78	108	120	129	101	0	409	1947	0	45	1624	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	150	476	463	234	501		489	3147		116	2365	
Arrive On Green	0.05	0.14	0.14	0.06	0.15	0.00	0.17	0.51	0.00	0.04	0.38	0.00
Sat Flow, veh/h	2956	3420	1512	4029	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	78	108	120	129	101	0	409	1947	0	45	1624	0
Grp Sat Flow(s),veh/h/ln	1478	1710	1512	1343	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	2.1	2.3	4.9	2.5	2.1	0.0	10.9	18.4	0.0	1.2	17.9	0.0
Cycle Q Clear(g_c), s	2.1	2.3	4.9	2.5	2.1	0.0	10.9	18.4	0.0	1.2	17.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	150	476	463	234	501		489	3147		116	2365	
V/C Ratio(X)	0.52	0.23	0.26	0.55	0.20		0.84	0.62		0.39	0.69	
Avail Cap(c_a), veh/h	243	1679	995	336	1683		820	4361		181	3024	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.7	31.2	21.4	37.3	30.6	0.0	32.9	14.4	0.0	38.2	21.1	0.0
Incr Delay (d2), s/veh	1.0	0.2	0.3	0.8	0.2	0.0	1.5	0.2	0.0	0.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.9	1.6	0.8	0.8	0.0	3.7	5.4	0.0	0.4	5.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.7	31.4	21.7	38.1	30.8	0.0	34.4	14.6	0.0	39.0	21.6	0.0
LnGrp LOS	D	C	C	D	C		C	B		D	C	
Approach Vol, veh/h		306			230	A		2356	A		1669	A
Approach Delay, s/veh		29.5			34.9			18.0			22.0	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	47.2	9.3	17.2	18.1	36.9	8.7	17.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	57.4	6.8	40.0	22.6	39.8	6.7	40.1
Max Q Clear Time (g_c+I1), s	3.2	20.4	4.5	6.9	12.9	19.9	4.1	4.1
Green Ext Time (p_c), s	0.0	19.7	0.0	1.0	0.6	11.1	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	21.1
HCM 6th LOS	C

Notes

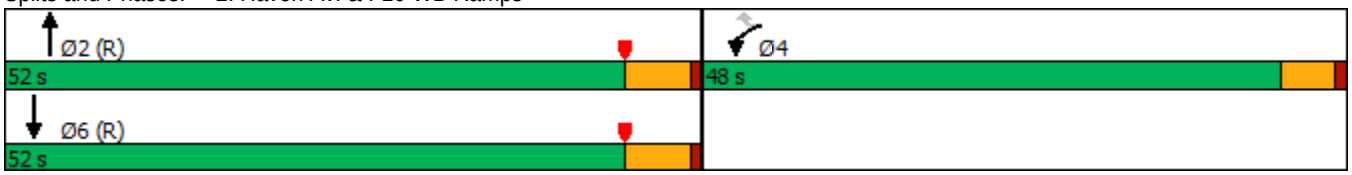
Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	534	585	1913	491	1368
Future Volume (vph)	534	585	1913	491	1368
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	48.0	48.0	52.0		52.0
Total Split (%)	48.0%	48.0%	52.0%		52.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	534	585	1913	491	0	1368
Future Volume (veh/h)	534	585	1913	491	0	1368
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	0	1800
Adj Flow Rate, veh/h	711	360	2079	0	0	1487
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	862	406	3869		0	3869
Arrive On Green	0.27	0.27	1.00	0.00	0.00	0.62
Sat Flow, veh/h	3238	1525	6444	1525	0	6696
Grp Volume(v), veh/h	711	360	2079	0	0	1487
Grp Sat Flow(s),veh/h/ln	1619	1525	1548	1525	0	1548
Q Serve(g_s), s	20.6	22.7	0.0	0.0	0.0	11.9
Cycle Q Clear(g_c), s	20.6	22.7	0.0	0.0	0.0	11.9
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	862	406	3869		0	3869
V/C Ratio(X)	0.83	0.89	0.54		0.00	0.38
Avail Cap(c_a), veh/h	1389	654	3869		0	3869
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.67	0.00	0.00	0.69
Uniform Delay (d), s/veh	34.5	35.2	0.0	0.0	0.0	9.3
Incr Delay (d2), s/veh	1.0	5.4	0.4	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	8.5	0.1	0.0	0.0	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.5	40.7	0.4	0.0	0.0	9.5
LnGrp LOS	D	D	A		A	A
Approach Vol, veh/h	1071		2079	A		1487
Approach Delay, s/veh	37.2		0.4			9.5
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		68.3		31.7		68.3
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		46.2		42.9		46.2
Max Q Clear Time (g_c+I1), s		2.0		24.7		13.9
Green Ext Time (p_c), s		14.7		1.9		7.9

Intersection Summary	
HCM 6th Ctrl Delay	11.8
HCM 6th LOS	B

Notes

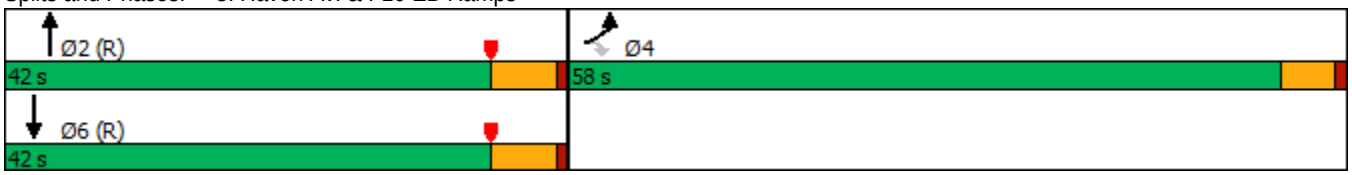
User approved volume balancing among the lanes for turning movement.

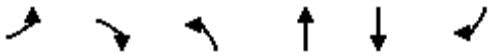
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	891	647	1513	1450	451
Future Volume (vph)	891	647	1513	1450	451
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	58.0	58.0	42.0	42.0	
Total Split (%)	58.0%	58.0%	42.0%	42.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	891	647	0	1513	1450	451
Future Volume (veh/h)	891	647	0	1513	1450	451
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	1023	514	0	1610	1543	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1266	597	0	3096	3096	
Arrive On Green	0.39	0.39	0.00	0.50	1.00	0.00
Sat Flow, veh/h	3238	1525	0	6696	6444	1525
Grp Volume(v), veh/h	1023	514	0	1610	1543	0
Grp Sat Flow(s),veh/h/ln	1619	1525	0	1548	1548	1525
Q Serve(g_s), s	28.1	30.9	0.0	17.6	0.0	0.0
Cycle Q Clear(g_c), s	28.1	30.9	0.0	17.6	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1266	597	0	3096	3096	
V/C Ratio(X)	0.81	0.86	0.00	0.52	0.50	
Avail Cap(c_a), veh/h	1713	807	0	3096	3096	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.76	0.80	0.00
Uniform Delay (d), s/veh	27.1	28.0	0.0	16.9	0.0	0.0
Incr Delay (d2), s/veh	2.1	7.2	0.0	0.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	11.5	0.0	5.7	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.3	35.2	0.0	17.4	0.5	0.0
LnGrp LOS	C	D	A	B	A	
Approach Vol, veh/h	1537			1610	1543	A
Approach Delay, s/veh	31.2			17.4	0.5	
Approach LOS	C			B	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		55.8		44.2		55.8
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		36.2		52.9		36.2
Max Q Clear Time (g_c+I1), s		19.6		32.9		2.0
Green Ext Time (p_c), s		7.1		6.2		8.4

Intersection Summary		
HCM 6th Ctrl Delay		16.4
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

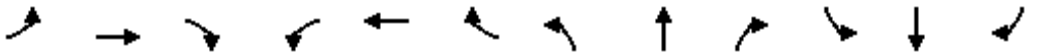
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	26	35	57	37	131	157	1659	100	202	1624	272
Future Volume (vph)	82	26	35	57	37	131	157	1659	100	202	1624	272
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	12.0	48.2	48.2	11.0	47.2	47.2	17.0	51.8	51.8	19.0	53.8	53.8
Total Split (%)	9.2%	37.1%	37.1%	8.5%	36.3%	36.3%	13.1%	39.8%	39.8%	14.6%	41.4%	41.4%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 90.8
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	26	35	57	37	131	157	1659	100	202	1624	272
Future Volume (veh/h)	82	26	35	57	37	131	157	1659	100	202	1624	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	84	27	19	58	38	68	160	1693	68	206	1657	174
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	160	286	239	136	272	406	230	2636	648	281	2744	667
Arrive On Green	0.05	0.16	0.16	0.05	0.15	0.15	0.08	0.43	0.43	0.10	0.44	0.44
Sat Flow, veh/h	2956	1800	1505	2956	1800	2685	2956	6192	1522	2956	6192	1505
Grp Volume(v), veh/h	84	27	19	58	38	68	160	1693	68	206	1657	174
Grp Sat Flow(s),veh/h/ln	1478	1800	1505	1478	1800	1342	1478	1548	1522	1478	1548	1505
Q Serve(g_s), s	2.1	1.0	0.8	1.5	1.4	1.7	4.1	16.7	2.1	5.2	15.7	5.6
Cycle Q Clear(g_c), s	2.1	1.0	0.8	1.5	1.4	1.7	4.1	16.7	2.1	5.2	15.7	5.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	286	239	136	272	406	230	2636	648	281	2744	667
V/C Ratio(X)	0.53	0.09	0.08	0.43	0.14	0.17	0.70	0.64	0.10	0.73	0.60	0.26
Avail Cap(c_a), veh/h	283	977	817	245	954	1423	474	3682	905	550	3842	934
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	27.8	27.7	35.9	28.5	28.6	34.8	17.6	13.4	34.0	16.4	13.6
Incr Delay (d2), s/veh	1.0	0.1	0.1	0.8	0.2	0.2	1.4	0.3	0.1	1.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.4	0.3	0.5	0.6	0.5	1.4	5.2	0.6	1.8	4.8	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.6	27.9	27.8	36.7	28.7	28.8	36.2	17.8	13.4	35.4	16.6	13.8
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		130			164			1921			2037	
Approach Delay, s/veh		33.5			31.6			19.2			18.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	38.7	8.2	18.5	10.6	40.1	8.8	17.9
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	14.4	46.0	6.4	42.0	12.4	48.0	7.4	41.0
Max Q Clear Time (g_c+I1), s	7.2	18.7	3.5	3.0	6.1	17.7	4.1	3.7
Green Ext Time (p_c), s	0.2	14.2	0.0	0.1	0.1	15.2	0.0	0.4

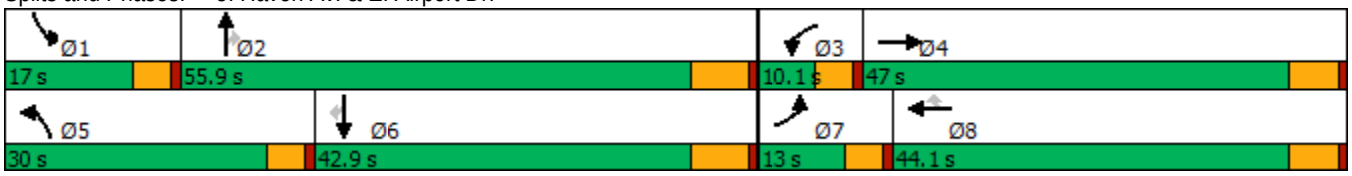
Intersection Summary	
HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

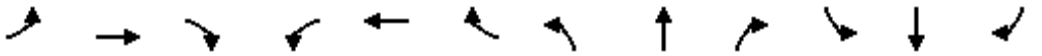
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	95	177	57	167	232	405	1362	210	365	1124	124
Future Volume (vph)	95	177	57	167	232	405	1362	210	365	1124	124
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	13.0	47.0	10.1	44.1	44.1	30.0	55.9	55.9	17.0	42.9	42.9
Total Split (%)	10.0%	36.2%	7.8%	33.9%	33.9%	23.1%	43.0%	43.0%	13.1%	33.0%	33.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 92.1
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	177	218	57	167	232	405	1362	210	365	1124	124
Future Volume (veh/h)	95	177	218	57	167	232	405	1362	210	365	1124	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	104	195	148	63	184	175	445	1497	195	401	1235	101
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	308	222	137	525	234	526	2343	577	446	2177	536
Arrive On Green	0.06	0.16	0.16	0.05	0.15	0.15	0.18	0.38	0.38	0.15	0.35	0.35
Sat Flow, veh/h	2956	1898	1366	2956	3420	1525	2956	6192	1525	2956	6192	1524
Grp Volume(v), veh/h	104	175	168	63	184	175	445	1497	195	401	1235	101
Grp Sat Flow(s),veh/h/ln	1478	1710	1554	1478	1710	1525	1478	1548	1525	1478	1548	1524
Q Serve(g_s), s	2.8	7.8	8.4	1.7	4.0	9.0	12.0	16.3	7.5	10.9	13.3	3.8
Cycle Q Clear(g_c), s	2.8	7.8	8.4	1.7	4.0	9.0	12.0	16.3	7.5	10.9	13.3	3.8
Prop In Lane	1.00		0.88	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	278	252	137	525	234	526	2343	577	446	2177	536
V/C Ratio(X)	0.64	0.63	0.67	0.46	0.35	0.75	0.85	0.64	0.34	0.90	0.57	0.19
Avail Cap(c_a), veh/h	302	858	780	198	1595	712	914	3725	918	446	2745	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	32.1	32.3	38.1	31.1	33.2	32.7	20.9	18.2	34.2	21.6	18.5
Incr Delay (d2), s/veh	1.5	2.3	3.0	0.9	0.4	4.7	1.5	0.3	0.3	20.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	3.2	3.1	0.6	1.6	3.4	4.0	5.1	2.4	4.8	4.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.5	34.4	35.3	39.0	31.5	37.9	34.1	21.2	18.5	54.3	21.8	18.7
LnGrp LOS	D	C	D	D	C	D	C	C	B	D	C	B
Approach Vol, veh/h		447			422			2137			1737	
Approach Delay, s/veh		36.0			35.3			23.7			29.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	37.6	8.4	19.1	19.2	35.4	9.1	18.4
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	49.4	5.5	41.2	25.4	36.4	8.4	38.3
Max Q Clear Time (g_c+I1), s	12.9	18.3	3.7	10.4	14.0	15.3	4.8	11.0
Green Ext Time (p_c), s	0.0	12.7	0.0	1.9	0.6	8.3	0.0	1.6

Intersection Summary	
HCM 6th Ctrl Delay	27.9
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	1976	6	0	1398
Future Vol, veh/h	0	2	1976	6	0	1398
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	2148	7	0	1520

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1078	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	187	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	187	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	187	-
HCM Lane V/C Ratio	-	-	0.012	-
HCM Control Delay (s)	-	-	24.5	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	1976	5	0	1398
Future Vol, veh/h	0	6	1976	5	0	1398
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	7	2148	5	0	1520

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1077	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	187	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	187	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	187	-
HCM Lane V/C Ratio	-	-	0.035	-
HCM Control Delay (s)	-	-	24.9	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	1964	26	0	1477
Future Vol, veh/h	0	17	1964	26	0	1477
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	18	2089	28	0	1571

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1059	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	192	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	192	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.7	0	0
HCM LOS	D		

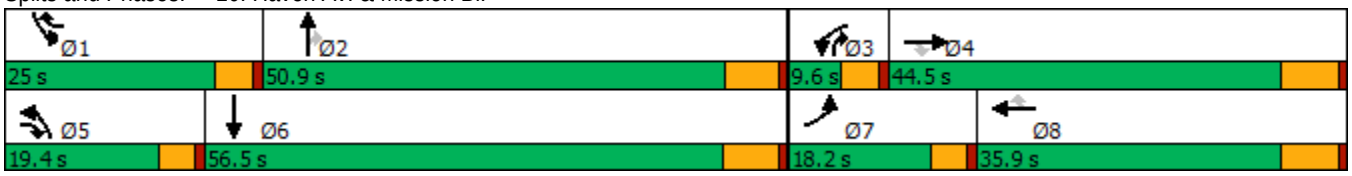
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	192	-
HCM Lane V/C Ratio	-	-	0.094	-
HCM Control Delay (s)	-	-	25.7	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.3	-

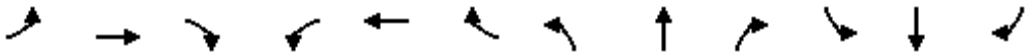
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	202	245	118	54	586	590	97	1637	14	138	1295
Future Volume (vph)	202	245	118	54	586	590	97	1637	14	138	1295
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	18.2	44.5	19.4	9.6	35.9	25.0	19.4	50.9	9.6	25.0	56.5
Total Split (%)	14.0%	34.2%	14.9%	7.4%	27.6%	19.2%	14.9%	39.2%	7.4%	19.2%	43.5%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 118.8
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	245	118	54	586	590	97	1637	14	138	1295	195
Future Volume (veh/h)	202	245	118	54	586	590	97	1637	14	138	1295	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	215	261	103	57	623	463	103	1741	10	147	1378	191
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	263	1474	574	105	1211	538	125	1830	614	172	1751	243
Arrive On Green	0.09	0.30	0.30	0.04	0.25	0.25	0.08	0.37	0.37	0.11	0.40	0.40
Sat Flow, veh/h	2956	4914	1522	2956	4914	1525	1619	4914	1501	1619	4363	605
Grp Volume(v), veh/h	215	261	103	57	623	463	103	1741	10	147	1035	534
Grp Sat Flow(s),veh/h/ln	1478	1638	1522	1478	1638	1525	1619	1638	1501	1619	1638	1691
Q Serve(g_s), s	8.5	4.7	5.4	2.3	13.1	29.4	7.5	41.1	0.5	10.7	33.0	33.0
Cycle Q Clear(g_c), s	8.5	4.7	5.4	2.3	13.1	29.4	7.5	41.1	0.5	10.7	33.0	33.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	263	1474	574	105	1211	538	125	1830	614	172	1315	679
V/C Ratio(X)	0.82	0.18	0.18	0.54	0.51	0.86	0.82	0.95	0.02	0.86	0.79	0.79
Avail Cap(c_a), veh/h	337	1565	603	124	1211	538	201	1841	617	277	1373	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	30.9	24.8	56.6	38.8	35.9	54.3	36.4	21.0	52.4	31.3	31.3
Incr Delay (d2), s/veh	9.2	0.1	0.1	1.6	0.4	13.4	6.5	11.5	0.0	7.7	3.0	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	1.8	1.9	0.8	5.0	13.6	3.2	17.2	0.2	4.5	12.5	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.6	30.9	25.0	58.2	39.2	49.3	60.7	47.9	21.1	60.1	34.3	37.0
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	C	D
Approach Vol, veh/h		579			1143			1854			1716	
Approach Delay, s/veh		41.6			44.2			48.4			37.3	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	51.0	8.8	42.3	13.8	54.4	15.2	35.9
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	20.4	* 45	5.0	38.0	14.8	50.0	13.6	29.4
Max Q Clear Time (g_c+I1), s	12.7	43.1	4.3	7.4	9.5	35.0	10.5	31.4
Green Ext Time (p_c), s	0.1	1.4	0.0	1.8	0.0	8.2	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	43.2
HCM 6th LOS	D

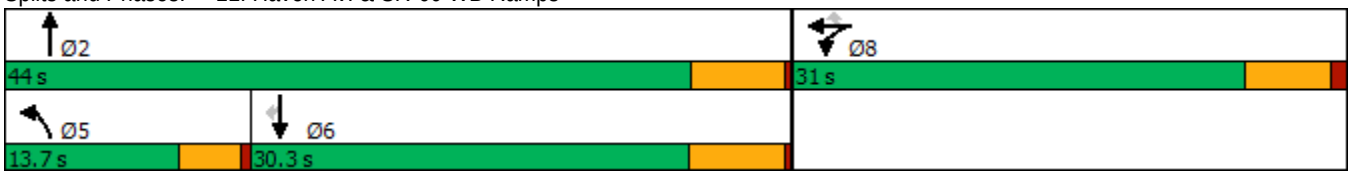
Notes

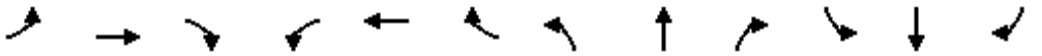
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	134	9	461	300	1541	760	571
Future Volume (vph)	134	9	461	300	1541	760	571
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.5	35.2	28.3	28.3
Total Split (s)	31.0	31.0	31.0	13.7	44.0	30.3	30.3
Total Split (%)	41.3%	41.3%	41.3%	18.3%	58.7%	40.4%	40.4%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 64.4
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	134	9	461	300	1541	0	0	760	571
Future Volume (veh/h)	0	0	0	134	9	461	300	1541	0	0	760	571
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	1600	1800	0	0	1800	1800
Adj Flow Rate, veh/h				147	0	258	316	1622	0	0	800	436
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				704	0	332	422	2788	0	0	1721	534
Arrive On Green				0.22	0.00	0.22	0.14	0.57	0.00	0.00	0.35	0.35
Sat Flow, veh/h				3238	0	1525	2956	5076	0	0	5076	1525
Grp Volume(v), veh/h				147	0	258	316	1622	0	0	800	436
Grp Sat Flow(s),veh/h/ln				1619	0	1525	1478	1638	0	0	1638	1525
Q Serve(g_s), s				2.0	0.0	8.6	5.5	11.5	0.0	0.0	6.8	14.0
Cycle Q Clear(g_c), s				2.0	0.0	8.6	5.5	11.5	0.0	0.0	6.8	14.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				704	0	332	422	2788	0	0	1721	534
V/C Ratio(X)				0.21	0.00	0.78	0.75	0.58	0.00	0.00	0.46	0.82
Avail Cap(c_a), veh/h				1514	0	713	532	3492	0	0	2234	693
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.3	0.0	19.9	22.2	7.5	0.0	0.0	13.6	15.9
Incr Delay (d2), s/veh				0.1	0.0	3.9	4.4	0.1	0.0	0.0	0.1	4.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	0.0	2.9	1.9	2.2	0.0	0.0	1.9	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				17.4	0.0	23.8	26.6	7.6	0.0	0.0	13.7	20.4
LnGrp LOS				B	A	C	C	A	A	A	B	C
Approach Vol, veh/h					405			1938			1236	
Approach Delay, s/veh					21.5			10.7			16.1	
Approach LOS					C			B			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		36.4			11.7	24.7		17.5				
Change Period (Y+Rc), s		* 5.8			4.0	5.8		5.8				
Max Green Setting (Gmax), s		* 38			9.7	24.5		25.2				
Max Q Clear Time (g_c+I1), s		13.5			7.5	16.0		10.6				
Green Ext Time (p_c), s		8.0			0.2	2.9		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		13.8	
HCM 6th LOS		B	

Notes

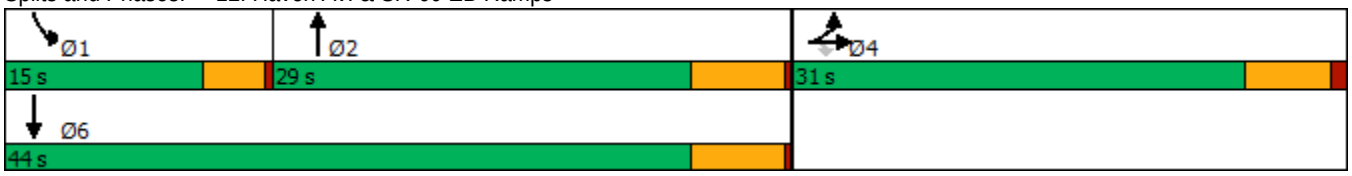
User approved volume balancing among the lanes for turning movement.

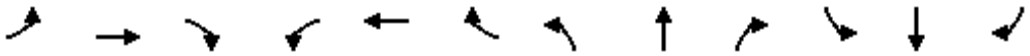
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	893	7	198	948	338	556
Future Volume (vph)	893	7	198	948	338	556
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.6	29.7
Total Split (s)	31.0	31.0	31.0	29.0	15.0	44.0
Total Split (%)	41.3%	41.3%	41.3%	38.7%	20.0%	58.7%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 72.6
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	893	7	198	0	0	0	0	948	266	338	556	0
Future Volume (veh/h)	893	7	198	0	0	0	0	948	266	338	556	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800				0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h	945	0	67				0	998	216	356	585	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	1069	0	503				0	1196	258	437	2469	0
Arrive On Green	0.33	0.00	0.33				0.00	0.30	0.30	0.15	0.50	0.00
Sat Flow, veh/h	3238	0	1525				0	4197	871	2956	5076	0
Grp Volume(v), veh/h	945	0	67				0	810	404	356	585	0
Grp Sat Flow(s),veh/h/ln	1619	0	1525				0	1638	1630	1478	1638	0
Q Serve(g_s), s	18.9	0.0	2.1				0.0	15.9	15.9	8.0	4.6	0.0
Cycle Q Clear(g_c), s	18.9	0.0	2.1				0.0	15.9	15.9	8.0	4.6	0.0
Prop In Lane	1.00		1.00				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	1069	0	503				0	971	483	437	2469	0
V/C Ratio(X)	0.88	0.00	0.13				0.00	0.83	0.84	0.82	0.24	0.00
Avail Cap(c_a), veh/h	1189	0	560				0	1112	553	474	2743	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.8	0.0	16.1				0.0	22.6	22.6	28.3	9.6	0.0
Incr Delay (d2), s/veh	7.6	0.0	0.1				0.0	4.4	8.6	9.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	0.7				0.0	5.8	6.3	3.1	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.4	0.0	16.2				0.0	27.0	31.2	38.3	9.7	0.0
LnGrp LOS	C	A	B				A	C	C	D	A	A
Approach Vol, veh/h		1012						1214			941	
Approach Delay, s/veh		28.5						28.4			20.5	
Approach LOS		C						C			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	14.1	26.0		28.4		40.2						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	11.0	23.3		25.2		38.3						
Max Q Clear Time (g_c+I1), s	10.0	17.9		20.9		6.6						
Green Ext Time (p_c), s	0.1	2.4		1.7		2.3						

Intersection Summary			
HCM 6th Ctrl Delay			26.1
HCM 6th LOS			C

Notes

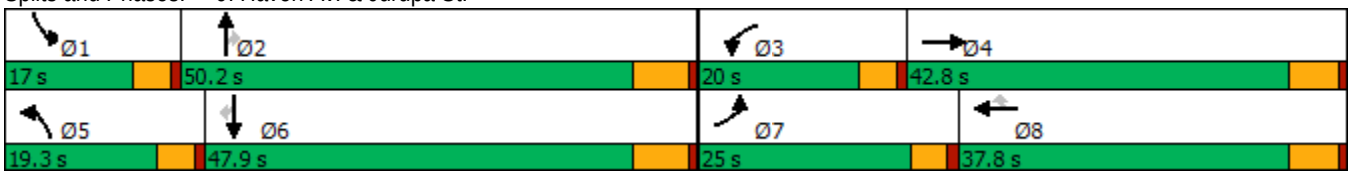
User approved volume balancing among the lanes for turning movement.

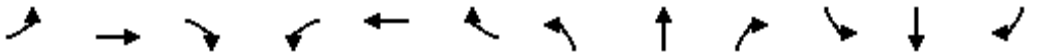
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	333	202	292	289	74	96	1584	252	77	975	424
Future Volume (vph)	333	202	292	289	74	96	1584	252	77	975	424
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	25.0	42.8	20.0	37.8	37.8	19.3	50.2	50.2	17.0	47.9	47.9
Total Split (%)	19.2%	32.9%	15.4%	29.1%	29.1%	14.8%	38.6%	38.6%	13.1%	36.8%	36.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 101.6
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	333	202	112	292	289	74	96	1584	252	77	975	424
Future Volume (veh/h)	333	202	112	292	289	74	96	1584	252	77	975	424
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	351	213	93	307	304	52	101	1667	150	81	1026	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	429	511	204	380	451	201	126	2468	608	101	2373	
Arrive On Green	0.15	0.15	0.15	0.13	0.13	0.13	0.08	0.40	0.40	0.06	0.38	0.00
Sat Flow, veh/h	2956	3444	1377	2956	3420	1525	1619	6192	1525	1619	6192	1525
Grp Volume(v), veh/h	351	202	104	307	304	52	101	1667	150	81	1026	0
Grp Sat Flow(s),veh/h/ln	1478	1638	1545	1478	1710	1525	1619	1548	1525	1619	1548	1525
Q Serve(g_s), s	9.5	4.6	5.1	8.3	6.9	2.5	5.0	18.2	5.4	4.1	10.1	0.0
Cycle Q Clear(g_c), s	9.5	4.6	5.1	8.3	6.9	2.5	5.0	18.2	5.4	4.1	10.1	0.0
Prop In Lane	1.00		0.89	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	486	229	380	451	201	126	2468	608	101	2373	
V/C Ratio(X)	0.82	0.41	0.46	0.81	0.67	0.26	0.80	0.68	0.25	0.80	0.43	
Avail Cap(c_a), veh/h	735	1477	697	555	1334	595	290	3298	812	245	3124	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.0	31.7	31.9	34.8	33.9	32.0	37.2	20.3	16.5	38.0	18.7	0.0
Incr Delay (d2), s/veh	1.5	0.6	1.4	3.4	1.8	0.7	4.4	0.3	0.2	5.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	1.7	1.9	3.0	2.8	0.9	2.0	5.6	1.7	1.6	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	32.3	33.3	38.2	35.7	32.7	41.6	20.6	16.7	43.4	18.8	0.0
LnGrp LOS	D	C	C	D	D	C	D	C	B	D	B	
Approach Vol, veh/h		657			663			1918			1107	A
Approach Delay, s/veh		34.2			36.6			21.4			20.6	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	39.2	15.2	18.0	11.0	37.9	16.5	16.6
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	43.7	15.4	37.0	14.7	41.4	20.4	32.0
Max Q Clear Time (g_c+I1), s	6.1	20.2	10.3	7.1	7.0	12.1	11.5	8.9
Green Ext Time (p_c), s	0.0	12.5	0.3	1.8	0.1	7.0	0.5	1.9

Intersection Summary	
HCM 6th Ctrl Delay	25.5
HCM 6th LOS	C

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	744	7	13	452	0	4	0	1	0	0	0
Future Vol, veh/h	0	744	7	13	452	0	4	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	240	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	809	8	14	491	0	4	0	1	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	491	0	0	817	0	0	1037	1332	409	924	1336	246
Stage 1	-	-	-	-	-	-	813	813	-	519	519	-
Stage 2	-	-	-	-	-	-	224	519	-	405	817	-
Critical Hdwy	5.3	-	-	4.1	-	-	6.95	6.5	6.9	6.95	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.5	5.5	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.65	4	3.3	3.65	4	3.9
Pot Cap-1 Maneuver	691	-	-	820	-	-	215	156	597	255	155	647
Stage 1	-	-	-	-	-	-	334	395	-	443	536	-
Stage 2	-	-	-	-	-	-	727	536	-	579	393	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	691	-	-	820	-	-	212	153	597	251	152	647
Mov Cap-2 Maneuver	-	-	-	-	-	-	212	153	-	251	152	-
Stage 1	-	-	-	-	-	-	334	395	-	443	527	-
Stage 2	-	-	-	-	-	-	715	527	-	578	393	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.3	20.2	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	243	691	-	-	820	-	-	-
HCM Lane V/C Ratio	0.022	-	-	-	0.017	-	-	-
HCM Control Delay (s)	20.2	0	-	-	9.5	-	-	0
HCM Lane LOS	C	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	732	14	0	465	0	8
Future Vol, veh/h	732	14	0	465	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	796	15	0	505	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	406
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	600
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	600
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	600	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-
HCM Control Delay (s)	11.1	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	710	30	0	465	0	19
Future Vol, veh/h	710	30	0	465	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	772	33	0	505	0	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	403
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	603
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	603
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	603	-	-	-
HCM Lane V/C Ratio	0.034	-	-	-
HCM Control Delay (s)	11.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	22	3	4	15	1	1
Future Vol, veh/h	22	3	4	15	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	24	3	4	16	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	27	0	42	14
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	16	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1600	-	970	1069
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1010	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1600	-	968	1069
Mov Cap-2 Maneuver	-	-	-	-	941	-
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1008	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1001	-	-	1600	-
HCM Lane V/C Ratio	0.002	-	-	0.003	-
HCM Control Delay (s)	8.6	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	3	6	18	2	3
Future Vol, veh/h	20	3	6	18	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	22	3	7	20	2	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	25	0	48	13
Stage 1	-	-	-	-	24	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1603	-	962	1070
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1603	-	958	1070
Mov Cap-2 Maneuver	-	-	-	-	935	-
Stage 1	-	-	-	-	1001	-
Stage 2	-	-	-	-	997	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1012	-	-	1603	-
HCM Lane V/C Ratio	0.005	-	-	0.004	-
HCM Control Delay (s)	8.6	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	21	17	14	1	7
Future Vol, veh/h	3	21	17	14	1	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	23	18	15	1	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	33	0	-	0	44	17
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	18	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1592	-	-	-	967	1064
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1008	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1592	-	-	-	965	1064
Mov Cap-2 Maneuver	-	-	-	-	939	-
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	1008	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1592	-	-	-	1047
HCM Lane V/C Ratio	0.002	-	-	-	0.008
HCM Control Delay (s)	7.3	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	33	72	1	1	1
Future Vol, veh/h	1	33	72	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	36	78	1	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	79	0	-	0	99	40
Stage 1	-	-	-	-	79	-
Stage 2	-	-	-	-	20	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1532	-	-	-	895	1029
Stage 1	-	-	-	-	941	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1532	-	-	-	894	1029
Mov Cap-2 Maneuver	-	-	-	-	887	-
Stage 1	-	-	-	-	940	-
Stage 2	-	-	-	-	1006	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1532	-	-	-	953
HCM Lane V/C Ratio	0.001	-	-	-	0.002
HCM Control Delay (s)	7.4	-	-	-	8.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	532	651	8	0	2
Future Vol, veh/h	0	532	651	8	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	578	708	9	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	359
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	643
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	643
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	643
HCM Lane V/C Ratio	-	-	-	0.003
HCM Control Delay (s)	-	-	-	10.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	532	655	8	0	3
Future Vol, veh/h	0	532	655	8	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	578	712	9	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	361
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	641
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	641
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

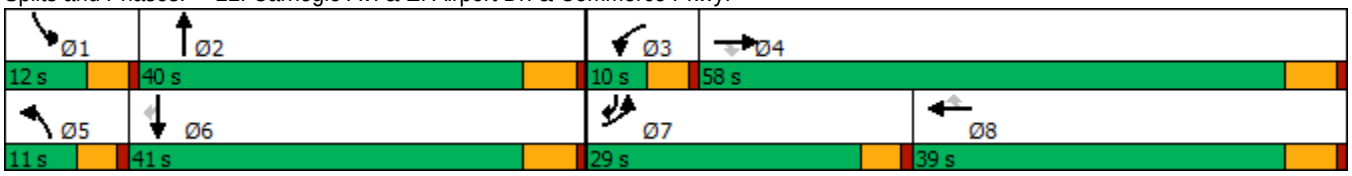
Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	641
HCM Lane V/C Ratio	-	-	-	0.005
HCM Control Delay (s)	-	-	-	10.6
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	151	205	111	2	205	29	71	16	27	50	167
Future Volume (vph)	151	205	111	2	205	29	71	16	27	50	167
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	29.0	58.0	58.0	10.0	39.0	39.0	11.0	40.0	12.0	41.0	29.0
Total Split (%)	24.2%	48.3%	48.3%	8.3%	32.5%	32.5%	9.2%	33.3%	10.0%	34.2%	24.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 64.7
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	205	111	2	205	29	71	16	0	27	50	167
Future Volume (veh/h)	151	205	111	2	205	29	71	16	0	27	50	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1700
Adj Flow Rate, veh/h	182	247	133	2	247	23	86	19	0	33	60	142
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	227	1138	508	4	667	298	112	760	0	59	649	837
Arrive On Green	0.14	0.33	0.33	0.00	0.20	0.20	0.07	0.22	0.00	0.04	0.19	0.19
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	3510	0	1619	3420	2536
Grp Volume(v), veh/h	182	247	133	2	247	23	86	19	0	33	60	142
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	0	1619	1710	1268
Q Serve(g_s), s	5.6	2.7	3.3	0.1	3.2	0.6	2.7	0.2	0.0	1.0	0.7	2.0
Cycle Q Clear(g_c), s	5.6	2.7	3.3	0.1	3.2	0.6	2.7	0.2	0.0	1.0	0.7	2.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	1138	508	4	667	298	112	760	0	59	649	837
V/C Ratio(X)	0.80	0.22	0.26	0.45	0.37	0.08	0.77	0.03	0.00	0.56	0.09	0.17
Avail Cap(c_a), veh/h	771	3483	1554	171	2215	988	202	2282	0	234	2349	2097
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	12.3	12.5	25.5	17.9	16.9	23.5	15.6	0.0	24.3	17.1	12.2
Incr Delay (d2), s/veh	2.5	0.1	0.3	24.4	0.3	0.1	4.2	0.0	0.0	3.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.8	0.9	0.1	1.1	0.2	1.0	0.1	0.0	0.4	0.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	12.4	12.8	49.9	18.2	17.0	27.7	15.6	0.0	27.3	17.2	12.3
LnGrp LOS	C	B	B	D	B	B	C	B	A	C	B	B
Approach Vol, veh/h		562			272			105			235	
Approach Delay, s/veh		16.2			18.4			25.5			15.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	17.2	4.7	22.9	8.1	15.5	11.8	15.8
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	34.2	5.4	52.2	6.4	35.2	24.4	33.2
Max Q Clear Time (g_c+I1), s	3.0	2.2	2.1	5.3	4.7	4.0	7.6	5.2
Green Ext Time (p_c), s	0.0	0.1	0.0	1.9	0.0	0.9	0.2	1.5

Intersection Summary	
HCM 6th Ctrl Delay	17.4
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	1	0	0	1	5	81	1	3	136	23
Future Vol, veh/h	6	0	1	0	0	1	5	81	1	3	136	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	0	1	0	0	1	5	88	1	3	148	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	221	266	87	179	278	45	173	0	0	89	0	0
Stage 1	167	167	-	99	99	-	-	-	-	-	-	-
Stage 2	54	99	-	80	179	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	721	643	961	772	633	1022	1416	-	-	1519	-	-
Stage 1	824	764	-	902	817	-	-	-	-	-	-	-
Stage 2	958	817	-	925	755	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	717	639	961	768	629	1022	1416	-	-	1519	-	-
Mov Cap-2 Maneuver	767	696	-	817	687	-	-	-	-	-	-	-
Stage 1	821	762	-	898	814	-	-	-	-	-	-	-
Stage 2	954	814	-	922	753	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	8.5	0.4	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1416	-	-	790	1022	1519	-	-
HCM Lane V/C Ratio	0.004	-	-	0.01	0.001	0.002	-	-
HCM Control Delay (s)	7.6	-	-	9.6	8.5	7.4	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	84	1	7	131
Future Vol, veh/h	0	2	84	1	7	131
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	91	1	8	142

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	179	46	0	0	92	0
Stage 1	92	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	799	1020	-	-	1515	-
Stage 1	927	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	795	1020	-	-	1515	-
Mov Cap-2 Maneuver	838	-	-	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	927	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1020	1515	-
HCM Lane V/C Ratio	-	-	0.002	0.005	-
HCM Control Delay (s)	-	-	8.5	7.4	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1	14	82	126	5
Future Vol, veh/h	3	1	14	82	126	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	1	15	89	137	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	215	71	142	0	-	0
Stage 1	140	-	-	-	-	-
Stage 2	75	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	759	983	1453	-	-	-
Stage 1	878	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	751	983	1453	-	-	-
Mov Cap-2 Maneuver	804	-	-	-	-	-
Stage 1	869	-	-	-	-	-
Stage 2	945	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	1.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1453	-	842	-	-
HCM Lane V/C Ratio	0.01	-	0.005	-	-
HCM Control Delay (s)	7.5	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	1	7	0	31	11	63	30	41	84	3
Future Vol, veh/h	2	0	1	7	0	31	11	63	30	41	84	3
Peak Hour Factor	0.92	0.92	0.92	0.64	0.92	0.64	0.92	0.64	0.64	0.64	0.64	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	1	11	0	48	12	98	47	64	131	3
Number of Lanes	0	1	0	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	1
HCM Control Delay	8.4	7.7	8.1	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	67%	100%	4%	0%	100%	0%	0%
Vol Thru, %	0%	100%	41%	0%	0%	0%	0%	0%	100%	90%
Vol Right, %	0%	0%	59%	33%	0%	96%	100%	0%	0%	10%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	42	51	3	6	16	16	41	56	31
LT Vol	11	0	0	2	6	1	0	41	0	0
Through Vol	0	42	21	0	0	0	0	0	56	28
RT Vol	0	0	30	1	0	15	16	0	0	3
Lane Flow Rate	12	66	80	3	10	25	25	64	88	47
Geometry Grp	8	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.018	0.092	0.103	0.005	0.016	0.032	0.032	0.097	0.121	0.064
Departure Headway (Hd)	5.559	5.058	4.646	5.604	5.8	4.655	4.603	5.466	4.965	4.897
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	645	710	772	639	618	770	779	657	724	733
Service Time	3.28	2.779	2.367	3.336	3.523	2.378	2.326	3.186	2.685	2.618
HCM Lane V/C Ratio	0.019	0.093	0.104	0.005	0.016	0.032	0.032	0.097	0.122	0.064
HCM Control Delay	8.4	8.3	7.9	8.4	8.6	7.5	7.5	8.8	8.4	8
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.3	0	0	0.1	0.1	0.3	0.4	0.2

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	18	40	91	81	11
Future Vol, veh/h	12	18	40	91	81	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	20	43	99	88	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	230	50	100	0	-	0
Stage 1	94	-	-	-	-	-
Stage 2	136	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	743	1014	1505	-	-	-
Stage 1	925	-	-	-	-	-
Stage 2	882	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	721	1014	1505	-	-	-
Mov Cap-2 Maneuver	791	-	-	-	-	-
Stage 1	898	-	-	-	-	-
Stage 2	882	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	2.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1505	-	911	-	-
HCM Lane V/C Ratio	0.029	-	0.036	-	-
HCM Control Delay (s)	7.5	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	9	130	86	13
Future Vol, veh/h	1	5	9	130	86	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	5	10	141	93	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	191	54	107	0	-	0
Stage 1	100	-	-	-	-	-
Stage 2	91	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	786	1008	1497	-	-	-
Stage 1	919	-	-	-	-	-
Stage 2	928	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	780	1008	1497	-	-	-
Mov Cap-2 Maneuver	829	-	-	-	-	-
Stage 1	913	-	-	-	-	-
Stage 2	928	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1497	-	973	-	-
HCM Lane V/C Ratio	0.007	-	0.007	-	-
HCM Control Delay (s)	7.4	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	16	39	121	58	33
Future Vol, veh/h	17	16	39	121	58	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	17	42	132	63	36
Number of Lanes	1	1	1	2	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	7.9	7.3	7.7
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	37%
Vol Right, %	0%	0%	0%	0%	100%	0%	63%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	39	61	61	17	16	39	52
LT Vol	39	0	0	17	0	0	0
Through Vol	0	61	61	0	0	39	19
RT Vol	0	0	0	0	16	0	33
Lane Flow Rate	42	66	66	18	17	42	57
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.061	0.086	0.055	0.029	0.021	0.057	0.07
Departure Headway (Hd)	5.2	4.699	2.998	5.636	4.435	4.898	4.456
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	680	751	1164	639	811	735	808
Service Time	2.999	2.498	0.795	3.34	2.139	2.601	2.159
HCM Lane V/C Ratio	0.062	0.088	0.057	0.028	0.021	0.057	0.071
HCM Control Delay	8.3	7.9	6	8.5	7.2	7.9	7.5
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.2	0.1	0.1	0.2	0.2

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	1	160	12	0	74
Future Vol, veh/h	2	1	160	12	0	74
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	1	174	13	0	80

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	221	94	0	0	187	0
Stage 1	181	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	753	951	-	-	1399	-
Stage 1	838	-	-	-	-	-
Stage 2	983	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	753	951	-	-	1399	-
Mov Cap-2 Maneuver	788	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	983	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0
HCM LOS	A		

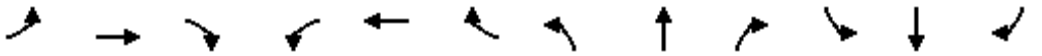
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	836	1399	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	-	-	9.3	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	101	602	6	697	100	8	3	22	59
Future Volume (vph)	101	602	6	697	100	8	3	22	59
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	81.0	81.0	81.0	81.0	81.0	39.0	39.0	39.0	39.0
Total Split (%)	67.5%	67.5%	67.5%	67.5%	67.5%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 33.8
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	602	3	6	697	100	8	0	3	22	0	59
Future Volume (veh/h)	101	602	3	6	697	100	8	0	3	22	0	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	112	669	3	7	774	111	9	0	2	24	0	56
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	471	2682	12	572	1817	800	352	165	139	358	165	140
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.09	0.00	0.09	0.09	0.00	0.09
Sat Flow, veh/h	602	5049	23	734	3420	1506	1293	1800	1523	1353	1800	1525
Grp Volume(v), veh/h	112	434	238	7	774	111	9	0	2	24	0	56
Grp Sat Flow(s),veh/h/ln	602	1638	1795	734	1710	1506	1293	1800	1523	1353	1800	1525
Q Serve(g_s), s	4.3	2.2	2.2	0.2	4.2	1.1	0.2	0.0	0.0	0.5	0.0	1.1
Cycle Q Clear(g_c), s	8.5	2.2	2.2	2.4	4.2	1.1	0.2	0.0	0.0	0.5	0.0	1.1
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	471	1740	954	572	1817	800	352	165	139	358	165	140
V/C Ratio(X)	0.24	0.25	0.25	0.01	0.43	0.14	0.03	0.00	0.01	0.07	0.00	0.40
Avail Cap(c_a), veh/h	1624	8010	4390	1977	8362	3683	1680	2013	1703	1695	1943	1647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.9	3.9	3.9	4.5	4.4	3.6	12.8	0.0	12.7	12.9	0.0	13.2
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.1	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.2	0.0	0.3	0.1	0.0	0.0	0.0	0.1	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.2	4.0	4.0	4.5	4.5	3.7	12.8	0.0	12.7	13.0	0.0	15.0
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	B
Approach Vol, veh/h		784			892			11			80	
Approach Delay, s/veh		4.4			4.4			12.8			14.4	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		8.6		22.1		8.6		22.1				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 34		75.2		33.2		75.2				
Max Q Clear Time (g_c+I1), s		2.2		10.5		3.1		6.2				
Green Ext Time (p_c), s		0.0		5.8		0.2		6.2				

Intersection Summary		
HCM 6th Ctrl Delay		4.9
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	55	10	0	34	5	2	0	0	0	0	2
Future Vol, veh/h	6	55	10	0	34	5	2	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	60	11	0	37	5	2	0	0	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	42	0	0	71	0	0	99	122	36	84	125	21
Stage 1	-	-	-	-	-	-	80	80	-	40	40	-
Stage 2	-	-	-	-	-	-	19	42	-	44	85	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1580	-	-	1542	-	-	878	772	1035	899	769	1058
Stage 1	-	-	-	-	-	-	925	832	-	976	866	-
Stage 2	-	-	-	-	-	-	1003	864	-	970	828	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1580	-	-	1542	-	-	874	769	1035	896	766	1058
Mov Cap-2 Maneuver	-	-	-	-	-	-	870	774	-	896	773	-
Stage 1	-	-	-	-	-	-	921	829	-	972	866	-
Stage 2	-	-	-	-	-	-	1001	864	-	966	825	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	9.1	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	870	1580	-	-	1542	-	-	1058
HCM Lane V/C Ratio	0.002	0.004	-	-	-	-	-	0.002
HCM Control Delay (s)	9.1	7.3	-	-	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	27	18	4	27	8	3	0	11	0	0	9
Future Vol, veh/h	10	27	18	4	27	8	3	0	11	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	29	20	4	29	9	3	0	12	0	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	38	0	0	49	0	0	84	107	25	79	113	19
Stage 1	-	-	-	-	-	-	61	61	-	42	42	-
Stage 2	-	-	-	-	-	-	23	46	-	37	71	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1585	-	-	1571	-	-	899	787	1052	906	781	1061
Stage 1	-	-	-	-	-	-	949	848	-	973	864	-
Stage 2	-	-	-	-	-	-	998	861	-	980	840	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1585	-	-	1571	-	-	885	779	1052	889	773	1061
Mov Cap-2 Maneuver	-	-	-	-	-	-	883	781	-	890	777	-
Stage 1	-	-	-	-	-	-	942	842	-	966	861	-
Stage 2	-	-	-	-	-	-	986	858	-	962	834	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.7	8.6	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1011	1585	-	-	1571	-	-	1061
HCM Lane V/C Ratio	0.015	0.007	-	-	0.003	-	-	0.009
HCM Control Delay (s)	8.6	7.3	-	-	7.3	-	-	8.4
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	0	236	217	8
Future Vol, veh/h	0	2	0	236	217	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	0	257	236	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	123	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	774	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	774	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	774	-	-
HCM Lane V/C Ratio	-	0.003	-	-
HCM Control Delay (s)	-	9.7	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	236	216	4
Future Vol, veh/h	0	7	0	236	216	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	8	0	257	235	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	120	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	777	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	777	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	777	-	-
HCM Lane V/C Ratio	-	0.01	-	-
HCM Control Delay (s)	-	9.7	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	235	6	0	222
Future Vol, veh/h	0	2	235	6	0	222
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	255	7	0	241

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	131	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	765	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	765	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	765	-
HCM Lane V/C Ratio	-	-	0.003	-
HCM Control Delay (s)	-	-	9.7	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	22	10	1	6	35	30	200	23	111	110	3
Future Vol, veh/h	6	22	10	1	6	35	30	200	23	111	110	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	23	11	1	6	37	32	211	24	117	116	3
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.7	8.4	9	9.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	74%	0%	100%	42%	0%	100%	5%	0%	100%
Vol Right, %	0%	0%	26%	0%	0%	58%	0%	0%	95%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	133	90	6	15	17	1	4	37	111	73
LT Vol	30	0	0	6	0	0	1	0	0	111	0
Through Vol	0	133	67	0	15	7	0	4	2	0	73
RT Vol	0	0	23	0	0	10	0	0	35	0	0
Lane Flow Rate	32	140	94	6	15	18	1	4	39	117	77
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.05	0.203	0.132	0.011	0.025	0.028	0.002	0.007	0.056	0.186	0.112
Departure Headway (Hd)	5.712	5.212	5.032	6.359	5.859	5.456	6.358	5.858	5.195	5.744	5.244
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	626	688	711	561	608	653	561	608	685	623	682
Service Time	3.456	2.956	2.776	4.123	3.623	3.219	4.121	3.621	2.959	3.492	2.992
HCM Lane V/C Ratio	0.051	0.203	0.132	0.011	0.025	0.028	0.002	0.007	0.057	0.188	0.113
HCM Control Delay	8.8	9.3	8.5	9.2	8.8	8.4	9.1	8.7	8.3	9.8	8.7
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.8	0.5	0	0.1	0.1	0	0	0.2	0.7	0.4

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	253	105	16
Future Vol, veh/h	0	8	0	253	105	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	9	0	275	114	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	66	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	991	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	991	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	991	-	-
HCM Lane V/C Ratio	-	0.009	-	-
HCM Control Delay (s)	-	8.7	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	15	237	46	4	109
Future Vol, veh/h	23	15	237	46	4	109
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	16	258	50	4	118

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	350	154	0	0	308	0
Stage 1	283	-	-	-	-	-
Stage 2	67	-	-	-	-	-
Critical Hdwy	6.25	7.1	-	-	5.3	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.65	3.9	-	-	3.1	-
Pot Cap-1 Maneuver	638	740	-	-	840	-
Stage 1	675	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	635	740	-	-	840	-
Mov Cap-2 Maneuver	635	-	-	-	-	-
Stage 1	675	-	-	-	-	-
Stage 2	911	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	673	840	-
HCM Lane V/C Ratio	-	-	0.061	0.005	-
HCM Control Delay (s)	-	-	10.7	9.3	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	281	10	0	131
Future Vol, veh/h	0	2	281	10	0	131
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	305	11	0	142

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	158	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	735	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	735	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.9	0	0
HCM LOS	A		

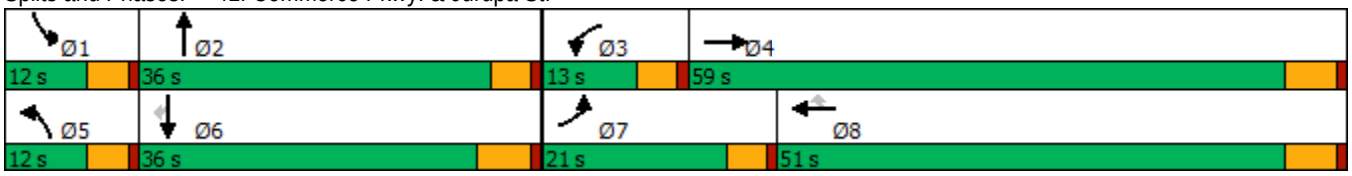
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	735	-
HCM Lane V/C Ratio	-	-	0.003	-
HCM Control Delay (s)	-	-	9.9	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	102	510	18	752	190	13	5	83	4	38
Future Volume (vph)	102	510	18	752	190	13	5	83	4	38
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	21.0	59.0	13.0	51.0	51.0	12.0	36.0	12.0	36.0	36.0
Total Split (%)	17.5%	49.2%	10.8%	42.5%	42.5%	10.0%	30.0%	10.0%	30.0%	30.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 67.2
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	510	13	18	752	190	13	5	31	83	4	38
Future Volume (veh/h)	102	510	13	18	752	190	13	5	31	83	4	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	111	554	13	20	817	0	14	5	23	90	4	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	139	2012	47	39	1181		28	36	164	200	320	271
Arrive On Green	0.09	0.41	0.41	0.02	0.35	0.00	0.02	0.13	0.13	0.07	0.18	0.18
Sat Flow, veh/h	1619	4940	116	1619	3420	1525	1619	280	1288	2956	1800	1525
Grp Volume(v), veh/h	111	367	200	20	817	0	14	0	28	90	4	34
Grp Sat Flow(s),veh/h/ln	1619	1638	1779	1619	1710	1525	1619	0	1568	1478	1800	1525
Q Serve(g_s), s	3.7	4.2	4.2	0.7	11.4	0.0	0.5	0.0	0.9	1.6	0.1	1.0
Cycle Q Clear(g_c), s	3.7	4.2	4.2	0.7	11.4	0.0	0.5	0.0	0.9	1.6	0.1	1.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.82	1.00		1.00
Lane Grp Cap(c), veh/h	139	1334	725	39	1181		28	0	200	200	320	271
V/C Ratio(X)	0.80	0.28	0.28	0.52	0.69		0.49	0.00	0.14	0.45	0.01	0.13
Avail Cap(c_a), veh/h	477	3132	1701	244	2778		215	0	885	393	977	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	11.0	11.0	26.8	15.7	0.0	27.1	0.0	21.6	24.9	18.9	19.2
Incr Delay (d2), s/veh	3.9	0.1	0.2	3.9	0.7	0.0	4.9	0.0	0.3	0.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.2	1.3	0.3	3.6	0.0	0.2	0.0	0.3	0.5	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.9	11.1	11.2	30.8	16.4	0.0	32.0	0.0	21.9	25.5	18.9	19.5
LnGrp LOS	C	B	B	C	B		C	A	C	C	B	B
Approach Vol, veh/h		678			837	A		42			128	
Approach Delay, s/veh		14.1			16.7			25.2			23.7	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	12.9	5.9	28.5	5.6	15.7	9.4	25.0
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	* 31	8.4	53.2	7.4	30.2	16.4	45.2
Max Q Clear Time (g_c+I1), s	3.6	2.9	2.7	6.2	2.5	3.0	5.7	13.4
Green Ext Time (p_c), s	0.0	0.1	0.0	3.5	0.0	0.1	0.1	5.8

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	129	19	3	38	2	3	0	2	1	0	1
Future Vol, veh/h	6	129	19	3	38	2	3	0	2	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	140	21	3	41	2	3	0	2	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	43	0	0	161	0	0	192	214	81	132	223	22
Stage 1	-	-	-	-	-	-	165	165	-	48	48	-
Stage 2	-	-	-	-	-	-	27	49	-	84	175	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1579	-	-	1430	-	-	756	687	969	832	679	1056
Stage 1	-	-	-	-	-	-	826	766	-	965	859	-
Stage 2	-	-	-	-	-	-	993	858	-	920	758	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1579	-	-	1430	-	-	751	683	969	826	675	1056
Mov Cap-2 Maneuver	-	-	-	-	-	-	751	683	-	826	675	-
Stage 1	-	-	-	-	-	-	823	763	-	961	857	-
Stage 2	-	-	-	-	-	-	990	856	-	914	755	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.5	9.4	8.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	825	1579	-	-	1430	-	-	927
HCM Lane V/C Ratio	0.007	0.004	-	-	0.002	-	-	0.002
HCM Control Delay (s)	9.4	7.3	-	-	7.5	-	-	8.9
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	119	5	11	39	1	1	0	3	2	0	3
Future Vol, veh/h	7	119	5	11	39	1	1	0	3	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	129	5	12	42	1	1	0	3	2	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	43	0	0	134	0	0	193	215	67	148	217	22
Stage 1	-	-	-	-	-	-	148	148	-	67	67	-
Stage 2	-	-	-	-	-	-	45	67	-	81	150	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1579	-	-	1463	-	-	755	686	989	811	685	1056
Stage 1	-	-	-	-	-	-	845	779	-	941	843	-
Stage 2	-	-	-	-	-	-	969	843	-	924	777	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1579	-	-	1463	-	-	745	677	989	800	676	1056
Mov Cap-2 Maneuver	-	-	-	-	-	-	745	677	-	800	676	-
Stage 1	-	-	-	-	-	-	841	775	-	936	836	-
Stage 2	-	-	-	-	-	-	958	836	-	916	773	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.6	9	8.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	914	1579	-	-	1463	-	-	936
HCM Lane V/C Ratio	0.005	0.005	-	-	0.008	-	-	0.006
HCM Control Delay (s)	9	7.3	-	-	7.5	-	-	8.9
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	2	39	28	1
Future Vol, veh/h	2	1	2	39	28	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	1	2	42	30	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	56	16	31	0	-	0
Stage 1	31	-	-	-	-	-
Stage 2	25	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	951	1066	1595	-	-	-
Stage 1	993	-	-	-	-	-
Stage 2	1000	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	950	1066	1595	-	-	-
Mov Cap-2 Maneuver	930	-	-	-	-	-
Stage 1	992	-	-	-	-	-
Stage 2	1000	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1595	-	971	-	-
HCM Lane V/C Ratio	0.001	-	0.003	-	-
HCM Control Delay (s)	7.3	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	41	58	7	23	9	12	8	2	8	5	16
Future Vol, veh/h	24	41	58	7	23	9	12	8	2	8	5	16
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	26	44	62	7	24	10	13	9	2	9	5	17
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.5	7.6	8	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	57%	0%	100%	19%	0%	100%	46%	0%	100%
Vol Right, %	0%	0%	43%	0%	0%	81%	0%	0%	54%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	5	5	24	27	72	7	15	17	8	3
LT Vol	12	0	0	24	0	0	7	0	0	8	0
Through Vol	0	5	3	0	27	14	0	15	8	0	3
RT Vol	0	0	2	0	0	58	0	0	9	0	0
Lane Flow Rate	13	6	5	26	29	76	7	16	18	9	4
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.019	0.008	0.006	0.037	0.038	0.087	0.011	0.022	0.022	0.013	0.005
Departure Headway (Hd)	5.483	4.983	4.683	5.151	4.651	4.085	5.38	4.88	4.502	5.473	4.973
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	657	722	768	689	762	866	669	738	799	658	724
Service Time	3.185	2.685	2.385	2.929	2.429	1.863	3.082	2.582	2.204	3.173	2.673
HCM Lane V/C Ratio	0.02	0.008	0.007	0.038	0.038	0.088	0.01	0.022	0.023	0.014	0.006
HCM Control Delay	8.3	7.7	7.4	8.1	7.6	7.3	8.1	7.7	7.3	8.2	7.7
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0	0	0.1	0.1	0.3	0	0.1	0.1	0	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	31	17	4	44	0	3
Future Vol, veh/h	31	17	4	44	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	34	18	4	48	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	52	0	75	26
Stage 1	-	-	-	-	43	-
Stage 2	-	-	-	-	32	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1567	-	926	1050
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	992	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1567	-	923	1050
Mov Cap-2 Maneuver	-	-	-	-	915	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	989	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1050	-	-	1567	-
HCM Lane V/C Ratio	0.003	-	-	0.003	-
HCM Control Delay (s)	8.4	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	30	6	10	20	10	22	62	7	3	32	8
Future Vol, veh/h	7	30	6	10	20	10	22	62	7	3	32	8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	33	7	11	22	11	24	68	8	3	35	9
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.8	7.8	7.9	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	75%	0%	100%	62%	0%	100%	40%	0%	100%
Vol Right, %	0%	0%	25%	0%	0%	38%	0%	0%	60%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	41	28	7	20	16	10	13	17	3	21
LT Vol	22	0	0	7	0	0	10	0	0	3	0
Through Vol	0	41	21	0	20	10	0	13	7	0	21
RT Vol	0	0	7	0	0	6	0	0	10	0	0
Lane Flow Rate	24	45	30	8	22	18	11	15	18	3	23
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.036	0.061	0.039	0.012	0.03	0.023	0.017	0.02	0.023	0.005	0.032
Departure Headway (Hd)	5.33	4.83	4.652	5.467	4.967	4.705	5.473	4.973	4.553	5.43	4.93
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	675	744	772	657	724	764	656	722	789	661	729
Service Time	3.041	2.541	2.364	3.178	2.678	2.415	3.185	2.685	2.265	3.144	2.644
HCM Lane V/C Ratio	0.036	0.06	0.039	0.012	0.03	0.024	0.017	0.021	0.023	0.005	0.032
HCM Control Delay	8.2	7.9	7.6	8.2	7.8	7.5	8.3	7.8	7.4	8.2	7.8
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0.1

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	31	44	104	21	4
Future Vol, veh/h	1	31	44	104	21	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	37	52	124	25	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	194	15	30	0	-	0
Stage 1	28	-	-	-	-	-
Stage 2	166	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	782	1067	1596	-	-	-
Stage 1	997	-	-	-	-	-
Stage 2	852	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	756	1067	1596	-	-	-
Mov Cap-2 Maneuver	797	-	-	-	-	-
Stage 1	964	-	-	-	-	-
Stage 2	852	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	2.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1596	-	797	1067	-	-
HCM Lane V/C Ratio	0.033	-	0.001	0.035	-	-
HCM Control Delay (s)	7.3	-	9.5	8.5	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	3	2	159	37	8
Future Vol, veh/h	2	3	2	159	37	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	3	2	173	40	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	136	25	49	0	-	0
Stage 1	45	-	-	-	-	-
Stage 2	91	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	849	1052	1571	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	928	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	848	1052	1571	-	-	-
Mov Cap-2 Maneuver	866	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	928	-	-	-	-	-

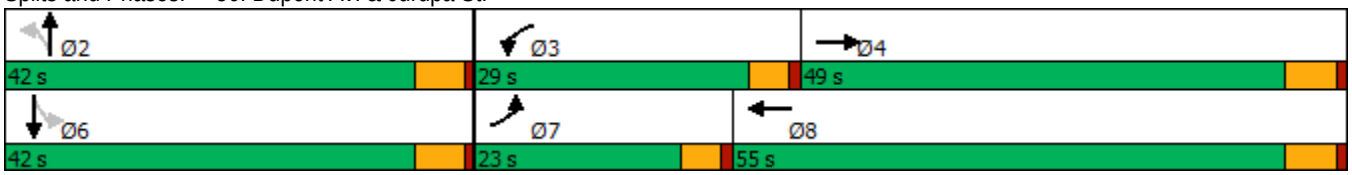
Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.1	0
HCM LOS	A		

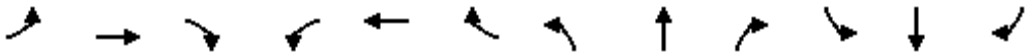
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1571	-	969	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	7.3	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	52	526	91	906	22	30	16	5
Future Volume (vph)	52	526	91	906	22	30	16	5
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	23.0	49.0	29.0	55.0	42.0	42.0	42.0	42.0
Total Split (%)	19.2%	40.8%	24.2%	45.8%	35.0%	35.0%	35.0%	35.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 49.7
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	526	17	91	906	79	22	30	82	16	5	18
Future Volume (veh/h)	52	526	17	91	906	79	22	30	82	16	5	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	53	537	16	93	924	80	22	31	60	16	5	12
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	89	1725	51	127	1730	149	423	332	297	373	332	297
Arrive On Green	0.05	0.35	0.35	0.08	0.38	0.38	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1619	4904	146	1619	4607	398	1339	1710	1525	1253	1710	1525
Grp Volume(v), veh/h	53	358	195	93	656	348	22	31	60	16	5	12
Grp Sat Flow(s),veh/h/ln	1619	1638	1774	1619	1638	1728	1339	1710	1525	1253	1710	1525
Q Serve(g_s), s	1.3	3.4	3.4	2.4	6.6	6.6	0.6	0.6	1.4	0.5	0.1	0.3
Cycle Q Clear(g_c), s	1.3	3.4	3.4	2.4	6.6	6.6	0.8	0.6	1.4	1.8	0.1	0.3
Prop In Lane	1.00		0.08	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	89	1152	624	127	1230	649	423	332	297	373	332	297
V/C Ratio(X)	0.60	0.31	0.31	0.73	0.53	0.54	0.05	0.09	0.20	0.04	0.02	0.04
Avail Cap(c_a), veh/h	707	3360	1819	938	3827	2019	1326	1486	1326	1218	1486	1326
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	9.9	9.9	19.0	10.3	10.3	14.1	13.9	14.2	15.0	13.7	13.8
Incr Delay (d2), s/veh	2.4	0.2	0.3	3.0	0.4	0.7	0.1	0.1	0.3	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.8	0.9	0.8	1.6	1.7	0.1	0.2	0.4	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	10.1	10.2	21.9	10.6	11.0	14.2	14.0	14.6	15.0	13.7	13.8
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		606			1097			113			33	
Approach Delay, s/veh		11.2			11.7			14.3			14.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.6	7.9	20.6		13.6	6.9	21.6				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		36.6	24.4	43.2		36.6	18.4	49.2				
Max Q Clear Time (g_c+I1), s		3.4	4.4	5.4		3.8	3.3	8.6				
Green Ext Time (p_c), s		0.5	0.1	3.4		0.1	0.0	7.2				

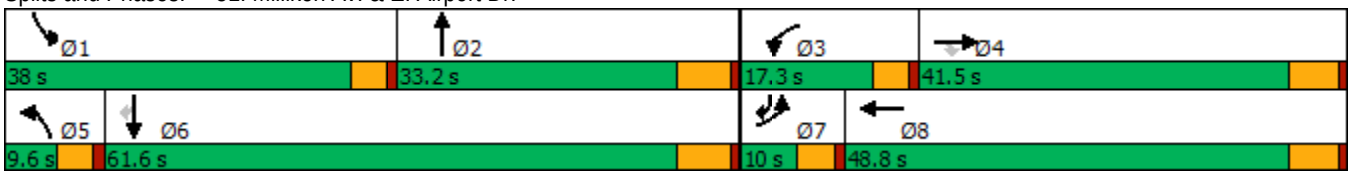
Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

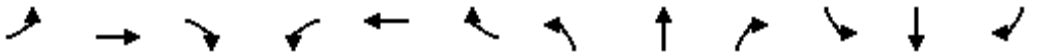
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	73	105	21	76	147	21	594	331	792	160
Future Volume (vph)	73	105	21	76	147	21	594	331	792	160
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	10.0	41.5	41.5	17.3	48.8	9.6	33.2	38.0	61.6	10.0
Total Split (%)	7.7%	31.9%	31.9%	13.3%	37.5%	7.4%	25.5%	29.2%	47.4%	7.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 96.5
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	105	21	76	147	202	21	594	70	331	792	160
Future Volume (veh/h)	73	105	21	76	147	202	21	594	70	331	792	160
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	85	122	11	88	171	134	24	691	65	385	921	137
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	169	493	220	110	290	214	79	1028	96	428	2273	792
Arrive On Green	0.06	0.14	0.14	0.07	0.15	0.15	0.03	0.22	0.22	0.26	0.46	0.46
Sat Flow, veh/h	2956	3420	1525	1619	1876	1382	2956	4572	427	1619	4914	1523
Grp Volume(v), veh/h	85	122	11	88	155	150	24	494	262	385	921	137
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1619	1710	1548	1478	1638	1722	1619	1638	1523
Q Serve(g_s), s	2.0	2.2	0.4	3.8	6.0	6.4	0.6	9.8	9.9	16.3	8.8	3.4
Cycle Q Clear(g_c), s	2.0	2.2	0.4	3.8	6.0	6.4	0.6	9.8	9.9	16.3	8.8	3.4
Prop In Lane	1.00		1.00	1.00		0.89	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	169	493	220	110	264	239	79	737	387	428	2273	792
V/C Ratio(X)	0.50	0.25	0.05	0.80	0.59	0.63	0.31	0.67	0.68	0.90	0.41	0.17
Avail Cap(c_a), veh/h	225	1722	768	290	1037	939	209	1248	656	763	3841	1278
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	26.9	26.2	32.6	27.9	28.1	33.9	25.1	25.1	25.2	12.6	9.0
Incr Delay (d2), s/veh	0.9	0.3	0.1	5.0	2.1	2.7	0.8	1.1	2.1	3.1	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.9	0.2	1.5	2.4	2.4	0.2	3.4	3.8	5.8	2.6	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	27.2	26.2	37.6	29.9	30.7	34.7	26.1	27.2	28.3	12.7	9.1
LnGrp LOS	C	C	C	D	C	C	C	C	C	C	B	A
Approach Vol, veh/h		218			393			780			1443	
Approach Delay, s/veh		29.5			32.0			26.8			16.5	
Approach LOS		C			C			C			B	

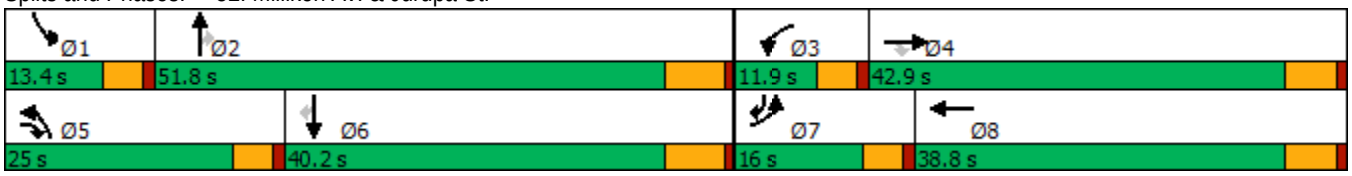
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.3	22.1	9.4	16.0	6.5	39.0	8.7	16.8
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	33.4	27.0	12.7	35.7	5.0	55.4	5.4	43.0
Max Q Clear Time (g_c+I1), s	18.3	11.9	5.8	4.2	2.6	10.8	4.0	8.4
Green Ext Time (p_c), s	0.5	3.8	0.0	0.7	0.0	7.3	0.0	1.7

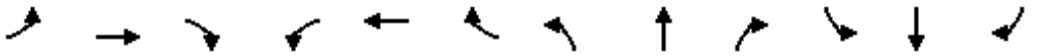
Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	203	723	295	100	581	461	742	104	128	370	62
Future Volume (vph)	203	723	295	100	581	461	742	104	128	370	62
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	16.0	42.9	25.0	11.9	38.8	25.0	51.8	51.8	13.4	40.2	16.0
Total Split (%)	13.3%	35.8%	20.8%	9.9%	32.3%	20.8%	43.2%	43.2%	11.2%	33.5%	13.3%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 83.4
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	723	295	100	581	68	461	742	104	128	370	62
Future Volume (veh/h)	203	723	295	100	581	68	461	742	104	128	370	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	209	745	199	103	599	45	475	765	89	132	381	28
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	302	1254	674	207	1051	78	586	1343	417	223	775	387
Arrive On Green	0.10	0.26	0.26	0.07	0.23	0.23	0.19	0.27	0.27	0.07	0.16	0.16
Sat Flow, veh/h	3141	4914	1525	3141	4666	348	3141	4914	1525	3141	4914	1525
Grp Volume(v), veh/h	209	745	199	103	419	225	475	765	89	132	381	28
Grp Sat Flow(s),veh/h/ln	1570	1638	1525	1570	1638	1737	1570	1638	1525	1570	1638	1525
Q Serve(g_s), s	4.1	8.4	5.3	2.0	7.2	7.3	9.2	8.5	2.9	2.6	4.5	0.9
Cycle Q Clear(g_c), s	4.1	8.4	5.3	2.0	7.2	7.3	9.2	8.5	2.9	2.6	4.5	0.9
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	302	1254	674	207	738	391	586	1343	417	223	775	387
V/C Ratio(X)	0.69	0.59	0.30	0.50	0.57	0.57	0.81	0.57	0.21	0.59	0.49	0.07
Avail Cap(c_a), veh/h	565	2875	1177	362	1705	904	1010	3534	1097	436	2635	964
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	20.7	11.4	28.6	21.8	21.9	24.7	19.8	17.8	28.6	24.4	18.0
Incr Delay (d2), s/veh	1.1	0.5	0.2	0.7	0.7	1.3	1.0	0.4	0.3	0.9	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.8	1.5	0.7	2.5	2.7	3.0	2.8	0.9	0.9	1.6	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.8	21.2	11.6	29.3	22.5	23.2	25.7	20.2	18.0	29.5	24.9	18.1
LnGrp LOS	C	C	B	C	C	C	C	C	B	C	C	B
Approach Vol, veh/h		1153			747			1329			541	
Approach Delay, s/veh		20.9			23.7			22.0			25.6	
Approach LOS		C			C			C			C	

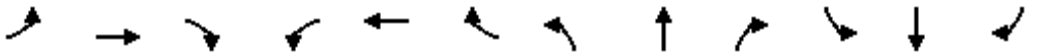
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	23.5	8.8	22.0	16.4	16.2	10.7	20.1
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	8.8	45.6	7.3	37.1	20.4	34.0	11.4	33.0
Max Q Clear Time (g_c+I1), s	4.6	10.5	4.0	10.4	11.2	6.5	6.1	9.3
Green Ext Time (p_c), s	0.1	5.5	0.0	5.7	0.7	2.4	0.2	3.8

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	202	2	19	16	235	296	1208	116	557	327
Future Volume (vph)	202	2	19	16	235	296	1208	116	557	327
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	21.0	33.0	12.0	24.0	24.0	27.0	59.0	16.0	48.0	48.0
Total Split (%)	17.5%	27.5%	10.0%	20.0%	20.0%	22.5%	49.2%	13.3%	40.0%	40.0%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 86
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	2	47	19	16	235	296	1208	14	116	557	327
Future Volume (veh/h)	202	2	47	19	16	235	296	1208	14	116	557	327
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	224	2	43	21	0	206	329	1342	15	129	619	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	312	15	315	39	0	424	426	1961	22	202	1574	
Arrive On Green	0.10	0.21	0.21	0.02	0.00	0.14	0.14	0.39	0.39	0.06	0.32	0.00
Sat Flow, veh/h	3141	68	1468	1619	0	3051	3141	5010	56	3141	4914	1525
Grp Volume(v), veh/h	224	0	45	21	0	206	329	878	479	129	619	0
Grp Sat Flow(s),veh/h/ln	1570	0	1536	1619	0	1525	1570	1638	1790	1570	1638	1525
Q Serve(g_s), s	5.0	0.0	1.7	0.9	0.0	4.5	7.2	15.9	15.9	2.9	7.0	0.0
Cycle Q Clear(g_c), s	5.0	0.0	1.7	0.9	0.0	4.5	7.2	15.9	15.9	2.9	7.0	0.0
Prop In Lane	1.00		0.96	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	312	0	330	39	0	424	426	1282	701	202	1574	
V/C Ratio(X)	0.72	0.00	0.14	0.54	0.00	0.49	0.77	0.68	0.68	0.64	0.39	
Avail Cap(c_a), veh/h	719	0	568	167	0	745	982	2415	1319	500	2868	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.3	0.0	22.8	34.6	0.0	28.5	29.9	18.1	18.1	32.7	18.9	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.2	4.4	0.0	0.9	1.1	0.7	1.2	1.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.6	0.4	0.0	1.5	2.5	5.1	5.7	1.0	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.4	0.0	22.9	38.9	0.0	29.3	31.0	18.8	19.3	33.9	19.1	0.0
LnGrp LOS	C	A	C	D	A	C	C	B	B	C	B	
Approach Vol, veh/h		269			227			1686			748	A
Approach Delay, s/veh		30.8			30.2			21.3			21.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	34.2	6.3	21.9	14.3	29.1	11.7	16.5
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	11.4	52.8	7.4	26.5	22.4	41.8	16.4	17.5
Max Q Clear Time (g_c+I1), s	4.9	18.0	2.9	3.7	9.2	9.0	7.0	6.5
Green Ext Time (p_c), s	0.1	10.1	0.0	0.1	0.5	4.0	0.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Notes

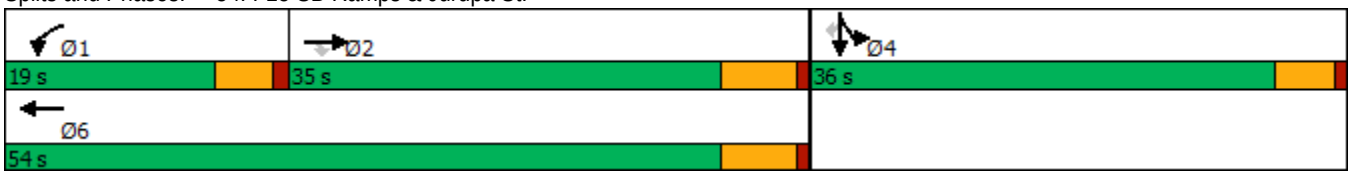
User approved volume balancing among the lanes for turning movement.

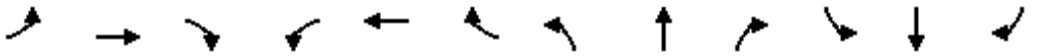
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	652	190	403	673	490	3	916
Future Volume (vph)	652	190	403	673	490	3	916
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	35.0	35.0	19.0	54.0	36.0	36.0	36.0
Total Split (%)	38.9%	38.9%	21.1%	60.0%	40.0%	40.0%	40.0%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 79.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	652	190	403	673	0	0	0	0	490	3	916
Future Volume (veh/h)	0	652	190	403	673	0	0	0	0	490	3	916
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1800	1800	1600	1800	0				1700	1800	1800
Adj Flow Rate, veh/h	0	716	157	443	740	0				360	0	1015
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1115	315	523	2238	0				626	0	1179
Arrive On Green	0.00	0.21	0.21	0.18	0.46	0.00				0.39	0.00	0.39
Sat Flow, veh/h	0	5400	1525	2956	5076	0				1619	0	3051
Grp Volume(v), veh/h	0	716	157	443	740	0				360	0	1015
Grp Sat Flow(s),veh/h/ln	0	1800	1525	1478	1638	0				1619	0	1525
Q Serve(g_s), s	0.0	8.4	6.3	10.1	6.7	0.0				12.2	0.0	21.3
Cycle Q Clear(g_c), s	0.0	8.4	6.3	10.1	6.7	0.0				12.2	0.0	21.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1115	315	523	2238	0				626	0	1179
V/C Ratio(X)	0.00	0.64	0.50	0.85	0.33	0.00				0.58	0.00	0.86
Avail Cap(c_a), veh/h	0	2254	637	596	3394	0				722	0	1361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	25.2	24.4	27.7	12.1	0.0				16.8	0.0	19.6
Incr Delay (d2), s/veh	0.0	0.5	0.9	8.9	0.1	0.0				0.8	0.0	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.3	2.1	3.9	2.0	0.0				4.0	0.0	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	25.7	25.3	36.6	12.2	0.0				17.7	0.0	24.9
LnGrp LOS	A	C	C	D	B	A				B	A	C
Approach Vol, veh/h		873			1183						1375	
Approach Delay, s/veh		25.6			21.3						23.0	
Approach LOS		C			C						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	17.3	20.3		31.8		37.6
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0
Max Green Setting (Gmax), s	14.0	29.0		31.0		48.0
Max Q Clear Time (g_c+I1), s	12.1	10.4		23.3		8.7
Green Ext Time (p_c), s	0.2	3.9		3.6		4.2

Intersection Summary		
HCM 6th Ctrl Delay		23.1
HCM 6th LOS		C

Notes

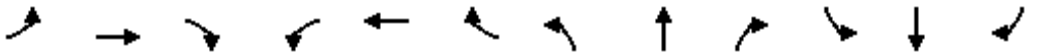
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	377	764	757	350	319	0	521
Future Volume (vph)	377	764	757	350	319	0	521
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	23.0	57.0	34.0	34.0	33.0	33.0	33.0
Total Split (%)	25.6%	63.3%	37.8%	37.8%	36.7%	36.7%	36.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 67.8
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	764	0	0	757	350	319	0	521	0	0	0
Future Volume (veh/h)	377	764	0	0	757	350	319	0	521	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1700	1800	1800			
Adj Flow Rate, veh/h	401	813	0	0	805	290	467	0	251			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	540	2760	0	0	1469	456	767	0	361			
Arrive On Green	0.17	0.56	0.00	0.00	0.30	0.30	0.24	0.00	0.24			
Sat Flow, veh/h	3141	5076	0	0	5076	1525	3238	0	1525			
Grp Volume(v), veh/h	401	813	0	0	805	290	467	0	251			
Grp Sat Flow(s),veh/h/ln	1570	1638	0	0	1638	1525	1619	0	1525			
Q Serve(g_s), s	6.1	4.4	0.0	0.0	7.0	8.3	6.5	0.0	7.6			
Cycle Q Clear(g_c), s	6.1	4.4	0.0	0.0	7.0	8.3	6.5	0.0	7.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	540	2760	0	0	1469	456	767	0	361			
V/C Ratio(X)	0.74	0.29	0.00	0.00	0.55	0.64	0.61	0.00	0.69			
Avail Cap(c_a), veh/h	1142	5037	0	0	2805	871	1784	0	841			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.9	5.8	0.0	0.0	14.9	15.4	17.2	0.0	17.6			
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.2	1.1	0.8	0.0	2.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.9	0.8	0.0	0.0	2.0	2.4	2.0	0.0	2.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.7	5.9	0.0	0.0	15.1	16.5	18.0	0.0	20.1			
LnGrp LOS	C	A	A	A	B	B	B	A	C			
Approach Vol, veh/h		1214			1095			718				
Approach Delay, s/veh		10.8			15.5			18.7				
Approach LOS		B			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		33.5			13.3	20.2		17.1				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		51.9			18.4	28.9		27.9				
Max Q Clear Time (g_c+I1), s		6.4			8.1	10.3		9.6				
Green Ext Time (p_c), s		4.7			0.6	4.8		2.4				

Intersection Summary	
HCM 6th Ctrl Delay	14.4
HCM 6th LOS	B

Notes

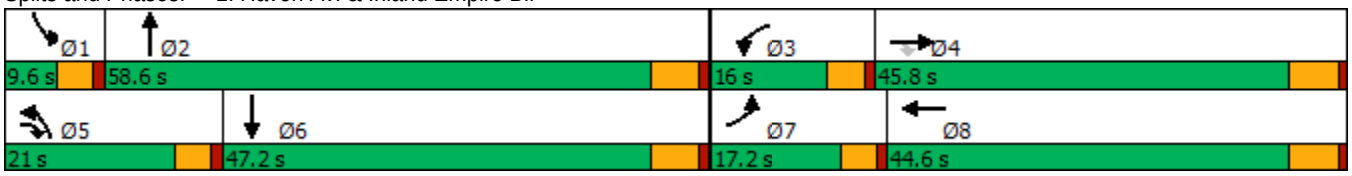
User approved volume balancing among the lanes for turning movement.

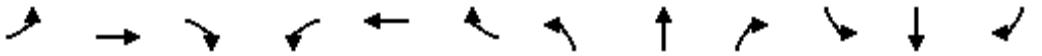
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	189	335	376	336	226	39	335	1869	427	39	1697	66
Future Volume (vph)	189	335	376	336	226	39	335	1869	427	39	1697	66
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	17.2	45.8	21.0	16.0	44.6		21.0	58.6		9.6	47.2	
Total Split (%)	13.2%	35.2%	16.2%	12.3%	34.3%		16.2%	45.1%		7.4%	36.3%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 107.7
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	335	376	336	226	39	335	1869	427	39	1697	66
Future Volume (veh/h)	189	335	376	336	226	39	335	1869	427	39	1697	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1500	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	197	349	218	350	235	0	349	1947	0	41	1768	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	256	567	464	430	635		409	2962		102	2319	
Arrive On Green	0.09	0.17	0.17	0.11	0.19	0.00	0.14	0.48	0.00	0.03	0.37	0.00
Sat Flow, veh/h	2956	3420	1525	4029	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	197	349	218	350	235	0	349	1947	0	41	1768	0
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1343	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	6.3	9.2	11.2	8.2	5.8	0.0	11.2	23.2	0.0	1.3	24.2	0.0
Cycle Q Clear(g_c), s	6.3	9.2	11.2	8.2	5.8	0.0	11.2	23.2	0.0	1.3	24.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	567	464	430	635		409	2962		102	2319	
V/C Ratio(X)	0.77	0.62	0.47	0.81	0.37		0.85	0.66		0.40	0.76	
Avail Cap(c_a), veh/h	384	1412	841	474	1369		500	3374		153	2646	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.3	37.5	27.4	42.3	34.5	0.0	40.8	19.2	0.0	45.8	26.5	0.0
Incr Delay (d2), s/veh	2.3	1.1	0.7	8.6	0.4	0.0	9.9	0.4	0.0	0.9	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.8	4.0	3.0	2.3	0.0	4.4	7.5	0.0	0.5	8.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.6	38.6	28.1	51.0	34.9	0.0	50.7	19.6	0.0	46.8	27.7	0.0
LnGrp LOS	D	D	C	D	C		D	B		D	C	
Approach Vol, veh/h		764			585	A		2296	A		1809	A
Approach Delay, s/veh		37.4			44.5			24.3			28.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	52.2	14.9	21.9	18.0	42.1	13.0	23.8
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	52.8	11.4	40.0	16.4	41.4	12.6	38.8
Max Q Clear Time (g_c+I1), s	3.3	25.2	10.2	13.2	13.2	26.2	8.3	7.8
Green Ext Time (p_c), s	0.0	16.6	0.1	2.8	0.2	10.1	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	246	319	2311	965	1721
Future Volume (vph)	246	319	2311	965	1721
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	33.0	33.0	67.0		67.0
Total Split (%)	33.0%	33.0%	67.0%		67.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	246	319	2311	965	0	1721
Future Volume (veh/h)	246	319	2311	965	0	1721
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	0	1800
Adj Flow Rate, veh/h	327	166	2358	0	0	1756
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	433	204	4690		0	4690
Arrive On Green	0.13	0.13	1.00	0.00	0.00	0.76
Sat Flow, veh/h	3238	1525	6444	1525	0	6696
Grp Volume(v), veh/h	327	166	2358	0	0	1756
Grp Sat Flow(s),veh/h/ln	1619	1525	1548	1525	0	1548
Q Serve(g_s), s	9.7	10.6	0.0	0.0	0.0	9.6
Cycle Q Clear(g_c), s	9.7	10.6	0.0	0.0	0.0	9.6
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	433	204	4690		0	4690
V/C Ratio(X)	0.76	0.81	0.50		0.00	0.37
Avail Cap(c_a), veh/h	903	426	4690		0	4690
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.63	0.00	0.00	0.57
Uniform Delay (d), s/veh	41.7	42.1	0.0	0.0	0.0	4.1
Incr Delay (d2), s/veh	1.0	3.0	0.2	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	4.0	0.1	0.0	0.0	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.8	45.1	0.2	0.0	0.0	4.2
LnGrp LOS	D	D	A		A	A
Approach Vol, veh/h	493		2358	A		1756
Approach Delay, s/veh	43.6		0.2			4.2
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		81.5		18.5		81.5
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		2.0		12.6		11.6
Green Ext Time (p_c), s		20.3		0.8		11.0

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Notes

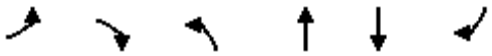
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	529	310	2747	1616	351
Future Volume (vph)	529	310	2747	1616	351
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	33.0	33.0	67.0	67.0	
Total Split (%)	33.0%	33.0%	67.0%	67.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	529	310	0	2747	1616	351
Future Volume (veh/h)	529	310	0	2747	1616	351
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	545	241	0	2832	1666	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	656	309	0	4263	4263	
Arrive On Green	0.20	0.20	0.00	0.69	1.00	0.00
Sat Flow, veh/h	3238	1525	0	6696	6444	1525
Grp Volume(v), veh/h	545	241	0	2832	1666	0
Grp Sat Flow(s),veh/h/ln	1619	1525	0	1548	1548	1525
Q Serve(g_s), s	16.1	15.0	0.0	26.3	0.0	0.0
Cycle Q Clear(g_c), s	16.1	15.0	0.0	26.3	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	656	309	0	4263	4263	
V/C Ratio(X)	0.83	0.78	0.00	0.66	0.39	
Avail Cap(c_a), veh/h	903	426	0	4263	4263	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.19	0.89	0.00
Uniform Delay (d), s/veh	38.2	37.8	0.0	8.9	0.0	0.0
Incr Delay (d2), s/veh	4.8	6.2	0.0	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	5.8	0.0	6.7	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.0	44.0	0.0	9.1	0.2	0.0
LnGrp LOS	D	D	A	A	A	
Approach Vol, veh/h	786			2832	1666	A
Approach Delay, s/veh	43.3			9.1	0.2	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		74.6		25.4		74.6
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		28.3		18.1		2.0
Green Ext Time (p_c), s		22.0		2.1		10.1

Intersection Summary		
HCM 6th Ctrl Delay	11.4	
HCM 6th LOS	B	

Notes

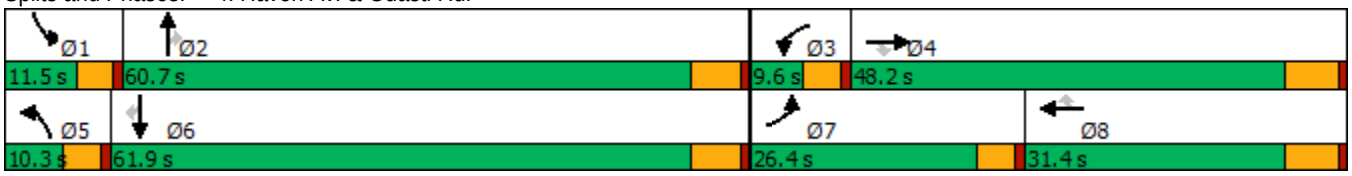
User approved volume balancing among the lanes for turning movement.

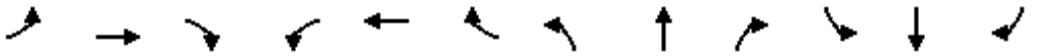
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	383	45	208	80	19	223	63	2894	105	162	1653	110
Future Volume (vph)	383	45	208	80	19	223	63	2894	105	162	1653	110
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	26.4	48.2	48.2	9.6	31.4	31.4	10.3	60.7	60.7	11.5	61.9	61.9
Total Split (%)	20.3%	37.1%	37.1%	7.4%	24.2%	24.2%	7.9%	46.7%	46.7%	8.8%	47.6%	47.6%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 115.1
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	383	45	208	80	19	223	63	2894	105	162	1653	110
Future Volume (veh/h)	383	45	208	80	19	223	63	2894	105	162	1653	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1700	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	395	46	86	82	20	150	65	2984	72	167	1704	89
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	451	363	308	124	164	231	116	3097	763	186	3243	799
Arrive On Green	0.15	0.20	0.20	0.04	0.09	0.09	0.04	0.50	0.50	0.06	0.52	0.52
Sat Flow, veh/h	2956	1800	1525	2956	1800	2536	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	395	46	86	82	20	150	65	2984	72	167	1704	89
Grp Sat Flow(s),veh/h/ln	1478	1800	1525	1478	1800	1268	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	14.3	2.3	5.2	3.0	1.1	6.3	2.4	51.0	2.7	6.2	19.8	3.2
Cycle Q Clear(g_c), s	14.3	2.3	5.2	3.0	1.1	6.3	2.4	51.0	2.7	6.2	19.8	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	451	363	308	124	164	231	116	3097	763	186	3243	799
V/C Ratio(X)	0.88	0.13	0.28	0.66	0.12	0.65	0.56	0.96	0.09	0.90	0.53	0.11
Avail Cap(c_a), veh/h	587	689	584	135	414	582	154	3099	763	186	3243	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	35.9	37.0	51.8	45.8	48.2	51.8	26.4	14.4	51.0	17.2	13.2
Incr Delay (d2), s/veh	9.6	0.2	0.5	7.6	0.3	3.1	1.6	9.2	0.1	37.9	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	1.0	1.9	1.2	0.5	2.0	0.9	18.8	0.9	3.2	6.5	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	36.0	37.5	59.4	46.1	51.2	53.3	35.7	14.4	89.0	17.3	13.3
LnGrp LOS	E	D	D	E	D	D	D	D	B	F	B	B
Approach Vol, veh/h		527			252			3121			1960	
Approach Delay, s/veh		50.5			53.5			35.6			23.2	
Approach LOS		D			D			D			C	

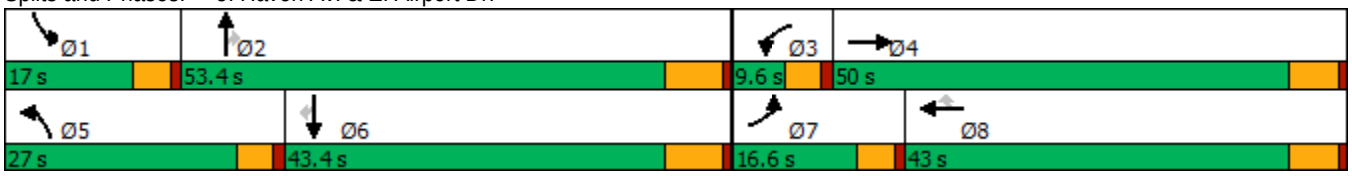
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	60.7	9.2	28.3	8.9	63.3	21.3	16.2
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	6.9	54.9	5.0	42.0	5.7	56.1	21.8	25.2
Max Q Clear Time (g_c+I1), s	8.2	53.0	5.0	7.2	4.4	21.8	16.3	8.3
Green Ext Time (p_c), s	0.0	1.9	0.0	0.5	0.0	16.2	0.4	0.5

Intersection Summary	
HCM 6th Ctrl Delay	33.6
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	288	472	31	600	599	493	2163	22	295	1405	172
Future Volume (vph)	288	472	31	600	599	493	2163	22	295	1405	172
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	16.6	50.0	9.6	43.0	43.0	27.0	53.4	53.4	17.0	43.4	43.4
Total Split (%)	12.8%	38.5%	7.4%	33.1%	33.1%	20.8%	41.1%	41.1%	13.1%	33.4%	33.4%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	472	599	31	600	599	493	2163	22	295	1405	172
Future Volume (veh/h)	288	472	599	31	600	599	493	2163	22	295	1405	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	294	482	466	32	612	480	503	2207	20	301	1434	135
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	273	602	537	78	979	437	509	2234	550	282	1758	433
Arrive On Green	0.09	0.35	0.35	0.03	0.29	0.29	0.17	0.36	0.36	0.10	0.28	0.28
Sat Flow, veh/h	2956	1710	1524	2956	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	294	482	466	32	612	480	503	2207	20	301	1434	135
Grp Sat Flow(s),veh/h/ln	1478	1710	1524	1478	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	12.0	33.1	37.1	1.4	20.2	37.2	22.1	46.0	1.1	12.4	28.1	9.0
Cycle Q Clear(g_c), s	12.0	33.1	37.1	1.4	20.2	37.2	22.1	46.0	1.1	12.4	28.1	9.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	273	602	537	78	979	437	509	2234	550	282	1758	433
V/C Ratio(X)	1.08	0.80	0.87	0.41	0.63	1.10	0.99	0.99	0.04	1.07	0.82	0.31
Avail Cap(c_a), veh/h	273	602	537	114	979	437	509	2234	550	282	1758	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.0	38.0	39.3	62.3	40.3	46.4	53.7	41.3	26.9	58.8	43.4	36.6
Incr Delay (d2), s/veh	76.6	7.6	14.2	1.3	1.3	72.8	36.5	16.2	0.0	72.6	3.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	14.6	15.4	0.5	8.4	22.4	10.4	18.9	0.4	7.3	10.6	3.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	135.6	45.6	53.5	63.6	41.6	119.2	90.1	57.5	26.9	131.4	46.5	37.0
LnGrp LOS	F	D	D	E	D	F	F	E	C	F	D	D
Approach Vol, veh/h		1242			1124			2730			1870	
Approach Delay, s/veh		69.9			75.4			63.3			59.5	
Approach LOS		E			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	53.4	8.0	51.6	27.0	43.4	16.6	43.0
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	46.9	5.0	44.2	22.4	36.9	12.0	37.2
Max Q Clear Time (g_c+I1), s	14.4	48.0	3.4	39.1	24.1	30.1	14.0	39.2
Green Ext Time (p_c), s	0.0	0.0	0.0	2.5	0.0	4.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	65.4
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	2003	3	0	1526
Future Vol, veh/h	0	6	2003	3	0	1526
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	7	2177	3	0	1659

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1090	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	183	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	183	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.4	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	183	-
HCM Lane V/C Ratio	-	-	0.036	-
HCM Control Delay (s)	-	-	25.4	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	2003	3	0	1526
Future Vol, veh/h	0	2	2003	3	0	1526
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	2177	3	0	1659

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1090	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	183	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	183	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	183	-
HCM Lane V/C Ratio	-	-	0.012	-
HCM Control Delay (s)	-	-	24.9	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	25	1968	17	0	1535
Future Vol, veh/h	0	25	1968	17	0	1535
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	26	2029	18	0	1582

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1024	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	203	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	203	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

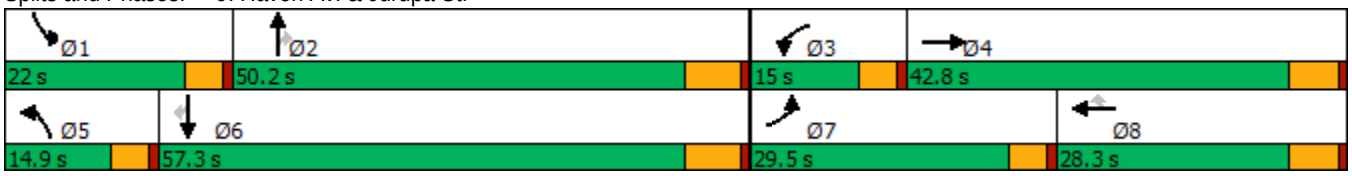
Approach	WB	NB	SB
HCM Control Delay, s	25.3	0	0
HCM LOS	D		

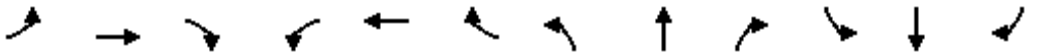
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	203	-
HCM Lane V/C Ratio	-	-	0.127	-
HCM Control Delay (s)	-	-	25.3	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.4	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	454	338	313	283	211	66	1976	343	202	1515	330
Future Volume (vph)	454	338	313	283	211	66	1976	343	202	1515	330
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	29.5	42.8	15.0	28.3	28.3	14.9	50.2	50.2	22.0	57.3	57.3
Total Split (%)	22.7%	32.9%	11.5%	21.8%	21.8%	11.5%	38.6%	38.6%	16.9%	44.1%	44.1%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 120.8
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	454	338	65	313	283	211	66	1976	343	202	1515	330
Future Volume (veh/h)	454	338	65	313	283	211	66	1976	343	202	1515	330
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	463	345	53	319	289	157	67	2016	256	206	1546	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	925	138	265	443	198	84	2281	561	230	2843	
Arrive On Green	0.17	0.21	0.21	0.09	0.13	0.13	0.05	0.37	0.37	0.14	0.46	0.00
Sat Flow, veh/h	2956	4313	645	2956	3420	1525	1619	6192	1522	1619	6192	1525
Grp Volume(v), veh/h	463	260	138	319	289	157	67	2016	256	206	1546	0
Grp Sat Flow(s),veh/h/ln	1478	1638	1682	1478	1710	1525	1619	1548	1522	1619	1548	1525
Q Serve(g_s), s	17.8	7.9	8.2	10.4	9.3	11.6	4.8	35.4	14.8	14.5	20.9	0.0
Cycle Q Clear(g_c), s	17.8	7.9	8.2	10.4	9.3	11.6	4.8	35.4	14.8	14.5	20.9	0.0
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	703	361	265	443	198	84	2281	561	230	2843	
V/C Ratio(X)	0.90	0.37	0.38	1.20	0.65	0.79	0.80	0.88	0.46	0.89	0.54	
Avail Cap(c_a), veh/h	634	1044	536	265	663	296	144	2331	573	243	2843	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.9	38.9	39.0	52.8	48.0	49.0	54.5	34.3	27.8	48.9	22.6	0.0
Incr Delay (d2), s/veh	12.1	0.3	0.7	122.2	1.6	8.5	6.5	4.4	0.6	29.4	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	3.1	3.3	8.2	4.0	4.8	2.0	12.9	5.3	7.5	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	39.2	39.7	175.1	49.7	57.6	61.0	38.7	28.4	78.4	22.9	0.0
LnGrp LOS	E	D	D	F	D	E	E	D	C	E	C	
Approach Vol, veh/h		861			765			2339			1752	A
Approach Delay, s/veh		50.0			103.6			38.2			29.4	
Approach LOS		D			F			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.1	49.3	15.0	30.7	10.6	59.8	24.9	20.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	17.4	43.7	10.4	37.0	10.3	50.8	24.9	22.5
Max Q Clear Time (g_c+I1), s	16.5	37.4	12.4	10.2	6.8	22.9	19.8	13.6
Green Ext Time (p_c), s	0.0	5.4	0.0	2.3	0.0	11.7	0.5	1.4

Intersection Summary	
HCM 6th Ctrl Delay	46.0
HCM 6th LOS	D

Notes

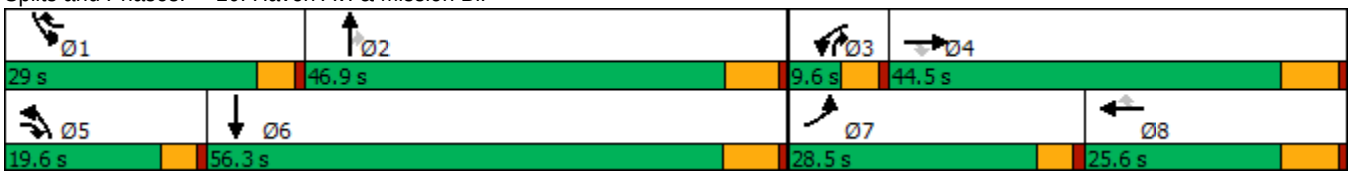
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

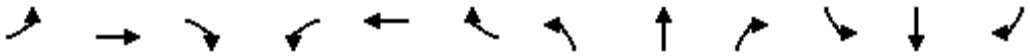
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	519	655	109	37	449	422	101	1488	57	302	1329
Future Volume (vph)	519	655	109	37	449	422	101	1488	57	302	1329
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	28.5	44.5	19.6	9.6	25.6	29.0	19.6	46.9	9.6	29.0	56.3
Total Split (%)	21.9%	34.2%	15.1%	7.4%	19.7%	22.3%	15.1%	36.1%	7.4%	22.3%	43.3%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 127.8
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	519	655	109	37	449	422	101	1488	57	302	1329	130
Future Volume (veh/h)	519	655	109	37	449	422	101	1488	57	302	1329	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	541	682	69	39	468	326	105	1550	39	315	1384	124
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	542	1479	577	86	720	509	126	1535	520	303	1934	173
Arrive On Green	0.18	0.30	0.30	0.03	0.15	0.15	0.08	0.31	0.31	0.19	0.42	0.42
Sat Flow, veh/h	2956	4914	1524	2956	4914	1525	1619	4914	1524	1619	4585	411
Grp Volume(v), veh/h	541	682	69	39	468	326	105	1550	39	315	989	519
Grp Sat Flow(s),veh/h/ln	1478	1638	1524	1478	1638	1525	1619	1638	1524	1619	1638	1720
Q Serve(g_s), s	23.8	14.7	3.8	1.7	11.7	19.1	8.3	40.7	2.3	24.4	32.6	32.6
Cycle Q Clear(g_c), s	23.8	14.7	3.8	1.7	11.7	19.1	8.3	40.7	2.3	24.4	32.6	32.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	542	1479	577	86	720	509	126	1535	520	303	1382	725
V/C Ratio(X)	1.00	0.46	0.12	0.45	0.65	0.64	0.83	1.01	0.07	1.04	0.72	0.72
Avail Cap(c_a), veh/h	542	1479	577	113	720	509	186	1535	520	303	1382	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	37.0	26.3	62.2	52.4	36.8	59.2	44.8	29.0	52.9	31.2	31.2
Incr Delay (d2), s/veh	38.0	0.2	0.1	1.4	2.1	2.7	12.1	25.4	0.1	62.2	1.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	5.6	1.3	0.6	4.8	8.7	3.7	19.3	0.8	14.7	12.3	13.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.2	37.2	26.4	63.6	54.5	39.5	71.3	70.2	29.1	115.1	33.0	34.6
LnGrp LOS	F	D	C	E	D	D	E	F	C	F	C	C
Approach Vol, veh/h		1292			833			1694			1823	
Approach Delay, s/veh		59.2			49.0			69.3			47.6	
Approach LOS		E			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.0	47.2	8.4	45.7	14.7	61.5	28.5	25.6
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	24.4	* 41	5.0	38.0	15.0	49.8	23.9	19.1
Max Q Clear Time (g_c+I1), s	26.4	42.7	3.7	16.7	10.3	34.6	25.8	21.1
Green Ext Time (p_c), s	0.0	0.0	0.0	4.2	0.0	7.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	57.0
HCM 6th LOS	E

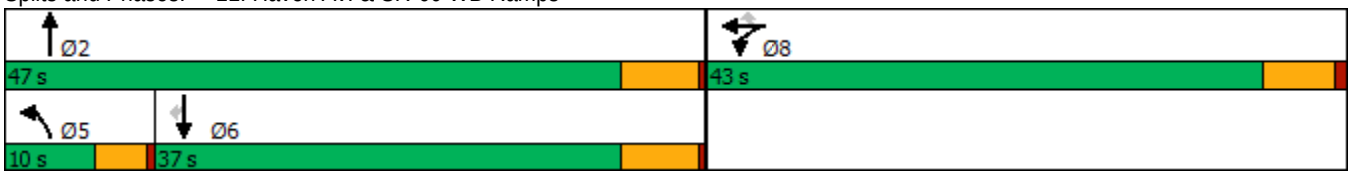
Notes

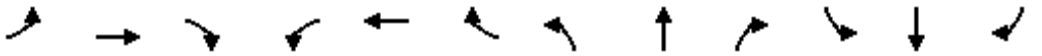
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	276	9	509	142	852	1199	527
Future Volume (vph)	276	9	509	142	852	1199	527
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.0	34.7	27.8	27.8
Total Split (s)	43.0	43.0	43.0	10.0	47.0	37.0	37.0
Total Split (%)	47.8%	47.8%	47.8%	11.1%	52.2%	41.1%	41.1%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 78
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	276	9	509	142	852	0	0	1199	527
Future Volume (veh/h)	0	0	0	276	9	509	142	852	0	0	1199	527
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	1600	1800	0	0	1800	1800
Adj Flow Rate, veh/h				294	0	241	148	888	0	0	1249	382
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				721	0	340	259	2668	0	0	1840	564
Arrive On Green				0.22	0.00	0.22	0.09	0.54	0.00	0.00	0.37	0.37
Sat Flow, veh/h				3238	0	1525	2956	5076	0	0	5076	1506
Grp Volume(v), veh/h				294	0	241	148	888	0	0	1249	382
Grp Sat Flow(s),veh/h/ln				1619	0	1525	1478	1638	0	0	1638	1506
Q Serve(g_s), s				3.8	0.0	7.2	2.4	5.0	0.0	0.0	10.6	10.5
Cycle Q Clear(g_c), s				3.8	0.0	7.2	2.4	5.0	0.0	0.0	10.6	10.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				721	0	340	259	2668	0	0	1840	564
V/C Ratio(X)				0.41	0.00	0.71	0.57	0.33	0.00	0.00	0.68	0.68
Avail Cap(c_a), veh/h				2432	0	1146	358	4098	0	0	3096	949
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.5	0.0	17.8	21.7	6.3	0.0	0.0	13.0	13.0
Incr Delay (d2), s/veh				0.4	0.0	2.7	2.0	0.0	0.0	0.0	0.2	0.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.2	0.0	2.3	0.8	0.9	0.0	0.0	2.7	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				16.8	0.0	20.5	23.7	6.3	0.0	0.0	13.2	13.5
LnGrp LOS				B	A	C	C	A	A	A	B	B
Approach Vol, veh/h					535			1036			1631	
Approach Delay, s/veh					18.5			8.8			13.2	
Approach LOS					B			A			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		32.7			8.3	24.3		16.8				
Change Period (Y+Rc), s		* 5.8			4.0	5.8		5.8				
Max Green Setting (Gmax), s		* 41			6.0	31.2		37.2				
Max Q Clear Time (g_c+I1), s		7.0			4.4	12.6		9.2				
Green Ext Time (p_c), s		3.8			0.1	6.0		1.8				

Intersection Summary		
HCM 6th Ctrl Delay	12.7	
HCM 6th LOS	B	

Notes

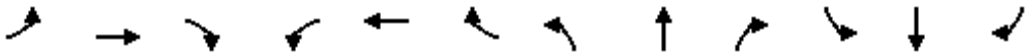
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	392	7	154	602	609	866
Future Volume (vph)	392	7	154	602	609	866
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.0	29.7
Total Split (s)	27.0	27.0	27.0	32.0	31.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	35.6%	34.4%	70.0%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 69.4
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	392	7	154	0	0	0	0	602	195	609	866	0
Future Volume (veh/h)	392	7	154	0	0	0	0	602	195	609	866	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800				0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h	428	0	56				0	647	149	655	931	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	607	0	286				0	956	217	831	2926	0
Arrive On Green	0.19	0.00	0.19				0.00	0.24	0.24	0.28	0.60	0.00
Sat Flow, veh/h	3238	0	1525				0	4166	908	2956	5076	0
Grp Volume(v), veh/h	428	0	56				0	527	269	655	931	0
Grp Sat Flow(s),veh/h/ln	1619	0	1525				0	1638	1637	1478	1638	0
Q Serve(g_s), s	6.6	0.0	1.6				0.0	7.7	7.9	10.8	5.0	0.0
Cycle Q Clear(g_c), s	6.6	0.0	1.6				0.0	7.7	7.9	10.8	5.0	0.0
Prop In Lane	1.00		1.00				0.00		0.55	1.00		0.00
Lane Grp Cap(c), veh/h	607	0	286				0	782	391	831	2926	0
V/C Ratio(X)	0.71	0.00	0.20				0.00	0.67	0.69	0.79	0.32	0.00
Avail Cap(c_a), veh/h	1296	0	611				0	1627	813	1507	5316	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	20.1	0.0	18.1				0.0	18.3	18.4	17.6	5.3	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.3				0.0	0.4	0.8	1.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.0	0.5				0.0	2.4	2.5	3.0	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	18.5				0.0	18.7	19.2	19.3	5.4	0.0
LnGrp LOS	C	A	B				A	B	B	B	A	A
Approach Vol, veh/h		484						796			1586	
Approach Delay, s/veh		21.3						18.8			11.1	
Approach LOS		C						B			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	18.9	18.3		15.7		37.2						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	27.0	26.3		21.2		57.3						
Max Q Clear Time (g_c+I1), s	12.8	9.9		8.6		7.0						
Green Ext Time (p_c), s	2.1	2.7		1.4		4.1						

Intersection Summary			
HCM 6th Ctrl Delay			15.0
HCM 6th LOS			B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	784	4	7	1216	0	14	0	4	0	0	0
Future Vol, veh/h	0	784	4	7	1216	0	14	0	4	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	240	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	852	4	8	1322	0	15	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1322	0	0	856	0	0	1399	2192	428	1764	2194	661
Stage 1	-	-	-	-	-	-	854	854	-	1338	1338	-
Stage 2	-	-	-	-	-	-	545	1338	-	426	856	-
Critical Hdwy	5.3	-	-	4.1	-	-	6.95	6.5	6.9	6.95	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.5	5.5	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.65	4	3.3	3.65	4	3.9
Pot Cap-1 Maneuver	278	-	-	793	-	-	124	46	581	70	46	351
Stage 1	-	-	-	-	-	-	315	378	-	120	224	-
Stage 2	-	-	-	-	-	-	466	224	-	563	377	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	278	-	-	793	-	-	123	46	581	69	46	351
Mov Cap-2 Maneuver	-	-	-	-	-	-	123	46	-	69	46	-
Stage 1	-	-	-	-	-	-	315	378	-	120	222	-
Stage 2	-	-	-	-	-	-	461	222	-	559	377	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	32.8	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	149	278	-	-	793	-	-	-
HCM Lane V/C Ratio	0.131	-	-	-	0.01	-	-	-
HCM Control Delay (s)	32.8	0	-	-	9.6	-	-	0
HCM Lane LOS	D	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	781	7	0	1223	0	10
Future Vol, veh/h	781	7	0	1223	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	849	8	0	1329	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	429
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	580
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	580
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	580	-	-	-
HCM Lane V/C Ratio	0.019	-	-	-
HCM Control Delay (s)	11.3	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	774	17	0	1223	0	24
Future Vol, veh/h	774	17	0	1223	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	841	18	0	1329	0	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	430
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	579
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	579
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	579	-	-	-
HCM Lane V/C Ratio	0.045	-	-	-
HCM Control Delay (s)	11.5	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	15	2	2	44	5	2
Future Vol, veh/h	15	2	2	44	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	2	2	48	5	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	18	0	45	9
Stage 1	-	-	-	-	17	-
Stage 2	-	-	-	-	28	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1612	-	966	1077
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	997	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1612	-	965	1077
Mov Cap-2 Maneuver	-	-	-	-	939	-
Stage 1	-	-	-	-	1009	-
Stage 2	-	-	-	-	996	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	975	-	-	1612	-
HCM Lane V/C Ratio	0.008	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.2	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	16	2	3	45	3	5
Future Vol, veh/h	16	2	3	45	3	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	17	2	3	49	3	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	19	0	49	10
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	31	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1611	-	960	1075
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1611	-	958	1075
Mov Cap-2 Maneuver	-	-	-	-	893	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	991	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	999	-	-	1611	-
HCM Lane V/C Ratio	0.009	-	-	0.002	-
HCM Control Delay (s)	8.6	-	-	7.2	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	19	34	8	0	14
Future Vol, veh/h	2	19	34	8	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	21	37	9	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	46	0	-	0	57	23
Stage 1	-	-	-	-	42	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1575	-	-	-	949	1055
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	1011	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1575	-	-	-	948	1055
Mov Cap-2 Maneuver	-	-	-	-	926	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1575	-	-	-	1055
HCM Lane V/C Ratio	0.001	-	-	-	0.014
HCM Control Delay (s)	7.3	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	37	102	0	0	0
Future Vol, veh/h	0	37	102	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	40	111	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	111	0	-	0	131	56
Stage 1	-	-	-	-	111	-
Stage 2	-	-	-	-	20	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1492	-	-	-	855	1005
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	1006	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1492	-	-	-	855	1005
Mov Cap-2 Maneuver	-	-	-	-	857	-
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	1006	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1492	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	886	801	4	0	7
Future Vol, veh/h	0	886	801	4	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	963	871	4	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	438
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	572
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	572
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.4
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	572
HCM Lane V/C Ratio	-	-	-	0.013
HCM Control Delay (s)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	886	799	4	0	6
Future Vol, veh/h	0	886	799	4	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	963	868	4	0	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	436
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	574
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	574
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

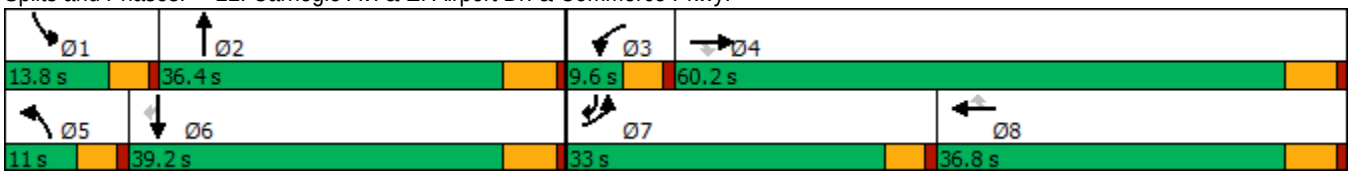
Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

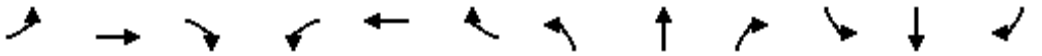
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	574
HCM Lane V/C Ratio	-	-	-	0.011
HCM Control Delay (s)	-	-	-	11.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	252	360	68	1	435	85	130	38	53	42	460
Future Volume (vph)	252	360	68	1	435	85	130	38	53	42	460
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	33.0	60.2	60.2	9.6	36.8	36.8	11.0	36.4	13.8	39.2	33.0
Total Split (%)	27.5%	50.2%	50.2%	8.0%	30.7%	30.7%	9.2%	30.3%	11.5%	32.7%	27.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 78
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	360	68	1	435	85	130	38	18	53	42	460
Future Volume (veh/h)	252	360	68	1	435	85	130	38	18	53	42	460
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1700
Adj Flow Rate, veh/h	286	409	77	1	494	64	148	43	20	60	48	311
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	333	1425	636	3	726	324	162	476	207	83	535	918
Arrive On Green	0.21	0.42	0.42	0.00	0.21	0.21	0.10	0.21	0.21	0.05	0.16	0.16
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	2320	1009	1619	3420	2536
Grp Volume(v), veh/h	286	409	77	1	494	64	148	31	32	60	48	311
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1618	1619	1710	1268
Q Serve(g_s), s	10.9	5.1	2.0	0.0	8.5	2.2	5.8	0.9	1.0	2.3	0.8	5.7
Cycle Q Clear(g_c), s	10.9	5.1	2.0	0.0	8.5	2.2	5.8	0.9	1.0	2.3	0.8	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	333	1425	636	3	726	324	162	351	332	83	535	918
V/C Ratio(X)	0.86	0.29	0.12	0.39	0.68	0.20	0.91	0.09	0.10	0.72	0.09	0.34
Avail Cap(c_a), veh/h	719	2911	1298	127	1659	740	162	819	775	233	1787	1846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.5	12.4	11.5	31.9	23.2	20.7	28.5	20.6	20.6	29.9	23.1	14.8
Incr Delay (d2), s/veh	2.5	0.1	0.1	33.2	1.1	0.3	45.3	0.1	0.1	4.4	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.6	0.6	0.0	3.1	0.7	4.1	0.3	0.4	0.9	0.3	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	12.5	11.5	65.0	24.3	21.0	73.8	20.7	20.7	34.3	23.1	15.0
LnGrp LOS	C	B	B	E	C	C	E	C	C	C	C	B
Approach Vol, veh/h		772			559			211			419	
Approach Delay, s/veh		17.8			24.0			58.0			18.7	
Approach LOS		B			C			E			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	18.9	4.7	32.4	11.0	15.8	17.7	19.4
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	9.2	30.6	5.0	54.4	6.4	33.4	28.4	31.0
Max Q Clear Time (g_c+I1), s	4.3	3.0	2.0	7.1	7.8	7.7	12.9	10.5
Green Ext Time (p_c), s	0.0	0.2	0.0	2.9	0.0	1.5	0.3	3.1

Intersection Summary	
HCM 6th Ctrl Delay	24.1
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	4	1	0	3	3	163	0	2	97	13
Future Vol, veh/h	20	0	4	1	0	3	3	163	0	2	97	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	22	0	4	1	0	3	3	177	0	2	105	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	211	299	60	240	306	89	119	0	0	177	0	0
Stage 1	116	116	-	183	183	-	-	-	-	-	-	-
Stage 2	95	183	-	57	123	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	733	616	999	699	611	958	1482	-	-	1411	-	-
Stage 1	882	803	-	807	752	-	-	-	-	-	-	-
Stage 2	907	752	-	954	798	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	729	614	999	694	609	958	1482	-	-	1411	-	-
Mov Cap-2 Maneuver	793	681	-	752	679	-	-	-	-	-	-	-
Stage 1	880	802	-	805	750	-	-	-	-	-	-	-
Stage 2	902	750	-	949	797	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.5	9	0.1	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1482	-	-	821	897	1411	-	-
HCM Lane V/C Ratio	0.002	-	-	0.032	0.005	0.002	-	-
HCM Control Delay (s)	7.4	-	-	9.5	9	7.6	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	6	159	1	4	98
Future Vol, veh/h	1	6	159	1	4	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	7	173	1	4	107

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	236	87	0	0	174	0
Stage 1	174	-	-	-	-	-
Stage 2	62	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	737	961	-	-	1415	-
Stage 1	845	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	735	961	-	-	1415	-
Mov Cap-2 Maneuver	787	-	-	-	-	-
Stage 1	845	-	-	-	-	-
Stage 2	956	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	932	1415	-
HCM Lane V/C Ratio	-	-	0.008	0.003	-
HCM Control Delay (s)	-	-	8.9	7.6	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	4	8	148	96	2
Future Vol, veh/h	12	4	8	148	96	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	4	9	161	104	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	204	53	106	0	-	0
Stage 1	105	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	771	1010	1498	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	766	1010	1498	-	-	-
Mov Cap-2 Maneuver	821	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	920	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1498	-	861	-	-
HCM Lane V/C Ratio	0.006	-	0.02	-	-
HCM Control Delay (s)	7.4	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	4	10	0	58	6	90	20	16	83	2
Future Vol, veh/h	8	0	4	10	0	58	6	90	20	16	83	2
Peak Hour Factor	0.92	0.92	0.92	0.79	0.92	0.79	0.92	0.79	0.79	0.79	0.79	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	0	4	13	0	73	7	114	25	20	105	2
Number of Lanes	0	1	0	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	1
HCM Control Delay	8.3	7.5	8.1	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	67%	100%	3%	0%	100%	0%	0%
Vol Thru, %	0%	100%	60%	0%	0%	0%	0%	0%	100%	93%
Vol Right, %	0%	0%	40%	33%	0%	97%	100%	0%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	60	50	12	9	29	30	16	55	30
LT Vol	6	0	0	8	9	1	0	16	0	0
Through Vol	0	60	30	0	0	0	0	0	55	28
RT Vol	0	0	20	4	0	28	30	0	0	2
Lane Flow Rate	7	76	63	13	11	37	37	20	70	37
Geometry Grp	8	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.01	0.106	0.083	0.02	0.018	0.046	0.046	0.031	0.098	0.052
Departure Headway (Hd)	5.514	5.013	4.732	5.451	5.637	4.48	4.439	5.538	5.037	4.99
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	651	716	758	657	636	800	808	648	712	719
Service Time	3.234	2.733	2.453	3.182	3.359	2.201	2.161	3.26	2.759	2.712
HCM Lane V/C Ratio	0.011	0.106	0.083	0.02	0.017	0.046	0.046	0.031	0.098	0.051
HCM Control Delay	8.3	8.3	7.9	8.3	8.5	7.4	7.4	8.4	8.3	8
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0.4	0.3	0.1	0.1	0.1	0.1	0.1	0.3	0.2

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	27	23	102	90	7
Future Vol, veh/h	13	27	23	102	90	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	29	25	111	98	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	208	53	106	0	-	0
Stage 1	102	-	-	-	-	-
Stage 2	106	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	767	1010	1498	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	913	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	754	1010	1498	-	-	-
Mov Cap-2 Maneuver	812	-	-	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	913	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1498	-	936	-	-
HCM Lane V/C Ratio	0.017	-	0.046	-	-
HCM Control Delay (s)	7.4	-	9	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	17	5	124	110	7
Future Vol, veh/h	2	17	5	124	110	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	18	5	135	120	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	202	64	128	0	-	0
Stage 1	124	-	-	-	-	-
Stage 2	78	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	774	994	1470	-	-	-
Stage 1	894	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	772	994	1470	-	-	-
Mov Cap-2 Maneuver	820	-	-	-	-	-
Stage 1	891	-	-	-	-	-
Stage 2	942	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1470	-	972	-	-
HCM Lane V/C Ratio	0.004	-	0.021	-	-
HCM Control Delay (s)	7.5	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	12	67	103	90	37
Future Vol, veh/h	25	12	67	103	90	37
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	27	13	71	110	96	39
Number of Lanes	1	1	1	2	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	8.3	7.7	7.9
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	45%
Vol Right, %	0%	0%	0%	0%	100%	0%	55%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	67	52	52	25	12	60	67
LT Vol	67	0	0	25	0	0	0
Through Vol	0	52	52	0	0	60	30
RT Vol	0	0	0	0	12	0	37
Lane Flow Rate	71	55	55	27	13	64	71
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.107	0.074	0.048	0.043	0.016	0.088	0.09
Departure Headway (Hd)	5.38	4.879	3.175	5.763	4.562	4.942	4.555
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	669	737	1130	623	785	727	788
Service Time	3.094	2.592	0.889	3.484	2.284	2.658	2.271
HCM Lane V/C Ratio	0.106	0.075	0.049	0.043	0.017	0.088	0.09
HCM Control Delay	8.7	8	6	8.7	7.4	8.1	7.7
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.4	0.2	0.2	0.1	0	0.3	0.3

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	3	167	7	0	102
Future Vol, veh/h	8	3	167	7	0	102
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	3	182	8	0	111

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	242	95	0	0	190	0
Stage 1	186	-	-	-	-	-
Stage 2	56	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	731	949	-	-	1396	-
Stage 1	833	-	-	-	-	-
Stage 2	966	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	731	949	-	-	1396	-
Mov Cap-2 Maneuver	732	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	966	-	-	-	-	-

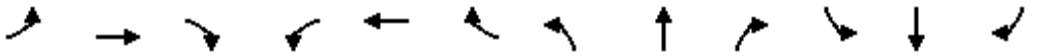
Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	781	1396	-
HCM Lane V/C Ratio	-	-	0.015	-	-
HCM Control Delay (s)	-	-	9.7	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	108	840	4	634	57	6	2	46	86
Future Volume (vph)	108	840	4	634	57	6	2	46	86
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	79.0	79.0	79.0	79.0	79.0	41.0	41.0	41.0	41.0
Total Split (%)	65.8%	65.8%	65.8%	65.8%	65.8%	34.2%	34.2%	34.2%	34.2%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 36
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	840	18	4	634	57	6	0	2	46	0	86
Future Volume (veh/h)	108	840	18	4	634	57	6	0	2	46	0	86
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	112	875	19	4	660	58	6	0	0	48	0	65
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	521	2614	57	484	1806	796	361	185	157	369	185	157
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.10	0.00	0.00	0.10	0.00	0.10
Sat Flow, veh/h	704	4949	107	597	3420	1506	1282	1800	1525	1360	1800	1525
Grp Volume(v), veh/h	112	579	315	4	660	58	6	0	0	48	0	65
Grp Sat Flow(s),veh/h/ln	704	1638	1781	597	1710	1506	1282	1800	1525	1360	1800	1525
Q Serve(g_s), s	3.5	3.2	3.2	0.1	3.5	0.6	0.1	0.0	0.0	1.0	0.0	1.3
Cycle Q Clear(g_c), s	7.0	3.2	3.2	3.3	3.5	0.6	0.1	0.0	0.0	1.0	0.0	1.3
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	521	1730	941	484	1806	796	361	185	157	369	185	157
V/C Ratio(X)	0.21	0.33	0.34	0.01	0.37	0.07	0.02	0.00	0.00	0.13	0.00	0.41
Avail Cap(c_a), veh/h	1789	7629	4147	1559	7964	3508	1714	2084	1766	1752	2016	1708
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.4	4.2	4.3	5.2	4.3	3.6	12.7	0.0	0.0	13.1	0.0	13.2
Incr Delay (d2), s/veh	0.2	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.2	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.6	4.4	4.5	5.2	4.5	3.7	12.7	0.0	0.0	13.3	0.0	15.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	B
Approach Vol, veh/h		1006			722			6			113	
Approach Delay, s/veh		4.6			4.4			12.7			14.2	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.0		22.4		9.0		22.4				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 36		73.2		35.2		73.2				
Max Q Clear Time (g_c+I1), s		2.1		9.0		3.3		5.5				
Green Ext Time (p_c), s		0.0		7.6		0.3		4.9				

Intersection Summary		
HCM 6th Ctrl Delay		5.2
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	28	5	0	53	3	7	0	2	1	0	8
Future Vol, veh/h	3	28	5	0	53	3	7	0	2	1	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	30	5	0	58	3	8	0	2	1	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	61	0	0	35	0	0	68	100	18	81	101	31
Stage 1	-	-	-	-	-	-	39	39	-	60	60	-
Stage 2	-	-	-	-	-	-	29	61	-	21	41	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1555	-	-	1589	-	-	923	794	1063	904	793	1043
Stage 1	-	-	-	-	-	-	977	866	-	950	849	-
Stage 2	-	-	-	-	-	-	990	848	-	1000	865	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1555	-	-	1589	-	-	914	792	1063	900	791	1043
Mov Cap-2 Maneuver	-	-	-	-	-	-	907	790	-	893	791	-
Stage 1	-	-	-	-	-	-	975	864	-	948	849	-
Stage 2	-	-	-	-	-	-	982	848	-	996	863	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	8.9	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	938	1555	-	-	1589	-	-	1024
HCM Lane V/C Ratio	0.01	0.002	-	-	-	-	-	0.01
HCM Control Delay (s)	8.9	7.3	-	-	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	14	11	3	34	5	10	0	8	1	0	12
Future Vol, veh/h	6	14	11	3	34	5	10	0	8	1	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	15	12	3	37	5	11	0	9	1	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	42	0	0	27	0	0	60	83	14	68	87	21
Stage 1	-	-	-	-	-	-	35	35	-	46	46	-
Stage 2	-	-	-	-	-	-	25	48	-	22	41	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1580	-	-	1600	-	-	934	811	1069	923	807	1058
Stage 1	-	-	-	-	-	-	982	870	-	968	861	-
Stage 2	-	-	-	-	-	-	995	859	-	999	865	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1580	-	-	1600	-	-	918	806	1069	911	802	1058
Mov Cap-2 Maneuver	-	-	-	-	-	-	918	806	-	911	802	-
Stage 1	-	-	-	-	-	-	978	867	-	964	859	-
Stage 2	-	-	-	-	-	-	981	857	-	986	862	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.5	8.8	8.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	979	1580	-	-	1600	-	-	1045
HCM Lane V/C Ratio	0.02	0.004	-	-	0.002	-	-	0.014
HCM Control Delay (s)	8.8	7.3	-	-	7.3	-	-	8.5
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	537	402	5
Future Vol, veh/h	0	7	0	537	402	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	8	0	584	437	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	221	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	671	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	671	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	671	-	-
HCM Lane V/C Ratio	-	0.011	-	-
HCM Control Delay (s)	-	10.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	537	407	2
Future Vol, veh/h	0	4	0	537	407	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	4	0	584	442	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	222	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	670	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	670	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	670	-	-
HCM Lane V/C Ratio	-	0.006	-	-
HCM Control Delay (s)	-	10.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	532	3	0	411
Future Vol, veh/h	0	5	532	3	0	411
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	5	578	3	0	447

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	291	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	606	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	606	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	606	-
HCM Lane V/C Ratio	-	-	0.009	-
HCM Control Delay (s)	-	-	11	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	6	8	25	6	149	20	376	11	80	316	15
Future Vol, veh/h	10	6	8	25	6	149	20	376	11	80	316	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	7	9	27	7	162	22	409	12	87	343	16
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	10.3	11.4	13.1	11.9
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	92%	0%	100%	20%	0%	100%	1%	0%	100%
Vol Right, %	0%	0%	8%	0%	0%	80%	0%	0%	99%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	251	136	10	4	10	25	4	151	80	211
LT Vol	20	0	0	10	0	0	25	0	0	80	0
Through Vol	0	251	125	0	4	2	0	4	2	0	211
RT Vol	0	0	11	0	0	8	0	0	149	0	0
Lane Flow Rate	22	272	148	11	4	11	27	4	164	87	229
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.041	0.472	0.254	0.024	0.009	0.021	0.056	0.008	0.287	0.163	0.397
Departure Headway (Hd)	6.736	6.236	6.18	7.896	7.396	6.836	7.482	6.982	6.291	6.734	6.234
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	531	578	581	452	482	521	478	511	570	532	577
Service Time	4.486	3.986	3.929	5.67	5.17	4.61	5.241	4.741	4.051	4.484	3.984
HCM Lane V/C Ratio	0.041	0.471	0.255	0.024	0.008	0.021	0.056	0.008	0.288	0.164	0.397
HCM Control Delay	9.8	14.5	11	10.9	10.2	9.8	10.7	9.8	11.6	10.8	13.1
HCM Lane LOS	A	B	B	B	B	A	B	A	B	B	B
HCM 95th-tile Q	0.1	2.5	1	0.1	0	0.1	0.2	0	1.2	0.6	1.9

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	14	0	407	339	10
Future Vol, veh/h	0	14	0	407	339	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	15	0	442	368	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	190	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	826	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	826	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	826	-	-
HCM Lane V/C Ratio	-	0.018	-	-
HCM Control Delay (s)	-	9.4	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	22	386	29	3	350
Future Vol, veh/h	17	22	386	29	3	350
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	24	420	32	3	380

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	632	226	0	0	452	0
Stage 1	436	-	-	-	-	-
Stage 2	196	-	-	-	-	-
Critical Hdwy	6.25	7.1	-	-	5.3	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.65	3.9	-	-	3.1	-
Pot Cap-1 Maneuver	446	666	-	-	721	-
Stage 1	549	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	444	666	-	-	721	-
Mov Cap-2 Maneuver	444	-	-	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	790	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	547	721	-
HCM Lane V/C Ratio	-	-	0.077	0.005	-
HCM Control Delay (s)	-	-	12.1	10	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	406	6	0	367
Future Vol, veh/h	0	9	406	6	0	367
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	10	441	7	0	399

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	224	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	668	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	668	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	0
HCM LOS	B		

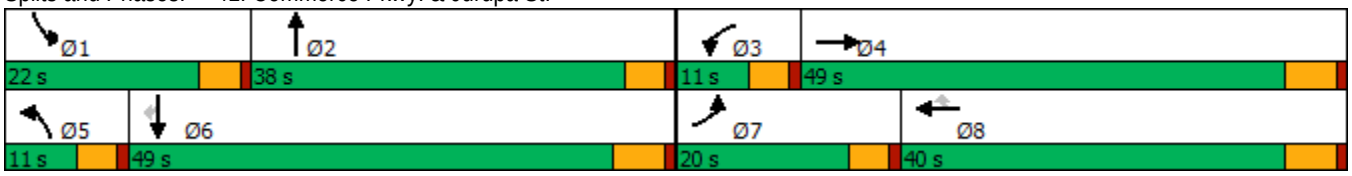
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	668	-
HCM Lane V/C Ratio	-	-	0.015	-
HCM Control Delay (s)	-	-	10.5	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

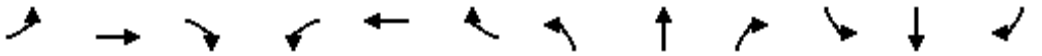
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	106	769	11	625	261	14	41	294	17	55
Future Volume (vph)	106	769	11	625	261	14	41	294	17	55
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	20.0	49.0	11.0	40.0	40.0	11.0	38.0	22.0	49.0	49.0
Total Split (%)	16.7%	40.8%	9.2%	33.3%	33.3%	9.2%	31.7%	18.3%	40.8%	40.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 75.5
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	769	13	11	625	261	14	41	55	294	17	55
Future Volume (veh/h)	106	769	13	11	625	261	14	41	55	294	17	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	110	801	12	11	651	0	15	43	38	306	18	42
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	138	1713	26	23	931		30	137	121	410	496	420
Arrive On Green	0.09	0.34	0.34	0.01	0.27	0.00	0.02	0.16	0.16	0.14	0.28	0.28
Sat Flow, veh/h	1619	4988	75	1619	3420	1525	1619	881	779	2956	1800	1525
Grp Volume(v), veh/h	110	526	287	11	651	0	15	0	81	306	18	42
Grp Sat Flow(s),veh/h/ln	1619	1638	1787	1619	1710	1525	1619	0	1660	1478	1800	1525
Q Serve(g_s), s	4.0	7.5	7.5	0.4	10.2	0.0	0.5	0.0	2.6	5.9	0.4	1.2
Cycle Q Clear(g_c), s	4.0	7.5	7.5	0.4	10.2	0.0	0.5	0.0	2.6	5.9	0.4	1.2
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	138	1125	613	23	931		30	0	257	410	496	420
V/C Ratio(X)	0.80	0.47	0.47	0.49	0.70		0.50	0.00	0.31	0.75	0.04	0.10
Avail Cap(c_a), veh/h	418	2374	1295	174	1962		174	0	930	863	1304	1105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.8	15.3	15.3	29.2	19.5	0.0	29.0	0.0	22.4	24.7	15.8	16.1
Incr Delay (d2), s/veh	4.0	0.3	0.6	5.9	1.0	0.0	4.8	0.0	0.7	1.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	2.3	2.6	0.2	3.5	0.0	0.2	0.0	1.0	1.9	0.2	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	15.6	15.9	35.1	20.5	0.0	33.8	0.0	23.1	25.7	15.8	16.2
LnGrp LOS	C	B	B	D	C		C	A	C	C	B	B
Approach Vol, veh/h		923			662	A		96			366	
Approach Delay, s/veh		17.5			20.7			24.7			24.1	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	15.0	5.4	26.3	5.7	22.2	9.7	22.0
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	17.4	* 33	6.4	43.2	6.4	43.2	15.4	34.2
Max Q Clear Time (g_c+I1), s	7.9	4.6	2.4	9.5	2.5	3.2	6.0	12.2
Green Ext Time (p_c), s	0.4	0.4	0.0	5.3	0.0	0.2	0.1	4.0

Intersection Summary	
HCM 6th Ctrl Delay	20.1
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	83	10	1	164	1	11	0	7	3	0	4
Future Vol, veh/h	4	83	10	1	164	1	11	0	7	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	90	11	1	178	1	12	0	8	3	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	179	0	0	101	0	0	195	285	51	234	290	90
Stage 1	-	-	-	-	-	-	104	104	-	181	181	-
Stage 2	-	-	-	-	-	-	91	181	-	53	109	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1409	-	-	1504	-	-	752	628	1013	706	624	956
Stage 1	-	-	-	-	-	-	896	813	-	809	754	-
Stage 2	-	-	-	-	-	-	912	754	-	959	809	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1409	-	-	1504	-	-	747	625	1013	699	622	956
Mov Cap-2 Maneuver	-	-	-	-	-	-	804	686	-	754	686	-
Stage 1	-	-	-	-	-	-	893	811	-	807	753	-
Stage 2	-	-	-	-	-	-	907	753	-	949	807	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	9.2	9.2
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	874	1409	-	-	1504	-	-	858
HCM Lane V/C Ratio	0.022	0.003	-	-	0.001	-	-	0.009
HCM Control Delay (s)	9.2	7.6	-	-	7.4	-	-	9.2
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	85	3	6	159	1	4	0	10	3	0	4
Future Vol, veh/h	4	85	3	6	159	1	4	0	10	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	92	3	7	173	1	4	0	11	3	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	174	0	0	95	0	0	203	290	48	242	291	87
Stage 1	-	-	-	-	-	-	102	102	-	188	188	-
Stage 2	-	-	-	-	-	-	101	188	-	54	103	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1415	-	-	1512	-	-	743	624	1017	697	623	961
Stage 1	-	-	-	-	-	-	899	815	-	801	748	-
Stage 2	-	-	-	-	-	-	900	748	-	958	814	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1415	-	-	1512	-	-	736	619	1017	686	618	961
Mov Cap-2 Maneuver	-	-	-	-	-	-	797	680	-	745	681	-
Stage 1	-	-	-	-	-	-	896	813	-	799	744	-
Stage 2	-	-	-	-	-	-	892	744	-	945	812	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.3	8.9	9.2
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	943	1415	-	-	1512	-	-	855
HCM Lane V/C Ratio	0.016	0.003	-	-	0.004	-	-	0.009
HCM Control Delay (s)	8.9	7.6	-	-	7.4	-	-	9.2
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	1	18	9	0
Future Vol, veh/h	1	0	1	18	9	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	1	20	10	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	22	5	10	0	-	0
Stage 1	10	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	997	1083	1623	-	-	0
Stage 1	1017	-	-	-	-	0
Stage 2	1015	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	996	1083	1623	-	-	-
Mov Cap-2 Maneuver	918	-	-	-	-	-
Stage 1	1016	-	-	-	-	-
Stage 2	1015	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	1623	-	918	-
HCM Lane V/C Ratio	0.001	-	0.001	-
HCM Control Delay (s)	7.2	-	8.9	-
HCM Lane LOS	A	-	A	-
HCM 95th %tile Q(veh)	0	-	0	-

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	44	43	7	132	6	26	2	14	2	0	7
Future Vol, veh/h	11	44	43	7	132	6	26	2	14	2	0	7
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	14	55	54	9	165	8	33	3	18	3	0	9
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.9	8.3	8.3	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	5%	0%	100%	25%	0%	100%	88%	0%	100%
Vol Right, %	0%	0%	95%	0%	0%	75%	0%	0%	12%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	26	1	15	11	29	58	7	88	50	2	0
LT Vol	26	0	0	11	0	0	7	0	0	2	0
Through Vol	0	1	1	0	29	15	0	88	44	0	0
RT Vol	0	0	14	0	0	43	0	0	6	0	0
Lane Flow Rate	32	2	18	14	37	72	9	110	62	2	0
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.052	0.002	0.023	0.021	0.051	0.09	0.013	0.15	0.084	0.004	0
Departure Headway (Hd)	5.771	5.272	4.605	5.53	5.03	4.507	5.411	4.911	4.827	5.861	5.361
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	622	680	778	649	714	797	664	733	744	611	0
Service Time	3.494	2.995	2.328	3.246	2.746	2.223	3.126	2.625	2.541	3.589	3.089
HCM Lane V/C Ratio	0.051	0.003	0.023	0.022	0.052	0.09	0.014	0.15	0.083	0.003	0
HCM Control Delay	8.8	8	7.4	8.4	8	7.7	8.2	8.5	8	8.6	8.1
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	N
HCM 95th-tile Q	0.2	0	0.1	0.1	0.2	0.3	0	0.5	0.3	0	0

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	58	9	2	39	1	10
Future Vol, veh/h	58	9	2	39	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	63	10	2	42	1	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	73	0	93	37
Stage 1	-	-	-	-	68	-
Stage 2	-	-	-	-	25	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1540	-	902	1034
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	1000	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1540	-	901	1034
Mov Cap-2 Maneuver	-	-	-	-	897	-
Stage 1	-	-	-	-	953	-
Stage 2	-	-	-	-	999	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1020	-	-	1540	-
HCM Lane V/C Ratio	0.012	-	-	0.001	-
HCM Control Delay (s)	8.6	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	34	10	15	90	26	38	85	24	10	47	12
Future Vol, veh/h	10	34	10	15	90	26	38	85	24	10	47	12
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	43	13	19	113	33	48	106	30	13	59	15
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.5	8.6	8.6	8.5
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	54%	0%	100%	53%	0%	100%	54%	0%	100%
Vol Right, %	0%	0%	46%	0%	0%	47%	0%	0%	46%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	57	52	10	23	21	15	60	56	10	31
LT Vol	38	0	0	10	0	0	15	0	0	10	0
Through Vol	0	57	28	0	23	11	0	60	30	0	31
RT Vol	0	0	24	0	0	10	0	0	26	0	0
Lane Flow Rate	48	71	65	12	28	27	19	75	70	12	39
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.076	0.104	0.09	0.021	0.044	0.039	0.031	0.112	0.098	0.021	0.06
Departure Headway (Hd)	5.794	5.294	4.973	6.034	5.534	5.206	5.857	5.357	5.032	5.977	5.477
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	617	674	718	591	644	684	610	668	710	597	651
Service Time	3.546	3.046	2.725	3.792	3.292	2.964	3.605	3.105	2.78	3.733	3.233
HCM Lane V/C Ratio	0.078	0.105	0.091	0.02	0.043	0.039	0.031	0.112	0.099	0.02	0.06
HCM Control Delay	9	8.7	8.2	8.9	8.5	8.2	8.8	8.8	8.3	8.9	8.6
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.4	0.3	0.1	0.2

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	63	29	107	92	12
Future Vol, veh/h	6	63	29	107	92	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	83	38	141	121	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	276	69	137	0	-	0
Stage 1	129	-	-	-	-	-
Stage 2	147	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	696	986	1459	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	871	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	678	986	1459	-	-	-
Mov Cap-2 Maneuver	764	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	871	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1459	-	764	986	-	-
HCM Lane V/C Ratio	0.026	-	0.01	0.084	-	-
HCM Control Delay (s)	7.5	-	9.8	9	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.3	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	9	1	133	140	4
Future Vol, veh/h	6	9	1	133	140	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	10	1	145	152	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	229	78	156	0	-	0
Stage 1	154	-	-	-	-	-
Stage 2	75	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	744	973	1436	-	-	-
Stage 1	864	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	743	973	1436	-	-	-
Mov Cap-2 Maneuver	798	-	-	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	945	-	-	-	-	-

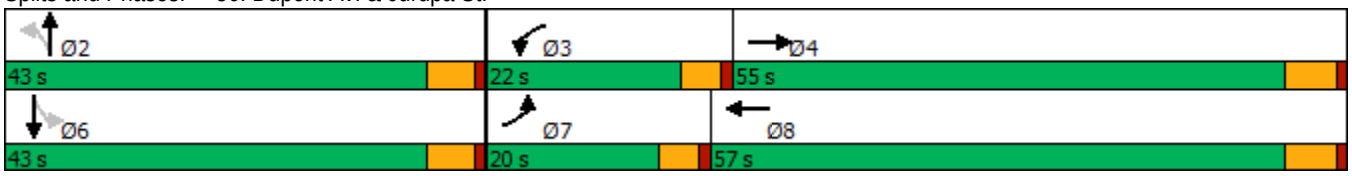
Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.1	0
HCM LOS	A		

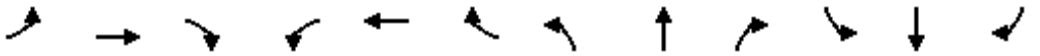
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1436	-	895	-	-
HCM Lane V/C Ratio	0.001	-	0.018	-	-
HCM Control Delay (s)	7.5	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	46	1022	64	794	42	27	76	25
Future Volume (vph)	46	1022	64	794	42	27	76	25
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	20.0	55.0	22.0	57.0	43.0	43.0	43.0	43.0
Total Split (%)	16.7%	45.8%	18.3%	47.5%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 52.8
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	1022	13	64	794	62	42	27	110	76	25	48
Future Volume (veh/h)	46	1022	13	64	794	62	42	27	110	76	25	48
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	49	1099	13	69	854	61	45	29	89	82	27	28
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	82	1945	23	103	1878	134	407	359	320	351	359	320
Arrive On Green	0.05	0.39	0.39	0.06	0.40	0.40	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1619	5006	59	1619	4678	333	1294	1710	1525	1222	1710	1525
Grp Volume(v), veh/h	49	719	393	69	597	318	45	29	89	82	27	28
Grp Sat Flow(s),veh/h/ln	1619	1638	1789	1619	1638	1735	1294	1710	1525	1222	1710	1525
Q Serve(g_s), s	1.4	8.0	8.0	1.9	6.2	6.3	1.4	0.6	2.3	2.8	0.6	0.7
Cycle Q Clear(g_c), s	1.4	8.0	8.0	1.9	6.2	6.3	2.0	0.6	2.3	5.1	0.6	0.7
Prop In Lane	1.00		0.03	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	82	1273	695	103	1315	696	407	359	320	351	359	320
V/C Ratio(X)	0.60	0.57	0.57	0.67	0.45	0.46	0.11	0.08	0.28	0.23	0.08	0.09
Avail Cap(c_a), veh/h	534	3452	1886	603	3593	1903	1177	1377	1228	1079	1377	1228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.7	11.2	11.2	21.4	10.2	10.2	15.7	14.8	15.5	17.6	14.8	14.8
Incr Delay (d2), s/veh	2.6	0.4	0.7	2.8	0.2	0.5	0.1	0.1	0.5	0.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.1	2.3	0.7	1.6	1.7	0.3	0.2	0.7	0.7	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	11.6	11.9	24.2	10.5	10.7	15.8	14.9	15.9	18.0	14.9	15.0
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1161			984			163			137	
Approach Delay, s/veh		12.2			11.5			15.7			16.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.2	7.6	23.9		15.2	7.0	24.5				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		37.6	17.4	49.2		37.6	15.4	51.2				
Max Q Clear Time (g_c+I1), s		4.3	3.9	10.0		7.1	3.4	8.3				
Green Ext Time (p_c), s		0.8	0.0	8.1		0.5	0.0	6.4				

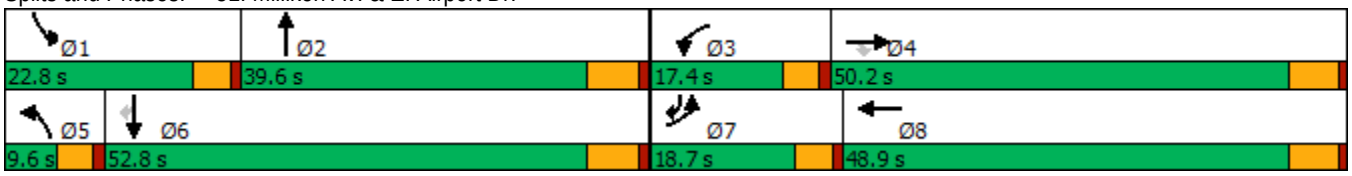
Intersection Summary												
HCM 6th Ctrl Delay			12.4									
HCM 6th LOS			B									

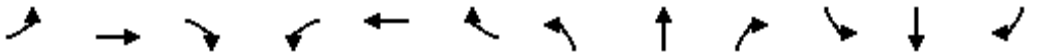
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	250	246	33	86	263	33	943	139	859	127
Future Volume (vph)	250	246	33	86	263	33	943	139	859	127
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	18.7	50.2	50.2	17.4	48.9	9.6	39.6	22.8	52.8	18.7
Total Split (%)	14.4%	38.6%	38.6%	13.4%	37.6%	7.4%	30.5%	17.5%	40.6%	14.4%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 94.1
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	246	33	86	263	323	33	943	60	139	859	127
Future Volume (veh/h)	250	246	33	86	263	323	33	943	60	139	859	127
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	253	248	12	87	266	204	33	953	54	140	868	81
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	334	851	379	109	380	281	99	1359	77	173	1766	721
Arrive On Green	0.11	0.25	0.25	0.07	0.20	0.20	0.03	0.29	0.29	0.11	0.36	0.36
Sat Flow, veh/h	2956	3420	1525	1619	1873	1388	2956	4754	269	1619	4914	1525
Grp Volume(v), veh/h	253	248	12	87	242	228	33	656	351	140	868	81
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1619	1710	1550	1478	1638	1747	1619	1638	1525
Q Serve(g_s), s	6.0	4.3	0.4	3.9	9.6	10.0	0.8	13.0	13.1	6.1	10.0	2.2
Cycle Q Clear(g_c), s	6.0	4.3	0.4	3.9	9.6	10.0	0.8	13.0	13.1	6.1	10.0	2.2
Prop In Lane	1.00		1.00	1.00		0.90	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	334	851	379	109	347	314	99	937	500	173	1766	721
V/C Ratio(X)	0.76	0.29	0.03	0.80	0.70	0.73	0.33	0.70	0.70	0.81	0.49	0.11
Avail Cap(c_a), veh/h	573	2088	931	285	1013	919	203	1504	802	405	3148	1150
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	22.1	20.7	33.5	26.9	27.1	34.4	23.2	23.2	31.8	18.1	10.7
Incr Delay (d2), s/veh	1.3	0.2	0.0	5.1	2.5	3.2	0.7	1.0	1.8	3.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.6	0.1	1.6	3.8	3.6	0.3	4.5	4.9	2.3	3.3	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	22.3	20.7	38.5	29.5	30.3	35.1	24.2	25.0	35.2	18.3	10.8
LnGrp LOS	C	C	C	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		513			557			1040			1089	
Approach Delay, s/veh		27.4			31.2			24.8			19.9	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	27.0	9.5	23.9	7.0	32.3	12.8	20.5
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	18.2	33.4	12.8	44.4	5.0	46.6	14.1	43.1
Max Q Clear Time (g_c+I1), s	8.1	15.1	5.9	6.3	2.8	12.0	8.0	12.0
Green Ext Time (p_c), s	0.1	5.7	0.0	1.5	0.0	6.4	0.2	2.7

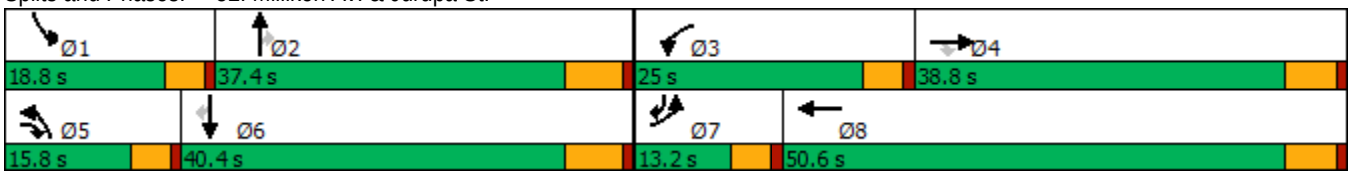
Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

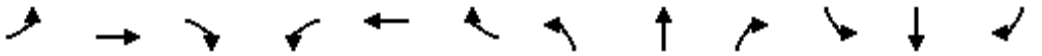
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	122	838	257	376	621	195	752	352	241	907	59
Future Volume (vph)	122	838	257	376	621	195	752	352	241	907	59
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	13.2	38.8	15.8	25.0	50.6	15.8	37.4	37.4	18.8	40.4	13.2
Total Split (%)	11.0%	32.3%	13.2%	20.8%	42.2%	13.2%	31.2%	31.2%	15.7%	33.7%	11.0%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 101.9
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	838	257	376	621	97	195	752	352	241	907	59
Future Volume (veh/h)	122	838	257	376	621	97	195	752	352	241	907	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	127	873	175	392	647	84	203	783	248	251	945	29
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	185	1232	520	464	1522	195	267	1199	372	318	1283	494
Arrive On Green	0.06	0.25	0.25	0.16	0.35	0.35	0.09	0.24	0.24	0.11	0.26	0.26
Sat Flow, veh/h	2956	4914	1524	2956	4408	566	2956	4914	1525	2956	4914	1525
Grp Volume(v), veh/h	127	873	175	392	479	252	203	783	248	251	945	29
Grp Sat Flow(s),veh/h/ln	1478	1638	1524	1478	1638	1698	1478	1638	1525	1478	1638	1525
Q Serve(g_s), s	3.7	14.2	7.5	11.3	9.9	10.0	5.9	12.6	12.9	7.3	15.5	1.2
Cycle Q Clear(g_c), s	3.7	14.2	7.5	11.3	9.9	10.0	5.9	12.6	12.9	7.3	15.5	1.2
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	1232	520	464	1131	586	267	1199	372	318	1283	494
V/C Ratio(X)	0.69	0.71	0.34	0.85	0.42	0.43	0.76	0.65	0.67	0.79	0.74	0.06
Avail Cap(c_a), veh/h	289	1843	709	685	1668	864	376	1742	541	477	1910	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	30.0	21.6	36.1	22.1	22.2	39.1	29.9	30.0	38.3	29.7	20.5
Incr Delay (d2), s/veh	1.7	0.8	0.4	4.3	0.3	0.5	3.2	0.6	2.1	2.7	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.3	2.5	4.1	3.5	3.8	2.1	4.6	4.6	2.6	5.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.1	30.8	22.0	40.3	22.4	22.7	42.3	30.5	32.1	41.0	30.6	20.6
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1175			1123			1234			1225	
Approach Delay, s/veh		30.7			28.7			32.8			32.5	
Approach LOS		C			C			C			C	

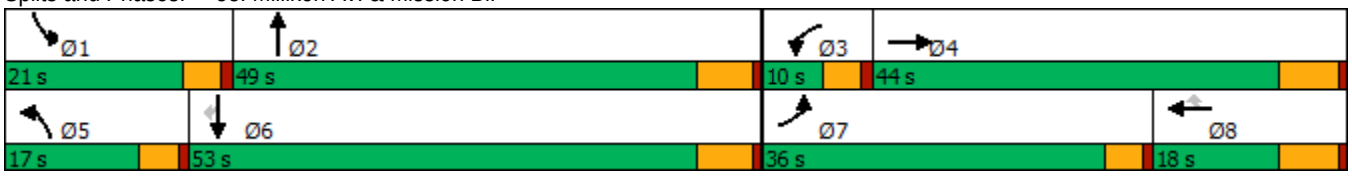
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	27.7	18.4	27.9	12.6	29.2	10.1	36.2
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	14.2	31.2	20.4	33.0	11.2	34.2	8.6	44.8
Max Q Clear Time (g_c+I1), s	9.3	14.9	13.3	16.2	7.9	17.5	5.7	12.0
Green Ext Time (p_c), s	0.2	5.2	0.5	5.7	0.1	5.5	0.0	4.7

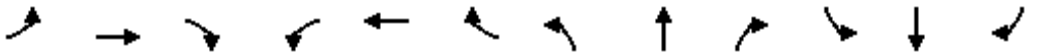
Intersection Summary	
HCM 6th Ctrl Delay	31.2
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	522	1	16	5	146	171	867	258	1266	390
Future Volume (vph)	522	1	16	5	146	171	867	258	1266	390
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	36.0	44.0	10.0	18.0	18.0	17.0	49.0	21.0	53.0	53.0
Total Split (%)	29.0%	35.5%	8.1%	14.5%	14.5%	13.7%	39.5%	16.9%	42.7%	42.7%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 124
Actuated Cycle Length: 107.7
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	522	1	81	16	5	146	171	867	20	258	1266	390
Future Volume (veh/h)	522	1	81	16	5	146	171	867	20	258	1266	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	549	1	78	17	0	120	180	913	21	272	1333	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	624	6	453	31	0	331	242	1620	37	338	1770	
Arrive On Green	0.21	0.30	0.30	0.02	0.00	0.11	0.08	0.33	0.33	0.11	0.36	0.00
Sat Flow, veh/h	2956	19	1509	1619	0	3051	2956	4942	114	2956	4914	1525
Grp Volume(v), veh/h	549	0	79	17	0	120	180	605	329	272	1333	0
Grp Sat Flow(s),veh/h/ln	1478	0	1528	1619	0	1525	1478	1638	1780	1478	1638	1525
Q Serve(g_s), s	16.5	0.0	3.5	1.0	0.0	3.4	5.5	14.0	14.0	8.2	21.9	0.0
Cycle Q Clear(g_c), s	16.5	0.0	3.5	1.0	0.0	3.4	5.5	14.0	14.0	8.2	21.9	0.0
Prop In Lane	1.00		0.99	1.00		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	624	0	459	31	0	331	242	1074	583	338	1770	
V/C Ratio(X)	0.88	0.00	0.17	0.55	0.00	0.36	0.74	0.56	0.56	0.81	0.75	
Avail Cap(c_a), veh/h	1011	0	624	95	0	382	399	1527	829	528	2504	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.1	0.0	23.7	44.7	0.0	38.0	41.2	25.4	25.5	39.7	25.8	0.0
Incr Delay (d2), s/veh	3.2	0.0	0.2	5.5	0.0	0.7	1.7	0.5	0.9	2.3	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	1.2	0.4	0.0	1.2	1.9	5.0	5.5	2.9	7.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	0.0	23.9	50.1	0.0	38.7	42.9	25.9	26.3	42.0	26.6	0.0
LnGrp LOS	D	A	C	D	A	D	D	C	C	D	C	
Approach Vol, veh/h		628			137			1114			1605	A
Approach Delay, s/veh		36.5			40.1			28.8			29.2	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	36.3	6.4	34.1	12.1	39.3	24.0	16.5
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	16.4	42.8	5.4	37.5	12.4	46.8	31.4	11.5
Max Q Clear Time (g_c+I1), s	10.2	16.0	3.0	5.5	7.5	23.9	18.5	5.4
Green Ext Time (p_c), s	0.3	5.8	0.0	0.4	0.1	9.2	0.9	0.2

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

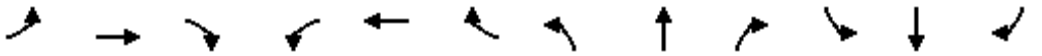
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1248	550	438	692	217	7	434
Future Volume (vph)	1248	550	438	692	217	7	434
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	43.0	43.0	23.0	66.0	24.0	24.0	24.0
Total Split (%)	47.8%	47.8%	25.6%	73.3%	26.7%	26.7%	26.7%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 81.6
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1248	550	438	692	0	0	0	0	217	7	434
Future Volume (veh/h)	0	1248	550	438	692	0	0	0	0	217	7	434
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1800	1800	1600	1800	0				1700	1800	1800
Adj Flow Rate, veh/h	0	1328	392	466	736	0				156	0	431
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	2050	579	562	3173	0				302	0	569
Arrive On Green	0.00	0.38	0.38	0.19	0.65	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	5400	1525	2956	5076	0				1619	0	3051
Grp Volume(v), veh/h	0	1328	392	466	736	0				156	0	431
Grp Sat Flow(s),veh/h/ln	0	1800	1525	1478	1638	0				1619	0	1525
Q Serve(g_s), s	0.0	13.3	14.1	10.0	4.1	0.0				5.7	0.0	8.8
Cycle Q Clear(g_c), s	0.0	13.3	14.1	10.0	4.1	0.0				5.7	0.0	8.8
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2050	579	562	3173	0				302	0	569
V/C Ratio(X)	0.00	0.65	0.68	0.83	0.23	0.00				0.52	0.00	0.76
Avail Cap(c_a), veh/h	0	3043	860	810	4491	0				469	0	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	16.8	17.0	25.6	4.8	0.0				24.0	0.0	25.3
Incr Delay (d2), s/veh	0.0	0.3	1.0	3.3	0.0	0.0				1.4	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.6	4.3	3.3	0.8	0.0				2.1	0.0	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	17.0	18.0	28.8	4.9	0.0				25.4	0.0	27.4
LnGrp LOS	A	B	B	C	A	A				C	A	C
Approach Vol, veh/h		1720			1202						587	
Approach Delay, s/veh		17.2			14.2						26.8	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	17.5	30.9		17.3		48.4						
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0						
Max Green Setting (Gmax), s	18.0	37.0		19.0		60.0						
Max Q Clear Time (g_c+I1), s	12.0	16.1		10.8		6.1						
Green Ext Time (p_c), s	0.5	8.8		1.5		4.2						

Intersection Summary												
HCM 6th Ctrl Delay			17.8									
HCM 6th LOS			B									

Notes

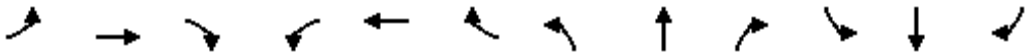
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	558	907	986	491	144	1	320
Future Volume (vph)	558	907	986	491	144	1	320
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	28.0	69.0	41.0	41.0	21.0	21.0	21.0
Total Split (%)	31.1%	76.7%	45.6%	45.6%	23.3%	23.3%	23.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 69.3
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	558	907	0	0	986	491	144	1	320	0	0	0
Future Volume (veh/h)	558	907	0	0	986	491	144	1	320	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800			
Adj Flow Rate, veh/h	575	935	0	0	1016	375	225	0	131			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	699	3363	0	0	1793	557	427	0	201			
Arrive On Green	0.24	0.68	0.00	0.00	0.36	0.36	0.13	0.00	0.13			
Sat Flow, veh/h	2956	5076	0	0	5076	1525	3238	0	1525			
Grp Volume(v), veh/h	575	935	0	0	1016	375	225	0	131			
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1525	1619	0	1525			
Q Serve(g_s), s	10.2	4.1	0.0	0.0	9.2	11.5	3.6	0.0	4.5			
Cycle Q Clear(g_c), s	10.2	4.1	0.0	0.0	9.2	11.5	3.6	0.0	4.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	699	3363	0	0	1793	557	427	0	201			
V/C Ratio(X)	0.82	0.28	0.00	0.00	0.57	0.67	0.53	0.00	0.65			
Avail Cap(c_a), veh/h	1246	5656	0	0	3178	986	927	0	437			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	20.1	3.4	0.0	0.0	14.1	14.8	22.5	0.0	22.9			
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.0	0.2	1.1	1.0	0.0	3.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.0	0.5	0.0	0.0	2.7	3.3	1.2	0.0	1.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	3.4	0.0	0.0	14.3	15.9	23.5	0.0	26.4			
LnGrp LOS	C	A	A	A	B	B	C	A	C			
Approach Vol, veh/h		1510			1391			356				
Approach Delay, s/veh		10.1			14.7			24.6				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		43.1			17.7	25.4		12.4				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		63.9			23.4	35.9		15.9				
Max Q Clear Time (g_c+I1), s		6.1			12.2	13.5		6.5				
Green Ext Time (p_c), s		5.7			0.9	6.8		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	13.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

APPENDIX 5.2:

E+P CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (2021)
				CALC MT	DATE	01/10/22
				CHK MT	DATE	01/10/22

Jurisdiction: **City of Ontario**
Major Street: **E. Airport Drive** — Critical Approach Speed (Major) 45 mph
Minor Street: **Driveway 3** — Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **3** lane — Minor Street Approach Lanes **1** lane

Major Street Future ADT = **18,618** vpd — Minor Street Future ADT = **161** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [√]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ..... [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **18,618**	*1* **161**	9,600	6,720 *	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **18,618**	*1* **161**	14,400	10,080 *	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more	A 10% B 19%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: La Salle Street				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 6				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **744** vpd Minor Street Future ADT = **63** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **744**	1 **63**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **744**	1 **63**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 3% **B** 5%

2 CONDITIONS 80% 2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **La Salle Street**
Minor Street: **Driveway 7**
Critical Approach Speed (Major) 25 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **760** vpd
Minor Street Future ADT = **103** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT			
			Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **760**	*1* **103**	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied (XX)						
	1	*1*	12,000	8,400	1,200	850
	2 + **760**	*1* **103**	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)						
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 4%	**B** 5%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: La Salle Street				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 8				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **754** vpd Minor Street Future ADT = **163** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **754**	1 **163**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **754**	1 **163**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 7% **B** 5%

2 CONDITIONS 80% 2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: La Salle Street				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 9				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **1,393** vpd

Minor Street Future ADT = **18** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……... [ ]

or

In built up area of isolated community of < 10,000 population …….. [ ]

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
CONDITION A - Minimum Vehicular Volume						
XX / Satisfied	*1*	*1*	8,000	5,600	2,400	1,680
XX / Satisfied	*2* + **1,393**	*1* **18**	9,600	6,720	2,400	1,680
XX / Satisfied	*2* +	*2* +	9,600	6,720	3,200	2,240
XX / Satisfied	*1*	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
XX / Satisfied	*1*	*1*	12,000	8,400	1,200	850
XX / Satisfied	*2* + **1,393**	*1* **18**	14,400	10,080	1,200	850
XX / Satisfied	*2* +	*2* +	14,400	10,080	1,600	1,120
XX / Satisfied	*1*	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
XX / Satisfied			2 CONDITIONS 80%		2 CONDITIONS 80%	
XX / Not Satisfied — No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 1%	**B** 2%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (2021)	
				CALC	MT	DATE	01/10/22
Jurisdiction:	City of Ontario			CHK	MT	DATE	01/10/22
Major Street:	Jurupa Avenue			Critical Approach Speed (Major)		45	mph
Minor Street:	Driveway 10			Critical Approach Speed (Minor)		25	mph

Major Street Approach Lanes = **3** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **15,240** vpd

Minor Street Future ADT = **63** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……... [√]

or

In built up area of isolated community of < 10,000 population …….. [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **15,240**	*1* **63**	9,600	6,720 *	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **15,240**	*1* **63**	14,400	10,080 *	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 4% **B** 7%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **Jurupa Avenue** — Critical Approach Speed (Major) 45 mph
Minor Street: **Driveway 11** — Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **3** lane — Minor Street Approach Lanes **1** lane

Major Street Future ADT = **15,241** vpd — Minor Street Future ADT = **72** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [√]

or

In built up area of isolated community of < 10,000 population ..... [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL (XX)

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied (XX)

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **15,241**	1 **72**	9,600	6,720 *	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied (XX)

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **15,241**	1 **72**	14,400	10,080 *	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied (XX)

No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** 4% **B** 8%

2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 12				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,142** vpd Minor Street Future ADT = **222** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **3,142**	1 **222**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **3,142**	1 **222**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied: XX

No one condition satisfied, but following conditions fulfilled 80% of more ..... A: 13% B: 26%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 13				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,926** vpd Minor Street Future ADT = **69** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / 1	8,000	5,600	2,400	1,680
2 + **2,926** / 1 **69**	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / 1	12,000	8,400	1,200	850
2 + **2,926** / 1 **69**	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: 4% B: 8%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 14				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,878** vpd Minor Street Future ADT = **148** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **2,878**	1 **148**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **2,878**	1 **148**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied: XX

No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** 9% **B** 17%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

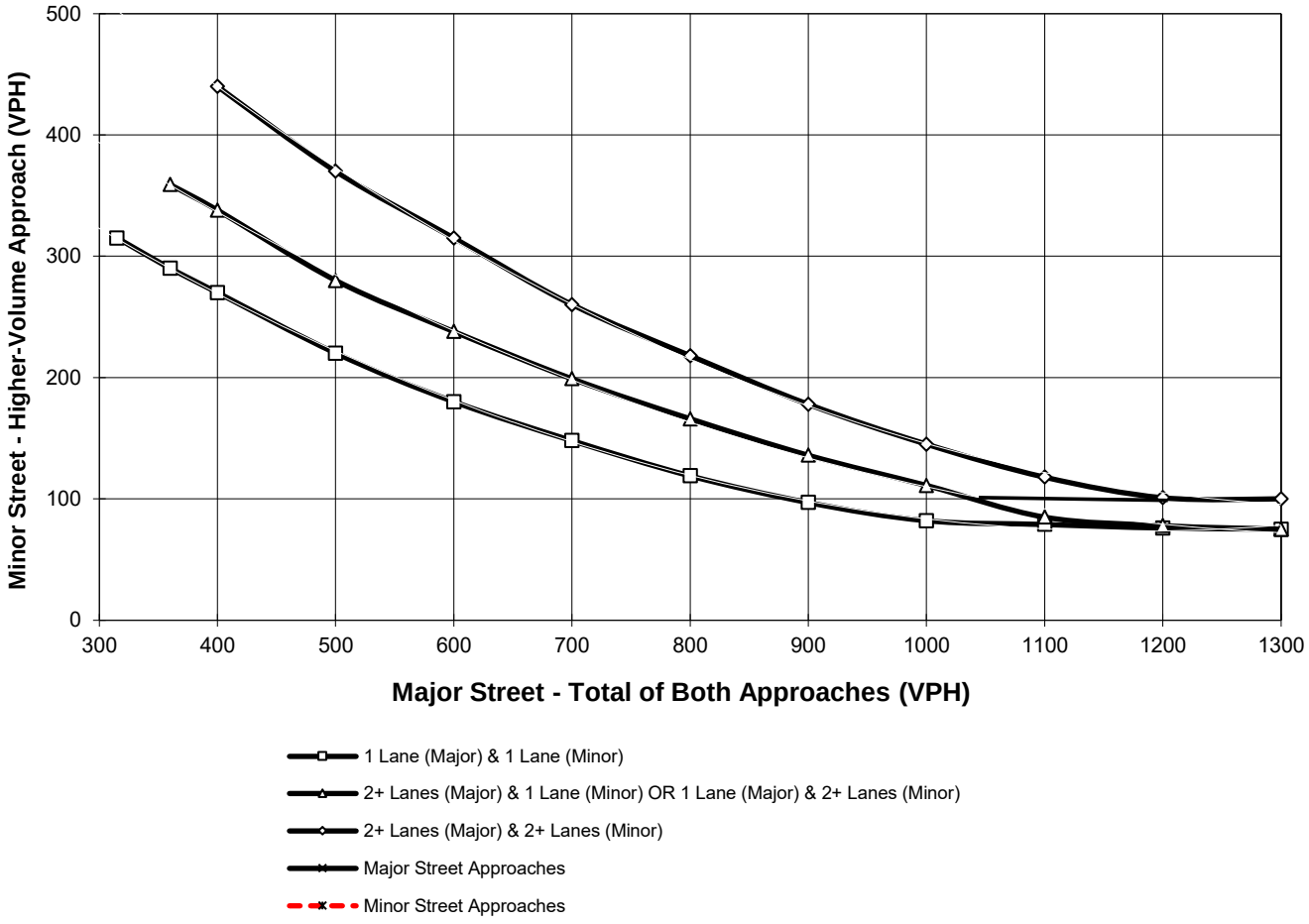
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **217**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 15/Santa Ana St** High Volume Approach (VPH) = **68**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 16				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,659** vpd Minor Street Future ADT = **507** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL **XX**

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **2,659**	*1* **507**	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **2,659**	*1* **507**	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied **XX**

No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** **30%** **B** **26%**

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (2021)	
				CALC	MT	DATE	01/10/22
Jurisdiction:	City of Ontario			CHK	MT	DATE	01/10/22
Major Street:	Carnegie Avenue			Critical Approach Speed (Major)		25	mph
Minor Street:	Driveway 17			Critical Approach Speed (Minor)		25	mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,919** vpd Minor Street Future ADT = **176** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. or In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **2,919**	*1* **176**	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **2,919**	*1* **176**	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 7% **B** 15%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

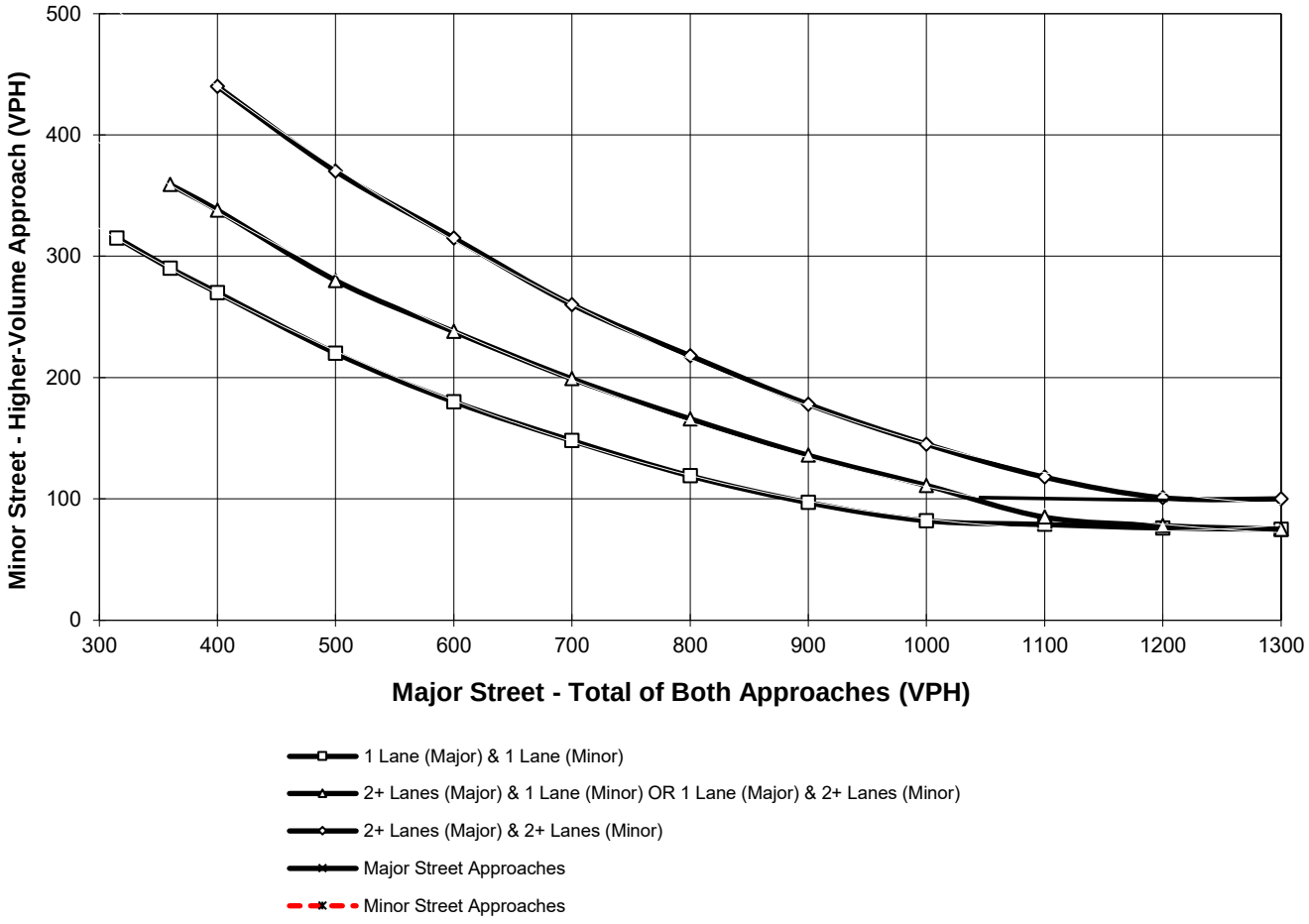
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **297**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **La Salle Street** High Volume Approach (VPH) = **37**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 18				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,101** vpd Minor Street Future ADT = **97** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / 1	8,000	5,600	2,400	1,680
2 + **3,101** / 1 **97**	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / 1	12,000	8,400	1,200	850
2 + **3,101** / 1 **97**	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 4% B: 8%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (2021)
				CALC MT	DATE	01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE	01/10/22
Major Street: Santa Ana Street				Critical Approach Speed (Major)		25 mph
Minor Street: Driveway 19				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **1,162** vpd

Minor Street Future ADT = **85** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **1,162**	*1* **85**	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **1,162**	*1* **85**	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 4% **B** 7%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (2021)	
				CALC	MT	DATE	01/10/22
Jurisdiction:	City of Ontario			CHK	MT	DATE	01/10/22
Major Street:	Santa Ana Street			Critical Approach Speed (Major)		25	mph
Minor Street:	Driveway 20			Critical Approach Speed (Minor)		25	mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **953** vpd

Minor Street Future ADT = **224** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **953**	*1* **224**	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **953**	*1* **224**	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 9% **B** 7%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

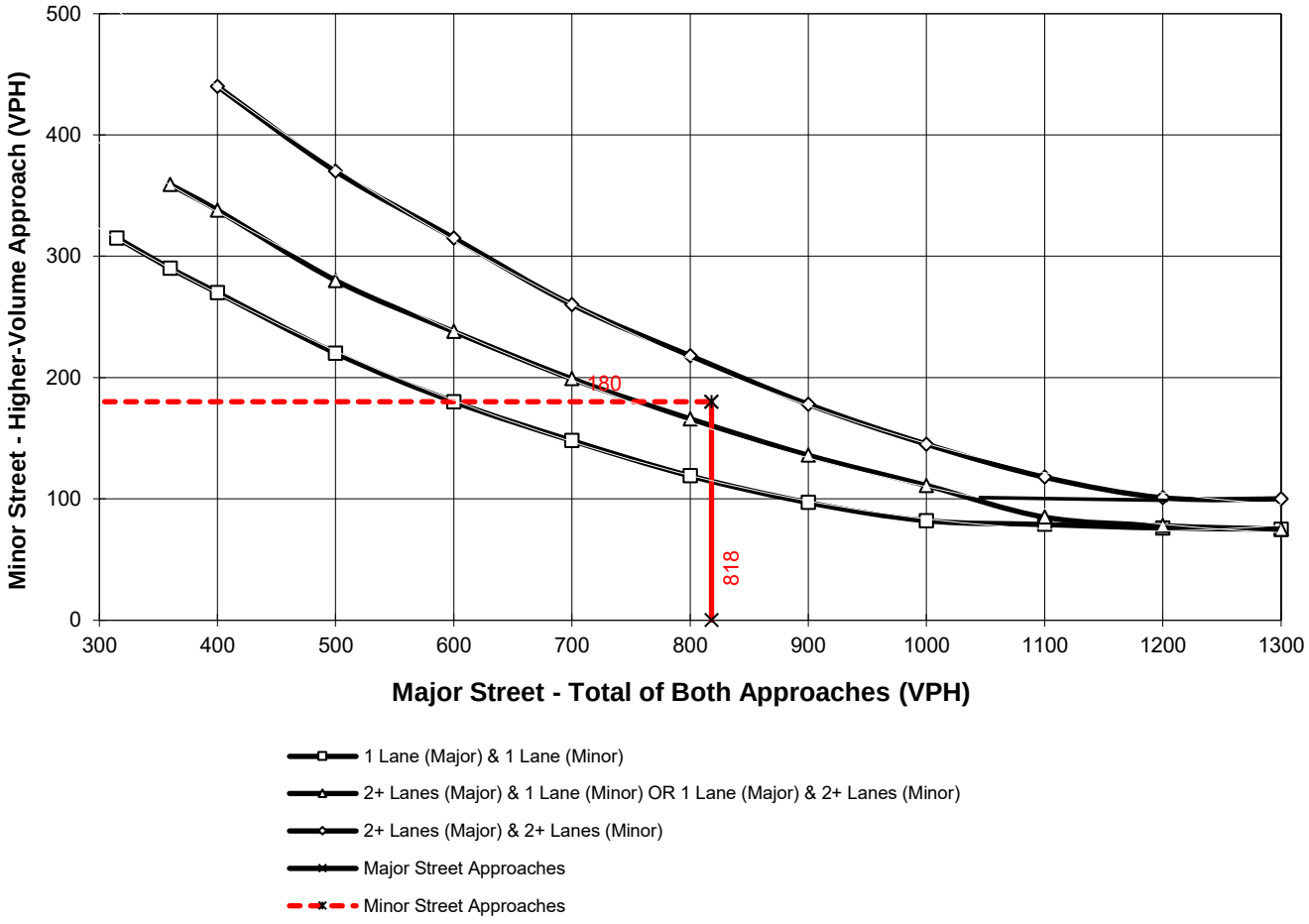
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **E+P (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Commerce Parkway** Total of Both Approaches (VPH) = **818**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Santa Ana Street** High Volume Approach (VPH) = **180**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (2021)
				CALC MT	DATE	01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE	01/10/22
Major Street: Santa Ana Street				Critical Approach Speed (Major)		35 mph
Minor Street: Driveway 27				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,542** vpd Minor Street Future ADT = **170** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. or In built up area of isolated community of < 10,000 population …….. **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
XX					
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **2,542**	*1* **170**	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **2,542**	*1* **170**	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 7% **B** 14%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Santa Ana Street				Critical Approach Speed (Major)	35 mph
Minor Street: Driveway 28				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,439** vpd Minor Street Future ADT = **129** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
CONDITION A - Minimum Vehicular Volume						
XX / XX						
Satisfied / Not Satisfied						
Number of lanes for moving traffic on each approach						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **2,439**	*1* **129**	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied						
XX						
Number of lanes for moving traffic on each approach						
	1	*1*	12,000	8,400	1,200	850
	2 + **2,439**	*1* **129**	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied						
XX						
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 5%	**B** 11%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Double Day Avenue				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 29				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **292** vpd Minor Street Future ADT = **34** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied: XX / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / *1*	8,000	5,600	2,400	1,680
2 + **292** / *1* **34**	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / *1*	12,000	8,400	1,200	850
2 + **292** / *1* **34**	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 1% B: 2%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

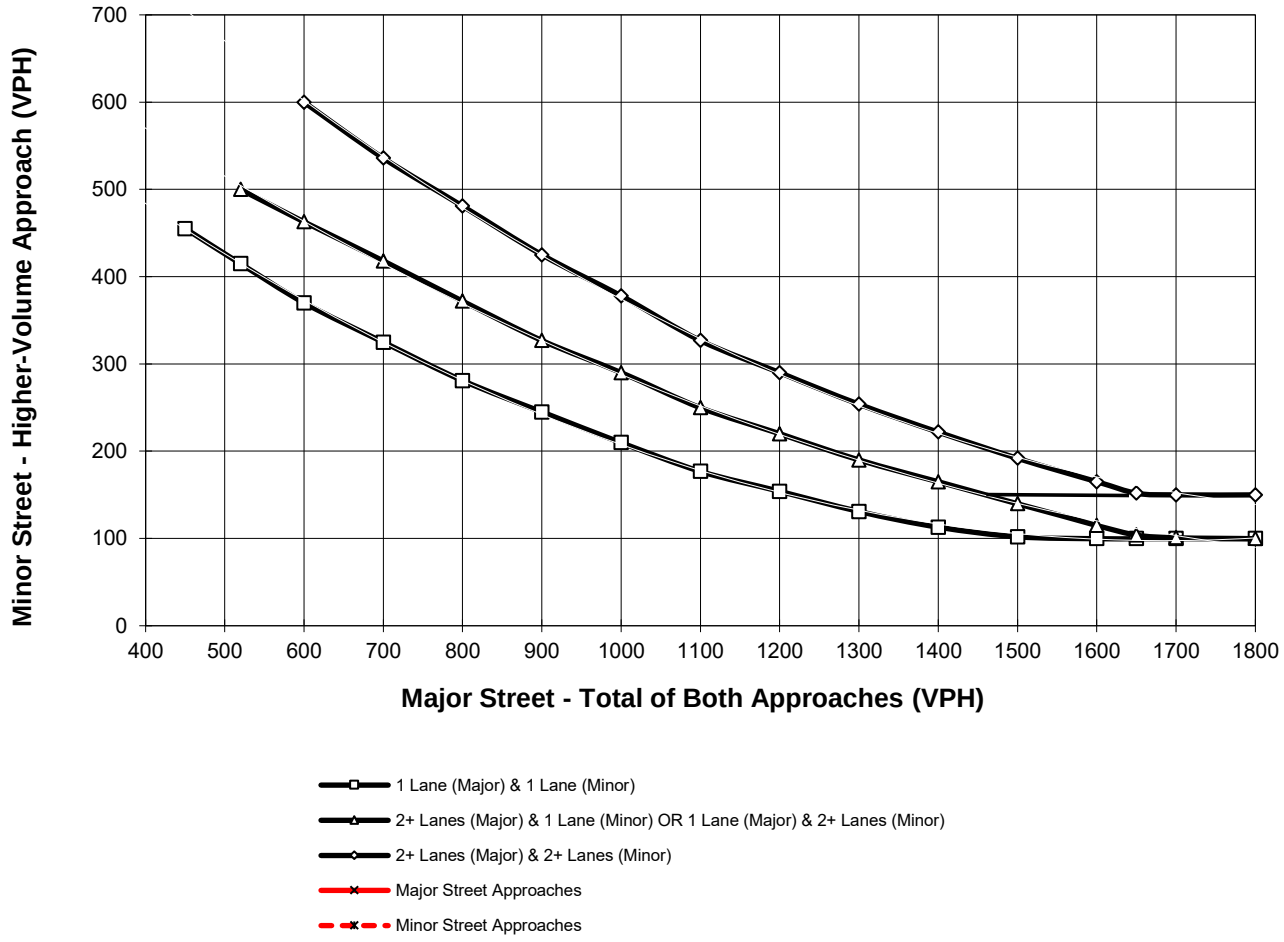
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Santa Ana Street** Total of Both Approaches (VPH) = **243**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue** High Volume Approach (VPH) = **42**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		E+P (2021)	
				CALC	MT	DATE	01/10/22
Jurisdiction:	City of Ontario			CHK	MT	DATE	01/10/22
Major Street:	Double Day Avenue			Critical Approach Speed (Major)		25	mph
Minor Street:	Driveway 30			Critical Approach Speed (Minor)		25	mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **1,102** vpd Minor Street Future ADT = **136** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. or In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **1,102**	*1* **136**	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **1,102**	*1* **136**	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 6% **B** 8%

2 CONDITIONS 80% 2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

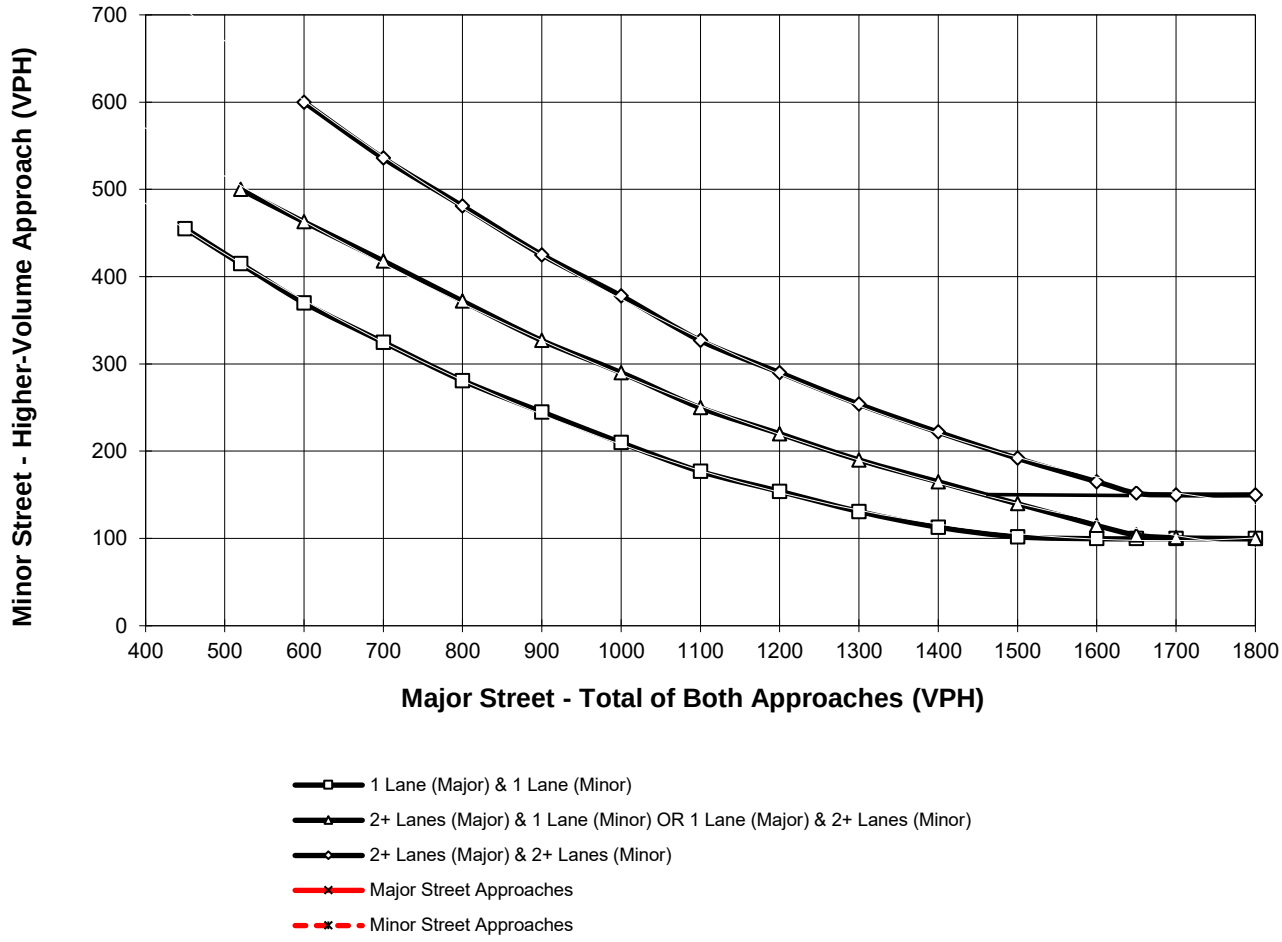
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue**
Total of Both Approaches (VPH) = **216**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Santa Ana Street**
High Volume Approach (VPH) = **131**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

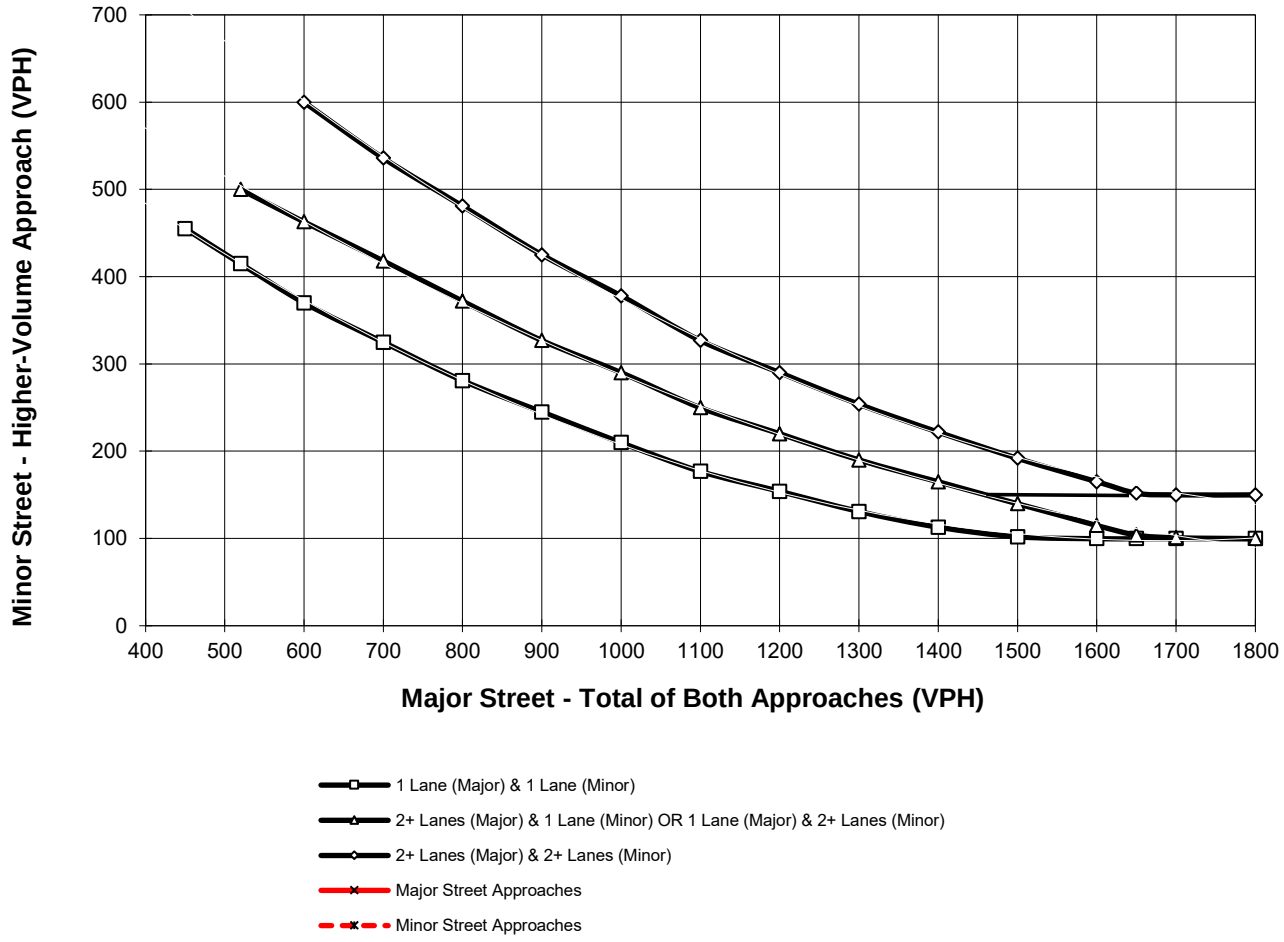
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **E+P (2021) Conditions - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue**
Total of Both Approaches (VPH) = **241**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue**
High Volume Approach (VPH) = **69**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	E+P (2021)
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Dupont Avenue				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 31				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,574** vpd Minor Street Future ADT = **114** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
CONDITION A - Minimum Vehicular Volume						
XX / XX						
Satisfied / Not Satisfied						
Number of lanes for moving traffic on each approach						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **2,574**	*1* **114**	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied						
XX						
Number of lanes for moving traffic on each approach						
	1	*1*	12,000	8,400	1,200	850
	2 + **2,574**	*1* **114**	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied						
XX						
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 5%	**B** 10%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 6.1:

OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Volume Development - AM Peak Hour

1: Haven Av. & Inland Empire Bl.

	PHF:	0.923		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	414	1,973	366	45	1,628	89	79	109	294	131	102	19	5,249

2: Haven Av. & I-10 WB Ramps

	PHF:	0.922		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	2,107	476	0	1,484	605	0	0	0	536	0	646	5,855

3: Haven Av. & I-10 EB Ramps

	PHF:	0.939		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	1,600	378	0	1,523	497	984	0	586	0	0	0	5,568

4: Haven Av. & E. Guasti Rd.

	PHF:	0.978		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	173	1,743	110	222	1,587	300	91	29	38	63	41	145	4,541

5: Haven Av. & E. Airport Dr.

	PHF:	0.911		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	446	1,485	224	185	1,252	137	104	162	240	61	178	188	4,662

6: Haven Av. & Driveway 1

	PHF:									Count Date:		1/0/1900	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		2,155			1,553								3,708

7: Haven Av. & Driveway 2

	PHF:									Count Date:		1/0/1900	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		2,155			1,553								3,708

8: Haven Av. & La Salle St.

	PHF:	0.935		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	2,153	8	0	1,640	0	0	0	0	0	0	2	3,802

9: Haven Av. & Jurupa Av.

	PHF:	0.946		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	106	1,718	214	87	1,083	470	365	203	123	263	313	77	5,022

10: Haven Av. & Mission Bl.

	PHF:	0.940		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	107	1,713	15	154	1,375	217	222	270	130	60	647	651	5,562

Volume Development - AM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.950 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	331	1,607	0	0	843	571	0	0	0	148	10	508	4,018

12: Haven Av. & SR-60 EB Ramps

PHF: 0.950 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	1,048	293	373	618	0	890	7	218	0	0	0	3,447

13: Driveway 3 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								571			426		998

14: Driveway 4 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								571			426		998

15: Driveway 5 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								571			426		998

16: Driveway 6 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								8			2		10

17: Driveway 7 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								8			2		10

18: Driveway 8 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								8			2		10

19: Driveway 9 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								21			47		68

20: Driveway 10 & Jurupa Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								504			654		1,157

Volume Development - AM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								504			654		1,157

22: Carnegie Av. & E. Airport Dr.

PHF: 0.834 7:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	18	11	0	21	29	177	164	112	5	2	206	29	774

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		29			36								65

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		29			36								65

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		29			36								65

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.641 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	23	4	18	18	0	0	0	0	2	0	6	71

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		28			20								47

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		28			20								47

29: Carnegie Av. & La Salle St.

PHF: 0.917 8:00am Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	41	19	0	0	13	7	9	0	12	0	0	0	100

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		60			25								85

Volume Development - AM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.902 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	9	0	3	6	0	23	60	630	3	7	731	31	1,503

32: Driveway 19 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								23			8		30

33: Driveway 20 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								23			8		30

34: Commerce Pkwy. & Driveway 21

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		239			127								366

35: Commerce Pkwy. & Driveway 22

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		239			127								366

36: Commerce Pkwy. & Driveway 23

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		239			127								366

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.948 7:15am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	206	25	51	72	3	0	22	1	0	4	33	418

38: Commerce Pkwy. & Driveway 24

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		231			73								305

39: Commerce Pkwy. & Driveway 25

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		231			73								305

40: Commerce Pkwy. & Driveway 26

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		231			73								305

Volume Development - AM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.918 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	14	5	34	43	4	20	79	545	14	20	735	153	1,667

42: Driveway 27 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								98			38		136

43: Driveway 28 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								98			38		136

44: Double Day Av. & Driveway 29

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		42			24								66

45: Double Day Av. & Santa Ana St.

PHF: 0.944 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	1	7	2	9	4	11	25	45	28	8	25	10	176

46: Driveway 30 & Double Day Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								15			35		50

47: Dupont Av. & Santa Ana St.

PHF: 0.910 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	24	67	8	3	28	8	8	33	7	11	22	11	230

48: Dupont Av. & Double Day Av.

PHF: 0.845 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	35	114	3	1	20	0	1	1	13	0	0	0	189

49: Dupont Av. & Driveway 31

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		162			26								188

50: Dupont Av. & Jurupa Av.

PHF: 0.982 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	24	33	90	8	6	13	57	513	19	100	855	72	1,789

Volume Development - AM Peak Hour

51: Milliken Av. & E. Airport Dr.

	PHF:	0.861		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	23	660	77	365	886	144	73	112	23	84	144	223	2,812

52: Milliken Av. & Jurupa Av.

	PHF:	0.970		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	463	821	114	143	416	70	225	736	310	110	527	76	4,011

53: Milliken Av. & Mission Bl.

	PHF:	0.895		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	327	1,310	15	122	610	363	222	2	52	21	17	238	3,300

54: I-15 SB Ramps & Jurupa Av.

	PHF:	0.910		7:30am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	0	0	540	3	994	0	694	176	445	646	0	3,498

55: I-15 NB Ramps & Jurupa Av.

	PHF:	0.939		7:00am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	275	0	575	0	0	0	395	839	0	0	816	386	3,287

Volume Development - PM Peak Hour

1: Haven Av. & Inland Empire Bl.

PHF: 0.960 4:30pm Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	365	2,046	471	43	1,863	72	209	369	412	371	249	43	6,514

2: Haven Av. & I-10 WB Ramps

PHF: 0.979 4:30pm Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	2,530	960	0	1,887	788	0	0	0	242	0	352	6,758

3: Haven Av. & I-10 EB Ramps

PHF: 0.975 4:30pm Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	2,906	786	0	1,741	388	584	0	268	0	0	0	6,673

4: Haven Av. & E. Guasti Rd.

PHF: 0.975 4:30pm Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	70	3,023	116	179	1,708	121	423	50	230	88	21	246	6,275

5: Haven Av. & E. Airport Dr.

PHF: 0.985 4:30pm Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	538	2,356	19	201	1,558	189	318	503	661	28	639	522	7,532

6: Haven Av. & Driveway 1

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		2,914			2,246								5,160

7: Haven Av. & Driveway 2

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		2,914			2,246								5,160

8: Haven Av. & La Salle St.

PHF: 0.968 4:15pm Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	2,894	7	0	2,259	0	0	0	0	0	0	20	5,179

9: Haven Av. & Jurupa Av.

PHF: 0.982 4:30pm Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	73	2,171	340	224	1,673	363	501	362	72	270	293	228	6,570

10: Haven Av. & Mission Bl.

PHF: 0.962 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	111	1,589	63	334	1,392	145	574	723	120	40	495	467	6,055

Volume Development - PM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.962 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	157	887	0	0	1,327	505	0	0	0	304	9	561	3,750

12: Haven Av. & SR-60 EB Ramps

PHF: 0.933 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	669	215	672	959	0	375	8	170	0	0	0	3,068

13: Driveway 3 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								724			1,189		1,912

14: Driveway 4 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								724			1,189		1,912

15: Driveway 5 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								724			1,189		1,912

16: Driveway 6 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								7			20		26

17: Driveway 7 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								7			20		26

18: Driveway 8 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								7			20		26

19: Driveway 9 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								26			86		112

20: Driveway 10 & Jurupa Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								926			792		1,718

Volume Development - PM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								926			792		1,718

22: Carnegie Av. & E. Airport Dr.

PHF: 0.882 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	41	19	20	54	32	505	273	319	2	1	425	86	1,776

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		79			35								115

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		79			35								115

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		79			35								115

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.786 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	60	6	2	33	0	0	0	0	3	0	20	123

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		65			36								101

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		65			36								101

29: Carnegie Av. & La Salle St.

PHF: 0.944 Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	71	45	0	0	21	15	20	0	6	0	0	0	178

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		116			27								144

Volume Development - PM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	6	0	2	14	0	38	89	904	19	4	661	18	1,754

32: Driveway 19 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								8			23		30

33: Driveway 20 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								8			23		30

34: Commerce Pkwy. & Driveway 21

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		531			365								897

35: Commerce Pkwy. & Driveway 22

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		531			365								897

36: Commerce Pkwy. & Driveway 23

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		531			365								897

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.920 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	3	384	12	49	300	17	2	6	0	22	3	145	942

38: Commerce Pkwy. & Driveway 24

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		399			322								722

39: Commerce Pkwy. & Driveway 25

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		399			322								722

40: Commerce Pkwy. & Driveway 26

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		399			322								722

Volume Development - PM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	15	45	60	263	18	39	97	809	14	12	628	252	2,253

42: Driveway 27 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								66			169		235

43: Driveway 28 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								66			169		235

44: Double Day Av. & Driveway 29

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		14			7								21

45: Double Day Av. & Santa Ana St.

PHF: 0.802 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	19	1	15	2	0	4	7	49	10	7	146	7	268

46: Driveway 30 & Double Day Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:								38			34		72

47: Dupont Av. & Santa Ana St.

PHF: 0.798 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	42	88	26	11	49	13	11	37	11	17	99	29	433

48: Dupont Av. & Double Day Av.

PHF: 0.763 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	23	113	1	0	100	11	7	0	31	2	0	0	288

49: Dupont Av. & Driveway 31

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:		139			120								259

50: Dupont Av. & Jurupa Av.

PHF: 0.934 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	46	29	121	52	28	40	50	1,027	14	71	793	60	2,331

Volume Development - PM Peak Hour

51: Milliken Av. & E. Airport Dr.

	PHF:	0.988		4:45pm					Count Date:	10/26/2021			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	36	1,053	66	153	955	122	247	255	36	95	280	357	3,656

52: Milliken Av. & Jurupa Av.

	PHF:	0.961		4:45pm					Count Date:	10/26/2021			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	188	838	388	267	1,006	66	137	832	244	415	619	109	5,108

53: Milliken Av. & Mission Bl.

	PHF:	0.950		4:30pm					Count Date:	10/26/2021			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	188	947	22	268	1,378	431	578	1	89	17	6	150	4,076

54: I-15 SB Ramps & Jurupa Av.

	PHF:	0.945		4:30pm					Count Date:	10/26/2021			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	0	0	0	239	8	467	0	1,350	543	484	710	0	3,800

55: I-15 NB Ramps & Jurupa Av.

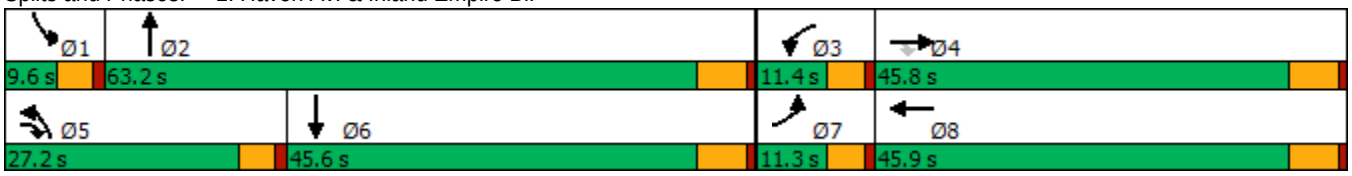
	PHF:	0.967		4:00pm					Count Date:	10/26/2021			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) NP:	114	1	353	0	0	0	604	984	0	0	1,080	542	3,678

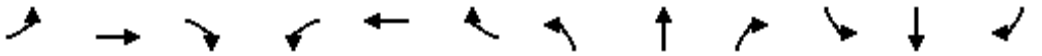
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	109	294	131	102	19	414	1973	366	45	1628	89
Future Volume (vph)	79	109	294	131	102	19	414	1973	366	45	1628	89
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	11.3	45.8	27.2	11.4	45.9		27.2	63.2		9.6	45.6	
Total Split (%)	8.7%	35.2%	20.9%	8.8%	35.3%		20.9%	48.6%		7.4%	35.1%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 101.5
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	109	294	131	102	19	414	1973	366	45	1628	89
Future Volume (veh/h)	79	109	294	131	102	19	414	1973	366	45	1628	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1500	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	86	118	147	142	111	0	450	2145	0	49	1770	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	150	453	471	227	473		525	3281		118	2429	
Arrive On Green	0.05	0.13	0.13	0.06	0.14	0.00	0.18	0.53	0.00	0.04	0.39	0.00
Sat Flow, veh/h	2956	3420	1512	4029	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	86	118	147	142	111	0	450	2145	0	49	1770	0
Grp Sat Flow(s),veh/h/ln	1478	1710	1512	1343	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	2.5	2.7	6.4	3.0	2.5	0.0	12.7	21.5	0.0	1.4	21.0	0.0
Cycle Q Clear(g_c), s	2.5	2.7	6.4	3.0	2.5	0.0	12.7	21.5	0.0	1.4	21.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	150	453	471	227	473		525	3281		118	2429	
V/C Ratio(X)	0.57	0.26	0.31	0.63	0.23		0.86	0.65		0.41	0.73	
Avail Cap(c_a), veh/h	230	1587	972	318	1591		775	4123		171	2859	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.0	33.6	22.7	39.8	33.1	0.0	34.4	14.6	0.0	40.4	22.3	0.0
Incr Delay (d2), s/veh	1.3	0.3	0.4	1.1	0.3	0.0	4.4	0.3	0.0	0.9	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.1	2.2	1.0	1.0	0.0	4.6	6.4	0.0	0.5	6.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.3	33.9	23.1	40.9	33.3	0.0	38.8	14.8	0.0	41.2	23.1	0.0
LnGrp LOS	D	C	C	D	C		D	B		D	C	
Approach Vol, veh/h		351			253	A		2595	A		1819	A
Approach Delay, s/veh		31.2			37.6			19.0			23.6	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	51.5	9.4	17.2	19.9	39.6	9.0	17.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	57.4	6.8	40.0	22.6	39.8	6.7	40.1
Max Q Clear Time (g_c+I1), s	3.4	23.5	5.0	8.4	14.7	23.0	4.5	4.5
Green Ext Time (p_c), s	0.0	21.3	0.0	1.1	0.6	10.8	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	22.4
HCM 6th LOS	C

Notes

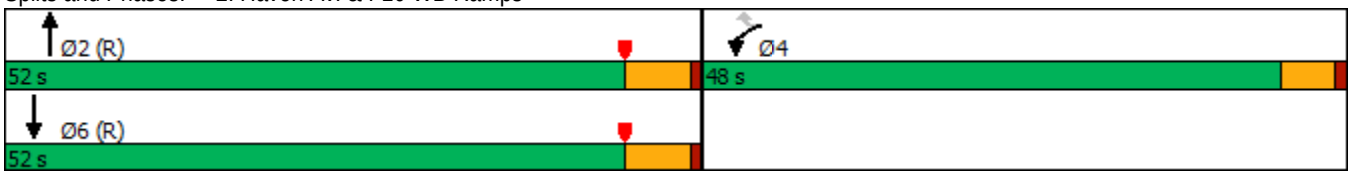
Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	536	646	2107	476	1484
Future Volume (vph)	536	646	2107	476	1484
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	48.0	48.0	52.0		52.0
Total Split (%)	48.0%	48.0%	52.0%		52.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	536	646	2107	476	0	1484
Future Volume (veh/h)	536	646	2107	476	0	1484
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	0	1800
Adj Flow Rate, veh/h	754	383	2290	0	0	1613
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	912	429	3774		0	3774
Arrive On Green	0.28	0.28	1.00	0.00	0.00	0.61
Sat Flow, veh/h	3238	1525	6444	1525	0	6696
Grp Volume(v), veh/h	754	383	2290	0	0	1613
Grp Sat Flow(s),veh/h/ln	1619	1525	1548	1525	0	1548
Q Serve(g_s), s	21.8	24.1	0.0	0.0	0.0	13.8
Cycle Q Clear(g_c), s	21.8	24.1	0.0	0.0	0.0	13.8
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	912	429	3774		0	3774
V/C Ratio(X)	0.83	0.89	0.61		0.00	0.43
Avail Cap(c_a), veh/h	1389	654	3774		0	3774
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.64	0.00	0.00	0.64
Uniform Delay (d), s/veh	33.6	34.5	0.0	0.0	0.0	10.3
Incr Delay (d2), s/veh	1.5	7.1	0.5	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	9.2	0.1	0.0	0.0	4.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.1	41.6	0.5	0.0	0.0	10.5
LnGrp LOS	D	D	A		A	B
Approach Vol, veh/h	1137		2290	A		1613
Approach Delay, s/veh	37.3		0.5			10.5
Approach LOS	D		A			B

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		66.7		33.3		66.7
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		46.2		42.9		46.2
Max Q Clear Time (g_c+I1), s		2.0		26.1		15.8
Green Ext Time (p_c), s		17.6		2.1		8.8

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

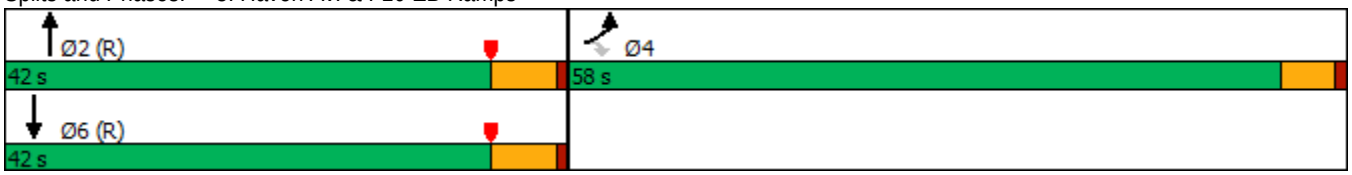
User approved volume balancing among the lanes for turning movement.

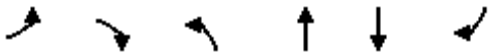
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	984	586	1600	1523	497
Future Volume (vph)	984	586	1600	1523	497
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	58.0	58.0	42.0	42.0	
Total Split (%)	58.0%	58.0%	42.0%	42.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	984	586	0	1600	1523	497
Future Volume (veh/h)	984	586	0	1600	1523	497
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	1051	525	0	1702	1620	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1291	608	0	3049	3049	
Arrive On Green	0.40	0.40	0.00	0.49	0.98	0.00
Sat Flow, veh/h	3238	1525	0	6696	6444	1525
Grp Volume(v), veh/h	1051	525	0	1702	1620	0
Grp Sat Flow(s),veh/h/ln	1619	1525	0	1548	1548	1525
Q Serve(g_s), s	28.9	31.6	0.0	19.2	0.8	0.0
Cycle Q Clear(g_c), s	28.9	31.6	0.0	19.2	0.8	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1291	608	0	3049	3049	
V/C Ratio(X)	0.81	0.86	0.00	0.56	0.53	
Avail Cap(c_a), veh/h	1713	807	0	3049	3049	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.74	0.77	0.00
Uniform Delay (d), s/veh	26.8	27.6	0.0	17.8	0.4	0.0
Incr Delay (d2), s/veh	2.3	7.5	0.0	0.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	11.8	0.0	6.3	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.1	35.1	0.0	18.3	0.9	0.0
LnGrp LOS	C	D	A	B	A	
Approach Vol, veh/h	1576			1702	1620	A
Approach Delay, s/veh	31.1			18.3	0.9	
Approach LOS	C			B	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		55.0		45.0		55.0
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		36.2		52.9		36.2
Max Q Clear Time (g_c+I1), s		21.2		33.6		2.8
Green Ext Time (p_c), s		7.1		6.3		9.0

Intersection Summary		
HCM 6th Ctrl Delay		16.7
HCM 6th LOS		B

Notes

User approved volume balancing among the lanes for turning movement.

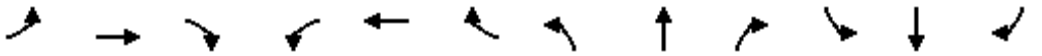
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	29	38	63	41	145	173	1743	110	222	1587	300
Future Volume (vph)	91	29	38	63	41	145	173	1743	110	222	1587	300
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	12.0	48.2	48.2	11.0	47.2	47.2	17.0	51.8	51.8	19.0	53.8	53.8
Total Split (%)	9.2%	37.1%	37.1%	8.5%	36.3%	36.3%	13.1%	39.8%	39.8%	14.6%	41.4%	41.4%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 93.5
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	29	38	63	41	145	173	1743	110	222	1587	300
Future Volume (veh/h)	91	29	38	63	41	145	173	1743	110	222	1587	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	93	30	22	64	42	82	177	1779	78	227	1619	202
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	160	278	232	140	265	395	246	2688	661	300	2801	681
Arrive On Green	0.05	0.15	0.15	0.05	0.15	0.15	0.08	0.43	0.43	0.10	0.45	0.45
Sat Flow, veh/h	2956	1800	1505	2956	1800	2685	2956	6192	1522	2956	6192	1505
Grp Volume(v), veh/h	93	30	22	64	42	82	177	1779	78	227	1619	202
Grp Sat Flow(s),veh/h/ln	1478	1800	1505	1478	1800	1342	1478	1548	1522	1478	1548	1505
Q Serve(g_s), s	2.5	1.2	1.0	1.7	1.6	2.2	4.7	18.4	2.5	6.0	15.6	6.8
Cycle Q Clear(g_c), s	2.5	1.2	1.0	1.7	1.6	2.2	4.7	18.4	2.5	6.0	15.6	6.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	160	278	232	140	265	395	246	2688	661	300	2801	681
V/C Ratio(X)	0.58	0.11	0.09	0.46	0.16	0.21	0.72	0.66	0.12	0.76	0.58	0.30
Avail Cap(c_a), veh/h	271	938	784	235	915	1365	455	3532	868	528	3686	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	29.3	29.3	37.4	30.0	30.2	36.0	18.1	13.6	35.3	16.4	14.0
Incr Delay (d2), s/veh	1.2	0.2	0.2	0.9	0.3	0.3	1.5	0.3	0.1	1.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.5	0.3	0.6	0.7	0.7	1.6	5.7	0.7	2.1	4.8	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.5	29.5	29.4	38.3	30.3	30.5	37.5	18.4	13.7	36.7	16.6	14.2
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		145			188			2034			2048	
Approach Delay, s/veh		35.2			33.1			19.9			18.6	
Approach LOS		D			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	40.8	8.4	18.6	11.3	42.3	9.0	18.1
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	14.4	46.0	6.4	42.0	12.4	48.0	7.4	41.0
Max Q Clear Time (g_c+I1), s	8.0	20.4	3.7	3.2	6.7	17.6	4.5	4.2
Green Ext Time (p_c), s	0.2	14.6	0.0	0.2	0.1	14.9	0.0	0.5

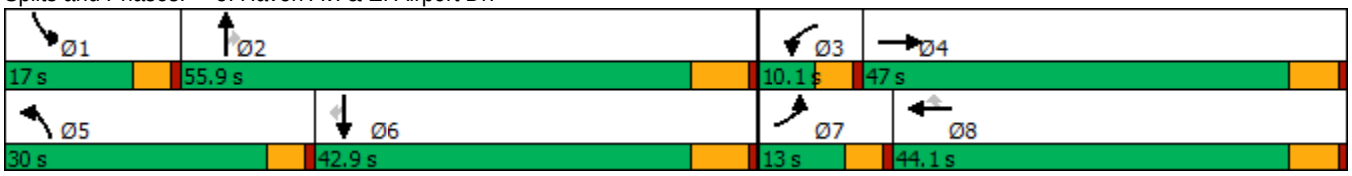
Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

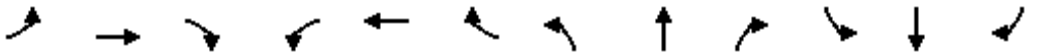
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	104	162	61	178	188	446	1485	224	185	1252	137
Future Volume (vph)	104	162	61	178	188	446	1485	224	185	1252	137
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	13.0	47.0	10.1	44.1	44.1	30.0	55.9	55.9	17.0	42.9	42.9
Total Split (%)	10.0%	36.2%	7.8%	33.9%	33.9%	23.1%	43.0%	43.0%	13.1%	33.0%	33.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 97
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	162	240	61	178	188	446	1485	224	185	1252	137
Future Volume (veh/h)	104	162	240	61	178	188	446	1485	224	185	1252	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	114	178	172	67	196	127	490	1632	210	203	1376	116
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	173	269	240	144	504	225	574	2670	658	274	2042	503
Arrive On Green	0.06	0.16	0.16	0.05	0.15	0.15	0.19	0.43	0.43	0.09	0.33	0.33
Sat Flow, veh/h	2956	1710	1525	2956	3420	1525	2956	6192	1525	2956	6192	1524
Grp Volume(v), veh/h	114	178	172	67	196	127	490	1632	210	203	1376	116
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1478	1710	1525	1478	1548	1525	1478	1548	1524
Q Serve(g_s), s	3.0	7.8	8.5	1.8	4.1	6.2	12.7	16.2	7.2	5.3	15.2	4.4
Cycle Q Clear(g_c), s	3.0	7.8	8.5	1.8	4.1	6.2	12.7	16.2	7.2	5.3	15.2	4.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	269	240	144	504	225	574	2670	658	274	2042	503
V/C Ratio(X)	0.66	0.66	0.72	0.47	0.39	0.57	0.85	0.61	0.32	0.74	0.67	0.23
Avail Cap(c_a), veh/h	312	886	790	204	1647	735	944	3846	947	461	2834	697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	31.5	31.8	36.8	30.7	31.5	31.0	17.5	14.9	35.1	23.0	19.3
Incr Delay (d2), s/veh	1.6	2.8	4.0	0.9	0.5	2.2	2.0	0.2	0.3	1.5	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.2	3.2	0.6	1.6	2.2	4.2	4.8	2.2	1.8	4.8	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.3	34.3	35.8	37.7	31.2	33.8	33.0	17.7	15.2	36.6	23.4	19.6
LnGrp LOS	D	C	D	D	C	C	C	B	B	D	C	B
Approach Vol, veh/h		464			390			2332			1695	
Approach Delay, s/veh		35.9			33.1			20.7			24.7	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	40.8	8.5	18.3	20.0	32.7	9.2	17.5
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	49.4	5.5	41.2	25.4	36.4	8.4	38.3
Max Q Clear Time (g_c+I1), s	7.3	18.2	3.8	10.5	14.7	17.2	5.0	8.2
Green Ext Time (p_c), s	0.1	14.4	0.0	2.0	0.7	9.0	0.0	1.5

Intersection Summary	
HCM 6th Ctrl Delay	24.5
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	1	1615	8	0	1230
Future Vol, veh/h	0	1	1615	8	0	1230
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1	1718	9	0	1309

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	864	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	259	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	259	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19	0	0
HCM LOS	C		

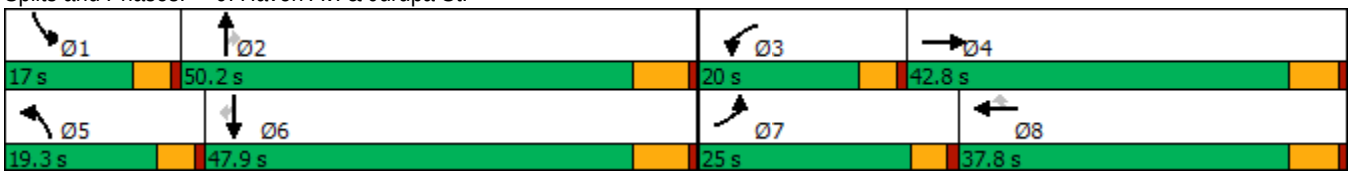
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	259	-
HCM Lane V/C Ratio	-	-	0.004	-
HCM Control Delay (s)	-	-	19	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0	-

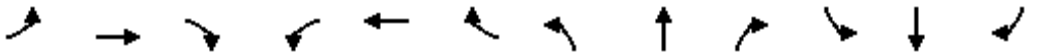
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	365	203	263	313	77	106	1718	214	87	1083	470
Future Volume (vph)	365	203	263	313	77	106	1718	214	87	1083	470
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	25.0	42.8	20.0	37.8	37.8	19.3	50.2	50.2	17.0	47.9	47.9
Total Split (%)	19.2%	32.9%	15.4%	29.1%	29.1%	14.8%	38.6%	38.6%	13.1%	36.8%	36.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 108.9
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	365	203	123	263	313	77	106	1718	214	87	1083	470
Future Volume (veh/h)	365	203	123	263	313	77	106	1718	214	87	1083	470
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	384	214	104	277	329	55	112	1808	110	92	1140	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	454	579	256	343	466	208	138	2488	613	114	2397	
Arrive On Green	0.15	0.17	0.17	0.12	0.14	0.14	0.09	0.40	0.40	0.07	0.39	0.00
Sat Flow, veh/h	2956	3332	1473	2956	3420	1525	1619	6192	1525	1619	6192	1525
Grp Volume(v), veh/h	384	210	108	277	329	55	112	1808	110	92	1140	0
Grp Sat Flow(s),veh/h/ln	1478	1638	1529	1478	1710	1525	1619	1548	1525	1619	1548	1525
Q Serve(g_s), s	11.4	5.1	5.7	8.3	8.3	2.9	6.1	22.3	4.2	5.1	12.5	0.0
Cycle Q Clear(g_c), s	11.4	5.1	5.7	8.3	8.3	2.9	6.1	22.3	4.2	5.1	12.5	0.0
Prop In Lane	1.00		0.96	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	454	569	266	343	466	208	138	2488	613	114	2397	
V/C Ratio(X)	0.85	0.37	0.41	0.81	0.71	0.26	0.81	0.73	0.18	0.80	0.48	
Avail Cap(c_a), veh/h	667	1341	626	504	1211	540	263	2993	737	222	2836	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.2	33.0	33.2	39.0	37.3	35.0	40.6	22.9	17.4	41.4	20.8	0.0
Incr Delay (d2), s/veh	4.5	0.4	1.0	3.6	2.0	0.7	4.3	0.7	0.1	4.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	2.0	2.1	3.0	3.4	1.1	2.4	7.1	1.4	2.0	4.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.7	33.4	34.2	42.6	39.3	35.7	44.9	23.6	17.6	46.3	21.0	0.0
LnGrp LOS	D	C	C	D	D	D	D	C	B	D	C	
Approach Vol, veh/h		702			661			2030			1232	A
Approach Delay, s/veh		38.1			40.4			24.4			22.8	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	42.8	15.1	21.5	12.3	41.5	18.5	18.1
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	43.7	15.4	37.0	14.7	41.4	20.4	32.0
Max Q Clear Time (g_c+I1), s	7.1	24.3	10.3	7.7	8.1	14.5	13.4	10.3
Green Ext Time (p_c), s	0.0	12.0	0.2	1.9	0.1	7.8	0.4	2.0

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

Notes

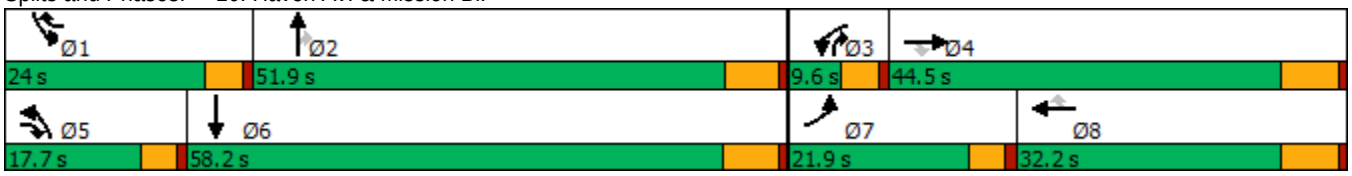
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

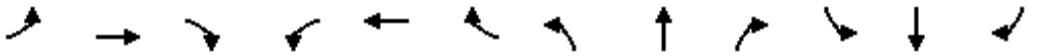
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	222	270	130	60	647	651	107	1713	15	154	1375
Future Volume (vph)	222	270	130	60	647	651	107	1713	15	154	1375
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	21.9	44.5	17.7	9.6	32.2	24.0	17.7	51.9	9.6	24.0	58.2
Total Split (%)	16.8%	34.2%	13.6%	7.4%	24.8%	18.5%	13.6%	39.9%	7.4%	18.5%	44.8%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 123.5
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	270	130	60	647	651	107	1713	15	154	1375	217
Future Volume (veh/h)	222	270	130	60	647	651	107	1713	15	154	1375	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	236	287	115	64	688	528	114	1822	11	164	1463	215
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	286	1356	549	109	1062	508	137	1886	633	189	1800	264
Arrive On Green	0.10	0.28	0.28	0.04	0.22	0.22	0.08	0.38	0.38	0.12	0.42	0.42
Sat Flow, veh/h	2956	4914	1522	2956	4914	1525	1619	4914	1502	1619	4327	635
Grp Volume(v), veh/h	236	287	115	64	688	528	114	1822	11	164	1107	571
Grp Sat Flow(s),veh/h/ln	1478	1638	1522	1478	1638	1525	1619	1638	1502	1619	1638	1686
Q Serve(g_s), s	9.3	5.3	6.2	2.5	15.2	25.7	8.2	43.2	0.5	11.8	35.5	35.5
Cycle Q Clear(g_c), s	9.3	5.3	6.2	2.5	15.2	25.7	8.2	43.2	0.5	11.8	35.5	35.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	286	1356	549	109	1062	508	137	1886	633	189	1363	701
V/C Ratio(X)	0.82	0.21	0.21	0.59	0.65	1.04	0.83	0.97	0.02	0.87	0.81	0.81
Avail Cap(c_a), veh/h	430	1570	615	124	1062	508	178	1888	633	264	1424	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	33.1	26.3	56.4	42.5	39.7	53.6	35.9	20.1	51.6	30.6	30.7
Incr Delay (d2), s/veh	4.7	0.1	0.2	2.5	1.4	50.8	17.9	13.6	0.0	15.2	3.6	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	2.0	2.2	0.9	6.0	20.9	3.9	18.4	0.2	5.4	13.5	14.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.4	33.2	26.5	58.8	43.9	90.5	71.6	49.5	20.1	66.8	34.2	37.4
LnGrp LOS	E	C	C	E	D	F	E	D	C	E	C	D
Approach Vol, veh/h		638			1280			1947			1842	
Approach Delay, s/veh		40.9			63.9			50.6			38.1	
Approach LOS		D			E			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	52.1	9.0	39.3	14.6	56.0	16.1	32.2
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	19.4	* 46	5.0	38.0	13.1	51.7	17.3	25.7
Max Q Clear Time (g_c+I1), s	13.8	45.2	4.5	8.2	10.2	37.5	11.3	27.7
Green Ext Time (p_c), s	0.1	0.5	0.0	2.0	0.0	8.5	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.5
HCM 6th LOS	D

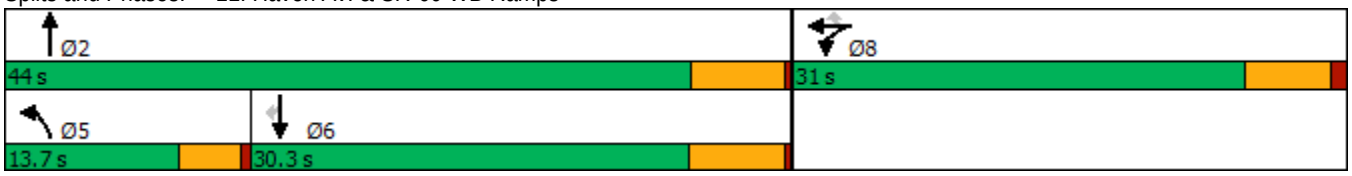
Notes

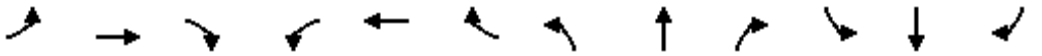
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	148	10	508	331	1607	843	571
Future Volume (vph)	148	10	508	331	1607	843	571
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.5	35.2	28.3	28.3
Total Split (s)	31.0	31.0	31.0	13.7	44.0	30.3	30.3
Total Split (%)	41.3%	41.3%	41.3%	18.3%	58.7%	40.4%	40.4%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 68.6
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	148	10	508	331	1607	0	0	843	571
Future Volume (veh/h)	0	0	0	148	10	508	331	1607	0	0	843	571
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	1600	1800	0	0	1800	1800
Adj Flow Rate, veh/h				164	0	308	348	1692	0	0	887	436
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				797	0	375	440	2746	0	0	1684	523
Arrive On Green				0.25	0.00	0.25	0.15	0.56	0.00	0.00	0.34	0.34
Sat Flow, veh/h				3238	0	1525	2956	5076	0	0	5076	1525
Grp Volume(v), veh/h				164	0	308	348	1692	0	0	887	436
Grp Sat Flow(s),veh/h/ln				1619	0	1525	1478	1638	0	0	1638	1525
Q Serve(g_s), s				2.4	0.0	11.3	6.8	13.8	0.0	0.0	8.6	15.6
Cycle Q Clear(g_c), s				2.4	0.0	11.3	6.8	13.8	0.0	0.0	8.6	15.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				797	0	375	440	2746	0	0	1684	523
V/C Ratio(X)				0.21	0.00	0.82	0.79	0.62	0.00	0.00	0.53	0.83
Avail Cap(c_a), veh/h				1372	0	646	482	3165	0	0	2025	629
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.8	0.0	21.2	24.4	8.8	0.0	0.0	15.7	18.0
Incr Delay (d2), s/veh				0.1	0.0	4.5	8.0	0.2	0.0	0.0	0.1	6.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.8	0.0	3.9	2.5	3.0	0.0	0.0	2.6	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				17.9	0.0	25.7	32.4	9.0	0.0	0.0	15.8	24.9
LnGrp LOS				B	A	C	C	A	A	A	B	C
Approach Vol, veh/h					472			2040			1323	
Approach Delay, s/veh					23.0			13.0			18.8	
Approach LOS					C			B			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		39.0			12.9	26.2		20.4				
Change Period (Y+Rc), s		* 5.8			4.0	5.8		5.8				
Max Green Setting (Gmax), s		* 38			9.7	24.5		25.2				
Max Q Clear Time (g_c+I1), s		15.8			8.8	17.6		13.3				
Green Ext Time (p_c), s		8.2			0.1	2.7		1.3				

Intersection Summary		
HCM 6th Ctrl Delay	16.2	
HCM 6th LOS	B	

Notes

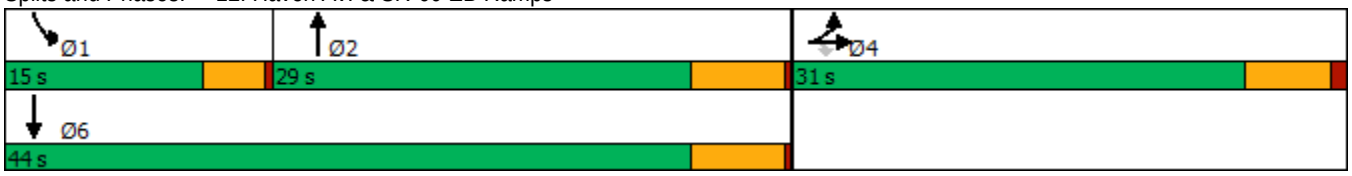
User approved volume balancing among the lanes for turning movement.

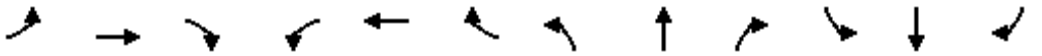
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	890	7	218	1048	373	618
Future Volume (vph)	890	7	218	1048	373	618
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.6	29.7
Total Split (s)	31.0	31.0	31.0	29.0	15.0	44.0
Total Split (%)	41.3%	41.3%	41.3%	38.7%	20.0%	58.7%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 73.9
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	890	7	218	0	0	0	0	1048	293	373	618	0
Future Volume (veh/h)	890	7	218	0	0	0	0	1048	293	373	618	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800				0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h	942	0	88				0	1103	244	393	651	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	1049	0	494				0	1240	274	451	2539	0
Arrive On Green	0.32	0.00	0.32				0.00	0.31	0.31	0.15	0.52	0.00
Sat Flow, veh/h	3238	0	1525				0	4177	888	2956	5076	0
Grp Volume(v), veh/h	942	0	88				0	900	447	393	651	0
Grp Sat Flow(s),veh/h/ln	1619	0	1525				0	1638	1627	1478	1638	0
Q Serve(g_s), s	20.0	0.0	3.0				0.0	18.9	18.9	9.4	5.3	0.0
Cycle Q Clear(g_c), s	20.0	0.0	3.0				0.0	18.9	18.9	9.4	5.3	0.0
Prop In Lane	1.00		1.00				0.00		0.55	1.00		0.00
Lane Grp Cap(c), veh/h	1049	0	494				0	1012	502	451	2539	0
V/C Ratio(X)	0.90	0.00	0.18				0.00	0.89	0.89	0.87	0.26	0.00
Avail Cap(c_a), veh/h	1131	0	533				0	1058	525	451	2608	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.3	0.0	17.5				0.0	23.8	23.8	29.9	9.7	0.0
Incr Delay (d2), s/veh	9.3	0.0	0.2				0.0	8.8	15.9	16.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	1.0				0.0	7.5	8.4	4.0	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	17.7				0.0	32.6	39.7	46.8	9.7	0.0
LnGrp LOS	C	A	B				A	C	D	D	A	A
Approach Vol, veh/h		1030						1347			1044	
Approach Delay, s/veh		31.3						35.0			23.7	
Approach LOS		C						C			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	15.0	28.0		29.2		43.0
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7
Max Green Setting (Gmax), s	11.0	23.3		25.2		38.3
Max Q Clear Time (g_c+I1), s	11.4	20.9		22.0		7.3
Green Ext Time (p_c), s	0.0	1.4		1.4		2.6

Intersection Summary		
HCM 6th Ctrl Delay		30.4
HCM 6th LOS		C

Notes

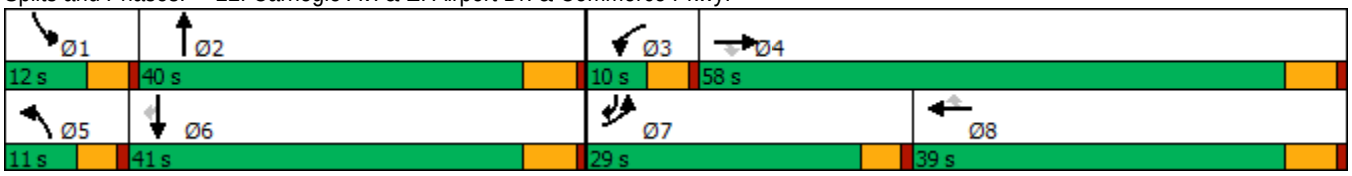
User approved volume balancing among the lanes for turning movement.

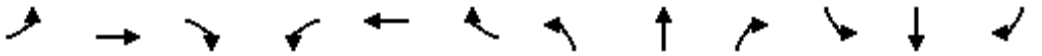
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	164	112	5	2	206	29	18	11	21	29	177
Future Volume (vph)	164	112	5	2	206	29	18	11	21	29	177
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	29.0	58.0	58.0	10.0	39.0	39.0	11.0	40.0	12.0	41.0	29.0
Total Split (%)	24.2%	48.3%	48.3%	8.3%	32.5%	32.5%	9.2%	33.3%	10.0%	34.2%	24.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 50.6
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	112	5	2	206	29	18	11	0	21	29	177
Future Volume (veh/h)	164	112	5	2	206	29	18	11	0	21	29	177
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1700
Adj Flow Rate, veh/h	198	135	5	2	248	23	22	13	0	25	35	154
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	247	1204	537	4	692	309	43	662	0	48	672	885
Arrive On Green	0.15	0.35	0.35	0.00	0.20	0.20	0.03	0.19	0.00	0.03	0.20	0.20
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	3510	0	1619	3420	2536
Grp Volume(v), veh/h	198	135	5	2	248	23	22	13	0	25	35	154
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	0	1619	1710	1268
Q Serve(g_s), s	5.8	1.3	0.1	0.1	3.1	0.6	0.7	0.2	0.0	0.7	0.4	2.1
Cycle Q Clear(g_c), s	5.8	1.3	0.1	0.1	3.1	0.6	0.7	0.2	0.0	0.7	0.4	2.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	1204	537	4	692	309	43	662	0	48	672	885
V/C Ratio(X)	0.80	0.11	0.01	0.45	0.36	0.07	0.51	0.02	0.00	0.53	0.05	0.17
Avail Cap(c_a), veh/h	802	3625	1617	178	2306	1028	210	2375	0	243	2445	2199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	10.8	10.4	24.5	16.9	15.9	23.7	16.1	0.0	23.6	16.1	11.1
Incr Delay (d2), s/veh	2.3	0.0	0.0	24.3	0.3	0.1	3.5	0.0	0.0	3.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.4	0.0	0.1	1.0	0.2	0.3	0.0	0.0	0.3	0.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	10.8	10.4	48.8	17.2	16.0	27.2	16.1	0.0	26.9	16.1	11.2
LnGrp LOS	C	B	B	D	B	B	C	B	A	C	B	B
Approach Vol, veh/h		338			273			35			214	
Approach Delay, s/veh		17.6			17.3			23.1			13.8	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	15.3	4.7	23.1	5.9	15.5	12.1	15.8
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	34.2	5.4	52.2	6.4	35.2	24.4	33.2
Max Q Clear Time (g_c+I1), s	2.7	2.2	2.1	3.3	2.7	4.1	7.8	5.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.0	0.8	0.2	1.5

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	6	23	4	18	18
Future Vol, veh/h	2	6	23	4	18	18
Peak Hour Factor	0.64	0.64	0.64	0.64	0.64	0.64
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	9	36	6	28	28
Number of Lanes	2	1	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	3	0
HCM Control Delay	6.4	7.4	7.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	18%	0%	100%	0%	0%
Vol Thru, %	100%	66%	0%	0%	0%	0%	100%	100%
Vol Right, %	0%	34%	0%	82%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	15	12	1	4	3	18	9	9
LT Vol	0	0	1	1	0	18	0	0
Through Vol	15	8	0	0	0	0	9	9
RT Vol	0	4	0	3	3	0	0	0
Lane Flow Rate	24	18	2	6	5	28	14	14
Geometry Grp	8	8	7	7	7	8	8	8
Degree of Util (X)	0.031	0.022	0.003	0.007	0.003	0.04	0.018	0.011
Departure Headway (Hd)	4.599	4.358	5.16	4.178	2.26	5.079	4.579	2.879
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	778	820	690	849	1551	705	782	1239
Service Time	2.329	2.089	2.921	1.939	0.021	2.808	2.307	0.607
HCM Lane V/C Ratio	0.031	0.022	0.003	0.007	0.003	0.04	0.018	0.011
HCM Control Delay	7.5	7.2	7.9	7	5	8	7.4	5.6
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0	0	0	0.1	0.1	0

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	12	41	19	13	7
Future Vol, veh/h	9	12	41	19	13	7
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	13	45	21	14	8
Number of Lanes	1	1	1	2	2	0

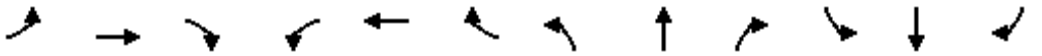
Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	7.3	7.6	7.2
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	38%
Vol Right, %	0%	0%	0%	0%	100%	0%	62%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	41	10	10	9	12	9	11
LT Vol	41	0	0	9	0	0	0
Through Vol	0	10	10	0	0	9	4
RT Vol	0	0	0	0	12	0	7
Lane Flow Rate	45	10	10	10	13	9	12
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.063	0.013	0.008	0.014	0.014	0.012	0.014
Departure Headway (Hd)	5.075	4.574	2.873	5.155	3.956	4.632	4.199
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	706	783	1242	690	895	769	847
Service Time	2.8	2.3	0.599	2.921	1.722	2.385	1.953
HCM Lane V/C Ratio	0.064	0.013	0.008	0.014	0.015	0.012	0.014
HCM Control Delay	8.1	7.4	5.6	8	6.8	7.4	7
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0	0	0	0	0	0

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	60	630	7	731	31	9	3	6	23
Future Volume (vph)	60	630	7	731	31	9	3	6	23
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	81.0	81.0	81.0	81.0	81.0	39.0	39.0	39.0	39.0
Total Split (%)	67.5%	67.5%	67.5%	67.5%	67.5%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 30
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	630	3	7	731	31	9	0	3	6	0	23
Future Volume (veh/h)	60	630	3	7	731	31	9	0	3	6	0	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	67	700	3	8	812	34	10	0	2	7	0	16
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	499	2586	11	583	1751	771	337	84	71	337	84	71
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.05	0.00	0.05	0.05	0.00	0.05
Sat Flow, veh/h	625	5050	22	714	3420	1506	1340	1800	1523	1349	1800	1525
Grp Volume(v), veh/h	67	454	249	8	812	34	10	0	2	7	0	16
Grp Sat Flow(s),veh/h/ln	625	1638	1796	714	1710	1506	1340	1800	1523	1349	1800	1525
Q Serve(g_s), s	2.0	2.1	2.1	0.2	4.0	0.3	0.2	0.0	0.0	0.1	0.0	0.3
Cycle Q Clear(g_c), s	6.0	2.1	2.1	2.2	4.0	0.3	0.2	0.0	0.0	0.1	0.0	0.3
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	499	1678	919	583	1751	771	337	84	71	337	84	71
V/C Ratio(X)	0.13	0.27	0.27	0.01	0.46	0.04	0.03	0.00	0.03	0.02	0.00	0.22
Avail Cap(c_a), veh/h	1965	9368	5134	2258	9780	4308	2027	2355	1992	1977	2272	1926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.0	3.6	3.6	4.3	4.1	3.2	12.0	0.0	12.0	12.0	0.0	12.1
Incr Delay (d2), s/veh	0.1	0.1	0.2	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.2	3.7	3.8	4.3	4.3	3.2	12.1	0.0	12.1	12.0	0.0	13.6
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	B
Approach Vol, veh/h		770			854			12			23	
Approach Delay, s/veh		4.0			4.3			12.1			13.1	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		7.0		19.3		7.0		19.3				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 34		75.2		33.2		75.2				
Max Q Clear Time (g_c+I1), s		2.2		8.0		2.3		6.0				
Green Ext Time (p_c), s		0.0		5.4		0.0		6.3				

Intersection Summary												
HCM 6th Ctrl Delay			4.3									
HCM 6th LOS			A									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	22	1	0	4	33	0	206	25	51	72	3
Future Vol, veh/h	0	22	1	0	4	33	0	206	25	51	72	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	23	1	0	4	35	0	217	26	54	76	3
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.4	7.8	8.6	8.5
HCM LOS	A	A	A	A

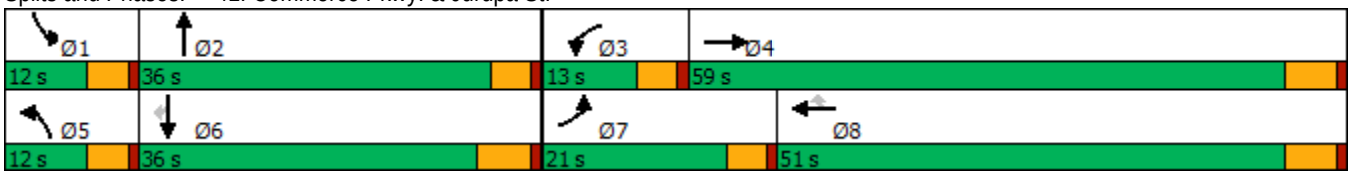
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	73%	100%	100%	88%	100%	100%	4%	0%	100%	89%
Vol Right, %	0%	0%	27%	0%	0%	12%	0%	0%	96%	0%	0%	11%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	137	94	0	15	8	0	3	34	51	48	27
LT Vol	0	0	0	0	0	0	0	0	0	51	0	0
Through Vol	0	137	69	0	15	7	0	3	1	0	48	24
RT Vol	0	0	25	0	0	1	0	0	33	0	0	3
Lane Flow Rate	0	145	99	0	15	9	0	3	36	54	51	28
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.199	0.13	0	0.024	0.013	0	0.004	0.049	0.084	0.072	0.04
Departure Headway (Hd)	4.95	4.95	4.763	5.549	5.549	5.465	5.525	5.525	4.851	5.644	5.142	5.064
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	726	753	0	644	654	0	647	737	635	697	707
Service Time	2.676	2.676	2.489	3.289	3.289	3.205	3.264	3.264	2.589	3.374	2.873	2.795
HCM Lane V/C Ratio	0	0.2	0.131	0	0.023	0.014	0	0.005	0.049	0.085	0.073	0.04
HCM Control Delay	7.7	8.9	8.2	8.3	8.4	8.3	8.3	8.3	7.8	8.9	8.3	8
HCM Lane LOS	N	A	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.7	0.4	0	0.1	0	0	0	0.2	0.3	0.2	0.1

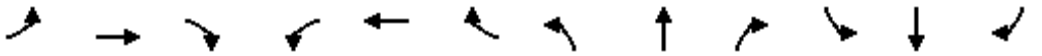
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	79	545	20	735	153	14	5	43	4	20
Future Volume (vph)	79	545	20	735	153	14	5	43	4	20
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	21.0	59.0	13.0	51.0	51.0	12.0	36.0	12.0	36.0	36.0
Total Split (%)	17.5%	49.2%	10.8%	42.5%	42.5%	10.0%	30.0%	10.0%	30.0%	30.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 60.5
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	545	14	20	735	153	14	5	34	43	4	20
Future Volume (veh/h)	79	545	14	20	735	153	14	5	34	43	4	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	86	592	14	22	799	0	15	5	26	47	4	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	113	1943	46	43	1198		30	30	156	141	266	225
Arrive On Green	0.07	0.39	0.39	0.03	0.35	0.00	0.02	0.12	0.12	0.05	0.15	0.15
Sat Flow, veh/h	1619	4939	116	1619	3420	1525	1619	252	1312	2956	1800	1525
Grp Volume(v), veh/h	86	392	214	22	799	0	15	0	31	47	4	15
Grp Sat Flow(s),veh/h/ln	1619	1638	1779	1619	1710	1525	1619	0	1564	1478	1800	1525
Q Serve(g_s), s	2.6	4.1	4.2	0.7	10.0	0.0	0.5	0.0	0.9	0.8	0.1	0.4
Cycle Q Clear(g_c), s	2.6	4.1	4.2	0.7	10.0	0.0	0.5	0.0	0.9	0.8	0.1	0.4
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.84	1.00		1.00
Lane Grp Cap(c), veh/h	113	1289	700	43	1198		30	0	186	141	266	225
V/C Ratio(X)	0.76	0.30	0.31	0.52	0.67		0.49	0.00	0.17	0.33	0.02	0.07
Avail Cap(c_a), veh/h	528	3466	1882	270	3074		238	0	977	435	1081	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	10.5	10.5	24.2	13.8	0.0	24.4	0.0	19.9	23.2	18.3	18.4
Incr Delay (d2), s/veh	4.0	0.1	0.2	3.6	0.6	0.0	4.5	0.0	0.4	0.5	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	1.1	1.2	0.3	3.0	0.0	0.2	0.0	0.3	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	10.6	10.8	27.7	14.5	0.0	29.0	0.0	20.3	23.7	18.3	18.6
LnGrp LOS	C	B	B	C	B		C	A	C	C	B	B
Approach Vol, veh/h		692			821	A		46			66	
Approach Delay, s/veh		12.7			14.8			23.2			22.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	11.8	5.9	25.6	5.5	13.2	8.1	23.4
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	* 31	8.4	53.2	7.4	30.2	16.4	45.2
Max Q Clear Time (g_c+I1), s	2.8	2.9	2.7	6.2	2.5	2.4	4.6	12.0
Green Ext Time (p_c), s	0.0	0.1	0.0	3.8	0.0	0.0	0.1	5.7

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	45	28	8	25	10	1	7	2	9	4	11
Future Vol, veh/h	25	45	28	8	25	10	1	7	2	9	4	11
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	27	48	30	9	27	11	1	7	2	10	4	12
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.6	7.5	7.6	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	54%	0%	100%	35%	0%	100%	45%	0%	100%	11%
Vol Right, %	0%	0%	46%	0%	0%	65%	0%	0%	55%	0%	0%	89%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	5	4	25	30	43	8	17	18	9	3	12
LT Vol	1	0	0	25	0	0	8	0	0	9	0	0
Through Vol	0	5	2	0	30	15	0	17	8	0	3	1
RT Vol	0	0	2	0	0	28	0	0	10	0	0	11
Lane Flow Rate	1	5	5	27	32	46	9	18	20	10	3	13
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.002	0.007	0.006	0.038	0.041	0.053	0.012	0.023	0.023	0.014	0.004	0.016
Departure Headway (Hd)	5.422	4.922	4.599	5.127	4.627	4.171	5.202	4.702	4.32	5.396	4.896	4.271
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	664	731	783	695	769	852	681	752	817	667	735	843
Service Time	3.123	2.623	2.3	2.884	2.384	1.928	2.99	2.49	2.108	3.096	2.596	1.971
HCM Lane V/C Ratio	0.002	0.007	0.006	0.039	0.042	0.054	0.013	0.024	0.024	0.015	0.004	0.015
HCM Control Delay	8.1	7.7	7.3	8.1	7.6	7.2	8.1	7.6	7.2	8.2	7.6	7
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0	0	0.1	0.1	0.2	0	0.1	0.1	0	0	0

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	33	7	11	22	11	24	67	8	3	28	8
Future Vol, veh/h	8	33	7	11	22	11	24	67	8	3	28	8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	36	8	12	24	12	26	74	9	3	31	9
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.9	7.8	7.9	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	74%	0%	100%	61%	0%	100%	40%	0%	100%	54%
Vol Right, %	0%	0%	26%	0%	0%	39%	0%	0%	60%	0%	0%	46%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	45	30	8	22	18	11	15	18	3	19	17
LT Vol	24	0	0	8	0	0	11	0	0	3	0	0
Through Vol	0	45	22	0	22	11	0	15	7	0	19	9
RT Vol	0	0	8	0	0	7	0	0	11	0	0	8
Lane Flow Rate	26	49	33	9	24	20	12	16	20	3	21	19
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.039	0.066	0.043	0.013	0.034	0.026	0.018	0.022	0.026	0.005	0.028	0.025
Departure Headway (Hd)	5.35	4.85	4.665	5.489	4.989	4.716	5.496	4.996	4.576	5.476	4.976	4.653
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	672	741	770	655	720	762	654	719	785	656	722	772
Service Time	3.061	2.561	2.376	3.199	2.699	2.427	3.209	2.709	2.289	3.188	2.688	2.365
HCM Lane V/C Ratio	0.039	0.066	0.043	0.014	0.033	0.026	0.018	0.022	0.025	0.005	0.029	0.025
HCM Control Delay	8.3	7.9	7.6	8.3	7.9	7.6	8.3	7.8	7.4	8.2	7.8	7.5
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	13	35	114	20	0
Future Vol, veh/h	1	13	35	114	20	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	15	42	136	24	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	176	12	24	0	-	0
Stage 1	24	-	-	-	-	-
Stage 2	152	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	803	1072	1604	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	866	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	782	1072	1604	-	-	-
Mov Cap-2 Maneuver	813	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	866	-	-	-	-	-

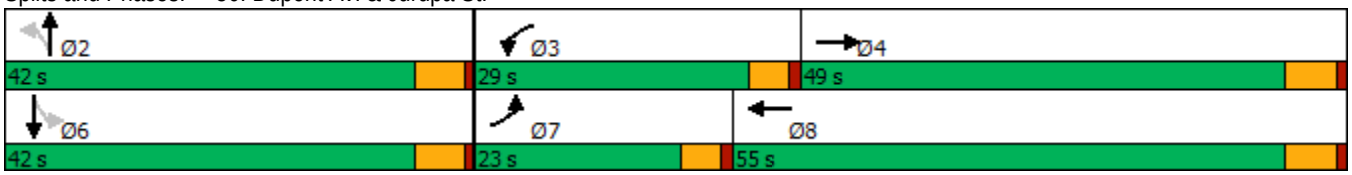
Approach	EB	NB	SB
HCM Control Delay, s	8.5	1.7	0
HCM LOS	A		

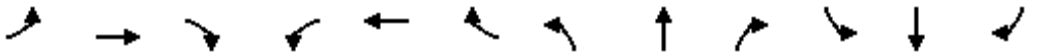
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1604	-	813	1072	-	-
HCM Lane V/C Ratio	0.026	-	0.001	0.014	-	-
HCM Control Delay (s)	7.3	-	9.4	8.4	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	57	513	100	855	24	33	8	6
Future Volume (vph)	57	513	100	855	24	33	8	6
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	23.0	49.0	29.0	55.0	42.0	42.0	42.0	42.0
Total Split (%)	19.2%	40.8%	24.2%	45.8%	35.0%	35.0%	35.0%	35.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 48.7
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	513	19	100	855	72	24	33	90	8	6	13
Future Volume (veh/h)	57	513	19	100	855	72	24	33	90	8	6	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	58	523	18	102	872	72	24	34	68	8	6	7
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	95	1633	56	135	1663	137	436	338	302	374	338	302
Arrive On Green	0.06	0.33	0.33	0.08	0.36	0.36	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1619	4879	167	1619	4627	381	1344	1710	1525	1240	1710	1525
Grp Volume(v), veh/h	58	350	191	102	617	327	24	34	68	8	6	7
Grp Sat Flow(s),veh/h/ln	1619	1638	1770	1619	1638	1731	1344	1710	1525	1240	1710	1525
Q Serve(g_s), s	1.4	3.3	3.3	2.5	6.1	6.1	0.6	0.7	1.5	0.2	0.1	0.2
Cycle Q Clear(g_c), s	1.4	3.3	3.3	2.5	6.1	6.1	0.8	0.7	1.5	1.8	0.1	0.2
Prop In Lane	1.00		0.09	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	95	1096	592	135	1177	622	436	338	302	374	338	302
V/C Ratio(X)	0.61	0.32	0.32	0.75	0.52	0.53	0.06	0.10	0.23	0.02	0.02	0.02
Avail Cap(c_a), veh/h	724	3439	1858	960	3917	2070	1366	1521	1357	1232	1521	1357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.9	10.2	10.2	18.4	10.4	10.4	13.6	13.5	13.9	14.6	13.3	13.3
Incr Delay (d2), s/veh	2.3	0.2	0.3	3.2	0.4	0.7	0.1	0.1	0.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.8	0.9	0.9	1.5	1.6	0.1	0.2	0.4	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.2	10.4	10.5	21.6	10.8	11.1	13.7	13.6	14.2	14.6	13.3	13.3
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		599			1046			126			21	
Approach Delay, s/veh		11.5			11.9			14.0			13.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		13.5	8.0	19.6		13.5	7.0	20.6				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		36.6	24.4	43.2		36.6	18.4	49.2				
Max Q Clear Time (g_c+I1), s		3.5	4.5	5.3		3.8	3.4	8.1				
Green Ext Time (p_c), s		0.6	0.1	3.3		0.1	0.0	6.6				

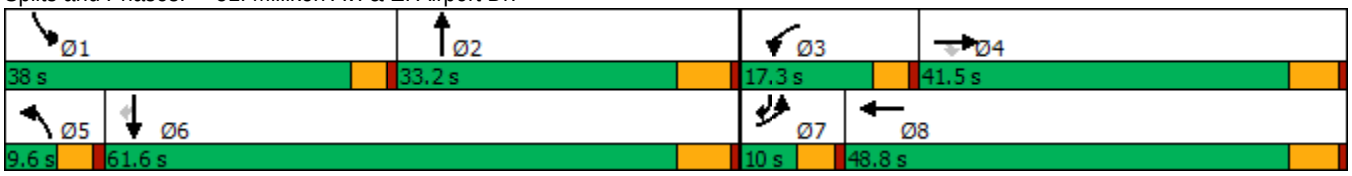
Intersection Summary												
HCM 6th Ctrl Delay			11.9									
HCM 6th LOS			B									

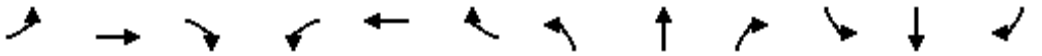
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	73	112	23	84	144	23	660	365	886	144
Future Volume (vph)	73	112	23	84	144	23	660	365	886	144
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	10.0	41.5	41.5	17.3	48.8	9.6	33.2	38.0	61.6	10.0
Total Split (%)	7.7%	31.9%	31.9%	13.3%	37.5%	7.4%	25.5%	29.2%	47.4%	7.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 103.8
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	112	23	84	144	223	23	660	77	365	886	144
Future Volume (veh/h)	73	112	23	84	144	223	23	660	77	365	886	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	85	130	14	98	167	158	27	767	74	424	1030	118
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	160	450	200	122	263	232	84	1072	103	462	2419	832
Arrive On Green	0.05	0.13	0.13	0.08	0.15	0.15	0.03	0.24	0.24	0.29	0.49	0.49
Sat Flow, veh/h	2956	3420	1525	1619	1718	1515	2956	4559	437	1619	4914	1524
Grp Volume(v), veh/h	85	130	14	98	166	159	27	550	291	424	1030	118
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1619	1710	1524	1478	1638	1721	1619	1638	1524
Q Serve(g_s), s	2.2	2.7	0.6	4.6	7.1	7.7	0.7	12.0	12.1	19.7	10.5	3.0
Cycle Q Clear(g_c), s	2.2	2.7	0.6	4.6	7.1	7.7	0.7	12.0	12.1	19.7	10.5	3.0
Prop In Lane	1.00		1.00	1.00		0.99	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	160	450	200	122	262	233	84	770	405	462	2419	832
V/C Ratio(X)	0.53	0.29	0.07	0.80	0.64	0.68	0.32	0.71	0.72	0.92	0.43	0.14
Avail Cap(c_a), veh/h	205	1569	700	264	945	842	190	1136	597	695	3498	1167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.9	30.5	29.6	35.4	30.9	31.2	37.1	27.4	27.4	26.9	12.7	8.7
Incr Delay (d2), s/veh	1.0	0.4	0.1	4.5	2.5	3.5	0.8	1.2	2.4	9.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.0	0.2	1.9	2.9	2.8	0.2	4.3	4.7	7.9	3.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	30.9	29.8	39.9	33.5	34.7	37.9	28.6	29.8	36.6	12.8	8.8
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	B	A
Approach Vol, veh/h		229			423			868			1572	
Approach Delay, s/veh		33.0			35.4			29.3			18.9	
Approach LOS		C			D			C			B	

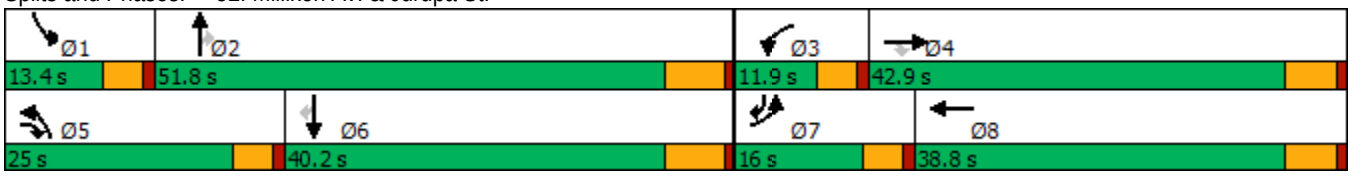
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.8	24.5	10.5	16.0	6.8	44.5	8.8	17.7
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	33.4	27.0	12.7	35.7	5.0	55.4	5.4	43.0
Max Q Clear Time (g_c+I1), s	21.7	14.1	6.6	4.7	2.7	12.5	4.2	9.7
Green Ext Time (p_c), s	0.5	4.0	0.0	0.7	0.0	8.3	0.0	1.8

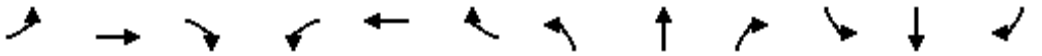
Intersection Summary	
HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	225	736	310	110	527	463	821	114	143	416	70
Future Volume (vph)	225	736	310	110	527	463	821	114	143	416	70
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	16.0	42.9	25.0	11.9	38.8	25.0	51.8	51.8	13.4	40.2	16.0
Total Split (%)	13.3%	35.8%	20.8%	9.9%	32.3%	20.8%	43.2%	43.2%	11.2%	33.5%	13.3%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 85.3
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	736	310	110	527	76	463	821	114	143	416	70
Future Volume (veh/h)	225	736	310	110	527	76	463	821	114	143	416	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	232	759	215	113	543	53	477	846	100	147	429	36
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	318	1263	690	197	985	95	577	1359	422	221	767	402
Arrive On Green	0.11	0.26	0.26	0.07	0.22	0.22	0.20	0.28	0.28	0.07	0.16	0.16
Sat Flow, veh/h	2956	4914	1525	2956	4557	440	2956	4914	1525	2956	4914	1525
Grp Volume(v), veh/h	232	759	215	113	389	207	477	846	100	147	429	36
Grp Sat Flow(s),veh/h/ln	1478	1638	1525	1478	1638	1721	1478	1638	1525	1478	1638	1525
Q Serve(g_s), s	5.0	8.9	5.9	2.4	6.9	7.0	10.1	9.8	3.3	3.2	5.3	1.2
Cycle Q Clear(g_c), s	5.0	8.9	5.9	2.4	6.9	7.0	10.1	9.8	3.3	3.2	5.3	1.2
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	318	1263	690	197	708	372	577	1359	422	221	767	402
V/C Ratio(X)	0.73	0.60	0.31	0.57	0.55	0.56	0.83	0.62	0.24	0.67	0.56	0.09
Avail Cap(c_a), veh/h	517	2795	1165	331	1657	871	925	3435	1066	399	2561	959
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	21.3	11.4	29.5	22.7	22.8	25.2	20.6	18.3	29.4	25.4	18.1
Incr Delay (d2), s/veh	1.2	0.5	0.3	1.0	0.7	1.3	1.6	0.5	0.3	1.3	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.0	1.6	0.8	2.4	2.6	3.2	3.2	1.1	1.0	1.8	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.4	21.8	11.7	30.5	23.4	24.1	26.8	21.1	18.5	30.7	26.1	18.2
LnGrp LOS	C	C	B	C	C	C	C	C	B	C	C	B
Approach Vol, veh/h		1206			709			1423			612	
Approach Delay, s/veh		21.4			24.7			22.8			26.7	
Approach LOS		C			C			C			C	

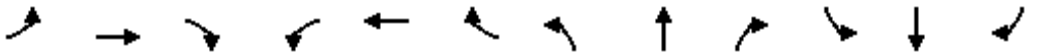
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	24.2	9.0	22.6	17.3	16.4	11.6	19.9
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	8.8	45.6	7.3	37.1	20.4	34.0	11.4	33.0
Max Q Clear Time (g_c+I1), s	5.2	11.8	4.4	10.9	12.1	7.3	7.0	9.0
Green Ext Time (p_c), s	0.1	6.2	0.0	5.9	0.6	2.7	0.2	3.5

Intersection Summary	
HCM 6th Ctrl Delay	23.3
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	222	2	21	17	238	327	1310	122	610	363
Future Volume (vph)	222	2	21	17	238	327	1310	122	610	363
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	21.0	33.0	12.0	24.0	24.0	27.0	59.0	16.0	48.0	48.0
Total Split (%)	17.5%	27.5%	10.0%	20.0%	20.0%	22.5%	49.2%	13.3%	40.0%	40.0%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 92.2
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	2	52	21	17	238	327	1310	15	122	610	363
Future Volume (veh/h)	222	2	52	21	17	238	327	1310	15	122	610	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	247	2	49	23	0	210	363	1456	16	136	678	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	325	13	315	41	0	393	447	2056	23	201	1609	
Arrive On Green	0.11	0.21	0.21	0.03	0.00	0.13	0.15	0.41	0.41	0.07	0.33	0.00
Sat Flow, veh/h	2956	60	1474	1619	0	3051	2956	5011	55	2956	4914	1525
Grp Volume(v), veh/h	247	0	51	23	0	210	363	952	520	136	678	0
Grp Sat Flow(s),veh/h/ln	1478	0	1535	1619	0	1525	1478	1638	1790	1478	1638	1525
Q Serve(g_s), s	6.3	0.0	2.1	1.1	0.0	5.0	9.2	18.7	18.7	3.5	8.3	0.0
Cycle Q Clear(g_c), s	6.3	0.0	2.1	1.1	0.0	5.0	9.2	18.7	18.7	3.5	8.3	0.0
Prop In Lane	1.00		0.96	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	325	0	328	41	0	393	447	1344	735	201	1609	
V/C Ratio(X)	0.76	0.00	0.16	0.56	0.00	0.53	0.81	0.71	0.71	0.68	0.42	
Avail Cap(c_a), veh/h	626	0	525	155	0	689	855	2234	1221	435	2652	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.5	0.0	24.8	37.3	0.0	31.6	31.8	19.0	19.0	35.2	20.3	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.2	4.5	0.0	1.1	1.4	0.7	1.3	1.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.7	0.4	0.0	1.7	3.1	6.1	6.8	1.2	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	0.0	25.0	41.8	0.0	32.7	33.2	19.7	20.2	36.7	20.5	0.0
LnGrp LOS	C	A	C	D	A	C	C	B	C	D	C	
Approach Vol, veh/h		298			233			1835			814	A
Approach Delay, s/veh		33.2			33.6			22.5			23.2	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	38.0	6.6	23.0	16.3	31.6	13.1	16.5
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	11.4	52.8	7.4	26.5	22.4	41.8	16.4	17.5
Max Q Clear Time (g_c+I1), s	5.5	20.7	3.1	4.1	11.2	10.3	8.3	7.0
Green Ext Time (p_c), s	0.1	11.1	0.0	0.2	0.5	4.4	0.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	24.5
HCM 6th LOS	C

Notes

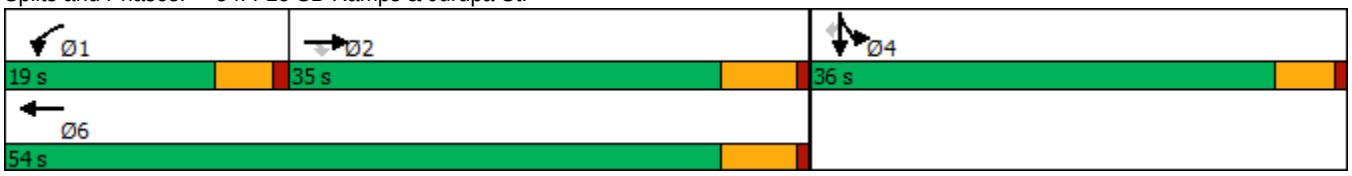
User approved volume balancing among the lanes for turning movement.

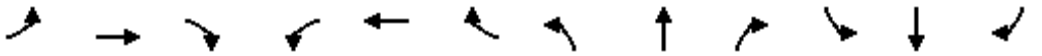
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	694	176	445	646	540	3	994
Future Volume (vph)	694	176	445	646	540	3	994
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	35.0	35.0	19.0	54.0	36.0	36.0	36.0
Total Split (%)	38.9%	38.9%	21.1%	60.0%	40.0%	40.0%	40.0%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 81.4
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	694	176	445	646	0	0	0	0	540	3	994
Future Volume (veh/h)	0	694	176	445	646	0	0	0	0	540	3	994
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1800	1800	1600	1800	0				1700	1800	1800
Adj Flow Rate, veh/h	0	763	141	489	710	0				396	0	1120
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1131	319	544	2256	0				642	0	1209
Arrive On Green	0.00	0.21	0.21	0.18	0.46	0.00				0.40	0.00	0.40
Sat Flow, veh/h	0	5400	1525	2956	5076	0				1619	0	3051
Grp Volume(v), veh/h	0	763	141	489	710	0				396	0	1120
Grp Sat Flow(s),veh/h/ln	0	1800	1525	1478	1638	0				1619	0	1525
Q Serve(g_s), s	0.0	9.9	6.1	12.3	7.0	0.0				14.9	0.0	26.6
Cycle Q Clear(g_c), s	0.0	9.9	6.1	12.3	7.0	0.0				14.9	0.0	26.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1131	319	544	2256	0				642	0	1209
V/C Ratio(X)	0.00	0.67	0.44	0.90	0.31	0.00				0.62	0.00	0.93
Avail Cap(c_a), veh/h	0	2058	581	544	3100	0				660	0	1243
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.7	26.2	30.4	13.0	0.0				18.4	0.0	21.9
Incr Delay (d2), s/veh	0.0	0.5	0.7	17.4	0.1	0.0				1.7	0.0	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.9	2.1	5.3	2.2	0.0				5.1	0.0	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	28.2	26.9	47.7	13.1	0.0				20.0	0.0	33.6
LnGrp LOS	A	C	C	D	B	A				C	A	C
Approach Vol, veh/h		904			1199						1516	
Approach Delay, s/veh		28.0			27.2						30.0	
Approach LOS		C			C						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.0	21.9		35.2		40.9
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0
Max Green Setting (Gmax), s	14.0	29.0		31.0		48.0
Max Q Clear Time (g_c+I1), s	14.3	11.9		28.6		9.0
Green Ext Time (p_c), s	0.0	4.0		1.5		4.0

Intersection Summary	
HCM 6th Ctrl Delay	28.6
HCM 6th LOS	C

Notes

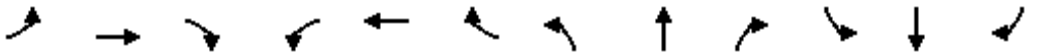
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	395	839	816	386	275	0	575
Future Volume (vph)	395	839	816	386	275	0	575
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	23.0	57.0	34.0	34.0	33.0	33.0	33.0
Total Split (%)	25.6%	63.3%	37.8%	37.8%	36.7%	36.7%	36.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 70.3
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	395	839	0	0	816	386	275	0	575	0	0	0
Future Volume (veh/h)	395	839	0	0	816	386	275	0	575	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1600	1800	1800			
Adj Flow Rate, veh/h	420	893	0	0	868	329	195	0	551			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	534	2821	0	0	1536	477	376	0	753			
Arrive On Green	0.18	0.57	0.00	0.00	0.31	0.31	0.25	0.00	0.25			
Sat Flow, veh/h	2956	5076	0	0	5076	1525	1524	0	3051			
Grp Volume(v), veh/h	420	893	0	0	868	329	195	0	551			
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1525	1524	0	1525			
Q Serve(g_s), s	7.7	5.4	0.0	0.0	8.4	10.8	6.3	0.0	9.4			
Cycle Q Clear(g_c), s	7.7	5.4	0.0	0.0	8.4	10.8	6.3	0.0	9.4			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	534	2821	0	0	1536	477	376	0	753			
V/C Ratio(X)	0.79	0.32	0.00	0.00	0.57	0.69	0.52	0.00	0.73			
Avail Cap(c_a), veh/h	956	4481	0	0	2495	775	747	0	1495			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	22.3	6.3	0.0	0.0	16.3	17.1	18.5	0.0	19.7			
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.0	0.2	1.3	1.1	0.0	1.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.4	1.2	0.0	0.0	2.6	3.2	2.0	0.0	2.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.3	6.4	0.0	0.0	16.6	18.5	19.6	0.0	21.1			
LnGrp LOS	C	A	A	A	B	B	B	A	C			
Approach Vol, veh/h		1313			1197			746				
Approach Delay, s/veh		11.8			17.1			20.7				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		37.8			14.9	22.9		19.1				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		51.9			18.4	28.9		27.9				
Max Q Clear Time (g_c+I1), s		7.4			9.7	12.8		11.4				
Green Ext Time (p_c), s		5.3			0.6	5.0		2.6				
Intersection Summary												
HCM 6th Ctrl Delay			15.8									
HCM 6th LOS			B									

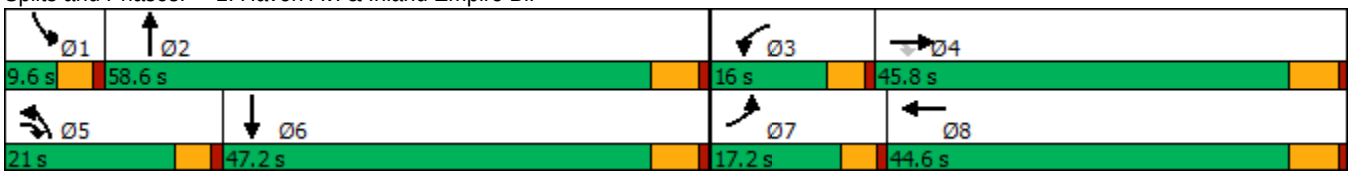
Notes

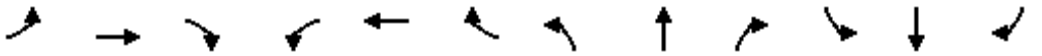
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	209	369	412	371	249	43	365	2046	471	43	1863	72
Future Volume (vph)	209	369	412	371	249	43	365	2046	471	43	1863	72
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	17.2	45.8	21.0	16.0	44.6		21.0	58.6		9.6	47.2	
Total Split (%)	13.2%	35.2%	16.2%	12.3%	34.3%		16.2%	45.1%		7.4%	36.3%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 110.8
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	369	412	371	249	43	365	2046	471	43	1863	72
Future Volume (veh/h)	209	369	412	371	249	43	365	2046	471	43	1863	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1500	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	218	384	255	386	259	0	380	2131	0	45	1941	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	272	625	501	429	676		430	2982		102	2294	
Arrive On Green	0.09	0.18	0.18	0.11	0.20	0.00	0.15	0.48	0.00	0.03	0.37	0.00
Sat Flow, veh/h	2956	3420	1525	4029	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	218	384	255	386	259	0	380	2131	0	45	1941	0
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1343	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	7.7	11.1	14.4	10.1	7.0	0.0	13.5	29.1	0.0	1.6	30.7	0.0
Cycle Q Clear(g_c), s	7.7	11.1	14.4	10.1	7.0	0.0	13.5	29.1	0.0	1.6	30.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	625	501	429	676		430	2982		102	2294	
V/C Ratio(X)	0.80	0.61	0.51	0.90	0.38		0.88	0.71		0.44	0.85	
Avail Cap(c_a), veh/h	348	1279	793	429	1241		453	3057		138	2397	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.6	40.2	29.0	47.2	37.3	0.0	44.8	21.9	0.0	50.6	30.9	0.0
Incr Delay (d2), s/veh	7.7	1.0	0.8	20.8	0.4	0.0	16.8	0.8	0.0	1.1	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	4.6	5.1	4.1	2.9	0.0	5.8	9.8	0.0	0.6	11.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.3	41.2	29.8	68.0	37.6	0.0	61.6	22.7	0.0	51.7	33.8	0.0
LnGrp LOS	E	D	C	E	D		E	C		D	C	
Approach Vol, veh/h		857			645	A		2511	A		1986	A
Approach Delay, s/veh		41.4			55.8			28.6			34.2	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	57.3	16.0	25.4	20.2	45.4	14.4	26.9
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	52.8	11.4	40.0	16.4	41.4	12.6	38.8
Max Q Clear Time (g_c+I1), s	3.6	31.1	12.1	16.4	15.5	32.7	9.7	9.0
Green Ext Time (p_c), s	0.0	15.6	0.0	3.1	0.1	6.9	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	35.2
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	242	352	2530	960	1887
Future Volume (vph)	242	352	2530	960	1887
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	33.0	33.0	67.0		67.0
Total Split (%)	33.0%	33.0%	67.0%		67.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	242	352	2530	960	0	1887
Future Volume (veh/h)	242	352	2530	960	0	1887
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	0	1800
Adj Flow Rate, veh/h	345	176	2582	0	0	1926
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	455	214	4648		0	4648
Arrive On Green	0.14	0.14	1.00	0.00	0.00	0.75
Sat Flow, veh/h	3238	1525	6444	1525	0	6696
Grp Volume(v), veh/h	345	176	2582	0	0	1926
Grp Sat Flow(s),veh/h/ln	1619	1525	1548	1525	0	1548
Q Serve(g_s), s	10.3	11.2	0.0	0.0	0.0	11.3
Cycle Q Clear(g_c), s	10.3	11.2	0.0	0.0	0.0	11.3
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	455	214	4648		0	4648
V/C Ratio(X)	0.76	0.82	0.56		0.00	0.41
Avail Cap(c_a), veh/h	903	426	4648		0	4648
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.56	0.00	0.00	0.46
Uniform Delay (d), s/veh	41.4	41.8	0.0	0.0	0.0	4.5
Incr Delay (d2), s/veh	1.0	3.0	0.3	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	4.2	0.1	0.0	0.0	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.3	44.8	0.3	0.0	0.0	4.6
LnGrp LOS	D	D	A		A	A
Approach Vol, veh/h	521		2582	A		1926
Approach Delay, s/veh	43.2		0.3			4.6
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		80.9		19.1		80.9
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		2.0		13.2		13.3
Green Ext Time (p_c), s		24.9		0.8		12.9

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

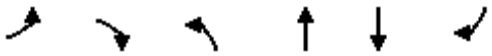
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	584	268	2906	1741	388
Future Volume (vph)	584	268	2906	1741	388
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	33.0	33.0	67.0	67.0	
Total Split (%)	33.0%	33.0%	67.0%	67.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	584	268	0	2906	1741	388
Future Volume (veh/h)	584	268	0	2906	1741	388
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	602	197	0	2996	1795	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	706	333	0	4166	4166	
Arrive On Green	0.22	0.22	0.00	0.67	1.00	0.00
Sat Flow, veh/h	3238	1525	0	6696	6444	1525
Grp Volume(v), veh/h	602	197	0	2996	1795	0
Grp Sat Flow(s),veh/h/ln	1619	1525	0	1548	1548	1525
Q Serve(g_s), s	17.9	11.6	0.0	30.7	0.0	0.0
Cycle Q Clear(g_c), s	17.9	11.6	0.0	30.7	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	706	333	0	4166	4166	
V/C Ratio(X)	0.85	0.59	0.00	0.72	0.43	
Avail Cap(c_a), veh/h	903	426	0	4166	4166	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.09	0.86	0.00
Uniform Delay (d), s/veh	37.5	35.1	0.0	10.4	0.0	0.0
Incr Delay (d2), s/veh	6.4	1.7	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	4.3	0.0	8.1	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.9	36.8	0.0	10.5	0.3	0.0
LnGrp LOS	D	D	A	B	A	
Approach Vol, veh/h	799			2996	1795	A
Approach Delay, s/veh	42.2			10.5	0.3	
Approach LOS	D			B	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		73.1		26.9		73.1
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		32.7		19.9		2.0
Green Ext Time (p_c), s		21.4		2.0		11.6

Intersection Summary		
HCM 6th Ctrl Delay		11.7
HCM 6th LOS		B

Notes

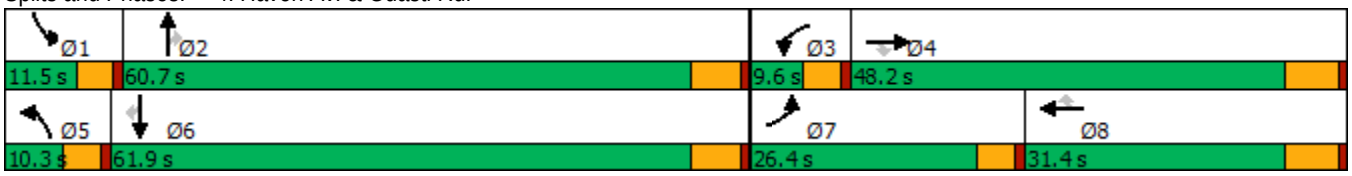
User approved volume balancing among the lanes for turning movement.

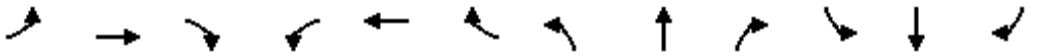
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	423	50	230	88	21	246	70	3023	116	179	1708	121
Future Volume (vph)	423	50	230	88	21	246	70	3023	116	179	1708	121
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	26.4	48.2	48.2	9.6	31.4	31.4	10.3	60.7	60.7	11.5	61.9	61.9
Total Split (%)	20.3%	37.1%	37.1%	7.4%	24.2%	24.2%	7.9%	46.7%	46.7%	8.8%	47.6%	47.6%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 116.8
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	423	50	230	88	21	246	70	3023	116	179	1708	121
Future Volume (veh/h)	423	50	230	88	21	246	70	3023	116	179	1708	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	436	52	109	91	22	174	72	3116	84	185	1761	101
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	489	379	321	133	162	241	118	3051	752	183	3186	785
Arrive On Green	0.17	0.21	0.21	0.04	0.09	0.09	0.04	0.49	0.49	0.06	0.51	0.51
Sat Flow, veh/h	2956	1800	1525	2956	1800	2685	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	436	52	109	91	22	174	72	3116	84	185	1761	101
Grp Sat Flow(s),veh/h/ln	1478	1800	1525	1478	1800	1342	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	16.1	2.6	6.8	3.4	1.3	7.0	2.7	54.9	3.3	6.9	21.5	3.8
Cycle Q Clear(g_c), s	16.1	2.6	6.8	3.4	1.3	7.0	2.7	54.9	3.3	6.9	21.5	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	489	379	321	133	162	241	118	3051	752	183	3186	785
V/C Ratio(X)	0.89	0.14	0.34	0.69	0.14	0.72	0.61	1.02	0.11	1.01	0.55	0.13
Avail Cap(c_a), veh/h	578	678	575	133	407	607	151	3051	752	183	3186	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	35.8	37.4	52.4	46.7	49.4	52.6	28.3	15.2	52.3	18.3	14.1
Incr Delay (d2), s/veh	13.1	0.2	0.6	11.6	0.4	4.1	1.9	22.0	0.1	69.3	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	1.1	2.5	1.4	0.6	2.4	1.0	22.9	1.1	4.2	7.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.6	35.9	38.0	64.0	47.1	53.4	54.5	50.2	15.2	121.6	18.6	14.1
LnGrp LOS	E	D	D	E	D	D	D	F	B	F	B	B
Approach Vol, veh/h		597			287			3272			2047	
Approach Delay, s/veh		52.9			56.3			49.4			27.6	
Approach LOS		D			E			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	60.7	9.6	29.6	9.1	63.1	23.0	16.2
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	6.9	54.9	5.0	42.0	5.7	56.1	21.8	25.2
Max Q Clear Time (g_c+I1), s	8.9	56.9	5.4	8.8	4.7	23.5	18.1	9.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.0	16.6	0.3	0.6

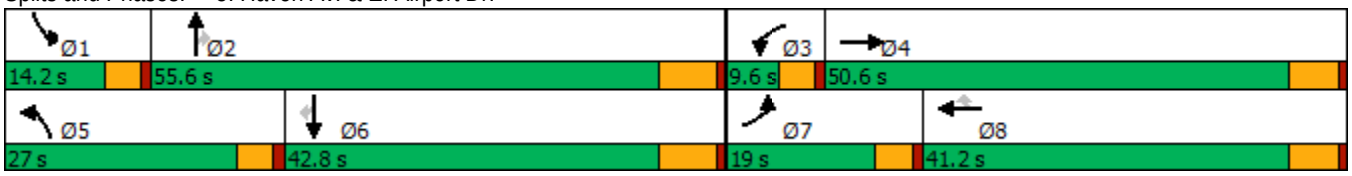
Intersection Summary	
HCM 6th Ctrl Delay	42.9
HCM 6th LOS	D

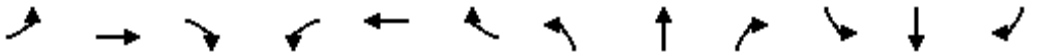
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	318	503	28	639	522	538	2356	19	201	1558	189
Future Volume (vph)	318	503	28	639	522	538	2356	19	201	1558	189
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	19.0	50.6	9.6	41.2	41.2	27.0	55.6	55.6	14.2	42.8	42.8
Total Split (%)	14.6%	38.9%	7.4%	31.7%	31.7%	20.8%	42.8%	42.8%	10.9%	32.9%	32.9%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 129.6
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	318	503	661	28	639	522	538	2356	19	201	1558	189
Future Volume (veh/h)	318	503	661	28	639	522	538	2356	19	201	1558	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	324	513	529	29	652	453	549	2404	17	205	1590	152
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	327	612	546	74	931	415	509	2339	576	218	1729	426
Arrive On Green	0.11	0.36	0.36	0.02	0.27	0.27	0.17	0.38	0.38	0.07	0.28	0.28
Sat Flow, veh/h	2956	1710	1524	2956	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	324	513	529	29	652	453	549	2404	17	205	1590	152
Grp Sat Flow(s),veh/h/ln	1478	1710	1524	1478	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	14.2	35.8	44.4	1.3	22.3	35.4	22.4	49.1	0.9	9.0	32.4	10.4
Cycle Q Clear(g_c), s	14.2	35.8	44.4	1.3	22.3	35.4	22.4	49.1	0.9	9.0	32.4	10.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	327	612	546	74	931	415	509	2339	576	218	1729	426
V/C Ratio(X)	0.99	0.84	0.97	0.39	0.70	1.09	1.08	1.03	0.03	0.94	0.92	0.36
Avail Cap(c_a), veh/h	327	612	546	114	931	415	509	2339	576	218	1729	426
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	38.3	41.0	62.4	42.5	47.3	53.8	40.5	25.5	59.9	45.4	37.5
Incr Delay (d2), s/veh	46.7	10.0	30.7	1.3	2.3	70.8	62.5	26.2	0.0	43.6	8.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	16.1	20.5	0.5	9.4	21.1	12.4	21.6	0.3	4.6	12.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.4	48.2	71.7	63.7	44.9	118.1	116.3	66.6	25.5	103.5	53.9	38.0
LnGrp LOS	F	D	E	E	D	F	F	F	C	F	D	D
Approach Vol, veh/h		1366			1134			2970			1947	
Approach Delay, s/veh		70.6			74.6			75.6			57.9	
Approach LOS		E			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	55.6	7.8	52.4	27.0	42.8	19.0	41.2
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	9.6	49.1	5.0	44.8	22.4	36.3	14.4	35.4
Max Q Clear Time (g_c+I1), s	11.0	51.1	3.3	46.4	24.4	34.4	16.2	37.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	69.9
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	10	2171	7	0	1694
Future Vol, veh/h	0	10	2171	7	0	1694
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	10	2238	7	0	1746

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1123	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	174	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	174	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

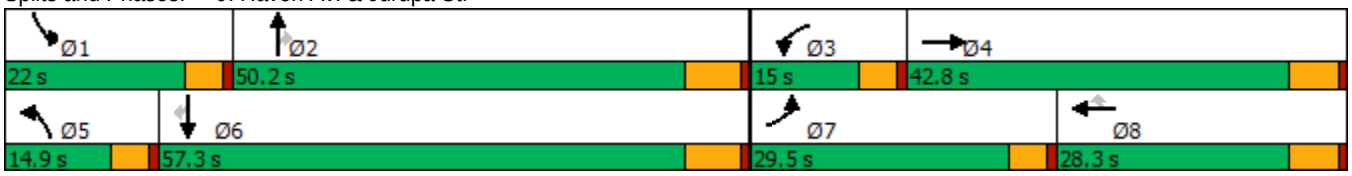
Approach	WB	NB	SB
HCM Control Delay, s	27	0	0
HCM LOS	D		

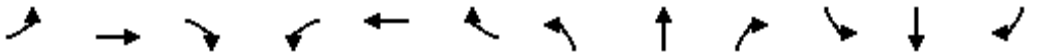
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	174	-
HCM Lane V/C Ratio	-	-	0.059	-
HCM Control Delay (s)	-	-	27	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	501	362	270	293	228	73	2171	340	224	1673	363
Future Volume (vph)	501	362	270	293	228	73	2171	340	224	1673	363
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	29.5	42.8	15.0	28.3	28.3	14.9	50.2	50.2	22.0	57.3	57.3
Total Split (%)	22.7%	32.9%	11.5%	21.8%	21.8%	11.5%	38.6%	38.6%	16.9%	44.1%	44.1%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 122.9
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	501	362	72	270	293	228	73	2171	340	224	1673	363
Future Volume (veh/h)	501	362	72	270	293	228	73	2171	340	224	1673	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	511	369	60	276	299	175	74	2215	253	229	1707	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	556	1035	164	251	474	211	92	2205	542	230	2733	
Arrive On Green	0.19	0.24	0.24	0.08	0.14	0.14	0.06	0.36	0.36	0.14	0.44	0.00
Sat Flow, veh/h	2956	4275	677	2956	3420	1525	1619	6192	1522	1619	6192	1525
Grp Volume(v), veh/h	511	280	149	276	299	175	74	2215	253	229	1707	0
Grp Sat Flow(s),veh/h/ln	1478	1638	1676	1478	1710	1525	1619	1548	1522	1619	1548	1525
Q Serve(g_s), s	20.8	8.7	9.0	10.4	10.1	13.7	5.5	43.7	15.8	17.3	26.1	0.0
Cycle Q Clear(g_c), s	20.8	8.7	9.0	10.4	10.1	13.7	5.5	43.7	15.8	17.3	26.1	0.0
Prop In Lane	1.00		0.40	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	556	793	406	251	474	211	92	2205	542	230	2733	
V/C Ratio(X)	0.92	0.35	0.37	1.10	0.63	0.83	0.81	1.00	0.47	1.00	0.62	
Avail Cap(c_a), veh/h	600	988	505	251	627	280	136	2205	542	230	2733	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.9	38.5	38.7	56.1	49.9	51.4	57.2	39.5	30.5	52.6	26.4	0.0
Incr Delay (d2), s/veh	17.8	0.3	0.6	86.7	1.4	14.3	11.7	20.2	0.6	58.6	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	3.4	3.7	6.8	4.3	5.9	2.5	18.5	5.7	10.5	9.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.7	38.8	39.2	142.8	51.3	65.7	68.9	59.7	31.1	111.2	26.9	0.0
LnGrp LOS	E	D	D	F	D	E	E	F	C	F	C	
Approach Vol, veh/h		940			750			2542			1936	A
Approach Delay, s/veh		54.0			88.3			57.1			36.9	
Approach LOS		D			F			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	50.2	15.0	35.5	11.6	60.6	27.7	22.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	17.4	43.7	10.4	37.0	10.3	50.8	24.9	22.5
Max Q Clear Time (g_c+I1), s	19.3	45.7	12.4	11.0	7.5	28.1	22.8	15.7
Green Ext Time (p_c), s	0.0	0.0	0.0	2.5	0.0	12.0	0.3	1.3

Intersection Summary	
HCM 6th Ctrl Delay	54.1
HCM 6th LOS	D

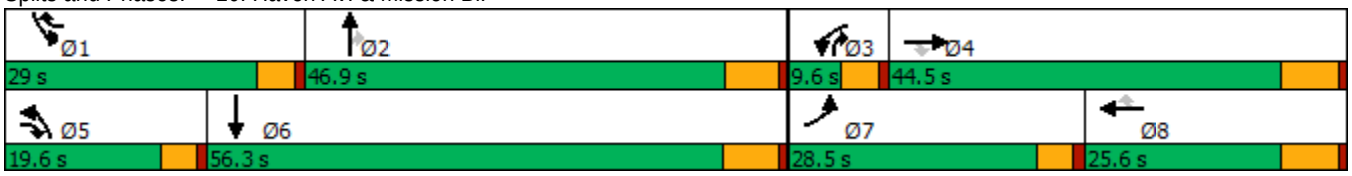
Notes

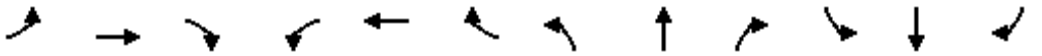
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	574	723	120	40	495	467	111	1589	63	334	1392
Future Volume (vph)	574	723	120	40	495	467	111	1589	63	334	1392
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	28.5	44.5	19.6	9.6	25.6	29.0	19.6	46.9	9.6	29.0	56.3
Total Split (%)	21.9%	34.2%	15.1%	7.4%	19.7%	22.3%	15.1%	36.1%	7.4%	22.3%	43.3%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 128.6
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	574	723	120	40	495	467	111	1589	63	334	1392	145
Future Volume (veh/h)	574	723	120	40	495	467	111	1589	63	334	1392	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	598	753	80	42	516	372	116	1655	46	348	1450	140
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	542	1474	587	89	720	509	138	1535	522	303	1887	182
Arrive On Green	0.18	0.30	0.30	0.03	0.15	0.15	0.08	0.31	0.31	0.19	0.41	0.41
Sat Flow, veh/h	2956	4914	1524	2956	4914	1525	1619	4914	1524	1619	4551	439
Grp Volume(v), veh/h	598	753	80	42	516	372	116	1655	46	348	1044	546
Grp Sat Flow(s),veh/h/ln	1478	1638	1524	1478	1638	1525	1619	1638	1524	1619	1638	1714
Q Serve(g_s), s	23.9	16.5	4.4	1.8	13.0	19.1	9.2	40.7	2.7	24.4	35.7	35.7
Cycle Q Clear(g_c), s	23.9	16.5	4.4	1.8	13.0	19.1	9.2	40.7	2.7	24.4	35.7	35.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	542	1474	587	89	720	509	138	1535	522	303	1358	711
V/C Ratio(X)	1.10	0.51	0.14	0.47	0.72	0.73	0.84	1.08	0.09	1.15	0.77	0.77
Avail Cap(c_a), veh/h	542	1474	587	113	720	509	186	1535	522	303	1358	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	37.7	26.0	62.2	53.0	38.2	58.8	44.8	29.1	52.9	32.8	32.8
Incr Delay (d2), s/veh	69.9	0.3	0.1	1.5	3.4	5.3	17.3	47.2	0.1	97.9	2.7	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	6.4	1.6	0.7	5.4	10.6	4.3	22.4	0.9	17.7	13.7	14.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	123.1	38.0	26.1	63.6	56.4	43.5	76.0	92.0	29.1	150.8	35.5	37.9
LnGrp LOS	F	D	C	E	E	D	E	F	C	F	D	D
Approach Vol, veh/h		1431			930			1817			1938	
Approach Delay, s/veh		72.9			51.6			89.4			56.9	
Approach LOS		E			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.0	47.2	8.5	45.6	15.7	60.5	28.5	25.6
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	24.4	* 41	5.0	38.0	15.0	49.8	23.9	19.1
Max Q Clear Time (g_c+I1), s	26.4	42.7	3.8	18.5	11.2	37.7	25.9	21.1
Green Ext Time (p_c), s	0.0	0.0	0.0	4.6	0.0	7.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	69.5
HCM 6th LOS	E

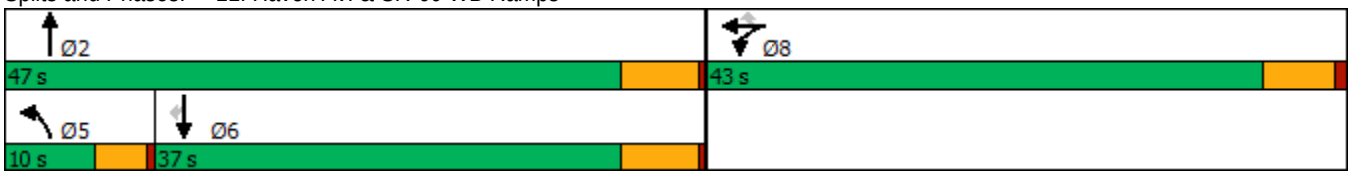
Notes

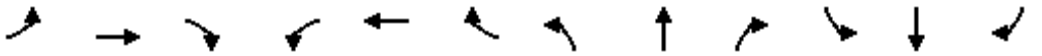
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	304	9	561	157	887	1327	505
Future Volume (vph)	304	9	561	157	887	1327	505
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.0	34.7	27.8	27.8
Total Split (s)	43.0	43.0	43.0	10.0	47.0	37.0	37.0
Total Split (%)	47.8%	47.8%	47.8%	11.1%	52.2%	41.1%	41.1%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 82.9
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	304	9	561	157	887	0	0	1327	505
Future Volume (veh/h)	0	0	0	304	9	561	157	887	0	0	1327	505
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	1600	1800	0	0	1800	1800
Adj Flow Rate, veh/h				323	0	295	164	924	0	0	1382	359
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				818	0	385	246	2658	0	0	1898	582
Arrive On Green				0.25	0.00	0.25	0.08	0.54	0.00	0.00	0.39	0.39
Sat Flow, veh/h				3238	0	1525	2956	5076	0	0	5076	1506
Grp Volume(v), veh/h				323	0	295	164	924	0	0	1382	359
Grp Sat Flow(s),veh/h/ln				1619	0	1525	1478	1638	0	0	1638	1506
Q Serve(g_s), s				4.6	0.0	10.1	3.0	6.0	0.0	0.0	13.5	10.8
Cycle Q Clear(g_c), s				4.6	0.0	10.1	3.0	6.0	0.0	0.0	13.5	10.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				818	0	385	246	2658	0	0	1898	582
V/C Ratio(X)				0.40	0.00	0.77	0.67	0.35	0.00	0.00	0.73	0.62
Avail Cap(c_a), veh/h				2146	0	1011	316	3616	0	0	2732	837
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.4	0.0	19.4	25.0	7.3	0.0	0.0	14.7	13.9
Incr Delay (d2), s/veh				0.3	0.0	3.2	3.5	0.0	0.0	0.0	0.2	0.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	0.0	3.3	1.0	1.3	0.0	0.0	3.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				17.7	0.0	22.6	28.5	7.3	0.0	0.0	14.9	14.3
LnGrp LOS				B	A	C	C	A	A	A	B	B
Approach Vol, veh/h					618			1088			1741	
Approach Delay, s/veh					20.1			10.5			14.8	
Approach LOS					C			B			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		36.2			8.7	27.5		20.0				
Change Period (Y+Rc), s		* 5.8			4.0	5.8		5.8				
Max Green Setting (Gmax), s		* 41			6.0	31.2		37.2				
Max Q Clear Time (g_c+I1), s		8.0			5.0	15.5		12.1				
Green Ext Time (p_c), s		4.0			0.0	6.2		2.1				

Intersection Summary		
HCM 6th Ctrl Delay	14.4	
HCM 6th LOS	B	

Notes

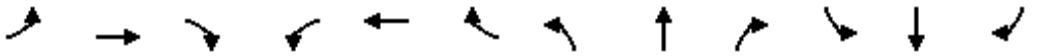
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	375	8	170	669	672	959
Future Volume (vph)	375	8	170	669	672	959
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.0	29.7
Total Split (s)	27.0	27.0	27.0	32.0	31.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	35.6%	34.4%	70.0%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 73.3
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	375	8	170	0	0	0	0	669	215	672	959	0
Future Volume (veh/h)	375	8	170	0	0	0	0	669	215	672	959	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800				0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h	409	0	73				0	719	170	723	1031	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	574	0	270				0	1010	236	885	3060	0
Arrive On Green	0.18	0.00	0.18				0.00	0.25	0.25	0.30	0.62	0.00
Sat Flow, veh/h	3238	0	1525				0	4141	930	2956	5076	0
Grp Volume(v), veh/h	409	0	73				0	590	299	723	1031	0
Grp Sat Flow(s),veh/h/ln	1619	0	1525				0	1638	1633	1478	1638	0
Q Serve(g_s), s	6.8	0.0	2.4				0.0	9.4	9.6	13.0	5.8	0.0
Cycle Q Clear(g_c), s	6.8	0.0	2.4				0.0	9.4	9.6	13.0	5.8	0.0
Prop In Lane	1.00		1.00				0.00		0.57	1.00		0.00
Lane Grp Cap(c), veh/h	574	0	270				0	832	414	885	3060	0
V/C Ratio(X)	0.71	0.00	0.27				0.00	0.71	0.72	0.82	0.34	0.00
Avail Cap(c_a), veh/h	1194	0	562				0	1498	747	1388	4897	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.3	0.0	20.4				0.0	19.5	19.6	18.7	5.2	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.5				0.0	0.4	0.9	2.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	0.8				0.0	3.0	3.1	3.8	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.9	0.0	21.0				0.0	20.0	20.5	20.9	5.2	0.0
LnGrp LOS	C	A	C				A	B	C	C	A	A
Approach Vol, veh/h		482						889			1754	
Approach Delay, s/veh		23.5						20.1			11.7	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	21.2	20.3		16.0		41.5						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	27.0	26.3		21.2		57.3						
Max Q Clear Time (g_c+I1), s	15.0	11.6		8.8		7.8						
Green Ext Time (p_c), s	2.2	3.0		1.4		4.7						

Intersection Summary			
HCM 6th Ctrl Delay			15.9
HCM 6th LOS			B

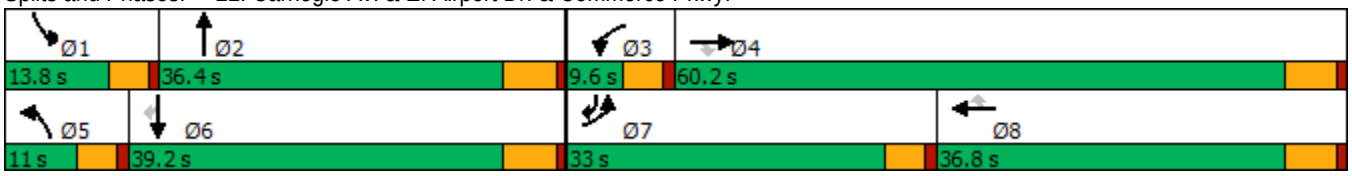
Notes

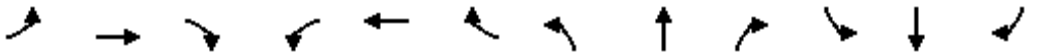
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	273	319	2	1	425	86	41	19	54	32	505
Future Volume (vph)	273	319	2	1	425	86	41	19	54	32	505
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	33.0	60.2	60.2	9.6	36.8	36.8	11.0	36.4	13.8	39.2	33.0
Total Split (%)	27.5%	50.2%	50.2%	8.0%	30.7%	30.7%	9.2%	30.3%	11.5%	32.7%	27.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 69.5
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	319	2	1	425	86	41	19	20	54	32	505
Future Volume (veh/h)	273	319	2	1	425	86	41	19	20	54	32	505
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1700
Adj Flow Rate, veh/h	310	362	2	1	483	65	47	22	23	61	36	362
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	360	1484	662	3	729	325	73	284	253	86	595	1005
Arrive On Green	0.22	0.43	0.43	0.00	0.21	0.21	0.05	0.17	0.17	0.05	0.17	0.17
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	1710	1525	1619	3420	2536
Grp Volume(v), veh/h	310	362	2	1	483	65	47	22	23	61	36	362
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1525	1619	1710	1268
Q Serve(g_s), s	11.1	4.0	0.0	0.0	7.8	2.1	1.7	0.7	0.8	2.2	0.5	6.1
Cycle Q Clear(g_c), s	11.1	4.0	0.0	0.0	7.8	2.1	1.7	0.7	0.8	2.2	0.5	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	360	1484	662	3	729	325	73	284	253	86	595	1005
V/C Ratio(X)	0.86	0.24	0.00	0.37	0.66	0.20	0.64	0.08	0.09	0.71	0.06	0.36
Avail Cap(c_a), veh/h	764	3091	1378	134	1761	786	172	869	775	247	1897	1970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.5	10.8	9.7	30.0	21.7	19.5	28.3	21.2	21.3	28.0	20.8	12.8
Incr Delay (d2), s/veh	2.4	0.1	0.0	28.8	1.0	0.3	3.5	0.1	0.2	4.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.2	0.0	0.0	2.8	0.7	0.7	0.2	0.3	0.9	0.2	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	10.9	9.7	58.9	22.7	19.8	31.7	21.3	21.4	32.0	20.8	13.0
LnGrp LOS	C	B	A	E	C	B	C	C	C	C	C	B
Approach Vol, veh/h		674			549			92			459	
Approach Delay, s/veh		17.3			22.5			26.7			16.2	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	15.8	4.7	31.9	7.3	16.3	18.0	18.6
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	9.2	30.6	5.0	54.4	6.4	33.4	28.4	31.0
Max Q Clear Time (g_c+I1), s	4.2	2.8	2.0	6.0	3.7	8.1	13.1	9.8
Green Ext Time (p_c), s	0.0	0.2	0.0	2.3	0.0	1.6	0.4	3.0

Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	7.1
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	20	60	6	2	33
Future Vol, veh/h	3	20	60	6	2	33
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	25	76	8	3	42
Number of Lanes	2	1	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	3	0
HCM Control Delay	6.3	7.6	6.7
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	9%	0%	100%	0%	0%
Vol Thru, %	100%	77%	0%	0%	0%	0%	100%	100%
Vol Right, %	0%	23%	0%	91%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	26	2	11	10	2	17	17
LT Vol	0	0	2	1	0	2	0	0
Through Vol	40	20	0	0	0	0	17	17
RT Vol	0	6	0	10	10	0	0	0
Lane Flow Rate	51	33	3	14	13	3	21	21
Geometry Grp	8	8	7	7	7	8	8	8
Degree of Util (X)	0.065	0.041	0.004	0.016	0.008	0.004	0.027	0.017
Departure Headway (Hd)	4.612	4.451	5.207	4.116	2.307	5.164	4.664	2.963
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	778	806	682	860	1514	690	763	1194
Service Time	2.331	2.169	2.978	1.887	0.078	2.919	2.418	0.717
HCM Lane V/C Ratio	0.066	0.041	0.004	0.016	0.009	0.004	0.028	0.018
HCM Control Delay	7.7	7.4	8	7	5.1	7.9	7.5	5.8
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0	0	0	0	0.1	0.1

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	6	71	45	21	15
Future Vol, veh/h	20	6	71	45	21	15
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	21	6	76	48	22	16
Number of Lanes	1	1	1	2	2	0

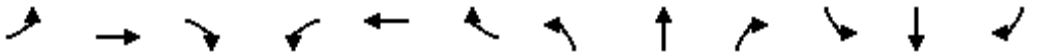
Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	8	7.8	7.4
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	32%
Vol Right, %	0%	0%	0%	0%	100%	0%	68%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	71	23	23	20	6	14	22
LT Vol	71	0	0	20	0	0	0
Through Vol	0	23	23	0	0	14	7
RT Vol	0	0	0	0	6	0	15
Lane Flow Rate	76	24	24	21	6	15	23
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.107	0.031	0.019	0.032	0.007	0.02	0.028
Departure Headway (Hd)	5.106	4.606	2.905	5.407	4.207	4.815	4.237
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	699	773	1219	666	856	748	830
Service Time	2.858	2.357	0.655	3.107	1.907	2.515	2.037
HCM Lane V/C Ratio	0.109	0.031	0.02	0.032	0.007	0.02	0.028
HCM Control Delay	8.5	7.5	5.7	8.3	6.9	7.6	7.2
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.4	0.1	0.1	0.1	0	0.1	0.1

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	89	904	4	661	18	6	2	14	38
Future Volume (vph)	89	904	4	661	18	6	2	14	38
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	79.0	79.0	79.0	79.0	79.0	41.0	41.0	41.0	41.0
Total Split (%)	65.8%	65.8%	65.8%	65.8%	65.8%	34.2%	34.2%	34.2%	34.2%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 30.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	904	19	4	661	18	6	0	2	14	0	38
Future Volume (veh/h)	89	904	19	4	661	18	6	0	2	14	0	38
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	93	942	20	4	689	18	6	0	0	15	0	15
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	563	2722	58	501	1880	828	311	78	66	312	78	66
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.04	0.00	0.00	0.04	0.00	0.04
Sat Flow, veh/h	711	4952	105	560	3420	1507	1342	1800	1525	1360	1800	1525
Grp Volume(v), veh/h	93	623	339	4	689	18	6	0	0	15	0	15
Grp Sat Flow(s),veh/h/ln	711	1638	1781	560	1710	1507	1342	1800	1525	1360	1800	1525
Q Serve(g_s), s	2.4	3.0	3.0	0.1	3.2	0.2	0.1	0.0	0.0	0.3	0.0	0.3
Cycle Q Clear(g_c), s	5.7	3.0	3.0	3.1	3.2	0.2	0.1	0.0	0.0	0.3	0.0	0.3
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	563	1801	979	501	1880	828	311	78	66	312	78	66
V/C Ratio(X)	0.17	0.35	0.35	0.01	0.37	0.02	0.02	0.00	0.00	0.05	0.00	0.23
Avail Cap(c_a), veh/h	1997	8409	4572	1631	8779	3867	1965	2298	1947	1931	2222	1883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.2	3.6	3.6	4.4	3.6	2.9	13.1	0.0	0.0	13.2	0.0	13.2
Incr Delay (d2), s/veh	0.1	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.4	3.7	3.8	4.4	3.7	2.9	13.1	0.0	0.0	13.3	0.0	14.9
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	B
Approach Vol, veh/h		1055			711			6			30	
Approach Delay, s/veh		3.9			3.7			13.1			14.1	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		7.0		21.5		7.0		21.5				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 36		73.2		35.2		73.2				
Max Q Clear Time (g_c+I1), s		2.1		7.7		2.3		5.2				
Green Ext Time (p_c), s		0.0		8.0		0.1		5.0				

Intersection Summary		
HCM 6th Ctrl Delay		4.0
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	6	0	22	3	145	3	384	12	49	300	17
Future Vol, veh/h	2	6	0	22	3	145	3	384	12	49	300	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	7	0	24	3	158	3	417	13	53	326	18
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	9.5	10.9	12.7	11.4
HCM LOS	A	B	B	B

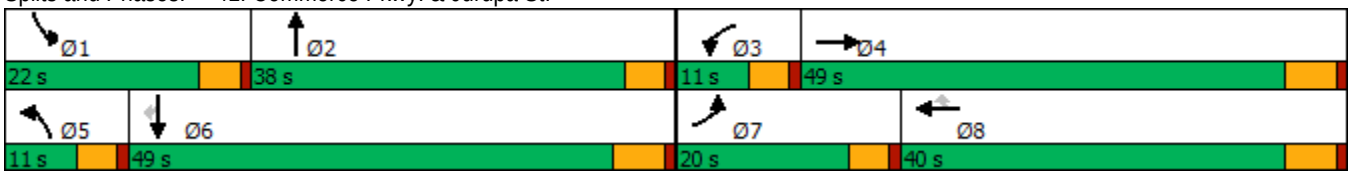
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	91%	0%	100%	100%	0%	100%	1%	0%	100%	85%
Vol Right, %	0%	0%	9%	0%	0%	0%	0%	0%	99%	0%	0%	15%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	256	140	2	3	3	22	2	146	49	200	117
LT Vol	3	0	0	2	0	0	22	0	0	49	0	0
Through Vol	0	256	128	0	3	3	0	2	1	0	200	100
RT Vol	0	0	12	0	0	0	0	0	145	0	0	17
Lane Flow Rate	3	278	152	2	3	3	24	2	159	53	217	127
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.006	0.464	0.251	0.005	0.007	0.005	0.048	0.004	0.267	0.097	0.367	0.211
Departure Headway (Hd)	6.508	6.008	5.948	7.682	7.182	5.482	7.259	6.759	6.064	6.577	6.077	5.975
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	550	601	604	465	497	650	493	529	592	545	591	600
Service Time	4.244	3.744	3.684	5.438	4.938	3.238	5.004	4.504	3.809	4.314	3.814	3.712
HCM Lane V/C Ratio	0.005	0.463	0.252	0.004	0.006	0.005	0.049	0.004	0.269	0.097	0.367	0.212
HCM Control Delay	9.3	13.9	10.7	10.5	10	8.3	10.4	9.5	11	10	12.3	10.3
HCM Lane LOS	A	B	B	B	A	A	B	A	B	A	B	B
HCM 95th-tile Q	0	2.4	1	0	0	0	0.2	0	1.1	0.3	1.7	0.8

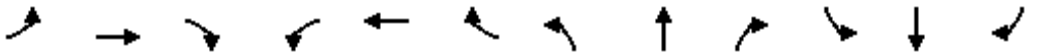
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	97	809	12	628	252	15	45	263	18	39
Future Volume (vph)	97	809	12	628	252	15	45	263	18	39
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	20.0	49.0	11.0	40.0	40.0	11.0	38.0	22.0	49.0	49.0
Total Split (%)	16.7%	40.8%	9.2%	33.3%	33.3%	9.2%	31.7%	18.3%	40.8%	40.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 74.2
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	809	14	12	628	252	15	45	60	263	18	39
Future Volume (veh/h)	97	809	14	12	628	252	15	45	60	263	18	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	101	843	13	12	654	0	16	47	43	274	19	26
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	126	1690	26	25	944		32	137	125	379	479	406
Arrive On Green	0.08	0.34	0.34	0.02	0.28	0.00	0.02	0.16	0.16	0.13	0.27	0.27
Sat Flow, veh/h	1619	4985	77	1619	3420	1525	1619	866	792	2956	1800	1525
Grp Volume(v), veh/h	101	554	302	12	654	0	16	0	90	274	19	26
Grp Sat Flow(s),veh/h/ln	1619	1638	1786	1619	1710	1525	1619	0	1657	1478	1800	1525
Q Serve(g_s), s	3.5	7.8	7.8	0.4	9.9	0.0	0.6	0.0	2.8	5.1	0.5	0.7
Cycle Q Clear(g_c), s	3.5	7.8	7.8	0.4	9.9	0.0	0.6	0.0	2.8	5.1	0.5	0.7
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	126	1110	605	25	944		32	0	261	379	479	406
V/C Ratio(X)	0.80	0.50	0.50	0.49	0.69		0.50	0.00	0.34	0.72	0.04	0.06
Avail Cap(c_a), veh/h	432	2449	1335	179	2024		179	0	958	890	1346	1140
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	15.2	15.2	28.2	18.7	0.0	28.0	0.0	21.7	24.2	15.7	15.8
Incr Delay (d2), s/veh	4.4	0.3	0.6	5.5	0.9	0.0	4.5	0.0	0.8	1.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.4	2.7	0.2	3.4	0.0	0.3	0.0	1.1	1.6	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.6	15.5	15.8	33.7	19.6	0.0	32.6	0.0	22.5	25.2	15.8	15.9
LnGrp LOS	C	B	B	C	B		C	A	C	C	B	B
Approach Vol, veh/h		957			666	A		106			319	
Approach Delay, s/veh		17.2			19.9			24.0			23.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	14.9	5.5	25.4	5.7	21.2	9.1	21.8
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	17.4	* 33	6.4	43.2	6.4	43.2	15.4	34.2
Max Q Clear Time (g_c+I1), s	7.1	4.8	2.4	9.8	2.6	2.7	5.5	11.9
Green Ext Time (p_c), s	0.4	0.5	0.0	5.6	0.0	0.1	0.1	4.1

Intersection Summary	
HCM 6th Ctrl Delay	19.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	49	10	7	146	7	19	1	15	2	0	4
Future Vol, veh/h	7	49	10	7	146	7	19	1	15	2	0	4
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	61	13	9	183	9	24	1	19	3	0	5
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.9	8.2	8.1	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	2%	0%	100%	62%	0%	100%	87%	0%	100%	0%
Vol Right, %	0%	0%	98%	0%	0%	38%	0%	0%	13%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	19	1	15	7	33	26	7	97	56	2	0	4
LT Vol	19	0	0	7	0	0	7	0	0	2	0	0
Through Vol	0	1	0	0	33	16	0	97	49	0	0	0
RT Vol	0	0	15	0	0	10	0	0	7	0	0	4
Lane Flow Rate	24	1	19	9	41	33	9	122	70	2	0	5
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.038	0.001	0.024	0.013	0.057	0.043	0.013	0.162	0.091	0.004	0	0.006
Departure Headway (Hd)	5.718	5.219	4.535	5.52	5.02	4.754	5.306	4.806	4.718	5.797	5.297	4.597
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	628	688	792	651	716	756	677	749	763	619	0	780
Service Time	3.433	2.933	2.249	3.233	2.733	2.467	3.017	2.516	2.428	3.516	3.016	2.316
HCM Lane V/C Ratio	0.038	0.001	0.024	0.014	0.057	0.044	0.013	0.163	0.092	0.003	0	0.006
HCM Control Delay	8.7	7.9	7.4	8.3	8	7.7	8.1	8.4	7.9	8.5	8	7.3
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	N	A
HCM 95th-tile Q	0.1	0	0.1	0	0.2	0.1	0	0.6	0.3	0	0	0

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	37	11	17	99	29	42	88	26	11	49	13
Future Vol, veh/h	11	37	11	17	99	29	42	88	26	11	49	13
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	14	46	14	21	124	36	53	110	33	14	61	16
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.6	8.7	8.7	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	53%	0%	100%	53%	0%	100%	53%	0%	100%	56%
Vol Right, %	0%	0%	47%	0%	0%	47%	0%	0%	47%	0%	0%	44%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	42	59	55	11	25	23	17	66	62	11	33	29
LT Vol	42	0	0	11	0	0	17	0	0	11	0	0
Through Vol	0	59	29	0	25	12	0	66	33	0	33	16
RT Vol	0	0	26	0	0	11	0	0	29	0	0	13
Lane Flow Rate	52	73	69	14	31	29	21	82	78	14	41	37
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.086	0.109	0.097	0.023	0.048	0.043	0.035	0.124	0.11	0.023	0.063	0.054
Departure Headway (Hd)	5.871	5.371	5.042	6.116	5.616	5.286	5.918	5.418	5.09	6.065	5.565	5.254
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	608	664	708	582	634	673	603	659	701	588	640	677
Service Time	3.625	3.125	2.797	3.883	3.383	3.053	3.673	3.173	2.845	3.829	3.329	3.019
HCM Lane V/C Ratio	0.086	0.11	0.097	0.024	0.049	0.043	0.035	0.124	0.111	0.024	0.064	0.055
HCM Control Delay	9.2	8.8	8.3	9	8.7	8.3	8.9	8.9	8.5	9	8.7	8.3
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.4	0.3	0.1	0.2	0.1	0.1	0.4	0.4	0.1	0.2	0.2

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	31	23	113	100	11
Future Vol, veh/h	7	31	23	113	100	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	41	30	149	132	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	274	73	146	0	-	0
Stage 1	139	-	-	-	-	-
Stage 2	135	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	698	981	1448	-	-	-
Stage 1	879	-	-	-	-	-
Stage 2	883	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	683	981	1448	-	-	-
Mov Cap-2 Maneuver	767	-	-	-	-	-
Stage 1	861	-	-	-	-	-
Stage 2	883	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	1.3	0
HCM LOS	A		

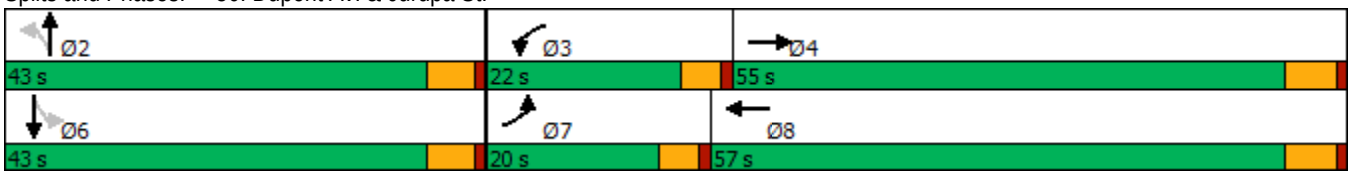
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1448	-	767	981	-	-
HCM Lane V/C Ratio	0.021	-	0.012	0.042	-	-
HCM Control Delay (s)	7.5	-	9.8	8.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.1	-	-

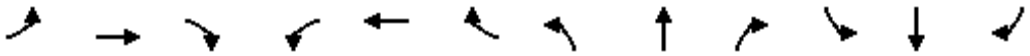
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	1027	71	793	46	29	52	28
Future Volume (vph)	50	1027	71	793	46	29	52	28
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	20.0	55.0	22.0	57.0	43.0	43.0	43.0	43.0
Total Split (%)	16.7%	45.8%	18.3%	47.5%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 57.8
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1027	14	71	793	60	46	29	121	52	28	40
Future Volume (veh/h)	50	1027	14	71	793	60	46	29	121	52	28	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	54	1104	14	76	853	59	49	31	101	56	30	19
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	87	1947	25	108	1887	130	407	355	317	336	434	250
Arrive On Green	0.05	0.39	0.39	0.07	0.40	0.40	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	1619	5001	63	1619	4690	323	1301	1710	1525	1207	2088	1205
Grp Volume(v), veh/h	54	723	395	76	595	317	49	31	101	56	24	25
Grp Sat Flow(s),veh/h/ln	1619	1638	1789	1619	1638	1737	1301	1710	1525	1207	1710	1583
Q Serve(g_s), s	1.5	8.1	8.1	2.2	6.2	6.3	1.5	0.7	2.6	1.9	0.5	0.6
Cycle Q Clear(g_c), s	1.5	8.1	8.1	2.2	6.2	6.3	2.1	0.7	2.6	4.6	0.5	0.6
Prop In Lane	1.00		0.04	1.00		0.19	1.00		1.00	1.00		0.76
Lane Grp Cap(c), veh/h	87	1275	696	108	1318	699	407	355	317	336	355	329
V/C Ratio(X)	0.62	0.57	0.57	0.70	0.45	0.45	0.12	0.09	0.32	0.17	0.07	0.08
Avail Cap(c_a), veh/h	530	3429	1872	599	3568	1892	1177	1368	1220	1051	1368	1266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	11.2	11.3	21.5	10.3	10.3	15.8	15.0	15.8	17.7	15.0	15.0
Incr Delay (d2), s/veh	2.7	0.4	0.7	3.1	0.2	0.5	0.1	0.1	0.6	0.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.1	2.4	0.8	1.6	1.7	0.4	0.2	0.8	0.5	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	11.6	12.0	24.5	10.5	10.7	16.0	15.1	16.4	18.0	15.0	15.1
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1172			988			181			105	
Approach Delay, s/veh		12.3			11.7			16.0			16.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.2	7.7	24.1		15.2	7.1	24.7				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		37.6	17.4	49.2		37.6	15.4	51.2				
Max Q Clear Time (g_c+I1), s		4.6	4.2	10.1		6.6	3.5	8.3				
Green Ext Time (p_c), s		0.9	0.1	8.2		0.4	0.0	6.3				

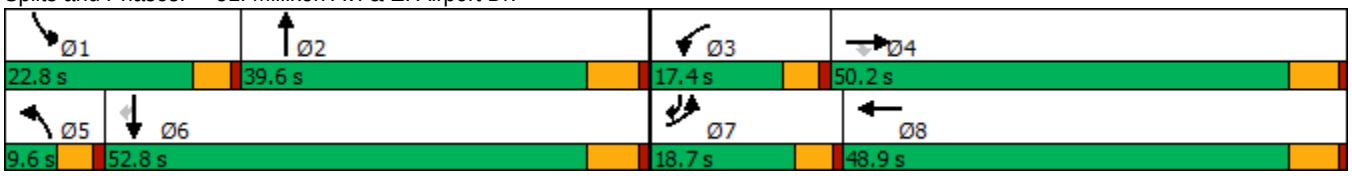
Intersection Summary												
HCM 6th Ctrl Delay			12.5									
HCM 6th LOS			B									

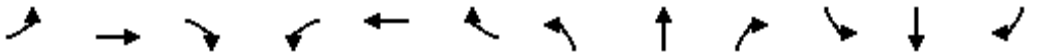
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	247	255	36	95	280	36	1053	153	955	122
Future Volume (vph)	247	255	36	95	280	36	1053	153	955	122
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	18.7	50.2	50.2	17.4	48.9	9.6	39.6	22.8	52.8	18.7
Total Split (%)	14.4%	38.6%	38.6%	13.4%	37.6%	7.4%	30.5%	17.5%	40.6%	14.4%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 100.3
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	247	255	36	95	280	357	36	1053	66	153	955	122
Future Volume (veh/h)	247	255	36	95	280	357	36	1053	66	153	955	122
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	249	258	15	96	283	239	36	1064	60	155	965	76
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	322	857	382	120	385	315	101	1421	80	188	1870	747
Arrive On Green	0.11	0.25	0.25	0.07	0.22	0.22	0.03	0.30	0.30	0.12	0.38	0.38
Sat Flow, veh/h	2956	3420	1525	1619	1785	1462	2956	4755	268	1619	4914	1525
Grp Volume(v), veh/h	249	258	15	96	271	251	36	733	391	155	965	76
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1619	1710	1537	1478	1638	1747	1619	1638	1525
Q Serve(g_s), s	6.7	5.0	0.6	4.7	12.0	12.5	1.0	16.4	16.5	7.6	12.3	2.2
Cycle Q Clear(g_c), s	6.7	5.0	0.6	4.7	12.0	12.5	1.0	16.4	16.5	7.6	12.3	2.2
Prop In Lane	1.00		1.00	1.00		0.95	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	322	857	382	120	369	331	101	979	522	188	1870	747
V/C Ratio(X)	0.77	0.30	0.04	0.80	0.73	0.76	0.36	0.75	0.75	0.83	0.52	0.10
Avail Cap(c_a), veh/h	512	1867	833	255	906	814	182	1345	717	362	2815	1040
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	24.7	23.1	37.1	29.7	29.9	38.4	25.8	25.8	35.1	19.4	11.2
Incr Delay (d2), s/veh	1.5	0.2	0.0	4.6	2.8	3.6	0.8	1.5	2.9	3.5	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.9	0.2	1.9	4.8	4.6	0.3	5.9	6.5	3.0	4.1	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.8	24.9	23.1	41.7	32.6	33.5	39.2	27.3	28.7	38.6	19.6	11.2
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		522			618			1160			1196	
Approach Delay, s/veh		30.5			34.3			28.1			21.6	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	30.5	10.6	26.2	7.4	37.2	13.4	23.3
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	18.2	33.4	12.8	44.4	5.0	46.6	14.1	43.1
Max Q Clear Time (g_c+I1), s	9.6	18.5	6.7	7.0	3.0	14.3	8.7	14.5
Green Ext Time (p_c), s	0.1	5.8	0.0	1.6	0.0	7.1	0.2	3.1

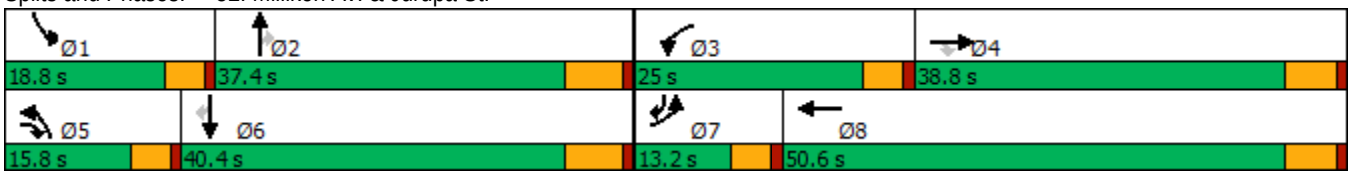
Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

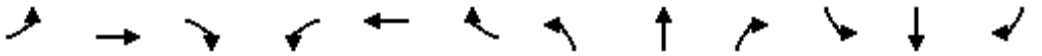
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	137	832	244	415	619	188	838	388	267	1006	66
Future Volume (vph)	137	832	244	415	619	188	838	388	267	1006	66
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	13.2	38.8	15.8	25.0	50.6	15.8	37.4	37.4	18.8	40.4	13.2
Total Split (%)	11.0%	32.3%	13.2%	20.8%	42.2%	13.2%	31.2%	31.2%	15.7%	33.7%	11.0%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 106.2
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	832	244	415	619	109	188	838	388	267	1006	66
Future Volume (veh/h)	137	832	244	415	619	109	188	838	388	267	1006	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	143	867	161	432	645	97	196	873	285	278	1048	37
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	199	1193	502	497	1483	220	256	1224	380	340	1363	526
Arrive On Green	0.07	0.24	0.24	0.17	0.34	0.34	0.09	0.25	0.25	0.11	0.28	0.28
Sat Flow, veh/h	2956	4914	1524	2956	4319	642	2956	4914	1525	2956	4914	1525
Grp Volume(v), veh/h	143	867	161	432	487	255	196	873	285	278	1048	37
Grp Sat Flow(s),veh/h/ln	1478	1638	1524	1478	1638	1684	1478	1638	1525	1478	1638	1525
Q Serve(g_s), s	4.5	15.3	7.5	13.4	10.8	11.0	6.1	15.3	16.2	8.7	18.4	1.5
Cycle Q Clear(g_c), s	4.5	15.3	7.5	13.4	10.8	11.0	6.1	15.3	16.2	8.7	18.4	1.5
Prop In Lane	1.00		1.00	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	1193	502	497	1125	578	256	1224	380	340	1363	526
V/C Ratio(X)	0.72	0.73	0.32	0.87	0.43	0.44	0.77	0.71	0.75	0.82	0.77	0.07
Avail Cap(c_a), veh/h	270	1722	666	640	1558	801	352	1628	505	446	1785	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	32.8	23.7	38.2	23.9	23.9	42.1	32.3	32.6	40.7	31.2	20.7
Incr Delay (d2), s/veh	3.0	0.9	0.4	8.5	0.3	0.5	4.1	1.0	4.3	6.8	1.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	5.8	2.6	5.2	3.9	4.2	2.3	5.7	6.1	3.3	6.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	33.7	24.0	46.6	24.1	24.4	46.2	33.3	37.0	47.5	32.8	20.8
LnGrp LOS	D	C	C	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		1171			1174			1354			1363	
Approach Delay, s/veh		33.9			32.5			35.9			35.4	
Approach LOS		C			C			D			D	

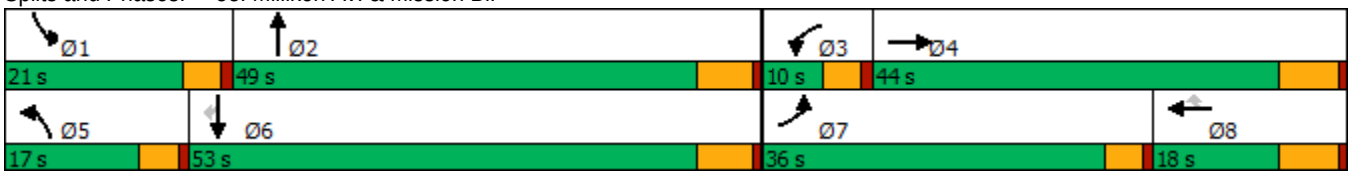
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	29.7	20.4	28.7	12.8	32.3	11.0	38.1
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	14.2	31.2	20.4	33.0	11.2	34.2	8.6	44.8
Max Q Clear Time (g_c+I1), s	10.7	18.2	15.4	17.3	8.1	20.4	6.5	13.0
Green Ext Time (p_c), s	0.2	5.2	0.4	5.4	0.1	5.6	0.0	4.8

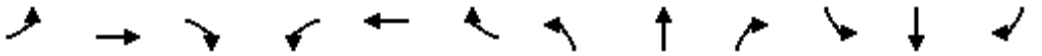
Intersection Summary	
HCM 6th Ctrl Delay	34.5
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	578	1	17	6	150	188	947	268	1378	431
Future Volume (vph)	578	1	17	6	150	188	947	268	1378	431
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	36.0	44.0	10.0	18.0	18.0	17.0	49.0	21.0	53.0	53.0
Total Split (%)	29.0%	35.5%	8.1%	14.5%	14.5%	13.7%	39.5%	16.9%	42.7%	42.7%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 124
Actuated Cycle Length: 113.6
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	578	1	89	17	6	150	188	947	22	268	1378	431
Future Volume (veh/h)	578	1	89	17	6	150	188	947	22	268	1378	431
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	608	1	87	18	0	125	198	997	23	282	1451	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	674	5	463	32	0	300	255	1693	39	341	1827	
Arrive On Green	0.23	0.31	0.31	0.02	0.00	0.10	0.09	0.34	0.34	0.12	0.37	0.00
Sat Flow, veh/h	2956	17	1511	1619	0	3051	2956	4942	114	2956	4914	1525
Grp Volume(v), veh/h	608	0	88	18	0	125	198	661	359	282	1451	0
Grp Sat Flow(s),veh/h/ln	1478	0	1528	1619	0	1525	1478	1638	1779	1478	1638	1525
Q Serve(g_s), s	20.3	0.0	4.3	1.1	0.0	3.9	6.7	16.9	16.9	9.5	26.7	0.0
Cycle Q Clear(g_c), s	20.3	0.0	4.3	1.1	0.0	3.9	6.7	16.9	16.9	9.5	26.7	0.0
Prop In Lane	1.00		0.99	1.00		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	674	0	469	32	0	300	255	1123	610	341	1827	
V/C Ratio(X)	0.90	0.00	0.19	0.57	0.00	0.42	0.78	0.59	0.59	0.83	0.79	
Avail Cap(c_a), veh/h	914	0	564	86	0	346	361	1381	750	478	2265	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.1	0.0	25.9	49.3	0.0	43.0	45.4	27.5	27.5	43.9	28.4	0.0
Incr Delay (d2), s/veh	8.0	0.0	0.2	5.8	0.0	0.9	4.0	0.5	0.9	5.8	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	0.0	1.5	0.5	0.0	1.4	2.5	6.2	6.8	3.6	9.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.1	0.0	26.1	55.1	0.0	44.0	49.5	28.0	28.4	49.8	30.1	0.0
LnGrp LOS	D	A	C	E	A	D	D	C	C	D	C	
Approach Vol, veh/h		696			143			1218			1733	A
Approach Delay, s/veh		43.5			45.4			31.6			33.3	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	41.0	6.6	37.6	13.3	43.9	27.8	16.5
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	16.4	42.8	5.4	37.5	12.4	46.8	31.4	11.5
Max Q Clear Time (g_c+I1), s	11.5	18.9	3.1	6.3	8.7	28.7	22.3	5.9
Green Ext Time (p_c), s	0.2	6.3	0.0	0.4	0.1	9.0	0.9	0.2

Intersection Summary	
HCM 6th Ctrl Delay	35.1
HCM 6th LOS	D

Notes

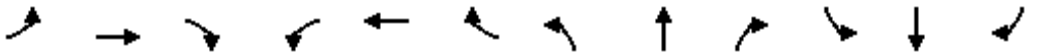
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1350	543	484	710	239	8	467
Future Volume (vph)	1350	543	484	710	239	8	467
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	43.0	43.0	23.0	66.0	24.0	24.0	24.0
Total Split (%)	47.8%	47.8%	25.6%	73.3%	26.7%	26.7%	26.7%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 85
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1350	543	484	710	0	0	0	0	239	8	467
Future Volume (veh/h)	0	1350	543	484	710	0	0	0	0	239	8	467
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1800	1800	1600	1800	0				1700	1800	1800
Adj Flow Rate, veh/h	0	1436	385	515	755	0				172	0	475
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	2048	579	598	3200	0				317	0	597
Arrive On Green	0.00	0.38	0.38	0.20	0.65	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	5400	1525	2956	5076	0				1619	0	3051
Grp Volume(v), veh/h	0	1436	385	515	755	0				172	0	475
Grp Sat Flow(s),veh/h/ln	0	1800	1525	1478	1638	0				1619	0	1525
Q Serve(g_s), s	0.0	16.2	15.1	12.1	4.6	0.0				6.9	0.0	10.7
Cycle Q Clear(g_c), s	0.0	16.2	15.1	12.1	4.6	0.0				6.9	0.0	10.7
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2048	579	598	3200	0				317	0	597
V/C Ratio(X)	0.00	0.70	0.67	0.86	0.24	0.00				0.54	0.00	0.80
Avail Cap(c_a), veh/h	0	2780	785	740	4102	0				428	0	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.9	18.5	27.7	5.2	0.0				26.0	0.0	27.5
Incr Delay (d2), s/veh	0.0	0.4	1.0	7.3	0.0	0.0				1.4	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.8	4.7	4.5	1.0	0.0				2.5	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.2	19.5	35.0	5.2	0.0				27.5	0.0	31.5
LnGrp LOS	A	B	B	D	A	A				C	A	C
Approach Vol, veh/h		1821			1270						647	
Approach Delay, s/veh		19.3			17.3						30.4	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.5	33.3		19.1		52.8
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0
Max Green Setting (Gmax), s	18.0	37.0		19.0		60.0
Max Q Clear Time (g_c+I1), s	14.1	18.2		12.7		6.6
Green Ext Time (p_c), s	0.5	9.1		1.4		4.3

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

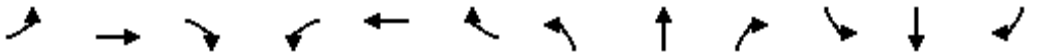
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	604	984	1080	542	114	1	353
Future Volume (vph)	604	984	1080	542	114	1	353
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	28.0	69.0	41.0	41.0	21.0	21.0	21.0
Total Split (%)	31.1%	76.7%	45.6%	45.6%	23.3%	23.3%	23.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 72.1
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	604	984	0	0	1080	542	114	1	353	0	0	0
Future Volume (veh/h)	604	984	0	0	1080	542	114	1	353	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800			
Adj Flow Rate, veh/h	623	1014	0	0	1113	428	79	0	289			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	730	3458	0	0	1889	586	219	0	413			
Arrive On Green	0.25	0.70	0.00	0.00	0.38	0.38	0.14	0.00	0.14			
Sat Flow, veh/h	2956	5076	0	0	5076	1525	1619	0	3051			
Grp Volume(v), veh/h	623	1014	0	0	1113	428	79	0	289			
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1525	1619	0	1525			
Q Serve(g_s), s	12.7	4.9	0.0	0.0	11.4	15.2	2.8	0.0	5.7			
Cycle Q Clear(g_c), s	12.7	4.9	0.0	0.0	11.4	15.2	2.8	0.0	5.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	730	3458	0	0	1889	586	219	0	413			
V/C Ratio(X)	0.85	0.29	0.00	0.00	0.59	0.73	0.36	0.00	0.70			
Avail Cap(c_a), veh/h	1091	4953	0	0	2783	864	406	0	765			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	22.8	3.5	0.0	0.0	15.5	16.7	24.9	0.0	26.2			
Incr Delay (d2), s/veh	2.9	0.0	0.0	0.0	0.2	1.3	1.0	0.0	2.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.1	0.7	0.0	0.0	3.5	4.6	1.0	0.0	2.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.7	3.5	0.0	0.0	15.8	18.0	25.9	0.0	28.3			
LnGrp LOS	C	A	A	A	B	B	C	A	C			
Approach Vol, veh/h		1637			1541			368				
Approach Delay, s/veh		12.0			16.4			27.8				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		49.7			20.3	29.5		13.7				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		63.9			23.4	35.9		15.9				
Max Q Clear Time (g_c+I1), s		6.9			14.7	17.2		7.7				
Green Ext Time (p_c), s		6.3			0.9	7.1		0.9				
Intersection Summary												
HCM 6th Ctrl Delay			15.5									
HCM 6th LOS			B									

Notes

User approved volume balancing among the lanes for turning movement.

APPENDIX 6.2:

OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Volume Development - AM Peak Hour

1: Haven Av. & Inland Empire Bl.

	PHF:	0.923		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	415	1,980	366	45	1,658	89	79	109	298	131	102	19	5,291

2: Haven Av. & I-10 WB Ramps

	PHF:	0.922		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	2,115	535	0	1,518	605	0	0	0	584	0	646	6,004

3: Haven Av. & I-10 EB Ramps

	PHF:	0.939		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	1,667	395	0	1,604	497	984	0	702	0	0	0	5,849

4: Haven Av. & E. Guasti Rd.

	PHF:	0.978		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	173	1,827	110	222	1,784	300	91	29	38	63	41	145	4,822

5: Haven Av. & E. Airport Dr.

	PHF:	0.911		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	447	1,506	231	382	1,252	137	104	192	240	63	184	250	4,988

6: Haven Av. & Driveway 1

	PHF:									Count Date:		1/0/1900	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	2,183	6	0	1,555	0	0	0	0	0	0	2	3,746

7: Haven Av. & Driveway 2

	PHF:									Count Date:		1/0/1900	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	2,183	5	0	1,555	0	0	0	0	0	0	6	3,749

8: Haven Av. & La Salle St.

	PHF:	0.935		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	2,171	27	0	1,642	0	0	0	0	0	0	17	3,856

9: Haven Av. & Jurupa Av.

	PHF:	0.946		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	106	1,747	272	87	1,084	470	368	221	123	316	318	82	5,194

10: Haven Av. & Mission Bl.

	PHF:	0.940		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	107	1,800	15	154	1,428	217	222	270	130	60	647	651	5,702

Volume Development - AM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.950 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	331	1,694	0	0	843	624	0	0	0	148	10	508	4,158

12: Haven Av. & SR-60 EB Ramps

PHF: 0.950 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	1,048	293	373	618	0	977	7	218	0	0	0	3,534

13: Driveway 3 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	4	0	1	0	0	0	0	797	7	13	492	0	1,315

14: Driveway 4 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	8	0	0	0	0	785	14	0	505	0	1,313

15: Driveway 5 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	19	0	0	0	0	763	30	0	505	0	1,318

16: Driveway 6 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	1	0	1	1	0	1	1	23	3	4	15	1	51

17: Driveway 7 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	2	0	3	0	0	0	0	21	3	6	18	0	53

18: Driveway 8 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	0	1	0	7	3	22	0	0	17	14	64

19: Driveway 9 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	0	1	0	1	1	35	0	0	76	1	115

20: Driveway 10 & Jurupa Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	0	0	0	2	0	581	0	0	714	8	1,304

Volume Development - AM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	0	0	0	3	0	581	0	0	718	8	1,309

22: Carnegie Av. & E. Airport Dr.

PHF: 0.834 7:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	73	17	0	29	53	183	166	215	111	2	224	31	1,104

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	5	84	1	3	139	23	6	0	1	0	0	1	263

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	87	1	7	134	0	0	0	0	0	0	2	231

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	14	85	0	0	129	5	3	0	1	0	0	0	237

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.641 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	11	65	30	42	86	3	2	0	1	7	0	32	279

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	40	94	0	0	83	11	12	0	18	0	0	0	257

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	9	133	0	0	88	13	1	0	5	0	0	0	248

29: Carnegie Av. & La Salle St.

PHF: 0.917 8:00am Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	43	123	0	0	59	34	18	0	17	0	0	0	293

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	166	12	0	76	0	0	0	0	2	0	1	257

Volume Development - AM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.902 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	9	0	3	22	0	61	106	661	3	7	765	103	1,740

32: Driveway 19 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	2	0	0	0	0	2	6	57	10	0	35	5	116

33: Driveway 20 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	3	0	11	0	0	9	10	29	18	4	28	8	119

34: Commerce Pkwy. & Driveway 21

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	258	0	0	229	8	0	0	2	0	0	0	497

35: Commerce Pkwy. & Driveway 22

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	258	0	0	228	4	0	0	7	0	0	0	497

36: Commerce Pkwy. & Driveway 23

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	257	6	0	234	0	0	0	0	0	0	2	499

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.948 7:15am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	30	219	25	115	116	3	6	24	10	1	6	38	594

38: Commerce Pkwy. & Driveway 24

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	274	0	0	111	16	0	0	8	0	0	0	410

39: Commerce Pkwy. & Driveway 25

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	258	46	4	115	0	0	0	0	23	0	15	462

40: Commerce Pkwy. & Driveway 26

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	302	10	0	137	0	0	0	0	0	0	2	452

Volume Development - AM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.918 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	14	5	34	87	4	40	109	561	14	20	821	204	1,914

42: Driveway 27 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	3	0	2	1	0	1	6	138	19	3	42	2	217

43: Driveway 28 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	1	0	3	2	0	3	7	128	5	11	43	1	204

44: Double Day Av. & Driveway 29

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	2	43	0	0	30	1	2	0	1	0	0	0	79

45: Double Day Av. & Santa Ana St.

PHF: 0.944 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	12	9	2	9	5	17	26	45	61	8	25	10	230

46: Driveway 30 & Double Day Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	3	0	0	0	0	32	17	4	47	0	103

47: Dupont Av. & Santa Ana St.

PHF: 0.910 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	24	68	8	3	34	8	8	33	7	11	22	11	237

48: Dupont Av. & Double Day Av.

PHF: 0.845 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	47	115	3	1	22	4	1	1	32	0	0	0	227

49: Dupont Av. & Driveway 31

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	2	174	0	0	39	8	2	0	3	0	0	0	228

50: Dupont Av. & Jurupa Av.

PHF: 0.982 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	24	33	90	17	6	19	57	574	19	100	986	86	2,010

Volume Development - AM Peak Hour

51: Milliken Av. & E. Airport Dr.

	PHF:	0.861		7:45am					Count Date:	10/26/2021			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	23	660	77	365	886	174	80	116	23	84	161	223	2,870

52: Milliken Av. & Jurupa Av.

	PHF:	0.970		7:45am					Count Date:	10/26/2021			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	505	821	114	143	416	70	225	792	324	110	630	76	4,226

53: Milliken Av. & Mission Bl.

	PHF:	0.895		7:45am					Count Date:	10/26/2021			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	327	1,333	15	129	618	363	222	2	52	21	17	257	3,357

54: I-15 SB Ramps & Jurupa Av.

	PHF:	0.910		7:30am					Count Date:	10/26/2021			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	0	540	3	1,010	0	719	207	445	734	0	3,658

55: I-15 NB Ramps & Jurupa Av.

	PHF:	0.939		7:00am					Count Date:	10/26/2021			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	345	0	575	0	0	0	414	844	0	0	834	386	3,399

Volume Development - PM Peak Hour

1: Haven Av. & Inland Empire Bl.

	PHF:	0.960		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	369	2,072	471	43	1,879	72	209	369	414	371	249	43	6,562

2: Haven Av. & I-10 WB Ramps

	PHF:	0.979		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	2,560	1,055	0	1,905	788	0	0	0	269	0	352	6,928

3: Haven Av. & I-10 EB Ramps

	PHF:	0.975		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	3,031	827	0	1,786	388	584	0	335	0	0	0	6,951

4: Haven Av. & E. Guasti Rd.

	PHF:	0.975		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	70	3,189	116	179	1,820	121	423	50	230	88	21	246	6,553

5: Haven Av. & E. Airport Dr.

	PHF:	0.985		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	543	2,396	23	313	1,558	189	318	519	661	34	660	648	7,862

6: Haven Av. & Driveway 1

	PHF:								Count Date:			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	2,956	3	0	2,252	0	0	0	0	0	0	6	5,217

7: Haven Av. & Driveway 2

	PHF:								Count Date:			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	2,957	3	0	2,252	0	0	0	0	0	0	2	5,214

8: Haven Av. & La Salle St.

	PHF:	0.968		4:15pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	2,908	18	0	2,265	0	0	0	0	0	0	52	5,242

9: Haven Av. & Jurupa Av.

	PHF:	0.982		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	73	2,188	375	224	1,677	365	503	372	72	338	310	234	6,731

10: Haven Av. & Mission Bl.

	PHF:	0.962		4:00pm					Count Date:	10/26/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	111	1,641	63	334	1,462	145	574	723	120	40	495	467	6,177

Volume Development - PM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.962 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	157	939	0	0	1,327	575	0	0	0	304	9	561	3,872

12: Haven Av. & SR-60 EB Ramps

PHF: 0.933 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	669	215	672	959	0	427	8	170	0	0	0	3,120

13: Driveway 3 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	14	0	4	0	0	0	0	852	4	7	1,328	0	2,208

14: Driveway 4 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	10	0	0	0	0	849	7	0	1,335	0	2,200

15: Driveway 5 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	24	0	0	0	0	842	17	0	1,335	0	2,217

16: Driveway 6 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	5	0	2	0	0	0	0	16	2	2	46	0	72

17: Driveway 7 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	3	0	5	0	0	0	0	17	2	3	47	0	76

18: Driveway 8 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	0	0	0	14	2	20	0	0	36	8	79

19: Driveway 9 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	0	0	0	0	0	39	0	0	110	0	149

20: Driveway 10 & Jurupa Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	0	0	0	7	0	974	0	0	877	4	1,862

Volume Development - PM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	0	0	0	6	0	974	0	0	875	4	1,859

22: Carnegie Av. & E. Airport Dr.

PHF: 0.882 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	134	40	20	58	45	508	277	390	68	1	475	93	2,108

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	3	170	0	2	100	13	20	0	4	1	0	3	317

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	166	1	4	101	0	0	0	0	1	0	6	280

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	8	155	0	0	99	2	12	0	4	0	0	0	281

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.786 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	6	96	21	16	86	2	8	0	4	10	0	60	308

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	23	108	0	0	93	7	13	0	27	0	0	0	271

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	5	130	0	0	113	7	2	0	17	0	0	0	274

29: Carnegie Av. & La Salle St.

PHF: 0.944 Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	73	107	0	0	92	38	27	0	12	0	0	0	349

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	177	7	0	104	0	0	0	0	8	0	3	300

Volume Development - PM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	6	0	2	47	0	90	116	925	19	4	696	59	1,963

32: Driveway 19 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	7	0	2	1	0	8	3	29	5	0	55	3	112

33: Driveway 20 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	10	0	8	1	0	12	6	15	11	3	36	5	106

34: Commerce Pkwy. & Driveway 21

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	587	0	0	436	5	0	0	7	0	0	0	1,036

35: Commerce Pkwy. & Driveway 22

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	587	0	0	441	2	0	0	4	0	0	0	1,035

36: Commerce Pkwy. & Driveway 23

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	582	3	0	445	0	0	0	0	0	0	5	1,036

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.920 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	20	412	12	85	344	17	10	7	8	27	6	163	1,110

38: Commerce Pkwy. & Driveway 24

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	444	0	0	369	10	0	0	14	0	0	0	838

39: Commerce Pkwy. & Driveway 25

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	423	29	3	380	0	0	0	0	17	0	22	875

40: Commerce Pkwy. & Driveway 26

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	443	6	0	397	0	0	0	0	0	0	9	856

Volume Development - PM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	15	45	60	318	18	59	115	845	14	12	684	284	2,470

42: Driveway 27 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	11	0	7	3	0	4	4	89	10	1	179	1	309

43: Driveway 28 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	4	0	10	3	0	4	4	91	3	6	174	1	300

44: Double Day Av. & Driveway 29

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	1	19	0	0	10	0	1	0	0	0	0	0	31

45: Double Day Av. & Santa Ana St.

PHF: 0.802 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	27	2	15	2	0	7	12	49	43	7	146	7	318

46: Driveway 30 & Double Day Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	1	0	10	0	0	0	0	62	9	2	42	0	126

47: Dupont Av. & Santa Ana St.

PHF: 0.798 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	42	93	26	11	52	13	11	37	11	17	99	29	441

48: Dupont Av. & Double Day Av.

PHF: 0.763 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	31	118	1	0	101	13	7	0	66	2	0	0	339

49: Dupont Av. & Driveway 31

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	1	146	0	0	151	4	6	0	9	0	0	0	317

50: Dupont Av. & Jurupa Av.

PHF: 0.934 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	46	29	121	81	28	51	50	1,118	14	71	869	68	2,546

Volume Development - PM Peak Hour

51: Milliken Av. & E. Airport Dr.

PHF: 0.988 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	36	1,053	66	153	955	138	273	270	36	95	289	357	3,722

52: Milliken Av. & Jurupa Av.

PHF: 0.961 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	212	838	388	267	1,006	66	137	916	280	415	679	109	5,312

53: Milliken Av. & Mission Bl.

PHF: 0.950 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	188	960	22	284	1,398	431	578	1	89	17	6	161	4,136

54: I-15 SB Ramps & Jurupa Av.

PHF: 0.945 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	0	0	0	239	8	478	0	1,376	601	484	760	0	3,945

55: I-15 NB Ramps & Jurupa Av.

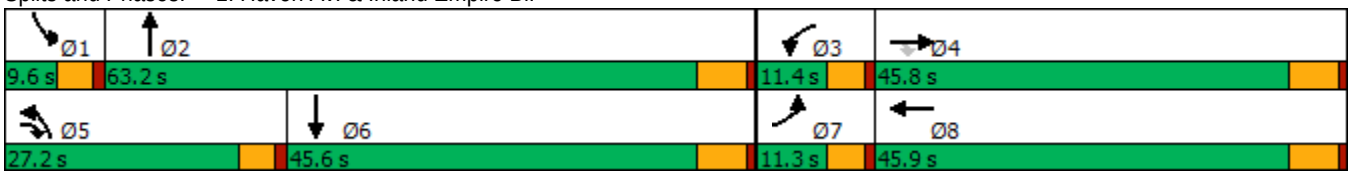
PHF: 0.967 4:00pm Count Date: 10/26/2021

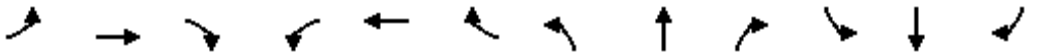
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
OYC (2026) WP:	154	1	353	0	0	0	614	1,000	0	0	1,090	542	3,754

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	79	109	298	131	102	19	415	1980	366	45	1658	89
Future Volume (vph)	79	109	298	131	102	19	415	1980	366	45	1658	89
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	11.3	45.8	27.2	11.4	45.9		27.2	63.2		9.6	45.6	
Total Split (%)	8.7%	35.2%	20.9%	8.8%	35.3%		20.9%	48.6%		7.4%	35.1%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 101.8
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	109	298	131	102	19	415	1980	366	45	1658	89
Future Volume (veh/h)	79	109	298	131	102	19	415	1980	366	45	1658	89
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1500	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	86	118	151	142	111	0	451	2152	0	49	1802	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	149	450	470	226	470		525	3299		118	2446	
Arrive On Green	0.05	0.13	0.13	0.06	0.14	0.00	0.18	0.53	0.00	0.04	0.40	0.00
Sat Flow, veh/h	2956	3420	1512	4029	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	86	118	151	142	111	0	451	2152	0	49	1802	0
Grp Sat Flow(s),veh/h/ln	1478	1710	1512	1343	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	2.5	2.7	6.7	3.0	2.5	0.0	12.9	21.6	0.0	1.4	21.6	0.0
Cycle Q Clear(g_c), s	2.5	2.7	6.7	3.0	2.5	0.0	12.9	21.6	0.0	1.4	21.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	149	450	470	226	470		525	3299		118	2446	
V/C Ratio(X)	0.58	0.26	0.32	0.63	0.24		0.86	0.65		0.42	0.74	
Avail Cap(c_a), veh/h	228	1575	967	315	1579		769	4091		170	2837	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.3	33.9	23.0	40.1	33.4	0.0	34.7	14.5	0.0	40.7	22.4	0.0
Incr Delay (d2), s/veh	1.3	0.3	0.4	1.1	0.3	0.0	4.6	0.3	0.0	0.9	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.1	2.2	1.0	1.0	0.0	4.7	6.4	0.0	0.5	7.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.7	34.2	23.4	41.2	33.7	0.0	39.3	14.8	0.0	41.6	23.3	0.0
LnGrp LOS	D	C	C	D	C		D	B		D	C	
Approach Vol, veh/h		355			253	A		2603	A		1851	A
Approach Delay, s/veh		31.4			37.9			19.0			23.8	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	52.1	9.5	17.2	20.0	40.1	9.0	17.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	57.4	6.8	40.0	22.6	39.8	6.7	40.1
Max Q Clear Time (g_c+I1), s	3.4	23.6	5.0	8.7	14.9	23.6	4.5	4.5
Green Ext Time (p_c), s	0.0	21.4	0.0	1.1	0.6	10.7	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C

Notes

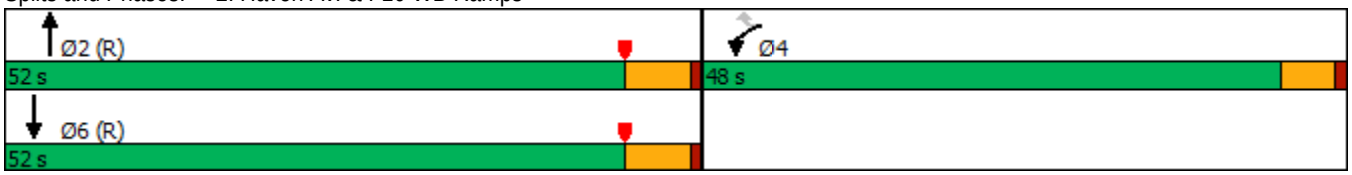
Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	584	646	2115	535	1518
Future Volume (vph)	584	646	2115	535	1518
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	48.0	48.0	52.0		52.0
Total Split (%)	48.0%	48.0%	52.0%		52.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	584	646	2115	535	0	1518
Future Volume (veh/h)	584	646	2115	535	0	1518
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	0	1800
Adj Flow Rate, veh/h	790	400	2299	0	0	1650
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	949	447	3703		0	3703
Arrive On Green	0.29	0.29	1.00	0.00	0.00	0.60
Sat Flow, veh/h	3238	1525	6444	1525	0	6696
Grp Volume(v), veh/h	790	400	2299	0	0	1650
Grp Sat Flow(s),veh/h/ln	1619	1525	1548	1525	0	1548
Q Serve(g_s), s	22.8	25.1	0.0	0.0	0.0	14.6
Cycle Q Clear(g_c), s	22.8	25.1	0.0	0.0	0.0	14.6
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	949	447	3703		0	3703
V/C Ratio(X)	0.83	0.90	0.62		0.00	0.45
Avail Cap(c_a), veh/h	1389	654	3703		0	3703
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.57	0.00	0.00	0.63
Uniform Delay (d), s/veh	33.1	33.9	0.0	0.0	0.0	11.0
Incr Delay (d2), s/veh	1.9	8.3	0.5	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	9.8	0.1	0.0	0.0	4.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	35.0	42.2	0.5	0.0	0.0	11.3
LnGrp LOS	C	D	A		A	B
Approach Vol, veh/h	1190		2299	A		1650
Approach Delay, s/veh	37.4		0.5			11.3
Approach LOS	D		A			B

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		65.6		34.4		65.6
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		46.2		42.9		46.2
Max Q Clear Time (g_c+I1), s		2.0		27.1		16.6
Green Ext Time (p_c), s		17.8		2.2		9.0

Intersection Summary	
HCM 6th Ctrl Delay	12.5
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

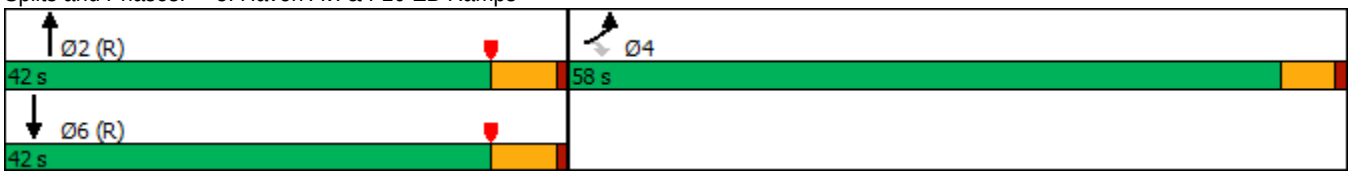
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

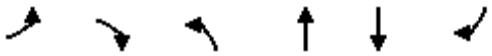
Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	984	702	1667	1604	497
Future Volume (vph)	984	702	1667	1604	497
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	58.0	58.0	42.0	42.0	
Total Split (%)	58.0%	58.0%	42.0%	42.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	984	702	0	1667	1604	497
Future Volume (veh/h)	984	702	0	1667	1604	497
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	1128	567	0	1773	1706	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1378	649	0	2882	2882	
Arrive On Green	0.43	0.43	0.00	0.47	0.93	0.00
Sat Flow, veh/h	3238	1525	0	6696	6444	1525
Grp Volume(v), veh/h	1128	567	0	1773	1706	0
Grp Sat Flow(s),veh/h/ln	1619	1525	0	1548	1548	1525
Q Serve(g_s), s	30.7	34.0	0.0	21.4	4.2	0.0
Cycle Q Clear(g_c), s	30.7	34.0	0.0	21.4	4.2	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1378	649	0	2882	2882	
V/C Ratio(X)	0.82	0.87	0.00	0.62	0.59	
Avail Cap(c_a), veh/h	1713	807	0	2882	2882	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.73	0.75	0.00
Uniform Delay (d), s/veh	25.3	26.3	0.0	20.0	2.0	0.0
Incr Delay (d2), s/veh	2.7	8.8	0.0	0.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	12.8	0.0	7.2	0.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	28.0	35.1	0.0	20.7	2.7	0.0
LnGrp LOS	C	D	A	C	A	
Approach Vol, veh/h	1695			1773	1706	A
Approach Delay, s/veh	30.3			20.7	2.7	
Approach LOS	C			C	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		52.3		47.7		52.3
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		36.2		52.9		36.2
Max Q Clear Time (g_c+I1), s		23.4		36.0		6.2
Green Ext Time (p_c), s		6.8		6.6		9.5

Intersection Summary		
HCM 6th Ctrl Delay	17.9	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

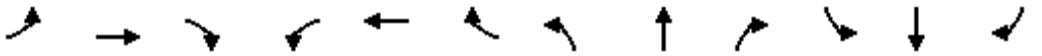
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	29	38	63	41	145	173	1827	110	222	1784	300
Future Volume (vph)	91	29	38	63	41	145	173	1827	110	222	1784	300
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	12.0	48.2	48.2	11.0	47.2	47.2	17.0	51.8	51.8	19.0	53.8	53.8
Total Split (%)	9.2%	37.1%	37.1%	8.5%	36.3%	36.3%	13.1%	39.8%	39.8%	14.6%	41.4%	41.4%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 95.4
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	29	38	63	41	145	173	1827	110	222	1784	300
Future Volume (veh/h)	91	29	38	63	41	145	173	1827	110	222	1784	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	93	30	22	64	42	82	177	1864	78	227	1820	202
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	158	273	228	138	260	388	245	2750	676	298	2862	696
Arrive On Green	0.05	0.15	0.15	0.05	0.14	0.14	0.08	0.44	0.44	0.10	0.46	0.46
Sat Flow, veh/h	2956	1800	1504	2956	1800	2685	2956	6192	1522	2956	6192	1505
Grp Volume(v), veh/h	93	30	22	64	42	82	177	1864	78	227	1820	202
Grp Sat Flow(s),veh/h/ln	1478	1800	1504	1478	1800	1342	1478	1548	1522	1478	1548	1505
Q Serve(g_s), s	2.5	1.2	1.0	1.7	1.7	2.2	4.8	19.8	2.5	6.2	18.5	6.9
Cycle Q Clear(g_c), s	2.5	1.2	1.0	1.7	1.7	2.2	4.8	19.8	2.5	6.2	18.5	6.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	158	273	228	138	260	388	245	2750	676	298	2862	696
V/C Ratio(X)	0.59	0.11	0.10	0.46	0.16	0.21	0.72	0.68	0.12	0.76	0.64	0.29
Avail Cap(c_a), veh/h	265	916	766	229	894	1334	444	3451	849	516	3601	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	30.2	30.2	38.3	30.9	31.1	36.9	18.2	13.4	36.1	16.9	13.8
Incr Delay (d2), s/veh	1.3	0.2	0.2	0.9	0.3	0.3	1.5	0.4	0.1	1.5	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.5	0.4	0.6	0.7	0.7	1.7	6.2	0.7	2.2	5.7	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.5	30.4	30.3	39.2	31.2	31.4	38.4	18.6	13.5	37.6	17.1	14.0
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		145			188			2119			2249	
Approach Delay, s/veh		36.2			34.0			20.1			18.9	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	42.5	8.4	18.7	11.4	43.9	9.0	18.1
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	14.4	46.0	6.4	42.0	12.4	48.0	7.4	41.0
Max Q Clear Time (g_c+I1), s	8.2	21.8	3.7	3.2	6.8	20.5	4.5	4.2
Green Ext Time (p_c), s	0.2	14.9	0.0	0.2	0.1	16.3	0.0	0.5

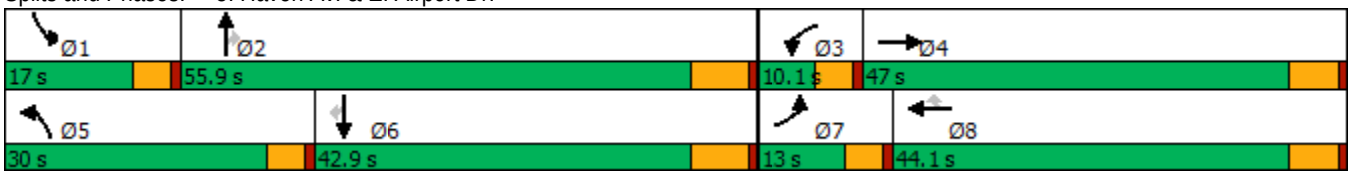
Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

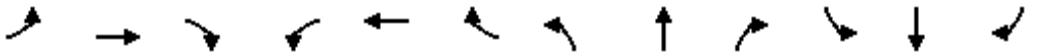
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	104	192	63	184	250	447	1506	231	382	1252	137
Future Volume (vph)	104	192	63	184	250	447	1506	231	382	1252	137
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	13.0	47.0	10.1	44.1	44.1	30.0	55.9	55.9	17.0	42.9	42.9
Total Split (%)	10.0%	36.2%	7.8%	33.9%	33.9%	23.1%	43.0%	43.0%	13.1%	33.0%	33.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 98.1
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	192	240	63	184	250	447	1506	231	382	1252	137
Future Volume (veh/h)	104	192	240	63	184	250	447	1506	231	382	1252	137
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	114	211	172	69	202	195	491	1655	218	420	1376	116
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	169	322	250	136	563	251	565	2464	607	411	2143	527
Arrive On Green	0.06	0.18	0.18	0.05	0.16	0.16	0.19	0.40	0.40	0.14	0.35	0.35
Sat Flow, veh/h	2956	1833	1421	2956	3420	1525	2956	6192	1525	2956	6192	1524
Grp Volume(v), veh/h	114	196	187	69	202	195	491	1655	218	420	1376	116
Grp Sat Flow(s),veh/h/ln	1478	1710	1544	1478	1710	1525	1478	1548	1525	1478	1548	1524
Q Serve(g_s), s	3.4	9.5	10.1	2.0	4.7	10.9	14.4	19.6	8.9	12.4	16.7	4.8
Cycle Q Clear(g_c), s	3.4	9.5	10.1	2.0	4.7	10.9	14.4	19.6	8.9	12.4	16.7	4.8
Prop In Lane	1.00		0.92	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	169	301	272	136	563	251	565	2464	607	411	2143	527
V/C Ratio(X)	0.68	0.65	0.69	0.51	0.36	0.78	0.87	0.67	0.36	1.02	0.64	0.22
Avail Cap(c_a), veh/h	279	790	714	182	1469	655	842	3431	845	411	2528	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	34.2	34.4	41.5	33.1	35.7	35.0	22.1	18.9	38.4	24.5	20.6
Incr Delay (d2), s/veh	1.8	2.4	3.1	1.1	0.4	5.1	4.6	0.3	0.4	50.0	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	3.9	3.8	0.7	1.9	4.2	5.1	6.2	2.9	7.0	5.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.0	36.6	37.5	42.6	33.4	40.8	39.6	22.4	19.2	88.3	24.9	20.8
LnGrp LOS	D	D	D	D	C	D	D	C	B	F	C	C
Approach Vol, veh/h		497			466			2364			1912	
Approach Delay, s/veh		38.4			37.9			25.7			38.6	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	42.0	8.7	21.5	21.6	37.4	9.7	20.5
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	49.4	5.5	41.2	25.4	36.4	8.4	38.3
Max Q Clear Time (g_c+I1), s	14.4	21.6	4.0	12.1	16.4	18.7	5.4	12.9
Green Ext Time (p_c), s	0.0	13.9	0.0	2.2	0.7	8.6	0.0	1.8

Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	1637	6	0	1166
Future Vol, veh/h	0	2	1637	6	0	1166
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	1779	7	0	1267

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	893	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	248	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	248	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.6	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	248	-
HCM Lane V/C Ratio	-	-	0.009	-
HCM Control Delay (s)	-	-	19.6	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	1637	5	0	1166
Future Vol, veh/h	0	6	1637	5	0	1166
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	7	1779	5	0	1267

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	892	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	248	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	248	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	248	-
HCM Lane V/C Ratio	-	-	0.026	-
HCM Control Delay (s)	-	-	19.9	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	1628	27	0	1232
Future Vol, veh/h	0	9	1628	27	0	1232
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	10	1732	29	0	1311

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	881	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	252	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	252	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.8	0	0
HCM LOS	C		

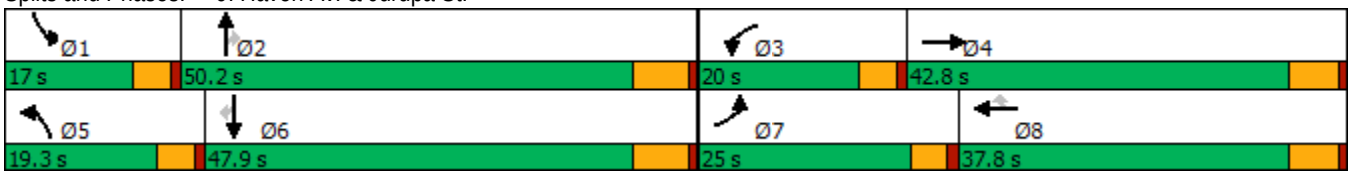
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	252	-
HCM Lane V/C Ratio	-	-	0.038	-
HCM Control Delay (s)	-	-	19.8	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

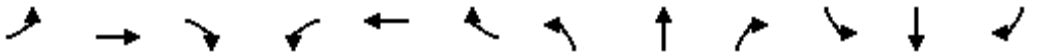
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	368	221	316	318	82	106	1747	272	87	1084	470
Future Volume (vph)	368	221	316	318	82	106	1747	272	87	1084	470
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	25.0	42.8	20.0	37.8	37.8	19.3	50.2	50.2	17.0	47.9	47.9
Total Split (%)	19.2%	32.9%	15.4%	29.1%	29.1%	14.8%	38.6%	38.6%	13.1%	36.8%	36.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 110
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	368	221	123	316	318	82	106	1747	272	87	1084	470
Future Volume (veh/h)	368	221	123	316	318	82	106	1747	272	87	1084	470
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	387	233	104	333	335	60	112	1839	171	92	1141	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	455	538	221	396	471	210	138	2503	617	114	2413	
Arrive On Green	0.15	0.16	0.16	0.13	0.14	0.14	0.09	0.40	0.40	0.07	0.39	0.00
Sat Flow, veh/h	2956	3417	1401	2956	3420	1525	1619	6192	1525	1619	6192	1525
Grp Volume(v), veh/h	387	223	114	333	335	60	112	1839	171	92	1141	0
Grp Sat Flow(s),veh/h/ln	1478	1638	1542	1478	1710	1525	1619	1548	1525	1619	1548	1525
Q Serve(g_s), s	11.7	5.7	6.2	10.1	8.6	3.3	6.3	23.2	6.9	5.2	12.7	0.0
Cycle Q Clear(g_c), s	11.7	5.7	6.2	10.1	8.6	3.3	6.3	23.2	6.9	5.2	12.7	0.0
Prop In Lane	1.00		0.91	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	455	516	243	396	471	210	138	2503	617	114	2413	
V/C Ratio(X)	0.85	0.43	0.47	0.84	0.71	0.29	0.81	0.73	0.28	0.80	0.47	
Avail Cap(c_a), veh/h	655	1317	620	494	1189	530	259	2939	724	218	2784	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.9	35.0	35.3	38.9	37.9	35.6	41.4	23.2	18.4	42.2	21.0	0.0
Incr Delay (d2), s/veh	5.2	0.6	1.4	8.5	2.0	0.7	4.3	0.8	0.2	4.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	2.2	2.3	4.0	3.6	1.2	2.5	7.5	2.3	2.1	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.1	35.6	36.7	47.4	39.9	36.4	45.7	24.1	18.6	47.1	21.2	0.0
LnGrp LOS	D	D	D	D	D	D	D	C	B	D	C	
Approach Vol, veh/h		724			728			2122			1233	A
Approach Delay, s/veh		39.8			43.1			24.8			23.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	43.7	16.9	20.3	12.4	42.4	18.8	18.5
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	43.7	15.4	37.0	14.7	41.4	20.4	32.0
Max Q Clear Time (g_c+I1), s	7.2	25.2	12.1	8.2	8.3	14.7	13.7	10.6
Green Ext Time (p_c), s	0.0	12.0	0.2	2.0	0.1	7.8	0.4	2.1

Intersection Summary	
HCM 6th Ctrl Delay	29.4
HCM 6th LOS	C

Notes

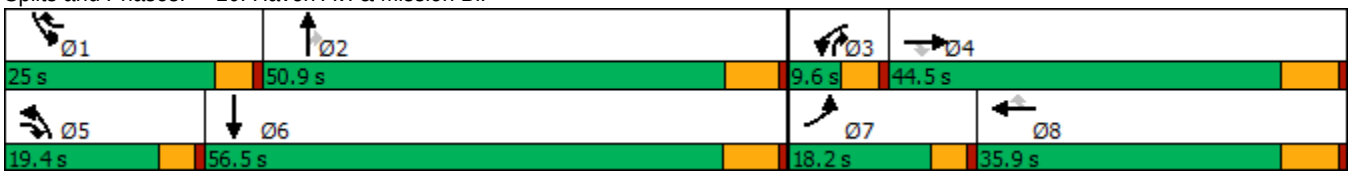
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

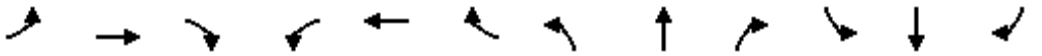
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	222	270	130	60	647	651	107	1800	15	154	1428
Future Volume (vph)	222	270	130	60	647	651	107	1800	15	154	1428
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	18.2	44.5	19.4	9.6	35.9	25.0	19.4	50.9	9.6	25.0	56.5
Total Split (%)	14.0%	34.2%	14.9%	7.4%	27.6%	19.2%	14.9%	39.2%	7.4%	19.2%	43.5%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 122.8
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	270	130	60	647	651	107	1800	15	154	1428	217
Future Volume (veh/h)	222	270	130	60	647	651	107	1800	15	154	1428	217
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	236	287	115	64	688	528	114	1915	11	164	1519	215
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	282	1474	585	107	1182	544	136	1798	605	188	1731	245
Arrive On Green	0.10	0.30	0.30	0.04	0.24	0.24	0.08	0.37	0.37	0.12	0.40	0.40
Sat Flow, veh/h	2956	4914	1522	2956	4914	1525	1619	4914	1501	1619	4351	615
Grp Volume(v), veh/h	236	287	115	64	688	528	114	1915	11	164	1143	591
Grp Sat Flow(s),veh/h/ln	1478	1638	1522	1478	1638	1525	1619	1638	1501	1619	1638	1689
Q Serve(g_s), s	9.6	5.3	6.1	2.6	15.1	29.4	8.5	44.7	0.5	12.2	39.4	39.6
Cycle Q Clear(g_c), s	9.6	5.3	6.1	2.6	15.1	29.4	8.5	44.7	0.5	12.2	39.4	39.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	282	1474	585	107	1182	544	136	1798	605	188	1303	672
V/C Ratio(X)	0.84	0.19	0.20	0.60	0.58	0.97	0.84	1.07	0.02	0.87	0.88	0.88
Avail Cap(c_a), veh/h	329	1528	602	121	1182	544	196	1798	605	270	1341	691
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	31.8	25.1	58.0	41.0	38.6	55.1	38.7	22.0	53.1	34.0	34.1
Incr Delay (d2), s/veh	13.2	0.1	0.2	3.3	0.7	30.9	13.1	41.0	0.0	14.3	6.8	12.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	2.0	2.1	1.0	5.9	19.1	3.8	23.6	0.2	5.5	15.6	17.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.5	31.9	25.2	61.3	41.7	69.5	68.2	79.8	22.0	67.4	40.8	46.3
LnGrp LOS	E	C	C	E	D	E	E	F	C	E	D	D
Approach Vol, veh/h		638			1280			2040			1898	
Approach Delay, s/veh		43.9			54.1			78.8			44.8	
Approach LOS		D			D			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	51.2	9.0	43.1	14.9	55.1	16.3	35.9
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	20.4	* 45	5.0	38.0	14.8	50.0	13.6	29.4
Max Q Clear Time (g_c+I1), s	14.2	46.7	4.6	8.1	10.5	41.6	11.6	31.4
Green Ext Time (p_c), s	0.1	0.0	0.0	2.0	0.0	5.9	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	58.6
HCM 6th LOS	E

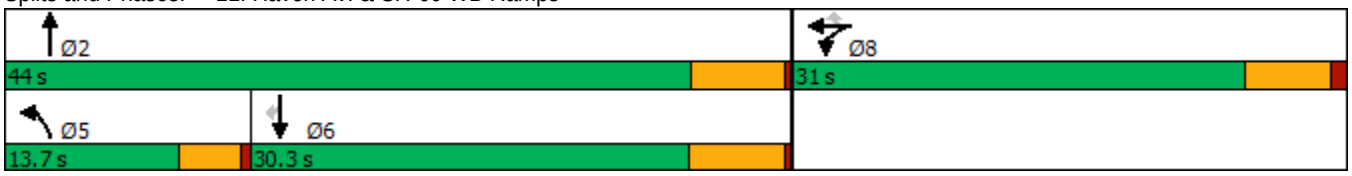
Notes

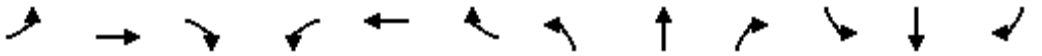
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	148	10	508	331	1694	843	624
Future Volume (vph)	148	10	508	331	1694	843	624
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.5	35.2	28.3	28.3
Total Split (s)	31.0	31.0	31.0	13.7	44.0	30.3	30.3
Total Split (%)	41.3%	41.3%	41.3%	18.3%	58.7%	40.4%	40.4%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 68.9
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	148	10	508	331	1694	0	0	843	624
Future Volume (veh/h)	0	0	0	148	10	508	331	1694	0	0	843	624
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	1600	1800	0	0	1800	1800
Adj Flow Rate, veh/h				164	0	308	348	1783	0	0	887	492
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				787	0	371	433	2813	0	0	1780	553
Arrive On Green				0.24	0.00	0.24	0.15	0.57	0.00	0.00	0.36	0.36
Sat Flow, veh/h				3238	0	1525	2956	5076	0	0	5076	1525
Grp Volume(v), veh/h				164	0	308	348	1783	0	0	887	492
Grp Sat Flow(s),veh/h/ln				1619	0	1525	1478	1638	0	0	1638	1525
Q Serve(g_s), s				2.5	0.0	12.0	7.2	15.3	0.0	0.0	8.8	19.1
Cycle Q Clear(g_c), s				2.5	0.0	12.0	7.2	15.3	0.0	0.0	8.8	19.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				787	0	371	433	2813	0	0	1780	553
V/C Ratio(X)				0.21	0.00	0.83	0.80	0.63	0.00	0.00	0.50	0.89
Avail Cap(c_a), veh/h				1297	0	611	456	2992	0	0	1914	594
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.0	0.0	22.6	26.0	9.0	0.0	0.0	15.6	18.9
Incr Delay (d2), s/veh				0.1	0.0	5.0	9.6	0.3	0.0	0.0	0.1	14.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.8	0.0	4.2	2.8	3.5	0.0	0.0	2.7	7.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				19.1	0.0	27.5	35.6	9.3	0.0	0.0	15.7	32.9
LnGrp LOS				B	A	C	D	A	A	A	B	C
Approach Vol, veh/h					472			2131			1379	
Approach Delay, s/veh					24.6			13.6			21.8	
Approach LOS					C			B			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		41.8			13.2	28.6		21.1				
Change Period (Y+Rc), s		* 5.8			4.0	5.8		5.8				
Max Green Setting (Gmax), s		* 38			9.7	24.5		25.2				
Max Q Clear Time (g_c+I1), s		17.3			9.2	21.1		14.0				
Green Ext Time (p_c), s		8.6			0.1	1.7		1.3				

Intersection Summary		
HCM 6th Ctrl Delay	17.8	
HCM 6th LOS	B	

Notes

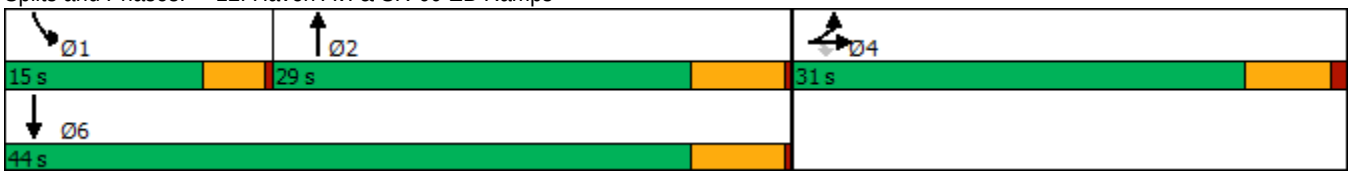
User approved volume balancing among the lanes for turning movement.

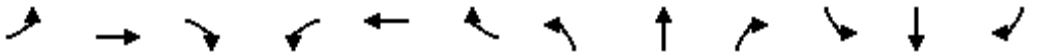
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	977	7	218	1048	373	618
Future Volume (vph)	977	7	218	1048	373	618
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.6	29.7
Total Split (s)	31.0	31.0	31.0	29.0	15.0	44.0
Total Split (%)	41.3%	41.3%	41.3%	38.7%	20.0%	58.7%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 74.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	977	7	218	0	0	0	0	1048	293	373	618	0
Future Volume (veh/h)	977	7	218	0	0	0	0	1048	293	373	618	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800				0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h	1033	0	88				0	1103	244	393	651	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	1096	0	516				0	1223	270	438	2490	0
Arrive On Green	0.34	0.00	0.34				0.00	0.30	0.30	0.15	0.51	0.00
Sat Flow, veh/h	3238	0	1525				0	4177	888	2956	5076	0
Grp Volume(v), veh/h	1033	0	88				0	900	447	393	651	0
Grp Sat Flow(s),veh/h/ln	1619	0	1525				0	1638	1627	1478	1638	0
Q Serve(g_s), s	23.0	0.0	3.0				0.0	19.5	19.6	9.7	5.6	0.0
Cycle Q Clear(g_c), s	23.0	0.0	3.0				0.0	19.5	19.6	9.7	5.6	0.0
Prop In Lane	1.00		1.00				0.00		0.55	1.00		0.00
Lane Grp Cap(c), veh/h	1096	0	516				0	998	495	438	2490	0
V/C Ratio(X)	0.94	0.00	0.17				0.00	0.90	0.90	0.90	0.26	0.00
Avail Cap(c_a), veh/h	1100	0	518				0	1029	511	438	2536	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.9	0.0	17.2				0.0	24.7	24.7	31.0	10.4	0.0
Incr Delay (d2), s/veh	15.3	0.0	0.2				0.0	10.4	18.3	20.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	0.0	1.0				0.0	8.0	9.0	4.4	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	0.0	17.4				0.0	35.1	43.0	51.8	10.4	0.0
LnGrp LOS	D	A	B				A	D	D	D	B	A
Approach Vol, veh/h		1121						1347			1044	
Approach Delay, s/veh		37.5						37.7			26.0	
Approach LOS		D						D			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.0	28.3		30.9		43.3						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	11.0	23.3		25.2		38.3						
Max Q Clear Time (g_c+I1), s	11.7	21.6		25.0		7.6						
Green Ext Time (p_c), s	0.0	1.0		0.1		2.6						

Intersection Summary			
HCM 6th Ctrl Delay			34.2
HCM 6th LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	797	7	13	492	0	4	0	1	0	0	0
Future Vol, veh/h	0	797	7	13	492	0	4	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	240	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	866	8	14	535	0	4	0	1	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	535	0	0	874	0	0	1112	1433	437	996	1437	268
Stage 1	-	-	-	-	-	-	870	870	-	563	563	-
Stage 2	-	-	-	-	-	-	242	563	-	433	874	-
Critical Hdwy	5.3	-	-	4.1	-	-	6.95	6.5	6.9	6.95	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.5	5.5	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.65	4	3.3	3.65	4	3.9
Pot Cap-1 Maneuver	659	-	-	781	-	-	192	135	573	229	135	627
Stage 1	-	-	-	-	-	-	309	372	-	413	512	-
Stage 2	-	-	-	-	-	-	709	512	-	558	370	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	659	-	-	781	-	-	189	133	573	225	133	627
Mov Cap-2 Maneuver	-	-	-	-	-	-	189	133	-	225	133	-
Stage 1	-	-	-	-	-	-	309	372	-	413	503	-
Stage 2	-	-	-	-	-	-	696	503	-	557	370	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	21.9	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	218	659	-	-	781	-	-	-
HCM Lane V/C Ratio	0.025	-	-	-	0.018	-	-	-
HCM Control Delay (s)	21.9	0	-	-	9.7	-	-	0
HCM Lane LOS	C	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	785	14	0	505	0	8
Future Vol, veh/h	785	14	0	505	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	853	15	0	549	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	434
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	576
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	576
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	576	-	-	-
HCM Lane V/C Ratio	0.015	-	-	-
HCM Control Delay (s)	11.3	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	763	30	0	505	0	19
Future Vol, veh/h	763	30	0	505	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	829	33	0	549	0	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	431
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	578
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	578
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	578	-	-	-
HCM Lane V/C Ratio	0.036	-	-	-
HCM Control Delay (s)	11.5	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	23	3	4	15	1	1
Future Vol, veh/h	23	3	4	15	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	3	4	16	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	28	0	43	14
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	16	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1599	-	968	1069
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	1010	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1599	-	965	1069
Mov Cap-2 Maneuver	-	-	-	-	939	-
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1000	-	-	1599	-
HCM Lane V/C Ratio	0.002	-	-	0.003	-
HCM Control Delay (s)	8.6	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	21	3	6	18	2	3
Future Vol, veh/h	21	3	6	18	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	23	3	7	20	2	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	26	0	49	13
Stage 1	-	-	-	-	25	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1601	-	960	1070
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1601	-	956	1070
Mov Cap-2 Maneuver	-	-	-	-	934	-
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	997	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1011	-	-	1601	-
HCM Lane V/C Ratio	0.005	-	-	0.004	-
HCM Control Delay (s)	8.6	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	22	17	14	1	7
Future Vol, veh/h	3	22	17	14	1	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	24	18	15	1	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	33	0	-	0	44	17
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	18	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1592	-	-	-	967	1064
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1008	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1592	-	-	-	965	1064
Mov Cap-2 Maneuver	-	-	-	-	939	-
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	1008	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1592	-	-	-	1047
HCM Lane V/C Ratio	0.002	-	-	-	0.008
HCM Control Delay (s)	7.3	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	35	76	1	1	1
Future Vol, veh/h	1	35	76	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	38	83	1	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	84	0	-	0	105	42
Stage 1	-	-	-	-	84	-
Stage 2	-	-	-	-	21	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1526	-	-	-	887	1026
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	1005	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1526	-	-	-	886	1026
Mov Cap-2 Maneuver	-	-	-	-	882	-
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	1005	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1526	-	-	-	949
HCM Lane V/C Ratio	0.001	-	-	-	0.002
HCM Control Delay (s)	7.4	-	-	-	8.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	581	714	8	0	2
Future Vol, veh/h	0	581	714	8	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	632	776	9	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	393
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	612
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	612
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	612
HCM Lane V/C Ratio	-	-	-	0.004
HCM Control Delay (s)	-	-	-	10.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	581	718	8	0	3
Future Vol, veh/h	0	581	718	8	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	632	780	9	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	395
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	610
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	610
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

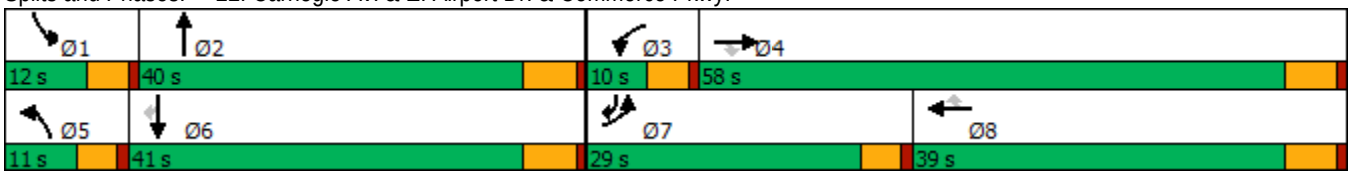
Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.9
HCM LOS			B

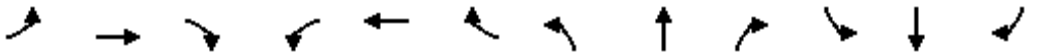
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	610
HCM Lane V/C Ratio	-	-	-	0.005
HCM Control Delay (s)	-	-	-	10.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	166	215	111	2	224	31	73	17	29	53	183
Future Volume (vph)	166	215	111	2	224	31	73	17	29	53	183
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	29.0	58.0	58.0	10.0	39.0	39.0	11.0	40.0	12.0	41.0	29.0
Total Split (%)	24.2%	48.3%	48.3%	8.3%	32.5%	32.5%	9.2%	33.3%	10.0%	34.2%	24.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 65.6
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	215	111	2	224	31	73	17	0	29	53	183
Future Volume (veh/h)	166	215	111	2	224	31	73	17	0	29	53	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1700
Adj Flow Rate, veh/h	200	259	133	2	270	25	88	20	0	35	64	161
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	248	1169	521	4	655	292	112	749	0	62	644	865
Arrive On Green	0.15	0.34	0.34	0.00	0.19	0.19	0.07	0.22	0.00	0.04	0.19	0.19
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	3510	0	1619	3420	2536
Grp Volume(v), veh/h	200	259	133	2	270	25	88	20	0	35	64	161
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	0	1619	1710	1268
Q Serve(g_s), s	6.2	2.8	3.3	0.1	3.6	0.7	2.8	0.2	0.0	1.1	0.8	2.3
Cycle Q Clear(g_c), s	6.2	2.8	3.3	0.1	3.6	0.7	2.8	0.2	0.0	1.1	0.8	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	1169	521	4	655	292	112	749	0	62	644	865
V/C Ratio(X)	0.81	0.22	0.26	0.45	0.41	0.09	0.79	0.03	0.00	0.57	0.10	0.19
Avail Cap(c_a), veh/h	756	3419	1525	167	2174	970	198	2240	0	229	2305	2097
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	12.2	12.4	26.0	18.5	17.4	23.9	16.0	0.0	24.7	17.5	12.1
Incr Delay (d2), s/veh	2.4	0.1	0.3	24.4	0.4	0.1	4.6	0.0	0.0	3.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	0.8	0.9	0.1	1.2	0.2	1.1	0.1	0.0	0.4	0.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	12.3	12.7	50.4	18.9	17.5	28.5	16.0	0.0	27.7	17.6	12.2
LnGrp LOS	C	B	B	D	B	B	C	B	A	C	B	B
Approach Vol, veh/h		592			297			108			260	
Approach Delay, s/veh		16.3			19.0			26.2			15.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	17.2	4.7	23.6	8.2	15.6	12.6	15.8
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	34.2	5.4	52.2	6.4	35.2	24.4	33.2
Max Q Clear Time (g_c+I1), s	3.1	2.2	2.1	5.3	4.8	4.3	8.2	5.6
Green Ext Time (p_c), s	0.0	0.1	0.0	2.0	0.0	1.0	0.2	1.6

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	1	0	0	1	5	84	1	3	139	23
Future Vol, veh/h	6	0	1	0	0	1	5	84	1	3	139	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	0	1	0	0	1	5	91	1	3	151	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	226	272	88	184	284	46	176	0	0	92	0	0
Stage 1	170	170	-	102	102	-	-	-	-	-	-	-
Stage 2	56	102	-	82	182	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	715	638	959	766	628	1020	1412	-	-	1515	-	-
Stage 1	821	762	-	899	815	-	-	-	-	-	-	-
Stage 2	955	815	-	923	753	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	711	634	959	762	624	1020	1412	-	-	1515	-	-
Mov Cap-2 Maneuver	764	694	-	813	684	-	-	-	-	-	-	-
Stage 1	818	760	-	895	812	-	-	-	-	-	-	-
Stage 2	951	812	-	920	751	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	8.5	0.4	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1412	-	-	787	1020	1515	-	-
HCM Lane V/C Ratio	0.004	-	-	0.01	0.001	0.002	-	-
HCM Control Delay (s)	7.6	-	-	9.6	8.5	7.4	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	87	1	7	134
Future Vol, veh/h	0	2	87	1	7	134
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	95	1	8	146

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	185	48	0	0	96	0
Stage 1	96	-	-	-	-	-
Stage 2	89	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	792	1017	-	-	1510	-
Stage 1	923	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	788	1017	-	-	1510	-
Mov Cap-2 Maneuver	834	-	-	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	925	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.5	0	0.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1017	1510	-
HCM Lane V/C Ratio	-	-	0.002	0.005	-
HCM Control Delay (s)	-	-	8.5	7.4	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1	14	85	129	5
Future Vol, veh/h	3	1	14	85	129	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	1	15	92	140	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	219	73	145	0	-	0
Stage 1	143	-	-	-	-	-
Stage 2	76	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	755	981	1450	-	-	-
Stage 1	875	-	-	-	-	-
Stage 2	944	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	747	981	1450	-	-	-
Mov Cap-2 Maneuver	801	-	-	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	944	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	1.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1450	-	840	-	-
HCM Lane V/C Ratio	0.01	-	0.005	-	-
HCM Control Delay (s)	7.5	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	1	7	0	32	11	65	30	42	86	3
Future Vol, veh/h	2	0	1	7	0	32	11	65	30	42	86	3
Peak Hour Factor	0.92	0.92	0.92	0.64	0.92	0.64	0.92	0.64	0.64	0.64	0.64	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	1	11	0	50	12	102	47	66	134	3
Number of Lanes	0	1	0	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	1
HCM Control Delay	8.4	7.7	8.1	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	67%	100%	4%	0%	100%	0%	0%
Vol Thru, %	0%	100%	42%	0%	0%	0%	0%	0%	100%	91%
Vol Right, %	0%	0%	58%	33%	0%	96%	100%	0%	0%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	43	52	3	6	16	16	42	57	32
LT Vol	11	0	0	2	6	1	0	42	0	0
Through Vol	0	43	22	0	0	0	0	0	57	29
RT Vol	0	0	30	1	0	15	16	0	0	3
Lane Flow Rate	12	68	81	3	10	26	26	66	90	48
Geometry Grp	8	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.019	0.095	0.105	0.005	0.016	0.033	0.033	0.1	0.124	0.066
Departure Headway (Hd)	5.572	5.072	4.665	5.625	5.817	4.671	4.619	5.476	4.975	4.909
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	644	708	769	636	616	767	775	656	722	731
Service Time	3.295	2.794	2.387	3.363	3.544	2.398	2.347	3.199	2.698	2.632
HCM Lane V/C Ratio	0.019	0.096	0.105	0.005	0.016	0.034	0.034	0.101	0.125	0.066
HCM Control Delay	8.4	8.3	7.9	8.4	8.6	7.6	7.5	8.8	8.4	8
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.3	0.4	0	0	0.1	0.1	0.3	0.4	0.2

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	18	40	94	83	11
Future Vol, veh/h	12	18	40	94	83	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	20	43	102	90	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	233	51	102	0	-	0
Stage 1	96	-	-	-	-	-
Stage 2	137	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	740	1013	1503	-	-	-
Stage 1	923	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	719	1013	1503	-	-	-
Mov Cap-2 Maneuver	789	-	-	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	881	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	2.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1503	-	910	-	-
HCM Lane V/C Ratio	0.029	-	0.036	-	-
HCM Control Delay (s)	7.5	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	9	133	88	13
Future Vol, veh/h	1	5	9	133	88	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	5	10	145	96	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	196	55	110	0	-	0
Stage 1	103	-	-	-	-	-
Stage 2	93	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	780	1007	1493	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	926	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	775	1007	1493	-	-	-
Mov Cap-2 Maneuver	826	-	-	-	-	-
Stage 1	910	-	-	-	-	-
Stage 2	926	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1493	-	972	-	-
HCM Lane V/C Ratio	0.007	-	0.007	-	-
HCM Control Delay (s)	7.4	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	17	43	123	59	34
Future Vol, veh/h	18	17	43	123	59	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	20	18	47	134	64	37
Number of Lanes	1	1	1	2	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	8	7.4	7.7
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	37%
Vol Right, %	0%	0%	0%	0%	100%	0%	63%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	43	62	62	18	17	39	54
LT Vol	43	0	0	18	0	0	0
Through Vol	0	62	62	0	0	39	20
RT Vol	0	0	0	0	17	0	34
Lane Flow Rate	47	67	67	20	18	43	58
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.069	0.089	0.058	0.031	0.023	0.058	0.072
Departure Headway (Hd)	5.312	4.811	3.108	5.658	4.457	4.917	4.473
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	678	749	1159	635	806	731	804
Service Time	3.012	2.511	0.808	3.371	2.17	2.629	2.185
HCM Lane V/C Ratio	0.069	0.089	0.058	0.031	0.022	0.059	0.072
HCM Control Delay	8.4	8	6	8.6	7.3	7.9	7.5
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.2	0.1	0.1	0.2	0.2

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	1	166	12	0	76
Future Vol, veh/h	2	1	166	12	0	76
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	1	180	13	0	83

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	229	97	0	0	193	0
Stage 1	187	-	-	-	-	-
Stage 2	42	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	744	947	-	-	1392	-
Stage 1	832	-	-	-	-	-
Stage 2	981	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	744	947	-	-	1392	-
Mov Cap-2 Maneuver	782	-	-	-	-	-
Stage 1	832	-	-	-	-	-
Stage 2	981	-	-	-	-	-

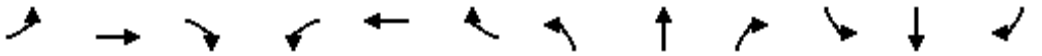
Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	830	1392	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	-	-	9.4	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	106	661	7	765	103	9	3	22	61
Future Volume (vph)	106	661	7	765	103	9	3	22	61
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	81.0	81.0	81.0	81.0	81.0	39.0	39.0	39.0	39.0
Total Split (%)	67.5%	67.5%	67.5%	67.5%	67.5%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 36.1
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	661	3	7	765	103	9	0	3	22	0	61
Future Volume (veh/h)	106	661	3	7	765	103	9	0	3	22	0	61
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	118	734	3	8	850	114	10	0	2	24	0	58
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	449	2837	12	552	1921	846	333	163	138	339	163	139
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.09	0.00	0.09	0.09	0.00	0.09
Sat Flow, veh/h	559	5051	21	691	3420	1507	1291	1800	1522	1353	1800	1525
Grp Volume(v), veh/h	118	476	261	8	850	114	10	0	2	24	0	58
Grp Sat Flow(s),veh/h/ln	559	1638	1796	691	1710	1507	1291	1800	1522	1353	1800	1525
Q Serve(g_s), s	5.2	2.5	2.5	0.2	4.8	1.2	0.2	0.0	0.0	0.5	0.0	1.2
Cycle Q Clear(g_c), s	10.0	2.5	2.5	2.7	4.8	1.2	0.2	0.0	0.0	0.5	0.0	1.2
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	449	1840	1009	552	1921	846	333	163	138	339	163	139
V/C Ratio(X)	0.26	0.26	0.26	0.01	0.44	0.13	0.03	0.00	0.01	0.07	0.00	0.42
Avail Cap(c_a), veh/h	1394	7381	4046	1722	7706	3394	1546	1855	1569	1562	1791	1517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.2	3.8	3.8	4.4	4.3	3.5	13.9	0.0	13.8	14.0	0.0	14.3
Incr Delay (d2), s/veh	0.3	0.1	0.1	0.0	0.2	0.1	0.0	0.0	0.0	0.1	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.2	0.0	0.3	0.1	0.1	0.0	0.0	0.1	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	3.8	3.9	4.5	4.4	3.5	13.9	0.0	13.9	14.1	0.0	16.3
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	B
Approach Vol, veh/h		855			972			12			82	
Approach Delay, s/veh		4.4			4.3			13.9			15.7	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		8.8		24.5		8.8		24.5				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 34		75.2		33.2		75.2				
Max Q Clear Time (g_c+I1), s		2.2		12.0		3.2		6.8				
Green Ext Time (p_c), s		0.0		6.7		0.2		7.0				

Intersection Summary												
HCM 6th Ctrl Delay			4.9									
HCM 6th LOS			A									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	57	10	0	35	5	2	0	0	0	0	2
Future Vol, veh/h	6	57	10	0	35	5	2	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	62	11	0	38	5	2	0	0	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	43	0	0	73	0	0	101	125	37	86	128	22
Stage 1	-	-	-	-	-	-	82	82	-	41	41	-
Stage 2	-	-	-	-	-	-	19	43	-	45	87	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1579	-	-	1540	-	-	875	769	1034	896	766	1056
Stage 1	-	-	-	-	-	-	923	831	-	974	865	-
Stage 2	-	-	-	-	-	-	1003	863	-	969	827	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1579	-	-	1540	-	-	871	766	1034	893	763	1056
Mov Cap-2 Maneuver	-	-	-	-	-	-	868	773	-	895	771	-
Stage 1	-	-	-	-	-	-	919	828	-	970	865	-
Stage 2	-	-	-	-	-	-	1001	863	-	965	824	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	9.2	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	868	1579	-	-	1540	-	-	1056
HCM Lane V/C Ratio	0.003	0.004	-	-	-	-	-	0.002
HCM Control Delay (s)	9.2	7.3	-	-	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	29	18	4	28	8	3	0	11	0	0	9
Future Vol, veh/h	10	29	18	4	28	8	3	0	11	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	32	20	4	30	9	3	0	12	0	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	52	0	0	87	111	26	81	117	20
Stage 1	-	-	-	-	-	-	64	64	-	43	43	-
Stage 2	-	-	-	-	-	-	23	47	-	38	74	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1584	-	-	1567	-	-	895	783	1050	904	777	1060
Stage 1	-	-	-	-	-	-	945	846	-	972	863	-
Stage 2	-	-	-	-	-	-	998	860	-	978	837	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1584	-	-	1567	-	-	881	775	1050	887	769	1060
Mov Cap-2 Maneuver	-	-	-	-	-	-	880	778	-	888	774	-
Stage 1	-	-	-	-	-	-	938	840	-	965	860	-
Stage 2	-	-	-	-	-	-	986	857	-	960	831	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.7	8.6	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1008	1584	-	-	1567	-	-	1060
HCM Lane V/C Ratio	0.015	0.007	-	-	0.003	-	-	0.009
HCM Control Delay (s)	8.6	7.3	-	-	7.3	-	-	8.4
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	0	258	229	8
Future Vol, veh/h	0	2	0	258	229	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	0	280	249	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	129	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	767	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	767	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	767	-	-
HCM Lane V/C Ratio	-	0.003	-	-
HCM Control Delay (s)	-	9.7	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	258	228	4
Future Vol, veh/h	0	7	0	258	228	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	8	0	280	248	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	126	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	770	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	770	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	770	-	-
HCM Lane V/C Ratio	-	0.01	-	-
HCM Control Delay (s)	-	9.7	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	257	6	0	234
Future Vol, veh/h	0	2	257	6	0	234
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	279	7	0	254

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	143	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	752	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	752	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	752	-
HCM Lane V/C Ratio	-	-	0.003	-
HCM Control Delay (s)	-	-	9.8	-
HCM Lane LOS	-	-	A	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	24	10	1	6	38	30	219	25	115	116	3
Future Vol, veh/h	6	24	10	1	6	38	30	219	25	115	116	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	25	11	1	6	40	32	231	26	121	122	3
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.8	8.5	9.1	9.3
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	74%	0%	100%	44%	0%	100%	5%	0%	100%
Vol Right, %	0%	0%	26%	0%	0%	56%	0%	0%	95%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	146	98	6	16	18	1	4	40	115	77
LT Vol	30	0	0	6	0	0	1	0	0	115	0
Through Vol	0	146	73	0	16	8	0	4	2	0	77
RT Vol	0	0	25	0	0	10	0	0	38	0	0
Lane Flow Rate	32	154	103	6	17	19	1	4	42	121	81
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.05	0.224	0.145	0.011	0.028	0.029	0.002	0.007	0.062	0.195	0.12
Departure Headway (Hd)	5.756	5.256	5.077	6.446	5.946	5.557	6.444	5.944	5.279	5.804	5.304
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	621	681	705	552	598	640	553	599	674	616	673
Service Time	3.503	3.003	2.824	4.218	3.718	3.329	4.213	3.713	3.048	3.556	3.056
HCM Lane V/C Ratio	0.052	0.226	0.146	0.011	0.028	0.03	0.002	0.007	0.062	0.196	0.12
HCM Control Delay	8.8	9.5	8.7	9.3	8.9	8.5	9.2	8.8	8.4	10	8.8
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.9	0.5	0	0.1	0.1	0	0	0.2	0.7	0.4

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	274	111	16
Future Vol, veh/h	0	8	0	274	111	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	9	0	298	121	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	69	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	986	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	986	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	986	-	-
HCM Lane V/C Ratio	-	0.009	-	-
HCM Control Delay (s)	-	8.7	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	15	258	46	4	115
Future Vol, veh/h	23	15	258	46	4	115
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	16	280	50	4	125

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	376	165	0	0	330	0
Stage 1	305	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.25	7.1	-	-	5.3	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.65	3.9	-	-	3.1	-
Pot Cap-1 Maneuver	618	728	-	-	821	-
Stage 1	656	-	-	-	-	-
Stage 2	912	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	615	728	-	-	821	-
Mov Cap-2 Maneuver	615	-	-	-	-	-
Stage 1	656	-	-	-	-	-
Stage 2	907	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.9	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	655	821	-
HCM Lane V/C Ratio	-	-	0.063	0.005	-
HCM Control Delay (s)	-	-	10.9	9.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	302	10	0	137
Future Vol, veh/h	0	2	302	10	0	137
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	328	11	0	149

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	170	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	723	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	723	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

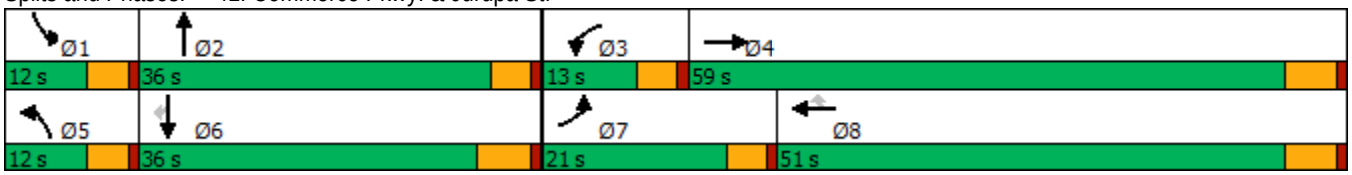
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	723	-
HCM Lane V/C Ratio	-	-	0.003	-
HCM Control Delay (s)	-	-	10	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

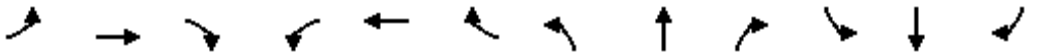
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	109	561	20	821	204	14	5	87	4	40
Future Volume (vph)	109	561	20	821	204	14	5	87	4	40
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	21.0	59.0	13.0	51.0	51.0	12.0	36.0	12.0	36.0	36.0
Total Split (%)	17.5%	49.2%	10.8%	42.5%	42.5%	10.0%	30.0%	10.0%	30.0%	30.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 70.3
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	561	14	20	821	204	14	5	34	87	4	40
Future Volume (veh/h)	109	561	14	20	821	204	14	5	34	87	4	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	118	610	14	22	892	0	15	5	26	95	4	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	148	2129	49	41	1248		30	32	167	197	316	268
Arrive On Green	0.09	0.43	0.43	0.03	0.36	0.00	0.02	0.13	0.13	0.07	0.18	0.18
Sat Flow, veh/h	1619	4942	113	1619	3420	1525	1619	252	1312	2956	1800	1525
Grp Volume(v), veh/h	118	404	220	22	892	0	15	0	31	95	4	36
Grp Sat Flow(s),veh/h/ln	1619	1638	1780	1619	1710	1525	1619	0	1564	1478	1800	1525
Q Serve(g_s), s	4.2	4.8	4.8	0.8	13.3	0.0	0.5	0.0	1.0	1.8	0.1	1.2
Cycle Q Clear(g_c), s	4.2	4.8	4.8	0.8	13.3	0.0	0.5	0.0	1.0	1.8	0.1	1.2
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.84	1.00		1.00
Lane Grp Cap(c), veh/h	148	1411	767	41	1248		30	0	199	197	316	268
V/C Ratio(X)	0.80	0.29	0.29	0.53	0.71		0.50	0.00	0.16	0.48	0.01	0.13
Avail Cap(c_a), veh/h	446	2929	1591	229	2598		201	0	825	368	914	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	11.0	11.0	28.6	16.2	0.0	28.9	0.0	23.1	26.8	20.3	20.7
Incr Delay (d2), s/veh	3.7	0.1	0.2	3.9	0.8	0.0	4.8	0.0	0.4	0.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.4	1.5	0.3	4.3	0.0	0.2	0.0	0.4	0.6	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.2	11.1	11.2	32.5	17.0	0.0	33.7	0.0	23.5	27.5	20.3	20.9
LnGrp LOS	C	B	B	C	B		C	A	C	C	C	C
Approach Vol, veh/h		742			914	A		46			135	
Approach Delay, s/veh		14.2			17.4			26.8			25.5	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	13.4	6.1	31.4	5.7	16.2	10.0	27.5
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	* 31	8.4	53.2	7.4	30.2	16.4	45.2
Max Q Clear Time (g_c+I1), s	3.8	3.0	2.8	6.8	2.5	3.2	6.2	15.3
Green Ext Time (p_c), s	0.0	0.1	0.0	4.0	0.0	0.1	0.1	6.4

Intersection Summary	
HCM 6th Ctrl Delay	16.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	138	19	3	42	2	3	0	2	1	0	1
Future Vol, veh/h	6	138	19	3	42	2	3	0	2	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	150	21	3	46	2	3	0	2	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	48	0	0	171	0	0	204	229	86	142	238	24
Stage 1	-	-	-	-	-	-	175	175	-	53	53	-
Stage 2	-	-	-	-	-	-	29	54	-	89	185	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1572	-	-	1418	-	-	741	674	962	819	666	1053
Stage 1	-	-	-	-	-	-	816	758	-	959	855	-
Stage 2	-	-	-	-	-	-	990	854	-	914	751	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1572	-	-	1418	-	-	737	670	962	813	662	1053
Mov Cap-2 Maneuver	-	-	-	-	-	-	737	670	-	813	662	-
Stage 1	-	-	-	-	-	-	813	755	-	955	853	-
Stage 2	-	-	-	-	-	-	987	852	-	908	748	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.5	9.5	8.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	813	1572	-	-	1418	-	-	918
HCM Lane V/C Ratio	0.007	0.004	-	-	0.002	-	-	0.002
HCM Control Delay (s)	9.5	7.3	-	-	7.5	-	-	8.9
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	128	5	11	43	1	1	0	3	2	0	3
Future Vol, veh/h	7	128	5	11	43	1	1	0	3	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	139	5	12	47	1	1	0	3	2	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	48	0	0	144	0	0	206	230	72	158	232	24
Stage 1	-	-	-	-	-	-	158	158	-	72	72	-
Stage 2	-	-	-	-	-	-	48	72	-	86	160	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1572	-	-	1451	-	-	739	673	982	798	672	1053
Stage 1	-	-	-	-	-	-	834	771	-	935	839	-
Stage 2	-	-	-	-	-	-	965	839	-	918	769	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1572	-	-	1451	-	-	729	664	982	788	663	1053
Mov Cap-2 Maneuver	-	-	-	-	-	-	729	664	-	788	663	-
Stage 1	-	-	-	-	-	-	830	767	-	930	832	-
Stage 2	-	-	-	-	-	-	954	832	-	910	765	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.4	1.5	9	8.9
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	904	1572	-	-	1451	-	-	928
HCM Lane V/C Ratio	0.005	0.005	-	-	0.008	-	-	0.006
HCM Control Delay (s)	9	7.3	-	-	7.5	-	-	8.9
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	2	43	30	1
Future Vol, veh/h	2	1	2	43	30	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	1	2	47	33	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	62	17	34	0	-	0
Stage 1	34	-	-	-	-	-
Stage 2	28	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	943	1064	1591	-	-	-
Stage 1	990	-	-	-	-	-
Stage 2	997	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	942	1064	1591	-	-	-
Mov Cap-2 Maneuver	926	-	-	-	-	-
Stage 1	989	-	-	-	-	-
Stage 2	997	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.7	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1591	-	968	-	-
HCM Lane V/C Ratio	0.001	-	0.003	-	-
HCM Control Delay (s)	7.3	-	8.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	45	61	8	25	10	12	9	2	9	5	17
Future Vol, veh/h	26	45	61	8	25	10	12	9	2	9	5	17
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	28	48	65	9	27	11	13	10	2	10	5	18
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.6	7.6	8	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	60%	0%	100%	20%	0%	100%	45%	0%	100%
Vol Right, %	0%	0%	40%	0%	0%	80%	0%	0%	55%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	12	6	5	26	30	76	8	17	18	9	3
LT Vol	12	0	0	26	0	0	8	0	0	9	0
Through Vol	0	6	3	0	30	15	0	17	8	0	3
RT Vol	0	0	2	0	0	61	0	0	10	0	0
Lane Flow Rate	13	6	5	28	32	81	9	18	20	10	4
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.02	0.009	0.007	0.04	0.041	0.092	0.013	0.024	0.024	0.015	0.005
Departure Headway (Hd)	5.516	5.016	4.736	5.165	4.665	4.103	5.403	4.903	4.521	5.506	5.006
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	652	717	759	686	758	861	666	734	796	654	719
Service Time	3.221	2.721	2.441	2.95	2.45	1.888	3.109	2.609	2.227	3.209	2.709
HCM Lane V/C Ratio	0.02	0.008	0.007	0.041	0.042	0.094	0.014	0.025	0.025	0.015	0.006
HCM Control Delay	8.3	7.8	7.5	8.2	7.7	7.3	8.2	7.7	7.3	8.3	7.7
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0	0	0.1	0.1	0.3	0	0.1	0.1	0	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	32	17	4	47	0	3
Future Vol, veh/h	32	17	4	47	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	35	18	4	51	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	53	0	78	27
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	34	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1566	-	922	1049
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	990	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1566	-	919	1049
Mov Cap-2 Maneuver	-	-	-	-	913	-
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	987	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1049	-	-	1566	-
HCM Lane V/C Ratio	0.003	-	-	0.003	-
HCM Control Delay (s)	8.4	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	33	7	11	22	11	24	68	8	3	34	8
Future Vol, veh/h	8	33	7	11	22	11	24	68	8	3	34	8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	36	8	12	24	12	26	75	9	3	37	9
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.9	7.8	7.9	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	74%	0%	100%	61%	0%	100%	40%	0%	100%
Vol Right, %	0%	0%	26%	0%	0%	39%	0%	0%	60%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	45	31	8	22	18	11	15	18	3	23
LT Vol	24	0	0	8	0	0	11	0	0	3	0
Through Vol	0	45	23	0	22	11	0	15	7	0	23
RT Vol	0	0	8	0	0	7	0	0	11	0	0
Lane Flow Rate	26	50	34	9	24	20	12	16	20	3	25
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.039	0.067	0.044	0.013	0.034	0.026	0.019	0.022	0.026	0.005	0.034
Departure Headway (Hd)	5.365	4.865	4.682	5.509	5.009	4.737	5.518	5.018	4.598	5.481	4.981
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	670	739	768	652	717	758	651	716	781	655	721
Service Time	3.076	2.576	2.393	3.222	2.722	2.449	3.23	2.73	2.31	3.193	2.693
HCM Lane V/C Ratio	0.039	0.068	0.044	0.014	0.033	0.026	0.018	0.022	0.026	0.005	0.035
HCM Control Delay	8.3	7.9	7.6	8.3	7.9	7.6	8.3	7.8	7.4	8.2	7.9
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	32	47	115	22	4
Future Vol, veh/h	1	32	47	115	22	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	38	56	137	26	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	210	16	31	0	-	0
Stage 1	29	-	-	-	-	-
Stage 2	181	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	765	1066	1595	-	-	-
Stage 1	996	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	738	1066	1595	-	-	-
Mov Cap-2 Maneuver	784	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	2.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1595	-	784	1066	-	-
HCM Lane V/C Ratio	0.035	-	0.002	0.036	-	-
HCM Control Delay (s)	7.3	-	9.6	8.5	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	3	2	174	39	8
Future Vol, veh/h	2	3	2	174	39	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	3	2	189	42	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	146	26	51	0	-	0
Stage 1	47	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	837	1050	1568	-	-	-
Stage 1	976	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	836	1050	1568	-	-	-
Mov Cap-2 Maneuver	858	-	-	-	-	-
Stage 1	975	-	-	-	-	-
Stage 2	920	-	-	-	-	-

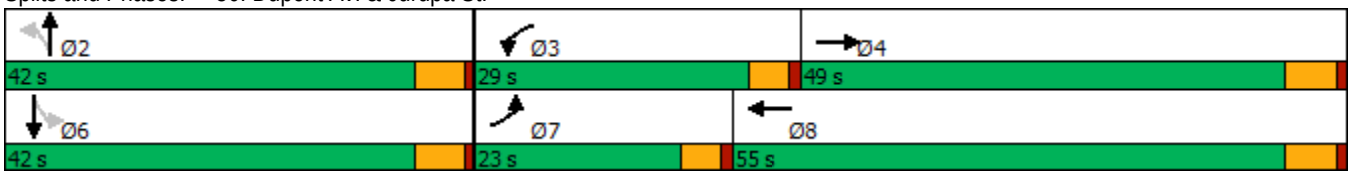
Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.1	0
HCM LOS	A		

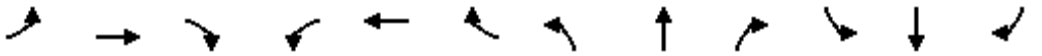
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1568	-	964	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	7.3	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	57	574	100	986	24	33	17	6
Future Volume (vph)	57	574	100	986	24	33	17	6
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	23.0	49.0	29.0	55.0	42.0	42.0	42.0	42.0
Total Split (%)	19.2%	40.8%	24.2%	45.8%	35.0%	35.0%	35.0%	35.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 51.5
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





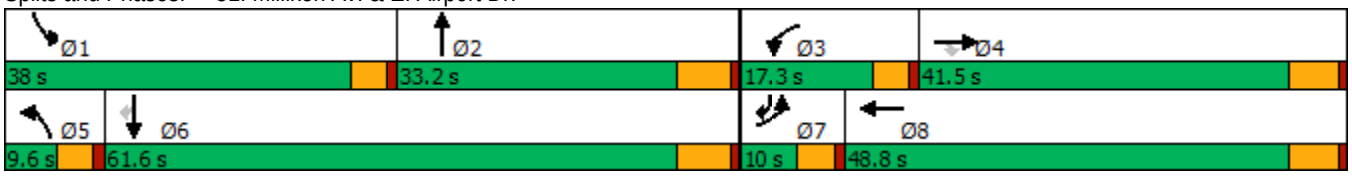
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	574	19	100	986	86	24	33	90	17	6	19
Future Volume (veh/h)	57	574	19	100	986	86	24	33	90	17	6	19
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	58	586	18	102	1006	87	24	34	68	17	6	13
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	93	1821	56	130	1818	157	411	332	296	355	332	296
Arrive On Green	0.06	0.37	0.37	0.08	0.39	0.39	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1619	4899	150	1619	4607	398	1337	1710	1525	1240	1710	1525
Grp Volume(v), veh/h	58	391	213	102	715	378	24	34	68	17	6	13
Grp Sat Flow(s),veh/h/ln	1619	1638	1773	1619	1638	1728	1337	1710	1525	1240	1710	1525
Q Serve(g_s), s	1.6	3.8	3.8	2.8	7.5	7.6	0.7	0.7	1.7	0.5	0.1	0.3
Cycle Q Clear(g_c), s	1.6	3.8	3.8	2.8	7.5	7.6	1.0	0.7	1.7	2.2	0.1	0.3
Prop In Lane	1.00		0.08	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	93	1218	659	130	1293	682	411	332	296	355	332	296
V/C Ratio(X)	0.62	0.32	0.32	0.78	0.55	0.55	0.06	0.10	0.23	0.05	0.02	0.04
Avail Cap(c_a), veh/h	667	3171	1716	885	3611	1905	1248	1402	1251	1132	1402	1251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	10.0	10.0	20.1	10.5	10.5	15.0	14.8	15.2	16.1	14.5	14.6
Incr Delay (d2), s/veh	2.5	0.2	0.3	3.9	0.4	0.7	0.1	0.1	0.4	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.0	1.1	1.0	1.9	2.0	0.2	0.2	0.5	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.1	10.2	10.3	24.0	10.8	11.2	15.1	14.9	15.6	16.2	14.6	14.7
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		662			1195			126			36	
Approach Delay, s/veh		11.3			12.1			15.3			15.4	
Approach LOS		B			B			B			B	
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.1	8.2	22.4		14.1	7.2	23.4				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		36.6	24.4	43.2		36.6	18.4	49.2				
Max Q Clear Time (g_c+I1), s		3.7	4.8	5.8		4.2	3.6	9.6				
Green Ext Time (p_c), s		0.6	0.1	3.8		0.1	0.0	8.0				
Intersection Summary												
HCM 6th Ctrl Delay			12.1									
HCM 6th LOS			B									

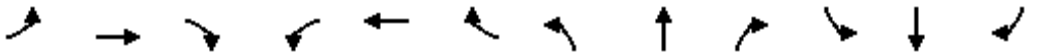
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	80	116	23	84	161	23	660	365	886	174
Future Volume (vph)	80	116	23	84	161	23	660	365	886	174
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	10.0	41.5	41.5	17.3	48.8	9.6	33.2	38.0	61.6	10.0
Total Split (%)	7.7%	31.9%	31.9%	13.3%	37.5%	7.4%	25.5%	29.2%	47.4%	7.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 103.9
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	116	23	84	161	223	23	660	77	365	886	174
Future Volume (veh/h)	80	116	23	84	161	223	23	660	77	365	886	174
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	93	135	14	98	187	158	27	767	74	424	1030	153
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	471	210	122	286	228	84	1066	102	462	2410	831
Arrive On Green	0.06	0.14	0.14	0.08	0.16	0.16	0.03	0.23	0.23	0.29	0.49	0.49
Sat Flow, veh/h	2956	3420	1525	1619	1808	1440	2956	4559	437	1619	4914	1524
Grp Volume(v), veh/h	93	135	14	98	176	169	27	550	291	424	1030	153
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1619	1710	1538	1478	1638	1721	1619	1638	1524
Q Serve(g_s), s	2.4	2.8	0.6	4.7	7.7	8.2	0.7	12.2	12.3	20.1	10.7	4.0
Cycle Q Clear(g_c), s	2.4	2.8	0.6	4.7	7.7	8.2	0.7	12.2	12.3	20.1	10.7	4.0
Prop In Lane	1.00		1.00	1.00		0.94	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	163	471	210	122	270	243	84	766	402	462	2410	831
V/C Ratio(X)	0.57	0.29	0.07	0.80	0.65	0.69	0.32	0.72	0.72	0.92	0.43	0.18
Avail Cap(c_a), veh/h	202	1543	688	260	930	836	187	1118	587	684	3442	1151
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.5	30.6	29.7	36.0	31.2	31.5	37.7	27.9	28.0	27.4	13.0	9.1
Incr Delay (d2), s/veh	1.2	0.3	0.1	4.5	2.6	3.5	0.8	1.3	2.5	10.4	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.1	0.2	1.9	3.1	3.1	0.2	4.5	4.8	8.2	3.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.6	30.9	29.8	40.5	33.9	35.0	38.5	29.2	30.4	37.7	13.1	9.2
LnGrp LOS	D	C	C	D	C	D	D	C	C	D	B	A
Approach Vol, veh/h		242			443			868			1607	
Approach Delay, s/veh		33.5			35.8			29.9			19.2	
Approach LOS		C			D			C			B	

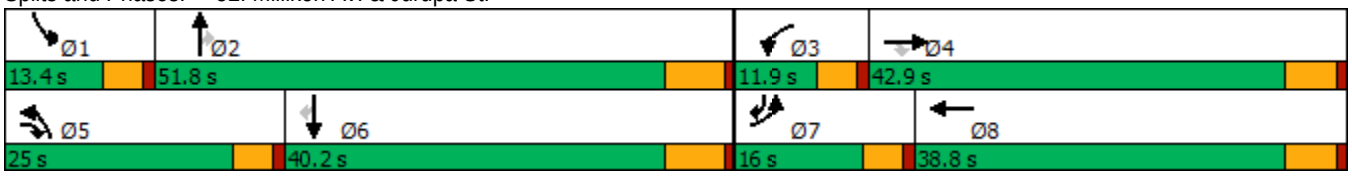
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.1	24.7	10.6	16.7	6.8	45.0	9.0	18.3
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	33.4	27.0	12.7	35.7	5.0	55.4	5.4	43.0
Max Q Clear Time (g_c+I1), s	22.1	14.3	6.7	4.8	2.7	12.7	4.4	10.2
Green Ext Time (p_c), s	0.5	3.9	0.0	0.8	0.0	8.5	0.0	2.0

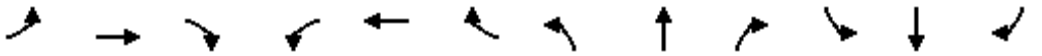
Intersection Summary	
HCM 6th Ctrl Delay	25.6
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	225	792	324	110	630	505	821	114	143	416	70
Future Volume (vph)	225	792	324	110	630	505	821	114	143	416	70
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	16.0	42.9	25.0	11.9	38.8	25.0	51.8	51.8	13.4	40.2	16.0
Total Split (%)	13.3%	35.8%	20.8%	9.9%	32.3%	20.8%	43.2%	43.2%	11.2%	33.5%	13.3%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 88.2
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	792	324	110	630	76	505	821	114	143	416	70
Future Volume (veh/h)	225	792	324	110	630	76	505	821	114	143	416	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	232	816	229	113	649	53	521	846	100	147	429	36
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	322	1326	715	205	1078	87	625	1368	425	225	742	387
Arrive On Green	0.10	0.27	0.27	0.07	0.23	0.23	0.20	0.28	0.28	0.07	0.15	0.15
Sat Flow, veh/h	3141	4914	1525	3141	4633	376	3141	4914	1525	3141	4914	1525
Grp Volume(v), veh/h	232	816	229	113	458	244	521	846	100	147	429	36
Grp Sat Flow(s),veh/h/ln	1570	1638	1525	1570	1638	1732	1570	1638	1525	1570	1638	1525
Q Serve(g_s), s	4.8	9.8	6.3	2.3	8.4	8.5	10.7	10.1	3.4	3.1	5.5	1.2
Cycle Q Clear(g_c), s	4.8	9.8	6.3	2.3	8.4	8.5	10.7	10.1	3.4	3.1	5.5	1.2
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	322	1326	715	205	762	403	625	1368	425	225	742	387
V/C Ratio(X)	0.72	0.62	0.32	0.55	0.60	0.61	0.83	0.62	0.24	0.65	0.58	0.09
Avail Cap(c_a), veh/h	532	2708	1144	341	1606	849	952	3329	1033	411	2482	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	21.5	11.2	30.5	23.0	23.1	25.9	21.2	18.8	30.4	26.6	19.2
Incr Delay (d2), s/veh	1.1	0.5	0.3	0.9	0.8	1.5	2.3	0.5	0.3	1.2	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	3.3	1.8	0.8	2.9	3.2	3.7	3.4	1.1	1.1	1.9	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.4	22.0	11.4	31.4	23.8	24.6	28.2	21.6	19.0	31.7	27.3	19.3
LnGrp LOS	C	C	B	C	C	C	C	C	B	C	C	B
Approach Vol, veh/h		1277			815			1467			612	
Approach Delay, s/veh		21.6			25.1			23.8			27.9	
Approach LOS		C			C			C			C	

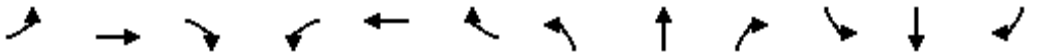
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	24.9	9.0	24.0	18.0	16.4	11.5	21.5
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	8.8	45.6	7.3	37.1	20.4	34.0	11.4	33.0
Max Q Clear Time (g_c+I1), s	5.1	12.1	4.3	11.8	12.7	7.5	6.8	10.5
Green Ext Time (p_c), s	0.1	6.2	0.0	6.4	0.7	2.7	0.2	4.1

Intersection Summary	
HCM 6th Ctrl Delay	24.0
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	222	2	21	17	257	327	1333	129	618	363
Future Volume (vph)	222	2	21	17	257	327	1333	129	618	363
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	21.0	33.0	12.0	24.0	24.0	22.0	59.0	16.0	53.0	53.0
Total Split (%)	17.5%	27.5%	10.0%	20.0%	20.0%	18.3%	49.2%	13.3%	44.2%	44.2%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 92.6
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	2	52	21	17	257	327	1333	15	129	618	363
Future Volume (veh/h)	222	2	52	21	17	257	327	1333	15	129	618	363
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	247	2	49	23	0	232	363	1481	16	143	687	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	330	13	307	41	0	392	449	2086	23	214	1679	
Arrive On Green	0.11	0.21	0.21	0.03	0.00	0.13	0.14	0.42	0.42	0.07	0.34	0.00
Sat Flow, veh/h	3141	60	1474	1619	0	3051	3141	5012	54	3141	4914	1525
Grp Volume(v), veh/h	247	0	51	23	0	232	363	968	529	143	687	0
Grp Sat Flow(s),veh/h/ln	1570	0	1535	1619	0	1525	1570	1638	1790	1570	1638	1525
Q Serve(g_s), s	5.9	0.0	2.1	1.1	0.0	5.6	8.7	19.0	19.0	3.5	8.3	0.0
Cycle Q Clear(g_c), s	5.9	0.0	2.1	1.1	0.0	5.6	8.7	19.0	19.0	3.5	8.3	0.0
Prop In Lane	1.00		0.96	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	330	0	320	41	0	392	449	1364	745	214	1679	
V/C Ratio(X)	0.75	0.00	0.16	0.56	0.00	0.59	0.81	0.71	0.71	0.67	0.41	
Avail Cap(c_a), veh/h	663	0	523	154	0	687	703	2227	1217	461	2960	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	0.0	25.2	37.4	0.0	31.9	32.3	18.8	18.8	35.3	19.6	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.2	4.5	0.0	1.4	1.8	0.7	1.3	1.3	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	0.7	0.4	0.0	1.9	3.1	6.2	6.9	1.3	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	0.0	25.4	41.9	0.0	33.4	34.1	19.5	20.1	36.7	19.7	0.0
LnGrp LOS	D	A	C	D	A	C	C	B	C	D	B	
Approach Vol, veh/h		298			255			1860			830	A
Approach Delay, s/veh		33.4			34.1			22.5			22.7	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	38.5	6.6	22.7	15.7	32.7	12.8	16.5
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	11.4	52.8	7.4	26.5	17.4	46.8	16.4	17.5
Max Q Clear Time (g_c+I1), s	5.5	21.0	3.1	4.1	10.7	10.3	7.9	7.6
Green Ext Time (p_c), s	0.1	11.3	0.0	0.2	0.4	4.6	0.3	0.6

Intersection Summary	
HCM 6th Ctrl Delay	24.5
HCM 6th LOS	C

Notes

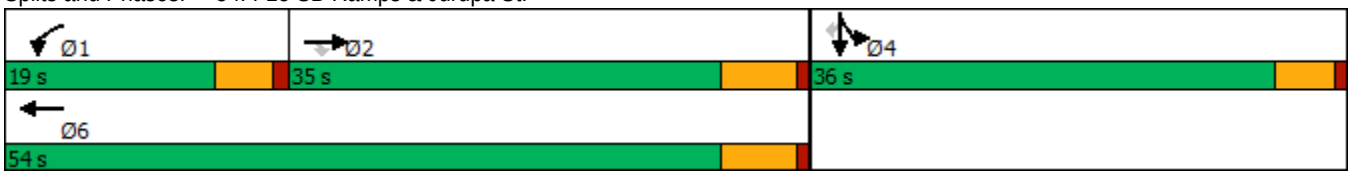
User approved volume balancing among the lanes for turning movement.

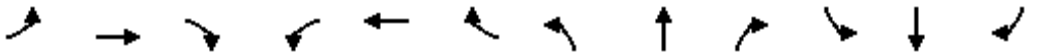
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	719	207	445	734	540	3	1010
Future Volume (vph)	719	207	445	734	540	3	1010
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	35.0	35.0	19.0	54.0	36.0	36.0	36.0
Total Split (%)	38.9%	38.9%	21.1%	60.0%	40.0%	40.0%	40.0%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 82.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	719	207	445	734	0	0	0	0	540	3	1010
Future Volume (veh/h)	0	719	207	445	734	0	0	0	0	540	3	1010
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1800	1800	1600	1800	0				1700	1800	1800
Adj Flow Rate, veh/h	0	790	175	489	807	0				396	0	1138
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1162	328	536	2267	0				642	0	1209
Arrive On Green	0.00	0.22	0.22	0.18	0.46	0.00				0.40	0.00	0.40
Sat Flow, veh/h	0	5400	1525	2956	5076	0				1619	0	3051
Grp Volume(v), veh/h	0	790	175	489	807	0				396	0	1138
Grp Sat Flow(s),veh/h/ln	0	1800	1525	1478	1638	0				1619	0	1525
Q Serve(g_s), s	0.0	10.4	7.9	12.5	8.2	0.0				15.1	0.0	27.7
Cycle Q Clear(g_c), s	0.0	10.4	7.9	12.5	8.2	0.0				15.1	0.0	27.7
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1162	328	536	2267	0				642	0	1209
V/C Ratio(X)	0.00	0.68	0.53	0.91	0.36	0.00				0.62	0.00	0.94
Avail Cap(c_a), veh/h	0	2028	573	536	3055	0				650	0	1225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.9	26.9	31.0	13.4	0.0				18.6	0.0	22.4
Incr Delay (d2), s/veh	0.0	0.5	1.0	19.6	0.1	0.0				1.7	0.0	13.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.1	2.7	5.6	2.6	0.0				5.2	0.0	10.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	28.4	27.9	50.6	13.5	0.0				20.4	0.0	36.3
LnGrp LOS	A	C	C	D	B	A				C	A	D
Approach Vol, veh/h		965			1296						1534	
Approach Delay, s/veh		28.3			27.5						32.2	
Approach LOS		C			C						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.0	22.6		35.6		41.6
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0
Max Green Setting (Gmax), s	14.0	29.0		31.0		48.0
Max Q Clear Time (g_c+I1), s	14.5	12.4		29.7		10.2
Green Ext Time (p_c), s	0.0	4.2		0.9		4.6

Intersection Summary	
HCM 6th Ctrl Delay	29.6
HCM 6th LOS	C

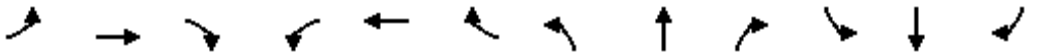
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	414	844	834	386	345	0	575
Future Volume (vph)	414	844	834	386	345	0	575
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	23.0	57.0	34.0	34.0	33.0	33.0	33.0
Total Split (%)	25.6%	63.3%	37.8%	37.8%	36.7%	36.7%	36.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 73.2
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	414	844	0	0	834	386	345	0	575	0	0	0
Future Volume (veh/h)	414	844	0	0	834	386	345	0	575	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1800	0	0	1800	1800	1700	1800	1800			
Adj Flow Rate, veh/h	440	898	0	0	887	329	518	0	284			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	562	2808	0	0	1536	477	814	0	383			
Arrive On Green	0.18	0.57	0.00	0.00	0.31	0.31	0.25	0.00	0.25			
Sat Flow, veh/h	3141	5076	0	0	5076	1525	3238	0	1525			
Grp Volume(v), veh/h	440	898	0	0	887	329	518	0	284			
Grp Sat Flow(s),veh/h/ln	1570	1638	0	0	1638	1525	1619	0	1525			
Q Serve(g_s), s	7.7	5.5	0.0	0.0	8.7	10.9	8.2	0.0	9.9			
Cycle Q Clear(g_c), s	7.7	5.5	0.0	0.0	8.7	10.9	8.2	0.0	9.9			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	562	2808	0	0	1536	477	814	0	383			
V/C Ratio(X)	0.78	0.32	0.00	0.00	0.58	0.69	0.64	0.00	0.74			
Avail Cap(c_a), veh/h	1004	4431	0	0	2467	766	1569	0	739			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	22.6	6.5	0.0	0.0	16.6	17.3	19.2	0.0	19.8			
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.0	0.3	1.3	0.8	0.0	2.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.5	1.2	0.0	0.0	2.7	3.3	2.7	0.0	3.2			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	6.5	0.0	0.0	16.8	18.7	20.0	0.0	22.6			
LnGrp LOS	C	A	A	A	B	B	C	A	C			
Approach Vol, veh/h		1338			1216			802				
Approach Delay, s/veh		12.1			17.3			21.0				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		38.0			14.9	23.1		19.6				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		51.9			18.4	28.9		27.9				
Max Q Clear Time (g_c+I1), s		7.5			9.7	12.9		11.9				
Green Ext Time (p_c), s		5.3			0.6	5.1		2.6				

Intersection Summary	
HCM 6th Ctrl Delay	16.1
HCM 6th LOS	B

Notes

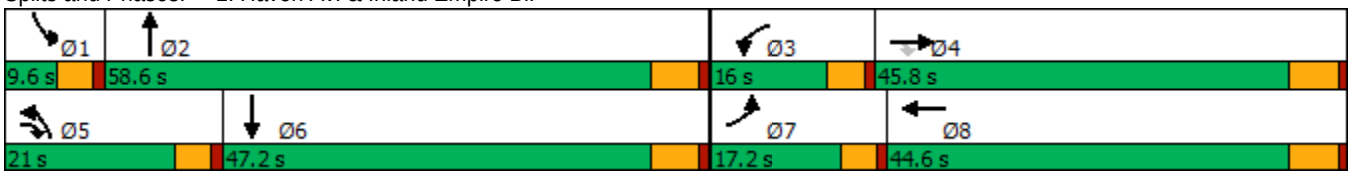
User approved volume balancing among the lanes for turning movement.

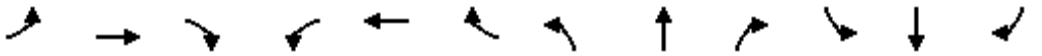
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	209	369	414	371	249	43	369	2072	471	43	1879	72
Future Volume (vph)	209	369	414	371	249	43	369	2072	471	43	1879	72
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	17.2	45.8	21.0	16.0	44.6		21.0	58.6		9.6	47.2	
Total Split (%)	13.2%	35.2%	16.2%	12.3%	34.3%		16.2%	45.1%		7.4%	36.3%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 110.8
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	209	369	414	371	249	43	369	2072	471	43	1879	72
Future Volume (veh/h)	209	369	414	371	249	43	369	2072	471	43	1879	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1500	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	218	384	257	386	259	0	384	2158	0	45	1957	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	271	628	504	427	676		434	2988		102	2293	
Arrive On Green	0.09	0.18	0.18	0.11	0.20	0.00	0.15	0.48	0.00	0.03	0.37	0.00
Sat Flow, veh/h	2956	3420	1525	4029	3420	1525	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	218	384	257	386	259	0	384	2158	0	45	1957	0
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1343	1710	1525	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	7.8	11.1	14.6	10.2	7.1	0.0	13.7	29.8	0.0	1.6	31.3	0.0
Cycle Q Clear(g_c), s	7.8	11.1	14.6	10.2	7.1	0.0	13.7	29.8	0.0	1.6	31.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	271	628	504	427	676		434	2988		102	2293	
V/C Ratio(X)	0.80	0.61	0.51	0.90	0.38		0.89	0.72		0.44	0.85	
Avail Cap(c_a), veh/h	346	1272	791	427	1234		451	3041		137	2384	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.9	40.4	29.0	47.5	37.4	0.0	45.0	22.1	0.0	50.9	31.2	0.0
Incr Delay (d2), s/veh	7.9	1.0	0.8	21.7	0.4	0.0	17.5	0.8	0.0	1.1	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	4.6	5.2	4.1	2.9	0.0	5.9	10.0	0.0	0.6	11.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.8	41.3	29.8	69.2	37.8	0.0	62.5	22.9	0.0	52.0	34.3	0.0
LnGrp LOS	E	D	C	E	D		E	C		D	C	
Approach Vol, veh/h		859			645	A		2542	A		2002	A
Approach Delay, s/veh		41.6			56.6			28.9			34.7	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	57.7	16.0	25.5	20.4	45.6	14.5	27.1
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	52.8	11.4	40.0	16.4	41.4	12.6	38.8
Max Q Clear Time (g_c+I1), s	3.6	31.8	12.2	16.6	15.7	33.3	9.8	9.1
Green Ext Time (p_c), s	0.0	15.4	0.0	3.1	0.1	6.5	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	35.6
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	269	352	2560	1055	1905
Future Volume (vph)	269	352	2560	1055	1905
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	33.0	33.0	67.0		67.0
Total Split (%)	33.0%	33.0%	67.0%		67.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	269	352	2560	1055	0	1905
Future Volume (veh/h)	269	352	2560	1055	0	1905
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1700	1800	1800	1800	0	1800
Adj Flow Rate, veh/h	363	185	2612	0	0	1944
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	474	223	4610		0	4610
Arrive On Green	0.15	0.15	1.00	0.00	0.00	0.74
Sat Flow, veh/h	3238	1525	6444	1525	0	6696
Grp Volume(v), veh/h	363	185	2612	0	0	1944
Grp Sat Flow(s),veh/h/ln	1619	1525	1548	1525	0	1548
Q Serve(g_s), s	10.8	11.8	0.0	0.0	0.0	11.7
Cycle Q Clear(g_c), s	10.8	11.8	0.0	0.0	0.0	11.7
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	474	223	4610		0	4610
V/C Ratio(X)	0.77	0.83	0.57		0.00	0.42
Avail Cap(c_a), veh/h	903	426	4610		0	4610
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.51	0.00	0.00	0.45
Uniform Delay (d), s/veh	41.0	41.5	0.0	0.0	0.0	4.8
Incr Delay (d2), s/veh	1.0	3.0	0.3	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.4	0.1	0.0	0.0	2.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.0	44.5	0.3	0.0	0.0	4.9
LnGrp LOS	D	D	A		A	A
Approach Vol, veh/h	548		2612	A		1944
Approach Delay, s/veh	42.8		0.3			4.9
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		80.3		19.7		80.3
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		2.0		13.8		13.7
Green Ext Time (p_c), s		25.6		0.9		13.1

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

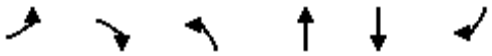
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	584	335	3031	1786	388
Future Volume (vph)	584	335	3031	1786	388
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	33.0	33.0	67.0	67.0	
Total Split (%)	33.0%	33.0%	67.0%	67.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	584	335	0	3031	1786	388
Future Volume (veh/h)	584	335	0	3031	1786	388
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1700	1800	0	1800	1800	1800
Adj Flow Rate, veh/h	602	266	0	3125	1841	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	711	335	0	4157	4157	
Arrive On Green	0.22	0.22	0.00	0.67	1.00	0.00
Sat Flow, veh/h	3238	1525	0	6696	6444	1525
Grp Volume(v), veh/h	602	266	0	3125	1841	0
Grp Sat Flow(s),veh/h/ln	1619	1525	0	1548	1548	1525
Q Serve(g_s), s	17.8	16.5	0.0	33.5	0.0	0.0
Cycle Q Clear(g_c), s	17.8	16.5	0.0	33.5	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	711	335	0	4157	4157	
V/C Ratio(X)	0.85	0.79	0.00	0.75	0.44	
Avail Cap(c_a), veh/h	903	426	0	4157	4157	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.09	0.86	0.00
Uniform Delay (d), s/veh	37.4	36.9	0.0	10.9	0.0	0.0
Incr Delay (d2), s/veh	6.1	7.9	0.0	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	6.6	0.0	8.8	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.5	44.7	0.0	11.0	0.3	0.0
LnGrp LOS	D	D	A	B	A	
Approach Vol, veh/h	868			3125	1841	A
Approach Delay, s/veh	43.9			11.0	0.3	
Approach LOS	D			B	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		72.9		27.1		72.9
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		35.5		19.8		2.0
Green Ext Time (p_c), s		20.6		2.1		12.2

Intersection Summary		
HCM 6th Ctrl Delay	12.5	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

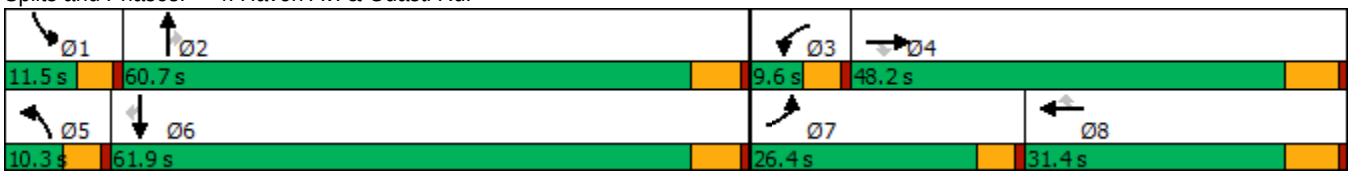
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

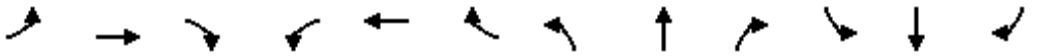
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	423	50	230	88	21	246	70	3189	116	179	1820	121
Future Volume (vph)	423	50	230	88	21	246	70	3189	116	179	1820	121
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	26.4	48.2	48.2	9.6	31.4	31.4	10.3	60.7	60.7	11.5	61.9	61.9
Total Split (%)	20.3%	37.1%	37.1%	7.4%	24.2%	24.2%	7.9%	46.7%	46.7%	8.8%	47.6%	47.6%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 116.9
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	423	50	230	88	21	246	70	3189	116	179	1820	121
Future Volume (veh/h)	423	50	230	88	21	246	70	3189	116	179	1820	121
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1700	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	436	52	109	91	22	174	72	3288	84	185	1876	101
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	489	380	322	133	163	229	118	3048	751	183	3184	784
Arrive On Green	0.17	0.21	0.21	0.04	0.09	0.09	0.04	0.49	0.49	0.06	0.51	0.51
Sat Flow, veh/h	2956	1800	1525	2956	1800	2536	2956	6192	1525	2956	6192	1525
Grp Volume(v), veh/h	436	52	109	91	22	174	72	3288	84	185	1876	101
Grp Sat Flow(s),veh/h/ln	1478	1800	1525	1478	1800	1268	1478	1548	1525	1478	1548	1525
Q Serve(g_s), s	16.1	2.6	6.8	3.4	1.3	7.5	2.7	54.9	3.3	6.9	23.5	3.8
Cycle Q Clear(g_c), s	16.1	2.6	6.8	3.4	1.3	7.5	2.7	54.9	3.3	6.9	23.5	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	489	380	322	133	163	229	118	3048	751	183	3184	784
V/C Ratio(X)	0.89	0.14	0.34	0.69	0.14	0.76	0.61	1.08	0.11	1.01	0.59	0.13
Avail Cap(c_a), veh/h	578	678	575	133	407	573	151	3048	751	183	3184	784
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	35.8	37.4	52.5	46.7	49.5	52.7	28.3	15.2	52.3	18.9	14.1
Incr Delay (d2), s/veh	13.1	0.2	0.6	11.6	0.4	5.1	1.9	42.2	0.1	69.5	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	1.1	2.5	1.4	0.6	2.4	1.0	27.2	1.1	4.3	7.8	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.7	35.9	38.0	64.1	47.1	54.7	54.5	70.5	15.3	121.8	19.2	14.2
LnGrp LOS	E	D	D	E	D	D	D	F	B	F	B	B
Approach Vol, veh/h		597			287			3444			2162	
Approach Delay, s/veh		52.9			57.1			68.8			27.7	
Approach LOS		D			E			E			C	

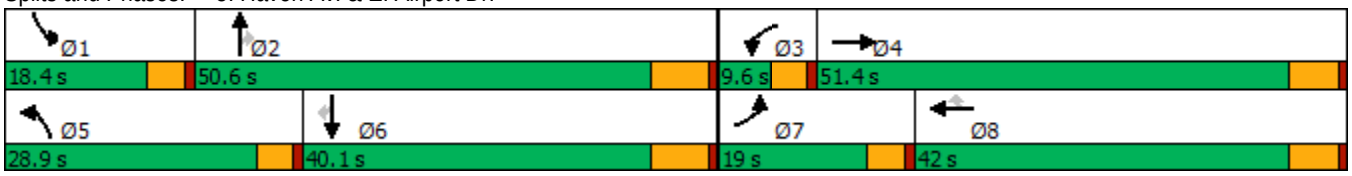
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	60.7	9.6	29.7	9.1	63.1	23.0	16.3
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	6.9	54.9	5.0	42.0	5.7	56.1	21.8	25.2
Max Q Clear Time (g_c+I1), s	8.9	56.9	5.4	8.8	4.7	25.5	18.1	9.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.0	17.4	0.3	0.6

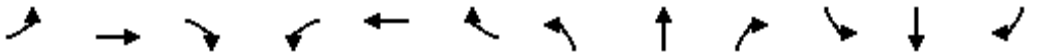
Intersection Summary	
HCM 6th Ctrl Delay	53.1
HCM 6th LOS	D

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	318	519	34	660	648	543	2396	23	313	1558	189
Future Volume (vph)	318	519	34	660	648	543	2396	23	313	1558	189
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	19.0	51.4	9.6	42.0	42.0	28.9	50.6	50.6	18.4	40.1	40.1
Total Split (%)	14.6%	39.5%	7.4%	32.3%	32.3%	22.2%	38.9%	38.9%	14.2%	30.8%	30.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	318	519	661	34	660	648	543	2396	23	313	1558	189
Future Volume (veh/h)	318	519	661	34	660	648	543	2396	23	313	1558	189
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	324	530	529	35	673	530	554	2445	21	319	1590	152
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	327	618	551	82	952	425	553	2442	517	314	1861	394
Arrive On Green	0.11	0.36	0.36	0.03	0.28	0.28	0.19	0.34	0.34	0.11	0.26	0.26
Sat Flow, veh/h	2956	1710	1524	2956	3420	1525	2956	7200	1525	2956	7200	1525
Grp Volume(v), veh/h	324	530	529	35	673	530	554	2445	21	319	1590	152
Grp Sat Flow(s),veh/h/ln	1478	1710	1524	1478	1710	1525	1478	1800	1525	1478	1800	1525
Q Serve(g_s), s	14.2	37.3	44.1	1.5	23.0	36.2	24.3	44.1	1.2	13.8	27.3	10.7
Cycle Q Clear(g_c), s	14.2	37.3	44.1	1.5	23.0	36.2	24.3	44.1	1.2	13.8	27.3	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	327	618	551	82	952	425	553	2442	517	314	1861	394
V/C Ratio(X)	0.99	0.86	0.96	0.43	0.71	1.25	1.00	1.00	0.04	1.02	0.85	0.39
Avail Cap(c_a), veh/h	327	618	551	114	952	425	553	2442	517	314	1861	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	38.4	40.6	62.2	42.1	46.9	52.9	42.9	28.8	58.1	45.9	39.7
Incr Delay (d2), s/veh	46.7	11.5	28.4	1.3	2.4	129.8	38.9	18.5	0.0	55.1	4.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	16.9	20.1	0.6	9.7	28.6	11.6	21.5	0.4	7.4	12.1	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	104.4	49.9	69.0	63.5	44.5	176.7	91.8	61.4	28.8	113.2	50.0	40.3
LnGrp LOS	F	D	E	E	D	F	F	F	C	F	D	D
Approach Vol, veh/h		1383			1238			3020			2061	
Approach Delay, s/veh		70.0			101.7			66.7			59.1	
Approach LOS		E			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	50.6	8.2	52.8	28.9	40.1	19.0	42.0
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	13.8	44.1	5.0	45.6	24.3	33.6	14.4	36.2
Max Q Clear Time (g_c+I1), s	15.8	46.1	3.5	46.1	26.3	29.3	16.2	38.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	70.9
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	2217	3	0	1689
Future Vol, veh/h	0	6	2217	3	0	1689
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	7	2410	3	0	1836

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1207	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	153	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	153	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.6	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	153	-
HCM Lane V/C Ratio	-	-	0.043	-
HCM Control Delay (s)	-	-	29.6	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	2217	3	0	1689
Future Vol, veh/h	0	2	2217	3	0	1689
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	2410	3	0	1836

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1207	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	153	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	153	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.9	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	153	-
HCM Lane V/C Ratio	-	-	0.014	-
HCM Control Delay (s)	-	-	28.9	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	26	2181	18	0	1699
Future Vol, veh/h	0	26	2181	18	0	1699
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	27	2248	19	0	1752

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1134	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	171	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	171	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	29.9	0	0
HCM LOS	D		

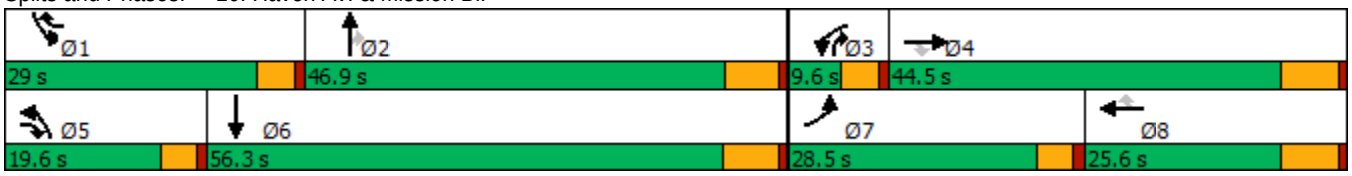
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	171	-
HCM Lane V/C Ratio	-	-	0.157	-
HCM Control Delay (s)	-	-	29.9	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.5	-

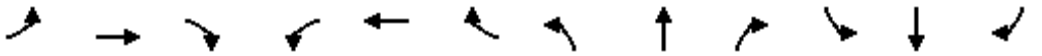
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	574	723	120	40	495	467	111	1641	63	334	1462
Future Volume (vph)	574	723	120	40	495	467	111	1641	63	334	1462
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	28.5	44.5	19.6	9.6	25.6	29.0	19.6	46.9	9.6	29.0	56.3
Total Split (%)	21.9%	34.2%	15.1%	7.4%	19.7%	22.3%	15.1%	36.1%	7.4%	22.3%	43.3%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 128.6
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	574	723	120	40	495	467	111	1641	63	334	1462	145
Future Volume (veh/h)	574	723	120	40	495	467	111	1641	63	334	1462	145
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	598	753	80	42	516	372	116	1709	46	348	1523	140
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	542	1474	587	89	720	509	138	1535	522	303	1897	174
Arrive On Green	0.18	0.30	0.30	0.03	0.15	0.15	0.08	0.31	0.31	0.19	0.41	0.41
Sat Flow, veh/h	2956	4914	1524	2956	4914	1525	1619	4914	1524	1619	4574	420
Grp Volume(v), veh/h	598	753	80	42	516	372	116	1709	46	348	1091	572
Grp Sat Flow(s),veh/h/ln	1478	1638	1524	1478	1638	1525	1619	1638	1524	1619	1638	1718
Q Serve(g_s), s	23.9	16.5	4.4	1.8	13.0	19.1	9.2	40.7	2.7	24.4	38.1	38.1
Cycle Q Clear(g_c), s	23.9	16.5	4.4	1.8	13.0	19.1	9.2	40.7	2.7	24.4	38.1	38.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	542	1474	587	89	720	509	138	1535	522	303	1358	712
V/C Ratio(X)	1.10	0.51	0.14	0.47	0.72	0.73	0.84	1.11	0.09	1.15	0.80	0.80
Avail Cap(c_a), veh/h	542	1474	587	113	720	509	186	1535	522	303	1358	712
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	37.7	26.0	62.2	53.0	38.2	58.8	44.8	29.1	52.9	33.5	33.5
Incr Delay (d2), s/veh	69.9	0.3	0.1	1.5	3.4	5.3	17.3	60.7	0.1	97.9	3.6	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	6.4	1.6	0.7	5.4	10.6	4.3	24.3	0.9	17.7	14.7	16.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	123.1	38.0	26.1	63.6	56.4	43.5	76.0	105.5	29.1	150.8	37.0	40.1
LnGrp LOS	F	D	C	E	E	D	E	F	C	F	D	D
Approach Vol, veh/h		1431			930			1871			2011	
Approach Delay, s/veh		72.9			51.6			101.8			57.6	
Approach LOS		E			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.0	47.2	8.5	45.6	15.7	60.5	28.5	25.6
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	24.4	* 41	5.0	38.0	15.0	49.8	23.9	19.1
Max Q Clear Time (g_c+I1), s	26.4	42.7	3.8	18.5	11.2	40.1	25.9	21.1
Green Ext Time (p_c), s	0.0	0.0	0.0	4.6	0.0	6.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	73.5
HCM 6th LOS	E

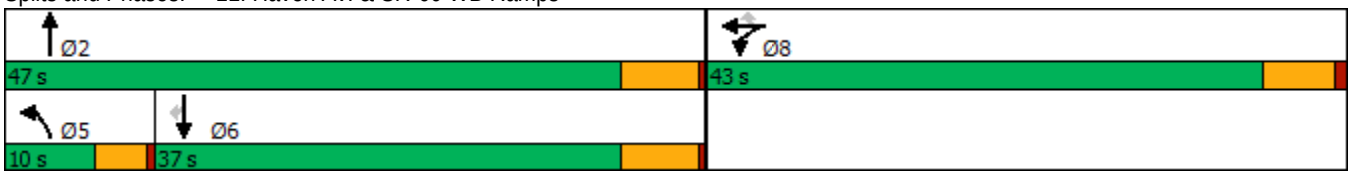
Notes

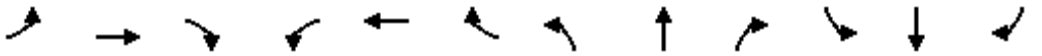
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	304	9	561	157	939	1327	575
Future Volume (vph)	304	9	561	157	939	1327	575
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.0	34.7	27.8	27.8
Total Split (s)	43.0	43.0	43.0	10.0	47.0	37.0	37.0
Total Split (%)	47.8%	47.8%	47.8%	11.1%	52.2%	41.1%	41.1%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 83.4
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	304	9	561	157	939	0	0	1327	575
Future Volume (veh/h)	0	0	0	304	9	561	157	939	0	0	1327	575
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1700	1800	1800	1600	1800	0	0	1800	1800
Adj Flow Rate, veh/h				323	0	295	164	978	0	0	1382	432
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				815	0	384	246	2674	0	0	1920	589
Arrive On Green				0.25	0.00	0.25	0.08	0.54	0.00	0.00	0.39	0.39
Sat Flow, veh/h				3238	0	1525	2956	5076	0	0	5076	1506
Grp Volume(v), veh/h				323	0	295	164	978	0	0	1382	432
Grp Sat Flow(s),veh/h/ln				1619	0	1525	1478	1638	0	0	1638	1506
Q Serve(g_s), s				4.7	0.0	10.2	3.1	6.4	0.0	0.0	13.6	13.9
Cycle Q Clear(g_c), s				4.7	0.0	10.2	3.1	6.4	0.0	0.0	13.6	13.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				815	0	384	246	2674	0	0	1920	589
V/C Ratio(X)				0.40	0.00	0.77	0.67	0.37	0.00	0.00	0.72	0.73
Avail Cap(c_a), veh/h				2119	0	998	312	3570	0	0	2697	827
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				17.7	0.0	19.7	25.3	7.4	0.0	0.0	14.7	14.8
Incr Delay (d2), s/veh				0.3	0.0	3.3	3.7	0.0	0.0	0.0	0.2	1.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.5	0.0	3.4	1.1	1.4	0.0	0.0	3.8	3.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				18.0	0.0	23.0	29.0	7.4	0.0	0.0	14.9	15.8
LnGrp LOS				B	A	C	C	A	A	A	B	B
Approach Vol, veh/h					618			1142			1814	
Approach Delay, s/veh					20.4			10.5			15.1	
Approach LOS					C			B			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		36.7			8.7	28.0		20.1				
Change Period (Y+Rc), s		* 5.8			4.0	5.8		5.8				
Max Green Setting (Gmax), s		* 41			6.0	31.2		37.2				
Max Q Clear Time (g_c+I1), s		8.4			5.1	15.9		12.2				
Green Ext Time (p_c), s		4.3			0.0	6.3		2.1				

Intersection Summary		
HCM 6th Ctrl Delay	14.6	
HCM 6th LOS	B	

Notes

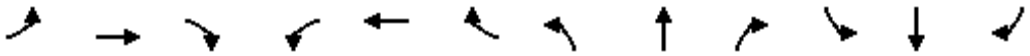
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	427	8	170	669	672	959
Future Volume (vph)	427	8	170	669	672	959
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.0	29.7
Total Split (s)	27.0	27.0	27.0	32.0	31.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	35.6%	34.4%	70.0%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 74.7
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	427	8	170	0	0	0	0	669	215	672	959	0
Future Volume (veh/h)	427	8	170	0	0	0	0	669	215	672	959	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800				0	1800	1800	1600	1800	0
Adj Flow Rate, veh/h	465	0	73				0	719	170	723	1031	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	626	0	295				0	998	233	877	3019	0
Arrive On Green	0.19	0.00	0.19				0.00	0.25	0.25	0.30	0.61	0.00
Sat Flow, veh/h	3238	0	1525				0	4141	930	2956	5076	0
Grp Volume(v), veh/h	465	0	73				0	590	299	723	1031	0
Grp Sat Flow(s),veh/h/ln	1619	0	1525				0	1638	1633	1478	1638	0
Q Serve(g_s), s	8.1	0.0	2.4				0.0	9.9	10.0	13.6	6.1	0.0
Cycle Q Clear(g_c), s	8.1	0.0	2.4				0.0	9.9	10.0	13.6	6.1	0.0
Prop In Lane	1.00		1.00				0.00		0.57	1.00		0.00
Lane Grp Cap(c), veh/h	626	0	295				0	821	409	877	3019	0
V/C Ratio(X)	0.74	0.00	0.25				0.00	0.72	0.73	0.82	0.34	0.00
Avail Cap(c_a), veh/h	1148	0	541				0	1441	718	1335	4709	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.7	0.0	20.4				0.0	20.5	20.5	19.6	5.6	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.4				0.0	0.4	0.9	2.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.8				0.0	3.2	3.3	4.1	1.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.5	0.0	20.9				0.0	20.9	21.5	22.2	5.7	0.0
LnGrp LOS	C	A	C				A	C	C	C	A	A
Approach Vol, veh/h		538						889			1754	
Approach Delay, s/veh		24.0						21.1			12.5	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	21.7	20.7		17.4		42.4						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	27.0	26.3		21.2		57.3						
Max Q Clear Time (g_c+I1), s	15.6	12.0		10.1		8.1						
Green Ext Time (p_c), s	2.1	3.0		1.5		4.7						

Intersection Summary												
HCM 6th Ctrl Delay			16.8									
HCM 6th LOS			B									

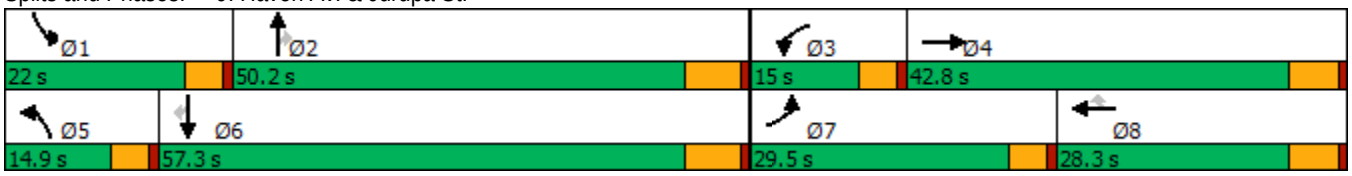
Notes

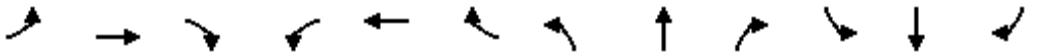
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	503	372	338	310	234	73	2188	375	224	1677	365
Future Volume (vph)	503	372	338	310	234	73	2188	375	224	1677	365
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	29.5	42.8	15.0	28.3	28.3	14.9	50.2	50.2	22.0	57.3	57.3
Total Split (%)	22.7%	32.9%	11.5%	21.8%	21.8%	11.5%	38.6%	38.6%	16.9%	44.1%	44.1%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 123.7
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	503	372	72	338	310	234	73	2188	375	224	1677	365
Future Volume (veh/h)	503	372	72	338	310	234	73	2188	375	224	1677	365
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	513	380	60	345	316	181	74	2233	289	229	1711	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	558	1059	163	249	486	217	92	2192	539	228	2714	
Arrive On Green	0.19	0.25	0.25	0.08	0.14	0.14	0.06	0.35	0.35	0.14	0.44	0.00
Sat Flow, veh/h	2956	4294	661	2956	3420	1525	1619	6192	1522	1619	6192	1525
Grp Volume(v), veh/h	513	288	152	345	316	181	74	2233	289	229	1711	0
Grp Sat Flow(s),veh/h/ln	1478	1638	1679	1478	1710	1525	1619	1548	1522	1619	1548	1525
Q Serve(g_s), s	21.0	9.0	9.3	10.4	10.8	14.3	5.6	43.7	18.7	17.4	26.5	0.0
Cycle Q Clear(g_c), s	21.0	9.0	9.3	10.4	10.8	14.3	5.6	43.7	18.7	17.4	26.5	0.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	558	808	414	249	486	217	92	2192	539	228	2714	
V/C Ratio(X)	0.92	0.36	0.37	1.39	0.65	0.83	0.81	1.02	0.54	1.00	0.63	
Avail Cap(c_a), veh/h	596	982	503	249	623	278	135	2192	539	228	2714	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.2	38.4	38.5	56.5	50.0	51.5	57.6	39.9	31.8	53.0	26.9	0.0
Incr Delay (d2), s/veh	18.3	0.3	0.5	196.3	1.5	15.6	12.1	24.0	1.1	60.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	3.5	3.8	10.6	4.6	6.2	2.5	19.1	6.8	10.6	9.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	67.5	38.7	39.1	252.8	51.6	67.2	69.7	63.9	32.8	113.5	27.4	0.0
LnGrp LOS	E	D	D	F	D	E	E	F	C	F	C	
Approach Vol, veh/h		953			842			2596			1940	A
Approach Delay, s/veh		54.2			137.4			60.6			37.5	
Approach LOS		D			F			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	50.2	15.0	36.2	11.6	60.6	27.9	23.4
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	17.4	43.7	10.4	37.0	10.3	50.8	24.9	22.5
Max Q Clear Time (g_c+I1), s	19.4	45.7	12.4	11.3	7.6	28.5	23.0	16.3
Green Ext Time (p_c), s	0.0	0.0	0.0	2.5	0.0	11.9	0.3	1.3

Intersection Summary	
HCM 6th Ctrl Delay	62.8
HCM 6th LOS	E

Notes

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	852	4	7	1328	0	14	0	4	0	0	0
Future Vol, veh/h	0	852	4	7	1328	0	14	0	4	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	240	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	926	4	8	1443	0	15	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1443	0	0	930	0	0	1521	2387	465	1922	2389	722
Stage 1	-	-	-	-	-	-	928	928	-	1459	1459	-
Stage 2	-	-	-	-	-	-	593	1459	-	463	930	-
Critical Hdwy	5.3	-	-	4.1	-	-	6.95	6.5	6.9	6.95	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.5	5.5	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.65	4	3.3	3.65	4	3.9
Pot Cap-1 Maneuver	242	-	-	744	-	-	103	35	550	55	34	320
Stage 1	-	-	-	-	-	-	285	349	-	98	196	-
Stage 2	-	-	-	-	-	-	435	196	-	536	349	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	242	-	-	744	-	-	102	35	550	54	34	320
Mov Cap-2 Maneuver	-	-	-	-	-	-	102	35	-	54	34	-
Stage 1	-	-	-	-	-	-	285	349	-	98	194	-
Stage 2	-	-	-	-	-	-	430	194	-	532	349	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	39.1	0
HCM LOS			E	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	125	242	-	-	744	-	-	-
HCM Lane V/C Ratio	0.157	-	-	-	0.01	-	-	-
HCM Control Delay (s)	39.1	0	-	-	9.9	-	-	0
HCM Lane LOS	E	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	849	7	0	1335	0	10
Future Vol, veh/h	849	7	0	1335	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	923	8	0	1451	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	466
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	549
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	549
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	549	-	-	-
HCM Lane V/C Ratio	0.02	-	-	-
HCM Control Delay (s)	11.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	842	17	0	1335	0	24
Future Vol, veh/h	842	17	0	1335	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	915	18	0	1451	0	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	467
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	548
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	548
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	11.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	548	-	-	-
HCM Lane V/C Ratio	0.048	-	-	-
HCM Control Delay (s)	11.9	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	16	2	2	46	5	2
Future Vol, veh/h	16	2	2	46	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	17	2	2	50	5	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	19	0	47	10
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	29	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1611	-	963	1075
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	996	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1611	-	962	1075
Mov Cap-2 Maneuver	-	-	-	-	937	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	995	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	973	-	-	1611	-
HCM Lane V/C Ratio	0.008	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.2	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	2	3	47	3	5
Future Vol, veh/h	17	2	3	47	3	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	2	3	51	3	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	20	0	51	10
Stage 1	-	-	-	-	19	-
Stage 2	-	-	-	-	32	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1609	-	957	1075
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	992	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1609	-	955	1075
Mov Cap-2 Maneuver	-	-	-	-	891	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	990	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	998	-	-	1609	-
HCM Lane V/C Ratio	0.009	-	-	0.002	-
HCM Control Delay (s)	8.6	-	-	7.2	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	20	36	8	0	14
Future Vol, veh/h	2	20	36	8	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	22	39	9	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	48	0	-	0	59	24
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1572	-	-	-	947	1053
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	1011	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1572	-	-	-	946	1053
Mov Cap-2 Maneuver	-	-	-	-	924	-
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1572	-	-	-	1053
HCM Lane V/C Ratio	0.001	-	-	-	0.014
HCM Control Delay (s)	7.3	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	39	110	0	0	0
Future Vol, veh/h	0	39	110	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	42	120	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	120	0	-	0	141	60
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	21	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1480	-	-	-	843	999
Stage 1	-	-	-	-	898	-
Stage 2	-	-	-	-	1005	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1480	-	-	-	843	999
Mov Cap-2 Maneuver	-	-	-	-	848	-
Stage 1	-	-	-	-	898	-
Stage 2	-	-	-	-	1005	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1480	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	974	877	4	0	7
Future Vol, veh/h	0	974	877	4	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1059	953	4	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	479
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	538
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	538
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	538
HCM Lane V/C Ratio	-	-	-	0.014
HCM Control Delay (s)	-	-	-	11.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	974	875	4	0	6
Future Vol, veh/h	0	974	875	4	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1059	951	4	0	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	478
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	539
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	539
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

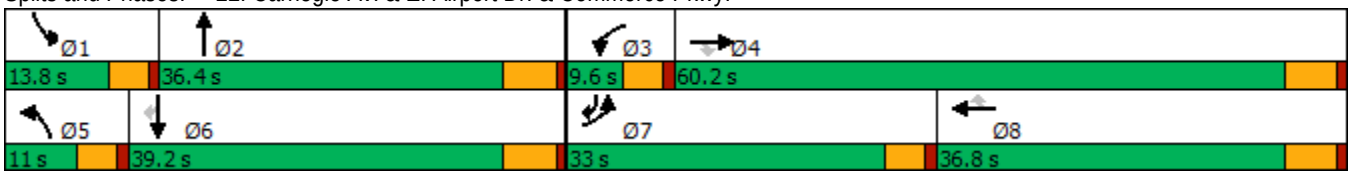
Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.8
HCM LOS			B

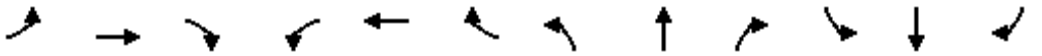
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	539
HCM Lane V/C Ratio	-	-	-	0.012
HCM Control Delay (s)	-	-	-	11.8
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	277	390	68	1	475	93	134	40	58	45	508
Future Volume (vph)	277	390	68	1	475	93	134	40	58	45	508
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	33.0	60.2	60.2	9.6	36.8	36.8	11.0	36.4	13.8	39.2	33.0
Total Split (%)	27.5%	50.2%	50.2%	8.0%	30.7%	30.7%	9.2%	30.3%	11.5%	32.7%	27.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 81.6
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	390	68	1	475	93	134	40	20	58	45	508
Future Volume (veh/h)	277	390	68	1	475	93	134	40	20	58	45	508
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1700
Adj Flow Rate, veh/h	315	443	77	1	540	73	152	45	23	66	51	365
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	359	1518	677	2	764	341	151	448	213	84	541	963
Arrive On Green	0.22	0.44	0.44	0.00	0.22	0.22	0.09	0.20	0.20	0.05	0.16	0.16
Sat Flow, veh/h	1619	3420	1525	1619	3420	1525	1619	2249	1069	1619	3420	2536
Grp Volume(v), veh/h	315	443	77	1	540	73	152	33	35	66	51	365
Grp Sat Flow(s),veh/h/ln	1619	1710	1525	1619	1710	1525	1619	1710	1608	1619	1710	1268
Q Serve(g_s), s	12.9	5.7	2.0	0.0	10.0	2.7	6.4	1.1	1.2	2.8	0.9	7.2
Cycle Q Clear(g_c), s	12.9	5.7	2.0	0.0	10.0	2.7	6.4	1.1	1.2	2.8	0.9	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.66	1.00		1.00
Lane Grp Cap(c), veh/h	359	1518	677	2	764	341	151	341	320	84	541	963
V/C Ratio(X)	0.88	0.29	0.11	0.42	0.71	0.21	1.01	0.10	0.11	0.78	0.09	0.38
Avail Cap(c_a), veh/h	670	2713	1210	118	1546	690	151	763	717	217	1666	1798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	12.2	11.2	34.2	24.6	21.7	31.1	22.4	22.5	32.1	24.7	15.4
Incr Delay (d2), s/veh	2.7	0.1	0.1	39.1	1.2	0.3	74.8	0.1	0.1	5.8	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	1.8	0.6	0.0	3.7	0.9	5.4	0.4	0.4	1.1	0.3	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.5	12.3	11.2	73.3	25.8	22.0	105.9	22.5	22.6	37.9	24.7	15.6
LnGrp LOS	C	B	B	E	C	C	F	C	C	D	C	B
Approach Vol, veh/h		835			614			220			482	
Approach Delay, s/veh		18.3			25.4			80.1			19.7	
Approach LOS		B			C			F			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	19.5	4.7	36.2	11.0	16.6	19.8	21.1
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	9.2	30.6	5.0	54.4	6.4	33.4	28.4	31.0
Max Q Clear Time (g_c+I1), s	4.8	3.2	2.0	7.7	8.4	9.2	14.9	12.0
Green Ext Time (p_c), s	0.0	0.3	0.0	3.1	0.0	1.7	0.4	3.3

Intersection Summary	
HCM 6th Ctrl Delay	27.0
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	4	1	0	3	3	170	0	2	100	13
Future Vol, veh/h	20	0	4	1	0	3	3	170	0	2	100	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	22	0	4	1	0	3	3	185	0	2	109	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	219	311	62	250	318	93	123	0	0	185	0	0
Stage 1	120	120	-	191	191	-	-	-	-	-	-	-
Stage 2	99	191	-	59	127	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	724	607	996	688	602	952	1477	-	-	1402	-	-
Stage 1	877	800	-	798	746	-	-	-	-	-	-	-
Stage 2	902	746	-	951	795	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	720	605	996	683	600	952	1477	-	-	1402	-	-
Mov Cap-2 Maneuver	787	675	-	743	673	-	-	-	-	-	-	-
Stage 1	875	799	-	796	745	-	-	-	-	-	-	-
Stage 2	897	745	-	945	794	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.6	9.1	0.1	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1477	-	-	816	889	1402	-	-
HCM Lane V/C Ratio	0.002	-	-	0.032	0.005	0.002	-	-
HCM Control Delay (s)	7.4	-	-	9.6	9.1	7.6	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	6	166	1	4	101
Future Vol, veh/h	1	6	166	1	4	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	7	180	1	4	110

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	244	91	0	0	181	0
Stage 1	181	-	-	-	-	-
Stage 2	63	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	729	955	-	-	1407	-
Stage 1	838	-	-	-	-	-
Stage 2	958	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	727	955	-	-	1407	-
Mov Cap-2 Maneuver	781	-	-	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	955	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	926	1407	-
HCM Lane V/C Ratio	-	-	0.008	0.003	-
HCM Control Delay (s)	-	-	8.9	7.6	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	4	8	155	99	2
Future Vol, veh/h	12	4	8	155	99	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	4	9	168	108	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	211	55	110	0	-	0
Stage 1	109	-	-	-	-	-
Stage 2	102	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	764	1007	1493	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	917	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	759	1007	1493	-	-	-
Mov Cap-2 Maneuver	816	-	-	-	-	-
Stage 1	904	-	-	-	-	-
Stage 2	917	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1493	-	857	-	-
HCM Lane V/C Ratio	0.006	-	0.02	-	-
HCM Control Delay (s)	7.4	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	4	10	0	60	6	96	21	16	86	2
Future Vol, veh/h	8	0	4	10	0	60	6	96	21	16	86	2
Peak Hour Factor	0.92	0.92	0.92	0.79	0.92	0.79	0.92	0.79	0.79	0.79	0.79	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	0	4	13	0	76	7	122	27	20	109	2
Number of Lanes	0	1	0	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	1
HCM Control Delay	8.3	7.6	8.2	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	67%	100%	3%	0%	100%	0%	0%
Vol Thru, %	0%	100%	60%	0%	0%	0%	0%	0%	100%	93%
Vol Right, %	0%	0%	40%	33%	0%	97%	100%	0%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	64	53	12	9	30	31	16	57	31
LT Vol	6	0	0	8	9	1	0	16	0	0
Through Vol	0	64	32	0	0	0	0	0	57	29
RT Vol	0	0	21	4	0	29	31	0	0	2
Lane Flow Rate	7	81	67	13	11	38	39	20	73	38
Geometry Grp	8	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.01	0.113	0.089	0.02	0.018	0.048	0.048	0.031	0.102	0.054
Departure Headway (Hd)	5.53	5.029	4.751	5.489	5.666	4.507	4.468	5.563	5.062	5.017
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	649	714	755	652	633	795	802	645	709	715
Service Time	3.251	2.75	2.472	3.221	3.389	2.231	2.191	3.287	2.786	2.74
HCM Lane V/C Ratio	0.011	0.113	0.089	0.02	0.017	0.048	0.049	0.031	0.103	0.053
HCM Control Delay	8.3	8.4	7.9	8.3	8.5	7.5	7.4	8.5	8.4	8
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0.4	0.3	0.1	0.1	0.2	0.2	0.1	0.3	0.2

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	27	23	108	93	7
Future Vol, veh/h	13	27	23	108	93	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	29	25	117	101	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	214	55	109	0	-	0
Stage 1	105	-	-	-	-	-
Stage 2	109	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	760	1007	1494	-	-	-
Stage 1	914	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	747	1007	1494	-	-	-
Mov Cap-2 Maneuver	808	-	-	-	-	-
Stage 1	898	-	-	-	-	-
Stage 2	909	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1494	-	932	-	-
HCM Lane V/C Ratio	0.017	-	0.047	-	-
HCM Control Delay (s)	7.5	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	17	5	130	113	7
Future Vol, veh/h	2	17	5	130	113	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	18	5	141	123	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	208	66	131	0	-	0
Stage 1	127	-	-	-	-	-
Stage 2	81	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	767	991	1467	-	-	-
Stage 1	891	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	765	991	1467	-	-	-
Mov Cap-2 Maneuver	816	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	939	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1467	-	969	-	-
HCM Lane V/C Ratio	0.004	-	0.021	-	-
HCM Control Delay (s)	7.5	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	27	12	73	107	92	38
Future Vol, veh/h	27	12	73	107	92	38
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	29	13	78	114	98	40
Number of Lanes	1	1	1	2	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	8.4	7.8	8
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	45%
Vol Right, %	0%	0%	0%	0%	100%	0%	55%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	73	54	54	27	12	61	69
LT Vol	73	0	0	27	0	0	0
Through Vol	0	54	54	0	0	61	31
RT Vol	0	0	0	0	12	0	38
Lane Flow Rate	78	57	57	29	13	65	73
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.116	0.077	0.05	0.046	0.016	0.09	0.093
Departure Headway (Hd)	5.396	4.895	3.191	5.799	4.598	4.972	4.584
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	667	735	1125	619	780	724	785
Service Time	3.107	2.606	0.902	3.519	2.318	2.684	2.296
HCM Lane V/C Ratio	0.117	0.078	0.051	0.047	0.017	0.09	0.093
HCM Control Delay	8.8	8	6.1	8.8	7.4	8.2	7.8
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.4	0.2	0.2	0.1	0	0.3	0.3

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	3	177	7	0	104
Future Vol, veh/h	8	3	177	7	0	104
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	3	192	8	0	113

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	253	100	0	0	200	0
Stage 1	196	-	-	-	-	-
Stage 2	57	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	719	943	-	-	1384	-
Stage 1	824	-	-	-	-	-
Stage 2	965	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	719	943	-	-	1384	-
Mov Cap-2 Maneuver	723	-	-	-	-	-
Stage 1	824	-	-	-	-	-
Stage 2	965	-	-	-	-	-

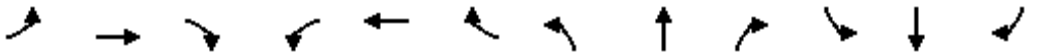
Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	772	1384	-
HCM Lane V/C Ratio	-	-	0.015	-	-
HCM Control Delay (s)	-	-	9.7	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	116	925	4	696	59	6	2	47	90
Future Volume (vph)	116	925	4	696	59	6	2	47	90
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	79.0	79.0	79.0	79.0	79.0	41.0	41.0	41.0	41.0
Total Split (%)	65.8%	65.8%	65.8%	65.8%	65.8%	34.2%	34.2%	34.2%	34.2%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 38.8
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	925	19	4	696	59	6	0	2	47	0	90
Future Volume (veh/h)	116	925	19	4	696	59	6	0	2	47	0	90
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	121	964	20	4	725	60	6	0	0	49	0	69
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	502	2772	57	459	1913	843	340	182	154	348	182	154
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.10	0.00	0.00	0.10	0.00	0.10
Sat Flow, veh/h	661	4955	103	549	3420	1507	1278	1800	1525	1360	1800	1525
Grp Volume(v), veh/h	121	637	347	4	725	60	6	0	0	49	0	69
Grp Sat Flow(s),veh/h/ln	661	1638	1782	549	1710	1507	1278	1800	1525	1360	1800	1525
Q Serve(g_s), s	4.3	3.6	3.6	0.1	4.1	0.6	0.1	0.0	0.0	1.1	0.0	1.5
Cycle Q Clear(g_c), s	8.3	3.6	3.6	3.8	4.1	0.6	0.1	0.0	0.0	1.1	0.0	1.5
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	502	1833	997	459	1913	843	340	182	154	348	182	154
V/C Ratio(X)	0.24	0.35	0.35	0.01	0.38	0.07	0.02	0.00	0.00	0.14	0.00	0.45
Avail Cap(c_a), veh/h	1548	7014	3815	1327	7323	3226	1571	1917	1624	1611	1853	1571
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.5	4.1	4.1	5.2	4.2	3.5	13.9	0.0	0.0	14.3	0.0	14.5
Incr Delay (d2), s/veh	0.2	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.3	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.0	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	6.8	4.2	4.3	5.2	4.3	3.5	13.9	0.0	0.0	14.5	0.0	16.5
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	B
Approach Vol, veh/h		1105			789			6			118	
Approach Delay, s/veh		4.5			4.3			13.9			15.7	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.3		24.9		9.3		24.9				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 36		73.2		35.2		73.2				
Max Q Clear Time (g_c+I1), s		2.1		10.3		3.5		6.1				
Green Ext Time (p_c), s		0.0		8.8		0.3		5.5				

Intersection Summary		
HCM 6th Ctrl Delay		5.1
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	29	5	0	55	3	7	0	2	1	0	8
Future Vol, veh/h	3	29	5	0	55	3	7	0	2	1	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	32	5	0	60	3	8	0	2	1	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	37	0	0	71	104	19	84	105	32
Stage 1	-	-	-	-	-	-	41	41	-	62	62	-
Stage 2	-	-	-	-	-	-	30	63	-	22	43	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1553	-	-	1587	-	-	918	790	1061	899	789	1041
Stage 1	-	-	-	-	-	-	974	865	-	948	847	-
Stage 2	-	-	-	-	-	-	989	846	-	999	863	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1553	-	-	1587	-	-	909	788	1061	895	787	1041
Mov Cap-2 Maneuver	-	-	-	-	-	-	904	788	-	891	789	-
Stage 1	-	-	-	-	-	-	972	863	-	946	847	-
Stage 2	-	-	-	-	-	-	981	846	-	995	861	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	8.9	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	935	1553	-	-	1587	-	-	1022
HCM Lane V/C Ratio	0.01	0.002	-	-	-	-	-	0.01
HCM Control Delay (s)	8.9	7.3	-	-	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	15	11	3	36	5	10	0	8	1	0	12
Future Vol, veh/h	6	15	11	3	36	5	10	0	8	1	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	16	12	3	39	5	11	0	9	1	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	44	0	0	28	0	0	62	86	14	70	90	22
Stage 1	-	-	-	-	-	-	36	36	-	48	48	-
Stage 2	-	-	-	-	-	-	26	50	-	22	42	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1577	-	-	1599	-	-	931	808	1069	920	804	1056
Stage 1	-	-	-	-	-	-	981	869	-	965	859	-
Stage 2	-	-	-	-	-	-	994	857	-	999	864	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1577	-	-	1599	-	-	915	803	1069	908	799	1056
Mov Cap-2 Maneuver	-	-	-	-	-	-	915	803	-	908	799	-
Stage 1	-	-	-	-	-	-	977	866	-	961	857	-
Stage 2	-	-	-	-	-	-	980	855	-	986	861	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.4	0.5	8.8	8.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	978	1577	-	-	1599	-	-	1043
HCM Lane V/C Ratio	0.02	0.004	-	-	0.002	-	-	0.014
HCM Control Delay (s)	8.8	7.3	-	-	7.3	-	-	8.5
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	587	436	5
Future Vol, veh/h	0	7	0	587	436	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	8	0	638	474	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	240	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	653	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	653	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	653	-	-
HCM Lane V/C Ratio	-	0.012	-	-
HCM Control Delay (s)	-	10.6	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	587	441	2
Future Vol, veh/h	0	4	0	587	441	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	4	0	638	479	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	241	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	652	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	652	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	652	-	-
HCM Lane V/C Ratio	-	0.007	-	-
HCM Control Delay (s)	-	10.6	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	582	3	0	445
Future Vol, veh/h	0	5	582	3	0	445
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	5	633	3	0	484

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	318	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	583	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	583	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	583	-
HCM Lane V/C Ratio	-	-	0.009	-
HCM Control Delay (s)	-	-	11.2	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	7	8	27	6	163	20	412	12	85	344	17
Future Vol, veh/h	10	7	8	27	6	163	20	412	12	85	344	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	8	9	29	7	177	22	448	13	92	374	18
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	10.6	12.2	14.5	12.7
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	92%	0%	100%	23%	0%	100%	1%	0%	100%
Vol Right, %	0%	0%	8%	0%	0%	77%	0%	0%	99%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	275	149	10	5	10	27	4	165	85	229
LT Vol	20	0	0	10	0	0	27	0	0	85	0
Through Vol	0	275	137	0	5	2	0	4	2	0	229
RT Vol	0	0	12	0	0	8	0	0	163	0	0
Lane Flow Rate	22	299	162	11	5	11	29	4	179	92	249
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.042	0.532	0.286	0.025	0.011	0.022	0.063	0.009	0.324	0.177	0.444
Departure Headway (Hd)	6.909	6.409	6.353	8.173	7.673	7.131	7.698	7.198	6.507	6.914	6.414
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	517	561	563	436	464	498	464	495	551	517	558
Service Time	4.672	4.172	4.116	5.966	5.466	4.924	5.472	4.972	4.281	4.678	4.178
HCM Lane V/C Ratio	0.043	0.533	0.288	0.025	0.011	0.022	0.063	0.008	0.325	0.178	0.446
HCM Control Delay	10	16.3	11.7	11.2	10.6	10.1	11	10	12.4	11.2	14.2
HCM Lane LOS	A	C	B	B	B	B	B	A	B	B	B
HCM 95th-tile Q	0.1	3.1	1.2	0.1	0	0.1	0.2	0	1.4	0.6	2.3

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	14	0	444	369	10
Future Vol, veh/h	0	14	0	444	369	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	15	0	483	401	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	206	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	807	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	807	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	807	-	-
HCM Lane V/C Ratio	-	0.019	-	-
HCM Control Delay (s)	-	9.5	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	22	423	29	3	380
Future Vol, veh/h	17	22	423	29	3	380
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	24	460	32	3	413

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	689	246	0	0	492	0
Stage 1	476	-	-	-	-	-
Stage 2	213	-	-	-	-	-
Critical Hdwy	6.25	7.1	-	-	5.3	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.65	3.9	-	-	3.1	-
Pot Cap-1 Maneuver	414	647	-	-	690	-
Stage 1	520	-	-	-	-	-
Stage 2	778	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	412	647	-	-	690	-
Mov Cap-2 Maneuver	412	-	-	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	775	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.6	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	518	690	-
HCM Lane V/C Ratio	-	-	0.082	0.005	-
HCM Control Delay (s)	-	-	12.6	10.2	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	443	6	0	397
Future Vol, veh/h	0	9	443	6	0	397
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	10	482	7	0	432

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	245	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	648	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	648	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

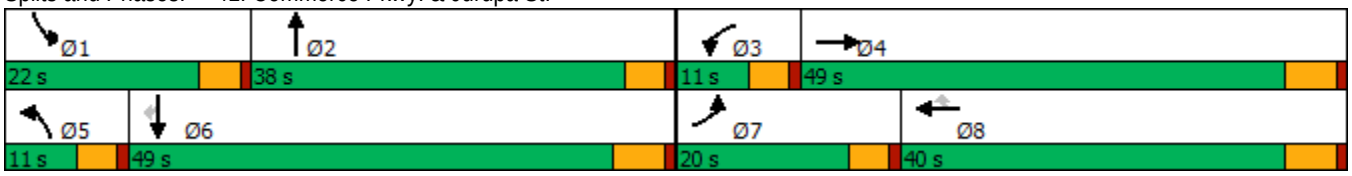
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	648	-
HCM Lane V/C Ratio	-	-	0.015	-
HCM Control Delay (s)	-	-	10.6	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

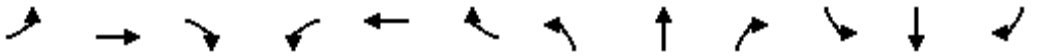
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	115	845	12	684	284	15	45	318	18	59
Future Volume (vph)	115	845	12	684	284	15	45	318	18	59
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	20.0	49.0	11.0	40.0	40.0	11.0	38.0	22.0	49.0	49.0
Total Split (%)	16.7%	40.8%	9.2%	33.3%	33.3%	9.2%	31.7%	18.3%	40.8%	40.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 81
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	845	14	12	684	284	15	45	60	318	18	59
Future Volume (veh/h)	115	845	14	12	684	284	15	45	60	318	18	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	120	880	13	12	712	0	16	47	43	331	19	46
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	150	1820	27	24	982		31	129	118	429	495	419
Arrive On Green	0.09	0.36	0.36	0.02	0.29	0.00	0.02	0.15	0.15	0.15	0.27	0.27
Sat Flow, veh/h	1619	4989	74	1619	3420	1525	1619	866	792	2956	1800	1525
Grp Volume(v), veh/h	120	578	315	12	712	0	16	0	90	331	19	46
Grp Sat Flow(s),veh/h/ln	1619	1638	1787	1619	1710	1525	1619	0	1657	1478	1800	1525
Q Serve(g_s), s	4.6	8.7	8.7	0.5	12.0	0.0	0.6	0.0	3.1	6.9	0.5	1.4
Cycle Q Clear(g_c), s	4.6	8.7	8.7	0.5	12.0	0.0	0.6	0.0	3.1	6.9	0.5	1.4
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	150	1195	652	24	982		31	0	247	429	495	419
V/C Ratio(X)	0.80	0.48	0.48	0.49	0.73		0.51	0.00	0.36	0.77	0.04	0.11
Avail Cap(c_a), veh/h	391	2217	1209	162	1833		162	0	867	806	1218	1033
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	15.6	15.6	31.2	20.5	0.0	31.0	0.0	24.4	26.3	17.0	17.3
Incr Delay (d2), s/veh	3.7	0.3	0.6	5.7	1.0	0.0	4.7	0.0	0.9	1.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	2.7	3.0	0.2	4.2	0.0	0.3	0.0	1.2	2.2	0.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.1	15.9	16.2	36.8	21.5	0.0	35.7	0.0	25.3	27.4	17.0	17.4
LnGrp LOS	C	B	B	D	C		D	A	C	C	B	B
Approach Vol, veh/h		1013			724	A		106			396	
Approach Delay, s/veh		17.9			21.8			26.9			25.7	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	15.3	5.6	29.1	5.8	23.3	10.5	24.1
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	17.4	* 33	6.4	43.2	6.4	43.2	15.4	34.2
Max Q Clear Time (g_c+I1), s	8.9	5.1	2.5	10.7	2.6	3.4	6.6	14.0
Green Ext Time (p_c), s	0.4	0.5	0.0	5.9	0.0	0.2	0.1	4.4

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	89	10	1	179	1	11	0	7	3	0	4
Future Vol, veh/h	4	89	10	1	179	1	11	0	7	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	97	11	1	195	1	12	0	8	3	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	196	0	0	108	0	0	211	309	54	255	314	98
Stage 1	-	-	-	-	-	-	111	111	-	198	198	-
Stage 2	-	-	-	-	-	-	100	198	-	57	116	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1389	-	-	1495	-	-	733	609	1008	683	605	945
Stage 1	-	-	-	-	-	-	888	807	-	791	741	-
Stage 2	-	-	-	-	-	-	901	741	-	954	803	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1389	-	-	1495	-	-	728	607	1008	676	603	945
Mov Cap-2 Maneuver	-	-	-	-	-	-	792	674	-	737	673	-
Stage 1	-	-	-	-	-	-	885	805	-	789	740	-
Stage 2	-	-	-	-	-	-	896	740	-	944	801	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0	9.3	9.3
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	864	1389	-	-	1495	-	-	843
HCM Lane V/C Ratio	0.023	0.003	-	-	0.001	-	-	0.009
HCM Control Delay (s)	9.3	7.6	-	-	7.4	-	-	9.3
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	91	3	6	174	1	4	0	10	3	0	4
Future Vol, veh/h	4	91	3	6	174	1	4	0	10	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	99	3	7	189	1	4	0	11	3	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	190	0	0	102	0	0	218	313	51	262	314	95
Stage 1	-	-	-	-	-	-	109	109	-	204	204	-
Stage 2	-	-	-	-	-	-	109	204	-	58	110	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1396	-	-	1503	-	-	725	606	1013	675	605	949
Stage 1	-	-	-	-	-	-	890	809	-	785	737	-
Stage 2	-	-	-	-	-	-	890	737	-	953	808	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1396	-	-	1503	-	-	718	601	1013	664	600	949
Mov Cap-2 Maneuver	-	-	-	-	-	-	785	669	-	730	669	-
Stage 1	-	-	-	-	-	-	887	807	-	783	733	-
Stage 2	-	-	-	-	-	-	882	733	-	940	806	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.2	8.9	9.3
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	935	1396	-	-	1503	-	-	841
HCM Lane V/C Ratio	0.016	0.003	-	-	0.004	-	-	0.009
HCM Control Delay (s)	8.9	7.6	-	-	7.4	-	-	9.3
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	1	19	10	0
Future Vol, veh/h	1	0	1	19	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	1	21	11	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	24	6	11	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	13	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	994	1081	1621	-	-	0
Stage 1	1016	-	-	-	-	0
Stage 2	1014	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	993	1081	1621	-	-	-
Mov Cap-2 Maneuver	916	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1014	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	1621	-	916	-
HCM Lane V/C Ratio	0.001	-	0.001	-
HCM Control Delay (s)	7.2	-	8.9	-
HCM Lane LOS	A	-	A	-
HCM 95th %tile Q(veh)	0	-	0	-

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	49	43	7	146	7	27	2	15	2	0	7
Future Vol, veh/h	12	49	43	7	146	7	27	2	15	2	0	7
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	61	54	9	183	9	34	3	19	3	0	9
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8	8.4	8.4	7.8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	4%	0%	100%	28%	0%	100%	87%	0%	100%
Vol Right, %	0%	0%	96%	0%	0%	72%	0%	0%	13%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	1	16	12	33	59	7	97	56	2	0
LT Vol	27	0	0	12	0	0	7	0	0	2	0
Through Vol	0	1	1	0	33	16	0	97	49	0	0
RT Vol	0	0	15	0	0	43	0	0	7	0	0
Lane Flow Rate	34	2	20	15	41	74	9	122	70	2	0
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.055	0.002	0.025	0.023	0.058	0.094	0.013	0.167	0.094	0.004	0
Departure Headway (Hd)	5.837	5.337	4.668	5.575	5.074	4.566	5.435	4.934	4.846	5.932	5.432
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	614	671	766	643	707	785	660	729	740	603	0
Service Time	3.567	3.067	2.398	3.296	2.795	2.288	3.156	2.656	2.568	3.666	3.166
HCM Lane V/C Ratio	0.055	0.003	0.026	0.023	0.058	0.094	0.014	0.167	0.095	0.003	0
HCM Control Delay	8.9	8.1	7.5	8.4	8.1	7.8	8.2	8.6	8.1	8.7	8.2
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	N
HCM 95th-tile Q	0.2	0	0.1	0.1	0.2	0.3	0	0.6	0.3	0	0

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	62	9	2	42	1	10
Future Vol, veh/h	62	9	2	42	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	67	10	2	46	1	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	77	0	99	39
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1535	-	895	1031
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	998	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1535	-	894	1031
Mov Cap-2 Maneuver	-	-	-	-	892	-
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	997	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1017	-	-	1535	-
HCM Lane V/C Ratio	0.012	-	-	0.001	-
HCM Control Delay (s)	8.6	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	37	11	17	99	29	42	93	26	11	52	13
Future Vol, veh/h	11	37	11	17	99	29	42	93	26	11	52	13
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	14	46	14	21	124	36	53	116	33	14	65	16
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.6	8.8	8.8	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	54%	0%	100%	53%	0%	100%	53%	0%	100%
Vol Right, %	0%	0%	46%	0%	0%	47%	0%	0%	47%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	42	62	57	11	25	23	17	66	62	11	35
LT Vol	42	0	0	11	0	0	17	0	0	11	0
Through Vol	0	62	31	0	25	12	0	66	33	0	35
RT Vol	0	0	26	0	0	11	0	0	29	0	0
Lane Flow Rate	52	78	71	14	31	29	21	82	78	14	43
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.086	0.116	0.1	0.023	0.048	0.043	0.035	0.125	0.11	0.023	0.067
Departure Headway (Hd)	5.881	5.381	5.061	6.143	5.643	5.313	5.944	5.444	5.117	6.078	5.578
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	607	663	705	580	631	669	600	656	697	586	638
Service Time	3.636	3.136	2.816	3.912	3.412	3.082	3.7	3.2	2.873	3.844	3.344
HCM Lane V/C Ratio	0.086	0.118	0.101	0.024	0.049	0.043	0.035	0.125	0.112	0.024	0.067
HCM Control Delay	9.2	8.8	8.4	9.1	8.7	8.3	8.9	9	8.5	9	8.7
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.4	0.3	0.1	0.2	0.1	0.1	0.4	0.4	0.1	0.2

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	66	31	118	101	13
Future Vol, veh/h	7	66	31	118	101	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	87	41	155	133	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	302	75	150	0	-	0
Stage 1	142	-	-	-	-	-
Stage 2	160	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	671	978	1444	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	652	978	1444	-	-	-
Mov Cap-2 Maneuver	747	-	-	-	-	-
Stage 1	851	-	-	-	-	-
Stage 2	858	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1444	-	747	978	-	-
HCM Lane V/C Ratio	0.028	-	0.012	0.089	-	-
HCM Control Delay (s)	7.6	-	9.9	9	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.3	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	9	1	146	151	4
Future Vol, veh/h	6	9	1	146	151	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	10	1	159	164	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	248	84	168	0	-	0
Stage 1	166	-	-	-	-	-
Stage 2	82	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	725	965	1422	-	-	-
Stage 1	852	-	-	-	-	-
Stage 2	938	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	724	965	1422	-	-	-
Mov Cap-2 Maneuver	786	-	-	-	-	-
Stage 1	851	-	-	-	-	-
Stage 2	938	-	-	-	-	-

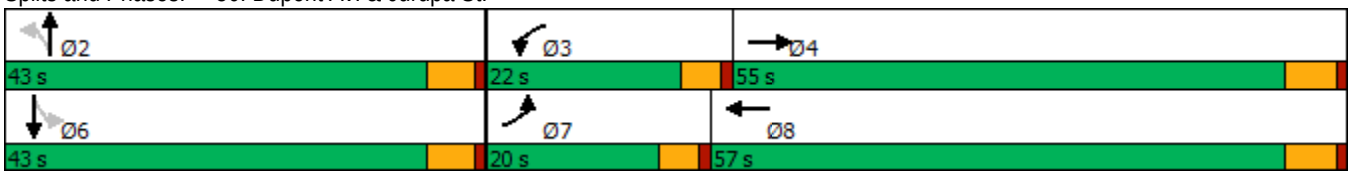
Approach	EB	NB	SB
HCM Control Delay, s	9.1	0.1	0
HCM LOS	A		

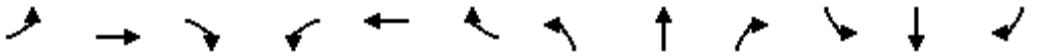
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1422	-	884	-	-
HCM Lane V/C Ratio	0.001	-	0.018	-	-
HCM Control Delay (s)	7.5	-	9.1	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	50	1118	71	869	46	29	81	28
Future Volume (vph)	50	1118	71	869	46	29	81	28
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	20.0	55.0	22.0	57.0	43.0	43.0	43.0	43.0
Total Split (%)	16.7%	45.8%	18.3%	47.5%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 61.7
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1118	14	71	869	68	46	29	121	81	28	51
Future Volume (veh/h)	50	1118	14	71	869	68	46	29	121	81	28	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1800	1800	1700	1800	1800	1700	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	54	1202	14	76	934	67	49	31	101	87	30	31
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	86	2064	24	106	1987	142	384	344	307	320	344	307
Arrive On Green	0.05	0.41	0.41	0.07	0.42	0.42	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1619	5007	58	1619	4676	335	1287	1710	1525	1207	1710	1525
Grp Volume(v), veh/h	54	786	430	76	654	347	49	31	101	87	30	31
Grp Sat Flow(s),veh/h/ln	1619	1638	1790	1619	1638	1735	1287	1710	1525	1207	1710	1525
Q Serve(g_s), s	1.6	9.1	9.1	2.3	7.1	7.1	1.6	0.7	2.8	3.3	0.7	0.8
Cycle Q Clear(g_c), s	1.6	9.1	9.1	2.3	7.1	7.1	2.4	0.7	2.8	6.1	0.7	0.8
Prop In Lane	1.00		0.03	1.00		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	86	1351	738	106	1392	737	384	344	307	320	344	307
V/C Ratio(X)	0.63	0.58	0.58	0.71	0.47	0.47	0.13	0.09	0.33	0.27	0.09	0.10
Avail Cap(c_a), veh/h	507	3276	1789	573	3409	1805	1108	1307	1166	1000	1307	1166
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	11.2	11.2	22.5	10.2	10.2	17.0	16.0	16.8	19.4	16.0	16.0
Incr Delay (d2), s/veh	2.8	0.4	0.7	3.3	0.2	0.5	0.1	0.1	0.6	0.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.4	2.7	0.8	1.8	1.9	0.4	0.3	0.9	0.8	0.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.6	11.6	11.9	25.9	10.4	10.6	17.2	16.1	17.4	19.9	16.1	16.2
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1270			1077			181			148	
Approach Delay, s/veh		12.3			11.6			17.1			18.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.3	7.8	26.1		15.3	7.2	26.7				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		37.6	17.4	49.2		37.6	15.4	51.2				
Max Q Clear Time (g_c+I1), s		4.8	4.3	11.1		8.1	3.6	9.1				
Green Ext Time (p_c), s		0.9	0.1	9.1		0.6	0.0	7.2				

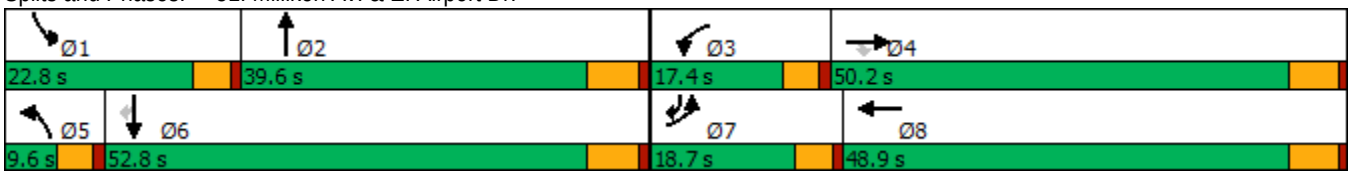
Intersection Summary												
HCM 6th Ctrl Delay			12.7									
HCM 6th LOS			B									

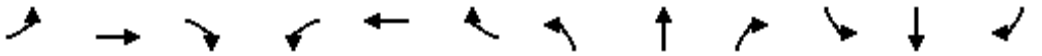
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	273	270	36	95	289	36	1053	153	955	138
Future Volume (vph)	273	270	36	95	289	36	1053	153	955	138
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	18.7	50.2	50.2	17.4	48.9	9.6	39.6	22.8	52.8	18.7
Total Split (%)	14.4%	38.6%	38.6%	13.4%	37.6%	7.4%	30.5%	17.5%	40.6%	14.4%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 101.6
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	273	270	36	95	289	357	36	1053	66	153	955	138
Future Volume (veh/h)	273	270	36	95	289	357	36	1053	66	153	955	138
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1700	1800	1800
Adj Flow Rate, veh/h	276	273	15	96	292	239	36	1064	60	155	965	92
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	347	891	397	120	393	313	100	1407	79	187	1856	755
Arrive On Green	0.12	0.26	0.26	0.07	0.22	0.22	0.03	0.30	0.30	0.12	0.38	0.38
Sat Flow, veh/h	2956	3420	1525	1619	1810	1440	2956	4755	268	1619	4914	1525
Grp Volume(v), veh/h	276	273	15	96	275	256	36	733	391	155	965	92
Grp Sat Flow(s),veh/h/ln	1478	1710	1525	1619	1710	1541	1478	1638	1747	1619	1638	1525
Q Serve(g_s), s	7.6	5.4	0.6	4.9	12.5	13.0	1.0	16.9	17.0	7.8	12.7	2.7
Cycle Q Clear(g_c), s	7.6	5.4	0.6	4.9	12.5	13.0	1.0	16.9	17.0	7.8	12.7	2.7
Prop In Lane	1.00		1.00	1.00		0.93	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	347	891	397	120	371	335	100	969	517	187	1856	755
V/C Ratio(X)	0.80	0.31	0.04	0.80	0.74	0.76	0.36	0.76	0.76	0.83	0.52	0.12
Avail Cap(c_a), veh/h	499	1819	811	248	883	796	177	1311	699	353	2743	1031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.9	24.8	23.0	38.0	30.5	30.7	39.4	26.6	26.7	36.1	20.1	11.3
Incr Delay (d2), s/veh	3.5	0.2	0.0	4.7	2.9	3.6	0.8	1.7	3.3	3.5	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	2.0	0.2	2.0	5.1	4.8	0.4	6.1	6.8	3.0	4.3	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.3	25.0	23.1	42.7	33.4	34.3	40.2	28.4	29.9	39.6	20.3	11.4
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	B
Approach Vol, veh/h		564			627			1160			1212	
Approach Delay, s/veh		32.0			35.2			29.3			22.1	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	30.9	10.8	27.5	7.4	37.7	14.4	23.9
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	18.2	33.4	12.8	44.4	5.0	46.6	14.1	43.1
Max Q Clear Time (g_c+I1), s	9.8	19.0	6.9	7.4	3.0	14.7	9.6	15.0
Green Ext Time (p_c), s	0.1	5.7	0.0	1.7	0.0	7.2	0.2	3.1

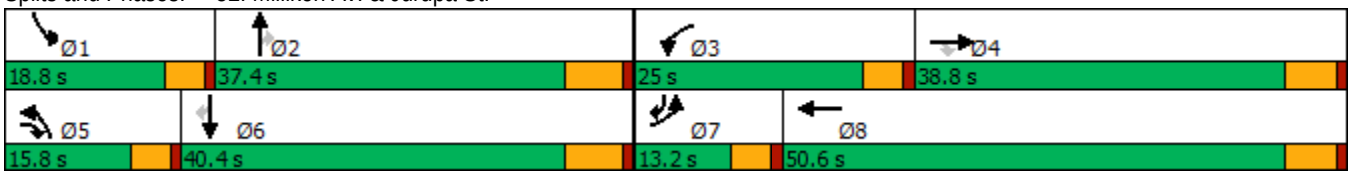
Intersection Summary	
HCM 6th Ctrl Delay	28.3
HCM 6th LOS	C

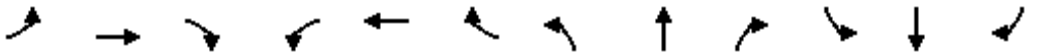
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	137	916	280	415	679	212	838	388	267	1006	66
Future Volume (vph)	137	916	280	415	679	212	838	388	267	1006	66
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	13.2	38.8	15.8	25.0	50.6	15.8	37.4	37.4	18.8	40.4	13.2
Total Split (%)	11.0%	32.3%	13.2%	20.8%	42.2%	13.2%	31.2%	31.2%	15.7%	33.7%	11.0%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 109
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	916	280	415	679	109	212	838	388	267	1006	66
Future Volume (veh/h)	137	916	280	415	679	109	212	838	388	267	1006	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1600	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	143	954	199	432	707	97	221	873	285	278	1048	37
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	197	1258	533	492	1557	212	277	1234	383	336	1331	515
Arrive On Green	0.07	0.26	0.26	0.17	0.36	0.36	0.09	0.25	0.25	0.11	0.27	0.27
Sat Flow, veh/h	2956	4914	1524	2956	4374	595	2956	4914	1525	2956	4914	1525
Grp Volume(v), veh/h	143	954	199	432	528	276	221	873	285	278	1048	37
Grp Sat Flow(s),veh/h/ln	1478	1638	1524	1478	1638	1693	1478	1638	1525	1478	1638	1525
Q Serve(g_s), s	4.7	17.9	9.7	14.2	12.3	12.5	7.3	16.1	17.1	9.2	19.7	1.6
Cycle Q Clear(g_c), s	4.7	17.9	9.7	14.2	12.3	12.5	7.3	16.1	17.1	9.2	19.7	1.6
Prop In Lane	1.00		1.00	1.00		0.35	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	1258	533	492	1166	603	277	1234	383	336	1331	515
V/C Ratio(X)	0.73	0.76	0.37	0.88	0.45	0.46	0.80	0.71	0.74	0.83	0.79	0.07
Avail Cap(c_a), veh/h	255	1627	648	605	1473	761	332	1539	478	421	1686	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	34.2	24.2	40.5	24.6	24.7	44.2	34.0	34.4	43.2	33.7	22.4
Incr Delay (d2), s/veh	4.5	1.6	0.4	10.4	0.3	0.5	8.9	1.1	4.8	8.7	2.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	6.9	3.4	5.6	4.5	4.8	2.9	6.1	6.5	3.6	7.5	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	35.8	24.7	51.0	24.9	25.2	53.1	35.1	39.2	51.9	35.7	22.5
LnGrp LOS	D	D	C	D	C	C	D	D	D	D	D	C
Approach Vol, veh/h		1296			1236			1379			1363	
Approach Delay, s/veh		35.6			34.1			38.8			38.6	
Approach LOS		D			C			D			D	

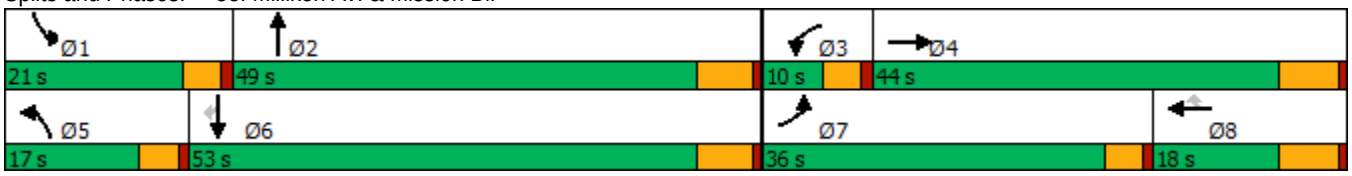
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	31.2	21.2	31.3	14.0	33.2	11.2	41.3
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	14.2	31.2	20.4	33.0	11.2	34.2	8.6	44.8
Max Q Clear Time (g_c+I1), s	11.2	19.1	16.2	19.9	9.3	21.7	6.7	14.5
Green Ext Time (p_c), s	0.2	5.0	0.4	5.6	0.1	5.3	0.0	5.2

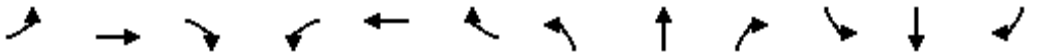
Intersection Summary	
HCM 6th Ctrl Delay	36.9
HCM 6th LOS	D

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	578	1	17	6	161	188	960	284	1398	431
Future Volume (vph)	578	1	17	6	161	188	960	284	1398	431
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	36.0	44.0	10.0	18.0	18.0	17.0	49.0	21.0	53.0	53.0
Total Split (%)	29.0%	35.5%	8.1%	14.5%	14.5%	13.7%	39.5%	16.9%	42.7%	42.7%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 124
Actuated Cycle Length: 114.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	578	1	89	17	6	161	188	960	22	284	1398	431
Future Volume (veh/h)	578	1	89	17	6	161	188	960	22	284	1398	431
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1800	1800	1700	1800	1800	1600	1800	1800	1600	1800	1800
Adj Flow Rate, veh/h	608	1	87	18	0	136	198	1011	23	299	1472	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	673	5	462	32	0	298	254	1680	38	357	1841	
Arrive On Green	0.23	0.31	0.31	0.02	0.00	0.10	0.09	0.34	0.34	0.12	0.37	0.00
Sat Flow, veh/h	2956	17	1511	1619	0	3051	2956	4943	112	2956	4914	1525
Grp Volume(v), veh/h	608	0	88	18	0	136	198	670	364	299	1472	0
Grp Sat Flow(s),veh/h/ln	1478	0	1528	1619	0	1525	1478	1638	1780	1478	1638	1525
Q Serve(g_s), s	20.5	0.0	4.3	1.1	0.0	4.3	6.7	17.4	17.4	10.1	27.4	0.0
Cycle Q Clear(g_c), s	20.5	0.0	4.3	1.1	0.0	4.3	6.7	17.4	17.4	10.1	27.4	0.0
Prop In Lane	1.00		0.99	1.00		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	673	0	467	32	0	298	254	1114	605	357	1841	
V/C Ratio(X)	0.90	0.00	0.19	0.57	0.00	0.46	0.78	0.60	0.60	0.84	0.80	
Avail Cap(c_a), veh/h	907	0	560	85	0	343	358	1370	744	474	2247	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.4	0.0	26.2	49.7	0.0	43.6	45.8	28.0	28.0	44.0	28.6	0.0
Incr Delay (d2), s/veh	8.2	0.0	0.2	5.8	0.0	1.1	4.3	0.5	1.0	7.6	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	0.0	1.5	0.5	0.0	1.6	2.5	6.4	7.0	3.9	10.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.6	0.0	26.4	55.6	0.0	44.7	50.1	28.6	29.0	51.6	30.3	0.0
LnGrp LOS	D	A	C	E	A	D	D	C	C	D	C	
Approach Vol, veh/h		696			154			1232			1771	A
Approach Delay, s/veh		44.1			46.0			32.1			33.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	41.0	6.6	37.8	13.4	44.5	27.9	16.5
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	16.4	42.8	5.4	37.5	12.4	46.8	31.4	11.5
Max Q Clear Time (g_c+I1), s	12.1	19.4	3.1	6.3	8.7	29.4	22.5	6.3
Green Ext Time (p_c), s	0.2	6.3	0.0	0.4	0.1	9.0	0.9	0.2

Intersection Summary	
HCM 6th Ctrl Delay	35.7
HCM 6th LOS	D

Notes

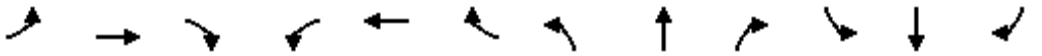
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1376	601	484	760	239	8	478
Future Volume (vph)	1376	601	484	760	239	8	478
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	43.0	43.0	23.0	66.0	24.0	24.0	24.0
Total Split (%)	47.8%	47.8%	25.6%	73.3%	26.7%	26.7%	26.7%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 85.7
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1376	601	484	760	0	0	0	0	239	8	478
Future Volume (veh/h)	0	1376	601	484	760	0	0	0	0	239	8	478
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1800	1800	1600	1800	0				1700	1800	1800
Adj Flow Rate, veh/h	0	1464	446	515	809	0				172	0	487
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	2117	598	592	3235	0				318	0	599
Arrive On Green	0.00	0.39	0.39	0.20	0.66	0.00				0.20	0.00	0.20
Sat Flow, veh/h	0	5400	1525	2956	5076	0				1619	0	3051
Grp Volume(v), veh/h	0	1464	446	515	809	0				172	0	487
Grp Sat Flow(s),veh/h/ln	0	1800	1525	1478	1638	0				1619	0	1525
Q Serve(g_s), s	0.0	17.1	19.0	12.8	5.1	0.0				7.2	0.0	11.6
Cycle Q Clear(g_c), s	0.0	17.1	19.0	12.8	5.1	0.0				7.2	0.0	11.6
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2117	598	592	3235	0				318	0	599
V/C Ratio(X)	0.00	0.69	0.75	0.87	0.25	0.00				0.54	0.00	0.81
Avail Cap(c_a), veh/h	0	2640	746	703	3896	0				407	0	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	19.2	19.8	29.3	5.3	0.0				27.3	0.0	29.1
Incr Delay (d2), s/veh	0.0	0.5	2.8	8.9	0.0	0.0				1.4	0.0	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.3	6.3	4.9	1.2	0.0				2.7	0.0	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	19.7	22.6	38.2	5.3	0.0				28.8	0.0	34.4
LnGrp LOS	A	B	C	D	A	A				C	A	C
Approach Vol, veh/h		1910			1324						659	
Approach Delay, s/veh		20.3			18.1						32.9	
Approach LOS		C			B						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.2	35.7		19.9		55.8
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0
Max Green Setting (Gmax), s	18.0	37.0		19.0		60.0
Max Q Clear Time (g_c+I1), s	14.8	21.0		13.6		7.1
Green Ext Time (p_c), s	0.4	8.6		1.3		4.7

Intersection Summary		
HCM 6th Ctrl Delay		21.7
HCM 6th LOS		C

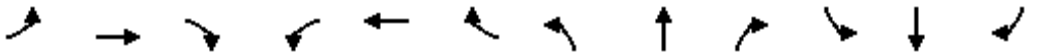
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	614	1000	1090	542	154	1	353
Future Volume (vph)	614	1000	1090	542	154	1	353
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	28.0	69.0	41.0	41.0	21.0	21.0	21.0
Total Split (%)	31.1%	76.7%	45.6%	45.6%	23.3%	23.3%	23.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 74.6
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	614	1000	0	0	1090	542	154	1	353	0	0	0
Future Volume (veh/h)	614	1000	0	0	1090	542	154	1	353	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1600	1800	0	0	1800	1800	1700	1800	1800			
Adj Flow Rate, veh/h	633	1031	0	0	1124	428	106	0	304			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	737	3451	0	0	1878	583	227	0	428			
Arrive On Green	0.25	0.70	0.00	0.00	0.38	0.38	0.14	0.00	0.14			
Sat Flow, veh/h	2956	5076	0	0	5076	1525	1619	0	3051			
Grp Volume(v), veh/h	633	1031	0	0	1124	428	106	0	304			
Grp Sat Flow(s),veh/h/ln	1478	1638	0	0	1638	1525	1619	0	1525			
Q Serve(g_s), s	13.3	5.1	0.0	0.0	11.9	15.6	3.9	0.0	6.2			
Cycle Q Clear(g_c), s	13.3	5.1	0.0	0.0	11.9	15.6	3.9	0.0	6.2			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	737	3451	0	0	1878	583	227	0	428			
V/C Ratio(X)	0.86	0.30	0.00	0.00	0.60	0.73	0.47	0.00	0.71			
Avail Cap(c_a), veh/h	1067	4845	0	0	2722	845	397	0	748			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	23.2	3.6	0.0	0.0	16.0	17.2	25.6	0.0	26.6			
Incr Delay (d2), s/veh	3.5	0.0	0.0	0.0	0.2	1.4	1.5	0.0	2.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.4	0.8	0.0	0.0	3.7	4.7	1.4	0.0	2.1			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.8	3.7	0.0	0.0	16.3	18.6	27.1	0.0	28.8			
LnGrp LOS	C	A	A	A	B	B	C	A	C			
Approach Vol, veh/h		1664			1552			410				
Approach Delay, s/veh		12.5			16.9			28.4				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		50.6			20.8	29.9		14.2				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		63.9			23.4	35.9		15.9				
Max Q Clear Time (g_c+I1), s		7.1			15.3	17.6		8.2				
Green Ext Time (p_c), s		6.5			0.9	7.1		0.9				

Intersection Summary	
HCM 6th Ctrl Delay	16.2
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

APPENDIX 6.3:

OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

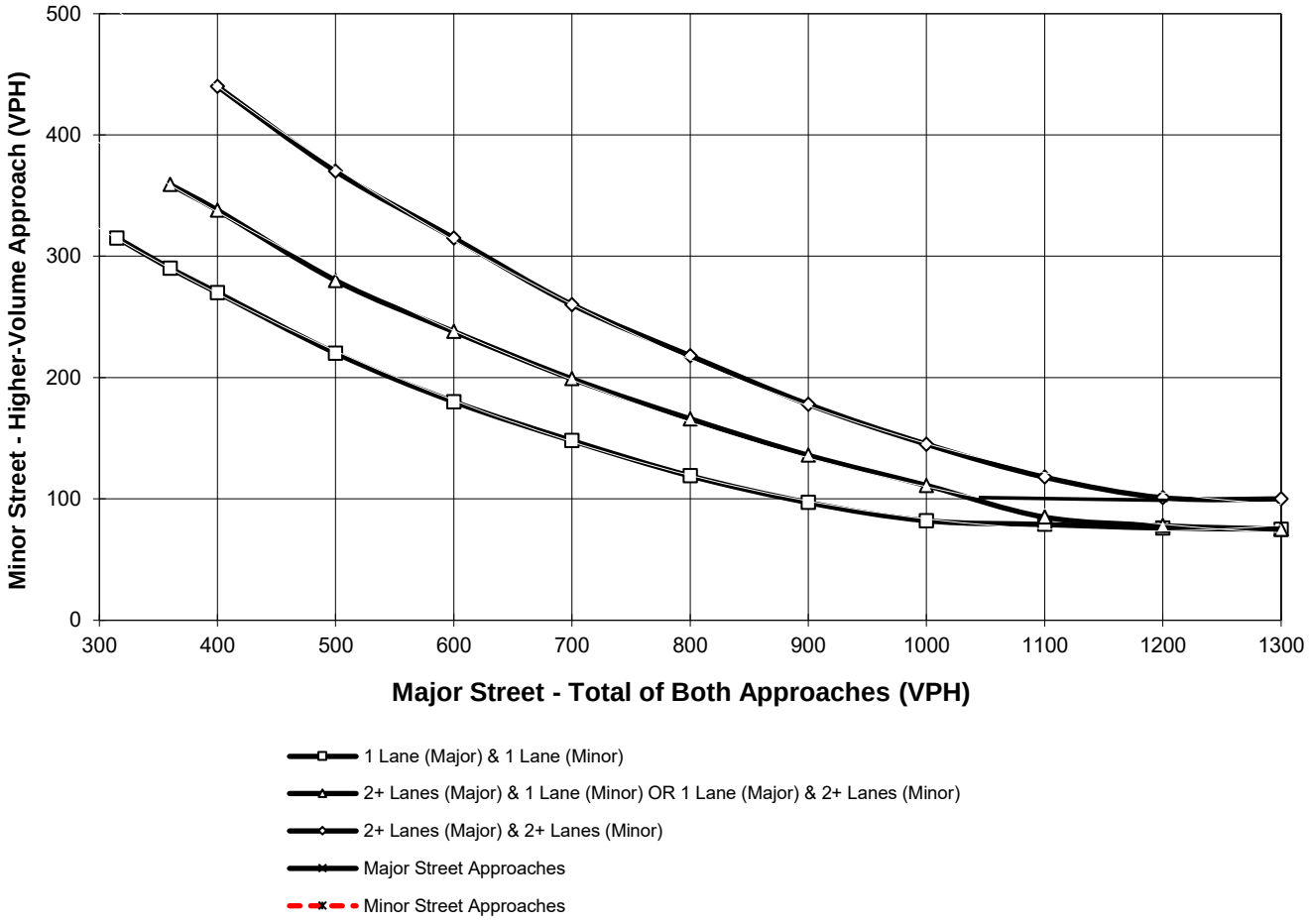
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Opening Year (2026) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **101**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 15/Santa Ana St** High Volume Approach (VPH) = **23**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

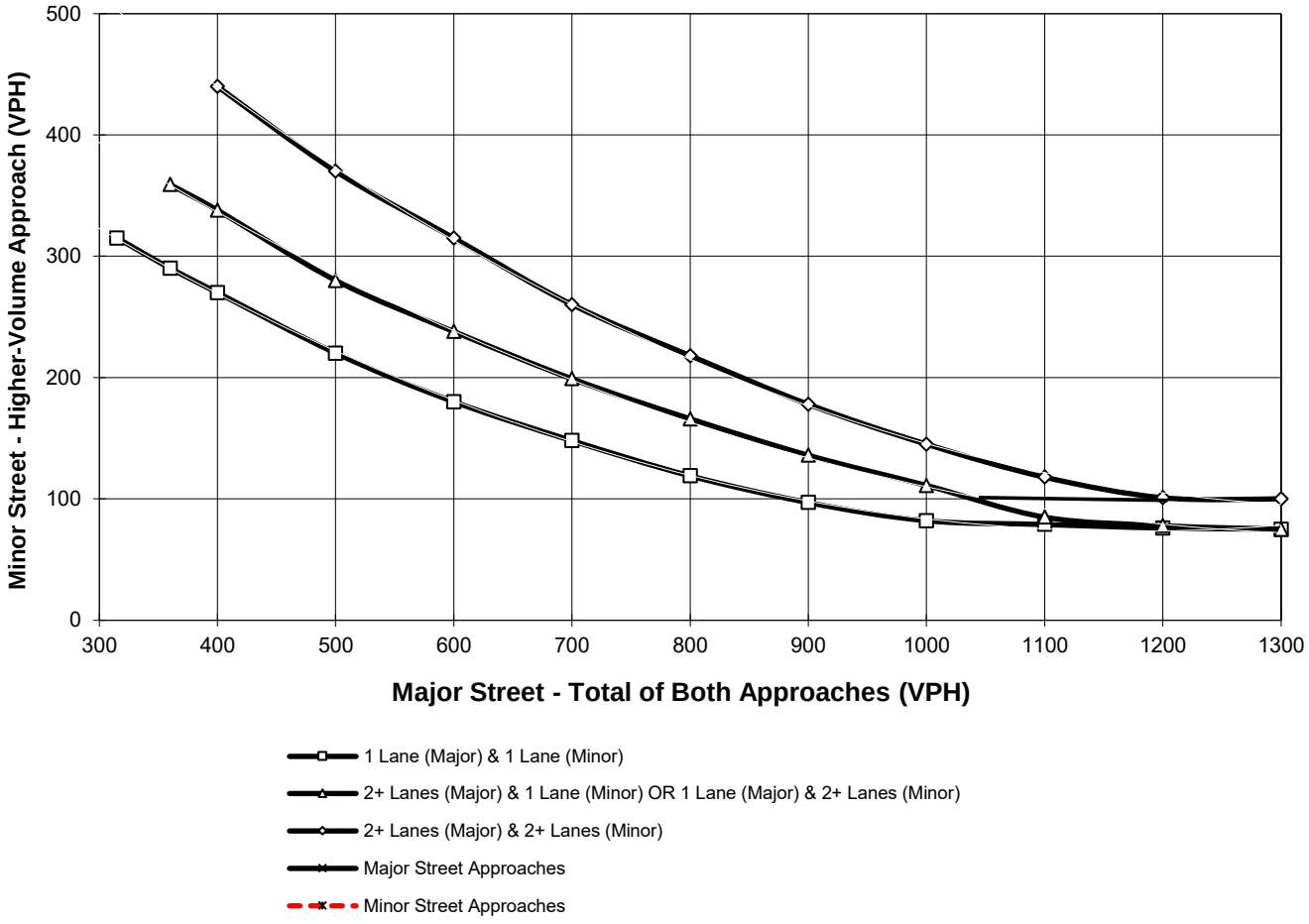
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Opening Year (2026) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **152**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **La Salle Street** High Volume Approach (VPH) = **26**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

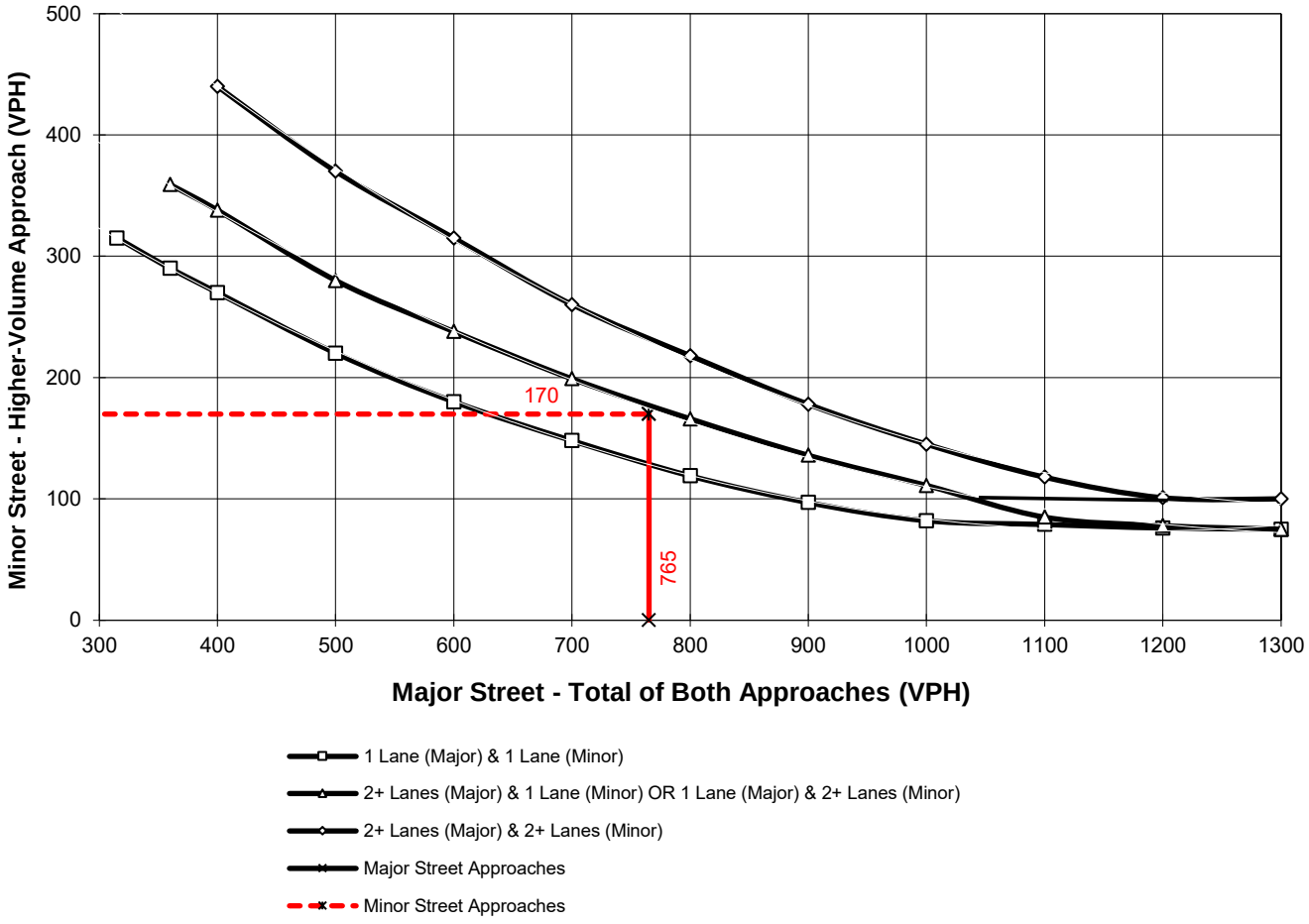
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Opening Year (2026) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Commerce Parkway** Total of Both Approaches (VPH) = **765**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Santa Ana Street** High Volume Approach (VPH) = **170**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

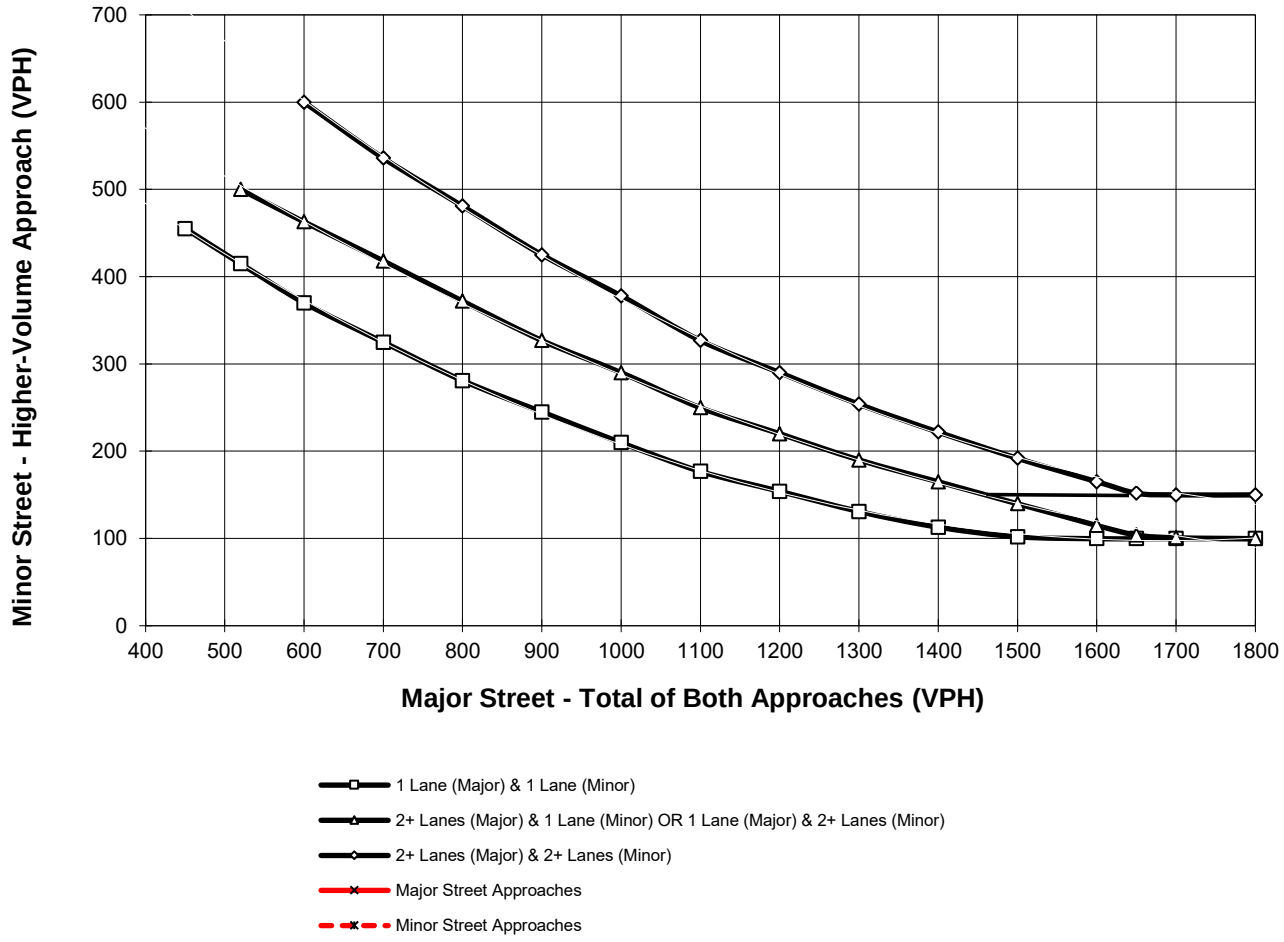
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Opening Year (2026) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Santa Ana Street** Total of Both Approaches (VPH) = **226**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue** High Volume Approach (VPH) = **35**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

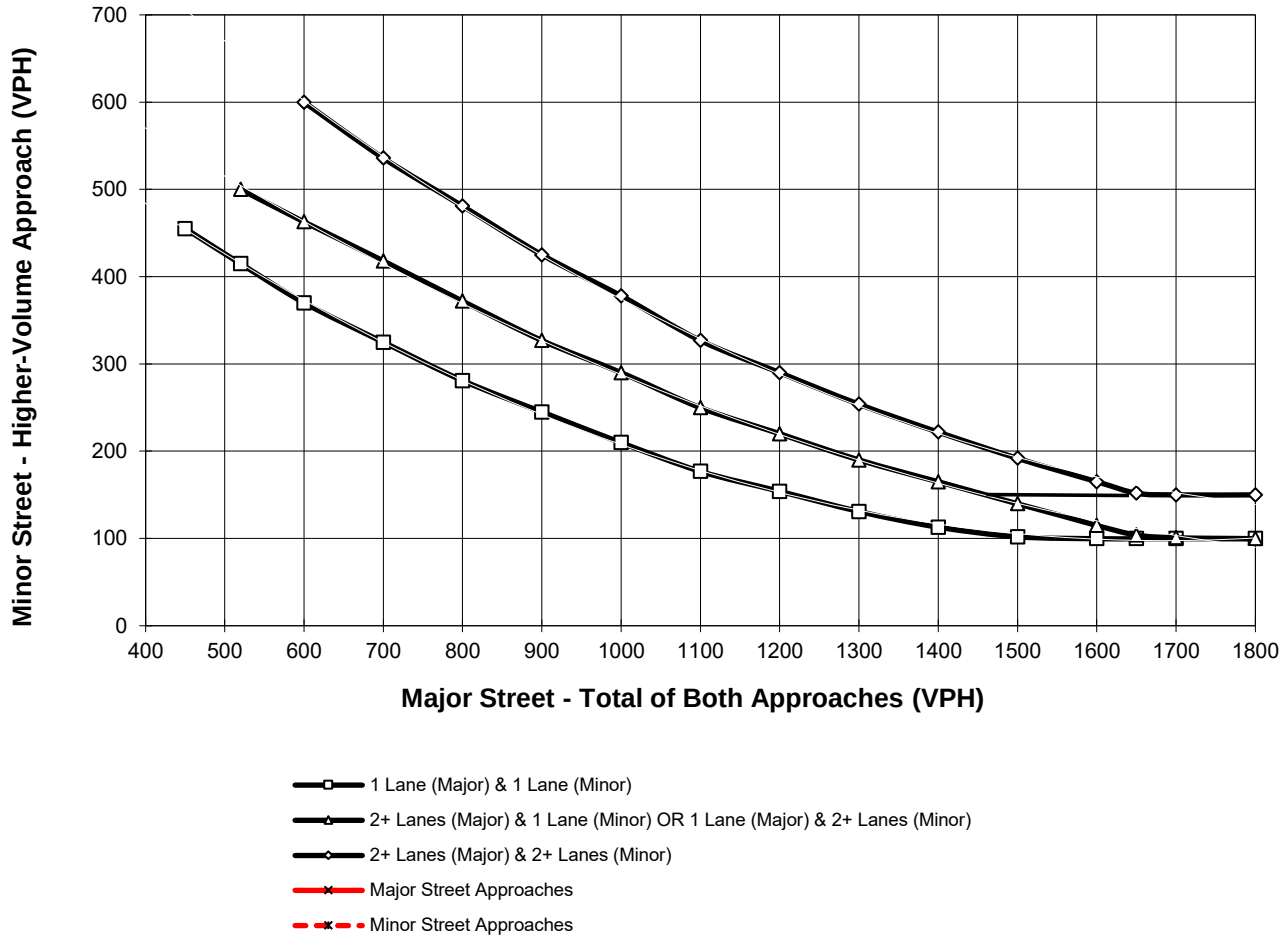
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Opening Year (2026) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue**
Total of Both Approaches (VPH) = **229**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Santa Ana Street**
High Volume Approach (VPH) = **145**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

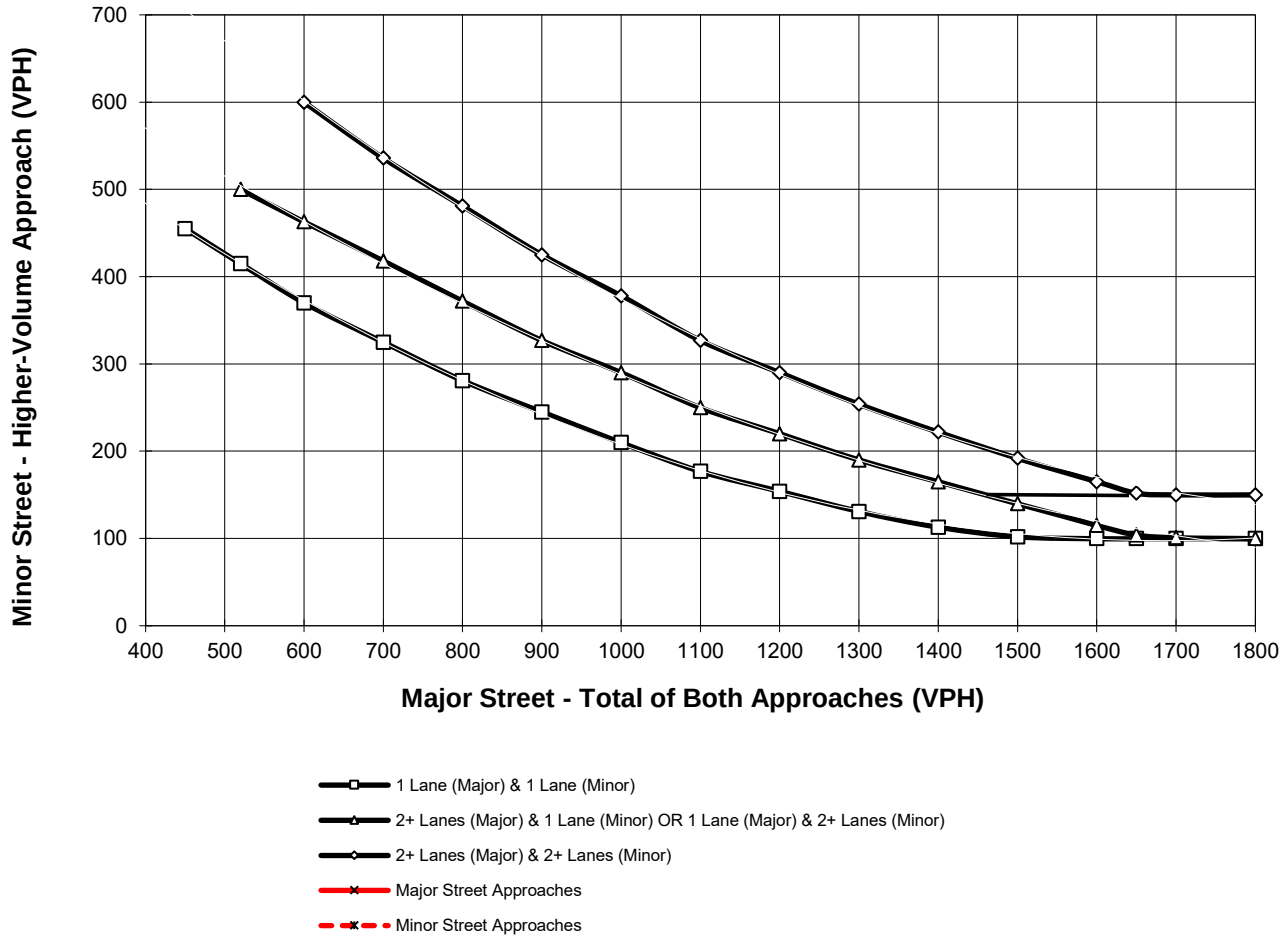
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Opening Year (2026) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue**
Total of Both Approaches (VPH) = **248**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue**
High Volume Approach (VPH) = **38**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

APPENDIX 6.4:

OPENING YEAR CUMULATIVE (2026) WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: City of Ontario
Major Street: E. Airport Drive
Minor Street: Driveway 3
Critical Approach Speed (Major) 45 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = 3 lane
Minor Street Approach Lanes = 1 lane

Major Street Future ADT = 20,172 vpd
Minor Street Future ADT = 161 vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √
or
In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL — XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied — XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + 20,172	1 161	9,600	6,720 *	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied — XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + 20,172	1 161	14,400	10,080 *	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied — XX

No one condition satisfied, but following conditions fulfilled 80% of more ..... A 10% B 19%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: La Salle Street				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 6				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **765** vpd

Minor Street Future ADT = **63** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach: Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **765**	*1* **63**	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied (XX)						
	1	*1*	12,000	8,400	1,200	850
	2 + **765**	*1* **63**	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)			2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 3%	**B** 5%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **La Salle Street**
Minor Street: **Driveway 7**
Critical Approach Speed (Major) 25 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **782** vpd
Minor Street Future ADT = **103** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
CONDITION A - Minimum Vehicular Volume						
XX / Satisfied	*1*	*1*	8,000	5,600	2,400	1,680
	2 + **782**	*1* **103**	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
XX / Satisfied	*1*	*1*	12,000	8,400	1,200	850
	2 + **782**	*1* **103**	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
XX / Satisfied			2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 4%	**B** 5%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **La Salle Street**
Minor Street: **Driveway 8**
Critical Approach Speed (Major) 25 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **775** vpd
Minor Street Future ADT = **163** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied — Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **775**	1 **163**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied — Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **775**	1 **163**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied — Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 7% **B** 5%

Vehicles Per Day on Major Street (Total of Both Approaches)	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)
2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **La Salle Street**
Minor Street: **Driveway 9**
Critical Approach Speed (Major) 25 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **1,484** vpd
Minor Street Future ADT = **18** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied — Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **1,484**	1 **18**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied — Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **1,484**	1 **18**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied — Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 1% **B** 2%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **Jurupa Avenue**
Minor Street: **Driveway 10**
Critical Approach Speed (Major) 45 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **3** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **16,633** vpd
Minor Street Future ADT = **63** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……... √
or
In built up area of isolated community of < 10,000 population ……..……

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN	RURAL	Minimum Requirements EADT			
	XX				
CONDITION A - Minimum Vehicular Volume		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **16,633**	*1* **63**	9,600	6,720 *	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied	Not Satisfied XX				
Number of lanes for moving traffic on each approach					
Major Street	Minor Street	Urban	Rural	Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **16,633**	*1* **63**	14,400	10,080 *	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B					
Satisfied	Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	A 4% B 7%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Jurupa Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 11				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **3** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **16,634** vpd Minor Street Future ADT = **72** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [√]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ..... [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 / 1	8,000	5,600	2,400	1,680
2 + **16,634** / 1 **72**	9,600	6,720 *	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 / 1	12,000	8,400	1,200	850
2 + **16,634** / 1 **72**	14,400	10,080 *	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX				
No one condition satisfied, but following conditions fulfilled 80% of more ..... A 4% B 8%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 12				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,235** vpd Minor Street Future ADT = **222** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / 1	8,000	5,600	2,400	1,680
2 + **3,235** / 1 **222**	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / 1	12,000	8,400	1,200	850
2 + **3,235** / 1 **222**	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A: 13% B: 26%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 13				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,019** vpd Minor Street Future ADT = **69** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **3,019**	1 **69**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **3,019**	1 **69**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied: XX

No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** 4% **B** 8%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 14				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,971** vpd Minor Street Future ADT = **148** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [√]

or **RURAL (R)**

In built up area of isolated community of < 10,000 population ..... [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 / *1*	8,000	5,600	2,400	1,680
2 + **2,971** / *1* **148**	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 / *1*	12,000	8,400	1,200	850
2 + **2,971** / *1* **148**	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A 9% B 17%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

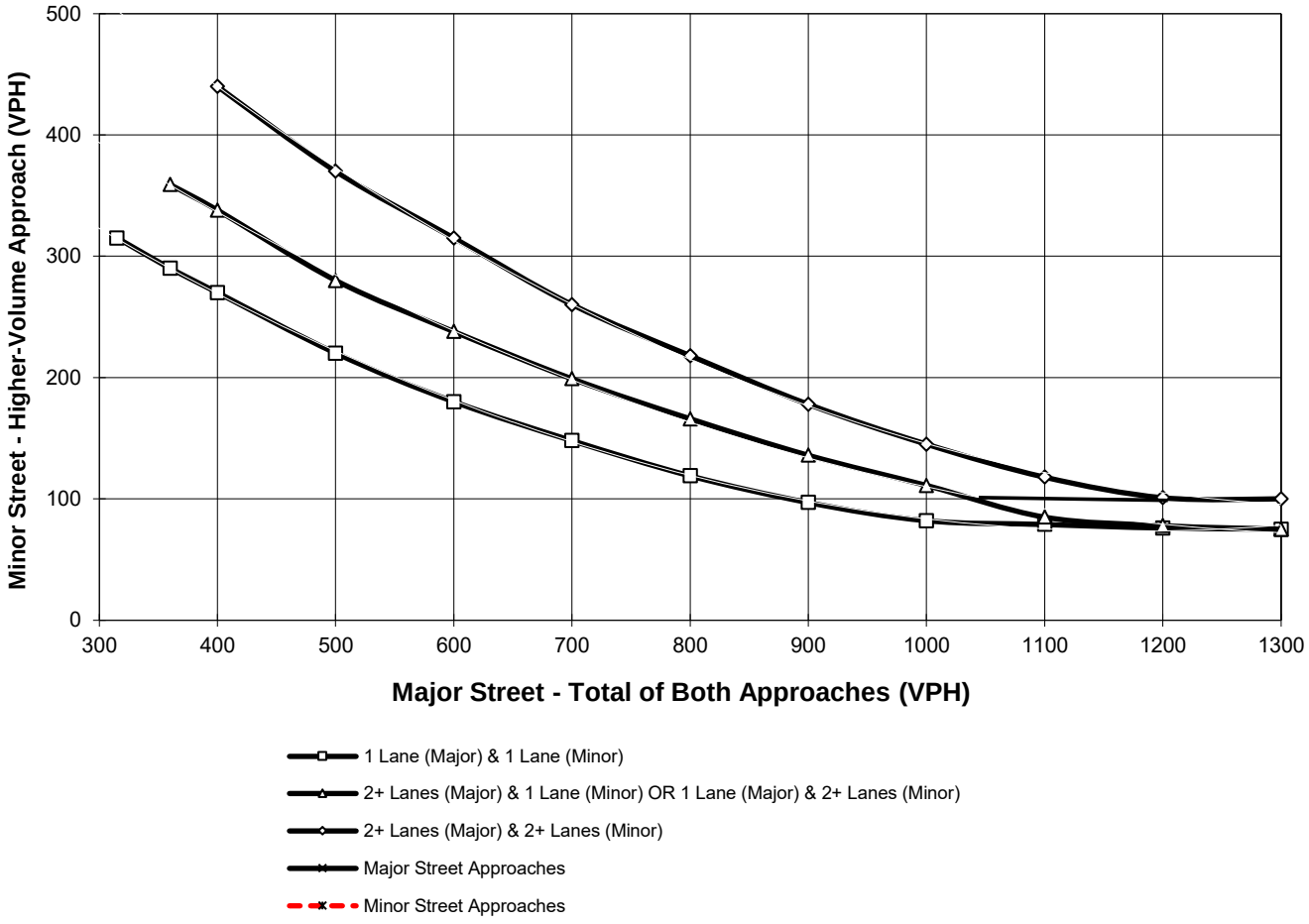
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Opening Year (2026) Conditions with Project - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **227**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 15/Santa Ana St** High Volume Approach (VPH) = **70**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **Carnegie Avenue**
Minor Street: **Driveway 16**
Critical Approach Speed (Major) 45 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **2,741** vpd
Minor Street Future ADT = **507** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √
or
In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Major Street Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Minor Street Rural
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / *1*	8,000	5,600	2,400	1,680
2 + **2,741** / *1* **507**	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / *1*	12,000	8,400	1,200	850
2 + **2,741** / *1* **507**	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX				
No one condition satisfied, but following conditions fulfilled 80% of more ..... A 30% B 27%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 17				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,001** vpd Minor Street Future ADT = **176** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……... [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / 1	8,000	5,600	2,400	1,680
2 + **3,001** / 1 **176**	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / 1	12,000	8,400	1,200	850
2 + **3,001** / 1 **176**	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A 7% B 15%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

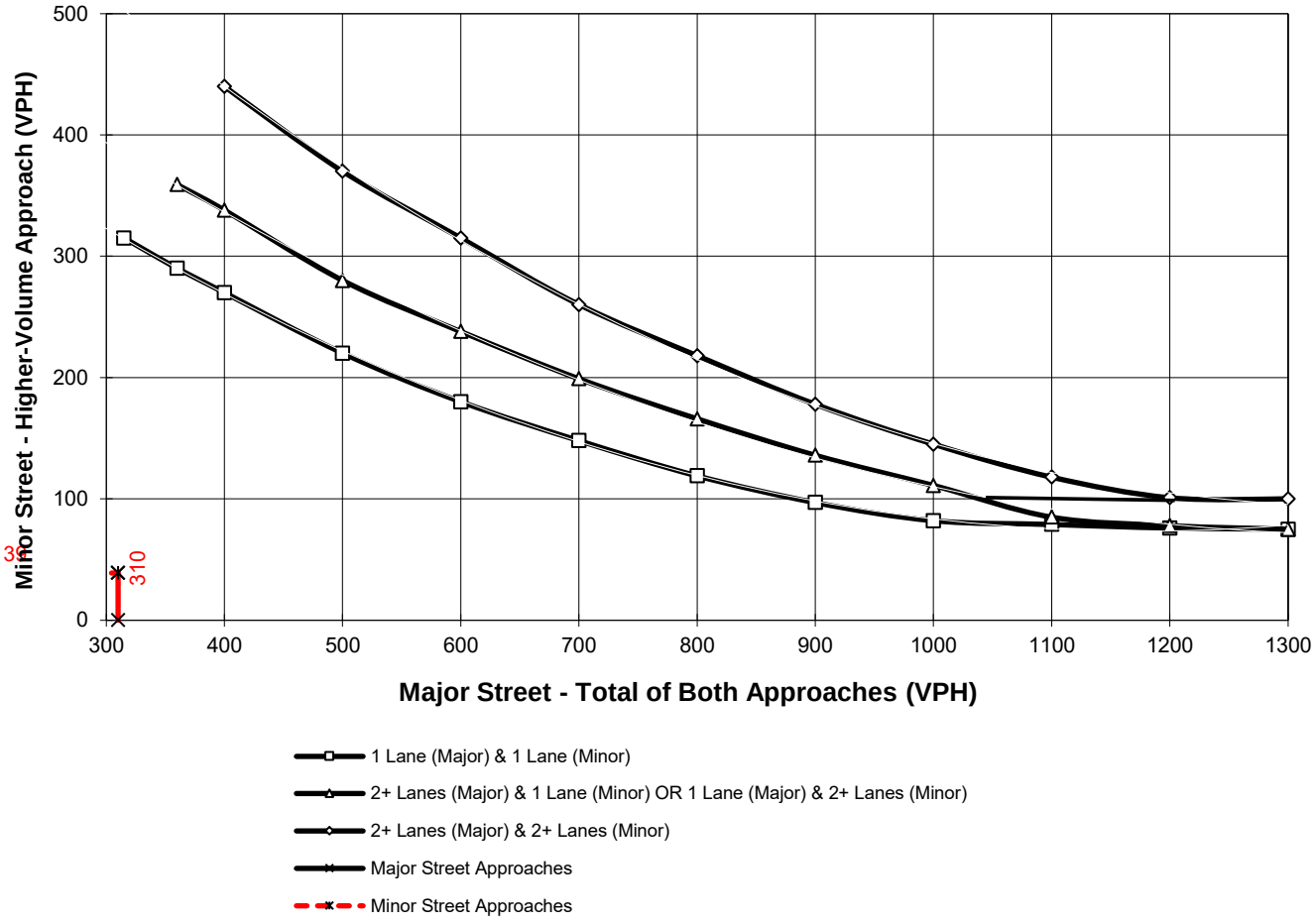
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Opening Year (2026) Conditions with Project - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **310**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **La Salle Street** High Volume Approach (VPH) = **39**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 18				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,218** vpd Minor Street Future ADT = **97** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied: XX / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	8,000	5,600	2,400	1,680
Major Street: 2 + **3,218** / Minor Street: 1 **97**	9,600	6,720	2,400	1,680
Major Street: 2 + / Minor Street: 2 +	9,600	6,720	3,200	2,240
Major Street: 1 / Minor Street: 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	12,000	8,400	1,200	850
Major Street: 2 + **3,218** / Minor Street: 1 **97**	14,400	10,080	1,200	850
Major Street: 2 + / Minor Street: 2 +	14,400	10,080	1,600	1,120
Major Street: 1 / Minor Street: 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 4% B: 8%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Santa Ana Street				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 19				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **1,187** vpd Minor Street Future ADT = **85** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied: XX / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	8,000	5,600	2,400	1,680
Major Street: 2 + **1,187** / Minor Street: 1 **85**	9,600	6,720	2,400	1,680
Major Street: 2 + / Minor Street: 2 +	9,600	6,720	3,200	2,240
Major Street: 1 / Minor Street: 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	12,000	8,400	1,200	850
Major Street: 2 + **1,187** / Minor Street: 1 **85**	14,400	10,080	1,200	850
Major Street: 2 + / Minor Street: 2 +	14,400	10,080	1,600	1,120
Major Street: 1 / Minor Street: 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 4% B: 7%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Santa Ana Street				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 20				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **978** vpd

Minor Street Future ADT = **224** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **978**	1 **224**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **978**	1 **224**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 9% **B** 7%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

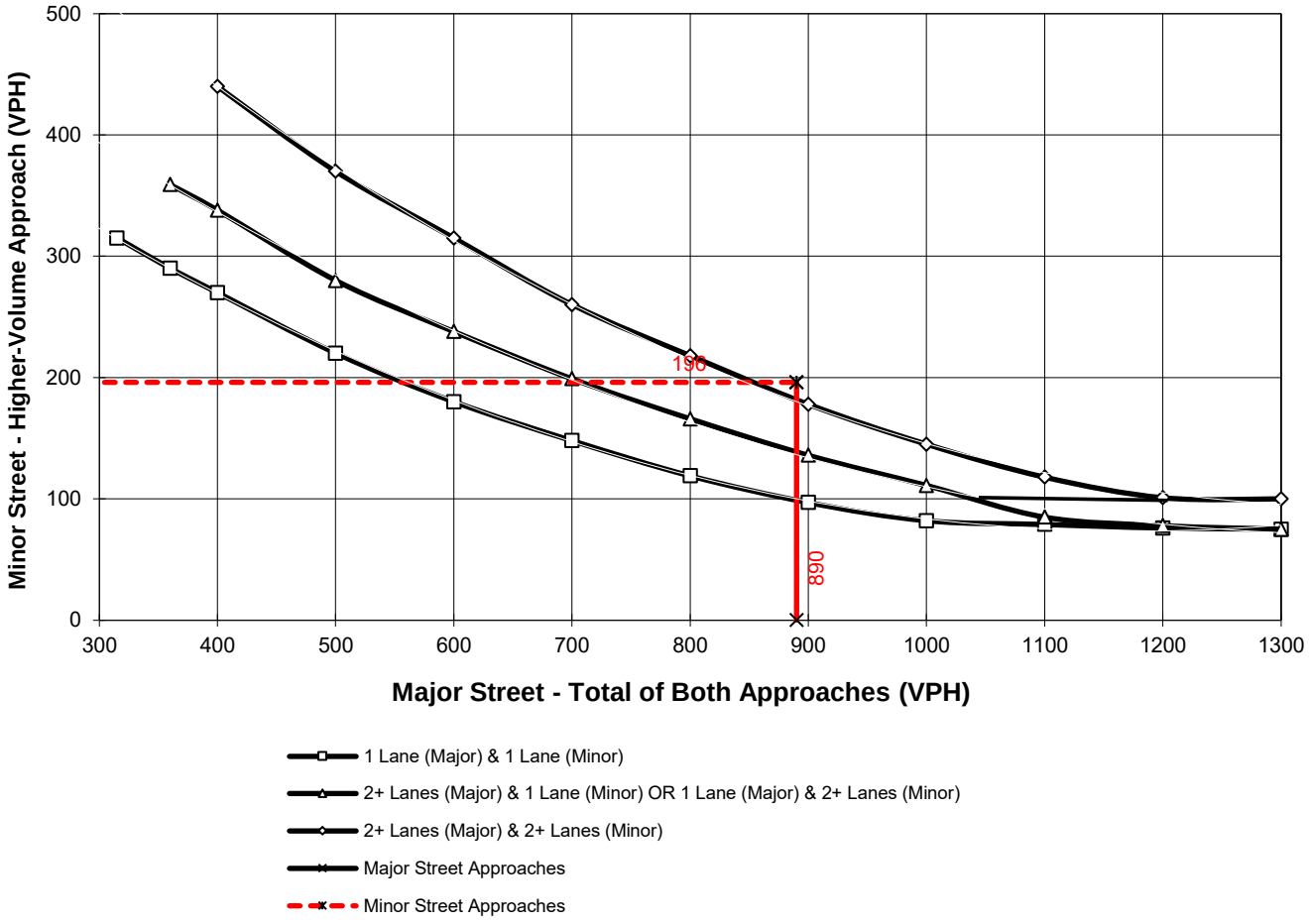
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Opening Year (2026) Conditions with Project - Weekday PM Peak Hour**

Major Street Name = **Commerce Parkway** Total of Both Approaches (VPH) = **890**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Santa Ana Street** High Volume Approach (VPH) = **196**
Number of Approach Lanes Minor Street = **2**

WARRANTED FOR A SIGNAL



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Santa Ana Street				Critical Approach Speed (Major)	35 mph
Minor Street: Driveway 27				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,733** vpd

Minor Street Future ADT = **170** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
Number of lanes for moving traffic on each approach						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **2,733**	*1* **170**	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied (XX)						
Number of lanes for moving traffic on each approach						
	1	*1*	12,000	8,400	1,200	850
	2 + **2,733**	*1* **170**	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)						
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 7%	**B** 14%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **Santa Ana Street**
Minor Street: **Driveway 28**
Critical Approach Speed (Major) 35 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **2,630** vpd
Minor Street Future ADT = **129** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied — Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **2,630**	1 **129**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied — Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **2,630**	1 **129**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied — Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 5% **B** 11%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Double Day Avenue				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 29				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **309** vpd

Minor Street Future ADT = **34** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied: XX / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	8,000	5,600	2,400	1,680
Major Street: 2 + **309** / Minor Street: 1 **34**	9,600	6,720	2,400	1,680
Major Street: 2 + / Minor Street: 2 +	9,600	6,720	3,200	2,240
Major Street: 1 / Minor Street: 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	12,000	8,400	1,200	850
Major Street: 2 + **309** / Minor Street: 1 **34**	14,400	10,080	1,200	850
Major Street: 2 + / Minor Street: 2 +	14,400	10,080	1,600	1,120
Major Street: 1 / Minor Street: 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 1% B: 2%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

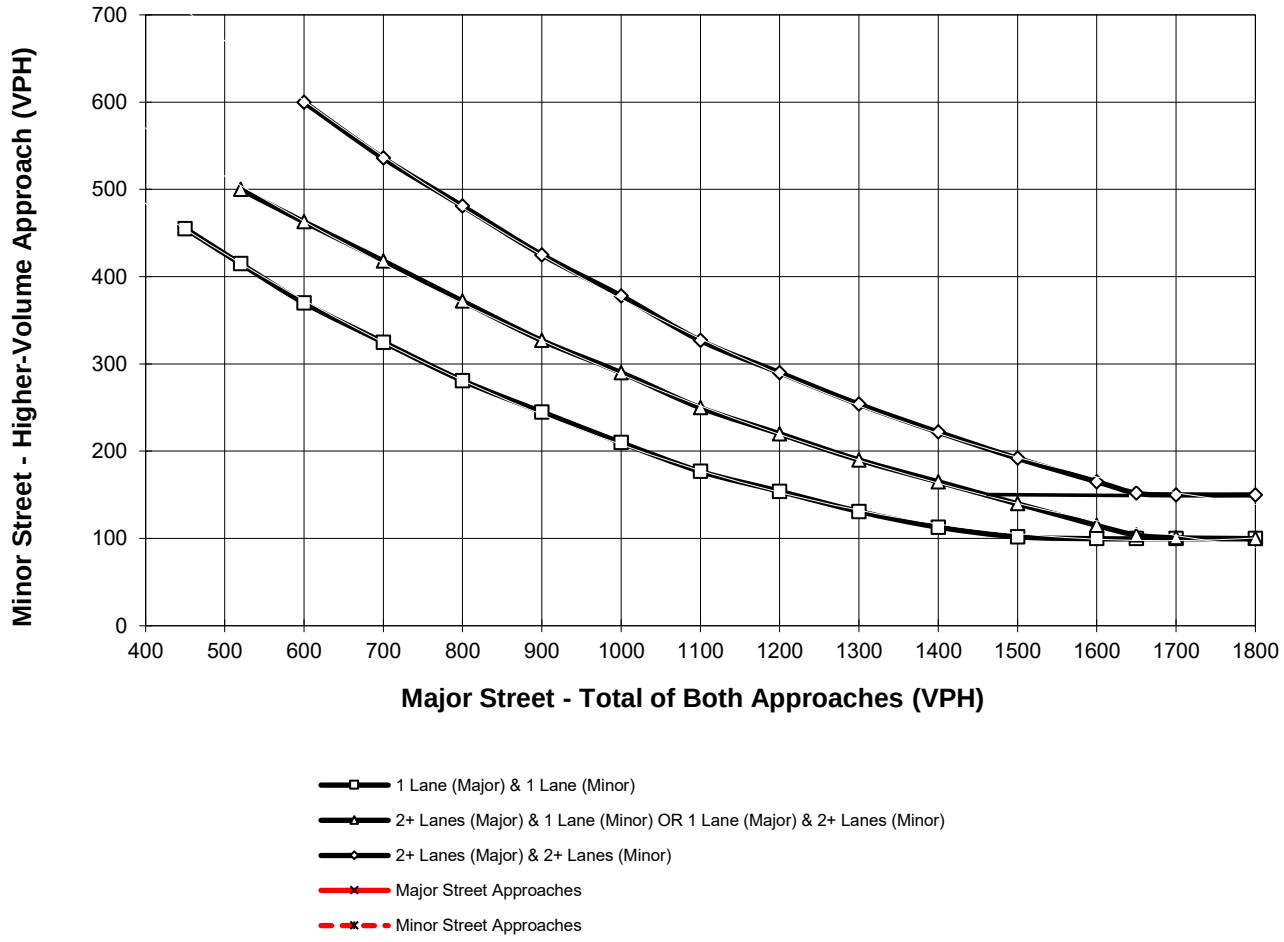
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Opening Year (2026) Conditions with Project - Weekday PM Peak Hour**

Major Street Name = **Santa Ana Street** Total of Both Approaches (VPH) = **264**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue** High Volume Approach (VPH) = **44**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Double Day Avenue				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 30				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **1,160** vpd

Minor Street Future ADT = **136** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied: URBAN XX / Not Satisfied: RURAL XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	8,000	5,600	2,400	1,680
Major Street: 2 + **1,160** / Minor Street: 1 **136**	9,600	6,720	2,400	1,680
Major Street: 2 + / Minor Street: 2 +	9,600	6,720	3,200	2,240
Major Street: 1 / Minor Street: 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	12,000	8,400	1,200	850
Major Street: 2 + **1,160** / Minor Street: 1 **136**	14,400	10,080	1,200	850
Major Street: 2 + / Minor Street: 2 +	14,400	10,080	1,600	1,120
Major Street: 1 / Minor Street: 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 6% B: 8%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

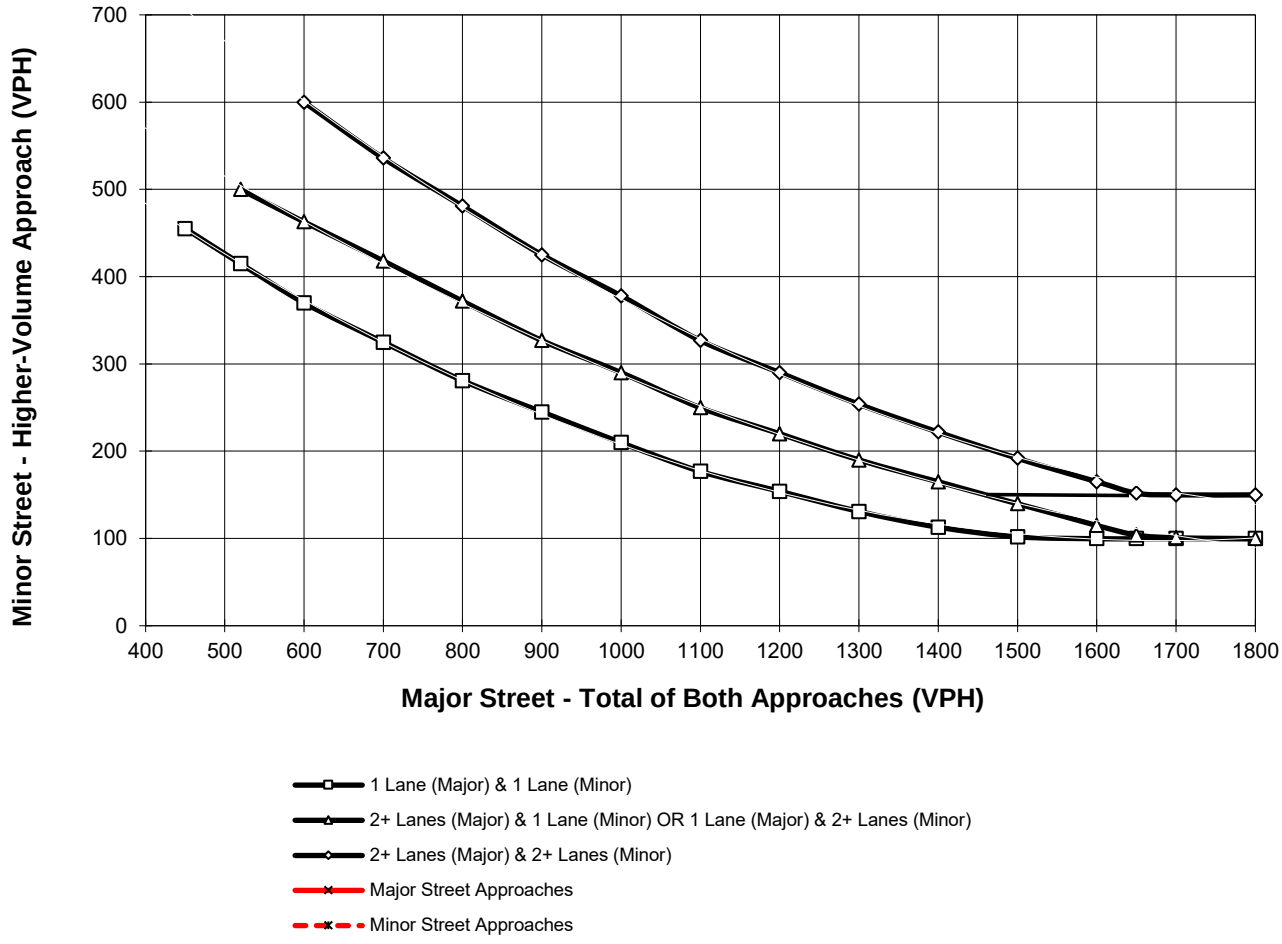
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Opening Year (2026) Conditions with Project - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue**
Total of Both Approaches (VPH) = **237**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Santa Ana Street**
High Volume Approach (VPH) = **145**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

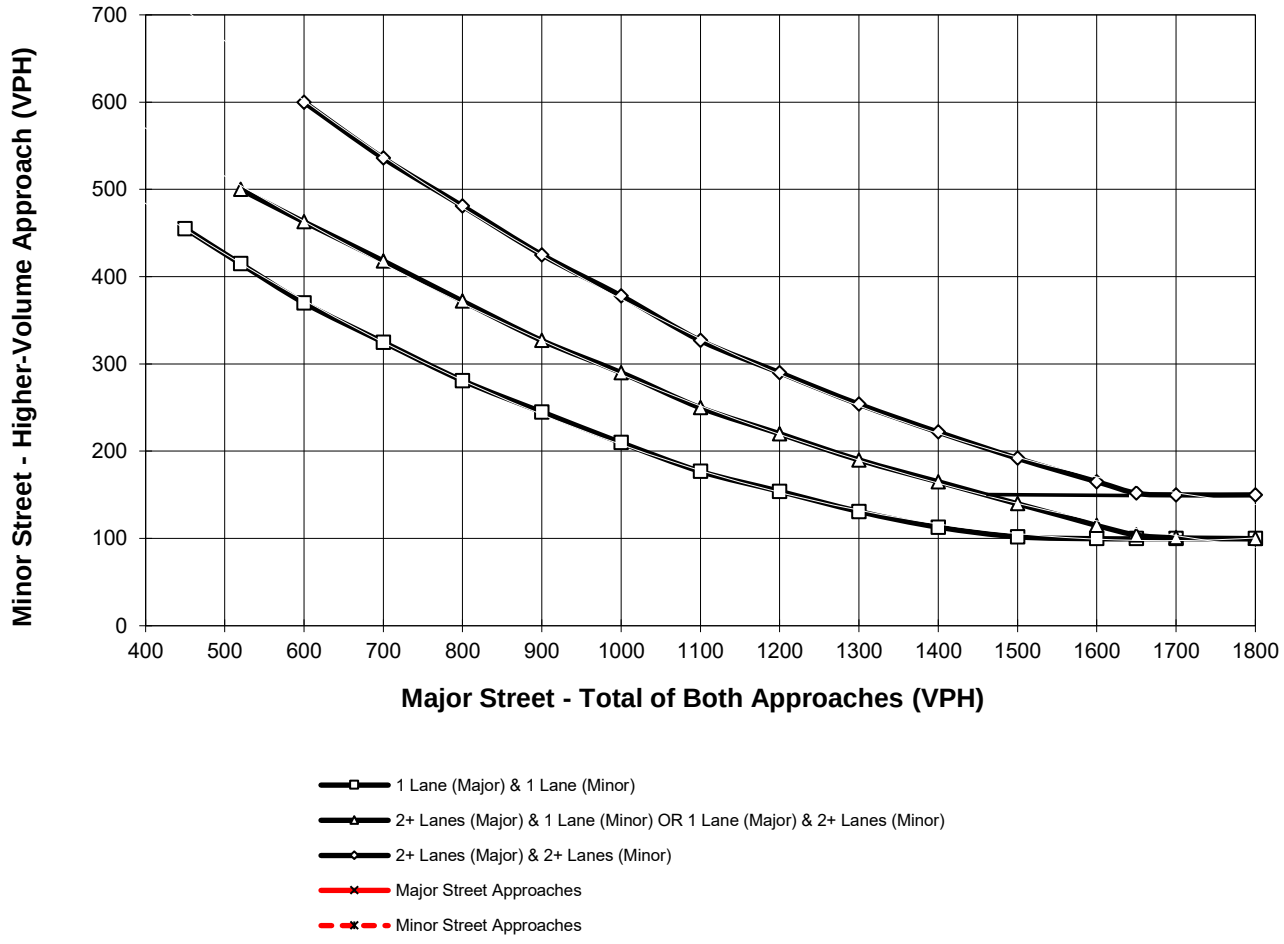
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Opening Year (2026) Conditions with Project - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue** Total of Both Approaches (VPH) = **264**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue** High Volume Approach (VPH) = **73**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	OYC (2026) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Dupont Avenue				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 31				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,785** vpd

Minor Street Future ADT = **114** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
Number of lanes for moving traffic on each approach						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **2,785**	*1* **114**	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied (XX)						
Number of lanes for moving traffic on each approach						
	1	*1*	12,000	8,400	1,200	850
	2 + **2,785**	*1* **114**	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)						
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 5%	**B** 10%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

APPENDIX 7.1:

HORIZON YEAR (2040) WITHOUT PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Volume Development - AM Peak Hour

1: Haven Av. & Inland Empire Bl.

PHF: 0.923 7:45am Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	483	2,072	366	55	1,808	155	112	130	326	131	142	21	5,801

2: Haven Av. & I-10 WB Ramps

PHF: 0.922 7:45am Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	**2,261**	476	0	**1,811**	605	0	0	0	**890**	0	**660**	6,703

3: Haven Av. & I-10 EB Ramps

PHF: 0.939 7:30am Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	**1,718**	430	0	**2,204**	497	**1,020**	0	696	0	0	0	6,565

4: Haven Av. & E. Guasti Rd.

PHF: 0.978 7:45am Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	173	**1,913**	110	222	2,378	300	91	29	42	75	41	145	5,518

5: Haven Av. & E. Airport Dr.

PHF: 0.911 7:30am Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	**506**	**1,678**	**238**	240	1,722	205	239	322	509	79	249	263	6,250

6: Haven Av. & Driveway 1

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		2,422			2,310								4,732

7: Haven Av. & Driveway 2

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		2,422			2,310								4,732

8: Haven Av. & La Salle St.

PHF: 0.935 7:45am Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	**2,420**	8	0	**2,387**	0	0	0	0	0	0	2	4,817

9: Haven Av. & Jurupa Av.

PHF: 0.946 7:30am Count Date: 11/18/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	133	1,804	214	110	1,417	860	547	280	173	263	398	77	6,277

10: Haven Av. & Mission Bl.

PHF: 0.940 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	144	1,798	33	331	1,544	285	222	447	130	68	863	651	6,517

Volume Development - AM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.950 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	**352**	**1,823**	0	0	**1,102**	571	0	0	0	150	10	508	4,517

12: Haven Av. & SR-60 EB Ramps

PHF: 0.950 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	1,285	354	413	839	0	890	7	218	0	0	0	4,006

13: Driveway 3 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								800			591		1,391

14: Driveway 4 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								800			591		1,391

15: Driveway 5 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								800			591		1,391

16: Driveway 6 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								8			2		10

17: Driveway 7 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								8			2		10

18: Driveway 8 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								8			2		10

19: Driveway 9 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								47			55		102

20: Driveway 10 & Jurupa Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								604			739		1,343

Volume Development - AM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								604			739		1,343

22: Carnegie Av. & E. Airport Dr.

PHF: 0.834 7:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	**68**	**39**	0	62	**45**	177	164	348	7	5	333	45	1,293

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		107			57								164

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		107			57								164

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		107			57								164

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.641 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	100	9	18	39	0	0	0	0	**5**	0	**7**	178

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		109			44								153

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		109			44								153

29: Carnegie Av. & La Salle St.

PHF: 0.917 8:00am Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	41	**74**	0	0	**29**	**15**	**35**	0	12	0	0	0	205

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		115			41								156

Volume Development - AM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.902 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	9	0	3	6	0	34	117	**682**	4	7	767	43	1,671

32: Driveway 19 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								27			12		39

33: Driveway 20 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								27			12		39

34: Commerce Pkwy. & Driveway 21

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		433			419								852

35: Commerce Pkwy. & Driveway 22

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		433			419								852

36: Commerce Pkwy. & Driveway 23

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		433			419								852

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.948 7:15am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	348	25	99	314	6	0	**26**	2	0	6	85	911

38: Commerce Pkwy. & Driveway 24

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		373			316								689

39: Commerce Pkwy. & Driveway 25

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		373			316								689

40: Commerce Pkwy. & Driveway 26

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		373			316								689

Volume Development - AM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.918 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	14	5	41	223	11	47	79	597	14	22	755	307	2,116

42: Driveway 27 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								150			91		241

43: Driveway 28 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								150			91		241

44: Double Day Av. & Driveway 29

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		56			40								96

45: Double Day Av. & Santa Ana St.

PHF: 0.944 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	**2**	7	2	9	4	**27**	**39**	**69**	**42**	8	**61**	10	281

46: Driveway 30 & Double Day Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								15			35		50

47: Dupont Av. & Santa Ana St.

PHF: 0.910 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	33	67	8	3	32	16	14	43	13	15	51	14	309

48: Dupont Av. & Double Day Av.

PHF: 0.845 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	35	114	3	1	20	0	1	1	13	0	0	0	189

49: Dupont Av. & Driveway 31

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		184			30								214

50: Dupont Av. & Jurupa Av.

PHF: 0.982 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	24	33	90	9	6	15	75	700	20	100	943	76	2,090

Volume Development - AM Peak Hour

51: Milliken Av. & E. Airport Dr.

PHF: 0.861 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	27	693	77	365	1,272	180	81	121	37	105	155	223	3,336

52: Milliken Av. & Jurupa Av.

PHF: 0.970 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	463	862	194	268	801	70	225	870	378	294	678	106	5,209

53: Milliken Av. & Mission Bl.

PHF: 0.895 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	630	1,376	77	437	880	509	461	29	269	49	39	238	4,994

54: I-15 SB Ramps & Jurupa Av.

PHF: 0.910 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	0	0	540	4	1,163	0	**829**	333	474	**698**	0	4,041

55: I-15 NB Ramps & Jurupa Av.

PHF: 0.939 7:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	347	0	575	0	0	0	**466**	**903**	0	0	**825**	386	3,503

Volume Development - PM Peak Hour

1: Haven Av. & Inland Empire Bl.

	PHF:	0.960		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	432	**2,421**	581	44	1,956	72	223	414	413	371	249	43	7,219

2: Haven Av. & I-10 WB Ramps

	PHF:	0.979		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	3,042	960	0	1,981	788	0	0	0	268	0	392	7,431

3: Haven Av. & I-10 EB Ramps

	PHF:	0.975		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	**3,176**	786	0	**1,861**	388	826	0	626	0	0	0	7,663

4: Haven Av. & E. Guasti Rd.

	PHF:	0.975		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	70	**3,269**	116	**188**	**2,170**	**129**	**439**	50	230	88	21	**254**	7,024

5: Haven Av. & E. Airport Dr.

	PHF:	0.985		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	626	**2,488**	19	296	1,736	347	385	576	661	28	707	522	8,390

6: Haven Av. & Driveway 1

	PHF:									Count Date:			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		3,133			2,424								5,558

7: Haven Av. & Driveway 2

	PHF:									Count Date:			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		3,133			2,424								5,558

8: Haven Av. & La Salle St.

	PHF:	0.968		4:15pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	**3,113**	7	0	2,490	0	0	0	0	0	0	20	5,629

9: Haven Av. & Jurupa Av.

	PHF:	0.982		4:30pm						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	119	2,279	561	282	1,756	452	612	751	114	316	442	228	7,912

10: Haven Av. & Mission Bl.

	PHF:	0.962		4:00pm						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	225	1,854	105	334	1,435	167	574	1,020	183	64	890	482	7,334

Volume Development - PM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.962 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	174	**1,273**	0	0	**1,578**	505	0	0	0	396	9	645	4,580

12: Haven Av. & SR-60 EB Ramps

PHF: 0.933 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	1,072	230	672	1,302	0	375	8	170	0	0	0	3,830

13: Driveway 3 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								891			1,256		2,148

14: Driveway 4 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								891			1,256		2,148

15: Driveway 5 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								891			1,256		2,148

16: Driveway 6 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								7			20		26

17: Driveway 7 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								7			20		26

18: Driveway 8 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								7			20		26

19: Driveway 9 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								172			180		352

20: Driveway 10 & Jurupa Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								1,594			986		2,580

Volume Development - PM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								1,594			986		2,580

22: Carnegie Av. & E. Airport Dr.

PHF: 0.882 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	185	**221**	146	68	238	505	438	320	13	11	440	229	2,814

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		552			262								814

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		552			262								814

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		552			262								814

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.786 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	532	**8**	3	**259**	0	0	0	0	3	0	20	825

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		540			262								802

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		540			262								802

29: Carnegie Av. & La Salle St.

PHF: 0.944 Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	71	**374**	0	0	**153**	**109**	**166**	0	6	0	0	0	879

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		445			159								605

Volume Development - PM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	9	0	2	36	0	254	540	**1,091**	19	4	661	32	2,648

32: Driveway 19 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								11			23		34

33: Driveway 20 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								11			23		34

34: Commerce Pkwy. & Driveway 21

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		701			535								1,236

35: Commerce Pkwy. & Driveway 22

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		701			535								1,236

36: Commerce Pkwy. & Driveway 23

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		701			535								1,236

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.920 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	3	523	18	84	434	17	3	8	0	26	3	175	1,294

38: Commerce Pkwy. & Driveway 24

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		544			460								1,004

39: Commerce Pkwy. & Driveway 25

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		544			460								1,004

40: Commerce Pkwy. & Driveway 26

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		544			460								1,004

Volume Development - PM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	15	45	60	407	18	39	113	1,002	14	12	**642**	368	2,736

42: Driveway 27 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								110			204		314

43: Driveway 28 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								110			204		314

44: Double Day Av. & Driveway 29

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		14			7								21

45: Double Day Av. & Santa Ana St.

PHF: 0.802 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	19	1	15	2	0	4	7	**93**	10	7	**180**	7	346

46: Driveway 30 & Double Day Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:								38			34		72

47: Dupont Av. & Santa Ana St.

PHF: 0.798 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	46	88	33	15	50	15	14	62	14	17	108	29	491

48: Dupont Av. & Double Day Av.

PHF: 0.763 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	23	113	1	0	100	11	7	0	31	2	0	0	288

49: Dupont Av. & Driveway 31

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:		153			150								303

50: Dupont Av. & Jurupa Av.

PHF: 0.934 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	46	29	121	66	29	55	63	1,281	14	71	854	61	2,690

Volume Development - PM Peak Hour

51: Milliken Av. & E. Airport Dr.

PHF: 0.988 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	57	1,198	77	179	1,003	194	478	496	56	95	310	357	4,500

52: Milliken Av. & Jurupa Av.

PHF: 0.961 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	206	1,029	636	287	1,056	66	137	1,067	262	562	668	130	6,105

53: Milliken Av. & Mission Bl.

PHF: 0.950 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	706	1,010	71	314	1,447	591	889	5	313	105	52	401	5,904

54: I-15 SB Ramps & Jurupa Av.

PHF: 0.945 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	0	0	0	239	8	478	0	1,782	553	484	882	0	4,425

55: I-15 NB Ramps & Jurupa Av.

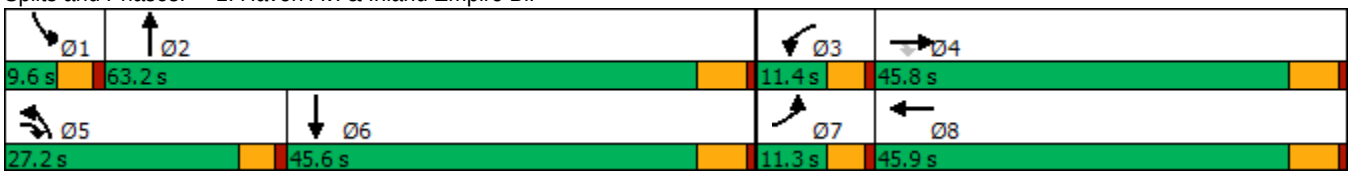
PHF: 0.967 4:00pm Count Date: 10/26/2021

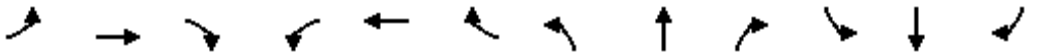
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 NP:	**199**	1	466	0	0	0	**732**	**1,289**	0	0	**1,167**	542	4,396

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	99	266	119	93	17	375	1784	332	41	1464	81
Future Volume (vph)	72	99	266	119	93	17	375	1784	332	41	1464	81
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	11.3	45.8	27.2	11.4	45.9		27.2	63.2		9.6	45.6	
Total Split (%)	8.7%	35.2%	20.9%	8.8%	35.3%		20.9%	48.6%		7.4%	35.1%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 93.4
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	99	266	119	93	17	375	1784	332	41	1464	81
Future Volume (veh/h)	72	99	266	119	93	17	375	1784	332	41	1464	81
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1600	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	78	108	116	129	101	0	408	1939	0	45	1591	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	163	518	484	256	545		498	3226		125	2450	
Arrive On Green	0.05	0.14	0.14	0.06	0.15	0.00	0.16	0.49	0.00	0.04	0.37	0.00
Sat Flow, veh/h	3141	3610	1597	4297	3610	1610	3141	6536	1610	3141	6536	1610
Grp Volume(v), veh/h	78	108	116	129	101	0	408	1939	0	45	1591	0
Grp Sat Flow(s),veh/h/ln	1570	1805	1597	1432	1805	1610	1570	1634	1610	1570	1634	1610
Q Serve(g_s), s	1.9	2.1	4.3	2.3	1.9	0.0	9.9	16.9	0.0	1.1	15.9	0.0
Cycle Q Clear(g_c), s	1.9	2.1	4.3	2.3	1.9	0.0	9.9	16.9	0.0	1.1	15.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	518	484	256	545		498	3226		125	2450	
V/C Ratio(X)	0.48	0.21	0.24	0.50	0.19		0.82	0.60		0.36	0.65	
Avail Cap(c_a), veh/h	267	1831	1065	370	1835		900	4756		199	3298	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.4	29.8	20.7	36.0	29.2	0.0	32.1	14.4	0.0	36.9	20.4	0.0
Incr Delay (d2), s/veh	0.8	0.2	0.3	0.6	0.2	0.0	1.3	0.2	0.0	0.7	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.9	1.5	0.8	0.8	0.0	3.6	5.2	0.0	0.4	5.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.2	30.0	21.0	36.5	29.4	0.0	33.4	14.6	0.0	37.5	20.7	0.0
LnGrp LOS	D	C	C	D	C		C	B		D	C	
Approach Vol, veh/h		302			230	A		2347	A		1636	A
Approach Delay, s/veh		28.4			33.4			17.8			21.1	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.7	44.7	9.3	17.1	17.1	35.4	8.7	17.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	57.4	6.8	40.0	22.6	39.8	6.7	40.1
Max Q Clear Time (g_c+I1), s	3.1	18.9	4.3	6.3	11.9	17.9	3.9	3.9
Green Ext Time (p_c), s	0.0	20.0	0.0	1.0	0.6	11.5	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Notes

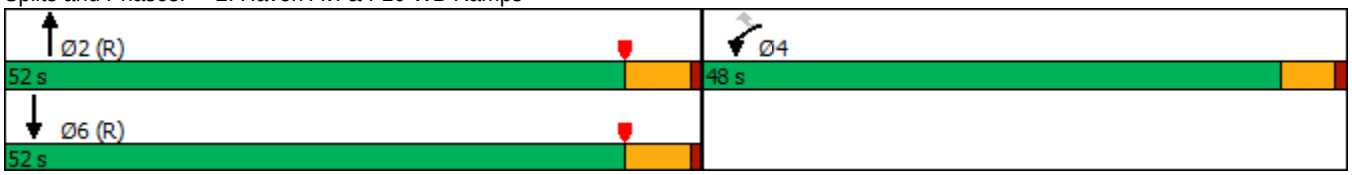
Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	486	585	1905	432	1334
Future Volume (vph)	486	585	1905	432	1334
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	48.0	48.0	52.0		52.0
Total Split (%)	48.0%	48.0%	52.0%		52.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	486	585	1905	432	0	1334
Future Volume (veh/h)	486	585	1905	432	0	1334
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1800	1900	1900	1900	0	1900
Adj Flow Rate, veh/h	675	343	2071	0	0	1450
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	834	392	4234		0	4234
Arrive On Green	0.24	0.24	1.00	0.00	0.00	0.65
Sat Flow, veh/h	3429	1610	6802	1610	0	7068
Grp Volume(v), veh/h	675	343	2071	0	0	1450
Grp Sat Flow(s),veh/h/ln	1714	1610	1634	1610	0	1634
Q Serve(g_s), s	18.6	20.5	0.0	0.0	0.0	10.0
Cycle Q Clear(g_c), s	18.6	20.5	0.0	0.0	0.0	10.0
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	834	392	4234		0	4234
V/C Ratio(X)	0.81	0.88	0.49		0.00	0.34
Avail Cap(c_a), veh/h	1471	691	4234		0	4234
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.77	0.00	0.00	0.74
Uniform Delay (d), s/veh	35.7	36.4	0.0	0.0	0.0	8.0
Incr Delay (d2), s/veh	0.7	2.5	0.3	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	7.9	0.1	0.0	0.0	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	36.4	38.9	0.3	0.0	0.0	8.1
LnGrp LOS	D	D	A		A	A
Approach Vol, veh/h	1018		2071	A		1450
Approach Delay, s/veh	37.2		0.3			8.1
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		70.6		29.4		70.6
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		46.2		42.9		46.2
Max Q Clear Time (g_c+I1), s		2.0		22.5		12.0
Green Ext Time (p_c), s		14.6		1.8		7.7

Intersection Summary		
HCM 6th Ctrl Delay		11.1
HCM 6th LOS		B

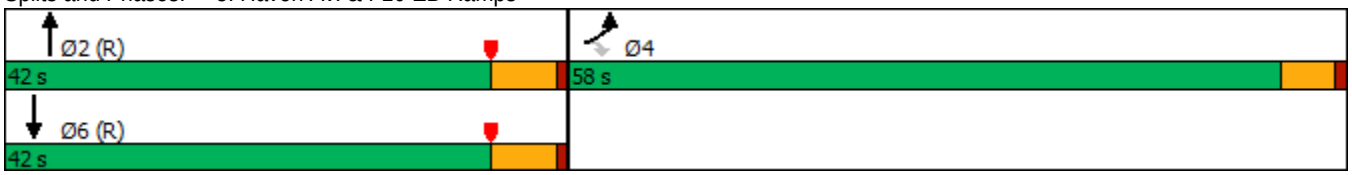
Notes

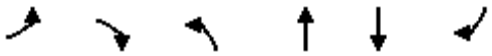
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	891	531	1446	1369	451
Future Volume (vph)	891	531	1446	1369	451
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	58.0	58.0	42.0	42.0	
Total Split (%)	58.0%	58.0%	42.0%	42.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 45
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps





Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	891	531	0	1446	1369	451
Future Volume (veh/h)	891	531	0	1446	1369	451
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1900	0	1900	1900	1900
Adj Flow Rate, veh/h	948	471	0	1538	1456	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1192	560	0	3552	3552	
Arrive On Green	0.35	0.35	0.00	0.54	1.00	0.00
Sat Flow, veh/h	3429	1610	0	7068	6802	1610
Grp Volume(v), veh/h	948	471	0	1538	1456	0
Grp Sat Flow(s),veh/h/ln	1714	1610	0	1634	1634	1610
Q Serve(g_s), s	24.9	27.0	0.0	14.0	0.0	0.0
Cycle Q Clear(g_c), s	24.9	27.0	0.0	14.0	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1192	560	0	3552	3552	
V/C Ratio(X)	0.80	0.84	0.00	0.43	0.41	
Avail Cap(c_a), veh/h	1814	852	0	3552	3552	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.79	0.84	0.00
Uniform Delay (d), s/veh	29.4	30.1	0.0	13.6	0.0	0.0
Incr Delay (d2), s/veh	1.5	4.8	0.0	0.3	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	10.5	0.0	4.7	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	30.9	34.9	0.0	13.9	0.3	0.0
LnGrp LOS	C	C	A	B	A	
Approach Vol, veh/h	1419			1538	1456	A
Approach Delay, s/veh	32.2			13.9	0.3	
Approach LOS	C			B	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		60.1		39.9		60.1
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		36.2		52.9		36.2
Max Q Clear Time (g_c+I1), s		16.0		29.0		2.0
Green Ext Time (p_c), s		7.2		5.8		7.7

Intersection Summary	
HCM 6th Ctrl Delay	15.3
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

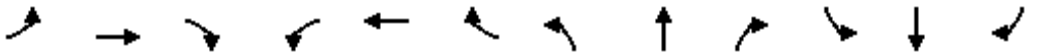
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	26	35	57	37	131	157	1575	100	202	1427	272
Future Volume (vph)	82	26	35	57	37	131	157	1575	100	202	1427	272
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	12.0	48.2	48.2	11.0	47.2	47.2	17.0	51.8	51.8	19.0	53.8	53.8
Total Split (%)	9.2%	37.1%	37.1%	8.5%	36.3%	36.3%	13.1%	39.8%	39.8%	14.6%	41.4%	41.4%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 87
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	26	35	57	37	131	157	1575	100	202	1427	272
Future Volume (veh/h)	82	26	35	57	37	131	157	1575	100	202	1427	272
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1800	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	84	27	19	58	38	68	160	1607	68	206	1456	174
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	175	314	262	148	297	420	237	2668	656	290	2777	675
Arrive On Green	0.06	0.17	0.17	0.05	0.16	0.16	0.08	0.41	0.41	0.09	0.42	0.42
Sat Flow, veh/h	3141	1900	1590	3141	1900	2685	3141	6536	1607	3141	6536	1589
Grp Volume(v), veh/h	84	27	19	58	38	68	160	1607	68	206	1456	174
Grp Sat Flow(s),veh/h/ln	1570	1900	1590	1570	1900	1342	1570	1634	1607	1570	1634	1589
Q Serve(g_s), s	1.9	0.9	0.7	1.3	1.3	1.6	3.7	14.2	1.9	4.7	12.2	5.2
Cycle Q Clear(g_c), s	1.9	0.9	0.7	1.3	1.3	1.6	3.7	14.2	1.9	4.7	12.2	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	314	262	148	297	420	237	2668	656	290	2777	675
V/C Ratio(X)	0.48	0.09	0.07	0.39	0.13	0.16	0.67	0.60	0.10	0.71	0.52	0.26
Avail Cap(c_a), veh/h	315	1081	905	272	1056	1491	528	4074	1001	613	4251	1033
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	26.1	26.0	34.1	26.8	26.9	33.2	17.1	13.5	32.5	15.7	13.7
Incr Delay (d2), s/veh	0.8	0.1	0.1	0.6	0.2	0.2	1.2	0.2	0.1	1.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.4	0.3	0.5	0.5	0.5	1.3	4.6	0.6	1.7	3.9	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.6	26.2	26.1	34.8	27.0	27.1	34.5	17.4	13.6	33.8	15.9	13.9
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	B	B
Approach Vol, veh/h		130			164			1835			1836	
Approach Delay, s/veh		31.6			29.8			18.7			17.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	35.9	8.1	18.4	10.2	37.2	8.7	17.8
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	14.4	46.0	6.4	42.0	12.4	48.0	7.4	41.0
Max Q Clear Time (g_c+I1), s	6.7	16.2	3.3	2.9	5.7	14.2	3.9	3.6
Green Ext Time (p_c), s	0.2	13.9	0.0	0.1	0.1	13.4	0.0	0.4

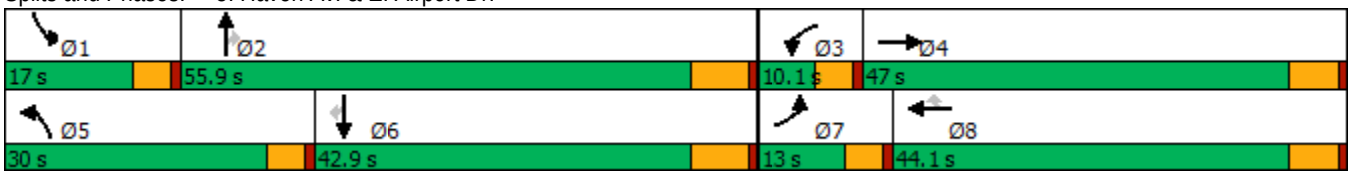
Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

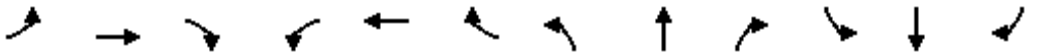
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	95	147	55	161	170	404	1341	203	168	1124	124
Future Volume (vph)	95	147	55	161	170	404	1341	203	168	1124	124
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	13.0	47.0	10.1	44.1	44.1	30.0	55.9	55.9	17.0	42.9	42.9
Total Split (%)	10.0%	36.2%	7.8%	33.9%	33.9%	23.1%	43.0%	43.0%	13.1%	33.0%	33.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 88.5
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	147	218	55	161	170	404	1341	203	168	1124	124
Future Volume (veh/h)	95	147	218	55	161	170	404	1341	203	168	1124	124
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	104	162	148	60	177	107	444	1474	187	185	1235	101
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	195	288	245	155	517	230	547	2624	646	269	2045	503
Arrive On Green	0.06	0.16	0.16	0.05	0.14	0.14	0.17	0.40	0.40	0.09	0.31	0.31
Sat Flow, veh/h	3141	1848	1574	3141	3610	1610	3141	6536	1610	3141	6536	1609
Grp Volume(v), veh/h	104	158	152	60	177	107	444	1474	187	185	1235	101
Grp Sat Flow(s),veh/h/ln	1570	1805	1617	1570	1805	1610	1570	1634	1610	1570	1634	1609
Q Serve(g_s), s	2.2	5.7	6.1	1.3	3.1	4.3	9.5	12.2	5.5	4.0	11.2	3.2
Cycle Q Clear(g_c), s	2.2	5.7	6.1	1.3	3.1	4.3	9.5	12.2	5.5	4.0	11.2	3.2
Prop In Lane	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	195	281	252	155	517	230	547	2624	646	269	2045	503
V/C Ratio(X)	0.53	0.56	0.60	0.39	0.34	0.46	0.81	0.56	0.29	0.69	0.60	0.20
Avail Cap(c_a), veh/h	378	1064	953	247	1979	883	1142	4621	1138	557	3405	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	27.3	27.5	32.2	27.0	27.5	27.7	16.2	14.2	31.0	20.3	17.6
Incr Delay (d2), s/veh	0.8	1.8	2.3	0.6	0.4	1.5	1.1	0.2	0.2	1.2	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.4	2.3	0.5	1.2	1.6	3.2	3.7	1.7	1.4	3.6	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	29.0	29.8	32.8	27.4	28.9	28.9	16.3	14.4	32.2	20.6	17.8
LnGrp LOS	C	C	C	C	C	C	C	B	B	C	C	B
Approach Vol, veh/h		414			344			2105			1521	
Approach Delay, s/veh		30.2			28.8			18.8			21.8	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	34.6	8.0	16.7	16.8	28.4	8.9	15.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	49.4	5.5	41.2	25.4	36.4	8.4	38.3
Max Q Clear Time (g_c+I1), s	6.0	14.2	3.3	8.1	11.5	13.2	4.2	6.3
Green Ext Time (p_c), s	0.2	13.0	0.0	1.7	0.7	8.6	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	1460	7	0	1106
Future Vol, veh/h	0	2	1460	7	0	1106
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	1553	7	0	1177

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	780	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	294	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	294	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.3	0	0
HCM LOS	C		

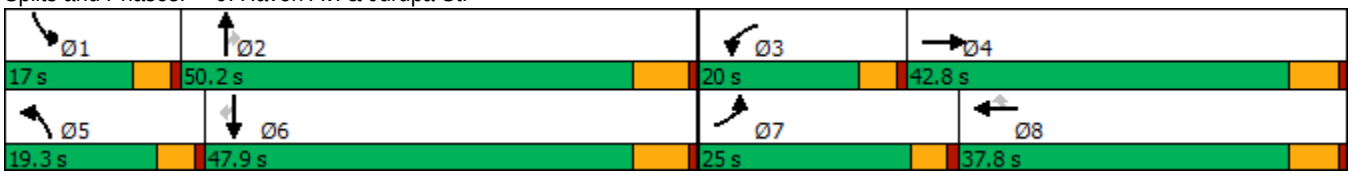
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	294	-
HCM Lane V/C Ratio	-	-	0.007	-
HCM Control Delay (s)	-	-	17.3	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0	-

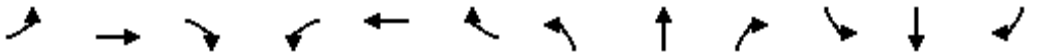
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	330	184	239	284	69	96	1555	194	77	974	424
Future Volume (vph)	330	184	239	284	69	96	1555	194	77	974	424
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	25.0	42.8	20.0	37.8	37.8	19.3	50.2	50.2	17.0	47.9	47.9
Total Split (%)	19.2%	32.9%	15.4%	29.1%	29.1%	14.8%	38.6%	38.6%	13.1%	36.8%	36.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 97.7
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	184	112	239	284	69	96	1555	194	77	974	424
Future Volume (veh/h)	330	184	112	239	284	69	96	1555	194	77	974	424
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	347	194	93	252	299	47	101	1637	89	81	1025	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	436	572	248	335	468	209	128	2567	632	103	2471	
Arrive On Green	0.14	0.16	0.16	0.11	0.13	0.13	0.07	0.39	0.39	0.06	0.38	0.00
Sat Flow, veh/h	3141	3538	1537	3141	3610	1610	1714	6536	1610	1714	6536	1610
Grp Volume(v), veh/h	347	189	98	252	299	47	101	1637	89	81	1025	0
Grp Sat Flow(s),veh/h/ln	1570	1729	1617	1570	1805	1610	1714	1634	1610	1714	1634	1610
Q Serve(g_s), s	8.3	3.7	4.2	6.0	6.1	2.0	4.5	15.7	2.7	3.6	8.9	0.0
Cycle Q Clear(g_c), s	8.3	3.7	4.2	6.0	6.1	2.0	4.5	15.7	2.7	3.6	8.9	0.0
Prop In Lane	1.00		0.95	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	436	559	261	335	468	209	128	2567	632	103	2471	
V/C Ratio(X)	0.80	0.34	0.37	0.75	0.64	0.23	0.79	0.64	0.14	0.79	0.41	
Avail Cap(c_a), veh/h	830	1658	775	627	1497	668	327	3701	912	275	3506	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.2	28.7	28.9	33.5	31.9	30.1	35.1	19.0	15.1	35.8	17.7	0.0
Incr Delay (d2), s/veh	1.3	0.4	0.9	1.3	1.5	0.5	4.0	0.3	0.1	4.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	1.5	1.6	2.2	2.6	0.8	1.8	5.0	0.9	1.5	2.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	29.0	29.8	34.8	33.3	30.7	39.1	19.2	15.2	40.7	17.8	0.0
LnGrp LOS	C	C	C	C	C	C	D	B	B	D	B	
Approach Vol, veh/h		634			598			1827			1106	A
Approach Delay, s/veh		31.6			33.7			20.1			19.5	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	36.8	12.8	18.3	10.4	35.7	15.3	15.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	43.7	15.4	37.0	14.7	41.4	20.4	32.0
Max Q Clear Time (g_c+I1), s	5.6	17.7	8.0	6.2	6.5	10.9	10.3	8.1
Green Ext Time (p_c), s	0.0	12.7	0.3	1.7	0.1	7.0	0.5	1.8

Intersection Summary	
HCM 6th Ctrl Delay	23.7
HCM 6th LOS	C

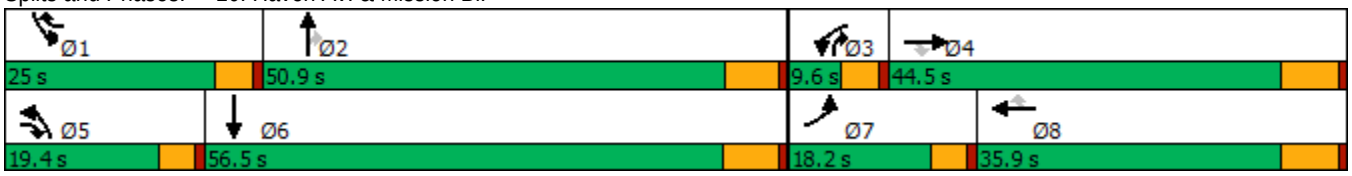
Notes

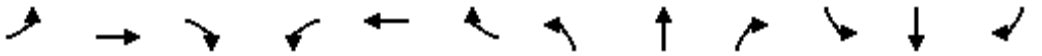
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	202	245	118	54	586	590	97	1550	14	138	1242
Future Volume (vph)	202	245	118	54	586	590	97	1550	14	138	1242
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	18.2	44.5	19.4	9.6	35.9	25.0	19.4	50.9	9.6	25.0	56.5
Total Split (%)	14.0%	34.2%	14.9%	7.4%	27.6%	19.2%	14.9%	39.2%	7.4%	19.2%	43.5%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 114.4
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	245	118	54	586	590	97	1550	14	138	1242	195
Future Volume (veh/h)	202	245	118	54	586	590	97	1550	14	138	1242	195
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	215	261	103	57	623	463	103	1649	10	147	1321	191
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	269	1577	608	114	1322	574	127	1896	638	174	1798	260
Arrive On Green	0.09	0.30	0.30	0.04	0.25	0.25	0.07	0.37	0.37	0.10	0.39	0.39
Sat Flow, veh/h	3141	5187	1607	3141	5187	1610	1714	5187	1585	1714	4577	662
Grp Volume(v), veh/h	215	261	103	57	623	463	103	1649	10	147	998	514
Grp Sat Flow(s),veh/h/ln	1570	1729	1607	1570	1729	1610	1714	1729	1585	1714	1729	1781
Q Serve(g_s), s	7.7	4.3	4.9	2.1	11.7	29.4	6.8	34.1	0.4	9.7	28.4	28.4
Cycle Q Clear(g_c), s	7.7	4.3	4.9	2.1	11.7	29.4	6.8	34.1	0.4	9.7	28.4	28.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	269	1577	608	114	1322	574	127	1896	638	174	1359	700
V/C Ratio(X)	0.80	0.17	0.17	0.50	0.47	0.81	0.81	0.87	0.02	0.84	0.73	0.73
Avail Cap(c_a), veh/h	370	1709	649	136	1322	574	220	2010	673	303	1499	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	29.4	23.8	54.5	36.4	33.5	52.6	34.0	20.8	50.9	29.9	29.9
Incr Delay (d2), s/veh	5.7	0.0	0.1	1.3	0.3	8.3	4.6	4.3	0.0	4.2	1.7	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	1.7	1.8	0.8	4.7	12.1	3.0	14.1	0.2	4.2	11.1	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.5	29.5	24.0	55.8	36.6	41.8	57.2	38.3	20.8	55.1	31.6	33.2
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	C	C
Approach Vol, veh/h		579			1143			1762			1659	
Approach Delay, s/veh		38.9			39.7			39.3			34.2	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	48.6	8.8	41.6	13.1	51.8	14.5	35.9
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	20.4	* 45	5.0	38.0	14.8	50.0	13.6	29.4
Max Q Clear Time (g_c+I1), s	11.7	36.1	4.1	6.9	8.8	30.4	9.7	31.4
Green Ext Time (p_c), s	0.1	6.0	0.0	1.8	0.0	9.2	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	37.7
HCM 6th LOS	D

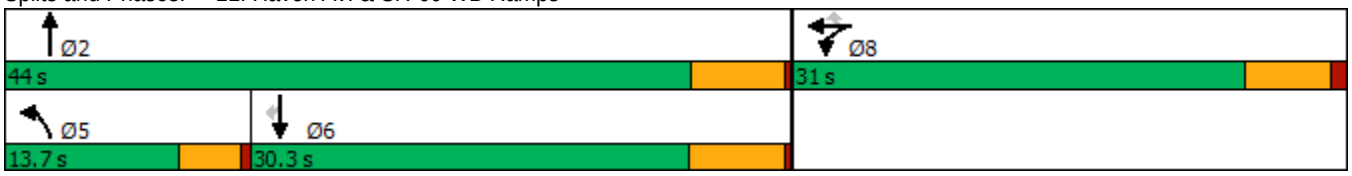
Notes

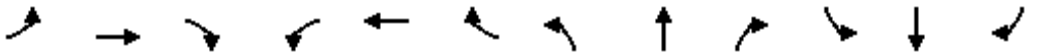
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	134	9	461	300	1454	760	518
Future Volume (vph)	134	9	461	300	1454	760	518
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.5	35.2	28.3	28.3
Total Split (s)	31.0	31.0	31.0	13.7	44.0	30.3	30.3
Total Split (%)	41.3%	41.3%	41.3%	18.3%	58.7%	40.4%	40.4%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 62.5
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	134	9	461	300	1454	0	0	760	518
Future Volume (veh/h)	0	0	0	134	9	461	300	1454	0	0	760	518
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1900	1900	1700	1900	0	0	1900	1900
Adj Flow Rate, veh/h				147	0	258	316	1531	0	0	800	380
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				737	0	346	446	2825	0	0	1659	515
Arrive On Green				0.21	0.00	0.21	0.14	0.54	0.00	0.00	0.32	0.32
Sat Flow, veh/h				3429	0	1610	3141	5358	0	0	5358	1610
Grp Volume(v), veh/h				147	0	258	316	1531	0	0	800	380
Grp Sat Flow(s),veh/h/ln				1714	0	1610	1570	1729	0	0	1729	1610
Q Serve(g_s), s				1.7	0.0	7.2	4.6	9.2	0.0	0.0	6.0	10.1
Cycle Q Clear(g_c), s				1.7	0.0	7.2	4.6	9.2	0.0	0.0	6.0	10.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				737	0	346	446	2825	0	0	1659	515
V/C Ratio(X)				0.20	0.00	0.75	0.71	0.54	0.00	0.00	0.48	0.74
Avail Cap(c_a), veh/h				1790	0	841	631	4116	0	0	2633	817
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				15.5	0.0	17.7	19.8	7.1	0.0	0.0	13.2	14.6
Incr Delay (d2), s/veh				0.1	0.0	3.2	2.1	0.1	0.0	0.0	0.1	0.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.5	0.0	2.4	1.5	1.7	0.0	0.0	1.7	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				15.7	0.0	20.9	21.8	7.2	0.0	0.0	13.3	15.4
LnGrp LOS				B	A	C	C	A	A	A	B	B
Approach Vol, veh/h					405			1847			1180	
Approach Delay, s/veh					19.0			9.7			14.0	
Approach LOS					B			A			B	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	32.1		10.9	21.2		16.2						
Change Period (Y+Rc), s	* 5.8		4.0	5.8		5.8						
Max Green Setting (Gmax), s	* 38		9.7	24.5		25.2						
Max Q Clear Time (g_c+I1), s	11.2		6.6	12.1		9.2						
Green Ext Time (p_c), s	7.5		0.3	3.3		1.2						

Intersection Summary	
HCM 6th Ctrl Delay	12.2
HCM 6th LOS	B

Notes

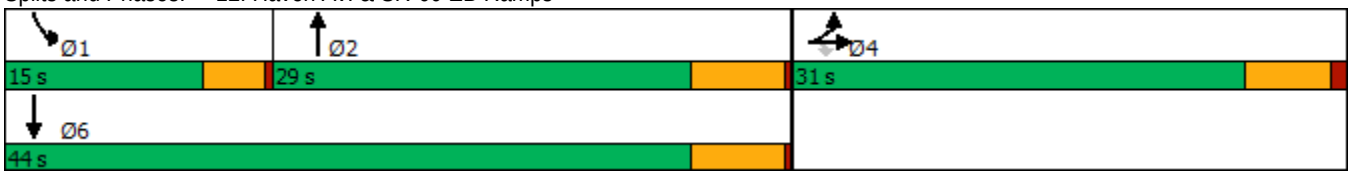
User approved volume balancing among the lanes for turning movement.

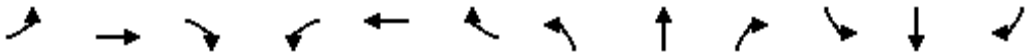
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	806	7	198	948	338	556
Future Volume (vph)	806	7	198	948	338	556
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.6	29.7
Total Split (s)	31.0	31.0	31.0	29.0	15.0	44.0
Total Split (%)	41.3%	41.3%	41.3%	38.7%	20.0%	58.7%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 69.7
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	806	7	198	0	0	0	0	948	266	338	556	0
Future Volume (veh/h)	806	7	198	0	0	0	0	948	266	338	556	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900				0	1900	1900	1700	1900	0
Adj Flow Rate, veh/h	853	0	67				0	998	216	356	585	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	1041	0	489				0	1274	275	459	2645	0
Arrive On Green	0.30	0.00	0.30				0.00	0.30	0.30	0.15	0.51	0.00
Sat Flow, veh/h	3429	0	1610				0	4430	920	3141	5358	0
Grp Volume(v), veh/h	853	0	67				0	810	404	356	585	0
Grp Sat Flow(s),veh/h/ln	1714	0	1610				0	1729	1720	1570	1729	0
Q Serve(g_s), s	14.2	0.0	1.9				0.0	13.2	13.3	6.7	3.8	0.0
Cycle Q Clear(g_c), s	14.2	0.0	1.9				0.0	13.2	13.3	6.7	3.8	0.0
Prop In Lane	1.00		1.00				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	1041	0	489				0	1034	515	459	2645	0
V/C Ratio(X)	0.82	0.00	0.14				0.00	0.78	0.79	0.78	0.22	0.00
Avail Cap(c_a), veh/h	1401	0	658				0	1307	650	560	3222	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	19.9	0.0	15.6				0.0	19.8	19.8	25.4	8.3	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.1				0.0	1.9	3.7	5.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.0	0.6				0.0	4.6	4.9	2.5	1.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.8	0.0	15.7				0.0	21.6	23.5	30.9	8.4	0.0
LnGrp LOS	C	A	B				A	C	C	C	A	A
Approach Vol, veh/h		920						1214			941	
Approach Delay, s/veh		22.3						22.3			16.9	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	13.0	24.1		24.5		37.1						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	11.0	23.3		25.2		38.3						
Max Q Clear Time (g_c+I1), s	8.7	15.3		16.2		5.8						
Green Ext Time (p_c), s	0.3	3.2		2.5		2.3						

Intersection Summary			
HCM 6th Ctrl Delay			20.6
HCM 6th LOS			C

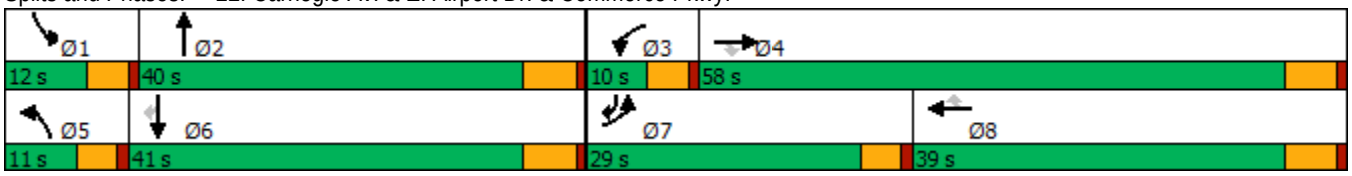
Notes

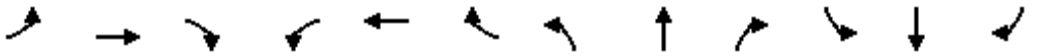
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	149	102	5	2	187	27	16	10	19	26	161
Future Volume (vph)	149	102	5	2	187	27	16	10	19	26	161
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	29.0	58.0	58.0	10.0	39.0	39.0	11.0	40.0	12.0	41.0	29.0
Total Split (%)	24.2%	48.3%	48.3%	8.3%	32.5%	32.5%	9.2%	33.3%	10.0%	34.2%	24.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 48.9
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	102	5	2	187	27	16	10	0	19	26	161
Future Volume (veh/h)	149	102	5	2	187	27	16	10	0	19	26	161
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1800
Adj Flow Rate, veh/h	180	123	5	2	225	21	19	12	0	23	31	135
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	230	1226	547	5	752	335	40	701	0	47	716	893
Arrive On Green	0.13	0.34	0.34	0.00	0.21	0.21	0.02	0.19	0.00	0.03	0.20	0.20
Sat Flow, veh/h	1714	3610	1610	1714	3610	1610	1714	3705	0	1714	3610	2685
Grp Volume(v), veh/h	180	123	5	2	225	21	19	12	0	23	31	135
Grp Sat Flow(s),veh/h/ln	1714	1805	1610	1714	1805	1610	1714	1805	0	1714	1805	1342
Q Serve(g_s), s	4.8	1.1	0.1	0.1	2.5	0.5	0.5	0.1	0.0	0.6	0.3	1.7
Cycle Q Clear(g_c), s	4.8	1.1	0.1	0.1	2.5	0.5	0.5	0.1	0.0	0.6	0.3	1.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	1226	547	5	752	335	40	701	0	47	716	893
V/C Ratio(X)	0.78	0.10	0.01	0.43	0.30	0.06	0.48	0.02	0.00	0.49	0.04	0.15
Avail Cap(c_a), veh/h	877	3950	1762	194	2512	1121	230	2588	0	266	2664	2341
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	10.8	10.4	23.7	15.9	15.2	23.0	15.5	0.0	22.9	15.5	11.2
Incr Delay (d2), s/veh	2.2	0.0	0.0	21.1	0.2	0.1	3.2	0.0	0.0	2.9	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.3	0.0	0.0	0.9	0.2	0.2	0.0	0.0	0.3	0.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.2	10.8	10.4	44.8	16.2	15.2	26.2	15.5	0.0	25.7	15.5	11.3
LnGrp LOS	C	B	B	D	B	B	C	B	A	C	B	B
Approach Vol, veh/h		308			248			31			189	
Approach Delay, s/veh		17.5			16.3			22.1			13.7	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	15.1	4.7	22.0	5.7	15.3	11.0	15.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	34.2	5.4	52.2	6.4	35.2	24.4	33.2
Max Q Clear Time (g_c+I1), s	2.6	2.1	2.1	3.1	2.5	3.7	6.8	4.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.7	0.0	0.7	0.2	1.3

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	7.2
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	5	21	4	17	16
Future Vol, veh/h	2	5	21	4	17	16
Peak Hour Factor	0.64	0.64	0.64	0.64	0.64	0.64
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	8	33	6	27	25
Number of Lanes	2	1	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	3	0
HCM Control Delay	6.5	7.3	7.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	21%	0%	100%	0%	0%
Vol Thru, %	100%	64%	0%	0%	0%	0%	100%	100%
Vol Right, %	0%	36%	0%	79%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	14	11	1	3	3	17	8	8
LT Vol	0	0	1	1	0	17	0	0
Through Vol	14	7	0	0	0	0	8	8
RT Vol	0	4	0	2	3	0	0	0
Lane Flow Rate	22	17	2	5	4	27	12	12
Geometry Grp	8	8	7	7	7	8	8	8
Degree of Util (X)	0.028	0.021	0.003	0.006	0.002	0.037	0.016	0.01
Departure Headway (Hd)	4.587	4.332	5.146	4.198	2.246	5.071	4.57	2.87
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	780	826	692	846	1563	707	783	1243
Service Time	2.316	2.062	2.903	1.956	0.003	2.797	2.297	0.597
HCM Lane V/C Ratio	0.028	0.021	0.003	0.006	0.003	0.038	0.015	0.01
HCM Control Delay	7.4	7.2	7.9	7	5	8	7.4	5.6
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0	0	0	0.1	0	0

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	8	11	37	17	12	6
Future Vol, veh/h	8	11	37	17	12	6
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	12	40	18	13	7
Number of Lanes	1	1	1	2	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	7.3	7.6	7.2
HCM LOS	A	A	A

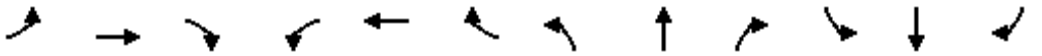
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	40%
Vol Right, %	0%	0%	0%	0%	100%	0%	60%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	9	9	8	11	8	10
LT Vol	37	0	0	8	0	0	0
Through Vol	0	9	9	0	0	8	4
RT Vol	0	0	0	0	11	0	6
Lane Flow Rate	40	9	9	9	12	9	11
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.057	0.012	0.007	0.012	0.013	0.011	0.013
Departure Headway (Hd)	5.069	4.568	2.868	5.141	3.942	4.618	4.198
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	708	784	1246	692	900	771	848
Service Time	2.791	2.29	0.589	2.902	1.702	2.367	1.947
HCM Lane V/C Ratio	0.056	0.011	0.007	0.013	0.013	0.012	0.013
HCM Control Delay	8.1	7.3	5.6	8	6.8	7.4	7
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0	0	0	0	0	0

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	55	571	6	663	28	8	3	6	21
Future Volume (vph)	55	571	6	663	28	8	3	6	21
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	81.0	81.0	81.0	81.0	81.0	39.0	39.0	39.0	39.0
Total Split (%)	67.5%	67.5%	67.5%	67.5%	67.5%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 25.8
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	571	3	6	663	28	8	0	3	6	0	21
Future Volume (veh/h)	55	571	3	6	663	28	8	0	3	6	0	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	61	634	3	7	737	31	9	0	2	7	0	13
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	529	2548	12	608	1727	760	355	81	69	355	81	69
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.04	0.00	0.04	0.04	0.00	0.04
Sat Flow, veh/h	674	5328	25	761	3610	1590	1348	1900	1608	1352	1900	1610
Grp Volume(v), veh/h	61	411	226	7	737	31	9	0	2	7	0	13
Grp Sat Flow(s),veh/h/ln	674	1729	1895	761	1805	1590	1348	1900	1608	1352	1900	1610
Q Serve(g_s), s	1.6	1.7	1.7	0.1	3.2	0.3	0.2	0.0	0.0	0.1	0.0	0.2
Cycle Q Clear(g_c), s	4.8	1.7	1.7	1.8	3.2	0.3	0.2	0.0	0.0	0.1	0.0	0.2
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	529	1654	906	608	1727	760	355	81	69	355	81	69
V/C Ratio(X)	0.12	0.25	0.25	0.01	0.43	0.04	0.03	0.00	0.03	0.02	0.00	0.19
Avail Cap(c_a), veh/h	2299	10736	5883	2606	11208	4937	2212	2698	2283	2151	2604	2207
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.7	3.7	3.7	4.3	4.1	3.4	11.2	0.0	11.1	11.2	0.0	11.2
Incr Delay (d2), s/veh	0.1	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.8	3.8	3.9	4.3	4.3	3.4	11.2	0.0	11.3	11.2	0.0	12.5
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	B
Approach Vol, veh/h		698			775			11			20	
Approach Delay, s/veh		4.0			4.3			11.2			12.0	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		6.8		17.4		6.8		17.4				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 34		75.2		33.2		75.2				
Max Q Clear Time (g_c+I1), s		2.2		6.8		2.2		5.2				
Green Ext Time (p_c), s		0.0		4.7		0.0		5.5				

Intersection Summary												
HCM 6th Ctrl Delay			4.3									
HCM 6th LOS			A									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	20	1	0	4	30	0	187	23	47	66	3
Future Vol, veh/h	0	20	1	0	4	30	0	187	23	47	66	3
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	21	1	0	4	32	0	197	24	49	69	3
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.3	7.7	8.5	8.4
HCM LOS	A	A	A	A

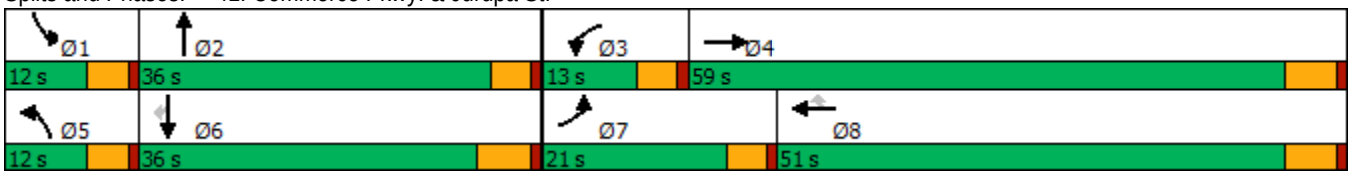
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%
Vol Thru, %	100%	100%	73%	100%	100%	87%	100%	100%	4%	0%	100%	88%
Vol Right, %	0%	0%	27%	0%	0%	13%	0%	0%	96%	0%	0%	12%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	0	125	85	0	13	8	0	3	31	47	44	25
LT Vol	0	0	0	0	0	0	0	0	0	47	0	0
Through Vol	0	125	62	0	13	7	0	3	1	0	44	22
RT Vol	0	0	23	0	0	1	0	0	30	0	0	3
Lane Flow Rate	0	131	90	0	14	8	0	3	33	49	46	26
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0	0.179	0.118	0	0.021	0.012	0	0.004	0.044	0.077	0.065	0.037
Departure Headway (Hd)	4.912	4.912	4.723	5.46	5.46	5.368	5.438	5.438	4.766	5.586	5.085	5.001
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	0	732	760	0	656	667	0	658	751	643	705	717
Service Time	2.633	2.633	2.444	3.193	3.193	3.102	3.17	3.17	2.498	3.31	2.808	2.724
HCM Lane V/C Ratio	0	0.179	0.118	0	0.021	0.012	0	0.005	0.044	0.076	0.065	0.036
HCM Control Delay	7.6	8.7	8.1	8.2	8.3	8.2	8.2	8.2	7.7	8.8	8.2	7.9
HCM Lane LOS	N	A	A	N	A	A	N	A	A	A	A	A
HCM 95th-tile Q	0	0.6	0.4	0	0.1	0	0	0	0.1	0.2	0.2	0.1

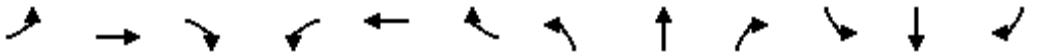
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	72	494	18	666	139	13	5	39	4	18
Future Volume (vph)	72	494	18	666	139	13	5	39	4	18
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	21.0	59.0	13.0	51.0	51.0	12.0	36.0	12.0	36.0	36.0
Total Split (%)	17.5%	49.2%	10.8%	42.5%	42.5%	10.0%	30.0%	10.0%	30.0%	30.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 56
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	494	13	18	666	139	13	5	31	39	4	18
Future Volume (veh/h)	72	494	13	18	666	139	13	5	31	39	4	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	78	537	13	20	724	0	14	5	23	42	4	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	117	1903	46	42	1161		30	35	160	141	276	234
Arrive On Green	0.07	0.37	0.37	0.02	0.32	0.00	0.02	0.12	0.12	0.05	0.15	0.15
Sat Flow, veh/h	1714	5210	126	1714	3610	1610	1714	296	1360	3141	1900	1610
Grp Volume(v), veh/h	78	356	194	20	724	0	14	0	28	42	4	13
Grp Sat Flow(s),veh/h/ln	1714	1729	1877	1714	1805	1610	1714	0	1655	1570	1900	1610
Q Serve(g_s), s	2.1	3.4	3.4	0.5	7.9	0.0	0.4	0.0	0.7	0.6	0.1	0.3
Cycle Q Clear(g_c), s	2.1	3.4	3.4	0.5	7.9	0.0	0.4	0.0	0.7	0.6	0.1	0.3
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.82	1.00		1.00
Lane Grp Cap(c), veh/h	117	1263	686	42	1161		30	0	195	141	276	234
V/C Ratio(X)	0.67	0.28	0.28	0.48	0.62		0.46	0.00	0.14	0.30	0.01	0.06
Avail Cap(c_a), veh/h	605	3956	2148	310	3509		273	0	1118	500	1234	1046
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	10.4	10.4	22.4	13.4	0.0	22.6	0.0	18.4	21.5	17.0	17.1
Incr Delay (d2), s/veh	2.4	0.1	0.2	3.1	0.6	0.0	4.0	0.0	0.3	0.4	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.9	1.0	0.2	2.4	0.0	0.2	0.0	0.3	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.6	10.6	10.7	25.5	13.9	0.0	26.6	0.0	18.7	21.9	17.0	17.2
LnGrp LOS	C	B	B	C	B		C	A	B	C	B	B
Approach Vol, veh/h		628			744	A		42			59	
Approach Delay, s/veh		12.2			14.3			21.3			20.6	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	11.3	5.7	22.8	5.4	12.5	7.8	20.8
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	* 31	8.4	53.2	7.4	30.2	16.4	45.2
Max Q Clear Time (g_c+I1), s	2.6	2.7	2.5	5.4	2.4	2.3	4.1	9.9
Green Ext Time (p_c), s	0.0	0.1	0.0	3.4	0.0	0.0	0.1	5.0

Intersection Summary	
HCM 6th Ctrl Delay	13.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	41	25	7	23	9	1	6	2	8	4	10
Future Vol, veh/h	23	41	25	7	23	9	1	6	2	8	4	10
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	24	44	27	7	24	10	1	6	2	9	4	11
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.5	7.5	7.5	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	50%	0%	100%	35%	0%	100%	46%	0%	100%	12%
Vol Right, %	0%	0%	50%	0%	0%	65%	0%	0%	54%	0%	0%	88%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	1	4	4	23	27	39	7	15	17	8	3	11
LT Vol	1	0	0	23	0	0	7	0	0	8	0	0
Through Vol	0	4	2	0	27	14	0	15	8	0	3	1
RT Vol	0	0	2	0	0	25	0	0	9	0	0	10
Lane Flow Rate	1	4	4	24	29	41	7	16	18	9	3	12
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.002	0.006	0.005	0.035	0.037	0.048	0.011	0.021	0.021	0.013	0.004	0.014
Departure Headway (Hd)	5.385	4.885	4.535	5.117	4.617	4.165	5.187	4.687	4.309	5.361	4.861	4.243
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	668	737	794	697	772	855	684	756	821	672	741	849
Service Time	3.087	2.587	2.237	2.867	2.367	1.914	2.963	2.463	2.085	3.061	2.561	1.943
HCM Lane V/C Ratio	0.001	0.005	0.005	0.034	0.038	0.048	0.01	0.021	0.022	0.013	0.004	0.014
HCM Control Delay	8.1	7.6	7.3	8.1	7.5	7.1	8	7.6	7.2	8.1	7.6	7
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0	0	0	0.1	0.1	0.2	0	0.1	0.1	0	0	0

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	30	6	10	20	10	22	61	7	3	26	8
Future Vol, veh/h	7	30	6	10	20	10	22	61	7	3	26	8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	33	7	11	22	11	24	67	8	3	29	9
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.8	7.8	7.8	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	74%	0%	100%	62%	0%	100%	40%	0%	100%	52%
Vol Right, %	0%	0%	26%	0%	0%	38%	0%	0%	60%	0%	0%	48%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	22	41	27	7	20	16	10	13	17	3	17	17
LT Vol	22	0	0	7	0	0	10	0	0	3	0	0
Through Vol	0	41	20	0	20	10	0	13	7	0	17	9
RT Vol	0	0	7	0	0	6	0	0	10	0	0	8
Lane Flow Rate	24	45	30	8	22	18	11	15	18	3	19	18
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.036	0.06	0.039	0.012	0.03	0.023	0.017	0.02	0.023	0.005	0.026	0.023
Departure Headway (Hd)	5.328	4.828	4.648	5.448	4.948	4.686	5.454	4.954	4.534	5.429	4.929	4.593
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	676	746	775	660	726	767	659	725	792	661	729	782
Service Time	3.028	2.528	2.348	3.159	2.659	2.396	3.166	2.666	2.246	3.143	2.643	2.307
HCM Lane V/C Ratio	0.036	0.06	0.039	0.012	0.03	0.023	0.017	0.021	0.023	0.005	0.026	0.023
HCM Control Delay	8.2	7.8	7.5	8.2	7.8	7.5	8.3	7.8	7.4	8.2	7.8	7.4
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0	0.1	0.1	0.1	0.1	0.1	0	0.1	0.1

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	12	32	103	19	0
Future Vol, veh/h	1	12	32	103	19	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	14	38	123	23	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	161	12	23	0	-	0
Stage 1	23	-	-	-	-	-
Stage 2	138	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	820	1072	1605	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	880	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	800	1072	1605	-	-	-
Mov Cap-2 Maneuver	826	-	-	-	-	-
Stage 1	978	-	-	-	-	-
Stage 2	880	-	-	-	-	-

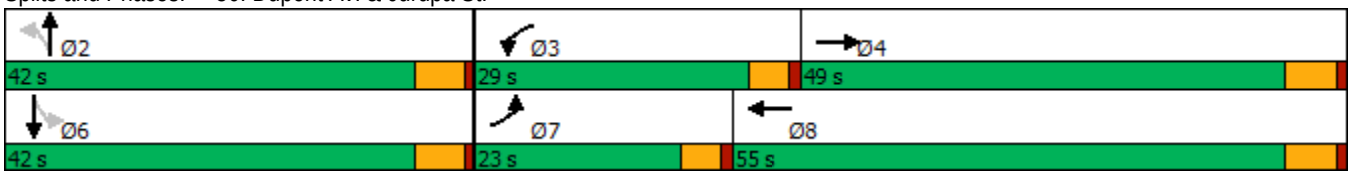
Approach	EB	NB	SB
HCM Control Delay, s	8.5	1.7	0
HCM LOS	A		

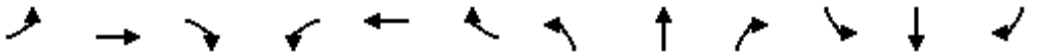
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1605	-	826	1072	-	-
HCM Lane V/C Ratio	0.024	-	0.001	0.013	-	-
HCM Control Delay (s)	7.3	-	9.4	8.4	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	52	465	91	775	22	30	7	5
Future Volume (vph)	52	465	91	775	22	30	7	5
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	23.0	49.0	29.0	55.0	42.0	42.0	42.0	42.0
Total Split (%)	19.2%	40.8%	24.2%	45.8%	35.0%	35.0%	35.0%	35.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 46.3
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	465	17	91	775	65	22	30	82	7	5	12
Future Volume (veh/h)	52	465	17	91	775	65	22	30	82	7	5	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	53	474	16	93	791	65	22	31	60	7	5	6
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	96	1593	54	141	1636	134	449	354	316	396	354	316
Arrive On Green	0.06	0.31	0.31	0.08	0.33	0.33	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1714	5154	173	1714	4886	400	1351	1805	1610	1256	1805	1610
Grp Volume(v), veh/h	53	317	173	93	559	297	22	31	60	7	5	6
Grp Sat Flow(s),veh/h/ln	1714	1729	1869	1714	1729	1828	1351	1805	1610	1256	1805	1610
Q Serve(g_s), s	1.2	2.7	2.7	2.0	4.9	4.9	0.5	0.5	1.2	0.2	0.1	0.1
Cycle Q Clear(g_c), s	1.2	2.7	2.7	2.0	4.9	4.9	0.6	0.5	1.2	1.4	0.1	0.1
Prop In Lane	1.00		0.09	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	96	1069	578	141	1158	612	449	354	316	396	354	316
V/C Ratio(X)	0.55	0.30	0.30	0.66	0.48	0.49	0.05	0.09	0.19	0.02	0.01	0.02
Avail Cap(c_a), veh/h	824	3901	2108	1092	4443	2349	1475	1725	1539	1350	1725	1539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	10.1	10.1	17.1	10.1	10.1	12.7	12.6	12.8	13.4	12.4	12.4
Incr Delay (d2), s/veh	1.8	0.2	0.3	2.0	0.3	0.6	0.0	0.1	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.7	0.8	0.7	1.2	1.3	0.1	0.2	0.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.4	10.2	10.4	19.0	10.4	10.7	12.7	12.7	13.1	13.4	12.4	12.4
LnGrp LOS	B	B	B	B	B	B	B	B	B	B	B	B
Approach Vol, veh/h		543			949			113			18	
Approach Delay, s/veh		11.2			11.4			12.9			12.8	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.9	7.7	17.6		12.9	6.8	18.6				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		36.6	24.4	43.2		36.6	18.4	49.2				
Max Q Clear Time (g_c+I1), s		3.2	4.0	4.7		3.4	3.2	6.9				
Green Ext Time (p_c), s		0.5	0.1	3.0		0.0	0.0	5.8				

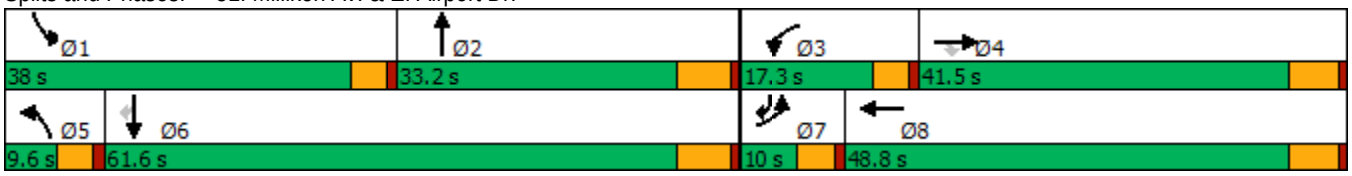
Intersection Summary												
HCM 6th Ctrl Delay			11.4									
HCM 6th LOS			B									

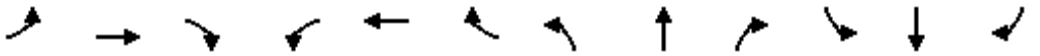
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	66	101	21	76	130	21	594	331	792	130
Future Volume (vph)	66	101	21	76	130	21	594	331	792	130
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	10.0	41.5	41.5	17.3	48.8	9.6	33.2	38.0	61.6	10.0
Total Split (%)	7.7%	31.9%	31.9%	13.3%	37.5%	7.4%	25.5%	29.2%	47.4%	7.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 92.7
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	101	21	76	130	202	21	594	70	331	792	130
Future Volume (veh/h)	66	101	21	76	130	202	21	594	70	331	792	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1800	1900	1900	1700	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	77	117	11	88	151	134	24	691	65	385	921	102
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	177	540	241	112	298	245	84	1070	100	433	2321	810
Arrive On Green	0.06	0.15	0.15	0.07	0.16	0.16	0.03	0.22	0.22	0.25	0.45	0.45
Sat Flow, veh/h	3141	3610	1610	1714	1877	1547	3141	4825	451	1714	5187	1608
Grp Volume(v), veh/h	77	117	11	88	145	140	24	494	262	385	921	102
Grp Sat Flow(s),veh/h/ln	1570	1805	1610	1714	1805	1618	1570	1729	1818	1714	1729	1608
Q Serve(g_s), s	1.6	1.9	0.4	3.4	5.0	5.4	0.5	8.8	8.9	14.8	8.1	2.3
Cycle Q Clear(g_c), s	1.6	1.9	0.4	3.4	5.0	5.4	0.5	8.8	8.9	14.8	8.1	2.3
Prop In Lane	1.00		1.00	1.00		0.96	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	177	540	241	112	286	257	84	767	403	433	2321	810
V/C Ratio(X)	0.44	0.22	0.05	0.79	0.51	0.55	0.29	0.64	0.65	0.89	0.40	0.13
Avail Cap(c_a), veh/h	249	1890	843	319	1138	1020	230	1369	720	839	4213	1397
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	25.5	24.8	31.4	26.2	26.4	32.5	24.1	24.1	24.6	12.7	9.0
Incr Delay (d2), s/veh	0.6	0.2	0.1	4.5	1.4	1.8	0.7	0.9	1.8	2.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.8	0.1	1.5	2.1	2.0	0.2	3.2	3.5	5.5	2.5	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.8	25.7	24.9	35.9	27.6	28.2	33.2	25.0	25.9	27.1	12.8	9.0
LnGrp LOS	C	C	C	D	C	C	C	C	C	C	B	A
Approach Vol, veh/h		205			373			780			1408	
Approach Delay, s/veh		27.9			29.8			25.6			16.4	
Approach LOS		C			C			C			B	

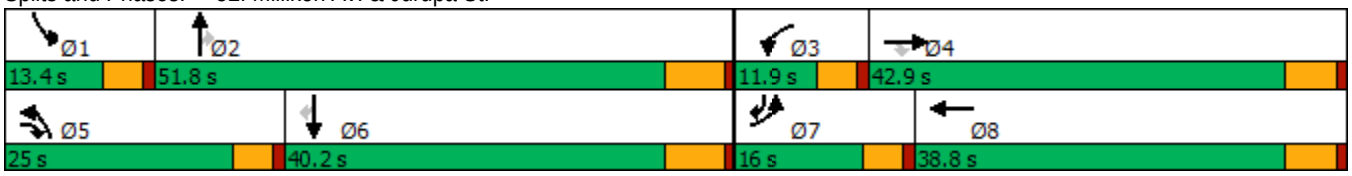
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.8	21.3	9.1	16.0	6.4	36.7	8.4	16.6
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	33.4	27.0	12.7	35.7	5.0	55.4	5.4	43.0
Max Q Clear Time (g_c+I1), s	16.8	10.9	5.4	3.9	2.5	10.1	3.6	7.4
Green Ext Time (p_c), s	0.5	3.9	0.0	0.7	0.0	7.1	0.0	1.6

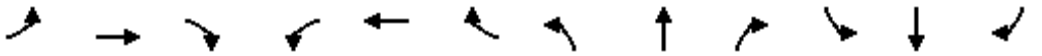
Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	203	667	281	100	478	419	742	104	128	370	62
Future Volume (vph)	203	667	281	100	478	419	742	104	128	370	62
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	16.0	42.9	25.0	11.9	38.8	25.0	51.8	51.8	13.4	40.2	16.0
Total Split (%)	13.3%	35.8%	20.8%	9.9%	32.3%	20.8%	43.2%	43.2%	11.2%	33.5%	13.3%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 78.6
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	667	281	100	478	68	419	742	104	128	370	62
Future Volume (veh/h)	203	667	281	100	478	68	419	742	104	128	370	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	209	688	185	103	493	45	432	765	89	132	381	28
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	306	1233	664	214	1010	91	549	1386	430	232	863	425
Arrive On Green	0.10	0.24	0.24	0.07	0.21	0.21	0.17	0.27	0.27	0.07	0.17	0.17
Sat Flow, veh/h	3141	5187	1610	3141	4843	437	3141	5187	1610	3141	5187	1610
Grp Volume(v), veh/h	209	688	185	103	350	188	432	765	89	132	381	28
Grp Sat Flow(s),veh/h/ln	1570	1729	1610	1570	1729	1821	1570	1729	1610	1570	1729	1610
Q Serve(g_s), s	3.9	7.0	4.6	1.9	5.4	5.5	7.9	7.6	2.6	2.4	4.0	0.8
Cycle Q Clear(g_c), s	3.9	7.0	4.6	1.9	5.4	5.5	7.9	7.6	2.6	2.4	4.0	0.8
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	306	1233	664	214	721	380	549	1386	430	232	863	425
V/C Ratio(X)	0.68	0.56	0.28	0.48	0.49	0.49	0.79	0.55	0.21	0.57	0.44	0.07
Avail Cap(c_a), veh/h	596	3202	1275	381	1899	1000	1066	3935	1222	460	2934	1068
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	20.1	11.7	27.0	20.9	21.0	23.7	18.9	17.1	26.9	22.5	16.6
Incr Delay (d2), s/veh	1.0	0.4	0.2	0.6	0.5	1.0	1.0	0.3	0.2	0.8	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.5	1.3	0.7	1.9	2.1	2.6	2.6	0.8	0.8	1.4	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	20.5	11.9	27.6	21.5	22.0	24.7	19.3	17.3	27.7	22.9	16.6
LnGrp LOS	C	C	B	C	C	C	C	B	B	C	C	B
Approach Vol, veh/h		1082			641			1286			541	
Approach Delay, s/veh		20.4			22.6			21.0			23.7	
Approach LOS		C			C			C			C	

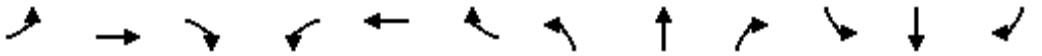
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	22.3	8.7	20.1	15.1	16.2	10.5	18.3
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	8.8	45.6	7.3	37.1	20.4	34.0	11.4	33.0
Max Q Clear Time (g_c+I1), s	4.4	9.6	3.9	9.0	9.9	6.0	5.9	7.5
Green Ext Time (p_c), s	0.1	5.5	0.0	5.3	0.6	2.4	0.2	3.1

Intersection Summary	
HCM 6th Ctrl Delay	21.5
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	202	2	19	16	216	296	1185	109	549	327
Future Volume (vph)	202	2	19	16	216	296	1185	109	549	327
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	21.0	33.0	12.0	24.0	24.0	27.0	59.0	16.0	48.0	48.0
Total Split (%)	17.5%	27.5%	10.0%	20.0%	20.0%	22.5%	49.2%	13.3%	40.0%	40.0%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 82.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	202	2	47	19	16	216	296	1185	14	109	549	327
Future Volume (veh/h)	202	2	47	19	16	216	296	1185	14	109	549	327
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1800	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	224	2	43	21	0	185	329	1317	15	121	610	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	315	16	339	41	0	459	429	1997	23	204	1588	
Arrive On Green	0.10	0.22	0.22	0.02	0.00	0.14	0.14	0.38	0.38	0.06	0.31	0.00
Sat Flow, veh/h	3141	72	1549	1714	0	3220	3141	5287	60	3141	5187	1610
Grp Volume(v), veh/h	224	0	45	21	0	185	329	861	471	121	610	0
Grp Sat Flow(s),veh/h/ln	1570	0	1621	1714	0	1610	1570	1729	1889	1570	1729	1610
Q Serve(g_s), s	4.8	0.0	1.6	0.8	0.0	3.6	7.0	14.4	14.4	2.6	6.4	0.0
Cycle Q Clear(g_c), s	4.8	0.0	1.6	0.8	0.0	3.6	7.0	14.4	14.4	2.6	6.4	0.0
Prop In Lane	1.00		0.96	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	315	0	355	41	0	459	429	1306	713	204	1588	
V/C Ratio(X)	0.71	0.00	0.13	0.51	0.00	0.40	0.77	0.66	0.66	0.59	0.38	
Avail Cap(c_a), veh/h	740	0	617	182	0	810	1011	2624	1433	515	3116	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.3	0.0	21.8	33.6	0.0	27.1	29.0	17.9	17.9	31.6	19.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.2	3.6	0.0	0.6	1.1	0.6	1.0	1.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.5	0.4	0.0	1.3	2.4	4.8	5.4	0.9	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.5	0.0	22.0	37.2	0.0	27.7	30.1	18.5	19.0	32.7	19.1	0.0
LnGrp LOS	C	A	C	D	A	C	C	B	B	C	B	
Approach Vol, veh/h		269			206			1661			731	A
Approach Delay, s/veh		29.9			28.7			20.9			21.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	32.5	6.3	21.7	14.1	27.5	11.6	16.4
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	11.4	52.8	7.4	26.5	22.4	41.8	16.4	17.5
Max Q Clear Time (g_c+I1), s	4.6	16.4	2.8	3.6	9.0	8.4	6.8	5.6
Green Ext Time (p_c), s	0.1	9.9	0.0	0.1	0.5	4.0	0.3	0.5

Intersection Summary	
HCM 6th Ctrl Delay	22.5
HCM 6th LOS	C

Notes

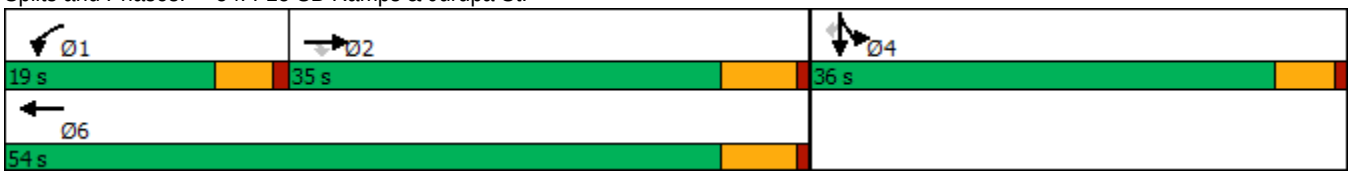
User approved volume balancing among the lanes for turning movement.

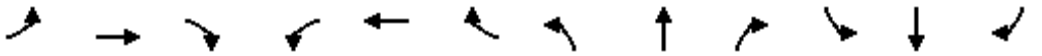
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	627	159	403	585	490	3	900
Future Volume (vph)	627	159	403	585	490	3	900
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	35.0	35.0	19.0	54.0	36.0	36.0	36.0
Total Split (%)	38.9%	38.9%	21.1%	60.0%	40.0%	40.0%	40.0%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 76.5
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	627	159	403	585	0	0	0	0	490	3	900
Future Volume (veh/h)	0	627	159	403	585	0	0	0	0	490	3	900
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1700	1900	0				1800	1900	1900
Adj Flow Rate, veh/h	0	689	123	443	643	0				360	0	997
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1139	322	541	2334	0				648	0	1218
Arrive On Green	0.00	0.20	0.20	0.17	0.45	0.00				0.38	0.00	0.38
Sat Flow, veh/h	0	5700	1610	3141	5358	0				1714	0	3220
Grp Volume(v), veh/h	0	689	123	443	643	0				360	0	997
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1570	1729	0				1714	0	1610
Q Serve(g_s), s	0.0	7.0	4.2	8.7	5.0	0.0				10.6	0.0	17.9
Cycle Q Clear(g_c), s	0.0	7.0	4.2	8.7	5.0	0.0				10.6	0.0	17.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1139	322	541	2334	0				648	0	1218
V/C Ratio(X)	0.00	0.60	0.38	0.82	0.28	0.00				0.56	0.00	0.82
Avail Cap(c_a), veh/h	0	2580	729	686	3887	0				830	0	1558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.3	22.2	25.6	11.1	0.0				15.7	0.0	17.9
Incr Delay (d2), s/veh	0.0	0.4	0.6	4.9	0.0	0.0				0.7	0.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.8	1.5	3.3	1.5	0.0				3.6	0.0	5.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	23.7	22.8	30.5	11.1	0.0				16.4	0.0	20.7
LnGrp LOS	A	C	C	C	B	A				B	A	C
Approach Vol, veh/h		812			1086						1357	
Approach Delay, s/veh		23.6			19.0						19.6	
Approach LOS		C			B						B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	16.0	18.8		29.2		34.8						
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0						
Max Green Setting (Gmax), s	14.0	29.0		31.0		48.0						
Max Q Clear Time (g_c+I1), s	10.7	9.0		19.9		7.0						
Green Ext Time (p_c), s	0.3	3.8		4.4		3.6						

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Notes

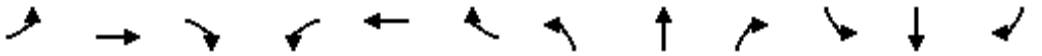
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	358	759	739	350	249	0	521
Future Volume (vph)	358	759	739	350	249	0	521
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	23.0	57.0	34.0	34.0	33.0	33.0	33.0
Total Split (%)	25.6%	63.3%	37.8%	37.8%	36.7%	36.7%	36.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 62.2
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	358	759	0	0	739	350	249	0	521	0	0	0
Future Volume (veh/h)	358	759	0	0	739	350	249	0	521	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1900	0	0	1900	1900	1800	1900	1900			
Adj Flow Rate, veh/h	381	807	0	0	786	290	177	0	483			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	528	2905	0	0	1535	476	389	0	730			
Arrive On Green	0.17	0.56	0.00	0.00	0.30	0.30	0.23	0.00	0.23			
Sat Flow, veh/h	3141	5358	0	0	5358	1610	1714	0	3220			
Grp Volume(v), veh/h	381	807	0	0	786	290	177	0	483			
Grp Sat Flow(s),veh/h/ln	1570	1729	0	0	1729	1610	1714	0	1610			
Q Serve(g_s), s	5.5	3.9	0.0	0.0	6.0	7.4	4.3	0.0	6.5			
Cycle Q Clear(g_c), s	5.5	3.9	0.0	0.0	6.0	7.4	4.3	0.0	6.5			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	528	2905	0	0	1535	476	389	0	730			
V/C Ratio(X)	0.72	0.28	0.00	0.00	0.51	0.61	0.46	0.00	0.66			
Avail Cap(c_a), veh/h	1208	5626	0	0	3133	973	1000	0	1878			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	18.8	5.5	0.0	0.0	14.0	14.5	15.9	0.0	16.8			
Incr Delay (d2), s/veh	0.7	0.0	0.0	0.0	0.2	0.9	0.8	0.0	1.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.7	0.7	0.0	0.0	1.8	2.2	1.4	0.0	2.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	5.5	0.0	0.0	14.2	15.4	16.8	0.0	17.9			
LnGrp LOS	B	A	A	A	B	B	B	A	B			
Approach Vol, veh/h		1188			1076			660				
Approach Delay, s/veh		10.0			14.5			17.6				
Approach LOS		B			B			B				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		31.9			12.6	19.3		16.0				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		51.9			18.4	28.9		27.9				
Max Q Clear Time (g_c+I1), s		5.9			7.5	9.4		8.5				
Green Ext Time (p_c), s		4.7			0.5	4.8		2.3				

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

Notes

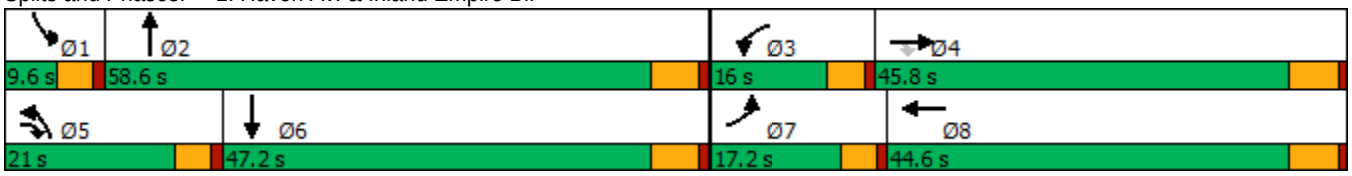
User approved volume balancing among the lanes for turning movement.

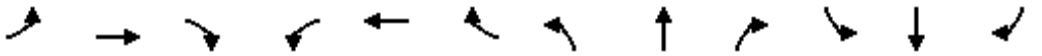
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	189	335	374	336	226	39	331	1843	427	39	1681	66
Future Volume (vph)	189	335	374	336	226	39	331	1843	427	39	1681	66
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	17.2	45.8	21.0	16.0	44.6		21.0	58.6		9.6	47.2	
Total Split (%)	13.2%	35.2%	16.2%	12.3%	34.3%		16.2%	45.1%		7.4%	36.3%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 104.7
Natural Cycle: 115
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	335	374	336	226	39	331	1843	427	39	1681	66
Future Volume (veh/h)	189	335	374	336	226	39	331	1843	427	39	1681	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	197	349	216	350	235	0	345	1920	0	41	1751	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	265	586	475	453	640		416	3097		111	2464	
Arrive On Green	0.08	0.16	0.16	0.10	0.18	0.00	0.13	0.47	0.00	0.04	0.38	0.00
Sat Flow, veh/h	3141	3610	1610	4566	3610	1610	3141	6536	1610	3141	6536	1610
Grp Volume(v), veh/h	197	349	216	350	235	0	345	1920	0	41	1751	0
Grp Sat Flow(s),veh/h/ln	1570	1805	1610	1522	1805	1610	1570	1634	1610	1570	1634	1610
Q Serve(g_s), s	5.6	8.1	9.9	6.8	5.2	0.0	9.7	19.9	0.0	1.2	20.7	0.0
Cycle Q Clear(g_c), s	5.6	8.1	9.9	6.8	5.2	0.0	9.7	19.9	0.0	1.2	20.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	586	475	453	640		416	3097		111	2464	
V/C Ratio(X)	0.74	0.60	0.46	0.77	0.37		0.83	0.62		0.37	0.71	
Avail Cap(c_a), veh/h	436	1590	922	573	1543		567	3801		173	2980	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.6	35.3	26.1	39.9	32.9	0.0	38.4	17.8	0.0	42.8	24.1	0.0
Incr Delay (d2), s/veh	1.6	1.0	0.7	3.7	0.4	0.0	5.5	0.2	0.0	0.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	3.5	3.6	2.6	2.2	0.0	3.9	6.6	0.0	0.4	7.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.2	36.2	26.8	43.6	33.2	0.0	43.9	18.0	0.0	43.5	24.7	0.0
LnGrp LOS	D	D	C	D	C		D	B		D	C	
Approach Vol, veh/h		762			585	A		2265	A		1792	A
Approach Delay, s/veh		35.1			39.4			21.9			25.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	48.8	13.6	20.5	16.6	40.0	12.3	21.9
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	52.8	11.4	40.0	16.4	41.4	12.6	38.8
Max Q Clear Time (g_c+I1), s	3.2	21.9	8.8	11.9	11.7	22.7	7.6	7.2
Green Ext Time (p_c), s	0.0	17.5	0.2	2.8	0.3	11.5	0.1	1.4

Intersection Summary	
HCM 6th Ctrl Delay	26.7
HCM 6th LOS	C

Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	219	319	2281	870	1703
Future Volume (vph)	219	319	2281	870	1703
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	33.0	33.0	67.0		67.0
Total Split (%)	33.0%	33.0%	67.0%		67.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 40
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	219	319	2281	870	0	1703
Future Volume (veh/h)	219	319	2281	870	0	1703
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1800	1900	1900	1900	0	1900
Adj Flow Rate, veh/h	308	157	2328	0	0	1738
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	419	197	5025		0	5025
Arrive On Green	0.12	0.12	1.00	0.00	0.00	0.77
Sat Flow, veh/h	3429	1610	6802	1610	0	7068
Grp Volume(v), veh/h	308	157	2328	0	0	1738
Grp Sat Flow(s),veh/h/ln	1714	1610	1634	1610	0	1634
Q Serve(g_s), s	8.7	9.5	0.0	0.0	0.0	8.4
Cycle Q Clear(g_c), s	8.7	9.5	0.0	0.0	0.0	8.4
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	419	197	5025		0	5025
V/C Ratio(X)	0.74	0.80	0.46		0.00	0.35
Avail Cap(c_a), veh/h	957	449	5025		0	5025
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.72	0.00	0.00	0.64
Uniform Delay (d), s/veh	42.3	42.7	0.0	0.0	0.0	3.6
Incr Delay (d2), s/veh	0.9	2.8	0.2	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.8	0.1	0.0	0.0	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	43.3	45.5	0.2	0.0	0.0	3.8
LnGrp LOS	D	D	A		A	A
Approach Vol, veh/h	465		2328	A		1738
Approach Delay, s/veh	44.0		0.2			3.8
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		82.7		17.3		82.7
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		2.0		11.5		10.4
Green Ext Time (p_c), s		19.8		0.7		10.8

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

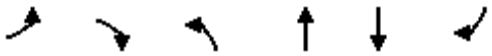
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	529	243	2622	1571	351
Future Volume (vph)	529	243	2622	1571	351
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	33.0	33.0	67.0	67.0	
Total Split (%)	33.0%	33.0%	67.0%	67.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 50
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	529	243	0	2622	1571	351
Future Volume (veh/h)	529	243	0	2622	1571	351
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1900	0	1900	1900	1900
Adj Flow Rate, veh/h	545	172	0	2703	1620	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	660	310	0	4565	4565	
Arrive On Green	0.19	0.19	0.00	0.70	1.00	0.00
Sat Flow, veh/h	3429	1610	0	7068	6802	1610
Grp Volume(v), veh/h	545	172	0	2703	1620	0
Grp Sat Flow(s),veh/h/ln	1714	1610	0	1634	1634	1610
Q Serve(g_s), s	15.3	9.7	0.0	21.3	0.0	0.0
Cycle Q Clear(g_c), s	15.3	9.7	0.0	21.3	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	660	310	0	4565	4565	
V/C Ratio(X)	0.83	0.55	0.00	0.59	0.35	
Avail Cap(c_a), veh/h	957	449	0	4565	4565	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.40	0.91	0.00
Uniform Delay (d), s/veh	38.8	36.5	0.0	7.7	0.0	0.0
Incr Delay (d2), s/veh	4.0	1.6	0.0	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	3.8	0.0	5.6	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	42.8	38.1	0.0	8.0	0.2	0.0
LnGrp LOS	D	D	A	A	A	
Approach Vol, veh/h	717			2703	1620	A
Approach Delay, s/veh	41.6			8.0	0.2	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		75.7		24.3		75.7
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		23.3		17.3		2.0
Green Ext Time (p_c), s		22.3		2.0		9.6

Intersection Summary		
HCM 6th Ctrl Delay		10.3
HCM 6th LOS		B

Notes

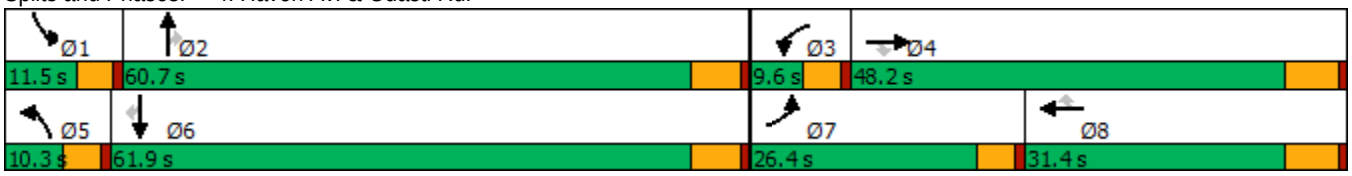
User approved volume balancing among the lanes for turning movement.

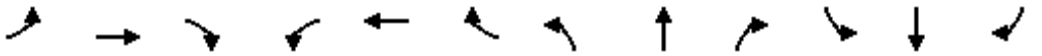
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	383	45	208	80	19	223	63	2728	105	162	1541	110
Future Volume (vph)	383	45	208	80	19	223	63	2728	105	162	1541	110
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	26.4	48.2	48.2	9.6	31.4	31.4	10.3	60.7	60.7	11.5	61.9	61.9
Total Split (%)	20.3%	37.1%	37.1%	7.4%	24.2%	24.2%	7.9%	46.7%	46.7%	8.8%	47.6%	47.6%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 114.1
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	383	45	208	80	19	223	63	2728	105	162	1541	110
Future Volume (veh/h)	383	45	208	80	19	223	63	2728	105	162	1541	110
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1800	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	395	46	86	82	20	150	65	2812	72	167	1589	89
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	457	372	315	133	176	249	125	3276	807	201	3434	846
Arrive On Green	0.15	0.20	0.20	0.04	0.09	0.09	0.04	0.50	0.50	0.06	0.53	0.53
Sat Flow, veh/h	3141	1900	1610	3141	1900	2685	3141	6536	1610	3141	6536	1610
Grp Volume(v), veh/h	395	46	86	82	20	150	65	2812	72	167	1589	89
Grp Sat Flow(s),veh/h/ln	1570	1900	1610	1570	1900	1342	1570	1634	1610	1570	1634	1610
Q Serve(g_s), s	13.3	2.2	4.9	2.8	1.0	5.8	2.2	40.6	2.5	5.7	16.4	3.0
Cycle Q Clear(g_c), s	13.3	2.2	4.9	2.8	1.0	5.8	2.2	40.6	2.5	5.7	16.4	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	457	372	315	133	176	249	125	3276	807	201	3434	846
V/C Ratio(X)	0.86	0.12	0.27	0.62	0.11	0.60	0.52	0.86	0.09	0.83	0.46	0.11
Avail Cap(c_a), veh/h	635	740	627	146	444	627	166	3327	820	201	3434	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	35.7	36.8	50.8	44.9	47.0	50.8	23.5	14.0	49.9	16.0	12.9
Incr Delay (d2), s/veh	6.9	0.1	0.5	4.2	0.3	2.3	1.2	2.4	0.0	23.3	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	1.0	1.9	1.1	0.5	1.9	0.9	14.6	0.8	2.8	5.6	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.9	35.9	37.3	54.9	45.1	49.4	52.0	26.0	14.1	73.2	16.1	12.9
LnGrp LOS	D	D	D	D	D	D	D	C	B	E	B	B
Approach Vol, veh/h		527			252			2949			1845	
Approach Delay, s/veh		48.1			50.8			26.3			21.1	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	59.9	9.2	27.3	8.9	62.5	20.3	16.2
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	6.9	54.9	5.0	42.0	5.7	56.1	21.8	25.2
Max Q Clear Time (g_c+I1), s	7.7	42.6	4.8	6.9	4.2	18.4	15.3	7.8
Green Ext Time (p_c), s	0.0	11.4	0.0	0.5	0.0	15.2	0.4	0.5

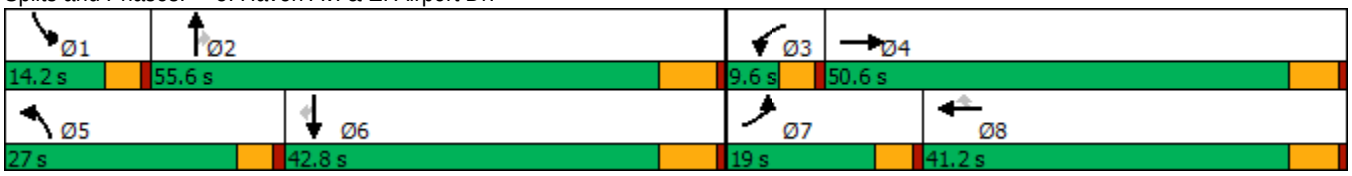
Intersection Summary	
HCM 6th Ctrl Delay	27.7
HCM 6th LOS	C

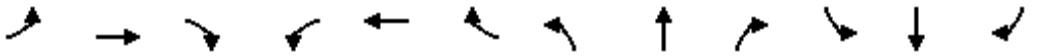
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	288	456	25	579	473	488	2123	18	183	1405	172
Future Volume (vph)	288	456	25	579	473	488	2123	18	183	1405	172
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	19.0	50.6	9.6	41.2	41.2	27.0	55.6	55.6	14.2	42.8	42.8
Total Split (%)	14.6%	38.9%	7.4%	31.7%	31.7%	20.8%	42.8%	42.8%	10.9%	32.9%	32.9%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 123.6
Natural Cycle: 110
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	456	599	25	579	473	488	2123	18	183	1405	172
Future Volume (veh/h)	288	456	599	25	579	473	488	2123	18	183	1405	172
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	294	465	466	26	591	403	498	2166	16	187	1434	135
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	340	640	570	74	974	435	542	2468	608	234	1827	450
Arrive On Green	0.11	0.35	0.35	0.02	0.27	0.27	0.17	0.38	0.38	0.07	0.28	0.28
Sat Flow, veh/h	3141	1805	1609	3141	3610	1610	3141	6536	1610	3141	6536	1610
Grp Volume(v), veh/h	294	465	466	26	591	403	498	2166	16	187	1434	135
Grp Sat Flow(s),veh/h/ln	1570	1805	1609	1570	1805	1610	1570	1634	1610	1570	1634	1610
Q Serve(g_s), s	11.7	28.3	33.3	1.0	18.1	30.8	19.7	39.0	0.8	7.4	25.6	8.3
Cycle Q Clear(g_c), s	11.7	28.3	33.3	1.0	18.1	30.8	19.7	39.0	0.8	7.4	25.6	8.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	340	640	570	74	974	435	542	2468	608	234	1827	450
V/C Ratio(X)	0.86	0.73	0.82	0.35	0.61	0.93	0.92	0.88	0.03	0.80	0.78	0.30
Avail Cap(c_a), veh/h	357	640	570	124	1010	450	556	2536	625	238	1875	462
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	35.5	37.1	60.8	40.3	45.0	51.5	36.7	24.8	57.6	42.1	35.9
Incr Delay (d2), s/veh	17.6	4.1	9.1	1.0	1.0	25.0	19.8	3.8	0.0	15.9	2.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	12.7	14.0	0.4	7.9	14.9	8.9	15.1	0.3	3.4	10.1	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.1	39.7	46.2	61.9	41.3	70.0	71.3	40.4	24.8	73.5	44.3	36.2
LnGrp LOS	E	D	D	E	D	E	E	D	C	E	D	D
Approach Vol, veh/h		1225			1020			2680			1756	
Approach Delay, s/veh		50.2			53.2			46.1			46.8	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	54.3	7.6	50.7	26.4	41.9	18.3	40.0
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	9.6	49.1	5.0	44.8	22.4	36.3	14.4	35.4
Max Q Clear Time (g_c+I1), s	9.4	41.0	3.0	35.3	21.7	27.6	13.7	32.8
Green Ext Time (p_c), s	0.0	6.7	0.0	3.9	0.1	5.6	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	48.1
HCM 6th LOS	D

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	1958	6	0	1530
Future Vol, veh/h	0	9	1958	6	0	1530
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	9	2019	6	0	1577

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1013	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	206	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	206	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

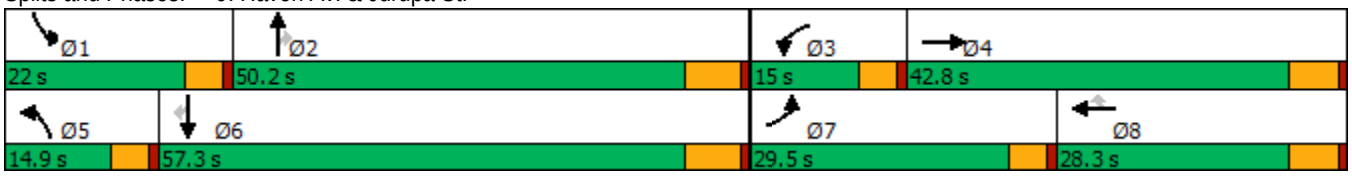
Approach	WB	NB	SB
HCM Control Delay, s	23.3	0	0
HCM LOS	C		

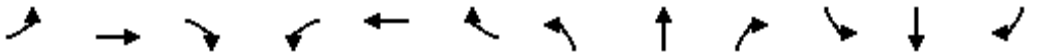
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	206	-
HCM Lane V/C Ratio	-	-	0.045	-
HCM Control Delay (s)	-	-	23.3	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	452	328	245	266	205	66	1959	308	202	1511	328
Future Volume (vph)	452	328	245	266	205	66	1959	308	202	1511	328
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	29.5	42.8	15.0	28.3	28.3	14.9	50.2	50.2	22.0	57.3	57.3
Total Split (%)	22.7%	32.9%	11.5%	21.8%	21.8%	11.5%	38.6%	38.6%	16.9%	44.1%	44.1%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 117.5
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	452	328	65	245	266	205	66	1959	308	202	1511	328
Future Volume (veh/h)	452	328	65	245	266	205	66	1959	308	202	1511	328
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	461	335	53	250	271	151	67	1999	220	206	1542	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	524	881	136	299	443	198	85	2463	605	234	3031	
Arrive On Green	0.17	0.19	0.19	0.10	0.12	0.12	0.05	0.38	0.38	0.14	0.46	0.00
Sat Flow, veh/h	3141	4533	697	3141	3610	1610	1714	6536	1606	1714	6536	1610
Grp Volume(v), veh/h	461	253	135	250	271	151	67	1999	220	206	1542	0
Grp Sat Flow(s),veh/h/ln	1570	1729	1772	1570	1805	1610	1714	1634	1606	1714	1634	1610
Q Serve(g_s), s	15.6	7.0	7.2	8.5	7.8	9.9	4.2	30.0	10.8	12.9	18.1	0.0
Cycle Q Clear(g_c), s	15.6	7.0	7.2	8.5	7.8	9.9	4.2	30.0	10.8	12.9	18.1	0.0
Prop In Lane	1.00		0.39	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	524	672	344	299	443	198	85	2463	605	234	3031	
V/C Ratio(X)	0.88	0.38	0.39	0.84	0.61	0.76	0.79	0.81	0.36	0.88	0.51	
Avail Cap(c_a), veh/h	717	1172	601	299	744	332	162	2617	643	273	3042	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	44.4	38.2	38.3	48.5	45.4	46.3	51.3	30.5	24.6	46.2	20.5	0.0
Incr Delay (d2), s/veh	7.6	0.3	0.7	17.2	1.4	6.0	5.9	1.9	0.4	21.9	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	2.9	3.1	4.0	3.5	4.2	1.9	11.0	4.0	6.6	6.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.0	38.6	39.1	65.8	46.8	52.4	57.2	32.5	24.9	68.1	20.7	0.0
LnGrp LOS	D	D	D	E	D	D	E	C	C	E	C	
Approach Vol, veh/h		849			672			2286			1748	A
Approach Delay, s/veh		45.9			55.1			32.5			26.3	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	47.6	15.0	27.0	10.0	57.1	22.8	19.2
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	17.4	43.7	10.4	37.0	10.3	50.8	24.9	22.5
Max Q Clear Time (g_c+I1), s	14.9	32.0	10.5	9.2	6.2	20.1	17.6	11.9
Green Ext Time (p_c), s	0.1	9.2	0.0	2.2	0.0	12.2	0.6	1.5

Intersection Summary	
HCM 6th Ctrl Delay	35.3
HCM 6th LOS	D

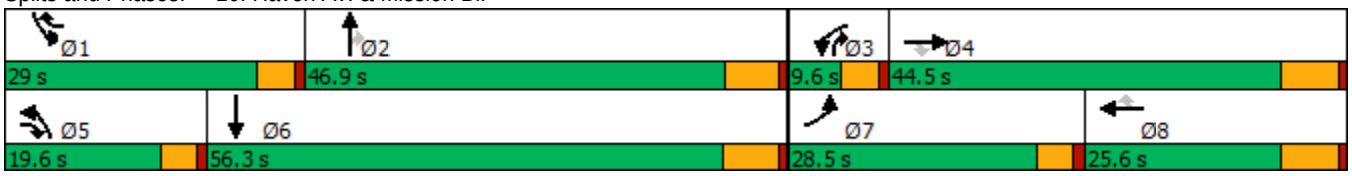
Notes

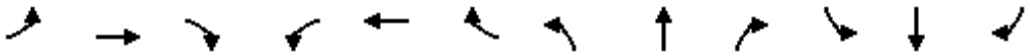
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	519	655	109	37	449	422	101	1436	57	302	1259
Future Volume (vph)	519	655	109	37	449	422	101	1436	57	302	1259
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	28.5	44.5	19.6	9.6	25.6	29.0	19.6	46.9	9.6	29.0	56.3
Total Split (%)	21.9%	34.2%	15.1%	7.4%	19.7%	22.3%	15.1%	36.1%	7.4%	22.3%	43.3%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 126.3
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	519	655	109	37	449	422	101	1436	57	302	1259	130
Future Volume (veh/h)	519	655	109	37	449	422	101	1436	57	302	1259	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	541	682	69	39	468	326	105	1496	39	315	1311	124
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	579	1568	606	91	764	540	128	1605	545	322	2037	193
Arrive On Green	0.18	0.30	0.30	0.03	0.15	0.15	0.07	0.31	0.31	0.19	0.42	0.42
Sat Flow, veh/h	3141	5187	1609	3141	5187	1610	1714	5187	1609	1714	4814	455
Grp Volume(v), veh/h	541	682	69	39	468	326	105	1496	39	315	942	493
Grp Sat Flow(s),veh/h/ln	1570	1729	1609	1570	1729	1610	1714	1729	1609	1714	1729	1811
Q Serve(g_s), s	22.0	13.7	3.6	1.6	11.0	19.1	7.8	36.3	2.1	23.7	28.0	28.0
Cycle Q Clear(g_c), s	22.0	13.7	3.6	1.6	11.0	19.1	7.8	36.3	2.1	23.7	28.0	28.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.25
Lane Grp Cap(c), veh/h	579	1568	606	91	764	540	128	1605	545	322	1463	766
V/C Ratio(X)	0.94	0.43	0.11	0.43	0.61	0.60	0.82	0.93	0.07	0.98	0.64	0.64
Avail Cap(c_a), veh/h	579	1568	606	121	764	540	198	1627	551	322	1463	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	36.4	26.3	61.9	51.9	35.9	59.2	43.5	29.1	52.4	29.7	29.7
Incr Delay (d2), s/veh	22.4	0.2	0.1	1.2	1.5	1.9	8.1	10.1	0.1	43.6	1.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	5.6	1.3	0.6	4.7	8.4	3.6	16.3	0.8	13.6	11.1	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	74.5	36.6	26.4	63.1	53.3	37.9	67.3	53.6	29.1	96.0	30.6	31.5
LnGrp LOS	E	D	C	E	D	D	E	D	C	F	C	C
Approach Vol, veh/h		1292			833			1640			1750	
Approach Delay, s/veh		51.9			47.7			53.9			42.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.0	46.7	8.4	45.7	14.3	61.4	28.5	25.6
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	24.4	* 41	5.0	38.0	15.0	49.8	23.9	19.1
Max Q Clear Time (g_c+I1), s	25.7	38.3	3.6	15.7	9.8	30.0	24.0	21.1
Green Ext Time (p_c), s	0.0	1.8	0.0	4.3	0.0	8.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	48.9
HCM 6th LOS	D

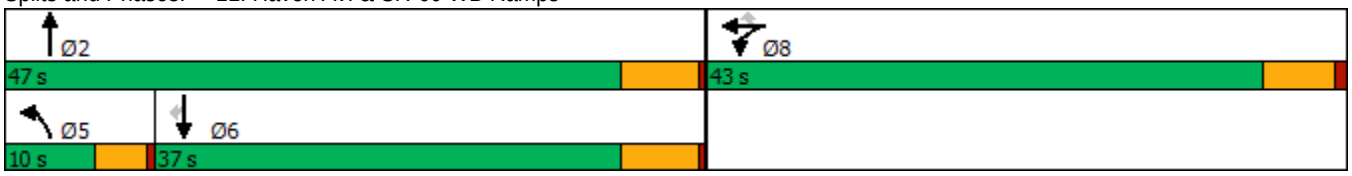
Notes

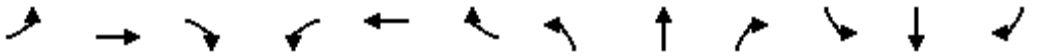
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	276	9	509	142	800	1199	457
Future Volume (vph)	276	9	509	142	800	1199	457
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.0	34.7	27.8	27.8
Total Split (s)	43.0	43.0	43.0	10.0	47.0	37.0	37.0
Total Split (%)	47.8%	47.8%	47.8%	11.1%	52.2%	41.1%	41.1%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 74.6
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	276	9	509	142	800	0	0	1199	457
Future Volume (veh/h)	0	0	0	276	9	509	142	800	0	0	1199	457
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1900	1900	1700	1900	0	0	1900	1900
Adj Flow Rate, veh/h				294	0	241	148	833	0	0	1249	309
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				745	0	350	283	2801	0	0	1900	582
Arrive On Green				0.22	0.00	0.22	0.09	0.54	0.00	0.00	0.37	0.37
Sat Flow, veh/h				3429	0	1610	3141	5358	0	0	5358	1590
Grp Volume(v), veh/h				294	0	241	148	833	0	0	1249	309
Grp Sat Flow(s),veh/h/ln				1714	0	1610	1570	1729	0	0	1729	1590
Q Serve(g_s), s				3.5	0.0	6.6	2.2	4.2	0.0	0.0	9.6	7.3
Cycle Q Clear(g_c), s				3.5	0.0	6.6	2.2	4.2	0.0	0.0	9.6	7.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				745	0	350	283	2801	0	0	1900	582
V/C Ratio(X)				0.39	0.00	0.69	0.52	0.30	0.00	0.00	0.66	0.53
Avail Cap(c_a), veh/h				2669	0	1254	394	4483	0	0	3387	1038
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				16.0	0.0	17.2	20.8	6.0	0.0	0.0	12.6	11.9
Incr Delay (d2), s/veh				0.3	0.0	2.4	1.5	0.0	0.0	0.0	0.1	0.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.1	0.0	2.2	0.7	0.8	0.0	0.0	2.6	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				16.3	0.0	19.6	22.3	6.0	0.0	0.0	12.8	12.2
LnGrp LOS				B	A	B	C	A	A	A	B	B
Approach Vol, veh/h					535			981			1558	
Approach Delay, s/veh					17.8			8.5			12.7	
Approach LOS					B			A			B	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		31.6			8.3	23.3		16.2				
Change Period (Y+Rc), s		* 5.8			4.0	5.8		5.8				
Max Green Setting (Gmax), s		* 41			6.0	31.2		37.2				
Max Q Clear Time (g_c+I1), s		6.2			4.2	11.6		8.6				
Green Ext Time (p_c), s		3.5			0.1	5.9		1.8				

Intersection Summary		
HCM 6th Ctrl Delay	12.2	
HCM 6th LOS	B	

Notes

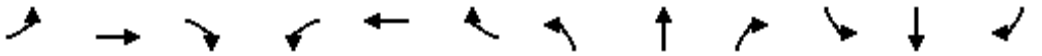
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	340	7	154	602	609	866
Future Volume (vph)	340	7	154	602	609	866
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.0	29.7
Total Split (s)	27.0	27.0	27.0	32.0	31.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	35.6%	34.4%	70.0%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 64.9
Natural Cycle: 60
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	7	154	0	0	0	0	602	195	609	866	0
Future Volume (veh/h)	340	7	154	0	0	0	0	602	195	609	866	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900				0	1900	1900	1700	1900	0
Adj Flow Rate, veh/h	372	0	56				0	647	149	655	931	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	574	0	270				0	1007	228	865	3092	0
Arrive On Green	0.17	0.00	0.17				0.00	0.24	0.24	0.28	0.60	0.00
Sat Flow, veh/h	3429	0	1610				0	4398	959	3141	5358	0
Grp Volume(v), veh/h	372	0	56				0	527	269	655	931	0
Grp Sat Flow(s),veh/h/ln	1714	0	1610				0	1729	1727	1570	1729	0
Q Serve(g_s), s	4.9	0.0	1.5				0.0	6.7	6.8	9.3	4.3	0.0
Cycle Q Clear(g_c), s	4.9	0.0	1.5				0.0	6.7	6.8	9.3	4.3	0.0
Prop In Lane	1.00		1.00				0.00		0.55	1.00		0.00
Lane Grp Cap(c), veh/h	574	0	270				0	824	412	865	3092	0
V/C Ratio(X)	0.65	0.00	0.21				0.00	0.64	0.65	0.76	0.30	0.00
Avail Cap(c_a), veh/h	1494	0	702				0	1870	934	1744	6110	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.9	0.0	17.5				0.0	16.7	16.7	16.1	4.8	0.0
Incr Delay (d2), s/veh	1.2	0.0	0.4				0.0	0.3	0.7	1.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.5				0.0	2.1	2.1	2.6	0.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.1	0.0	17.8				0.0	17.0	17.4	17.5	4.9	0.0
LnGrp LOS	C	A	B				A	B	B	B	A	A
Approach Vol, veh/h		428						796			1586	
Approach Delay, s/veh		19.8						17.1			10.1	
Approach LOS		B						B			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	17.4	17.3		13.9		34.7						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	27.0	26.3		21.2		57.3						
Max Q Clear Time (g_c+I1), s	11.3	8.8		6.9		6.3						
Green Ext Time (p_c), s	2.1	2.8		1.2		4.1						

Intersection Summary												
HCM 6th Ctrl Delay			13.6									
HCM 6th LOS			B									

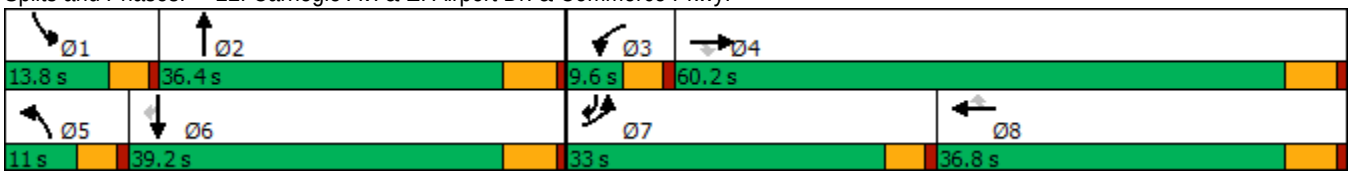
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	248	289	2	1	385	78	37	17	49	29	457
Future Volume (vph)	248	289	2	1	385	78	37	17	49	29	457
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	33.0	60.2	60.2	9.6	36.8	36.8	11.0	36.4	13.8	39.2	33.0
Total Split (%)	27.5%	50.2%	50.2%	8.0%	30.7%	30.7%	9.2%	30.3%	11.5%	32.7%	27.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 64.8
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	289	2	1	385	78	37	17	18	49	29	457
Future Volume (veh/h)	248	289	2	1	385	78	37	17	18	49	29	457
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	282	328	2	1	438	56	42	19	20	56	33	307
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	339	1417	632	3	709	316	74	324	289	89	682	1095
Arrive On Green	0.20	0.39	0.39	0.00	0.20	0.20	0.04	0.18	0.18	0.05	0.19	0.19
Sat Flow, veh/h	1714	3610	1610	1714	3610	1610	1714	1805	1610	1714	3610	2834
Grp Volume(v), veh/h	282	328	2	1	438	56	42	19	20	56	33	307
Grp Sat Flow(s),veh/h/ln	1714	1805	1610	1714	1805	1610	1714	1805	1610	1714	1805	1417
Q Serve(g_s), s	8.8	3.4	0.0	0.0	6.2	1.6	1.3	0.5	0.6	1.8	0.4	4.1
Cycle Q Clear(g_c), s	8.8	3.4	0.0	0.0	6.2	1.6	1.3	0.5	0.6	1.8	0.4	4.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	339	1417	632	3	709	316	74	324	289	89	682	1095
V/C Ratio(X)	0.83	0.23	0.00	0.32	0.62	0.18	0.57	0.06	0.07	0.63	0.05	0.28
Avail Cap(c_a), veh/h	876	3534	1576	154	2014	898	197	994	887	284	2170	2263
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	11.3	10.3	27.7	20.4	18.6	26.1	18.9	18.9	25.8	18.5	11.7
Incr Delay (d2), s/veh	2.1	0.1	0.0	21.0	0.9	0.3	2.6	0.1	0.1	2.7	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	1.1	0.0	0.0	2.3	0.5	0.5	0.2	0.2	0.7	0.2	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	11.4	10.3	48.7	21.3	18.9	28.7	19.0	19.0	28.5	18.5	11.9
LnGrp LOS	C	B	B	D	C	B	C	B	B	C	B	B
Approach Vol, veh/h		612			495			81			396	
Approach Delay, s/veh		16.9			21.1			24.0			14.8	
Approach LOS		B			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	15.8	4.7	27.6	7.0	16.3	15.6	16.7
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	9.2	30.6	5.0	54.4	6.4	33.4	28.4	31.0
Max Q Clear Time (g_c+I1), s	3.8	2.6	2.0	5.4	3.3	6.1	10.8	8.2
Green Ext Time (p_c), s	0.0	0.1	0.0	2.1	0.0	1.4	0.3	2.8

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Intersection	
Intersection Delay, s/veh	7
Intersection LOS	A

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	18	54	5	2	30
Future Vol, veh/h	3	18	54	5	2	30
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	4	23	68	6	3	38
Number of Lanes	2	1	2	0	1	2

Approach	WB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	3	2
Conflicting Approach Left	NB		WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right	SB	WB	
Conflicting Lanes Right	3	3	0
HCM Control Delay	6.2	7.5	6.7
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	0%	0%	100%	10%	0%	100%	0%	0%
Vol Thru, %	100%	78%	0%	0%	0%	0%	100%	100%
Vol Right, %	0%	22%	0%	90%	100%	0%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	23	2	10	9	2	15	15
LT Vol	0	0	2	1	0	2	0	0
Through Vol	36	18	0	0	0	0	15	15
RT Vol	0	5	0	9	9	0	0	0
Lane Flow Rate	46	29	3	13	11	3	19	19
Geometry Grp	8	8	7	7	7	8	8	8
Degree of Util (X)	0.058	0.036	0.004	0.014	0.007	0.004	0.025	0.016
Departure Headway (Hd)	4.602	4.45	5.187	4.107	2.287	5.15	4.649	2.948
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	780	806	685	863	1531	693	767	1203
Service Time	2.32	2.168	2.952	1.872	0.052	2.894	2.394	0.693
HCM Lane V/C Ratio	0.059	0.036	0.004	0.015	0.007	0.004	0.025	0.016
HCM Control Delay	7.6	7.3	8	6.9	5.1	7.9	7.5	5.7
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.1	0	0	0	0	0.1	0

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	6	65	41	19	14
Future Vol, veh/h	18	6	65	41	19	14
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	19	6	69	44	20	15
Number of Lanes	1	1	1	2	2	0

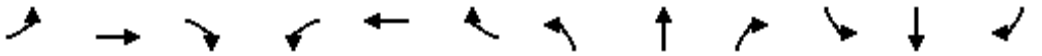
Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	7.9	7.7	7.3
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	31%
Vol Right, %	0%	0%	0%	0%	100%	0%	69%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	65	21	21	18	6	13	20
LT Vol	65	0	0	18	0	0	0
Through Vol	0	21	21	0	0	13	6
RT Vol	0	0	0	0	6	0	14
Lane Flow Rate	69	22	22	19	6	13	22
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.098	0.028	0.018	0.029	0.007	0.018	0.025
Departure Headway (Hd)	5.097	4.597	2.896	5.372	4.172	4.696	4.213
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	701	776	1224	670	863	752	836
Service Time	2.843	2.343	0.641	3.072	1.872	2.49	2.007
HCM Lane V/C Ratio	0.098	0.028	0.018	0.028	0.007	0.017	0.026
HCM Control Delay	8.4	7.5	5.7	8.2	6.9	7.6	7.1
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.1	0.1	0.1	0	0.1	0.1

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	81	819	4	599	16	6	2	13	34
Future Volume (vph)	81	819	4	599	16	6	2	13	34
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	79.0	79.0	79.0	79.0	79.0	41.0	41.0	41.0	41.0
Total Split (%)	65.8%	65.8%	65.8%	65.8%	65.8%	34.2%	34.2%	34.2%	34.2%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 28.3
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	819	18	4	599	16	6	0	2	13	0	34
Future Volume (veh/h)	81	819	18	4	599	16	6	0	2	13	0	34
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	84	853	19	4	624	16	6	0	0	14	0	10
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	592	2696	60	535	1864	821	328	71	60	328	71	60
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.04	0.00	0.00	0.04	0.00	0.04
Sat Flow, veh/h	759	5221	116	611	3610	1590	1352	1900	1610	1364	1900	1610
Grp Volume(v), veh/h	84	565	307	4	624	16	6	0	0	14	0	10
Grp Sat Flow(s),veh/h/ln	759	1729	1879	611	1805	1590	1352	1900	1610	1364	1900	1610
Q Serve(g_s), s	1.9	2.5	2.5	0.1	2.6	0.1	0.1	0.0	0.0	0.3	0.0	0.2
Cycle Q Clear(g_c), s	4.5	2.5	2.5	2.6	2.6	0.1	0.1	0.0	0.0	0.3	0.0	0.2
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	592	1785	970	535	1864	821	328	71	60	328	71	60
V/C Ratio(X)	0.14	0.32	0.32	0.01	0.33	0.02	0.02	0.00	0.00	0.04	0.00	0.17
Avail Cap(c_a), veh/h	2338	9737	5291	1941	10165	4478	2170	2660	2255	2124	2573	2180
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	5.0	3.6	3.6	4.4	3.7	3.1	12.1	0.0	0.0	12.2	0.0	12.1
Incr Delay (d2), s/veh	0.1	0.1	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.1	3.7	3.8	4.4	3.8	3.1	12.1	0.0	0.0	12.2	0.0	13.4
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	B
Approach Vol, veh/h		956			644			6			24	
Approach Delay, s/veh		3.9			3.8			12.1			12.7	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		6.8		19.2		6.8		19.2				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 36		73.2		35.2		73.2				
Max Q Clear Time (g_c+I1), s		2.1		6.5		2.3		4.6				
Green Ext Time (p_c), s		0.0		6.9		0.0		4.4				

Intersection Summary		
HCM 6th Ctrl Delay		4.0
HCM 6th LOS		A

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	11
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	5	0	20	3	131	3	348	11	44	272	15
Future Vol, veh/h	2	5	0	20	3	131	3	348	11	44	272	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	5	0	22	3	142	3	378	12	48	296	16
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	9.2	10.3	11.7	10.7
HCM LOS	A	B	B	B

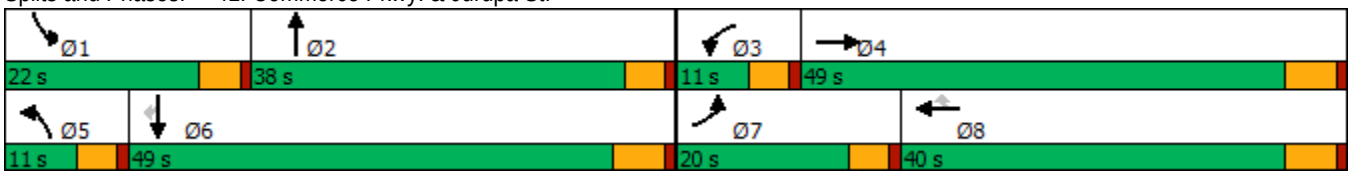
Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	91%	0%	100%	100%	0%	100%	1%	0%	100%	86%
Vol Right, %	0%	0%	9%	0%	0%	0%	0%	0%	99%	0%	0%	14%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	232	127	2	3	3	20	2	132	44	181	106
LT Vol	3	0	0	2	0	0	20	0	0	44	0	0
Through Vol	0	232	116	0	3	3	0	2	1	0	181	91
RT Vol	0	0	11	0	0	0	0	0	131	0	0	15
Lane Flow Rate	3	252	138	2	3	3	22	2	143	48	197	115
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.006	0.409	0.222	0.004	0.005	0.004	0.043	0.004	0.233	0.085	0.323	0.185
Departure Headway (Hd)	6.337	5.837	5.777	7.411	6.911	5.211	7.041	6.541	5.846	6.403	5.903	5.804
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	566	618	623	483	518	685	509	547	614	561	609	619
Service Time	4.066	3.566	3.506	5.157	4.657	2.957	4.777	4.277	3.582	4.132	3.632	3.533
HCM Lane V/C Ratio	0.005	0.408	0.222	0.004	0.006	0.004	0.043	0.004	0.233	0.086	0.323	0.186
HCM Control Delay	9.1	12.6	10.2	10.2	9.7	8	10.1	9.3	10.4	9.7	11.4	9.9
HCM Lane LOS	A	B	B	B	A	A	B	A	B	A	B	A
HCM 95th-tile Q	0	2	0.8	0	0	0	0.1	0	0.9	0.3	1.4	0.7

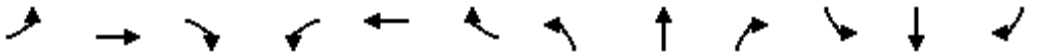
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	88	733	11	569	229	14	41	239	17	35
Future Volume (vph)	88	733	11	569	229	14	41	239	17	35
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	20.0	49.0	11.0	40.0	40.0	11.0	38.0	22.0	49.0	49.0
Total Split (%)	16.7%	40.8%	9.2%	33.3%	33.3%	9.2%	31.7%	18.3%	40.8%	40.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 69.2
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	733	13	11	569	229	14	41	55	239	17	35
Future Volume (veh/h)	88	733	13	11	569	229	14	41	55	239	17	35
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	92	764	12	11	593	0	15	43	38	249	18	21
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	121	1640	26	24	922		32	153	135	376	491	416
Arrive On Green	0.07	0.31	0.31	0.01	0.26	0.00	0.02	0.16	0.16	0.11	0.26	0.26
Sat Flow, veh/h	1714	5261	83	1714	3610	1610	1714	930	822	3326	1900	1610
Grp Volume(v), veh/h	92	502	274	11	593	0	15	0	81	249	18	21
Grp Sat Flow(s),veh/h/ln	1714	1729	1885	1714	1805	1610	1714	0	1752	1663	1900	1610
Q Serve(g_s), s	2.8	6.1	6.1	0.3	7.7	0.0	0.5	0.0	2.1	3.8	0.4	0.5
Cycle Q Clear(g_c), s	2.8	6.1	6.1	0.3	7.7	0.0	0.5	0.0	2.1	3.8	0.4	0.5
Prop In Lane	1.00		0.04	1.00		1.00	1.00		0.47	1.00		1.00
Lane Grp Cap(c), veh/h	121	1078	588	24	922		32	0	287	376	491	416
V/C Ratio(X)	0.76	0.47	0.47	0.45	0.64		0.47	0.00	0.28	0.66	0.04	0.05
Avail Cap(c_a), veh/h	504	2851	1554	209	2356		209	0	1117	1104	1566	1327
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	14.5	14.5	25.6	17.4	0.0	25.5	0.0	19.2	22.3	14.5	14.6
Incr Delay (d2), s/veh	3.7	0.3	0.6	4.9	0.8	0.0	3.9	0.0	0.5	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	1.9	2.2	0.2	2.7	0.0	0.2	0.0	0.9	1.3	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.6	14.8	15.1	30.5	18.1	0.0	29.3	0.0	19.7	23.0	14.6	14.6
LnGrp LOS	C	B	B	C	B		C	A	B	C	B	B
Approach Vol, veh/h		868			604	A		96			288	
Approach Delay, s/veh		16.3			18.4			21.2			21.9	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	14.4	5.3	22.1	5.6	19.3	8.3	19.2
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	17.4	* 33	6.4	43.2	6.4	43.2	15.4	34.2
Max Q Clear Time (g_c+I1), s	5.8	4.1	2.3	8.1	2.5	2.5	4.8	9.7
Green Ext Time (p_c), s	0.3	0.4	0.0	5.0	0.0	0.1	0.1	3.7

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Intersection Delay, s/veh	8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	44	10	7	132	6	18	1	14	2	0	4
Future Vol, veh/h	6	44	10	7	132	6	18	1	14	2	0	4
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	55	13	9	165	8	23	1	18	3	0	5
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.9	8.1	8	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	2%	0%	100%	59%	0%	100%	88%	0%	100%	0%
Vol Right, %	0%	0%	98%	0%	0%	41%	0%	0%	12%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	1	14	6	29	25	7	88	50	2	0	4
LT Vol	18	0	0	6	0	0	7	0	0	2	0	0
Through Vol	0	1	0	0	29	15	0	88	44	0	0	0
RT Vol	0	0	14	0	0	10	0	0	6	0	0	4
Lane Flow Rate	22	1	18	8	37	31	9	110	62	2	0	5
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.035	0.001	0.022	0.011	0.051	0.04	0.013	0.146	0.082	0.004	0	0.006
Departure Headway (Hd)	5.653	5.154	4.471	5.477	4.977	4.693	5.291	4.79	4.706	5.726	5.226	4.526
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	635	697	803	656	722	766	681	754	766	627	0	792
Service Time	3.368	2.868	2.186	3.188	2.688	2.404	2.991	2.49	2.406	3.444	2.944	2.244
HCM Lane V/C Ratio	0.035	0.001	0.022	0.012	0.051	0.04	0.013	0.146	0.081	0.003	0	0.006
HCM Control Delay	8.6	7.9	7.3	8.2	8	7.6	8.1	8.3	7.8	8.5	7.9	7.3
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	N	A
HCM 95th-tile Q	0.1	0	0.1	0	0.2	0.1	0	0.5	0.3	0	0	0

Intersection	
Intersection Delay, s/veh	8.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	34	10	15	90	26	38	80	24	10	44	12
Future Vol, veh/h	10	34	10	15	90	26	38	80	24	10	44	12
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	13	43	13	19	113	33	48	100	30	13	55	15
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.4	8.5	8.6	8.4
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%	0%
Vol Thru, %	0%	100%	53%	0%	100%	53%	0%	100%	54%	0%	100%	55%
Vol Right, %	0%	0%	47%	0%	0%	47%	0%	0%	46%	0%	0%	45%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	38	53	51	10	23	21	15	60	56	10	29	27
LT Vol	38	0	0	10	0	0	15	0	0	10	0	0
Through Vol	0	53	27	0	23	11	0	60	30	0	29	15
RT Vol	0	0	24	0	0	10	0	0	26	0	0	12
Lane Flow Rate	48	67	63	12	28	27	19	75	70	12	37	33
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.076	0.098	0.087	0.021	0.043	0.038	0.03	0.111	0.097	0.021	0.056	0.048
Departure Headway (Hd)	5.787	5.287	4.955	6.009	5.509	5.181	5.832	5.332	5.007	5.965	5.465	5.15
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	618	677	721	594	648	688	613	671	714	599	653	693
Service Time	3.529	3.029	2.697	3.762	3.262	2.934	3.576	3.076	2.751	3.713	3.213	2.898
HCM Lane V/C Ratio	0.078	0.099	0.087	0.02	0.043	0.039	0.031	0.112	0.098	0.02	0.057	0.048
HCM Control Delay	9	8.6	8.2	8.9	8.5	8.1	8.8	8.7	8.3	8.8	8.5	8.2
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.3	0.1	0.1	0.1	0.1	0.4	0.3	0.1	0.2	0.2

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	28	21	102	91	10
Future Vol, veh/h	6	28	21	102	91	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	8	37	28	134	120	13

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	250	67	133	0	-	0
Stage 1	127	-	-	-	-	-
Stage 2	123	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	723	989	1464	-	-	-
Stage 1	891	-	-	-	-	-
Stage 2	895	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	709	989	1464	-	-	-
Mov Cap-2 Maneuver	783	-	-	-	-	-
Stage 1	874	-	-	-	-	-
Stage 2	895	-	-	-	-	-

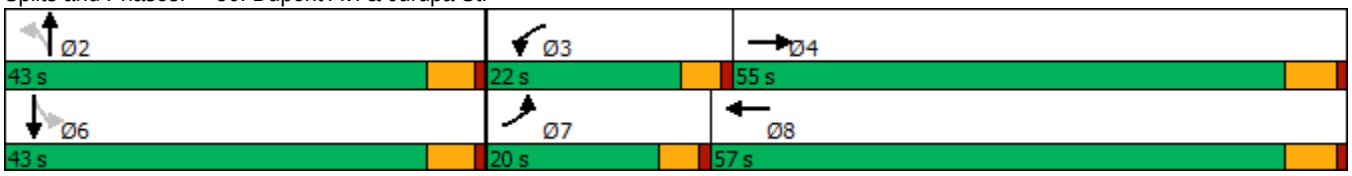
Approach	EB	NB	SB
HCM Control Delay, s	8.9	1.3	0
HCM LOS	A		

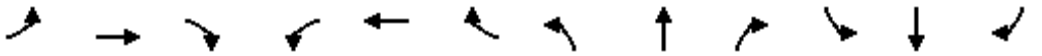
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1464	-	783	989	-	-
HCM Lane V/C Ratio	0.019	-	0.01	0.037	-	-
HCM Control Delay (s)	7.5	-	9.6	8.8	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	46	931	64	718	42	27	47	25
Future Volume (vph)	46	931	64	718	42	27	47	25
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	20.0	55.0	22.0	57.0	43.0	43.0	43.0	43.0
Total Split (%)	16.7%	45.8%	18.3%	47.5%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 48.8
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	931	13	64	718	54	42	27	110	47	25	37
Future Volume (veh/h)	46	931	13	64	718	54	42	27	110	47	25	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	49	1001	13	69	772	52	45	29	89	51	27	16
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	88	1893	25	111	1846	124	435	393	350	374	491	266
Arrive On Green	0.05	0.36	0.36	0.06	0.37	0.37	0.22	0.22	0.22	0.22	0.22	0.22
Sat Flow, veh/h	1714	5277	69	1714	4961	333	1312	1805	1610	1226	2259	1225
Grp Volume(v), veh/h	49	656	358	69	537	287	45	29	89	51	21	22
Grp Sat Flow(s),veh/h/ln	1714	1729	1888	1714	1729	1835	1312	1805	1610	1226	1805	1679
Q Serve(g_s), s	1.2	6.6	6.6	1.7	5.1	5.1	1.2	0.6	2.0	1.6	0.4	0.5
Cycle Q Clear(g_c), s	1.2	6.6	6.6	1.7	5.1	5.1	1.7	0.6	2.0	3.6	0.4	0.5
Prop In Lane	1.00		0.04	1.00		0.18	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	88	1240	677	111	1287	683	435	393	350	374	393	365
V/C Ratio(X)	0.56	0.53	0.53	0.62	0.42	0.42	0.10	0.07	0.25	0.14	0.05	0.06
Avail Cap(c_a), veh/h	600	3867	2111	678	4024	2135	1271	1543	1376	1155	1543	1435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	11.2	11.2	20.0	10.3	10.3	14.3	13.7	14.3	15.7	13.6	13.7
Incr Delay (d2), s/veh	2.1	0.4	0.6	2.1	0.2	0.4	0.1	0.1	0.4	0.2	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.8	2.0	0.6	1.4	1.5	0.3	0.2	0.6	0.4	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	11.5	11.8	22.2	10.5	10.7	14.4	13.8	14.6	15.9	13.7	13.7
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1063			893			163			94	
Approach Delay, s/veh		12.1			11.4			14.4			14.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.0	7.4	21.6		15.0	6.9	22.2				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		37.6	17.4	49.2		37.6	15.4	51.2				
Max Q Clear Time (g_c+I1), s		4.0	3.7	8.6		5.6	3.2	7.1				
Green Ext Time (p_c), s		0.8	0.0	7.2		0.4	0.0	5.6				

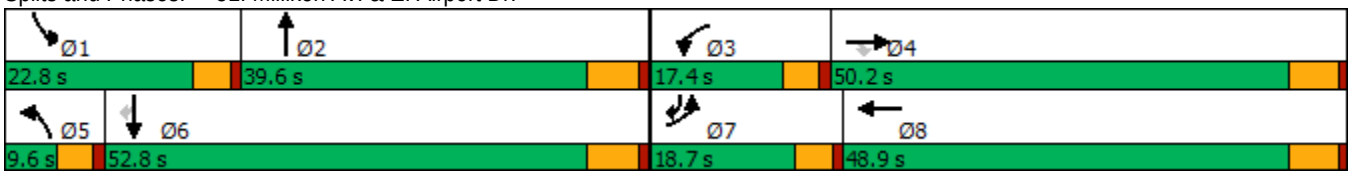
Intersection Summary												
HCM 6th Ctrl Delay			12.1									
HCM 6th LOS			B									

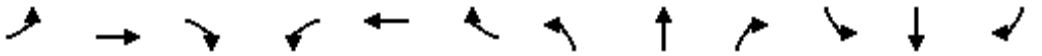
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	224	231	33	86	254	33	943	139	859	111
Future Volume (vph)	224	231	33	86	254	33	943	139	859	111
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	18.7	50.2	50.2	17.4	48.9	9.6	39.6	22.8	52.8	18.7
Total Split (%)	14.4%	38.6%	38.6%	13.4%	37.6%	7.4%	30.5%	17.5%	40.6%	14.4%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 90
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	231	33	86	254	323	33	943	60	139	859	111
Future Volume (veh/h)	224	231	33	86	254	323	33	943	60	139	859	111
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1800	1900	1900	1700	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	226	233	12	87	257	204	33	953	54	140	868	65
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	318	843	376	111	383	293	107	1433	81	177	1838	734
Arrive On Green	0.10	0.23	0.23	0.06	0.20	0.20	0.03	0.29	0.29	0.10	0.35	0.35
Sat Flow, veh/h	3141	3610	1610	1714	1947	1490	3141	5018	284	1714	5187	1610
Grp Volume(v), veh/h	226	233	12	87	238	223	33	656	351	140	868	65
Grp Sat Flow(s),veh/h/ln	1570	1805	1610	1714	1805	1632	1570	1729	1844	1714	1729	1610
Q Serve(g_s), s	4.7	3.6	0.4	3.4	8.2	8.6	0.7	11.3	11.4	5.4	8.8	1.5
Cycle Q Clear(g_c), s	4.7	3.6	0.4	3.4	8.2	8.6	0.7	11.3	11.4	5.4	8.8	1.5
Prop In Lane	1.00		1.00	1.00		0.91	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	318	843	376	111	355	321	107	988	527	177	1838	734
V/C Ratio(X)	0.71	0.28	0.03	0.79	0.67	0.70	0.31	0.66	0.67	0.79	0.47	0.09
Avail Cap(c_a), veh/h	655	2369	1057	324	1150	1040	232	1707	910	461	3573	1272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	21.2	20.0	31.2	25.1	25.3	31.9	21.3	21.3	29.6	16.9	10.4
Incr Delay (d2), s/veh	1.1	0.2	0.0	4.6	2.2	2.7	0.6	0.8	1.5	3.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	1.4	0.1	1.4	3.4	3.2	0.2	4.0	4.4	2.1	2.9	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.6	21.4	20.1	35.7	27.3	28.0	32.5	22.1	22.8	32.7	17.1	10.5
LnGrp LOS	C	C	C	D	C	C	C	C	C	C	B	B
Approach Vol, veh/h		471			548			1040			1073	
Approach Delay, s/veh		25.8			28.9			22.6			18.7	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	25.5	9.0	21.6	6.9	30.2	11.4	19.1
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	18.2	33.4	12.8	44.4	5.0	46.6	14.1	43.1
Max Q Clear Time (g_c+I1), s	7.4	13.4	5.4	5.6	2.7	10.8	6.7	10.6
Green Ext Time (p_c), s	0.1	5.9	0.0	1.4	0.0	6.3	0.2	2.7

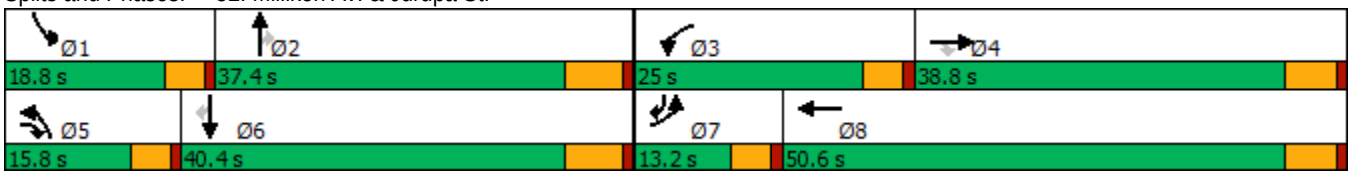
Intersection Summary	
HCM 6th Ctrl Delay	22.9
HCM 6th LOS	C

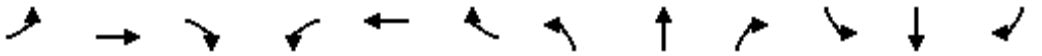
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	122	754	221	376	561	171	752	352	241	907	59
Future Volume (vph)	122	754	221	376	561	171	752	352	241	907	59
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	13.2	38.8	15.8	25.0	50.6	15.8	37.4	37.4	18.8	40.4	13.2
Total Split (%)	11.0%	32.3%	13.2%	20.8%	42.2%	13.2%	31.2%	31.2%	15.7%	33.7%	11.0%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 95.5
Natural Cycle: 100
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	754	221	376	561	97	171	752	352	241	907	59
Future Volume (veh/h)	122	754	221	376	561	97	171	752	352	241	907	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	127	785	137	392	584	84	178	783	248	251	945	29
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	194	1207	504	480	1487	211	253	1238	384	332	1369	524
Arrive On Green	0.06	0.23	0.23	0.15	0.32	0.32	0.08	0.24	0.24	0.11	0.26	0.26
Sat Flow, veh/h	3141	5187	1608	3141	4590	651	3141	5187	1610	3141	5187	1610
Grp Volume(v), veh/h	127	785	137	392	438	230	178	783	248	251	945	29
Grp Sat Flow(s),veh/h/ln	1570	1729	1608	1570	1729	1783	1570	1729	1610	1570	1729	1610
Q Serve(g_s), s	3.1	10.7	5.0	9.5	7.7	7.9	4.3	10.6	10.9	6.1	12.9	1.0
Cycle Q Clear(g_c), s	3.1	10.7	5.0	9.5	7.7	7.9	4.3	10.6	10.9	6.1	12.9	1.0
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	194	1207	504	480	1120	578	253	1238	384	332	1369	524
V/C Ratio(X)	0.66	0.65	0.27	0.82	0.39	0.40	0.70	0.63	0.65	0.76	0.69	0.06
Avail Cap(c_a), veh/h	344	2180	806	816	1973	1017	448	2061	640	568	2259	801
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.0	27.2	20.2	32.2	20.5	20.6	35.2	26.8	26.9	34.1	26.0	18.2
Incr Delay (d2), s/veh	1.4	0.6	0.3	1.3	0.2	0.4	1.3	0.5	1.8	1.3	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	4.1	1.7	3.4	2.8	3.0	1.6	4.0	4.0	2.2	4.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.4	27.8	20.5	33.5	20.8	21.0	36.5	27.3	28.7	35.5	26.6	18.2
LnGrp LOS	D	C	C	C	C	C	D	C	C	D	C	B
Approach Vol, veh/h		1049			1060			1209			1225	
Approach Delay, s/veh		28.0			25.5			29.0			28.3	
Approach LOS		C			C			C			C	

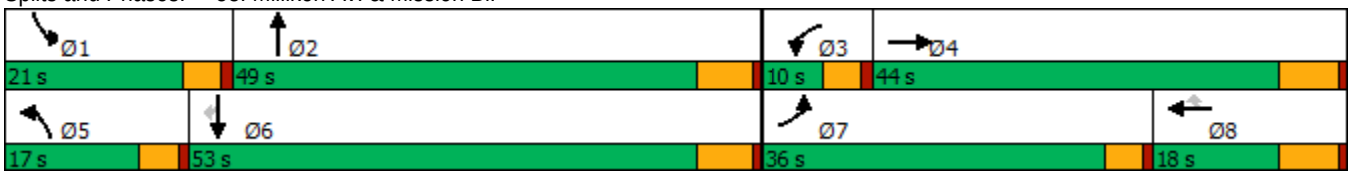
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	24.9	16.6	24.1	10.9	26.9	9.4	31.2
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	14.2	31.2	20.4	33.0	11.2	34.2	8.6	44.8
Max Q Clear Time (g_c+I1), s	8.1	12.9	11.5	12.7	6.3	14.9	5.1	9.9
Green Ext Time (p_c), s	0.2	5.4	0.5	5.4	0.1	5.8	0.1	4.3

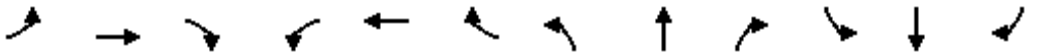
Intersection Summary	
HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	522	1	16	5	135	171	854	242	1246	390
Future Volume (vph)	522	1	16	5	135	171	854	242	1246	390
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	36.0	44.0	10.0	18.0	18.0	17.0	49.0	21.0	53.0	53.0
Total Split (%)	29.0%	35.5%	8.1%	14.5%	14.5%	13.7%	39.5%	16.9%	42.7%	42.7%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 124
Actuated Cycle Length: 100.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	522	1	81	16	5	135	171	854	20	242	1246	390
Future Volume (veh/h)	522	1	81	16	5	135	171	854	20	242	1246	390
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1800	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	549	1	78	17	0	108	180	899	21	255	1312	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	635	6	473	33	0	368	250	1701	40	330	1824	
Arrive On Green	0.20	0.30	0.30	0.02	0.00	0.11	0.08	0.33	0.33	0.10	0.35	0.00
Sat Flow, veh/h	3141	20	1593	1714	0	3220	3141	5214	122	3141	5187	1610
Grp Volume(v), veh/h	549	0	79	17	0	108	180	596	324	255	1312	0
Grp Sat Flow(s),veh/h/ln	1570	0	1613	1714	0	1610	1570	1729	1878	1570	1729	1610
Q Serve(g_s), s	14.7	0.0	3.1	0.9	0.0	2.7	4.9	12.2	12.2	6.9	19.1	0.0
Cycle Q Clear(g_c), s	14.7	0.0	3.1	0.9	0.0	2.7	4.9	12.2	12.2	6.9	19.1	0.0
Prop In Lane	1.00		0.99	1.00		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	635	0	479	33	0	368	250	1128	613	330	1824	
V/C Ratio(X)	0.86	0.00	0.16	0.51	0.00	0.29	0.72	0.53	0.53	0.77	0.72	
Avail Cap(c_a), veh/h	1136	0	697	107	0	427	449	1705	926	593	2796	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.5	0.0	22.5	42.2	0.0	35.2	39.0	23.8	23.8	37.8	24.4	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.2	4.5	0.0	0.4	1.5	0.4	0.7	1.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	0.0	1.1	0.4	0.0	1.0	1.8	4.5	5.0	2.5	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	0.0	22.7	46.6	0.0	35.7	40.5	24.2	24.5	39.3	25.0	0.0
LnGrp LOS	C	A	C	D	A	D	D	C	C	D	C	
Approach Vol, veh/h		628			125			1100			1567	A
Approach Delay, s/veh		33.4			37.2			27.0			27.3	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	34.5	6.3	32.3	11.5	36.7	22.1	16.4
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	16.4	42.8	5.4	37.5	12.4	46.8	31.4	11.5
Max Q Clear Time (g_c+I1), s	8.9	14.2	2.9	5.1	6.9	21.1	16.7	4.7
Green Ext Time (p_c), s	0.3	5.8	0.0	0.4	0.1	9.5	0.9	0.1

Intersection Summary	
HCM 6th Ctrl Delay	28.7
HCM 6th LOS	C

Notes

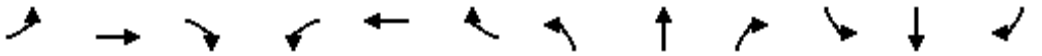
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1222	492	438	642	217	7	423
Future Volume (vph)	1222	492	438	642	217	7	423
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	43.0	43.0	23.0	66.0	24.0	24.0	24.0
Total Split (%)	47.8%	47.8%	25.6%	73.3%	26.7%	26.7%	26.7%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 78.6
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1222	492	438	642	0	0	0	0	217	7	423
Future Volume (veh/h)	0	1222	492	438	642	0	0	0	0	217	7	423
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1700	1900	0				1800	1900	1900
Adj Flow Rate, veh/h	0	1300	330	466	683	0				156	0	419
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	2093	591	581	3296	0				311	0	584
Arrive On Green	0.00	0.37	0.37	0.18	0.64	0.00				0.18	0.00	0.18
Sat Flow, veh/h	0	5700	1610	3141	5358	0				1714	0	3220
Grp Volume(v), veh/h	0	1300	330	466	683	0				156	0	419
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1570	1729	0				1714	0	1610
Q Serve(g_s), s	0.0	11.2	9.8	8.5	3.3	0.0				4.9	0.0	7.4
Cycle Q Clear(g_c), s	0.0	11.2	9.8	8.5	3.3	0.0				4.9	0.0	7.4
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2093	591	581	3296	0				311	0	584
V/C Ratio(X)	0.00	0.62	0.56	0.80	0.21	0.00				0.50	0.00	0.72
Avail Cap(c_a), veh/h	0	3510	991	941	5179	0				542	0	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.6	15.1	23.4	4.6	0.0				22.1	0.0	23.1
Incr Delay (d2), s/veh	0.0	0.2	0.6	1.0	0.0	0.0				1.3	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.0	3.0	2.8	0.7	0.0				1.8	0.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	15.8	15.7	24.4	4.6	0.0				23.4	0.0	24.8
LnGrp LOS	A	B	B	C	A	A				C	A	C
Approach Vol, veh/h		1630			1149						575	
Approach Delay, s/veh		15.8			12.7						24.4	
Approach LOS		B			B						C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	16.1	28.1		15.9		44.2
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0
Max Green Setting (Gmax), s	18.0	37.0		19.0		60.0
Max Q Clear Time (g_c+I1), s	10.5	13.2		9.4		5.3
Green Ext Time (p_c), s	0.6	8.8		1.5		3.9

Intersection Summary		
HCM 6th Ctrl Delay		16.2
HCM 6th LOS		B

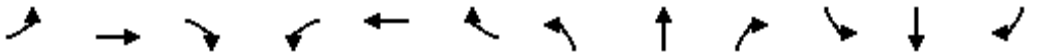
Notes

User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	548	891	976	491	104	1	320
Future Volume (vph)	548	891	976	491	104	1	320
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	28.0	69.0	41.0	41.0	21.0	21.0	21.0
Total Split (%)	31.1%	76.7%	45.6%	45.6%	23.3%	23.3%	23.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 64.6
Natural Cycle: 50
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	548	891	0	0	976	491	104	1	320	0	0	0
Future Volume (veh/h)	548	891	0	0	976	491	104	1	320	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1900	0	0	1900	1900	1800	1900	1900			
Adj Flow Rate, veh/h	565	919	0	0	1006	375	72	0	251			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	709	3512	0	0	1882	584	217	0	408			
Arrive On Green	0.23	0.68	0.00	0.00	0.36	0.36	0.13	0.00	0.13			
Sat Flow, veh/h	3141	5358	0	0	5358	1610	1714	0	3220			
Grp Volume(v), veh/h	565	919	0	0	1006	375	72	0	251			
Grp Sat Flow(s),veh/h/ln	1570	1729	0	0	1729	1610	1714	0	1610			
Q Serve(g_s), s	8.8	3.6	0.0	0.0	8.0	10.1	2.0	0.0	3.8			
Cycle Q Clear(g_c), s	8.8	3.6	0.0	0.0	8.0	10.1	2.0	0.0	3.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	709	3512	0	0	1882	584	217	0	408			
V/C Ratio(X)	0.80	0.26	0.00	0.00	0.53	0.64	0.33	0.00	0.62			
Avail Cap(c_a), veh/h	1414	6375	0	0	3582	1112	524	0	985			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	19.0	3.3	0.0	0.0	13.1	13.8	20.7	0.0	21.5			
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.2	0.9	0.9	0.0	1.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.7	0.4	0.0	0.0	2.4	2.9	0.7	0.0	1.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	3.3	0.0	0.0	13.3	14.6	21.6	0.0	23.0			
LnGrp LOS	B	A	A	A	B	B	C	A	C			
Approach Vol, veh/h		1484			1381			323				
Approach Delay, s/veh		9.6			13.6			22.7				
Approach LOS		A			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		40.3			16.3	24.0		11.7				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		63.9			23.4	35.9		15.9				
Max Q Clear Time (g_c+I1), s		5.6			10.8	12.1		5.8				
Green Ext Time (p_c), s		5.6			0.9	6.8		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

APPENDIX 7.2:

HORIZON YEAR (2040) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Volume Development - AM Peak Hour

1: Haven Av. & Inland Empire Bl.

	PHF:	0.923		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	484	2,079	366	55	1,838	155	112	130	330	131	142	21	5,843

2: Haven Av. & I-10 WB Ramps

	PHF:	0.922		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	2,269	535	0	1,845	605	0	0	0	938	0	660	6,852

3: Haven Av. & I-10 EB Ramps

	PHF:	0.939		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	1,785	447	0	2,285	497	1,020	0	812	0	0	0	6,846

4: Haven Av. & E. Guasti Rd.

	PHF:	0.978		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	173	1,997	110	222	2,575	300	91	29	42	75	41	145	5,799

5: Haven Av. & E. Airport Dr.

	PHF:	0.911		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	507	1,699	245	437	1,722	205	239	352	509	81	255	325	6,576

6: Haven Av. & Driveway 1

	PHF:									Count Date:		1/0/1900	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	2,450	6	0	2,312	0	0	0	0	0	0	2	4,770

7: Haven Av. & Driveway 2

	PHF:									Count Date:		1/0/1900	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	2,450	5	0	2,312	0	0	0	0	0	0	6	4,773

8: Haven Av. & La Salle St.

	PHF:	0.935		7:45am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	2,438	27	0	2,389	0	0	0	0	0	0	17	4,871

9: Haven Av. & Jurupa Av.

	PHF:	0.946		7:30am						Count Date:		11/18/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	133	1,833	272	110	1,418	860	550	298	173	316	403	82	6,449

10: Haven Av. & Mission Bl.

	PHF:	0.940		7:45am						Count Date:		10/26/2021	
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	144	1,885	33	331	1,597	285	222	447	130	68	863	651	6,657

Volume Development - AM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.950 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	352	1,910	0	0	1,102	624	0	0	0	150	10	508	4,657

12: Haven Av. & SR-60 EB Ramps

PHF: 0.950 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	1,285	354	413	839	0	977	7	218	0	0	0	4,093

13: Driveway 3 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	4	0	1	0	0	0	0	1,026	7	13	657	0	1,708

14: Driveway 4 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	8	0	0	0	0	1,014	14	0	670	0	1,706

15: Driveway 5 & E. Airport Dr.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	19	0	0	0	0	992	30	0	670	0	1,711

16: Driveway 6 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	1	0	1	1	0	1	1	23	3	4	15	1	51

17: Driveway 7 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	2	0	3	0	0	0	0	21	3	6	18	0	53

18: Driveway 8 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	0	1	0	7	3	22	0	0	17	14	64

19: Driveway 9 & La Salle St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	0	1	0	1	1	61	0	0	84	1	149

20: Driveway 10 & Jurupa Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	0	0	0	2	0	681	0	0	799	8	1,490

Volume Development - AM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	0	0	0	3	0	681	0	0	803	8	1,495

22: Carnegie Av. & E. Airport Dr.

PHF: 0.834 7:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	123	45	0	70	69	183	166	451	113	5	351	47	1,623

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	5	162	1	3	160	23	6	0	1	0	0	1	362

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	165	1	7	155	0	0	0	0	0	0	2	330

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	14	163	0	0	150	5	3	0	1	0	0	0	336

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.641 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	11	142	35	42	107	3	2	0	1	10	0	33	386

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	40	175	0	0	107	11	12	0	18	0	0	0	363

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	9	214	0	0	112	13	1	0	5	0	0	0	354

29: Carnegie Av. & La Salle St.

PHF: 0.917 8:00am Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	43	178	0	0	75	42	44	0	17	0	0	0	398

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	221	12	0	92	0	0	0	0	2	0	1	328

Volume Development - AM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.902 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	9	0	3	22	0	72	163	713	4	7	801	115	1,908

32: Driveway 19 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	2	0	0	0	0	2	6	61	10	0	39	5	125

33: Driveway 20 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	3	0	11	0	0	9	10	33	18	4	32	8	128

34: Commerce Pkwy. & Driveway 21

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	452	0	0	521	8	0	0	2	0	0	0	983

35: Commerce Pkwy. & Driveway 22

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	452	0	0	520	4	0	0	7	0	0	0	983

36: Commerce Pkwy. & Driveway 23

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	451	6	0	526	0	0	0	0	0	0	2	985

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.948 7:15am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	30	361	25	163	358	6	6	28	11	1	8	90	1,087

38: Commerce Pkwy. & Driveway 24

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	416	0	0	354	16	0	0	8	0	0	0	794

39: Commerce Pkwy. & Driveway 25

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	400	46	4	358	0	0	0	0	23	0	15	846

40: Commerce Pkwy. & Driveway 26

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	444	10	0	380	0	0	0	0	0	0	2	836

Volume Development - AM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.918 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	14	5	41	267	11	67	109	613	14	22	841	358	2,363

42: Driveway 27 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	3	0	2	1	0	1	6	190	19	3	95	2	322

43: Driveway 28 & Santa Ana St.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	1	0	3	2	0	3	7	180	5	11	96	1	309

44: Double Day Av. & Driveway 29

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	2	57	0	0	46	1	2	0	1	0	0	0	109

45: Double Day Av. & Santa Ana St.

PHF: 0.944 8:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	13	9	2	9	5	33	40	69	75	8	61	10	335

46: Driveway 30 & Double Day Av.

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	3	0	0	0	0	32	17	4	47	0	103

47: Dupont Av. & Santa Ana St.

PHF: 0.910 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	33	68	8	3	38	16	14	43	13	15	51	14	316

48: Dupont Av. & Double Day Av.

PHF: 0.845 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	47	115	3	1	22	4	1	1	32	0	0	0	227

49: Dupont Av. & Driveway 31

PHF: Count Date: 1/0/1900

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	2	196	0	0	43	8	2	0	3	0	0	0	254

50: Dupont Av. & Jurupa Av.

PHF: 0.982 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	24	33	90	18	6	21	75	761	20	100	1,074	90	2,311

Volume Development - AM Peak Hour

51: Milliken Av. & E. Airport Dr.

PHF: 0.861 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	27	693	77	365	1,272	210	88	125	37	105	172	223	3,394

52: Milliken Av. & Jurupa Av.

PHF: 0.970 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	505	862	194	268	801	70	225	926	392	294	781	106	5,424

53: Milliken Av. & Mission Bl.

PHF: 0.895 7:45am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	630	1,399	77	444	888	509	461	29	269	49	39	257	5,051

54: I-15 SB Ramps & Jurupa Av.

PHF: 0.910 7:30am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	0	540	4	1,179	0	854	364	474	786	0	4,201

55: I-15 NB Ramps & Jurupa Av.

PHF: 0.939 7:00am Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	417	0	575	0	0	0	485	908	0	0	843	386	3,615

Volume Development - PM Peak Hour

1: Haven Av. & Inland Empire Bl.

	PHF:	0.960		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	436	2,447	581	44	1,972	72	223	414	415	371	249	43	7,267

2: Haven Av. & I-10 WB Ramps

	PHF:	0.979		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	3,072	1,055	0	1,999	788	0	0	0	295	0	392	7,601

3: Haven Av. & I-10 EB Ramps

	PHF:	0.975		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	3,301	827	0	1,906	388	826	0	693	0	0	0	7,941

4: Haven Av. & E. Guasti Rd.

	PHF:	0.975		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	70	3,435	116	188	2,282	129	439	50	230	88	21	254	7,302

5: Haven Av. & E. Airport Dr.

	PHF:	0.985		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	631	2,528	23	408	1,736	347	385	592	661	34	728	648	8,720

6: Haven Av. & Driveway 1

	PHF:								Count Date:			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	3,175	3	0	2,430	0	0	0	0	0	0	6	5,615

7: Haven Av. & Driveway 2

	PHF:								Count Date:			
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	3,176	3	0	2,430	0	0	0	0	0	0	2	5,612

8: Haven Av. & La Salle St.

	PHF:	0.968		4:15pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	3,127	18	0	2,496	0	0	0	0	0	0	52	5,692

9: Haven Av. & Jurupa Av.

	PHF:	0.982		4:30pm					Count Date:	11/18/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	119	2,296	596	282	1,760	454	614	761	114	384	459	234	8,073

10: Haven Av. & Mission Bl.

	PHF:	0.962		4:00pm					Count Date:	10/26/2021		
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	225	1,906	105	334	1,505	167	574	1,020	183	64	890	482	7,456

Volume Development - PM Peak Hour

11: Haven Av. & SR-60 WB Ramps

PHF: 0.962 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	174	1,325	0	0	1,578	575	0	0	0	396	9	645	4,702

12: Haven Av. & SR-60 EB Ramps

PHF: 0.933 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	1,072	230	672	1,302	0	427	8	170	0	0	0	3,882

13: Driveway 3 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	14	0	4	0	0	0	0	1,019	4	7	1,395	0	2,444

14: Driveway 4 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	10	0	0	0	0	1,016	7	0	1,402	0	2,436

15: Driveway 5 & E. Airport Dr.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	24	0	0	0	0	1,009	17	0	1,402	0	2,453

16: Driveway 6 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	5	0	2	0	0	0	0	16	2	2	46	0	72

17: Driveway 7 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	3	0	5	0	0	0	0	17	2	3	47	0	76

18: Driveway 8 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	0	0	0	14	2	20	0	0	36	8	79

19: Driveway 9 & La Salle St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	0	0	0	0	0	185	0	0	204	0	389

20: Driveway 10 & Jurupa Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	0	0	0	7	0	1,642	0	0	1,071	4	2,724

Volume Development - PM Peak Hour

21: Driveway 11 & Jurupa Av.

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	0	0	0	6	0	1,642	0	0	1,069	4	2,721

22: Carnegie Av. & E. Airport Dr.

PHF: 0.882 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	278	242	146	72	251	508	442	391	79	11	490	236	3,146

23: Carnegie Av. & Driveway 12

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	3	643	0	2	327	13	20	0	4	1	0	3	1,016

24: Carnegie Av. & Driveway 13

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	639	1	4	328	0	0	0	0	1	0	6	979

25: Carnegie Av. & Driveway 14

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	8	628	0	0	326	2	12	0	4	0	0	0	980

26: Carnegie Av. & Driveway 15/Santa Ana St.

PHF: 0.786 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	6	568	23	17	312	2	8	0	4	10	0	60	1,010

27: Carnegie Av. & Driveway 16

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	23	583	0	0	319	7	13	0	27	0	0	0	972

28: Carnegie Av. & Driveway 17

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	5	605	0	0	339	7	2	0	17	0	0	0	975

29: Carnegie Av. & La Salle St.

PHF: 0.944 Count Date: 10/26/2022

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	73	436	0	0	224	132	173	0	12	0	0	0	1,050

30: Carnegie Av. & Driveway 18

PHF: _____ Count Date: _____

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	506	7	0	236	0	0	0	0	8	0	3	761

Volume Development - PM Peak Hour

31: Carnegie Av. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	9	0	2	69	0	306	567	1,112	19	4	696	73	2,857

32: Driveway 19 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	7	0	2	1	0	8	3	32	5	0	55	3	116

33: Driveway 20 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	10	0	8	1	0	12	6	18	11	3	36	5	110

34: Commerce Pkwy. & Driveway 21

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	757	0	0	606	5	0	0	7	0	0	0	1,375

35: Commerce Pkwy. & Driveway 22

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	757	0	0	611	2	0	0	4	0	0	0	1,374

36: Commerce Pkwy. & Driveway 23

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	752	3	0	615	0	0	0	0	0	0	5	1,375

37: Commerce Pkwy. & Santa Ana St.

PHF: 0.920 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	20	551	18	120	478	17	11	9	8	31	6	193	1,462

38: Commerce Pkwy. & Driveway 24

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	589	0	0	507	10	0	0	14	0	0	0	1,120

39: Commerce Pkwy. & Driveway 25

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	568	29	3	518	0	0	0	0	17	0	22	1,157

40: Commerce Pkwy. & Driveway 26

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	588	6	0	535	0	0	0	0	0	0	9	1,138

Volume Development - PM Peak Hour

41: Commerce Pkwy. & Jurupa Av.

PHF: 0.957 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	15	45	60	462	18	59	131	1,038	14	12	698	400	2,953

42: Driveway 27 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	11	0	7	3	0	4	4	133	10	1	214	1	388

43: Driveway 28 & Santa Ana St.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	4	0	10	3	0	4	4	135	3	6	209	1	379

44: Double Day Av. & Driveway 29

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	1	19	0	0	10	0	1	0	0	0	0	0	31

45: Double Day Av. & Santa Ana St.

PHF: 0.802 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	27	2	15	2	0	7	12	93	43	7	180	7	396

46: Driveway 30 & Double Day Av.

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	1	0	10	0	0	0	0	62	9	2	42	0	126

47: Dupont Av. & Santa Ana St.

PHF: 0.798 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	46	93	33	15	53	15	14	62	14	17	108	29	499

48: Dupont Av. & Double Day Av.

PHF: 0.763 4:00pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	31	118	1	0	101	13	7	0	66	2	0	0	339

49: Dupont Av. & Driveway 31

PHF: Count Date:

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	1	160	0	0	181	4	6	0	9	0	0	0	361

50: Dupont Av. & Jurupa Av.

PHF: 0.934 4:15pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	46	29	121	95	29	66	63	1,372	14	71	930	69	2,905

Volume Development - PM Peak Hour

51: Milliken Av. & E. Airport Dr.

PHF: 0.988 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	57	1,198	77	179	1,003	210	504	511	56	95	319	357	4,566

52: Milliken Av. & Jurupa Av.

PHF: 0.961 4:45pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	230	1,029	636	287	1,056	66	137	1,151	298	562	728	130	6,309

53: Milliken Av. & Mission Bl.

PHF: 0.950 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	706	1,023	71	330	1,467	591	889	5	313	105	52	412	5,964

54: I-15 SB Ramps & Jurupa Av.

PHF: 0.945 4:30pm Count Date: 10/26/2021

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	0	0	0	239	8	489	0	1,808	611	484	932	0	4,570

55: I-15 NB Ramps & Jurupa Av.

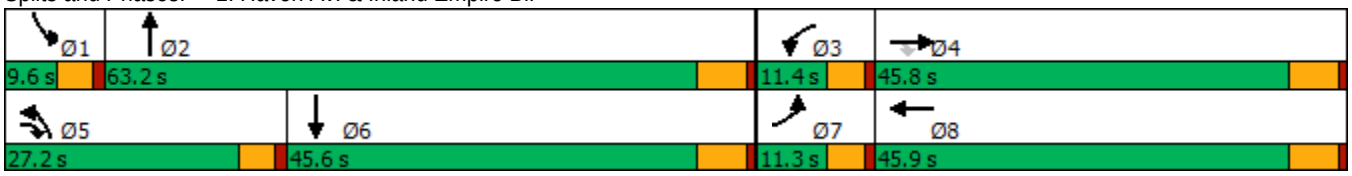
PHF: 0.967 4:00pm Count Date: 10/26/2021

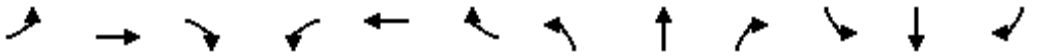
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL
2040 WP:	239	1	466	0	0	0	742	1,305	0	0	1,177	542	4,472

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	112	130	330	131	142	21	484	2079	366	55	1838	155
Future Volume (vph)	112	130	330	131	142	21	484	2079	366	55	1838	155
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	11.3	45.8	27.2	11.4	45.9		27.2	63.2		9.6	45.6	
Total Split (%)	8.7%	35.2%	20.9%	8.8%	35.3%		20.9%	48.6%		7.4%	35.1%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 105.2
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	130	330	131	142	21	484	2079	366	55	1838	155
Future Volume (veh/h)	112	130	330	131	142	21	484	2079	366	55	1838	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1600	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	122	141	186	142	154	0	526	2260	0	60	1998	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	180	507	531	227	491		598	3540		133	2572	
Arrive On Green	0.06	0.14	0.14	0.05	0.14	0.00	0.19	0.54	0.00	0.04	0.39	0.00
Sat Flow, veh/h	3141	3610	1596	4297	3610	1610	3141	6536	1610	3141	6536	1610
Grp Volume(v), veh/h	122	141	186	142	154	0	526	2260	0	60	1998	0
Grp Sat Flow(s),veh/h/ln	1570	1805	1596	1432	1805	1610	1570	1634	1610	1570	1634	1610
Q Serve(g_s), s	3.6	3.3	8.2	3.0	3.6	0.0	15.2	22.6	0.0	1.7	24.9	0.0
Cycle Q Clear(g_c), s	3.6	3.3	8.2	3.0	3.6	0.0	15.2	22.6	0.0	1.7	24.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	507	531	227	491		598	3540		133	2572	
V/C Ratio(X)	0.68	0.28	0.35	0.63	0.31		0.88	0.64		0.45	0.78	
Avail Cap(c_a), veh/h	226	1547	991	313	1551		761	4020		168	2788	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.1	35.9	23.7	43.3	36.4	0.0	36.7	15.0	0.0	43.6	24.7	0.0
Incr Delay (d2), s/veh	3.2	0.3	0.4	1.1	0.4	0.0	8.2	0.3	0.0	0.9	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.4	3.0	1.0	1.5	0.0	6.2	7.2	0.0	0.7	9.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.4	36.2	24.1	44.3	36.7	0.0	45.0	15.3	0.0	44.5	26.1	0.0
LnGrp LOS	D	D	C	D	D		D	B		D	C	
Approach Vol, veh/h		449			296	A		2786	A		2058	A
Approach Delay, s/veh		33.9			40.4			20.9			26.6	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	56.3	9.5	18.9	22.4	42.5	9.9	18.5
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	57.4	6.8	40.0	22.6	39.8	6.7	40.1
Max Q Clear Time (g_c+I1), s	3.7	24.6	5.0	10.2	17.2	26.9	5.6	5.6
Green Ext Time (p_c), s	0.0	22.3	0.0	1.4	0.6	9.8	0.0	0.9

Intersection Summary	
HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C

Notes

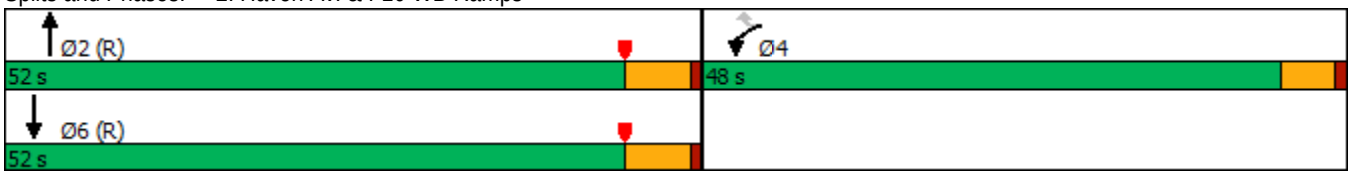
Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	938	660	2269	535	1845
Future Volume (vph)	938	660	2269	535	1845
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	48.0	48.0	52.0		52.0
Total Split (%)	48.0%	48.0%	52.0%		52.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 65
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	938	660	2269	535	0	1845
Future Volume (veh/h)	938	660	2269	535	0	1845
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1800	1900	1900	1900	0	1900
Adj Flow Rate, veh/h	1064	534	2466	0	0	2005
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1244	584	3453		0	3453
Arrive On Green	0.36	0.36	1.00	0.00	0.00	0.53
Sat Flow, veh/h	3429	1610	6802	1610	0	7068
Grp Volume(v), veh/h	1064	534	2466	0	0	2005
Grp Sat Flow(s),veh/h/ln	1714	1610	1634	1610	0	1634
Q Serve(g_s), s	28.7	31.6	0.0	0.0	0.0	20.9
Cycle Q Clear(g_c), s	28.7	31.6	0.0	0.0	0.0	20.9
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	1244	584	3453		0	3453
V/C Ratio(X)	0.86	0.91	0.71		0.00	0.58
Avail Cap(c_a), veh/h	1471	691	3453		0	3453
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.54	0.00	0.00	0.58
Uniform Delay (d), s/veh	29.4	30.4	0.0	0.0	0.0	16.0
Incr Delay (d2), s/veh	4.0	14.0	0.7	0.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	13.6	0.2	0.0	0.0	7.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	33.4	44.4	0.7	0.0	0.0	16.5
LnGrp LOS	C	D	A		A	B
Approach Vol, veh/h	1598		2466	A		2005
Approach Delay, s/veh	37.1		0.7			16.5
Approach LOS	D		A			B

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		58.6		41.4		58.6
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		46.2		42.9		46.2
Max Q Clear Time (g_c+I1), s		2.0		33.6		22.9
Green Ext Time (p_c), s		20.3		2.6		11.0

Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Notes

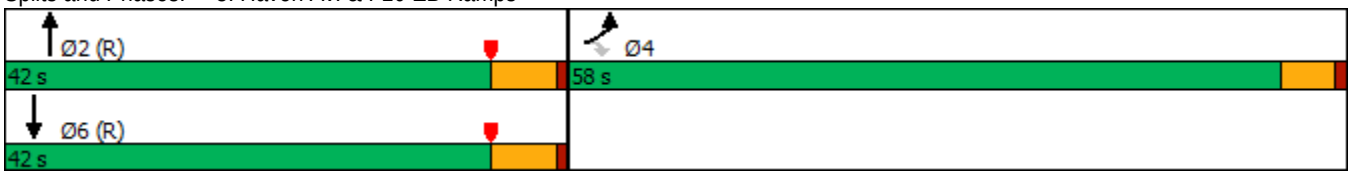
User approved volume balancing among the lanes for turning movement.
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	1020	812	1785	2285	497
Future Volume (vph)	1020	812	1785	2285	497
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	58.0	58.0	42.0	42.0	
Total Split (%)	58.0%	58.0%	42.0%	42.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 75
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	1020	812	0	1785	2285	497
Future Volume (veh/h)	1020	812	0	1785	2285	497
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1900	0	1900	1900	1900
Adj Flow Rate, veh/h	1227	618	0	1899	2431	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	1508	708	0	2948	2948	
Arrive On Green	0.44	0.44	0.00	0.45	0.90	0.00
Sat Flow, veh/h	3429	1610	0	7068	6802	1610
Grp Volume(v), veh/h	1227	618	0	1899	2431	0
Grp Sat Flow(s),veh/h/ln	1714	1610	0	1634	1634	1610
Q Serve(g_s), s	31.2	34.9	0.0	22.5	14.2	0.0
Cycle Q Clear(g_c), s	31.2	34.9	0.0	22.5	14.2	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	1508	708	0	2948	2948	
V/C Ratio(X)	0.81	0.87	0.00	0.64	0.82	
Avail Cap(c_a), veh/h	1814	852	0	2948	2948	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.75	0.61	0.00
Uniform Delay (d), s/veh	24.4	25.5	0.0	21.2	3.4	0.0
Incr Delay (d2), s/veh	2.5	8.6	0.0	0.8	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	13.7	0.0	8.0	1.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.9	34.1	0.0	22.1	5.1	0.0
LnGrp LOS	C	C	A	C	A	
Approach Vol, veh/h	1845			1899	2431	A
Approach Delay, s/veh	29.3			22.1	5.1	
Approach LOS	C			C	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		50.9		49.1		50.9
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		36.2		52.9		36.2
Max Q Clear Time (g_c+I1), s		24.5		36.9		16.2
Green Ext Time (p_c), s		6.9		7.1		12.9

Intersection Summary		
HCM 6th Ctrl Delay	17.5	
HCM 6th LOS	B	

Notes

User approved volume balancing among the lanes for turning movement.

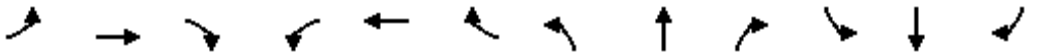
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	29	42	75	41	145	173	1997	110	222	2575	300
Future Volume (vph)	91	29	42	75	41	145	173	1997	110	222	2575	300
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	12.0	48.2	48.2	11.0	47.2	47.2	17.0	51.8	51.8	19.0	53.8	53.8
Total Split (%)	9.2%	37.1%	37.1%	8.5%	36.3%	36.3%	13.1%	39.8%	39.8%	14.6%	41.4%	41.4%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 99.9
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	29	42	75	41	145	173	1997	110	222	2575	300
Future Volume (veh/h)	91	29	42	75	41	145	173	1997	110	222	2575	300
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1800	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	93	30	26	77	42	82	177	2038	78	227	2628	202
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	155	264	221	147	260	367	243	3196	786	296	3305	804
Arrive On Green	0.05	0.14	0.14	0.05	0.14	0.14	0.08	0.49	0.49	0.09	0.51	0.51
Sat Flow, veh/h	3141	1900	1586	3141	1900	2685	3141	6536	1607	3141	6536	1589
Grp Volume(v), veh/h	93	30	26	77	42	82	177	2038	78	227	2628	202
Grp Sat Flow(s),veh/h/ln	1570	1900	1586	1570	1900	1342	1570	1634	1607	1570	1634	1589
Q Serve(g_s), s	2.7	1.3	1.3	2.2	1.8	2.5	5.1	21.3	2.4	6.5	30.5	6.6
Cycle Q Clear(g_c), s	2.7	1.3	1.3	2.2	1.8	2.5	5.1	21.3	2.4	6.5	30.5	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	264	221	147	260	367	243	3196	786	296	3305	804
V/C Ratio(X)	0.60	0.11	0.12	0.52	0.16	0.22	0.73	0.64	0.10	0.77	0.80	0.25
Avail Cap(c_a), veh/h	253	869	725	219	848	1199	424	3274	805	493	3417	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	34.6	34.6	42.8	35.0	35.3	41.4	17.4	12.6	40.6	18.8	12.9
Incr Delay (d2), s/veh	1.4	0.2	0.2	1.1	0.3	0.3	1.6	0.4	0.1	1.6	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.6	0.5	0.8	0.8	0.8	1.9	7.1	0.8	2.5	10.2	2.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	34.8	34.8	43.8	35.3	35.6	43.0	17.8	12.7	42.2	20.1	13.0
LnGrp LOS	D	C	C	D	D	D	D	B	B	D	C	B
Approach Vol, veh/h		149			201			2293			3057	
Approach Delay, s/veh		40.6			38.7			19.6			21.3	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	50.7	8.9	19.0	11.7	52.2	9.1	18.7
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	14.4	46.0	6.4	42.0	12.4	48.0	7.4	41.0
Max Q Clear Time (g_c+I1), s	8.5	23.3	4.2	3.3	7.1	32.5	4.7	4.5
Green Ext Time (p_c), s	0.2	15.7	0.0	0.2	0.1	13.9	0.0	0.5

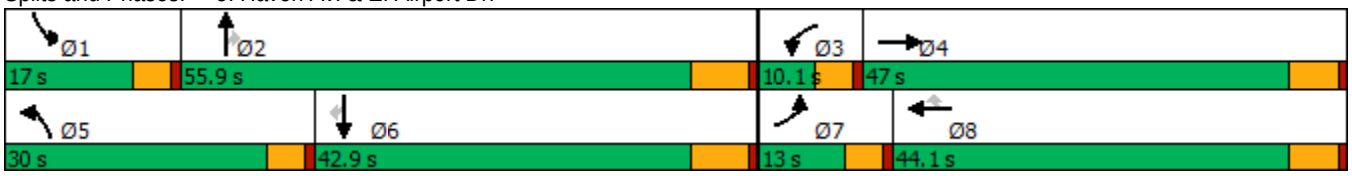
Intersection Summary	
HCM 6th Ctrl Delay	21.7
HCM 6th LOS	C

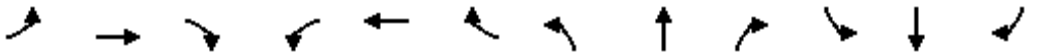
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	239	352	81	255	325	507	1699	245	437	1722	205
Future Volume (vph)	239	352	81	255	325	507	1699	245	437	1722	205
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	13.0	47.0	10.1	44.1	44.1	30.0	55.9	55.9	17.0	42.9	42.9
Total Split (%)	10.0%	36.2%	7.8%	33.9%	33.9%	23.1%	43.0%	43.0%	13.1%	33.0%	33.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 116
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	352	509	81	255	325	507	1699	245	437	1722	205
Future Volume (veh/h)	239	352	509	81	255	325	507	1699	245	437	1722	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	263	387	467	89	280	277	557	1867	233	480	1892	190
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	210	592	502	132	1089	462	603	2866	607	310	2157	456
Arrive On Green	0.07	0.31	0.31	0.04	0.29	0.29	0.19	0.38	0.38	0.10	0.28	0.28
Sat Flow, veh/h	3141	1900	1610	3141	3800	1610	3141	7600	1610	3141	7600	1608
Grp Volume(v), veh/h	263	387	467	89	280	277	557	1867	233	480	1892	190
Grp Sat Flow(s),veh/h/ln	1570	1900	1610	1570	1900	1610	1570	1900	1610	1570	1900	1608
Q Serve(g_s), s	8.4	22.1	35.4	3.5	7.1	18.6	21.9	25.5	13.3	12.4	29.9	12.1
Cycle Q Clear(g_c), s	8.4	22.1	35.4	3.5	7.1	18.6	21.9	25.5	13.3	12.4	29.9	12.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	592	502	132	1089	462	603	2866	607	310	2157	456
V/C Ratio(X)	1.25	0.65	0.93	0.68	0.26	0.60	0.92	0.65	0.38	1.55	0.88	0.42
Avail Cap(c_a), veh/h	210	622	527	137	1157	490	634	2985	632	310	2200	466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	37.4	42.0	59.4	34.5	38.7	49.9	32.4	28.5	56.7	43.0	36.6
Incr Delay (d2), s/veh	147.1	2.3	22.9	9.5	0.1	1.8	18.4	0.5	0.4	262.9	4.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	10.3	16.7	1.5	3.2	7.4	9.7	11.1	5.0	16.0	13.9	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	205.8	39.7	64.9	68.9	34.7	40.5	68.3	32.8	28.9	319.6	47.3	37.2
LnGrp LOS	F	D	E	E	C	D	E	C	C	F	D	D
Approach Vol, veh/h		1117			646			2657			2562	
Approach Delay, s/veh		89.3			41.9			39.9			97.5	
Approach LOS		F			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	53.9	9.9	45.0	28.7	42.2	13.0	41.8
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	49.4	5.5	41.2	25.4	36.4	8.4	38.3
Max Q Clear Time (g_c+I1), s	14.4	27.5	5.5	37.4	23.9	31.9	10.4	20.6
Green Ext Time (p_c), s	0.0	13.9	0.0	1.8	0.2	3.8	0.0	2.4

Intersection Summary	
HCM 6th Ctrl Delay	69.2
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	2450	6	0	2312
Future Vol, veh/h	0	2	2450	6	0	2312
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	2663	7	0	2513

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1335	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	125	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	125	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	34.3	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	125	-
HCM Lane V/C Ratio	-	-	0.017	-
HCM Control Delay (s)	-	-	34.3	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	2450	5	0	2312
Future Vol, veh/h	0	6	2450	5	0	2312
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	7	2663	5	0	2513

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1334	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	126	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	126	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	35.1	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	126	-
HCM Lane V/C Ratio	-	-	0.052	-
HCM Control Delay (s)	-	-	35.1	-
HCM Lane LOS	-	-	E	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	17	2438	27	0	2389
Future Vol, veh/h	0	17	2438	27	0	2389
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	18	2594	29	0	2541

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1312	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	130	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	130	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37.1	0	0
HCM LOS	E		

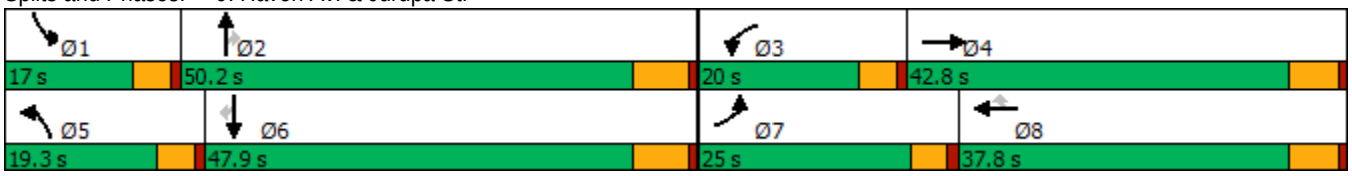
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	130	-
HCM Lane V/C Ratio	-	-	0.139	-
HCM Control Delay (s)	-	-	37.1	-
HCM Lane LOS	-	-	E	-
HCM 95th %tile Q(veh)	-	-	0.5	-

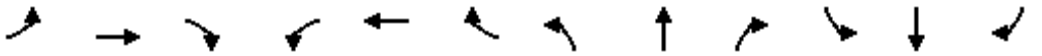
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	550	298	316	403	82	133	1833	272	110	1418	860
Future Volume (vph)	550	298	316	403	82	133	1833	272	110	1418	860
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	25.0	42.8	20.0	37.8	37.8	19.3	50.2	50.2	17.0	47.9	47.9
Total Split (%)	19.2%	32.9%	15.4%	29.1%	29.1%	14.8%	38.6%	38.6%	13.1%	36.8%	36.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 117
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	550	298	173	316	403	82	133	1833	272	110	1418	860
Future Volume (veh/h)	550	298	173	316	403	82	133	1833	272	110	1418	860
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	579	314	157	333	424	60	140	1929	171	116	1493	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	596	761	353	389	557	248	168	2439	601	142	2341	
Arrive On Green	0.19	0.22	0.22	0.12	0.15	0.15	0.10	0.37	0.37	0.08	0.36	0.00
Sat Flow, veh/h	3141	3458	1606	3141	3610	1610	1714	6536	1610	1714	6536	1610
Grp Volume(v), veh/h	579	314	157	333	424	60	140	1929	171	116	1493	0
Grp Sat Flow(s),veh/h/ln	1570	1729	1606	1570	1805	1610	1714	1634	1610	1714	1634	1610
Q Serve(g_s), s	19.7	8.4	9.1	11.2	12.1	3.5	8.6	28.2	8.0	7.2	20.4	0.0
Cycle Q Clear(g_c), s	19.7	8.4	9.1	11.2	12.1	3.5	8.6	28.2	8.0	7.2	20.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	596	761	353	389	557	248	168	2439	601	142	2341	
V/C Ratio(X)	0.97	0.41	0.44	0.86	0.76	0.24	0.83	0.79	0.28	0.82	0.64	
Avail Cap(c_a), veh/h	596	1190	553	450	1075	479	234	2657	654	198	2517	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.3	36.0	36.2	46.1	43.6	39.9	47.6	30.0	23.6	48.5	28.7	0.0
Incr Delay (d2), s/veh	29.5	0.4	0.9	12.0	2.2	0.5	12.1	1.6	0.3	11.9	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	3.4	3.5	4.9	5.4	1.4	4.1	10.3	0.0	3.4	7.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	72.8	36.3	37.1	58.2	45.7	40.4	59.7	31.5	23.9	60.4	29.2	0.0
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	C	
Approach Vol, veh/h		1050			817			2240			1609	A
Approach Delay, s/veh		56.6			50.4			32.7			31.4	
Approach LOS		E			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	46.6	17.9	29.5	15.1	45.0	25.0	22.4
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	12.4	43.7	15.4	37.0	14.7	41.4	20.4	32.0
Max Q Clear Time (g_c+I1), s	9.2	30.2	13.2	11.1	10.6	22.4	21.7	14.1
Green Ext Time (p_c), s	0.0	9.9	0.2	2.8	0.1	9.3	0.0	2.5

Intersection Summary	
HCM 6th Ctrl Delay	39.3
HCM 6th LOS	D

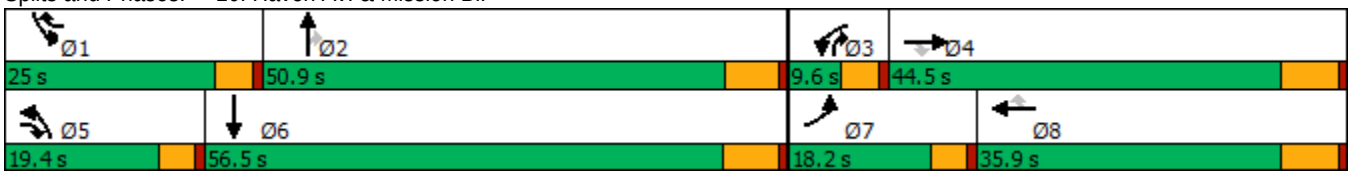
Notes

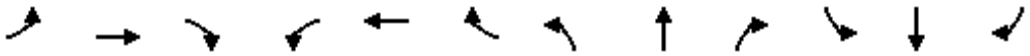
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	222	447	130	68	863	651	144	1885	33	331	1597
Future Volume (vph)	222	447	130	68	863	651	144	1885	33	331	1597
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	18.2	44.5	19.4	9.6	35.9	25.0	19.4	50.9	9.6	25.0	56.5
Total Split (%)	14.0%	34.2%	14.9%	7.4%	27.6%	19.2%	14.9%	39.2%	7.4%	19.2%	43.5%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 127
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	447	130	68	863	651	144	1885	33	331	1597	285
Future Volume (veh/h)	222	447	130	68	863	651	144	1885	33	331	1597	285
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	236	476	115	72	918	528	153	2005	30	352	1699	287
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	283	1470	622	113	1189	625	177	1808	610	273	1808	303
Arrive On Green	0.09	0.28	0.28	0.04	0.23	0.23	0.10	0.35	0.35	0.16	0.40	0.40
Sat Flow, veh/h	3141	5187	1607	3141	5187	1610	1714	5187	1584	1714	4473	750
Grp Volume(v), veh/h	236	476	115	72	918	528	153	2005	30	352	1311	675
Grp Sat Flow(s),veh/h/ln	1570	1729	1607	1570	1729	1610	1714	1729	1584	1714	1729	1765
Q Serve(g_s), s	9.5	9.3	6.1	2.9	21.3	29.4	11.3	44.7	1.5	20.4	46.6	47.3
Cycle Q Clear(g_c), s	9.5	9.3	6.1	2.9	21.3	29.4	11.3	44.7	1.5	20.4	46.6	47.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	283	1470	622	113	1189	625	177	1808	610	273	1398	714
V/C Ratio(X)	0.83	0.32	0.19	0.64	0.77	0.84	0.86	1.11	0.05	1.29	0.94	0.95
Avail Cap(c_a), veh/h	333	1537	642	122	1189	625	198	1808	610	273	1398	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.4	36.3	26.0	61.0	46.3	35.7	56.6	41.8	24.8	53.9	36.7	36.9
Incr Delay (d2), s/veh	12.6	0.1	0.1	6.5	3.2	10.3	26.4	57.7	0.0	155.6	12.2	21.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	3.8	2.2	1.2	9.1	15.8	6.0	27.6	0.6	20.2	20.5	23.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	70.0	36.4	26.1	67.5	49.5	46.0	83.0	99.5	24.8	209.6	48.8	58.4
LnGrp LOS	E	D	C	E	D	D	F	F	C	F	D	E
Approach Vol, veh/h		827			1518			2188			2338	
Approach Delay, s/veh		44.6			49.1			97.4			75.8	
Approach LOS		D			D			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	51.2	9.2	42.9	17.8	58.4	16.2	35.9
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	20.4	* 45	5.0	38.0	14.8	50.0	13.6	29.4
Max Q Clear Time (g_c+I1), s	22.4	46.7	4.9	11.3	13.3	49.3	11.5	31.4
Green Ext Time (p_c), s	0.0	0.0	0.0	3.2	0.0	0.6	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	73.0
HCM 6th LOS	E

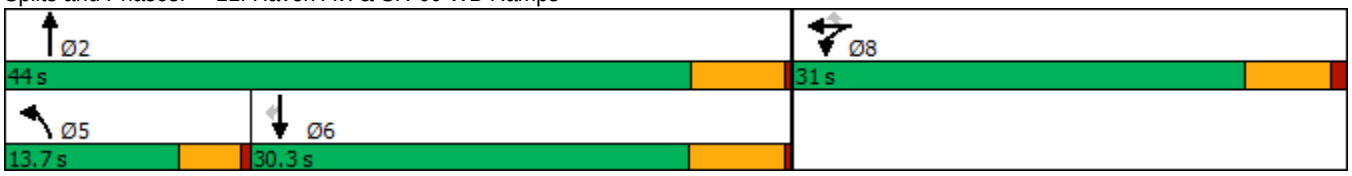
Notes

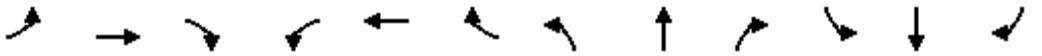
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	150	10	508	352	1910	1102	624
Future Volume (vph)	150	10	508	352	1910	1102	624
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.5	35.2	28.3	28.3
Total Split (s)	31.0	31.0	31.0	13.7	44.0	30.3	30.3
Total Split (%)	41.3%	41.3%	41.3%	18.3%	58.7%	40.4%	40.4%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 70.9
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	150	10	508	352	1910	0	0	1102	624
Future Volume (veh/h)	0	0	0	150	10	508	352	1910	0	0	1102	624
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1900	1900	1700	1900	0	0	1900	1900
Adj Flow Rate, veh/h				166	0	308	371	2011	0	0	1160	492
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				806	0	378	466	2983	0	0	1873	581
Arrive On Green				0.23	0.00	0.23	0.15	0.58	0.00	0.00	0.36	0.36
Sat Flow, veh/h				3429	0	1610	3141	5358	0	0	5358	1610
Grp Volume(v), veh/h				166	0	308	371	2011	0	0	1160	492
Grp Sat Flow(s),veh/h/ln				1714	0	1610	1570	1729	0	0	1729	1610
Q Serve(g_s), s				2.4	0.0	11.0	7.0	16.4	0.0	0.0	11.2	17.2
Cycle Q Clear(g_c), s				2.4	0.0	11.0	7.0	16.4	0.0	0.0	11.2	17.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				806	0	378	466	2983	0	0	1873	581
V/C Ratio(X)				0.21	0.00	0.81	0.80	0.67	0.00	0.00	0.62	0.85
Avail Cap(c_a), veh/h				1415	0	665	499	3254	0	0	2082	646
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				18.8	0.0	22.1	25.1	9.0	0.0	0.0	16.0	17.9
Incr Delay (d2), s/veh				0.1	0.0	4.3	8.3	0.4	0.0	0.0	0.3	8.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.8	0.0	4.0	2.8	3.8	0.0	0.0	3.6	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				18.9	0.0	26.4	33.4	9.4	0.0	0.0	16.3	26.4
LnGrp LOS				B	A	C	C	A	A	A	B	C
Approach Vol, veh/h					474			2382			1652	
Approach Delay, s/veh					23.8			13.1			19.3	
Approach LOS					C			B			B	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	40.9		13.1	27.8		20.1						
Change Period (Y+Rc), s	* 5.8		4.0	5.8		5.8						
Max Green Setting (Gmax), s	* 38		9.7	24.5		25.2						
Max Q Clear Time (g_c+I1), s	18.4		9.0	19.2		13.0						
Green Ext Time (p_c), s	9.8		0.1	2.9		1.3						

Intersection Summary		
HCM 6th Ctrl Delay	16.5	
HCM 6th LOS	B	

Notes

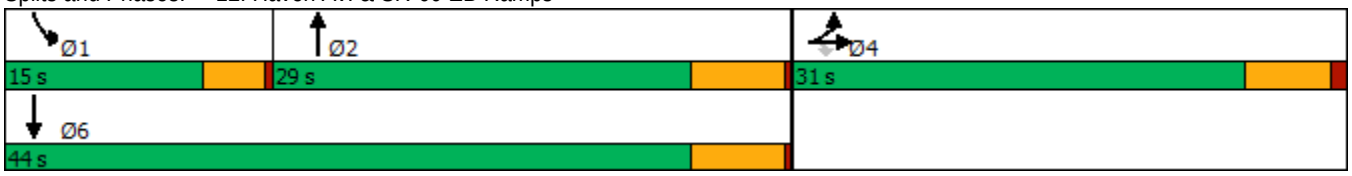
User approved volume balancing among the lanes for turning movement.

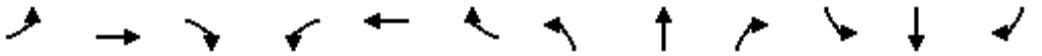
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	977	7	218	1285	413	839
Future Volume (vph)	977	7	218	1285	413	839
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.6	29.7
Total Split (s)	31.0	31.0	31.0	29.0	15.0	44.0
Total Split (%)	41.3%	41.3%	41.3%	38.7%	20.0%	58.7%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 75
Actuated Cycle Length: 74.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	977	7	218	0	0	0	0	1285	354	413	839	0
Future Volume (veh/h)	977	7	218	0	0	0	0	1285	354	413	839	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900				0	1900	1900	1700	1900	0
Adj Flow Rate, veh/h	1033	0	88				0	1353	309	435	883	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	1126	0	529				0	1323	302	466	2679	0
Arrive On Green	0.33	0.00	0.33				0.00	0.31	0.31	0.15	0.52	0.00
Sat Flow, veh/h	3429	0	1610				0	4382	960	3141	5358	0
Grp Volume(v), veh/h	1033	0	88				0	1111	551	435	883	0
Grp Sat Flow(s),veh/h/ln	1714	0	1610				0	1729	1713	1570	1729	0
Q Serve(g_s), s	21.5	0.0	2.9				0.0	23.3	23.3	10.2	7.4	0.0
Cycle Q Clear(g_c), s	21.5	0.0	2.9				0.0	23.3	23.3	10.2	7.4	0.0
Prop In Lane	1.00		1.00				0.00		0.56	1.00		0.00
Lane Grp Cap(c), veh/h	1126	0	529				0	1087	538	466	2679	0
V/C Ratio(X)	0.92	0.00	0.17				0.00	1.02	1.02	0.93	0.33	0.00
Avail Cap(c_a), veh/h	1165	0	547				0	1087	538	466	2679	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.9	0.0	17.7				0.0	25.4	25.4	31.2	10.4	0.0
Incr Delay (d2), s/veh	11.2	0.0	0.1				0.0	33.1	45.1	26.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	0.0	1.0				0.0	13.2	14.8	5.2	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	0.0	17.8				0.0	58.5	70.5	57.2	10.5	0.0
LnGrp LOS	D	A	B				A	F	F	E	B	A
Approach Vol, veh/h		1121						1662			1318	
Approach Delay, s/veh		33.8						62.5			25.9	
Approach LOS		C						E			C	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	15.0	29.0		30.2		44.0						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	11.0	23.3		25.2		38.3						
Max Q Clear Time (g_c+I1), s	12.2	25.3		23.5		9.4						
Green Ext Time (p_c), s	0.0	0.0		0.9		3.7						

Intersection Summary			
HCM 6th Ctrl Delay			42.9
HCM 6th LOS			D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1026	7	13	657	0	4	0	1	0	0	0
Future Vol, veh/h	0	1026	7	13	657	0	4	0	1	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	240	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1115	8	14	714	0	4	0	1	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	714	0	0	1123	0	0	1433	1861	562	1300	1865	357
Stage 1	-	-	-	-	-	-	1119	1119	-	742	742	-
Stage 2	-	-	-	-	-	-	314	742	-	558	1123	-
Critical Hdwy	5.3	-	-	4.1	-	-	6.95	6.5	6.9	6.95	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.5	5.5	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.65	4	3.3	3.65	4	3.9
Pot Cap-1 Maneuver	543	-	-	629	-	-	118	74	475	144	74	550
Stage 1	-	-	-	-	-	-	219	285	-	312	425	-
Stage 2	-	-	-	-	-	-	642	425	-	472	283	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	543	-	-	629	-	-	116	72	475	141	72	550
Mov Cap-2 Maneuver	-	-	-	-	-	-	116	72	-	141	72	-
Stage 1	-	-	-	-	-	-	219	285	-	312	416	-
Stage 2	-	-	-	-	-	-	628	416	-	471	283	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	32.4	0
HCM LOS			D	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	137	543	-	-	629	-	-	-
HCM Lane V/C Ratio	0.04	-	-	-	0.022	-	-	-
HCM Control Delay (s)	32.4	0	-	-	10.9	-	-	0
HCM Lane LOS	D	A	-	-	B	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0.1	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1014	14	0	670	0	8
Future Vol, veh/h	1014	14	0	670	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1102	15	0	728	0	9

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	559
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	478
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	478
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	478	-	-	-
HCM Lane V/C Ratio	0.018	-	-	-
HCM Control Delay (s)	12.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	992	30	0	670	0	19
Future Vol, veh/h	992	30	0	670	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1078	33	0	728	0	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	556
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	480
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	480
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	480	-	-	-
HCM Lane V/C Ratio	0.043	-	-	-
HCM Control Delay (s)	12.8	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	23	3	4	15	1	1
Future Vol, veh/h	23	3	4	15	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	3	4	16	1	1

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	28	0	43	14
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	16	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1599	-	968	1069
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	1010	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1599	-	965	1069
Mov Cap-2 Maneuver	-	-	-	-	939	-
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1000	-	-	1599	-
HCM Lane V/C Ratio	0.002	-	-	0.003	-
HCM Control Delay (s)	8.6	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	21	3	6	18	2	3
Future Vol, veh/h	21	3	6	18	2	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	23	3	7	20	2	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	26	0	49	13
Stage 1	-	-	-	-	25	-
Stage 2	-	-	-	-	24	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1601	-	960	1070
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1601	-	956	1070
Mov Cap-2 Maneuver	-	-	-	-	934	-
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	997	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.8	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1011	-	-	1601	-
HCM Lane V/C Ratio	0.005	-	-	0.004	-
HCM Control Delay (s)	8.6	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	3	22	17	14	1	7
Future Vol, veh/h	3	22	17	14	1	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	24	18	15	1	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	33	0	-	0	44	17
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	18	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1592	-	-	-	967	1064
Stage 1	-	-	-	-	999	-
Stage 2	-	-	-	-	1008	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1592	-	-	-	965	1064
Mov Cap-2 Maneuver	-	-	-	-	939	-
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	1008	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1592	-	-	-	1047
HCM Lane V/C Ratio	0.002	-	-	-	0.008
HCM Control Delay (s)	7.3	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	1	61	84	1	1	1
Future Vol, veh/h	1	61	84	1	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	66	91	1	1	1

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	92	0	-	0	127	46
Stage 1	-	-	-	-	92	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1515	-	-	-	860	1020
Stage 1	-	-	-	-	927	-
Stage 2	-	-	-	-	989	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1515	-	-	-	859	1020
Mov Cap-2 Maneuver	-	-	-	-	869	-
Stage 1	-	-	-	-	926	-
Stage 2	-	-	-	-	989	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1515	-	-	-	938
HCM Lane V/C Ratio	0.001	-	-	-	0.002
HCM Control Delay (s)	7.4	-	-	-	8.8
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	681	799	8	0	2
Future Vol, veh/h	0	681	799	8	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	740	868	9	0	2

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	439
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	571
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	571
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	571
HCM Lane V/C Ratio	-	-	-	0.004
HCM Control Delay (s)	-	-	-	11.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	681	803	8	0	3
Future Vol, veh/h	0	681	803	8	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	740	873	9	0	3

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	441
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	570
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	570
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

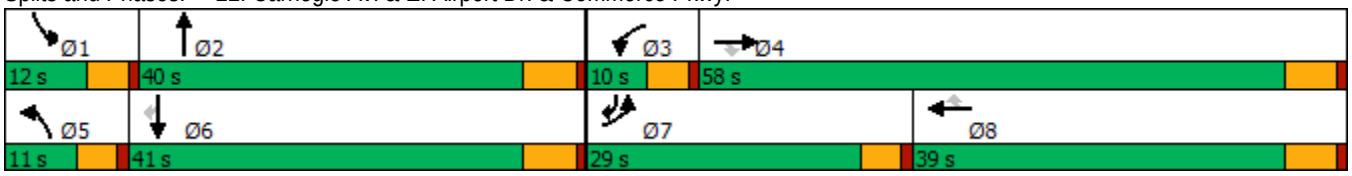
Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.4
HCM LOS			B

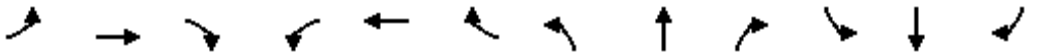
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	570
HCM Lane V/C Ratio	-	-	-	0.006
HCM Control Delay (s)	-	-	-	11.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	166	451	113	5	351	47	123	45	70	69	183
Future Volume (vph)	166	451	113	5	351	47	123	45	70	69	183
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	29.0	58.0	58.0	10.0	39.0	39.0	11.0	40.0	12.0	41.0	29.0
Total Split (%)	24.2%	48.3%	48.3%	8.3%	32.5%	32.5%	9.2%	33.3%	10.0%	34.2%	24.2%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 68.9
Natural Cycle: 105
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	451	113	5	351	47	123	45	0	70	69	183
Future Volume (veh/h)	166	451	113	5	351	47	123	45	0	70	69	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	200	543	135	6	423	45	148	54	0	84	83	161
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	250	1189	530	14	692	309	185	803	0	112	649	922
Arrive On Green	0.15	0.33	0.33	0.01	0.19	0.19	0.11	0.22	0.00	0.07	0.18	0.18
Sat Flow, veh/h	1714	3610	1610	1714	3610	1610	1714	3705	0	1714	3610	2834
Grp Volume(v), veh/h	200	543	135	6	423	45	148	54	0	84	83	161
Grp Sat Flow(s),veh/h/ln	1714	1805	1610	1714	1805	1610	1714	1805	0	1714	1805	1417
Q Serve(g_s), s	6.3	6.6	3.4	0.2	6.0	1.3	4.7	0.7	0.0	2.7	1.1	2.3
Cycle Q Clear(g_c), s	6.3	6.6	3.4	0.2	6.0	1.3	4.7	0.7	0.0	2.7	1.1	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	1189	530	14	692	309	185	803	0	112	649	922
V/C Ratio(X)	0.80	0.46	0.25	0.44	0.61	0.15	0.80	0.07	0.00	0.75	0.13	0.17
Avail Cap(c_a), veh/h	754	3396	1515	167	2160	963	198	2225	0	229	2290	2211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	14.7	13.6	27.4	20.5	18.7	24.2	17.0	0.0	25.5	19.1	13.4
Incr Delay (d2), s/veh	2.3	0.3	0.3	8.1	0.9	0.2	17.4	0.0	0.0	3.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.2	1.0	0.1	2.2	0.4	2.5	0.2	0.0	1.1	0.4	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.2	15.0	13.9	35.5	21.4	18.9	41.6	17.1	0.0	29.2	19.2	13.5
LnGrp LOS	C	B	B	D	C	B	D	B	A	C	B	B
Approach Vol, veh/h		878			474			202			328	
Approach Delay, s/veh		17.1			21.4			35.0			18.9	
Approach LOS		B			C			D			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	18.1	5.0	24.1	10.6	15.8	12.7	16.4
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	34.2	5.4	52.2	6.4	35.2	24.4	33.2
Max Q Clear Time (g_c+I1), s	4.7	2.7	2.2	8.6	6.7	4.3	8.3	8.0
Green Ext Time (p_c), s	0.0	0.2	0.0	4.1	0.0	1.1	0.2	2.7

Intersection Summary	
HCM 6th Ctrl Delay	20.4
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	1	0	0	1	5	162	1	3	160	23
Future Vol, veh/h	6	0	1	0	0	1	5	162	1	3	160	23
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	0	1	0	0	1	5	176	1	3	174	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	291	380	100	280	392	89	199	0	0	177	0	0
Stage 1	193	193	-	187	187	-	-	-	-	-	-	-
Stage 2	98	187	-	93	205	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	644	556	943	656	547	958	1385	-	-	1411	-	-
Stage 1	796	745	-	803	749	-	-	-	-	-	-	-
Stage 2	903	749	-	909	736	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	641	553	943	652	544	958	1385	-	-	1411	-	-
Mov Cap-2 Maneuver	726	645	-	734	639	-	-	-	-	-	-	-
Stage 1	793	744	-	800	746	-	-	-	-	-	-	-
Stage 2	899	746	-	906	735	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	8.8	0.2	0.1
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1385	-	-	751	958	1411	-	-
HCM Lane V/C Ratio	0.004	-	-	0.01	0.001	0.002	-	-
HCM Control Delay (s)	7.6	-	-	9.8	8.8	7.6	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	165	1	7	155
Future Vol, veh/h	0	2	165	1	7	155
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	179	1	8	168

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	280	90	0	0	180	0
Stage 1	180	-	-	-	-	-
Stage 2	100	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	692	956	-	-	1408	-
Stage 1	839	-	-	-	-	-
Stage 2	919	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	688	956	-	-	1408	-
Mov Cap-2 Maneuver	766	-	-	-	-	-
Stage 1	839	-	-	-	-	-
Stage 2	913	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0.3
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	956	1408	-
HCM Lane V/C Ratio	-	-	0.002	0.005	-
HCM Control Delay (s)	-	-	8.8	7.6	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	1	14	163	150	5
Future Vol, veh/h	3	1	14	163	150	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	3	1	15	177	163	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	285	84	168	0	-	0
Stage 1	166	-	-	-	-	-
Stage 2	119	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	687	965	1422	-	-	-
Stage 1	852	-	-	-	-	-
Stage 2	899	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	679	965	1422	-	-	-
Mov Cap-2 Maneuver	763	-	-	-	-	-
Stage 1	843	-	-	-	-	-
Stage 2	899	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1422	-	805	-	-
HCM Lane V/C Ratio	0.011	-	0.005	-	-
HCM Control Delay (s)	7.6	-	9.5	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	1	10	0	33	11	142	35	42	107	3
Future Vol, veh/h	2	0	1	10	0	33	11	142	35	42	107	3
Peak Hour Factor	0.92	0.92	0.92	0.64	0.92	0.64	0.92	0.64	0.64	0.64	0.64	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	2	0	1	16	0	52	12	222	55	66	167	3
Number of Lanes	0	1	0	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	1
HCM Control Delay	8.8	8.2	9	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	67%	100%	6%	0%	100%	0%	0%
Vol Thru, %	0%	100%	57%	0%	0%	0%	0%	0%	100%	92%
Vol Right, %	0%	0%	43%	33%	0%	94%	100%	0%	0%	8%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	95	82	3	9	17	17	42	71	39
LT Vol	11	0	0	2	9	1	0	42	0	0
Through Vol	0	95	47	0	0	0	0	0	71	36
RT Vol	0	0	35	1	0	16	17	0	0	3
Lane Flow Rate	12	148	129	3	14	26	27	66	111	59
Geometry Grp	8	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.019	0.213	0.174	0.005	0.024	0.037	0.037	0.105	0.162	0.085
Departure Headway (Hd)	5.676	5.175	4.877	6.029	6.162	5.035	4.964	5.748	5.247	5.193
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	630	694	735	591	580	708	718	623	682	689
Service Time	3.412	2.911	2.613	3.793	3.911	2.785	2.714	3.488	2.987	2.933
HCM Lane V/C Ratio	0.019	0.213	0.176	0.005	0.024	0.037	0.038	0.106	0.163	0.086
HCM Control Delay	8.5	9.3	8.6	8.8	9.1	8	7.9	9.2	9	8.4
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.8	0.6	0	0.1	0.1	0.1	0.4	0.6	0.3

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	18	40	175	107	11
Future Vol, veh/h	12	18	40	175	107	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	20	43	190	116	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	303	64	128	0	-	0
Stage 1	122	-	-	-	-	-
Stage 2	181	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	670	994	1470	-	-	-
Stage 1	896	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	651	994	1470	-	-	-
Mov Cap-2 Maneuver	745	-	-	-	-	-
Stage 1	870	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	1.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1470	-	877	-	-
HCM Lane V/C Ratio	0.03	-	0.037	-	-
HCM Control Delay (s)	7.5	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	5	9	214	112	13
Future Vol, veh/h	1	5	9	214	112	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	5	10	233	122	14

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	266	68	136	0	-	0
Stage 1	129	-	-	-	-	-
Stage 2	137	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	706	988	1461	-	-	-
Stage 1	889	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	701	988	1461	-	-	-
Mov Cap-2 Maneuver	780	-	-	-	-	-
Stage 1	883	-	-	-	-	-
Stage 2	881	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1461	-	946	-	-
HCM Lane V/C Ratio	0.007	-	0.007	-	-
HCM Control Delay (s)	7.5	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	17	43	178	75	42
Future Vol, veh/h	44	17	43	178	75	42
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	48	18	47	193	82	46
Number of Lanes	1	1	1	2	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	8.7	7.6	8.1
HCM LOS	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	37%
Vol Right, %	0%	0%	0%	0%	100%	0%	63%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	43	89	89	44	17	50	67
LT Vol	43	0	0	44	0	0	0
Through Vol	0	89	89	0	0	50	25
RT Vol	0	0	0	0	17	0	42
Lane Flow Rate	47	97	97	48	18	54	73
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.071	0.133	0.087	0.078	0.024	0.077	0.095
Departure Headway (Hd)	5.46	4.959	3.254	5.854	4.654	5.115	4.675
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	658	725	1102	613	769	702	768
Service Time	3.177	2.676	0.971	3.583	2.382	2.838	2.398
HCM Lane V/C Ratio	0.071	0.134	0.088	0.078	0.023	0.077	0.095
HCM Control Delay	8.6	8.4	6.3	9.1	7.5	8.3	7.9
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.5	0.3	0.3	0.1	0.2	0.3

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	1	221	12	0	92
Future Vol, veh/h	2	1	221	12	0	92
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	1	240	13	0	100

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	297	127	0	0	253	0
Stage 1	247	-	-	-	-	-
Stage 2	50	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	676	906	-	-	1324	-
Stage 1	777	-	-	-	-	-
Stage 2	972	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	676	906	-	-	1324	-
Mov Cap-2 Maneuver	730	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	972	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.6	0	0
HCM LOS	A		

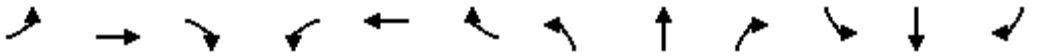
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	781	1324	-
HCM Lane V/C Ratio	-	-	0.004	-	-
HCM Control Delay (s)	-	-	9.6	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	163	713	7	801	115	9	3	22	72
Future Volume (vph)	163	713	7	801	115	9	3	22	72
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	81.0	81.0	81.0	81.0	81.0	39.0	39.0	39.0	39.0
Total Split (%)	67.5%	67.5%	67.5%	67.5%	67.5%	32.5%	32.5%	32.5%	32.5%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 44.8
Natural Cycle: 80
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	713	4	7	801	115	9	0	3	22	0	72
Future Volume (veh/h)	163	713	4	7	801	115	9	0	3	22	0	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	181	792	4	8	890	128	10	0	2	24	0	70
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	446	3355	17	546	2274	1002	288	169	143	295	169	143
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.09	0.00	0.09	0.09	0.00	0.09
Sat Flow, veh/h	533	5326	27	656	3610	1590	1281	1900	1606	1357	1900	1610
Grp Volume(v), veh/h	181	514	282	8	890	128	10	0	2	24	0	70
Grp Sat Flow(s),veh/h/ln	533	1729	1894	656	1805	1590	1281	1900	1606	1357	1900	1610
Q Serve(g_s), s	10.4	2.7	2.7	0.2	5.0	1.3	0.3	0.0	0.0	0.7	0.0	1.7
Cycle Q Clear(g_c), s	15.4	2.7	2.7	2.9	5.0	1.3	0.3	0.0	0.0	0.7	0.0	1.7
Prop In Lane	1.00		0.01	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	446	2179	1194	546	2274	1002	288	169	143	295	169	143
V/C Ratio(X)	0.41	0.24	0.24	0.01	0.39	0.13	0.03	0.00	0.01	0.08	0.00	0.49
Avail Cap(c_a), veh/h	1081	6303	3453	1328	6580	2899	1242	1584	1339	1267	1529	1296
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	7.5	3.3	3.3	3.9	3.7	3.1	17.3	0.0	17.1	17.4	0.0	17.9
Incr Delay (d2), s/veh	0.6	0.1	0.1	0.0	0.1	0.1	0.0	0.0	0.0	0.1	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.2	0.3	0.0	0.4	0.1	0.1	0.0	0.0	0.2	0.0	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.1	3.4	3.4	4.0	3.9	3.1	17.3	0.0	17.2	17.6	0.0	20.5
LnGrp LOS	A	A	A	A	A	A	B	A	B	B	A	C
Approach Vol, veh/h		977			1026			12			94	
Approach Delay, s/veh		4.3			3.8			17.3			19.7	
Approach LOS		A			A			B			B	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		9.5		31.8		9.5		31.8				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 34		75.2		33.2		75.2				
Max Q Clear Time (g_c+I1), s		2.3		17.4		3.7		7.0				
Green Ext Time (p_c), s		0.0		8.6		0.2		7.6				

Intersection Summary												
HCM 6th Ctrl Delay			4.8									
HCM 6th LOS			A									

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	61	10	0	39	5	2	0	0	0	0	2
Future Vol, veh/h	6	61	10	0	39	5	2	0	0	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	66	11	0	42	5	2	0	0	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	47	0	0	77	0	0	107	133	39	92	136	24
Stage 1	-	-	-	-	-	-	86	86	-	45	45	-
Stage 2	-	-	-	-	-	-	21	47	-	47	91	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1573	-	-	1535	-	-	867	761	1031	888	759	1053
Stage 1	-	-	-	-	-	-	918	827	-	969	861	-
Stage 2	-	-	-	-	-	-	1000	860	-	967	823	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1573	-	-	1535	-	-	863	758	1031	885	756	1053
Mov Cap-2 Maneuver	-	-	-	-	-	-	863	768	-	890	767	-
Stage 1	-	-	-	-	-	-	914	824	-	965	861	-
Stage 2	-	-	-	-	-	-	998	860	-	963	820	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	9.2	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	863	1573	-	-	1535	-	-	1053
HCM Lane V/C Ratio	0.003	0.004	-	-	-	-	-	0.002
HCM Control Delay (s)	9.2	7.3	-	-	0	-	-	8.4
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	33	18	4	32	8	3	0	11	0	0	9
Future Vol, veh/h	10	33	18	4	32	8	3	0	11	0	0	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	36	20	4	35	9	3	0	12	0	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	44	0	0	56	0	0	94	120	28	88	126	22
Stage 1	-	-	-	-	-	-	68	68	-	48	48	-
Stage 2	-	-	-	-	-	-	26	52	-	40	78	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1577	-	-	1562	-	-	885	774	1047	893	768	1056
Stage 1	-	-	-	-	-	-	940	842	-	965	859	-
Stage 2	-	-	-	-	-	-	994	856	-	976	834	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1577	-	-	1562	-	-	871	766	1047	876	760	1056
Mov Cap-2 Maneuver	-	-	-	-	-	-	874	773	-	882	769	-
Stage 1	-	-	-	-	-	-	933	836	-	958	856	-
Stage 2	-	-	-	-	-	-	982	853	-	958	828	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	0.7	8.6	8.4
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	1004	1577	-	-	1562	-	-	1056
HCM Lane V/C Ratio	0.015	0.007	-	-	0.003	-	-	0.009
HCM Control Delay (s)	8.6	7.3	-	-	7.3	-	-	8.4
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	2	0	452	521	8
Future Vol, veh/h	0	2	0	452	521	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	0	491	566	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	288	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	609	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	609	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	609	-	-
HCM Lane V/C Ratio	-	0.004	-	-
HCM Control Delay (s)	-	10.9	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	452	520	4
Future Vol, veh/h	0	7	0	452	520	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	8	0	491	565	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	285	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	612	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	612	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	612	-	-
HCM Lane V/C Ratio	-	0.012	-	-
HCM Control Delay (s)	-	11	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	451	6	0	526
Future Vol, veh/h	0	2	451	6	0	526
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	490	7	0	572

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	249	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	644	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	644	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	644	-
HCM Lane V/C Ratio	-	-	0.003	-
HCM Control Delay (s)	-	-	10.6	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	28	11	1	8	90	30	361	25	163	358	6
Future Vol, veh/h	6	28	11	1	8	90	30	361	25	163	358	6
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	6	29	12	1	8	95	32	380	26	172	377	6
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	10.3	10.7	12.5	12.1
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	83%	0%	100%	46%	0%	100%	3%	0%	100%
Vol Right, %	0%	0%	17%	0%	0%	54%	0%	0%	97%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	241	145	6	19	20	1	5	93	163	239
LT Vol	30	0	0	6	0	0	1	0	0	163	0
Through Vol	0	241	120	0	19	9	0	5	3	0	239
RT Vol	0	0	25	0	0	11	0	0	90	0	0
Lane Flow Rate	32	253	153	6	20	21	1	6	98	172	251
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.059	0.437	0.259	0.014	0.04	0.041	0.002	0.011	0.177	0.31	0.419
Departure Headway (Hd)	6.709	6.209	6.089	7.852	7.352	6.974	7.715	7.215	6.535	6.511	6.011
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	534	580	589	455	486	512	463	495	547	552	598
Service Time	4.45	3.95	3.83	5.614	5.114	4.735	5.471	4.971	4.291	4.251	3.751
HCM Lane V/C Ratio	0.06	0.436	0.26	0.013	0.041	0.041	0.002	0.012	0.179	0.312	0.42
HCM Control Delay	9.9	13.7	11	10.7	10.4	10	10.5	10.1	10.7	12.2	13
HCM Lane LOS	A	B	B	B	B	A	B	B	B	B	B
HCM 95th-tile Q	0.2	2.2	1	0	0.1	0.1	0	0	0.6	1.3	2.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	8	0	416	354	16
Future Vol, veh/h	0	8	0	416	354	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	9	0	452	385	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	201	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	813	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	813	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	813	-	-
HCM Lane V/C Ratio	-	0.011	-	-
HCM Control Delay (s)	-	9.5	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	23	15	400	46	4	358
Future Vol, veh/h	23	15	400	46	4	358
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	16	435	50	4	389

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	663	243	0	0	485	0
Stage 1	460	-	-	-	-	-
Stage 2	203	-	-	-	-	-
Critical Hdwy	6.25	7.1	-	-	5.3	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.65	3.9	-	-	3.1	-
Pot Cap-1 Maneuver	428	650	-	-	696	-
Stage 1	531	-	-	-	-	-
Stage 2	787	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	425	650	-	-	696	-
Mov Cap-2 Maneuver	425	-	-	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	782	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	492	696	-
HCM Lane V/C Ratio	-	-	0.084	0.006	-
HCM Control Delay (s)	-	-	13	10.2	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	444	10	0	380
Future Vol, veh/h	0	2	444	10	0	380
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	483	11	0	413

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	247	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	646	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	646	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.6	0	0
HCM LOS	B		

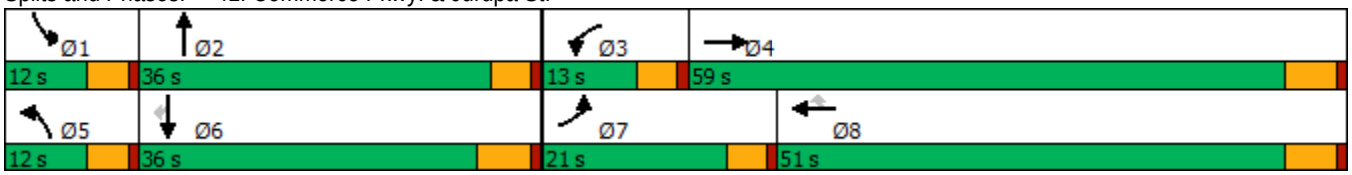
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	646	-
HCM Lane V/C Ratio	-	-	0.003	-
HCM Control Delay (s)	-	-	10.6	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

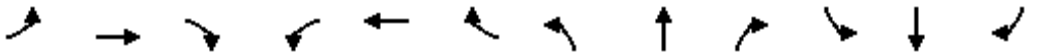
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	109	613	22	841	358	14	5	267	11	67
Future Volume (vph)	109	613	22	841	358	14	5	267	11	67
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	21.0	59.0	13.0	51.0	51.0	12.0	36.0	12.0	36.0	36.0
Total Split (%)	17.5%	49.2%	10.8%	42.5%	42.5%	10.0%	30.0%	10.0%	30.0%	30.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 74.7
Natural Cycle: 85
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	613	14	22	841	358	14	5	41	267	11	67
Future Volume (veh/h)	109	613	14	22	841	358	14	5	41	267	11	67
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	118	666	14	24	914	0	15	5	34	290	12	66
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	150	2143	45	46	1261		31	29	197	351	439	372
Arrive On Green	0.09	0.41	0.41	0.03	0.35	0.00	0.02	0.14	0.14	0.11	0.23	0.23
Sat Flow, veh/h	1714	5229	110	1714	3610	1610	1714	211	1432	3141	1900	1610
Grp Volume(v), veh/h	118	440	240	24	914	0	15	0	39	290	12	66
Grp Sat Flow(s),veh/h/ln	1714	1729	1880	1714	1805	1610	1714	0	1642	1570	1900	1610
Q Serve(g_s), s	4.5	5.7	5.7	0.9	14.6	0.0	0.6	0.0	1.4	6.0	0.3	2.2
Cycle Q Clear(g_c), s	4.5	5.7	5.7	0.9	14.6	0.0	0.6	0.0	1.4	6.0	0.3	2.2
Prop In Lane	1.00		0.06	1.00		1.00	1.00		0.87	1.00		1.00
Lane Grp Cap(c), veh/h	150	1418	771	46	1261		31	0	226	351	439	372
V/C Ratio(X)	0.79	0.31	0.31	0.52	0.72		0.48	0.00	0.17	0.83	0.03	0.18
Avail Cap(c_a), veh/h	424	2776	1509	217	2462		191	0	778	351	866	734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	13.2	13.2	31.8	18.8	0.0	32.2	0.0	25.2	28.8	19.7	20.4
Incr Delay (d2), s/veh	3.4	0.1	0.2	3.3	0.8	0.0	4.2	0.0	0.4	14.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.9	2.1	0.4	5.3	0.0	0.3	0.0	0.6	2.7	0.1	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	13.3	13.5	35.2	19.6	0.0	36.4	0.0	25.6	43.0	19.7	20.7
LnGrp LOS	C	B	B	D	B		D	A	C	D	B	C
Approach Vol, veh/h		798			938	A		54			368	
Approach Delay, s/veh		16.3			20.0			28.6			38.2	
Approach LOS		B			B			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	14.9	6.4	33.0	5.8	21.1	10.4	28.9
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	7.4	* 31	8.4	53.2	7.4	30.2	16.4	45.2
Max Q Clear Time (g_c+I1), s	8.0	3.4	2.9	7.7	2.6	4.2	6.5	16.6
Green Ext Time (p_c), s	0.0	0.2	0.0	4.4	0.0	0.2	0.1	6.5

Intersection Summary	
HCM 6th Ctrl Delay	21.9
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	190	19	3	95	2	3	0	2	1	0	1
Future Vol, veh/h	6	190	19	3	95	2	3	0	2	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	207	21	3	103	2	3	0	2	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	105	0	0	228	0	0	290	343	114	228	352	53
Stage 1	-	-	-	-	-	-	232	232	-	110	110	-
Stage 2	-	-	-	-	-	-	58	111	-	118	242	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1499	-	-	1352	-	-	645	583	923	713	576	1010
Stage 1	-	-	-	-	-	-	756	716	-	889	808	-
Stage 2	-	-	-	-	-	-	953	807	-	880	709	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1499	-	-	1352	-	-	641	579	923	707	572	1010
Mov Cap-2 Maneuver	-	-	-	-	-	-	641	579	-	707	572	-
Stage 1	-	-	-	-	-	-	752	712	-	885	806	-
Stage 2	-	-	-	-	-	-	950	805	-	874	705	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	10	9.3
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	730	1499	-	-	1352	-	-	832
HCM Lane V/C Ratio	0.007	0.004	-	-	0.002	-	-	0.003
HCM Control Delay (s)	10	7.4	-	-	7.7	-	-	9.3
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	180	5	11	96	1	1	0	3	2	0	3
Future Vol, veh/h	7	180	5	11	96	1	1	0	3	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	8	196	5	12	104	1	1	0	3	2	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	105	0	0	201	0	0	291	344	101	243	346	53
Stage 1	-	-	-	-	-	-	215	215	-	129	129	-
Stage 2	-	-	-	-	-	-	76	129	-	114	217	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1499	-	-	1383	-	-	644	582	941	696	580	1010
Stage 1	-	-	-	-	-	-	773	729	-	867	793	-
Stage 2	-	-	-	-	-	-	930	793	-	884	727	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1499	-	-	1383	-	-	635	574	941	686	572	1010
Mov Cap-2 Maneuver	-	-	-	-	-	-	635	574	-	686	572	-
Stage 1	-	-	-	-	-	-	769	725	-	863	786	-
Stage 2	-	-	-	-	-	-	919	786	-	876	723	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.3	0.8	9.3	9.3
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	840	1499	-	-	1383	-	-	850
HCM Lane V/C Ratio	0.005	0.005	-	-	0.009	-	-	0.006
HCM Control Delay (s)	9.3	7.4	-	-	7.6	-	-	9.3
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	1	2	57	46	1
Future Vol, veh/h	2	1	2	57	46	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	1	2	62	50	1

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	86	26	51	0	-	0
Stage 1	51	-	-	-	-	-
Stage 2	35	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	911	1050	1568	-	-	-
Stage 1	971	-	-	-	-	-
Stage 2	989	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	910	1050	1568	-	-	-
Mov Cap-2 Maneuver	907	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	989	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.2	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1568	-	950	-	-
HCM Lane V/C Ratio	0.001	-	0.003	-	-
HCM Control Delay (s)	7.3	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Intersection Delay, s/veh	7.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	69	75	8	61	10	13	9	2	9	5	33
Future Vol, veh/h	40	69	75	8	61	10	13	9	2	9	5	33
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	43	73	80	9	65	11	14	10	2	10	5	35
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	7.9	8	8.3	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	60%	0%	100%	23%	0%	100%	67%	0%	100%
Vol Right, %	0%	0%	40%	0%	0%	77%	0%	0%	33%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	13	6	5	40	46	98	8	41	30	9	3
LT Vol	13	0	0	40	0	0	8	0	0	9	0
Through Vol	0	6	3	0	46	23	0	41	20	0	3
RT Vol	0	0	2	0	0	75	0	0	10	0	0
Lane Flow Rate	14	6	5	43	49	104	9	43	32	10	4
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.022	0.009	0.007	0.063	0.066	0.126	0.013	0.061	0.043	0.015	0.005
Departure Headway (Hd)	5.785	5.285	5.005	5.369	4.869	4.334	5.557	5.057	4.826	5.746	5.246
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	620	679	717	670	738	830	646	710	744	625	684
Service Time	3.504	3.004	2.724	3.08	2.58	2.044	3.271	2.771	2.54	3.463	2.963
HCM Lane V/C Ratio	0.023	0.009	0.007	0.064	0.066	0.125	0.014	0.061	0.043	0.016	0.006
HCM Control Delay	8.6	8.1	7.8	8.4	7.9	7.7	8.3	8.1	7.8	8.6	8
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0	0	0.2	0.2	0.4	0	0.2	0.1	0	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	32	17	4	47	0	3
Future Vol, veh/h	32	17	4	47	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	35	18	4	51	0	3

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	53	0	78	27
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	34	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1566	-	922	1049
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	990	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1566	-	919	1049
Mov Cap-2 Maneuver	-	-	-	-	913	-
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	987	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1049	-	-	1566	-
HCM Lane V/C Ratio	0.003	-	-	0.003	-
HCM Control Delay (s)	8.4	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Intersection Delay, s/veh	8.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	43	13	15	51	14	33	68	8	3	38	16
Future Vol, veh/h	14	43	13	15	51	14	33	68	8	3	38	16
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	47	14	16	56	15	36	75	9	3	42	18
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8	8.1	8.2	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	74%	0%	100%	52%	0%	100%	55%	0%	100%
Vol Right, %	0%	0%	26%	0%	0%	48%	0%	0%	45%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	33	45	31	14	29	27	15	34	31	3	25
LT Vol	33	0	0	14	0	0	15	0	0	3	0
Through Vol	0	45	23	0	29	14	0	34	17	0	25
RT Vol	0	0	8	0	0	13	0	0	14	0	0
Lane Flow Rate	36	50	34	15	32	30	16	37	34	3	28
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.056	0.07	0.046	0.024	0.045	0.04	0.026	0.053	0.046	0.005	0.04
Departure Headway (Hd)	5.558	5.058	4.875	5.654	5.154	4.821	5.631	5.131	4.815	5.672	5.172
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	645	709	735	634	695	743	636	698	744	632	693
Service Time	3.282	2.782	2.599	3.381	2.881	2.548	3.359	2.859	2.543	3.4	2.9
HCM Lane V/C Ratio	0.056	0.071	0.046	0.024	0.046	0.04	0.025	0.053	0.046	0.005	0.04
HCM Control Delay	8.6	8.2	7.8	8.5	8.1	7.7	8.5	8.1	7.8	8.4	8.1
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	32	47	115	22	4
Future Vol, veh/h	1	32	47	115	22	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	38	56	137	26	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	210	16	31	0	-	0
Stage 1	29	-	-	-	-	-
Stage 2	181	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	765	1066	1595	-	-	-
Stage 1	996	-	-	-	-	-
Stage 2	838	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	738	1066	1595	-	-	-
Mov Cap-2 Maneuver	784	-	-	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	838	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.5	2.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1595	-	784	1066	-	-
HCM Lane V/C Ratio	0.035	-	0.002	0.036	-	-
HCM Control Delay (s)	7.3	-	9.6	8.5	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.1	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	3	2	196	43	8
Future Vol, veh/h	2	3	2	196	43	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	3	2	213	47	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	163	28	56	0	-	0
Stage 1	52	-	-	-	-	-
Stage 2	111	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	817	1047	1562	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	907	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	816	1047	1562	-	-	-
Mov Cap-2 Maneuver	845	-	-	-	-	-
Stage 1	969	-	-	-	-	-
Stage 2	907	-	-	-	-	-

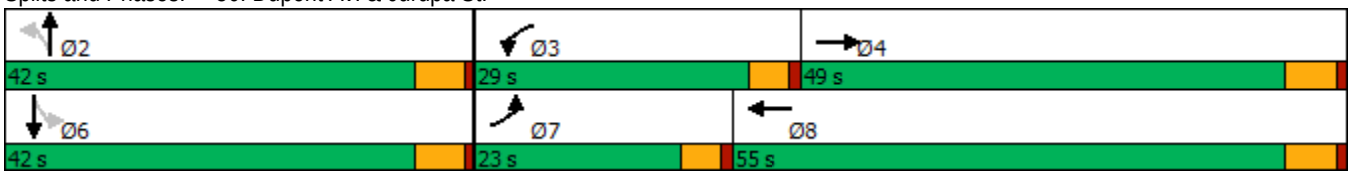
Approach	EB	NB	SB
HCM Control Delay, s	8.8	0.1	0
HCM LOS	A		

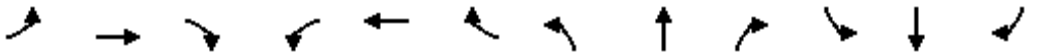
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1562	-	956	-	-
HCM Lane V/C Ratio	0.001	-	0.006	-	-
HCM Control Delay (s)	7.3	-	8.8	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	75	761	100	1074	24	33	18	6
Future Volume (vph)	75	761	100	1074	24	33	18	6
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	23.0	49.0	29.0	55.0	42.0	42.0	42.0	42.0
Total Split (%)	19.2%	40.8%	24.2%	45.8%	35.0%	35.0%	35.0%	35.0%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 55
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	761	20	100	1074	90	24	33	90	18	6	21
Future Volume (veh/h)	75	761	20	100	1074	90	24	33	90	18	6	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	77	777	19	102	1096	91	24	34	68	18	6	15
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	116	2061	50	134	1985	165	396	340	304	344	340	304
Arrive On Green	0.07	0.40	0.40	0.08	0.41	0.41	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1714	5208	127	1714	4880	405	1339	1805	1610	1244	1805	1610
Grp Volume(v), veh/h	77	515	281	102	776	411	24	34	68	18	6	15
Grp Sat Flow(s),veh/h/ln	1714	1729	1877	1714	1729	1827	1339	1805	1610	1244	1805	1610
Q Serve(g_s), s	2.1	5.0	5.0	2.7	8.0	8.1	0.7	0.7	1.7	0.6	0.1	0.4
Cycle Q Clear(g_c), s	2.1	5.0	5.0	2.7	8.0	8.1	1.1	0.7	1.7	2.3	0.1	0.4
Prop In Lane	1.00		0.07	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	116	1369	743	134	1406	743	396	340	304	344	340	304
V/C Ratio(X)	0.67	0.38	0.38	0.76	0.55	0.55	0.06	0.10	0.22	0.05	0.02	0.05
Avail Cap(c_a), veh/h	673	3188	1731	893	3631	1919	1189	1410	1258	1081	1410	1258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	10.0	10.1	21.2	10.6	10.6	16.0	15.7	16.1	17.1	15.5	15.6
Incr Delay (d2), s/veh	2.4	0.2	0.3	3.3	0.3	0.6	0.1	0.1	0.4	0.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.3	1.5	1.0	2.1	2.3	0.2	0.3	0.5	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.8	10.2	10.4	24.4	11.0	11.3	16.1	15.8	16.5	17.1	15.5	15.6
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		873			1289			126			39	
Approach Delay, s/veh		11.5			12.1			16.2			16.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.2	8.3	24.3		14.2	7.8	24.9				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		36.6	24.4	43.2		36.6	18.4	49.2				
Max Q Clear Time (g_c+I1), s		3.7	4.7	7.0		4.3	4.1	10.1				
Green Ext Time (p_c), s		0.6	0.1	5.2		0.1	0.1	9.0				

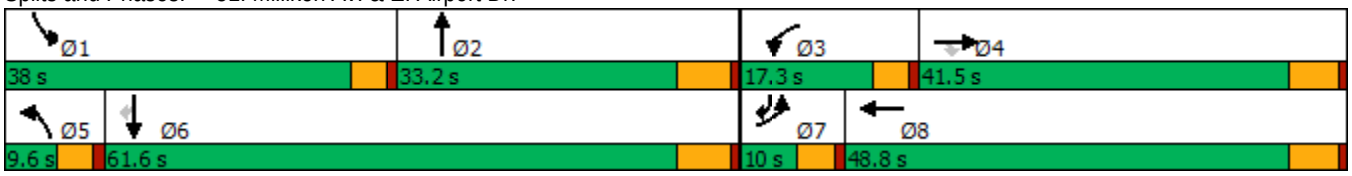
Intersection Summary												
HCM 6th Ctrl Delay			12.2									
HCM 6th LOS			B									

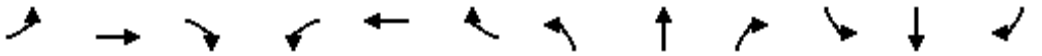
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	88	125	37	105	172	27	693	365	1272	210
Future Volume (vph)	88	125	37	105	172	27	693	365	1272	210
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	10.0	41.5	41.5	17.3	48.8	9.6	33.2	38.0	61.6	10.0
Total Split (%)	7.7%	31.9%	31.9%	13.3%	37.5%	7.4%	25.5%	29.2%	47.4%	7.7%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 102.6
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	125	37	105	172	223	27	693	77	365	1272	210
Future Volume (veh/h)	88	125	37	105	172	223	27	693	77	365	1272	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1800	1900	1900	1700	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	102	145	30	122	200	158	31	806	74	424	1479	195
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	179	474	211	153	321	241	99	1141	104	465	2469	857
Arrive On Green	0.06	0.13	0.13	0.09	0.16	0.16	0.03	0.24	0.24	0.27	0.48	0.48
Sat Flow, veh/h	3141	3610	1610	1714	1965	1472	3141	4836	442	1714	5187	1608
Grp Volume(v), veh/h	102	145	30	122	183	175	31	575	305	424	1479	195
Grp Sat Flow(s),veh/h/ln	1570	1805	1610	1714	1805	1632	1570	1729	1820	1714	1729	1608
Q Serve(g_s), s	2.5	2.8	1.3	5.4	7.3	7.8	0.8	11.9	12.0	18.7	16.3	5.0
Cycle Q Clear(g_c), s	2.5	2.8	1.3	5.4	7.3	7.8	0.8	11.9	12.0	18.7	16.3	5.0
Prop In Lane	1.00		1.00	1.00		0.90	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	179	474	211	153	295	267	99	816	429	465	2469	857
V/C Ratio(X)	0.57	0.31	0.14	0.80	0.62	0.66	0.31	0.71	0.71	0.91	0.60	0.23
Avail Cap(c_a), veh/h	218	1654	738	279	996	901	202	1198	631	735	3688	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.8	30.6	30.0	34.8	30.3	30.5	36.9	27.3	27.3	27.5	15.0	9.7
Incr Delay (d2), s/veh	1.1	0.4	0.3	3.6	2.1	2.7	0.7	1.1	2.2	7.4	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	1.2	0.5	2.3	3.1	3.1	0.3	4.5	4.9	7.7	5.3	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	31.0	30.3	38.3	32.5	33.3	37.6	28.4	29.5	34.9	15.2	9.8
LnGrp LOS	D	C	C	D	C	C	D	C	C	C	B	A
Approach Vol, veh/h		277			480			911			2098	
Approach Delay, s/veh		33.1			34.3			29.1			18.7	
Approach LOS		C			C			C			B	

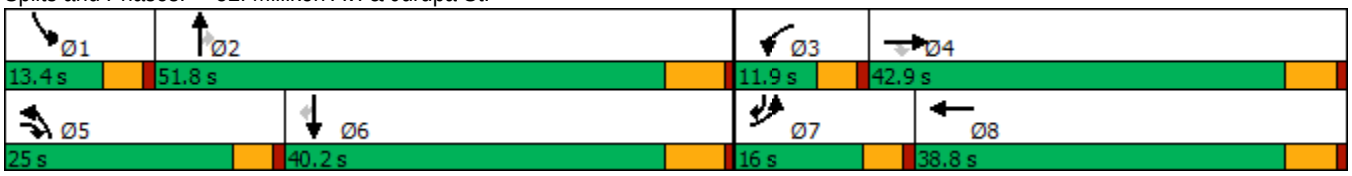
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.8	24.6	11.6	16.0	7.0	43.3	9.1	18.5
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	33.4	27.0	12.7	35.7	5.0	55.4	5.4	43.0
Max Q Clear Time (g_c+I1), s	20.7	14.0	7.4	4.8	2.8	18.3	4.5	9.8
Green Ext Time (p_c), s	0.5	4.2	0.1	0.9	0.0	13.8	0.0	2.0

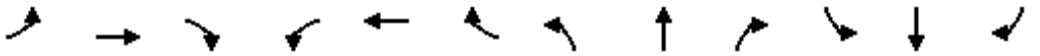
Intersection Summary	
HCM 6th Ctrl Delay	24.2
HCM 6th LOS	C

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	225	926	392	294	781	505	862	194	268	801	70
Future Volume (vph)	225	926	392	294	781	505	862	194	268	801	70
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	16.0	42.9	25.0	11.9	38.8	25.0	51.8	51.8	13.4	40.2	16.0
Total Split (%)	13.3%	35.8%	20.8%	9.9%	32.3%	20.8%	43.2%	43.2%	11.2%	33.5%	13.3%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 100.6
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	926	392	294	781	106	505	862	194	268	801	70
Future Volume (veh/h)	225	926	392	294	781	106	505	862	194	268	801	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	232	955	299	303	805	84	521	889	182	276	826	36
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	300	1392	736	256	1214	126	593	1636	508	308	1167	516
Arrive On Green	0.10	0.27	0.27	0.08	0.25	0.25	0.19	0.32	0.32	0.10	0.22	0.22
Sat Flow, veh/h	3141	5187	1610	3141	4773	495	3141	5187	1610	3141	5187	1610
Grp Volume(v), veh/h	232	955	299	303	582	307	521	889	182	276	826	36
Grp Sat Flow(s),veh/h/ln	1570	1729	1610	1570	1729	1811	1570	1729	1610	1570	1729	1610
Q Serve(g_s), s	6.5	14.8	11.1	7.3	13.5	13.6	14.5	12.7	7.8	7.8	13.2	1.4
Cycle Q Clear(g_c), s	6.5	14.8	11.1	7.3	13.5	13.6	14.5	12.7	7.8	7.8	13.2	1.4
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	300	1392	736	256	879	461	593	1636	508	308	1167	516
V/C Ratio(X)	0.77	0.69	0.41	1.18	0.66	0.67	0.88	0.54	0.36	0.89	0.71	0.07
Avail Cap(c_a), veh/h	400	2147	970	256	1273	667	715	2639	819	308	1968	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	29.4	16.2	41.2	30.0	30.0	35.4	25.3	23.7	40.0	32.0	21.2
Incr Delay (d2), s/veh	4.5	0.6	0.4	115.4	0.9	1.7	9.4	0.3	0.4	25.9	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	5.8	3.7	6.8	5.4	5.8	5.9	4.8	2.8	3.9	5.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.1	30.0	16.6	156.6	30.8	31.7	44.8	25.6	24.1	65.9	32.8	21.2
LnGrp LOS	D	C	B	F	C	C	D	C	C	E	C	C
Approach Vol, veh/h		1486			1192			1592			1138	
Approach Delay, s/veh		29.5			63.0			31.7			40.5	
Approach LOS		C			E			C			D	

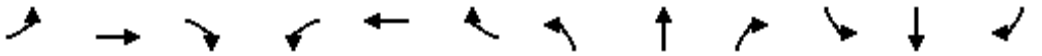
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	34.5	11.9	29.9	21.5	26.4	13.2	28.6
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	8.8	45.6	7.3	37.1	20.4	34.0	11.4	33.0
Max Q Clear Time (g_c+I1), s	9.8	14.7	9.3	16.8	16.5	15.2	8.5	15.6
Green Ext Time (p_c), s	0.0	6.9	0.0	7.3	0.5	5.0	0.1	5.0

Intersection Summary	
HCM 6th Ctrl Delay	39.8
HCM 6th LOS	D

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	461	29	49	39	257	630	1399	444	888	509
Future Volume (vph)	461	29	49	39	257	630	1399	444	888	509
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	21.0	33.0	12.0	24.0	24.0	27.0	59.0	16.0	48.0	48.0
Total Split (%)	17.5%	27.5%	10.0%	20.0%	20.0%	22.5%	49.2%	13.3%	40.0%	40.0%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 105.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	461	29	269	49	39	257	630	1399	77	444	888	509
Future Volume (veh/h)	461	29	269	49	39	257	630	1399	77	444	888	509
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1800	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	512	32	290	54	0	248	700	1554	85	493	987	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	516	37	331	68	0	323	704	2024	111	358	1514	
Arrive On Green	0.16	0.22	0.22	0.04	0.00	0.10	0.22	0.40	0.40	0.11	0.29	0.00
Sat Flow, veh/h	3141	162	1472	1714	0	3220	3141	5033	275	3141	5187	1610
Grp Volume(v), veh/h	512	0	322	54	0	248	700	1068	571	493	987	0
Grp Sat Flow(s),veh/h/ln	1570	0	1635	1714	0	1610	1570	1729	1850	1570	1729	1610
Q Serve(g_s), s	16.3	0.0	19.0	3.1	0.0	7.5	22.2	26.7	26.7	11.4	16.6	0.0
Cycle Q Clear(g_c), s	16.3	0.0	19.0	3.1	0.0	7.5	22.2	26.7	26.7	11.4	16.6	0.0
Prop In Lane	1.00		0.90	1.00		1.00	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	516	0	367	68	0	323	704	1390	744	358	1514	
V/C Ratio(X)	0.99	0.00	0.88	0.79	0.00	0.77	0.99	0.77	0.77	1.38	0.65	
Avail Cap(c_a), veh/h	516	0	434	127	0	564	704	1828	978	358	2170	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	0.0	37.4	47.5	0.0	43.8	38.7	25.8	25.8	44.2	30.9	0.0
Incr Delay (d2), s/veh	37.7	0.0	16.1	7.4	0.0	3.8	32.3	1.5	2.7	185.7	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	8.7	1.4	0.0	3.0	11.1	10.2	11.2	13.4	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	79.4	0.0	53.5	54.9	0.0	47.6	71.0	27.3	28.6	229.9	31.4	0.0
LnGrp LOS	E	A	D	D	A	D	E	C	C	F	C	
Approach Vol, veh/h		834			302			2339			1480	A
Approach Delay, s/veh		69.4			48.9			40.7			97.5	
Approach LOS		E			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	46.4	8.6	28.9	27.0	35.4	21.0	16.5
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	11.4	52.8	7.4	26.5	22.4	41.8	16.4	17.5
Max Q Clear Time (g_c+I1), s	13.4	28.7	5.1	21.0	24.2	18.6	18.3	9.5
Green Ext Time (p_c), s	0.0	11.5	0.0	0.8	0.0	6.4	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	63.0
HCM 6th LOS	E

Notes

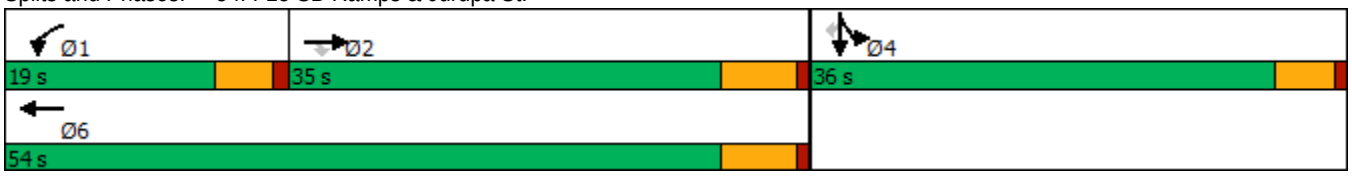
User approved volume balancing among the lanes for turning movement.

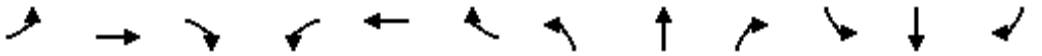
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	854	364	474	786	540	4	1179
Future Volume (vph)	854	364	474	786	540	4	1179
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	35.0	35.0	19.0	54.0	36.0	36.0	36.0
Total Split (%)	38.9%	38.9%	21.1%	60.0%	40.0%	40.0%	40.0%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 86.1
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	854	364	474	786	0	0	0	0	540	4	1179
Future Volume (veh/h)	0	854	364	474	786	0	0	0	0	540	4	1179
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1700	1900	0				1800	1900	1900
Adj Flow Rate, veh/h	0	978	322	521	864	0				397	0	1324
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91				0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	1513	427	530	2564	0				640	0	1202
Arrive On Green	0.00	0.27	0.27	0.17	0.49	0.00				0.37	0.00	0.37
Sat Flow, veh/h	0	5700	1610	3141	5358	0				1714	0	3220
Grp Volume(v), veh/h	0	978	322	521	864	0				397	0	1324
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1570	1729	0				1714	0	1610
Q Serve(g_s), s	0.0	12.6	15.2	13.7	8.4	0.0				15.7	0.0	31.0
Cycle Q Clear(g_c), s	0.0	12.6	15.2	13.7	8.4	0.0				15.7	0.0	31.0
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1513	427	530	2564	0				640	0	1202
V/C Ratio(X)	0.00	0.65	0.75	0.98	0.34	0.00				0.62	0.00	1.10
Avail Cap(c_a), veh/h	0	1990	562	530	2998	0				640	0	1202
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.0	28.0	34.4	12.7	0.0				21.2	0.0	26.0
Incr Delay (d2), s/veh	0.0	0.3	3.5	34.8	0.1	0.0				1.8	0.0	58.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.3	5.8	7.4	2.8	0.0				6.0	0.0	20.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	27.4	31.5	69.2	12.8	0.0				23.1	0.0	84.4
LnGrp LOS	A	C	C	E	B	A				C	A	F
Approach Vol, veh/h		1300			1385						1721	
Approach Delay, s/veh		28.4			34.0						70.2	
Approach LOS		C			C						E	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	19.0	28.0		36.0		47.0
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0
Max Green Setting (Gmax), s	14.0	29.0		31.0		48.0
Max Q Clear Time (g_c+I1), s	15.7	17.2		33.0		10.4
Green Ext Time (p_c), s	0.0	4.8		0.0		5.0

Intersection Summary	
HCM 6th Ctrl Delay	46.5
HCM 6th LOS	D

Notes

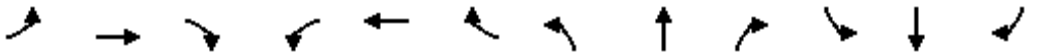
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	485	908	843	386	417	0	575
Future Volume (vph)	485	908	843	386	417	0	575
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	23.0	57.0	34.0	34.0	33.0	33.0	33.0
Total Split (%)	25.6%	63.3%	37.8%	37.8%	36.7%	36.7%	36.7%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 75.5
Natural Cycle: 55
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	485	908	0	0	843	386	417	0	575	0	0	0
Future Volume (veh/h)	485	908	0	0	843	386	417	0	575	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1900	0	0	1900	1900	1800	1900	1900			
Adj Flow Rate, veh/h	516	966	0	0	897	329	583	0	297			
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	632	2999	0	0	1556	483	861	0	404			
Arrive On Green	0.20	0.58	0.00	0.00	0.30	0.30	0.25	0.00	0.25			
Sat Flow, veh/h	3141	5358	0	0	5358	1610	3429	0	1610			
Grp Volume(v), veh/h	516	966	0	0	897	329	583	0	297			
Grp Sat Flow(s),veh/h/ln	1570	1729	0	0	1729	1610	1714	0	1610			
Q Serve(g_s), s	9.4	5.8	0.0	0.0	8.7	10.7	9.2	0.0	10.1			
Cycle Q Clear(g_c), s	9.4	5.8	0.0	0.0	8.7	10.7	9.2	0.0	10.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	632	2999	0	0	1556	483	861	0	404			
V/C Ratio(X)	0.82	0.32	0.00	0.00	0.58	0.68	0.68	0.00	0.73			
Avail Cap(c_a), veh/h	967	4505	0	0	2509	779	1601	0	752			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	22.8	6.5	0.0	0.0	17.7	18.4	20.2	0.0	20.5			
Incr Delay (d2), s/veh	1.8	0.0	0.0	0.0	0.3	1.3	0.9	0.0	2.6			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.1	1.4	0.0	0.0	2.9	3.5	3.2	0.0	3.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.6	6.6	0.0	0.0	18.0	19.7	21.1	0.0	23.2			
LnGrp LOS	C	A	A	A	B	B	C	A	C			
Approach Vol, veh/h		1482			1226			880				
Approach Delay, s/veh		12.8			18.4			21.8				
Approach LOS		B			B			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		39.7			16.6	23.0		20.1				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		51.9			18.4	28.9		27.9				
Max Q Clear Time (g_c+I1), s		7.8			11.4	12.7		12.1				
Green Ext Time (p_c), s		5.9			0.6	5.2		2.9				
Intersection Summary												
HCM 6th Ctrl Delay			16.9									
HCM 6th LOS			B									

Notes

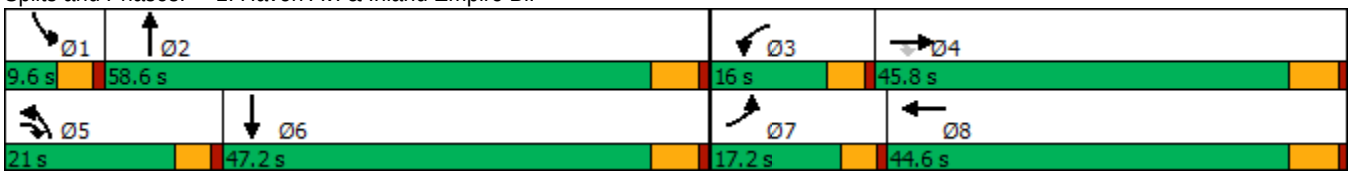
User approved volume balancing among the lanes for turning movement.

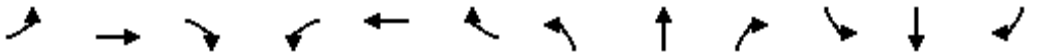
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	223	414	415	371	249	43	436	2447	581	44	1972	72
Future Volume (vph)	223	414	415	371	249	43	436	2447	581	44	1972	72
Turn Type	Prot	NA	pm+ov	Prot	NA	Free	Prot	NA	Free	Prot	NA	Free
Protected Phases	7	4	5	3	8		5	2		1	6	
Permitted Phases			4			Free			Free			Free
Detector Phase	7	4	5	3	8		5	2		1	6	
Switch Phase												
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0		5.0	10.0		5.0	10.0	
Minimum Split (s)	9.6	45.8	9.6	9.6	39.8		9.6	32.8		9.6	38.8	
Total Split (s)	17.2	45.8	21.0	16.0	44.6		21.0	58.6		9.6	47.2	
Total Split (%)	13.2%	35.2%	16.2%	12.3%	34.3%		16.2%	45.1%		7.4%	36.3%	
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8		3.6	4.8		3.6	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8		4.6	5.8		4.6	5.8	
Lead/Lag	Lead	Lag	Lead	Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None	None	None	None		None	None		None	None	

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 111.5
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 1: Haven Av. & Inland Empire Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	414	415	371	249	43	436	2447	581	44	1972	72
Future Volume (veh/h)	223	414	415	371	249	43	436	2447	581	44	1972	72
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	232	431	258	386	259	0	454	2549	0	46	2054	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	289	645	534	466	681		481	3205		109	2432	
Arrive On Green	0.09	0.18	0.18	0.10	0.19	0.00	0.15	0.49	0.00	0.03	0.37	0.00
Sat Flow, veh/h	3141	3610	1610	4566	3610	1610	3141	6536	1610	3141	6536	1610
Grp Volume(v), veh/h	232	431	258	386	259	0	454	2549	0	46	2054	0
Grp Sat Flow(s),veh/h/ln	1570	1805	1610	1522	1805	1610	1570	1634	1610	1570	1634	1610
Q Serve(g_s), s	7.8	11.9	13.7	8.9	6.7	0.0	15.3	34.9	0.0	1.5	30.8	0.0
Cycle Q Clear(g_c), s	7.8	11.9	13.7	8.9	6.7	0.0	15.3	34.9	0.0	1.5	30.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	289	645	534	466	681		481	3205		109	2432	
V/C Ratio(X)	0.80	0.67	0.48	0.83	0.38		0.94	0.80		0.42	0.84	
Avail Cap(c_a), veh/h	369	1347	847	486	1307		481	3220		147	2525	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	47.7	41.1	28.5	47.2	38.0	0.0	44.9	22.8	0.0	50.7	30.8	0.0
Incr Delay (d2), s/veh	7.4	1.2	0.7	10.2	0.3	0.0	27.3	1.4	0.0	1.0	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	5.2	5.1	3.7	2.9	0.0	7.6	12.5	0.0	0.6	11.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.1	42.3	29.2	57.4	38.4	0.0	72.3	24.3	0.0	51.6	33.5	0.0
LnGrp LOS	E	D	C	E	D		E	C		D	C	
Approach Vol, veh/h		921			645	A		3003	A		2100	A
Approach Delay, s/veh		41.8			49.8			31.5			33.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	58.4	15.5	24.9	21.0	45.7	14.5	26.0
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	5.0	52.8	11.4	40.0	16.4	41.4	12.6	38.8
Max Q Clear Time (g_c+I1), s	3.5	36.9	10.9	15.7	17.3	32.8	9.8	8.7
Green Ext Time (p_c), s	0.0	13.8	0.1	3.5	0.0	7.0	0.1	1.5

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

Unsignalized Delay for [NBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	WBL	WBR	NBT	NBR	SBT
Lane Configurations					
Traffic Volume (vph)	295	392	3072	1055	1999
Future Volume (vph)	295	392	3072	1055	1999
Turn Type	Prot	Perm	NA	Free	NA
Protected Phases	4		2		6
Permitted Phases		4		Free	
Detector Phase	4	4	2		6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0		5.0
Minimum Split (s)	10.1	10.1	23.8		10.8
Total Split (s)	33.0	33.0	67.0		67.0
Total Split (%)	33.0%	33.0%	67.0%		67.0%
Yellow Time (s)	4.1	4.1	4.8		4.8
All-Red Time (s)	1.0	1.0	1.0		1.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0
Total Lost Time (s)	5.1	5.1	5.8		5.8
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min		C-Min

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 55
Control Type: Actuated-Coordinated

Splits and Phases: 2: Haven Av. & I-10 WB Ramps

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	295	392	3072	1055	0	1999
Future Volume (veh/h)	295	392	3072	1055	0	1999
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1800	1900	1900	1900	0	1900
Adj Flow Rate, veh/h	407	207	3135	0	0	2040
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	529	249	4814		0	4814
Arrive On Green	0.15	0.15	1.00	0.00	0.00	0.74
Sat Flow, veh/h	3429	1610	6802	1610	0	7068
Grp Volume(v), veh/h	407	207	3135	0	0	2040
Grp Sat Flow(s),veh/h/ln	1714	1610	1634	1610	0	1634
Q Serve(g_s), s	11.4	12.5	0.0	0.0	0.0	12.0
Cycle Q Clear(g_c), s	11.4	12.5	0.0	0.0	0.0	12.0
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	529	249	4814		0	4814
V/C Ratio(X)	0.77	0.83	0.65		0.00	0.42
Avail Cap(c_a), veh/h	957	449	4814		0	4814
HCM Platoon Ratio	1.00	1.00	2.00	2.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.26	0.00	0.00	0.48
Uniform Delay (d), s/veh	40.6	41.0	0.0	0.0	0.0	5.0
Incr Delay (d2), s/veh	0.9	2.8	0.2	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	4.9	0.1	0.0	0.0	2.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	41.5	43.8	0.2	0.0	0.0	5.2
LnGrp LOS	D	D	A		A	A
Approach Vol, veh/h	614		3135	A		2040
Approach Delay, s/veh	42.3		0.2			5.2
Approach LOS	D		A			A

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		79.5		20.5		79.5
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		2.0		14.5		14.0
Green Ext Time (p_c), s		37.9		1.0		14.4

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

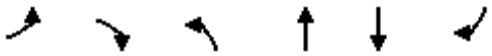
Unsignalized Delay for [NBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBR	NBT	SBT	SBR
Lane Configurations					
Traffic Volume (vph)	826	693	3301	1906	388
Future Volume (vph)	826	693	3301	1906	388
Turn Type	Prot	Perm	NA	NA	Free
Protected Phases	4		2	6	
Permitted Phases		4			Free
Detector Phase	4	4	2	6	
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	
Minimum Split (s)	10.1	10.1	10.8	10.8	
Total Split (s)	33.0	33.0	67.0	67.0	
Total Split (%)	33.0%	33.0%	67.0%	67.0%	
Yellow Time (s)	4.1	4.1	4.8	4.8	
All-Red Time (s)	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	
Total Lost Time (s)	5.1	5.1	5.8	5.8	
Lead/Lag					
Lead-Lag Optimize?					
Recall Mode	None	None	C-Min	C-Min	

Intersection Summary

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 98.8 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated

Splits and Phases: 3: Haven Av. & I-10 EB Ramps



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	826	693	0	3301	1906	388
Future Volume (veh/h)	826	693	0	3301	1906	388
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1800	1900	0	1900	1900	1900
Adj Flow Rate, veh/h	982	496	0	3403	1965	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	957	449	0	4000	4000	
Arrive On Green	0.28	0.28	0.00	0.61	1.00	0.00
Sat Flow, veh/h	3429	1610	0	7068	6802	1610
Grp Volume(v), veh/h	982	496	0	3403	1965	0
Grp Sat Flow(s),veh/h/ln	1714	1610	0	1634	1634	1610
Q Serve(g_s), s	27.9	27.9	0.0	42.1	0.0	0.0
Cycle Q Clear(g_c), s	27.9	27.9	0.0	42.1	0.0	0.0
Prop In Lane	1.00	1.00	0.00			1.00
Lane Grp Cap(c), veh/h	957	449	0	4000	4000	
V/C Ratio(X)	1.03	1.10	0.00	0.85	0.49	
Avail Cap(c_a), veh/h	957	449	0	4000	4000	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	1.00	0.00	0.09	0.85	0.00
Uniform Delay (d), s/veh	36.0	36.0	0.0	15.7	0.0	0.0
Incr Delay (d2), s/veh	36.1	73.8	0.0	0.2	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.7	19.5	0.0	12.9	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	72.1	109.9	0.0	15.9	0.4	0.0
LnGrp LOS	F	F	A	B	A	
Approach Vol, veh/h	1478			3403	1965	A
Approach Delay, s/veh	84.8			15.9	0.4	
Approach LOS	F			B	A	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		67.0		33.0		67.0
Change Period (Y+Rc), s		5.8		5.1		5.8
Max Green Setting (Gmax), s		61.2		27.9		61.2
Max Q Clear Time (g_c+I1), s		44.1		29.9		2.0
Green Ext Time (p_c), s		15.4		0.0		13.8

Intersection Summary		
HCM 6th Ctrl Delay		26.3
HCM 6th LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

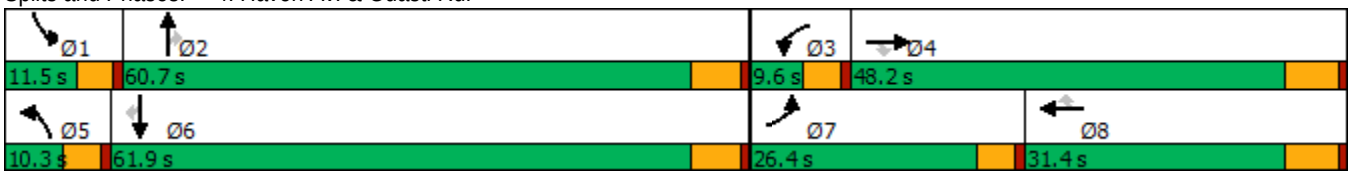
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

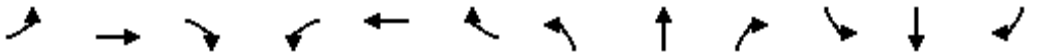
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	439	50	230	88	21	254	70	3435	116	188	2282	129
Future Volume (vph)	439	50	230	88	21	254	70	3435	116	188	2282	129
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	48.2	48.2	9.6	16.2	16.2	9.6	33.8	33.8	9.6	30.8	30.8
Total Split (s)	26.4	48.2	48.2	9.6	31.4	31.4	10.3	60.7	60.7	11.5	61.9	61.9
Total Split (%)	20.3%	37.1%	37.1%	7.4%	24.2%	24.2%	7.9%	46.7%	46.7%	8.8%	47.6%	47.6%
Yellow Time (s)	3.6	5.2	5.2	3.6	5.2	5.2	3.6	4.8	4.8	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.2	6.2	4.6	6.2	6.2	4.6	5.8	5.8	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 116.6
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 4: Haven Av. & Guasti Rd.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	439	50	230	88	21	254	70	3435	116	188	2282	129
Future Volume (veh/h)	439	50	230	88	21	254	70	3435	116	188	2282	129
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1800	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	453	52	109	91	22	182	72	3541	84	194	2353	109
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	511	397	336	137	171	242	126	3231	796	195	3375	831
Arrive On Green	0.16	0.21	0.21	0.04	0.09	0.09	0.04	0.49	0.49	0.06	0.52	0.52
Sat Flow, veh/h	3141	1900	1610	3141	1900	2685	3141	6536	1610	3141	6536	1610
Grp Volume(v), veh/h	453	52	109	91	22	182	72	3541	84	194	2353	109
Grp Sat Flow(s),veh/h/ln	1570	1900	1610	1570	1900	1342	1570	1634	1610	1570	1634	1610
Q Serve(g_s), s	15.7	2.5	6.4	3.2	1.2	7.3	2.5	54.9	3.1	6.9	30.2	3.9
Cycle Q Clear(g_c), s	15.7	2.5	6.4	3.2	1.2	7.3	2.5	54.9	3.1	6.9	30.2	3.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	511	397	336	137	171	242	126	3231	796	195	3375	831
V/C Ratio(X)	0.89	0.13	0.32	0.66	0.13	0.75	0.57	1.10	0.11	0.99	0.70	0.13
Avail Cap(c_a), veh/h	617	719	609	141	431	609	161	3231	796	195	3375	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	35.7	37.3	52.3	46.5	49.3	52.4	28.1	15.0	52.1	20.3	13.9
Incr Delay (d2), s/veh	11.5	0.1	0.6	8.4	0.3	4.7	1.5	48.8	0.1	62.6	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	1.1	2.5	1.4	0.6	2.5	1.0	30.2	1.1	4.3	10.6	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.0	35.9	37.8	60.7	46.9	54.0	53.9	76.9	15.0	114.7	20.9	14.0
LnGrp LOS	E	D	D	E	D	D	D	F	B	F	C	B
Approach Vol, veh/h		614			295			3697			2656	
Approach Delay, s/veh		51.8			55.5			75.1			27.5	
Approach LOS		D			E			E			C	

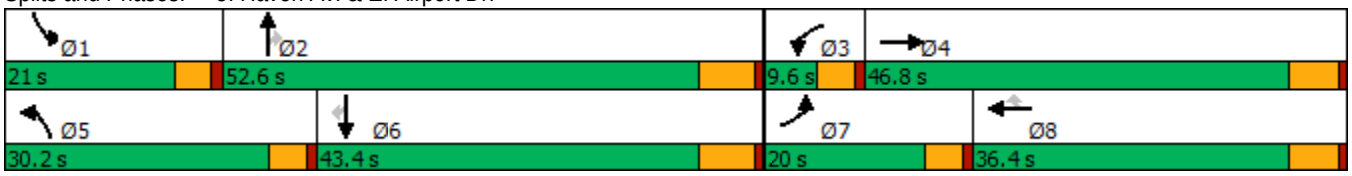
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	60.7	9.5	29.4	9.1	63.1	22.7	16.2
Change Period (Y+Rc), s	4.6	5.8	4.6	6.2	4.6	5.8	4.6	6.2
Max Green Setting (Gmax), s	6.9	54.9	5.0	42.0	5.7	56.1	21.8	25.2
Max Q Clear Time (g_c+I1), s	8.9	56.9	5.2	8.4	4.5	32.2	17.7	9.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.6	0.0	18.7	0.4	0.6

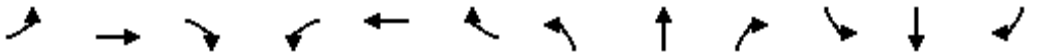
Intersection Summary	
HCM 6th Ctrl Delay	54.9
HCM 6th LOS	D

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	385	592	34	728	648	631	2528	23	408	1736	347
Future Volume (vph)	385	592	34	728	648	631	2528	23	408	1736	347
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	46.8	9.6	15.8	15.8	9.6	41.5	41.5	9.6	37.5	37.5
Total Split (s)	20.0	46.8	9.6	36.4	36.4	30.2	52.6	52.6	21.0	43.4	43.4
Total Split (%)	15.4%	36.0%	7.4%	28.0%	28.0%	23.2%	40.5%	40.5%	16.2%	33.4%	33.4%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 5: Haven Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	385	592	661	34	728	648	631	2528	23	408	1736	347
Future Volume (veh/h)	385	592	661	34	728	648	631	2528	23	408	1736	347
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	393	604	529	35	743	330	644	2580	21	416	1771	313
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	376	607	514	87	865	366	625	2720	576	401	2177	461
Arrive On Green	0.12	0.32	0.32	0.03	0.23	0.23	0.20	0.36	0.36	0.13	0.29	0.29
Sat Flow, veh/h	3141	1900	1609	3141	3800	1610	3141	7600	1610	3141	7600	1610
Grp Volume(v), veh/h	393	604	529	35	743	330	644	2580	21	416	1771	313
Grp Sat Flow(s),veh/h/ln	1570	1900	1609	1570	1900	1610	1570	1900	1610	1570	1900	1610
Q Serve(g_s), s	15.4	40.8	41.1	1.4	24.1	25.6	25.6	42.4	1.1	16.4	27.9	22.1
Cycle Q Clear(g_c), s	15.4	40.8	41.1	1.4	24.1	25.6	25.6	42.4	1.1	16.4	27.9	22.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	376	607	514	87	865	366	625	2720	576	401	2177	461
V/C Ratio(X)	1.04	0.99	1.03	0.40	0.86	0.90	1.03	0.95	0.04	1.04	0.81	0.68
Avail Cap(c_a), veh/h	376	607	514	122	904	383	625	2725	577	401	2181	462
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	43.6	43.7	61.5	47.7	48.3	51.5	40.1	26.9	56.1	42.7	40.6
Incr Delay (d2), s/veh	58.5	35.1	47.3	1.1	8.1	23.0	43.8	8.2	0.0	55.3	2.5	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	24.3	22.4	0.6	12.1	12.3	13.4	20.0	0.4	9.3	12.8	9.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.1	78.8	91.1	62.6	55.8	71.3	95.3	48.4	26.9	111.4	45.2	44.6
LnGrp LOS	F	E	F	E	E	E	F	D	C	F	D	D
Approach Vol, veh/h		1526			1108			3245			2500	
Approach Delay, s/veh		92.4			60.6			57.5			56.1	
Approach LOS		F			E			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	52.5	8.2	46.9	30.2	43.3	20.0	35.1
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	16.4	46.1	5.0	41.0	25.6	36.9	15.4	30.6
Max Q Clear Time (g_c+I1), s	18.4	44.4	3.4	43.1	27.6	29.9	17.4	27.6
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	5.6	0.0	1.7

Intersection Summary	
HCM 6th Ctrl Delay	63.9
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	6	2381	3	0	1823
Future Vol, veh/h	0	6	2381	3	0	1823
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	7	2588	3	0	1982

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1296	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	133	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	133	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	33.5	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	133	-
HCM Lane V/C Ratio	-	-	0.049	-
HCM Control Delay (s)	-	-	33.5	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.2	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	2	2381	3	0	1823
Future Vol, veh/h	0	2	2381	3	0	1823
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	2	2588	3	0	1982

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1296	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	133	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	133	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	32.5	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	133	-
HCM Lane V/C Ratio	-	-	0.016	-
HCM Control Delay (s)	-	-	32.5	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	26	2345	18	0	1872
Future Vol, veh/h	0	26	2345	18	0	1872
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	27	2418	19	0	1930

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1219	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	150	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	150	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

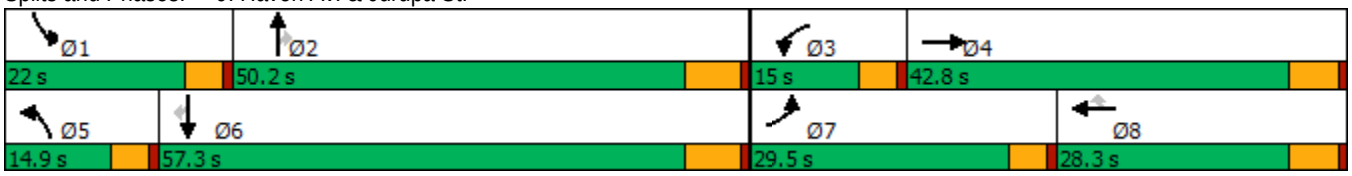
Approach	WB	NB	SB
HCM Control Delay, s	34.2	0	0
HCM LOS	D		

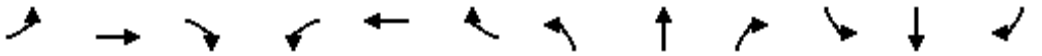
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	150	-
HCM Lane V/C Ratio	-	-	0.179	-
HCM Control Delay (s)	-	-	34.2	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	614	761	384	459	234	119	2296	596	282	1760	454
Future Volume (vph)	614	761	384	459	234	119	2296	596	282	1760	454
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2		1	6	
Permitted Phases					8			2			6
Detector Phase	7	4	3	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	42.8	9.6	15.8	15.8	9.6	36.5	36.5	9.6	35.5	35.5
Total Split (s)	29.5	42.8	15.0	28.3	28.3	14.9	50.2	50.2	22.0	57.3	57.3
Total Split (%)	22.7%	32.9%	11.5%	21.8%	21.8%	11.5%	38.6%	38.6%	16.9%	44.1%	44.1%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	5.5	5.5	3.6	5.5	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	6.5	6.5	4.6	6.5	6.5
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 128.3
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 9: Haven Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	614	761	114	384	459	234	119	2296	596	282	1760	454
Future Volume (veh/h)	614	761	114	384	459	234	119	2296	596	282	1760	454
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	627	777	103	392	468	181	121	2343	514	288	1796	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	616	1239	163	257	553	247	139	2250	553	235	2616	
Arrive On Green	0.20	0.27	0.27	0.08	0.15	0.15	0.08	0.34	0.34	0.14	0.40	0.00
Sat Flow, veh/h	3141	4636	610	3141	3610	1610	1714	6536	1606	1714	6536	1610
Grp Volume(v), veh/h	627	578	302	392	468	181	121	2343	514	288	1796	0
Grp Sat Flow(s),veh/h/ln	1570	1729	1789	1570	1805	1610	1714	1634	1606	1714	1634	1610
Q Serve(g_s), s	24.9	18.7	18.9	10.4	16.0	13.6	8.9	43.7	39.2	17.4	28.8	0.0
Cycle Q Clear(g_c), s	24.9	18.7	18.9	10.4	16.0	13.6	8.9	43.7	39.2	17.4	28.8	0.0
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	616	925	478	257	553	247	139	2250	553	235	2616	
V/C Ratio(X)	1.02	0.63	0.63	1.52	0.85	0.73	0.87	1.04	0.93	1.23	0.69	
Avail Cap(c_a), veh/h	616	1008	521	257	640	285	139	2250	553	235	2616	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.0	40.9	41.0	58.3	52.3	51.3	57.7	41.6	40.1	54.8	31.5	0.0
Incr Delay (d2), s/veh	40.8	1.1	2.2	254.3	9.2	8.1	39.4	30.8	22.4	133.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	7.9	8.4	13.1	7.8	5.9	5.2	21.2	18.2	15.9	10.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	91.8	42.0	43.1	312.6	61.5	59.3	97.0	72.4	62.6	188.0	32.2	0.0
LnGrp LOS	F	D	D	F	E	E	F	F	E	F	C	
Approach Vol, veh/h		1507			1041			2978			2084	A
Approach Delay, s/veh		62.9			155.7			71.7			53.8	
Approach LOS		E			F			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	50.2	15.0	39.7	14.9	57.3	29.5	25.2
Change Period (Y+Rc), s	4.6	6.5	4.6	5.8	4.6	6.5	4.6	5.8
Max Green Setting (Gmax), s	17.4	43.7	10.4	37.0	10.3	50.8	24.9	22.5
Max Q Clear Time (g_c+I1), s	19.4	45.7	12.4	20.9	10.9	30.8	26.9	18.0
Green Ext Time (p_c), s	0.0	0.0	0.0	4.8	0.0	11.8	0.0	1.4

Intersection Summary	
HCM 6th Ctrl Delay	76.5
HCM 6th LOS	E

Notes

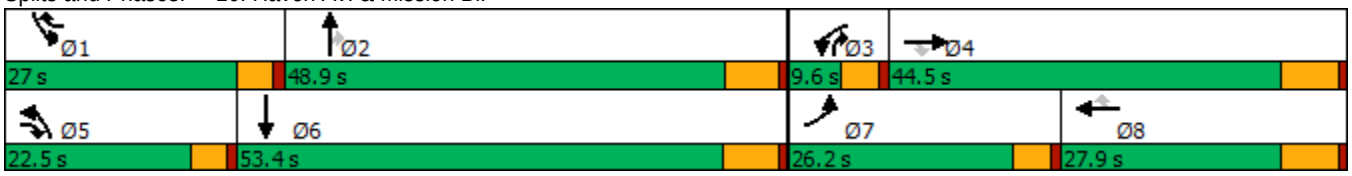
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

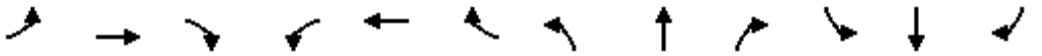
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations											
Traffic Volume (vph)	574	1020	183	64	890	482	225	1906	105	334	1505
Future Volume (vph)	574	1020	183	64	890	482	225	1906	105	334	1505
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA
Protected Phases	7	4	5	3	8	1	5	2	3	1	6
Permitted Phases			4			8			2		
Detector Phase	7	4	5	3	8	1	5	2	3	1	6
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0	5.0	5.0	10.0
Minimum Split (s)	9.6	44.5	9.6	9.6	16.5	9.6	9.6	45.2	9.6	9.6	48.5
Total Split (s)	26.2	44.5	22.5	9.6	27.9	27.0	22.5	48.9	9.6	27.0	53.4
Total Split (%)	20.2%	34.2%	17.3%	7.4%	21.5%	20.8%	17.3%	37.6%	7.4%	20.8%	41.1%
Yellow Time (s)	3.6	5.5	3.6	3.6	5.5	3.6	3.6	5.2	3.6	3.6	5.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	4.6	6.5	4.6	4.6	6.2	4.6	4.6	6.5
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 130
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 10: Haven Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	574	1020	183	64	890	482	225	1906	105	334	1505	167
Future Volume (veh/h)	574	1020	183	64	890	482	225	1906	105	334	1505	167
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	598	1062	146	67	927	388	234	1985	89	348	1568	163
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	537	1682	696	113	936	541	236	1868	583	295	1837	191
Arrive On Green	0.17	0.30	0.30	0.03	0.16	0.16	0.14	0.33	0.33	0.17	0.36	0.36
Sat Flow, veh/h	3238	5700	1609	3238	5700	1610	1714	5700	1609	1714	5071	526
Grp Volume(v), veh/h	598	1062	146	67	927	388	234	1985	89	348	1174	557
Grp Sat Flow(s),veh/h/ln	1619	1900	1609	1619	1900	1610	1714	1900	1609	1714	1900	1797
Q Serve(g_s), s	21.6	21.0	7.4	2.7	21.2	21.4	17.8	42.7	4.9	22.4	37.2	37.3
Cycle Q Clear(g_c), s	21.6	21.0	7.4	2.7	21.2	21.4	17.8	42.7	4.9	22.4	37.2	37.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	537	1682	696	113	936	541	236	1868	583	295	1377	651
V/C Ratio(X)	1.11	0.63	0.21	0.59	0.99	0.72	0.99	1.06	0.15	1.18	0.85	0.85
Avail Cap(c_a), veh/h	537	1682	696	124	936	541	236	1868	583	295	1377	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	39.8	23.1	62.0	54.3	37.8	56.1	43.8	28.0	53.9	38.4	38.4
Incr Delay (d2), s/veh	74.0	0.8	0.1	3.4	26.9	4.5	56.7	39.8	0.1	110.7	5.4	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.9	9.5	2.7	1.1	12.0	10.9	11.1	25.9	1.8	18.3	17.2	17.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	128.4	40.6	23.2	65.4	81.3	42.3	112.8	83.6	28.1	164.6	43.8	49.2
LnGrp LOS	F	D	C	E	F	D	F	F	C	F	D	D
Approach Vol, veh/h		1806			1382			2308			2079	
Approach Delay, s/veh		68.2			69.6			84.4			65.4	
Approach LOS		E			E			F			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	49.2	9.2	44.9	22.5	53.7	26.2	27.9
Change Period (Y+Rc), s	4.6	* 6.5	4.6	6.5	4.6	6.5	4.6	6.5
Max Green Setting (Gmax), s	22.4	* 43	5.0	38.0	17.9	46.9	21.6	21.4
Max Q Clear Time (g_c+I1), s	24.4	44.7	4.7	23.0	19.8	39.3	23.6	23.4
Green Ext Time (p_c), s	0.0	0.0	0.0	6.1	0.0	5.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	72.6
HCM 6th LOS	E

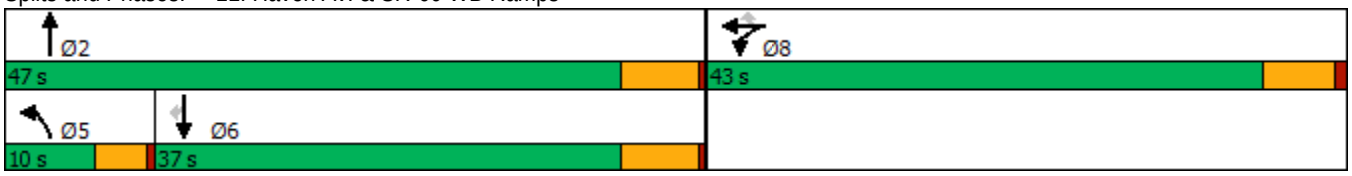
Notes

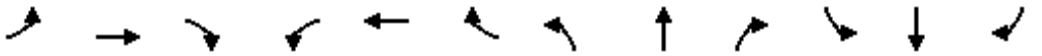
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	396	9	645	174	1325	1578	575
Future Volume (vph)	396	9	645	174	1325	1578	575
Turn Type	Split	NA	Perm	Prot	NA	NA	Perm
Protected Phases	8	8		5	2	6	
Permitted Phases			8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	9.0	34.7	27.8	27.8
Total Split (s)	43.0	43.0	43.0	10.0	47.0	37.0	37.0
Total Split (%)	47.8%	47.8%	47.8%	11.1%	52.2%	41.1%	41.1%
Yellow Time (s)	4.8	4.8	4.8	3.5	5.2	5.3	5.3
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	4.0	5.7	5.8	5.8
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	Min	Min	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 88.4
Natural Cycle: 70
Control Type: Actuated-Uncoordinated

Splits and Phases: 11: Haven Av. & SR-60 WB Ramps





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	396	9	645	174	1325	0	0	1578	575
Future Volume (veh/h)	0	0	0	396	9	645	174	1325	0	0	1578	575
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1800	1900	1900	1700	1900	0	0	1900	1900
Adj Flow Rate, veh/h				418	0	383	181	1380	0	0	1644	432
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				998	0	469	260	2790	0	0	2055	630
Arrive On Green				0.29	0.00	0.29	0.08	0.54	0.00	0.00	0.40	0.40
Sat Flow, veh/h				3429	0	1610	3141	5358	0	0	5358	1590
Grp Volume(v), veh/h				418	0	383	181	1380	0	0	1644	432
Grp Sat Flow(s),veh/h/ln				1714	0	1610	1570	1729	0	0	1729	1590
Q Serve(g_s), s				6.7	0.0	15.0	3.8	11.4	0.0	0.0	19.0	15.3
Cycle Q Clear(g_c), s				6.7	0.0	15.0	3.8	11.4	0.0	0.0	19.0	15.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				998	0	469	260	2790	0	0	2055	630
V/C Ratio(X)				0.42	0.00	0.82	0.70	0.49	0.00	0.00	0.80	0.69
Avail Cap(c_a), veh/h				1879	0	882	278	3156	0	0	2384	731
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				19.4	0.0	22.4	30.3	9.9	0.0	0.0	18.1	17.0
Incr Delay (d2), s/veh				0.3	0.0	3.6	6.8	0.1	0.0	0.0	1.5	1.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.4	0.0	5.4	1.5	3.1	0.0	0.0	6.4	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				19.7	0.0	25.9	37.1	9.9	0.0	0.0	19.6	18.5
LnGrp LOS				B	A	C	D	A	A	A	B	B
Approach Vol, veh/h					801			1561			2076	
Approach Delay, s/veh					22.7			13.1			19.4	
Approach LOS					C			B			B	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	42.3		9.6	32.7		25.6						
Change Period (Y+Rc), s	* 5.8		4.0	5.8		5.8						
Max Green Setting (Gmax), s	* 41		6.0	31.2		37.2						
Max Q Clear Time (g_c+I1), s	13.4		5.8	21.0		17.0						
Green Ext Time (p_c), s	6.6		0.0	5.9		2.7						

Intersection Summary	
HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B

Notes

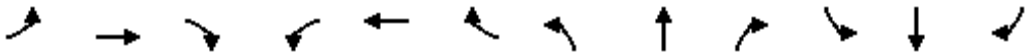
User approved volume balancing among the lanes for turning movement.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	EBR	NBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	427	8	170	1072	672	1302
Future Volume (vph)	427	8	170	1072	672	1302
Turn Type	Split	NA	Perm	NA	Prot	NA
Protected Phases	4	4		2	1	6
Permitted Phases			4			
Detector Phase	4	4	4	2	1	6
Switch Phase						
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	10.8	10.8	10.8	26.7	9.0	29.7
Total Split (s)	27.0	27.0	27.0	32.0	31.0	63.0
Total Split (%)	30.0%	30.0%	30.0%	35.6%	34.4%	70.0%
Yellow Time (s)	4.8	4.8	4.8	5.2	3.5	5.2
All-Red Time (s)	1.0	1.0	1.0	0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.7	4.0	5.7
Lead/Lag				Lag	Lead	
Lead-Lag Optimize?				Yes	Yes	
Recall Mode	None	None	None	Min	None	Min

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 80.4
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 12: Haven Av. & SR-60 EB Ramps



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	427	8	170	0	0	0	0	1072	230	672	1302	0
Future Volume (veh/h)	427	8	170	0	0	0	0	1072	230	672	1302	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900				0	1900	1900	1700	1900	0
Adj Flow Rate, veh/h	465	0	73				0	1153	186	723	1400	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	615	0	289				0	1427	230	866	3380	0
Arrive On Green	0.18	0.00	0.18				0.00	0.32	0.32	0.28	0.65	0.00
Sat Flow, veh/h	3429	0	1610				0	4672	726	3141	5358	0
Grp Volume(v), veh/h	465	0	73				0	886	453	723	1400	0
Grp Sat Flow(s),veh/h/ln	1714	0	1610				0	1729	1769	1570	1729	0
Q Serve(g_s), s	8.8	0.0	2.7				0.0	16.0	16.0	14.7	8.8	0.0
Cycle Q Clear(g_c), s	8.8	0.0	2.7				0.0	16.0	16.0	14.7	8.8	0.0
Prop In Lane	1.00		1.00				0.00		0.41	1.00		0.00
Lane Grp Cap(c), veh/h	615	0	289				0	1096	561	866	3380	0
V/C Ratio(X)	0.76	0.00	0.25				0.00	0.81	0.81	0.83	0.41	0.00
Avail Cap(c_a), veh/h	1069	0	502				0	1338	684	1247	4371	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.5	0.0	24.0				0.0	21.3	21.3	23.2	5.7	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.5				0.0	2.5	4.9	3.4	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	1.0				0.0	5.8	6.3	5.1	1.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.4	0.0	24.4				0.0	23.9	26.2	26.6	5.7	0.0
LnGrp LOS	C	A	C				A	C	C	C	A	A
Approach Vol, veh/h		538						1339			2123	
Approach Delay, s/veh		27.9						24.6			12.8	
Approach LOS		C						C			B	

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	22.8	27.3		18.0		50.0						
Change Period (Y+Rc), s	4.0	5.7		5.8		5.7						
Max Green Setting (Gmax), s	27.0	26.3		21.2		57.3						
Max Q Clear Time (g_c+I1), s	16.7	18.0		10.8		10.8						
Green Ext Time (p_c), s	2.0	3.6		1.4		7.1						

Intersection Summary			
HCM 6th Ctrl Delay			18.8
HCM 6th LOS			B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1019	4	7	1395	0	14	0	4	0	0	0
Future Vol, veh/h	0	1019	4	7	1395	0	14	0	4	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	240	-	-	210	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	1108	4	8	1516	0	15	0	4	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1516	0	0	1112	0	0	1732	2642	556	2086	2644	758
Stage 1	-	-	-	-	-	-	1110	1110	-	1532	1532	-
Stage 2	-	-	-	-	-	-	622	1532	-	554	1112	-
Critical Hdwy	5.3	-	-	4.1	-	-	6.95	6.5	6.9	6.95	6.5	7.1
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	7.3	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.7	5.5	-	6.5	5.5	-
Follow-up Hdwy	3.1	-	-	2.2	-	-	3.65	4	3.3	3.65	4	3.9
Pot Cap-1 Maneuver	223	-	-	635	-	-	74	24	480	42	24	304
Stage 1	-	-	-	-	-	-	221	287	-	87	180	-
Stage 2	-	-	-	-	-	-	418	180	-	474	287	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	223	-	-	635	-	-	73	24	480	41	24	304
Mov Cap-2 Maneuver	-	-	-	-	-	-	73	24	-	41	24	-
Stage 1	-	-	-	-	-	-	221	287	-	87	178	-
Stage 2	-	-	-	-	-	-	413	178	-	470	287	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	55.8	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	90	223	-	-	635	-	-	-
HCM Lane V/C Ratio	0.217	-	-	-	0.012	-	-	-
HCM Control Delay (s)	55.8	0	-	-	10.7	-	-	0
HCM Lane LOS	F	A	-	-	B	-	-	A
HCM 95th %tile Q(veh)	0.8	0	-	-	0	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1016	7	0	1402	0	10
Future Vol, veh/h	1016	7	0	1402	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1104	8	0	1524	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	556
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	480
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	480
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	12.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	480	-	-	-
HCM Lane V/C Ratio	0.023	-	-	-
HCM Control Delay (s)	12.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1009	17	0	1402	0	24
Future Vol, veh/h	1009	17	0	1402	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1097	18	0	1524	0	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	558
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	-	0	-	0	478
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	478
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	478	-	-	-
HCM Lane V/C Ratio	0.055	-	-	-
HCM Control Delay (s)	13	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	16	2	2	46	5	2
Future Vol, veh/h	16	2	2	46	5	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	17	2	2	50	5	2

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	19	0	47	10
Stage 1	-	-	-	-	18	-
Stage 2	-	-	-	-	29	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1611	-	963	1075
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	996	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1611	-	962	1075
Mov Cap-2 Maneuver	-	-	-	-	937	-
Stage 1	-	-	-	-	1008	-
Stage 2	-	-	-	-	995	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	973	-	-	1611	-
HCM Lane V/C Ratio	0.008	-	-	0.001	-
HCM Control Delay (s)	8.7	-	-	7.2	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	2	3	47	3	5
Future Vol, veh/h	17	2	3	47	3	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	2	3	51	3	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	20	0	51	10
Stage 1	-	-	-	-	19	-
Stage 2	-	-	-	-	32	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1609	-	957	1075
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	992	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1609	-	955	1075
Mov Cap-2 Maneuver	-	-	-	-	891	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	990	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.4	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	998	-	-	1609	-
HCM Lane V/C Ratio	0.009	-	-	0.002	-
HCM Control Delay (s)	8.6	-	-	7.2	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	2	20	36	8	0	14
Future Vol, veh/h	2	20	36	8	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	22	39	9	0	15

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	48	0	-	0	59	24
Stage 1	-	-	-	-	44	-
Stage 2	-	-	-	-	15	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1572	-	-	-	947	1053
Stage 1	-	-	-	-	979	-
Stage 2	-	-	-	-	1011	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1572	-	-	-	946	1053
Mov Cap-2 Maneuver	-	-	-	-	924	-
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	1011	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	8.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1572	-	-	-	1053
HCM Lane V/C Ratio	0.001	-	-	-	0.014
HCM Control Delay (s)	7.3	-	-	-	8.5
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	185	204	0	0	0
Future Vol, veh/h	0	185	204	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	2	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	201	222	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	222	0	-	0	323	111
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	101	-
Critical Hdwy	4.1	-	-	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1359	-	-	-	651	927
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	918	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1359	-	-	-	651	927
Mov Cap-2 Maneuver	-	-	-	-	736	-
Stage 1	-	-	-	-	800	-
Stage 2	-	-	-	-	918	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1359	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	-	0
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↱			↱
Traffic Vol, veh/h	0	1642	1071	4	0	7
Future Vol, veh/h	0	1642	1071	4	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1785	1164	4	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	584
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	460
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	460
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	13
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	460
HCM Lane V/C Ratio	-	-	-	0.017
HCM Control Delay (s)	-	-	-	13
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↱			↱
Traffic Vol, veh/h	0	1642	1069	4	0	6
Future Vol, veh/h	0	1642	1069	4	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	1785	1162	4	0	7

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	583
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	0	-	-	-	0	461
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	461
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

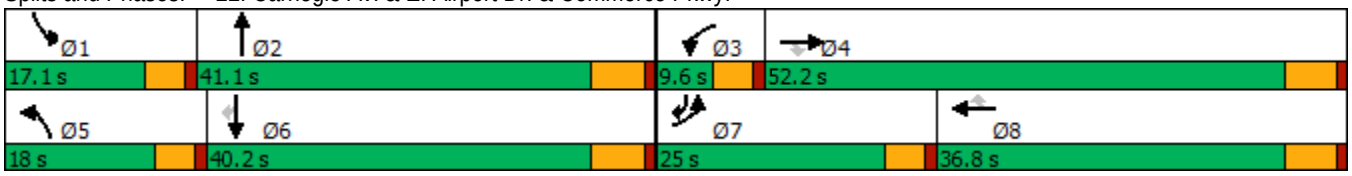
Approach	EB	WB	SB
HCM Control Delay, s	0	0	12.9
HCM LOS			B

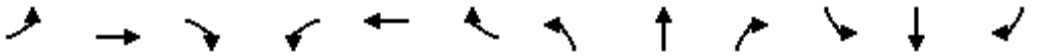
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	461
HCM Lane V/C Ratio	-	-	-	0.014
HCM Control Delay (s)	-	-	-	12.9
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	442	391	79	11	490	236	278	242	72	251	508
Future Volume (vph)	442	391	79	11	490	236	278	242	72	251	508
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8		5	2	1	6	7
Permitted Phases			4			8					6
Detector Phase	7	4	4	3	8	8	5	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	25.8	25.8	9.6	36.8	36.8	9.6	34.8	9.6	38.8	9.6
Total Split (s)	25.0	52.2	52.2	9.6	36.8	36.8	18.0	41.1	17.1	40.2	25.0
Total Split (%)	20.8%	43.5%	43.5%	8.0%	30.7%	30.7%	15.0%	34.3%	14.3%	33.5%	20.8%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	4.8	3.6	4.8	3.6	4.8	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	5.8	4.6	5.8	4.6	5.8	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 91.8
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 22: Carnegie Av. & E. Airport Dr. & Commerce Pkwy.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	442	391	79	11	490	236	278	242	146	72	251	508
Future Volume (veh/h)	442	391	79	11	490	236	278	242	146	72	251	508
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	502	444	90	12	557	235	316	275	166	82	285	365
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	408	1573	702	25	765	341	268	539	316	104	543	1101
Arrive On Green	0.24	0.44	0.44	0.01	0.21	0.21	0.16	0.25	0.25	0.06	0.15	0.15
Sat Flow, veh/h	1714	3610	1610	1714	3610	1610	1714	2191	1283	1714	3610	2834
Grp Volume(v), veh/h	502	444	90	12	557	235	316	225	216	82	285	365
Grp Sat Flow(s),veh/h/ln	1714	1805	1610	1714	1805	1610	1714	1805	1669	1714	1805	1417
Q Serve(g_s), s	20.4	6.8	2.9	0.6	12.3	11.5	13.4	9.2	9.6	4.0	6.2	7.7
Cycle Q Clear(g_c), s	20.4	6.8	2.9	0.6	12.3	11.5	13.4	9.2	9.6	4.0	6.2	7.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.77	1.00		1.00
Lane Grp Cap(c), veh/h	408	1573	702	25	765	341	268	444	411	104	543	1101
V/C Ratio(X)	1.23	0.28	0.13	0.48	0.73	0.69	1.18	0.51	0.53	0.79	0.52	0.33
Avail Cap(c_a), veh/h	408	1956	872	100	1307	583	268	744	688	250	1450	1813
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.6	15.5	14.4	41.9	31.4	31.1	36.1	27.8	28.0	39.7	33.6	18.4
Incr Delay (d2), s/veh	123.0	0.1	0.1	5.3	1.3	2.5	111.9	0.9	1.0	4.8	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.8	2.5	1.0	0.3	5.1	4.4	13.6	3.8	3.7	1.8	2.6	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	155.6	15.6	14.5	47.2	32.8	33.6	148.0	28.7	29.0	44.5	34.3	18.5
LnGrp LOS	F	B	B	D	C	C	F	C	C	D	C	B
Approach Vol, veh/h		1036			804			757			732	
Approach Delay, s/veh		83.4			33.2			78.6			27.6	
Approach LOS		F			C			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	26.9	5.8	43.1	18.0	18.7	25.0	24.0
Change Period (Y+Rc), s	4.6	5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	12.5	35.3	5.0	46.4	13.4	34.4	20.4	31.0
Max Q Clear Time (g_c+I1), s	6.0	11.6	2.6	8.8	15.4	9.7	22.4	14.3
Green Ext Time (p_c), s	0.0	2.4	0.0	3.1	0.0	3.1	0.0	3.8

Intersection Summary	
HCM 6th Ctrl Delay	57.9
HCM 6th LOS	E

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	4	1	0	3	3	643	0	2	327	13
Future Vol, veh/h	20	0	4	1	0	3	3	643	0	2	327	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	200	-	-	200	-	-
Veh in Median Storage, #	-	2	-	-	2	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	22	0	4	1	0	3	3	699	0	2	355	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	722	1071	185	887	1078	350	369	0	0	699	0	0
Stage 1	366	366	-	705	705	-	-	-	-	-	-	-
Stage 2	356	705	-	182	373	-	-	-	-	-	-	-
Critical Hdwy	7.5	6.5	6.9	7.5	6.5	6.9	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.5	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	318	223	832	242	220	652	1201	-	-	907	-	-
Stage 1	631	626	-	398	442	-	-	-	-	-	-	-
Stage 2	640	442	-	808	622	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	315	222	832	240	219	652	1201	-	-	907	-	-
Mov Cap-2 Maneuver	499	384	-	368	384	-	-	-	-	-	-	-
Stage 1	630	625	-	397	441	-	-	-	-	-	-	-
Stage 2	635	441	-	802	621	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.1	11.6	0	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1201	-	-	535	547	907	-	-
HCM Lane V/C Ratio	0.003	-	-	0.049	0.008	0.002	-	-
HCM Control Delay (s)	8	-	-	12.1	11.6	9	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	6	639	1	4	328
Future Vol, veh/h	1	6	639	1	4	328
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	7	695	1	4	357

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	883	348	0	0	696	0
Stage 1	696	-	-	-	-	-
Stage 2	187	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	289	654	-	-	909	-
Stage 1	461	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	288	654	-	-	909	-
Mov Cap-2 Maneuver	426	-	-	-	-	-
Stage 1	461	-	-	-	-	-
Stage 2	829	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	608	909	-
HCM Lane V/C Ratio	-	-	0.013	0.005	-
HCM Control Delay (s)	-	-	11	9	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	4	8	628	326	2
Future Vol, veh/h	12	4	8	628	326	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	4	9	683	354	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	715	178	356	0	-	0
Stage 1	355	-	-	-	-	-
Stage 2	360	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	370	841	1214	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	683	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	367	841	1214	-	-	-
Mov Cap-2 Maneuver	548	-	-	-	-	-
Stage 1	681	-	-	-	-	-
Stage 2	683	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1214	-	600	-	-
HCM Lane V/C Ratio	0.007	-	0.029	-	-
HCM Control Delay (s)	8	-	11.2	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	17.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	0	4	10	0	60	6	568	23	17	312	2
Future Vol, veh/h	8	0	4	10	0	60	6	568	23	17	312	2
Peak Hour Factor	0.92	0.92	0.92	0.79	0.92	0.79	0.92	0.79	0.79	0.79	0.79	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	9	0	4	13	0	76	7	719	29	22	395	2
Number of Lanes	0	1	0	1	1	1	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	1	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	1	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	1
HCM Control Delay	10.8	9.8	21.5	13.4
HCM LOS	B	A	C	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	67%	100%	3%	0%	100%	0%	0%
Vol Thru, %	0%	100%	89%	0%	0%	0%	0%	0%	100%	98%
Vol Right, %	0%	0%	11%	33%	0%	97%	100%	0%	0%	2%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	379	212	12	9	30	31	17	208	106
LT Vol	6	0	0	8	9	1	0	17	0	0
Through Vol	0	379	189	0	0	0	0	0	208	104
RT Vol	0	0	23	4	0	29	31	0	0	2
Lane Flow Rate	7	479	269	13	11	38	39	22	263	134
Geometry Grp	8	8	8	8	7	7	7	8	8	8
Degree of Util (X)	0.012	0.782	0.433	0.028	0.024	0.069	0.069	0.041	0.47	0.238
Departure Headway (Hd)	6.378	5.876	5.8	7.769	7.649	6.482	6.442	6.928	6.425	6.412
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	562	618	621	460	468	552	555	517	561	559
Service Time	4.112	3.61	3.534	5.532	5.399	4.231	4.191	4.671	4.169	4.156
HCM Lane V/C Ratio	0.012	0.775	0.433	0.028	0.024	0.069	0.07	0.043	0.469	0.24
HCM Control Delay	9.2	26.5	12.9	10.8	10.6	9.7	9.7	10	14.8	11.2
HCM Lane LOS	A	D	B	B	B	A	A	A	B	B
HCM 95th-tile Q	0	7.4	2.2	0.1	0.1	0.2	0.2	0.1	2.5	0.9

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	27	23	583	319	7
Future Vol, veh/h	13	27	23	583	319	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	29	25	634	347	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	718	178	355	0	-	0
Stage 1	351	-	-	-	-	-
Stage 2	367	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	368	841	1215	-	-	-
Stage 1	690	-	-	-	-	-
Stage 2	677	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	360	841	1215	-	-	-
Mov Cap-2 Maneuver	542	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	677	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.4	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1215	-	713	-	-
HCM Lane V/C Ratio	0.021	-	0.061	-	-
HCM Control Delay (s)	8	-	10.4	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	17	5	605	339	7
Future Vol, veh/h	2	17	5	605	339	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2	18	5	658	368	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	711	188	376	0	-	0
Stage 1	372	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	372	828	1194	-	-	-
Stage 1	673	-	-	-	-	-
Stage 2	699	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	371	828	1194	-	-	-
Mov Cap-2 Maneuver	550	-	-	-	-	-
Stage 1	670	-	-	-	-	-
Stage 2	699	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.1	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1194	-	786	-	-
HCM Lane V/C Ratio	0.005	-	0.026	-	-
HCM Control Delay (s)	8	-	9.7	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Intersection Delay, s/veh	11.9
Intersection LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	173	12	73	436	224	132
Future Vol, veh/h	173	12	73	436	224	132
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	184	13	78	464	238	140
Number of Lanes	1	1	1	2	2	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	3
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	3	0	2
HCM Control Delay	14.3	11	12
HCM LOS	B	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	0%
Vol Thru, %	0%	100%	100%	0%	0%	100%	36%
Vol Right, %	0%	0%	0%	0%	100%	0%	64%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	73	218	218	173	12	149	207
LT Vol	73	0	0	173	0	0	0
Through Vol	0	218	218	0	0	149	75
RT Vol	0	0	0	0	12	0	132
Lane Flow Rate	78	232	232	184	13	159	220
Geometry Grp	8	8	8	8	8	8	8
Degree of Util (X)	0.145	0.401	0.29	0.38	0.022	0.284	0.365
Departure Headway (Hd)	6.73	6.224	4.503	7.426	6.216	6.43	5.976
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	531	577	793	484	573	558	600
Service Time	4.488	3.981	2.259	5.191	3.98	4.19	3.737
HCM Lane V/C Ratio	0.147	0.402	0.293	0.38	0.023	0.285	0.367
HCM Control Delay	10.6	13.1	9.1	14.7	9.1	11.7	12.2
HCM Lane LOS	B	B	A	B	A	B	B
HCM 95th-tile Q	0.5	1.9	1.2	1.8	0.1	1.2	1.7

Intersection	
Int Delay, s/veh	0.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	3	506	7	0	236
Future Vol, veh/h	8	3	506	7	0	236
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	3	550	8	0	257

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	683	279	0	0	558	0
Stage 1	554	-	-	-	-	-
Stage 2	129	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	387	724	-	-	1023	-
Stage 1	545	-	-	-	-	-
Stage 2	889	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	387	724	-	-	1023	-
Mov Cap-2 Maneuver	463	-	-	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	889	-	-	-	-	-

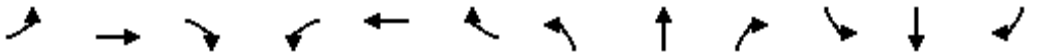
Approach	WB	NB	SB
HCM Control Delay, s	12.2	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	513	1023	-
HCM Lane V/C Ratio	-	-	0.023	-	-
HCM Control Delay (s)	-	-	12.2	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBR	SBL	SBR
Lane Configurations									
Traffic Volume (vph)	567	1112	4	696	73	9	2	69	306
Future Volume (vph)	567	1112	4	696	73	9	2	69	306
Turn Type	Perm	NA	Perm	NA	Perm	Perm	Perm	Perm	Perm
Protected Phases		4		8					
Permitted Phases	4		8		8	2	2	6	6
Detector Phase	4	4	8	8	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	26.8	26.8	26.8	26.8	26.8	33.6	33.6	34.8	34.8
Total Split (s)	79.0	79.0	79.0	79.0	79.0	41.0	41.0	41.0	41.0
Total Split (%)	65.8%	65.8%	65.8%	65.8%	65.8%	34.2%	34.2%	34.2%	34.2%
Yellow Time (s)	4.8	4.8	4.8	4.8	4.8	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	5.8	5.8	5.8	5.8	4.6	4.6	5.8	5.8
Lead/Lag									
Lead-Lag Optimize?									
Recall Mode	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 98.9
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 31: Carnegie Av. & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	567	1112	19	4	696	73	9	0	2	69	0	306
Future Volume (veh/h)	567	1112	19	4	696	73	9	0	2	69	0	306
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	591	1158	20	4	725	75	9	0	0	72	0	294
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	464	3601	62	341	2476	1091	282	391	331	348	391	331
Arrive On Green	0.69	0.69	0.69	0.69	0.69	0.69	0.21	0.00	0.00	0.21	0.00	0.21
Sat Flow, veh/h	654	5251	91	458	3610	1590	1044	1900	1610	1364	1900	1610
Grp Volume(v), veh/h	591	763	415	4	725	75	9	0	0	72	0	294
Grp Sat Flow(s),veh/h/ln	654	1729	1884	458	1805	1590	1044	1900	1610	1364	1900	1610
Q Serve(g_s), s	64.8	9.5	9.5	0.4	8.4	1.7	0.7	0.0	0.0	4.7	0.0	18.9
Cycle Q Clear(g_c), s	73.2	9.5	9.5	9.9	8.4	1.7	0.7	0.0	0.0	4.7	0.0	18.9
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	464	2371	1292	341	2476	1091	282	391	331	348	391	331
V/C Ratio(X)	1.27	0.32	0.32	0.01	0.29	0.07	0.03	0.00	0.00	0.21	0.00	0.89
Avail Cap(c_a), veh/h	464	2371	1292	341	2476	1091	424	648	549	517	627	531
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.7	6.8	6.8	8.8	6.6	5.5	34.0	0.0	0.0	35.6	0.0	41.2
Incr Delay (d2), s/veh	138.7	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.3	0.0	10.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	30.0	2.8	3.1	0.0	2.6	0.5	0.2	0.0	0.0	1.5	0.0	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	164.4	6.8	6.9	8.8	6.7	5.6	34.0	0.0	0.0	35.9	0.0	51.9
LnGrp LOS	F	A	A	A	A	A	C	A	A	D	A	D
Approach Vol, veh/h		1769			804			9			366	
Approach Delay, s/veh		59.5			6.6			34.0			48.8	
Approach LOS		E			A			C			D	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.7		79.0		27.7		79.0				
Change Period (Y+Rc), s		* 5.8		5.8		5.8		5.8				
Max Green Setting (Gmax), s		* 36		73.2		35.2		73.2				
Max Q Clear Time (g_c+I1), s		2.7		75.2		20.9		11.9				
Green Ext Time (p_c), s		0.0		0.0		1.0		5.6				

Intersection Summary		
HCM 6th Ctrl Delay		43.6
HCM 6th LOS		D

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	32	5	0	55	3	7	0	2	1	0	8
Future Vol, veh/h	3	32	5	0	55	3	7	0	2	1	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	3	35	5	0	60	3	8	0	2	1	0	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	63	0	0	40	0	0	74	107	20	86	108	32
Stage 1	-	-	-	-	-	-	44	44	-	62	62	-
Stage 2	-	-	-	-	-	-	30	63	-	24	46	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1553	-	-	1583	-	-	914	787	1060	896	786	1041
Stage 1	-	-	-	-	-	-	970	862	-	948	847	-
Stage 2	-	-	-	-	-	-	989	846	-	996	861	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1553	-	-	1583	-	-	905	785	1060	892	784	1041
Mov Cap-2 Maneuver	-	-	-	-	-	-	902	786	-	890	787	-
Stage 1	-	-	-	-	-	-	968	860	-	946	847	-
Stage 2	-	-	-	-	-	-	981	846	-	992	859	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0	8.9	8.6
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	933	1553	-	-	1583	-	-	1022
HCM Lane V/C Ratio	0.01	0.002	-	-	-	-	-	0.01
HCM Control Delay (s)	8.9	7.3	-	-	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	18	11	3	36	5	10	0	8	1	0	12
Future Vol, veh/h	6	18	11	3	36	5	10	0	8	1	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	20	12	3	39	5	11	0	9	1	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	44	0	0	32	0	0	66	90	16	72	94	22
Stage 1	-	-	-	-	-	-	40	40	-	48	48	-
Stage 2	-	-	-	-	-	-	26	50	-	24	46	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1577	-	-	1593	-	-	926	804	1066	917	800	1056
Stage 1	-	-	-	-	-	-	976	866	-	965	859	-
Stage 2	-	-	-	-	-	-	994	857	-	996	861	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1577	-	-	1593	-	-	910	799	1066	905	795	1056
Mov Cap-2 Maneuver	-	-	-	-	-	-	910	799	-	905	795	-
Stage 1	-	-	-	-	-	-	972	863	-	961	857	-
Stage 2	-	-	-	-	-	-	980	855	-	983	858	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0.5	8.8	8.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	973	1577	-	-	1593	-	-	1043
HCM Lane V/C Ratio	0.02	0.004	-	-	0.002	-	-	0.014
HCM Control Delay (s)	8.8	7.3	-	-	7.3	-	-	8.5
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	7	0	757	606	5
Future Vol, veh/h	0	7	0	757	606	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	8	0	823	659	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	332	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	571	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	571	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	571	-	-
HCM Lane V/C Ratio	-	0.013	-	-
HCM Control Delay (s)	-	11.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	4	0	757	611	2
Future Vol, veh/h	0	4	0	757	611	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	4	0	823	664	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	333	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	570	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	570	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	570	-	-
HCM Lane V/C Ratio	-	0.008	-	-
HCM Control Delay (s)	-	11.4	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	752	3	0	615
Future Vol, veh/h	0	5	752	3	0	615
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	5	817	3	0	668

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	410	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	509	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	509	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	509	-
HCM Lane V/C Ratio	-	-	0.011	-
HCM Control Delay (s)	-	-	12.1	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0	-

Intersection	
Intersection Delay, s/veh	21.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	9	8	31	6	193	20	551	18	120	478	17
Future Vol, veh/h	11	9	8	31	6	193	20	551	18	120	478	17
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	10	9	34	7	210	22	599	20	130	520	18
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	12	15.7	26.1	19.3
HCM LOS	B	C	D	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	91%	0%	100%	27%	0%	100%	1%	0%	100%
Vol Right, %	0%	0%	9%	0%	0%	73%	0%	0%	99%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	367	202	11	6	11	31	4	195	120	319
LT Vol	20	0	0	11	0	0	31	0	0	120	0
Through Vol	0	367	184	0	6	3	0	4	2	0	319
RT Vol	0	0	18	0	0	8	0	0	193	0	0
Lane Flow Rate	22	399	219	12	7	12	34	4	212	130	346
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.046	0.798	0.434	0.031	0.016	0.028	0.082	0.01	0.446	0.278	0.689
Departure Headway (Hd)	7.693	7.193	7.13	9.464	8.964	8.454	8.761	8.261	7.568	7.662	7.162
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	466	503	506	378	399	423	409	433	475	470	506
Service Time	5.434	4.934	4.871	7.227	6.727	6.218	6.51	6.01	5.317	5.401	4.901
HCM Lane V/C Ratio	0.047	0.793	0.433	0.032	0.018	0.028	0.083	0.009	0.446	0.277	0.684
HCM Control Delay	10.8	32.8	15.3	12.5	11.9	11.5	12.3	11.1	16.3	13.3	24.4
HCM Lane LOS	B	D	C	B	B	B	B	B	C	B	C
HCM 95th-tile Q	0.1	7.4	2.2	0.1	0	0.1	0.3	0	2.3	1.1	5.2

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	14	0	589	507	10
Future Vol, veh/h	0	14	0	589	507	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	15	0	640	551	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	281	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.9	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.3	-	-	-	-
Pot Cap-1 Maneuver	0	722	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	722	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	722	-	-
HCM Lane V/C Ratio	-	0.021	-	-
HCM Control Delay (s)	-	10.1	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.1	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	22	568	29	3	518
Future Vol, veh/h	17	22	568	29	3	518
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	200	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	18	24	617	32	3	563

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	921	325	0	0	649	0
Stage 1	633	-	-	-	-	-
Stage 2	288	-	-	-	-	-
Critical Hdwy	6.25	7.1	-	-	5.3	-
Critical Hdwy Stg 1	6.6	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.65	3.9	-	-	3.1	-
Pot Cap-1 Maneuver	307	577	-	-	583	-
Stage 1	419	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	305	577	-	-	583	-
Mov Cap-2 Maneuver	305	-	-	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	711	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	415	583	-
HCM Lane V/C Ratio	-	-	0.102	0.006	-
HCM Control Delay (s)	-	-	14.7	11.2	-
HCM Lane LOS	-	-	B	B	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	9	588	6	0	535
Future Vol, veh/h	0	9	588	6	0	535
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	10	639	7	0	582

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	323	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.1	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.9	-	-	-	-
Pot Cap-1 Maneuver	0	579	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	579	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

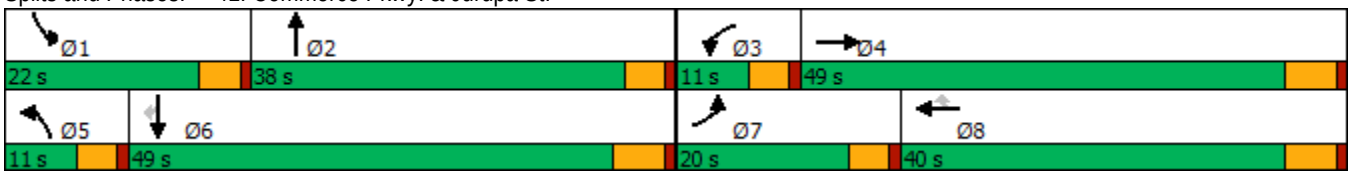
Approach	WB	NB	SB
HCM Control Delay, s	11.3	0	0
HCM LOS	B		

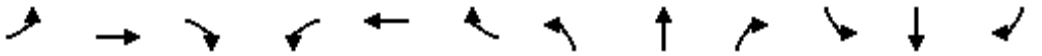
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	579	-
HCM Lane V/C Ratio	-	-	0.017	-
HCM Control Delay (s)	-	-	11.3	-
HCM Lane LOS	-	-	B	-
HCM 95th %tile Q(veh)	-	-	0.1	-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	131	1038	12	698	400	15	45	462	18	59
Future Volume (vph)	131	1038	12	698	400	15	45	462	18	59
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	29.8	9.6	29.8	29.8	9.6	33.6	9.6	26.8	26.8
Total Split (s)	20.0	49.0	11.0	40.0	40.0	11.0	38.0	22.0	49.0	49.0
Total Split (%)	16.7%	40.8%	9.2%	33.3%	33.3%	9.2%	31.7%	18.3%	40.8%	40.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.8	3.6	3.6	3.6	4.8	4.8
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.8	4.6	4.6	4.6	5.8	5.8
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 87.8
Natural Cycle: 95
Control Type: Actuated-Uncoordinated

Splits and Phases: 41: Commerce Pkwy. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	1038	14	12	698	400	15	45	60	462	18	59
Future Volume (veh/h)	131	1038	14	12	698	400	15	45	60	462	18	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	136	1081	13	12	727	0	16	47	43	481	19	46
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	171	1905	23	26	995		33	127	117	577	578	490
Arrive On Green	0.10	0.36	0.36	0.01	0.28	0.00	0.02	0.14	0.14	0.18	0.30	0.30
Sat Flow, veh/h	1714	5283	64	1714	3610	1610	1714	914	836	3141	1900	1610
Grp Volume(v), veh/h	136	707	387	12	727	0	16	0	90	481	19	46
Grp Sat Flow(s),veh/h/ln	1714	1729	1889	1714	1805	1610	1714	0	1750	1570	1900	1610
Q Serve(g_s), s	5.4	11.4	11.4	0.5	12.6	0.0	0.6	0.0	3.2	10.2	0.5	1.4
Cycle Q Clear(g_c), s	5.4	11.4	11.4	0.5	12.6	0.0	0.6	0.0	3.2	10.2	0.5	1.4
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	171	1247	681	26	995		33	0	244	577	578	490
V/C Ratio(X)	0.79	0.57	0.57	0.47	0.73		0.49	0.00	0.37	0.83	0.03	0.09
Avail Cap(c_a), veh/h	382	2164	1182	159	1788		159	0	846	792	1189	1007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	17.7	17.7	33.7	22.7	0.0	33.5	0.0	27.0	27.2	16.9	17.2
Incr Delay (d2), s/veh	3.1	0.4	0.7	4.9	1.1	0.0	4.1	0.0	0.9	4.1	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	3.9	4.4	0.2	4.9	0.0	0.3	0.0	1.4	3.8	0.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.5	18.1	18.5	38.7	23.7	0.0	37.6	0.0	27.9	31.3	16.9	17.3
LnGrp LOS	C	B	B	D	C		D	A	C	C	B	B
Approach Vol, veh/h		1230			739	A		106			546	
Approach Delay, s/veh		20.0			24.0			29.4			29.6	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	15.4	5.6	30.7	5.9	26.8	11.5	24.8
Change Period (Y+Rc), s	4.6	* 5.8	4.6	5.8	4.6	5.8	4.6	5.8
Max Green Setting (Gmax), s	17.4	* 33	6.4	43.2	6.4	43.2	15.4	34.2
Max Q Clear Time (g_c+I1), s	12.2	5.2	2.5	13.4	2.6	3.4	7.4	14.6
Green Ext Time (p_c), s	0.5	0.5	0.0	7.5	0.0	0.2	0.1	4.4

Intersection Summary	
HCM 6th Ctrl Delay	23.5
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	133	10	1	214	1	11	0	7	3	0	4
Future Vol, veh/h	4	133	10	1	214	1	11	0	7	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	145	11	1	233	1	12	0	8	3	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	234	0	0	156	0	0	278	395	78	317	400	117
Stage 1	-	-	-	-	-	-	159	159	-	236	236	-
Stage 2	-	-	-	-	-	-	119	236	-	81	164	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1345	-	-	1436	-	-	658	545	973	617	541	919
Stage 1	-	-	-	-	-	-	833	770	-	752	713	-
Stage 2	-	-	-	-	-	-	879	713	-	924	766	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1345	-	-	1436	-	-	653	543	973	610	539	919
Mov Cap-2 Maneuver	-	-	-	-	-	-	743	635	-	695	634	-
Stage 1	-	-	-	-	-	-	831	768	-	750	712	-
Stage 2	-	-	-	-	-	-	874	712	-	914	764	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0	9.5	9.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	818	1345	-	-	1436	-	-	807
HCM Lane V/C Ratio	0.024	0.003	-	-	0.001	-	-	0.009
HCM Control Delay (s)	9.5	7.7	-	-	7.5	-	-	9.5
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	135	3	6	209	1	4	0	10	3	0	4
Future Vol, veh/h	4	135	3	6	209	1	4	0	10	3	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	200	-	-	200	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	2	-	-	2	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	147	3	7	227	1	4	0	11	3	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	228	0	0	150	0	0	285	399	75	324	400	114
Stage 1	-	-	-	-	-	-	157	157	-	242	242	-
Stage 2	-	-	-	-	-	-	128	242	-	82	158	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1352	-	-	1444	-	-	650	542	978	611	541	923
Stage 1	-	-	-	-	-	-	835	772	-	746	709	-
Stage 2	-	-	-	-	-	-	868	709	-	923	771	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1352	-	-	1444	-	-	643	538	978	601	537	923
Mov Cap-2 Maneuver	-	-	-	-	-	-	737	631	-	688	631	-
Stage 1	-	-	-	-	-	-	832	770	-	744	705	-
Stage 2	-	-	-	-	-	-	860	705	-	910	769	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.2	9.1	9.5
HCM LOS			A	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	894	1352	-	-	1444	-	-	805
HCM Lane V/C Ratio	0.017	0.003	-	-	0.005	-	-	0.009
HCM Control Delay (s)	9.1	7.7	-	-	7.5	-	-	9.5
HCM Lane LOS	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	1	0	1	19	10	0
Future Vol, veh/h	1	0	1	19	10	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1	0	1	21	11	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	24	6	11	0	-	0
Stage 1	11	-	-	-	-	-
Stage 2	13	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	994	1081	1621	-	-	0
Stage 1	1016	-	-	-	-	0
Stage 2	1014	-	-	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	993	1081	1621	-	-	-
Mov Cap-2 Maneuver	916	-	-	-	-	-
Stage 1	1015	-	-	-	-	-
Stage 2	1014	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	8.9	0.4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT
Capacity (veh/h)	1621	-	916	-
HCM Lane V/C Ratio	0.001	-	0.001	-
HCM Control Delay (s)	7.2	-	8.9	-
HCM Lane LOS	A	-	A	-
HCM 95th %tile Q(veh)	0	-	0	-

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	93	43	7	180	7	27	2	15	2	0	7
Future Vol, veh/h	12	93	43	7	180	7	27	2	15	2	0	7
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	15	116	54	9	225	9	34	3	19	3	0	9
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.4	8.8	8.7	8
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	4%	0%	100%	42%	0%	100%	90%	0%	100%
Vol Right, %	0%	0%	96%	0%	0%	58%	0%	0%	10%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	27	1	16	12	62	74	7	120	67	2	0
LT Vol	27	0	0	12	0	0	7	0	0	2	0
Through Vol	0	1	1	0	62	31	0	120	60	0	0
RT Vol	0	0	15	0	0	43	0	0	7	0	0
Lane Flow Rate	34	2	20	15	78	92	9	150	84	2	0
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.057	0.003	0.027	0.024	0.111	0.122	0.013	0.21	0.116	0.004	0
Departure Headway (Hd)	6.076	5.577	4.907	5.664	5.163	4.756	5.55	5.05	4.976	6.173	5.673
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	589	640	727	632	694	753	645	711	720	578	0
Service Time	3.82	3.321	2.651	3.396	2.895	2.488	3.281	2.78	2.707	3.924	3.424
HCM Lane V/C Ratio	0.058	0.003	0.028	0.024	0.112	0.122	0.014	0.211	0.117	0.003	0
HCM Control Delay	9.2	8.3	7.8	8.5	8.5	8.2	8.4	9.1	8.4	8.9	8.4
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	N
HCM 95th-tile Q	0.2	0	0.1	0.1	0.4	0.4	0	0.8	0.4	0	0

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	62	9	2	42	1	10
Future Vol, veh/h	62	9	2	42	1	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	200	-	0	-
Veh in Median Storage, #	0	-	-	0	2	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	67	10	2	46	1	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	77	0	99	39
Stage 1	-	-	-	-	72	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	-	-	4.1	-	6.8	6.9
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1535	-	895	1031
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	998	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1535	-	894	1031
Mov Cap-2 Maneuver	-	-	-	-	892	-
Stage 1	-	-	-	-	948	-
Stage 2	-	-	-	-	997	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1017	-	-	1535	-
HCM Lane V/C Ratio	0.012	-	-	0.001	-
HCM Control Delay (s)	8.6	-	-	7.3	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	14	62	14	17	108	29	46	93	33	15	53	15
Future Vol, veh/h	14	62	14	17	108	29	46	93	33	15	53	15
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	18	78	18	21	135	36	58	116	41	19	66	19
Number of Lanes	1	2	0	1	2	0	1	2	0	1	2	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	3	3	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	3	3
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	3	3
HCM Control Delay	8.9	9.1	9	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	100%	0%	0%	100%	0%	0%	100%	0%
Vol Thru, %	0%	100%	48%	0%	100%	60%	0%	100%	55%	0%	100%
Vol Right, %	0%	0%	52%	0%	0%	40%	0%	0%	45%	0%	0%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	46	62	64	14	41	35	17	72	65	15	35
LT Vol	46	0	0	14	0	0	17	0	0	15	0
Through Vol	0	62	31	0	41	21	0	72	36	0	35
RT Vol	0	0	33	0	0	14	0	0	29	0	0
Lane Flow Rate	58	78	80	18	52	43	21	90	81	19	44
Geometry Grp	8	8	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.096	0.119	0.115	0.03	0.082	0.066	0.036	0.14	0.119	0.033	0.07
Departure Headway (Hd)	6.037	5.537	5.176	6.235	5.735	5.453	6.087	5.587	5.275	6.246	5.746
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	589	642	686	569	619	650	584	636	674	569	617
Service Time	3.817	3.317	2.956	4.024	3.524	3.241	3.867	3.367	3.055	4.035	3.535
HCM Lane V/C Ratio	0.098	0.121	0.117	0.032	0.084	0.066	0.036	0.142	0.12	0.033	0.071
HCM Control Delay	9.5	9.1	8.6	9.2	9	8.6	9.1	9.3	8.8	9.3	9
HCM Lane LOS	A	A	A	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.4	0.4	0.1	0.3	0.2	0.1	0.5	0.4	0.1	0.2

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	66	31	118	101	13
Future Vol, veh/h	7	66	31	118	101	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	140	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	9	87	41	155	133	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	302	75	150	0	-	0
Stage 1	142	-	-	-	-	-
Stage 2	160	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	671	978	1444	-	-	-
Stage 1	876	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	652	978	1444	-	-	-
Mov Cap-2 Maneuver	747	-	-	-	-	-
Stage 1	851	-	-	-	-	-
Stage 2	858	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	1.6	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1444	-	747	978	-	-
HCM Lane V/C Ratio	0.028	-	0.012	0.089	-	-
HCM Control Delay (s)	7.6	-	9.9	9	-	-
HCM Lane LOS	A	-	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0	0.3	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	9	1	160	181	4
Future Vol, veh/h	6	9	1	160	181	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	200	-	-	-
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	7	10	1	174	197	4

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	288	101	201	0	-	0
Stage 1	199	-	-	-	-	-
Stage 2	89	-	-	-	-	-
Critical Hdwy	6.8	6.9	4.1	-	-	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	684	941	1383	-	-	-
Stage 1	821	-	-	-	-	-
Stage 2	930	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	683	941	1383	-	-	-
Mov Cap-2 Maneuver	757	-	-	-	-	-
Stage 1	820	-	-	-	-	-
Stage 2	930	-	-	-	-	-

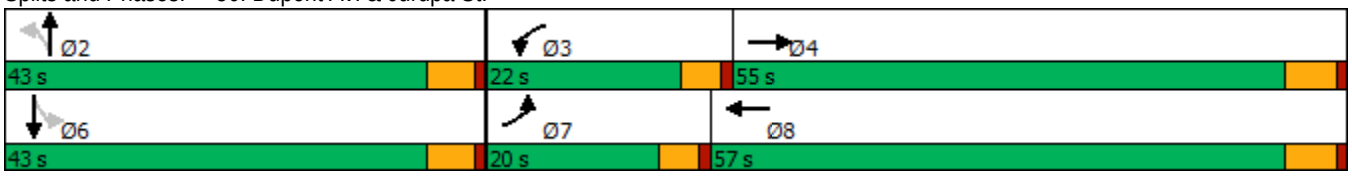
Approach	EB	NB	SB
HCM Control Delay, s	9.3	0	0
HCM LOS	A		

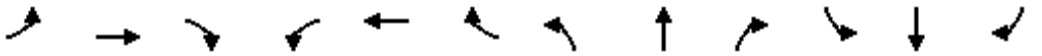
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1383	-	858	-	-
HCM Lane V/C Ratio	0.001	-	0.019	-	-
HCM Control Delay (s)	7.6	-	9.3	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	63	1372	71	930	46	29	95	29
Future Volume (vph)	63	1372	71	930	46	29	95	29
Turn Type	Prot	NA	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4	3	8		2		6
Permitted Phases					2		6	
Detector Phase	7	4	3	8	2	2	6	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	26.8	9.6	26.8	34.4	34.4	34.4	34.4
Total Split (s)	20.0	55.0	22.0	57.0	43.0	43.0	43.0	43.0
Total Split (%)	16.7%	45.8%	18.3%	47.5%	35.8%	35.8%	35.8%	35.8%
Yellow Time (s)	3.6	4.8	3.6	4.8	4.4	4.4	4.4	4.4
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	5.8	5.4	5.4	5.4	5.4
Lead/Lag	Lead	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				
Recall Mode	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 68.8
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 50: Dupont Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	1372	14	71	930	69	46	29	121	95	29	66
Future Volume (veh/h)	63	1372	14	71	930	69	46	29	121	95	29	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1800	1900	1900	1800	1900	1900	1800	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	68	1475	14	76	1000	68	49	31	101	102	31	47
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	101	2463	23	107	2322	158	334	332	296	288	332	296
Arrive On Green	0.06	0.46	0.46	0.06	0.47	0.47	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1714	5299	50	1714	4956	336	1271	1805	1610	1211	1805	1610
Grp Volume(v), veh/h	68	963	526	76	697	371	49	31	101	102	31	47
Grp Sat Flow(s),veh/h/ln	1714	1729	1891	1714	1729	1834	1271	1805	1610	1211	1805	1610
Q Serve(g_s), s	2.1	11.3	11.3	2.4	7.3	7.4	1.8	0.8	3.0	4.4	0.8	1.3
Cycle Q Clear(g_c), s	2.1	11.3	11.3	2.4	7.3	7.4	3.2	0.8	3.0	7.4	0.8	1.3
Prop In Lane	1.00		0.03	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	101	1607	879	107	1620	859	334	332	296	288	332	296
V/C Ratio(X)	0.67	0.60	0.60	0.71	0.43	0.43	0.15	0.09	0.34	0.35	0.09	0.16
Avail Cap(c_a), veh/h	482	3109	1700	545	3235	1716	974	1240	1106	897	1240	1106
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	10.9	10.9	25.2	9.7	9.7	20.1	18.5	19.4	22.7	18.5	18.8
Incr Delay (d2), s/veh	2.9	0.4	0.7	3.2	0.2	0.3	0.2	0.1	0.7	0.7	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	3.1	3.5	0.9	2.0	2.2	0.5	0.3	1.0	1.2	0.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.1	11.2	11.5	28.4	9.9	10.0	20.3	18.7	20.1	23.4	18.7	19.0
LnGrp LOS	C	B	B	C	A	B	C	B	C	C	B	B
Approach Vol, veh/h		1557			1144			181			180	
Approach Delay, s/veh		12.1			11.1			19.9			21.4	
Approach LOS		B			B			B			C	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.5	8.0	31.2		15.5	7.8	31.4				
Change Period (Y+Rc), s		5.4	4.6	5.8		5.4	4.6	5.8				
Max Green Setting (Gmax), s		37.6	17.4	49.2		37.6	15.4	51.2				
Max Q Clear Time (g_c+I1), s		5.2	4.4	13.3		9.4	4.1	9.4				
Green Ext Time (p_c), s		0.9	0.1	12.1		0.7	0.0	7.8				

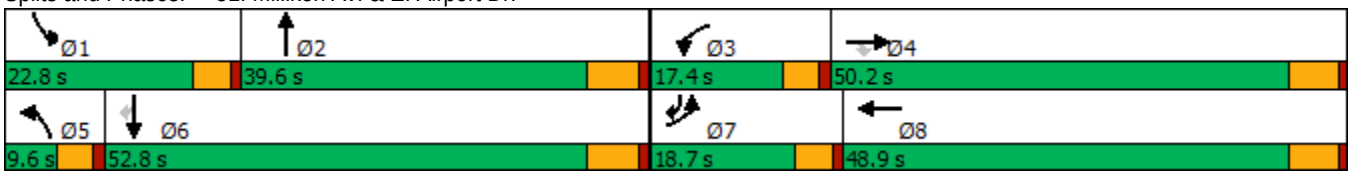
Intersection Summary												
HCM 6th Ctrl Delay			12.7									
HCM 6th LOS			B									

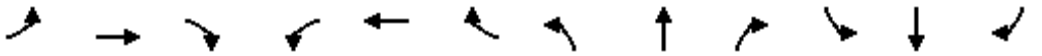
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	504	511	56	95	319	57	1198	179	1003	210
Future Volume (vph)	504	511	56	95	319	57	1198	179	1003	210
Turn Type	Prot	NA	Perm	Prot	NA	Prot	NA	Prot	NA	pm+ov
Protected Phases	7	4		3	8	5	2	1	6	7
Permitted Phases			4							6
Detector Phase	7	4	4	3	8	5	2	1	6	7
Switch Phase										
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	36.8	36.8	9.6	48.8	9.6	31.2	9.6	36.2	9.6
Total Split (s)	18.7	50.2	50.2	17.4	48.9	9.6	39.6	22.8	52.8	18.7
Total Split (%)	14.4%	38.6%	38.6%	13.4%	37.6%	7.4%	30.5%	17.5%	40.6%	14.4%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 130
Actuated Cycle Length: 107.3
Natural Cycle: 125
Control Type: Actuated-Uncoordinated

Splits and Phases: 51: Milliken Av. & E. Airport Dr.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	504	511	56	95	319	357	57	1198	77	179	1003	210
Future Volume (veh/h)	504	511	56	95	319	357	57	1198	77	179	1003	210
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1800	1900	1900	1700	1900	1900	1800	1900	1900
Adj Flow Rate, veh/h	509	516	36	96	322	239	58	1210	71	181	1013	165
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	460	1035	462	121	420	305	129	1494	88	213	1980	851
Arrive On Green	0.15	0.29	0.29	0.07	0.21	0.21	0.04	0.30	0.30	0.12	0.38	0.38
Sat Flow, veh/h	3141	3610	1610	1714	1996	1448	3141	5006	294	1714	5187	1610
Grp Volume(v), veh/h	509	516	36	96	291	270	58	836	445	181	1013	165
Grp Sat Flow(s),veh/h/ln	1570	1805	1610	1714	1805	1639	1570	1729	1842	1714	1729	1610
Q Serve(g_s), s	14.1	11.5	1.6	5.3	14.6	15.0	1.7	21.5	21.5	10.0	14.4	5.2
Cycle Q Clear(g_c), s	14.1	11.5	1.6	5.3	14.6	15.0	1.7	21.5	21.5	10.0	14.4	5.2
Prop In Lane	1.00		1.00	1.00		0.88	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	460	1035	462	121	380	345	129	1032	550	213	1980	851
V/C Ratio(X)	1.11	0.50	0.08	0.79	0.76	0.78	0.45	0.81	0.81	0.85	0.51	0.19
Avail Cap(c_a), veh/h	460	1665	742	228	808	734	163	1199	639	324	2510	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	28.6	25.1	44.1	35.7	35.9	45.1	31.3	31.3	41.3	22.9	11.9
Incr Delay (d2), s/veh	74.2	0.4	0.1	4.4	3.2	3.9	0.9	3.7	6.8	8.0	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	4.7	0.6	2.3	6.4	6.1	0.7	8.8	9.8	4.4	5.4	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	115.3	29.0	25.1	48.5	39.0	39.8	46.0	35.0	38.1	49.3	23.1	12.0
LnGrp LOS	F	C	C	D	D	D	D	C	D	D	C	B
Approach Vol, veh/h		1061			657			1339			1359	
Approach Delay, s/veh		70.3			40.7			36.5			25.2	
Approach LOS		E			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.6	34.9	11.4	33.4	8.5	43.0	18.7	26.1
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	18.2	33.4	12.8	44.4	5.0	46.6	14.1	43.1
Max Q Clear Time (g_c+I1), s	12.0	23.5	7.3	13.5	3.7	16.4	16.1	17.0
Green Ext Time (p_c), s	0.1	5.2	0.0	3.4	0.0	7.9	0.0	3.3

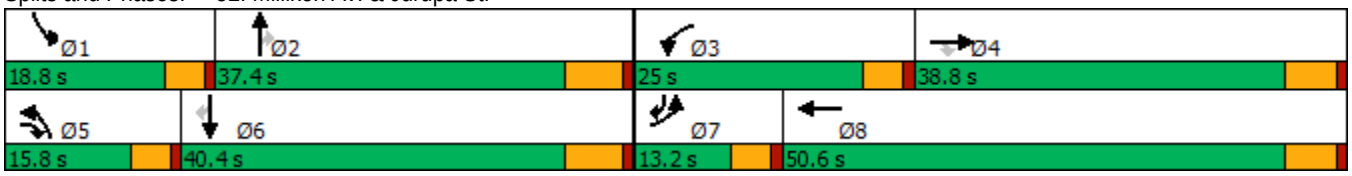
Intersection Summary	
HCM 6th Ctrl Delay	41.8
HCM 6th LOS	D

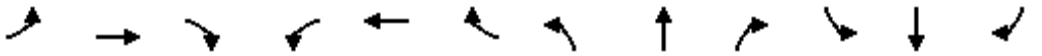
Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	137	1151	298	562	728	230	1029	636	287	1056	66
Future Volume (vph)	137	1151	298	562	728	230	1029	636	287	1056	66
Turn Type	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm	Prot	NA	pm+ov
Protected Phases	7	4	5	3	8	5	2		1	6	7
Permitted Phases			4					2			6
Detector Phase	7	4	5	3	8	5	2	2	1	6	7
Switch Phase											
Minimum Initial (s)	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0
Minimum Split (s)	9.6	38.8	9.6	9.6	38.8	9.6	35.2	35.2	9.6	39.2	9.6
Total Split (s)	13.2	38.8	15.8	25.0	50.6	15.8	37.4	37.4	18.8	40.4	13.2
Total Split (%)	11.0%	32.3%	13.2%	20.8%	42.2%	13.2%	31.2%	31.2%	15.7%	33.7%	11.0%
Yellow Time (s)	3.6	4.8	3.6	3.6	4.8	3.6	5.2	5.2	3.6	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	4.6	4.6	5.8	4.6	6.2	6.2	4.6	6.2	4.6
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None	None

Intersection Summary

Cycle Length: 120
Actuated Cycle Length: 118.4
Natural Cycle: 120
Control Type: Actuated-Uncoordinated

Splits and Phases: 52: Milliken Av. & Jurupa St.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	137	1151	298	562	728	130	230	1029	636	287	1056	66
Future Volume (veh/h)	137	1151	298	562	728	130	230	1029	636	287	1056	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1700	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	143	1199	217	585	758	118	240	1072	543	299	1100	37
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	193	1385	578	547	1721	266	290	1382	429	349	1480	559
Arrive On Green	0.06	0.27	0.27	0.17	0.38	0.38	0.09	0.27	0.27	0.11	0.29	0.29
Sat Flow, veh/h	3141	5187	1608	3141	4532	700	3141	5187	1610	3141	5187	1610
Grp Volume(v), veh/h	143	1199	217	585	577	299	240	1072	543	299	1100	37
Grp Sat Flow(s),veh/h/ln	1570	1729	1608	1570	1729	1774	1570	1729	1610	1570	1729	1610
Q Serve(g_s), s	5.2	25.8	11.7	20.4	14.5	14.7	8.8	22.4	31.2	10.9	22.5	1.8
Cycle Q Clear(g_c), s	5.2	25.8	11.7	20.4	14.5	14.7	8.8	22.4	31.2	10.9	22.5	1.8
Prop In Lane	1.00		1.00	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	193	1385	578	547	1313	674	290	1382	429	349	1480	559
V/C Ratio(X)	0.74	0.87	0.38	1.07	0.44	0.44	0.83	0.78	1.27	0.86	0.74	0.07
Avail Cap(c_a), veh/h	231	1462	602	547	1323	679	300	1382	429	381	1515	569
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	40.9	27.8	48.3	27.0	27.1	52.2	39.7	42.9	51.1	37.9	25.6
Incr Delay (d2), s/veh	7.5	5.5	0.4	58.2	0.2	0.5	15.6	2.8	137.0	15.0	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	11.3	4.4	12.1	5.8	6.1	4.0	9.4	28.2	4.9	9.3	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.5	46.4	28.2	106.6	27.3	27.6	67.9	42.6	179.9	66.1	39.9	25.6
LnGrp LOS	E	D	C	F	C	C	E	D	F	E	D	C
Approach Vol, veh/h		1559			1461			1855			1436	
Approach Delay, s/veh		45.3			59.1			86.0			45.0	
Approach LOS		D			E			F			D	

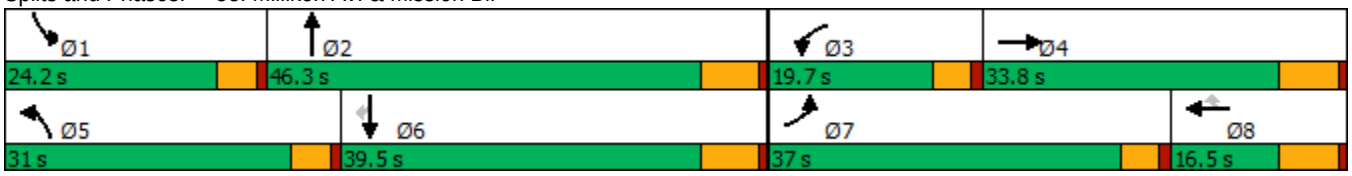
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	37.4	25.0	37.1	15.4	39.6	11.8	50.3
Change Period (Y+Rc), s	4.6	6.2	4.6	5.8	4.6	6.2	4.6	5.8
Max Green Setting (Gmax), s	14.2	31.2	20.4	33.0	11.2	34.2	8.6	44.8
Max Q Clear Time (g_c+I1), s	12.9	33.2	22.4	27.8	10.8	24.5	7.2	16.7
Green Ext Time (p_c), s	0.1	0.0	0.0	3.4	0.0	4.7	0.0	5.7

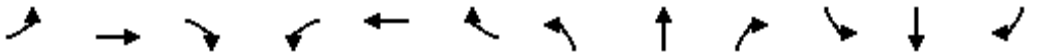
Intersection Summary	
HCM 6th Ctrl Delay	60.4
HCM 6th LOS	E

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	889	5	105	52	412	706	1023	330	1467	591
Future Volume (vph)	889	5	105	52	412	706	1023	330	1467	591
Turn Type	Prot	NA	Prot	NA	Perm	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8		5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	8	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	10.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	16.5	9.6	40.2	9.6	27.2	27.2
Total Split (s)	37.0	33.8	19.7	16.5	16.5	31.0	46.3	24.2	39.5	39.5
Total Split (%)	29.8%	27.3%	15.9%	13.3%	13.3%	25.0%	37.3%	19.5%	31.9%	31.9%
Yellow Time (s)	3.6	5.5	3.6	5.5	5.5	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	6.5	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 124
Actuated Cycle Length: 124
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	889	5	313	105	52	412	706	1023	71	330	1467	591
Future Volume (veh/h)	889	5	313	105	52	412	706	1023	71	330	1467	591
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1800	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	936	5	322	111	0	434	743	1077	75	347	1544	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	846	6	419	135	0	260	689	1885	131	400	1531	
Arrive On Green	0.26	0.26	0.26	0.08	0.00	0.08	0.21	0.36	0.36	0.12	0.27	0.00
Sat Flow, veh/h	3238	25	1589	1714	0	3220	3238	5268	366	3238	5700	1610
Grp Volume(v), veh/h	936	0	327	111	0	434	743	777	375	347	1544	0
Grp Sat Flow(s),veh/h/ln	1619	0	1614	1714	0	1610	1619	1900	1834	1619	1900	1610
Q Serve(g_s), s	32.4	0.0	23.2	7.9	0.0	10.0	26.4	20.5	20.5	13.0	33.3	0.0
Cycle Q Clear(g_c), s	32.4	0.0	23.2	7.9	0.0	10.0	26.4	20.5	20.5	13.0	33.3	0.0
Prop In Lane	1.00		0.98	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	846	0	425	135	0	260	689	1360	656	400	1531	
V/C Ratio(X)	1.11	0.00	0.77	0.82	0.00	1.67	1.08	0.57	0.57	0.87	1.01	
Avail Cap(c_a), veh/h	846	0	425	209	0	260	689	1360	656	512	1531	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	45.8	0.0	42.2	56.3	0.0	57.0	48.8	32.1	32.2	53.3	45.3	0.0
Incr Delay (d2), s/veh	64.3	0.0	8.3	7.9	0.0	318.4	57.1	0.6	1.2	10.2	25.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.8	0.0	9.8	3.6	0.0	15.4	15.7	9.1	8.9	5.7	18.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	110.1	0.0	50.5	64.2	0.0	375.4	105.9	32.7	33.4	63.5	70.5	0.0
LnGrp LOS	F	A	D	E	A	F	F	C	C	E	F	
Approach Vol, veh/h		1263			545			1895			1891	A
Approach Delay, s/veh		94.7			312.0			61.6			69.2	
Approach LOS		F			F			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.9	50.6	14.3	39.2	31.0	39.5	37.0	16.5
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	19.6	40.1	15.1	27.3	26.4	33.3	32.4	10.0
Max Q Clear Time (g_c+I1), s	15.0	22.5	9.9	25.2	28.4	35.3	34.4	12.0
Green Ext Time (p_c), s	0.3	6.5	0.0	0.4	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	96.0
HCM 6th LOS	F

Notes

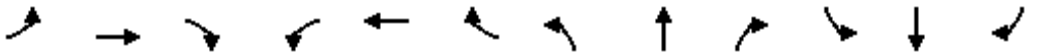
User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	1808	611	484	932	239	8	489
Future Volume (vph)	1808	611	484	932	239	8	489
Turn Type	NA	Perm	Prot	NA	Split	NA	Perm
Protected Phases	2		1	6	4	4	
Permitted Phases		2					4
Detector Phase	2	2	1	6	4	4	4
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	34.0	34.0	10.0	11.0	10.0	10.0	10.0
Total Split (s)	43.0	43.0	23.0	66.0	24.0	24.0	24.0
Total Split (%)	47.8%	47.8%	25.6%	73.3%	26.7%	26.7%	26.7%
Yellow Time (s)	5.0	5.0	4.0	5.0	4.0	4.0	4.0
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	5.0	6.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead				
Lead-Lag Optimize?	Yes	Yes	Yes				
Recall Mode	Min	Min	None	Min	None	None	None

Intersection Summary
Cycle Length: 90
Actuated Cycle Length: 86.3
Natural Cycle: 75
Control Type: Actuated-Uncoordinated

Splits and Phases: 54: I-15 SB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1808	611	484	932	0	0	0	0	239	8	489
Future Volume (veh/h)	0	1808	611	484	932	0	0	0	0	239	8	489
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1900	1900	1700	1900	0				1800	1900	1900
Adj Flow Rate, veh/h	0	1923	457	515	991	0				172	0	498
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94				0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0				0	0	0
Cap, veh/h	0	2415	682	593	3499	0				324	0	608
Arrive On Green	0.00	0.42	0.42	0.19	0.67	0.00				0.19	0.00	0.19
Sat Flow, veh/h	0	5700	1610	3141	5358	0				1714	0	3220
Grp Volume(v), veh/h	0	1923	457	515	991	0				172	0	498
Grp Sat Flow(s),veh/h/ln	0	1900	1610	1570	1729	0				1714	0	1610
Q Serve(g_s), s	0.0	23.6	18.4	12.8	6.2	0.0				7.3	0.0	11.9
Cycle Q Clear(g_c), s	0.0	23.6	18.4	12.8	6.2	0.0				7.3	0.0	11.9
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	2415	682	593	3499	0				324	0	608
V/C Ratio(X)	0.00	0.80	0.67	0.87	0.28	0.00				0.53	0.00	0.82
Avail Cap(c_a), veh/h	0	2619	740	702	3865	0				405	0	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	20.2	18.7	31.7	5.3	0.0				29.4	0.0	31.3
Incr Delay (d2), s/veh	0.0	1.6	1.9	8.9	0.0	0.0				1.4	0.0	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.4	6.3	5.2	1.5	0.0				2.9	0.0	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	21.8	20.6	40.6	5.3	0.0				30.8	0.0	37.1
LnGrp LOS	A	C	C	D	A	A				C	A	D
Approach Vol, veh/h		2380			1506						670	
Approach Delay, s/veh		21.5			17.4						35.5	
Approach LOS		C			B						D	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	20.2	40.1		20.2		60.3
Change Period (Y+Rc), s	5.0	6.0		5.0		6.0
Max Green Setting (Gmax), s	18.0	37.0		19.0		60.0
Max Q Clear Time (g_c+I1), s	14.8	25.6		13.9		8.2
Green Ext Time (p_c), s	0.4	8.5		1.3		6.1

Intersection Summary		
HCM 6th Ctrl Delay		22.2
HCM 6th LOS		C

Notes

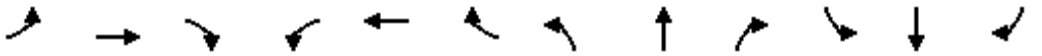
User approved volume balancing among the lanes for turning movement.

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	742	1305	1177	542	239	1	466
Future Volume (vph)	742	1305	1177	542	239	1	466
Turn Type	Prot	NA	NA	Perm	Split	NA	Perm
Protected Phases	5	2	6		8	8	
Permitted Phases				6			8
Detector Phase	5	2	6	6	8	8	8
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.6	30.1	10.1	10.1	10.1	10.1	10.1
Total Split (s)	28.0	69.0	41.0	41.0	21.0	21.0	21.0
Total Split (%)	31.1%	76.7%	45.6%	45.6%	23.3%	23.3%	23.3%
Yellow Time (s)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.5	1.5	1.5	1.5	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead		Lag	Lag			
Lead-Lag Optimize?	Yes		Yes	Yes			
Recall Mode	None	Min	Min	Min	None	None	None

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 81.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated

Splits and Phases: 55: I-15 NB Ramps & Jurupa St.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	742	1305	0	0	1177	542	239	1	466	0	0	0
Future Volume (veh/h)	742	1305	0	0	1177	542	239	1	466	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1700	1900	0	0	1900	1900	1800	1900	1900			
Adj Flow Rate, veh/h	765	1345	0	0	1213	428	164	0	451			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97			
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0			
Cap, veh/h	852	3579	0	0	1853	575	298	0	559			
Arrive On Green	0.27	0.69	0.00	0.00	0.36	0.36	0.17	0.00	0.17			
Sat Flow, veh/h	3141	5358	0	0	5358	1610	1714	0	3220			
Grp Volume(v), veh/h	765	1345	0	0	1213	428	164	0	451			
Grp Sat Flow(s),veh/h/ln	1570	1729	0	0	1729	1610	1714	0	1610			
Q Serve(g_s), s	17.6	8.1	0.0	0.0	14.7	17.4	6.5	0.0	10.1			
Cycle Q Clear(g_c), s	17.6	8.1	0.0	0.0	14.7	17.4	6.5	0.0	10.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	852	3579	0	0	1853	575	298	0	559			
V/C Ratio(X)	0.90	0.38	0.00	0.00	0.65	0.74	0.55	0.00	0.81			
Avail Cap(c_a), veh/h	983	4432	0	0	2490	773	364	0	685			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	26.3	4.9	0.0	0.0	20.2	21.0	28.2	0.0	29.7			
Incr Delay (d2), s/veh	9.2	0.0	0.0	0.0	0.3	2.2	1.6	0.0	5.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.0	1.8	0.0	0.0	5.2	6.1	2.6	0.0	4.0			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	4.9	0.0	0.0	20.5	23.3	29.8	0.0	35.5			
LnGrp LOS	D	A	A	A	C	C	C	A	D			
Approach Vol, veh/h		2110			1641			615				
Approach Delay, s/veh		16.0			21.2			34.0				
Approach LOS		B			C			C				
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		56.7			24.9	31.8		18.1				
Change Period (Y+Rc), s		5.1			4.6	5.1		5.1				
Max Green Setting (Gmax), s		63.9			23.4	35.9		15.9				
Max Q Clear Time (g_c+I1), s		10.1			19.6	19.4		12.1				
Green Ext Time (p_c), s		9.5			0.7	7.3		0.9				

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

APPENDIX 7.3:

HORIZON YEAR (2040) WITHOUT PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

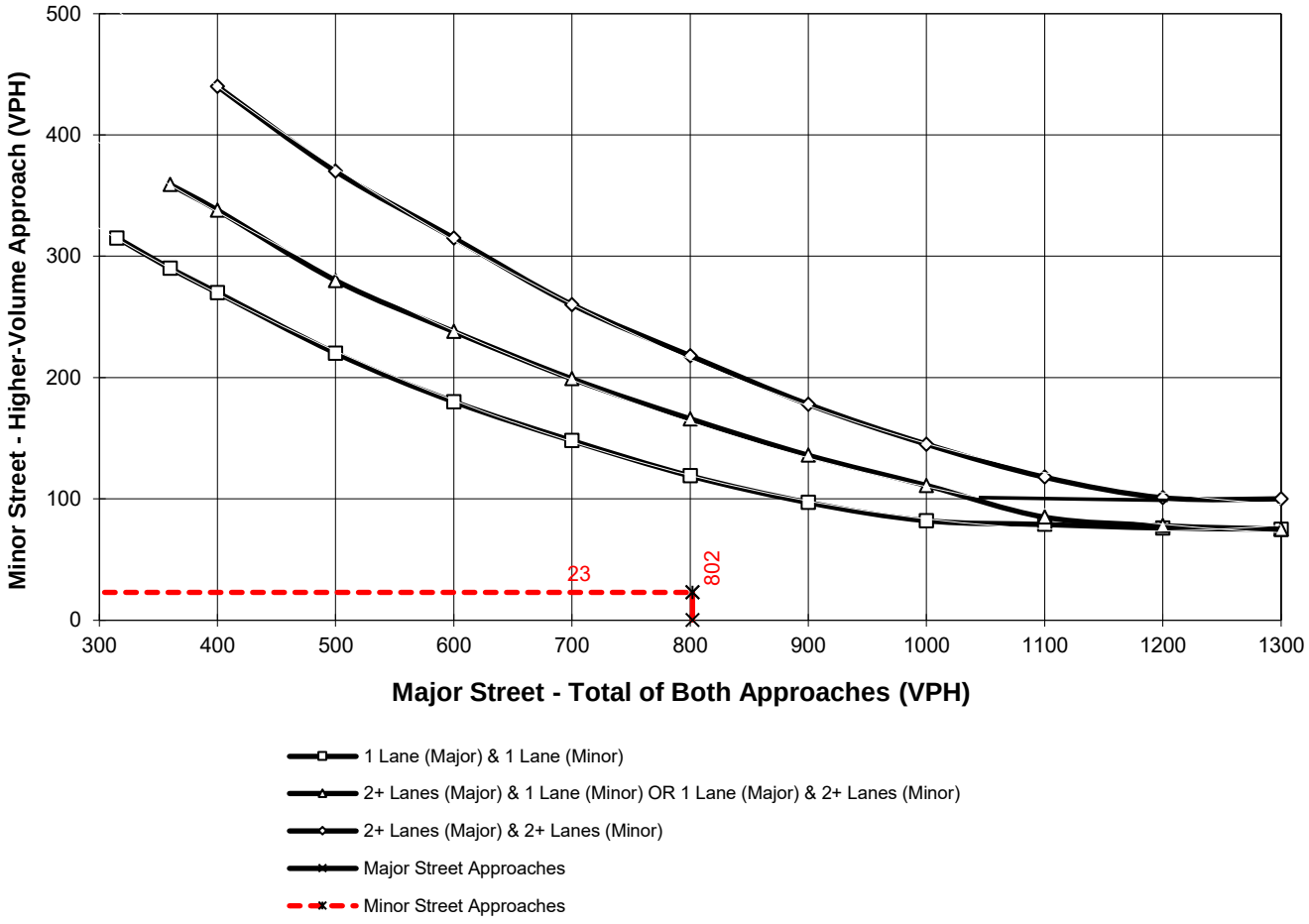
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2040) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **802**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 15/Santa Ana St** High Volume Approach (VPH) = **23**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

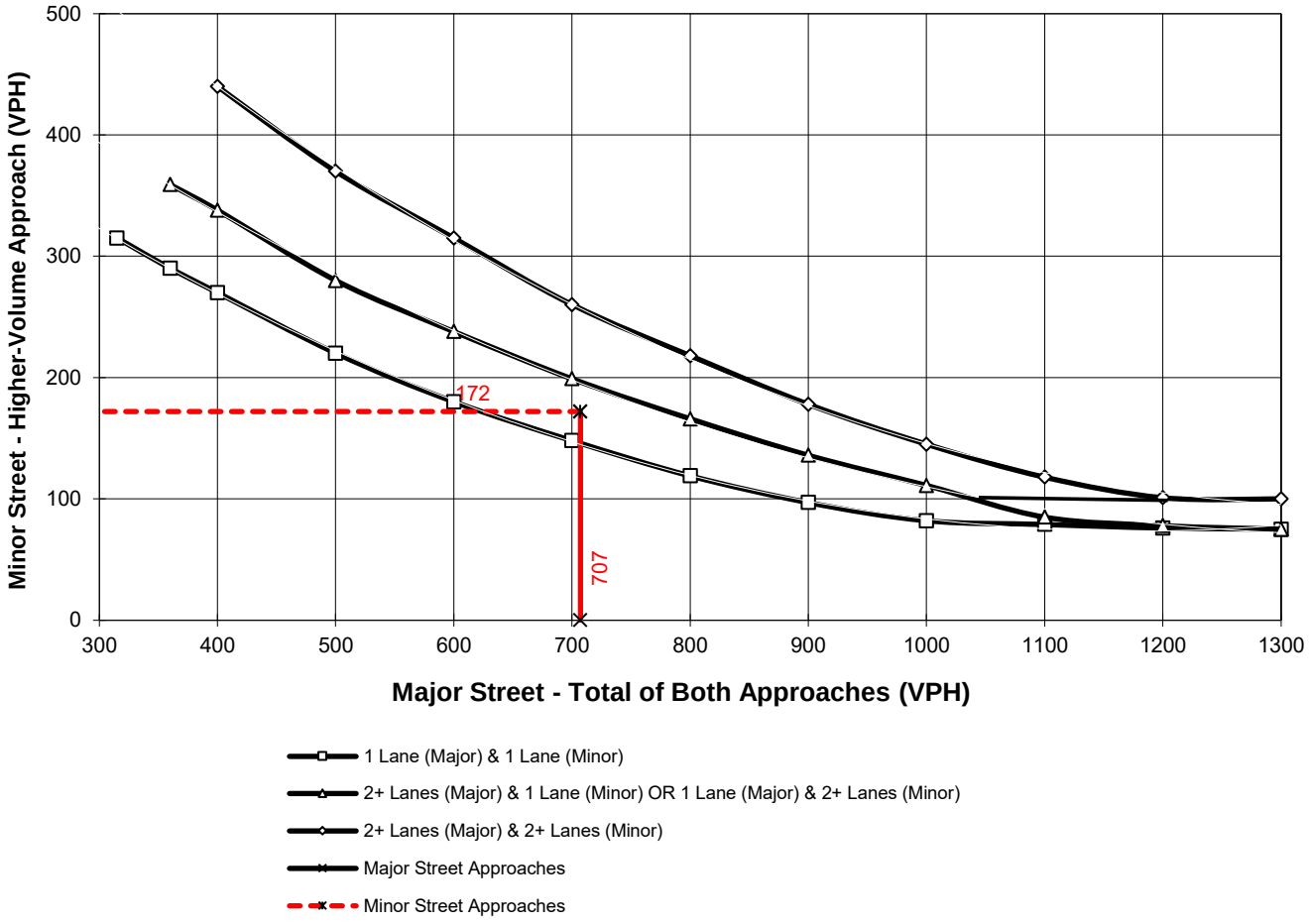
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2040) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** — Total of Both Approaches (VPH) = **707**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **La Salle Street** — High Volume Approach (VPH) = **172**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

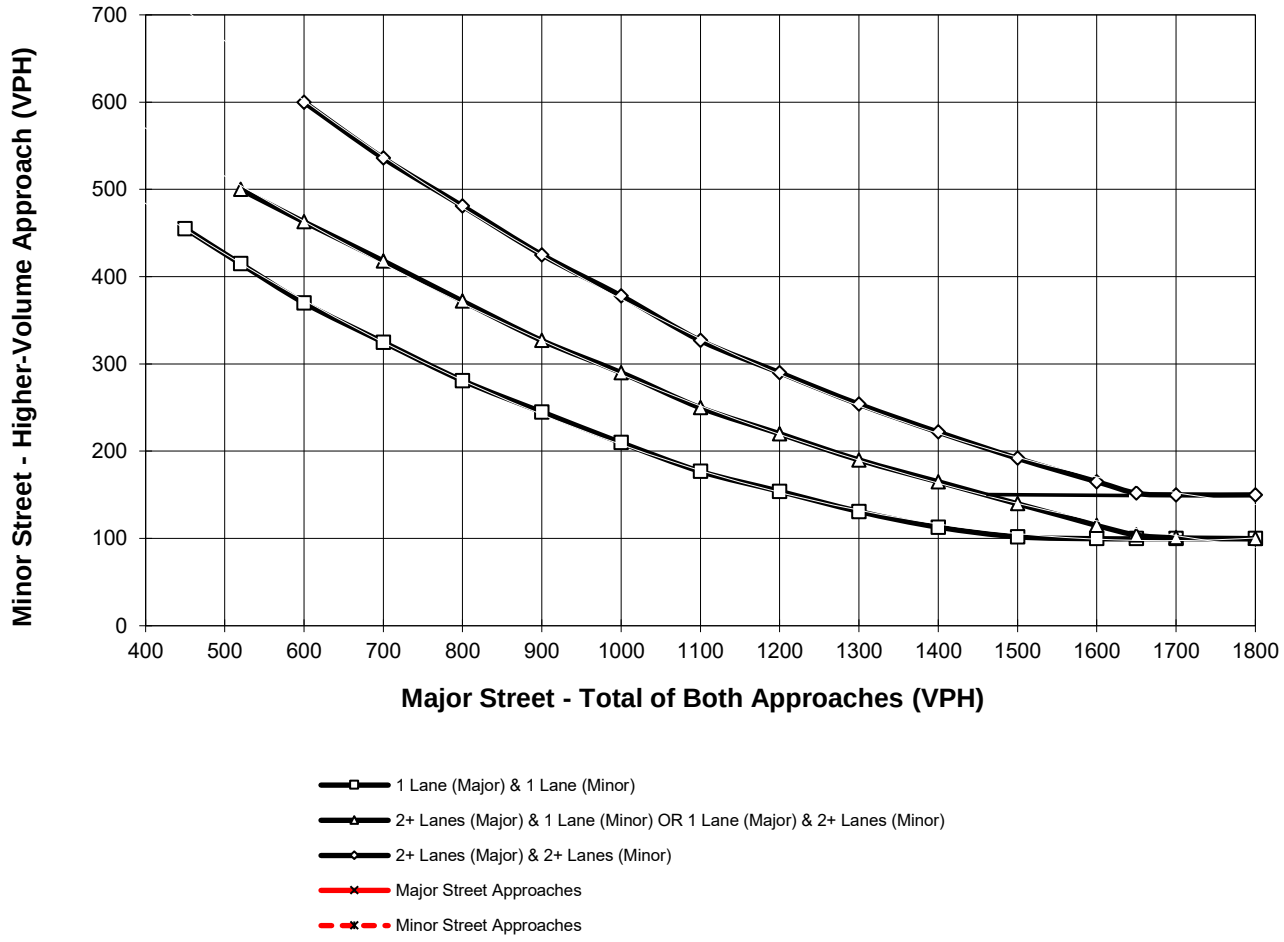
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2040) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Santa Ana Street** Total of Both Approaches (VPH) = **304**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue** High Volume Approach (VPH) = **35**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

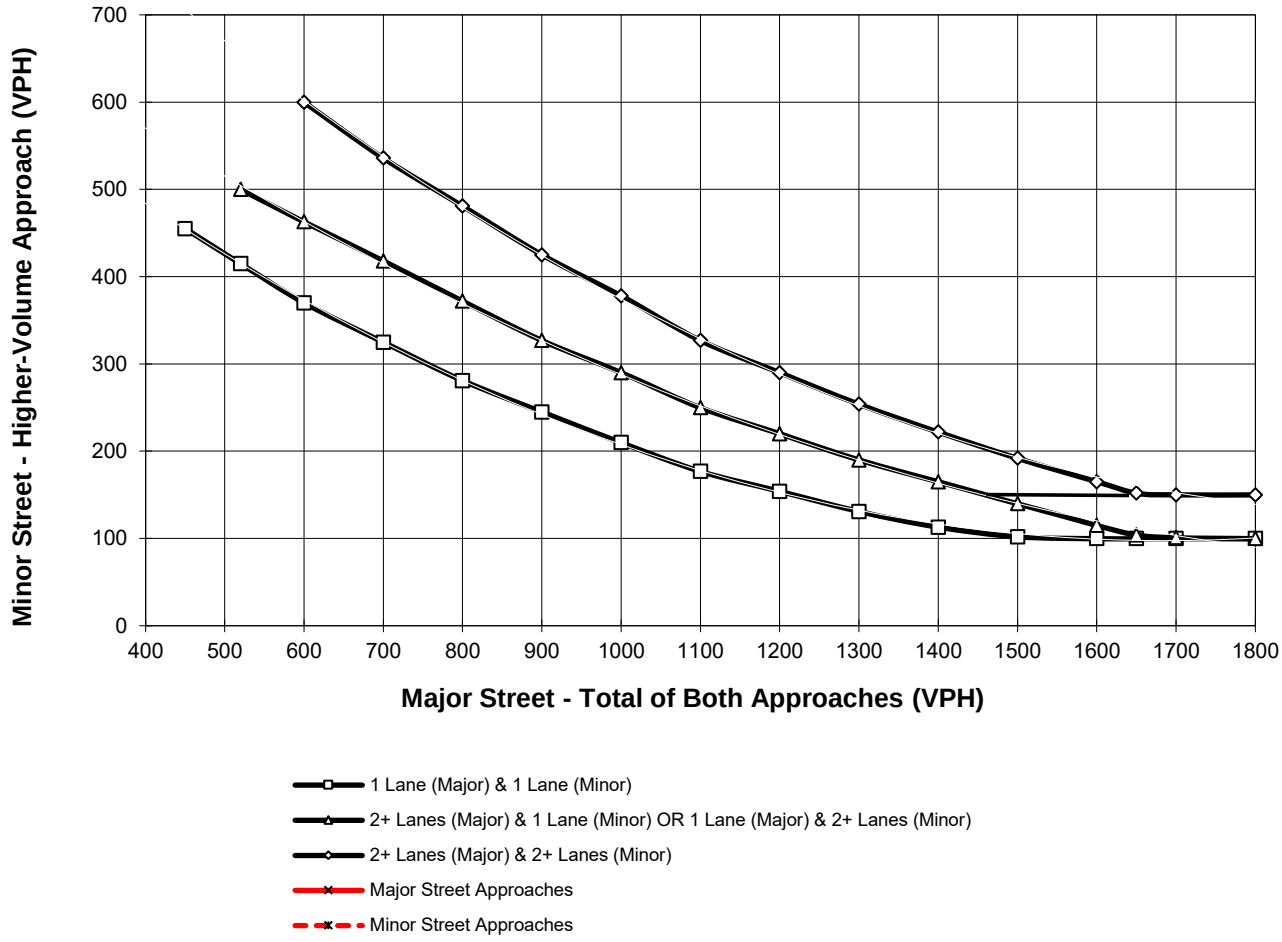
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2040) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue**
Total of Both Approaches (VPH) = **247**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Santa Ana Street**
High Volume Approach (VPH) = **154**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

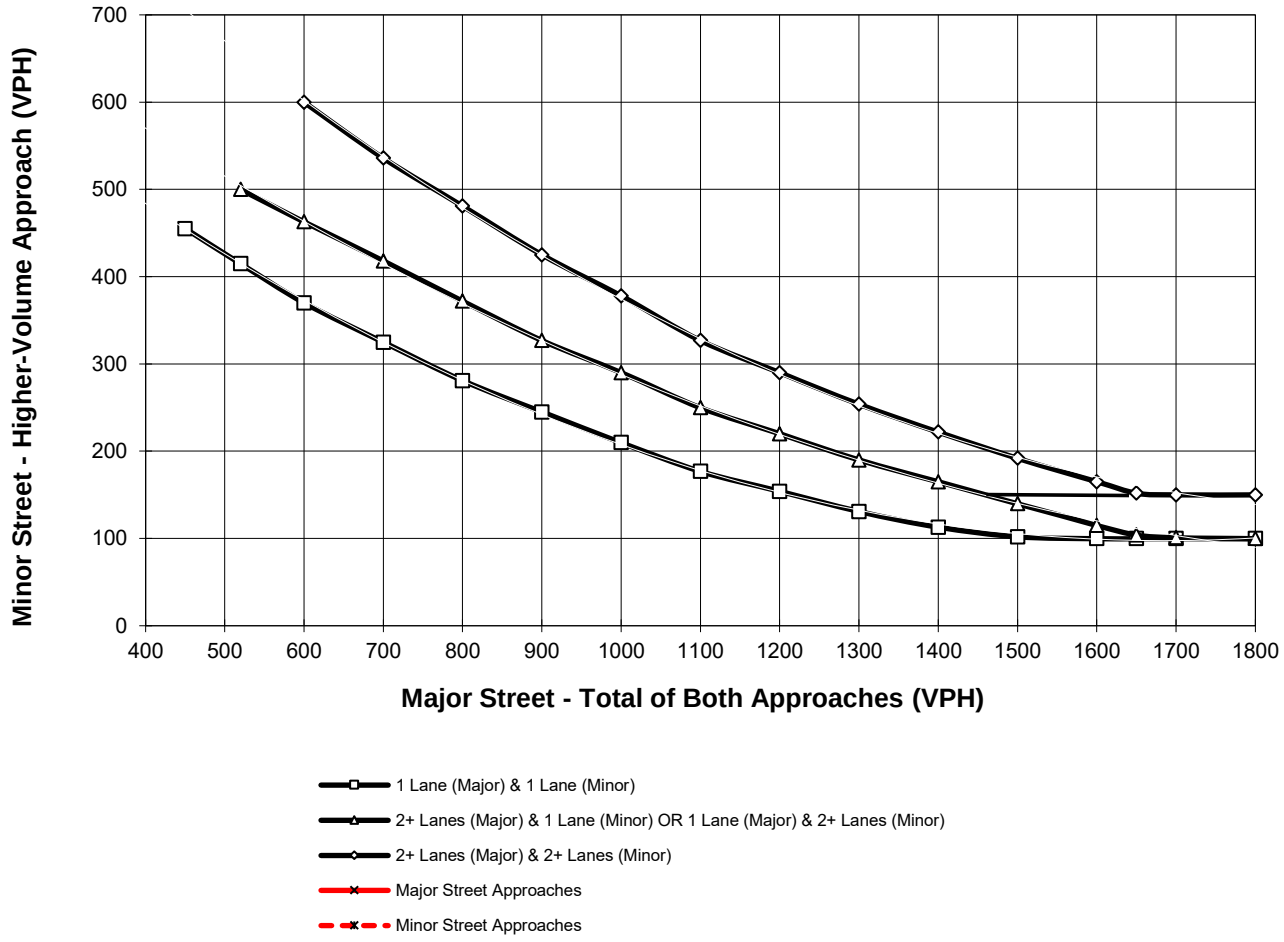
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2040) Conditions Without Project - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue**
Total of Both Approaches (VPH) = **248**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue**
High Volume Approach (VPH) = **38**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

This Page Intentionally Left Blank

APPENDIX 7.4:

HORIZON YEAR (2040) WITH PROJECT CONDITIONS TRAFFIC SIGNAL WARRANT ANALYSIS WORKSHEETS

This Page Intentionally Left Blank

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: E. Airport Drive				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 3				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **3** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **20,172** vpd Minor Street Future ADT = **161** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach: Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied XX						
	1	1	8,000	5,600	2,400	1,680
	2 + **20,172**	1 **161**	9,600	6,720 *	2,400	1,680
	2 +	2 +	9,600	6,720	3,200	2,240
	1	2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied XX						
	1	1	12,000	8,400	1,200	850
	2 + **20,172**	1 **161**	14,400	10,080 *	1,200	850
	2 +	2 +	14,400	10,080	1,600	1,120
	1	2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied XX			2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more	**A** 10%	**B** 19%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **La Salle Street**
Minor Street: **Driveway 6**
Critical Approach Speed (Major) 25 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **765** vpd
Minor Street Future ADT = **63** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied: XX / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / *1*	8,000	5,600	2,400	1,680
2 + **765** / *1* **63**	9,600	6,720	2,400	1,680
2 + / *2* +	9,600	6,720	3,200	2,240
1 / *2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / *1*	12,000	8,400	1,200	850
2 + **765** / *1* **63**	14,400	10,080	1,200	850
2 + / *2* +	14,400	10,080	1,600	1,120
1 / *2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 3% B: 5%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **La Salle Street**
Minor Street: **Driveway 7**
Critical Approach Speed (Major) 25 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **782** vpd
Minor Street Future ADT = **103** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied: XX						
Number of lanes for moving traffic on each approach						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **782**	*1* **103**	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic			Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX						
Number of lanes for moving traffic on each approach						
	1	*1*	12,000	8,400	1,200	850
	2 + **782**	*1* **103**	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied: XX			2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 4%	**B** 5%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: La Salle Street				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 8				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **775** vpd Minor Street Future ADT = **163** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied: XX / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	8,000	5,600	2,400	1,680
Major Street: 2 + **775** / Minor Street: 1 **163**	9,600	6,720	2,400	1,680
Major Street: 2 + / Minor Street: 2 +	9,600	6,720	3,200	2,240
Major Street: 1 / Minor Street: 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	12,000	8,400	1,200	850
Major Street: 2 + **775** / Minor Street: 1 **163**	14,400	10,080	1,200	850
Major Street: 2 + / Minor Street: 2 +	14,400	10,080	1,600	1,120
Major Street: 1 / Minor Street: 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 7% B: 5%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: City of Ontario
Major Street: La Salle Street
Minor Street: Driveway 9
Critical Approach Speed (Major) 25 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = 2 lane
Minor Street Approach Lanes = 1 lane

Major Street Future ADT = 1,484 vpd
Minor Street Future ADT = 18 vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / 1	8,000	5,600	2,400	1,680
2 + 1,484 / 1 18	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / 1	12,000	8,400	1,200	850
2 + 1,484 / 1 18	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A 1% B 2%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Jurupa Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 10				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **3** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **16,633** vpd Minor Street Future ADT = **63** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)		Minimum Requirements EADT: Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
CONDITION A - Minimum Vehicular Volume				
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 / 1	8,000	5,600	2,400	1,680
2 + **16,633** / 1 **63**	9,600	6,720 *	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied XX				
Number of lanes for moving traffic on each approach				
Major Street / Minor Street	Urban	Rural	Urban	Rural
1 / 1	12,000	8,400	1,200	850
2 + **16,633** / 1 **63**	14,400	10,080 *	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied XX				
No one condition satisfied, but following conditions fulfilled 80% of more ..... A 4% B 7%	2 CONDITIONS 80%		2 CONDITIONS 80%	

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Jurupa Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 11				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **3** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **16,634** vpd Minor Street Future ADT = **72** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL: XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **16,634**	1 **72**	9,600	6,720 *	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **16,634**	1 **72**	14,400	10,080 *	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied: XX

No one condition satisfied, but following conditions fulfilled 80% of more .....

A	B	2 CONDITIONS 80%	2 CONDITIONS 80%
4%	8%		

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		HY (2040) WP
				CALC MT	DATE	01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE	01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)		45 mph
Minor Street: Driveway 12				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,235** vpd

Minor Street Future ADT = **222** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [√]

or

In built up area of isolated community of < 10,000 population ..... [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL **XX**

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **3,235**	1 **222**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **3,235**	1 **222**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied **XX**

No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** **13%** **B** **26%**

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 13				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,019** vpd Minor Street Future ADT = **69** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / 1	8,000	5,600	2,400	1,680
2 + **3,019** / 1 **69**	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street / Minor Street				
1 / 1	12,000	8,400	1,200	850
2 + **3,019** / 1 **69**	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ..... A 4% B 8%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	45 mph
Minor Street: Driveway 14				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,971** vpd Minor Street Future ADT = **148** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... √

or

In built up area of isolated community of < 10,000 population .....

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL — XX

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied — XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **2,971**	1 **148**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied — XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **2,971**	1 **148**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied — XX

No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** 9% **B** 17%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

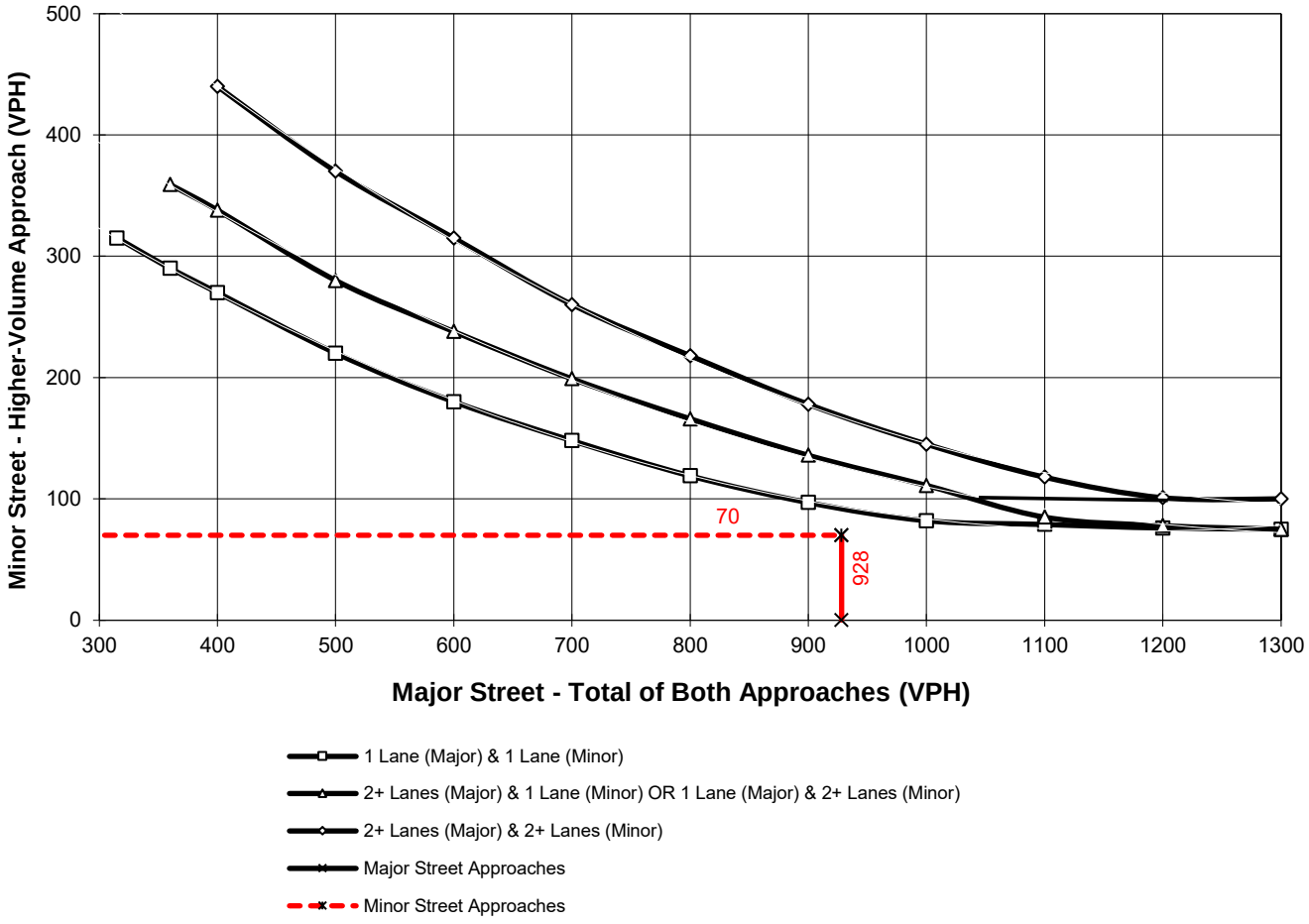
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2040) Conditions With Project - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **928**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **Driveway 15/Santa Ana St** High Volume Approach (VPH) = **70**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS		HY (2040) WP
				CALC MT	DATE	01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE	01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)		45 mph
Minor Street: Driveway 16				Critical Approach Speed (Minor)		25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,741** vpd

Minor Street Future ADT = **507** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ..... [√]

or

In built up area of isolated community of < 10,000 population ..... [ ]

RURAL (R)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL **XX**

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **2,741**	1 **507**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied **XX**

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **2,741**	1 **507**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied **XX**

No one condition satisfied, but following conditions fulfilled 80% of more ..... **A** **30%** **B** **27%**

Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)
2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Carnegie Avenue				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 17				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,001** vpd Minor Street Future ADT = **176** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. or **URBAN (U)**

In built up area of isolated community of < 10,000 population ……..

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied: XX / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	8,000	5,600	2,400	1,680
Major Street: 2 + **3,001** / Minor Street: 1 **176**	9,600	6,720	2,400	1,680
Major Street: 2 + / Minor Street: 2 +	9,600	6,720	3,200	2,240
Major Street: 1 / Minor Street: 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	12,000	8,400	1,200	850
Major Street: 2 + **3,001** / Minor Street: 1 **176**	14,400	10,080	1,200	850
Major Street: 2 + / Minor Street: 2 +	14,400	10,080	1,600	1,120
Major Street: 1 / Minor Street: 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 7% B: 15%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

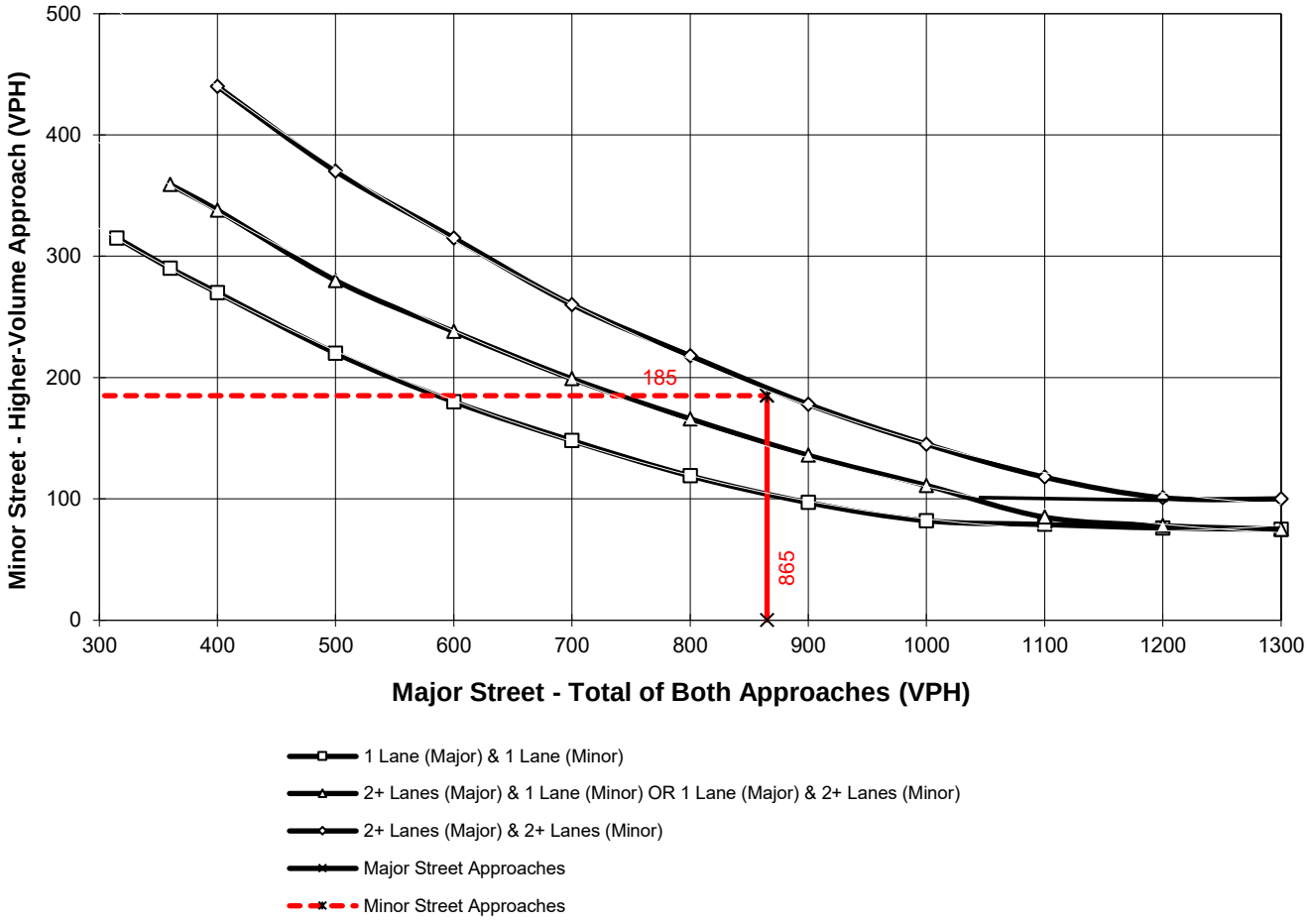
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 64 km/h OR ABOVE 40 mph ON MAJOR STREET)

Traffic Conditions = **Horizon Year (2040) Conditions With Project - Weekday PM Peak Hour**

Major Street Name = **Carnegie Avenue** Total of Both Approaches (VPH) = **865**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **La Salle Street** High Volume Approach (VPH) = **185**
Number of Approach Lanes Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 100 vph applies as the lower threshold for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **Carnegie Avenue**
Minor Street: **Driveway 18**
Critical Approach Speed (Major) 25 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **3,218** vpd
Minor Street Future ADT = **97** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Number of lanes for moving traffic on each approach		Minimum Requirements EADT			
			Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
	Major Street	Minor Street	Urban	Rural	Urban	Rural
CONDITION A - Minimum Vehicular Volume						
Satisfied / Not Satisfied (XX)						
	1	*1*	8,000	5,600	2,400	1,680
	2 + **3,218**	*1* **97**	9,600	6,720	2,400	1,680
	2 +	*2* +	9,600	6,720	3,200	2,240
	1	*2* +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic						
Satisfied / Not Satisfied (XX)						
	1	*1*	12,000	8,400	1,200	850
	2 + **3,218**	*1* **97**	14,400	10,080	1,200	850
	2 +	*2* +	14,400	10,080	1,600	1,120
	1	*2* +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B						
Satisfied / Not Satisfied (XX)			2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more …..	**A** 4%	**B** 8%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Santa Ana Street				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 19				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane

Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **1,187** vpd

Minor Street Future ADT = **85** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..

or

In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied: XX / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	8,000	5,600	2,400	1,680
Major Street: 2 + **1,187** / Minor Street: 1 **85**	9,600	6,720	2,400	1,680
Major Street: 2 + / Minor Street: 2 +	9,600	6,720	3,200	2,240
Major Street: 1 / Minor Street: 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied: XX	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach				
Major Street: 1 / Minor Street: 1	12,000	8,400	1,200	850
Major Street: 2 + **1,187** / Minor Street: 1 **85**	14,400	10,080	1,200	850
Major Street: 2 + / Minor Street: 2 +	14,400	10,080	1,600	1,120
Major Street: 1 / Minor Street: 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied: XX	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 4% B: 7%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Santa Ana Street				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 20				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **978** vpd Minor Street Future ADT = **224** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN: XX RURAL:

CONDITION A - Minimum Vehicular Volume

Satisfied: Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **978**	1 **224**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied: Not Satisfied: XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **978**	1 **224**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied: Not Satisfied: XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 9% **B** 7%

2 CONDITIONS 80% 2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Santa Ana Street				Critical Approach Speed (Major)	35 mph
Minor Street: Driveway 27				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,733** vpd Minor Street Future ADT = **170** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. or In built up area of isolated community of < 10,000 population …….. **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / 1	8,000	5,600	2,400	1,680
2 + **2,733** / 1 **170**	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / 1	12,000	8,400	1,200	850
2 + **2,733** / 1 **170**	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 7% B: 14%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Santa Ana Street				Critical Approach Speed (Major)	35 mph
Minor Street: Driveway 28				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **2,630** vpd Minor Street Future ADT = **129** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. or In built up area of isolated community of < 10,000 population …….. **URBAN (U)**

(Based on Estimated Average Daily Traffic - See Note)

URBAN / RURAL	Minimum Requirements EADT			
CONDITION A - Minimum Vehicular Volume	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / 1	8,000	5,600	2,400	1,680
2 + **2,630** / 1 **129**	9,600	6,720	2,400	1,680
2 + / 2 +	9,600	6,720	3,200	2,240
1 / 2 +	8,000	5,600	3,200	2,240
CONDITION B - Interruption of Continuous Traffic	Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
Satisfied / Not Satisfied (XX)	Urban	Rural	Urban	Rural
Number of lanes for moving traffic on each approach: Major Street / Minor Street				
1 / 1	12,000	8,400	1,200	850
2 + **2,630** / 1 **129**	14,400	10,080	1,200	850
2 + / 2 +	14,400	10,080	1,600	1,120
1 / 2 +	12,000	8,400	1,600	1,120
Combination of CONDITIONS A + B				
Satisfied / Not Satisfied (XX)	2 CONDITIONS 80%		2 CONDITIONS 80%	
No one condition satisfied, but following conditions fulfilled 80% of more ….. A: 5% B: 11%				

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
Jurisdiction: City of Ontario				CHK MT	DATE 01/10/22
Major Street: Double Day Avenue				Critical Approach Speed (Major)	25 mph
Minor Street: Driveway 29				Critical Approach Speed (Minor)	25 mph

Major Street Approach Lanes = **2** lane Minor Street Approach Lanes = **1** lane

Major Street Future ADT = **309** vpd Minor Street Future ADT = **34** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); …….. [ ]

or **URBAN (U)**

In built up area of isolated community of < 10,000 population …….. [ ]

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **309**	1 **34**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **309**	1 **34**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 1% **B** 2%

Vehicles Per Day on Major Street (Total of Both Approaches)	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)
2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

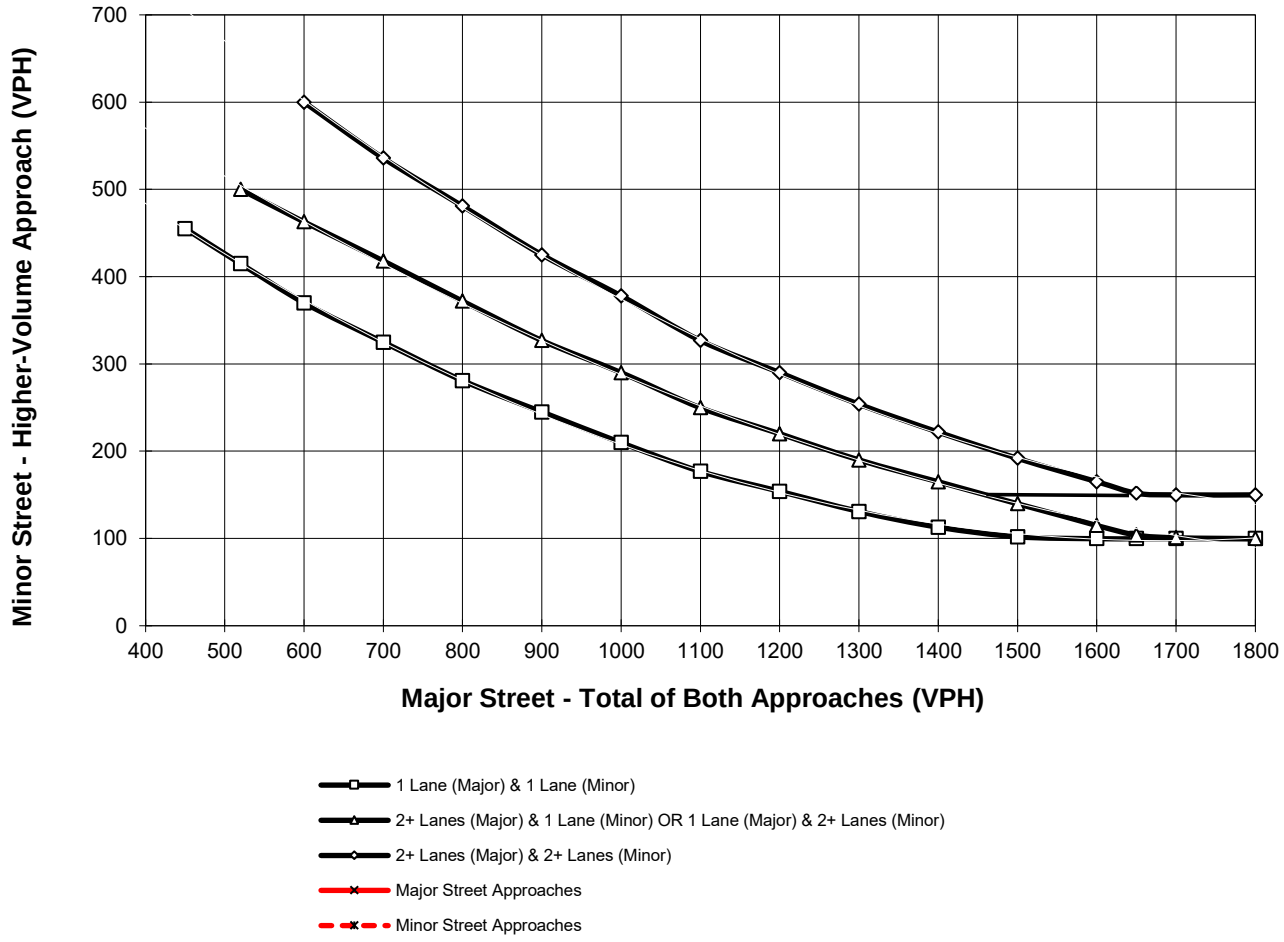
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2040) Conditions With Project - Weekday PM Peak Hour**

Major Street Name = **Santa Ana Street** Total of Both Approaches (VPH) = **342**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue** High Volume Approach (VPH) = **44**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **Double Day Avenue**
Minor Street: **Driveway 30**
Critical Approach Speed (Major) 25 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **1,160** vpd
Minor Street Future ADT = **136** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied / Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	*1*	8,000	5,600	2,400	1,680
2 + **1,160**	*1* **136**	9,600	6,720	2,400	1,680
2 +	*2* +	9,600	6,720	3,200	2,240
1	*2* +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied / Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	*1*	12,000	8,400	1,200	850
2 + **1,160**	*1* **136**	14,400	10,080	1,200	850
2 +	*2* +	14,400	10,080	1,600	1,120
1	*2* +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied / Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 6% **B** 8%

2 CONDITIONS 80%

2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

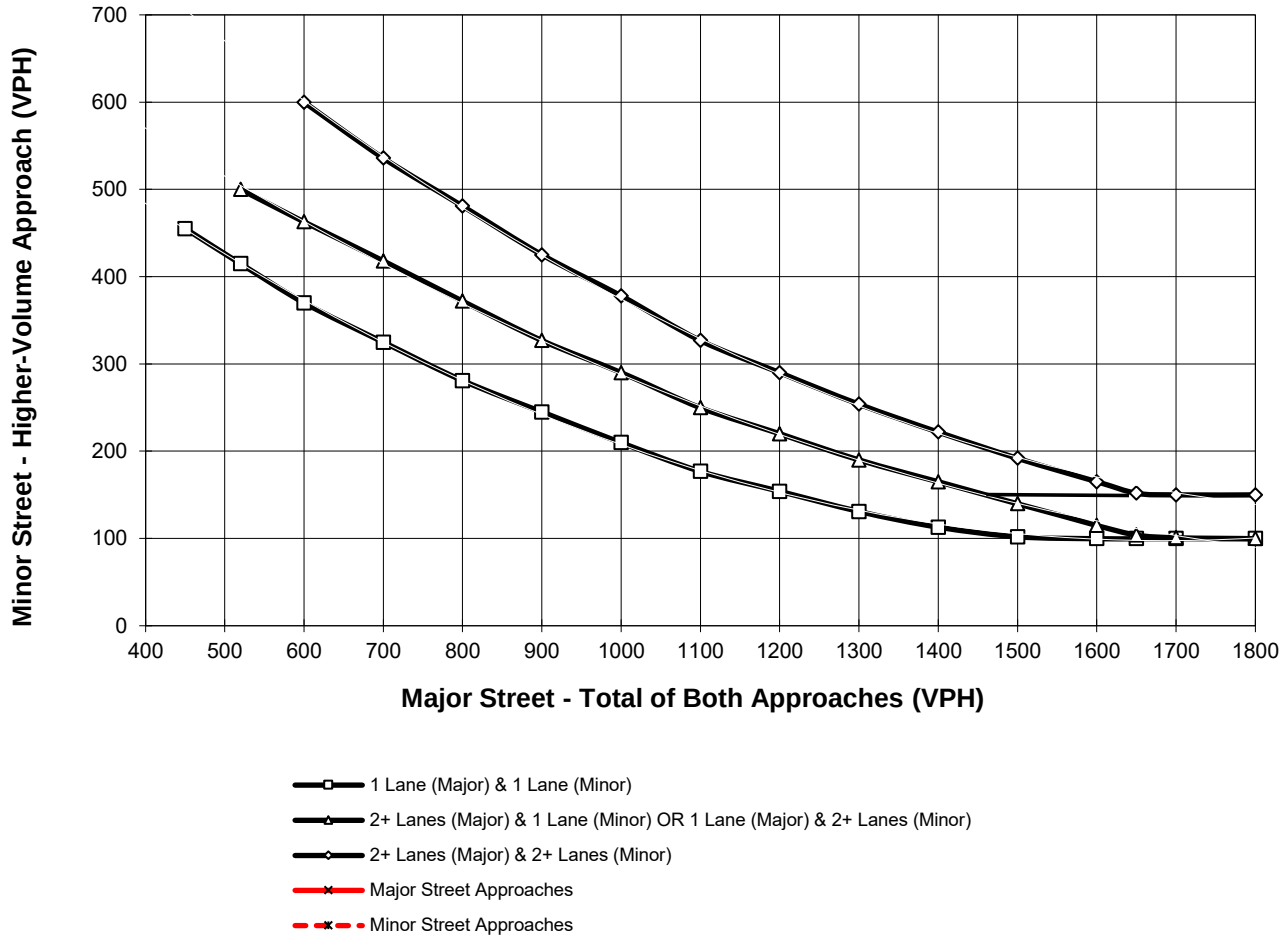
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2040) Conditions With Project - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue**
Total of Both Approaches (VPH) = **255**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Santa Ana Street**
High Volume Approach (VPH) = **154**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

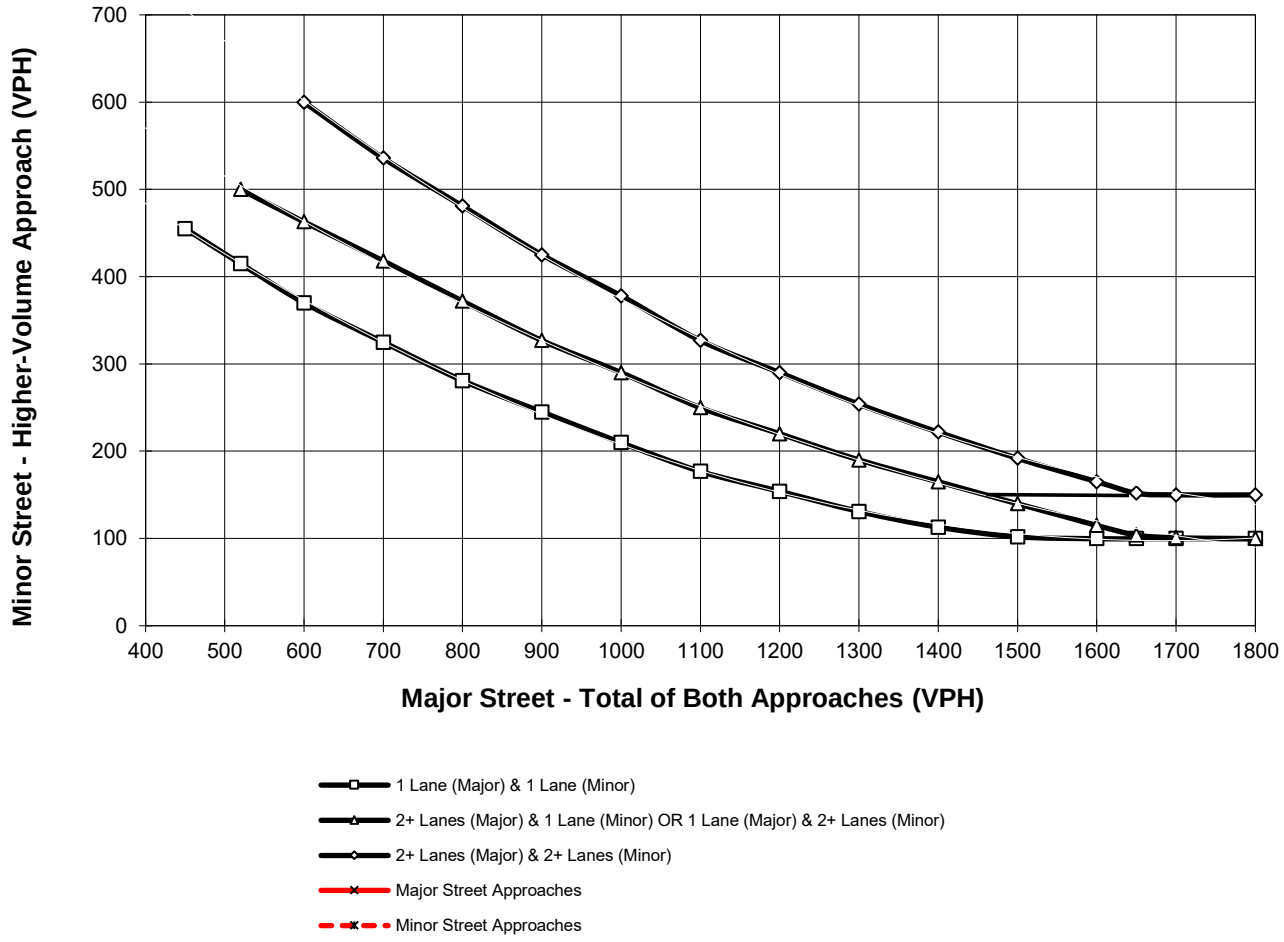
Figure 4C-3. Warrant 3, Peak Hour

Traffic Conditions = **Horizon Year (2040) Conditions With Project - Weekday PM Peak Hour**

Major Street Name = **Dupont Avenue** Total of Both Approaches (VPH) = **264**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Double Day Avenue** High Volume Approach (VPH) = **73**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



*Note: 150 vph applies as the lower threshold for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold for a minor-street approach with one lane

Figure 4C-103 (CA). Traffic Signal Warrants Worksheet
(Average Traffic Estimate Form)

DIST	CO	RTE	PM	TRAFFIC CONDITIONS	HY (2040) WP
				CALC MT	DATE 01/10/22
				CHK MT	DATE 01/10/22

Jurisdiction: **City of Ontario**
Major Street: **Dupont Avenue**
Minor Street: **Driveway 31**
Critical Approach Speed (Major) 25 mph
Critical Approach Speed (Minor) 25 mph

Major Street Approach Lanes = **2** lane
Minor Street Approach Lanes **1** lane

Major Street Future ADT = **2,785** vpd
Minor Street Future ADT = **114** vpd

Speed limit or critical speed on major street traffic > 64 km/h (40 mph); ……..
or
In built up area of isolated community of < 10,000 population ……..

URBAN (U)

(Based on Estimated Average Daily Traffic - See Note)

URBAN XX | RURAL

CONDITION A - Minimum Vehicular Volume

Satisfied | Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	8,000	5,600	2,400	1,680
2 + **2,785**	1 **114**	9,600	6,720	2,400	1,680
2 +	2 +	9,600	6,720	3,200	2,240
1	2 +	8,000	5,600	3,200	2,240

CONDITION B - Interruption of Continuous Traffic

Satisfied | Not Satisfied XX

Number of lanes for moving traffic on each approach

Major Street	Minor Street	Vehicles Per Day on Major Street (Total of Both Approaches) Urban	Rural	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only) Urban	Rural
1	1	12,000	8,400	1,200	850
2 + **2,785**	1 **114**	14,400	10,080	1,200	850
2 +	2 +	14,400	10,080	1,600	1,120
1	2 +	12,000	8,400	1,600	1,120

Combination of CONDITIONS A + B

Satisfied | Not Satisfied XX

No one condition satisfied, but following conditions fulfilled 80% of more ….. **A** 5% **B** 10%

Minimum Requirements EADT: Vehicles Per Day on Major Street (Total of Both Approaches)	Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)
2 CONDITIONS 80%	2 CONDITIONS 80%

Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

This Page Intentionally Left Blank

APPENDIX 7.5:

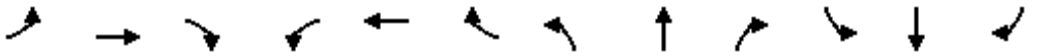
HORIZON YEAR (2040) WITH PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS WITH IMPROVEMENTS

This Page Intentionally Left Blank

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	461	29	49	39	257	630	1399	444	888	509
Future Volume (vph)	461	29	49	39	257	630	1399	444	888	509
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8	1	5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	1	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	9.6	9.6	40.2	9.6	27.2	27.2
Total Split (s)	28.0	31.3	13.7	17.0	27.0	35.0	48.0	27.0	40.0	40.0
Total Split (%)	23.3%	26.1%	11.4%	14.2%	22.5%	29.2%	40.0%	22.5%	33.3%	33.3%
Yellow Time (s)	3.6	5.5	3.6	5.5	3.6	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	4.6	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 120
Actuated Cycle Length: 111.8
Natural Cycle: 90
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	461	29	269	49	39	257	630	1399	77	444	888	509
Future Volume (veh/h)	461	29	269	49	39	257	630	1399	77	444	888	509
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1800	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	512	32	290	54	0	248	700	1554	85	493	987	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	576	38	341	69	0	855	768	1883	103	556	1633	
Arrive On Green	0.18	0.23	0.23	0.04	0.00	0.09	0.24	0.35	0.35	0.17	0.29	0.00
Sat Flow, veh/h	3238	162	1472	1714	0	3220	3238	5355	293	3238	5700	1610
Grp Volume(v), veh/h	512	0	322	54	0	248	700	1103	536	493	987	0
Grp Sat Flow(s),veh/h/ln	1619	0	1635	1714	0	1610	1619	1900	1847	1619	1900	1610
Q Serve(g_s), s	16.5	0.0	20.1	3.3	0.0	6.5	22.5	28.3	28.3	15.9	16.0	0.0
Cycle Q Clear(g_c), s	16.5	0.0	20.1	3.3	0.0	6.5	22.5	28.3	28.3	15.9	16.0	0.0
Prop In Lane	1.00		0.90	1.00		1.00	1.00		0.16	1.00		1.00
Lane Grp Cap(c), veh/h	576	0	378	69	0	855	768	1337	650	556	1633	
V/C Ratio(X)	0.89	0.00	0.85	0.79	0.00	0.29	0.91	0.83	0.83	0.89	0.60	
Avail Cap(c_a), veh/h	709	0	380	146	0	870	922	1487	723	679	1804	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.9	0.0	39.3	50.8	0.0	31.2	39.7	31.6	31.6	43.2	32.9	0.0
Incr Delay (d2), s/veh	10.2	0.0	16.6	7.3	0.0	0.2	10.7	3.6	7.1	10.4	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	9.3	1.5	0.0	2.4	9.5	12.7	13.0	6.8	7.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	0.0	55.9	58.1	0.0	31.4	50.3	35.2	38.8	53.6	33.4	0.0
LnGrp LOS	D	A	E	E	A	C	D	D	D	D	C	
Approach Vol, veh/h		834			302			2339			1480	A
Approach Delay, s/veh		54.1			36.2			40.6			40.1	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.9	43.8	8.9	31.2	29.9	36.8	23.6	16.5
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	22.4	41.8	9.1	24.8	30.4	33.8	23.4	10.5
Max Q Clear Time (g_c+I1), s	17.9	30.3	5.3	22.1	24.5	18.0	18.5	8.5
Green Ext Time (p_c), s	0.5	7.2	0.0	0.4	0.8	5.5	0.5	0.2

Intersection Summary	
HCM 6th Ctrl Delay	42.4
HCM 6th LOS	D

Notes

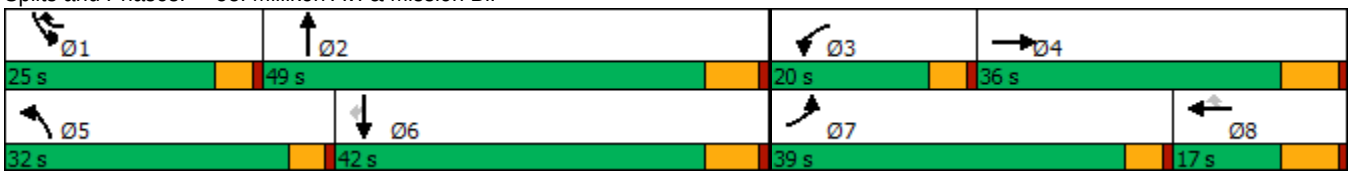
User approved volume balancing among the lanes for turning movement.

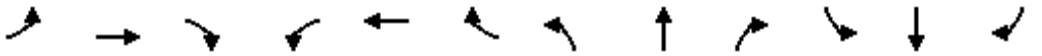
Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Configurations										
Traffic Volume (vph)	889	5	105	52	412	706	1023	330	1467	591
Future Volume (vph)	889	5	105	52	412	706	1023	330	1467	591
Turn Type	Prot	NA	Prot	NA	pm+ov	Prot	NA	Prot	NA	Perm
Protected Phases	7	4	3	8	1	5	2	1	6	
Permitted Phases					8					6
Detector Phase	7	4	3	8	1	5	2	1	6	6
Switch Phase										
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	5.0	10.0	5.0	10.0	10.0
Minimum Split (s)	9.6	16.5	9.6	16.5	9.6	9.6	40.2	9.6	27.2	27.2
Total Split (s)	39.0	36.0	20.0	17.0	25.0	32.0	49.0	25.0	42.0	42.0
Total Split (%)	30.0%	27.7%	15.4%	13.1%	19.2%	24.6%	37.7%	19.2%	32.3%	32.3%
Yellow Time (s)	3.6	5.5	3.6	5.5	3.6	3.6	5.2	3.6	5.2	5.2
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	6.5	4.6	6.5	4.6	4.6	6.2	4.6	6.2	6.2
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	None	None	None

Intersection Summary
Cycle Length: 130
Actuated Cycle Length: 130
Natural Cycle: 130
Control Type: Actuated-Uncoordinated

Splits and Phases: 53: Milliken Av. & Mission Bl.





Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	889	5	313	105	52	412	706	1023	71	330	1467	591
Future Volume (veh/h)	889	5	313	105	52	412	706	1023	71	330	1467	591
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1700	1900	1900	1800	1900	1900	1700	1900	1900	1700	1900	1900
Adj Flow Rate, veh/h	936	5	322	111	0	434	743	1077	75	347	1544	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	857	7	426	132	0	650	682	1923	134	392	1570	
Arrive On Green	0.53	0.54	0.54	0.15	0.00	0.16	0.42	0.73	0.73	0.24	0.55	0.00
Sat Flow, veh/h	3238	25	1589	1714	0	3220	3238	5268	366	3238	5700	1610
Grp Volume(v), veh/h	936	0	327	111	0	434	743	777	375	347	1544	0
Grp Sat Flow(s),veh/h/ln	1619	0	1614	1714	0	1610	1619	1900	1834	1619	1900	1610
Q Serve(g_s), s	34.4	0.0	20.5	8.2	0.0	10.5	27.4	12.1	12.2	13.4	34.5	0.0
Cycle Q Clear(g_c), s	34.4	0.0	20.5	8.2	0.0	10.5	27.4	12.1	12.2	13.4	34.5	0.0
Prop In Lane	1.00		0.98	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	857	0	433	132	0	650	682	1387	669	392	1570	
V/C Ratio(X)	1.09	0.00	0.76	0.84	0.00	0.67	1.09	0.56	0.56	0.88	0.98	
Avail Cap(c_a), veh/h	857	0	433	203	0	650	682	1387	669	508	1570	
HCM Platoon Ratio	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.6	0.0	26.8	54.2	0.0	44.0	37.6	12.8	12.8	48.4	28.9	0.0
Incr Delay (d2), s/veh	59.1	0.0	7.4	10.3	0.0	2.6	61.1	0.5	1.1	11.9	18.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.2	0.0	6.2	3.5	0.0	5.8	13.6	3.6	3.5	5.3	12.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	89.7	0.0	34.2	64.4	0.0	46.6	98.7	13.3	13.8	60.3	47.8	0.0
LnGrp LOS	F	A	C	E	A	D	F	B	B	E	D	
Approach Vol, veh/h		1263			545			1895			1891	A
Approach Delay, s/veh		75.3			50.2			46.9			50.1	
Approach LOS		E			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.3	53.7	14.6	41.4	32.0	42.0	39.0	17.0
Change Period (Y+Rc), s	4.6	6.2	4.6	6.5	4.6	6.2	4.6	6.5
Max Green Setting (Gmax), s	20.4	42.8	15.4	29.5	27.4	35.8	34.4	10.5
Max Q Clear Time (g_c+I1), s	15.4	14.2	10.2	22.5	29.4	36.5	36.4	12.5
Green Ext Time (p_c), s	0.3	7.8	0.0	1.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	54.7
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Unsignalized Delay for [SBR] is excluded from calculations of the approach delay and intersection delay.

January 26, 2022

Attention: Mr. Bruce McDonald
CanAm Ontario, LLC
Care of: McDonald Property Group
1140 N. Coast Highway
Laguna Beach, CA 92651

Subject: California Logistics Center – Airport Land Use Compatibility Review

Dear Mr. McDonald:

This letter documents Mead & Hunt's airport compatibility review of the proposed California Logistics Center (the Project) located just beyond a half mile east of Ontario International Airport (ONT or Airport). Our evaluation compares the Project proposal against the airport land use compatibility criteria included in the Ontario International Airport Land Use Compatibility Plan (ALUCP) adopted by the City of Ontario (the City) in 2011 and amended in July 2018.

There are three areas of your development which we have reviewed as it relates to the proposed Project:

1. Support interpreting the City's ALUCP (heights and occupancy intensity limits).
2. Support interpreting Federal Aviation Administration (FAA) airspace regulations related to Part 77 of the Federal Aviation Regulations, *Safe, Efficient Use, and Preservation of National Airspace*, and Runway Threshold Siting Surfaces in FAA Advisory Circular (AC) 150/5300-13A, Change 1, *Airport Design* (hereafter "AC-13A").
3. Support interpreting FAA runway protection zone (RPZ) policy and guidance in AC-13A and the FAA Memorandum on *Interim Guidance on Land Uses Within a Runway Protection Zone*, dated September 2012. Mead & Hunt provided its RPZ findings in a draft "ghost" letter in September 2021 that would be submitted on McDonald Property Group letterhead to the Ontario International Airport Authority (OIAA).

As detailed below, Mead & Hunt finds the Project to be conditionally consistent with the 2018 ALUCP and other matters reviewed by Mead & Hunt. Recommended conditions are noted at the end of this letter.

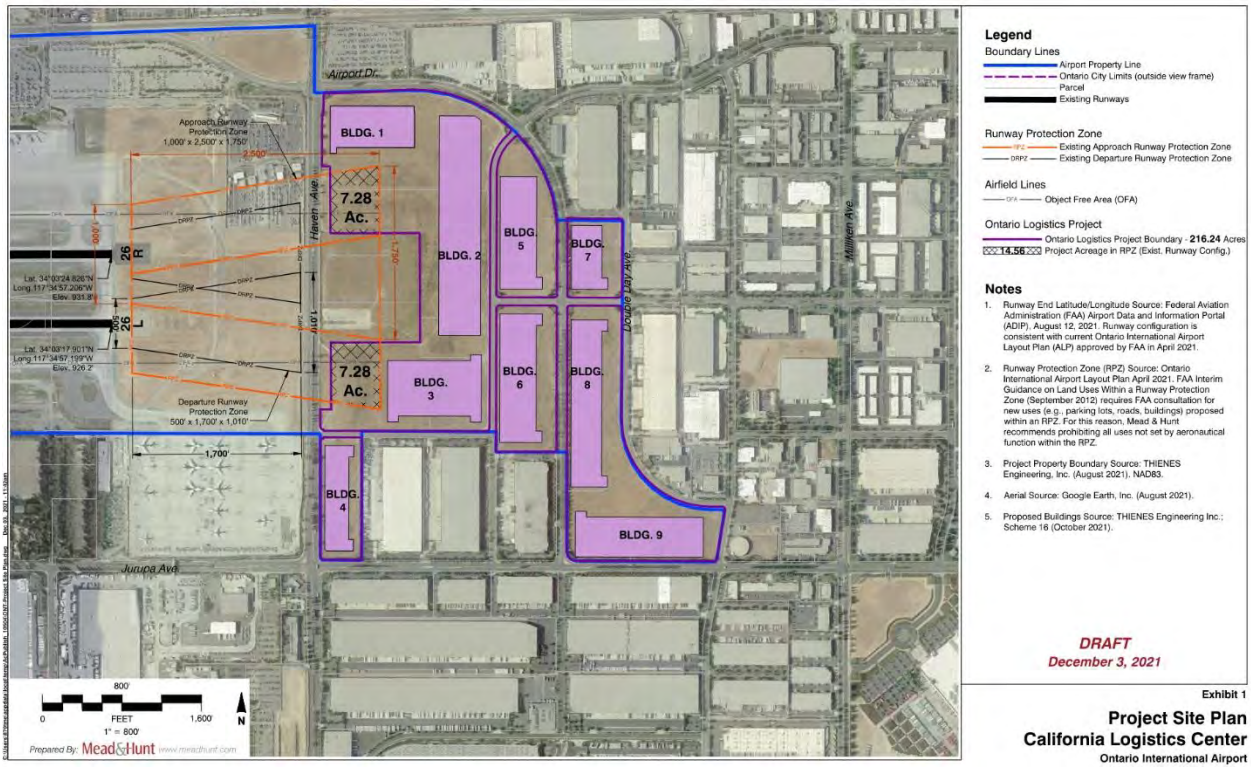
PROJECT OVERVIEW

As the information provided to us indicates, the Project site is located between Haven Avenue and Dupont Avenue, east of the Ontario International Airport (the Airport) on property owned by the OIAA. The Project site totals 216± acres (see **Exhibit 1**). Under a Ground Lease between the OIAA and the McDonald Property Group, the Project site will be developed for nonaeronautical use and will consist of nine industrial buildings (warehousing/manufacturing). As indicated in OIAA Resolution No. 2021-22, the FAA released the property under Section 163 of the FAA Reauthorization Act of 2018 for nonaeronautical use to support the Project on November 23, 2020 (first portion of property) and January 21, 2021 (second portion of property).

The Project site is part of the California Commerce Center that was developed in the 1980s, at which time underground infrastructure, streets, street frontages, and select corner landscape monuments were constructed. Since then, several commercial/industrial buildings have been constructed throughout the park; however, the Project site remains vacant and undeveloped.

The proposed California Logistics Center is conceptually planned as a nine-building, master-planned industrial park totaling approximately 4.2 million square feet of state-of-the art buildings. Buildings will range in size from 205,000 square feet to 927,000 square feet with a minimum interior clearance height ranging from 36 feet to 40 feet and will have a maximum exterior height of approximately 65 feet, which provides a 10-foot vertical clearance for rooftop equipment. Once the exterior shells of the buildings and associated infrastructure (e.g., parking lots) are constructed, the buildings will be leased to tenants for warehousing and light manufacturing uses. Mead & Hunt understands that the McDonald Property Group is designing each building to provide ancillary office space and employee facilities (e.g., break rooms, restrooms) and are assumed for purposes of this ALUCP review to be less than, but not limited to, 10% of each building's floor area.

Exhibit 1: Project Site Plan



ALUCP REQUIREMENTS

California Public Utilities Code (PUC), Section 21675(a) requires that an airport land use compatibility plan (ALUCP) be developed for all public-use airports in the state. The City adopted an ALUCP for the Ontario International Airport in April 2021. The 2011 ALUCP protected for a long-term scenario involving shifting both runways south and east of their present positions.

In 2018, at the request of the OIAA, the City amended the ALUCP to remove the long-term runway scenario and to reflect only the runway configuration that exists today (see **Attachment A**).

The basic function of the ALUCP is to promote compatibility between the Airport and the land uses that surround it in order to avoid future compatibility conflicts. The ALUCP policies address four types of airport land use concerns:

- Noise – Locations exposed to potentially disruptive levels of aircraft noise.
- Overflights – Locations where aircraft overflights can be intrusive and annoying to many people.
- Safety – Areas where the risk of an aircraft accident poses heightened safety concerns for people and property on the ground.
- Airspace Protection – Places where height and certain other land use characteristics need to be restricted to protect the safe and efficient use of navigable airspace.

A compatibility evaluation of the Project against each compatibility factor is described below.

Noise Evaluation

The purpose of noise compatibility policies is to avoid the establishment of noise-sensitive land uses in areas exposed to significant levels of aircraft noise.

As shown in **Exhibit 2**, the Project site falls within three ALUCP Noise Impact Zones:

- 65-70 dB CNEL
- 70-75 dB CNEL
- 75-80 dB CNEL

Exhibit 2: Noise

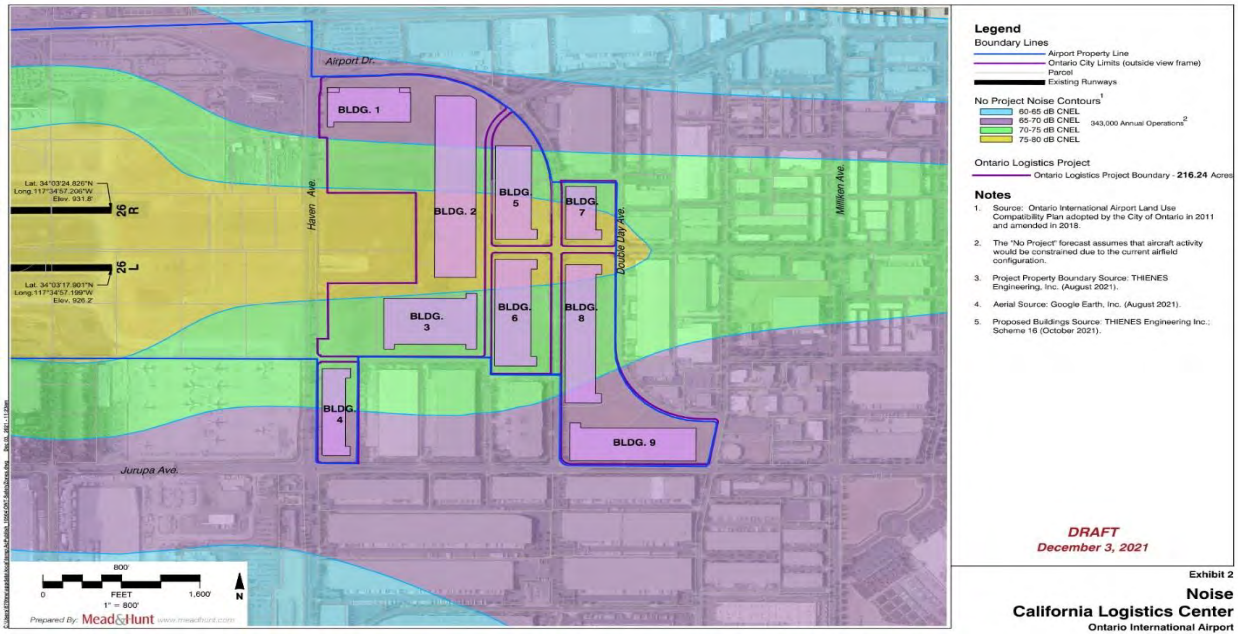


Exhibit 3 presents the ALUCP noise criteria that indicate that office uses are considered normally incompatible in areas exposed to CNEL 75 dB or greater unless extensive mitigation techniques are applied to make the indoor environment (with windows closed) acceptable for performance of expected activities (i.e., maximum of CNEL 50 dB). In the lower Noise Impact Zones, office spaces are deemed to be conditionally compatible if a maximum interior noise level of CNEL 50 dB is achieved through incorporation of proper sound attenuation design. The requirement also applies to Light Industrial Uses in the CNEL 70-80 dB Noise Impact Zones. Warehousing is deemed to be a compatible use in all three zones.

To facilitate a consistency determination from the City for the portion of the Project site in the CNEL 75-80 dB zone, Mead & Hunt recommends further actions by the McDonald Property Group that are listed in the Findings section below at the end of this letter.

Exhibit 3: ALUCP Noise Criteria

Noise Criteria

Legend: Land use compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-50 of this table.)

Normally Compatible Land Use	Conditional Land Use (45/50)	Incompatible Land Use

- Cells that are conditionally compatible that have a number, indicate the interior noise level standard condition for use consistency.

Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Noise Impact Zones Exterior Noise Exposure [1] (CNEL dB)					Criteria for Conditional Uses *Note: Interior noise level limits shown in yellow cells also apply (See **Policy N4**)*
	≤ 60	60-65	65-70	70-75	≥ 75	
Offices: professional services, doctors, finance, civic; radio, television & recording studios, office space associated with other listed uses			50	50		
Personal & Miscellaneous Services: barbers, car washes, print shops			50	50		
Vehicle Fueling: gas stations, trucking & transportation terminals				50	50	
Industrial, Manufacturing, and Storage Uses						
Hazardous Materials Production: oil refineries, chemical plants (≥6,000 gallons)						
Heavy Industrial						
Light Industrial, High Intensity: food products preparation, electronic equipment				50	50	
Light Industrial, Low Intensity: machine shops, wood products, auto repair				50	50	
Research & Development			50	50		
Indoor Storage: wholesale sales, warehouses, mini/other indoor storage, barns, greenhouses						
Outdoor Storage: public works yards, automobile dismantling						
Mining & Extraction						

Overflight Evaluation

Noise from individual aircraft operations, especially by comparatively loud aircraft, can be intrusive and annoying in locations beyond the limits of the noise impact zones. The purpose of overflight compatibility policies is to help notify people about the presence of overflights near airports so that they can make more informed decisions regarding acquisition or lease of property in the affected area.

As shown in **Exhibit 4**, the Project falls entirely with the Overflight Notification Zone - Avigation Easement Dedication. The ALUCP requires dedication of an avigation easement to the Airport owner/operator prior to commencement of construction as a condition for approval of new development. **Exhibit 5** provides a sample avigation easement from the ALUCP.

Exhibit 4: Overflight

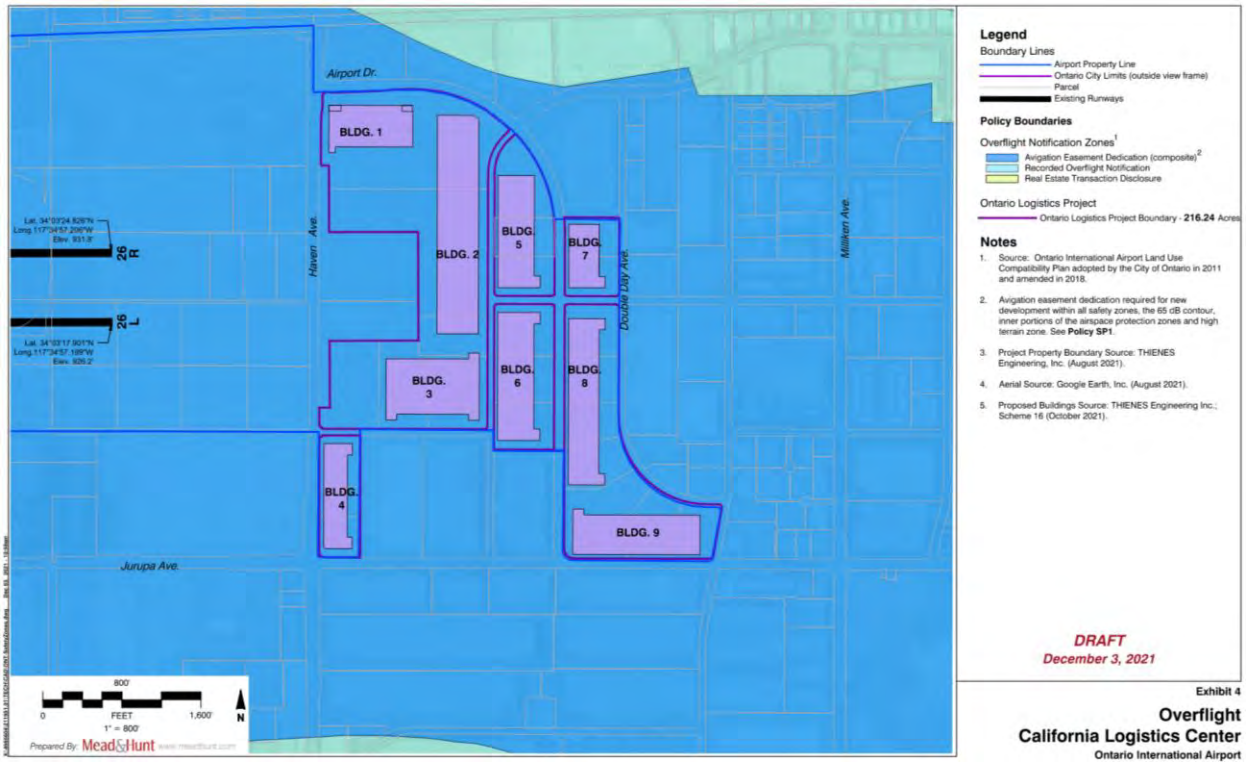


Exhibit 5: Avigation Easement

Table E3

Typical Avigation Easement

AVIGATION EASEMENT

This indenture made this _____ day of _____, 20__, between _____ hereinafter referred to as Grantor, and the City of Los Angeles, Los Angeles World Airports (LAWA), a political subdivision in the State of California, that owns and operates LA/Ontario International Airport in the City of Ontario, State of California, hereinafter referred to as Grantee.

The Grantor, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby grant to the Grantee, its successors and assigns, a perpetual and assignable easement over the following described parcel of land in which the Grantor holds a fee simple estate. The property which is subject to this easement is depicted as _____ on "Exhibit A" attached and is more particularly described as follows:

[Insert legal description of real property]

The easement applies to the Airspace above an imaginary plane over the real property. The plane is described as follows:

The imaginary plane above the hereinbefore described real property, as such plane is defined by Part 77 of the Federal Aviation Regulations, and consists of a plane [describe approach, transition, or horizontal surface]; the elevation of said plane being based upon the LA/Ontario International Airport official runway end elevation of 944 feet Above Mean Sea Level (AMSL), as determined by the LA/Ontario International Airport Layout Plan, the approximate dimensions of which said plane are described and shown on Exhibit A attached hereto and incorporated herein by reference.

The aforesaid easement and right-of-way includes, but is not limited to:

(1) For the use and benefit of the public, the easement and continuing right to fly, or cause or permit the flight by any and all persons, or any aircraft, of any and all kinds now or hereafter known, in, through, across, or about any portion of the Airspace hereinabove described; and

(2) The easement and right to cause or create, or permit or allow to be caused and created within all space above the existing surface of the hereinabove described real property and any and all Airspace laterally adjacent to said real property, such noise, vibration, currents and other effects of air illumination and fuel consumption as may be inherent in, or may arise or occur from or during the operation of aircraft of any and all kinds, now or hereafter known or used, for navigation of or flight in air; and

(3) A continuing right to clear and keep clear from the Airspace any portions of buildings, structures or improvements of any kinds, and of trees or other objects, including the right to remove or demolish those portions of such buildings, structures, improvements, trees, or other things which extend into or above said Airspace, and the right to cut to the ground level and remove, any trees which extend into or above the Airspace; and

(4) The right to mark and light, or cause or require to be marked and lighted, as obstructions to air navigation, any and all buildings, structures or other improvements, and trees or other objects, which extend into or above the Airspace; and

(5) The right of ingress to, passage within, and egress from the hereinabove described real property, for the purposes described in subparagraphs (3) and (4) above at reasonable times and after reasonable notice.

For and on behalf of itself, its successors and assigns, the Grantor hereby covenants with the Los Angeles World Airports (LAWA), for the direct benefit of the real property constituting the LA/Ontario International Airport hereinafter described, that neither the Grantor, nor its successors in interest or assigns will construct, install, erect, place or grow, in or upon the hereinabove described real property, nor will they permit or allow any building structure, improvement, tree, or other object to extend into or above the Airspace so as to constitute an obstruction to air navigation or to obstruct or interfere with the use of the easement and rights-of-way herein granted.

The easements and rights-of-way herein granted shall be deemed both appurtenant to and for the direct benefit of that real property which constitutes the LA/Ontario International Airport, in the City of Ontario, State of California; and shall further be deemed in gross, being conveyed to the Grantee for the benefit of the Grantee and any and all members of the general public who may use said easement or right-of-way, in landing at, taking off from or operating such aircraft in or about the LA/Ontario International Airport, or in otherwise flying through said Airspace.

Grantor, together with its successors in interest and assigns, hereby waives its right to legal action against Grantee, its successors or assigns for monetary damages or other redress due to impacts, as described in paragraph (2) of the granted rights of easement, associated with aircraft operations in the air or on the ground at the airport, including future increases in the volume or changes in location of said operations. Furthermore, Grantee, its successors, and assigns shall have no duty to avoid or mitigate such damages through physical modification of airport facilities or establishment or modification of aircraft operational procedures or restrictions. However, this waiver shall not apply if the airport role or character of its usage (as identified in an adopted airport master plan, for example) changes in a fundamental manner which could not reasonably have been anticipated at the time of the granting of this easement and which results in a substantial increase in the in the impacts associated with aircraft operations. Also, this grant of easement shall not operate to deprive the Grantor, its successors or assigns of any rights which may from time to time have against any air carrier or private operator for negligent or unlawful operation of aircraft.

These covenants and agreements run with the land and are binding upon the heirs, administrators, executors, successors and assigns of the Grantor, and, for the purpose of this instrument, the real property firstly hereinabove described is the servient tenement and said Los Angeles World Airports (LAWA) is the dominant tenement.

DATED:

_____ _____

_____

STATE OF }

s

COUNTY OF }

On _____, before me, the undersigned, a Notary Public in and for said County and State personally appeared _____, and _____ known to me to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same.

WITNESS my hand and official seal.

_____

Notary Public

Source: California Airport Land Use Planning Handbook (January 2002)

Table E3, continued

Although the Project site is owned by the OIAA, Mead & Hunt recommends that a formal avigation easement be recorded with the Property and acknowledged in the Ground Lease between the OIAA and McDonald Property Group.

The avigation easement will enable the McDonald Property Group to incorporate the OIAA's standard avigation easement requirements into future tenant agreements and Covenants, Conditions, and Restrictions (CC&Rs).

Safety Evaluation

The intent of the safety compatibility policies is to minimize the risks associated with an off-airport aircraft accident or emergency landing. The policies focus on reducing the potential consequences of such events when they occur. For most nonresidential development, risk is measured in terms of the usage intensity—the number of people per acre on the site. Local development standards (e.g., floor area ratios, parking requirements) and building code occupancies can be used to calculate nonresidential usage intensities. The ALUCP safety criteria for light industrial, warehouse, and office uses are presented below (**Exhibit 6)**.

Exhibit 6: ALUCP Safety Criteria

Safety Criteria

Legend: Land Use Compatibility
(A detailed explanation of each land use acceptability category is provided on pg. 2-46 of this table)

Normally Compatible Land Use	Conditional Land Use (FAR)	Incompatible Land Use

- A yellow cell indicates a use that is conditionally compatible provided it satisfies the maximum intensity limits and/or other listed conditions.
- Numbers in yellow cells indicate the Floor Area Ratio (FAR) limit for the use. The FAR limit is based on the common occupancy load factor [approx. number of square feet per person] indicated for that use. The FAR and/or the common occupancy load factors can be used to calculate the intensity (number of people per acre) of the proposed development (see **Policy S2c**). Up to 10% of the total FAR of a building may be devoted to an ancillary use and excluded from the single-acre intensity calculations, but not the average sitewide intensity limits.

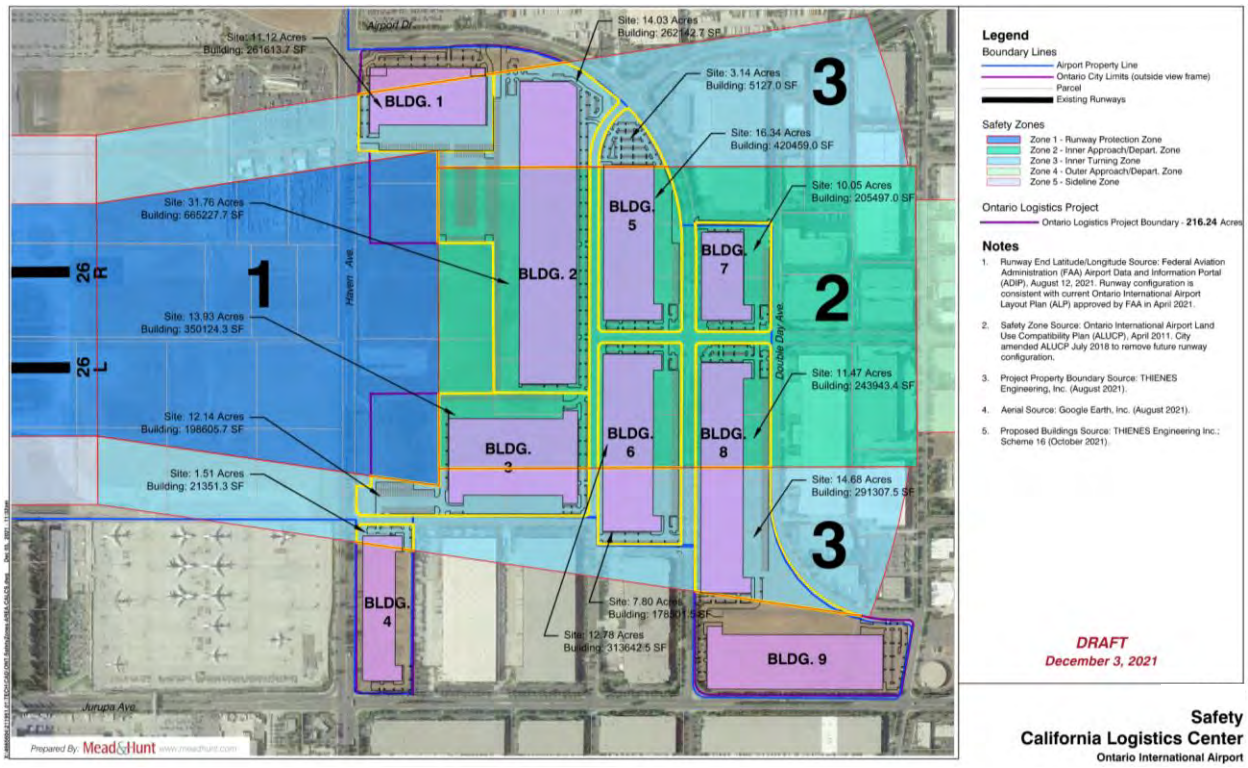
Land Use Category [1] *Note: Multiple land use categories and compatibility criteria may apply to a project*	Safety Zone [2] 1	2	3	4	5	Criteria for Conditional Uses *Note: The numbers below indicate zone in which condition applies.*
Max Sitewide Average Intensity (people/acre)	10	60	100	160	160	• Nonresidential development must satisfy both forms of intensity limits. • Maximum intensity criteria apply to Normally Compatible as well as Conditional land uses
Max Single-Acre Intensity (people/acre) *applicable to all nonresidential development*	20	120	250	400	400	
Industrial, Manufacturing, and Storage Uses						
Hazardous Materials Production: oil refineries, chemical plants (> 6,000 gallons)						
Heavy Industrial						3, 4: Avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Light Industrial, High Intensity: food products preparation, electronic equipment [approx. 200 s.f./person]		0.28	0.46	0.74		2-4: FAR limits as indicated; avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Light Industrial, Low Intensity: machine shops, wood products, auto repair [approx. 350 s.f./person]		0.48	0.80	1.29		2-4: FAR limits as indicated 5: Single story only; max. 10% in mezzanine 2-5: Avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Research & Development [approx. 300 s.f./person]			0.69	1.10		3, 4: FAR limits as indicated; avoid bulk storage of hazardous (flammable, explosive, corrosive, or toxic) materials; permitting agencies to evaluate possible need for special measures to minimize hazards if struck by aircraft
Indoor Storage: wholesale sales, warehouses, mini/other indoor storage, barns, greenhouses [approx. 1,000 s.f./person]						2: Single story only; max. 10% in mezzanine
Offices: professional services, doctors, finance, civic; radio, television & recording studios, office space associated with other listed uses [approx. 215 s.f./person]		0.30	0.49	0.79	0.79	2-5: FAR limits as indicated

As shown in **Exhibit 7A**, the Project site spans the following Safety Zones:

- Safety Zone 1, Runway Protection Zone (RPZ);
- Safety Zone 2, Inner Approach/Departure Zone; and
- Safety Zone 3, Inner Turning Zone.

Although 14.56 acres of the Project site fall within Safety Zone 1, which encompasses the Runway Protection Zones (RPZs) for Runways 26L and 26R, the proposed site plan keeps this zone clear of future structures and parking lots. As such, no compatibility conflicts exist in Safety Zone 1, which is the most restrictive of all the safety zones.

Exhibit 7A: Safety



For Safety Zones 2 and 3, the individual proposed building sites are subject to the ALUCP usage intensity (people per acre) limits for each zone (see **Exhibit 6**). In accordance with ALUCP Policy S2, any site that is split by safety zone boundaries is treated as if it were multiple parcels divided at the safety zone boundary. Exhibit 7A indicates the portions of the site and buildings in each of the Safety Zones.

Exhibit 7B

Site #	Site Ac.	Zone				Bldg. S.F.	Zone			
		1	2	3	Outside		1	2	3	Outside
1	17	0	0	11	6	360,660	-	-	261,614	99,046
2	47	0	32	14	1	927,370	-	665,226	262,144	-
3	25	0	14	11	0	548,730	-	350,124	198,606	-
4	12	0	0	2	10	265,200	-	-	21,348	243,852
5	19	0	16	3	0	425,580	-	420,456	5,124	-
6	21	0	13	8	0	492,140	-	313,641	178,499	-
7	10	0	10	0	0	205,500	-	205,500	-	-
8	24	0	11	12	1	535,350	-	243,943	291,308	99
9	22	0	0	0	22	521,920	-	-	-	521,920

Source: Scheme 16, McDonald Group (October 2021)

Allowable Occupancy by Site

Exhibit 8 presents the maximum allowable occupancy (number of people) permitted for each building site based on the ALUCP average intensity limits for Safety Zones 2 and 3. The maximum allowable occupancy is the primary criterion by which to evaluate the compatibility of each lessee's proposed specific use or combination of uses within each building. Note that each building site, as depicted by the yellow lines in **Exhibit 7A,** includes the building itself plus adjacent parking and landscaping areas.

Also note that the total allowable occupancies indicated in the last column of **Exhibit 8** assume that, when a building falls into two zones, each part will be used to its allowable limit. In all cases, the maximum allowable occupancy in Zone 2 cannot be exceeded. However, to the extent that the use in the Zone 2 part of a building will have less than its allowable maximum occupancy, the unused amount of the occupancy can be transferred to the Zone 3 part of the building. The Zone 3 part can then exceed the allowable limit for that part provided that the total building occupancy remains within the limits. Although subject to approval by the City, what this transfer provision accomplishes is to move people from the higher risk Zone 2 into comparatively less at-risk Zone 3 in accordance with ALUCP Policy S7 which states:

> *"… the intensity of nonresidential development allowed within the more restricted portion of the parcel can (and is encouraged to) be transferred to the less restricted portion. The full or partial reallocation of intensity is permitted even if the resulting intensity in the less restricted area would then exceed the average intensity limits which would otherwise apply within the safety zone."*

Exhibit 8: Maximum Allowable Occupancy

BLDG #	Zone 2 Intensity Limit (People/Acre)	Zone 2 Site Acres	Zone 2 Allow-Able Occ.	Zone 3 Intensity Limit (People/Acre)	Zone 3 Site Acres	Zone 3 Allow-Able Occ.	Allowable Occupancy (Max. Number Of People On Each Building Site)
BLDG 1*	60	-	**-**	100	11.1	**1,112**	**1,112**
BLDG 2	60	31.8	**1,906**	100	14.0	**1,403**	**3,309**
BLDG 3	60	13.9	**836**	100	12.1	**1,214**	**2,050**
BLDG 4*	60	-	**-**	100	1.5	**151**	**151**
BLDG 5	60	16.3	**980**	100	-	**-**	**980**
BLDG 6	60	12.8	**767**	100	7.8	**780**	**1,547**
BLDG 7	60	10.1	**603**	100	-	**-**	**603**
BLDG 8	60	11.5	**688**	100	14.7	**1,468**	**2,156**
BLDG 9*	NA	NA	**NA**	NA	NA	**NA**	**NA**

Note: * Building 9 is not in a Safety Zone and no total building occupancy limits apply. Portions of Buildings 1 and 4 are also outside of the Safety Zones, which have no ALUCP occupancy limits, and only the portions inside the Safety Zones are subject to building occupancy limits as shown above.
Note: Totals rounded to the nearest whole number.
Example Calculation - BLDG 2 ALLOWABLE OCCUPANCY: (60*31.8)+(100*14.0) = 3,309

Occupancy by Use

The City of Ontario controls the ultimate determination of compliance with the ALUCP usage criteria, and those determinations will occur when a potential tenant(s) is identified for each building and a specific land use is proposed. As discussed above, the types of uses envisioned for the California Logistics Center include a mix of light industrial or warehouse uses with ancillary office space.

Exhibit 9, Theoretical Occupancy, presents the calculated total intensity of each building assuming that the building is developed as either a light industrial/office use or warehouse/office use. As can be seen in the table, a high-intensity light industrial use (e.g., food products preparation) is likely to exceed the maximum allowable occupancy limits for Zone 2. Buildings located in Zone 2 are therefore better suited for low-intensity light industrial and warehouse uses.

Exhibit 10, Hypothetical Development Scenarios, provides two hypothetical scenarios for Building 2 to showcase how the proposed use of the building will influence the intensity results and, ultimately, the compatibility determination of the individual uses. An editable version of the Development Scenario table is provided for use by McDonald Property Group (see **Exhibit 11** for example).

Scenario 1 shows the percent of space allocation across office, light industrial, and warehouse uses. This scenario loads up Zone 3 with the most intensive uses (office and light industrial). The office space (10 percent of the total building square footage) is kept in Zone 3 with the balance remaining for light industrial use. In Zone 2, the more restrictive zone, only 46 percent of the building's square footage can be allocated to light industrial use (with 54 percent left for warehousing) to maintain compliance with the ALUCP intensity criteria. Compliance is based on a comparison of the proposed occupancy with the maximum allowable occupancy (orange columns).

Scenario 2 increases the percentage of light industrial use with a corresponding decrease in warehouse use. While the proposed occupancy exceeds the maximum allowable occupancy, the proposed occupancy for the entire Building 2 site is still satisfied. Under this scenario and other similar scenarios, coordination with the City of Ontario would be required if there is a desire to exceed or transfer the additional intensity criteria as provided by ALUCP Policy S7.

Exhibit 9: Theoretical Occupancy

Zone/ Building	Bldg Sf	THEORETICAL OCCUPANCY (Number of people allowed on site)				
		Light Industrial	Ware-House	Office	Total Occupancy: Light Industrial + Office	Total Occupancy: Warehouse + Office
ZONE 2						
BLDG 2	665,227.7	2,994	599	309	3,303	908
BLDG 3	350,124.3	1,576	315	163	1,738	478
BLDG 5	425,586.0	1,915	383	198	2,113	581
BLDG 6	313,642.5	1,411	282	146	1,557	428
BLDG 7	205,497.0	925	185	96	1,020	281
BLDG 8	243,943.4	1,098	220	113	1,211	333
ZONE 3						
BLDG 1	665,227.7	1,177	235	122	1,299	357
BLDG 2	350,124.3	1,180	236	122	1,302	358
BLDG 3	425,586.0	894	179	92	986	271
BLDG 4	313,642.5	96	19	10	106	29
BLDG 6	205,497.0	803	161	83	886	244
BLDG 8	243,943.4	1,311	262	135	1,446	398

Example Calculation – **ZONE 2, BLDG 2, LIGHT INDUSTRIAL+OFFICE (NO WAREHOUSING)**:
665,227.7 sf of BLDG 2 in Zone 2 – 10% for office = 598,704.93 sf of Light Industrial
598,704.93 sf of light industrial/200 sf per person = 2,994 people
66,522.77 sf of office/215 sf per person = 309 people
2,994 people + 309 people = **3,303 people on BLDG 2 site in Zone 2**
Max. Allowable Occupancy for BLDG 2 (see **Exhibit 8**) = **1,906 people on BLDG 2 site in Zone 2**
Consistency Finding: **Incompatible (proposed use exceeds intensity limit)**
Notes: Red text indicates exceedance of intensity limits. Totals rounded to the nearest whole number.

Exhibit 10: Development Scenarios

Scenario 1

BLDG 2	BLDG SF	MAX. ALLOWABLE OCCUPANCY	% OF OFFICE SPACE	SQ. FT. OF OFFICE SPACE	MAX. OCC. FOR OFFICE SPACE (OCC. LOAD: 215 SF/PERSON)	% OF LIGHT IND SPACE	SQ. FT OF LIGHT IND SPACE	MAX. OCC. FOR LIGHT IND SPACE (OCC. LOAD: 200 SF/PERSON)	% OF WAREHOUSE SPACE	SQ. FT. OF WAREHOUSE SPACE	MAX. OCC. FOR WAREHOUSE SPACE (OCC LOAD: 1,000 SF/PERSON)	PROPOSED OCCUPANCY
ZONE 2	665,228	1,906	0%	-	-	46%	306,005	**1,530**	54%	359,223	**359**	1,889
ZONE 3	262,143	1,403	35%	92,737	**431**	65%	169,406	**847**	0%	-	-	1,278
	927,370	**3,309**	**10%**	**92,737**	**431**		**475,410**	**2,377**		**359,223**	**359**	**3,168**

Scenario 2

BLDG 2	BLDG SF	MAX. ALLOWABLE OCCUPANCY	% OF OFFICE SPACE	SQ. FT. OF OFFICE SPACE	MAX. OCC. FOR OFFICE SPACE (OCC. LOAD: 215 SF/PERSON)	% OF LIGHT IND SPACE	SQ. FT OF LIGHT IND SPACE	MAX. OCC. FOR LIGHT IND SPACE (OCC. LOAD: 200 SF/PERSON)	% OF WAREHOUSE SPACE	SQ. FT. OF WAREHOUSE SPACE	MAX. OCC. FOR WAREHOUSE SPACE (OCC LOAD: 1,000 SF/PERSON)	PROPOSED OCCUPANCY
ZONE 2	665,228	1,906	10%	66,523	**309**	45%	299,352	**1,497**	25%	166,307	**166**	1,972
ZONE 3	262,143	1,403	0%	-	-	100%	262,143	**1,311**	0%	-	-	1,311
		3,309		**66,523**	**309**		**561,495**	**2,807**		**166,307**	**166**	**3,283**

Exhibit 11: Development Scenario Worksheet

DEVELOPMENT SCENARIO WORKSHEET
NOTE: Adjust percentages (in red) to determine if proposed allocation of use will satisfy intensity criteria. Do not change percentages in black as they are formula-driven.

Airspace Evaluation

Airspace protection compatibility policies seek to prevent creation of land use features that can pose hazards to the airspace required by aircraft in flight and have the potential for causing an aircraft accident. Categories of hazards to airspace include:

- Physical hazards such as tall structures that may intrude upon protected airspace and land use features that have the potential to attract birds or other potentially hazardous wildlife to the airport area.

- Visual hazards such as certain types of lights, sources of glare, and sources of dust, steam, or smoke.

Physical Hazards

Airspace Obstruction Hazards

Title 14 of the Code of Federal Regulations (CFR) Part 77 establishes height limits to provide a margin of safety for normal aircraft operations. Objects that exceed the Part 77 height limits constitute airspace obstructions. However, the standards are not absolute and deviation from the CFR Part 77 standards requires the offending objects be evaluated by the FAA and may be considered for marking or lighting application if appropriate.

Exhibit 12 shows the layout of the 9 proposed buildings at the Project site. The heights of the buildings are required to be reported to the FAA by a completed Form 7460-1, *Notice of Proposed Construction or Alteration*. The building elevations are reported as the roof height with 10 feet added to account for building appurtenances such as, but not limited to, parapets and heating ventilation equipment.

Mead & Hunt has confirmed that the Project has been conceptually designed to keep all future structures below the Part 77 obstruction surfaces and the other FAA clear areas noted in **Exhibit 12**. Additionally, FAA Form 7460-1 has been submitted to the FAA for an aeronautical study for all nine buildings. FAA airspace determinations are expected in the March 2022 timeframe and prior to commencement of construction. **Exhibit 13** provides a copy of the supporting graphics for the FAA Form 7460-1 submittals.

Mead & Hunt understands that the McDonald Property Group will submit the required FAA Form 7460-1 for construction cranes at least 45 days prior to the beginning of Project construction. We also understand that the maximum height of a tilt panel crane boom tower at full extension is 185 feet; however, lower boom heights are anticipated for this Project because the standard total weight per panel is typical and not excessive. **Exhibit 14** identifies the allowable height within a 60-foot working area around each building. As can be seen, some building sites will require the use of a modified crane to ensure that the above airspace remains obstruction-free. McDonald Property Group has confirmed with its concrete subcontractor and crane consultant that the boom crane height can be significantly lowered by a combination of a.) modifying the hydraulic counterweights associated with the crane and b.) reducing the crane “picking” reach distance by constructing more strategic off-building floor slab casting beds. When the panel pick locations are poured closer to the perimeter/final building wall locations, lower crane boom heights are enabled to suit each situation, as may be required by FAA.

Mead & Hunt highly recommends close coordination with the Airport before commencing with construction as Project construction activities will impact aircraft operations and necessitate the Airport to take certain actions such as informing tenants, pilots, and Airport users of Project construction (e.g., filing NOTAMs), monitoring Project construction progress, or making temporary changes to airport operations to accommodate Project construction schedules (e.g., adjusting runway use or runway closure). As such, coordinating the Project’s construction schedule with the Airport will be critical for safety.

Mead & Hunt also understands that the Airport is undertaking several airport improvement projects that will require closure of the existing runways. Depending on the timing of construction of the Project, this planned runway closure may certainly benefit the approval of the Project crane operation. Aligning Project construction activities during planned runway closures would be ideal for all parties involved. Mead & Hunt understands that the tentative schedule for runway closure to be:

- Runway 8L/26R: Jan 2023-Oct 2024; runway will be reopened for FAA flight checks during a 30-day period from mid-May to mid-June in 2023 (tentative)
- Runway 8R/26L: Jan 2024-Oct 2024 and Jan 2025-Oct 2026 (tentative)

Exhibit 12: Airspace

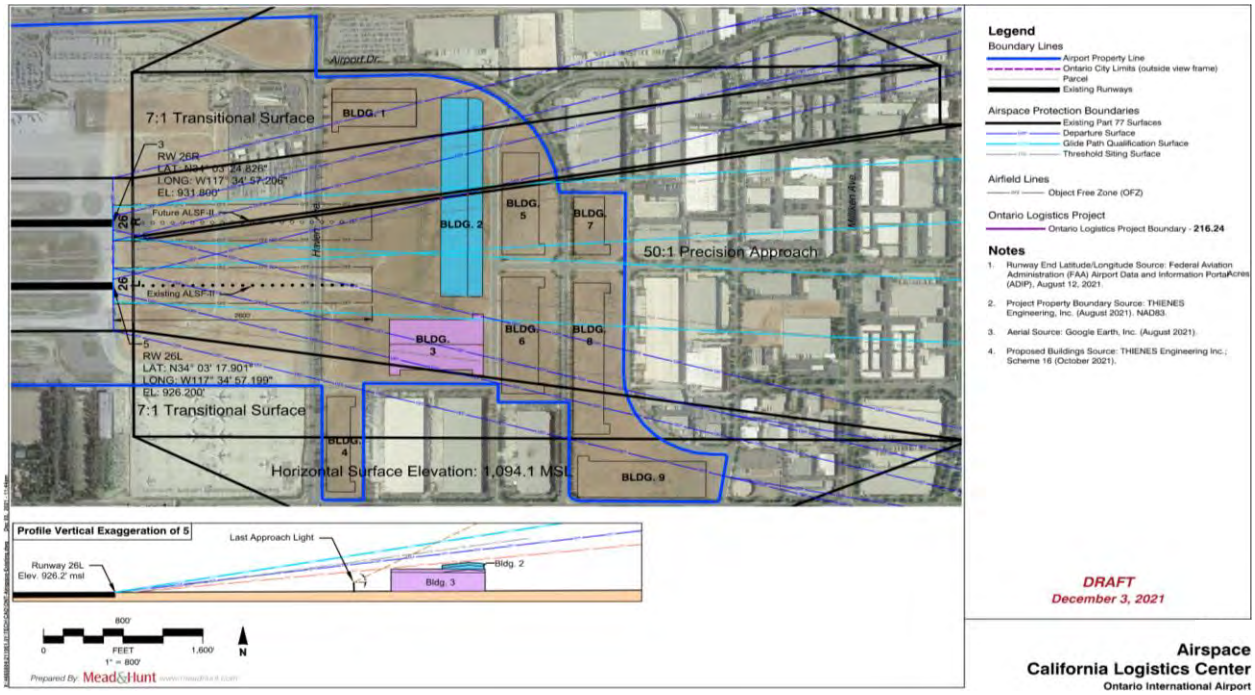
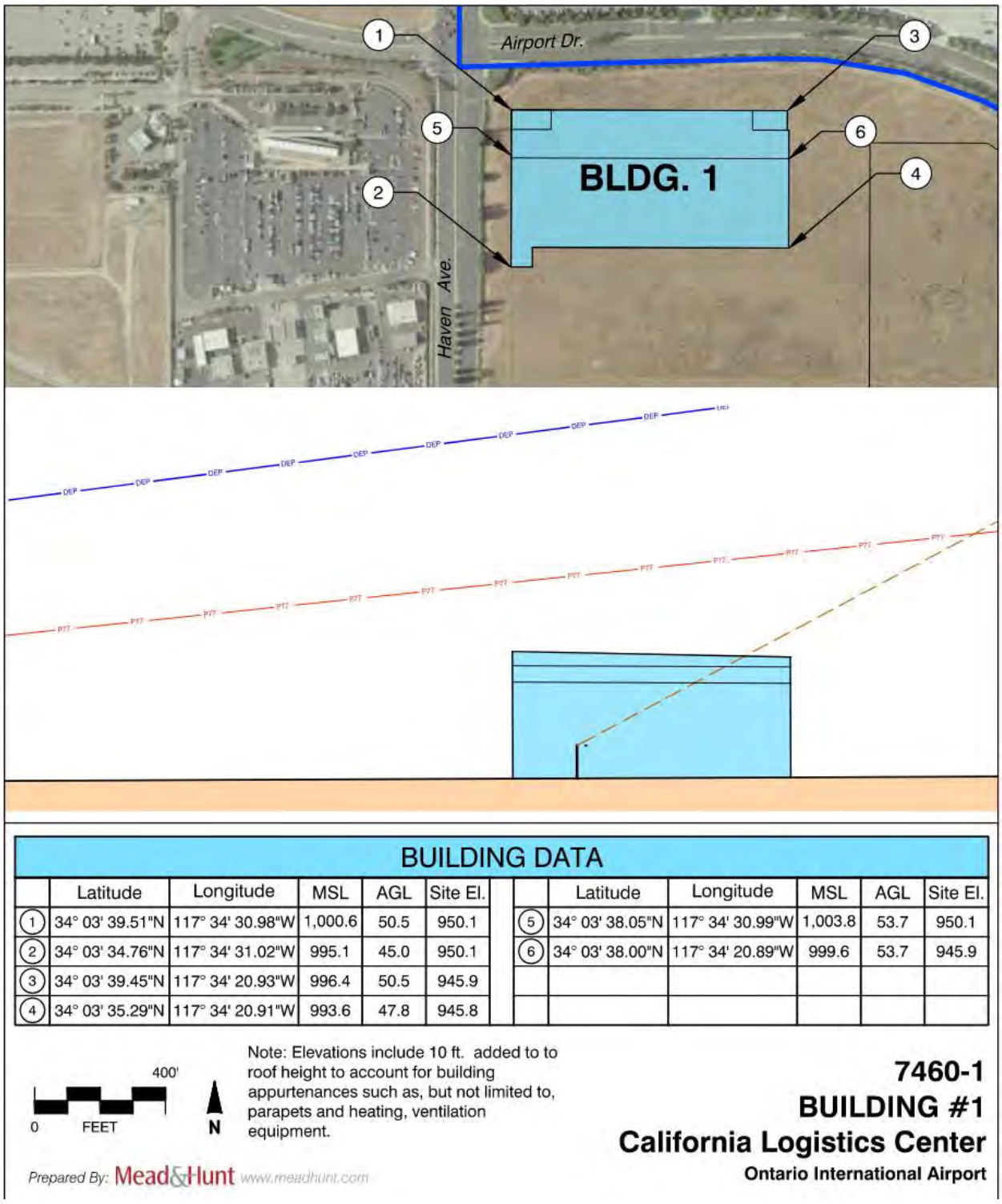


Exhibit 13: FAA Form 7460 Submittals



BUILDING DATA

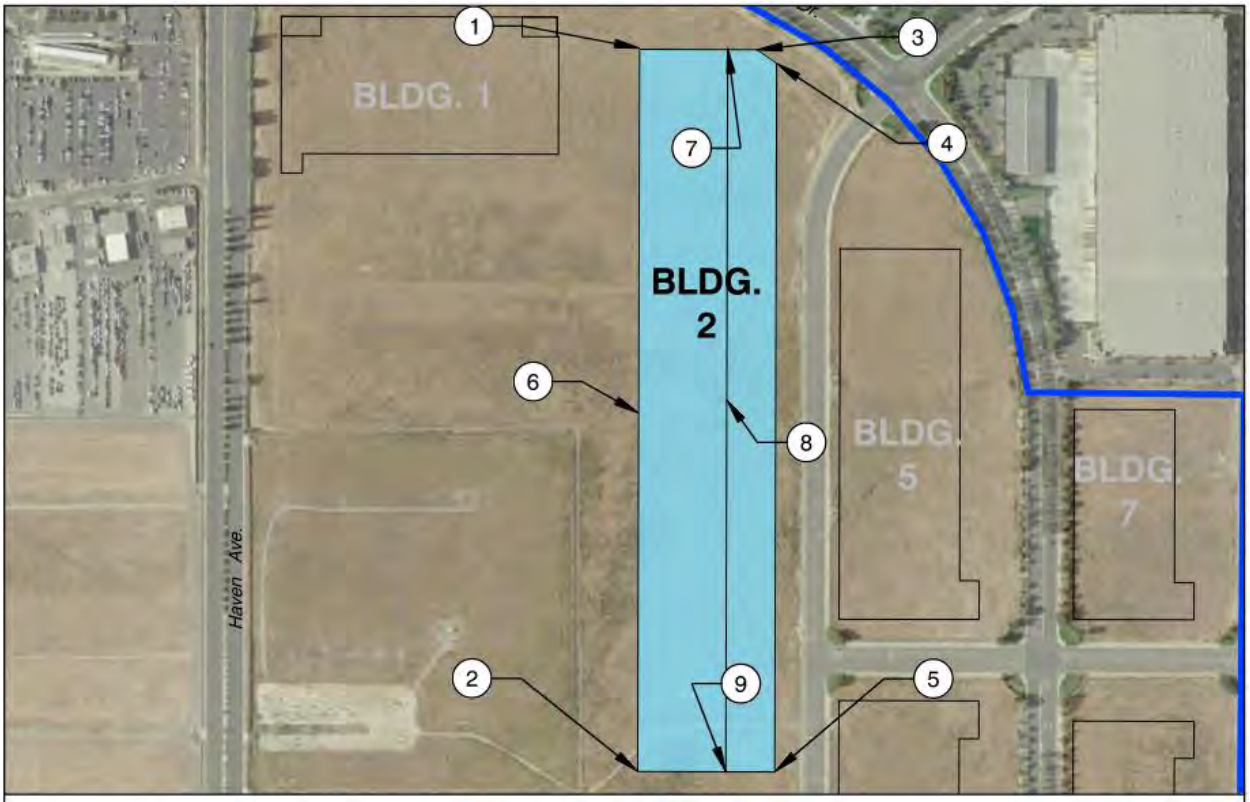
	Latitude	Longitude	MSL	AGL	Site El.
1	34° 03' 39.51"N	117° 34' 30.98"W	1,000.6	50.5	950.1
2	34° 03' 34.76"N	117° 34' 31.02"W	995.1	45.0	950.1
3	34° 03' 39.45"N	117° 34' 20.93"W	996.4	50.5	945.9
4	34° 03' 35.29"N	117° 34' 20.91"W	993.6	47.8	945.8
5	34° 03' 38.05"N	117° 34' 30.99"W	1,003.8	53.7	950.1
6	34° 03' 38.00"N	117° 34' 20.89"W	999.6	53.7	945.9

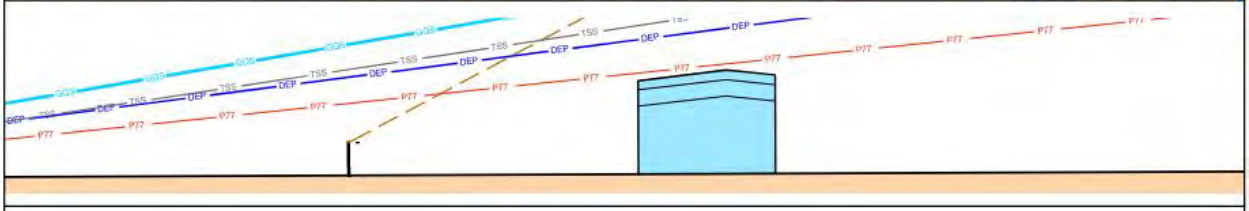
400'
0 FEET
N

Note: Elevations include 10 ft. added to to roof height to account for building appurtenances such as, but not limited to, parapets and heating, ventilation equipment.

7460-1
BUILDING #1
California Logistics Center
Ontario International Airport

Prepared By: Mead & Hunt www.meadhunt.com





BUILDING DATA

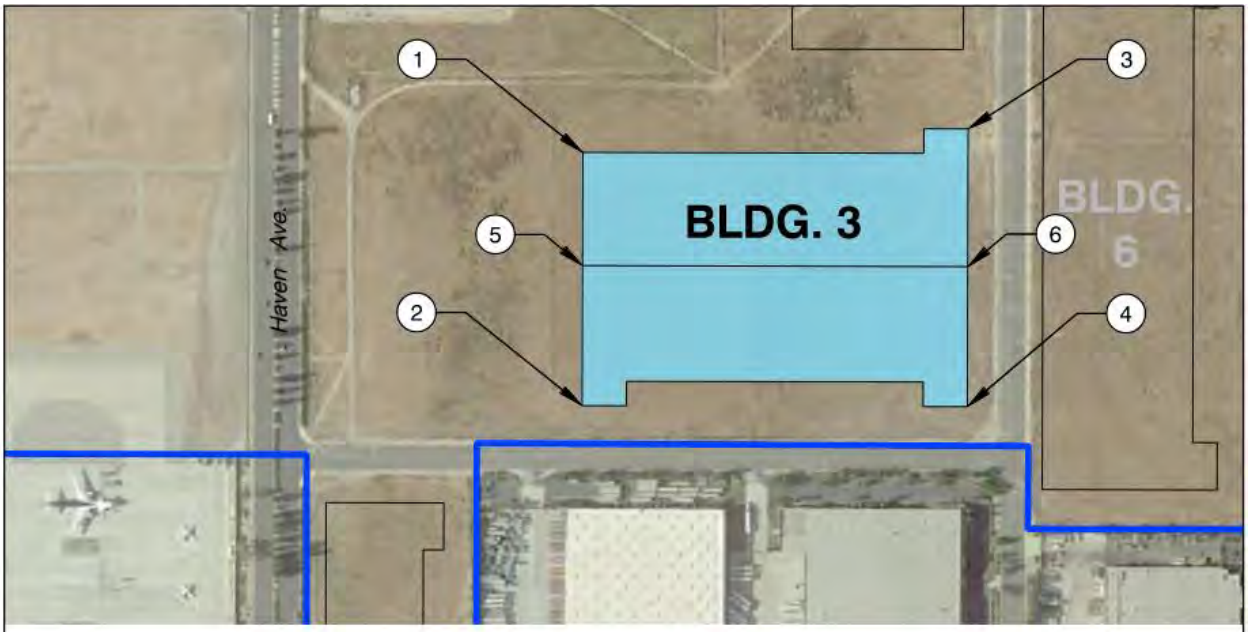
	Latitude	Longitude	MSL	AGL	Site El.
1	34° 03' 38.50"N	117° 34' 17.94"W	988.8	51.8	937.0
2	34° 03' 16.59"N	117° 34' 18.12"W	977.8	51.8	926.0
3	34° 03' 38.44"N	117° 34' 13.66"W	992.6	55.5	937.1
4	34° 03' 38.02"N	117° 34' 12.95"W	991.3	54.5	936.8
5	34° 03' 16.56"N	117° 34' 13.13"W	980.5	54.5	926.0
6	34° 03' 27.45"N	117° 34' 18.03"W	983.2	51.8	931.4
7	34° 03' 38.48"N	117° 34' 14.73"W	994.7	57.7	937.0
8	34° 03' 27.84"N	117° 34' 14.82"W	989.7	57.7	932.0
9	34° 03' 16.57"N	117° 34' 14.91"W	983.7	57.7	926.0

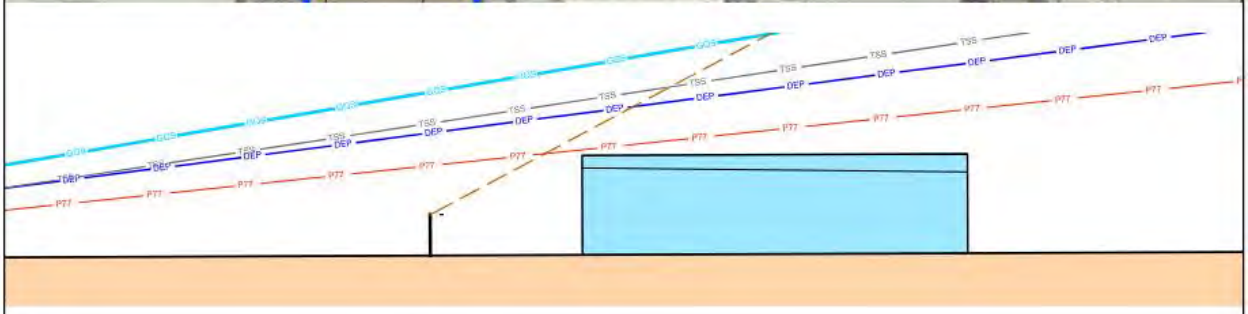
500'
0 FEET
N

Note: Elevations include 10 ft. added to to roof height to account for building appurtenances such as, but not limited to, parapets and heating, ventilation equipment.

7460-1
BUILDING #2
California Logistics Center
Ontario International Airport

Prepared By: Mead&Hunt www.meadhunt.com





BUILDING DATA

	Latitude	Longitude	MSL	AGL	Site El.
1	34° 03' 14.11"N	117° 34' 24.24"W	968.8	51.8	917.0
2	34° 03' 07.98"N	117° 34' 24.29"W	966.0	49.0	917.0
3	34° 03' 14.64"N	117° 34' 13.00"W	966.0	49.0	917.0
4	34° 03' 07.91"N	117° 34' 13.06"W	966.0	49.0	917.0
5	34° 03' 11.37"N	117° 34' 24.26"W	974.9	57.9	917.0
6	34° 03' 11.30"N	117° 34' 13.03"W	974.9	57.9	917.0

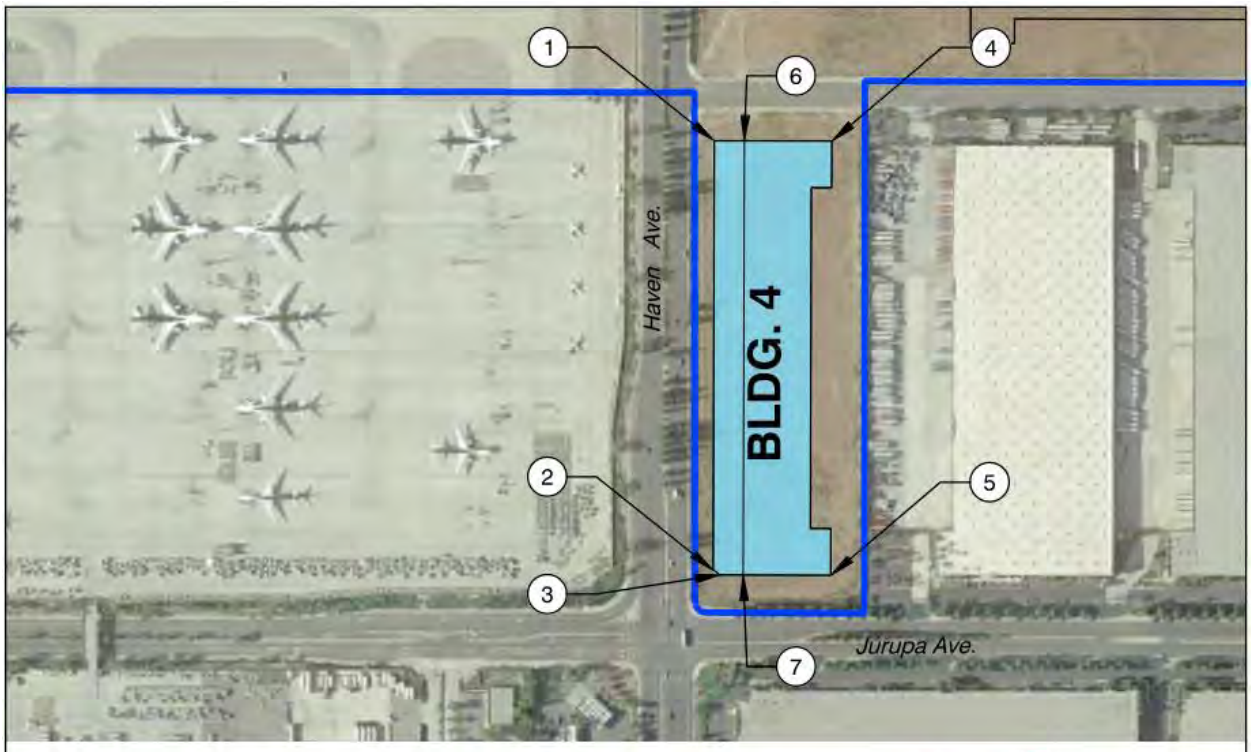
0 400' FEET

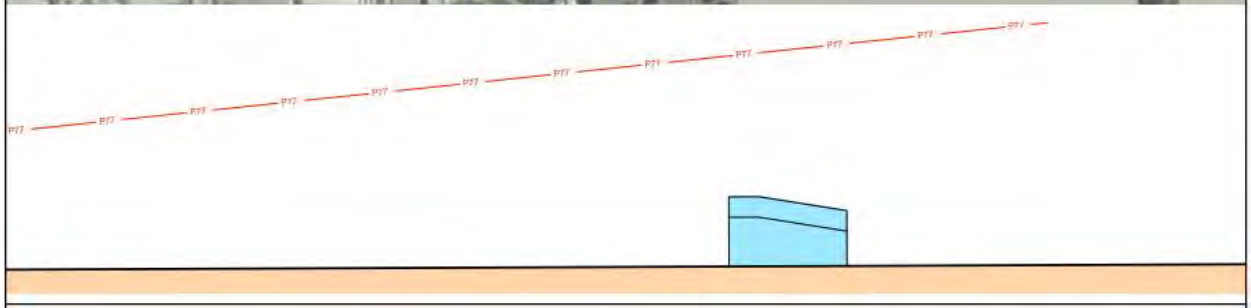
N

Note: Elevations include 10 ft. added to to roof height to account for building appurtenances such as, but not limited to, parapets and heating, ventilation equipment.

Prepared By: Mead&Hunt www.meadhunt.com

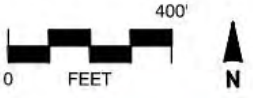
7460-1
BUILDING #3
California Logistics Center
Ontario International Airport





BUILDING DATA

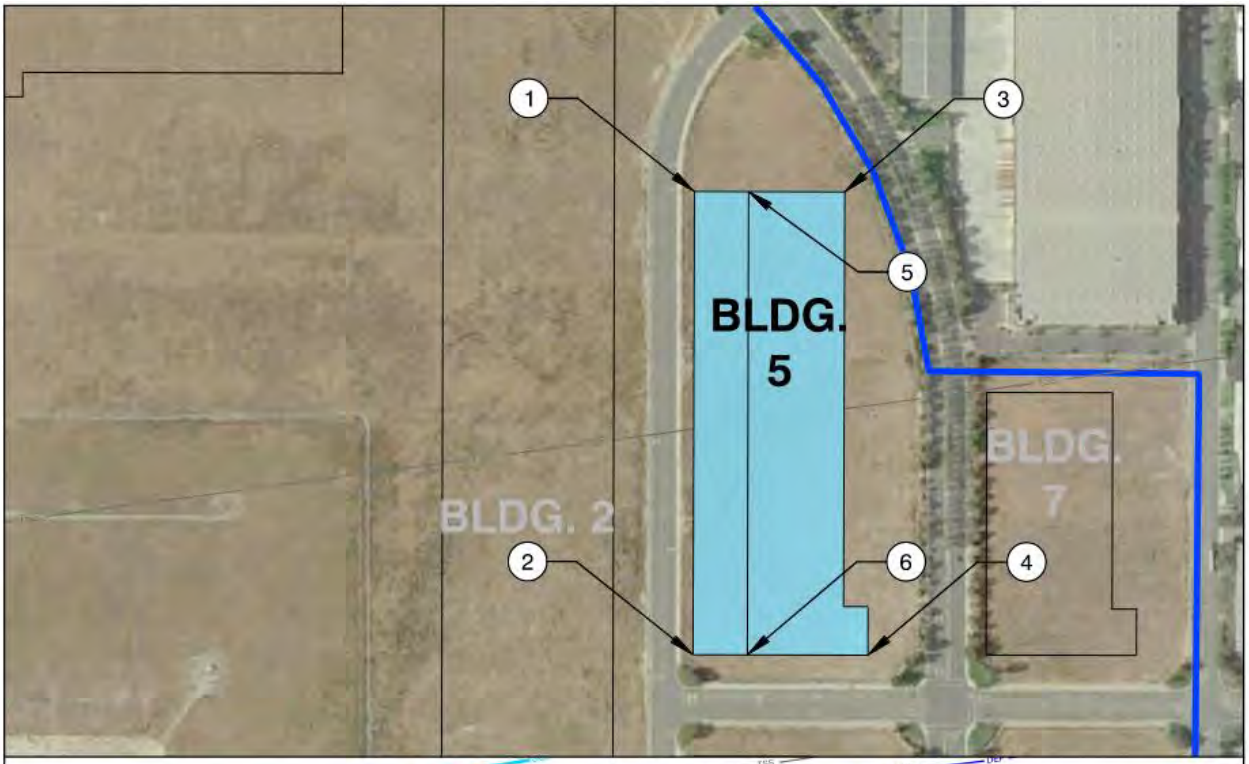
	Latitude	Longitude	MSL	AGL	Site El.		Latitude	Longitude	MSL	AGL	Site El.
1	34° 03' 05.66"N	117° 34' 31.77"W	960.2	50.5	909.7	5	34° 02' 55.13"N	117° 34' 28.42"W	954.7	45.0	909.7
2	34° 02' 55.28"N	117° 34' 31.85"W	960.2	50.5	909.7	6	34° 03' 05.65"N	117° 34' 30.89"W	960.4	51.8	908.6
3	34° 02' 55.15"N	117° 34' 31.65"W	960.2	50.5	909.7	7	34° 02' 55.15"N	117° 34' 30.97"W	960.4	51.8	908.6
4	34° 03' 05.64"N	117° 34' 28.33"W	953.2	43.5	909.7						

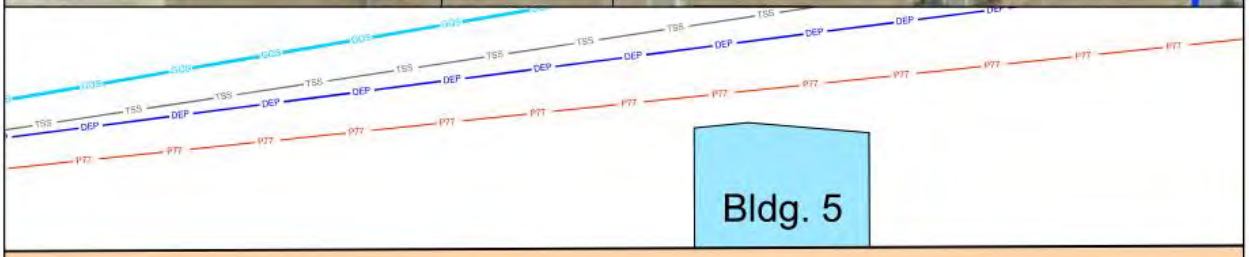


Note: Elevations include 10 ft. added to to roof height to account for building appurtenances such as, but not limited to, parapets and heating, ventilation equipment.

7460-1
BUILDING #4
California Logistics Center
Ontario International Airport

Prepared By: Mead&Hunt www.meadhunt.com





BUILDING DATA

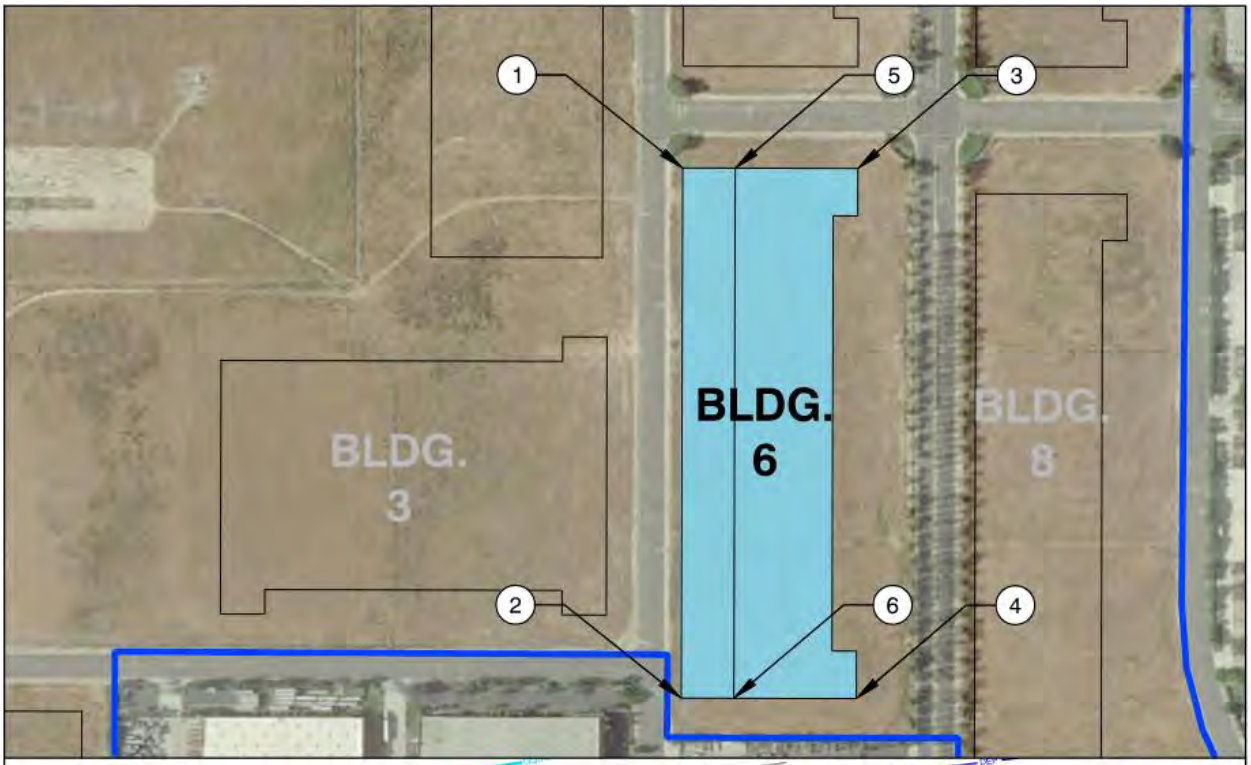
	LATITUDE	LONGITUDE	MSL	AGL	Site El.		LATITUDE	LONGITUDE	MSL	AGL	Site El.
1	34° 03' 32.40"N	117° 34' 10.67"W	985.0	50.5	934.5	5	34° 03' 32.39"N	117° 34' 09.09"W	987.5	53.0	934.5
2	34° 03' 21.18"N	117° 34' 10.77"W	985.0	50.5	934.5	6	34° 03' 21.17"N	117° 34' 09.19"W	987.5	53.0	934.5
3	34° 03' 32.37"N	117° 34' 06.29"W	982.3	47.8	934.5						
4	34° 03' 21.15"N	117° 34' 05.67"W	979.5	45.0	934.5						

400'
0 FEET
N

Note: Elevations include 10 ft. added to to roof height to account for building appurtenances such as, but not limited to, parapets and heating, ventilation equipment.

7460-1
BUILDING #5
California Logistics Center
Ontario International Airport

Prepared By: Mead&Hunt www.meadhunt.com



BUILDING DATA

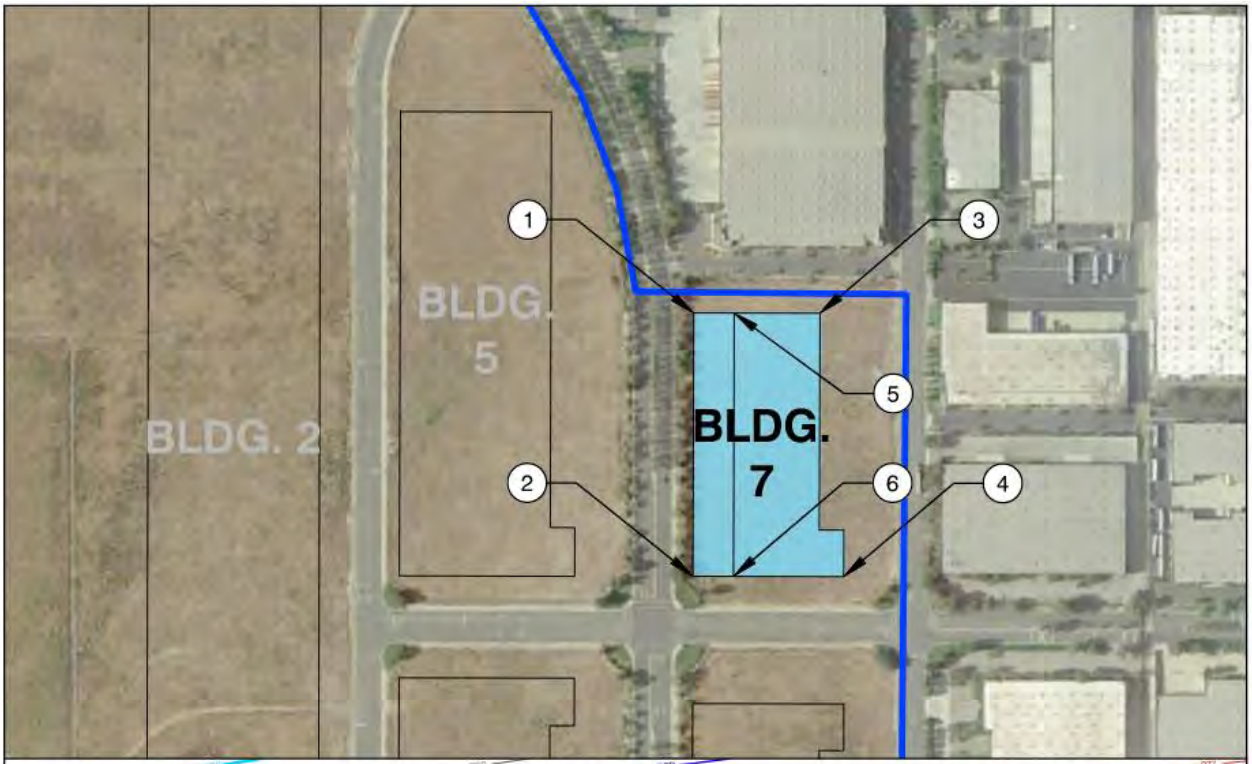
	LATITUDE	LONGITUDE	MSL	AGL	Site El.
1	34° 03' 18.72"N	117° 34' 10.79"W	972.9	54.5	918.4
2	34° 03' 05.90"N	117° 34' 10.90"W	972.9	54.5	918.4
3	34° 03' 18.69"N	117° 34' 05.69"W	965.9	47.5	918.4
4	34° 03' 05.87"N	117° 34' 05.80"W	967.4	49.0	918.4
5	34° 03' 18.71"N	117° 34' 09.26"W	975.4	57.0	918.4
6	34° 03' 05.89"N	117° 34' 09.37"W	975.4	57.0	918.4

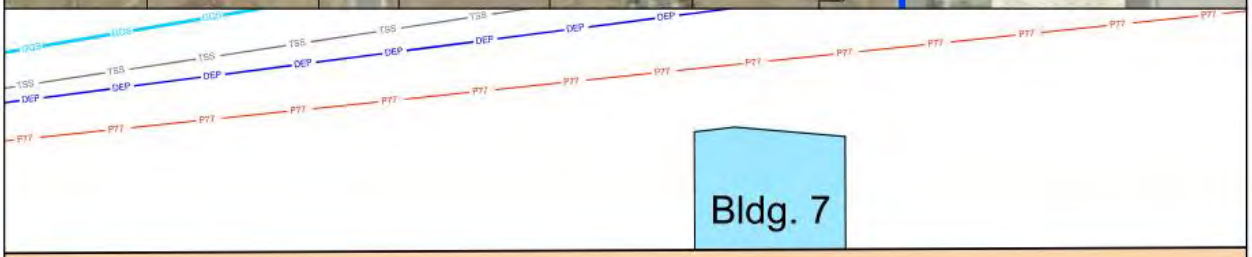
400'
0 FEET
N

Note: Elevations include 10 ft. added to to roof height to account for building appurtenances such as, but not limited to, parapets and heating, ventilation equipment.

7460-1
BUILDING #6
California Logistics Center
Ontario International Airport

Prepared By: Mead&Hunt www.meadhunt.com





BUILDING DATA

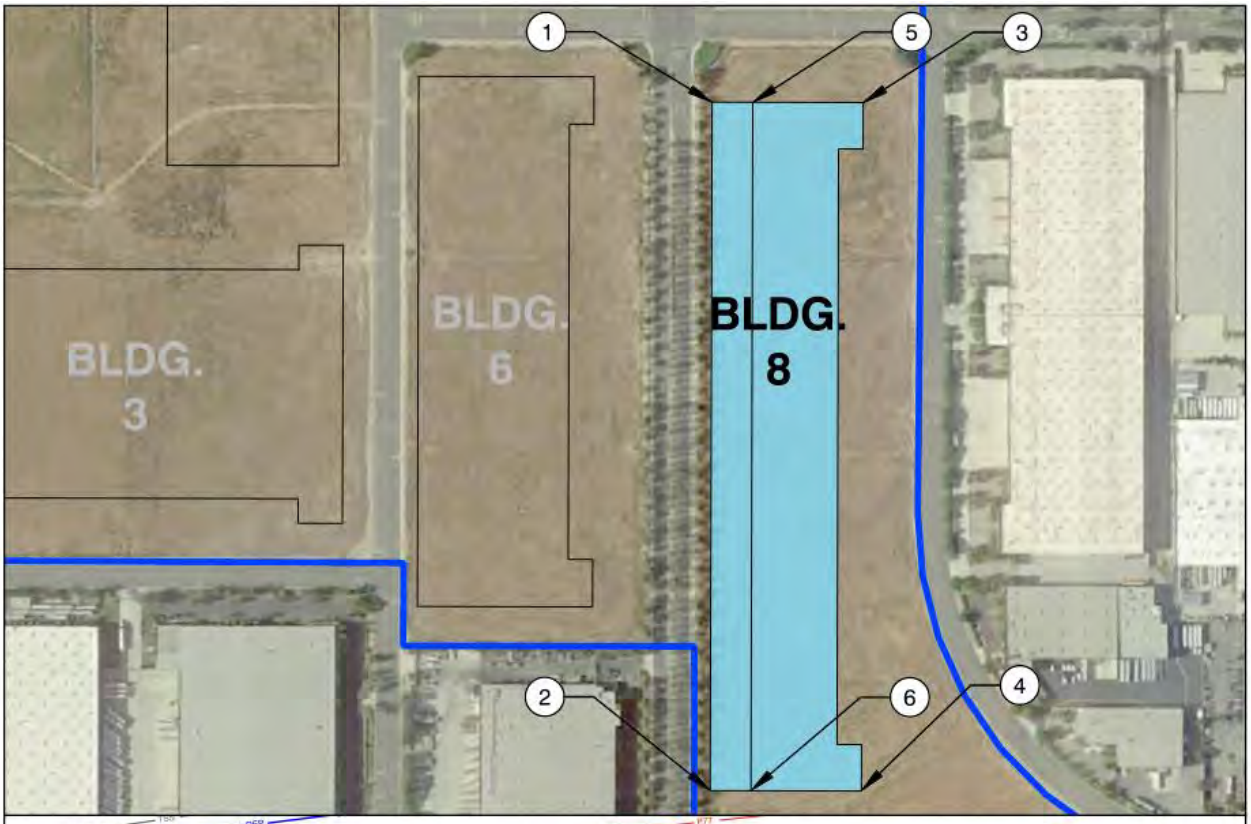
	LATITUDE	LONGITUDE	MSL	AGL	Site El.
1	34° 03' 27.50"N	117° 34' 02.18"W	983.9	50.3	933.6
2	34° 03' 21.14"N	117° 34' 02.23"W	983.9	50.3	933.6
3	34° 03' 27.48"N	117° 33' 58.51"W	981.3	47.8	933.5
4	34° 03' 21.11"N	117° 33' 57.85"W	978.6	45.0	933.6
5	34° 03' 27.50"N	117° 34' 01.00"W	986.1	52.5	933.6
6	34° 03' 21.13"N	117° 34' 01.05"W	986.1	52.5	933.6

400'
0 FEET
N

Note: Elevations include 10 ft. added to to roof height to account for building appurtenances such as, but not limited to, parapets and heating, ventilation equipment.

7460-1
BUILDING #7
California Logistics Center
Ontario International Airport

Prepared By: Mead&Hunt www.meadhunt.com



BUILDING DATA

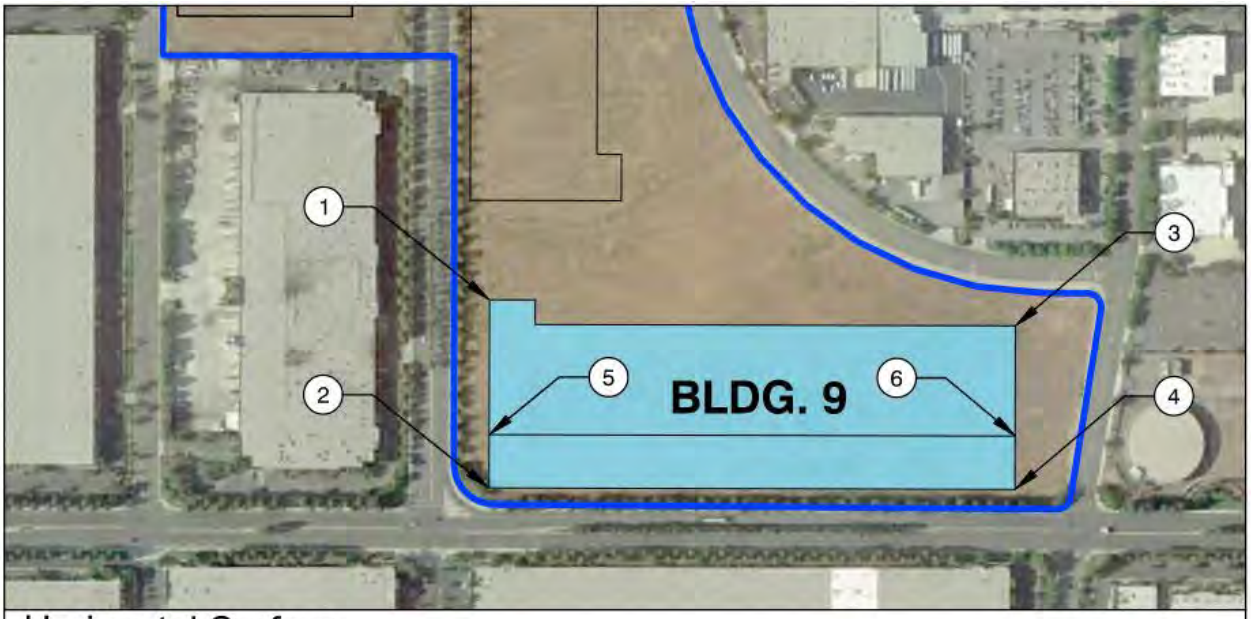
	LATITUDE	LONGITUDE	MSL	AGL	Site El.
1	34° 03' 18.06"N	117° 34' 02.25"W	970.7	54.3	916.4
2	34° 03' 01.41"N	117° 34' 02.39"W	970.7	54.3	916.4
3	34° 03' 18.04"N	117° 33' 57.85"W	963.9	47.5	916.4
4	34° 03' 01.39"N	117° 33' 57.99"W	965.4	49.0	916.4
5	34° 03' 18.06"N	117° 34' 01.08"W	972.9	56.5	916.4
6	34° 03' 01.41"N	117° 34' 01.22"W	972.9	56.5	916.4

400'
0 FEET
N

Note: Elevations include 10 ft. added to to roof height to account for building appurtenances such as, but not limited to, parapets and heating, ventilation equipment.

7460-1
BUILDING #8
California Logistics Center
Ontario International Airport

Prepared By: Mead&Hunt www.meadhunt.com



Horizontal Surface

Bldg. 9

BUILDING DATA

	LATITUDE	LONGITUDE	MSL	AGL	Site El.		LATITUDE	LONGITUDE	MSL	AGL	Site El.
1	34° 02' 59.00"N	117° 34' 01.83"W	956.8	49.0	907.8	5	34° 02' 55.75"N	117° 34' 01.88"W	965.5	57.7	907.8
2	34° 02' 54.46"N	117° 34' 01.87"W	962.7	54.8	907.9	6	34° 02' 55.66"N	117° 33' 46.55"W	965.5	57.7	907.8
3	34° 02' 58.32"N	117° 33' 46.54"W	959.6	51.8	907.8						
4	34° 02' 54.37"N	117° 33' 46.57"W	962.7	54.8	907.9						

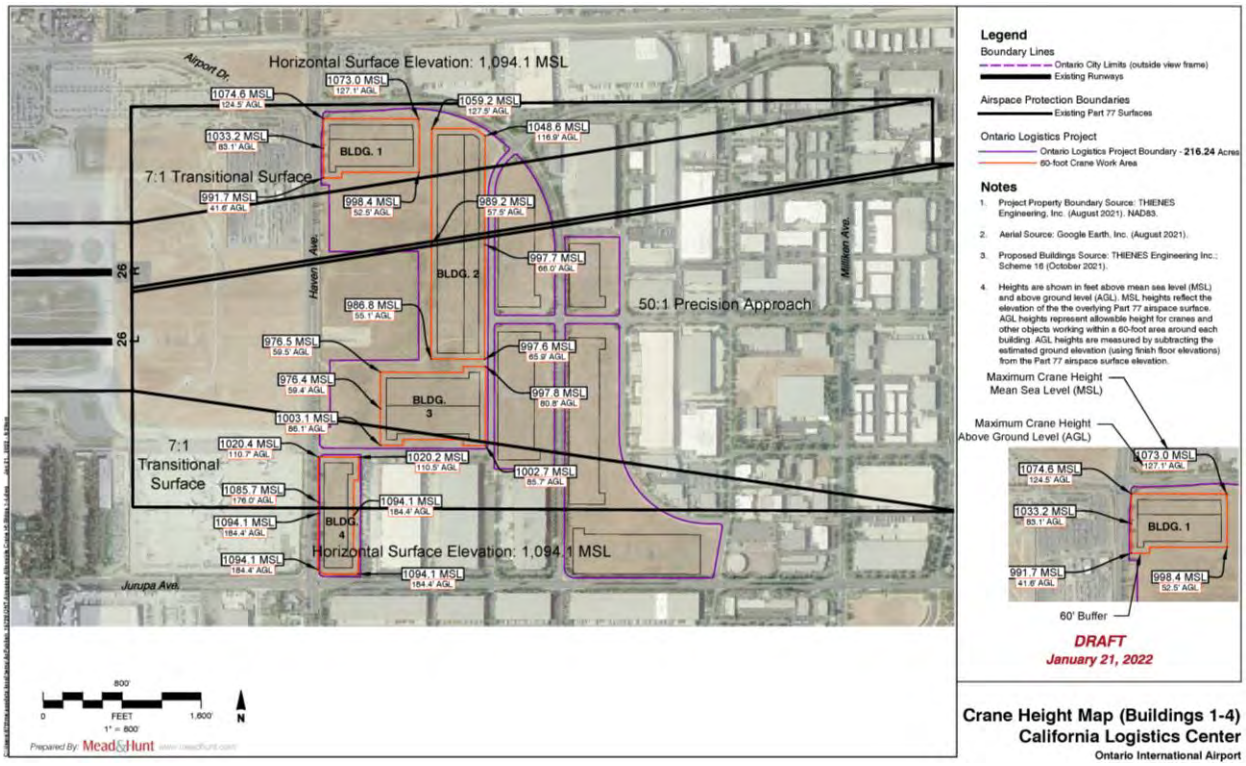
400'
0 FEET
N

Note: Elevations include 10 ft. added to to roof height to account for building appurtenances such as, but not limited to, parapets and heating, ventilation equipment.

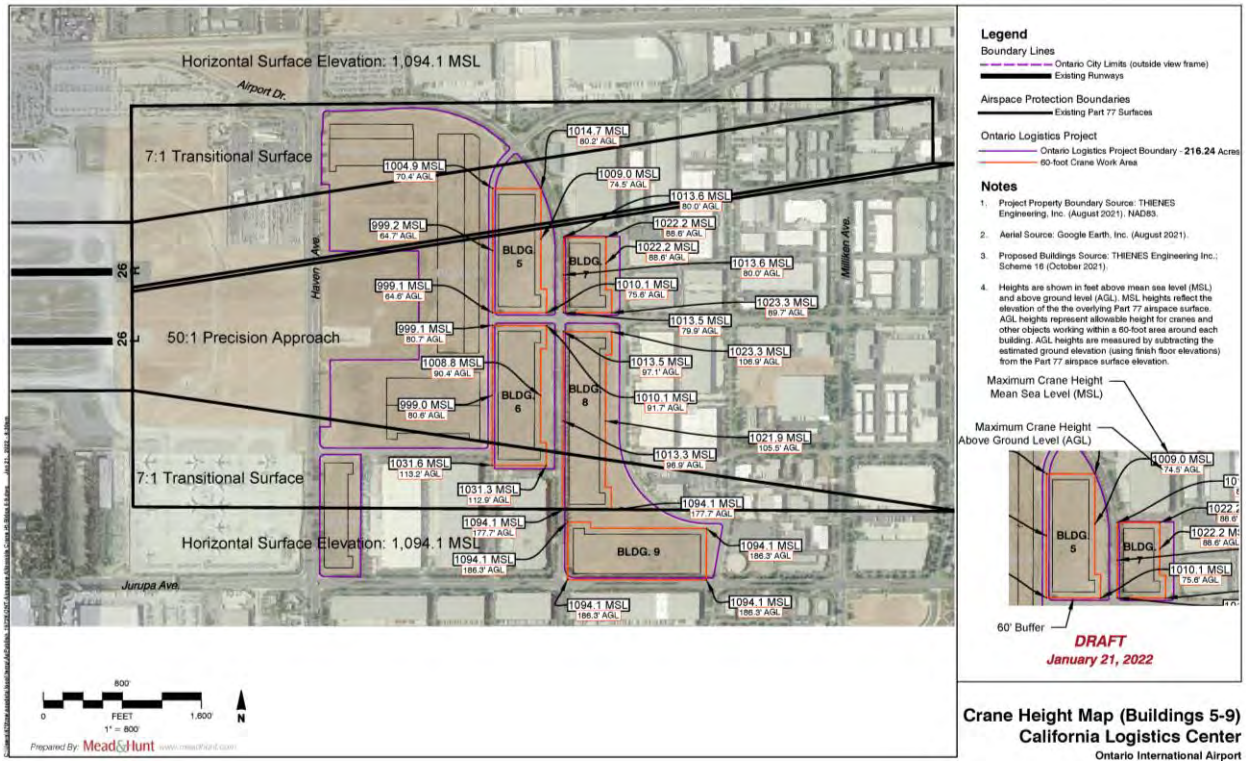
7460-1
BUILDING #9
California Logistics Center
Ontario International Airport

Prepared By: Mead&Hunt www.meadhunt.com

Exhibit 14



Crane Height Map (Buildings 1-4)
California Logistics Center
Ontario International Airport



Crane Height Map (Buildings 5-9)
California Logistics Center
Ontario International Airport

Wildlife Hazards

The FAA establishes guidelines to address wildlife hazards in Advisory Circular 150/5200-33C, *Hazardous Wildlife Attractants On or Near Airports*. A wildlife hazard is a land use feature and location that creates the potential to attract wildlife that may collide with aircraft or cause aircraft damage or injuries/loss of human life.
A wildlife attractant is defined as any human-made structure, land-use practice, or human-made or natural geographic feature that can attract or sustain potentially hazardous wildlife within the approach or departure airspace or an airport's air operations area.

Any proposed use that creates an increased attraction for hazardous wildlife and that is inconsistent with FAA rules and regulations is deemed to be a wildlife hazard. As such, land use features that have the potential to attract birds and certain other wildlife to the airport area need to be evaluated as a form of physical hazard.

To address wildlife hazards, Mead & Hunt recommends that the Project be designed to consider the following:

- Structures or architectural features that could provide nesting, shelter, or perching opportunities for raptors and large birds should be designed to reduce the attractiveness of these features through the application of nets, bird spikes, or other deterrents. Communication towers, signs, and light standards are examples of structures of this type.
- Landscaping plans should preclude the planting of new trees that create a dense and contiguous canopy or plant materials that provide food sources such as fruit, nuts, or berries. Additionally, use short tree varieties to ensure that mature trees will not create an airspace obstruction. Mead & Hunt also understands that the City may require replacement of the mature Pine and Sycamore trees that will be removed during Project construction with similar tree species elsewhere on the Project site. These types of trees are known to attract birds of prey (e.g., Red-tailed hawks) for perching while hunting the Burrowing Owls that reside in and around the Airport. These mid-sized raptors increase the potential for a bird-strike incident. For this reason, Mead & Hunt strongly encourages that only small tree varieties be located onsite, and that the replacement of large tree species be sited outside of the city-established Airport Influence Area or, alternatively, for the McDonald Property Group to participate in an offsite mitigation bank to offset Project impacts. These options should be discussed with the City.
- Onsite stormwater drainage facilities (e.g., bioretention ponds) should be designed to provide a 48-hour drawdown following a design storm event (i.e., 24-hour storm). Stormwater facilities and water features holding exposed surface water for more than 48 hours are considered incompatible with airport operations per FAA Advisory Circular 150/5200-33C, *Hazardous Wildlife Attractants on or near Airports*.

Visual Hazards

Certain land uses or land use features can create visual distractions or impairment for pilots, thereby threatening the safety of aircraft operations. These conditions increase the risk not only to the occupants of aircraft but also to persons occupying land uses near the airport in the event that an aircraft accident occurs. Visual hazards can result from:

- The amount of dust, glare, light emissions, smoke, steam, or smog the development will emit.
- The location of lighting fixtures relative to the runway ends and runway extended centerlines.
- High-intensity lighting projecting directly onto airfields or into airport approach corridors.
- Glare or reflection from glass windows or open water bodies such as retention ponds.
- Glare from concentrated solar arrays (ones that concentrate a large area of sunlight onto a receiver).

As of May 2021, airports are no longer required to submit the results of an ocular analysis to the FAA for an on-airport solar project. Instead, the FAA requires that the airport "sufficiently analyze the potential for glint and glare and determine there will be no potential for ocular impact to the airport traffic control tower cab." A statement of this determination of no visual impact must be confirmed via FAA Form 7460-1. This due-diligence requirement to assess visual impacts should also be applied to off-airport projects.

The FAA's Airport Solar Guidance (2018) indicates that a solar photovoltaics (PV) system (roof- or ground-mounted system) is one of the more practical applications for airports and, therefore by inference, near airports. The FAA has no specific standards for PV facilities, glare impacts, and type of glare analyses. Based on FAA guidance, Mead & Hunt recommends one or both activities be undertaken by the McDonald Property Group:

- A geometric analysis to determine days and times when there may be an ocular impact. The ocular analysis would be conducted once PV systems have been designed but not installed. Some vendors provide free or low-cost glare analysis tools online (e.g., Sandia and ForgeSolar).
- A demonstration field test with solar panels at the proposed site in coordination with Air Traffic Control Tower (ACTC) personnel. Coordination with Airport staff would be required to involve ACTC staff.

Recommended measures to mitigate visual hazards are described in the Findings section below.

FINDINGS

Based on the analysis described above, Mead & Hunt finds the proposed California Logistics Center to be conditionally consistent with the compatibility criteria included in the 2018 ALUCP with the caveats and recommendations listed below. However, the City of Ontario will make the final determination of Project compliance with the 2018 ALUCP and other local standards and will define appropriate Project conditions and impact mitigations.

- **Noise:** The office space in the CNEL 75-80 dB Noise Impact Zone does not clearly comply with the ALUCP noise criteria. To facilitate a consistency determination from the City, we recommend that the following actions be taken:
  - The Project architect shall provide written confirmation that future office spaces constructed within the CNEL 75-80 dB noise impact zone (portions of Buildings 2 and 5-8 only; excludes Buildings 1, 3, 4, and 9) will be designed in a manner to achieve a maximum interior noise limit of CNEL 50 dB.
  - Following construction and before occupancy, an acoustical study shall be conducted to document that the structure (with windows closed) is built to comply with the CNEL 50 dB maximum interior noise limit in the office spaces and in areas where the uses themselves generate little noise and/or are noise sensitive.

- The McDonald Property Group seek concurrence from the City of Ontario that the above recommendations will adequately address noise impacts.

- **Overflight:** Mead & Hunt recommends that an avigation easement be recorded with the deed to the property. Additionally, the avigation easement language and conveyances should be acknowledged in the Ground Lease between the OIAA and the McDonald Property Group and all future tenant sub-lease agreements, Project Covenants, Conditions & Restrictions (CCRs), and Conditions of Approval (COA) by the City of Ontario.
- **Safety:** The McDonald Property Group will need to demonstrate to both the OIAA and the City of Ontario that the proposed use complies with the ALUCP intensity criteria. Additionally, consideration should be given to the potential for the use of a building to change over time. As such, we recommend that the Ground Lease between the OIAA and McDonald Property Group and COA with the City require a consistency evaluation at the time a specific use (or re-use) is proposed for each of the nine building sites to ensure long-term compliance with the ALUCP usage intensity criteria.
- **Airspace:**
  - **Obstructions:** The Ground Lease Agreement should be contingent upon a positive "No Airspace Hazard Determination" determination from the FAA. While the proposed buildings have been confirmed by Mead & Hunt to be designed in compliance with Part 77 height limits, the FAA may find that other aspects of the Project be further evaluated and addressed, such as electrical interference with aircraft communications or navigation.
  - **Wildlife Hazards:** Structures or architectural features that could provide nesting, shelter, or perching opportunities for raptors and large birds should be designed to reduce the attractiveness of these features through the application of nets, bird spikes, or other deterrents. Communication towers, signs, and light standards are examples of structures of this type. Landscaping plans should preclude the planting of new trees that create a dense and contiguous canopy or plant materials that provide food sources such as fruit, nuts, or berries. Additionally, use short tree varieties to ensure that mature trees will not create an airspace obstruction or hazardous wildlife attractant.
  - **Outdoor Lighting:** No lighting features should project light directly onto the existing runways or taxiways or into the approach and departure paths for the Airport. Exterior lighting should incorporate down-shielding in their designs to reflect light downward and away from the airport approach and departure paths. Lighting should not imitate airport lighting or impede the ability of pilots to distinguish airport lighting from other lighting (streetlights, signs, etc.), nor create the appearance of oncoming traffic to pilots landing from or departing toward the east on Runway 26R/L or toward the west on Runways 8R and 8L. Lighting within the airport approach should not be aligned in a linear pattern parallel with the runways (Runway 8R/26L and 8L/26R).
  - **Glare:** No glare-producing material, including but not limited to unpainted metal, white paint/rooftop materials, or highly reflective glass (e.g., mirrored glass), shall be used on the exterior of structures located within the airport approach and departure paths or on nearby lands where glare could impair a pilot's vision. Mead & Hunt also recommends that a glare analysis of proposed rooftop solar systems be conducted to mitigate potential visual impacts and the findings be included in the FAA Form 7460-1 submittal for the solar project.

- **Other Recommendations**
  - **Project Construction:** Coordinate with the Airport to develop a Project construction schedule that will appropriately mitigate impacts to airport operations, particularly from cranes. If the Project's schedule is aligned with planned runway closures, include runway closure timeframes on FAA Form 7460-1 submittal for the cranes.

If you have any questions or require additional information, please contact me at (707) 284-8690.

Sincerely,

MEAD & HUNT, Inc.

Maranda Thompson
Senior Aviation Planner

Attachment:
Attachment A - OIAA Resolution No. 2021-22

ATTACHMENT A

RESOLUTION NO. 2021-22

A RESOLUTION OF THE ONTARIO INTERNATIONAL AIRPORT AUTHORITY TO APPROVE AND ADOPT FINDINGS, INCLUDING AS TO "EXEMPT SURPLUS PROPERTY", REGARDING THE DISPOSITION OF CERTAIN AIRPORT REAL PROPERTY, AND TO APPROVE AND AUTHORIZE THE CHIEF EXECUTIVE OFFICER (CEO), OR THE CEO'S DESIGNEE, TO EXECUTE NECESSARY DOCUMENTATION FOR A DEVELOPMENT AND ENTITLEMENT AGREEMENT AND A LONG-TERM GROUND LEASE FOR SUCH AIRPORT REAL PROPERTY WITH CANAM ONTARIO, LLC.

WHEREAS, the Ontario International Airport Authority (OIAA or Authority) was established under a Joint Exercise of Powers Agreement between the City of Ontario and the County of San Bernardino pursuant to the Joint Exercise of Powers Act of the State of California, for the purpose of operating, maintaining, managing, developing, and marketing the Ontario International Airport (Airport) and related Airport facilities;

WHEREAS, the Authority owns approximately 197 acres on the eastern end of the Airport, east of Haven Road, north of Jurupa Avenue, and south of Airport Drive, which include Assessor's Parcel Numbers 0211-232-44-0-000, 0211-232-45-0-000, 0211-232-46-0-000, 0211-222-47-0-000, 0211-222-48-0-000, 0211-222-52-0-000 AND 0211-222-53-0-000, 0211-222-54-0-000, 0211-222-55-0-000, 0211-232-11-0-000, 0211-232-12-0-000, 0211-232-13-0-000, 0211-232-14, 0211-232-15-0-000, 0211-232-16-0-000, 0211-232-17-0-000, 0211-232-18-0-000, 0211-232-19-0-000, 0211-232-20-000, 0211-232-04-0-000, 0211-232-05-0-000, 0211-232-06-0-000, 0211-232-07-0-000, and 0211-222-56-0-000 (collectively the Property). The Property is surrounded by industrial buildings and land uses to the north, east, and south;

WHEREAS, in 2020, the Authority discussed with the Federal Aviation Administration (FAA) whether the possible lease and use of the Property for industrial logistics development related to the warehousing and distribution of goods and products would be subject to federal jurisdiction and approval. On November 23, 2020, the FAA issued to OIAA a letter under Section 163 of the FAA Reauthorization Act of 2018 regarding a portion of the Property. On January 21, 2021, the FAA issued to OIAA another letter under Section 163 of the Act regarding the remaining portions of the Property. Collectively, the two FAA letters stated that the proposed use of the Property for industrial logistics development related to the warehousing and distribution of goods and products would (1) create revenue to help fund Airport operating costs and (2) not adversely impact aircraft operations at the Airport. The FAA therefore determined it lacked authority to approve or disapprove any potential lease and development of the Property;

WHEREAS, the Property has been vacant and unused for decades. OIAA has determined that the Property is not suited for land uses for typical Authority or Airport aeronautical purposes, such as for runways, taxiways, terminals, hangars, and similar Airport facilities because the Property is physically separated and removed from the balance of the Airport by Haven Avenue, which runs along or near the entire western limits of the Property. Accordingly, the Property is not required for other Authority purposes, and pursuant to Government Code section 37395, can be leased for up to 55 years;

WHEREAS, between April and June 2020, OIAA commissioned three (3) separate and independent appraisals of the Property for the purpose of determining fair market value related to a sale or long-term lease of the Property;

WHEREAS, in February 2021, CBRE, Inc. (CBRE), on behalf of the OIAA, initiated an Offering of Memorandum for the proposed leasing and development of the Property. The Offering of Memorandum was distributed to CBRE's bidder list, which included more than 4,800 potential bidders nationwide. The first round offers received on April 9, 2021, included seventeen (17) responsive bidders. The second round of offers received on April 26, 2021, included twelve (12) responsive bidders. The final round of offers received on May 12, 2021, included five (5) responsive bidders. After the final round of offers/bids on June 23, 2021, the OIAA selection committee held interviews to understand bidders' proposals related to development process, timing, due diligence and environmental analysis, as well as a further analysis of their proposed ground lease offerings. After interviews, USAA Real Estate Company (later CanAm Ontario, LLC) was the final selected responsive bidder as the company was determined to have presented the best proposal for a long-term lease of the Property based on the bidding process, which proposal exceeded the determinations of fair market value in the appraisals for the Property discussed above. OIAA staff presented this determination and report on the bid process to the OIAA Commission in July 2021 and thereafter moved forward with negotiating lease and development terms relating to the Property;

WHEREAS, CanAm Ontario, LLC (CanAm) proposes a long-term Ground Lease for the Property for industrial logistics development related to the warehousing and distribution of goods and products (the Project), which use is generally complimentary with Airport operations. As detailed in the Agenda Report on the proposed Development and Entitlement Agreement and Ground Lease between OIAA and CanAm to be considered at the OIAA Commission's December 23, 2021, Regular public meeting, operations and uses on the Property under the proposed Ground Lease would involve significant improvements to the Property (subject to all environmental reviews and approvals), and significant rental revenues paid to OIAA over the 55-year term of the Ground Lease;

WHEREAS, operations under the proposed Project and Ground Lease will be also consistent with supply chain improvements that are encouraged in Governor Newsom's Executive Order N-19-21 regarding supply chain issues, which Order recognized that "the movement of goods and health of supply and distribution chains across California is a matter of vital statewide importance ...."

WHEREAS, given the unique circumstances that the Property is non-aeronautical lands of the Airport, the City of Ontario will be (i) the lead agency for purposes of compliance by the Project with the California Environmental Quality Act (CEQA), Public Resources Code § 21000 *et seq*., and (ii) the zoning approval authority relating to the Property and the Project. Before approval by OIAA of any Ground Lease for the Property, or the allowance of any development activity on the Property related to the Project, CanAm shall be required to obtain all applicable land use, zoning, and CEQA reviews, approvals, and certifications for the Project (collectively "Government Approvals"), and shall implement any requirements under such Governmental Approvals, including, without limitation, any mitigation measures required as a result of compliance with CEQA;

WHEREAS, the Offering Memorandum and related request for proposals or bids process for the long-term Ground Lease and development of the Property summarized above confirmed that the proposed Ground Lease with CanAm will provide OIAA with fair market value for lease of the Property;

WHEREAS, certain State-imposed laws and regulations restrict and prevent use of the

Property for residential purposes and for some, but not all, non-residential uses, due to safety concerns and high noise levels;

WHEREAS, certain FAA-imposed regulations restrict and prevent use of the Property for residential purposes and for some, but not all, non-residential uses, due to safety concerns and high noise levels;

WHEREAS, such State and FAA laws and regulations justify a determination and finding by OIAA under Government Code section 54221(f)(1)(G) that the Property is "exempt surplus property" where housing would be prohibited;

WHEREAS, the OIAA Commission has reviewed and considered all materials identified and referred to in this Resolution, as well as all materials and documents discussed in and attached to the Agenda Report for this matter; and

WHEREAS, on December 20, 2021, the Authority provided notice of the Regular OIAA Commission meeting, which includes consideration of this matter, scheduled for December 23, 2021, in accordance with the Ralph M. Brown Act, Government Code § 54950, *et seq.*, and provided notice to Douglas Carstens, Esq.:

NOW, THEREFORE, BE IT RESOLVED by the OIAA Commission as follows:

SECTION 1. FINDINGS.

All Whereas clauses or Recitals in this Resolution above are incorporated by reference into these Findings.

Further, the OIAA Commission, in light of the whole record before it including, but not limited to (1) the Agenda Report, including attachments to the Report, for this matter, and (2) other substantial evidence within the record and/or provided at this December 23, 2021 Regular public meeting (all of which administrative record materials for this matter are incorporated by reference into this Resolution No. 2021-____), finds and determines as follows:

1. **The Property is not required for other Authority purposes, and pursuant to Government Code section 37395, can be leased for up to 55 years.**

   The Property has been vacant and unused for decades. OIAA has determined that the Property is not suited for land uses for typical Authority or Airport aeronautical purposes, such as for runways, taxiways, terminals, hangars, and similar Airport facilities because the Property is physically separated and removed from the balance of the Airport by Haven Avenue, which runs along or near the entire western limits of the Property. Accordingly, the Property is not required for other Authority purposes, and pursuant to Government Code section 37395, can be leased for up to 55 years.

2. **State Law and the Ontario International Airport Land Use Compatibility Plan Establish Legal Restrictions that Prohibit Residential Housing on the Property.**

   A. State Law Requires an Airport Land Use Compatibility Plan for the Airport

   The California State Aeronautics Act (Public Utilities Code section 21670 *et seq.*) requires each airport to adopt an Airport Land Use Compatibility Plan and requires

affected agencies to adopt land use designations consistent with the terms therein. (Pub. Util. Code, §§ 21674, 21675, 21676, 21676.5.) The intent of the Legislature under the Aeronautics Act is to "discourage incompatible land uses near existing airports." (*Id.* at § 21674.7.)

The Ontario International Airport Land Use Compatibility Plan, amended July 2018 (linked at https://www.ontarioca.gov/planning/ont-iac at Compatibility Plan, and incorporated in its entirety into this Resolution No. 2021-___), limits certain land uses near the airport based on state and FAA requirements. (Compatibility Plan, pp. 1-1, 1-2; see also Compatibility Plan, Appendix A, State Laws and Appendix B, Federal Aviation Regulations.) The Airport Compatibility Plan was created by the City of Ontario in coordination with the County of San Bernardino and other affected agencies, such as Riverside County and Los Angeles County. (*Id.* at pp. 1-3 through 1-4.) The policies set forth in the Compatibility Plan that limit land uses are requirements for surrounding jurisdictions, such as OIAA. (*Id.* at p. 2-4; see also Exhibit 2A: Affected Jurisdictions.) Affected agencies must modify, if necessary, any zoning and land use regulations to ensure they are consistent with the land use policies set forth in the Compatibility Plan. (*Id.* at p. 2-6; Gov. Code, § 65302.3; Pub. Util. Code, § 21676 [local agencies must comply with land use compatibility plans].)

B. State-Mandated Safety Policies in the Airport Land Use Compatibility Plan Prohibit Residential Housing and Uses on the Property.

The Airport Compatibility Plan required under State law adopts safety compatibility policies to minimize risks associated with off-airport accidents or emergency landings. More safety restrictions are set on residential land uses because residential uses warrant a greater degree of protection. (Compatibility Plan, p. 2-14.)

The Compatibility Plan creates five safety zones. (Compatibility Plan, p. 2-15.) "Residential development **is incompatible within all Safety Zones** (1 through 5)." (*Id.* at p. 2-15; *see* pp. 2-34 and 2-41.) "New mixed-use developments **will locate the residential component outside of all safety zones**." (*Id.* at pp. 2-15; *see* p. 2-41.)

The Property is located within Safety Zones 1, 2, and 3 in the Compatibility Plan. (*See* Safety Zone Map Exhibit 1-8, attached to this Resolution as **Exhibit 1**; *see also* Appendix I, at I-13.) Residential development is therefore prohibited under State law for the Property under the Compatibility Plan's Safety Policies.

C. State-Mandated Noise Policies in the Airport Land Use Compatibility Plan Prohibit Residential Housing and Uses on the Property

The Airport Compatibility Plan also establishes noise polices based on state regulations, guidelines, and the California Airport Land Use Planning Handbook. (*Id.* at p. 2-21.) The purpose of the noise policies is to "avoid the establishment of noise-sensitive land uses in the portions of the [Ontario International Airport] that are exposed to significant levels of aircraft noise." (*Id.* at p. 2-19.)

Residential uses are incompatible with airport land areas with noise exposure CNEL 70 dB and above. (*Id.* at Tables 2-3 at p. 2-47.) Noise Policy SP3 states: "Residential infill development **should not be allowed in areas exposed to exterior noise levels equal to or greater than CNEL 70 dB**." (*Id.* at p. 2-34.)

The Property is located directly below the flight path for the Airport. (Compatibility Plan, Modeled Flight Routes, Exhibit 1-13.) The Property is within the high noise impact zones of CNEL 70-75 dB and CNEL 75+ dB. (*See* Compatibility Plan, p. 1-10; Noise Map Exhibit 1-9, which Map is attached to this Resolution as **Exhibit 2**; *see also* Appendix I, at I-5.) Thus, residential development is not allowed on the Property under the Compatibility Plan's noise policies. (Noise Map Exhibit 1-9; *see also* Appendix I, at I-6 [map of areas with residential land use designation, do not include the Property, or anywhere near the Property].

3. **Federal Regulations Prohibit Residential Uses and Housing on the Property.**

FAA regulations require OIAA to "take appropriate action . . . to restrict the use of land adjacent to or in the immediate vicinity of the airport to activities and purposes compatible with normal airport operations." (49 U.S.C. § 47107(a)(10); see also FAA Order 5190.6B, (linked at: FAA Order 5190.6B Change 1, Airport Compliance Manual, 22 November 2021 and incorporated in its entirety into this Resolution No. 2021-___.) This is considered a "federal obligation to ensure compatible land use." (FAA Order 5190.6B, p. 20-2.)

"Incompatible land use at or near airports may result in the creation of hazards to air navigation and reductions in airport utility resulting from obstructions to flight paths or noise-related incompatible land uses resulting from residential construction too close to the airport." (*Id.* at p. 20-1.) "Residential housing and other land uses near airports must remain compatible with airports and the airport approach/departure corridors." (*Id.* at p. 20-1.) **"Restricting residential development near the airport is essential in order to avoid noise-related problems."** (*Id.* at p. 20-2.)

FAA Order 5190.6B also states, **"The general rule on residential use of land on or near airport property is that it is incompatible with airport operations because of the impact of aircraft noise and, in some cases, for reasons of safety, depending on the location of the property."** (*Id.* at p. 20-5.)

In sum, FAA Order 5190.6B mandates that OIAA ensures compatible land uses with land on or immediately surrounding the Airport, and that it therefore restrict residential housing on the Property, which is located directly below the flight path for the Airport and is within areas affected by high noise levels.

4. **The Property is Exempt Surplus Property under Government Code Section 54221(f)(1)(G).**

The State and federal laws and regulations discussed and referenced in Sections 2 and 3 (Findings) of this Resolution above warrant, justify, and result in a determination and finding by OIAA under Government Code section 54221(f)(1)(G) that the Property is "exempt surplus property" where housing would be prohibited from being developed.

The Property is suitable for use and development of industrial uses regarding the Project consistent with the Airport Compatibility Plan.

5. **The Long-Term Ground Lease of the Property will Produce and Provide Fair Market Value to the Authority.**

   OIAA's Offering Memorandum, through CBRE, and the related request for proposals or bids process for the long-term ground lease and development of the Property summarized above confirmed that the proposed Ground Lease with CanAm Ontario, LLC, will provide OIAA with fair market value for lease of the Property. The proposed Ground Lease between OIAA and CanAm will provide lease rentals and revenues for the Property that exceed the determinations of fair market value for the Property contained in the three (3) separate appraisals for the Property discussed above.

6. **The Proposed Development and Use of the Property Under the Ground Lease Will be Consistent with Vital State Objectives Regarding the Movement of Goods and Health of Supply and Distribution Chains Across California.**

   The proposed Project would utilize the Property for industrial logistics development related to the warehousing and distribution of goods and products. Operations under the proposed Project and Ground Lease will therefore be consistent with supply chain improvements that are encouraged in Governor Newsom's Executive Order N-19-21 regarding supply chain issues, which Order recognized that "the movement of goods and health of supply and distribution chains across California is a matter of vital statewide importance …."

SECTION 2. OIAA COMMISSION ACTIONS:

1. Approval of Findings: The OIAA Commission approves and adopts the Findings set forth in Section 1 of this Resolution above.

2. Approval of the Development and Entitlement Agreement with CanAm Ontario, LLC: The OIAA Commission approves the Development and Entitlement Agreement (DEA) between CanAm Ontario, LLC, and OIAA included as Attachment A to the Agenda Report for this matter, and authorizes the OIAA's Chief Executive Officer (CEO), or the CEO's designee, to execute all documents related to the DEA.

3. Approval of the Ground Lease with CanAm Ontario, LLC: The OIAA Commission approves the Ground Lease between CanAm Ontario, LLC, and OIAA included as Attachment B to the Agenda Report for this matter, and, subject to satisfaction of each of the conditions stated and contained in Sections 2.2(a)(1), 2.3(d), 2.7, 4.1(f), and 4.1(g) of the DEA, authorizes the OIAA's Chief Executive Officer (CEO), or the CEO's designee, to execute all documents related to the Ground Lease.

PASSED, APPROVED, AND ADOPTED this 23rd day of December 2021.

ALAN D. WAPNER, OIAA PRESIDENT

ATTEST:

NATALIE GONZAGA, ASSISTANT SECRETARY

APPROVED AS TO LEGAL FORM:

LORI D. BALLANCE, GENERAL COUNSEL

STATE OF CALIFORNIA)
COUNTY OF SAN BERNARDINO)
CITY OF ONTARIO)

I, Natalie Gonzaga, Commission Clerk of the Ontario International Airport Authority, DO HEREBY CERTIFY that foregoing Resolution No. 2021-22 was duly passed and adopted by the Commission of the Ontario International Airport Authority at their Regular meeting held December 23, 2021 by the following roll call vote, to wit:

AYES:	COMMISSIONERS:	HAGMAN, BOWMAN, LOVERIDGE, PRESIDENT WAPNER
NOES:	COMMISSIONERS:	NONE
ABSENT:	COMMISSIONERS:	GOUW

ngonzaga
NATALIE GONZAGA, ASSISTANT SECRETARY

(SEAL)

The foregoing is the original of Resolution No. 2021-22 duly passed and adopted by the Commission of the Ontario International Airport Authority at their Regular meeting held December 23, 2021.

ngonzaga
NATALIE GONZAGA, ASSISTANT SECRETARY

(SEAL)

EXHIBIT 1
OIAA RESOLUTION NO. 2021-__
(SAFETY ZONES MAP)

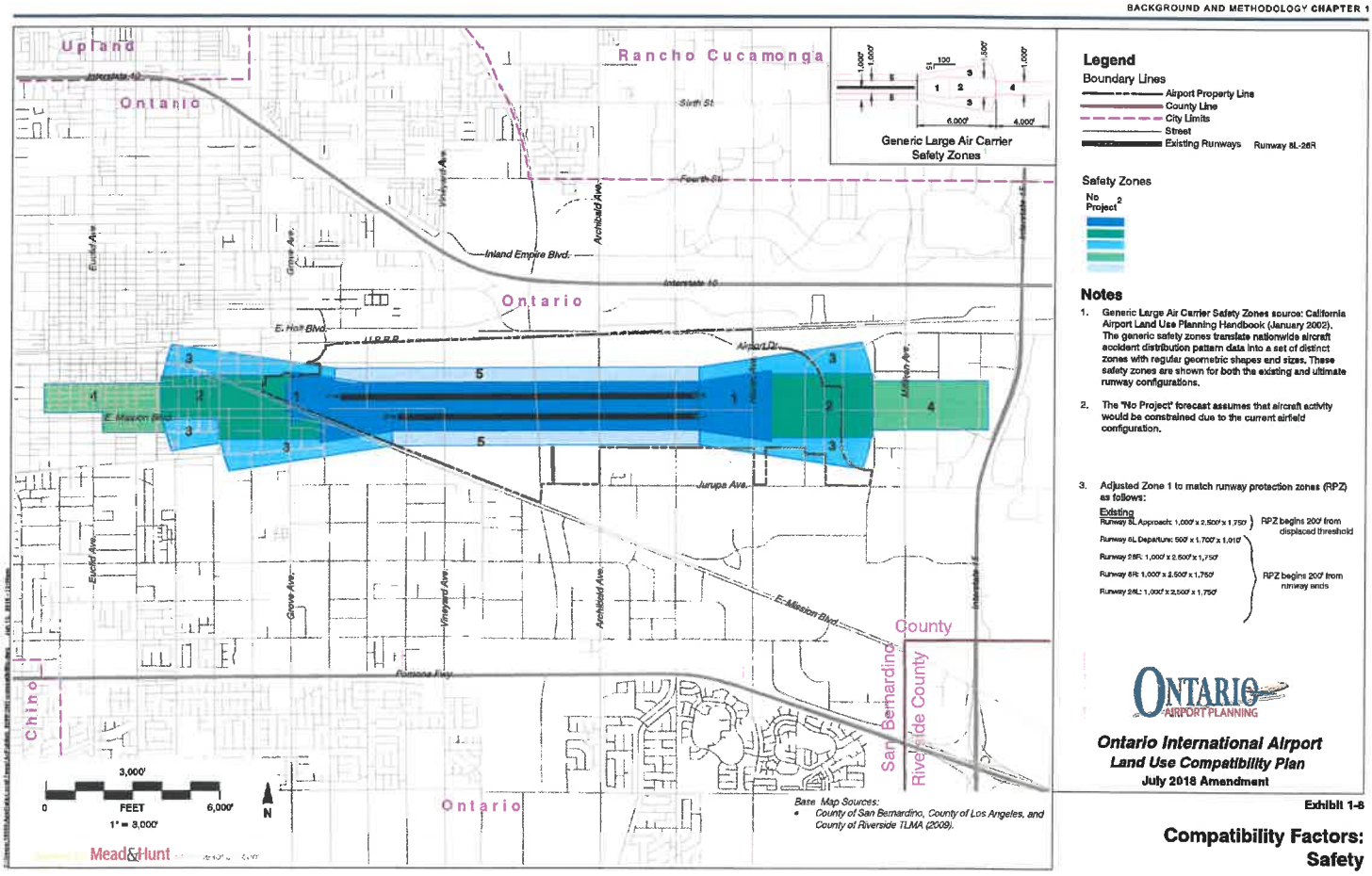
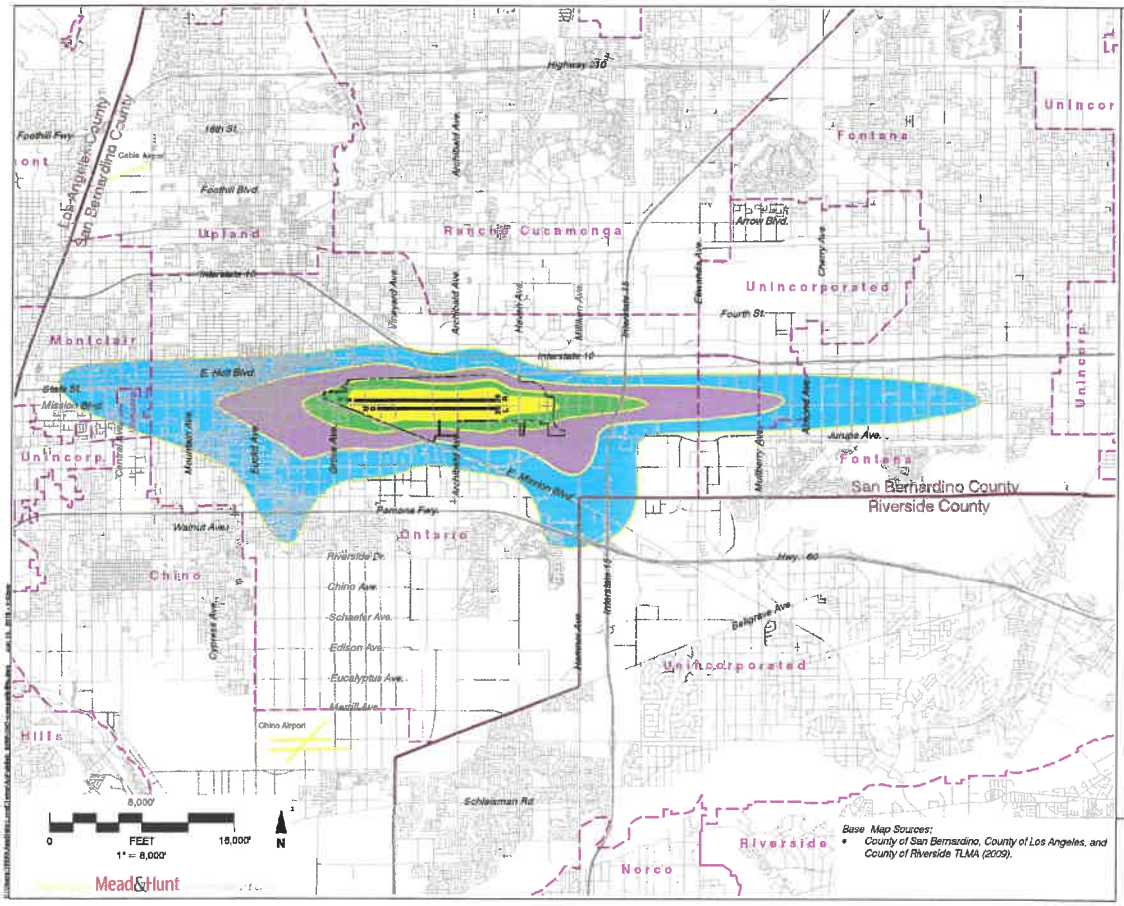


Exhibit 1-8

Compatibility Factors: Safety

EXHIBIT 2
OIAA RESOLUTION NO. 2021-__
(NOISE IMPACT ZONES MAP)



Legend

Boundary Lines
- Airport Property Line
- County Line
- City Limits
- Street
- Existing Runways } Runway 8L-26R, Runway 8R-26L

No Project Noise Contours[1]
- 60-65 dB CNEL
- 65-70 dB CNEL
- 70-75 dB CNEL
- 75-80 dB CNEL

343,000 Annual Operations[2]

Notes
1. Source: HNTB Technical Memorandum to LAWA, *Noise Contours for LA/ONT Environmental Impact Report* (June 13, 2008).
2. The "No Project" forecast assumes that aircraft activity would be constrained due to the current airfield configuration. The "Proposed Project" forecast is based on the ultimate reconfiguration of the airport - both runways shifting south and east of their current alignments. Annual operations rounded to nearest thousand.

Base Map Sources:
- County of San Bernardino, County of Los Angeles, and County of Riverside TLMA (2009).

ONTARIO AIRPORT PLANNING

Ontario International Airport
Land Use Compatibility Plan
July 2018 Amendment

Exhibit 1-9

Compatibility Factors: Noise

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING

PRELIMINARY HYDROLOGY CALCULATIONS

FOR

CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT
ONTARIO, CA 91761

PREPARED FOR

McDONALD PROPERTY GROUP
1140 NORTH COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227

DECEMBER 27, 2021

JOB NO. 4005

PREPARED BY

THIENES ENGINEERING
14349 FIRESTONE BLVD.
LA MIRADA, CALIFORNIA 90638
PHONE: (714) 521-4811
FAX: (714) 521-4173

PRELIMINARY HYDROLOGY CALCULATIONS

FOR

CALIFORNIA LOGISTICS CENTER

PREPARED UNDER
THE SUPERVISION OF

12/27/21

REINHARD STENZEL DATE:
R.C.E. 56155
EXP. 12/31/2022

INTRODUCTION

A: PROJECT LOCATION

The project site is generally located south of Airport Drive, east of Haven Avenue, west of Doubleday Avenue and north of Jurupa Street in the city of Ontario, California. Please see next page for vicinity map.

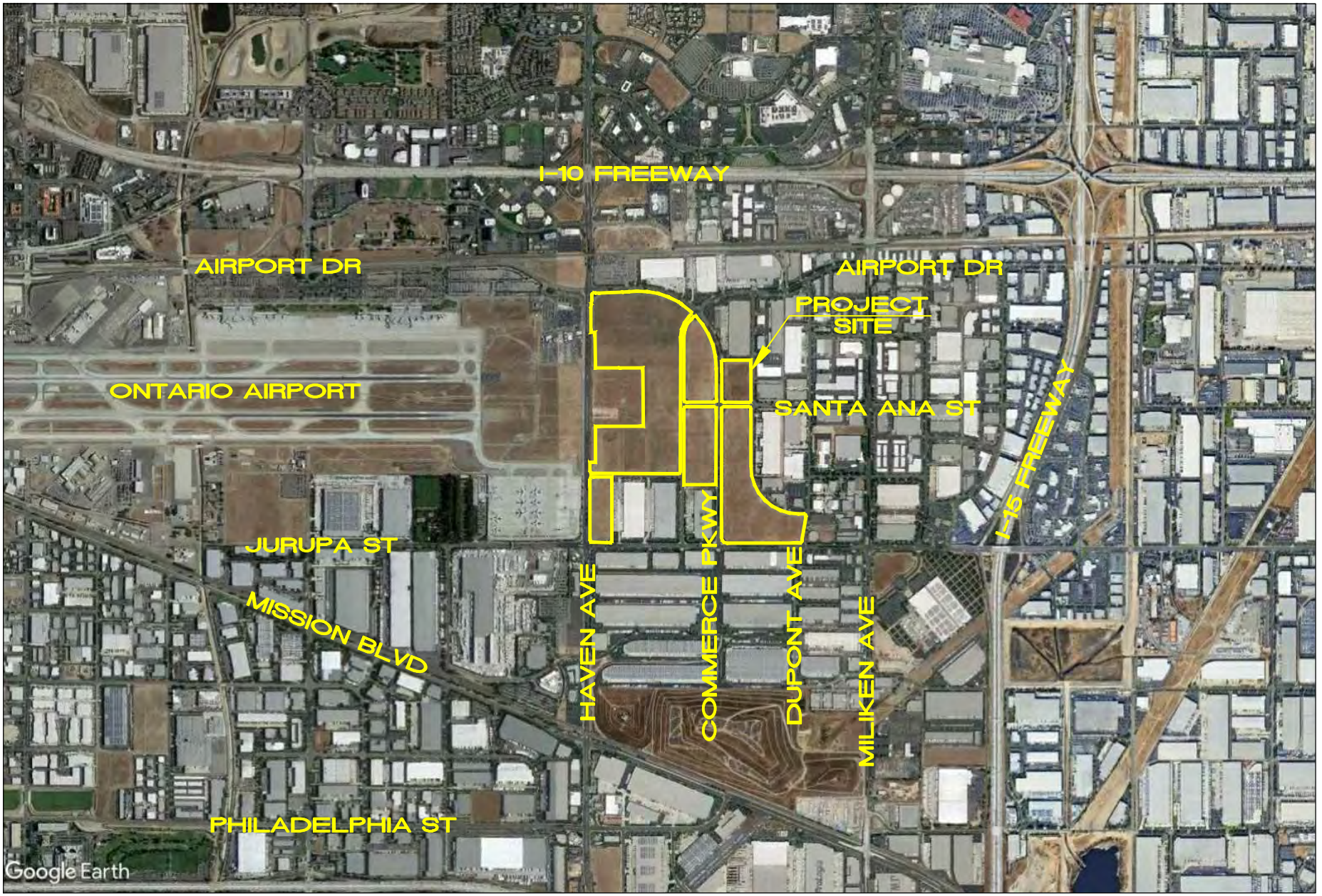
B: STUDY PURPOSE

The purpose of this study is to determine the 25-and 100-year proposed condition peak flow rates from the project site that are tributary to existing storm drain systems in Commerce Parkway, Carnegie Avenue, La Salle Street and Santa Ana Street.

C: PROJECT STAFF:

Thienes Engineering staff involved in this study include:

Reinhard Stenzel
Brian Weil



Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

VICINITY MAP

FOR

CALIFORNIA LOGISTICS CENTER
ONTARIO, CA 91761

NTS

Last Update:12/14/21
O:\4000-4099\4005\4005VicM

5695

DISCUSSION

The project site is generally bounded by Airport Drive to the north, Haven Avenue to the west, Jurupa Street to the South and Doubleday Avenue to the east. The site consists of 9 separate buildings as follows:

- Buildings 1-3 are located between Airport Drive, Haven Avenue, La Salle Street and Carnegie Avenue. The respective Building sizes are 360,660 square feet, 930,300 square feet and 548,730 square feet. This portion of the project site encompasses approximately 105.3 acres.
- Building 4 is located at the northeast corner of Haven Avenue and Jurupa Street. This building is approximately 265,200 square feet on a 11.8 acre site.
- Building 5 is located between Carnegie Avenue and Commerce Parkway north of Santa Ana Street. This building is approximately 425,580 square feet on 19.5 acres.
- Building 6 is located between Carnegie Avenue and Commerce Parkway south of Santa Ana Street. The site is approximately 20.6 acres. The proposed building is approximately 492,140 square feet.
- Building 7 is located between Commerce Parkway and Doubleday Avenue north of Santa Ana Street. This site is approximately 10.0 acres. The proposed building is approximately 205,500 square feet.
- Buildings 8 and 9 are located between Commerce Parkway and Doubleday Avenue between Santa Ana Street and Jurupa Street. The respective building sizes are 535,350 square feet and 521,920 square feet. This portion of the project site encompasses approximately 49.0 acres.

Master Plan Hydrology

The project site is part of Drainage Area III of the City of Ontario's Master Plan of Drainage, March 2012. From the Master Plan of Drainage, it appears that Buildings 1-3 and 5-9 of the project site ultimately drain to the Master Plan facility in Commerce Parkway via existing storm drains in La Salle Street, Carnegie Avenue, Jurupa Street and Santa Ana Street. Building 4 is tabled to an existing storm drain system in Haven Avenue.

The Master Plan of Drainage generally does not indicate peak flow rates for the individual buildings, since they are a small part of the overall drainage areas tributary to the Commerce Parkway storm drain system. However, existing storm drain plans do indicate peak flow rates that appear to be for specific lots that are part of the project site, as further described below.

Please see Appendix "A" for the portions of the City's Master Plan of Drainage.

Existing Storm Drains

There are several existing storm drain systems to which the project site is tabled. A brief description of each are as follows:

- The largest storm drain system is in Commerce Parkway. This is an existing 10' wide by 9' high reinforced concrete box (RCB). This storm drain is part of the Deer Creek watershed. This storm drain conveys flows from north to south. The storm drain plans, prepared by Williamson and Schmid, show a hydraulic grade line, but do not indicate peak flow rates or storm frequency.
- The southerly Carnegie Avenue storm drain is 24" diameter pipe at the upstream portion of the system. The storm drain then transitions to a 60" diameter pipe upstream of La Salle Street. These plans, also prepared by Williamson and Schmid, indicate a 25-year peak flow rate for the 24" portion and 100-year peak flow rates for the 60" portion. This storm drain conveys runoff southerly to Jurupa Street. The storm drain continues easterly in Jurupa Street ultimately connecting to the RCB in Commerce Parkway.
- The La Salle storm drain conveys runoff from Haven Avenue easterly to the storm drain system in Carnegie Avenue as described above. The upstream portion of this drain indicates 25-year peak flow rates while the downstream portion shows 100-year peak flow rates. Pipe sizes range from 30" diameter to 54" diameter.
- The northerly Carnegie Avenue storm drain conveys flows from north to south then turns easterly in Santa Ana Street. This storm drain continues easterly to the existing RCB in Commerce Parkway. The portion of storm drain in Carnegie Avenue indicates 25-year peak flow rates, while the portion in Santa Ana Street shows 100-year peak flow rates.
- The storm drain in Dupont Avenue conveys mostly offsite flows southerly in a 72" storm drain. There are two stubs provided for the project site. Both the laterals and the 72" storm drain indicate 25-year peak flow rates.
- Separate Commerce Parkway storm drain plans show several laterals to the 10' x 9' RCB. These laterals tend to collect runoff from the street or are intended to serve many of the individual lots that comprise the project site. These laterals generally indicate 25-year peak flow rates.

There are two existing storm drains that convey offsite flow through the project site that will need to be relocated due to the layout of Buildings 3 and 8. Based on recent survey and recorded easements, there appears to be an existing storm drain system that conveys offsite flow through the Building 3 site. A plan for this drain was not available. Proposed improvements will redirect this storm drain around the westerly side of Building 3 and reconnect to the original storm drain.

The other storm drain relocation is an existing 48" storm drain that traverses westerly through the Building 8 site. This storm drain conveys offsite flow from areas tributary to Doubleday Avenue to the existing RCB in Commerce Parkway. This storm drain plan, prepared by Williamson and Schmid, indicates a 25-year peak flow rate. Proposed

improvements will redirect this storm drain around the southerly side of Building 8 and connect to the existing RCB in Commerce Parkway downstream of the original connection.

While not shown on the storm drain plans, it is assumed that the Commerce Parkway storm drain system is sized for 100-year frequencies. Typically, in San Bernardino County, a storm drain of this size with such a large tributary area and peak flow rate would be sized for the 100-year storm event. Also, there are several storm drain systems that connect to this facility that do indicate 100-year peak flow rates.

See Appendix "A" for pertinent storm drain plans.

Proposed Condition

As previously mentioned, there are several laterals that appear to be designed to accept runoff from individual lots that comprise the overall project site. Unfortunately, a hydrology map was not available that corresponds to the laterals and storm drains prepared by Williamson and Schmid. But, based on lot sizes and peak flow rates indicated on the storm drain plans, it can be assumed that particular lots were tabled to specific laterals as further described below.

Buildings 1-2 Site:

The Building 1 and 2 portions of the project site appears to encompass three lots that are tabled to three separate laterals tributary to the northerly storm drain system in Carnegie Avenue. The southerly portion of Building 2 and a small portion of Building 3 appears to be tabled to a lateral tributary to the southerly storm drain system in Carnegie Avenue.

Runoff from the Building 1 site will be collected in catch basins located in the vehicle and truck parking areas (nodes 100-122). A proposed storm drain conveys flows southerly through the truck parking area (at node 142) then into the Building 2 site. Runoff from the undeveloped portion of Building 1 (nodes 130-131) will also be intercepted in this storm drain system.

Flow from the westerly portion of Building 2 and the truck yard area (nodes 200-203) will be conveyed southerly through the truck yard and intercepted a catch basin located at the southwest corner of Building 2 site. Here, flows confluence with Building 1 (at node 204). The proposed storm drain system continues easterly on the southerly side of Building 2.

Runoff from the easterly portion of Building 2 and the easterly parking lot (nodes 210-213) drains from north to south to catch basins located at the southeasterly parking area. This area confluences with the previously mentioned storm drain system (at node 214). This storm drain continues northeasterly to an existing lateral to the northerly Carnegie Avenue storm drain system. The 100-year peak flow rate at this location is approximately 159.5 cfs.

Runoff from parking areas on the northerly side of Building 2 (nodes 220-222) will be intercepted in catch basins in the parking lot. A proposed storm drain conveys this flow around the easterly side of Building 2, ultimately connecting to an existing lateral to the northerly Carnegie Avenue storm drain (at node 223). The 100-year peak flow rate at this location is approximately 13.9 cfs.

Building 3 site:

The majority of Building 3 appears to be tabled to three laterals at La Salle Street. There is an additional lateral at La Salle Street that appears to serve an existing storm drain traversing though the Building 3 portion of the site. This existing storm drain collects runoff from 2 undeveloped lots north of Building 3.

Runoff from the northerly half of Building 3 and the northerly truck yard (nodes 300-307) drain to catch basin located in the truck yard. A proposed storm drain conveys flow easterly around the building and connects to an existing lateral on the southerly storm drain system in Carnegie Avenue (at node 308). The 100-year peak flow rate for this area is approximately 41.7 cfs.

Flow from offsite areas adjacent to Haven Avenue and the southwesterly corner of Building 3 site (nodes 310-311) will drain southerly to a proposed C.M.P. riser. A proposed storm drain will connect this area to the existing storm drain in La Salle Street (at node 312). The 100-year peak flow rate at this location is approximately 5.1 cfs.

Runoff from the westerly parking lot and the undeveloped areas north of this lot (nodes 320-332) area conveyed to an existing storm drain lateral at La Salle Street. The 100-year peak flow rate for this area is approximately 20.9 cfs.

Runoff from the southwest corner of Building 3 and a portion of the truck yard (nodes 340-341) drain to a catch basin in the truck yard area. A proposed storm drain will convey flow to an existing storm drain lateral at La Salle Street (at node 342). The 100-year peak flow rate at this area is approximately 13.5 cfs.

Flow from the undeveloped lots north of Building 3 (nodes 350-353) will be intercepted by a proposed C.M.P. riser. A proposed storm drain will convey this flow around the westerly side of the building. This is a relocation of the existing storm drain that would be under the proposed building. Runoff from the westerly parking lot adjacent to the building (nodes 360-361) is also tributary to this storm drain (at node 362). The storm drain continues around the building, ultimately connecting to the existing storm drain lateral at La Salle Street. The 100-year peak flow rate for this area is approximately 42.6 cfs.

Finally, a portion of the southerly half of the building, truck yard and easterly parking lot (nodes 370-375 and 380-382) will be collected in catch basin at the southerly portion of the site. A proposed storm drain will convey runoff to an existing lateral at La Salle Street (at node 383). The 100-year peak flow rate at this area is approximately 27.2 cfs.

Building 4 site:

The Building 4 portion of the project site appears to be tabled to an existing stub located at the northeast corner of Haven Avenue and Jurupa Street. This is part of an existing storm drain in Jurupa Street that continues southerly in Haven Avenue.

Runoff from this portion of the site drains to catch basins located in the northerly parking lot and the truck yard (nodes 400-409). A proposed onsite storm drain conveys runoff southerly then westerly around the building to the aforementioned lateral (at node 410). The 100-year peak flow rate at this location is approximately 31.2 cfs.

Building 5 site:

The Building 5 portion of the project site appears tabled to two laterals tributary to the northerly Carnegie Avenue storm drain and 2 laterals to the Santa Ana Street storm drain. Ultimately, all runoff from Building 5 is tributary to the downstream portion of the existing storm drain in Santa Ana Street.

While the site appears to be tabled to 4 different locations, proposed condition will utilize only the downstream connection, thus providing relief to the upstream portion of existing storm drain system.

Runoff from the westerly portion of the building (nodes 511-520) will be collected in a storm drain in the westerly landscaped area. This drain conveys flows south then east around the proposed building. Runoff from the southerly parking lot is added to this drain (at nodes 521-522). The storm drain continues easterly.

The northerly parking lot, the easterly half of the building and the truck yard area (nodes 500-506) will drain to catch basins located in the parking lot and truck yard. A proposed storm drain system will collect flow from these catch basins and convey runoff southerly to the previously mentioned storm drain (at node 523), ultimately connecting to the easterly existing stub at Santa Ana Street (at node 524). The 100-year peak flow for this area is about 59.6 cfs.

Building 6 site:

From available information, it appears that half of the Building 6 site is tabled westerly to the Carnegie Avenue storm drain while the other half is tabled to the Commerce Parkway storm drain. There are three existing laterals to each storm drain system serving the project site.

Roof drains from the westerly portion of the building (nodes 621-631) will be conveyed in an onsite storm drain and will connect to the southerly lateral at Carnegie Avenue (at node 632). The 100-year peak flow rate at this location is approximately 20.5 cfs.

The easterly half of the building and the easterly parking area (nodes 600-613) drain to catch basin in the truck and parking areas. A storm drain system conveys runoff to the southerly lateral at Commerce Parkway (at node 614). Here, the 100-year peak flow rate is approximately 42.5 cfs.

Building 7 site:

The Building 7 site appears to be tabled to two separate laterals that are tributary to the RCB in Commerce Parkway. Proposed improvements will only utilize the downstream lateral, thus providing relief to the upstream portions of the RCB in Commerce Parkway.

Runoff from the northerly parking area, the easterly half of the building and the easterly truck yard (nodes 710-714) will be collected in catch basin in the truck and vehicle parking areas. A proposed storm drain system will convey runoff from these catch basins and convey the flow westerly through the southerly parking area. Runoff from this parking area (nodes 715-716) will be added to this storm drain. This storm drain continues westerly to an existing lateral at Commerce Parkway (at node 717). Flow from the westerly half of the building (nodes 700-706) will be conveyed southerly to the existing lateral at Commerce Parkway (at node 707). The respective 100-year peak flow rates for these areas are approximately 20.2 cfs and 8.0 cfs.

Buildings 8 and 9 site:

This portion of the project site consists of 7 individual lots. The 5 lots adjacent to Commerce Parkway appear to have existing laterals that convey runoff to the existing RCB in Commerce Parkway. The easterly lot appears to be tabled to a storm drain lateral at Dupont Street. The remaining lot appears to sheet flow to Jurupa Avenue, where most of the flow continues westerly to the intersection with Commerce Parkway. There is no storm drain in Jurupa Avenue at this location.

The easterly half of the building, the truck yard area and the vehicle parking lots (nodes 800-812) drain to catch basin in the truck yard and parking areas. A proposed storm drain system conveys these flows southerly, connecting to the relocated storm drain system from Doubleday Avenue (at node 813). The 100-year peak flow rate at this connection is approximately 49.4 cfs.

Flow from the parking area south of Building 8 (node 820-821) will drain to a catch basin in the parking lot. A storm drain will connect to the relocated storm drain (at node 822). The 100-year peak flow rate added at this location is approximately 4.4 cfs.

Runoff from the westerly portion of Building 8 (nodes 831-835, nodes 841-845 and nodes 850-855) will be conveyed southerly in a proposed storm drain system, which will connect to the 3 existing laterals adjacent to the building. The respective 100-year peak flow rate at these areas are approximately 6.0 cfs, 6.6 cfs and 6.6 cfs.

The southwesterly portion of Building 8 (nodes 861-865) drains southerly and connects to the proposed relocated storm drain from Doubleday Avenue. The 100-year peak flow rate at this connection is approximately 6.0 cfs.

The majority of the Building 9 site will drain to the existing lateral located at the northeast corner of Jurupa Street and Commerce Parkway. Here, runoff from the northerly portion of the building and the truck yard area (nodes 910-918) will drain to catch basin located in the truck yard. A storm drain will convey flows west then south around the building. Runoff from the westerly parking lot (node 919) is also added to this storm drain. The storm drain continues southerly and then connects to an existing lateral (at node 920). The 100-year peak flow rate at this location is approximately 34.2 cfs.

Roof drains from the southerly half of the building (nodes 931-942) will be conveyed to a proposed storm drain that traverses westerly to the join with the other onsite storm drain. This system then connects to the existing lateral (at node 943). The 100-year peak flow rate for this portion of the site is approximately 20.3 cfs.

The remaining easterly parking lot of Building 9 (nodes 900-901) will be collected in a catch basin at the easterly parking lot. A proposed storm drain will convey runoff easterly to an existing lateral off Dupont Street (at node 902). The 100-year peak flow rate at this location is approximately 7.7 cfs.

Finally, the portion between Buildings 8 and 9 will remain undeveloped and will continue with its current drainage pattern by draining to Doubleday Avenue.

See Appendix "B" for proposed condition hydrology calculations and Appendix “C” for proposed condition hydrology map.

Storm Drain Improvements

At some point, the existing storm drain systems become 100-year facilities. To avoid any onsite detention, it is recommended that portions of the existing 25-year storm drain systems be replaced with a larger storm drain to accommodate 100-year peak flow rates. The following is a preliminary list of proposed improvements to existing storm drain systems:

- Santa Ana Street and northerly Carnegie Avenue storm drain. The expected limits of replacement of this storm drain system is from station 65+86 to station 90+27. Note, there is a stationing change within this range and the amount of replacement is about 131 linear feet. The lateral to the Building 1-2 connection will also need to be increased. With the onsite redirection of flow from Building 5, the upstream portion of the northerly Carnegie Avenue storm drain will not need to be upgraded.
- Southerly Carnegie Avenue Storm Drain. This storm drain is designated as a 25-year drain upstream of the La Salle Street connection. Portions of this storm drain are already 60” diameter, which is the same as the downstream 100-year portion. It is unlikely that this portion needs improvements. However, the upstream portion

may need to be replaced from station 79+94 to station 83+77 along with the lateral that serves the Building 3 site.

- La Salle Street Storm Drain. This storm drain is designed as a 25-year facility upstream of station 56+93. Improvements will be required from station 56+93 to station 53+76. Additional upsizing may be required upstream depending on hydraulic calculations.
- The relocated storm drain that traverses through the Building 8 site has a 25-year design. This storm drain will likely need to be upsized due to longer length and the addition of onsite 100-year peak flow rates.
- Plans for the existing storm drain that traverses through the Building 3 site were not available. Therefore, the design frequency is not known at this time. Hydraulic analysis will be required to determine the size of the proposed storm drain realignment.

In addition to the above, several laterals may need to be upsized as well depending on hydraulic capacity of each lateral. Ultimate storm drain and lateral sizing will be determined with precise grading and storm drain plans.

Methodology

Hydrology calculations were computed using San Bernardino County Rational Method program (by AES Software). The soil type is "B" per the San Bernardino County Hydrology Manual. Rainfall values are taken from isohyetal map from the Hydrology Manual. See Appendix "A" for reference materials.

Offsite areas adjacent to Buildings 1-3 are modeled as existing condition (open brush) since these areas will not be fully developed due to airport lighting and beacons.

APPENDIX	DESCRIPTION
A	REFERENCE MATERIAL
B	HYDROLOGY CALCULATIONS
C	HYDROLOGY MAPS

APPENDIX A

REFERENCE MATERIAL

PROJECT SITE
COMMERCE CENTER STORM DRAIN
COMMERCE CENTER STORM DRAIN
E AIRPORT DR
OLD BROOKSIDE RD
GUASTI RD
HAVEN AVE
MILLIKEN AVE
S ROCKEFELLER AVE
BRICKELL ST
SANTA ANA ST
DUPONT AVE
LOWELL ST
WALL ST
DOUBLEDAY AVE
SLATER DR
E JURUPA ST
JURUPA ST
WANAMAKER AVE
970
960
940
930
920
910
890
880

5706

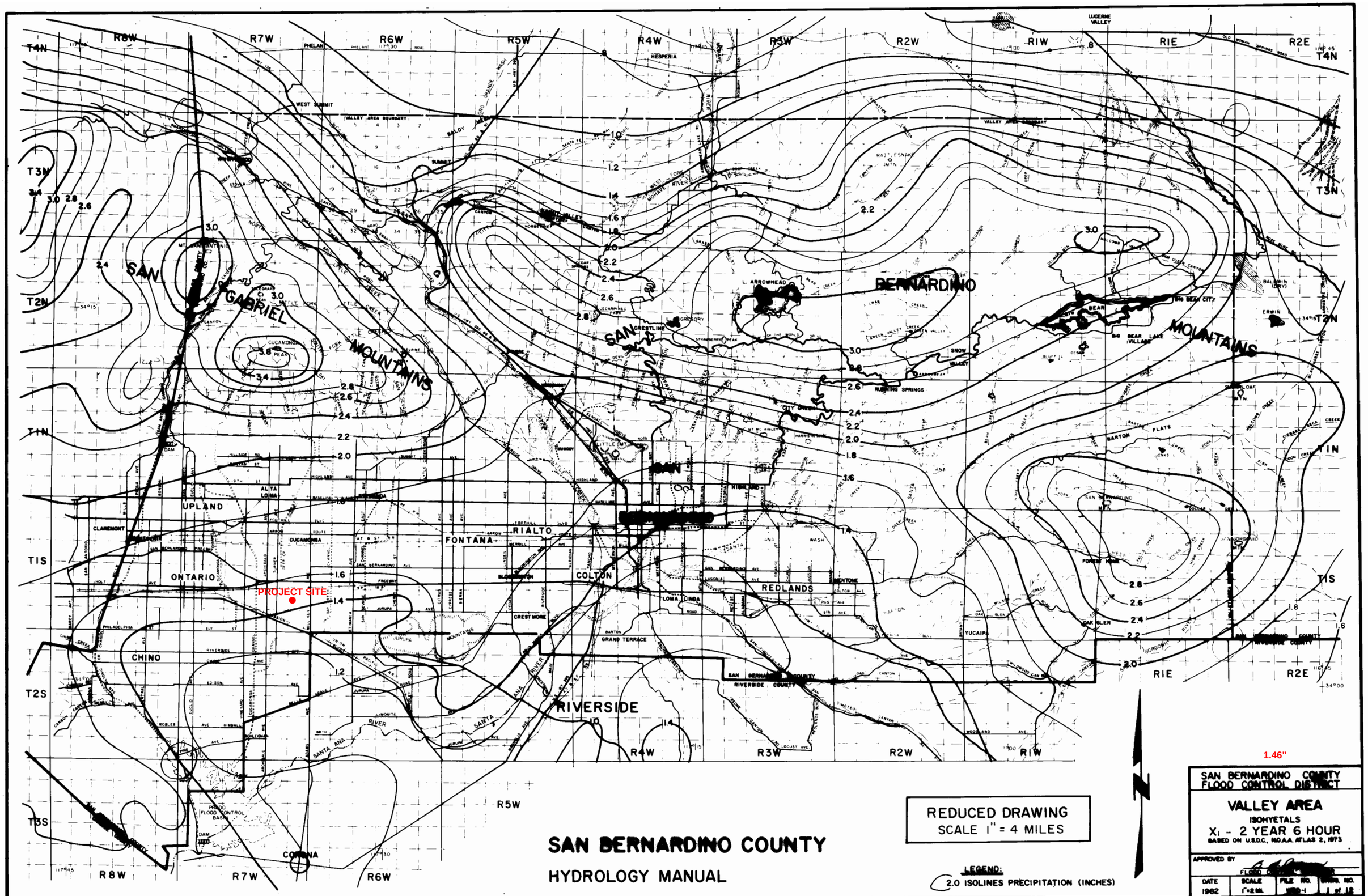
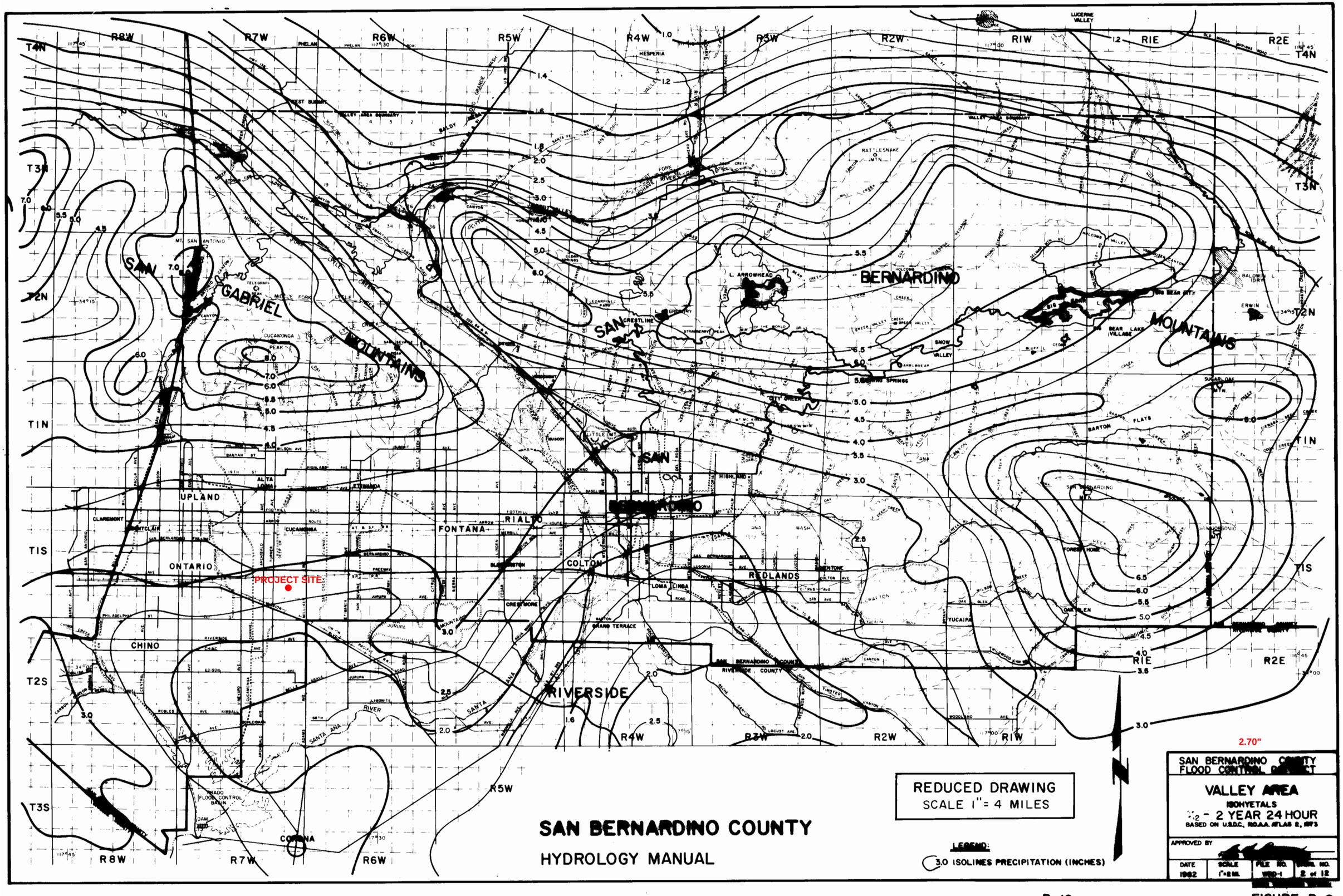
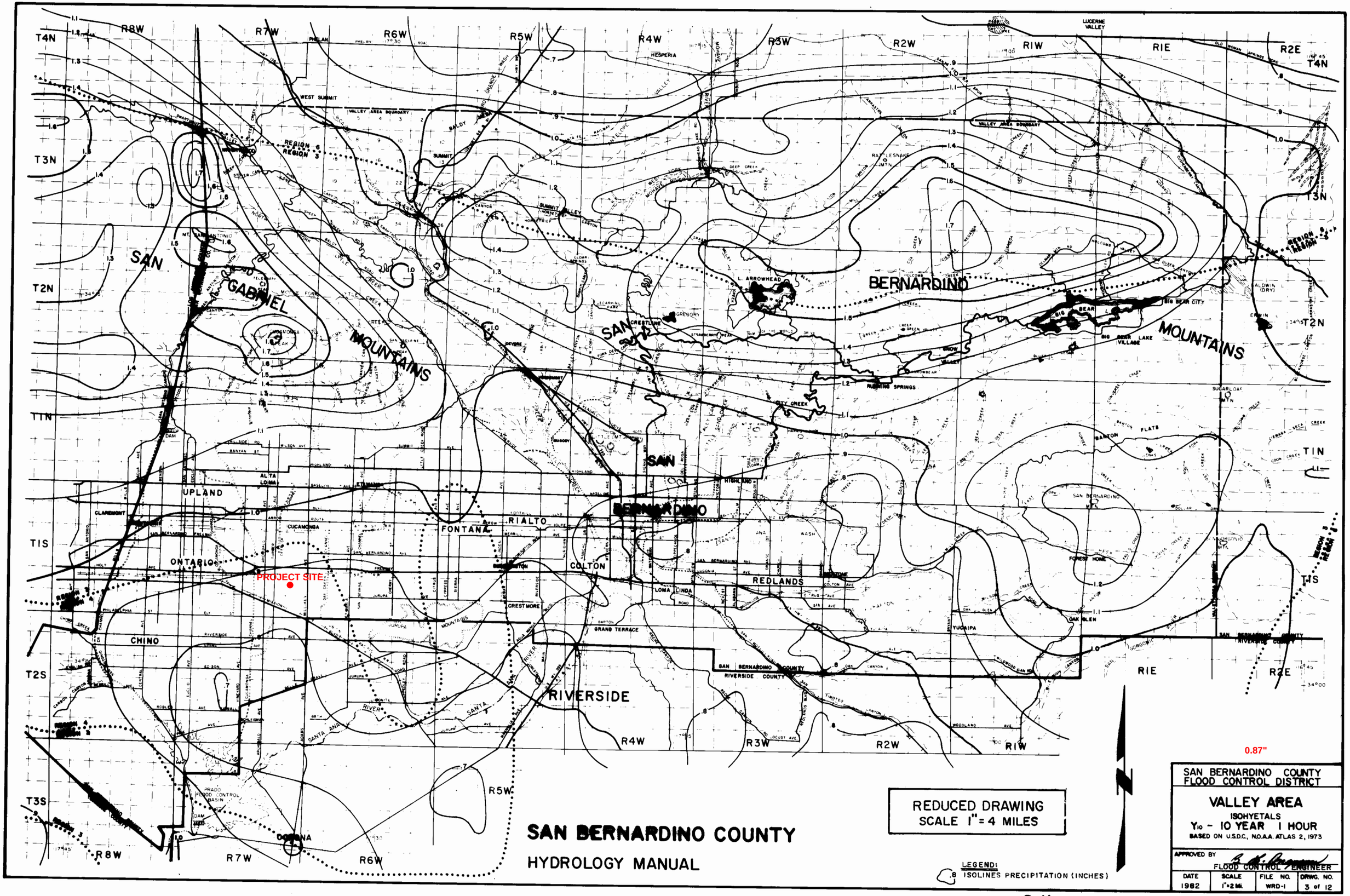


FIGURE B-1

5707



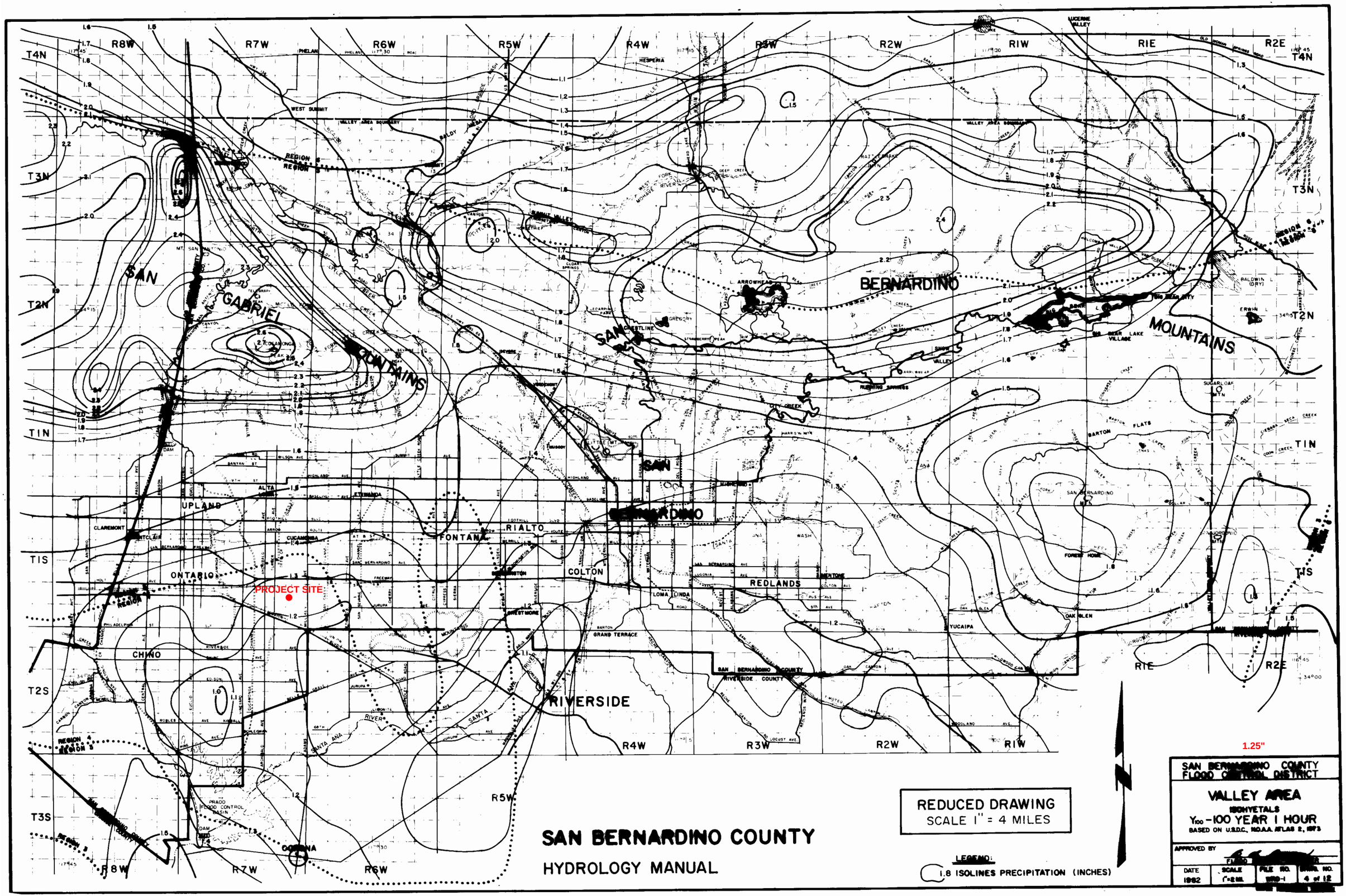
SAN BERNARDINO COUNTY
HYDROLOGY MANUAL



5709

B-11

FIGURE B-3



REDUCED DRAWING
SCALE 1" = 4 MILES

LEGEND:
1.8 ISOLINES PRECIPITATION (INCHES)

SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

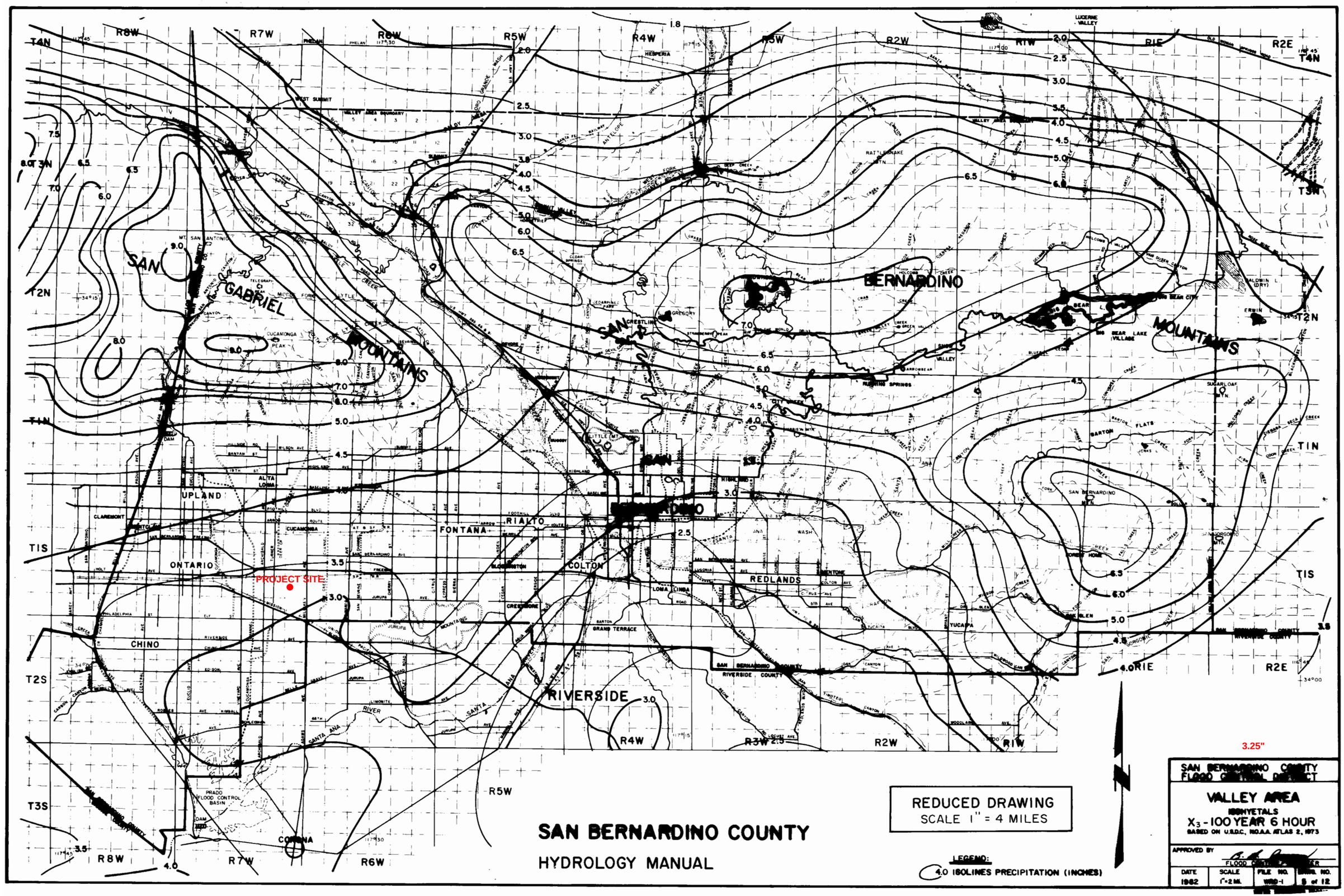
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

VALLEY AREA
ISOHYETALS
Y_{100} - 100 YEAR 1 HOUR
BASED ON U.S.D.C., NOAA ATLAS 2, 1973

APPROVED BY

DATE	SCALE	FILE NO.	SHEET NO.
1982	1"=2MI.	VHD-1	4 of 12

FIGURE B-4



REDUCED DRAWING
SCALE 1" = 4 MILES

LEGEND:
4.0 ISOLINES PRECIPITATION (INCHES)

SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

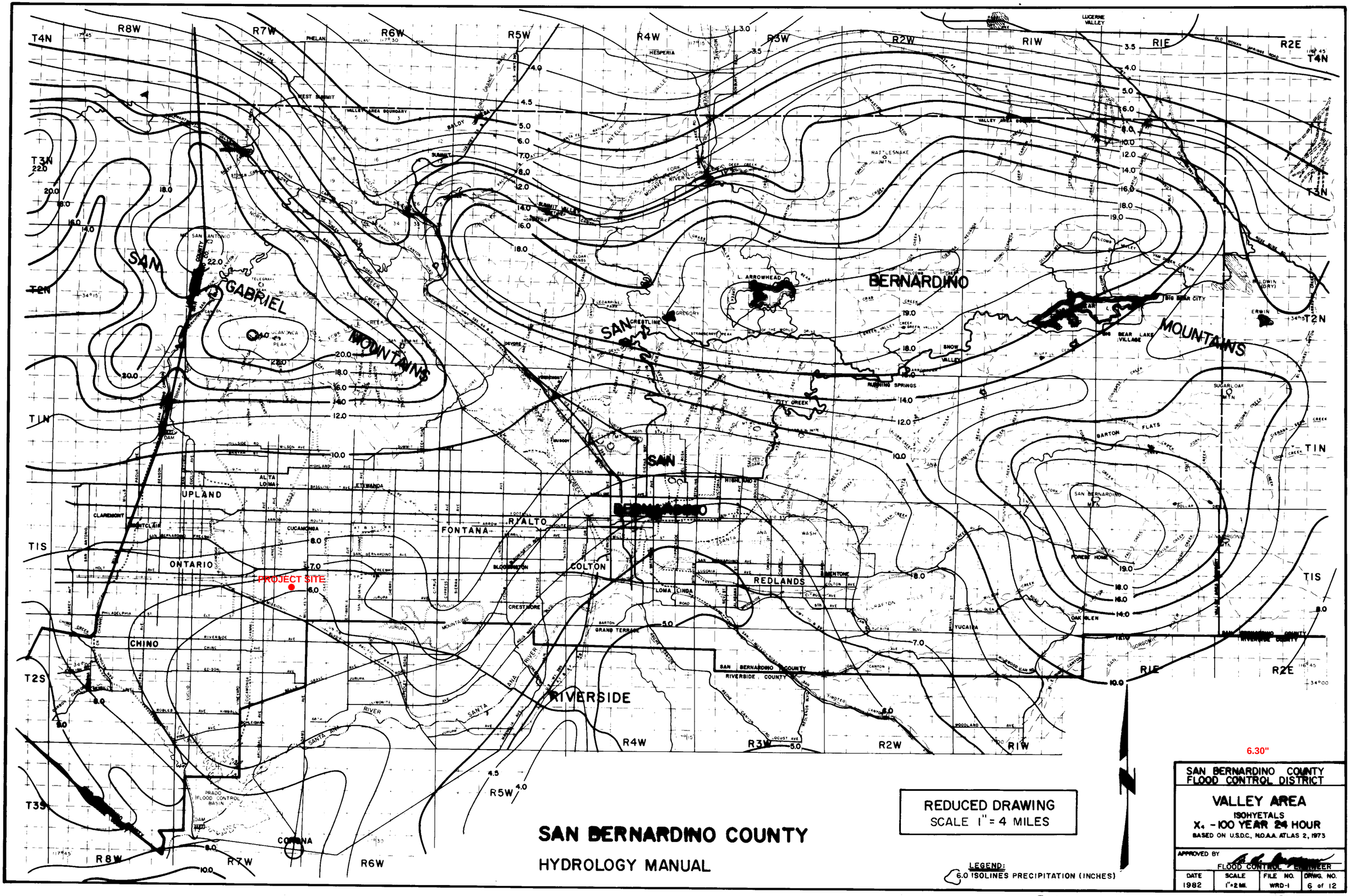
SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

VALLEY AREA
ISOHYETALS
X_3 - 100 YEAR 6 HOUR
BASED ON U.S.D.C., NOAA ATLAS 2, 1973

APPROVED BY [redacted] FLOOD CONTROL ENGINEER

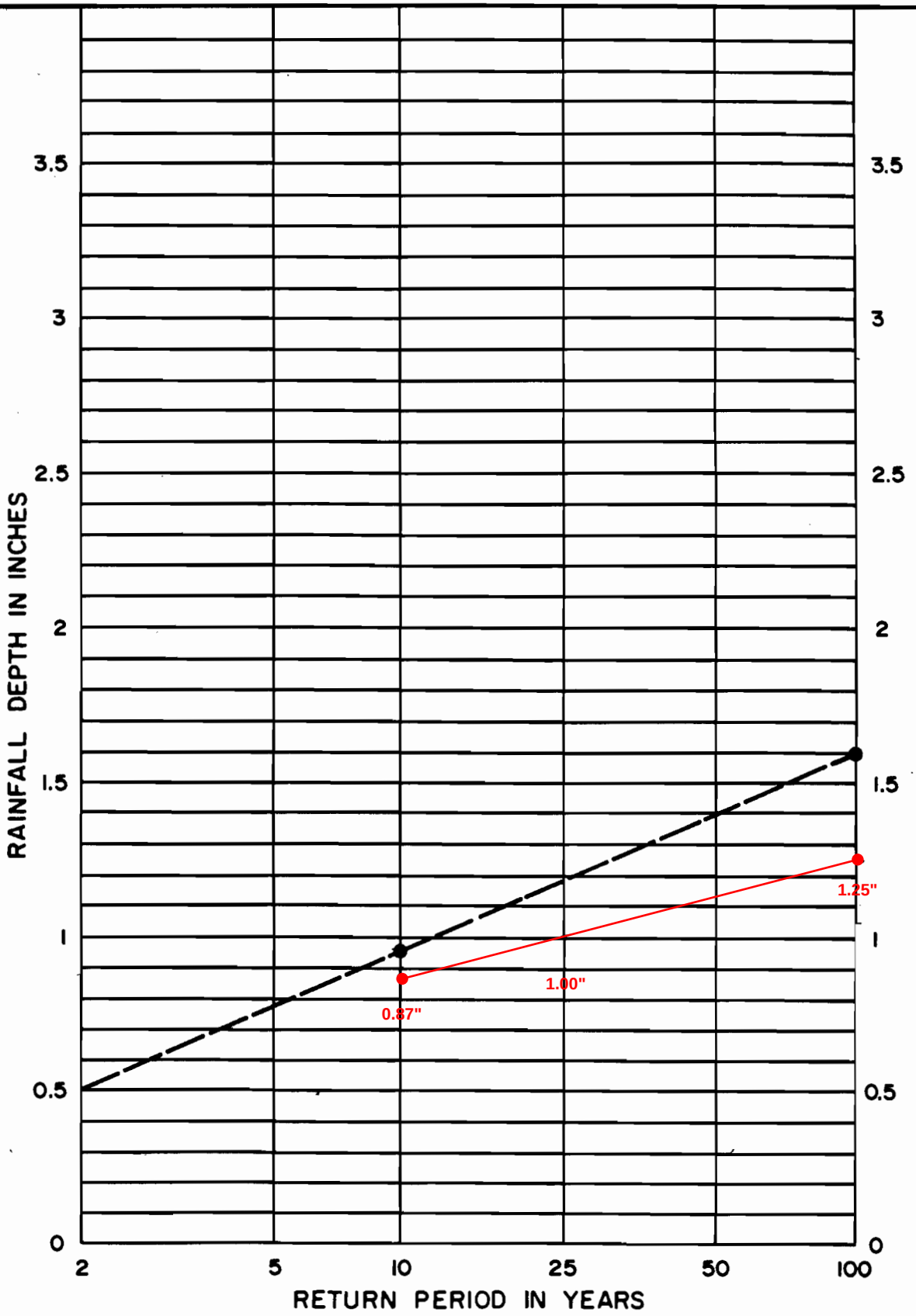
DATE	SCALE	FILE NO.	DWG. NO.
1982	1"=2 MI.	V(3)-1	8 of 12

FIGURE B-5



5712

FIGURE B-6



NOTE:

1. FOR INTERMEDIATE RETURN PERIODS PLOT 10-YEAR AND 100-YEAR ONE HOUR VALUES FROM MAPS, THEN CONNECT POINTS AND READ VALUE FOR DESIRED RETURN PERIOD. FOR EXAMPLE GIVEN 10-YEAR ONE HOUR = 0.95" AND 100-YEAR ONE HOUR = 1.60", 25-YEAR ONE HOUR = 1.18".

1-HOUR

REFERENCE: NOAA ATLAS 2, VOLUME XI - CAL., 1973

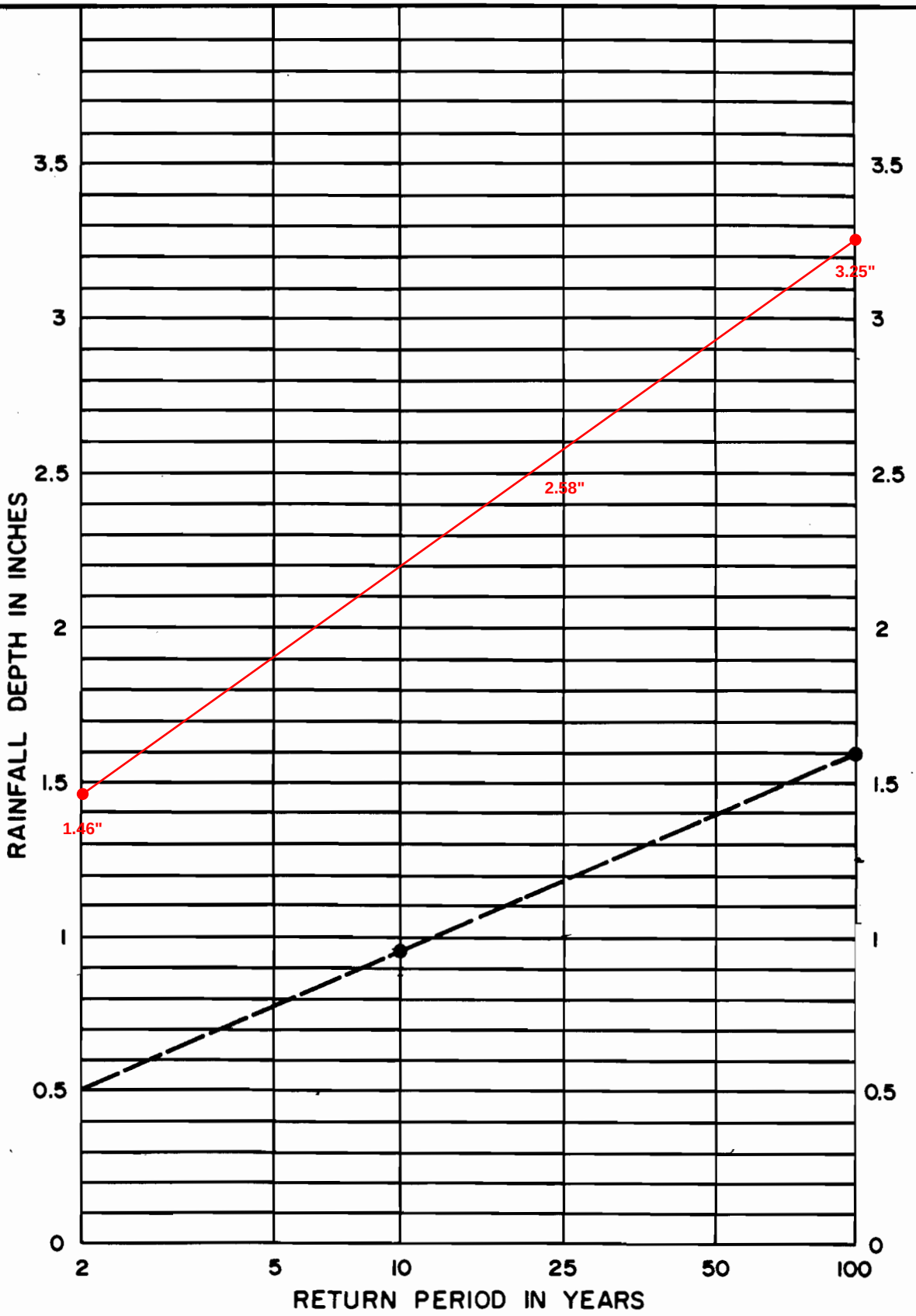
SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

RAINFALL DEPTH VERSUS RETURN PERIOD FOR PARTIAL DURATION SERIES

FIGURE 1

5713

10



NOTE:

1. FOR INTERMEDIATE RETURN PERIODS PLOT 10-YEAR AND 100-YEAR ONE HOUR VALUES FROM MAPS, THEN CONNECT POINTS AND READ VALUE FOR DESIRED RETURN PERIOD. FOR EXAMPLE GIVEN 10-YEAR ONE HOUR = 0.95" AND 100-YEAR ONE HOUR = 1.60", 25-YEAR ONE HOUR = 1.18".

6-HOUR

REFERENCE: NOAA ATLAS 2, VOLUME XI - CAL., 1973

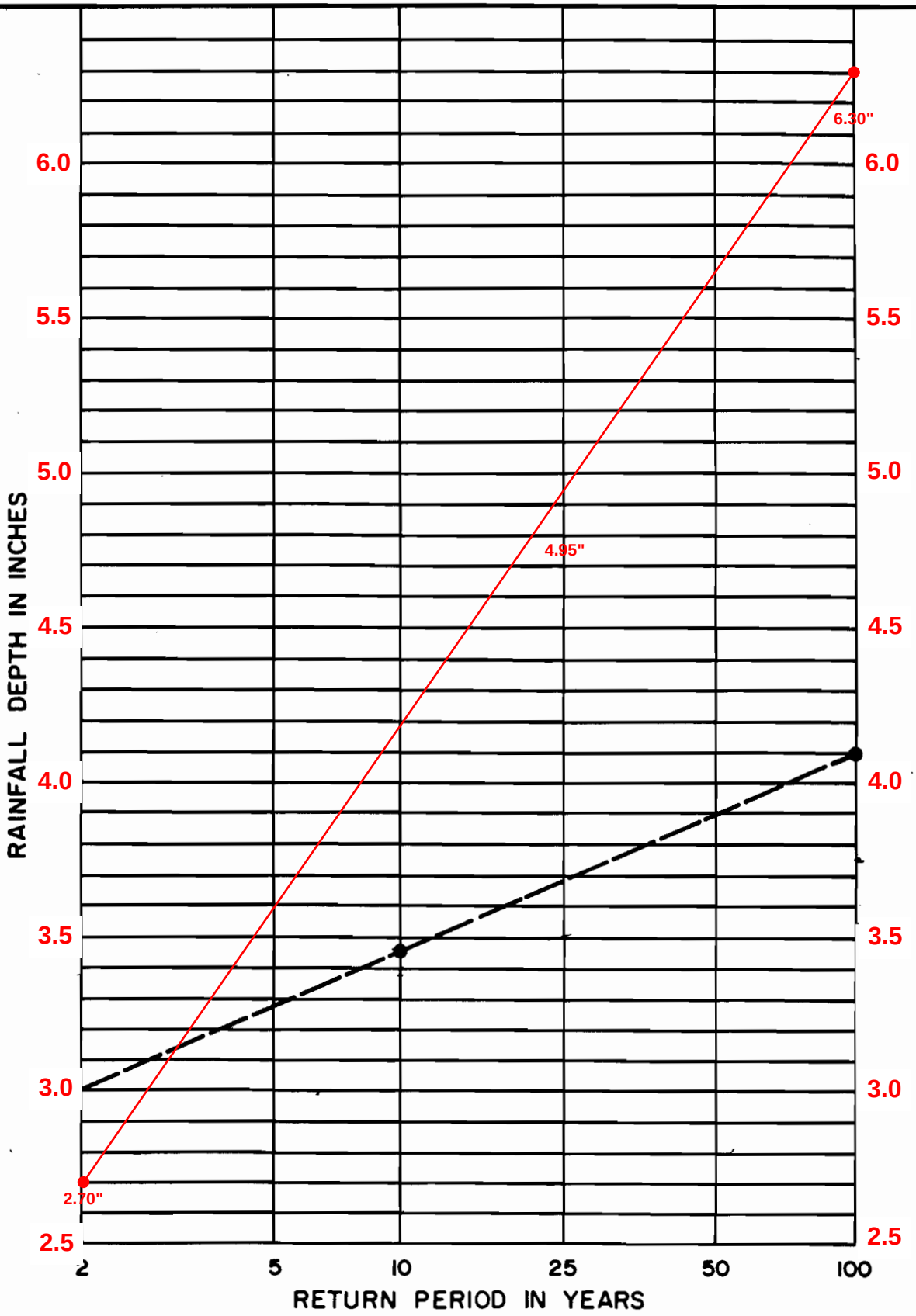
SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

RAINFALL DEPTH VERSUS RETURN PERIOD FOR PARTIAL DURATION SERIES

FIGURE 1

5714

10



NOTE:

1. FOR INTERMEDIATE RETURN PERIODS PLOT 10-YEAR AND 100-YEAR ONE HOUR VALUES FROM MAPS, THEN CONNECT POINTS AND READ VALUE FOR DESIRED RETURN PERIOD. FOR EXAMPLE GIVEN 10-YEAR ONE HOUR = 0.95" AND 100-YEAR ONE HOUR = 1.60", 25-YEAR ONE HOUR = 1.18".

24-HOUR

REFERENCE: NOAA ATLAS 2, VOLUME XI - CAL., 1973

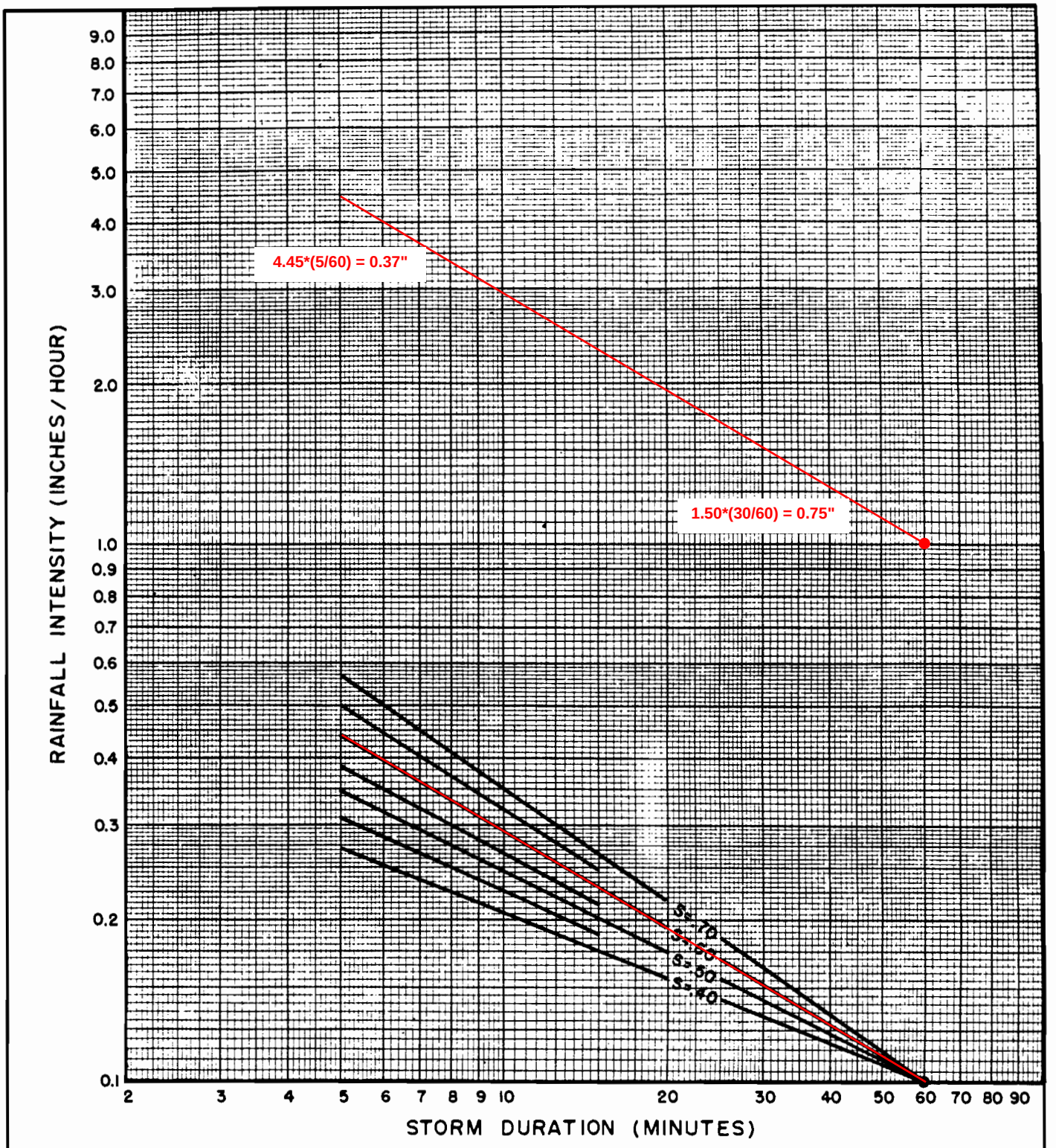
SAN BERNARDINO COUNTY
HYDROLOGY MANUAL

RAINFALL DEPTH VERSUS RETURN PERIOD FOR PARTIAL DURATION SERIES

FIGURE 1

5715

10



DESIGN STORM FREQUENCY = 25 YEARS

ONE HOUR POINT RAINFALL = 1.00 INCHES

LOG-LOG SLOPE = 0.60

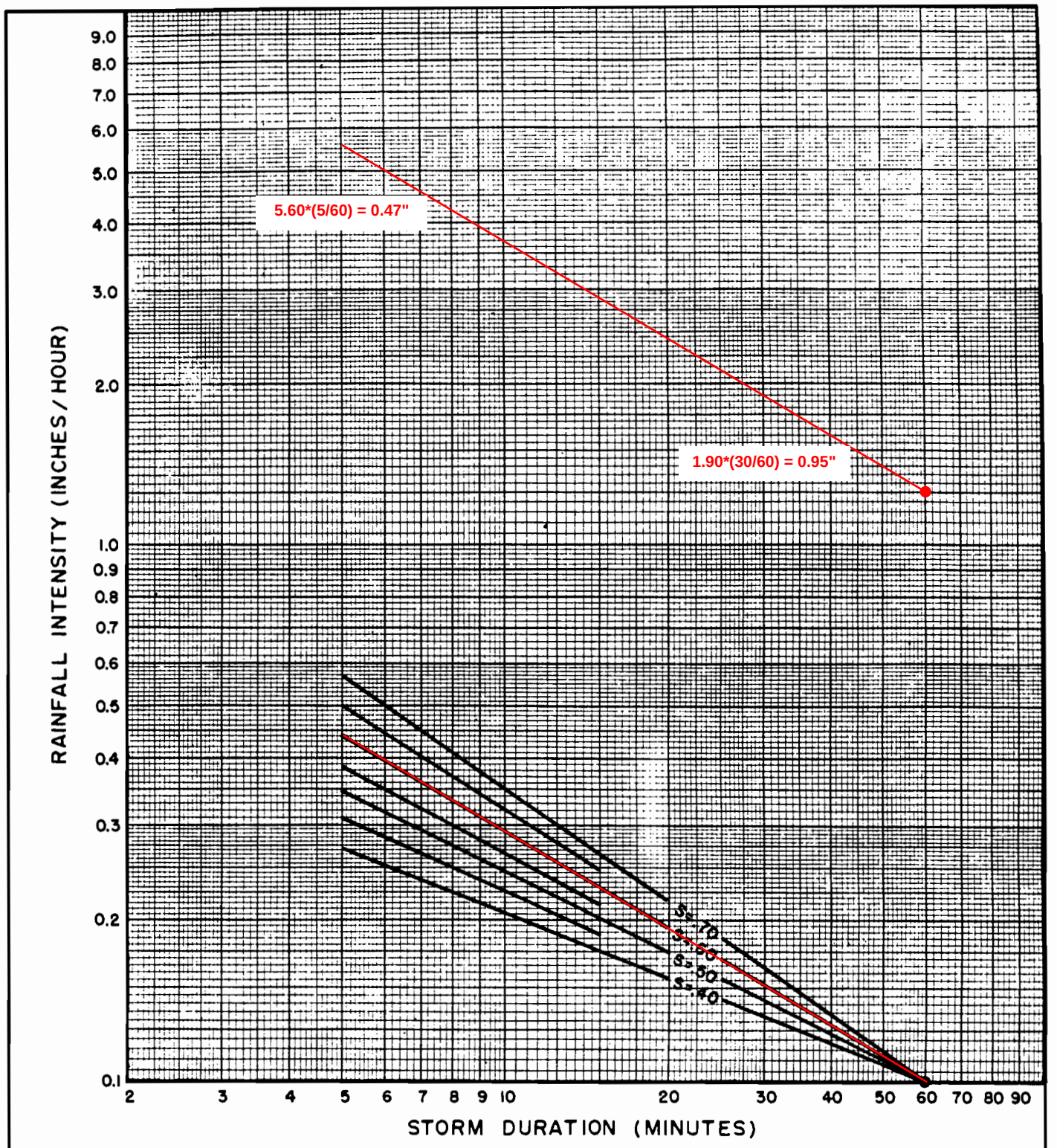
PROJECT LOCATION = _____

SAN BERNARDINO COUNTY

HYDROLOGY MANUAL

INTENSITY - DURATION CURVES CALCULATION SHEET

FIGURE 5716



DESIGN STORM FREQUENCY = 100 YEARS

ONE HOUR POINT RAINFALL = 1.25 INCHES

LOG-LOG SLOPE = 0.60

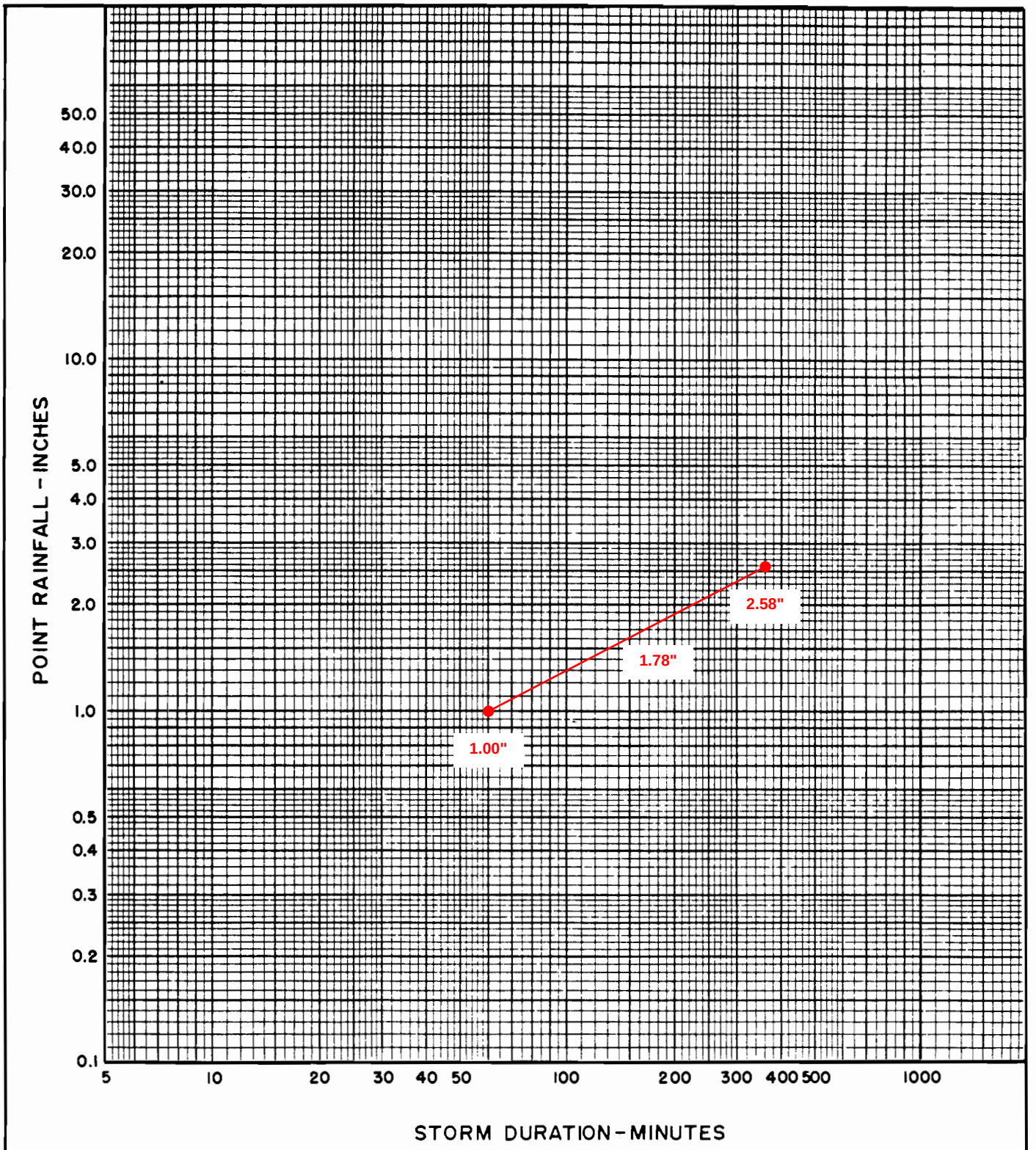
PROJECT LOCATION = _____

SAN BERNARDINO COUNTY

HYDROLOGY MANUAL

INTENSITY - DURATION CURVES CALCULATION SHEET

FIGURE 5717



PROJECT LOCATION _____

NOTES 25-YEAR _____

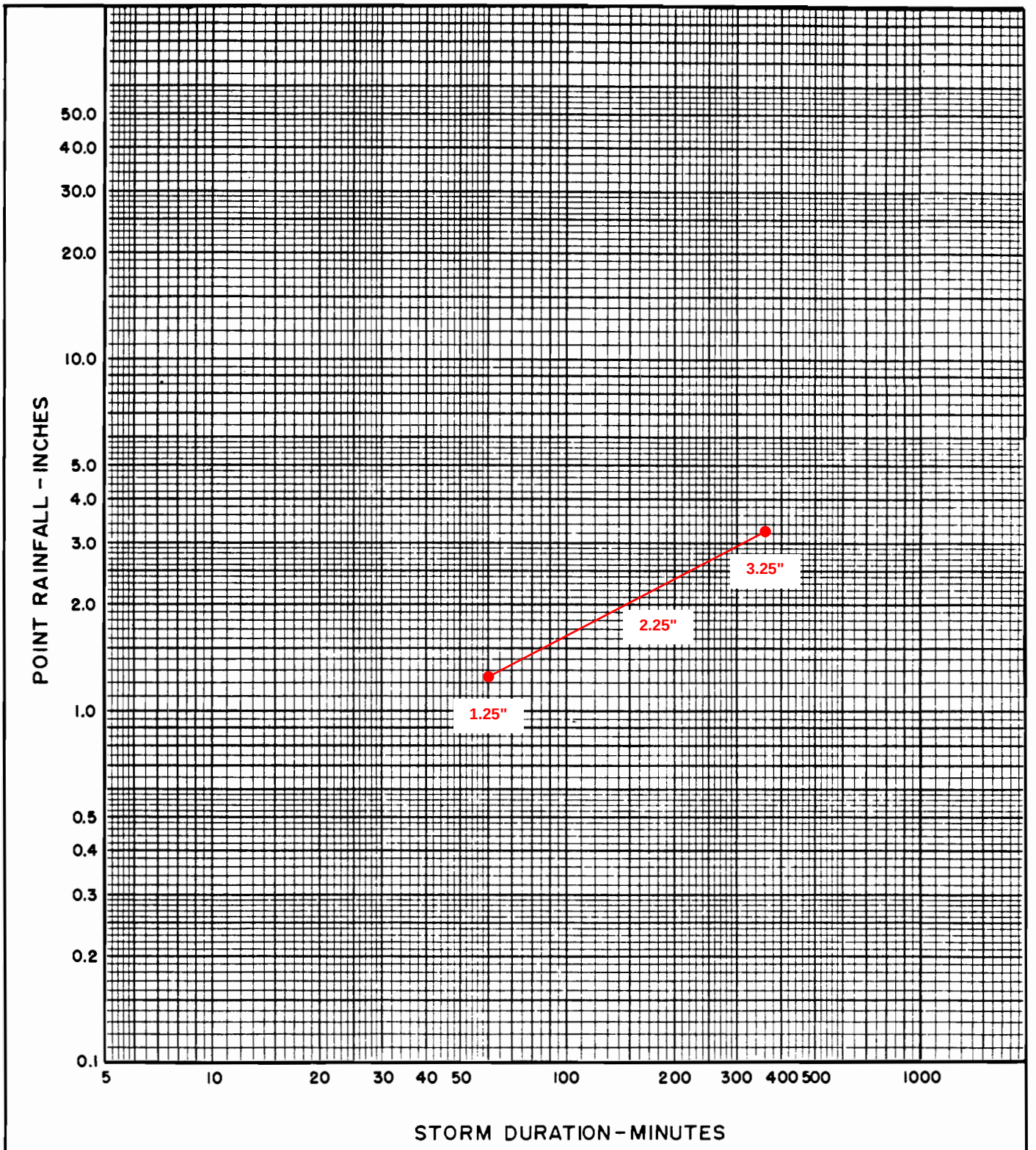
_____

SAN BERNARDINO COUNTY

HYDROLOGY MANUAL

AREA - AVERAGED MASS RAINFALL PLOTTING SHEET

FIGURE E-5718



PROJECT LOCATION _____

NOTES 100-YEAR _____

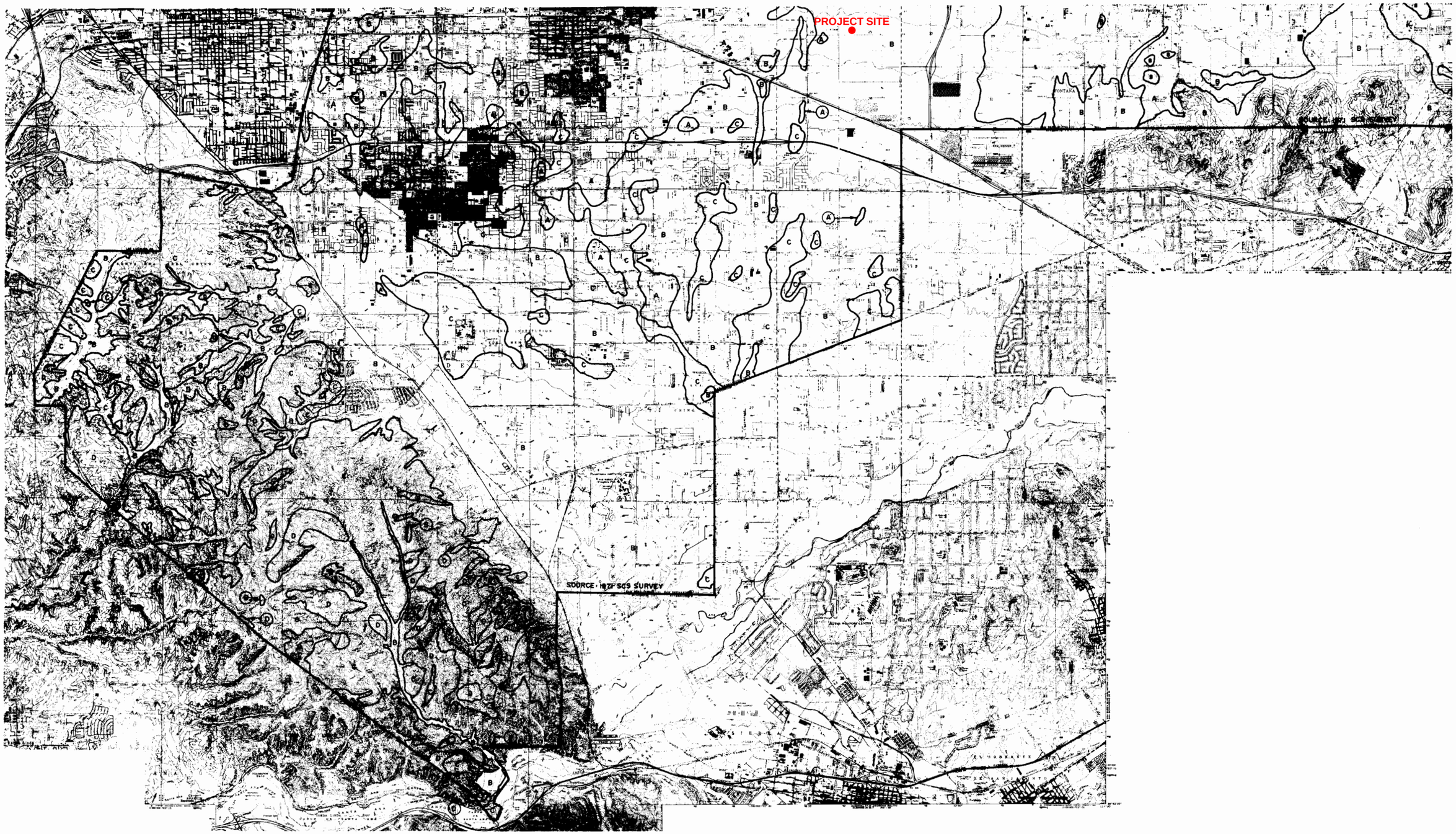
_____

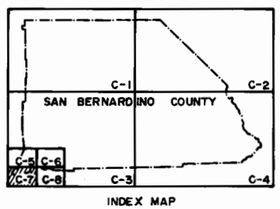
SAN BERNARDINO COUNTY

HYDROLOGY MANUAL

AREA - AVERAGED MASS RAINFALL PLOTTING SHEET

FIGURE E-5719





INDEX MAP

LEGEND

SOIL GROUP BOUNDARY

A SOIL GROUP DESIGNATION

BOUNDARY OF INDICATED SOURCE

SCALE 1:48,000

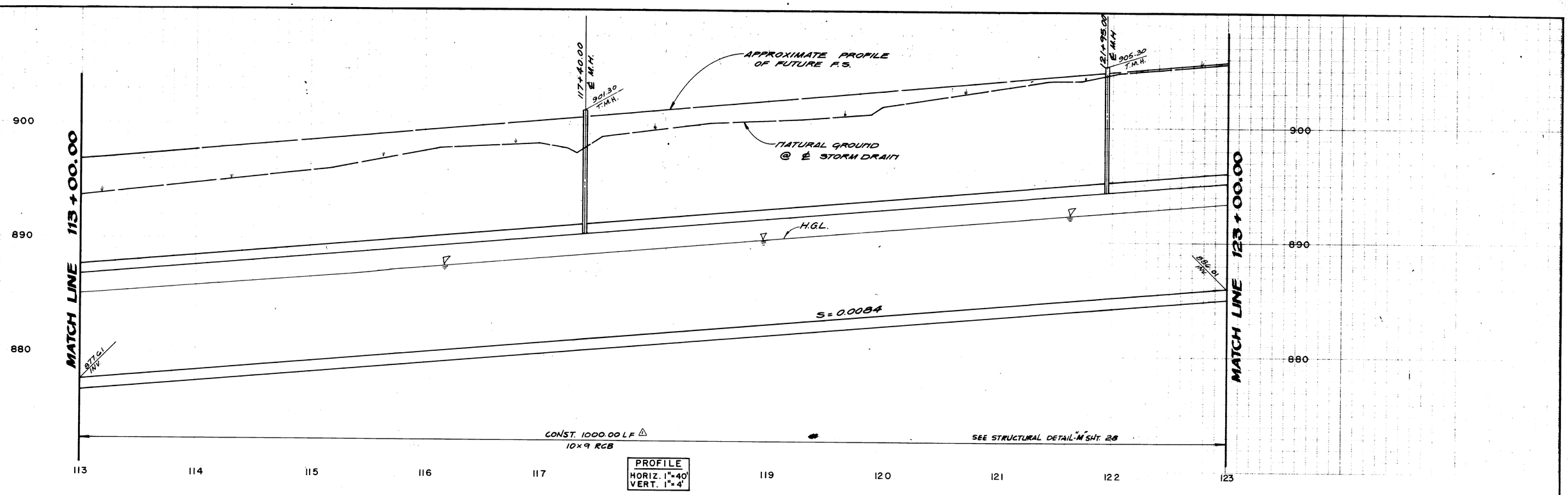
SCALE REDUCED BY 1/2

SAN BERNARDINO COUNTY

HYDROLOGY MANUAL

HYDROLOGIC SOILS GROUP MAP
FOR
SOUTHWEST-C AREA

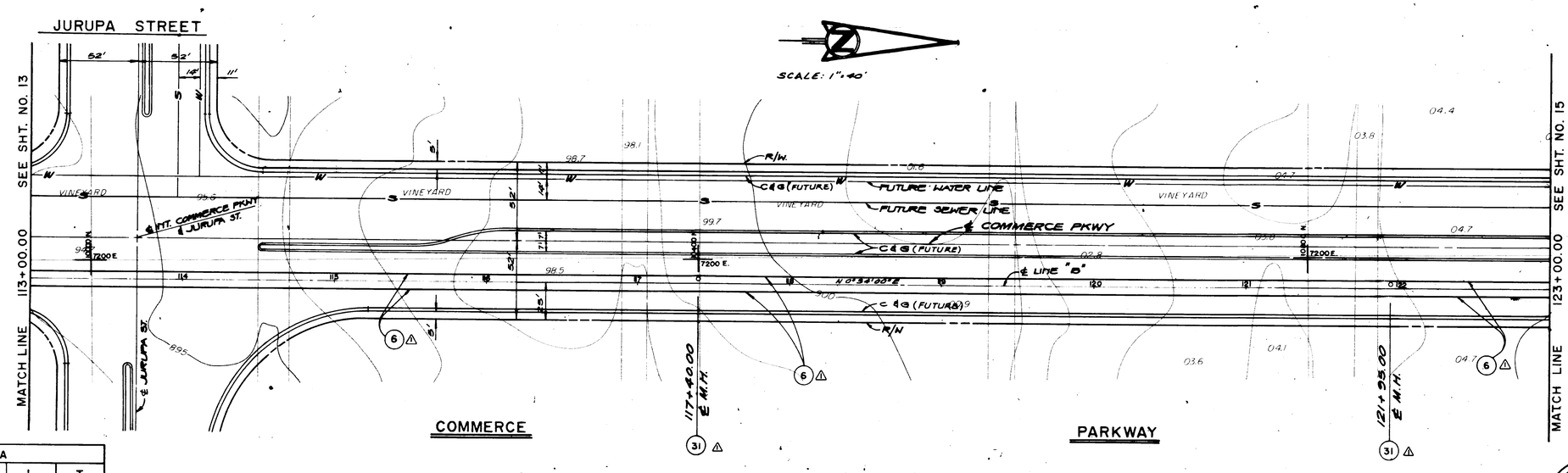
FIGURE C-15

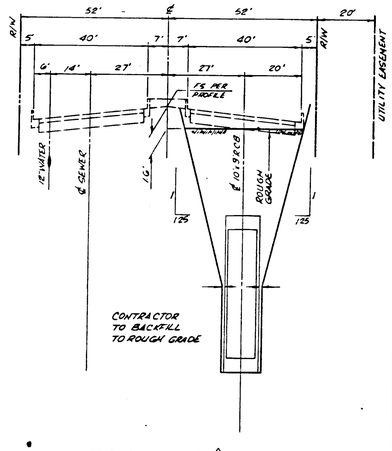


PROFILE
HORIZ. 1"=40'
VERT. 1"=4'

CONSTRUCTION NOTES

(6) CONSTRUCT 10' X 9' R.C.B.
(31) CONSTRUCT, MANHOLE NO.3 PER L.A.C.F.C.D. STD. DWG. NO. 2-D104.





TYPICAL SECTION ⚠
NO SCALE

CURVE DATA				
⬡	△	R	L	T

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
⚠1	11/4/86	D.VALLE	
⚠2	8-19-87	D.VALLE	

DESIGNED BY
DATE
DRAWN BY
DATE
CHECKED BY
DATE

CITY OF ONTARIO

RECOMMENDED BY _____ ASS'T. CITY ENGINEER _____ C. E. No. _____ DATE _____
APPROVED BY _____ CITY ENGINEER _____ C. E. No. _____ DATE _____

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION:
SAN BERNARDINO COUNTY BENCH MARK
FOUND BRASS CAP STAMPED "701-3-1974 RESET" IN NORTHEAST CORNER OF TRAFFIC ISLAND, 41 FEET NORTH OF CENTERLINE OF MISSION BLVD., 21 FEET WEST OF CENTERLINE OF MILLIKEN AVE.

WILLIAMSON & SCHMID
CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS
17782 SKY PARK BOULEVARD • IRVINE, CALIFORNIA 92714 • (714) 261-2222
APPROVED BY WILLIAM F. YOUNG R.C.E. 35715 EXPIRES 9/30/87 DATE 6/16/87

REGISTERED PROFESSIONAL ENGINEER
WILLIAM F. YOUNG
No. 35715
EXP. 9/30/87
CIVIL
STATE OF CALIFORNIA

D 10141

⚠2 AS BUILT

DEER CREEK SYSTEM
CALIFORNIA COMMERCE CENTER STORM DRAIN
FROM 113+00.00 TO 123.+00.00

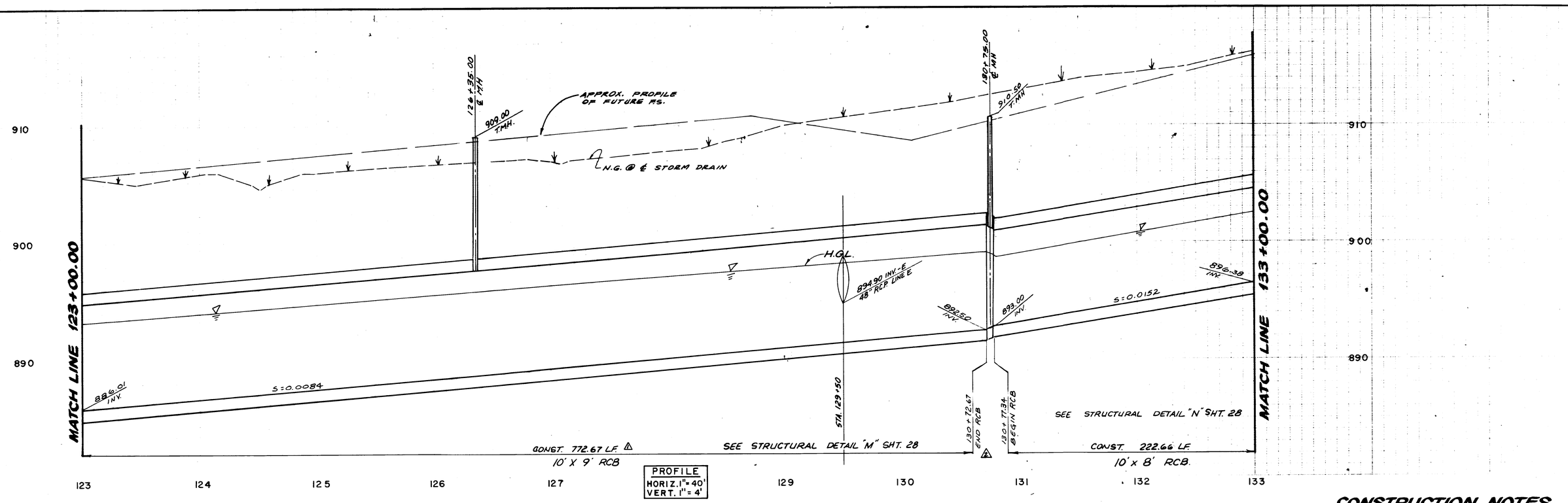
SHEET 14 OF 30
CONTRACT
ACCOUNT
DWG. NO. D-930

BRUNING 44-132

AUG 18 1988

JOB No. 86111

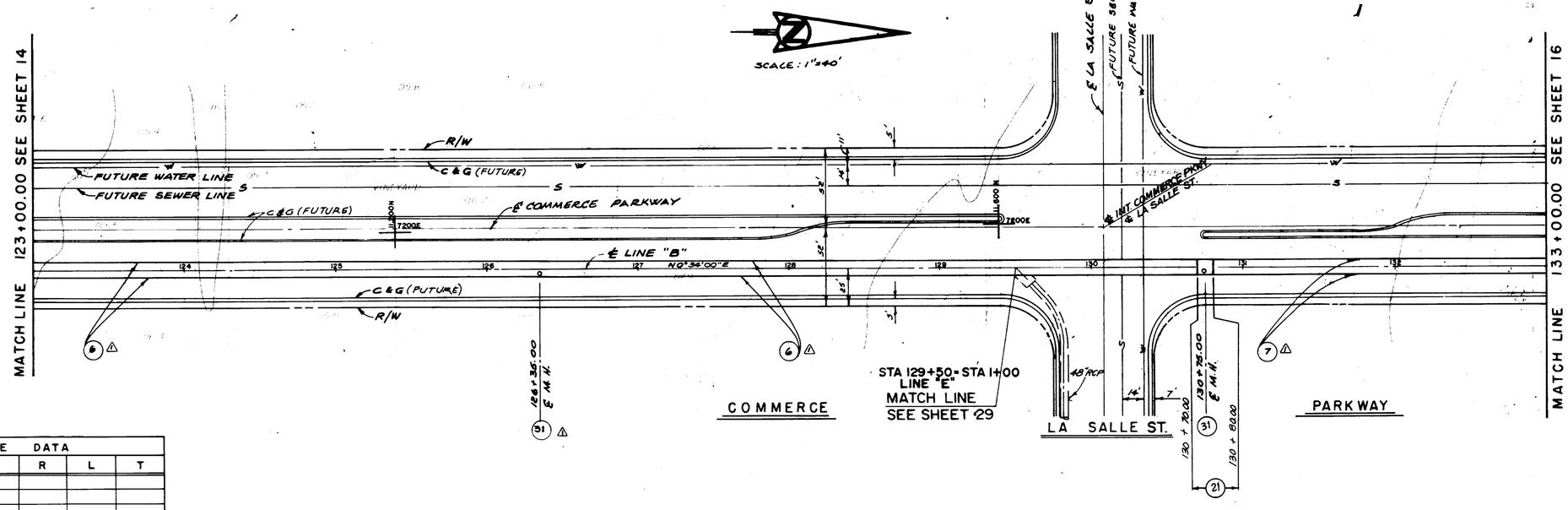
5721

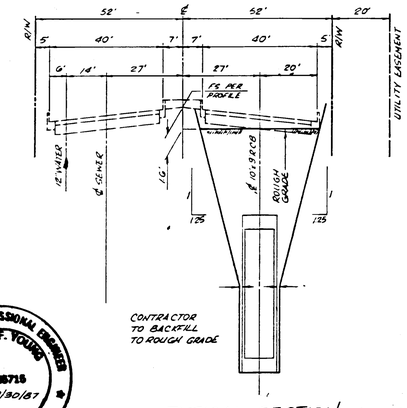


PROFILE
HORIZ. 1"=40'
VERT. 1"= 4'

CONSTRUCTION NOTES

- ⚠ (6) — CONSTRUCT 10' x 9' R.C.B.
- ⚠ (7) — CONSTRUCT 10' x 8' R.C.B.
- ⚠ (21) — CONSTRUCT TRANSITION STRUCTURE NO. 2 PER L.A.C.F.C.D. STD. DWG. NO. 2-D239
- ⚠ (31) — CONSTRUCT MANHOLE NO. 3 PER L.A.C.F.C.D. STD. DWG. NO. 2-D104





TYPICAL SECTION ⚠
NO SCALE

⚠ AS BUILT

CURVE DATA				
⬡	△	R	L	T

REVISIONS			
MARK	DATE	BY	APPROVED/RCE. NO.
⚠	11/4/86	D.VALE	
⚠	8-19-87	D.VALE	

DESIGNED BY
DATE
DRAWN BY F.N.F.
DATE 17 APRIL 86
CHECKED BY
DATE

CITY OF ONTARIO

RECOMMENDED BY _____ ASS'T. CITY ENGINEER — C. E. No. — DATE
APPROVED BY _____ CITY ENGINEER — C. E. No. — DATE

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION:
SAN BERNARDINO COUNTY BENCH MARK
FOUND BRASS CAP STAMPED "701-3-1974 RESET" IN NORTHEAST CORNER OF TRAFFIC ISLAND, 41 FEET NORTH OF CENTERLINE OF MISSION BLVD., 21 FEET WEST OF CENTERLINE OF MILLIKEN AVE.

WILLIAMSON & SCHMID
CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS
17782 SKY PARK BOULEVARD • IRVINE, CALIFORNIA 92714 • (714) 261-2222
APPROVED BY WILLIAM F. YOUNG — R.C.E. 35715 — EXPIRES 9/30/87 — DATE 6/1/86

REGISTERED PROFESSIONAL ENGINEER WILLIAM F. YOUNG No. 35715 EXP. 9/30/87 CIVIL STATE OF CALIFORNIA

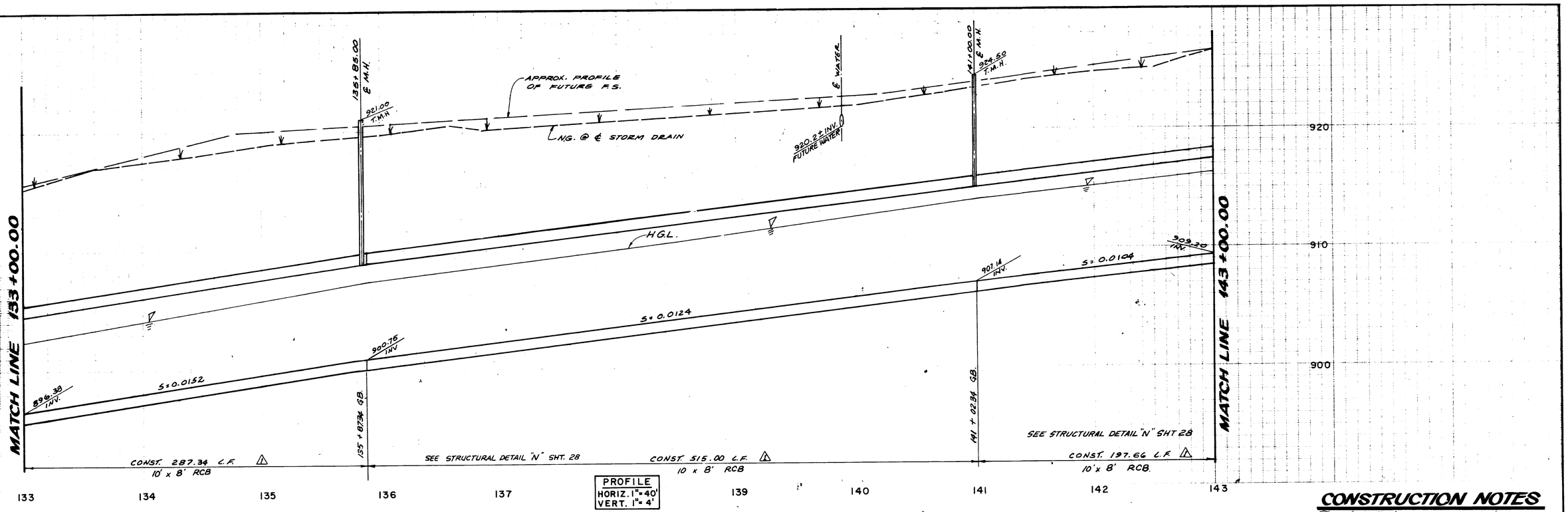
D 10142

DEER CREEK SYSTEM
CALIFORNIA COMMERCE CENTER STORM DRAIN
FROM 123+00.00 TO 133+00.00

SHEET 15 OF 30
CONTRACT
ACCOUNT
DWG. NO. D-931

AUG 18 1988
JOB No. 86111

BRUNING 44-132
5722



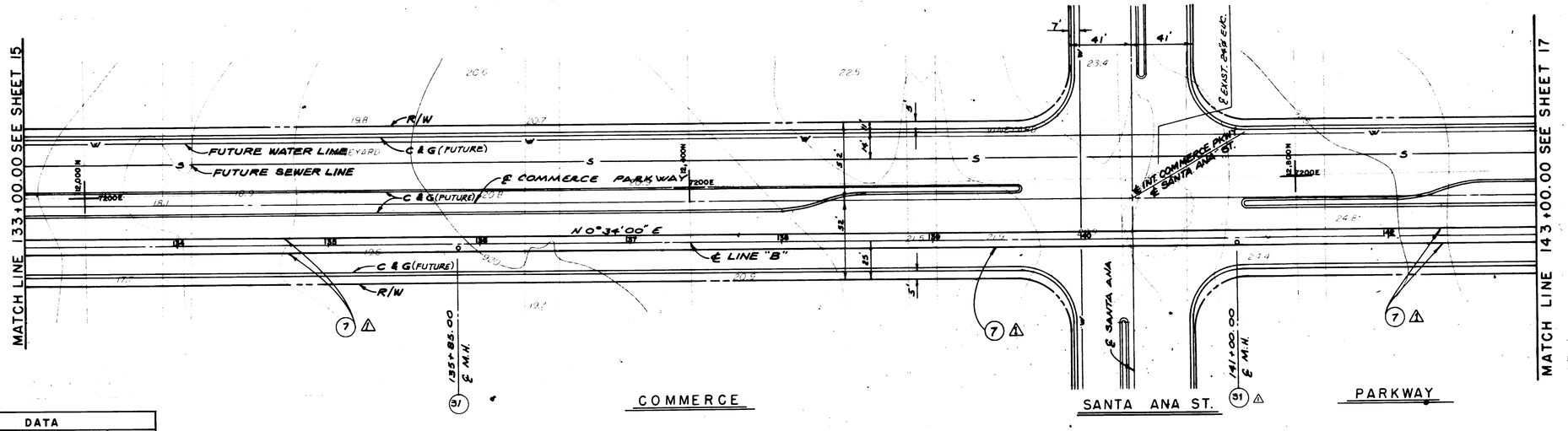
PROFILE
HORIZ. 1"=40'
VERT. 1"= 4'

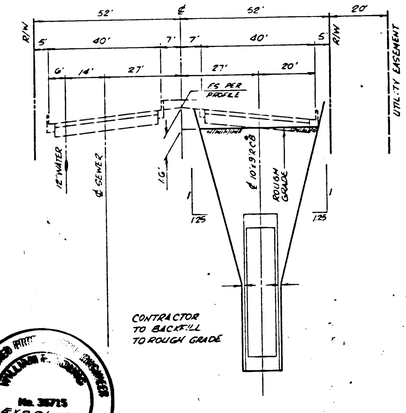
CONSTRUCTION NOTES

(7) CONSTRUCT 10' X 8' R.C.B.

(37) CONSTRUCT MANHOLE NO. 3 PER L.A.C.F.C.D. STD. DWG. NO. 2-D104.

SCALE: 1"=40'





TYPICAL SECTION
NO SCALE

2 AS BUILT

CURVE DATA				
◯	Δ	R	L	T

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
1	11-4-86	D.VALLE	
2	8-19-87	D.VALLE	

DESIGNED BY
DATE
DRAWN BY E.N.E.
DATE APRIL 86
CHECKED BY
DATE

CITY OF ONTARIO

RECOMMENDED BY _____ ASS'T. CITY ENGINEER — C. E. No. — DATE
APPROVED BY _____ CITY ENGINEER — C. E. No. — DATE

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION:
SAN BERNARDINO COUNTY BENCH MARK
FOUND BRASS CAP STAMPED "701-3-1974 RESET" IN NORTHEAST CORNER OF TRAFFIC ISLAND, 41 FEET NORTH OF CENTERLINE OF MISSION BLVD., 21 FEET WEST OF CENTERLINE OF MILLIKEN AVE.

WILLIAMSON & SCHMID
CONSULTING CIVIL ENGINEERS AND LAND SURVEYORS
17782 SKY PARK BOULEVARD • IRVINE, CALIFORNIA 92714 • (714) 261-2222

APPROVED BY WILLIAM F. YOUNG	R.C.E.	EXPIRES	DATE
	35715	9/30/87	6/4/86

REGISTERED CIVIL ENGINEER WILLIAM F. YOUNG No. 35715 EXP. 9/30/87 CIVIL STATE OF CALIFORNIA

DEER CREEK SYSTEM
CALIFORNIA COMMERCE CENTER STORM DRAIN
FROM 133+00.00 TO 143+00.00

SHEET 16 OF 30
CONTRACT
ACCOUNT
DWG. NO. D-932

D10143

AUG 18 1988

JOB No. 86111

BRUNING 44 132
5723

MATCH LINE STA. 64+51.92 AH. EC.=63+68.99 BK. SEE SHEET NO. 3

E.C.

890

885

880

875

F.S. over Storm Drain

EXIST. 10'X9' R.C.B.

879.20 INV. EXIST R.C.B.

877.80 INV. EXIST R.C.B.

FINISH SURFACE OVER STORM DRAIN

CONST. 137.00 L.F. 24" R.C.P. (2000-D) Q = 8 C.F.S. V max = 2.8 F.P.S.

LATERAL A

CONST. 845.76 L.F. 30" R.C.P. (1350-D)

CONST. 277.84 L.F. 24" R.C.P. (2000-D) Q = 277 C.F.S. V = 6.3 F.P.S.

Q = 251 C.F.S. V = 5.7 F.P.S.

Q = 261 C.F.S. V = 5.9 F.P.S.

Q = 277 C.F.S. V = 6.3 F.P.S.

SCALE
HORIZ. 1" = 40'
VERT. 1" = 4'

65 66 67 68 69 70 71 72 73 74 75 76 77

Commerce Parkway
See Sheet 11

PARCEL 24 PARCEL 25 PARCEL 42

PARCEL 48 PARCEL 47 PARCEL 46

JURUPA STREET

JURUPA AVENUE = 73+52.00
COMMERCE PARKWAY = 67+10.00

Δ = 89°59'33" R = 45.00' L = 70.68' T = 44.99'

Δ = 60°00'00" R = 45.00' L = 47.12' T = 25.98'

Δ = 59°59'13" R = 45' L = 47.11' T = 25.97'

LATERAL "A" SEE SHT. 17

LATERAL "B" SEE SHT. 17

N 89°25'13" W

N 89°26'00" W

16" W

8" S

65+22.60 B.C.

71+39.88 B.C.

N 07°00'00" E

EXIST. 10'X9' R.C.B.

22.97 C.F.S. COMMERCE PKWY. 7.71 C.F.S. JURUPA AVE. 14.91 C.F.S. EXIST. 10'X9' R.C.B. 30.69 C.F.S.

JOIN EXIST. 10'X9' R.C.B.

Storm Drain Data
Δ = 59°59'13"
R = 45'
L = 47.11'
T = 25.97'

CONST. 30" R.C.P. (1750-D)

CONST. 24" R.C.P. (2000-D) 73+32.00 & CB #27 W. 14' V = 6.53

END 18" R.C.P. TO JOIN C.B. 73+25.00

STA 77+00

1" = 40'

MATCH LINE STA. 64+51.92 AH. EC.=63+68.99 BK. SEE SHEET 3

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF.

Commerce Parkway (future)

REGISTERED PROFESSIONAL ENGINEER — WILLIAM F. YOUNG — No. 35715 — EXP 9/30/91 — CIVIL — STATE OF CALIFORNIA

CONSTRUCTION NOTES

(2) Construct 24" R.C.P. (2000-D)
(7) Construct 30" R.C.P. (1250-D)
(11) Construct Manhole No. 2 per LACFCD STD. 2-D184
(13) Construct Junction Structure No. 1 per LACFCD Std. 2-D189
(15) Construct Junction Structure No. 2 per LACFCD Std. 2-D112
(16) Construct PIPE CONNECTION PER LACFCD STD. 2-D190
(20) CONSTRUCT CATCH BASIN PER CITY STD. 302, 304 (W=14')
(24) CONSTRUCT BRICK & MORTAR PLUG PER DETAIL SHT. 18
(5) CONST. 30" R.C.P. (1750-D)

D10224

△ REVISED MATCH LINE STA.
△ REVISED Q & V.

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
1	7/5/89	W.V.B.	
2	7/10/89	W.V.B.	

DESIGNED BY W.V.B. DATE 4-13-89
DRAWN BY I.C.I. / C.I.G. DATE 4-13-89
CHECKED BY F.E. DATE 7/10/89

CITY OF ONTARIO

REVIEWED BY Richard Anderson — DATE 7-17-89
ACCEPTED BY Jay O. Bencen, CITY ENGINEER — DATE 7-18-89

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN.

WILLIAMSON & SCHMID
17781 MITCHELL BOULEVARD • IRVINE, CALIFORNIA 92714 • (714) 261-2222
APPROVED BY William F. Young — DATE 5/11/89
WILLIAM F. YOUNG — R.C.E. 35715

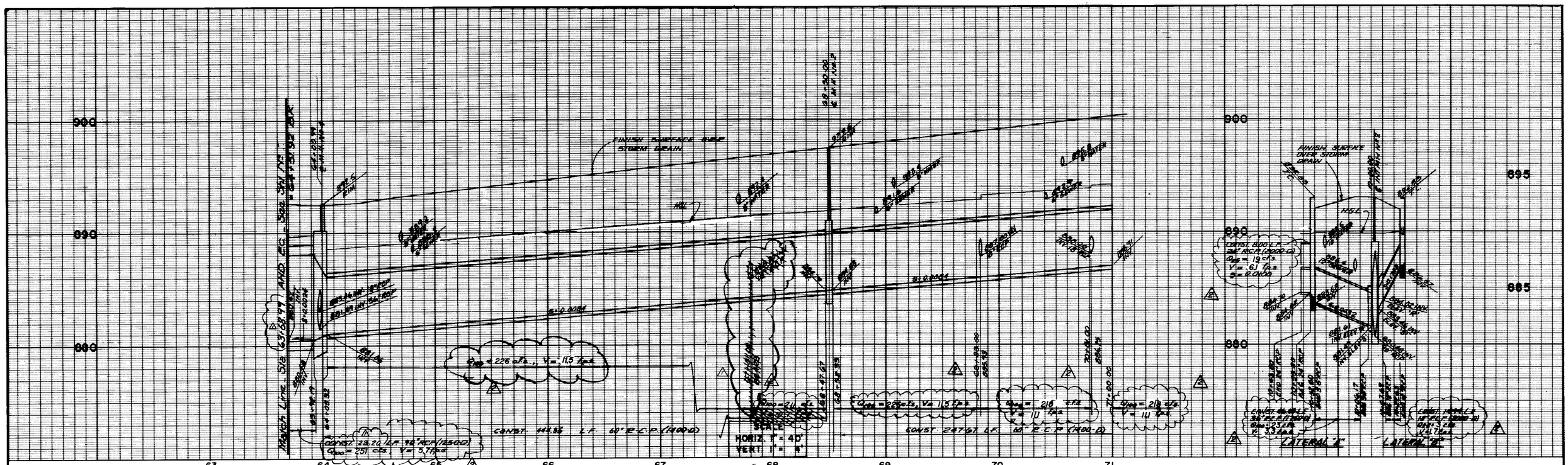
PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN
JURUPA STREET
STA. 64+51.92 TO 71+89.26

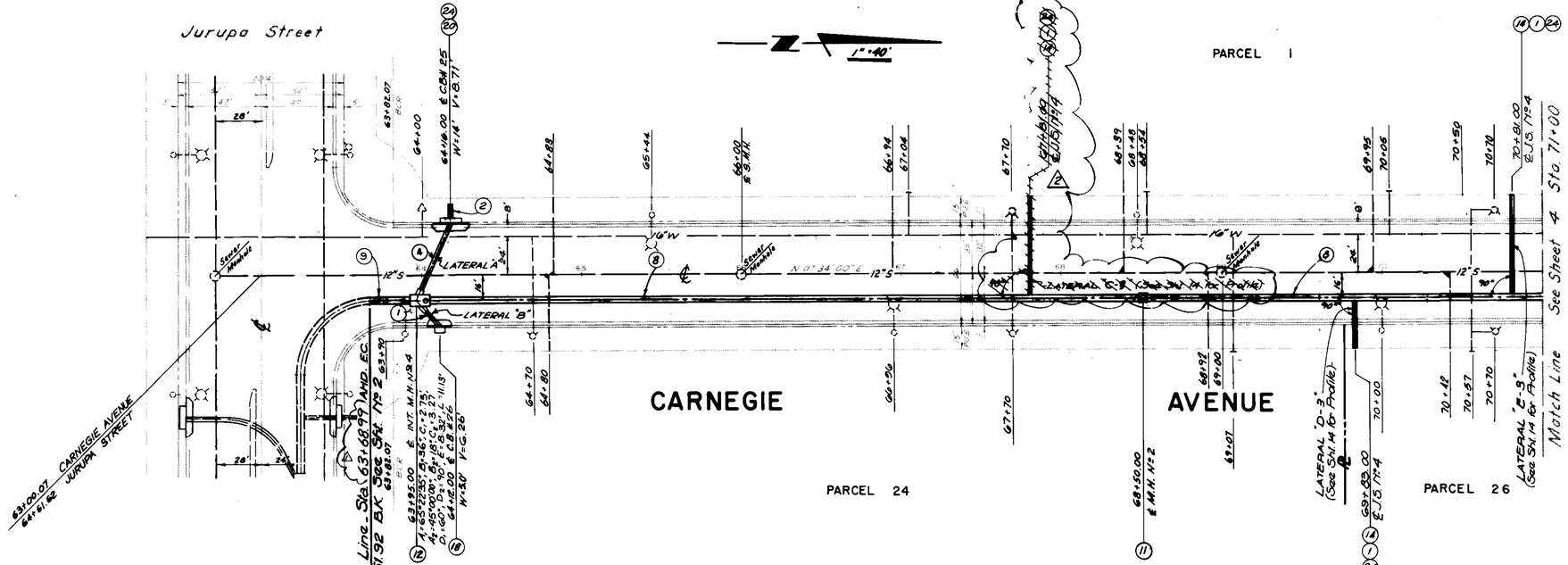
P. M. 10112

SHEET 2 OF 21
CONTRACT
ACCOUNT
DWG. NO. D-1015

JOB# 88123

5724





△ REVISED MATCH LINE STA.
△ REVISED Q & V, DELETED LATERAL C-3.

CONSTRUCTION NOTES

1. Construct 18" R.C.P. (2000D)
2. Construct 24" R.C.P. (2000D)
6. Construct 60" R.C.P. (1400D)
9. Construct 96" R.C.P. (1250-D)
11. Construct Manhole No. 2 per LACFCD Std. 2-D184
12. Construct Manhole No. 4 per LACFCD Std. 2-0113
23. Construct Catch Basin per City Std. 302, 304 (W=14')
14. Construct Junction Structure N°4 per LACFCD Std. 2-D193
24. Construct Brick & Marker Plug per Detail Sht. 18
18. Construct Catch Basin Per City Std. 302,304 (w=5.0')
4. CONSTRUCT 36" RCP (1750-D)

REGISTERED PROFESSIONAL ENGINEER — WILLIAM F. YOUNG — No. 35715 — EXP 9/30/91 — CIVIL — STATE OF CALIFORNIA

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF.

D10225

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
△	9/26/89	WVB	
△	1-11-90	WVB	

DESIGNED BY W.V.B. DATE 4-13-89
DRAWN BY L.C.I. /C.J.G. DATE 4-13-89
CHECKED BY F.Z. DATE 7/10/89

CITY OF ONTARIO

REVIEWED BY _____ DATE 7-12-89
ACCEPTED BY _____ CITY ENGINEER DATE 7-18-89

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN.

WILLIAMSON & SCHMID
17782 SKY PARK BOULEVARD • IRVINE, CALIFORNIA 92714 • (714) 261-2323
APPROVED BY _____ DATE _____
WILLIAM F. YOUNG — R.C.E. 35715 — 5/4/89

PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN
CARNEGIE AVENUE
STA. 63+69.06 TO 71+00

P. M. 10112

SHEET 3 OF 21
CONTRACT _____
ACCOUNT _____
DWG. NO. D-1016

JOB# 88123

5725

MATCH LINE STA. 71+00.00 SEE SHEET NO. 3

MATCH LINE STA. 81+00.00 SEE SHEET NO. 5

910 / 900 / 890

HGL

S=.0040

S=.0082

S=.0045

S=.0020

CONST. 197.63 L.F. 60" R.C.P.(1400-D)
Qdes = 210 CFS V= 11.1 FPS

CONST 272.60 L.F
60" R.C.P. (1400-D)

Qdes=210 cfs
V=11.1 fps

Qdes=207 cfs
V=10.6 fps

CONST 304.19 L.F. 60" RCP (1400-D)
Qdes 197 cfs V=9.9 fps

CONST. 195.57 L.F. 24" R.C.P. (2000-D)
Qdes = 20 CFS V= 6.4 FPS

FINISH SURFACE OVER STORM DRAIN

CONST. 53.97 L.F. 18" R.C.P. (2000-D)
Qdes 17 cfs V=5.1 fps

CONST. 241.59 L.F. 24" R.C.P. (2000-D)
Qdes=10 cfs V=3.2 fps

CONST. 88.01 L.F. 24" R.C.P. (2000-D)
Qdes=3 cfs V=2.6 fps

LATERAL "A"

LATERAL "B"

71 72 73 74 75 76 77 78 79 80 81

SCALE
HORIZ. 1"= 40'
VERT 1"= 4'

1"=40'

LA SALLE ST. SEE SHT. 6A

PARCEL 1

78+22.51 CARNEGIE AVENUE
83+00.00 LA SALLE STREET

Match Line See Sheet 3 Sta 71+00

Sta 81+00 See Sheet 5 Match Line

CARNEGIE AVENUE

LATERAL "A"

LATERAL "B"

LATERAL D-4 (SEE SHT. 6 FOR PROFILE)

PARCEL 26

PARCEL 27

PARCEL 28

△ REVISED Q & V, SLOPE STA. 73+00 TO 78+97.58
MOVED LA SALLE ST. 215' SOUTH, EXTENDED 60" R.C.P. TO STA. 78+94.96
DELETED LATERAL STA. 73+85.

CONSTRUCTION NOTES

(2) (1) CONSTRUCT 18" R.C.P. (2000-D)
Construct 24" R.C.P. (2000D)

(8) Construct 60" R.C.P. (1400D)
(11) Construct Manhole No. 2 per LACFCD STD 2-D184
(12) Construct Manhole No. 4 per LACFCD Std. 2-D113

(17) Construct Transition Structure No. 3 per LACFCD Std. 2-D188
(18) Construct Catch Basin per City Std. 302, 304 (W=5')

(24) CONST. BRICK & MORTAR PLUG PER DETAIL SHT. 18
(14) CONST. JUNCTION STRUCTURE No. 4 PER LACFCD STD. 2-D193

REGISTERED PROFESSIONAL ENGINEER
WILLIAM F. YOUNG
No. 35715
EXP 9/30/91
CIVIL
STATE OF CALIFORNIA

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF.

D10226

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
△	7-27-89	W.V.B.	

DESIGNED BY W.V.B.
DATE 4-13-89
DRAWN BY L.C.L. / C.J.G.
DATE 4-13-89
CHECKED BY F.Z.
DATE 7/10/89

CITY OF ONTARIO

REVIEWED BY [signature] 7-12-89 DATE
ACCEPTED BY [signature] CITY ENGINEER 7-18-89 DATE

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN.

WILLIAMSON & SCHMID
17782 SKY PARK BOULEVARD · IRVINE, CALIFORNIA 92714 · (714) 261-2222
APPROVED BY [signature] DATE 5/1/89
WILLIAM F. YOUNG R.C.E. 35715

PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN

CARNEGIE AVENUE

STA. 71+00 TO 81+00

P. M. 10112

SHEET 4 OF 21
CONTRACT
ACCOUNT
DWG. NO. D-1017

JOB# 88123

5726

MATCH LINE STA. 81+00.00 SEE SHT. NO. 4

FINISH SURFACE OVER STORM DRAIN

HGL

CONST. 277.95 L.F. 24"R.C.P. (1750D)
Qap=20 cfs V=6.4 F.P.S.

CONST. 48 & 54 L.F. 42"R.C.P. (1000-D)
Qap=18 cfs. V=6.4 f.p.s.

CONST. 92.00 L.F. 18" R.C.P. (2000-D)
Qap=9 cfs
V=8.1 f.p.s.

LATERAL B-10
SEE SHT. 10 FOR PLAN VIEW

CONST. 98.00 L.F. 24" R.C.P. (1000-D)
Qap=14 c.f.s.
V=8.0 f.p.s.

LATERAL B-10
SEE SHT. 10 FOR PLAN VIEW

CONST. 74.36 L.F. 24" R.C.P. (2000-D)
Qap=11.2 c.f.s.
V=5.8 f.p.s.

CONST. 64.72 L.F. 30" R.C.P. (1750-D)
Qap=17 c.f.s.
V=10.1 f.p.s.

CONST. 68.33 L.F. 18" R.C.P. (2000-D)
Qap=2 c.f.s.
V=4.5 f.p.s.

LATERAL "A"

CONST. 88 L.F. 18" R.C.P. (2000-D)
Qap=1 c.f.s.
V=3.6 f.p.s.

LATERAL "B"

CONST. 1180 L.F. 30" R.C.P. (1750-D)
Qap=22 c.f.s.
V=4.5 F.P.S.

SCALE
HORIZ. 1" = 40'
VERT. 1" = 4'

PARCEL 5 | PARCEL 4 | PARCEL 3

1" = 40'

CURVE DATA
Δ=45°00'00"
R=22.50'
L=17.67'
T=9.32'

LATERAL "C"
PROFILE TO RIGHT

CARNEGIE AVENUE

Match Line See Sheet 4 Sta 81+00.00

Match Line See Sheet 10 Sta 91+00.00

CURVE DATA
Δ=90°00'00"
R=22.50'
L=35.34'
T=22.50'

PARCEL 28 | PARCEL 29 | PARCEL 30

CURVE DATA
Δ=90°00'00"
R=45.00'
L=70.69'
T=45.00'

MATCH LINE SEE SHEET 9

89+52.29 CARNEGIE AVE.
&
88+28.61 SANTA ANA ST.

Santa Ana Street
See Sheet 9

LATERAL "A"

LATERAL "B"

LATERAL "C"

CONST. 706.4 L.F. 24" R.C.P. (2000-D)
Qap=17.2 c.f.s.
V=5.4 F.P.S.

FINISH SURFACE OVER E STORM DRAIN

910.0 18" WATER HGL

S=0.0040

S=0.2372

BEG 24" R.C.P.

BEG 24" R.C.P.

10+02.47 BEG 24" R.C.P.

CONSTRUCTION NOTES

1. CONSTRUCT 18" R.C.P. (2000-D)
2. Construct 24" R.C.P. (2000D)
3. Construct 30" R.C.P. (1750-D)
5. Construct 42" R.C.P. (1400-D)
9. Construct 60" R.C.P. (1400D)
10. Construct Manhole No. 1 per LACFCD STD. 2-D102
12. Construct Manhole No. 4 per LACFCD Std. 2-D113
17. Construct Catch Basin per City Std. 302, 304 (W=21')
18. CONSTRUCT CATCH BASIN PER CITY STD. 302, 304 (W=5.0')
24. CONSTRUCT BRICK & MORTAR PLUG PER DETAIL SHT. 18
25. CONSTRUCT CONCRETE COLLAR PER LACFCD STD. 2-D399

REGISTERED PROFESSIONAL ENGINEER
WILLIAM F. YOUNG
No. 35715
EXP 9/30/91
CIVIL
STATE OF CALIFORNIA

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF:

D10227

△ REVISED Q & F.V.

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
△	1-29-90	WVB	William F. Young 35715

DESIGNED BY W.V.B. DATE 4-13-89
DRAWN BY L.C.L./C.J.G. DATE 4-13-89
CHECKED BY F.Z. DATE 7/10/89

CITY OF ONTARIO

REVIEWED BY Richard Richman DATE 7-17-89
ACCEPTED BY John D. Rennie CITY ENGINEER DATE 7/18/89

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN.

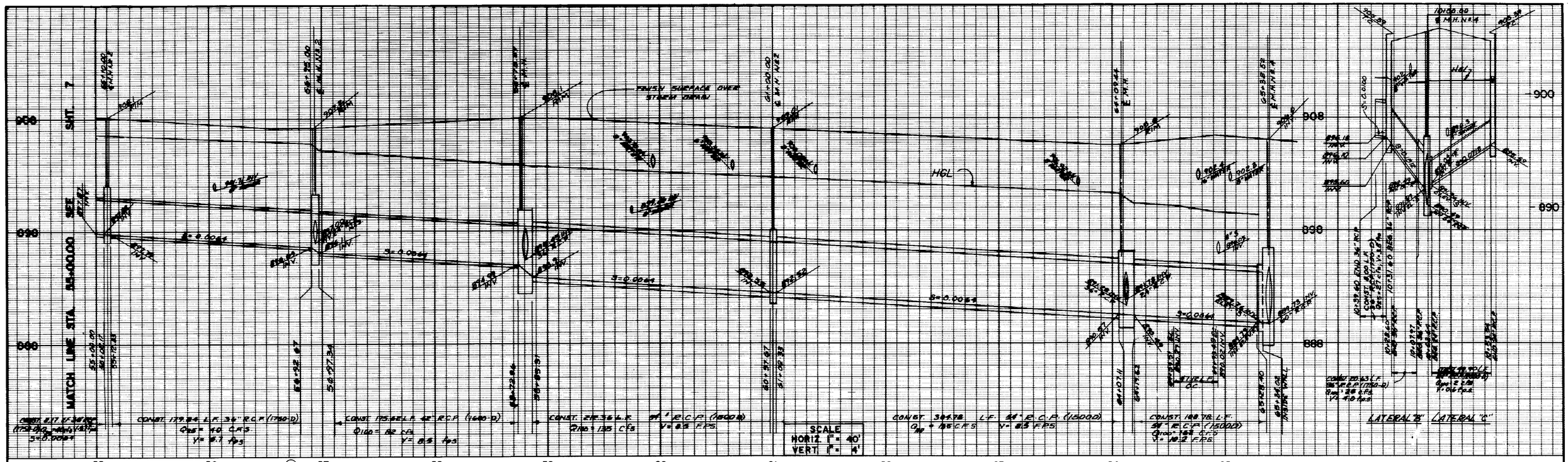
WILLIAMSON & SCHMID
17782 SKY PARK BOULEVARD • IRVINE, CALIFORNIA 92714 • (714) 261-2222
APPROVED BY William F. Young DATE 5/4/89
WILLIAM F. YOUNG R.C.E. 35715

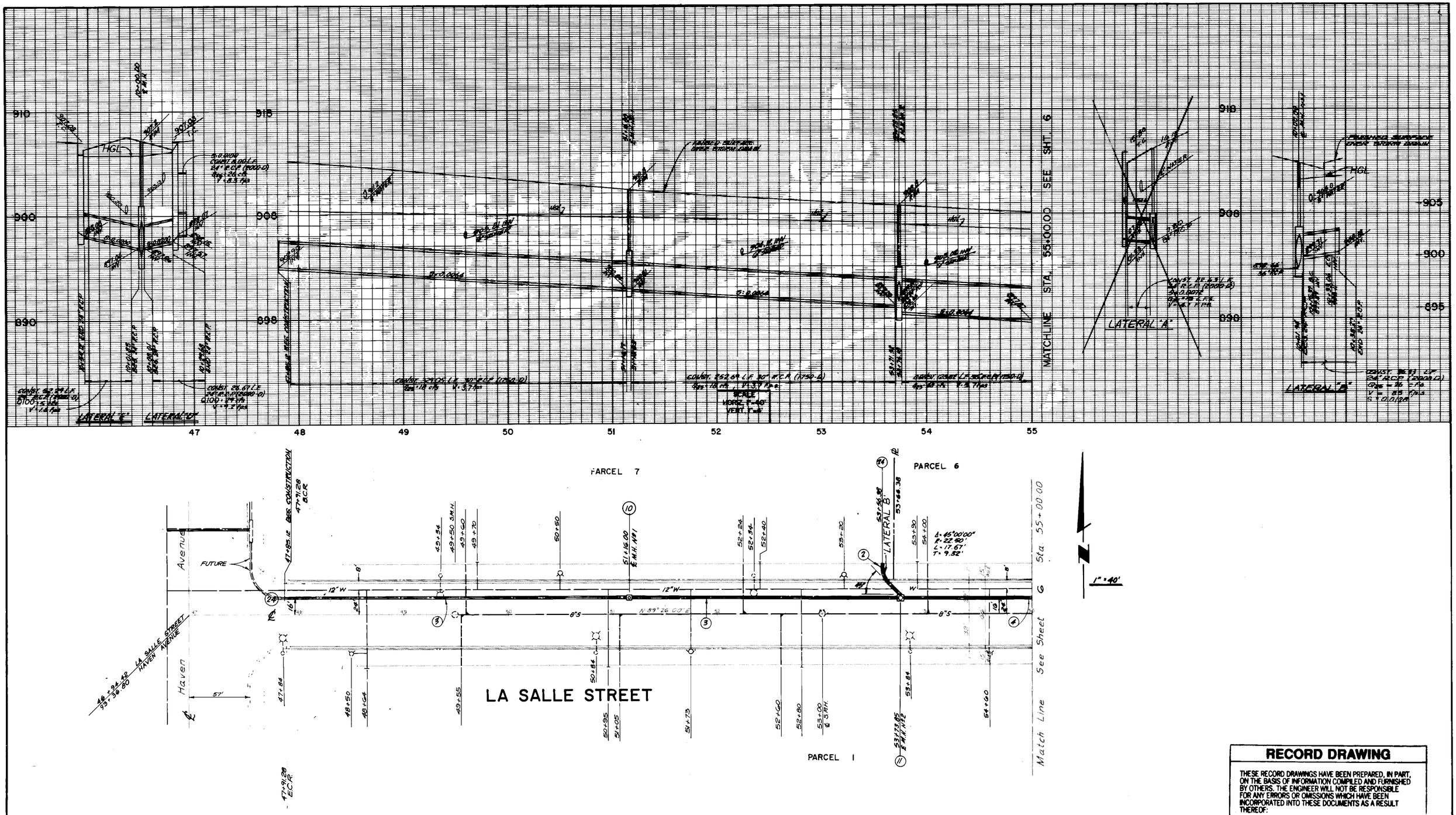
PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN
CARNEGIE AVENUE
STA. 81+00 TO 84+28.84 AND STA. 89+52.29 TO 91+00

P. M. 10112

SHEET 5 OF 21
CONTRACT
ACCOUNT
DWG. NO. D-10118

JOB# 88123
5727


MATCH LINE STA. 55+00.00
SHT. 7
SEE
PARCEL 6
PARCEL 5
PARCEL 1
LA SALLE STREET
Match Line See Sheet 7A Sta 55+00
SCALE
HORIZ 1" = 40'
VERT 1" = 4'
HGL
FINISH SURFACE OVER STORM DRAIN
LATERAL "A"
LATERAL "B"
LATERAL "C"
LATERAL "E"
(SEE SHEET N° 7)
Carnegie Ave.
See Sheet 4
SEE SHEET 4
CURVE DATA
Δ = 60°00'00"
R = 45.00'
L = 47.12'
T = 25.98'
Δ = 60°00'00"
R = 22.50'
L = 23.56'
T = 12.99'
N89°26'00"W
12" W
8"S
LATERAL "B"
LATERAL "C"
LATERAL "A"
CONSTRUCT 38.9 L.F. 36" R.C.P. (1750-D) Q100 = 57 cfs V = 8.1 fps
CONSTRUCT 179.84 L.F. 36" R.C.P. (1750-D) Q100 = 40 C.F.S V = 8.1 fps
CONSTRUCT 195.82 L.F. 42" R.C.P. (1600-D) Q100 = 82 cfs V = 8.5 fps
CONSTRUCT 214.36 L.F. 36" R.C.P. (1750-D) Q100 = 135 C.F.S
84" R.C.P. (1800-D) V = 8.5 FPS.
CONST. 304.78 L.F. 54" R.C.P. (1500D) Q100 = 136 C.F.S V = 8.5 FPS.
CONST. 188.78 L.F. 36" R.C.P. (1500D) Q100 = 152 C.F.S V = 10.12 FPS.
CONST. 120.63 L.F. 36" R.C.P. (1750-D) Q100 = 38 cfs V = 10 fps
CONST. 78.70 L.F. 36" R.C.P. (1750-D) Q100 = 2.58 V = 1.04 fps
CONSTRUCT 42" R.C.P. (1600-D)
CONSTRUCT MANHOLE NO. 2 PER LACFCD STD. 2-D184
CONSTRUCT 24" R.C.P. (2000D)
CONSTRUCT 30" R.C.P. (1750D)
CONSTRUCT 36" R.C.P. (1750D)
CONSTRUCT 54" R.C.P. (1500D)
CONSTRUCT 42" R.C.P. (1600D)
CONSTRUCT MANHOLE NO. 1 PER LACFCD STD. 2-D102
CONSTRUCT MANHOLE NO. 4 PER LACFCD STD. 2-D113
CONSTRUCT CATCH BASIN PER CITY STD. 302, 304 (W=5.0')
CONSTRUCT CATCH BASIN PER CITY STD. 302, 304 (W=21')
CONSTRUCT BRICK & MORTAR PLUG PER DETAIL ON SHT. 18
CONSTRUCT 42" RCP (1600-D)
CONSTRUCT 36" RCP (1750-D)
CONSTRUCT 30" RCP (1750-D)
CONSTRUCT 24" RCP (2000D)
CONSTRUCT 54" RCP (1500D)
CONSTRUCT 36" RCP (1500D)
CONSTRUCT 42" RCP (1600D)
CONSTRUCT 36" RCP (1750D)
CONSTRUCT 30" RCP (1750



RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF.

REGISTERED PROFESSIONAL ENGINEER
WILLIAM F. YOUNG
No. 35715
EXP 9/30/91
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES

(2) Construct 24" R.C.P. (2000D)
(10) Construct Manhole No. 1 per LACFCD Std. 2-D102
(4) CONSTRUCT 36"RCP (1750-D)
(24) Construct B & M. Plug per detail Sht. 18.
(3) Construct 30" R.C.P. (1750-D).

D10229

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.

DESIGNED BY W.V.B. DATE 1-29-90
DRAWN BY L.C.L./C.J.G. DATE 1-29-90
CHECKED BY F.Z. DATE 3/27/90

CITY OF ONTARIO

REVIEWED BY Richard D. Dinkelman DATE 3-27-90
ACCEPTED BY D. Lenhert CITY ENGINEER DATE 3-27-90

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN.

WILLIAMSON & SCHMID
17782 SKY PARK BOULEVARD • IRVINE, CALIFORNIA 92714 • (714) 261-2222
APPROVED BY William F. Young DATE 5/1/90
WILLIAM F. YOUNG R.C.E. 35715

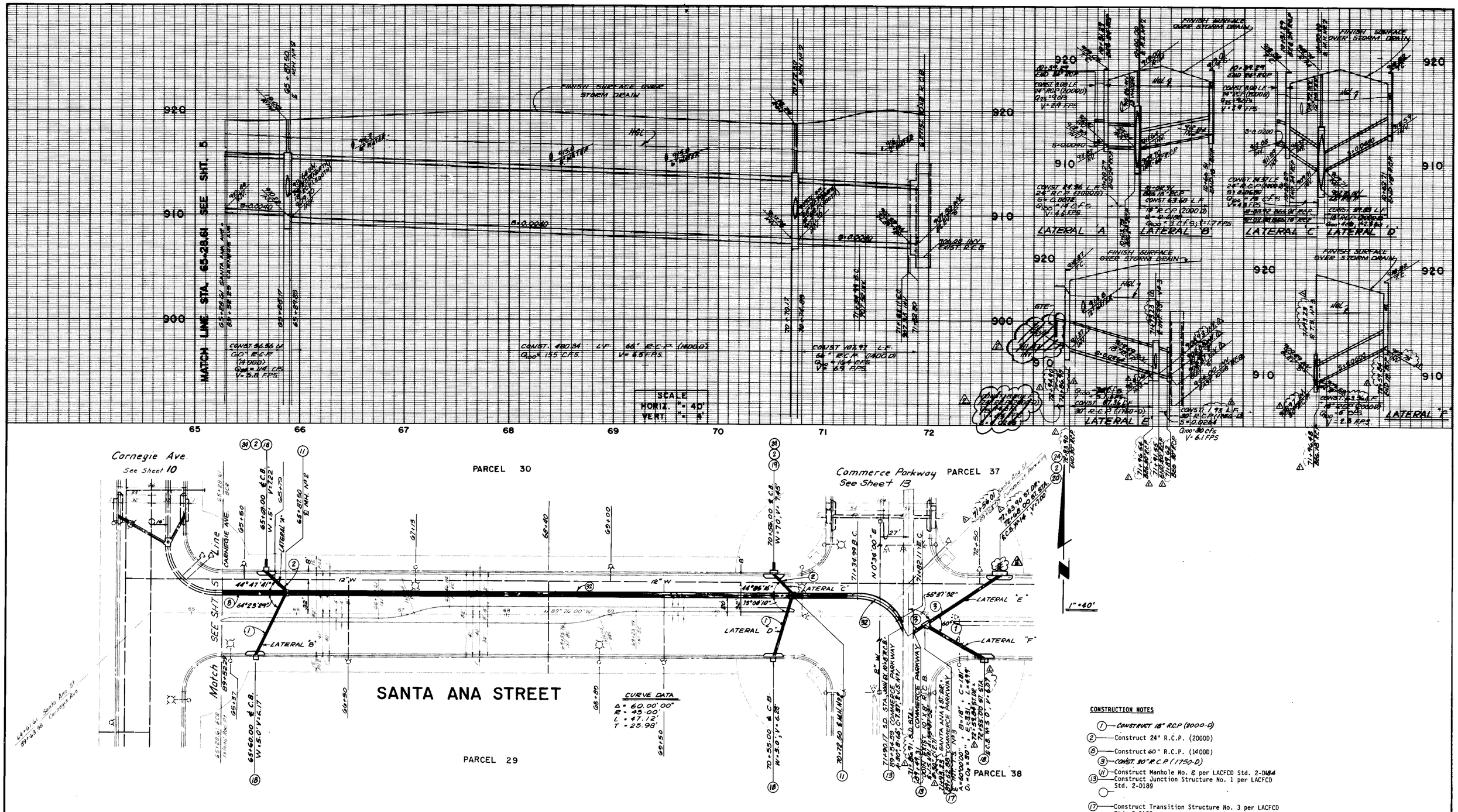
PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN
LA SALLE STREET
STA. 47+95.24 TO 55+00.00

P. M. 13141

SHEET 7A OF 21
CONTRACT
ACCOUNT
DWG. NO. D-1020

JOB# 88123

5729



REGISTERED PROFESSIONAL ENGINEER
WILLIAM F. YOUNG
No. 35715
EXP 9/30/91
CIVIL
STATE OF CALIFORNIA

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF:

D 1 0 2 3 1

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
A	9/6/89	W.F.B.	
B	9-27-89	W.F.B.	

DESIGNED BY W.V.B.
DATE 4-13-89
DRAWN BY L.C.L./C.J.G.
DATE 4-13-89
CHECKED BY E.E.
DATE 7/10/89

CITY OF ONTARIO

REVIEWED BY _____ DATE 7-17-89
ACCEPTED BY _____ CITY ENGINEER DATE 7-18-89

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN.

WILLIAMSON & SCHMID
17782 SKY PARK BOULEVARD • IRVINE CALIFORNIA 92714 • (714) 261-2222
APPROVED BY _____ DATE 6/16/89
WILLIAM F. YOUNG R.C.E. 35715

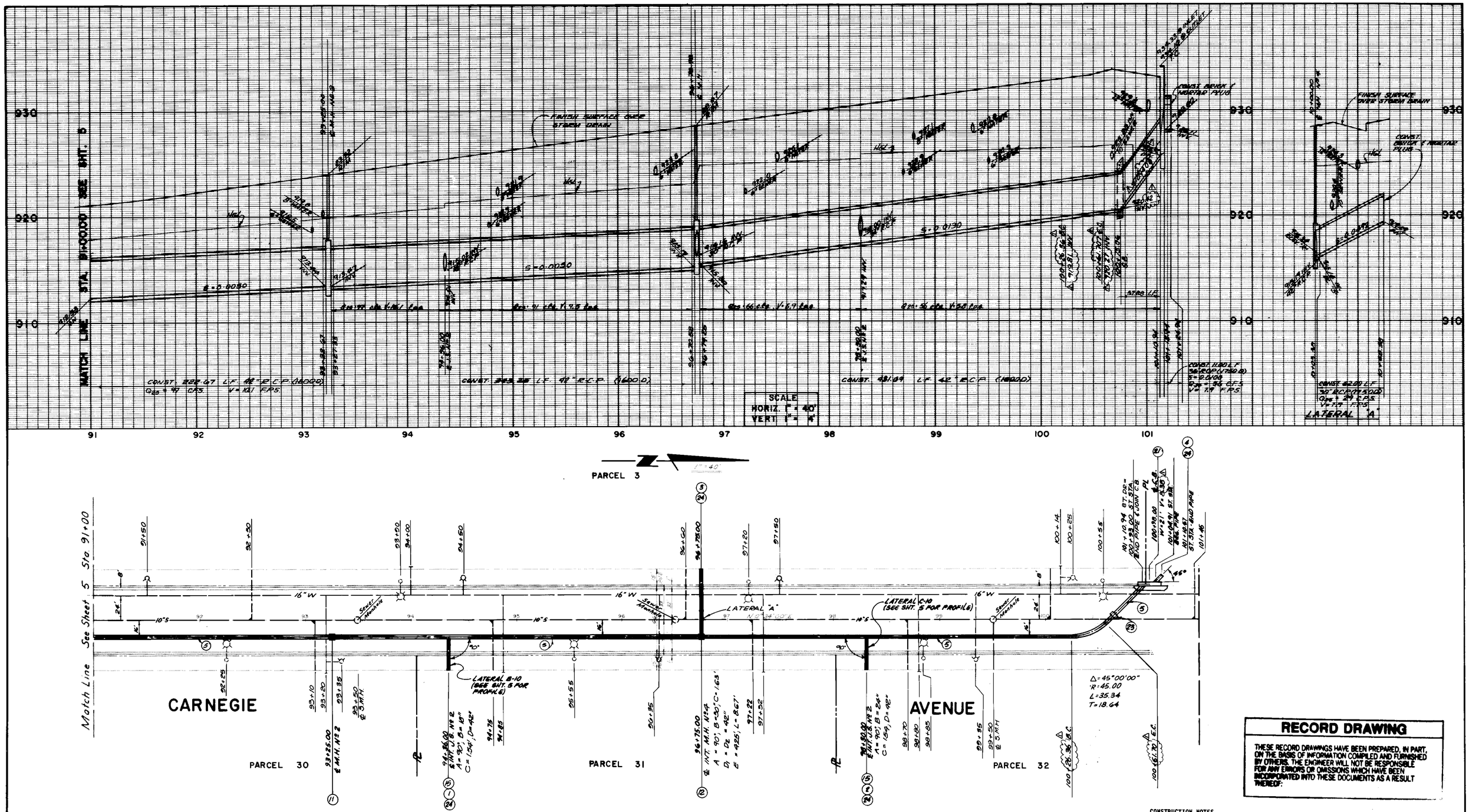
PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN
SANTA ANA STREET
STA. 65+28.61 TO 71+90.17

P. M. 10112

SHEET 9 OF 21
CONTRACT
ACCOUNT
DWG. NO. D-10122

JOB# 88123

5730



RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF:

CONSTRUCTION NOTES

(2) (5) Construct 24" R.C.P. (2000-D)
(3) (5) Construct 30" R.C.P. (1750-D)
(4) (5) Construct 36" R.C.P. (1750-D)
(5) (1) Construct 18" R.C.P. (2000D)
(5) ( ) Construct 42" R.C.P. (1600-D)
(11) Construct Manhole No. 2 per LACFCD STD. 2-D114
(27) Construct Catch Basin per City Std. 302, 304 (W=21')
(28) Construct Concrete Collar per LACFCD Std. 2-D393
(24) Construct Brick and Mortar Plug PER DETAIL SHT. 18
(15) CONSTRUCT J.B. N°2 PER LACFCD STD. 2-D112
(12) CONSTRUCT MANHOLE No 4 PER LACFCD STD. 2-D 113.

REGISTERED PROFESSIONAL ENGINEER WILLIAM F. YOUNG No. 35715 EXP 9/30/91 CIVIL STATE OF CALIFORNIA

D 1 0 2 3 2

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
1	9-6-89	W.V.B.	

DESIGNED BY W.V.B. DATE 4-13-89
DRAWN BY L.C.L./C.J.G. DATE 4-13-89
CHECKED BY F.E. DATE 7/10/89

CITY OF ONTARIO

REVIEWED BY Richard P. Dinsbeer DATE 7-17-89
ACCEPTED BY Jay O. Brandt CITY ENGINEER DATE 7-17-89

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN.

WILLIAMSON & SCHMID
17782 SKY PARK BOULEVARD • IRVINE, CALIFORNIA 92714 • (714) 261-2222
APPROVED BY William F. Young DATE 7/10/89
WILLIAM F. YOUNG R.C.E. 35715

PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN

CARNEGIE AVENUE

STA. 91+00 TO 101+12.88

P. M. 10112

SHEET 10 OF 21
CONTRACT
ACCOUNT
DWG. NO. D-1023

JOB# 88123
5731

LATERAL 'A'

LATERAL 'B'

LATERAL 'C'

LATERAL 'D'

LATERAL 'E'

LATERAL 'G'

LATERAL 'F'

SCALE
HORIZ. 1" = 40'
VERT. 1" = 4'

Jurupa Street
See Sheet 2

PARCEL 48

PARCEL 47

PARCEL 25

PARCEL 26

PARCEL 42

PARCEL 41

COMMERCE PARKWAY

1" = 40'

Match Line See Sheet 12

Sta 72+00.00

EXISTING 10'x 9' RCB

EXIST. 10'x9' RCB

LATERAL 'A'

LATERAL 'B'
N89°26'00"W

LATERAL 'D'

LATERAL 'F'

EXIST. 40' EASEMENT TO CITY OF ONTARIO FOR STORM DRAIN PURPOSES

101' OFFERED FOR DEDICATION TO CITY OF ONTARIO FOR STORM DRAIN PURPOSES

Sta. 64+52.00 E.C.E.
Match Line See Sheet

64+21.00 E.I.S. No.1
E.C.B. N=74', W=74.29'
A=90°, B=30°, C=1.33'

64+82.00 S.C.E.

64+60

66+33

68+06

69+72

69+91.00 E.I.S.

71+52

70+75.00 E.INT. U.S.

N 0°34'00" E

CONSTRUCTION NOTES

(2) Construct 24" R.C.P. (2000D)
(13) Construct Junction Structure No. 1 per LACFCD Std. 2-D189
(20) Construct Catch Basin per City Std. 302, 304 (W=48")
(21) Construct Catch Basin per City Std. 302, 304 (W=21')
(16) CONST. PIPE CONNECTION PER LACFCD STD. 2-D/98
(24) CONST. BRICK & MORTAR PLUG PER DETAIL SHT. 18
(3) CONST. 30" R.C.P. (1750-D)
(5) CONST. 42" R.C.P. (1600-D)

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF.

REGISTERED PROFESSIONAL ENGINEER
WILLIAM F. YOUNG
No. 35715
EXP 9/30/91
CIVIL
STATE OF CALIFORNIA

D10233

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
1	6/16/89	TCE	

DESIGNED BY W.V.B. DATE 4-13-89
DRAWN BY L.C.L./C.J.G. DATE 4-13-89
CHECKED BY F.Z. DATE 7/10/89

CITY OF ONTARIO

REVIEWED BY [signature] DATE 7-17-89
ACCEPTED BY [signature] CITY ENGINEER DATE 7-18-89

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN.

WILLIAMSON & SCHMID
17782 SKY PARK BOULEVARD · IRVINE CALIFORNIA 92714 · (714) 261 2222
APPROVED BY [signature] DATE 5/6/89
WILLIAM F. YOUNG R.C.E. 35715

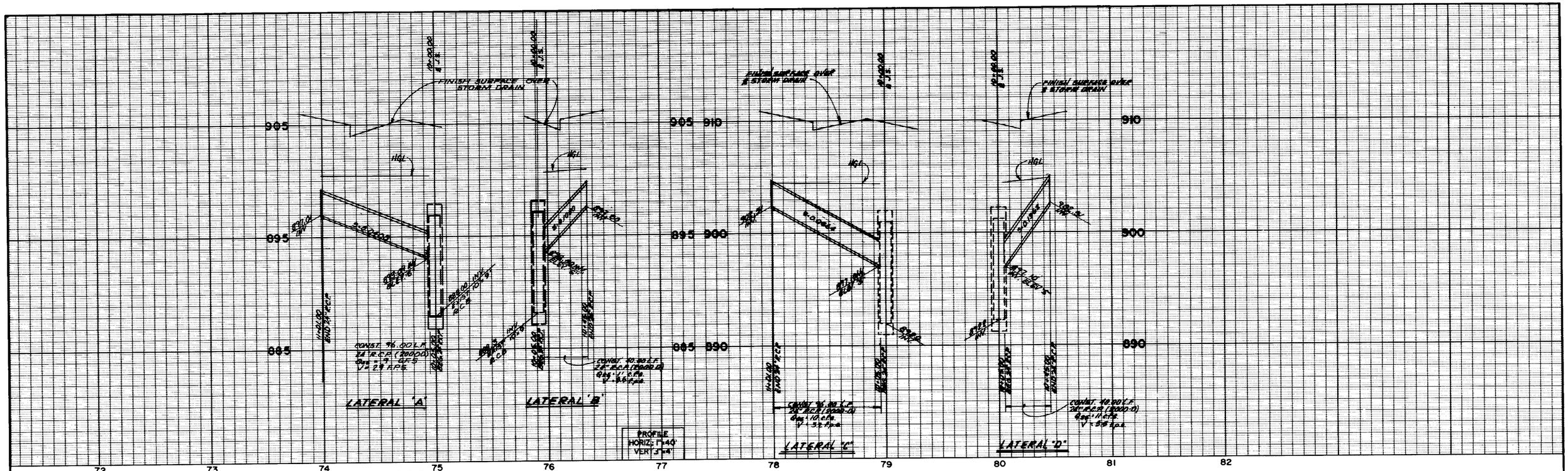
PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN
COMMERCE PARKWAY
STA. 64+17.00 TO STA. 72+00.00

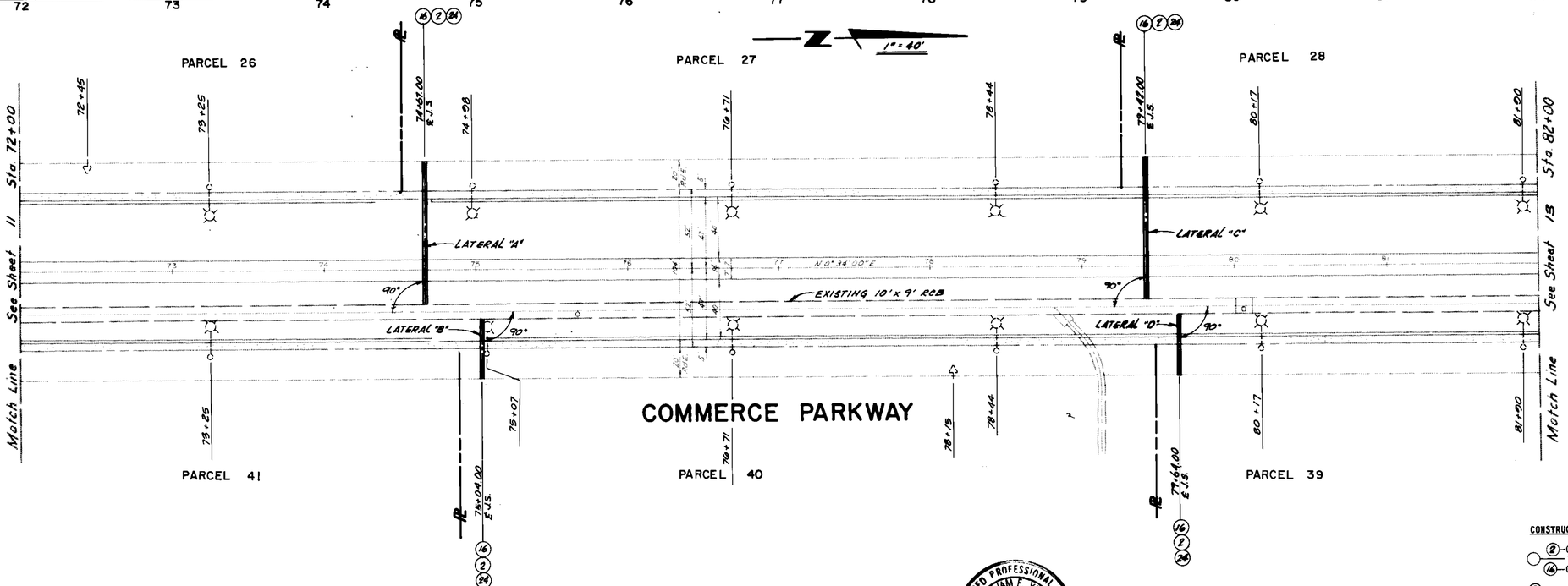
P. M. 10112

SHEET 11 OF 21
CONTRACT
ACCOUNT
DWG. NO. D-1024

JOB# 88123

5732





RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF:

CONSTRUCTION NOTES

(2)—Construct 24" R.C.P. (2000D)
(16)—Construct PIPE CONNECTION PER L.A.C.F.C.D STD. 2-D190
(24)—CONST. BRICK & MORTAR PLUG PER DETAIL SHT. 18

REGISTERED PROFESSIONAL ENGINEER
WILLIAM F. YOUNG
No. 35715
EXP 9/30/91
CIVIL
STATE OF CALIFORNIA

D10234

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.

DESIGNED BY W.V.B.
DATE 4-13-89
DRAWN BY L.C.L./C.J.G.
DATE 4-13-89
CHECKED BY F.Z.
DATE 7/10/89

CITY OF ONTARIO

REVIEWED BY _____ DATE 7-17-89
ACCEPTED BY _____ CITY ENGINEER DATE 7-18-89

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN.

WILLIAMSON & SCHMID
1753 SKY PARK BOULEVARD • IRVINE, CALIFORNIA 92714 • (714) 261-2532
APPROVED BY _____ DATE 5/4/89
WILLIAM F. YOUNG R.C.E. 35715

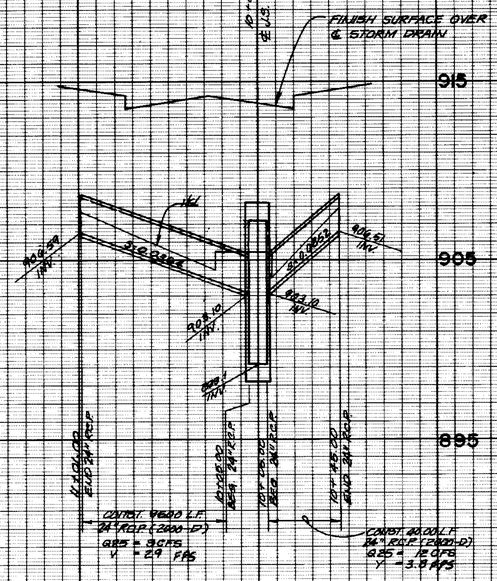
PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN
COMMERCE PARKWAY
STA. 72+00.00 TO STA. 82+00.00

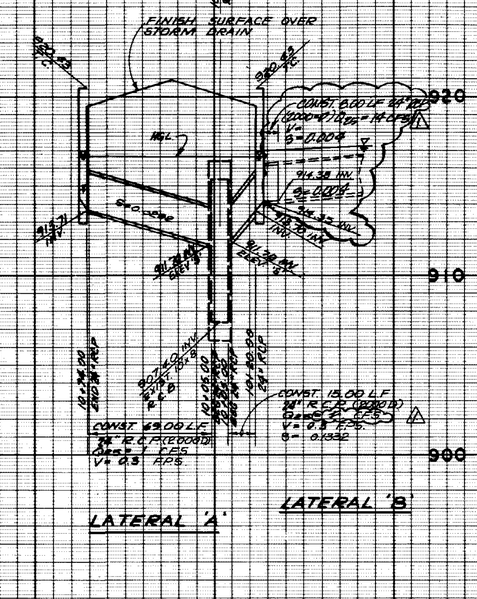
P. M. 10112

SHEET 12 OF 21
CONTRACT _____
ACCOUNT _____
DWG. NO. D-1025

JOB# 88123

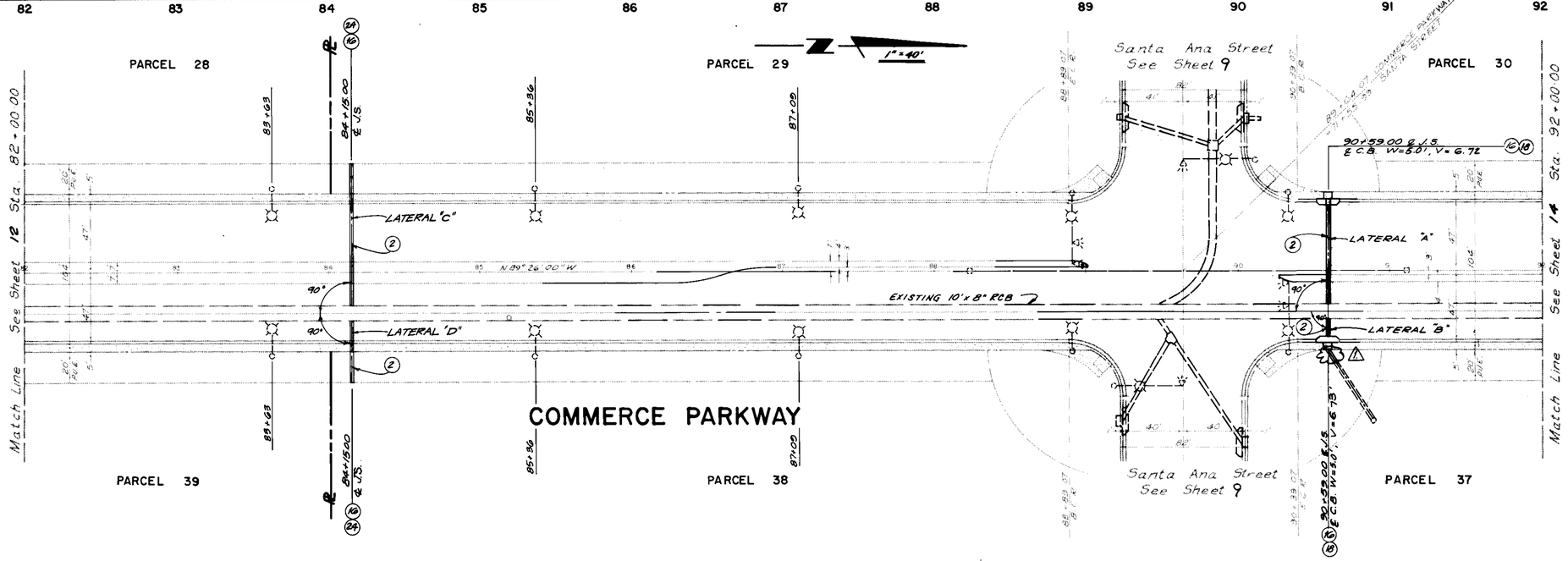
5733





PROFILE
HORIZ. 1"=40'
VERT. 1"=4'

82 83 84 85 86 87 88 89 90 91 92



RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF:

REGISTERED PROFESSIONAL ENGINEER
WILLIAM F. YOUNG
No. 35715
EXP 9/30/91
CIVIL
STATE OF CALIFORNIA

CONSTRUCTION NOTES

(2) Construct 24" R.C.P. (2000D)
(16) Construct PIPE CONNECTION PER LACFCD Std. 2-D190
(18) Construct Catch Basin per City Std. 302, 304 (W=5.0')
(24) Construct. Brick & Mortar Plug per Detail Sht. 18

D10235

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
1	5-5-89	GFM	Thomas L. Madison 12540

DESIGNED BY W.V.B.
DATE 4-13-89
DRAWN BY L.C.L./C.J.G.
DATE 4-13-89
CHECKED BY F.Z.
DATE 7/10/89

CITY OF ONTARIO

REVIEWED BY _____ DATE 7-12-89
ACCEPTED BY _____ CITY ENGINEER DATE 7-18-89

BENCH MARK No. 701-3-1974 ELEV. 847.607
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN.

WILLIAMSON & SCHMID
17782 SKY PARK BOULEVARD · IRVINE, CALIFORNIA 92714 · (714) 261-2533
APPROVED BY _____ DATE 5/4/89
WILLIAM F. YOUNG R.C.E. 35715

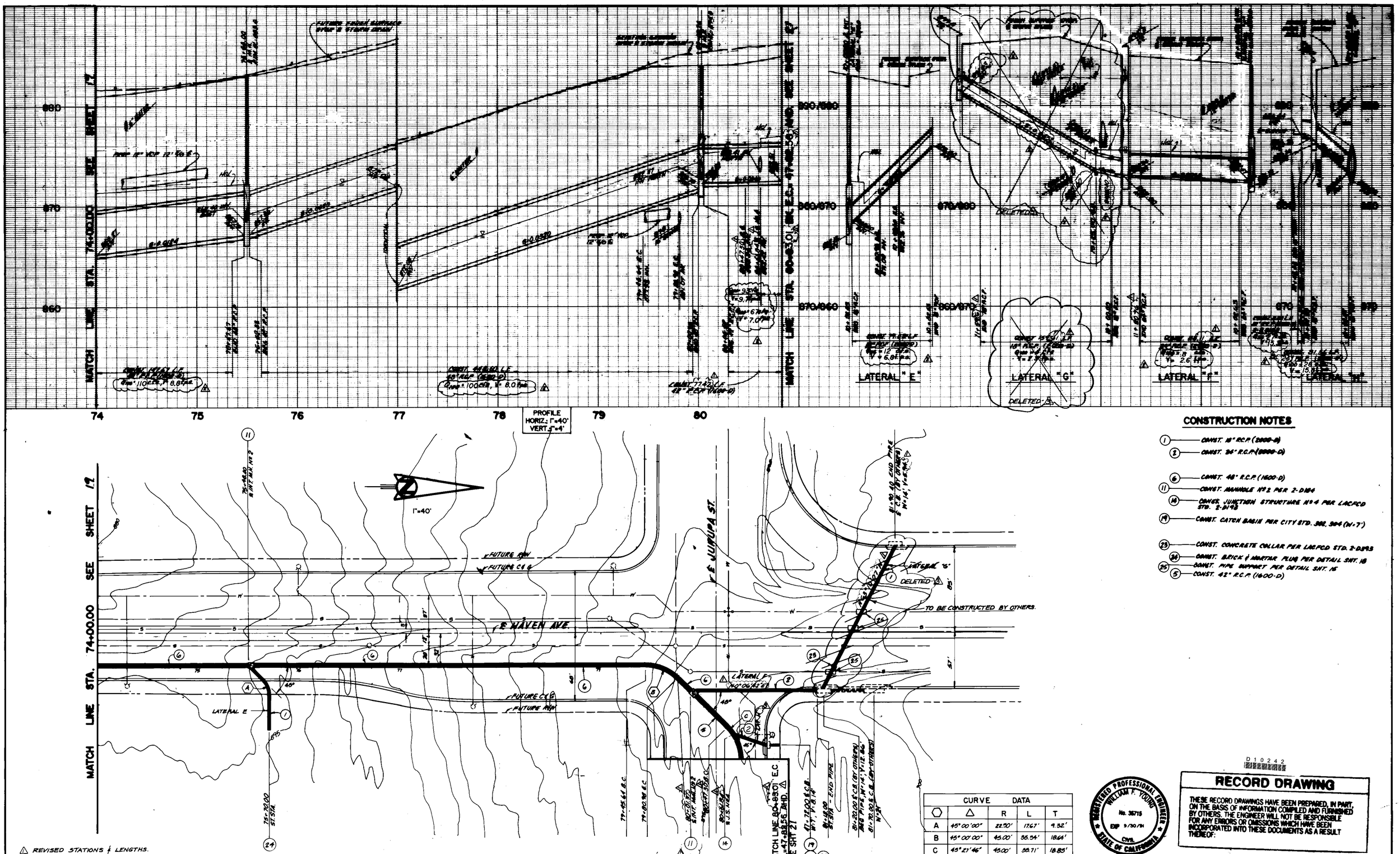
PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN
COMMERCE PARKWAY
STA. 82+00.00 TO STA. 92+00.00

P. M. 10112

SHEET 13 OF 21
CONTRACT _____
ACCOUNT _____
DWG. NO. D-1026

JOB# 88123

5734



CURVE DATA				
⬡	△	R	L	T
A	45°00'00"	22.50'	17.67'	9.32'
B	45°00'00"	45.00'	35.34'	18.64'
C	45°21'46"	45.00'	35.71'	18.85'

△ REVISED STATIONS & LENGTHS.
△ REVISED Q & V, LATERAL G.
△ DELETED LATERAL G., ADD - LAT. H. 18" TO 24".

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
△	9/6/89	W.V.B.	William F. Young 35715
△	10-9-90	W.V.B.	William F. Young 35715
△	4-19-90	CMM	William F. Young 12566

DESIGNED BY W.V.B. DATE 4-13-89
DRAWN BY L.C.L./C.J.G. DATE 4-13-89
CHECKED BY F.E. DATE 7/10/89

DIETERICH-POST 65328 FILM

CITY OF ONTARIO

REVIEWED BY _____ DATE 7-17-89
ACCEPTED BY _____ CITY ENGINEER DATE 7-18-89

BENCH MARK No. 701-3-1974 ELEV. 847.907
LOCATION: SAN BERNARDINO COUNTY SURVEYOR
BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN

WILLIAMSON-SCHMID
William F. Young 5/14/89
WILLIAM F. YOUNG R.C.E. 35715

PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN
HAVEN AVENUE
STA. 74+00.00 TO STA. 80+82.46 B.K.=47+82.17 AHD.

SHEET 20 OF 21
CONTRACT
ACCOUNT
DWG. NO. D-1033

JOB# 88128

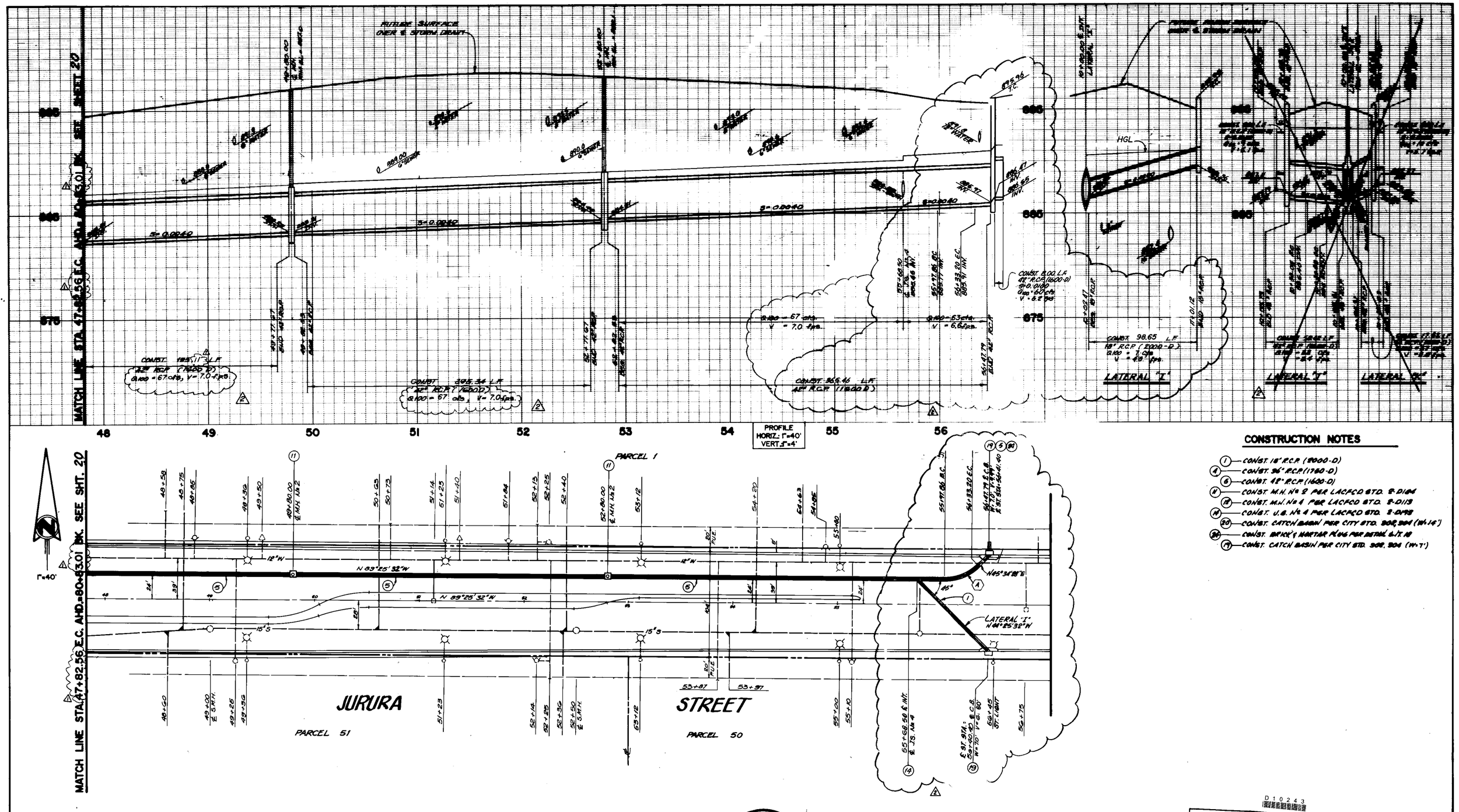
D10242

REGISTERED PROFESSIONAL ENGINEER WILLIAM F. YOUNG No. 35715 EXP. 9/30/91 CIVIL STATE OF CALIFORNIA

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF:

5735



CONSTRUCTION NOTES

1. CONST. 18" R.C.P. (2000-D)
4. CONST. 36" R.C.P. (1760-D)
5. CONST. 48" R.C.P. (1620-D)
M. CONST. M.H. No. 2 PER LACFCD STD. S-D164
18. CONST. M.H. No. 4 PER LACFCD STD. S-D113
M. CONST. J.B. No. 4 PER LACFCD STD. S-D118
20. CONST. CATCH BASIN PER CITY STD. 302, 304 (W=14')
24. CONST. BRICK & MORTAR PLUG PER DETAIL 6 ON 18
19. CONST. CATCH BASIN PER CITY STD. 302, 304 (W=7')

△ REVISED MATCH LINE STA.
△ REVISED Q & V, SYSTEM STA. 55+68 EAST DELETED LA FAYETTE ST.

A	45°00'00"	45.00'	35.34'	18.64'
	△	R	L	T

CURVE DATA

REGISTERED PROFESSIONAL ENGINEER WILLIAM F. YOUNG No. 35715 EXP 9/30/91 CIVIL STATE OF CALIFORNIA

D 10243

RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THESE DOCUMENTS AS A RESULT THEREOF:

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO.
△	9/6/89	W.V.B.	William F. Young 35715
△	12-4-89	W.V.B.	William F. Young 35715

DESIGNED BY W.V.B. DATE 4-13-89
DRAWN BY L.C.L. / C.J.G. DATE 4-13-89
CHECKED BY F.Z. DATE 7/10/89

DIETERICH-POST 6332 FILM

CITY OF ONTARIO

REVIEWED BY _____ DATE 7-17-89
ACCEPTED BY _____ CITY ENGINEER DATE 7-18-89

BENCH MARK No. 701-3-1974 ELEV. 847.807
LOCATION: SAN BERNARDINO COUNTY SURVEYOR

BRASS DISK IN CONCRETE AT N.E. CORNER OF TRAFFIC ISLAND AT N.W. CORNER OF MISSION & MILLIKEN

WILLIAMSON & SCHMID
WILLIAM F. YOUNG _____ R.C.E. 35715

PLAN AND PROFILE OF STORM DRAIN IMPROVEMENTS IN

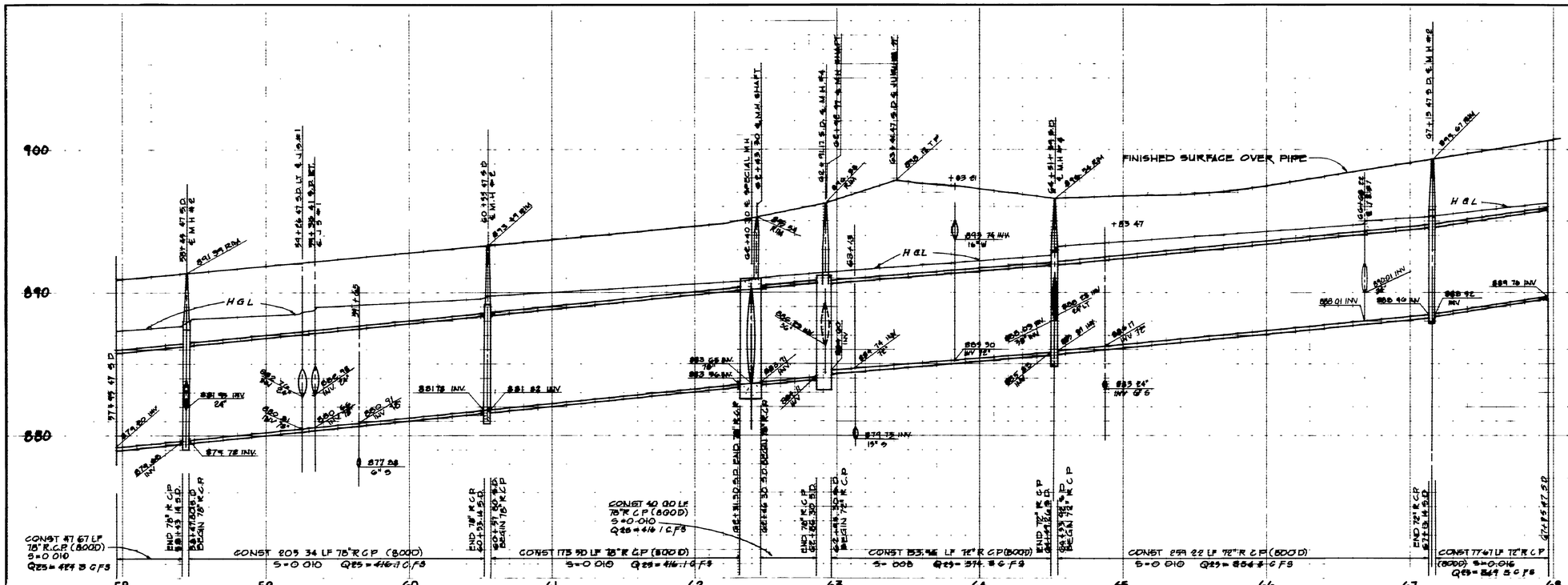
JURUPA STREET

STA. 47+82.17 AHD=80+82.46 BK TO STA. 64+06.80

SHEET 21 OF 21
CONTRACT _____
ACCOUNT _____
DWG. NO. D-1034

JOB# 60025

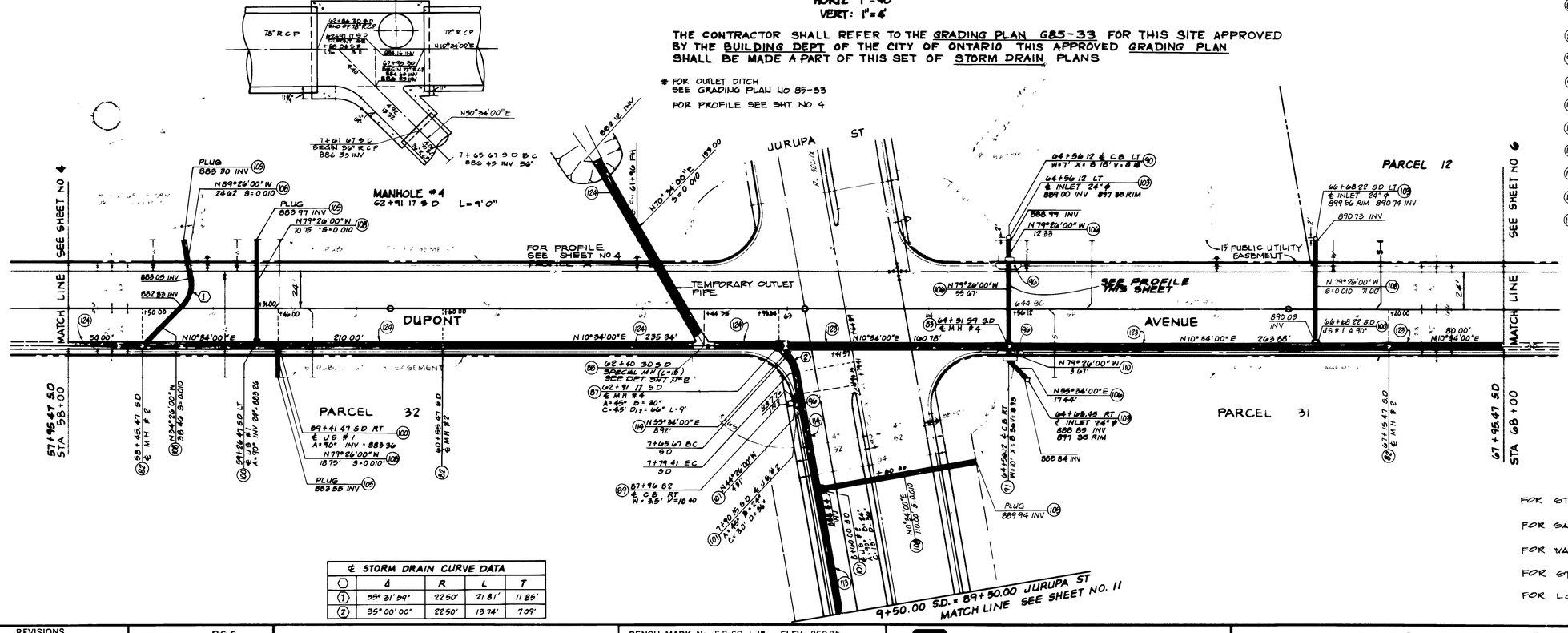
5736



PROFILE SCALES
HORIZ 1"=40'
VERT: 1"=4'

THE CONTRACTOR SHALL REFER TO THE GRADING PLAN 685-33 FOR THIS SITE APPROVED BY THE BUILDING DEPT OF THE CITY OF ONTARIO THIS APPROVED GRADING PLAN SHALL BE MADE A PART OF THIS SET OF STORM DRAIN PLANS

* FOR OUTLET DITCH SEE GRADING PLAN NO 85-33
FOR PROFILE SEE SHT NO 4



CONSTRUCTION NOTES

(82) CONST MANHOLE NO 2 PER STD 306
(83) CONST MANHOLE NO. 4 (L=4'0") PER L.A.C.F.C.D STD 2-D113
(87) CONST MANHOLE NO 4 (L=9'0") PER L.A.C.F.C.D STD 2-D113 AND PER DETAIL SHEET NO 5 OR 6
(86) CONST SPECIAL MANHOLE (L=15'0") PER DETAIL SHEET NO 2
(94) CONST CATCH BASIN PER STD 302, 303, 304 & 305 (L=5'6")
(90) CONST CATCH BASIN PER STD 302, 303, 304 & 305 (L=7'0")
(91) CONST CATCH BASIN PER STD 302, 303, 304 & 305 (L=10'0")
(92) CONST LOCAL DEPRESSION PER STD 304 & DETAIL SHT NO 2
(100) CONST JUNCTION STRUCTURE NO 1 PER STD 307
(101) CONST JUNCTION STRUCTURE NO. 2 PER STD 308
(103) CONST 24" DIA. C.M.P. INLET PER DETAIL SHEET NO 2
(109) CONST BRICK & MORTAR PLUG
(104) CONST 24" R.C.P. (1000D)
(107) CONST 24" R.C.P. (1200D)
(106) CONST 24" R.C.P. (1500D)
(110) CONST 30" R.C.P. (1000D)
(113) CONST 36" R.C.P. (1000D)
(114) CONST 36" R.C.P. (1650D)
(123) CONST 72" R.C.P. (800D)
(124) CONST 78" R.C.P. (800D)

℄ STORM DRAIN CURVE DATA				
	Δ	R	L	T
(1)	95° 31' 54"	225.0'	218.1'	11.85'
(2)	35° 00' 00"	225.0'	137.4'	70.9'

FOR STREETS SEE SHEET NO 14 OF 32 (R)
FOR SANITARY SEWER SYSTEM SEE SHEET NO 10 OF 24 (S)
FOR WATER SYSTEM SEE SHEET NO 9 OF 27 (W)
FOR STREET LIGHTING SEE SHEET NO 5 OF 12 (L)
FOR LOCAL DEPRESSIONS SEE SHEET NO 2 OF 23
PROJECT SHEET ____ OF ____

D10892

REVISIONS			
MARK	DATE	BY	APPROVED/RCE NO

DESIGNED BY DGS DATE
DRAWN BY CB, RC, ME DATE
CHECKED BY DATE

CITY OF ONTARIO

REVIEWED BY Ray A. Maddock ASS'T CITY ENGINEER 11/5/85 DATE
ACCEPTED BY Leroy C. Bender CITY ENGINEER 11/7/85 DATE

BENCH MARK No SBCO 1-18 ELEV 969.85
LOCATION P.K. NAIL N.E. CORNER CONCRETE BASE S.C.E. TOWER @ VISTA-ETIWANDA, S.W. CORNER ETIWANDA AVENUE & SLOVER AVENUE
ELEVATION OF ABOVE BENCH MARK BASED ON CITY OF ONTARIO DATUM - 969.00
PLANS BASED ON S.B.CO DATUM

WILLIAMSON & SCHMID
17782 SKY PARK BOULEVARD • IRVINE CALIFORNIA 92714 • (714) 261 2222
APPROVED BY MICHAEL E. MCGOVERN DATE
RCE 27163 7/18/85

DUPONT AVENUE
STORM DRAIN IMPROVEMENTS
FROM FRANCIS STREET TO AIRPORT DRIVE

PM 8776

SHEET 5 OF 23
CONTRACT
ACCOUNT
DWG NO D-701

JN84211

MICROFILMED

5737

APPENDIX B

HYDROLOGY CALCULATIONS

25-YEAR HYDROLOGY

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDINGS 1 & 2 - NODES 100-215                   *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P1AB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    100.00 TO NODE    101.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   848.00
  ELEVATION DATA: UPSTREAM(FEET) =    952.59  DOWNSTREAM(FEET) =    944.53

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   11.446
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.702
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                B        6.00      0.75      0.100    56   11.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     14.19
  TOTAL AREA(ACRES) =      6.00   PEAK FLOW RATE(CFS) =     14.19
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    101.00 TO NODE    122.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   940.53  DOWNSTREAM(FEET) =   933.20
  FLOW LENGTH(FEET) =   738.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  15.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.26
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      14.19
  PIPE TRAVEL TIME(MIN.) =   1.69    Tc(MIN.) =   13.14
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    122.00 =    1586.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    122.00 TO NODE    122.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  3
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   13.14
  RAINFALL INTENSITY(INCH/HR) =   2.49
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       6.00
  TOTAL STREAM AREA(ACRES) =       6.00
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      14.19

****************************************************************************
  FLOW PROCESS FROM NODE    110.00 TO NODE    111.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   408.00
  ELEVATION DATA: UPSTREAM(FEET) =    952.59  DOWNSTREAM(FEET) =    946.84

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.895
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.377
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.90      0.75      0.100    56    7.89
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.67
  TOTAL AREA(ACRES) =      0.90   PEAK FLOW RATE(CFS) =      2.67

****************************************************************************
  FLOW PROCESS FROM NODE    111.00 TO NODE    112.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   942.84  DOWNSTREAM(FEET) =   940.37
  FLOW LENGTH(FEET) =   278.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   8.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.65
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.67
  PIPE TRAVEL TIME(MIN.) =   1.00    Tc(MIN.) =    8.89
  LONGEST FLOWPATH FROM NODE    110.00 TO NODE    112.00 =     686.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    112.00 TO NODE    112.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
```

```
================================================================================
  MAINLINE Tc(MIN.) =    8.89
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.144
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.30      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.30      SUBAREA RUNOFF(CFS) =    0.83
  EFFECTIVE AREA(ACRES) =      1.20   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.2       PEAK FLOW RATE(CFS) =       3.31

****************************************************************************
  FLOW PROCESS FROM NODE    112.00 TO NODE    122.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   940.37  DOWNSTREAM(FEET) =   933.20
  FLOW LENGTH(FEET) =   808.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.97
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.31
  PIPE TRAVEL TIME(MIN.) =   2.71    Tc(MIN.) =   11.60
  LONGEST FLOWPATH FROM NODE    110.00 TO NODE    122.00 =    1494.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    122.00 TO NODE    122.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  3
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   11.60
  RAINFALL INTENSITY(INCH/HR) =   2.68
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       1.20
  TOTAL STREAM AREA(ACRES) =       1.20
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       3.31

****************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    121.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   983.00
  ELEVATION DATA: UPSTREAM(FEET) =    948.50  DOWNSTREAM(FEET) =    937.27

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   11.704
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.666
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        9.70      0.75     0.100    56   11.70
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     22.62
  TOTAL AREA(ACRES) =      9.70   PEAK FLOW RATE(CFS) =     22.62

****************************************************************************
  FLOW PROCESS FROM NODE    121.00 TO NODE    122.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
```

```
  ELEVATION DATA: UPSTREAM(FEET) =   933.27  DOWNSTREAM(FEET) =   933.20
  FLOW LENGTH(FEET) =    14.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  20.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.40
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      22.62
  PIPE TRAVEL TIME(MIN.) =   0.04    Tc(MIN.) =   11.74
  LONGEST FLOWPATH FROM NODE    120.00 TO NODE    122.00 =     997.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    122.00 TO NODE    122.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  3
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  3 ARE:
  TIME OF CONCENTRATION(MIN.) =   11.74
  RAINFALL INTENSITY(INCH/HR) =   2.66
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       9.70
  TOTAL STREAM AREA(ACRES) =       9.70
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      22.62

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       14.19   13.14    2.487  0.75( 0.07) 0.10       6.0     100.00
      2        3.31   11.60    2.680  0.75( 0.07) 0.10       1.2     110.00
      3       22.62   11.74    2.661  0.75( 0.07) 0.10       9.7     120.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  3 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       39.37   11.60    2.680  0.75( 0.07) 0.10      16.1     110.00
      2       39.50   11.74    2.661  0.75( 0.07) 0.10      16.3     120.00
      3       38.36   13.14    2.487  0.75( 0.07) 0.10      16.9     100.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      39.50    Tc(MIN.) =    11.74
  EFFECTIVE AREA(ACRES) =      16.26   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       16.9
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    122.00 =    1586.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    122.00 TO NODE    142.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   933.20  DOWNSTREAM(FEET) =   925.11
  FLOW LENGTH(FEET) =   623.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  21.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  10.45
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      39.50
  PIPE TRAVEL TIME(MIN.) =   0.99    Tc(MIN.) =   12.73
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    142.00 =    2209.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    142.00 TO NODE    142.00 IS CODE =  10
----------------------------------------------------------------------------
  >>>>>MAIN-STREAM MEMORY COPIED ONTO MEMORY BANK # 1 <<<<<
============================================================================

****************************************************************************
```

```
 FLOW PROCESS FROM NODE    130.00 TO NODE    131.00 IS CODE =  21
----------------------------------------------------------------------------
 >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
 INITIAL SUBAREA FLOW-LENGTH(FEET) =   791.00
 ELEVATION DATA: UPSTREAM(FEET) =    951.00  DOWNSTREAM(FEET) =    938.70

 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   17.421
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.100
 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE           GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
 NATURAL POOR COVER
 "OPEN BRUSH"               B        7.80      0.45     1.000    76   17.42
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.45
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
 SUBAREA RUNOFF(CFS) =     11.57
 TOTAL AREA(ACRES) =      7.80   PEAK FLOW RATE(CFS) =     11.57

****************************************************************************
 FLOW PROCESS FROM NODE    131.00 TO NODE    141.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   934.70  DOWNSTREAM(FEET) =   925.25
 FLOW LENGTH(FEET) =   352.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.0 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =  10.24
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      11.57
 PIPE TRAVEL TIME(MIN.) =   0.57    Tc(MIN.) =   17.99
 LONGEST FLOWPATH FROM NODE    130.00 TO NODE    141.00 =    1143.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    141.00 TO NODE    141.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
 TIME OF CONCENTRATION(MIN.) =   17.99
 RAINFALL INTENSITY(INCH/HR) =   2.06
 AREA-AVERAGED Fm(INCH/HR) =  0.45
 AREA-AVERAGED Fp(INCH/HR) =  0.45
 AREA-AVERAGED Ap =  1.00
 EFFECTIVE STREAM AREA(ACRES) =       7.80
 TOTAL STREAM AREA(ACRES) =       7.80
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      11.57

****************************************************************************
 FLOW PROCESS FROM NODE    140.00 TO NODE    141.00 IS CODE =  21
----------------------------------------------------------------------------
 >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
 INITIAL SUBAREA FLOW-LENGTH(FEET) =   907.00
 ELEVATION DATA: UPSTREAM(FEET) =    940.85  DOWNSTREAM(FEET) =    929.25

 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   11.080
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.755
 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE           GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
 COMMERCIAL                 B        6.30      0.75     0.100    56   11.08
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA RUNOFF(CFS) =     15.20
 TOTAL AREA(ACRES) =      6.30   PEAK FLOW RATE(CFS) =     15.20
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    141.00 TO NODE    141.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   11.08
  RAINFALL INTENSITY(INCH/HR) =   2.76
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       6.30
  TOTAL STREAM AREA(ACRES) =       6.30
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      15.20

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       11.57   17.99    2.060  0.45( 0.45) 1.00       7.8     130.00
      2       15.20   11.08    2.755  0.75( 0.07) 0.10       6.3     140.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       25.40   11.08    2.755  0.49( 0.24) 0.49      11.1     140.00
      2       22.82   17.99    2.060  0.47( 0.28) 0.60      14.1     130.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      25.40    Tc(MIN.) =    11.08
  EFFECTIVE AREA(ACRES) =      11.10   AREA-AVERAGED Fm(INCH/HR) =  0.24
  AREA-AVERAGED Fp(INCH/HR) =  0.49  AREA-AVERAGED Ap =  0.49
  TOTAL AREA(ACRES) =       14.1
  LONGEST FLOWPATH FROM NODE    130.00 TO NODE    141.00 =    1143.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    141.00 TO NODE    142.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   929.25  DOWNSTREAM(FEET) =   925.11
  FLOW LENGTH(FEET) =    28.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  10.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  23.67
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      25.40
  PIPE TRAVEL TIME(MIN.) =   0.02    Tc(MIN.) =   11.10
  LONGEST FLOWPATH FROM NODE    130.00 TO NODE    142.00 =    1171.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    142.00 TO NODE    142.00 IS CODE =  11
----------------------------------------------------------------------------
  >>>>>CONFLUENCE MEMORY BANK # 1 WITH THE MAIN-STREAM MEMORY<<<<<
============================================================================

  ** MAIN STREAM CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       25.40   11.10    2.752  0.49( 0.24) 0.49      11.1     140.00
      2       22.82   18.02    2.058  0.47( 0.28) 0.60      14.1     130.00
  LONGEST FLOWPATH FROM NODE    130.00 TO NODE    142.00 =    1171.00 FEET.

  ** MEMORY BANK #  1 CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       39.37   12.60    2.551  0.75( 0.07) 0.10      16.1     110.00
```

```
      2       39.50   12.73    2.535  0.75( 0.07) 0.10      16.3     120.00
      3       38.36   14.14    2.380  0.75( 0.07) 0.10      16.9     100.00
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    142.00 =    2209.00 FEET.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       62.91   11.10    2.752  0.54( 0.15) 0.27      25.3     140.00
      2       64.21   12.60    2.551  0.54( 0.15) 0.27      27.8     110.00
      3       64.30   12.73    2.535  0.54( 0.15) 0.27      28.1     120.00
      4       62.63   14.14    2.380  0.53( 0.15) 0.29      29.3     100.00
      5       55.82   18.02    2.058  0.52( 0.17) 0.33      31.0     130.00
    TOTAL AREA(ACRES) =        31.0

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =       64.30  Tc(MIN.) =   12.734
  EFFECTIVE AREA(ACRES) =     28.07  AREA-AVERAGED Fm(INCH/HR) =  0.15
  AREA-AVERAGED Fp(INCH/HR) =  0.53  AREA-AVERAGED Ap =  0.29
  TOTAL AREA(ACRES) =       31.0
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    142.00 =    2209.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    142.00 TO NODE    142.00 IS CODE =  12
----------------------------------------------------------------------------
  >>>>>CLEAR MEMORY BANK # 1 <<<<<
============================================================================

****************************************************************************
  FLOW PROCESS FROM NODE    142.00 TO NODE    204.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.11  DOWNSTREAM(FEET) =   915.87
  FLOW LENGTH(FEET) =  1207.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  39.0 INCH PIPE IS  29.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.62
  ESTIMATED PIPE DIAMETER(INCH) =  39.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      64.30
  PIPE TRAVEL TIME(MIN.) =   2.09    Tc(MIN.) =   14.82
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    204.00 =    3416.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    204.00 TO NODE    204.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   14.82
  RAINFALL INTENSITY(INCH/HR) =   2.31
  AREA-AVERAGED Fm(INCH/HR) =  0.15
  AREA-AVERAGED Fp(INCH/HR) =  0.54
  AREA-AVERAGED Ap =  0.27
  EFFECTIVE STREAM AREA(ACRES) =      28.07
  TOTAL STREAM AREA(ACRES) =      31.00
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      64.30

****************************************************************************
  FLOW PROCESS FROM NODE    200.00 TO NODE    201.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   769.00
  ELEVATION DATA: UPSTREAM(FEET) =    954.36  DOWNSTREAM(FEET) =    929.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.637
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.199
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
```

```
     LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL               B        5.30      0.75      0.100    56    8.64
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     14.90
  TOTAL AREA(ACRES) =      5.30   PEAK FLOW RATE(CFS) =     14.90

****************************************************************************
  FLOW PROCESS FROM NODE    201.00 TO NODE    202.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =    929.80
  DOWNSTREAM NODE ELEVATION(FEET) =    926.40
  CHANNEL LENGTH THRU SUBAREA(FEET) =   673.00
  "V" GUTTER WIDTH(FEET) =   3.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.010   MANNING'S N = .0150
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.02500
  MAXIMUM DEPTH(FEET) =   1.00
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.537
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
     LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL               B        7.10      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =     22.76
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   2.75
  AVERAGE FLOW DEPTH(FEET) =   0.48   FLOOD WIDTH(FEET) =   36.27
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   4.08   Tc(MIN.) =   12.71
  SUBAREA AREA(ACRES) =    7.10       SUBAREA RUNOFF(CFS) =   15.73
  EFFECTIVE AREA(ACRES) =   12.40     AREA-AVERAGED Fm(INCH/HR) =   0.07
  AREA-AVERAGED Fp(INCH/HR) =   0.75  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =       12.4         PEAK FLOW RATE(CFS) =      27.48

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.51   FLOOD WIDTH(FEET) =   39.06
  FLOW VELOCITY(FEET/SEC.) =   2.87   DEPTH*VELOCITY(FT*FT/SEC) =   1.46
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    202.00 =    1442.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    202.00 TO NODE    203.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =    926.40
  DOWNSTREAM NODE ELEVATION(FEET) =    919.94
  CHANNEL LENGTH THRU SUBAREA(FEET) =  1090.00
  "V" GUTTER WIDTH(FEET) =   3.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.010   MANNING'S N = .0150
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.02500
  MAXIMUM DEPTH(FEET) =   1.00
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.043
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
     LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL               B       10.90      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =     37.11
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   3.28
  AVERAGE FLOW DEPTH(FEET) =   0.55   FLOOD WIDTH(FEET) =   42.44
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   5.53   Tc(MIN.) =   18.25
  SUBAREA AREA(ACRES) =   10.90       SUBAREA RUNOFF(CFS) =   19.30
  EFFECTIVE AREA(ACRES) =   23.30     AREA-AVERAGED Fm(INCH/HR) =   0.07
  AREA-AVERAGED Fp(INCH/HR) =   0.75  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =       23.3         PEAK FLOW RATE(CFS) =      41.26

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.57   FLOOD WIDTH(FEET) =   44.20
  FLOW VELOCITY(FEET/SEC.) =   3.37   DEPTH*VELOCITY(FT*FT/SEC) =   1.94
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    203.00 =    2532.00 FEET.
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    203.00 TO NODE    204.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   915.94  DOWNSTREAM(FEET) =   915.87
  FLOW LENGTH(FEET) =    14.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  36.0 INCH PIPE IS  26.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.36
  ESTIMATED PIPE DIAMETER(INCH) =  36.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      41.26
  PIPE TRAVEL TIME(MIN.) =   0.03    Tc(MIN.) =   18.28
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    204.00 =    2546.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    204.00 TO NODE    204.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   18.28
  RAINFALL INTENSITY(INCH/HR) =   2.04
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =      23.30
  TOTAL STREAM AREA(ACRES) =      23.30
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      41.26

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       62.91   13.20    2.481  0.54( 0.15) 0.27      25.3     140.00
      1       64.21   14.69    2.327  0.54( 0.15) 0.27      27.8     110.00
      1       64.30   14.82    2.314  0.54( 0.15) 0.27      28.1     120.00
      1       62.63   16.24    2.191  0.53( 0.15) 0.29      29.3     100.00
      1       55.82   20.21    1.921  0.52( 0.17) 0.33      31.0     130.00
      2       41.26   18.28    2.040  0.75( 0.07) 0.10      23.3     200.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       99.37   13.20    2.481  0.58( 0.12) 0.20      42.1     140.00
      2      102.19   14.69    2.327  0.58( 0.12) 0.20      46.6     110.00
      3      102.42   14.82    2.314  0.58( 0.12) 0.20      47.0     120.00
      4      102.08   16.24    2.191  0.58( 0.12) 0.21      50.0     100.00
      5      100.39   18.28    2.040  0.57( 0.12) 0.22      53.5     200.00
      6       94.58   20.21    1.921  0.56( 0.13) 0.23      54.3     130.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =     102.42    Tc(MIN.) =    14.82
  EFFECTIVE AREA(ACRES) =      46.97   AREA-AVERAGED Fm(INCH/HR) =  0.12
  AREA-AVERAGED Fp(INCH/HR) =  0.58  AREA-AVERAGED Ap =  0.20
  TOTAL AREA(ACRES) =      54.3
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    204.00 =    3416.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    204.00 TO NODE    205.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   915.87  DOWNSTREAM(FEET) =   913.45
  FLOW LENGTH(FEET) =   483.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  51.0 INCH PIPE IS  37.1 INCHES
```

```
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.26
  ESTIMATED PIPE DIAMETER(INCH) =  51.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =     102.42
  PIPE TRAVEL TIME(MIN.) =   0.87    Tc(MIN.) =   15.69
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    205.00 =    3899.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    205.00 TO NODE    205.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   15.69
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.236
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.10      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.10      SUBAREA RUNOFF(CFS) =    2.14
  EFFECTIVE AREA(ACRES) =     48.07   AREA-AVERAGED Fm(INCH/HR) =  0.12
  AREA-AVERAGED Fp(INCH/HR) =  0.58  AREA-AVERAGED Ap =  0.20
  TOTAL AREA(ACRES) =       55.4       PEAK FLOW RATE(CFS) =     102.42
  NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE

****************************************************************************
  FLOW PROCESS FROM NODE    205.00 TO NODE    214.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   913.45  DOWNSTREAM(FEET) =   912.14
  FLOW LENGTH(FEET) =   263.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  51.0 INCH PIPE IS  37.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.24
  ESTIMATED PIPE DIAMETER(INCH) =  51.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =     102.42
  PIPE TRAVEL TIME(MIN.) =   0.47    Tc(MIN.) =   16.17
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    214.00 =    4162.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    214.00 TO NODE    214.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   16.17
  RAINFALL INTENSITY(INCH/HR) =   2.20
  AREA-AVERAGED Fm(INCH/HR) =  0.12
  AREA-AVERAGED Fp(INCH/HR) =  0.58
  AREA-AVERAGED Ap =  0.20
  EFFECTIVE STREAM AREA(ACRES) =      48.07
  TOTAL STREAM AREA(ACRES) =      55.40
  PEAK FLOW RATE(CFS) AT CONFLUENCE =     102.42

****************************************************************************
  FLOW PROCESS FROM NODE    210.00 TO NODE    211.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   946.00
  ELEVATION DATA: UPSTREAM(FEET) =    936.37  DOWNSTREAM(FEET) =    930.50

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   13.022
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.501
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        6.30      0.75     0.100    56   13.02
```

```
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     13.76
  TOTAL AREA(ACRES) =      6.30   PEAK FLOW RATE(CFS) =     13.76

****************************************************************************
  FLOW PROCESS FROM NODE    211.00 TO NODE    212.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =    930.50
  DOWNSTREAM NODE ELEVATION(FEET) =    927.00
  CHANNEL LENGTH THRU SUBAREA(FEET) =   688.00
  "V" GUTTER WIDTH(FEET) =   3.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.010   MANNING'S N = .0150
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.02500
  MAXIMUM DEPTH(FEET) =   1.00
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.095
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        3.70      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =     17.14
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   2.56
  AVERAGE FLOW DEPTH(FEET) =   0.43   FLOOD WIDTH(FEET) =   32.60
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   4.47   Tc(MIN.) =   17.50
  SUBAREA AREA(ACRES) =    3.70       SUBAREA RUNOFF(CFS) =    6.73
  EFFECTIVE AREA(ACRES) =   10.00     AREA-AVERAGED Fm(INCH/HR) =   0.07
  AREA-AVERAGED Fp(INCH/HR) =   0.75  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =       10.0         PEAK FLOW RATE(CFS) =      18.18

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.44   FLOOD WIDTH(FEET) =   33.33
  FLOW VELOCITY(FEET/SEC.) =   2.60   DEPTH*VELOCITY(FT*FT/SEC) =   1.14
  LONGEST FLOWPATH FROM NODE    210.00 TO NODE    212.00 =    1634.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    212.00 TO NODE    213.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =    927.00
  DOWNSTREAM NODE ELEVATION(FEET) =    921.80
  CHANNEL LENGTH THRU SUBAREA(FEET) =   549.00
  "V" GUTTER WIDTH(FEET) =   3.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.010   MANNING'S N = .0150
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.02500
  MAXIMUM DEPTH(FEET) =   1.00
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  1.923
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        3.00      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =     20.68
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   3.42
  AVERAGE FLOW DEPTH(FEET) =   0.41   FLOOD WIDTH(FEET) =   30.98
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   2.68   Tc(MIN.) =   20.17
  SUBAREA AREA(ACRES) =    3.00       SUBAREA RUNOFF(CFS) =    4.99
  EFFECTIVE AREA(ACRES) =   13.00     AREA-AVERAGED Fm(INCH/HR) =   0.07
  AREA-AVERAGED Fp(INCH/HR) =   0.75  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =       13.0         PEAK FLOW RATE(CFS) =      21.63

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.42   FLOOD WIDTH(FEET) =   31.57
  FLOW VELOCITY(FEET/SEC.) =   3.45   DEPTH*VELOCITY(FT*FT/SEC) =   1.44
  LONGEST FLOWPATH FROM NODE    210.00 TO NODE    213.00 =    2183.00 FEET.

****************************************************************************
```

```
 FLOW PROCESS FROM NODE    213.00 TO NODE    214.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   917.80  DOWNSTREAM(FEET) =   912.14
 FLOW LENGTH(FEET) =    19.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.6 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =  29.59
 ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      21.63
 PIPE TRAVEL TIME(MIN.) =   0.01    Tc(MIN.) =   20.18
 LONGEST FLOWPATH FROM NODE    210.00 TO NODE    214.00 =    2202.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    214.00 TO NODE    214.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
 TIME OF CONCENTRATION(MIN.) =   20.18
 RAINFALL INTENSITY(INCH/HR) =   1.92
 AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75
 AREA-AVERAGED Ap =  0.10
 EFFECTIVE STREAM AREA(ACRES) =      13.00
 TOTAL STREAM AREA(ACRES) =      13.00
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      21.63

 ** CONFLUENCE DATA **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1       99.37   14.55    2.340  0.58( 0.12) 0.20      43.2     140.00
     1      102.19   16.03    2.208  0.58( 0.12) 0.20      47.7     110.00
     1      102.42   16.17    2.196  0.58( 0.12) 0.20      48.1     120.00
     1      102.08   17.58    2.089  0.58( 0.12) 0.21      51.1     100.00
     1      100.39   19.63    1.955  0.57( 0.12) 0.21      54.6     200.00
     1       94.58   21.59    1.846  0.56( 0.13) 0.23      55.4     130.00
     2       21.63   20.18    1.923  0.75( 0.07) 0.10      13.0     210.00

 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR  2 STREAMS.

 ** PEAK FLOW RATE TABLE **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1      118.48   14.55    2.340  0.60( 0.11) 0.18      52.6     140.00
     2      122.02   16.03    2.208  0.60( 0.11) 0.18      58.0     110.00
     3      122.31   16.17    2.196  0.60( 0.11) 0.18      58.5     120.00
     4      122.61   17.58    2.089  0.60( 0.11) 0.19      62.4     100.00
     5      121.79   19.63    1.955  0.59( 0.11) 0.19      67.2     200.00
     6      120.38   20.18    1.923  0.59( 0.11) 0.20      67.8     210.00
     7      115.32   21.59    1.846  0.58( 0.12) 0.20      68.4     130.00

 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) =     122.61    Tc(MIN.) =    17.58
 EFFECTIVE AREA(ACRES) =      62.44   AREA-AVERAGED Fm(INCH/HR) =  0.11
 AREA-AVERAGED Fp(INCH/HR) =  0.60  AREA-AVERAGED Ap =  0.19
 TOTAL AREA(ACRES) =       68.4
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    214.00 =    4162.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    214.00 TO NODE    215.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   912.14  DOWNSTREAM(FEET) =   910.34
 FLOW LENGTH(FEET) =   359.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  54.0 INCH PIPE IS  40.2 INCHES
```

```
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.66
  ESTIMATED PIPE DIAMETER(INCH) =  54.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =     122.61
  PIPE TRAVEL TIME(MIN.) =   0.62    Tc(MIN.) =   18.20
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    215.00 =    4521.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       68.4  TC(MIN.) =     18.20
  EFFECTIVE AREA(ACRES) =     62.44  AREA-AVERAGED Fm(INCH/HR)=  0.11
  AREA-AVERAGED Fp(INCH/HR) =  0.60  AREA-AVERAGED Ap = 0.187
  PEAK FLOW RATE(CFS)   =     122.61

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1      118.48   15.17    2.282  0.60( 0.11) 0.18      52.6     140.00
      2      122.02   16.65    2.158  0.60( 0.11) 0.18      58.0     110.00
      3      122.31   16.79    2.147  0.60( 0.11) 0.18      58.5     120.00
      4      122.61   18.20    2.046  0.60( 0.11) 0.19      62.4     100.00
      5      121.79   20.25    1.919  0.59( 0.11) 0.19      67.2     200.00
      6      120.38   20.80    1.888  0.59( 0.11) 0.20      67.8     210.00
      7      115.32   22.23    1.814  0.58( 0.12) 0.20      68.4     130.00
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 2 - NODES 220-223                         *
* HYDROLOGIC ANALYSIS - 25-YEAR                                           *
 *************************************************************************

  FILE NAME: 4005P2AB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    220.00 TO NODE    221.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   187.00
  ELEVATION DATA: UPSTREAM(FEET) =    942.50  DOWNSTREAM(FEET) =    936.56

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                B        0.90      0.75      0.100    56    5.00
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      3.54
  TOTAL AREA(ACRES) =      0.90   PEAK FLOW RATE(CFS) =      3.54
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    221.00 TO NODE    222.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   932.56  DOWNSTREAM(FEET) =   930.60
  FLOW LENGTH(FEET) =   392.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  10.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.03
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.54
  PIPE TRAVEL TIME(MIN.) =   1.62    Tc(MIN.) =    6.62
  LONGEST FLOWPATH FROM NODE    220.00 TO NODE    222.00 =     579.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    222.00 TO NODE    222.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.62
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.752
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.40      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.40      SUBAREA RUNOFF(CFS) =    7.94
  EFFECTIVE AREA(ACRES) =      3.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.3       PEAK FLOW RATE(CFS) =      10.92

****************************************************************************
  FLOW PROCESS FROM NODE    222.00 TO NODE    223.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   930.60  DOWNSTREAM(FEET) =   925.73
  FLOW LENGTH(FEET) =   975.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  14.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.37
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.92
  PIPE TRAVEL TIME(MIN.) =   3.03    Tc(MIN.) =    9.65
  LONGEST FLOWPATH FROM NODE    220.00 TO NODE    223.00 =    1554.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        3.3  TC(MIN.) =      9.65
  EFFECTIVE AREA(ACRES) =      3.30  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      10.92
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 3 - NODES 300-308                         *
* HYDROLOGIC ANALYSIS - 25-YEAR                                           *
 *************************************************************************

  FILE NAME: 4005P3AB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    300.00 TO NODE    301.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   170.00
  ELEVATION DATA: UPSTREAM(FEET) =    916.35  DOWNSTREAM(FEET) =    912.38

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.028
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.426
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        1.30      0.75      0.100    56    5.03
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      5.09
  TOTAL AREA(ACRES) =      1.30   PEAK FLOW RATE(CFS) =      5.09
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    301.00 TO NODE    302.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.38  DOWNSTREAM(FEET) =   907.69
  FLOW LENGTH(FEET) =   137.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.45
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.09
  PIPE TRAVEL TIME(MIN.) =   0.51    Tc(MIN.) =    5.54
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    302.00 =     307.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    302.00 TO NODE    302.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.54
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.176
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.20      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.20      SUBAREA RUNOFF(CFS) =    4.43
  EFFECTIVE AREA(ACRES) =      2.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.5       PEAK FLOW RATE(CFS) =       9.23

****************************************************************************
  FLOW PROCESS FROM NODE    302.00 TO NODE    303.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.69  DOWNSTREAM(FEET) =   907.09
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  14.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.09
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       9.23
  PIPE TRAVEL TIME(MIN.) =   0.39    Tc(MIN.) =    5.93
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    303.00 =     427.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    303.00 TO NODE    303.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.93
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.008
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.20      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.20      SUBAREA RUNOFF(CFS) =    4.25
  EFFECTIVE AREA(ACRES) =      3.70   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.7       PEAK FLOW RATE(CFS) =      13.10

****************************************************************************
  FLOW PROCESS FROM NODE    303.00 TO NODE    304.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.09  DOWNSTREAM(FEET) =   906.49
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  16.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.56
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.10
  PIPE TRAVEL TIME(MIN.) =   0.36    Tc(MIN.) =    6.29
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    304.00 =     547.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    304.00 TO NODE    304.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.29
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.869
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.40      SUBAREA RUNOFF(CFS) =    4.78
  EFFECTIVE AREA(ACRES) =      5.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.1       PEAK FLOW RATE(CFS) =      17.41

****************************************************************************
  FLOW PROCESS FROM NODE    304.00 TO NODE    305.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.49  DOWNSTREAM(FEET) =   905.89
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.98
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      17.41
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    6.63
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    305.00 =     667.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    305.00 TO NODE    305.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.63
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.750
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.40      SUBAREA RUNOFF(CFS) =    4.63
  EFFECTIVE AREA(ACRES) =      6.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.5       PEAK FLOW RATE(CFS) =      21.50

****************************************************************************
  FLOW PROCESS FROM NODE    305.00 TO NODE    306.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.89  DOWNSTREAM(FEET) =   905.29
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  19.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.34
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      21.50
  PIPE TRAVEL TIME(MIN.) =   0.32    Tc(MIN.) =    6.94
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    306.00 =     787.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    306.00 TO NODE    306.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.94
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.647
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.20      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.20      SUBAREA RUNOFF(CFS) =    3.86
  EFFECTIVE AREA(ACRES) =      7.70   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        7.7       PEAK FLOW RATE(CFS) =      24.76

****************************************************************************
  FLOW PROCESS FROM NODE    306.00 TO NODE    307.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.29  DOWNSTREAM(FEET) =   904.76
  FLOW LENGTH(FEET) =   107.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  21.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.47
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      24.76
  PIPE TRAVEL TIME(MIN.) =   0.28    Tc(MIN.) =    7.22
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    307.00 =     894.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    307.00 TO NODE    307.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.22
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.563
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.70      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.70      SUBAREA RUNOFF(CFS) =    8.48
  EFFECTIVE AREA(ACRES) =     10.40   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       10.4       PEAK FLOW RATE(CFS) =      32.65

****************************************************************************
  FLOW PROCESS FROM NODE    307.00 TO NODE    308.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.76  DOWNSTREAM(FEET) =   903.28
  FLOW LENGTH(FEET) =   294.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  24.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.96
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      32.65
  PIPE TRAVEL TIME(MIN.) =   0.70    Tc(MIN.) =    7.92
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    308.00 =    1188.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       10.4  TC(MIN.) =      7.92
```

```
  EFFECTIVE AREA(ACRES) =     10.40  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      32.65
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 3 - NODES 310-312                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P3BB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    310.00 TO NODE    311.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   880.00
  ELEVATION DATA: UPSTREAM(FEET) =    928.60  DOWNSTREAM(FEET) =    915.50

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   18.340
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.036
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  NATURAL POOR COVER
  "OPEN BRUSH"                B        2.40      0.45     1.000    76   18.34
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.45
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA RUNOFF(CFS) =      3.42
```

```
  TOTAL AREA(ACRES) =      2.40   PEAK FLOW RATE(CFS) =      3.42

****************************************************************************
  FLOW PROCESS FROM NODE    311.00 TO NODE    312.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   911.50  DOWNSTREAM(FEET) =   911.32
  FLOW LENGTH(FEET) =    35.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   9.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.05
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.42
  PIPE TRAVEL TIME(MIN.) =   0.14    Tc(MIN.) =   18.48
  LONGEST FLOWPATH FROM NODE    310.00 TO NODE    312.00 =     915.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        2.4  TC(MIN.) =     18.48
  EFFECTIVE AREA(ACRES) =      2.40  AREA-AVERAGED Fm(INCH/HR)=  0.45
  AREA-AVERAGED Fp(INCH/HR) =  0.45  AREA-AVERAGED Ap = 1.000
  PEAK FLOW RATE(CFS)   =       3.42
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                  *
* PROPOSED CONDITION - BUILDING 3 - NODES 320-332                       *
* HYDROLOGIC ANALYSIS - 25-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P3CB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    320.00 TO NODE    321.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   429.00
  ELEVATION DATA: UPSTREAM(FEET) =    917.07  DOWNSTREAM(FEET) =    912.15

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.394
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.255
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        2.10      0.75      0.100    56    8.39
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      6.01
  TOTAL AREA(ACRES) =      2.10   PEAK FLOW RATE(CFS) =      6.01
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    321.00 TO NODE    332.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.15  DOWNSTREAM(FEET) =   907.22
  FLOW LENGTH(FEET) =   186.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.58
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.01
  PIPE TRAVEL TIME(MIN.) =   0.68    Tc(MIN.) =    9.07
  LONGEST FLOWPATH FROM NODE    320.00 TO NODE    332.00 =     615.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    332.00 TO NODE    332.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =    9.07
  RAINFALL INTENSITY(INCH/HR) =   3.11
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       2.10
  TOTAL STREAM AREA(ACRES) =       2.10
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       6.01

****************************************************************************
  FLOW PROCESS FROM NODE    330.00 TO NODE    331.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   887.00
  ELEVATION DATA: UPSTREAM(FEET) =    925.22  DOWNSTREAM(FEET) =    913.90

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   18.973
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  1.995
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  NATURAL POOR COVER
  "OPEN BRUSH"                B        7.80      0.45     1.000    76   18.97
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.45
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA RUNOFF(CFS) =     10.83
  TOTAL AREA(ACRES) =      7.80   PEAK FLOW RATE(CFS) =     10.83

****************************************************************************
  FLOW PROCESS FROM NODE    331.00 TO NODE    332.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   909.90  DOWNSTREAM(FEET) =   907.22
  FLOW LENGTH(FEET) =   132.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.04
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.83
  PIPE TRAVEL TIME(MIN.) =   0.24    Tc(MIN.) =   19.22
  LONGEST FLOWPATH FROM NODE    330.00 TO NODE    332.00 =    1019.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    332.00 TO NODE    332.00 IS CODE =   1
----------------------------------------------------------------------------
```

```
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   19.22
  RAINFALL INTENSITY(INCH/HR) =   1.98
  AREA-AVERAGED Fm(INCH/HR) =  0.45
  AREA-AVERAGED Fp(INCH/HR) =  0.45
  AREA-AVERAGED Ap =  1.00
  EFFECTIVE STREAM AREA(ACRES) =       7.80
  TOTAL STREAM AREA(ACRES) =       7.80
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      10.83

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1        6.01    9.07    3.107  0.75( 0.07) 0.10       2.1     320.00
      2       10.83   19.22    1.980  0.45( 0.45) 1.00       7.8     330.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       14.89    9.07    3.107  0.47( 0.31) 0.67       5.8     320.00
      2       14.61   19.22    1.980  0.46( 0.37) 0.81       9.9     330.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      14.89    Tc(MIN.) =     9.07
  EFFECTIVE AREA(ACRES) =       5.78   AREA-AVERAGED Fm(INCH/HR) =  0.31
  AREA-AVERAGED Fp(INCH/HR) =  0.47  AREA-AVERAGED Ap =  0.67
  TOTAL AREA(ACRES) =        9.9
  LONGEST FLOWPATH FROM NODE    330.00 TO NODE    332.00 =    1019.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        9.9  TC(MIN.) =      9.07
  EFFECTIVE AREA(ACRES) =      5.78  AREA-AVERAGED Fm(INCH/HR)=  0.31
  AREA-AVERAGED Fp(INCH/HR) =  0.47  AREA-AVERAGED Ap = 0.673
  PEAK FLOW RATE(CFS)   =      14.89

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       14.89    9.07    3.107  0.47( 0.31) 0.67       5.8     320.00
      2       14.61   19.22    1.980  0.46( 0.37) 0.81       9.9     330.00
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 3 - NODES 340-342                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P3DB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    340.00 TO NODE    341.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   206.00
  ELEVATION DATA: UPSTREAM(FEET) =    912.96  DOWNSTREAM(FEET) =    910.48

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.199
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.904
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        3.10      0.75      0.100    56    6.20
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     10.68
  TOTAL AREA(ACRES) =      3.10   PEAK FLOW RATE(CFS) =     10.68
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    341.00 TO NODE    342.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.48  DOWNSTREAM(FEET) =   906.19
  FLOW LENGTH(FEET) =    57.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  16.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.22
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.68
  PIPE TRAVEL TIME(MIN.) =   0.18    Tc(MIN.) =    6.38
  LONGEST FLOWPATH FROM NODE    340.00 TO NODE    342.00 =     263.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        3.1  TC(MIN.) =      6.38
  EFFECTIVE AREA(ACRES) =      3.10  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      10.68
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 3 - NODES 350-363                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P3EB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    350.00 TO NODE    351.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   936.00
  ELEVATION DATA: UPSTREAM(FEET) =    943.50  DOWNSTREAM(FEET) =    924.50

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   17.667
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.083
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  NATURAL POOR COVER
  "OPEN BRUSH"                B        9.80      0.45     1.000    76   17.67
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.45
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA RUNOFF(CFS) =     14.38
```

```
  TOTAL AREA(ACRES) =      9.80   PEAK FLOW RATE(CFS) =     14.38

****************************************************************************
  FLOW PROCESS FROM NODE    351.00 TO NODE    352.00 IS CODE =  52
----------------------------------------------------------------------------
  >>>>>COMPUTE NATURAL VALLEY CHANNEL FLOW<<<<<
  >>>>>TRAVELTIME THRU SUBAREA<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    924.50  DOWNSTREAM(FEET) =    924.20
  CHANNEL LENGTH THRU SUBAREA(FEET) =   169.00   CHANNEL SLOPE =  0.0018
  CHANNEL FLOW THRU SUBAREA(CFS) =      14.38
  FLOW VELOCITY(FEET/SEC) =   1.16 (PER LACFCD/RCFC&WCD HYDROLOGY MANUAL)
  TRAVEL TIME(MIN.) =   2.44   Tc(MIN.) =   20.10
  LONGEST FLOWPATH FROM NODE    350.00 TO NODE    352.00 =    1105.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    352.00 TO NODE    352.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   20.10
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  1.927
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  NATURAL POOR COVER
  "OPEN BRUSH"                B        4.70      0.45     1.000    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.45
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA AREA(ACRES) =    4.70      SUBAREA RUNOFF(CFS) =    6.24
  EFFECTIVE AREA(ACRES) =     14.50   AREA-AVERAGED Fm(INCH/HR) =  0.45
  AREA-AVERAGED Fp(INCH/HR) =  0.45  AREA-AVERAGED Ap =  1.00
  TOTAL AREA(ACRES) =       14.5       PEAK FLOW RATE(CFS) =      19.25

****************************************************************************
  FLOW PROCESS FROM NODE    352.00 TO NODE    353.00 IS CODE =  52
----------------------------------------------------------------------------
  >>>>>COMPUTE NATURAL VALLEY CHANNEL FLOW<<<<<
  >>>>>TRAVELTIME THRU SUBAREA<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    924.20  DOWNSTREAM(FEET) =    921.60
  CHANNEL LENGTH THRU SUBAREA(FEET) =   515.00   CHANNEL SLOPE =  0.0050
  CHANNEL FLOW THRU SUBAREA(CFS) =      19.25
  FLOW VELOCITY(FEET/SEC) =   2.11 (PER LACFCD/RCFC&WCD HYDROLOGY MANUAL)
  TRAVEL TIME(MIN.) =   4.07   Tc(MIN.) =   24.18
  LONGEST FLOWPATH FROM NODE    350.00 TO NODE    353.00 =    1620.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    353.00 TO NODE    353.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   24.18
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  1.725
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  NATURAL POOR COVER
  "OPEN BRUSH"                B        8.20      0.45     1.000    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.45
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA AREA(ACRES) =    8.20      SUBAREA RUNOFF(CFS) =    9.40
  EFFECTIVE AREA(ACRES) =     22.70   AREA-AVERAGED Fm(INCH/HR) =  0.45
  AREA-AVERAGED Fp(INCH/HR) =  0.45  AREA-AVERAGED Ap =  1.00
  TOTAL AREA(ACRES) =       22.7       PEAK FLOW RATE(CFS) =      26.01

****************************************************************************
  FLOW PROCESS FROM NODE    353.00 TO NODE    362.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
```

```
  ELEVATION DATA: UPSTREAM(FEET) =   917.60  DOWNSTREAM(FEET) =   907.09
  FLOW LENGTH(FEET) =   912.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.06
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      26.01
  PIPE TRAVEL TIME(MIN.) =   1.68    Tc(MIN.) =   25.85
  LONGEST FLOWPATH FROM NODE    350.00 TO NODE    362.00 =    2532.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    362.00 TO NODE    362.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   25.85
  RAINFALL INTENSITY(INCH/HR) =   1.66
  AREA-AVERAGED Fm(INCH/HR) =  0.45
  AREA-AVERAGED Fp(INCH/HR) =  0.45
  AREA-AVERAGED Ap =  1.00
  EFFECTIVE STREAM AREA(ACRES) =      22.70
  TOTAL STREAM AREA(ACRES) =      22.70
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      26.01

****************************************************************************
  FLOW PROCESS FROM NODE    360.00 TO NODE    361.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   572.00
  ELEVATION DATA: UPSTREAM(FEET) =    916.35  DOWNSTREAM(FEET) =    911.16

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.869
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.953
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        1.00      0.75      0.100    56    9.87
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.59
  TOTAL AREA(ACRES) =      1.00   PEAK FLOW RATE(CFS) =      2.59

****************************************************************************
  FLOW PROCESS FROM NODE    361.00 TO NODE    362.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.16  DOWNSTREAM(FEET) =   907.09
  FLOW LENGTH(FEET) =    14.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.76
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.59
  PIPE TRAVEL TIME(MIN.) =   0.06    Tc(MIN.) =    9.93
  LONGEST FLOWPATH FROM NODE    360.00 TO NODE    362.00 =     586.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    362.00 TO NODE    362.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    9.93
  RAINFALL INTENSITY(INCH/HR) =   2.94
  AREA-AVERAGED Fm(INCH/HR) =  0.07
```

```
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       1.00
  TOTAL STREAM AREA(ACRES) =       1.00
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       2.59

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       26.01   25.85    1.657  0.45( 0.45) 1.00      22.7     350.00
      2        2.59    9.93    2.942  0.75( 0.07) 0.10       1.0     360.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       23.24    9.93    2.942  0.46( 0.41) 0.91       9.7     360.00
      2       27.44   25.85    1.657  0.45( 0.44) 0.96      23.7     350.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      27.44    Tc(MIN.) =    25.85
  EFFECTIVE AREA(ACRES) =      23.70   AREA-AVERAGED Fm(INCH/HR) =  0.44
  AREA-AVERAGED Fp(INCH/HR) =  0.45  AREA-AVERAGED Ap =  0.96
  TOTAL AREA(ACRES) =       23.7
  LONGEST FLOWPATH FROM NODE    350.00 TO NODE    362.00 =    2532.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    362.00 TO NODE    363.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.09  DOWNSTREAM(FEET) =   903.42
  FLOW LENGTH(FEET) =   735.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  23.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.56
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      27.44
  PIPE TRAVEL TIME(MIN.) =   1.87    Tc(MIN.) =   27.72
  LONGEST FLOWPATH FROM NODE    350.00 TO NODE    363.00 =    3267.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       23.7  TC(MIN.) =     27.72
  EFFECTIVE AREA(ACRES) =     23.70  AREA-AVERAGED Fm(INCH/HR)=  0.44
  AREA-AVERAGED Fp(INCH/HR) =  0.45  AREA-AVERAGED Ap = 0.962
  PEAK FLOW RATE(CFS)   =      27.44

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       23.24   11.84    2.648  0.46( 0.41) 0.91       9.7     360.00
      2       27.44   27.72    1.589  0.45( 0.44) 0.96      23.7     350.00
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 3 - NODES 370-383                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P3FB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    370.00 TO NODE    371.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   208.00
  ELEVATION DATA: UPSTREAM(FEET) =    912.96  DOWNSTREAM(FEET) =    910.48

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.235
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.890
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        3.10      0.75      0.100    56    6.23
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     10.65
  TOTAL AREA(ACRES) =      3.10   PEAK FLOW RATE(CFS) =     10.65
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    371.00 TO NODE    372.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.48  DOWNSTREAM(FEET) =   904.85
  FLOW LENGTH(FEET) =   325.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  16.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.18
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.65
  PIPE TRAVEL TIME(MIN.) =   1.05    Tc(MIN.) =    7.28
  LONGEST FLOWPATH FROM NODE    370.00 TO NODE    372.00 =     533.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    372.00 TO NODE    372.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.28
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.545
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.70      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.70      SUBAREA RUNOFF(CFS) =    8.43
  EFFECTIVE AREA(ACRES) =      5.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.8       PEAK FLOW RATE(CFS) =      18.11

****************************************************************************
  FLOW PROCESS FROM NODE    372.00 TO NODE    383.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.85  DOWNSTREAM(FEET) =   904.04
  FLOW LENGTH(FEET) =   163.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  19.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.01
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      18.11
  PIPE TRAVEL TIME(MIN.) =   0.45    Tc(MIN.) =    7.73
  LONGEST FLOWPATH FROM NODE    370.00 TO NODE    383.00 =     696.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    383.00 TO NODE    383.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =    7.73
  RAINFALL INTENSITY(INCH/HR) =   3.42
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       5.80
  TOTAL STREAM AREA(ACRES) =       5.80
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      18.11

****************************************************************************
  FLOW PROCESS FROM NODE    380.00 TO NODE    381.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   538.00
```

```
 ELEVATION DATA: UPSTREAM(FEET) =    917.76  DOWNSTREAM(FEET) =    912.09

 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.346
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.052
 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
 COMMERCIAL                 B        1.00      0.75      0.100    56    9.35
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA RUNOFF(CFS) =      2.68
 TOTAL AREA(ACRES) =      1.00   PEAK FLOW RATE(CFS) =      2.68

****************************************************************************
 FLOW PROCESS FROM NODE    381.00 TO NODE    382.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   908.09  DOWNSTREAM(FEET) =   906.14
 FLOW LENGTH(FEET) =   140.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  12.0 INCH PIPE IS   7.1 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.56
 ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       2.68
 PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    9.77
 LONGEST FLOWPATH FROM NODE    380.00 TO NODE    382.00 =     678.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    382.00 TO NODE    382.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    9.77
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.972
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.40      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.04
 EFFECTIVE AREA(ACRES) =      1.40   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        1.4       PEAK FLOW RATE(CFS) =       3.65

****************************************************************************
 FLOW PROCESS FROM NODE    382.00 TO NODE    383.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   906.14  DOWNSTREAM(FEET) =   904.04
 FLOW LENGTH(FEET) =   150.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  12.0 INCH PIPE IS   8.8 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.91
 ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       3.65
 PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =   10.19
 LONGEST FLOWPATH FROM NODE    380.00 TO NODE    383.00 =     828.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    383.00 TO NODE    383.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
 TIME OF CONCENTRATION(MIN.) =   10.19
 RAINFALL INTENSITY(INCH/HR) =   2.90
```

```
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       1.40
  TOTAL STREAM AREA(ACRES) =       1.40
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       3.65

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       18.11    7.73    3.419  0.75( 0.07) 0.10       5.8     370.00
      2        3.65   10.19    2.897  0.75( 0.07) 0.10       1.4     380.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       21.40    7.73    3.419  0.75( 0.07) 0.10       6.9     370.00
      2       18.94   10.19    2.897  0.75( 0.07) 0.10       7.2     380.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      21.40    Tc(MIN.) =     7.73
  EFFECTIVE AREA(ACRES) =       6.86   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        7.2
  LONGEST FLOWPATH FROM NODE    380.00 TO NODE    383.00 =     828.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        7.2  TC(MIN.) =      7.73
  EFFECTIVE AREA(ACRES) =      6.86  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      21.40

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       21.40    7.73    3.419  0.75( 0.07) 0.10       6.9     370.00
      2       18.94   10.19    2.897  0.75( 0.07) 0.10       7.2     380.00
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 4 - NODES 400-410                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P4AB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    400.00 TO NODE    401.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    91.00
  ELEVATION DATA: UPSTREAM(FEET) =    912.06  DOWNSTREAM(FEET) =    910.04

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.10      0.75     0.100    56    5.00
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      0.39
  TOTAL AREA(ACRES) =      0.10   PEAK FLOW RATE(CFS) =      0.39
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    401.00 TO NODE    402.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.04  DOWNSTREAM(FEET) =   905.14
  FLOW LENGTH(FEET) =   179.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 12.000
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   3.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   2.28
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       0.39
  PIPE TRAVEL TIME(MIN.) =   1.31    Tc(MIN.) =    6.31
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    402.00 =     270.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    402.00 TO NODE    402.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.31
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.862
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.36
  EFFECTIVE AREA(ACRES) =      0.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.5       PEAK FLOW RATE(CFS) =       1.70

****************************************************************************
  FLOW PROCESS FROM NODE    402.00 TO NODE    403.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.14  DOWNSTREAM(FEET) =   903.62
  FLOW LENGTH(FEET) =   306.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   7.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.37
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.70
  PIPE TRAVEL TIME(MIN.) =   1.51    Tc(MIN.) =    7.82
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    403.00 =     576.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    403.00 TO NODE    403.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.82
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.395
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.00      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.00      SUBAREA RUNOFF(CFS) =    5.98
  EFFECTIVE AREA(ACRES) =      2.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.5       PEAK FLOW RATE(CFS) =       7.47

****************************************************************************
  FLOW PROCESS FROM NODE    403.00 TO NODE    404.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
```

```
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.62  DOWNSTREAM(FEET) =   902.84
  FLOW LENGTH(FEET) =   156.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  12.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.89
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       7.47
  PIPE TRAVEL TIME(MIN.) =   0.53    Tc(MIN.) =    8.35
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    404.00 =     732.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    404.00 TO NODE    404.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.35
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.264
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.30      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.30      SUBAREA RUNOFF(CFS) =    3.73
  EFFECTIVE AREA(ACRES) =      3.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.8       PEAK FLOW RATE(CFS) =      10.91

****************************************************************************
  FLOW PROCESS FROM NODE    404.00 TO NODE    405.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   902.84  DOWNSTREAM(FEET) =   902.06
  FLOW LENGTH(FEET) =   156.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  17.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.17
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.91
  PIPE TRAVEL TIME(MIN.) =   0.50    Tc(MIN.) =    8.86
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    405.00 =     888.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    405.00 TO NODE    405.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.86
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.151
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.30      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.30      SUBAREA RUNOFF(CFS) =    3.60
  EFFECTIVE AREA(ACRES) =      5.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.1       PEAK FLOW RATE(CFS) =      14.12

****************************************************************************
  FLOW PROCESS FROM NODE    405.00 TO NODE    406.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   902.06  DOWNSTREAM(FEET) =   901.28
  FLOW LENGTH(FEET) =   156.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.62
```

```
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      14.12
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    9.32
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    406.00 =    1044.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    406.00 TO NODE    406.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.32
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.057
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.30      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.30      SUBAREA RUNOFF(CFS) =    3.49
  EFFECTIVE AREA(ACRES) =      6.40   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.4       PEAK FLOW RATE(CFS) =      17.18

****************************************************************************
  FLOW PROCESS FROM NODE    406.00 TO NODE    407.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.28  DOWNSTREAM(FEET) =   900.50
  FLOW LENGTH(FEET) =   156.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.97
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      17.18
  PIPE TRAVEL TIME(MIN.) =   0.44    Tc(MIN.) =    9.76
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    407.00 =    1200.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    407.00 TO NODE    407.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.76
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.974
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.30      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.30      SUBAREA RUNOFF(CFS) =    3.39
  EFFECTIVE AREA(ACRES) =      7.70   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        7.7       PEAK FLOW RATE(CFS) =      20.09

****************************************************************************
  FLOW PROCESS FROM NODE    407.00 TO NODE    408.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   900.50  DOWNSTREAM(FEET) =   899.71
  FLOW LENGTH(FEET) =   158.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  20.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.10
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      20.09
  PIPE TRAVEL TIME(MIN.) =   0.43    Tc(MIN.) =   10.19
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    408.00 =    1358.00 FEET.

****************************************************************************
```

```
 FLOW PROCESS FROM NODE    408.00 TO NODE    408.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   10.19
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.898
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        1.80      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    1.80      SUBAREA RUNOFF(CFS) =    4.57
 EFFECTIVE AREA(ACRES) =      9.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        9.5       PEAK FLOW RATE(CFS) =      24.14

****************************************************************************
 FLOW PROCESS FROM NODE    408.00 TO NODE    409.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   899.71  DOWNSTREAM(FEET) =   898.04
 FLOW LENGTH(FEET) =   334.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  30.0 INCH PIPE IS  21.3 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   6.47
 ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      24.14
 PIPE TRAVEL TIME(MIN.) =   0.86    Tc(MIN.) =   11.05
 LONGEST FLOWPATH FROM NODE    400.00 TO NODE    409.00 =    1692.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    409.00 TO NODE    409.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   11.05
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.760
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.40      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    0.97
 EFFECTIVE AREA(ACRES) =      9.90   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        9.9       PEAK FLOW RATE(CFS) =      24.14
 NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE

****************************************************************************
 FLOW PROCESS FROM NODE    409.00 TO NODE    410.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   898.04  DOWNSTREAM(FEET) =   897.21
 FLOW LENGTH(FEET) =   166.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  30.0 INCH PIPE IS  21.3 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   6.47
 ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      24.14
 PIPE TRAVEL TIME(MIN.) =   0.43    Tc(MIN.) =   11.47
 LONGEST FLOWPATH FROM NODE    400.00 TO NODE    410.00 =    1858.00 FEET.
============================================================================
 END OF STUDY SUMMARY:
 TOTAL AREA(ACRES)     =        9.9  TC(MIN.) =     11.47
 EFFECTIVE AREA(ACRES) =      9.90  AREA-AVERAGED Fm(INCH/HR)=  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
 PEAK FLOW RATE(CFS)   =      24.14
============================================================================
```

```
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 5 - NODES 500-524                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P5AB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    500.00 TO NODE    501.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   307.00
  ELEVATION DATA: UPSTREAM(FEET) =    942.80  DOWNSTREAM(FEET) =    932.29

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.900
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.022
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        2.50      0.75      0.100    56    5.90
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      8.88
  TOTAL AREA(ACRES) =      2.50   PEAK FLOW RATE(CFS) =      8.88
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    501.00 TO NODE    502.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   928.29  DOWNSTREAM(FEET) =   926.43
  FLOW LENGTH(FEET) =   372.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  14.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.06
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       8.88
  PIPE TRAVEL TIME(MIN.) =   1.23    Tc(MIN.) =    7.13
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    502.00 =     679.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    502.00 TO NODE    502.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.13
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.591
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.90      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.90      SUBAREA RUNOFF(CFS) =    6.01
  EFFECTIVE AREA(ACRES) =      4.40   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.4       PEAK FLOW RATE(CFS) =      13.92

****************************************************************************
  FLOW PROCESS FROM NODE    502.00 TO NODE    503.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   926.43  DOWNSTREAM(FEET) =   925.72
  FLOW LENGTH(FEET) =   142.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.61
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.92
  PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    7.55
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    503.00 =     821.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    503.00 TO NODE    503.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.55
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.469
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.90      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.90      SUBAREA RUNOFF(CFS) =    2.75
  EFFECTIVE AREA(ACRES) =      5.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.3       PEAK FLOW RATE(CFS) =      16.19

****************************************************************************
  FLOW PROCESS FROM NODE    503.00 TO NODE    504.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.72  DOWNSTREAM(FEET) =   925.12
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  17.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.90
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      16.19
  PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    7.89
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    504.00 =     941.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    504.00 TO NODE    504.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    7.89
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.379
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.97
  EFFECTIVE AREA(ACRES) =      6.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.3       PEAK FLOW RATE(CFS) =      18.73

****************************************************************************
  FLOW PROCESS FROM NODE    504.00 TO NODE    505.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.12  DOWNSTREAM(FEET) =   923.51
  FLOW LENGTH(FEET) =   321.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  19.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.06
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      18.73
  PIPE TRAVEL TIME(MIN.) =   0.88    Tc(MIN.) =    8.77
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    505.00 =    1262.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    505.00 TO NODE    505.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    8.77
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.171
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        3.10      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    3.10      SUBAREA RUNOFF(CFS) =    8.64
  EFFECTIVE AREA(ACRES) =      9.40   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        9.4       PEAK FLOW RATE(CFS) =      26.19

****************************************************************************
  FLOW PROCESS FROM NODE    505.00 TO NODE    506.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   923.51  DOWNSTREAM(FEET) =   922.07
  FLOW LENGTH(FEET) =   288.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  22.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.54
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      26.19
  PIPE TRAVEL TIME(MIN.) =   0.73    Tc(MIN.) =    9.50
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    506.00 =    1550.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    506.00 TO NODE    506.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.50
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.021
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.80      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.80      SUBAREA RUNOFF(CFS) =    4.77
  EFFECTIVE AREA(ACRES) =     11.20   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       11.2       PEAK FLOW RATE(CFS) =      29.70

****************************************************************************
  FLOW PROCESS FROM NODE    506.00 TO NODE    523.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   922.07  DOWNSTREAM(FEET) =   921.07
  FLOW LENGTH(FEET) =   200.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  22.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.84
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      29.70
  PIPE TRAVEL TIME(MIN.) =   0.49    Tc(MIN.) =    9.99
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    523.00 =    1750.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    523.00 TO NODE    523.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =    9.99
  RAINFALL INTENSITY(INCH/HR) =   2.93
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =      11.20
  TOTAL STREAM AREA(ACRES) =      11.20
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      29.70

****************************************************************************
  FLOW PROCESS FROM NODE    511.00 TO NODE    511.00 IS CODE =  22
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   200.00
  USER SPECIFIED Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.60      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.36
  TOTAL AREA(ACRES) =      0.60   PEAK FLOW RATE(CFS) =      2.36

****************************************************************************
```

```
 FLOW PROCESS FROM NODE    511.00 TO NODE    512.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   929.43  DOWNSTREAM(FEET) =   928.82
 FLOW LENGTH(FEET) =   122.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  12.0 INCH PIPE IS   9.4 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   3.56
 ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       2.36
 PIPE TRAVEL TIME(MIN.) =   0.57    Tc(MIN.) =    5.57
 LONGEST FLOWPATH FROM NODE    511.00 TO NODE    512.00 =     322.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    512.00 TO NODE    512.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    5.57
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.162
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.84
 EFFECTIVE AREA(ACRES) =      1.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        1.1       PEAK FLOW RATE(CFS) =       4.05

****************************************************************************
 FLOW PROCESS FROM NODE    512.00 TO NODE    513.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   928.82  DOWNSTREAM(FEET) =   928.26
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  15.0 INCH PIPE IS  11.2 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.11
 ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       4.05
 PIPE TRAVEL TIME(MIN.) =   0.45    Tc(MIN.) =    6.03
 LONGEST FLOWPATH FROM NODE    511.00 TO NODE    513.00 =     434.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    513.00 TO NODE    513.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    6.03
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.971
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.75
 EFFECTIVE AREA(ACRES) =      1.60   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        1.6       PEAK FLOW RATE(CFS) =       5.61

****************************************************************************
 FLOW PROCESS FROM NODE    513.00 TO NODE    514.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   928.26  DOWNSTREAM(FEET) =   927.70
```

```
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.52
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.61
  PIPE TRAVEL TIME(MIN.) =   0.41    Tc(MIN.) =    6.44
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    514.00 =     546.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    514.00 TO NODE    514.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.44
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.816
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.68
  EFFECTIVE AREA(ACRES) =      2.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.1       PEAK FLOW RATE(CFS) =       7.07

****************************************************************************
  FLOW PROCESS FROM NODE    514.00 TO NODE    515.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   927.70  DOWNSTREAM(FEET) =   927.14
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  14.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.67
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       7.07
  PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =    6.84
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    515.00 =     658.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    515.00 TO NODE    515.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.84
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.681
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.62
  EFFECTIVE AREA(ACRES) =      2.60   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.6       PEAK FLOW RATE(CFS) =       8.44

****************************************************************************
  FLOW PROCESS FROM NODE    515.00 TO NODE    516.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   927.14  DOWNSTREAM(FEET) =   926.53
  FLOW LENGTH(FEET) =   122.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  13.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.01
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       8.44
  PIPE TRAVEL TIME(MIN.) =   0.41    Tc(MIN.) =    7.24
```

```
 LONGEST FLOWPATH FROM NODE    511.00 TO NODE    516.00 =     780.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    516.00 TO NODE    516.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    7.24
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.556
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.57
 EFFECTIVE AREA(ACRES) =      3.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        3.1       PEAK FLOW RATE(CFS) =       9.71

****************************************************************************
 FLOW PROCESS FROM NODE    516.00 TO NODE    517.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   926.53  DOWNSTREAM(FEET) =   925.92
 FLOW LENGTH(FEET) =   122.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  15.4 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.13
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       9.71
 PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =    7.64
 LONGEST FLOWPATH FROM NODE    511.00 TO NODE    517.00 =     902.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    517.00 TO NODE    517.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    7.64
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.444
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.52
 EFFECTIVE AREA(ACRES) =      3.60   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        3.6       PEAK FLOW RATE(CFS) =      10.92

****************************************************************************
 FLOW PROCESS FROM NODE    517.00 TO NODE    518.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   925.92  DOWNSTREAM(FEET) =   925.36
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  17.2 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.18
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      10.92
 PIPE TRAVEL TIME(MIN.) =   0.36    Tc(MIN.) =    8.00
 LONGEST FLOWPATH FROM NODE    511.00 TO NODE    518.00 =    1014.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    518.00 TO NODE    518.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
```

```
==========================================================================
  MAINLINE Tc(MIN.) =    8.00
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.350
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.47
  EFFECTIVE AREA(ACRES) =      4.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.1       PEAK FLOW RATE(CFS) =      12.08

**************************************************************************
  FLOW PROCESS FROM NODE    518.00 TO NODE    519.00 IS CODE =  31
--------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.36  DOWNSTREAM(FEET) =   924.80
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.48
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      12.08
  PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    8.34
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    519.00 =    1126.00 FEET.

**************************************************************************
  FLOW PROCESS FROM NODE    519.00 TO NODE    519.00 IS CODE =  81
--------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    8.34
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.267
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.44
  EFFECTIVE AREA(ACRES) =      4.60   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.6       PEAK FLOW RATE(CFS) =      13.22

**************************************************************************
  FLOW PROCESS FROM NODE    519.00 TO NODE    520.00 IS CODE =  31
--------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   924.80  DOWNSTREAM(FEET) =   924.24
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.57
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.22
  PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    8.68
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    520.00 =    1238.00 FEET.

**************************************************************************
  FLOW PROCESS FROM NODE    520.00 TO NODE    520.00 IS CODE =  81
--------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    8.68
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.191
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
```

```
  COMMERCIAL                B        0.60      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.60      SUBAREA RUNOFF(CFS) =    1.68
  EFFECTIVE AREA(ACRES) =      5.20   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.2       PEAK FLOW RATE(CFS) =      14.58

****************************************************************************
  FLOW PROCESS FROM NODE    520.00 TO NODE    521.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   924.24  DOWNSTREAM(FEET) =   922.64
  FLOW LENGTH(FEET) =   320.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  18.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.64
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      14.58
  PIPE TRAVEL TIME(MIN.) =   0.95    Tc(MIN.) =    9.62
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    521.00 =    1558.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    521.00 TO NODE    521.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.62
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.999
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                B        0.60      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.60      SUBAREA RUNOFF(CFS) =    1.58
  EFFECTIVE AREA(ACRES) =      5.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.8       PEAK FLOW RATE(CFS) =      15.26

****************************************************************************
  FLOW PROCESS FROM NODE    521.00 TO NODE    522.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   922.64  DOWNSTREAM(FEET) =   921.81
  FLOW LENGTH(FEET) =   166.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  19.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.66
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      15.26
  PIPE TRAVEL TIME(MIN.) =   0.49    Tc(MIN.) =   10.11
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    522.00 =    1724.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    522.00 TO NODE    522.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   10.11
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.911
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                B        0.80      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.80      SUBAREA RUNOFF(CFS) =    2.04
  EFFECTIVE AREA(ACRES) =      6.60   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
```

```
 TOTAL AREA(ACRES) =        6.6       PEAK FLOW RATE(CFS) =      16.85

****************************************************************************
 FLOW PROCESS FROM NODE    522.00 TO NODE    523.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   921.81  DOWNSTREAM(FEET) =   921.07
 FLOW LENGTH(FEET) =   148.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.1 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.95
 ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      16.85
 PIPE TRAVEL TIME(MIN.) =   0.41    Tc(MIN.) =   10.53
 LONGEST FLOWPATH FROM NODE    511.00 TO NODE    523.00 =    1872.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    523.00 TO NODE    523.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
 TIME OF CONCENTRATION(MIN.) =   10.53
 RAINFALL INTENSITY(INCH/HR) =   2.84
 AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75
 AREA-AVERAGED Ap =  0.10
 EFFECTIVE STREAM AREA(ACRES) =       6.60
 TOTAL STREAM AREA(ACRES) =       6.60
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      16.85

 ** CONFLUENCE DATA **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1       29.70    9.99    2.932  0.75( 0.07) 0.10      11.2     500.00
     2       16.85   10.53    2.841  0.75( 0.07) 0.10       6.6     511.00

 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR  2 STREAMS.

 ** PEAK FLOW RATE TABLE **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1       46.21    9.99    2.932  0.75( 0.07) 0.10      17.5     500.00
     2       45.60   10.53    2.841  0.75( 0.07) 0.10      17.8     511.00

 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) =      46.21    Tc(MIN.) =     9.99
 EFFECTIVE AREA(ACRES) =      17.46   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =       17.8
 LONGEST FLOWPATH FROM NODE    511.00 TO NODE    523.00 =    1872.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    523.00 TO NODE    524.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   921.07  DOWNSTREAM(FEET) =   920.99
 FLOW LENGTH(FEET) =    16.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  39.0 INCH PIPE IS  26.7 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   7.64
 ESTIMATED PIPE DIAMETER(INCH) =  39.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      46.21
 PIPE TRAVEL TIME(MIN.) =   0.03    Tc(MIN.) =   10.02
 LONGEST FLOWPATH FROM NODE    511.00 TO NODE    524.00 =    1888.00 FEET.
============================================================================
 END OF STUDY SUMMARY:
```

```
  TOTAL AREA(ACRES)     =       17.8  TC(MIN.) =     10.02
  EFFECTIVE AREA(ACRES) =     17.46  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      46.21

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       46.21   10.02    2.926  0.75( 0.07) 0.10      17.5     500.00
      2       45.60   10.56    2.836  0.75( 0.07) 0.10      17.8     511.00
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 6 - NODES 600-614                         *
* HYDROLOGIC ANALYSIS - 25-YEAR                                           *
 *************************************************************************

  FILE NAME: 4005P6AB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    600.00 TO NODE    601.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   129.00
  ELEVATION DATA: UPSTREAM(FEET) =    921.90  DOWNSTREAM(FEET) =    917.22

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.30      0.75      0.100    56    5.00
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.18
  TOTAL AREA(ACRES) =      0.30   PEAK FLOW RATE(CFS) =      1.18
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    601.00 TO NODE    602.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   913.22  DOWNSTREAM(FEET) =   911.75
  FLOW LENGTH(FEET) =   224.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 12.000
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   5.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.43
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.18
  PIPE TRAVEL TIME(MIN.) =   1.09    Tc(MIN.) =    6.09
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    602.00 =     353.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    602.00 TO NODE    602.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.09
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.946
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.74
  EFFECTIVE AREA(ACRES) =      0.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       2.79

****************************************************************************
  FLOW PROCESS FROM NODE    602.00 TO NODE    603.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   911.75  DOWNSTREAM(FEET) =   909.19
  FLOW LENGTH(FEET) =   388.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   9.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.09
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.79
  PIPE TRAVEL TIME(MIN.) =   1.58    Tc(MIN.) =    7.67
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    603.00 =     741.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    603.00 TO NODE    603.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.67
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.436
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.30      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.30      SUBAREA RUNOFF(CFS) =    6.96
  EFFECTIVE AREA(ACRES) =      3.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.1       PEAK FLOW RATE(CFS) =       9.38

****************************************************************************
  FLOW PROCESS FROM NODE    603.00 TO NODE    604.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
```

```
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   909.19  DOWNSTREAM(FEET) =   908.42
  FLOW LENGTH(FEET) =   118.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  13.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.69
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       9.38
  PIPE TRAVEL TIME(MIN.) =   0.35    Tc(MIN.) =    8.01
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    604.00 =     859.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    604.00 TO NODE    604.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.01
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.346
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.94
  EFFECTIVE AREA(ACRES) =      4.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.1       PEAK FLOW RATE(CFS) =      12.07

****************************************************************************
  FLOW PROCESS FROM NODE    604.00 TO NODE    605.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.42  DOWNSTREAM(FEET) =   907.63
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  16.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.93
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      12.07
  PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    8.35
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    605.00 =     979.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    605.00 TO NODE    605.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.35
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.265
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.87
  EFFECTIVE AREA(ACRES) =      5.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.1       PEAK FLOW RATE(CFS) =      14.64

****************************************************************************
  FLOW PROCESS FROM NODE    605.00 TO NODE    606.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.63  DOWNSTREAM(FEET) =   906.84
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  16.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.35
```

```
 ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      14.64
 PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    8.67
 LONGEST FLOWPATH FROM NODE    600.00 TO NODE    606.00 =    1099.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    606.00 TO NODE    606.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    8.67
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.193
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        1.00      0.75     0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.81
 EFFECTIVE AREA(ACRES) =      6.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        6.1       PEAK FLOW RATE(CFS) =      17.12

****************************************************************************
 FLOW PROCESS FROM NODE    606.00 TO NODE    607.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   906.84  DOWNSTREAM(FEET) =   904.88
 FLOW LENGTH(FEET) =   297.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  24.0 INCH PIPE IS  18.8 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   6.49
 ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      17.12
 PIPE TRAVEL TIME(MIN.) =   0.76    Tc(MIN.) =    9.43
 LONGEST FLOWPATH FROM NODE    600.00 TO NODE    607.00 =    1396.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    607.00 TO NODE    607.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    9.43
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.035
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        2.70      0.75     0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    2.70      SUBAREA RUNOFF(CFS) =    7.19
 EFFECTIVE AREA(ACRES) =      8.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        8.8       PEAK FLOW RATE(CFS) =      23.45

****************************************************************************
 FLOW PROCESS FROM NODE    607.00 TO NODE    608.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   904.88  DOWNSTREAM(FEET) =   903.30
 FLOW LENGTH(FEET) =   239.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  27.0 INCH PIPE IS  21.1 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   7.03
 ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      23.45
 PIPE TRAVEL TIME(MIN.) =   0.57    Tc(MIN.) =   10.00
 LONGEST FLOWPATH FROM NODE    600.00 TO NODE    608.00 =    1635.00 FEET.

****************************************************************************
```

```
 FLOW PROCESS FROM NODE    608.00 TO NODE    608.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   10.00
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.931
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        2.20      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    2.20      SUBAREA RUNOFF(CFS) =    5.66
 EFFECTIVE AREA(ACRES) =     11.00   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =       11.0       PEAK FLOW RATE(CFS) =      28.28

****************************************************************************
 FLOW PROCESS FROM NODE    608.00 TO NODE    609.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   903.30  DOWNSTREAM(FEET) =   901.86
 FLOW LENGTH(FEET) =   219.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  30.0 INCH PIPE IS  21.7 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   7.44
 ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      28.28
 PIPE TRAVEL TIME(MIN.) =   0.49    Tc(MIN.) =   10.49
 LONGEST FLOWPATH FROM NODE    600.00 TO NODE    609.00 =    1854.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    609.00 TO NODE    609.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   10.49
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.848
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        1.20      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    1.20      SUBAREA RUNOFF(CFS) =    2.99
 EFFECTIVE AREA(ACRES) =     12.20   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =       12.2       PEAK FLOW RATE(CFS) =      30.45

****************************************************************************
 FLOW PROCESS FROM NODE    609.00 TO NODE    613.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   901.86  DOWNSTREAM(FEET) =   901.25
 FLOW LENGTH(FEET) =    93.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  30.0 INCH PIPE IS  23.1 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   7.50
 ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      30.45
 PIPE TRAVEL TIME(MIN.) =   0.21    Tc(MIN.) =   10.69
 LONGEST FLOWPATH FROM NODE    600.00 TO NODE    613.00 =    1947.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    613.00 TO NODE    613.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
```

```
  TIME OF CONCENTRATION(MIN.) =   10.69
  RAINFALL INTENSITY(INCH/HR) =   2.81
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =      12.20
  TOTAL STREAM AREA(ACRES) =      12.20
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      30.45

****************************************************************************
  FLOW PROCESS FROM NODE    610.00 TO NODE    611.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   230.00
  ELEVATION DATA: UPSTREAM(FEET) =    913.20  DOWNSTREAM(FEET) =    907.65

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.637
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.133
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.50      0.75      0.100    56    5.64
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.83
  TOTAL AREA(ACRES) =      0.50   PEAK FLOW RATE(CFS) =      1.83

****************************************************************************
  FLOW PROCESS FROM NODE    611.00 TO NODE    612.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.65  DOWNSTREAM(FEET) =   901.78
  FLOW LENGTH(FEET) =   373.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   7.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.43
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.83
  PIPE TRAVEL TIME(MIN.) =   1.81    Tc(MIN.) =    7.45
  LONGEST FLOWPATH FROM NODE    610.00 TO NODE    612.00 =     603.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    612.00 TO NODE    612.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.45
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.497
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.23
  EFFECTIVE AREA(ACRES) =      0.90   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.9       PEAK FLOW RATE(CFS) =       2.77

****************************************************************************
  FLOW PROCESS FROM NODE    612.00 TO NODE    613.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.78  DOWNSTREAM(FEET) =   901.25
  FLOW LENGTH(FEET) =   106.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.6 INCHES
```

```
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.83
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.77
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    7.91
  LONGEST FLOWPATH FROM NODE    610.00 TO NODE    613.00 =     709.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    613.00 TO NODE    613.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    7.91
  RAINFALL INTENSITY(INCH/HR) =   3.37
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       0.90
  TOTAL STREAM AREA(ACRES) =       0.90
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       2.77

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       30.45   10.69    2.815  0.75( 0.07) 0.10      12.2     600.00
      2        2.77    7.91    3.373  0.75( 0.07) 0.10       0.9     610.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       29.88    7.91    3.373  0.75( 0.07) 0.10       9.9     610.00
      2       32.75   10.69    2.815  0.75( 0.07) 0.10      13.1     600.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      32.75    Tc(MIN.) =    10.69
  EFFECTIVE AREA(ACRES) =      13.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       13.1
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    613.00 =    1947.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    613.00 TO NODE    614.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.25  DOWNSTREAM(FEET) =   901.09
  FLOW LENGTH(FEET) =    31.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  24.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.04
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      32.75
  PIPE TRAVEL TIME(MIN.) =   0.07    Tc(MIN.) =   10.77
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    614.00 =    1978.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       13.1  TC(MIN.) =     10.77
  EFFECTIVE AREA(ACRES) =     13.10  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      32.75

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       29.88    7.99    3.354  0.75( 0.07) 0.10       9.9     610.00
      2       32.75   10.77    2.803  0.75( 0.07) 0.10      13.1     600.00
============================================================================
```

```
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 6 - NODES 620-632                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P6BB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    621.00 TO NODE    621.00 IS CODE =  22
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    93.00
  USER SPECIFIED Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.96
  TOTAL AREA(ACRES) =      0.50   PEAK FLOW RATE(CFS) =      1.96

**************************************************************************
  FLOW PROCESS FROM NODE    621.00 TO NODE    622.00 IS CODE =  31
```

```
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.76  DOWNSTREAM(FEET) =   908.15
  FLOW LENGTH(FEET) =   122.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   8.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.47
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.96
  PIPE TRAVEL TIME(MIN.) =   0.59    Tc(MIN.) =    5.59
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    622.00 =     215.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    622.00 TO NODE    622.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.59
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.156
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.84
  EFFECTIVE AREA(ACRES) =      1.00   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.0       PEAK FLOW RATE(CFS) =       3.67

****************************************************************************
  FLOW PROCESS FROM NODE    622.00 TO NODE    623.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.15  DOWNSTREAM(FEET) =   907.59
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  10.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.05
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.67
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    6.05
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    623.00 =     327.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    623.00 TO NODE    623.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.05
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.963
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.75
  EFFECTIVE AREA(ACRES) =      1.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.5       PEAK FLOW RATE(CFS) =       5.25

****************************************************************************
  FLOW PROCESS FROM NODE    623.00 TO NODE    624.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.59  DOWNSTREAM(FEET) =   907.03
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
```

```
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.46
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.25
  PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    6.46
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    624.00 =     439.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    624.00 TO NODE    624.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.46
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.807
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.68
  EFFECTIVE AREA(ACRES) =      2.00   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.0       PEAK FLOW RATE(CFS) =       6.72

****************************************************************************
  FLOW PROCESS FROM NODE    624.00 TO NODE    625.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.03  DOWNSTREAM(FEET) =   906.47
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.65
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.72
  PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =    6.87
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    625.00 =     551.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    625.00 TO NODE    625.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.87
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.672
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.62
  EFFECTIVE AREA(ACRES) =      2.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.5       PEAK FLOW RATE(CFS) =       8.09

****************************************************************************
  FLOW PROCESS FROM NODE    625.00 TO NODE    626.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.47  DOWNSTREAM(FEET) =   905.91
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  13.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.97
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       8.09
  PIPE TRAVEL TIME(MIN.) =   0.38    Tc(MIN.) =    7.24
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    626.00 =     663.00 FEET.
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    626.00 TO NODE    626.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.24
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.556
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.57
  EFFECTIVE AREA(ACRES) =      3.00   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.0       PEAK FLOW RATE(CFS) =       9.40

****************************************************************************
  FLOW PROCESS FROM NODE    626.00 TO NODE    627.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.91  DOWNSTREAM(FEET) =   905.35
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  15.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.11
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       9.40
  PIPE TRAVEL TIME(MIN.) =   0.37    Tc(MIN.) =    7.61
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    627.00 =     775.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    627.00 TO NODE    627.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.61
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.453
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.52
  EFFECTIVE AREA(ACRES) =      3.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.5       PEAK FLOW RATE(CFS) =      10.64

****************************************************************************
  FLOW PROCESS FROM NODE    627.00 TO NODE    628.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.35  DOWNSTREAM(FEET) =   904.74
  FLOW LENGTH(FEET) =   122.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  16.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.17
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.64
  PIPE TRAVEL TIME(MIN.) =   0.39    Tc(MIN.) =    8.00
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    628.00 =     897.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    628.00 TO NODE    628.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
```

```
  MAINLINE Tc(MIN.) =    8.00
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.350
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.47
  EFFECTIVE AREA(ACRES) =      4.00   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.0       PEAK FLOW RATE(CFS) =      11.79

****************************************************************************
  FLOW PROCESS FROM NODE    628.00 TO NODE    629.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.74  DOWNSTREAM(FEET) =   904.18
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.46
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      11.79
  PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    8.34
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    629.00 =    1009.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    629.00 TO NODE    629.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.34
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.267
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.44
  EFFECTIVE AREA(ACRES) =      4.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.5       PEAK FLOW RATE(CFS) =      12.93

****************************************************************************
  FLOW PROCESS FROM NODE    629.00 TO NODE    630.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.18  DOWNSTREAM(FEET) =   903.62
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  16.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.55
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      12.93
  PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    8.68
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    630.00 =    1121.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    630.00 TO NODE    630.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.68
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.190
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75      0.100    56
```

```
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.40
  EFFECTIVE AREA(ACRES) =      5.00   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.0       PEAK FLOW RATE(CFS) =      14.02

****************************************************************************
  FLOW PROCESS FROM NODE    630.00 TO NODE    631.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.62  DOWNSTREAM(FEET) =   903.06
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.62
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      14.02
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    9.01
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    631.00 =    1233.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    631.00 TO NODE    631.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.01
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.119
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.80      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.80      SUBAREA RUNOFF(CFS) =    2.19
  EFFECTIVE AREA(ACRES) =      5.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.8       PEAK FLOW RATE(CFS) =      15.89

****************************************************************************
  FLOW PROCESS FROM NODE    631.00 TO NODE    632.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.06  DOWNSTREAM(FEET) =   902.00
  FLOW LENGTH(FEET) =   212.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  17.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.88
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      15.89
  PIPE TRAVEL TIME(MIN.) =   0.60    Tc(MIN.) =    9.61
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    632.00 =    1445.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        5.8  TC(MIN.) =      9.61
  EFFECTIVE AREA(ACRES) =      5.80  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      15.89
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 7 - NODES 701-707                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P7AB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    701.00 TO NODE    701.00 IS CODE =  22
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    93.00
  USER SPECIFIED Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.57
  TOTAL AREA(ACRES) =      0.40   PEAK FLOW RATE(CFS) =      1.57

**************************************************************************
  FLOW PROCESS FROM NODE    701.00 TO NODE    702.00 IS CODE =  31
```

```
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   923.31  DOWNSTREAM(FEET) =   922.74
  FLOW LENGTH(FEET) =   114.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   7.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.32
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.57
  PIPE TRAVEL TIME(MIN.) =   0.57    Tc(MIN.) =    5.57
  LONGEST FLOWPATH FROM NODE    701.00 TO NODE    702.00 =     207.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    702.00 TO NODE    702.00 IS CODE =  81
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =    5.57
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.162
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.30      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.30      SUBAREA RUNOFF(CFS) =    1.10
  EFFECTIVE AREA(ACRES) =      0.70   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.7       PEAK FLOW RATE(CFS) =       2.57

****************************************************************************
  FLOW PROCESS FROM NODE    702.00 TO NODE    703.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   922.74  DOWNSTREAM(FEET) =   922.22
  FLOW LENGTH(FEET) =   104.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.76
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.57
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    6.03
  LONGEST FLOWPATH FROM NODE    701.00 TO NODE    703.00 =     311.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    703.00 TO NODE    703.00 IS CODE =  81
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =    6.03
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.968
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.30      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.30      SUBAREA RUNOFF(CFS) =    1.05
  EFFECTIVE AREA(ACRES) =      1.00   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.0       PEAK FLOW RATE(CFS) =       3.50

****************************************************************************
  FLOW PROCESS FROM NODE    703.00 TO NODE    704.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   922.22  DOWNSTREAM(FEET) =   921.70
  FLOW LENGTH(FEET) =   104.00   MANNING'S N =  0.013
```

```
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  10.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.02
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.50
  PIPE TRAVEL TIME(MIN.) =   0.43    Tc(MIN.) =    6.47
  LONGEST FLOWPATH FROM NODE    701.00 TO NODE    704.00 =     415.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    704.00 TO NODE    704.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.47
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.807
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.30      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.30      SUBAREA RUNOFF(CFS) =    1.01
  EFFECTIVE AREA(ACRES) =      1.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.3       PEAK FLOW RATE(CFS) =       4.37

****************************************************************************
  FLOW PROCESS FROM NODE    704.00 TO NODE    705.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   921.70  DOWNSTREAM(FEET) =   921.18
  FLOW LENGTH(FEET) =   104.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  12.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.14
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.37
  PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    6.88
  LONGEST FLOWPATH FROM NODE    701.00 TO NODE    705.00 =     519.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    705.00 TO NODE    705.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.88
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.666
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.30      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.30      SUBAREA RUNOFF(CFS) =    0.97
  EFFECTIVE AREA(ACRES) =      1.60   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.6       PEAK FLOW RATE(CFS) =       5.17

****************************************************************************
  FLOW PROCESS FROM NODE    705.00 TO NODE    706.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   921.18  DOWNSTREAM(FEET) =   920.66
  FLOW LENGTH(FEET) =   104.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.45
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.17
  PIPE TRAVEL TIME(MIN.) =   0.39    Tc(MIN.) =    7.27
  LONGEST FLOWPATH FROM NODE    701.00 TO NODE    706.00 =     623.00 FEET.
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    706.00 TO NODE    706.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.27
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.547
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.25
  EFFECTIVE AREA(ACRES) =      2.00   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.0       PEAK FLOW RATE(CFS) =       6.25

****************************************************************************
  FLOW PROCESS FROM NODE    706.00 TO NODE    707.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   920.66  DOWNSTREAM(FEET) =   920.32
  FLOW LENGTH(FEET) =    68.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.61
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.25
  PIPE TRAVEL TIME(MIN.) =   0.25    Tc(MIN.) =    7.52
  LONGEST FLOWPATH FROM NODE    701.00 TO NODE    707.00 =     691.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        2.0  TC(MIN.) =      7.52
  EFFECTIVE AREA(ACRES) =      2.00  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       6.25
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 7 - NODES 710-717                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P7BB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    710.00 TO NODE    711.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   186.00
  ELEVATION DATA: UPSTREAM(FEET) =    933.16  DOWNSTREAM(FEET) =    931.42

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.259
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.882
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                B        0.50      0.75      0.100    56    6.26
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.71
  TOTAL AREA(ACRES) =      0.50   PEAK FLOW RATE(CFS) =      1.71
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    711.00 TO NODE    712.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   927.42  DOWNSTREAM(FEET) =   925.27
  FLOW LENGTH(FEET) =   430.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   7.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.38
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.71
  PIPE TRAVEL TIME(MIN.) =   2.12    Tc(MIN.) =    8.38
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    712.00 =     616.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    712.00 TO NODE    712.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.38
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.258
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.10      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.10      SUBAREA RUNOFF(CFS) =    6.02
  EFFECTIVE AREA(ACRES) =      2.60   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.6       PEAK FLOW RATE(CFS) =       7.45

****************************************************************************
  FLOW PROCESS FROM NODE    712.00 TO NODE    713.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.27  DOWNSTREAM(FEET) =   923.67
  FLOW LENGTH(FEET) =   319.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  12.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.89
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       7.45
  PIPE TRAVEL TIME(MIN.) =   1.09    Tc(MIN.) =    9.47
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    713.00 =     935.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    713.00 TO NODE    713.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.47
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.028
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.50      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.50      SUBAREA RUNOFF(CFS) =    6.64
  EFFECTIVE AREA(ACRES) =      5.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.1       PEAK FLOW RATE(CFS) =      13.55

****************************************************************************
  FLOW PROCESS FROM NODE    713.00 TO NODE    714.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   923.67  DOWNSTREAM(FEET) =   922.76
  FLOW LENGTH(FEET) =   183.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.58
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.55
  PIPE TRAVEL TIME(MIN.) =   0.55    Tc(MIN.) =   10.02
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    714.00 =    1118.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    714.00 TO NODE    714.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =   10.02
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.927
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.20      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.20      SUBAREA RUNOFF(CFS) =    0.51
  EFFECTIVE AREA(ACRES) =      5.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.3       PEAK FLOW RATE(CFS) =      13.61

****************************************************************************
  FLOW PROCESS FROM NODE    714.00 TO NODE    715.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   922.76  DOWNSTREAM(FEET) =   921.37
  FLOW LENGTH(FEET) =   278.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.59
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.61
  PIPE TRAVEL TIME(MIN.) =   0.83    Tc(MIN.) =   10.84
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    715.00 =    1396.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    715.00 TO NODE    715.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =   10.84
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.791
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.44
  EFFECTIVE AREA(ACRES) =      6.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.3       PEAK FLOW RATE(CFS) =      15.40

****************************************************************************
  FLOW PROCESS FROM NODE    715.00 TO NODE    716.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   921.37  DOWNSTREAM(FEET) =   920.94
  FLOW LENGTH(FEET) =    85.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  19.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.69
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      15.40
  PIPE TRAVEL TIME(MIN.) =   0.25    Tc(MIN.) =   11.09
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    716.00 =    1481.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    716.00 TO NODE    716.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   11.09
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.753
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE           GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                B        0.20      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.20      SUBAREA RUNOFF(CFS) =    0.48
  EFFECTIVE AREA(ACRES) =      6.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.5       PEAK FLOW RATE(CFS) =      15.67

****************************************************************************
  FLOW PROCESS FROM NODE    716.00 TO NODE    717.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   920.94  DOWNSTREAM(FEET) =   920.22
  FLOW LENGTH(FEET) =   145.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  17.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.85
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      15.67
  PIPE TRAVEL TIME(MIN.) =   0.41    Tc(MIN.) =   11.51
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    717.00 =    1626.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        6.5  TC(MIN.) =     11.51
  EFFECTIVE AREA(ACRES) =      6.50  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      15.67
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 8 - NODES 800-813                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P8AB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    800.00 TO NODE    801.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   114.00
  ELEVATION DATA: UPSTREAM(FEET) =    918.51  DOWNSTREAM(FEET) =    914.94

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE             GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.60      0.75      0.100    56    5.00
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.36
  TOTAL AREA(ACRES) =      0.60   PEAK FLOW RATE(CFS) =      2.36
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    801.00 TO NODE    802.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   910.94  DOWNSTREAM(FEET) =   910.11
  FLOW LENGTH(FEET) =   166.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   9.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.56
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.36
  PIPE TRAVEL TIME(MIN.) =   0.78    Tc(MIN.) =    5.78
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    802.00 =     280.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    802.00 TO NODE    802.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.78
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.072
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.80      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.80      SUBAREA RUNOFF(CFS) =    2.88
  EFFECTIVE AREA(ACRES) =      1.40   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.4       PEAK FLOW RATE(CFS) =       5.04

****************************************************************************
  FLOW PROCESS FROM NODE    802.00 TO NODE    803.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   910.11  DOWNSTREAM(FEET) =   908.64
  FLOW LENGTH(FEET) =   293.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.43
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.04
  PIPE TRAVEL TIME(MIN.) =   1.10    Tc(MIN.) =    6.88
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    803.00 =     573.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    803.00 TO NODE    803.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.88
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.667
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.62
  EFFECTIVE AREA(ACRES) =      1.90   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.9       PEAK FLOW RATE(CFS) =       6.14

****************************************************************************
  FLOW PROCESS FROM NODE    803.00 TO NODE    804.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.64  DOWNSTREAM(FEET) =   907.98
  FLOW LENGTH(FEET) =   132.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.60
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.14
  PIPE TRAVEL TIME(MIN.) =   0.48    Tc(MIN.) =    7.36
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    804.00 =     705.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    804.00 TO NODE    804.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.36
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.522
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.20      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.20      SUBAREA RUNOFF(CFS) =    6.83
  EFFECTIVE AREA(ACRES) =      4.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.1       PEAK FLOW RATE(CFS) =      12.72

****************************************************************************
  FLOW PROCESS FROM NODE    804.00 TO NODE    805.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.98  DOWNSTREAM(FEET) =   907.38
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  16.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.53
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      12.72
  PIPE TRAVEL TIME(MIN.) =   0.36    Tc(MIN.) =    7.72
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    805.00 =     825.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    805.00 TO NODE    805.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.72
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.422
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.01
  EFFECTIVE AREA(ACRES) =      5.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.1       PEAK FLOW RATE(CFS) =      15.37

****************************************************************************
  FLOW PROCESS FROM NODE    805.00 TO NODE    806.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.38  DOWNSTREAM(FEET) =   906.78
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  19.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.66
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      15.37
  PIPE TRAVEL TIME(MIN.) =   0.35    Tc(MIN.) =    8.07
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    806.00 =     945.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    806.00 TO NODE    806.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.07
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.332
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.93
  EFFECTIVE AREA(ACRES) =      6.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.1       PEAK FLOW RATE(CFS) =      17.88

****************************************************************************
  FLOW PROCESS FROM NODE    806.00 TO NODE    807.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.78  DOWNSTREAM(FEET) =   906.18
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.01
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      17.88
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    8.41
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    807.00 =    1065.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    807.00 TO NODE    807.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.41
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.252
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.86
  EFFECTIVE AREA(ACRES) =      7.10   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        7.1       PEAK FLOW RATE(CFS) =      20.30

****************************************************************************
  FLOW PROCESS FROM NODE    807.00 TO NODE    808.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.18  DOWNSTREAM(FEET) =   905.58
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  21.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.11
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      20.30
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    8.73
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    808.00 =    1185.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    808.00 TO NODE    808.00 IS CODE =  81
```

```
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.73
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.178
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.90      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.90      SUBAREA RUNOFF(CFS) =    2.51
  EFFECTIVE AREA(ACRES) =      8.00   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        8.0       PEAK FLOW RATE(CFS) =      22.34

****************************************************************************
  FLOW PROCESS FROM NODE    808.00 TO NODE    809.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.58  DOWNSTREAM(FEET) =   904.98
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  20.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.38
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      22.34
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    9.05
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    809.00 =    1305.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    809.00 TO NODE    809.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.05
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.112
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.90      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.90      SUBAREA RUNOFF(CFS) =    2.46
  EFFECTIVE AREA(ACRES) =      8.90   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        8.9       PEAK FLOW RATE(CFS) =      24.33

****************************************************************************
  FLOW PROCESS FROM NODE    809.00 TO NODE    810.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.98  DOWNSTREAM(FEET) =   904.38
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  21.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.48
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      24.33
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    9.36
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    810.00 =    1425.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    810.00 TO NODE    810.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.36
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.050
  SUBAREA LOSS RATE DATA(AMC  II):
```

```
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.90      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.90      SUBAREA RUNOFF(CFS) =    2.41
  EFFECTIVE AREA(ACRES) =      9.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        9.8       PEAK FLOW RATE(CFS) =      26.24

****************************************************************************
  FLOW PROCESS FROM NODE    810.00 TO NODE    811.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.38  DOWNSTREAM(FEET) =   903.04
  FLOW LENGTH(FEET) =   269.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  22.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.53
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      26.24
  PIPE TRAVEL TIME(MIN.) =   0.69    Tc(MIN.) =   10.04
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    811.00 =    1694.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    811.00 TO NODE    811.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   10.04
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.923
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.50      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.50      SUBAREA RUNOFF(CFS) =    6.41
  EFFECTIVE AREA(ACRES) =     12.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       12.3       PEAK FLOW RATE(CFS) =      31.53

****************************************************************************
  FLOW PROCESS FROM NODE    811.00 TO NODE    812.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.04  DOWNSTREAM(FEET) =   901.60
  FLOW LENGTH(FEET) =   288.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  23.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.91
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      31.53
  PIPE TRAVEL TIME(MIN.) =   0.69    Tc(MIN.) =   10.74
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    812.00 =    1982.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    812.00 TO NODE    812.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   10.74
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.808
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        3.20      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    3.20      SUBAREA RUNOFF(CFS) =    7.87
```

```
  EFFECTIVE AREA(ACRES) =     15.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       15.5       PEAK FLOW RATE(CFS) =      38.12

****************************************************************************
  FLOW PROCESS FROM NODE    812.00 TO NODE    813.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.60  DOWNSTREAM(FEET) =   901.01
  FLOW LENGTH(FEET) =   117.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  36.0 INCH PIPE IS  24.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.30
  ESTIMATED PIPE DIAMETER(INCH) =  36.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      38.12
  PIPE TRAVEL TIME(MIN.) =   0.27    Tc(MIN.) =   11.00
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    813.00 =    2099.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       15.5  TC(MIN.) =     11.00
  EFFECTIVE AREA(ACRES) =     15.50  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      38.12
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 8 - NODES 820-822                         *
* HYDROLOGIC ANALYSIS - 25-YEAR                                           *
 *************************************************************************

  FILE NAME: 4005P8BB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    820.00 TO NODE    821.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   268.00
  ELEVATION DATA: UPSTREAM(FEET) =    914.75  DOWNSTREAM(FEET) =    908.66

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.065
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.955
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                B       1.00      0.75      0.100    56    6.06
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      3.49
  TOTAL AREA(ACRES) =      1.00   PEAK FLOW RATE(CFS) =      3.49
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    821.00 TO NODE    822.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.66  DOWNSTREAM(FEET) =   898.40
  FLOW LENGTH(FEET) =    36.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 12.000
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   4.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  15.19
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.49
  PIPE TRAVEL TIME(MIN.) =   0.04    Tc(MIN.) =    6.10
  LONGEST FLOWPATH FROM NODE    820.00 TO NODE    822.00 =     304.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.0  TC(MIN.) =      6.10
  EFFECTIVE AREA(ACRES) =      1.00  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       3.49
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                       *
* PROPOSED CONDITION - BUILDING 8 - NODES 831-835                            *
* HYDROLOGIC ANALYSIS - 25-YEAR                                              *
 ****************************************************************************

  FILE NAME: 4005P8CB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
============================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
============================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    831.00 TO NODE    831.00 IS CODE =  22
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    36.00
  USER SPECIFIED Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.20      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      0.79
  TOTAL AREA(ACRES) =      0.20   PEAK FLOW RATE(CFS) =      0.79

******************************************************************************
  FLOW PROCESS FROM NODE    831.00 TO NODE    832.00 IS CODE =  31
```

```
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.17  DOWNSTREAM(FEET) =   905.84
  FLOW LENGTH(FEET) =    66.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 12.000
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   4.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   2.79
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       0.79
  PIPE TRAVEL TIME(MIN.) =   0.39    Tc(MIN.) =    5.39
  LONGEST FLOWPATH FROM NODE    831.00 TO NODE    832.00 =     102.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    832.00 TO NODE    832.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.39
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.244
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.50
  EFFECTIVE AREA(ACRES) =      0.60   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.6       PEAK FLOW RATE(CFS) =       2.25

****************************************************************************
  FLOW PROCESS FROM NODE    832.00 TO NODE    833.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.84  DOWNSTREAM(FEET) =   905.28
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   9.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.54
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.25
  PIPE TRAVEL TIME(MIN.) =   0.53    Tc(MIN.) =    5.92
  LONGEST FLOWPATH FROM NODE    831.00 TO NODE    833.00 =     214.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    833.00 TO NODE    833.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.92
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.013
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.42
  EFFECTIVE AREA(ACRES) =      1.00   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.0       PEAK FLOW RATE(CFS) =       3.54

****************************************************************************
  FLOW PROCESS FROM NODE    833.00 TO NODE    834.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.28  DOWNSTREAM(FEET) =   904.72
```

```
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  10.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.03
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.54
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    6.38
  LONGEST FLOWPATH FROM NODE    831.00 TO NODE    834.00 =     326.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    834.00 TO NODE    834.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.38
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.835
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.35
  EFFECTIVE AREA(ACRES) =      1.40   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.4       PEAK FLOW RATE(CFS) =       4.74

****************************************************************************
  FLOW PROCESS FROM NODE    834.00 TO NODE    835.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.72  DOWNSTREAM(FEET) =   904.60
  FLOW LENGTH(FEET) =    24.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  10.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.37
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.74
  PIPE TRAVEL TIME(MIN.) =   0.09    Tc(MIN.) =    6.48
  LONGEST FLOWPATH FROM NODE    831.00 TO NODE    835.00 =     350.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.4  TC(MIN.) =      6.48
  EFFECTIVE AREA(ACRES) =      1.40  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       4.74
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 8 - NODES 841-845                         *
* HYDROLOGIC ANALYSIS - 25-YEAR                                           *
 *************************************************************************

  FILE NAME: 4005P8DB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    840.00 TO NODE    841.00 IS CODE =  22
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    36.00
  USER SPECIFIED Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.57
  TOTAL AREA(ACRES) =      0.40   PEAK FLOW RATE(CFS) =      1.57

******************************************************************************
  FLOW PROCESS FROM NODE    841.00 TO NODE    842.00 IS CODE =  31
```

```
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.21  DOWNSTREAM(FEET) =   903.60
  FLOW LENGTH(FEET) =   121.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   7.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.32
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.57
  PIPE TRAVEL TIME(MIN.) =   0.61    Tc(MIN.) =    5.61
  LONGEST FLOWPATH FROM NODE    840.00 TO NODE    842.00 =     157.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    842.00 TO NODE    842.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.61
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.146
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.47
  EFFECTIVE AREA(ACRES) =      0.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       2.93

****************************************************************************
  FLOW PROCESS FROM NODE    842.00 TO NODE    843.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.60  DOWNSTREAM(FEET) =   903.04
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.87
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.93
  PIPE TRAVEL TIME(MIN.) =   0.48    Tc(MIN.) =    6.09
  LONGEST FLOWPATH FROM NODE    840.00 TO NODE    843.00 =     269.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    843.00 TO NODE    843.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.09
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.946
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.39
  EFFECTIVE AREA(ACRES) =      1.20   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.2       PEAK FLOW RATE(CFS) =       4.18

****************************************************************************
  FLOW PROCESS FROM NODE    843.00 TO NODE    844.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.04  DOWNSTREAM(FEET) =   902.48
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
```

```
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  11.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.12
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.18
  PIPE TRAVEL TIME(MIN.) =   0.45    Tc(MIN.) =    6.54
  LONGEST FLOWPATH FROM NODE    840.00 TO NODE    844.00 =     381.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    844.00 TO NODE    844.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.54
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.780
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.33
  EFFECTIVE AREA(ACRES) =      1.60   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.6       PEAK FLOW RATE(CFS) =       5.34

****************************************************************************
  FLOW PROCESS FROM NODE    844.00 TO NODE    845.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   902.48  DOWNSTREAM(FEET) =   902.34
  FLOW LENGTH(FEET) =    28.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.48
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.34
  PIPE TRAVEL TIME(MIN.) =   0.10    Tc(MIN.) =    6.65
  LONGEST FLOWPATH FROM NODE    840.00 TO NODE    845.00 =     409.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.6  TC(MIN.) =      6.65
  EFFECTIVE AREA(ACRES) =      1.60  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       5.34
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 8 - NODES 851-855                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P8EB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    851.00 TO NODE    851.00 IS CODE =  22
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    36.00
  USER SPECIFIED Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.57
  TOTAL AREA(ACRES) =      0.40   PEAK FLOW RATE(CFS) =      1.57

******************************************************************************
  FLOW PROCESS FROM NODE    851.00 TO NODE    852.00 IS CODE =  31
```

```
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.96  DOWNSTREAM(FEET) =   901.36
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   7.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.32
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.57
  PIPE TRAVEL TIME(MIN.) =   0.60    Tc(MIN.) =    5.60
  LONGEST FLOWPATH FROM NODE    851.00 TO NODE    852.00 =     156.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    852.00 TO NODE    852.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.60
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.148
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.47
  EFFECTIVE AREA(ACRES) =      0.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       2.93

****************************************************************************
  FLOW PROCESS FROM NODE    852.00 TO NODE    853.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.36  DOWNSTREAM(FEET) =   900.80
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.88
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.93
  PIPE TRAVEL TIME(MIN.) =   0.48    Tc(MIN.) =    6.08
  LONGEST FLOWPATH FROM NODE    851.00 TO NODE    853.00 =     268.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    853.00 TO NODE    853.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.08
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.948
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.39
  EFFECTIVE AREA(ACRES) =      1.20   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.2       PEAK FLOW RATE(CFS) =       4.18

****************************************************************************
  FLOW PROCESS FROM NODE    853.00 TO NODE    854.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   900.80  DOWNSTREAM(FEET) =   900.24
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
```

```
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  11.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.13
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.18
  PIPE TRAVEL TIME(MIN.) =   0.45    Tc(MIN.) =    6.54
  LONGEST FLOWPATH FROM NODE    851.00 TO NODE    854.00 =     380.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    854.00 TO NODE    854.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.54
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.782
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.33
  EFFECTIVE AREA(ACRES) =      1.60   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.6       PEAK FLOW RATE(CFS) =       5.34

****************************************************************************
  FLOW PROCESS FROM NODE    854.00 TO NODE    855.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   900.24  DOWNSTREAM(FEET) =   900.04
  FLOW LENGTH(FEET) =    41.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.44
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.34
  PIPE TRAVEL TIME(MIN.) =   0.15    Tc(MIN.) =    6.69
  LONGEST FLOWPATH FROM NODE    851.00 TO NODE    855.00 =     421.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.6  TC(MIN.) =      6.69
  EFFECTIVE AREA(ACRES) =      1.60  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       5.34
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 8 - NODES 861-865                         *
* HYDROLOGIC ANALYSIS - 25-YEAR                                           *
 *************************************************************************

  FILE NAME: 4005P8FB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    861.00 TO NODE    861.00 IS CODE =  22
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    36.00
  USER SPECIFIED Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.57
  TOTAL AREA(ACRES) =      0.40   PEAK FLOW RATE(CFS) =      1.57

******************************************************************************
  FLOW PROCESS FROM NODE    861.00 TO NODE    862.00 IS CODE =  31
```

```
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   899.71  DOWNSTREAM(FEET) =   899.12
  FLOW LENGTH(FEET) =   119.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   7.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.31
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.57
  PIPE TRAVEL TIME(MIN.) =   0.60    Tc(MIN.) =    5.60
  LONGEST FLOWPATH FROM NODE    861.00 TO NODE    862.00 =     155.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    862.00 TO NODE    862.00 IS CODE =  81
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =    5.60
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.149
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.47
  EFFECTIVE AREA(ACRES) =      0.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       2.93

****************************************************************************
  FLOW PROCESS FROM NODE    862.00 TO NODE    863.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   899.12  DOWNSTREAM(FEET) =   898.56
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.88
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.93
  PIPE TRAVEL TIME(MIN.) =   0.48    Tc(MIN.) =    6.08
  LONGEST FLOWPATH FROM NODE    861.00 TO NODE    863.00 =     267.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    863.00 TO NODE    863.00 IS CODE =  81
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =    6.08
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.949
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.39
  EFFECTIVE AREA(ACRES) =      1.20   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.2       PEAK FLOW RATE(CFS) =       4.18

****************************************************************************
  FLOW PROCESS FROM NODE    863.00 TO NODE    864.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   898.56  DOWNSTREAM(FEET) =   898.02
  FLOW LENGTH(FEET) =   107.00   MANNING'S N =  0.013
```

```
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  11.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.14
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.18
  PIPE TRAVEL TIME(MIN.) =   0.43    Tc(MIN.) =    6.51
  LONGEST FLOWPATH FROM NODE    861.00 TO NODE    864.00 =     374.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    864.00 TO NODE    864.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.51
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.790
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.20      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.20      SUBAREA RUNOFF(CFS) =    0.67
  EFFECTIVE AREA(ACRES) =      1.40   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.4       PEAK FLOW RATE(CFS) =       4.68

****************************************************************************
  FLOW PROCESS FROM NODE    864.00 TO NODE    865.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   898.02  DOWNSTREAM(FEET) =   897.88
  FLOW LENGTH(FEET) =    28.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  10.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.36
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.68
  PIPE TRAVEL TIME(MIN.) =   0.11    Tc(MIN.) =    6.62
  LONGEST FLOWPATH FROM NODE    861.00 TO NODE    865.00 =     402.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.4  TC(MIN.) =      6.62
  EFFECTIVE AREA(ACRES) =      1.40  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       4.68
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 9 - NODES 900-902                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P9AB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    900.00 TO NODE    901.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   361.00
  ELEVATION DATA: UPSTREAM(FEET) =    905.34  DOWNSTREAM(FEET) =    900.69

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.654
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.440
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                B        2.00      0.75     0.100    56    7.65
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      6.06
  TOTAL AREA(ACRES) =      2.00   PEAK FLOW RATE(CFS) =      6.06
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    901.00 TO NODE    902.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   896.69  DOWNSTREAM(FEET) =   896.46
  FLOW LENGTH(FEET) =    45.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.63
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.06
  PIPE TRAVEL TIME(MIN.) =   0.16    Tc(MIN.) =    7.82
  LONGEST FLOWPATH FROM NODE    900.00 TO NODE    902.00 =     406.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        2.0  TC(MIN.) =      7.82
  EFFECTIVE AREA(ACRES) =      2.00  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       6.06
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 9 - NODES 910-920                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P9BB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    910.00 TO NODE    911.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   340.00
  ELEVATION DATA: UPSTREAM(FEET) =    906.22  DOWNSTREAM(FEET) =    903.18

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.039
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.340
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                B        2.20      0.75     0.100    56    8.04
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      6.47
  TOTAL AREA(ACRES) =      2.20   PEAK FLOW RATE(CFS) =      6.47
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    911.00 TO NODE    912.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   899.18  DOWNSTREAM(FEET) =   898.58
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.63
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.47
  PIPE TRAVEL TIME(MIN.) =   0.43    Tc(MIN.) =    8.47
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    912.00 =     460.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    912.00 TO NODE    912.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.47
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.237
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.85
  EFFECTIVE AREA(ACRES) =      3.20   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.2       PEAK FLOW RATE(CFS) =       9.11

****************************************************************************
  FLOW PROCESS FROM NODE    912.00 TO NODE    913.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   898.58  DOWNSTREAM(FEET) =   897.98
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  14.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.08
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       9.11
  PIPE TRAVEL TIME(MIN.) =   0.39    Tc(MIN.) =    8.86
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    913.00 =     580.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    913.00 TO NODE    913.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.86
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.150
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.77
  EFFECTIVE AREA(ACRES) =      4.20   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.2       PEAK FLOW RATE(CFS) =      11.62

****************************************************************************
  FLOW PROCESS FROM NODE    913.00 TO NODE    914.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   897.98  DOWNSTREAM(FEET) =   897.29
  FLOW LENGTH(FEET) =   138.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.44
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      11.62
  PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    9.29
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    914.00 =     718.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    914.00 TO NODE    914.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.29
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.063
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.69
  EFFECTIVE AREA(ACRES) =      5.20   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.2       PEAK FLOW RATE(CFS) =      13.99

****************************************************************************
  FLOW PROCESS FROM NODE    914.00 TO NODE    915.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   897.29  DOWNSTREAM(FEET) =   896.69
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.61
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.99
  PIPE TRAVEL TIME(MIN.) =   0.36    Tc(MIN.) =    9.64
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    915.00 =     838.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    915.00 TO NODE    915.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.64
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.995
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.50      SUBAREA RUNOFF(CFS) =    3.94
  EFFECTIVE AREA(ACRES) =      6.70   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.7       PEAK FLOW RATE(CFS) =      17.61

****************************************************************************
  FLOW PROCESS FROM NODE    915.00 TO NODE    916.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   896.69  DOWNSTREAM(FEET) =   896.09
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.00
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      17.61
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    9.98
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    916.00 =     958.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    916.00 TO NODE    916.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.98
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.934
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.57
  EFFECTIVE AREA(ACRES) =      7.70   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        7.7       PEAK FLOW RATE(CFS) =      19.82

****************************************************************************
  FLOW PROCESS FROM NODE    916.00 TO NODE    917.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   896.09  DOWNSTREAM(FEET) =   895.49
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  20.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.10
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      19.82
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =   10.31
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    917.00 =    1078.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    917.00 TO NODE    917.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   10.31
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.878
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    2.52
  EFFECTIVE AREA(ACRES) =      8.70   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        8.7       PEAK FLOW RATE(CFS) =      21.95

****************************************************************************
  FLOW PROCESS FROM NODE    917.00 TO NODE    918.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   895.49  DOWNSTREAM(FEET) =   894.90
  FLOW LENGTH(FEET) =   118.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  19.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.36
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      21.95
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =   10.61
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    918.00 =    1196.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    918.00 TO NODE    918.00 IS CODE =  81
```

```
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =   10.61
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.827
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.10      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.10      SUBAREA RUNOFF(CFS) =    5.20
  EFFECTIVE AREA(ACRES) =     10.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       10.8       PEAK FLOW RATE(CFS) =      26.75

************************************************************************
  FLOW PROCESS FROM NODE    918.00 TO NODE    919.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   894.90  DOWNSTREAM(FEET) =   891.84
  FLOW LENGTH(FEET) =   611.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  23.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.56
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      26.75
  PIPE TRAVEL TIME(MIN.) =   1.55    Tc(MIN.) =   12.17
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    919.00 =    1807.00 FEET.

************************************************************************
  FLOW PROCESS FROM NODE    919.00 TO NODE    919.00 IS CODE =  81
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =   12.17
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.605
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.70      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.70      SUBAREA RUNOFF(CFS) =    1.59
  EFFECTIVE AREA(ACRES) =     11.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       11.5       PEAK FLOW RATE(CFS) =      26.75
  NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE

************************************************************************
  FLOW PROCESS FROM NODE    919.00 TO NODE    920.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   891.84  DOWNSTREAM(FEET) =   891.51
  FLOW LENGTH(FEET) =    67.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  23.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.51
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      26.75
  PIPE TRAVEL TIME(MIN.) =   0.17    Tc(MIN.) =   12.34
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    920.00 =    1874.00 FEET.
========================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       11.5  TC(MIN.) =     12.34
  EFFECTIVE AREA(ACRES) =     11.50  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      26.75
========================================================================
========================================================================
```

END OF RATIONAL METHOD ANALYSIS

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 9 - NODES 931-943                        *
* HYDROLOGIC ANALYSIS - 25-YEAR                                          *
 ************************************************************************

  FILE NAME: 4005P9CB.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.0000

  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    931.00 TO NODE    931.00 IS CODE =  22
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    67.00
  USER SPECIFIED Tc(MIN.) =    5.000
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.441
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.30      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.18
  TOTAL AREA(ACRES) =      0.30   PEAK FLOW RATE(CFS) =      1.18

**************************************************************************
  FLOW PROCESS FROM NODE    931.00 TO NODE    932.00 IS CODE =  31
```

```
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   898.27  DOWNSTREAM(FEET) =   897.94
  FLOW LENGTH(FEET) =    66.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   5.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.09
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.18
  PIPE TRAVEL TIME(MIN.) =   0.36    Tc(MIN.) =    5.36
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    932.00 =     133.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    932.00 TO NODE    932.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.36
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.262
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.88
  EFFECTIVE AREA(ACRES) =      0.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       3.01

****************************************************************************
  FLOW PROCESS FROM NODE    932.00 TO NODE    933.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   897.94  DOWNSTREAM(FEET) =   897.38
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   9.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.90
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.01
  PIPE TRAVEL TIME(MIN.) =   0.48    Tc(MIN.) =    5.83
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    933.00 =     245.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    933.00 TO NODE    933.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.83
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.048
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.79
  EFFECTIVE AREA(ACRES) =      1.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.3       PEAK FLOW RATE(CFS) =       4.65

****************************************************************************
  FLOW PROCESS FROM NODE    933.00 TO NODE    934.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   897.38  DOWNSTREAM(FEET) =   896.82
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
```

```
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  10.5 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.35
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       4.65
 PIPE TRAVEL TIME(MIN.) =   0.43    Tc(MIN.) =    6.26
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    934.00 =     357.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    934.00 TO NODE    934.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    6.26
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.880
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.75     0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.71
 EFFECTIVE AREA(ACRES) =      1.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        1.8       PEAK FLOW RATE(CFS) =       6.16

****************************************************************************
 FLOW PROCESS FROM NODE    934.00 TO NODE    935.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   896.82  DOWNSTREAM(FEET) =   896.26
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.8 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.60
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       6.16
 PIPE TRAVEL TIME(MIN.) =   0.41    Tc(MIN.) =    6.67
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    935.00 =     469.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    935.00 TO NODE    935.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    6.67
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.736
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.75     0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.65
 EFFECTIVE AREA(ACRES) =      2.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        2.3       PEAK FLOW RATE(CFS) =       7.58

****************************************************************************
 FLOW PROCESS FROM NODE    935.00 TO NODE    936.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   896.26  DOWNSTREAM(FEET) =   895.70
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  12.9 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.90
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       7.58
 PIPE TRAVEL TIME(MIN.) =   0.38    Tc(MIN.) =    7.05
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    936.00 =     581.00 FEET.
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    936.00 TO NODE    936.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.05
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.614
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.59
  EFFECTIVE AREA(ACRES) =      2.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.8       PEAK FLOW RATE(CFS) =       8.92

****************************************************************************
  FLOW PROCESS FROM NODE    936.00 TO NODE    937.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   895.70  DOWNSTREAM(FEET) =   895.14
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  14.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.06
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       8.92
  PIPE TRAVEL TIME(MIN.) =   0.37    Tc(MIN.) =    7.42
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    937.00 =     693.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    937.00 TO NODE    937.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.42
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.505
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75     0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.54
  EFFECTIVE AREA(ACRES) =      3.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.3       PEAK FLOW RATE(CFS) =      10.19

****************************************************************************
  FLOW PROCESS FROM NODE    937.00 TO NODE    938.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   895.14  DOWNSTREAM(FEET) =   894.58
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  16.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.16
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.19
  PIPE TRAVEL TIME(MIN.) =   0.36    Tc(MIN.) =    7.78
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    938.00 =     805.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    938.00 TO NODE    938.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
```

```
 MAINLINE Tc(MIN.) =    7.78
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.406
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.50
 EFFECTIVE AREA(ACRES) =      3.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        3.8       PEAK FLOW RATE(CFS) =      11.39

****************************************************************************
 FLOW PROCESS FROM NODE    938.00 TO NODE    939.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   894.58  DOWNSTREAM(FEET) =   894.02
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.2 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.42
 ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      11.39
 PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    8.13
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    939.00 =     917.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    939.00 TO NODE    939.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    8.13
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.319
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.75      0.100    56
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.46
 EFFECTIVE AREA(ACRES) =      4.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        4.3       PEAK FLOW RATE(CFS) =      12.55

****************************************************************************
 FLOW PROCESS FROM NODE    939.00 TO NODE    940.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   894.02  DOWNSTREAM(FEET) =   893.46
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  24.0 INCH PIPE IS  16.3 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.52
 ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      12.55
 PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    8.46
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    940.00 =    1029.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    940.00 TO NODE    940.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    8.46
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.239
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.75      0.100    56
```

```
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.42
  EFFECTIVE AREA(ACRES) =      4.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.8       PEAK FLOW RATE(CFS) =      13.67

****************************************************************************
  FLOW PROCESS FROM NODE    940.00 TO NODE    941.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   893.46  DOWNSTREAM(FEET) =   892.90
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.60
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.67
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    8.80
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    941.00 =    1141.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    941.00 TO NODE    941.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.80
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.164
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.39
  EFFECTIVE AREA(ACRES) =      5.30   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.3       PEAK FLOW RATE(CFS) =      14.74

****************************************************************************
  FLOW PROCESS FROM NODE    941.00 TO NODE    942.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   892.90  DOWNSTREAM(FEET) =   892.34
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  18.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.65
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      14.74
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    9.13
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    942.00 =    1253.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    942.00 TO NODE    942.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.13
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.095
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.75      0.100    56
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.75
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.36
  EFFECTIVE AREA(ACRES) =      5.80   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.8       PEAK FLOW RATE(CFS) =      15.77
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    942.00 TO NODE    943.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   892.34  DOWNSTREAM(FEET) =   891.50
  FLOW LENGTH(FEET) =   169.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  17.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.86
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      15.77
  PIPE TRAVEL TIME(MIN.) =   0.48    Tc(MIN.) =    9.61
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    943.00 =    1422.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        5.8  TC(MIN.) =      9.61
  EFFECTIVE AREA(ACRES) =      5.80  AREA-AVERAGED Fm(INCH/HR)=  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.75  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      15.77
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

100-YEAR HYDROLOGY

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDINGS 1 & 2 - NODES 100-215                   *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P1AC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    100.00 TO NODE    101.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   848.00
  ELEVATION DATA: UPSTREAM(FEET) =    952.59  DOWNSTREAM(FEET) =    944.53

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   11.446
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.378
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        6.00      0.42      0.100    76   11.45
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     18.01
  TOTAL AREA(ACRES) =      6.00   PEAK FLOW RATE(CFS) =     18.01
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    101.00 TO NODE    122.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   940.53  DOWNSTREAM(FEET) =   933.20
  FLOW LENGTH(FEET) =   738.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  16.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.80
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      18.01
  PIPE TRAVEL TIME(MIN.) =   1.58    Tc(MIN.) =   13.02
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    122.00 =    1586.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    122.00 TO NODE    122.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  3
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   13.02
  RAINFALL INTENSITY(INCH/HR) =   3.13
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       6.00
  TOTAL STREAM AREA(ACRES) =       6.00
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      18.01

****************************************************************************
  FLOW PROCESS FROM NODE    110.00 TO NODE    111.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   408.00
  ELEVATION DATA: UPSTREAM(FEET) =    952.59  DOWNSTREAM(FEET) =    946.84

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.895
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.221
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.90      0.42      0.100    76    7.89
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      3.38
  TOTAL AREA(ACRES) =      0.90   PEAK FLOW RATE(CFS) =      3.38

****************************************************************************
  FLOW PROCESS FROM NODE    111.00 TO NODE    112.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   942.84  DOWNSTREAM(FEET) =   940.37
  FLOW LENGTH(FEET) =   278.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.99
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.38
  PIPE TRAVEL TIME(MIN.) =   0.93    Tc(MIN.) =    8.82
  LONGEST FLOWPATH FROM NODE    110.00 TO NODE    112.00 =     686.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    112.00 TO NODE    112.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
```

```
==========================================================================
  MAINLINE Tc(MIN.) =    8.82
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.949
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.30      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.30      SUBAREA RUNOFF(CFS) =    1.05
  EFFECTIVE AREA(ACRES) =      1.20   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.2       PEAK FLOW RATE(CFS) =       4.22

**************************************************************************
  FLOW PROCESS FROM NODE    112.00 TO NODE    122.00 IS CODE =  31
--------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   940.37  DOWNSTREAM(FEET) =   933.20
  FLOW LENGTH(FEET) =   808.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   9.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.25
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.22
  PIPE TRAVEL TIME(MIN.) =   2.57    Tc(MIN.) =   11.39
  LONGEST FLOWPATH FROM NODE    110.00 TO NODE    122.00 =    1494.00 FEET.

**************************************************************************
  FLOW PROCESS FROM NODE    122.00 TO NODE    122.00 IS CODE =   1
--------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
==========================================================================
  TOTAL NUMBER OF STREAMS =  3
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   11.39
  RAINFALL INTENSITY(INCH/HR) =   3.39
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       1.20
  TOTAL STREAM AREA(ACRES) =       1.20
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       4.22

**************************************************************************
  FLOW PROCESS FROM NODE    120.00 TO NODE    121.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   983.00
  ELEVATION DATA: UPSTREAM(FEET) =    948.50  DOWNSTREAM(FEET) =    937.27

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   11.704
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.333
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        9.70      0.42     0.100    76   11.70
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     28.73
  TOTAL AREA(ACRES) =      9.70   PEAK FLOW RATE(CFS) =     28.73

**************************************************************************
  FLOW PROCESS FROM NODE    121.00 TO NODE    122.00 IS CODE =  31
--------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
```

```
  ELEVATION DATA: UPSTREAM(FEET) =   933.27  DOWNSTREAM(FEET) =   933.20
  FLOW LENGTH(FEET) =    14.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  22.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.80
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      28.73
  PIPE TRAVEL TIME(MIN.) =   0.03    Tc(MIN.) =   11.74
  LONGEST FLOWPATH FROM NODE    120.00 TO NODE    122.00 =     997.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    122.00 TO NODE    122.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  3
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  3 ARE:
  TIME OF CONCENTRATION(MIN.) =   11.74
  RAINFALL INTENSITY(INCH/HR) =   3.33
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       9.70
  TOTAL STREAM AREA(ACRES) =       9.70
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      28.73

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       18.01   13.02    3.126  0.42( 0.04) 0.10       6.0     100.00
      2        4.22   11.39    3.388  0.42( 0.04) 0.10       1.2     110.00
      3       28.73   11.74    3.327  0.42( 0.04) 0.10       9.7     120.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  3 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       49.70   11.39    3.388  0.42( 0.04) 0.10      15.9     110.00
      2       50.16   11.74    3.327  0.42( 0.04) 0.10      16.3     120.00
      3       48.87   13.02    3.126  0.42( 0.04) 0.10      16.9     100.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      50.16    Tc(MIN.) =    11.74
  EFFECTIVE AREA(ACRES) =      16.31   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       16.9
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    122.00 =    1586.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    122.00 TO NODE    142.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   933.20  DOWNSTREAM(FEET) =   925.11
  FLOW LENGTH(FEET) =   623.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  23.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  11.11
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      50.16
  PIPE TRAVEL TIME(MIN.) =   0.93    Tc(MIN.) =   12.67
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    142.00 =    2209.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    142.00 TO NODE    142.00 IS CODE =  10
----------------------------------------------------------------------------
  >>>>>MAIN-STREAM MEMORY COPIED ONTO MEMORY BANK # 1 <<<<<
============================================================================

****************************************************************************
```

```
 FLOW PROCESS FROM NODE    130.00 TO NODE    131.00 IS CODE =  21
----------------------------------------------------------------------------
 >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
 INITIAL SUBAREA FLOW-LENGTH(FEET) =   791.00
 ELEVATION DATA: UPSTREAM(FEET) =    951.00  DOWNSTREAM(FEET) =    938.70

 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   17.421
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  2.625
 SUBAREA Tc AND LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp          Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
 NATURAL POOR COVER
 "OPEN BRUSH"                B        7.80      0.20     1.000    92   17.42
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
 SUBAREA RUNOFF(CFS) =     17.02
 TOTAL AREA(ACRES) =      7.80   PEAK FLOW RATE(CFS) =     17.02

****************************************************************************
 FLOW PROCESS FROM NODE    131.00 TO NODE    141.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   934.70  DOWNSTREAM(FEET) =   925.25
 FLOW LENGTH(FEET) =   352.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  12.6 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =  11.28
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      17.02
 PIPE TRAVEL TIME(MIN.) =   0.52    Tc(MIN.) =   17.94
 LONGEST FLOWPATH FROM NODE    130.00 TO NODE    141.00 =    1143.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    141.00 TO NODE    141.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
 TIME OF CONCENTRATION(MIN.) =   17.94
 RAINFALL INTENSITY(INCH/HR) =   2.58
 AREA-AVERAGED Fm(INCH/HR) =  0.20
 AREA-AVERAGED Fp(INCH/HR) =  0.20
 AREA-AVERAGED Ap =  1.00
 EFFECTIVE STREAM AREA(ACRES) =       7.80
 TOTAL STREAM AREA(ACRES) =       7.80
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      17.02

****************************************************************************
 FLOW PROCESS FROM NODE    140.00 TO NODE    141.00 IS CODE =  21
----------------------------------------------------------------------------
 >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
 INITIAL SUBAREA FLOW-LENGTH(FEET) =   907.00
 ELEVATION DATA: UPSTREAM(FEET) =    940.85  DOWNSTREAM(FEET) =    929.25

 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   11.080
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.444
 SUBAREA Tc AND LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp          Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
 COMMERCIAL                  B        6.30      0.42     0.100    76   11.08
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA RUNOFF(CFS) =     19.29
 TOTAL AREA(ACRES) =      6.30   PEAK FLOW RATE(CFS) =     19.29
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    141.00 TO NODE    141.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   11.08
  RAINFALL INTENSITY(INCH/HR) =   3.44
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       6.30
  TOTAL STREAM AREA(ACRES) =       6.30
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      19.29

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       17.02   17.94    2.579  0.20( 0.20) 1.00       7.8     130.00
      2       19.29   11.08    3.444  0.42( 0.04) 0.10       6.3     140.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       33.62   11.08    3.444  0.23( 0.11) 0.49      11.1     140.00
      2       31.41   17.94    2.579  0.22( 0.13) 0.60      14.1     130.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      33.62    Tc(MIN.) =    11.08
  EFFECTIVE AREA(ACRES) =      11.12   AREA-AVERAGED Fm(INCH/HR) =  0.11
  AREA-AVERAGED Fp(INCH/HR) =  0.23  AREA-AVERAGED Ap =  0.49
  TOTAL AREA(ACRES) =       14.1
  LONGEST FLOWPATH FROM NODE    130.00 TO NODE    141.00 =    1143.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    141.00 TO NODE    142.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   929.25  DOWNSTREAM(FEET) =   925.11
  FLOW LENGTH(FEET) =    28.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  25.03
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      33.62
  PIPE TRAVEL TIME(MIN.) =   0.02    Tc(MIN.) =   11.10
  LONGEST FLOWPATH FROM NODE    130.00 TO NODE    142.00 =    1171.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    142.00 TO NODE    142.00 IS CODE =  11
----------------------------------------------------------------------------
  >>>>>CONFLUENCE MEMORY BANK # 1 WITH THE MAIN-STREAM MEMORY<<<<<
============================================================================

  ** MAIN STREAM CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       33.62   11.10    3.441  0.23( 0.11) 0.49      11.1     140.00
      2       31.41   17.96    2.578  0.22( 0.13) 0.60      14.1     130.00
  LONGEST FLOWPATH FROM NODE    130.00 TO NODE    142.00 =    1171.00 FEET.

  ** MEMORY BANK #  1 CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       49.70   12.33    3.231  0.42( 0.04) 0.10      15.9     110.00
```

```
      2       50.16   12.67    3.177  0.42( 0.04) 0.10      16.3     120.00
      3       48.87   13.96    2.998  0.42( 0.04) 0.10      16.9     100.00
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    142.00 =    2209.00 FEET.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       81.32   11.10    3.441  0.27( 0.07) 0.27      25.4     140.00
      2       82.92   12.33    3.231  0.27( 0.07) 0.27      27.5     110.00
      3       83.28   12.67    3.177  0.27( 0.07) 0.27      28.1     120.00
      4       81.57   13.96    2.998  0.26( 0.07) 0.28      29.3     100.00
      5       73.32   17.96    2.578  0.25( 0.08) 0.33      31.0     130.00
    TOTAL AREA(ACRES) =        31.0

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =       83.28  Tc(MIN.) =   12.673
  EFFECTIVE AREA(ACRES) =     28.11  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.26  AREA-AVERAGED Ap =  0.28
  TOTAL AREA(ACRES) =       31.0
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    142.00 =    2209.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    142.00 TO NODE    142.00 IS CODE =  12
----------------------------------------------------------------------------
  >>>>>CLEAR MEMORY BANK # 1 <<<<<
============================================================================

****************************************************************************
  FLOW PROCESS FROM NODE    142.00 TO NODE    204.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.11  DOWNSTREAM(FEET) =   915.87
  FLOW LENGTH(FEET) =  1207.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  42.0 INCH PIPE IS  33.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  10.16
  ESTIMATED PIPE DIAMETER(INCH) =  42.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      83.28
  PIPE TRAVEL TIME(MIN.) =   1.98    Tc(MIN.) =   14.65
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    204.00 =    3416.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    204.00 TO NODE    204.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   14.65
  RAINFALL INTENSITY(INCH/HR) =   2.91
  AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.27
  AREA-AVERAGED Ap =  0.27
  EFFECTIVE STREAM AREA(ACRES) =      28.11
  TOTAL STREAM AREA(ACRES) =      31.00
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      83.28

****************************************************************************
  FLOW PROCESS FROM NODE    200.00 TO NODE    201.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   769.00
  ELEVATION DATA: UPSTREAM(FEET) =    954.36  DOWNSTREAM(FEET) =    929.80

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.637
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.999
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
```

```
     LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL               B        5.30      0.42      0.100    76    8.64
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     18.87
  TOTAL AREA(ACRES) =      5.30   PEAK FLOW RATE(CFS) =     18.87

****************************************************************************
  FLOW PROCESS FROM NODE    201.00 TO NODE    202.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =    929.80
  DOWNSTREAM NODE ELEVATION(FEET) =    926.40
  CHANNEL LENGTH THRU SUBAREA(FEET) =   673.00
  "V" GUTTER WIDTH(FEET) =   3.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.010   MANNING'S N = .0150
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.02500
  MAXIMUM DEPTH(FEET) =   1.00
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.205
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL               B        7.10      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =     28.97
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   2.91
  AVERAGE FLOW DEPTH(FEET) =   0.52   FLOOD WIDTH(FEET) =   39.79
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   3.85   Tc(MIN.) =   12.49
  SUBAREA AREA(ACRES) =    7.10       SUBAREA RUNOFF(CFS) =   20.21
  EFFECTIVE AREA(ACRES) =   12.40     AREA-AVERAGED Fm(INCH/HR) =   0.04
  AREA-AVERAGED Fp(INCH/HR) =   0.42  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =       12.4         PEAK FLOW RATE(CFS) =      35.30

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.56   FLOOD WIDTH(FEET) =   43.02
  FLOW VELOCITY(FEET/SEC.) =   3.04   DEPTH*VELOCITY(FT*FT/SEC) =   1.70
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    202.00 =    1442.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    202.00 TO NODE    203.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =    926.40
  DOWNSTREAM NODE ELEVATION(FEET) =    919.94
  CHANNEL LENGTH THRU SUBAREA(FEET) =  1090.00
  "V" GUTTER WIDTH(FEET) =   3.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.010   MANNING'S N = .0150
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.02500
  MAXIMUM DEPTH(FEET) =   1.00
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  2.599
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL               B       10.90      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =     47.81
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   3.47
  AVERAGE FLOW DEPTH(FEET) =   0.61   FLOOD WIDTH(FEET) =   46.84
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   5.23   Tc(MIN.) =   17.72
  SUBAREA AREA(ACRES) =   10.90       SUBAREA RUNOFF(CFS) =   25.08
  EFFECTIVE AREA(ACRES) =   23.30     AREA-AVERAGED Fm(INCH/HR) =   0.04
  AREA-AVERAGED Fp(INCH/HR) =   0.42  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =       23.3         PEAK FLOW RATE(CFS) =      53.61

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.63   FLOOD WIDTH(FEET) =   48.90
  FLOW VELOCITY(FEET/SEC.) =   3.58   DEPTH*VELOCITY(FT*FT/SEC) =   2.27
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    203.00 =    2532.00 FEET.
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    203.00 TO NODE    204.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   915.94  DOWNSTREAM(FEET) =   915.87
  FLOW LENGTH(FEET) =    14.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  39.0 INCH PIPE IS  30.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.80
  ESTIMATED PIPE DIAMETER(INCH) =  39.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      53.61
  PIPE TRAVEL TIME(MIN.) =   0.03    Tc(MIN.) =   17.75
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    204.00 =    2546.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    204.00 TO NODE    204.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   17.75
  RAINFALL INTENSITY(INCH/HR) =   2.60
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =      23.30
  TOTAL STREAM AREA(ACRES) =      23.30
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      53.61

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       81.32   13.08    3.117  0.27( 0.07) 0.27      25.4     140.00
      1       82.92   14.31    2.955  0.27( 0.07) 0.27      27.5     110.00
      1       83.28   14.65    2.912  0.27( 0.07) 0.27      28.1     120.00
      1       81.57   15.94    2.769  0.26( 0.07) 0.28      29.3     100.00
      1       73.32   19.97    2.419  0.25( 0.08) 0.33      31.0     130.00
      2       53.61   17.75    2.596  0.42( 0.04) 0.10      23.3     200.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1      128.90   13.08    3.117  0.30( 0.06) 0.20      42.6     140.00
      2      132.20   14.31    2.955  0.30( 0.06) 0.20      46.3     110.00
      3      133.02   14.65    2.912  0.30( 0.06) 0.20      47.3     120.00
      4      132.98   15.94    2.769  0.30( 0.06) 0.21      50.2     100.00
      5      131.48   17.75    2.596  0.29( 0.06) 0.21      53.3     200.00
      6      123.21   19.97    2.419  0.28( 0.06) 0.23      54.3     130.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =     133.02    Tc(MIN.) =    14.65
  EFFECTIVE AREA(ACRES) =      47.35   AREA-AVERAGED Fm(INCH/HR) =  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap =  0.20
  TOTAL AREA(ACRES) =       54.3
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    204.00 =    3416.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    204.00 TO NODE    205.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   915.87  DOWNSTREAM(FEET) =   913.45
  FLOW LENGTH(FEET) =   483.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  54.0 INCH PIPE IS  43.3 INCHES
```

```
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.72
  ESTIMATED PIPE DIAMETER(INCH) =  54.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =     133.02
  PIPE TRAVEL TIME(MIN.) =   0.83    Tc(MIN.) =   15.48
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    205.00 =    3899.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    205.00 TO NODE    205.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   15.48
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  2.818
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.10      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.10      SUBAREA RUNOFF(CFS) =    2.75
  EFFECTIVE AREA(ACRES) =     48.45   AREA-AVERAGED Fm(INCH/HR) =  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.30  AREA-AVERAGED Ap =  0.20
  TOTAL AREA(ACRES) =       55.4       PEAK FLOW RATE(CFS) =     133.02
  NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE

****************************************************************************
  FLOW PROCESS FROM NODE    205.00 TO NODE    214.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   913.45  DOWNSTREAM(FEET) =   912.14
  FLOW LENGTH(FEET) =   263.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  54.0 INCH PIPE IS  43.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.70
  ESTIMATED PIPE DIAMETER(INCH) =  54.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =     133.02
  PIPE TRAVEL TIME(MIN.) =   0.45    Tc(MIN.) =   15.93
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    214.00 =    4162.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    214.00 TO NODE    214.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   15.93
  RAINFALL INTENSITY(INCH/HR) =   2.77
  AREA-AVERAGED Fm(INCH/HR) =  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.30
  AREA-AVERAGED Ap =  0.20
  EFFECTIVE STREAM AREA(ACRES) =      48.45
  TOTAL STREAM AREA(ACRES) =      55.40
  PEAK FLOW RATE(CFS) AT CONFLUENCE =     133.02

****************************************************************************
  FLOW PROCESS FROM NODE    210.00 TO NODE    211.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   946.00
  ELEVATION DATA: UPSTREAM(FEET) =    936.37  DOWNSTREAM(FEET) =    930.50

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   13.022
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.126
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        6.30      0.42     0.100    76   13.02
```

```
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     17.48
  TOTAL AREA(ACRES) =      6.30   PEAK FLOW RATE(CFS) =     17.48

****************************************************************************
  FLOW PROCESS FROM NODE    211.00 TO NODE    212.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =    930.50
  DOWNSTREAM NODE ELEVATION(FEET) =    927.00
  CHANNEL LENGTH THRU SUBAREA(FEET) =   688.00
  "V" GUTTER WIDTH(FEET) =   3.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.010   MANNING'S N = .0150
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.02500
  MAXIMUM DEPTH(FEET) =   1.00
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  2.643
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        3.70      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =     21.84
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   2.73
  AVERAGE FLOW DEPTH(FEET) =   0.47   FLOOD WIDTH(FEET) =   35.68
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   4.20   Tc(MIN.) =   17.22
  SUBAREA AREA(ACRES) =    3.70       SUBAREA RUNOFF(CFS) =    8.66
  EFFECTIVE AREA(ACRES) =   10.00     AREA-AVERAGED Fm(INCH/HR) =   0.04
  AREA-AVERAGED Fp(INCH/HR) =   0.42  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =       10.0         PEAK FLOW RATE(CFS) =      23.41

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.48   FLOOD WIDTH(FEET) =   36.71
  FLOW VELOCITY(FEET/SEC.) =   2.76   DEPTH*VELOCITY(FT*FT/SEC) =   1.33
  LONGEST FLOWPATH FROM NODE    210.00 TO NODE    212.00 =    1634.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    212.00 TO NODE    213.00 IS CODE =  91
----------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
============================================================================
  UPSTREAM NODE ELEVATION(FEET) =    927.00
  DOWNSTREAM NODE ELEVATION(FEET) =    921.80
  CHANNEL LENGTH THRU SUBAREA(FEET) =   549.00
  "V" GUTTER WIDTH(FEET) =   3.00   GUTTER HIKE(FEET) =  0.050
  PAVEMENT LIP(FEET) =  0.010   MANNING'S N = .0150
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.02500
  MAXIMUM DEPTH(FEET) =   1.00
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  2.434
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        3.00      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =     26.64
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   3.62
  AVERAGE FLOW DEPTH(FEET) =   0.45   FLOOD WIDTH(FEET) =   34.21
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   2.53   Tc(MIN.) =   19.75
  SUBAREA AREA(ACRES) =    3.00       SUBAREA RUNOFF(CFS) =    6.46
  EFFECTIVE AREA(ACRES) =   13.00     AREA-AVERAGED Fm(INCH/HR) =   0.04
  AREA-AVERAGED Fp(INCH/HR) =   0.42  AREA-AVERAGED Ap =   0.10
  TOTAL AREA(ACRES) =       13.0         PEAK FLOW RATE(CFS) =      27.99

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.46   FLOOD WIDTH(FEET) =   34.80
  FLOW VELOCITY(FEET/SEC.) =   3.67   DEPTH*VELOCITY(FT*FT/SEC) =   1.68
  LONGEST FLOWPATH FROM NODE    210.00 TO NODE    213.00 =    2183.00 FEET.

****************************************************************************
```

```
 FLOW PROCESS FROM NODE    213.00 TO NODE    214.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   917.80  DOWNSTREAM(FEET) =   912.14
 FLOW LENGTH(FEET) =    19.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  15.0 INCH PIPE IS  10.3 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =  31.21
 ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      27.99
 PIPE TRAVEL TIME(MIN.) =   0.01    Tc(MIN.) =   19.76
 LONGEST FLOWPATH FROM NODE    210.00 TO NODE    214.00 =    2202.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    214.00 TO NODE    214.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
 TIME OF CONCENTRATION(MIN.) =   19.76
 RAINFALL INTENSITY(INCH/HR) =   2.43
 AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42
 AREA-AVERAGED Ap =  0.10
 EFFECTIVE STREAM AREA(ACRES) =      13.00
 TOTAL STREAM AREA(ACRES) =      13.00
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      27.99

 ** CONFLUENCE DATA **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1      128.90   14.36    2.947  0.30( 0.06) 0.20      43.7     140.00
     1      132.20   15.59    2.806  0.30( 0.06) 0.20      47.4     110.00
     1      133.02   15.93    2.770  0.30( 0.06) 0.20      48.4     120.00
     1      132.98   17.22    2.643  0.30( 0.06) 0.20      51.3     100.00
     1      131.48   19.03    2.490  0.29( 0.06) 0.21      54.4     200.00
     1      123.21   21.26    2.330  0.28( 0.06) 0.23      55.4     130.00
     2       27.99   19.76    2.434  0.42( 0.04) 0.10      13.0     210.00

 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR  2 STREAMS.

 ** PEAK FLOW RATE TABLE **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1      153.61   14.36    2.947  0.31( 0.06) 0.18      53.1     140.00
     2      157.71   15.59    2.806  0.31( 0.06) 0.18      57.6     110.00
     3      158.75   15.93    2.770  0.31( 0.06) 0.18      58.9     120.00
     4      159.50   17.22    2.643  0.31( 0.06) 0.19      62.6     100.00
     5      159.06   19.03    2.490  0.31( 0.06) 0.19      67.0     200.00
     6      156.73   19.76    2.434  0.30( 0.06) 0.19      67.8     210.00
     7      149.98   21.26    2.330  0.30( 0.06) 0.20      68.4     130.00

 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) =     159.50    Tc(MIN.) =    17.22
 EFFECTIVE AREA(ACRES) =      62.62   AREA-AVERAGED Fm(INCH/HR) =  0.06
 AREA-AVERAGED Fp(INCH/HR) =  0.31  AREA-AVERAGED Ap =  0.19
 TOTAL AREA(ACRES) =       68.4
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    214.00 =    4162.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    214.00 TO NODE    215.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   912.14  DOWNSTREAM(FEET) =   910.34
 FLOW LENGTH(FEET) =   359.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  60.0 INCH PIPE IS  44.0 INCHES
```

```
  PIPE-FLOW VELOCITY(FEET/SEC.) =  10.34
  ESTIMATED PIPE DIAMETER(INCH) =  60.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =     159.50
  PIPE TRAVEL TIME(MIN.) =   0.58    Tc(MIN.) =   17.80
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    215.00 =    4521.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       68.4  TC(MIN.) =     17.80
  EFFECTIVE AREA(ACRES) =     62.62  AREA-AVERAGED Fm(INCH/HR)=  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.31  AREA-AVERAGED Ap = 0.186
  PEAK FLOW RATE(CFS)   =     159.50

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1      153.61   14.96    2.877  0.31( 0.06) 0.18      53.1     140.00
      2      157.71   16.17    2.746  0.31( 0.06) 0.18      57.6     110.00
      3      158.75   16.51    2.711  0.31( 0.06) 0.18      58.9     120.00
      4      159.50   17.80    2.591  0.31( 0.06) 0.19      62.6     100.00
      5      159.06   19.61    2.445  0.31( 0.06) 0.19      67.0     200.00
      6      156.73   20.36    2.391  0.30( 0.06) 0.19      67.8     210.00
      7      149.98   21.85    2.292  0.30( 0.06) 0.20      68.4     130.00
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 2 - NODES 220-223                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P2AC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    220.00 TO NODE    221.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   187.00
  ELEVATION DATA: UPSTREAM(FEET) =    942.50  DOWNSTREAM(FEET) =    936.56

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.90      0.42      0.100    76    5.00
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      4.46
  TOTAL AREA(ACRES) =      0.90   PEAK FLOW RATE(CFS) =      4.46
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    221.00 TO NODE    222.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   932.56  DOWNSTREAM(FEET) =   930.60
  FLOW LENGTH(FEET) =   392.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  10.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.31
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.46
  PIPE TRAVEL TIME(MIN.) =   1.52    Tc(MIN.) =    6.52
  LONGEST FLOWPATH FROM NODE    220.00 TO NODE    222.00 =     579.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    222.00 TO NODE    222.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.52
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.736
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.40      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.40      SUBAREA RUNOFF(CFS) =   10.14
  EFFECTIVE AREA(ACRES) =      3.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.3       PEAK FLOW RATE(CFS) =      13.94

****************************************************************************
  FLOW PROCESS FROM NODE    222.00 TO NODE    223.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   930.60  DOWNSTREAM(FEET) =   925.73
  FLOW LENGTH(FEET) =   975.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.61
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.94
  PIPE TRAVEL TIME(MIN.) =   2.90    Tc(MIN.) =    9.41
  LONGEST FLOWPATH FROM NODE    220.00 TO NODE    223.00 =    1554.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        3.3  TC(MIN.) =      9.41
  EFFECTIVE AREA(ACRES) =      3.30  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      13.94
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 3 - NODES 300-308                         *
* HYDROLOGIC ANALYSIS - 100-YEAR                                          *
 *************************************************************************

  FILE NAME: 4005P3AC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    300.00 TO NODE    301.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   170.00
  ELEVATION DATA: UPSTREAM(FEET) =    916.35  DOWNSTREAM(FEET) =    912.38

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.028
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.533
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        1.30      0.42      0.100    76    5.03
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      6.42
  TOTAL AREA(ACRES) =      1.30   PEAK FLOW RATE(CFS) =      6.42
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    301.00 TO NODE    302.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.38  DOWNSTREAM(FEET) =   907.69
  FLOW LENGTH(FEET) =   137.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.64
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.42
  PIPE TRAVEL TIME(MIN.) =   0.49    Tc(MIN.) =    5.52
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    302.00 =     307.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    302.00 TO NODE    302.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.52
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.232
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.20      SUBAREA RUNOFF(CFS) =    5.60
  EFFECTIVE AREA(ACRES) =      2.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.5       PEAK FLOW RATE(CFS) =      11.68

****************************************************************************
  FLOW PROCESS FROM NODE    302.00 TO NODE    303.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.69  DOWNSTREAM(FEET) =   907.09
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.44
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      11.68
  PIPE TRAVEL TIME(MIN.) =   0.37    Tc(MIN.) =    5.89
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    303.00 =     427.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    303.00 TO NODE    303.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.89
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.033
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.20      SUBAREA RUNOFF(CFS) =    5.39
  EFFECTIVE AREA(ACRES) =      3.70   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.7       PEAK FLOW RATE(CFS) =      16.62

****************************************************************************
  FLOW PROCESS FROM NODE    303.00 TO NODE    304.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.09  DOWNSTREAM(FEET) =   906.49
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  17.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.93
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      16.62
  PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    6.22
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    304.00 =     547.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    304.00 TO NODE    304.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    6.22
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.868
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.40      SUBAREA RUNOFF(CFS) =    6.08
  EFFECTIVE AREA(ACRES) =      5.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.1       PEAK FLOW RATE(CFS) =      22.15

****************************************************************************
  FLOW PROCESS FROM NODE    304.00 TO NODE    305.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.49  DOWNSTREAM(FEET) =   905.89
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  20.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.37
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      22.15
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    6.54
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    305.00 =     667.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    305.00 TO NODE    305.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    6.54
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.727
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.40      SUBAREA RUNOFF(CFS) =    5.90
  EFFECTIVE AREA(ACRES) =      6.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.5       PEAK FLOW RATE(CFS) =      27.40

****************************************************************************
  FLOW PROCESS FROM NODE    305.00 TO NODE    306.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.89  DOWNSTREAM(FEET) =   905.29
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  23.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.56
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      27.40
  PIPE TRAVEL TIME(MIN.) =   0.30    Tc(MIN.) =    6.84
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    306.00 =     787.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    306.00 TO NODE    306.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.84
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.599
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.20      SUBAREA RUNOFF(CFS) =    4.92
  EFFECTIVE AREA(ACRES) =      7.70   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        7.7       PEAK FLOW RATE(CFS) =      31.58

****************************************************************************
  FLOW PROCESS FROM NODE    306.00 TO NODE    307.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.29  DOWNSTREAM(FEET) =   904.76
  FLOW LENGTH(FEET) =   107.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  23.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.88
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      31.58
  PIPE TRAVEL TIME(MIN.) =   0.26    Tc(MIN.) =    7.10
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    307.00 =     894.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    307.00 TO NODE    307.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.10
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.498
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.70      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.70      SUBAREA RUNOFF(CFS) =   10.83
  EFFECTIVE AREA(ACRES) =     10.40   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       10.4       PEAK FLOW RATE(CFS) =      41.70

****************************************************************************
  FLOW PROCESS FROM NODE    307.00 TO NODE    308.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.76  DOWNSTREAM(FEET) =   903.28
  FLOW LENGTH(FEET) =   294.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  36.0 INCH PIPE IS  26.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.39
  ESTIMATED PIPE DIAMETER(INCH) =  36.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      41.70
  PIPE TRAVEL TIME(MIN.) =   0.66    Tc(MIN.) =    7.76
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    308.00 =    1188.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       10.4  TC(MIN.) =      7.76
```

```
  EFFECTIVE AREA(ACRES) =     10.40  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      41.70
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 3 - NODES 310-312                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P3BC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    310.00 TO NODE    311.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   880.00
  ELEVATION DATA: UPSTREAM(FEET) =    928.60  DOWNSTREAM(FEET) =    915.50

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   18.340
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  2.545
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  NATURAL POOR COVER
  "OPEN BRUSH"                B        2.40      0.20     1.000    92   18.34
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA RUNOFF(CFS) =      5.07
```

```
  TOTAL AREA(ACRES) =      2.40   PEAK FLOW RATE(CFS) =      5.07

****************************************************************************
  FLOW PROCESS FROM NODE    311.00 TO NODE    312.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   911.50  DOWNSTREAM(FEET) =   911.32
  FLOW LENGTH(FEET) =    35.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.48
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.07
  PIPE TRAVEL TIME(MIN.) =   0.13    Tc(MIN.) =   18.47
  LONGEST FLOWPATH FROM NODE    310.00 TO NODE    312.00 =     915.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        2.4  TC(MIN.) =     18.47
  EFFECTIVE AREA(ACRES) =      2.40  AREA-AVERAGED Fm(INCH/HR)=  0.20
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap = 1.000
  PEAK FLOW RATE(CFS)   =       5.07
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 3 - NODES 320-332                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P3CC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    320.00 TO NODE    321.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   429.00
  ELEVATION DATA: UPSTREAM(FEET) =    917.07  DOWNSTREAM(FEET) =    912.15

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.394
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.068
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        2.10      0.42      0.100    76    8.39
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      7.61
  TOTAL AREA(ACRES) =      2.10   PEAK FLOW RATE(CFS) =      7.61
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    321.00 TO NODE    332.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.15  DOWNSTREAM(FEET) =   907.22
  FLOW LENGTH(FEET) =   186.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  12.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.91
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       7.61
  PIPE TRAVEL TIME(MIN.) =   0.63    Tc(MIN.) =    9.03
  LONGEST FLOWPATH FROM NODE    320.00 TO NODE    332.00 =     615.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    332.00 TO NODE    332.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =    9.03
  RAINFALL INTENSITY(INCH/HR) =   3.90
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       2.10
  TOTAL STREAM AREA(ACRES) =       2.10
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       7.61

****************************************************************************
  FLOW PROCESS FROM NODE    330.00 TO NODE    331.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   887.00
  ELEVATION DATA: UPSTREAM(FEET) =    925.22  DOWNSTREAM(FEET) =    913.90

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   18.973
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  2.494
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  NATURAL POOR COVER
  "OPEN BRUSH"                B        7.80      0.20     1.000    92   18.97
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA RUNOFF(CFS) =     16.10
  TOTAL AREA(ACRES) =      7.80   PEAK FLOW RATE(CFS) =     16.10

****************************************************************************
  FLOW PROCESS FROM NODE    331.00 TO NODE    332.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   909.90  DOWNSTREAM(FEET) =   907.22
  FLOW LENGTH(FEET) =   132.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  13.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.99
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      16.10
  PIPE TRAVEL TIME(MIN.) =   0.22    Tc(MIN.) =   19.19
  LONGEST FLOWPATH FROM NODE    330.00 TO NODE    332.00 =    1019.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    332.00 TO NODE    332.00 IS CODE =   1
----------------------------------------------------------------------------
```

```
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   19.19
  RAINFALL INTENSITY(INCH/HR) =   2.48
  AREA-AVERAGED Fm(INCH/HR) =  0.20
  AREA-AVERAGED Fp(INCH/HR) =  0.20
  AREA-AVERAGED Ap =  1.00
  EFFECTIVE STREAM AREA(ACRES) =       7.80
  TOTAL STREAM AREA(ACRES) =       7.80
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      16.10

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1        7.61    9.03    3.895  0.42( 0.04) 0.10       2.1     320.00
      2       16.10   19.19    2.477  0.20( 0.20) 1.00       7.8     330.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       19.90    9.03    3.895  0.21( 0.14) 0.67       5.8     320.00
      2       20.91   19.19    2.477  0.21( 0.17) 0.81       9.9     330.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      20.91    Tc(MIN.) =    19.19
  EFFECTIVE AREA(ACRES) =       9.90   AREA-AVERAGED Fm(INCH/HR) =  0.17
  AREA-AVERAGED Fp(INCH/HR) =  0.21  AREA-AVERAGED Ap =  0.81
  TOTAL AREA(ACRES) =        9.9
  LONGEST FLOWPATH FROM NODE    330.00 TO NODE    332.00 =    1019.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        9.9  TC(MIN.) =     19.19
  EFFECTIVE AREA(ACRES) =      9.90  AREA-AVERAGED Fm(INCH/HR)=  0.17
  AREA-AVERAGED Fp(INCH/HR) =  0.21  AREA-AVERAGED Ap = 0.809
  PEAK FLOW RATE(CFS)   =      20.91

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       19.90    9.03    3.895  0.21( 0.14) 0.67       5.8     320.00
      2       20.91   19.19    2.477  0.21( 0.17) 0.81       9.9     330.00
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 3 - NODES 340-342                         *
* HYDROLOGIC ANALYSIS - 100-YEAR                                          *
 *************************************************************************

  FILE NAME: 4005P3DC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    340.00 TO NODE    341.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   206.00
  ELEVATION DATA: UPSTREAM(FEET) =    912.96  DOWNSTREAM(FEET) =    910.48

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.199
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.880
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        3.10      0.42      0.100    76    6.20
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     13.50
  TOTAL AREA(ACRES) =      3.10   PEAK FLOW RATE(CFS) =     13.50
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    341.00 TO NODE    342.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.48  DOWNSTREAM(FEET) =   906.19
  FLOW LENGTH(FEET) =    57.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.63
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.50
  PIPE TRAVEL TIME(MIN.) =   0.17    Tc(MIN.) =    6.37
  LONGEST FLOWPATH FROM NODE    340.00 TO NODE    342.00 =     263.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        3.1  TC(MIN.) =      6.37
  EFFECTIVE AREA(ACRES) =      3.10  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      13.50
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 3 - NODES 350-363                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P3EC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    350.00 TO NODE    351.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   936.00
  ELEVATION DATA: UPSTREAM(FEET) =    943.50  DOWNSTREAM(FEET) =    924.50

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   17.667
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  2.603
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  NATURAL POOR COVER
  "OPEN BRUSH"                B        9.80      0.20     1.000    92   17.67
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA RUNOFF(CFS) =     21.20
```

```
  TOTAL AREA(ACRES) =      9.80   PEAK FLOW RATE(CFS) =     21.20

****************************************************************************
  FLOW PROCESS FROM NODE    351.00 TO NODE    352.00 IS CODE =  52
----------------------------------------------------------------------------
  >>>>>COMPUTE NATURAL VALLEY CHANNEL FLOW<<<<<
  >>>>>TRAVELTIME THRU SUBAREA<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    924.50  DOWNSTREAM(FEET) =    924.20
  CHANNEL LENGTH THRU SUBAREA(FEET) =   169.00   CHANNEL SLOPE =  0.0018
  CHANNEL FLOW THRU SUBAREA(CFS) =      21.20
  FLOW VELOCITY(FEET/SEC) =   1.28 (PER LACFCD/RCFC&WCD HYDROLOGY MANUAL)
  TRAVEL TIME(MIN.) =   2.20   Tc(MIN.) =   19.86
  LONGEST FLOWPATH FROM NODE    350.00 TO NODE    352.00 =    1105.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    352.00 TO NODE    352.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   19.86
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  2.426
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  NATURAL POOR COVER
  "OPEN BRUSH"                B        4.70      0.20     1.000    92
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA AREA(ACRES) =    4.70      SUBAREA RUNOFF(CFS) =    9.42
  EFFECTIVE AREA(ACRES) =     14.50   AREA-AVERAGED Fm(INCH/HR) =  0.20
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  1.00
  TOTAL AREA(ACRES) =       14.5       PEAK FLOW RATE(CFS) =      29.05

****************************************************************************
  FLOW PROCESS FROM NODE    352.00 TO NODE    353.00 IS CODE =  52
----------------------------------------------------------------------------
  >>>>>COMPUTE NATURAL VALLEY CHANNEL FLOW<<<<<
  >>>>>TRAVELTIME THRU SUBAREA<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =    924.20  DOWNSTREAM(FEET) =    921.60
  CHANNEL LENGTH THRU SUBAREA(FEET) =   515.00   CHANNEL SLOPE =  0.0050
  CHANNEL FLOW THRU SUBAREA(CFS) =      29.05
  FLOW VELOCITY(FEET/SEC) =   2.36 (PER LACFCD/RCFC&WCD HYDROLOGY MANUAL)
  TRAVEL TIME(MIN.) =   3.64   Tc(MIN.) =   23.50
  LONGEST FLOWPATH FROM NODE    350.00 TO NODE    353.00 =    1620.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    353.00 TO NODE    353.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   23.50
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  2.193
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  NATURAL POOR COVER
  "OPEN BRUSH"                B        8.20      0.20     1.000    92
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA AREA(ACRES) =    8.20      SUBAREA RUNOFF(CFS) =   14.71
  EFFECTIVE AREA(ACRES) =     22.70   AREA-AVERAGED Fm(INCH/HR) =  0.20
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  1.00
  TOTAL AREA(ACRES) =       22.7       PEAK FLOW RATE(CFS) =      40.73

****************************************************************************
  FLOW PROCESS FROM NODE    353.00 TO NODE    362.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
```

```
  ELEVATION DATA: UPSTREAM(FEET) =   917.60  DOWNSTREAM(FEET) =   907.09
  FLOW LENGTH(FEET) =   912.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  23.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   9.95
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      40.73
  PIPE TRAVEL TIME(MIN.) =   1.53    Tc(MIN.) =   25.03
  LONGEST FLOWPATH FROM NODE    350.00 TO NODE    362.00 =    2532.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    362.00 TO NODE    362.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   25.03
  RAINFALL INTENSITY(INCH/HR) =   2.11
  AREA-AVERAGED Fm(INCH/HR) =  0.20
  AREA-AVERAGED Fp(INCH/HR) =  0.20
  AREA-AVERAGED Ap =  1.00
  EFFECTIVE STREAM AREA(ACRES) =      22.70
  TOTAL STREAM AREA(ACRES) =      22.70
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      40.73

****************************************************************************
  FLOW PROCESS FROM NODE    360.00 TO NODE    361.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   572.00
  ELEVATION DATA: UPSTREAM(FEET) =    916.35  DOWNSTREAM(FEET) =    911.16

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.869
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.692
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        1.00      0.42      0.100    76    9.87
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      3.28
  TOTAL AREA(ACRES) =      1.00   PEAK FLOW RATE(CFS) =      3.28

****************************************************************************
  FLOW PROCESS FROM NODE    361.00 TO NODE    362.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.16  DOWNSTREAM(FEET) =   907.09
  FLOW LENGTH(FEET) =    14.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   9.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.97
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.28
  PIPE TRAVEL TIME(MIN.) =   0.06    Tc(MIN.) =    9.93
  LONGEST FLOWPATH FROM NODE    360.00 TO NODE    362.00 =     586.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    362.00 TO NODE    362.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    9.93
  RAINFALL INTENSITY(INCH/HR) =   3.68
  AREA-AVERAGED Fm(INCH/HR) =  0.04
```

```
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       1.00
  TOTAL STREAM AREA(ACRES) =       1.00
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       3.28

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       40.73   25.03    2.112  0.20( 0.20) 1.00      22.7     350.00
      2        3.28    9.93    3.679  0.42( 0.04) 0.10       1.0     360.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       32.67    9.93    3.679  0.20( 0.18) 0.91      10.0     360.00
      2       42.60   25.03    2.112  0.20( 0.19) 0.96      23.7     350.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      42.60    Tc(MIN.) =    25.03
  EFFECTIVE AREA(ACRES) =      23.70   AREA-AVERAGED Fm(INCH/HR) =  0.19
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.96
  TOTAL AREA(ACRES) =       23.7
  LONGEST FLOWPATH FROM NODE    350.00 TO NODE    362.00 =    2532.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    362.00 TO NODE    363.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.09  DOWNSTREAM(FEET) =   903.42
  FLOW LENGTH(FEET) =   735.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  36.0 INCH PIPE IS  27.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.38
  ESTIMATED PIPE DIAMETER(INCH) =  36.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      42.60
  PIPE TRAVEL TIME(MIN.) =   1.66    Tc(MIN.) =   26.69
  LONGEST FLOWPATH FROM NODE    350.00 TO NODE    363.00 =    3267.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       23.7  TC(MIN.) =     26.69
  EFFECTIVE AREA(ACRES) =     23.70  AREA-AVERAGED Fm(INCH/HR)=  0.19
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap = 0.962
  PEAK FLOW RATE(CFS)   =      42.60

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       32.67   11.69    3.334  0.20( 0.18) 0.91      10.0     360.00
      2       42.60   26.69    2.032  0.20( 0.19) 0.96      23.7     350.00
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 3 - NODES 370-383                         *
* HYDROLOGIC ANALYSIS - 100-YEAR                                          *
 *************************************************************************

  FILE NAME: 4005P3FC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    370.00 TO NODE    371.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   208.00
  ELEVATION DATA: UPSTREAM(FEET) =    912.96  DOWNSTREAM(FEET) =    910.48

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.235
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.863
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        3.10      0.42      0.100    76    6.23
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     13.45
  TOTAL AREA(ACRES) =      3.10   PEAK FLOW RATE(CFS) =     13.45
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    371.00 TO NODE    372.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.48  DOWNSTREAM(FEET) =   904.85
  FLOW LENGTH(FEET) =   325.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.59
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.45
  PIPE TRAVEL TIME(MIN.) =   0.97    Tc(MIN.) =    7.20
  LONGEST FLOWPATH FROM NODE    370.00 TO NODE    372.00 =     533.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    372.00 TO NODE    372.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.20
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.459
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.70      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.70      SUBAREA RUNOFF(CFS) =   10.73
  EFFECTIVE AREA(ACRES) =      5.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.8       PEAK FLOW RATE(CFS) =      23.06

****************************************************************************
  FLOW PROCESS FROM NODE    372.00 TO NODE    383.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.85  DOWNSTREAM(FEET) =   904.04
  FLOW LENGTH(FEET) =   163.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  20.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.40
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      23.06
  PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    7.63
  LONGEST FLOWPATH FROM NODE    370.00 TO NODE    383.00 =     696.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    383.00 TO NODE    383.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =    7.63
  RAINFALL INTENSITY(INCH/HR) =   4.31
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       5.80
  TOTAL STREAM AREA(ACRES) =       5.80
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      23.06

****************************************************************************
  FLOW PROCESS FROM NODE    380.00 TO NODE    381.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   538.00
```

```
  ELEVATION DATA: UPSTREAM(FEET) =    917.76  DOWNSTREAM(FEET) =    912.09

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.346
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.814
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        1.00      0.42      0.100    76    9.35
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      3.39
  TOTAL AREA(ACRES) =      1.00   PEAK FLOW RATE(CFS) =      3.39

****************************************************************************
  FLOW PROCESS FROM NODE    381.00 TO NODE    382.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.09  DOWNSTREAM(FEET) =   906.14
  FLOW LENGTH(FEET) =   140.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   8.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.83
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.39
  PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =    9.75
  LONGEST FLOWPATH FROM NODE    380.00 TO NODE    382.00 =     678.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    382.00 TO NODE    382.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.75
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.720
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.32
  EFFECTIVE AREA(ACRES) =      1.40   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.4       PEAK FLOW RATE(CFS) =       4.63

****************************************************************************
  FLOW PROCESS FROM NODE    382.00 TO NODE    383.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.14  DOWNSTREAM(FEET) =   904.04
  FLOW LENGTH(FEET) =   150.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.40
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.63
  PIPE TRAVEL TIME(MIN.) =   0.39    Tc(MIN.) =   10.14
  LONGEST FLOWPATH FROM NODE    380.00 TO NODE    383.00 =     828.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    383.00 TO NODE    383.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   10.14
  RAINFALL INTENSITY(INCH/HR) =   3.63
```

```
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       1.40
  TOTAL STREAM AREA(ACRES) =       1.40
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       4.63

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       23.06    7.63    4.309  0.42( 0.04) 0.10       5.8     370.00
      2        4.63   10.14    3.633  0.42( 0.04) 0.10       1.4     380.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       27.20    7.63    4.309  0.42( 0.04) 0.10       6.9     370.00
      2       24.04   10.14    3.633  0.42( 0.04) 0.10       7.2     380.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      27.20    Tc(MIN.) =     7.63
  EFFECTIVE AREA(ACRES) =       6.85   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =         7.2
  LONGEST FLOWPATH FROM NODE    380.00 TO NODE    383.00 =     828.00 FEET.
================================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =         7.2  TC(MIN.) =      7.63
  EFFECTIVE AREA(ACRES) =      6.85  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      27.20

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       27.20    7.63    4.309  0.42( 0.04) 0.10       6.9     370.00
      2       24.04   10.14    3.633  0.42( 0.04) 0.10       7.2     380.00
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 4 - NODES 400-410                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P4AC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    400.00 TO NODE    401.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    91.00
  ELEVATION DATA: UPSTREAM(FEET) =    912.06  DOWNSTREAM(FEET) =    910.04

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.10      0.42      0.100    76    5.00
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      0.50
  TOTAL AREA(ACRES) =      0.10   PEAK FLOW RATE(CFS) =      0.50
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    401.00 TO NODE    402.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.04  DOWNSTREAM(FEET) =   905.14
  FLOW LENGTH(FEET) =   179.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 12.000
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   3.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   2.46
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       0.50
  PIPE TRAVEL TIME(MIN.) =   1.21    Tc(MIN.) =    6.21
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    402.00 =     270.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    402.00 TO NODE    402.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.21
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.873
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.74
  EFFECTIVE AREA(ACRES) =      0.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.5       PEAK FLOW RATE(CFS) =       2.17

****************************************************************************
  FLOW PROCESS FROM NODE    402.00 TO NODE    403.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.14  DOWNSTREAM(FEET) =   903.62
  FLOW LENGTH(FEET) =   306.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   8.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.52
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.17
  PIPE TRAVEL TIME(MIN.) =   1.45    Tc(MIN.) =    7.66
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    403.00 =     576.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    403.00 TO NODE    403.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.66
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.297
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.00      SUBAREA RUNOFF(CFS) =    7.66
  EFFECTIVE AREA(ACRES) =      2.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.5       PEAK FLOW RATE(CFS) =       9.57

****************************************************************************
  FLOW PROCESS FROM NODE    403.00 TO NODE    404.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
```

```
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.62  DOWNSTREAM(FEET) =   902.84
  FLOW LENGTH(FEET) =   156.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  15.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.12
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       9.57
  PIPE TRAVEL TIME(MIN.) =   0.51    Tc(MIN.) =    8.17
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    404.00 =     732.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    404.00 TO NODE    404.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    8.17
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.135
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.30      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.30      SUBAREA RUNOFF(CFS) =    4.79
  EFFECTIVE AREA(ACRES) =      3.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.8       PEAK FLOW RATE(CFS) =      14.00

****************************************************************************
  FLOW PROCESS FROM NODE    404.00 TO NODE    405.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   902.84  DOWNSTREAM(FEET) =   902.06
  FLOW LENGTH(FEET) =   156.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.61
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      14.00
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    8.63
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    405.00 =     888.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    405.00 TO NODE    405.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    8.63
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.001
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.30      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.30      SUBAREA RUNOFF(CFS) =    4.63
  EFFECTIVE AREA(ACRES) =      5.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.1       PEAK FLOW RATE(CFS) =      18.17

****************************************************************************
  FLOW PROCESS FROM NODE    405.00 TO NODE    406.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   902.06  DOWNSTREAM(FEET) =   901.28
  FLOW LENGTH(FEET) =   156.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  19.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.03
```

```
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      18.17
  PIPE TRAVEL TIME(MIN.) =   0.43    Tc(MIN.) =    9.06
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    406.00 =    1044.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    406.00 TO NODE    406.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.06
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.885
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.30      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.30      SUBAREA RUNOFF(CFS) =    4.50
  EFFECTIVE AREA(ACRES) =      6.40   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.4       PEAK FLOW RATE(CFS) =      22.14

****************************************************************************
  FLOW PROCESS FROM NODE    406.00 TO NODE    407.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.28  DOWNSTREAM(FEET) =   900.50
  FLOW LENGTH(FEET) =   156.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  20.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.37
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      22.14
  PIPE TRAVEL TIME(MIN.) =   0.41    Tc(MIN.) =    9.47
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    407.00 =    1200.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    407.00 TO NODE    407.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.47
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.784
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.30      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.30      SUBAREA RUNOFF(CFS) =    4.38
  EFFECTIVE AREA(ACRES) =      7.70   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        7.7       PEAK FLOW RATE(CFS) =      25.93

****************************************************************************
  FLOW PROCESS FROM NODE    407.00 TO NODE    408.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   900.50  DOWNSTREAM(FEET) =   899.71
  FLOW LENGTH(FEET) =   158.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  22.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.53
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      25.93
  PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =    9.88
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    408.00 =    1358.00 FEET.

****************************************************************************
```

```
 FLOW PROCESS FROM NODE    408.00 TO NODE    408.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    9.88
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.690
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        1.80      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    1.80      SUBAREA RUNOFF(CFS) =    5.91
 EFFECTIVE AREA(ACRES) =      9.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        9.5       PEAK FLOW RATE(CFS) =      31.19

****************************************************************************
 FLOW PROCESS FROM NODE    408.00 TO NODE    409.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   899.71  DOWNSTREAM(FEET) =   898.04
 FLOW LENGTH(FEET) =   334.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  33.0 INCH PIPE IS  23.5 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   6.90
 ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      31.19
 PIPE TRAVEL TIME(MIN.) =   0.81    Tc(MIN.) =   10.68
 LONGEST FLOWPATH FROM NODE    400.00 TO NODE    409.00 =    1692.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    409.00 TO NODE    409.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   10.68
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.520
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.40      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.25
 EFFECTIVE AREA(ACRES) =      9.90   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        9.9       PEAK FLOW RATE(CFS) =      31.19
 NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE

****************************************************************************
 FLOW PROCESS FROM NODE    409.00 TO NODE    410.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   898.04  DOWNSTREAM(FEET) =   897.21
 FLOW LENGTH(FEET) =   166.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  33.0 INCH PIPE IS  23.5 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   6.90
 ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      31.19
 PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =   11.08
 LONGEST FLOWPATH FROM NODE    400.00 TO NODE    410.00 =    1858.00 FEET.
============================================================================
 END OF STUDY SUMMARY:
 TOTAL AREA(ACRES)     =        9.9  TC(MIN.) =     11.08
 EFFECTIVE AREA(ACRES) =      9.90  AREA-AVERAGED Fm(INCH/HR)=  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
 PEAK FLOW RATE(CFS)   =      31.19
============================================================================
```

```
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 5 - NODES 500-524                         *
* HYDROLOGIC ANALYSIS - 100-YEAR                                          *
 *************************************************************************

  FILE NAME: 4005P5AC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    500.00 TO NODE    501.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   307.00
  ELEVATION DATA: UPSTREAM(FEET) =    942.80  DOWNSTREAM(FEET) =    932.29

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.900
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.027
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        2.50      0.42      0.100    76    5.90
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =     11.22
  TOTAL AREA(ACRES) =      2.50   PEAK FLOW RATE(CFS) =     11.22
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    501.00 TO NODE    502.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   928.29  DOWNSTREAM(FEET) =   926.43
  FLOW LENGTH(FEET) =   372.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.40
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      11.22
  PIPE TRAVEL TIME(MIN.) =   1.15    Tc(MIN.) =    7.05
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    502.00 =     679.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    502.00 TO NODE    502.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.05
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.518
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.90      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.90      SUBAREA RUNOFF(CFS) =    7.65
  EFFECTIVE AREA(ACRES) =      4.40   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.4       PEAK FLOW RATE(CFS) =      17.72

****************************************************************************
  FLOW PROCESS FROM NODE    502.00 TO NODE    503.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   926.43  DOWNSTREAM(FEET) =   925.72
  FLOW LENGTH(FEET) =   142.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.00
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      17.72
  PIPE TRAVEL TIME(MIN.) =   0.39    Tc(MIN.) =    7.44
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    503.00 =     821.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    503.00 TO NODE    503.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.44
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.373
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.90      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.90      SUBAREA RUNOFF(CFS) =    3.51
  EFFECTIVE AREA(ACRES) =      5.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.3       PEAK FLOW RATE(CFS) =      20.66

****************************************************************************
  FLOW PROCESS FROM NODE    503.00 TO NODE    504.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.72  DOWNSTREAM(FEET) =   925.12
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  21.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.12
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      20.66
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    7.77
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    504.00 =     941.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    504.00 TO NODE    504.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    7.77
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.262
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.80
  EFFECTIVE AREA(ACRES) =      6.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.3       PEAK FLOW RATE(CFS) =      23.92

****************************************************************************
  FLOW PROCESS FROM NODE    504.00 TO NODE    505.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.12  DOWNSTREAM(FEET) =   923.51
  FLOW LENGTH(FEET) =   321.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  21.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.47
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      23.92
  PIPE TRAVEL TIME(MIN.) =   0.83    Tc(MIN.) =    8.60
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    505.00 =    1262.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    505.00 TO NODE    505.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    8.60
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.011
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        3.10      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    3.10      SUBAREA RUNOFF(CFS) =   11.07
  EFFECTIVE AREA(ACRES) =      9.40   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        9.4       PEAK FLOW RATE(CFS) =      33.57

****************************************************************************
  FLOW PROCESS FROM NODE    505.00 TO NODE    506.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   923.51  DOWNSTREAM(FEET) =   922.07
  FLOW LENGTH(FEET) =   288.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  25.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.96
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      33.57
  PIPE TRAVEL TIME(MIN.) =   0.69    Tc(MIN.) =    9.29
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    506.00 =    1550.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    506.00 TO NODE    506.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.29
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.829
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.80      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.80      SUBAREA RUNOFF(CFS) =    6.13
  EFFECTIVE AREA(ACRES) =     11.20   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       11.2       PEAK FLOW RATE(CFS) =      38.17

****************************************************************************
  FLOW PROCESS FROM NODE    506.00 TO NODE    523.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   922.07  DOWNSTREAM(FEET) =   921.07
  FLOW LENGTH(FEET) =   200.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  36.0 INCH PIPE IS  25.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.27
  ESTIMATED PIPE DIAMETER(INCH) =  36.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      38.17
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    9.74
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    523.00 =    1750.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    523.00 TO NODE    523.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =    9.74
  RAINFALL INTENSITY(INCH/HR) =   3.72
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =      11.20
  TOTAL STREAM AREA(ACRES) =      11.20
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      38.17

****************************************************************************
  FLOW PROCESS FROM NODE    511.00 TO NODE    511.00 IS CODE =  22
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   200.00
  USER SPECIFIED Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.60      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.98
  TOTAL AREA(ACRES) =      0.60   PEAK FLOW RATE(CFS) =      2.98

****************************************************************************
```

```
 FLOW PROCESS FROM NODE    511.00 TO NODE    512.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   929.43  DOWNSTREAM(FEET) =   928.82
 FLOW LENGTH(FEET) =   122.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  15.0 INCH PIPE IS   9.0 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   3.88
 ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       2.98
 PIPE TRAVEL TIME(MIN.) =   0.52    Tc(MIN.) =    5.52
 LONGEST FLOWPATH FROM NODE    511.00 TO NODE    512.00 =     322.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    512.00 TO NODE    512.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    5.52
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.229
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42      0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.33
 EFFECTIVE AREA(ACRES) =      1.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        1.1       PEAK FLOW RATE(CFS) =       5.14

****************************************************************************
 FLOW PROCESS FROM NODE    512.00 TO NODE    513.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   928.82  DOWNSTREAM(FEET) =   928.26
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.2 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.44
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       5.14
 PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    5.94
 LONGEST FLOWPATH FROM NODE    511.00 TO NODE    513.00 =     434.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    513.00 TO NODE    513.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    5.94
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.004
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42      0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.23
 EFFECTIVE AREA(ACRES) =      1.60   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        1.6       PEAK FLOW RATE(CFS) =       7.15

****************************************************************************
 FLOW PROCESS FROM NODE    513.00 TO NODE    514.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   928.26  DOWNSTREAM(FEET) =   927.70
```

```
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  14.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.67
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       7.15
  PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =    6.34
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    514.00 =     546.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    514.00 TO NODE    514.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.34
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.813
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.15
  EFFECTIVE AREA(ACRES) =      2.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.1       PEAK FLOW RATE(CFS) =       9.02

****************************************************************************
  FLOW PROCESS FROM NODE    514.00 TO NODE    515.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   927.70  DOWNSTREAM(FEET) =   927.14
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  14.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.07
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       9.02
  PIPE TRAVEL TIME(MIN.) =   0.37    Tc(MIN.) =    6.71
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    515.00 =     658.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    515.00 TO NODE    515.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.71
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.653
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.07
  EFFECTIVE AREA(ACRES) =      2.60   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.6       PEAK FLOW RATE(CFS) =      10.79

****************************************************************************
  FLOW PROCESS FROM NODE    515.00 TO NODE    516.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   927.14  DOWNSTREAM(FEET) =   926.53
  FLOW LENGTH(FEET) =   122.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  17.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.17
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.79
  PIPE TRAVEL TIME(MIN.) =   0.39    Tc(MIN.) =    7.10
```

```
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    516.00 =     780.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    516.00 TO NODE    516.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.10
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.497
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.00
  EFFECTIVE AREA(ACRES) =      3.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.1       PEAK FLOW RATE(CFS) =      12.43

****************************************************************************
  FLOW PROCESS FROM NODE    516.00 TO NODE    517.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   926.53  DOWNSTREAM(FEET) =   925.92
  FLOW LENGTH(FEET) =   122.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  16.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.51
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      12.43
  PIPE TRAVEL TIME(MIN.) =   0.37    Tc(MIN.) =    7.47
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    517.00 =     902.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    517.00 TO NODE    517.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.47
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.362
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.94
  EFFECTIVE AREA(ACRES) =      3.60   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.6       PEAK FLOW RATE(CFS) =      14.00

****************************************************************************
  FLOW PROCESS FROM NODE    517.00 TO NODE    518.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.92  DOWNSTREAM(FEET) =   925.36
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.61
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      14.00
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    7.81
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    518.00 =    1014.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    518.00 TO NODE    518.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
```

```
==========================================================================
  MAINLINE Tc(MIN.) =    7.81
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.250
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.89
  EFFECTIVE AREA(ACRES) =      4.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.1       PEAK FLOW RATE(CFS) =      15.52

**************************************************************************
  FLOW PROCESS FROM NODE    518.00 TO NODE    519.00 IS CODE =  31
--------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.36  DOWNSTREAM(FEET) =   924.80
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  19.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.66
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      15.52
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    8.14
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    519.00 =    1126.00 FEET.

**************************************************************************
  FLOW PROCESS FROM NODE    519.00 TO NODE    519.00 IS CODE =  81
--------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    8.14
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.145
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.85
  EFFECTIVE AREA(ACRES) =      4.60   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.6       PEAK FLOW RATE(CFS) =      16.99

**************************************************************************
  FLOW PROCESS FROM NODE    519.00 TO NODE    520.00 IS CODE =  31
--------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   924.80  DOWNSTREAM(FEET) =   924.24
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.96
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      16.99
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    8.45
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    520.00 =    1238.00 FEET.

**************************************************************************
  FLOW PROCESS FROM NODE    520.00 TO NODE    520.00 IS CODE =  81
--------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    8.45
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.052
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
```

```
  COMMERCIAL                  B        0.60      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.60      SUBAREA RUNOFF(CFS) =    2.17
  EFFECTIVE AREA(ACRES) =      5.20   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.2       PEAK FLOW RATE(CFS) =      18.77

****************************************************************************
  FLOW PROCESS FROM NODE    520.00 TO NODE    521.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   924.24  DOWNSTREAM(FEET) =   922.64
  FLOW LENGTH(FEET) =   320.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  19.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.06
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      18.77
  PIPE TRAVEL TIME(MIN.) =   0.88    Tc(MIN.) =    9.33
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    521.00 =    1558.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    521.00 TO NODE    521.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.33
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.818
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                  B        0.60      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.60      SUBAREA RUNOFF(CFS) =    2.04
  EFFECTIVE AREA(ACRES) =      5.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.8       PEAK FLOW RATE(CFS) =      19.71

****************************************************************************
  FLOW PROCESS FROM NODE    521.00 TO NODE    522.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   922.64  DOWNSTREAM(FEET) =   921.81
  FLOW LENGTH(FEET) =   166.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  20.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.09
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      19.71
  PIPE TRAVEL TIME(MIN.) =   0.45    Tc(MIN.) =    9.78
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    522.00 =    1724.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    522.00 TO NODE    522.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.78
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.711
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                  B        0.80      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.80      SUBAREA RUNOFF(CFS) =    2.64
  EFFECTIVE AREA(ACRES) =      6.60   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
```

```
  TOTAL AREA(ACRES) =        6.6       PEAK FLOW RATE(CFS) =      21.79

****************************************************************************
  FLOW PROCESS FROM NODE    522.00 TO NODE    523.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   921.81  DOWNSTREAM(FEET) =   921.07
  FLOW LENGTH(FEET) =   148.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  19.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.35
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      21.79
  PIPE TRAVEL TIME(MIN.) =   0.39    Tc(MIN.) =   10.17
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    523.00 =    1872.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    523.00 TO NODE    523.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   10.17
  RAINFALL INTENSITY(INCH/HR) =   3.63
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       6.60
  TOTAL STREAM AREA(ACRES) =       6.60
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      21.79

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       38.17    9.74    3.720  0.42( 0.04) 0.10      11.2     500.00
      2       21.79   10.17    3.625  0.42( 0.04) 0.10       6.6     511.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       59.60    9.74    3.720  0.42( 0.04) 0.10      17.5     500.00
      2       58.98   10.17    3.625  0.42( 0.04) 0.10      17.8     511.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      59.60    Tc(MIN.) =     9.74
  EFFECTIVE AREA(ACRES) =      17.52   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       17.8
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    523.00 =    1872.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    523.00 TO NODE    524.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   921.07  DOWNSTREAM(FEET) =   920.99
  FLOW LENGTH(FEET) =    16.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  42.0 INCH PIPE IS  30.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   8.10
  ESTIMATED PIPE DIAMETER(INCH) =  42.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      59.60
  PIPE TRAVEL TIME(MIN.) =   0.03    Tc(MIN.) =    9.78
  LONGEST FLOWPATH FROM NODE    511.00 TO NODE    524.00 =    1888.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
```

```
  TOTAL AREA(ACRES)     =       17.8  TC(MIN.) =      9.78
  EFFECTIVE AREA(ACRES) =     17.52  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      59.60

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1       59.60    9.78    3.713  0.42( 0.04) 0.10      17.5     500.00
      2       58.98   10.21    3.618  0.42( 0.04) 0.10      17.8     511.00
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 6 - NODES 600-614                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P6AC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    600.00 TO NODE    601.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   129.00
  ELEVATION DATA: UPSTREAM(FEET) =    921.90  DOWNSTREAM(FEET) =    917.22

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.30      0.42      0.100    76    5.00
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.49
  TOTAL AREA(ACRES) =      0.30   PEAK FLOW RATE(CFS) =      1.49
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    601.00 TO NODE    602.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   913.22  DOWNSTREAM(FEET) =   911.75
  FLOW LENGTH(FEET) =   224.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   6.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.63
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.49
  PIPE TRAVEL TIME(MIN.) =   1.03    Tc(MIN.) =    6.03
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    602.00 =     353.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    602.00 TO NODE    602.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.03
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.962
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.21
  EFFECTIVE AREA(ACRES) =      0.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       3.54

****************************************************************************
  FLOW PROCESS FROM NODE    602.00 TO NODE    603.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   911.75  DOWNSTREAM(FEET) =   909.19
  FLOW LENGTH(FEET) =   388.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   9.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.50
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.54
  PIPE TRAVEL TIME(MIN.) =   1.44    Tc(MIN.) =    7.47
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    603.00 =     741.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    603.00 TO NODE    603.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.47
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.364
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.30      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.30      SUBAREA RUNOFF(CFS) =    8.95
  EFFECTIVE AREA(ACRES) =      3.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.1       PEAK FLOW RATE(CFS) =      12.06

****************************************************************************
  FLOW PROCESS FROM NODE    603.00 TO NODE    604.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   909.19  DOWNSTREAM(FEET) =   908.42
  FLOW LENGTH(FEET) =   118.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  16.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.91
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      12.06
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    7.80
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    604.00 =     859.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    604.00 TO NODE    604.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    7.80
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.251
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.79
  EFFECTIVE AREA(ACRES) =      4.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.1       PEAK FLOW RATE(CFS) =      15.53

****************************************************************************
  FLOW PROCESS FROM NODE    604.00 TO NODE    605.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.42  DOWNSTREAM(FEET) =   907.63
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.41
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      15.53
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    8.11
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    605.00 =     979.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    605.00 TO NODE    605.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    8.11
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.153
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.70
  EFFECTIVE AREA(ACRES) =      5.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.1       PEAK FLOW RATE(CFS) =      18.87

****************************************************************************
  FLOW PROCESS FROM NODE    605.00 TO NODE    606.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.63  DOWNSTREAM(FEET) =   906.84
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  17.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.79
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      18.87
  PIPE TRAVEL TIME(MIN.) =   0.29    Tc(MIN.) =    8.41
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    606.00 =    1099.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    606.00 TO NODE    606.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.41
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.065
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.62
  EFFECTIVE AREA(ACRES) =      6.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.1       PEAK FLOW RATE(CFS) =      22.08

****************************************************************************
  FLOW PROCESS FROM NODE    606.00 TO NODE    607.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.84  DOWNSTREAM(FEET) =   904.88
  FLOW LENGTH(FEET) =   297.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  20.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.98
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      22.08
  PIPE TRAVEL TIME(MIN.) =   0.71    Tc(MIN.) =    9.12
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    607.00 =    1396.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    607.00 TO NODE    607.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.12
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.872
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.70      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.70      SUBAREA RUNOFF(CFS) =    9.31
  EFFECTIVE AREA(ACRES) =      8.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        8.8       PEAK FLOW RATE(CFS) =      30.33

****************************************************************************
  FLOW PROCESS FROM NODE    607.00 TO NODE    608.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.88  DOWNSTREAM(FEET) =   903.30
  FLOW LENGTH(FEET) =   239.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  23.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.52
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      30.33
  PIPE TRAVEL TIME(MIN.) =   0.53    Tc(MIN.) =    9.65
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    608.00 =    1635.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    608.00 TO NODE    608.00 IS CODE =  81
```

```
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =    9.65
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.743
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.20      SUBAREA RUNOFF(CFS) =    7.33
  EFFECTIVE AREA(ACRES) =     11.00   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       11.0       PEAK FLOW RATE(CFS) =      36.64

************************************************************************
  FLOW PROCESS FROM NODE    608.00 TO NODE    609.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.30  DOWNSTREAM(FEET) =   901.86
  FLOW LENGTH(FEET) =   219.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  23.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.94
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      36.64
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =   10.11
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    609.00 =    1854.00 FEET.

************************************************************************
  FLOW PROCESS FROM NODE    609.00 TO NODE    609.00 IS CODE =  81
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =   10.11
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.640
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.20      SUBAREA RUNOFF(CFS) =    3.89
  EFFECTIVE AREA(ACRES) =     12.20   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       12.2       PEAK FLOW RATE(CFS) =      39.50

************************************************************************
  FLOW PROCESS FROM NODE    609.00 TO NODE    613.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.86  DOWNSTREAM(FEET) =   901.25
  FLOW LENGTH(FEET) =    93.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  25.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   8.00
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      39.50
  PIPE TRAVEL TIME(MIN.) =   0.19    Tc(MIN.) =   10.30
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    613.00 =    1947.00 FEET.

************************************************************************
  FLOW PROCESS FROM NODE    613.00 TO NODE    613.00 IS CODE =   1
------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
========================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   10.30
```

```
  RAINFALL INTENSITY(INCH/HR) =   3.60
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =      12.20
  TOTAL STREAM AREA(ACRES) =      12.20
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      39.50

****************************************************************************
  FLOW PROCESS FROM NODE    610.00 TO NODE    611.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   230.00
  ELEVATION DATA: UPSTREAM(FEET) =    913.20  DOWNSTREAM(FEET) =    907.65

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.637
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.166
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.50      0.42     0.100    76    5.64
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.31
  TOTAL AREA(ACRES) =      0.50   PEAK FLOW RATE(CFS) =      2.31

****************************************************************************
  FLOW PROCESS FROM NODE    611.00 TO NODE    612.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.65  DOWNSTREAM(FEET) =   901.78
  FLOW LENGTH(FEET) =   373.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   9.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.55
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.31
  PIPE TRAVEL TIME(MIN.) =   1.75    Tc(MIN.) =    7.39
  LONGEST FLOWPATH FROM NODE    610.00 TO NODE    612.00 =     603.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    612.00 TO NODE    612.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.39
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.393
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.57
  EFFECTIVE AREA(ACRES) =      0.90   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.9       PEAK FLOW RATE(CFS) =       3.52

****************************************************************************
  FLOW PROCESS FROM NODE    612.00 TO NODE    613.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.78  DOWNSTREAM(FEET) =   901.25
  FLOW LENGTH(FEET) =   106.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  10.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.03
```

```
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.52
  PIPE TRAVEL TIME(MIN.) =   0.44    Tc(MIN.) =    7.82
  LONGEST FLOWPATH FROM NODE    610.00 TO NODE    613.00 =     709.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    613.00 TO NODE    613.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    7.82
  RAINFALL INTENSITY(INCH/HR) =   4.24
  AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42
  AREA-AVERAGED Ap =  0.10
  EFFECTIVE STREAM AREA(ACRES) =       0.90
  TOTAL STREAM AREA(ACRES) =       0.90
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       3.52

  ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       39.50   10.30    3.599  0.42( 0.04) 0.10      12.2     600.00
      2        3.52    7.82    4.243  0.42( 0.04) 0.10       0.9     610.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       38.98    7.82    4.243  0.42( 0.04) 0.10      10.2     610.00
      2       42.48   10.30    3.599  0.42( 0.04) 0.10      13.1     600.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =      42.48    Tc(MIN.) =    10.30
  EFFECTIVE AREA(ACRES) =      13.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       13.1
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    613.00 =    1947.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    613.00 TO NODE    614.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.25  DOWNSTREAM(FEET) =   901.09
  FLOW LENGTH(FEET) =    31.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  36.0 INCH PIPE IS  26.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.49
  ESTIMATED PIPE DIAMETER(INCH) =  36.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      42.48
  PIPE TRAVEL TIME(MIN.) =   0.07    Tc(MIN.) =   10.37
  LONGEST FLOWPATH FROM NODE    600.00 TO NODE    614.00 =    1978.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       13.1  TC(MIN.) =     10.37
  EFFECTIVE AREA(ACRES) =     13.10  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      42.48

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1       38.98    7.89    4.221  0.42( 0.04) 0.10      10.2     610.00
      2       42.48   10.37    3.584  0.42( 0.04) 0.10      13.1     600.00
============================================================================
============================================================================
```

END OF RATIONAL METHOD ANALYSIS

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 6 - NODES 620-632                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P6BC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    621.00 TO NODE    621.00 IS CODE =  22
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    93.00
  USER SPECIFIED Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.48
  TOTAL AREA(ACRES) =      0.50   PEAK FLOW RATE(CFS) =      2.48

******************************************************************************
  FLOW PROCESS FROM NODE    621.00 TO NODE    622.00 IS CODE =  31
```

```
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.76  DOWNSTREAM(FEET) =   908.15
  FLOW LENGTH(FEET) =   122.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.73
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.48
  PIPE TRAVEL TIME(MIN.) =   0.55    Tc(MIN.) =    5.55
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    622.00 =     215.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    622.00 TO NODE    622.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.55
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.217
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.33
  EFFECTIVE AREA(ACRES) =      1.00   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.0       PEAK FLOW RATE(CFS) =       4.66

****************************************************************************
  FLOW PROCESS FROM NODE    622.00 TO NODE    623.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.15  DOWNSTREAM(FEET) =   907.59
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  10.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.35
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.66
  PIPE TRAVEL TIME(MIN.) =   0.43    Tc(MIN.) =    5.97
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    623.00 =     327.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    623.00 TO NODE    623.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.97
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.989
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.23
  EFFECTIVE AREA(ACRES) =      1.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.5       PEAK FLOW RATE(CFS) =       6.68

****************************************************************************
  FLOW PROCESS FROM NODE    623.00 TO NODE    624.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.59  DOWNSTREAM(FEET) =   907.03
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
```

```
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.6 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.65
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       6.68
 PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =    6.38
 LONGEST FLOWPATH FROM NODE    621.00 TO NODE    624.00 =     439.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    624.00 TO NODE    624.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    6.38
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.798
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.14
 EFFECTIVE AREA(ACRES) =      2.00   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        2.0       PEAK FLOW RATE(CFS) =       8.56

****************************************************************************
 FLOW PROCESS FROM NODE    624.00 TO NODE    625.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   907.03  DOWNSTREAM(FEET) =   906.47
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  14.0 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.03
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       8.56
 PIPE TRAVEL TIME(MIN.) =   0.37    Tc(MIN.) =    6.75
 LONGEST FLOWPATH FROM NODE    621.00 TO NODE    625.00 =     551.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    625.00 TO NODE    625.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    6.75
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.638
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.07
 EFFECTIVE AREA(ACRES) =      2.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        2.5       PEAK FLOW RATE(CFS) =      10.34

****************************************************************************
 FLOW PROCESS FROM NODE    625.00 TO NODE    626.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   906.47  DOWNSTREAM(FEET) =   905.91
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  16.3 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.16
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      10.34
 PIPE TRAVEL TIME(MIN.) =   0.36    Tc(MIN.) =    7.11
 LONGEST FLOWPATH FROM NODE    621.00 TO NODE    626.00 =     663.00 FEET.
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    626.00 TO NODE    626.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.11
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.495
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.00
  EFFECTIVE AREA(ACRES) =      3.00   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.0       PEAK FLOW RATE(CFS) =      12.02

****************************************************************************
  FLOW PROCESS FROM NODE    626.00 TO NODE    627.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.91  DOWNSTREAM(FEET) =   905.35
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.48
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      12.02
  PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    7.45
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    627.00 =     775.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    627.00 TO NODE    627.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.45
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.371
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.95
  EFFECTIVE AREA(ACRES) =      3.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.5       PEAK FLOW RATE(CFS) =      13.63

****************************************************************************
  FLOW PROCESS FROM NODE    627.00 TO NODE    628.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.35  DOWNSTREAM(FEET) =   904.74
  FLOW LENGTH(FEET) =   122.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  17.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.59
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      13.63
  PIPE TRAVEL TIME(MIN.) =   0.36    Tc(MIN.) =    7.81
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    628.00 =     897.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    628.00 TO NODE    628.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
```

```
 MAINLINE Tc(MIN.) =    7.81
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.247
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.89
 EFFECTIVE AREA(ACRES) =      4.00   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        4.0       PEAK FLOW RATE(CFS) =      15.14

****************************************************************************
 FLOW PROCESS FROM NODE    628.00 TO NODE    629.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   904.74  DOWNSTREAM(FEET) =   904.18
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  24.0 INCH PIPE IS  19.1 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.65
 ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      15.14
 PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    8.14
 LONGEST FLOWPATH FROM NODE    621.00 TO NODE    629.00 =    1009.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    629.00 TO NODE    629.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    8.14
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.143
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.85
 EFFECTIVE AREA(ACRES) =      4.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        4.5       PEAK FLOW RATE(CFS) =      16.61

****************************************************************************
 FLOW PROCESS FROM NODE    629.00 TO NODE    630.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   904.18  DOWNSTREAM(FEET) =   903.62
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  27.0 INCH PIPE IS  17.9 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.93
 ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      16.61
 PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    8.46
 LONGEST FLOWPATH FROM NODE    621.00 TO NODE    630.00 =    1121.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    630.00 TO NODE    630.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    8.46
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.050
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
```

```
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.80
  EFFECTIVE AREA(ACRES) =      5.00   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.0       PEAK FLOW RATE(CFS) =      18.03

****************************************************************************
  FLOW PROCESS FROM NODE    630.00 TO NODE    631.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.62  DOWNSTREAM(FEET) =   903.06
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  19.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.02
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      18.03
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    8.77
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    631.00 =    1233.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    631.00 TO NODE    631.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.77
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.963
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.80      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.80      SUBAREA RUNOFF(CFS) =    2.82
  EFFECTIVE AREA(ACRES) =      5.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.8       PEAK FLOW RATE(CFS) =      20.47

****************************************************************************
  FLOW PROCESS FROM NODE    631.00 TO NODE    632.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.06  DOWNSTREAM(FEET) =   902.00
  FLOW LENGTH(FEET) =   212.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  21.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.11
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      20.47
  PIPE TRAVEL TIME(MIN.) =   0.58    Tc(MIN.) =    9.35
  LONGEST FLOWPATH FROM NODE    621.00 TO NODE    632.00 =    1445.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        5.8  TC(MIN.) =      9.35
  EFFECTIVE AREA(ACRES) =      5.80  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      20.47
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 7 - NODES 701-707                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P7AC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    701.00 TO NODE    701.00 IS CODE =  22
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    93.00
  USER SPECIFIED Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.98
  TOTAL AREA(ACRES) =      0.40   PEAK FLOW RATE(CFS) =      1.98

**************************************************************************
  FLOW PROCESS FROM NODE    701.00 TO NODE    702.00 IS CODE =  31
```

```
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   923.31  DOWNSTREAM(FEET) =   922.74
  FLOW LENGTH(FEET) =   114.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   8.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.48
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.98
  PIPE TRAVEL TIME(MIN.) =   0.55    Tc(MIN.) =    5.55
  LONGEST FLOWPATH FROM NODE    701.00 TO NODE    702.00 =     207.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    702.00 TO NODE    702.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.55
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.217
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.30      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.30      SUBAREA RUNOFF(CFS) =    1.40
  EFFECTIVE AREA(ACRES) =      0.70   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.7       PEAK FLOW RATE(CFS) =       3.26

****************************************************************************
  FLOW PROCESS FROM NODE    702.00 TO NODE    703.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   922.74  DOWNSTREAM(FEET) =   922.22
  FLOW LENGTH(FEET) =   104.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   9.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.97
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.26
  PIPE TRAVEL TIME(MIN.) =   0.44    Tc(MIN.) =    5.98
  LONGEST FLOWPATH FROM NODE    701.00 TO NODE    703.00 =     311.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    703.00 TO NODE    703.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.98
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.985
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.30      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.30      SUBAREA RUNOFF(CFS) =    1.33
  EFFECTIVE AREA(ACRES) =      1.00   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.0       PEAK FLOW RATE(CFS) =       4.45

****************************************************************************
  FLOW PROCESS FROM NODE    703.00 TO NODE    704.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   922.22  DOWNSTREAM(FEET) =   921.70
  FLOW LENGTH(FEET) =   104.00   MANNING'S N =  0.013
```

```
 DEPTH OF FLOW IN  15.0 INCH PIPE IS  12.3 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.14
 ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       4.45
 PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    6.40
 LONGEST FLOWPATH FROM NODE    701.00 TO NODE    704.00 =     415.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    704.00 TO NODE    704.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    6.40
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.787
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.30      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.30      SUBAREA RUNOFF(CFS) =    1.28
 EFFECTIVE AREA(ACRES) =      1.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        1.3       PEAK FLOW RATE(CFS) =       5.55

****************************************************************************
 FLOW PROCESS FROM NODE    704.00 TO NODE    705.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   921.70  DOWNSTREAM(FEET) =   921.18
 FLOW LENGTH(FEET) =   104.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.8 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.52
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       5.55
 PIPE TRAVEL TIME(MIN.) =   0.38    Tc(MIN.) =    6.79
 LONGEST FLOWPATH FROM NODE    701.00 TO NODE    705.00 =     519.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    705.00 TO NODE    705.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    6.79
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.622
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.30      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.30      SUBAREA RUNOFF(CFS) =    1.24
 EFFECTIVE AREA(ACRES) =      1.60   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        1.6       PEAK FLOW RATE(CFS) =       6.60

****************************************************************************
 FLOW PROCESS FROM NODE    705.00 TO NODE    706.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   921.18  DOWNSTREAM(FEET) =   920.66
 FLOW LENGTH(FEET) =   104.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.5 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.65
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       6.60
 PIPE TRAVEL TIME(MIN.) =   0.37    Tc(MIN.) =    7.16
 LONGEST FLOWPATH FROM NODE    701.00 TO NODE    706.00 =     623.00 FEET.
```

```
**************************************************************************
  FLOW PROCESS FROM NODE    706.00 TO NODE    706.00 IS CODE =  81
--------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    7.16
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.476
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.60
  EFFECTIVE AREA(ACRES) =      2.00   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.0       PEAK FLOW RATE(CFS) =       7.98

**************************************************************************
  FLOW PROCESS FROM NODE    706.00 TO NODE    707.00 IS CODE =  31
--------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   920.66  DOWNSTREAM(FEET) =   920.32
  FLOW LENGTH(FEET) =    68.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  13.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.96
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       7.98
  PIPE TRAVEL TIME(MIN.) =   0.23    Tc(MIN.) =    7.39
  LONGEST FLOWPATH FROM NODE    701.00 TO NODE    707.00 =     691.00 FEET.
==========================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        2.0  TC(MIN.) =      7.39
  EFFECTIVE AREA(ACRES) =      2.00  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       7.98
==========================================================================
==========================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 7 - NODES 710-717                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P7BC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    710.00 TO NODE    711.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   186.00
  ELEVATION DATA: UPSTREAM(FEET) =    933.16  DOWNSTREAM(FEET) =    931.42

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.259
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.852
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.50      0.42      0.100    76    6.26
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.16
  TOTAL AREA(ACRES) =      0.50   PEAK FLOW RATE(CFS) =      2.16
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    711.00 TO NODE    712.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   927.42  DOWNSTREAM(FEET) =   925.27
  FLOW LENGTH(FEET) =   430.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   8.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.53
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.16
  PIPE TRAVEL TIME(MIN.) =   2.03    Tc(MIN.) =    8.29
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    712.00 =     616.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    712.00 TO NODE    712.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.29
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.099
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.10      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.10      SUBAREA RUNOFF(CFS) =    7.67
  EFFECTIVE AREA(ACRES) =      2.60   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        2.6       PEAK FLOW RATE(CFS) =       9.49

****************************************************************************
  FLOW PROCESS FROM NODE    712.00 TO NODE    713.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   925.27  DOWNSTREAM(FEET) =   923.67
  FLOW LENGTH(FEET) =   319.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  15.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.12
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       9.49
  PIPE TRAVEL TIME(MIN.) =   1.04    Tc(MIN.) =    9.33
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    713.00 =     935.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    713.00 TO NODE    713.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.33
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.819
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.50      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.50      SUBAREA RUNOFF(CFS) =    8.50
  EFFECTIVE AREA(ACRES) =      5.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.1       PEAK FLOW RATE(CFS) =      17.33

****************************************************************************
  FLOW PROCESS FROM NODE    713.00 TO NODE    714.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   923.67  DOWNSTREAM(FEET) =   922.76
  FLOW LENGTH(FEET) =   183.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.97
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      17.33
  PIPE TRAVEL TIME(MIN.) =   0.51    Tc(MIN.) =    9.84
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    714.00 =    1118.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    714.00 TO NODE    714.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    9.84
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.698
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.20      SUBAREA RUNOFF(CFS) =    0.66
  EFFECTIVE AREA(ACRES) =      5.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.3       PEAK FLOW RATE(CFS) =      17.44

****************************************************************************
  FLOW PROCESS FROM NODE    714.00 TO NODE    715.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   922.76  DOWNSTREAM(FEET) =   921.37
  FLOW LENGTH(FEET) =   278.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.99
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      17.44
  PIPE TRAVEL TIME(MIN.) =   0.77    Tc(MIN.) =   10.61
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    715.00 =    1396.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    715.00 TO NODE    715.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =   10.61
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.534
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.14
  EFFECTIVE AREA(ACRES) =      6.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.3       PEAK FLOW RATE(CFS) =      19.80

****************************************************************************
  FLOW PROCESS FROM NODE    715.00 TO NODE    716.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   921.37  DOWNSTREAM(FEET) =   920.94
  FLOW LENGTH(FEET) =    85.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  20.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.13
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      19.80
  PIPE TRAVEL TIME(MIN.) =   0.23    Tc(MIN.) =   10.85
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    716.00 =    1481.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    716.00 TO NODE    716.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   10.85
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.489
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.20      SUBAREA RUNOFF(CFS) =    0.62
  EFFECTIVE AREA(ACRES) =      6.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.5       PEAK FLOW RATE(CFS) =      20.16

****************************************************************************
  FLOW PROCESS FROM NODE    716.00 TO NODE    717.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   920.94  DOWNSTREAM(FEET) =   920.22
  FLOW LENGTH(FEET) =   145.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  21.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.09
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      20.16
  PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =   11.24
  LONGEST FLOWPATH FROM NODE    710.00 TO NODE    717.00 =    1626.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        6.5  TC(MIN.) =     11.24
  EFFECTIVE AREA(ACRES) =      6.50  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      20.16
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 8 - NODES 800-813                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P8AC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    800.00 TO NODE    801.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   114.00
  ELEVATION DATA: UPSTREAM(FEET) =    918.51  DOWNSTREAM(FEET) =    914.94

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        0.60      0.42      0.100    76    5.00
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      2.98
  TOTAL AREA(ACRES) =      0.60   PEAK FLOW RATE(CFS) =      2.98
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    801.00 TO NODE    802.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   910.94  DOWNSTREAM(FEET) =   910.11
  FLOW LENGTH(FEET) =   166.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   9.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.88
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.98
  PIPE TRAVEL TIME(MIN.) =   0.71    Tc(MIN.) =    5.71
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    802.00 =     280.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    802.00 TO NODE    802.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.71
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.125
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.80      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.80      SUBAREA RUNOFF(CFS) =    3.66
  EFFECTIVE AREA(ACRES) =      1.40   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.4       PEAK FLOW RATE(CFS) =       6.40

****************************************************************************
  FLOW PROCESS FROM NODE    802.00 TO NODE    803.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   910.11  DOWNSTREAM(FEET) =   908.64
  FLOW LENGTH(FEET) =   293.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.63
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.40
  PIPE TRAVEL TIME(MIN.) =   1.05    Tc(MIN.) =    6.77
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    803.00 =     573.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    803.00 TO NODE    803.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.77
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.630
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.06
  EFFECTIVE AREA(ACRES) =      1.90   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.9       PEAK FLOW RATE(CFS) =       7.84

****************************************************************************
  FLOW PROCESS FROM NODE    803.00 TO NODE    804.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   908.64  DOWNSTREAM(FEET) =   907.98
  FLOW LENGTH(FEET) =   132.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  13.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.94
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       7.84
  PIPE TRAVEL TIME(MIN.) =   0.45    Tc(MIN.) =    7.21
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    804.00 =     705.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    804.00 TO NODE    804.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.21
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.456
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.20      SUBAREA RUNOFF(CFS) =    8.74
  EFFECTIVE AREA(ACRES) =      4.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.1       PEAK FLOW RATE(CFS) =      16.29

****************************************************************************
  FLOW PROCESS FROM NODE    804.00 TO NODE    805.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.98  DOWNSTREAM(FEET) =   907.38
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  17.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.91
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      16.29
  PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    7.55
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    805.00 =     825.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    805.00 TO NODE    805.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.55
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.335
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.86
  EFFECTIVE AREA(ACRES) =      5.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.1       PEAK FLOW RATE(CFS) =      19.70

****************************************************************************
  FLOW PROCESS FROM NODE    805.00 TO NODE    806.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   907.38  DOWNSTREAM(FEET) =   906.78
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  20.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.09
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      19.70
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    7.88
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    806.00 =     945.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    806.00 TO NODE    806.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    7.88
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.226
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.77
  EFFECTIVE AREA(ACRES) =      6.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.1       PEAK FLOW RATE(CFS) =      22.97

****************************************************************************
  FLOW PROCESS FROM NODE    806.00 TO NODE    807.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.78  DOWNSTREAM(FEET) =   906.18
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  20.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.42
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      22.97
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    8.19
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    807.00 =    1065.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    807.00 TO NODE    807.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.19
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.128
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.68
  EFFECTIVE AREA(ACRES) =      7.10   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        7.1       PEAK FLOW RATE(CFS) =      26.11

****************************************************************************
  FLOW PROCESS FROM NODE    807.00 TO NODE    808.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.18  DOWNSTREAM(FEET) =   905.58
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  22.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.54
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      26.11
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    8.50
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    808.00 =    1185.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    808.00 TO NODE    808.00 IS CODE =  81
```

```
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =    8.50
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.039
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.90      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.90      SUBAREA RUNOFF(CFS) =    3.24
  EFFECTIVE AREA(ACRES) =      8.00   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        8.0       PEAK FLOW RATE(CFS) =      28.77

************************************************************************
  FLOW PROCESS FROM NODE    808.00 TO NODE    809.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.58  DOWNSTREAM(FEET) =   904.98
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  22.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.80
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      28.77
  PIPE TRAVEL TIME(MIN.) =   0.29    Tc(MIN.) =    8.79
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    809.00 =    1305.00 FEET.

************************************************************************
  FLOW PROCESS FROM NODE    809.00 TO NODE    809.00 IS CODE =  81
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =    8.79
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.957
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.90      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.90      SUBAREA RUNOFF(CFS) =    3.17
  EFFECTIVE AREA(ACRES) =      8.90   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        8.9       PEAK FLOW RATE(CFS) =      31.36

************************************************************************
  FLOW PROCESS FROM NODE    809.00 TO NODE    810.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.98  DOWNSTREAM(FEET) =   904.38
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  23.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.90
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      31.36
  PIPE TRAVEL TIME(MIN.) =   0.29    Tc(MIN.) =    9.08
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    810.00 =    1425.00 FEET.

************************************************************************
  FLOW PROCESS FROM NODE    810.00 TO NODE    810.00 IS CODE =  81
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =    9.08
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.881
  SUBAREA LOSS RATE DATA(AMC III):
```

```
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.90      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.90      SUBAREA RUNOFF(CFS) =    3.11
  EFFECTIVE AREA(ACRES) =      9.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        9.8       PEAK FLOW RATE(CFS) =      33.86

****************************************************************************
  FLOW PROCESS FROM NODE    810.00 TO NODE    811.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.38  DOWNSTREAM(FEET) =   903.04
  FLOW LENGTH(FEET) =   269.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  25.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.96
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      33.86
  PIPE TRAVEL TIME(MIN.) =   0.64    Tc(MIN.) =    9.73
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    811.00 =    1694.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    811.00 TO NODE    811.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.73
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.724
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.50      SUBAREA RUNOFF(CFS) =    8.28
  EFFECTIVE AREA(ACRES) =     12.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       12.3       PEAK FLOW RATE(CFS) =      40.76

****************************************************************************
  FLOW PROCESS FROM NODE    811.00 TO NODE    812.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.04  DOWNSTREAM(FEET) =   901.60
  FLOW LENGTH(FEET) =   288.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  36.0 INCH PIPE IS  26.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.35
  ESTIMATED PIPE DIAMETER(INCH) =  36.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      40.76
  PIPE TRAVEL TIME(MIN.) =   0.65    Tc(MIN.) =   10.38
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    812.00 =    1982.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    812.00 TO NODE    812.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   10.38
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.582
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        3.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    3.20      SUBAREA RUNOFF(CFS) =   10.19
```

```
  EFFECTIVE AREA(ACRES) =     15.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       15.5       PEAK FLOW RATE(CFS) =      49.38

****************************************************************************
  FLOW PROCESS FROM NODE    812.00 TO NODE    813.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.60  DOWNSTREAM(FEET) =   901.01
  FLOW LENGTH(FEET) =   117.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  39.0 INCH PIPE IS  28.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.75
  ESTIMATED PIPE DIAMETER(INCH) =  39.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      49.38
  PIPE TRAVEL TIME(MIN.) =   0.25    Tc(MIN.) =   10.63
  LONGEST FLOWPATH FROM NODE    800.00 TO NODE    813.00 =    2099.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       15.5  TC(MIN.) =     10.63
  EFFECTIVE AREA(ACRES) =     15.50  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      49.38
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 8 - NODES 820-822                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P8BC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    820.00 TO NODE    821.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   268.00
  ELEVATION DATA: UPSTREAM(FEET) =    914.75  DOWNSTREAM(FEET) =    908.66

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.065
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.944
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        1.00      0.42      0.100    76    6.06
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      4.41
  TOTAL AREA(ACRES) =      1.00   PEAK FLOW RATE(CFS) =      4.41
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    821.00 TO NODE    822.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.66  DOWNSTREAM(FEET) =   898.40
  FLOW LENGTH(FEET) =    36.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 12.000
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   4.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =  16.19
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.41
  PIPE TRAVEL TIME(MIN.) =   0.04    Tc(MIN.) =    6.10
  LONGEST FLOWPATH FROM NODE    820.00 TO NODE    822.00 =     304.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.0  TC(MIN.) =      6.10
  EFFECTIVE AREA(ACRES) =      1.00  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       4.41
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 8 - NODES 831-835                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P8CC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    831.00 TO NODE    831.00 IS CODE =  22
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    36.00
  USER SPECIFIED Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      0.99
  TOTAL AREA(ACRES) =      0.20   PEAK FLOW RATE(CFS) =      0.99

**************************************************************************
  FLOW PROCESS FROM NODE    831.00 TO NODE    832.00 IS CODE =  31
```

```
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   906.17  DOWNSTREAM(FEET) =   905.84
  FLOW LENGTH(FEET) =    66.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 12.000
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   5.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   2.96
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       0.99
  PIPE TRAVEL TIME(MIN.) =   0.37    Tc(MIN.) =    5.37
  LONGEST FLOWPATH FROM NODE    831.00 TO NODE    832.00 =     102.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    832.00 TO NODE    832.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.37
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.318
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.90
  EFFECTIVE AREA(ACRES) =      0.60   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.6       PEAK FLOW RATE(CFS) =       2.85

****************************************************************************
  FLOW PROCESS FROM NODE    832.00 TO NODE    833.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.84  DOWNSTREAM(FEET) =   905.28
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS   8.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.85
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.85
  PIPE TRAVEL TIME(MIN.) =   0.48    Tc(MIN.) =    5.86
  LONGEST FLOWPATH FROM NODE    831.00 TO NODE    833.00 =     214.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    833.00 TO NODE    833.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.86
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.049
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.80
  EFFECTIVE AREA(ACRES) =      1.00   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.0       PEAK FLOW RATE(CFS) =       4.51

****************************************************************************
  FLOW PROCESS FROM NODE    833.00 TO NODE    834.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   905.28  DOWNSTREAM(FEET) =   904.72
```

```
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  10.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.32
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.51
  PIPE TRAVEL TIME(MIN.) =   0.43    Tc(MIN.) =    6.29
  LONGEST FLOWPATH FROM NODE    831.00 TO NODE    834.00 =     326.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    834.00 TO NODE    834.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.29
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.838
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.73
  EFFECTIVE AREA(ACRES) =      1.40   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.4       PEAK FLOW RATE(CFS) =       6.04

****************************************************************************
  FLOW PROCESS FROM NODE    834.00 TO NODE    835.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.72  DOWNSTREAM(FEET) =   904.60
  FLOW LENGTH(FEET) =    24.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.58
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.04
  PIPE TRAVEL TIME(MIN.) =   0.09    Tc(MIN.) =    6.38
  LONGEST FLOWPATH FROM NODE    831.00 TO NODE    835.00 =     350.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.4  TC(MIN.) =      6.38
  EFFECTIVE AREA(ACRES) =      1.40  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       6.04
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 8 - NODES 841-845                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P8DC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    840.00 TO NODE    841.00 IS CODE =  22
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    36.00
  USER SPECIFIED Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.98
  TOTAL AREA(ACRES) =      0.40   PEAK FLOW RATE(CFS) =      1.98

**************************************************************************
  FLOW PROCESS FROM NODE    841.00 TO NODE    842.00 IS CODE =  31
```

```
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   904.21  DOWNSTREAM(FEET) =   903.60
  FLOW LENGTH(FEET) =   121.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   8.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.49
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.98
  PIPE TRAVEL TIME(MIN.) =   0.58    Tc(MIN.) =    5.58
  LONGEST FLOWPATH FROM NODE    840.00 TO NODE    842.00 =     157.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    842.00 TO NODE    842.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.58
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.199
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.86
  EFFECTIVE AREA(ACRES) =      0.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       3.71

****************************************************************************
  FLOW PROCESS FROM NODE    842.00 TO NODE    843.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.60  DOWNSTREAM(FEET) =   903.04
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  10.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.06
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.71
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    6.04
  LONGEST FLOWPATH FROM NODE    840.00 TO NODE    843.00 =     269.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    843.00 TO NODE    843.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.04
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.958
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.77
  EFFECTIVE AREA(ACRES) =      1.20   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.2       PEAK FLOW RATE(CFS) =       5.31

****************************************************************************
  FLOW PROCESS FROM NODE    843.00 TO NODE    844.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   903.04  DOWNSTREAM(FEET) =   902.48
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
```

```
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.48
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.31
  PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    6.45
  LONGEST FLOWPATH FROM NODE    840.00 TO NODE    844.00 =     381.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    844.00 TO NODE    844.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.45
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.763
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.70
  EFFECTIVE AREA(ACRES) =      1.60   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.6       PEAK FLOW RATE(CFS) =       6.80

****************************************************************************
  FLOW PROCESS FROM NODE    844.00 TO NODE    845.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   902.48  DOWNSTREAM(FEET) =   902.34
  FLOW LENGTH(FEET) =    28.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.66
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.80
  PIPE TRAVEL TIME(MIN.) =   0.10    Tc(MIN.) =    6.55
  LONGEST FLOWPATH FROM NODE    840.00 TO NODE    845.00 =     409.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.6  TC(MIN.) =      6.55
  EFFECTIVE AREA(ACRES) =      1.60  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       6.80
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 8 - NODES 851-855                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P8EC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    851.00 TO NODE    851.00 IS CODE =  22
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    36.00
  USER SPECIFIED Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.98
  TOTAL AREA(ACRES) =      0.40   PEAK FLOW RATE(CFS) =      1.98

******************************************************************************
  FLOW PROCESS FROM NODE    851.00 TO NODE    852.00 IS CODE =  31
```

```
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.96  DOWNSTREAM(FEET) =   901.36
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   8.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.48
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.98
  PIPE TRAVEL TIME(MIN.) =   0.57    Tc(MIN.) =    5.57
  LONGEST FLOWPATH FROM NODE    851.00 TO NODE    852.00 =     156.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    852.00 TO NODE    852.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.57
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.201
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.86
  EFFECTIVE AREA(ACRES) =      0.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       3.71

****************************************************************************
  FLOW PROCESS FROM NODE    852.00 TO NODE    853.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   901.36  DOWNSTREAM(FEET) =   900.80
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  10.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.06
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.71
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    6.03
  LONGEST FLOWPATH FROM NODE    851.00 TO NODE    853.00 =     268.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    853.00 TO NODE    853.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.03
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.960
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.77
  EFFECTIVE AREA(ACRES) =      1.20   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.2       PEAK FLOW RATE(CFS) =       5.31

****************************************************************************
  FLOW PROCESS FROM NODE    853.00 TO NODE    854.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   900.80  DOWNSTREAM(FEET) =   900.24
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
```

```
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.48
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.31
  PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    6.45
  LONGEST FLOWPATH FROM NODE    851.00 TO NODE    854.00 =     380.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    854.00 TO NODE    854.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.45
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.765
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.70
  EFFECTIVE AREA(ACRES) =      1.60   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.6       PEAK FLOW RATE(CFS) =       6.80

****************************************************************************
  FLOW PROCESS FROM NODE    854.00 TO NODE    855.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   900.24  DOWNSTREAM(FEET) =   900.04
  FLOW LENGTH(FEET) =    41.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  14.0 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.60
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.80
  PIPE TRAVEL TIME(MIN.) =   0.15    Tc(MIN.) =    6.60
  LONGEST FLOWPATH FROM NODE    851.00 TO NODE    855.00 =     421.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.6  TC(MIN.) =      6.60
  EFFECTIVE AREA(ACRES) =      1.60  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       6.80
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 8 - NODES 861-865                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P8FC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    861.00 TO NODE    861.00 IS CODE =  22
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    36.00
  USER SPECIFIED Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.98
  TOTAL AREA(ACRES) =      0.40   PEAK FLOW RATE(CFS) =      1.98

**************************************************************************
  FLOW PROCESS FROM NODE    861.00 TO NODE    862.00 IS CODE =  31
```

```
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   899.71  DOWNSTREAM(FEET) =   899.12
  FLOW LENGTH(FEET) =   119.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   8.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.47
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.98
  PIPE TRAVEL TIME(MIN.) =   0.57    Tc(MIN.) =    5.57
  LONGEST FLOWPATH FROM NODE    861.00 TO NODE    862.00 =     155.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    862.00 TO NODE    862.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.57
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.202
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.86
  EFFECTIVE AREA(ACRES) =      0.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       3.72

****************************************************************************
  FLOW PROCESS FROM NODE    862.00 TO NODE    863.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   899.12  DOWNSTREAM(FEET) =   898.56
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  10.5 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.06
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.72
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    6.03
  LONGEST FLOWPATH FROM NODE    861.00 TO NODE    863.00 =     267.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    863.00 TO NODE    863.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.03
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.961
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.40      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.40      SUBAREA RUNOFF(CFS) =    1.77
  EFFECTIVE AREA(ACRES) =      1.20   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.2       PEAK FLOW RATE(CFS) =       5.31

****************************************************************************
  FLOW PROCESS FROM NODE    863.00 TO NODE    864.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   898.56  DOWNSTREAM(FEET) =   898.02
  FLOW LENGTH(FEET) =   107.00   MANNING'S N =  0.013
```

```
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.49
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.31
  PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =    6.43
  LONGEST FLOWPATH FROM NODE    861.00 TO NODE    864.00 =     374.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    864.00 TO NODE    864.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    6.43
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.775
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.20      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.20      SUBAREA RUNOFF(CFS) =    0.85
  EFFECTIVE AREA(ACRES) =      1.40   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.4       PEAK FLOW RATE(CFS) =       5.96

****************************************************************************
  FLOW PROCESS FROM NODE    864.00 TO NODE    865.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   898.02  DOWNSTREAM(FEET) =   897.88
  FLOW LENGTH(FEET) =    28.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.57
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       5.96
  PIPE TRAVEL TIME(MIN.) =   0.10    Tc(MIN.) =    6.53
  LONGEST FLOWPATH FROM NODE    861.00 TO NODE    865.00 =     402.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        1.4  TC(MIN.) =      6.53
  EFFECTIVE AREA(ACRES) =      1.40  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       5.96
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************** DESCRIPTION OF STUDY **************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                    *
* PROPOSED CONDITION - BUILDING 9 - NODES 900-902                         *
* HYDROLOGIC ANALYSIS - 100-YEAR                                          *
 *************************************************************************

  FILE NAME: 4005P9AC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    900.00 TO NODE    901.00 IS CODE =  21
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   361.00
  ELEVATION DATA: UPSTREAM(FEET) =    905.34  DOWNSTREAM(FEET) =    900.69

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.654
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.300
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        2.00      0.42      0.100    76    7.65
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      7.66
  TOTAL AREA(ACRES) =      2.00   PEAK FLOW RATE(CFS) =      7.66
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    901.00 TO NODE    902.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   896.69  DOWNSTREAM(FEET) =   896.46
  FLOW LENGTH(FEET) =    45.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  12.9 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.96
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       7.66
  PIPE TRAVEL TIME(MIN.) =   0.15    Tc(MIN.) =    7.81
  LONGEST FLOWPATH FROM NODE    900.00 TO NODE    902.00 =     406.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        2.0  TC(MIN.) =      7.81
  EFFECTIVE AREA(ACRES) =      2.00  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =       7.66
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 9 - NODES 910-920                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P9BC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    910.00 TO NODE    911.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   340.00
  ELEVATION DATA: UPSTREAM(FEET) =    906.22  DOWNSTREAM(FEET) =    903.18

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.039
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.175
  SUBAREA Tc AND LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 B        2.20      0.42      0.100    76    8.04
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      8.18
  TOTAL AREA(ACRES) =      2.20   PEAK FLOW RATE(CFS) =      8.18
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    911.00 TO NODE    912.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   899.18  DOWNSTREAM(FEET) =   898.58
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  21.0 INCH PIPE IS  13.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.98
  ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       8.18
  PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =    8.44
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    912.00 =     460.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    912.00 TO NODE    912.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.44
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.055
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.61
  EFFECTIVE AREA(ACRES) =      3.20   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        3.2       PEAK FLOW RATE(CFS) =      11.56

****************************************************************************
  FLOW PROCESS FROM NODE    912.00 TO NODE    913.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   898.58  DOWNSTREAM(FEET) =   897.98
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.43
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      11.56
  PIPE TRAVEL TIME(MIN.) =   0.37    Tc(MIN.) =    8.81
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    913.00 =     580.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    913.00 TO NODE    913.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.81
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.952
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.52
  EFFECTIVE AREA(ACRES) =      4.20   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.2       PEAK FLOW RATE(CFS) =      14.78

****************************************************************************
  FLOW PROCESS FROM NODE    913.00 TO NODE    914.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
```

```
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   897.98  DOWNSTREAM(FEET) =   897.29
  FLOW LENGTH(FEET) =   138.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  24.0 INCH PIPE IS  18.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.65
  ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      14.78
  PIPE TRAVEL TIME(MIN.) =   0.41    Tc(MIN.) =    9.22
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    914.00 =     718.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    914.00 TO NODE    914.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    9.22
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.847
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.42
  EFFECTIVE AREA(ACRES) =      5.20   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.2       PEAK FLOW RATE(CFS) =      17.80

****************************************************************************
  FLOW PROCESS FROM NODE    914.00 TO NODE    915.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   897.29  DOWNSTREAM(FEET) =   896.69
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.01
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      17.80
  PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    9.55
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    915.00 =     838.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    915.00 TO NODE    915.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========================================================================
  MAINLINE Tc(MIN.) =    9.55
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.766
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.50      SUBAREA RUNOFF(CFS) =    5.03
  EFFECTIVE AREA(ACRES) =      6.70   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        6.7       PEAK FLOW RATE(CFS) =      22.45

****************************************************************************
  FLOW PROCESS FROM NODE    915.00 TO NODE    916.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   896.69  DOWNSTREAM(FEET) =   896.09
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  20.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.39
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
```

```
  PIPE-FLOW(CFS) =      22.45
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    9.86
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    916.00 =     958.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    916.00 TO NODE    916.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    9.86
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.693
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.29
  EFFECTIVE AREA(ACRES) =      7.70   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        7.7       PEAK FLOW RATE(CFS) =      25.30

****************************************************************************
  FLOW PROCESS FROM NODE    916.00 TO NODE    917.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   896.09  DOWNSTREAM(FEET) =   895.49
  FLOW LENGTH(FEET) =   120.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  22.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.51
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      25.30
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =   10.17
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    917.00 =    1078.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    917.00 TO NODE    917.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   10.17
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.626
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        1.00      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    1.00      SUBAREA RUNOFF(CFS) =    3.23
  EFFECTIVE AREA(ACRES) =      8.70   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        8.7       PEAK FLOW RATE(CFS) =      28.06

****************************************************************************
  FLOW PROCESS FROM NODE    917.00 TO NODE    918.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   895.49  DOWNSTREAM(FEET) =   894.90
  FLOW LENGTH(FEET) =   118.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  30.0 INCH PIPE IS  24.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.56
  ESTIMATED PIPE DIAMETER(INCH) =  30.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      28.06
  PIPE TRAVEL TIME(MIN.) =   0.30    Tc(MIN.) =   10.47
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    918.00 =    1196.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    918.00 TO NODE    918.00 IS CODE =  81
```

```
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =   10.47
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.564
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        2.10      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    2.10      SUBAREA RUNOFF(CFS) =    6.66
  EFFECTIVE AREA(ACRES) =     10.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       10.8       PEAK FLOW RATE(CFS) =      34.23

************************************************************************
  FLOW PROCESS FROM NODE    918.00 TO NODE    919.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   894.90  DOWNSTREAM(FEET) =   891.84
  FLOW LENGTH(FEET) =   611.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  25.4 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.98
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      34.23
  PIPE TRAVEL TIME(MIN.) =   1.46    Tc(MIN.) =   11.93
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    919.00 =    1807.00 FEET.

************************************************************************
  FLOW PROCESS FROM NODE    919.00 TO NODE    919.00 IS CODE =  81
------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
  MAINLINE Tc(MIN.) =   11.93
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.295
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.70      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.70      SUBAREA RUNOFF(CFS) =    2.05
  EFFECTIVE AREA(ACRES) =     11.50   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =       11.5       PEAK FLOW RATE(CFS) =      34.23
  NOTE: PEAK FLOW RATE DEFAULTED TO UPSTREAM VALUE

************************************************************************
  FLOW PROCESS FROM NODE    919.00 TO NODE    920.00 IS CODE =  31
------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   891.84  DOWNSTREAM(FEET) =   891.51
  FLOW LENGTH(FEET) =    67.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  33.0 INCH PIPE IS  25.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.93
  ESTIMATED PIPE DIAMETER(INCH) =  33.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      34.23
  PIPE TRAVEL TIME(MIN.) =   0.16    Tc(MIN.) =   12.09
  LONGEST FLOWPATH FROM NODE    910.00 TO NODE    920.00 =    1874.00 FEET.
========================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =       11.5  TC(MIN.) =     12.09
  EFFECTIVE AREA(ACRES) =     11.50  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      34.23
========================================================================
========================================================================
```

END OF RATIONAL METHOD ANALYSIS

```
******************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
         (Reference: 1986 SAN BERNARDINO CO. HYDROLOGY CRITERION)
        (c) Copyright 1983-2016 Advanced Engineering Software (aes)
            Ver. 23.0  Release Date: 07/01/2016  License ID 1435

                          Analysis prepared by:



 ************************* DESCRIPTION OF STUDY *************************
* CALIFORNIA LOGISTIC CENTER - ONTARIO                                   *
* PROPOSED CONDITION - BUILDING 9 - NODES 931-943                        *
* HYDROLOGIC ANALYSIS - 100-YEAR                                         *
 ************************************************************************

  FILE NAME: 4005P9CC.DAT
  TIME/DATE OF STUDY: 16:00 12/21/2021
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =  100.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  12.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *USER-DEFINED LOGARITHMIC INTERPOLATION USED FOR RAINFALL*

  SLOPE OF INTENSITY DURATION CURVE(LOG(I;IN/HR) vs. LOG(Tc;MIN)) = 0.6000
  USER SPECIFIED 1-HOUR INTENSITY(INCH/HOUR) = 1.2500

  *ANTECEDENT MOISTURE CONDITION (AMC) III ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  ========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

******************************************************************************
  FLOW PROCESS FROM NODE    931.00 TO NODE    931.00 IS CODE =  22
------------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>>>>USE SPECIFIED Tc VALUE FOR INITIAL SUBAREA<<<
==============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =    67.00
  USER SPECIFIED Tc(MIN.) =    5.000
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.552
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.30      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA RUNOFF(CFS) =      1.49
  TOTAL AREA(ACRES) =      0.30   PEAK FLOW RATE(CFS) =      1.49

******************************************************************************
  FLOW PROCESS FROM NODE    931.00 TO NODE    932.00 IS CODE =  31
```

```
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   898.27  DOWNSTREAM(FEET) =   897.94
  FLOW LENGTH(FEET) =    66.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  12.0 INCH PIPE IS   6.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.28
  ESTIMATED PIPE DIAMETER(INCH) =  12.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       1.49
  PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    5.34
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    932.00 =     133.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    932.00 TO NODE    932.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.34
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.339
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.38
  EFFECTIVE AREA(ACRES) =      0.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       3.81

****************************************************************************
  FLOW PROCESS FROM NODE    932.00 TO NODE    933.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   897.94  DOWNSTREAM(FEET) =   897.38
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  15.0 INCH PIPE IS  10.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.08
  ESTIMATED PIPE DIAMETER(INCH) =  15.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.81
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    5.79
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    933.00 =     245.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    933.00 TO NODE    933.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    5.79
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  5.082
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42     0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.27
  EFFECTIVE AREA(ACRES) =      1.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        1.3       PEAK FLOW RATE(CFS) =       5.90

****************************************************************************
  FLOW PROCESS FROM NODE    933.00 TO NODE    934.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   897.38  DOWNSTREAM(FEET) =   896.82
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
```

```
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.3 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.57
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       5.90
 PIPE TRAVEL TIME(MIN.) =   0.41    Tc(MIN.) =    6.20
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    934.00 =     357.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    934.00 TO NODE    934.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    6.20
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.878
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.18
 EFFECTIVE AREA(ACRES) =      1.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        1.8       PEAK FLOW RATE(CFS) =       7.83

****************************************************************************
 FLOW PROCESS FROM NODE    934.00 TO NODE    935.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   896.82  DOWNSTREAM(FEET) =   896.26
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  13.2 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.94
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       7.83
 PIPE TRAVEL TIME(MIN.) =   0.38    Tc(MIN.) =    6.58
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    935.00 =     469.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    935.00 TO NODE    935.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    6.58
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.708
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.10
 EFFECTIVE AREA(ACRES) =      2.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        2.3       PEAK FLOW RATE(CFS) =       9.66

****************************************************************************
 FLOW PROCESS FROM NODE    935.00 TO NODE    936.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   896.26  DOWNSTREAM(FEET) =   895.70
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  15.4 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.13
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       9.66
 PIPE TRAVEL TIME(MIN.) =   0.36    Tc(MIN.) =    6.94
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    936.00 =     581.00 FEET.
```

```
****************************************************************************
 FLOW PROCESS FROM NODE    936.00 TO NODE    936.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    6.94
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.558
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    2.03
 EFFECTIVE AREA(ACRES) =      2.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        2.8       PEAK FLOW RATE(CFS) =      11.38

****************************************************************************
 FLOW PROCESS FROM NODE    936.00 TO NODE    937.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   895.70  DOWNSTREAM(FEET) =   895.14
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.2 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.42
 ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      11.38
 PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    7.29
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    937.00 =     693.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    937.00 TO NODE    937.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    7.29
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.428
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.97
 EFFECTIVE AREA(ACRES) =      3.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        3.3       PEAK FLOW RATE(CFS) =      13.03

****************************************************************************
 FLOW PROCESS FROM NODE    937.00 TO NODE    938.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   895.14  DOWNSTREAM(FEET) =   894.58
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  24.0 INCH PIPE IS  16.8 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.55
 ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      13.03
 PIPE TRAVEL TIME(MIN.) =   0.34    Tc(MIN.) =    7.63
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    938.00 =     805.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    938.00 TO NODE    938.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
```

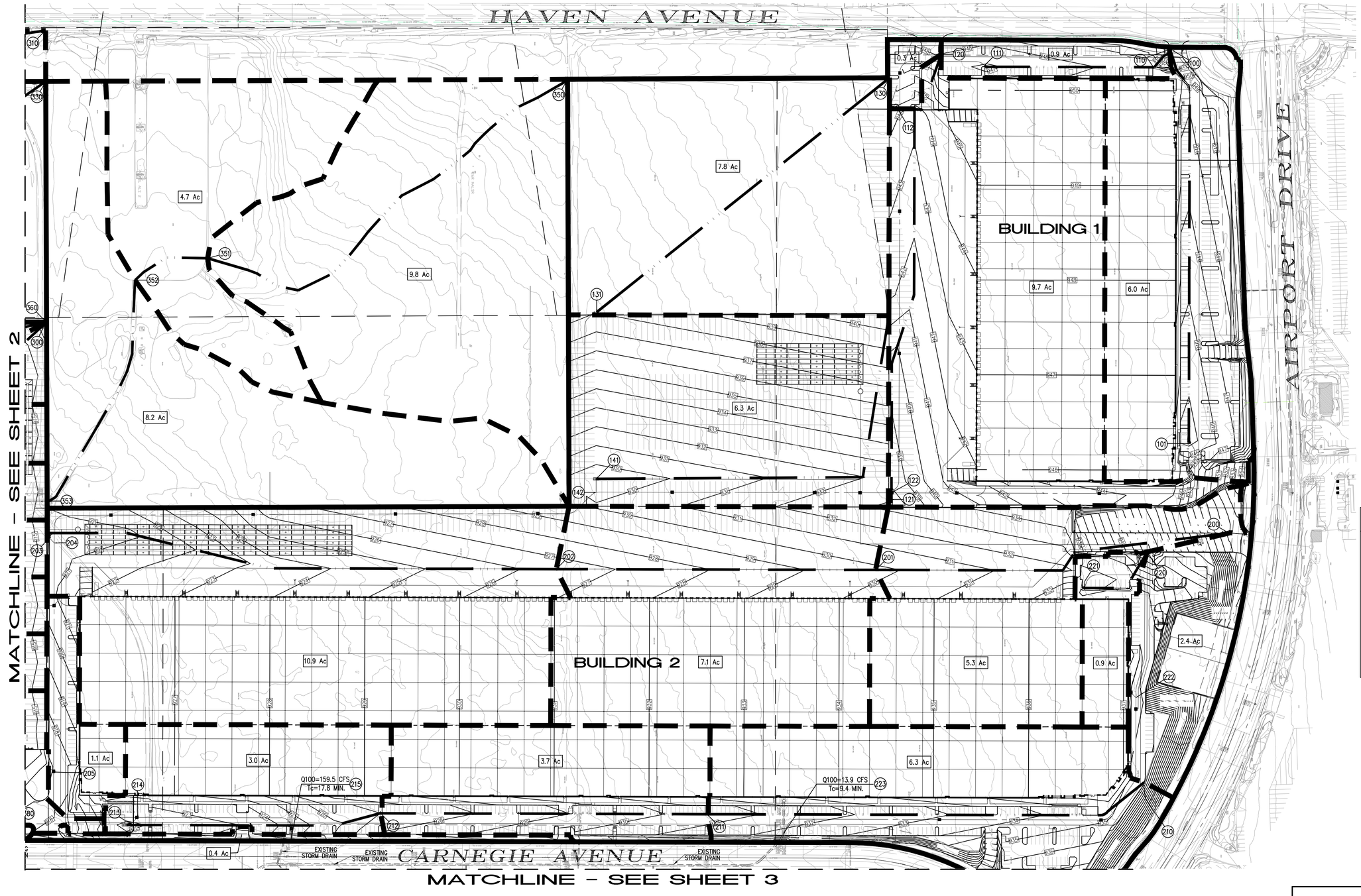
```
 MAINLINE Tc(MIN.) =    7.63
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.310
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.92
 EFFECTIVE AREA(ACRES) =      3.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        3.8       PEAK FLOW RATE(CFS) =      14.59

****************************************************************************
 FLOW PROCESS FROM NODE    938.00 TO NODE    939.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   894.58  DOWNSTREAM(FEET) =   894.02
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  24.0 INCH PIPE IS  18.4 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.64
 ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      14.59
 PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    7.96
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    939.00 =     917.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    939.00 TO NODE    939.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    7.96
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.201
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.87
 EFFECTIVE AREA(ACRES) =      4.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
 AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
 TOTAL AREA(ACRES) =        4.3       PEAK FLOW RATE(CFS) =      16.10

****************************************************************************
 FLOW PROCESS FROM NODE    939.00 TO NODE    940.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   894.02  DOWNSTREAM(FEET) =   893.46
 FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  27.0 INCH PIPE IS  17.5 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.90
 ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      16.10
 PIPE TRAVEL TIME(MIN.) =   0.32    Tc(MIN.) =    8.27
 LONGEST FLOWPATH FROM NODE    931.00 TO NODE    940.00 =    1029.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    940.00 TO NODE    940.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =    8.27
 * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.104
 SUBAREA LOSS RATE DATA(AMC III):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 B        0.50      0.42     0.100    76
```

```
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.83
  EFFECTIVE AREA(ACRES) =      4.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        4.8       PEAK FLOW RATE(CFS) =      17.55

****************************************************************************
  FLOW PROCESS FROM NODE    940.00 TO NODE    941.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   893.46  DOWNSTREAM(FEET) =   892.90
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  18.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.99
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      17.55
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    8.58
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    941.00 =    1141.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    941.00 TO NODE    941.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.58
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  4.014
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.79
  EFFECTIVE AREA(ACRES) =      5.30   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.3       PEAK FLOW RATE(CFS) =      18.95

****************************************************************************
  FLOW PROCESS FROM NODE    941.00 TO NODE    942.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   892.90  DOWNSTREAM(FEET) =   892.34
  FLOW LENGTH(FEET) =   112.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  19.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.06
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      18.95
  PIPE TRAVEL TIME(MIN.) =   0.31    Tc(MIN.) =    8.89
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    942.00 =    1253.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    942.00 TO NODE    942.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =    8.89
  * 100 YEAR RAINFALL INTENSITY(INCH/HR) =  3.930
  SUBAREA LOSS RATE DATA(AMC III):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 B        0.50      0.42      0.100    76
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.42
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.50      SUBAREA RUNOFF(CFS) =    1.75
  EFFECTIVE AREA(ACRES) =      5.80   AREA-AVERAGED Fm(INCH/HR) =  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap =  0.10
  TOTAL AREA(ACRES) =        5.8       PEAK FLOW RATE(CFS) =      20.29
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    942.00 TO NODE    943.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   892.34  DOWNSTREAM(FEET) =   891.50
  FLOW LENGTH(FEET) =   169.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  27.0 INCH PIPE IS  21.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.09
  ESTIMATED PIPE DIAMETER(INCH) =  27.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      20.29
  PIPE TRAVEL TIME(MIN.) =   0.46    Tc(MIN.) =    9.35
  LONGEST FLOWPATH FROM NODE    931.00 TO NODE    943.00 =    1422.00 FEET.
============================================================================
  END OF STUDY SUMMARY:
  TOTAL AREA(ACRES)     =        5.8  TC(MIN.) =      9.35
  EFFECTIVE AREA(ACRES) =      5.80  AREA-AVERAGED Fm(INCH/HR)=  0.04
  AREA-AVERAGED Fp(INCH/HR) =  0.42  AREA-AVERAGED Ap = 0.100
  PEAK FLOW RATE(CFS)   =      20.29
============================================================================
============================================================================
  END OF RATIONAL METHOD ANALYSIS
```

APPENDIX C

HYDROLOGY MAPS



LEGEND

- PROJECT BOUNDARY
- SUBAREA BOUNDARY
- FLOW PATH
- 4.10 AC. — SUBAREA AREA
- 100 — NODE NUMBER
- FLOW DIRECTION

Last Update:12/27/21
O:\4000-4099\4005\4005hyd.dwg

0 50 100 200 300

SCALE: 1"=100'

CITY OF ONTARIO
PUBLIC WORKS DEPARTMENT

HYDROLOGY MAP

CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT

4005/ 1 OF 4 SHEETS

PREPARED FOR:
McDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227
FAX: (949) 395-2487

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

Designed by _____ Date _____
Checked by _____ Date _____
Designed by _____ Date _____
Checked by _____ Date _____

Aproved by _____ Date _____
Public Works Director R.C.E. 28129

Sheet 1 of 4 Sheets

5962

HAVEN AVENUE

JURUPA STREET

LA SALLE STREET

CARNEGIE AVENUE

BUILDING 4

BUILDING 3

1.8 Ac
1.3 Ac
1.3 Ac
1.3 Ac
1.3 Ac
1.3 Ac
2.0 Ac
0.1 Ac
0.4 Ac
1.4 Ac
410 Q100=20.9 CFS Tc=19.2 MIN.
EXISTING STORM DRAIN
409
408
407
406
405
404
403
402
401
400

EXISTING STORM DRAIN
332 Q100=20.9 CFS Tc=19.2 MIN.

EXISTING STORM DRAIN
363 Q100=42.6 CFS Tc=26.7 MIN.

383 Q100=27.2 CFS Tc=7.8 MIN.

632 Q100=20.5 CFS Tc=9.4 MIN.

0.7 Ac
311 Q100=5.1 CFS Tc=18.5 MIN.
1.7 Ac
310
330
320
312
2.1 Ac
7.8 Ac
321
331
362
360
0.9 Ac
1.0 Ac
361
300
1.3 Ac
301
3.1 Ac
341
1.2 Ac
342 Q100=13.5 CFS Tc=6.4 MIN.
302
340
1.2 Ac
303
353
570
1.4 Ac
204
304
203
3.1 Ac
379
1.4 Ac
305
1.2 Ac
306
372
2.7 Ac
307
2.7 Ac
1.1 Ac
205
381
309 Q100=41.7 CFS Tc=7.8 MIN.
0.4 Ac
382
1.0 Ac
380
213
EXISTING STORM DRAIN
EXISTING STORM DRAIN

MATCHLINE – SEE SHEET 1

LEGEND

- PROJECT BOUNDARY
- SUBAREA BOUNDARY
- FLOW PATH
- 4.10 AC. — SUBAREA AREA
- 100 — NODE NUMBER
- FLOW DIRECTION

Last Update:12/27/21
O:\4000-4099\4005\4005hyd.dwg

0 50 100 200 300
SCALE: 1"=100'

CITY OF ONTARIO
PUBLIC WORKS DEPARTMENT

HYDROLOGY MAP

CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT

4005/ 2 OF 4 SHEETS

PREPARED FOR:
McDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227
FAX: (949) 395-2487

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

Designed by _____ Date _____
Checked by _____ Date _____
Designed by _____ Date _____
Checked by _____ Date _____

Aproved by _____ Date _____
Public Works Director _____ R.C.E. 28129

Sheet 2 of 4 Sheets

5963

MATCHLINE – SEE SHEET 1

MATCHLINE – SEE SHEET 4

CARNEGIE AVENUE

COMMERCE PARKWAY

DOUBLEDAY AVENUE

SANTA ANA STREET

BUILDING 6

BUILDING 5

BUILDING 8

BUILDING 7

EXISTING STORM DRAIN

EXISTING R.C. BOX

EXISTING CURB OUTLET

Q100=20.5 CFS Tc=9.4 MIN.

Q100=42.5 CFS Tc=10.4 MIN.

Q100=59.6 CFS Tc=9.8 MIN.

Q100=6.8 CFS Tc=6.6 MIN.

Q100=6.0 CFS Tc=6.4 MIN.

Q100=20.2 CFS Tc=11.2 MIN.

Q100=8.6 CFS Tc=7.4 MIN.

LEGEND

- PROJECT BOUNDARY
- SUBAREA BOUNDARY
- FLOW PATH
- 4.10 AC. — SUBAREA AREA
- 100 — NODE NUMBER
- FLOW DIRECTION

Last Update:12/27/21
O:\4000-4099\4005\4005hyd.dwg

0 50 100 200 300

SCALE: 1"=100'

CITY OF ONTARIO
PUBLIC WORKS DEPARTMENT

HYDROLOGY MAP

CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT

4005/3 OF 4 SHEETS

PREPARED FOR:

McDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227
FAX: (949) 395-2487

Thienes Engineering, Inc.
CIVIL ENGINEERING * LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

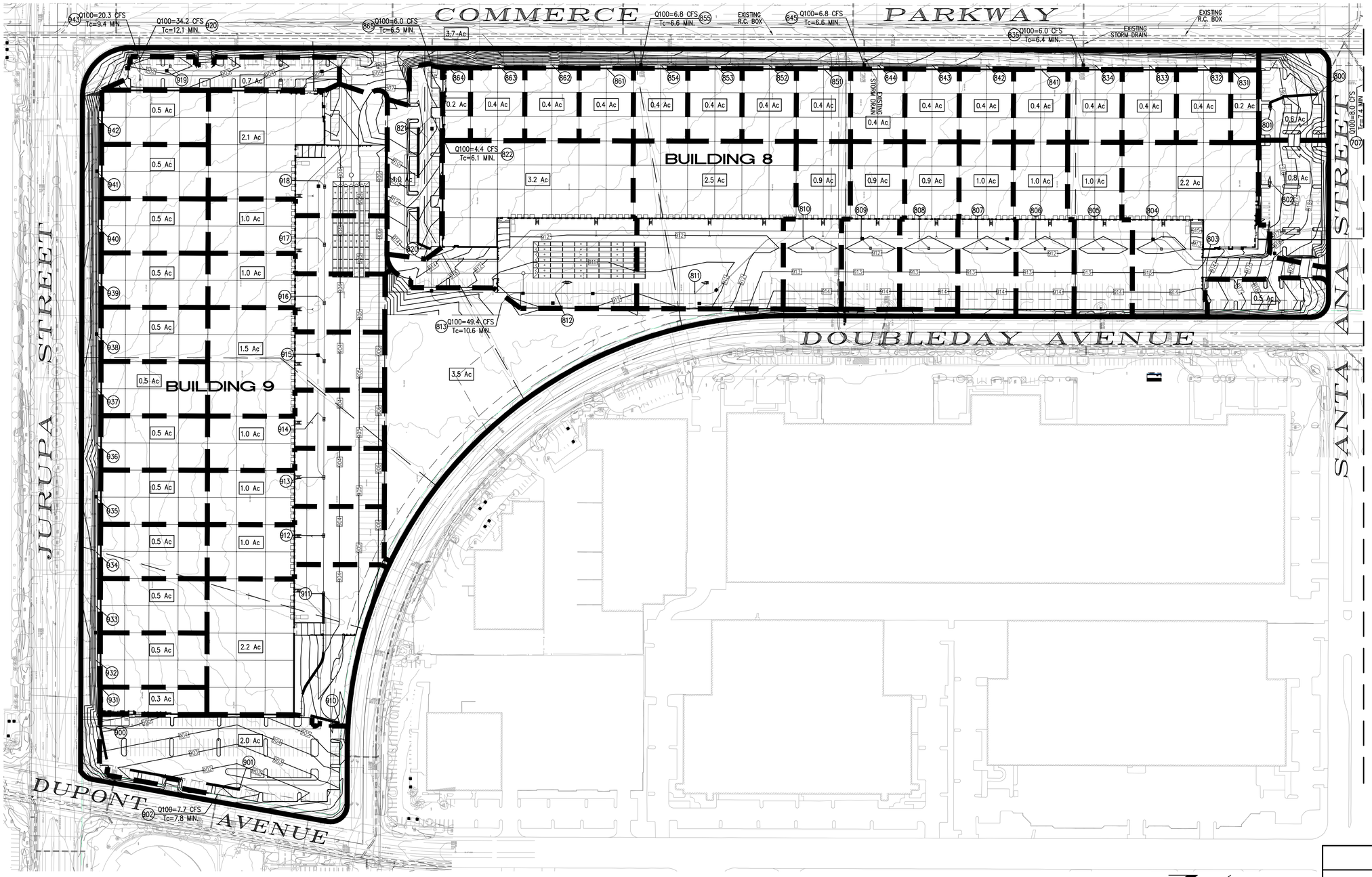
Designed by _____ Date _____
Checked by _____ Date _____
Designed by _____ Date _____
Checked by _____ Date _____

Aproved by _____ Date _____

Public Works Director _____ R.C.E. 28129

Sheet 3 of 4 Sheets

5964



LEGEND

- PROJECT BOUNDARY
- SUBAREA BOUNDARY
- FLOW PATH
- 4.10 AC. — SUBAREA AREA
- 100 — NODE NUMBER
- FLOW DIRECTION

Last Update:12/27/21
O:\4000-4099\4005\4005hyd.dwg

0 50 100 200 300
SCALE: 1"=100'

CITY OF ONTARIO
PUBLIC WORKS DEPARTMENT

HYDROLOGY MAP

CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT

4005/4 OF 4 SHEETS

PREPARED FOR:
McDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227
FAX: (949) 395-2487

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

Designed by _____ Date _____
Checked by _____ Date _____
Designed by _____ Date _____
Checked by _____ Date _____

Aproved by _____ Date _____
Public Works Director _____ R.C.E. 28129

Sheet 4 of 4 Sheets

5965

Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING

PRELIMINARY
WATER QUALITY MANAGEMENT PLAN
(WQMP)

FOR:
CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT
ONTARIO, CA 91761
APNS: 0211-222-47, 48, 52, 53, 54, 55 and 56 & 0211-232-04, 05, 06, 07, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 44, 45, and 46

ONTARIO LAND DEVELOPMENT FILE NO. PDEV21-XXX

PREPARED FOR:
MCDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227
CONTACT: BRUCE MCDONALD

DECEMBER 20, 2021

JOB NO. 4005

PREPARED BY:
THIENES ENGINEERING
14349 FIRESTONE BLVD.
LA MIRADA, CALIFORNIA 90638
PHONE: (714) 521-4811
FAX: (714) 521-4173
CONTACT: MIRA BOGDANOVA (mira@thieneseng.com)

PRELIMINARY
WATER QUALITY MANAGEMENT PLAN
(WQMP)

FOR

"CALIFORNIA LOGISTIC CENTER AT ONTARIO INTERNATIONAL AIRPORT"

PREPARED BY MIRA BOGDANOVA
UNDER THE SUPERVISION OF:

12/20/2021

REINHARD STENZEL DATE
R.C.E. 56155
EXP. 12/31/2022

Preliminary Water Quality Management Plan (PWQMP)

For compliance with Santa Ana Regional Water Quality Control Board
Order Number R8-2010-0036 (NPDES Permit No. CAS618036)

Project Name:	**California Logistic Center**
Ontario Project #:	**PDEV21-XXX**
Applicant Name:	**McDonald Property Group**
Applicant Address:	**1140 N. Coast Highway, Laguna Beach, CA 92651**
Project Address:	**Ontario International Airport, Ontario, CA 91761**
Project Size (acres):	**186.95 Acres**
Project Description:	**Light Industrial**

1st Submittal Date: 12/20/2021

Preliminary Water Quality Management Plan (PWQMP)

1. Introduction

The Preliminary Water Quality Management Plan (PWQMP) is a planning tool to improve integration of required water quality elements, stormwater management, water conservation, rainwater harvesting and re-use, and flood management in land use planning and the City's development process. The Preliminary WQMP will assist project applicants and planners in properly designing and laying out project sites so that water quality may be incorporated in the most effective manner and at the lowest cost for the developer.

The San Bernardino County Municipal Separate Storm Sewer System Permit (MS4 Permit) requires project-specific Water Quality Management plans (WQMP) to be prepared for all priority new development and significant redevelopment projects listed in Section 2 of this document. The MS4 Permit stipulates that the City of Ontario require priority project applicants to submit a Preliminary project-specific WQMP, as early as possible, during the environmental review or planning phase of a development project and that the Preliminary WQMP be approved prior to the issuance of land use entitlement.

2. Priority Projects (requiring a Preliminary WQMP)

Land Use entitlement shall not be issued for any of the listed projects, below, until a Preliminary WQMP has been approved by the City's Engineering Department. For construction projects not going through entitlement, a Preliminary and Final project specific WQMP shall be approved, prior to the issuance of construction permits:

Check the appropriate project category below, for this project:

Check below	**Project Categories**
	1. All significant re-development projects. Significant re-development is defined as the addition or replacement of 5,000 or more square feet of impervious surface on an already developed site subject to discretionary approval of the Permittee. Redevelopment does not include routine maintenance activities that are conducted to maintain original line and grade, hydraulic capacity, original purpose of the facility, or emergency redevelopment activity required to protect public health and safety. Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing developed site, and the existing development was not subject to WQMP requirements, the numeric sizing criteria discussed below applies only to the addition or replacement, and not to the entire developed site. Where redevelopment results in an increase of fifty percent or more of the impervious surfaces of a previously existing developed site, the numeric sizing criteria applies to the entire development (new and existing).
X	2. New development projects that create 10,000 square feet or more of impervious surface (collectively over the entire project site) including commercial, industrial, residential housing subdivisions (i.e., detached single family home subdivisions, multi-family attached subdivisions or townhomes, condominiums, apartments, etc.), mixed-use, and public projects. This category includes development projects on public and private land, which fall under the planning and building authority of the permitting agency.

Check below	Project Categories
	3. Automotive repair shops (with SIC codes 5013, 5014, 5541, 7532- 7534, 7536-7539).
	4. Restaurants and Food Service Establishments where the land area of development is 5,000 square feet or more.
	5. Developments of 2,500 square feet of impervious surface or more adjacent to (within 200 feet) or discharging directly into environmentally sensitive areas (ESA's) such as areas designated in the Ocean Plan as areas of special biological significance or waterbodies listed on the CWA Section 303(d) list of impaired waters.
X	6. Parking lots of 5,000 square feet or more exposed to storm water. Parking lot is defined as land area or facility for the temporary storage of motor vehicles.
	7. Retail Gasoline Outlets (RGOs) that are either 5,000 sq ft or more or have a projected average daily traffic of 100 or more vehicles per day.
	8. *This project is not covered under any of the categories listed above.

* If the development is not covered under any of the project categories listed in Section 2, the project is not required to design and install Site Design/LID BMPs or Treatment Control BMPs to treat the design storm event (Design Capture Volume) described in Section 4.

3. Preliminary WQMP Objectives

Through a combination of Site Design/LID BMPs (where feasible), Source Control, and/or Treatment Control BMPs, project-specific WQMPs shall address all identified pollutants and hydrologic conditions of concern from new development and significant re-development projects for the categories of projects (priority projects) listed in Section 2. Under each type of BMP, listed below, please indicate which BMPs are planned to be implemented and included in the Final WQMP for the project:

A. Site Design/LID (Low Impact Design) for Reducing Stormwater Runoff:

The MS4 Permit requires each priority development project to infiltrate, harvest and use, evapotranspire, or bio-treat the runoff from a 2-yr, 24-hour storm event (Design Capture Volume). If site conditions do not permit infiltration, harvest and use, evapotranspiration, and/or bio-treatment of the entire Design Capture Volume, at the project site, Site Design/LID techniques are required to be implemented to the Maximum Extent Practicable, at the project site, and the remainder of the DCV shall be infiltrated, harvested, bio-treated or treated by alternative measures. Project applicants shall submit a Preliminary WQMP that documents the LID/Site Design BMPs, proposed for the project. Please indicate, in the table below, which Site Design/LID BMPs will be utilized on this project to accomplish this requirement:

Site Design/LID Practice	Planned	Not Planned
Provide at least the minimum effective area required for LID BMPs, to comply with the WQMP (see Table 3-1 below).		**X[1]**
Grade parking lot areas/drive aisles/roof drains to sheet flow runoff into landscaped swales, via curb cuts or zero-face curbs or otherwise disconnect direct drainage from MS4.		**X[1]**
Design landscaped areas as swales and grade to accept runoff from building roofs, parking lots and project roadways.		**X[1]**
Install surface retention basins or infiltration trenches to receive impervious area runoff.		**X[2]**
Install pervious pavement in parking stalls, alleys, driveways, gutters, walkways, trails or patios.		**X[2]**
Install underground stormwater retention chambers where downstream landscaped areas are limited.	**X**	
Install approved Stormwater Drywells in detention areas.		**X[2]**
Construct streets, sidewalks, and parking lot stalls to the minimum widths necessary.	**X**	
Install on-site Biotreatment basins/trenches with underdrains, where soil type is poorly draining.		**X[2]**
Install “Engineered Soil” to increase uptake/soil storage capacity and/or evapotranspiration.		**X[2]**
Install Rainwater Harvesting/Use Equipment.		**X[3]**
Regional LID BMP facilities are installed, off-site, with the capacity and conveyances to accept post-development storm water runoff from this project and reserved capacity allocation credits have been assigned to the project, in a Certificate or other legally binding document, attached herein		**X[2]**

[1] Project capable of treating the full DCV onsite and not required to demonstrate this site design.
[2] The site will be captured and treated by the proposed underground infiltration facilities.
[3] Concept not utilized because the impervious area is much greater than landscape.

Table 3-1 Minimum Effective Area[1] Required for LID BMPs (surface + subsurface facilities) for Project WQMP to Demonstrate Infeasibility[2] (% of site)

Project Type	New Development	Re-Development
SF/MF Residential < 7 du/ac	10%	5%
SF/MF Residential < 7 - 18 du/ac	7%	3.5%
SF/MF Residential > 18 du/ac	5%	2.5%
Mixed Use, Commercial/Industrial w/FAR< 1.0	10%	5%
Mixed Use, Commercial/Industrial w/FAR 1.0-2.0	7%	3.5%
Mixed Use, Commercial/Industrial w/FAR> 2.0	5%	2.5%
Podium (parking under > 75% of project)	3%	1.5%
Zoning allowing development to property lines	2%	1%
Transit Oriented Development[3]	5%	2.5%
Parking	5%	2.5%

[1] "Effective area" is defined as land area which 1) is suitable for a retention/infiltration BMP (based on infeasibility criteria) and 2) is located down-gradient from building roof or paved areas, so that it may receive gravity flow runoff.

[2] Criteria only required if the project WQMP seeks to demonstrate that the full DCV cannot be feasibly managed on-site.

[3] Transit oriented development is defined as a project with development center within one half mile of a mass transit center.

Key: du/ac = dwelling units/acre, FAR = Floor Area Ratio = ratio of gross floor area of building to gross lot area, MF = Multi Family, SF = Single Family

B. Source Control BMPs – The following BMPs are designed to control stormwater pollutants and runoff water at the location where it is generated. Please indicate which of the listed BMPs are planned to be implemented for the project:

Source Control BMPs	Planned	Not Planned
Minimize non-stormwater site runoff through efficient irrigation system design and controllers.	**X**	
Minimize trash and debris in storm runoff through a regular parking lot, storage yard and roadway sweeping program.	**X**	
Provide proper covers/roofs and secondary containment for outside material storage & work areas.		**X[1]**
Provide solid roofs over all trash enclosures.	**X**	
Site Owner(s)/Property Manager/HOA or POA will be familiar with the project WQMP and stormwater BMPs.	**X**	
Owner or HOA or POA to provide Education/Training of site occupants and employees on stormwater BMPs.	**X**	
Install stormwater placards/stenciled messages with a "No Dumping" message on all on-site/off-site storm drain inlets.	**X**	
Provide contained equipment/vehicle wash rack areas that discharge to sanitary sewer.		**X[2]**

[1] Not applicable. No outside material storage or work areas. Secondary containment not needed.

[2] Not applicable, no vehicle wash areas.

C. Treatment Control BMPs – The following BMPs are designed to control stormwater pollutants where it is not feasible to install on-site or off-site Site Design/LID BMPs, with the requisite capacity to treat the Design Capture Volume for identified Pollutants of Concern or where pretreatment of stormwater runoff is required, ahead of infiltration BMPs. Please indicate which of the listed BMPs are planned to be implemented for the project:

Treatment Control BMP	Planned	Not Planned
Gravity Separator devices for pretreatment of sediment, trash/litter or Oil & Grease	**X**	
Proprietary Biofiltration vaults/devices		**X**
Media Cartridge Filtration Vaults		**X**
Proprietary Filter Inserts for on-site storm drain inlets or retention basin/trench overflow drains		**X**

4. Volume-based calculation (approximate) for sizing on-site or off-site Stormwater Retention/Infiltration, Harvest & Re-Use or Biotreatment facilities

1) After calculating the "Watershed Imperviousness Ratio", i, which is equal to the percent of impervious area in each Drainage Management Area, divided by 100, calculate the composite runoff coefficient C_{BMP} for the Drainage Area above using the following equation:

$$\mathbf{C_{BMP} = 0.858i^3 - 0.78i^2 + 0.774i + 0.04}$$

where: $\mathbf{C_{BMP}}$ = composite runoff coefficient; and,

i = watershed imperviousness ratio.

3) Determine the area-averaged "6-hour Mean Storm Rainfall", P_6, for the Drainage Area. This is calculated by multiplying the area averaged 2-year 1-hour value (0.5"-0.6") by the appropriate regression coefficient (1.4807). The 2-yr, 1-hr value for southern Ontario is approximately to 0.5" (P_6 = 0.5*1.4807 = 0.74 and northern Ontario is approximately 0.6" in/hr (P_6 = 0.6*1.4807 = 0.89).

4) Determine the appropriate drawdown time. Use the regression constant a = 1.582 for 24 hours and a = 1.963 for 48 hours. *Note: Regression constants are provided for both 24 hour and 48-hour drawdown times; however, 48-hour drawdown times should be used in most areas of California. Drawdown times in excess of 48 hours should be used with caution as vector breeding can be a problem after water has stood in excess of 72 hours. (Use of the 24-hour drawdown time should be limited to drainage areas with coarse soils (Class 'A' soils that readily drain.)*

5) Calculate the "Maximized Detention Volume", P_0, using the following equation:

$$\mathbf{P_0 = a \cdot C_{BMP} \cdot P_6}$$

where: $\mathbf{P_0}$ = Maximized Detention Volume, in inches

a = 1.582 for 24 hour and a = 1.963 for 48-hour drawdown,

C_{BMP} = composite runoff coefficient; and,

P_6 = 6-hour Mean Storm Rainfall, in inches

6) Calculate the "Target Capture Volume", V_0, using the following equation:

$$V_0 = (P_0 \cdot A) / 12$$

where: **V_0** = Target Capture Volume, in acre-feet

P_0 = Maximized Detention Volume, in inches; and,

A = BMP Drainage Area, in acres

Project Volume-based calculation (approximate) for planned on-site or off-site Stormwater Retention/Infiltration, Harvest & Re-Use or Biotreatment facilities:

Variable	Factor/Formula	DA 1-A	DA 2-A	DA 3-A	DA 4-A
Impervious surface/total surface, ratio	(i)	0.95	0.95	0.95	0.95
C_{BMP}= runoff coefficient	$0.858i^3 - 0.78i^2 + 0.774i + 0.04$	0.807	0.807	0.807	0.807
P_6	**P_6 = 2-yr,1-hr depth*1.4807 =	0.841	0.841	0.841	0.841
Detention Volume (acre inches)	$P_0 = a * C_{BMP} * P_6$ =	1.33	1.33	1.33	1.33
Drawdown rate of basin/trench (a)	1.963 for 48-hr drawdown =	1.963	1.963	1.963	1.963
Project Total Area (acre)	(A)	25.80	48.40	14.35	10.00
Design Capture Volume in cu. ft.	$V_0 = [(P_0 * A)/12] *43560$ =	124,774	234,072	69,399	48,362
Runoff Volume infiltrated in first 3 hours of storm (*not applicable for underground systems*)	Vol= in/hr/12 x ft^2 of infiltration area x 3 hrs	n/a	n/a	n/a	n/a
Retention Volume provided in cubic feet.	*Retention capacity of basins, trenches, underground storage or biotreatment basin	124,907	234,125	69,445	48,540

Variable	Factor/Formula	**DA 5-A**	**DA 6-A**	**DA 7-A**	**DA 8-A**
Impervious surface/total surface, ratio	(i)	0.95	0.95	0.95	0.95
C_{BMP}= runoff coefficient	$0.858i^3 - 0.78i^2 + 0.774i + 0.04$	0.807	0.807	0.807	0.807
P_6	**P_6 = 2-yr,1-hr depth*1.4807 =	0.841	0.841	0.841	0.841
Detention Volume (acre inches)	$P_0 = a * C_{BMP} * P_6$ =	1.33	1.33	1.33	1.33
Drawdown rate of basin/trench (a)	1.963 for 48-hr drawdown =	1.963	1.963	1.963	1.963
Project Total Area (acre)	(A)	17.90	18.65	8.80	23.25
Design Capture Volume in cu. ft.	$V_0 = [(P_0 * A)/12] *43560$ =	86,568	90,195	42,559	112,442
Runoff Volume infiltrated in first 3 hours of storm (*not applicable for underground systems*)	Vol= in/hr/12 x ft^2 of infiltration area x 3 hrs	n/a	n/a	n/a	n/a
Retention Volume provided in cubic feet.	*Retention capacity of basins, trenches, underground storage or biotreatment basin	86,816	90,530	42,723	112,574

Variable	Factor/Formula	**DA 9-A**			
Impervious surface/total surface, ratio	(i)	0.95			
C_{BMP}= runoff coefficient	$0.858i^3 - 0.78i^2 + 0.774i + 0.04$	0.807			
P_6	**P_6 = 2-yr,1-hr depth*1.4807 =	0.841			
Detention Volume (acre inches)	$P_0 = a * C_{BMP} * P_6$ =	1.33			
Drawdown rate of basin/trench (a)	1.963 for 48-hr drawdown =	1.963			
Project Total Area (acre)	(A)	19.80			
Design Capture Volume in cu. ft.	$V_0 = [(P_0 * A)/12]$ *43560 =	95,757			
Runoff Volume infiltrated in first 3 hours of storm (*not applicable for underground systems*)	Vol= in/hr/12 x ft^2 of infiltration area x 3 hrs	n/a			
Retention Volume provided in cubic feet.	*Retention capacity of basins, trenches, underground storage or biotreatment basin	96,094			

*Volume retained utilizing an underground infiltration facility. Refer to the DCV Calculations section for calculations.
**For P_6 value, use site coordinates and NOAA website to determine project's average 2-yr, 1-hr rainfall depth, at: http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html .

5. Flow-Based calculation (approximate) for sizing on-site or off-site Biotreatment facilities and proprietary treatment technology BMPs:

1) After calculating the "Watershed Imperviousness Ratio", i, which is equal to the percent of impervious area in each Drainage Management Area divided by 100, calculate the composite runoff coefficient C_{BMP} for the Drainage Area above using the following equation:

$$\mathbf{C_{BMP} = 0.858i^3 - 0.78i^2 + 0.774i + 0.04}$$

where: $\mathbf{C_{BMP}}$ = composite runoff coefficient; and,

i = watershed imperviousness ratio.

2) Determine BMP design rainfall intensity, $\mathbf{I_{BMP}}$, using the project site geo-coordinates and the NOAA website to determine project's average 2-yr, 1-hr rainfall intensity, at:

http://hdsc.nws.noaa.gov/hdsc/pfds/sa/sca_pfds.html .Multiply this value by 0.2787 (regression coefficient for Ontario) and a minimum safety factor of 2.

4) Calculate the target BMP flowrate, Q, using the following formula (for each DMA <50 acres*):

$$\mathbf{Q = C_{BMP} \cdot I_{BMP} \cdot A}$$

Where: **Q** = flow in cfs (Cubic feet per second)
$\mathbf{I_{BMP}}$ = BMP design rainfall intensity, in/hr
A = Drainage Area in acres

*For DMAs >50 acres, with C_{BMP} <0.5, the project applicant shall use the unit hydrograph method specified in the San Bernardino County Hydrology Manual, using the design storm pattern with rainfall return frequency such that the peak 1-hr rainfall intensity equals the 85th percentile 1-hr rainfall, multiplied by 2.

Project Flow-based calculation (approximate) for planned on-site or off-site flow-based Biotreatment facilities or Stormwater Treatment BMPs:

Variable	Factor/Formula	**DA 1-A**	**DA 2-A**	**DA 3-A**	**DA 4-A**
Impervious surface/ total surface, ratio	(i)	0.95	0.95	0.95	0.95
C_{BMP}= composite runoff coefficient	$0.858i^3+0.78i^2+0.774i+0.04$	0.81	0.81	0.81	0.81
I_{BMP}	I_{BMP} = 2-yr,1-hr storm intensity*0.2787*safety factor	0.279	0.279	0.279	0.279
Drainage area (ac)	A = DMA sq ft/43,560	25.80	48.40	14.35	10.00
Target BMP flowrate	Q = C_{BPM}* I_{BMP} * A	6.59	12.37	3.67	2.55

Variable	Factor/Formula	**DA 5-A**	**DA 6-A**	**DA 7-A**	**DA 8-A**
Impervious surface/ total surface, ratio	(i)	0.95	0.95	0.95	0.95
C_{BMP}= composite runoff coefficient	$0.858i^3+0.78i^2+0.774i+0.04$	0.81	0.81	0.81	0.81
I_{BMP}	I_{BMP} = 2-yr,1-hr storm intensity*0.2787*safety factor	0.279	0.279	0.279	0.279
Drainage area (ac)	A = DMA sq ft/43,560	17.90	18.65	8.80	23.25
Target BMP flowrate	Q = C_{BPM}* I_{BMP} * A	4.57	4.76	2.25	5.94

Variable	Factor/Formula	**DA 9-A**			
Impervious surface/ total surface, ratio	(i)	0.95			
C_{BMP}= composite runoff coefficient	$0.858i^3+0.78i^2+0.774i+0.04$	0.81			
I_{BMP}	I_{BMP} = 2-yr,1-hr storm intensity*0.2787*safety factor	0.279			
Drainage area (ac)	A = DMA sq ft/43,560	19.80			
Target BMP flowrate	Q = C_{BPM}* I_{BMP} * A	4.98			

6. Hydrologic Conditions of Concern (HCOC) and use of the on-line San Bernardino County HCOC Map for determining necessary mitigation steps necessary if there are HCOCs downstream of a project:

Project applicants may access the on-line HCOC Map at: http://permitrack.sbcounty.gov/WAP/. The map will indicate any hydrology concerns with downstream waterways that are hydraulically connected to the project and will indicate if there are any approved regional projects downstream that could be utilized for off-site mitigation of HCOCs. Please indicate here if the project will or will not be able to retain/infilter, harvest and use or biotreat and detain the DCV, on-site, as calculated in Section 4 and if there are HCOCs identified downstream of the project:

Retain or Harvest/Use the DCV on site?	Yes	**X**	No	
Biotreat the DCV but not infilter the runoff?	Yes		No	**X**
HCOCs identified downstream of site?	Yes		No	**X**

If the entire DCV will not be retained on site, the DCV is biotreated but not infiltered or additional detention capacity is needed to address identified HCOCs, downstream of the site, please list here, what additional mitigation measures will be utilized (on-site or off-site) to address HCOCs (see Section 4.2.1-4.2.3 of the SB County WQMP Technical Guidance):

HCOCs not applicable.

7. Site Plan and Conceptual Grading/Drainage Plan requirements for submission with the Preliminary WQMP:

Provide a Site Plan and Conceptual Grading/Drainage Plan along with this Preliminary WQMP, which conceptually shows the proposed locations of buildings, homes, parking lots, parks, new paved roadways, landscaped areas, drainage patterns and drainage sub-areas, methods of conveyance, proposed retention/infiltration, harvest & use or biotreatment facilities that are planned for installation. Where it is determined to be infeasible to capture and detain design storm runoff volumes, on-site, please include other design features, as described in Section 3, above. Include numbered or lettered notes on the Site Plan with a legend detailing other BMPs, as described in Section 3.

8. BMP Maintenance and Funding Mechanism & Description:

Ownership of the project will be held with McDonald Property Group. Long term maintenance will be the responsibility of the owner. This includes BMP maintenance, catch basin inspection, storm drain maintenance (on-site), efficient irrigation and landscape maintenance, and etcetera until the property is sold or transferred.

9. Acknowledgment:

As the property owner or developer, I understand that this project is required to install and implement permanent LID Storm Water Best Management Practices pursuant to the requirements of the San Bernardino County MS4 Permit and to document those BMPs in the submittal of a Water Quality Management Plan, which is binding on any current or successive owners of this property.

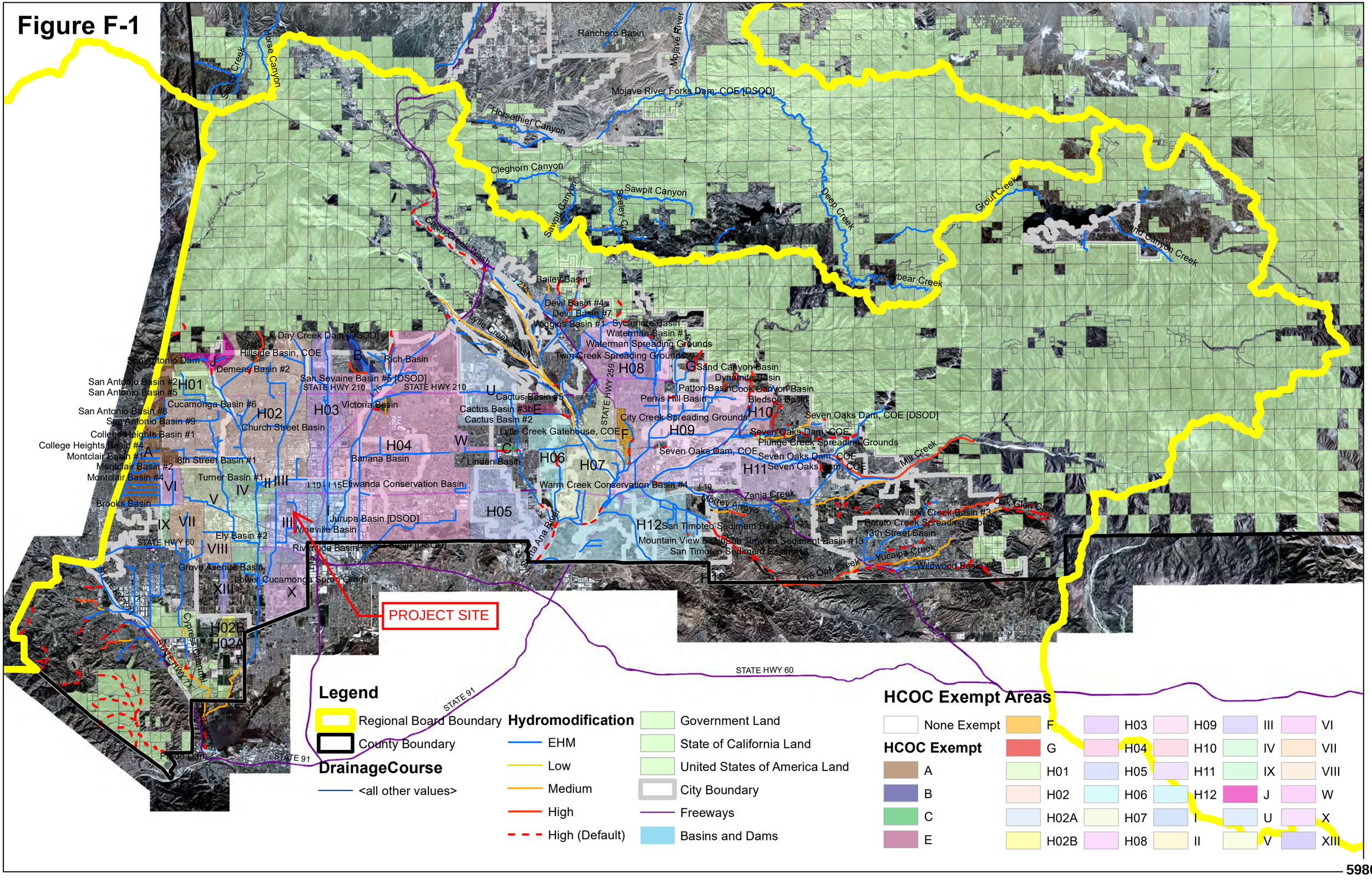
Yes	X	No	

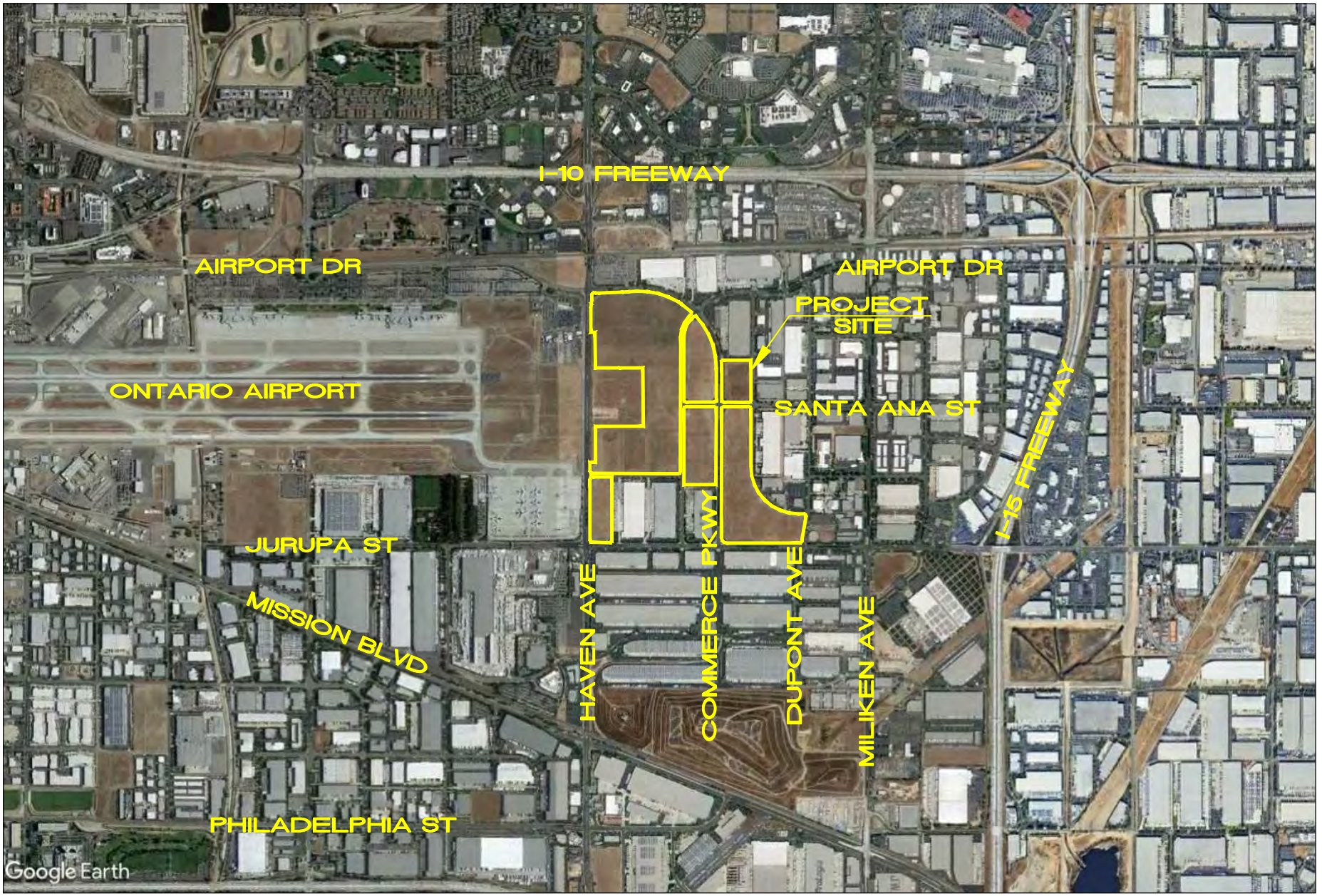
10. Exemption Signature:

As the property owner or developer, I understand that this project is not required by the San Bernardino County MS4 Permit to install and implement permanent LID Storm Water Best Management Practices and will not be required to submit a Water Quality Management Plan.

Signature of Owner or Developer Date

Figure F-1


Ranchero Basin
Mojave River
Mojave River Forks Dam: COE [DSOD]
Horsethief Canyon
Cleghorn Canyon
Sawpit Canyon
Deep Creek
Grout Creek
Bear Creek
Sand Canyon Creek
Cajon Creek Wash
Lytle Creek Wash
Bailey Basin
Devil Basin #4
Devil Basin #7
Wiggins Basin #1
Sycamore Basin
Waterman Basin #1
Waterman Spreading Grounds
Twin Creek Spreading Grounds
Day Creek Dam [DSOD]
Hillside Basin, COE
Rich Basin
San Antonio Dam
Demens Basin #2
San Antonio Basin #2
San Antonio Basin #5
San Sevaine Basin #5 [DSOD]
Cucamonga Basin #6
San Antonio Basin #8
San Antonio Basin #9
College Heights Basin #1
College Heights Basin #4
Montclair Basin #1
Montclair Basin #2
Montclair Basin #4
Church Street Basin
Victoria Basin
Cactus Basin #5
Cactus Basin #3b
Cactus Basin #2
Lytle Creek Gatehouse, COE
Linden Basin
8th Street Basin #1
Turner Basin #1
Banana Basin
Etiwanda Conservation Basin
Warm Creek Conservation Basin #4
Brooks Basin
Jurupa Basin [DSOD]
Mayeville Basin
Ely Basin #2
Riverside Basin
Grove Avenue Basin
Lower Cucamonga Spreading Grounds
Sand Canyon Basin
Dynamite Basin
Patton Basin
Cook Canyon Basin
Perris Hill Basin
Bledsoe Basin
City Creek Spreading Grounds
Seven Oaks Dam, COE [DSOD]
Seven Oaks Dam, COE
Plunge Creek Spreading Grounds
Mill Creek
Zanja Creek
Morrey Arroyo
Wilson Creek Basin #3
Potato Creek Spreading Grounds
3th Street Basin
Oak Glen Creek
Yucaipa Creek
Wildwood Basin #2
Ive Oak Creek
San Timoteo Sediment Basin #3
San Timoteo Sediment Basin #13
Mountain View Basin
Santa Ana River
Cypress Channel
PROJECT SITE
STATE HWY 60
STATE 91
STATE HWY 71
STATE HWY 259
I 10 - I 15
I 215
H01
H02
H03
H04
H05
H06
H07
H08
H09
H10
H11
H12
H13
H02A
H02B
A
B
C
E
F
G
J
U
W
I
II
III
IV
V
VI
VII
VIII
IX
X
XIII
Legend
Regional Board Boundary
County Boundary
DrainageCourse
<all other values>
Hydromodification
EHM
Low
Medium
High
High (Default)
Government Land
State of California Land
United States of America Land
City Boundary
Freeways
Basins and Dams
HCOC Exempt Areas
None Exempt
HCOC Exempt
A
B
C
E
F
G
H01
H02
H02A
H02B
H03
H04
H05
H06
H07
H08
H09
H10
H11
H12
I
II
III
IV
V
VI
VII
VIII
IX
J
U
W
X
XIII



Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

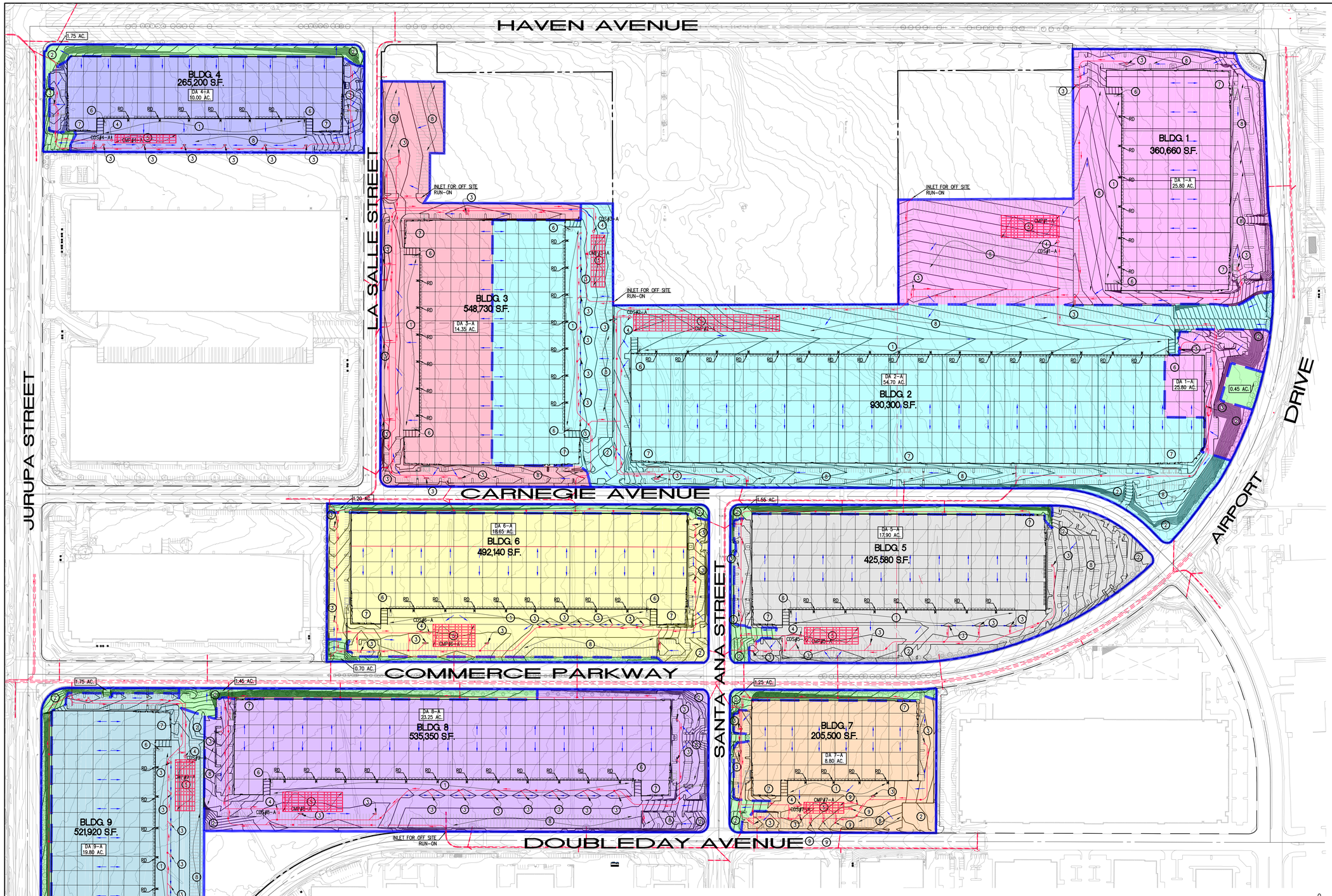
VICINITY MAP

FOR

CALIFORNIA LOGISTICS CENTER
ONTARIO, CA 91761

NTS

Last Update:12/14/21
O:\4000-4099\4005\4005VicM 5981



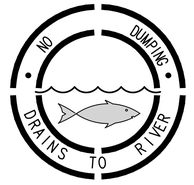
VICINITY MAP
N.T.S.

LEGEND

1. ABOVEGROUND LOADING DOCK
2. LANDSCAPE/IRRIGATION
3. STORM DRAIN SYSTEM SIGNS "NO DUMPING – DRAINS TO RIVER"
4. HYDRODYNAMIC SEPARATOR (MODEL PER TABLE) SEE SHEET 4 AND 5 FOR DETAILS
5. 96-INCH PERFORATED CMP SEE SHEET 2, 3, AND 4 FOR DETAILS
6. TRASH COMPACTOR
7. EDUCATIONAL MATERIAL/EMPLOYEE TRAINING
8. VACUUM SWEEPING/LITTER DEBRIS CONTROL
9. MAXWELL IV DRYWELL

NOTES:

- RD — ROOF DRAIN
- CMP — UNDERGROUND CMP SYSTEM
- PROJECT BOUNDARY
- DRAINAGE AREAS
- SURFACE FLOW DIRECTION
- SD DIRECTION



SAMPLE STENCIL TO BE USED AT GRATE AND CURB OPENING INLETS
SAMPLE CATCH BASIN STENCIL

* CONTRACTOR TO CONFIRM/VERIFY INFILTRATION RATES WITH SOILS ENGINEER AFTER THE GRADING OPERATION AND PRIOR TO INSTALLATION OF THE UNDERGROUND CHAMBERS. THE CITY SHALL BE NOTIFIED IF THE INFILTRATION RATES DEVIATE FROM THE ORIGINAL INFILTRATION REPORT.

0 75 150 300 450
SCALE: 1"=150'

DESIGN CAPTURE VOLUME (DCV)									BMP TYPE	PRETREATMENT		CMP PERFORATED INFILTRATION		
DA	TOTAL AREA (AC)	PERVIOUS AREA (AC)	IMPERVIOUS AREA (AC)	% PERVIOUS	% IMPERVIOUS	FLOWRATE REQUIRED (CFS)	DCV (CF)	DRAWDOWN TIME (HR)		HYDRODYNAMIC SEPARATOR MODEL (75 microns)	FLOWRATE PROVIDED (CFS)	CMP DIAMETER (IN)	LINEAR FOOTAGE (LF)	RETENTION/ DETENTION VOLUME PROVIDED (CF)
1-A	25.80	1.29	24.51	5%	95%	6.59	124,774	48	96 INCH CMP (CMP#1-A)	CDS5653-10	9.5	96	1,805	124,907
2-A	48.40	2.42	45.98	5%	95%	12.37	234,072	48	96 INCH CMP (CMP#2-A)	CDS5668-10	12.9	96	3,387	234,125
3-A	14.35	0.71	13.64	5%	95%	3.67	69,399	48	96 INCH CMP (CMP#3-A)	CDS4040-8	4.1	96	1,009	69,445
4-A	10.00	0.50	9.50	5%	95%	2.55	48,362	48	96 INCH CMP (CMP#4-A)	CDS3035-6	2.6	96	708	48,540
5-A	17.90	0.89	17.01	5%	95%	4.57	86,568	48	96 INCH CMP (CMP#5-A)	CDS4045-8	5.1	96	1,257	86,816
6-A	18.65	0.93	17.72	5%	95%	4.76	90,195	48	96 INCH CMP (CMP#6-A)	CDS4045-8	5.1	96	1,309	90,530
7-A	8.80	0.44	8.36	5%	95%	2.25	42,559	48	96 INCH CMP (CMP#7-A)	CDS3035-6	2.6	96	621	42,723
8-A	23.25	1.16	22.09	5%	95%	5.94	112,442	48	96 INCH CMP (CMP#8-A)	CDS5640-10	6.1	96	1,628	112,574
9-A	19.80	0.99	18.81	5%	95%	5.06	95,757	48	96 INCH CMP (CMP#9-A)	CDS4045-8	5.1	96	1,390	96,094
TOTAL	186.95	9.33	177.62	---	---	47.76	904,127	---	---	---	53.1		13,114	905,754

Last Update:12/20/21
O:\4000~4099\4005\4005BMPSITEMAP.dwg

CITY OF ONTARIO
PUBLIC WORKS DEPARTMENT

WQMP SITE MAP
FOR
CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT

4005/ 1 OF 5 SHEETS

PREPARED FOR:
McDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227
FAX: (949) 395-2487

PREPARED BY:
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH:(714)521-4811 FAX(714)521-4173

Designed by _____ Date _____
Checked by _____ Date _____
Designed by _____ Date _____
Checked by _____ Date _____
Aproved by _____ Date _____
Public Works Director R.C.E. 28129
Sheet 1 of 5 Sheets

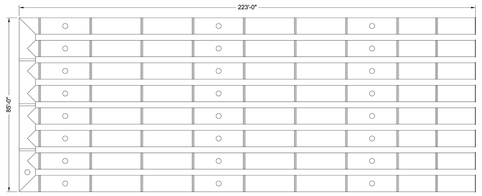
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,805 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 124,774 cf.
- PIPE STORAGE VOLUME = 90,729 cf.
- BACKFILL STORAGE VOLUME = 34,178 cf.
- TOTAL STORAGE PROVIDED = 124,907 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 30'

C:\DOCUMENTS\DESIGN\DRAWINGS\DYO12224 TEI 4005 - CMP#1-A.DWG 12/9/2019 11:03:00 AM
The design and information shown on this drawing is provided as a service to the project owner and contractor by Contech Engineered Solutions LLC ("Contech"). Neither the drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech also requests notification prior to bidding, construction or if inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12224 TEI 4005
TEI 4005 - CMP#1-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7696	12224	12/21/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

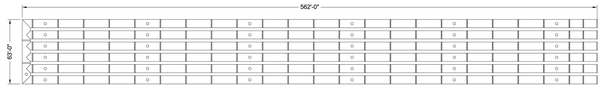
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 3,387 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 234,072 cf.
- PIPE STORAGE VOLUME = 170,249 cf.
- BACKFILL STORAGE VOLUME = 63,876 cf.
- TOTAL STORAGE PROVIDED = 234,125 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 60'

C:\DOCUMENTS\DESIGN\DRAWINGS\DYO12225 TEI 4005 - CMP#2-A.DWG 12/9/2019 11:03:00 AM
The design and information shown on this drawing is provided as a service to the project owner and contractor by Contech Engineered Solutions LLC ("Contech"). Neither the drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech also requests notification prior to bidding, construction or if inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12225 TEI 4005
TEI 4005 - CMP#2-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7696	12225	12/21/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

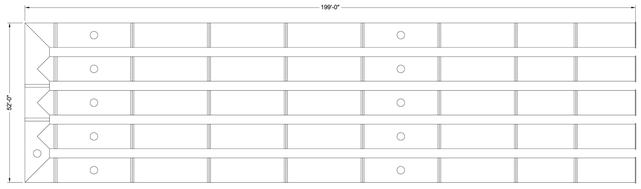
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,007 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 69,399 cf.
- PIPE STORAGE VOLUME = 50,617 cf.
- BACKFILL STORAGE VOLUME = 18,827 cf.
- TOTAL STORAGE PROVIDED = 69,445 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

C:\DOCUMENTS\DESIGN\DRAWINGS\DYO12227 TEI 4005 - CMP#3-A.DWG 12/9/2019 11:03:00 AM
The design and information shown on this drawing is provided as a service to the project owner and contractor by Contech Engineered Solutions LLC ("Contech"). Neither the drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech also requests notification prior to bidding, construction or if inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12227 TEI 4005
TEI 4005 - CMP#3-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7696	12227	12/15/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

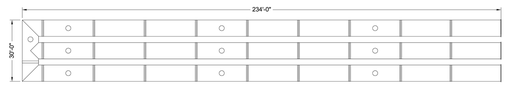
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 708 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 48,362 cf.
- PIPE STORAGE VOLUME = 35,588 cf.
- BACKFILL STORAGE VOLUME = 12,952 cf.
- TOTAL STORAGE PROVIDED = 48,540 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 30'

C:\DOCUMENTS\DESIGN\DRAWINGS\DYO12228 TEI 4005 - CMP#4-A.DWG 12/9/2019 11:03:00 AM
The design and information shown on this drawing is provided as a service to the project owner and contractor by Contech Engineered Solutions LLC ("Contech"). Neither the drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech also requests notification prior to bidding, construction or if inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12228 TEI 4005
TEI 4005 - CMP#4-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7696	12228	12/15/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

Last Update:12/16/21
O:\4000--4099\4005\4005BMPSITEMAP.dwg

CITY OF ONTARIO
PUBLIC WORKS DEPARTMENT

WQMP SITE MAP
FOR
CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT

PREPARED FOR:
McDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227
FAX: (949) 395-2487

PREPARED BY:
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

Designed by _____ Date _____
Checked by _____ Date _____
Designed by _____ Date _____
Checked by _____ Date _____

Aproved by _____ Date _____
Public Works Director R.C.E. 28129

Sheet 2 of 5 Sheets

4005/ 2 OF 5 SHEETS

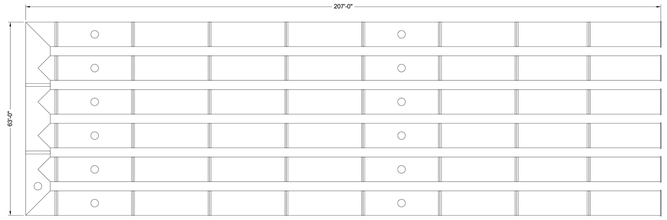
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,257 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 86,568 cf.
- PIPE STORAGE VOLUME = 63,184 cf.
- BACKFILL STORAGE VOLUME = 23,632 cf.
- TOTAL STORAGE PROVIDED = 86,816 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

COPYRIGHT 2021 CONTECH ENGINEERED SOLUTIONS LLC
The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither the drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech also requests the opportunity to review bidding, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12230 TEI 4005
TEI 4005 - CMP#5-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7696	12230	12/15/2021
DESIGNED:	DRAWN:	
DYO	DYO	
CHECKED:	APPROVED:	
DYO	DYO	
SHEET NO.:	D1	

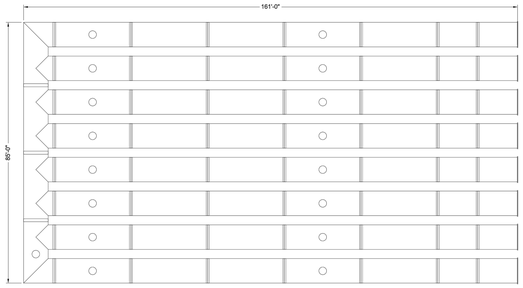
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,309 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 90,195 cf.
- PIPE STORAGE VOLUME = 65,798 cf.
- BACKFILL STORAGE VOLUME = 24,733 cf.
- TOTAL STORAGE PROVIDED = 90,530 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

COPYRIGHT 2021 CONTECH ENGINEERED SOLUTIONS LLC
The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither the drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech also requests the opportunity to review bidding, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12231 TEI 4005
TEI 4005 - CMP#6-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7696	12231	12/15/2021
DESIGNED:	DRAWN:	
DYO	DYO	
CHECKED:	APPROVED:	
DYO	DYO	
SHEET NO.:	D1	

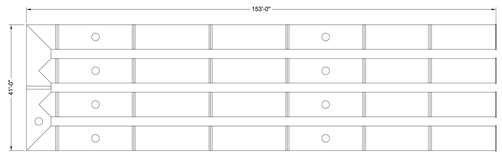
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 621 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 42,559 cf.
- PIPE STORAGE VOLUME = 31,215 cf.
- BACKFILL STORAGE VOLUME = 11,508 cf.
- TOTAL STORAGE PROVIDED = 42,723 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

COPYRIGHT 2021 CONTECH ENGINEERED SOLUTIONS LLC
The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither the drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech also requests the opportunity to review bidding, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12232 TEI 4005
TEI 4005 - CMP#7-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7696	12232	12/15/2021
DESIGNED:	DRAWN:	
DYO	DYO	
CHECKED:	APPROVED:	
DYO	DYO	
SHEET NO.:	D1	

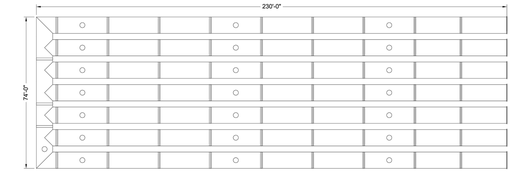
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,628 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 112,442 cf.
- PIPE STORAGE VOLUME = 81,832 cf.
- BACKFILL STORAGE VOLUME = 30,742 cf.
- TOTAL STORAGE PROVIDED = 112,574 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 30'

COPYRIGHT 2021 CONTECH ENGINEERED SOLUTIONS LLC
The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither the drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.
If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech also requests the opportunity to review bidding, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12233 TEI 4005
TEI 4005 - CMP#8-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7696	12233	12/15/2021
DESIGNED:	DRAWN:	
DYO	DYO	
CHECKED:	APPROVED:	
DYO	DYO	
SHEET NO.:	D1	

Last Update:12/16/21
O:\4000--4099\4005\4005BMPSITEMAP.dwg

CITY OF ONTARIO
PUBLIC WORKS DEPARTMENT

WQMP SITE MAP
FOR
CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT

4005/ 3 OF 5 SHEETS

PREPARED FOR:
McDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227
FAX: (949) 395-2487

PREPARED BY:
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

Designed by _____ Date _____
Checked by _____ Date _____
Designed by _____ Date _____
Checked by _____ Date _____

Aproved by _____ Date _____
Public Works Director R.C.E. 28129

Sheet 3 of 5 Sheets

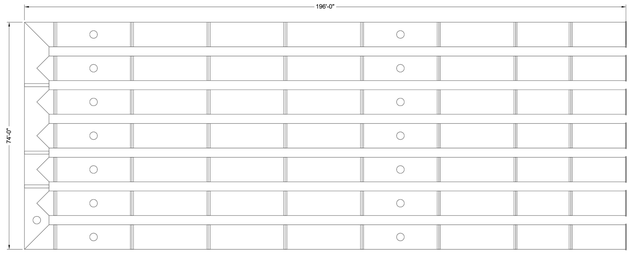
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,390 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 95,757 cf.
- PIPE STORAGE VOLUME = 69,869 cf.
- BACKFILL STORAGE VOLUME = 26,225 cf.
- TOTAL STORAGE PROVIDED = 96,094 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES
- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE 2⅔" x ½" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

The design and information shown on this drawing is provided as a service to purchasers or specifiers of CONTECH Construction Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or distributed for any purpose except as authorized in writing by Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability arising from such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered, it is the responsibility of the user of this drawing to notify Contech immediately for re-evaluation of the design. Contech is not responsible for inaccuracies in this drawing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

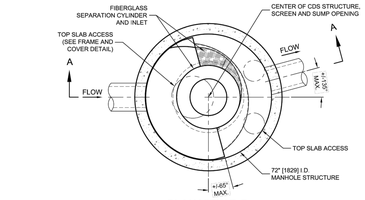
CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
DYODS DRAWING

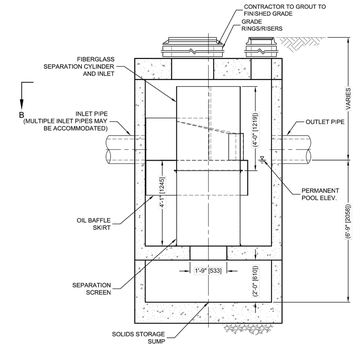
DYO12234 TEI 4005
TEI 4005 - CMP#9-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7666	12234	12/15/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

C:\DYO\Projects\DYO12234\DYO12234.dwg, 12/15/2021 10:53:54 AM



PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

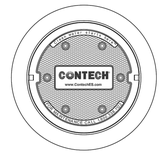
THIS PRODUCT OR PORTIONS THEREOF ARE A PART OF THE CDS TECHNOLOGY FAMILY OF PRODUCTS AND ARE PROTECTED BY ONE OR MORE PATENTS. SEE WWW.CONTECHES.COM/IP FOR DETAILS.

CDS3035-6-C DESIGN NOTES

CDS3035-6-C RATED TREATMENT CAPACITY IS 3.8 CFS [107.6 L/s], OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 20.0 CFS [566 L/s]. IF THE SITE CONDITIONS EXCEED 20.0 CFS [566 L/s], AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD CDS3035-6-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST	WIDTH		HEIGHT
	*		*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

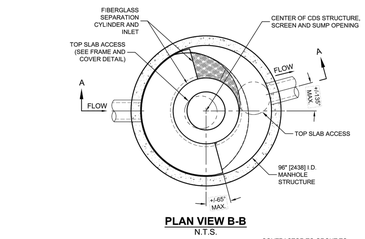
GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

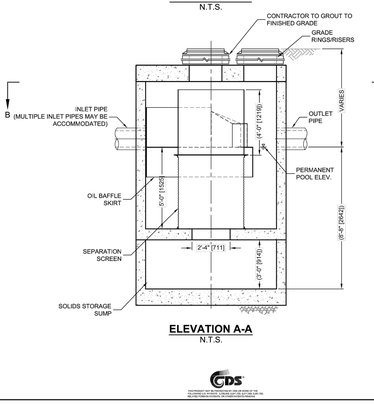
CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS3035-6-C
INLINE CDS
STANDARD DETAIL

I:\STORM\WATER\COMMON\PS\02 CDS\40 STANDARD DRAWINGS\INLINE (CDS)\DWG\CDS0404-8-C.DTL.DWG 5/13/2014 4:06 PM



PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

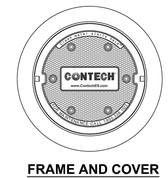
THIS PRODUCT OR PORTIONS THEREOF ARE A PART OF THE CDS TECHNOLOGY FAMILY OF PRODUCTS AND ARE PROTECTED BY ONE OR MORE PATENTS. SEE WWW.CONTECHES.COM/IP FOR DETAILS.

CDS4040-8-C DESIGN NOTES

CDS4040-8-C RATED TREATMENT CAPACITY IS 6.0 CFS [169.9 L/s], OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 30.0 CFS [850 L/s]. IF THE SITE CONDITIONS EXCEED 30.0 CFS [850 L/s], AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD CDS4040-8-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST	WIDTH		HEIGHT
	*		*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS4040-8-C
INLINE CDS
STANDARD DETAIL

I:\STORM\WATER\COMMON\PS\02 CDS\40 STANDARD DRAWINGS\INLINE (CDS)\DWG\CDS0404-8-C.DTL.DWG 5/13/2014 4:06 PM

PLAN VIEW B-B
N.T.S.

ELEVATION A-A
N.T.S.

THIS PRODUCT OR PORTIONS THEREOF ARE A PART OF THE CDS TECHNOLOGY FAMILY OF PRODUCTS AND ARE PROTECTED BY ONE OR MORE PATENTS. SEE WWW.CONTECHES.COM/IP FOR DETAILS.

CDS4045-8-C DESIGN NOTES

CDS4045-8-C RATED TREATMENT CAPACITY IS 7.5 CFS [212.4 L/s], OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 30.0 CFS [850 L/s]. IF THE SITE CONDITIONS EXCEED 30.0 CFS [850 L/s], AN UPSTREAM BYPASS STRUCTURE IS REQUIRED.

THE STANDARD CDS4045-8-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS

FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST	WIDTH		HEIGHT
	*		*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS4045-8-C
INLINE CDS
STANDARD DETAIL

Last Update:12/16/21
O:\4000--4099\4005\4005BMPSITEMAP.dwg

CITY OF ONTARIO
PUBLIC WORKS DEPARTMENT

WQMP SITE MAP
FOR
CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT

PREPARED FOR:
McDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227
FAX: (949) 395-2487

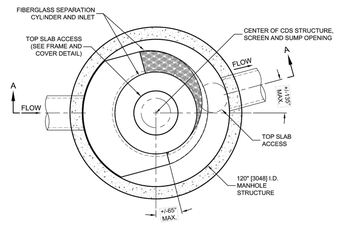
PREPARED BY:
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH.(714)521-4811 FAX(714)521-4173

Designed by _____ Date _____
Checked by _____ Date _____
Designed by _____ Date _____
Checked by _____ Date _____

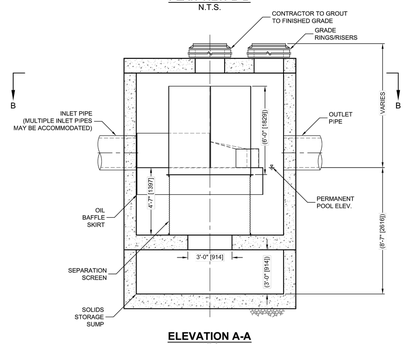
Aproved by _____ Date _____
Public Works Director _____ R.C.E. 28129

Sheet 4 of 5 Sheets

4005/ 4 OF 5 SHEETS

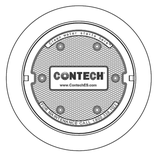


PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

CDS5640-10-C DESIGN NOTES
CDS5640-10-C RATED TREATMENT CAPACITY IS 9.0 CFS [254.9 L/s], OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 50.0 CFS [1416 L/s]. IF THE SITE CONDITIONS EXCEED 50.0 CFS [1416 L/s], AN UPSTREAM BYPASS STRUCTURE IS REQUIRED. THE STANDARD CDS5640-10-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
	*	*	
NOTES/SPECIAL REQUIREMENTS:			

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

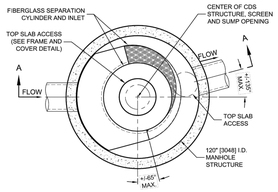
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

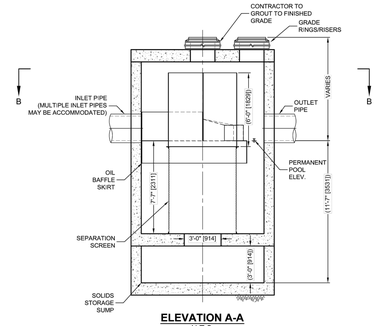
CDS5640-10-C
INLINE CDS
STANDARD DETAIL

THIS DRAWING IS THE PROPRIETARY PROPERTY OF CONTECH ENGINEERED SOLUTIONS LLC. NO USE OF THE INFORMATION CONTAINED ON THIS DRAWING IS TO BE MADE, EXCEPT BY AGREEMENT WITH OR WITH THE EXPRESS WRITTEN CONSENT OF CONTECH ENGINEERED SOLUTIONS LLC.

I:\ETDRAWN\TECH\COMMON\PS\02 CDS\All STANDARD DRAWINGS\ALINE (CDS)-C2\DWG\CDS5640-10-C.DTL.DWG 3/13/2014 4:09 PM

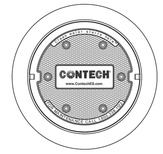


PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

CDS5668-10-C DESIGN NOTES
CDS5668-10-C RATED TREATMENT CAPACITY IS 19.0 CFS [538.0 L/s], OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 50.0 CFS [1416 L/s]. IF THE SITE CONDITIONS EXCEED 50.0 CFS [1416 L/s], AN UPSTREAM BYPASS STRUCTURE IS REQUIRED. THE STANDARD CDS5668-10-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
	*	*	
NOTES/SPECIAL REQUIREMENTS:			

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

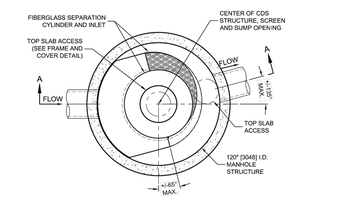
INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

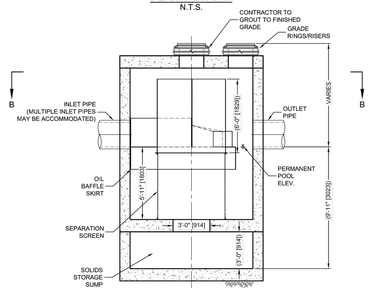
CDS5668-10-C
INLINE CDS
STANDARD DETAIL

THIS DRAWING IS THE PROPRIETARY PROPERTY OF CONTECH ENGINEERED SOLUTIONS LLC. NO USE OF THE INFORMATION CONTAINED ON THIS DRAWING IS TO BE MADE, EXCEPT BY AGREEMENT WITH OR WITH THE EXPRESS WRITTEN CONSENT OF CONTECH ENGINEERED SOLUTIONS LLC.

I:\ETDRAWN\TECH\COMMON\PS\02 CDS\All STANDARD DRAWINGS\ALINE (CDS)-C2\DWG\CDS5668-10-C.DTL.DWG 3/13/2014 4:09 PM

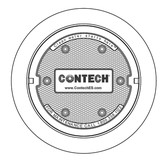


PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.

CDS5653-10-C DESIGN NOTES
CDS5653-10-C RATED TREATMENT CAPACITY IS 14.0 CFS [396.5 L/s], OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY IS 50.0 CFS [1416 L/s]. IF THE SITE CONDITIONS EXCEED 50.0 CFS [1416 L/s], AN UPSTREAM BYPASS STRUCTURE IS REQUIRED. THE STANDARD CDS5653-10-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.
CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST	WIDTH	HEIGHT	
	*	*	
NOTES/SPECIAL REQUIREMENTS:			

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.ContechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET HS20 (AASHTO M 306) AND BE CAST WITH THE CONTECH LOGO.
6. IF REQUIRED, PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

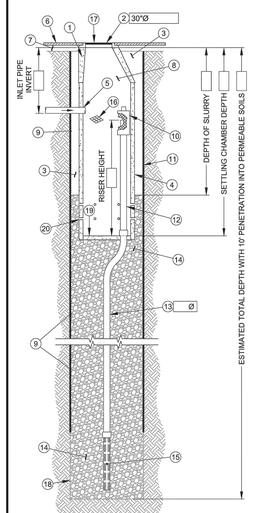
CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS5653-10-C
INLINE CDS
STANDARD DETAIL

THIS DRAWING IS THE PROPRIETARY PROPERTY OF CONTECH ENGINEERED SOLUTIONS LLC. NO USE OF THE INFORMATION CONTAINED ON THIS DRAWING IS TO BE MADE, EXCEPT BY AGREEMENT WITH OR WITH THE EXPRESS WRITTEN CONSENT OF CONTECH ENGINEERED SOLUTIONS LLC.

I:\ETDRAWN\TECH\COMMON\PS\02 CDS\All STANDARD DRAWINGS\ALINE (CDS)-C2\DWG\CDS5653-10-C.DTL.DWG 3/13/2014 4:09 PM

The MaxWell® IV
DRAINAGE SYSTEM DETAILS AND SPECIFICATIONS



#2 a.k.a. ROOTSMAN II, ROOTSTOP 30, ADAPTA 300
CA Lic. #967780, C-42, C-57, C-statewide
Also licensed in the following states: NY, NM, NV, OR, TX, UT, and WA.
U.S. Patent No. 4,903,330. ™ Trademark 1974, 1990, 2004

ITEM NUMBERS

1. **MANHOLE CONE** - MODIFIED FLAT BOTTOM.
2. **BOLTED RING & GRATE/COVER -** DIAMETER & TYPE AS SHOWN. CLEAN CAST IRON WITH WORDING **"STORM WATER ONLY"** IN RAISED LETTERS. **BOLTED IN 2 LOCATIONS** AND SECURED TO CONE WITH MORTAR. RIM ELEVATION ±0.02' OF PLANS.
3. **STABILIZED BACKFILL -** TWO-SACK SLURRY MIX.
4. **PRE-CAST LINER -** 4000 PSI CONCRETE 48" ID. X 54" OD. **CENTER IN HOLE** AND ALIGN SECTIONS **TO MAXIMIZE BEARING SURFACE.**
5. **INLET PIPE (BY OTHERS).** SEE SEPARATE PLAN FOR INVERT ELEVATIONS.
6. **GRADED BASIN OR PAVING** (BY OTHERS).
7. **COMPACTED BASE MATERIAL**, IF REQUIRED (BY OTHERS).
8. **FREEBOARD DEPTH VARIES** WITH INLET PIPE ELEVATION. INCREASE SETTLING CHAMBER DEPTH AS NEEDED TO MAINTAIN ALL INLET PIPE ELEVATIONS ABOVE RISER PIPE.
9. **NON-WOVEN GEOTEXTILE SLEEVE** - MIRAFI 140 NL, MIN. 6 FT Ø. HELD APPROX. 10 FEET OFF THE BOTTOM OF EXCAVATION.
10. **PUREFLO® DEBRIS SHIELD** - ROLLED 16 GA. STEEL X 24" LENGTH WITH VENTED ANTI-SIPHON AND INTERNAL 0.265" MAX. SWO FLATTENED EXPANDED STEEL SCREEN X 12" LENGTH. **FUSION BONDED EPOXY COATED.**
11. **MIN. 6' Ø DRILLED SHAFT.**
12. **RISER PIPE** - SCH. 40 PVC MATED TO DRAINAGE PIPE AT BASE SEAL.
13. **DRAINAGE PIPE -** ADS HIGHWAY GRADE OR SCH. 40 PVC WITH TRI-A COUPLER. SUSPEND PIPE DURING BACKFILL OPERATIONS. DIAMETER AS NOTED.
14. **ROCK** - WASHED, SIZED BETWEEN 3/8" AND 1-1/2".
15. **FLOFAST® DRAINAGE SCREEN** - SCH. 40 PVC 0.120" SLOTTED WELL SCREEN WITH 32 SLOTS PER ROW/FT. OVERALL LENGTH VARIES, UP TO 120" WITH TRI-B COUPLER.
16. **ABSORBENT** - HYDROPHOBIC PETROCHEMICAL SPONGE. MIN. 128 OZ. CAPACITY. TYPICAL, 2 PER CHAMBER.
17. **FABRIC SEAL** - U.V. RESISTANT GEOTEXTILE - **TO BE REMOVED BY CUSTOMER** AT PROJECT COMPLETION. GRATED ONLY.
18. **MIN. 6' Ø DRILLED SHAFT.**
19. **BASE SEAL** - GEOTEXTILE.
20. **6 PERFORATIONS MINIMUM PER FOOT, 2 ROWS MINIMUM.**

Manufactured and Installed by
TORRENT RESOURCES
An evolution of McGuckin Drilling
www.torrentresources.com
CALIFORNIA 909-629-0740
ARIZONA 602-269-0765

DETAIL: | REVISED BY:
DRAWN ON: | REVISED DATE: | SCALE: N.T.S

Last Update: 12/20/21
O:\4000~4099\4005\4005BMPSITEMAP.dwg

CITY OF ONTARIO
PUBLIC WORKS DEPARTMENT

WQMP SITE MAP
FOR
CALIFORNIA LOGISTIC CENTER
ONTARIO INTERNATIONAL AIRPORT

4005/ 5 OF 5 SHEETS

PREPARED FOR:
McDONALD PROPERTY GROUP
1140 N. COAST HIGHWAY
LAGUNA BEACH, CA 92651
PHONE: (949) 655-8227
FAX: (949) 395-2487

PREPARED BY:
Thienes Engineering, Inc.
CIVIL ENGINEERING • LAND SURVEYING
14349 FIRESTONE BOULEVARD
LA MIRADA, CALIFORNIA 90638
PH:(714)521-4811 FAX:(714)521-4173

Designed by _____ Date _____
Checked by _____ Date _____
Designed by _____ Date _____
Checked by _____ Date _____

Aproved by _____ Date _____
Public Works Director _____ R.C.E. 28129

Sheet 5 of 5 Sheets

DCV CALCULATIONS

www.nws.noaa.gov

NOAA's National Weather Service
Hydrometeorological Design Studies Center
Precipitation Frequency Data Server (PFDS)

NOAA ATLAS 14 POINT PRECIPITATION FREQUENCY ESTIMATES: CA

Data description

Data type: Precipitation depth **Units:** English **Time series type:** Partial duration

Select location

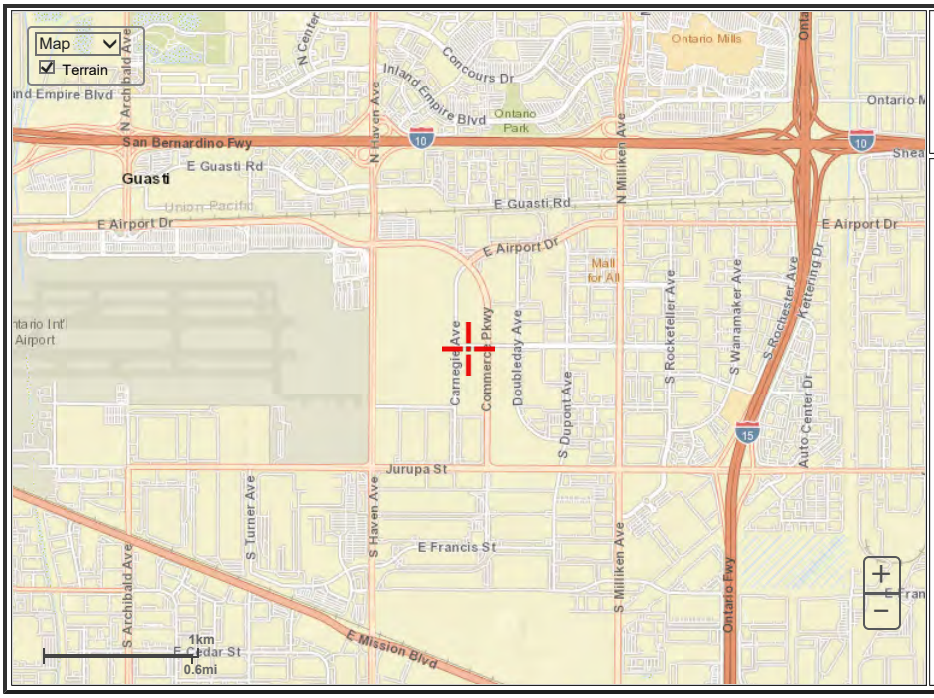
1) Manually:

a) By location (decimal degrees, use "-" for S and W): Latitude: 34.055241 Longitude: -117.56891 Submit

b) By station (list of CA stations): Select station

c) By address Search

2) Use map (if ESRI interactive map is not loading, try adding the host: **https://js.arcgis.com/** to the firewall, or contact us at hdsc.questions@noaa.gov):



a) Select location
Move crosshair or double click

b) Click on station icon
☐ Show stations on map

Location information:
Name: Ontario, California, USA*
Latitude: 34.0552°
Longitude: -117.5689°
Elevation: 926.38 ft **

* Source: ESRI Maps
** Source: USGS

POINT PRECIPITATION FREQUENCY (PF) ESTIMATES

WITH 90% CONFIDENCE INTERVALS AND SUPPLEMENTARY INFORMATION
NOAA Atlas 14, Volume 6, Version 2

PF tabular PF graphical Supplementary information Print page

PDS-based precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years) 1	2	5	10	25	50	100	200	500	1000
5-min	**0.109** (0.091-0.132)	**0.146** (0.122-0.177)	**0.192** (0.159-0.234)	**0.228** (0.188-0.280)	**0.275** (0.219-0.349)	**0.309** (0.241-0.401)	**0.343** (0.260-0.457)	**0.377** (0.278-0.517)	**0.421** (0.297-0.603)	**0.454** (0.309-0.674)
10-min	**0.157** (0.131-0.190)	**0.209** (0.174-0.254)	**0.275** (0.229-0.335)	**0.327** (0.269-0.401)	**0.394** (0.313-0.500)	**0.443** (0.345-0.575)	**0.492** (0.373-0.655)	**0.540** (0.398-0.741)	**0.604** (0.426-0.864)	**0.651** (0.443-0.966)
15-min	**0.189** (0.158-0.229)	**0.253** (0.211-0.307)	**0.333** (0.276-0.405)	**0.395** (0.325-0.485)	**0.476** (0.379-0.605)	**0.536** (0.417-0.696)	**0.595** (0.451-0.792)	**0.654** (0.482-0.896)	**0.730** (0.515-1.05)	**0.787** (0.536-1.17)
30-min	**0.288** (0.240-0.349)	**0.386** (0.321-0.467)	**0.507** (0.421-0.616)	**0.602** (0.496-0.738)	**0.725** (0.577-0.921)	**0.816** (0.635-1.06)	**0.906** (0.687-1.21)	**0.995** (0.733-1.36)	**1.11** (0.785-1.59)	**1.20** (0.816-1.78)
60-min	**0.425** (0.354-0.514)	**0.568** (0.473-0.688)	**0.746** (0.620-0.907)	**0.886** (0.730-1.09)	**1.07** (0.849-1.36)	**1.20** (0.935-1.56)	**1.33** (1.01-1.78)	**1.47** (1.08-2.01)	**1.64** (1.16-2.34)	**1.77** (1.20-2.62)
2-hr	**0.633** (0.528-0.766)	**0.836** (0.696-1.01)	**1.09** (0.903-1.32)	**1.28** (1.06-1.57)	**1.53** (1.22-1.95)	**1.72** (1.34-2.23)	**1.89** (1.44-2.52)	**2.07** (1.52-2.83)	**2.29** (1.62-3.28)	**2.46** (1.68-3.65)
3-hr	**0.794** (0.662-0.962)	**1.04** (0.870-1.27)	**1.35** (1.12-1.64)	**1.59** (1.31-1.95)	**1.89** (1.51-2.40)	**2.12** (1.65-2.75)	**2.33** (1.77-3.10)	**2.54** (1.87-3.48)	**2.81** (1.98-4.02)	**3.01** (2.05-4.46)
6-hr	**1.13** (0.939-1.36)	**1.48** (1.23-1.79)	**1.90** (1.58-2.32)	**2.23** (1.84-2.74)	**2.65** (2.11-3.37)	**2.96** (2.30-3.84)	**3.25** (2.47-4.33)	**3.54** (2.61-4.85)	**3.90** (2.75-5.58)	**4.16** (2.84-6.18)
12-hr	**1.47**	**1.93**	**2.50**	**2.94**	**3.49**	**3.89**	**4.28**	**4.66**	**5.13**	**5.48**

	(1.22-1.78)	(1.61-2.34)	(2.08-3.04)	(2.42-3.60)	(2.78-4.44)	(3.03-5.05)	(3.25-5.70)	(3.43-6.38)	(3.62-7.34)	(3.73-8.12)
24-hr	**1.95** (1.72-2.24)	**2.59** (2.29-2.99)	**3.39** (2.99-3.92)	**4.00** (3.50-4.67)	**4.79** (4.05-5.77)	**5.36** (4.44-6.59)	**5.91** (4.78-7.44)	**6.44** (5.08-8.34)	**7.13** (5.39-9.62)	**7.63** (5.58-10.6)
2-day	**2.34** (2.07-2.69)	**3.17** (2.81-3.66)	**4.23** (3.73-4.89)	**5.05** (4.42-5.89)	**6.12** (5.18-7.37)	**6.90** (5.73-8.49)	**7.67** (6.21-9.67)	**8.44** (6.65-10.9)	**9.42** (7.13-12.7)	**10.2** (7.43-14.2)
3-day	**2.52** (2.23-2.90)	**3.47** (3.07-4.01)	**4.69** (4.13-5.42)	**5.65** (4.94-6.59)	**6.91** (5.85-8.32)	**7.85** (6.51-9.65)	**8.77** (7.11-11.1)	**9.70** (7.65-12.6)	**10.9** (8.26-14.7)	**11.8** (8.66-16.5)
4-day	**2.73** (2.42-3.15)	**3.81** (3.37-4.40)	**5.19** (4.57-6.00)	**6.28** (5.50-7.33)	**7.73** (6.55-9.32)	**8.82** (7.32-10.9)	**9.90** (8.02-12.5)	**11.0** (8.66-14.2)	**12.4** (9.41-16.8)	**13.5** (9.90-18.9)
7-day	**3.18** (2.81-3.67)	**4.50** (3.98-5.19)	**6.20** (5.47-7.18)	**7.58** (6.63-8.84)	**9.42** (7.97-11.3)	**10.8** (8.97-13.3)	**12.2** (9.90-15.4)	**13.7** (10.8-17.7)	**15.6** (11.8-21.0)	**17.0** (12.5-23.8)
10-day	**3.42** (3.03-3.95)	**4.88** (4.32-5.64)	**6.79** (5.98-7.85)	**8.33** (7.29-9.72)	**10.4** (8.82-12.6)	**12.0** (9.97-14.8)	**13.6** (11.0-17.2)	**15.3** (12.1-19.8)	**17.6** (13.3-23.7)	**19.3** (14.1-26.9)
20-day	**4.06** (3.59-4.68)	**5.86** (5.18-6.77)	**8.27** (7.29-9.57)	**10.3** (8.97-12.0)	**13.0** (11.0-15.7)	**15.2** (12.6-18.6)	**17.4** (14.1-21.9)	**19.7** (15.5-25.5)	**22.9** (17.3-30.8)	**25.4** (18.6-35.4)
30-day	**4.79** (4.24-5.52)	**6.92** (6.11-7.98)	**9.79** (8.63-11.3)	**12.2** (10.7-14.2)	**15.6** (13.2-18.8)	**18.2** (15.1-22.4)	**21.0** (17.0-26.5)	**23.9** (18.9-31.0)	**28.0** (21.2-37.8)	**31.3** (22.9-43.7)
45-day	**5.78** (5.12-6.66)	**8.26** (7.30-9.53)	**11.7** (10.3-13.5)	**14.5** (12.7-17.0)	**18.6** (15.8-22.5)	**21.9** (18.2-27.0)	**25.4** (20.6-32.0)	**29.1** (23.0-37.7)	**34.4** (26.0-46.4)	**38.6** (28.3-53.9)
60-day	**6.77** (5.99-7.80)	**9.53** (8.42-11.0)	**13.4** (11.8-15.5)	**16.6** (14.6-19.4)	**21.4** (18.1-25.7)	**25.2** (20.9-31.0)	**29.3** (23.7-36.9)	**33.7** (26.5-43.6)	**40.0** (30.2-53.9)	**45.1** (33.0-62.9)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Estimates from the table in CSV format: Precipitation frequency estimates Submit

Main Link Categories:
Home | OWP

US Department of Commerce
National Oceanic and Atmospheric Administration
National Weather Service
Office of Water Prediction (OWP)
1325 East West Highway
Silver Spring, MD 20910
Page Author: HDSC webmaster
Page last modified: April 21, 2017

Map Disclaimer
Disclaimer
Credits
Glossary

Privacy Poli
About
Career Opportuniti

Worksheet H: Factor of Safety and Design Infiltration Rate Worksheet
DA 1-A

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.0
B	Design	Tributary area size	0.25	3	0.75
		Level of pretreatment/ expected sediment loads	0.25	1	0.25
		Redundancy	0.25	3	0.75
		Compaction during construction	0.25	1	0.25
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					2.0
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					6.3
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_M / S_{TOT}$					3.15

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

A site-specific infiltration test was conducted at the project site to support a minimum measured infiltration rate of 6.3 in/hr. The design infiltration rate will be 3.15 in/hr after applying the appropriate safety factors. This design rate is suitable for infiltration facilities.

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

Worksheet H: Factor of Safety and Design Infiltration Rate Worksheet
DA 2-A

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.0
B	Design	Tributary area size	0.25	3	0.75
		Level of pretreatment/ expected sediment loads	0.25	1	0.25
		Redundancy	0.25	3	0.75
		Compaction during construction	0.25	1	0.25
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					2.0
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					13.5
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_M / S_{TOT}$					6.75

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

A site-specific infiltration test was conducted at the project site to support a minimum measured infiltration rate of 13.5 in/hr. The design infiltration rate will be 6.75 in/hr after applying the appropriate safety factors. This design rate is suitable for infiltration facilities.

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

Worksheet H: Factor of Safety and Design Infiltration Rate Worksheet
DA 3-A

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.0
B	Design	Tributary area size	0.25	3	0.75
		Level of pretreatment/ expected sediment loads	0.25	1	0.25
		Redundancy	0.25	3	0.75
		Compaction during construction	0.25	1	0.25
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					2.0
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					13.5
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_M / S_{TOT}$					6.75

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

A site-specific infiltration test was conducted at the project site to support a minimum measured infiltration rate of 13.5 in/hr. The design infiltration rate will be 6.75 in/hr after applying the appropriate safety factors. This design rate is suitable for infiltration facilities.

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

Worksheet H: Factor of Safety and Design Infiltration Rate Worksheet
DA 4-A

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.0
B	Design	Tributary area size	0.25	3	0.75
		Level of pretreatment/ expected sediment loads	0.25	1	0.25
		Redundancy	0.25	3	0.75
		Compaction during construction	0.25	1	0.25
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					2.0
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					13.7
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_M / S_{TOT}$					6.85

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

A site-specific infiltration test was conducted at the project site to support a minimum measured infiltration rate of 13.7 in/hr. The design infiltration rate will be 6.85 in/hr after applying the appropriate safety factors. This design rate is suitable for infiltration facilities.

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

Worksheet H: Factor of Safety and Design Infiltration Rate Worksheet
DA 5-A

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.0
B	Design	Tributary area size	0.25	3	0.75
		Level of pretreatment/ expected sediment loads	0.25	1	0.25
		Redundancy	0.25	3	0.75
		Compaction during construction	0.25	1	0.25
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					2.0
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					22.5
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_M / S_{TOT}$					11.25

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

A site-specific infiltration test was conducted at the project site to support a minimum measured infiltration rate of 22.5 in/hr. The design infiltration rate will be 11.25 in/hr after applying the appropriate safety factors. This design rate is suitable for infiltration facilities.

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

Worksheet H: Factor of Safety and Design Infiltration Rate Worksheet
DA 6-A

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.0
B	Design	Tributary area size	0.25	3	0.75
		Level of pretreatment/ expected sediment loads	0.25	1	0.25
		Redundancy	0.25	3	0.75
		Compaction during construction	0.25	1	0.25
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					2.0
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					18.4
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_M / S_{TOT}$					9.2

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

A site-specific infiltration test was conducted at the project site to support a minimum measured infiltration rate of 18.4 in/hr. The design infiltration rate will be 9.2 in/hr after applying the appropriate safety factors. This design rate is suitable for infiltration facilities.

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

Worksheet H: Factor of Safety and Design Infiltration Rate Worksheet
DA 7-A

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.0
B	Design	Tributary area size	0.25	2	0.50
		Level of pretreatment/ expected sediment loads	0.25	1	0.25
		Redundancy	0.25	3	0.75
		Compaction during construction	0.25	1	0.25
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					1.75; use 2.0
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					1.3
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_M / S_{TOT}$					0.65

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

A site-specific infiltration test was conducted at the project site to support a minimum measured infiltration rate of 1.3 in/hr. The design infiltration rate will be 0.65 in/hr after applying the appropriate safety factors. This design rate is suitable for infiltration facilities.

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

Worksheet H: Factor of Safety and Design Infiltration Rate Worksheet
DA 8-A

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.0
B	Design	Tributary area size	0.25	3	0.75
		Level of pretreatment/ expected sediment loads	0.25	1	0.25
		Redundancy	0.25	3	0.75
		Compaction during construction	0.25	1	0.25
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					2.0
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					10.8
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_M / S_{TOT}$					5.4

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

A site-specific infiltration test was conducted at the project site to support a minimum measured infiltration rate of 10.8 in/hr. The design infiltration rate will be 5.4 in/hr after applying the appropriate safety factors. This design rate is suitable for infiltration facilities.

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

Worksheet H: Factor of Safety and Design Infiltration Rate Worksheet
DA 9-A

Factor Category		Factor Description	Assigned Weight (w)	Factor Value (v)	Product (p) p = w x v
A	Suitability Assessment	Soil assessment methods	0.25	1	0.25
		Predominant soil texture	0.25	1	0.25
		Site soil variability	0.25	1	0.25
		Depth to groundwater / impervious layer	0.25	1	0.25
		Suitability Assessment Safety Factor, $S_A = \Sigma p$			1.0
B	Design	Tributary area size	0.25	3	0.75
		Level of pretreatment/ expected sediment loads	0.25	1	0.25
		Redundancy	0.25	3	0.75
		Compaction during construction	0.25	1	0.25
		Design Safety Factor, $S_B = \Sigma p$			2.0
Combined Safety Factor, $S_{TOT} = S_A \times S_B$					2.0
Measured Infiltration Rate, inch/hr, K_M (corrected for test-specific bias)					4.33
Design Infiltration Rate, in/hr, $K_{DESIGN} = K_M / S_{TOT}$					2.165

Supporting Data

Briefly describe infiltration test and provide reference to test forms:

A site-specific infiltration test was conducted at the project site to support a minimum measured infiltration rate of 4.33 in/hr. The design infiltration rate will be 2.165 in/hr after applying the appropriate safety factors. This design rate is suitable for infiltration facilities.

Note: The minimum combined adjustment factor shall not be less than 2.0 and the maximum combined adjustment factor shall not exceed 9.0.

FLOW-BASED BMP DESIGN (pretreatment)

$C_{BMP} = 0.858(imp)^3 - 0.78(imp)^2 + 0.774(imp) + 0.04$
$I_{BMP} = (0.568)(0.2787)(2) = 0.317$ in/hr
$Q = C_{BMP} * 0.317 * Area$

DA 1-A – CDS "1-A"

Region		Valley	
Drainage Area (acres)		25.80	acres
Drainage Area (sq-ft)		1,123,848	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.81	
1-hr 2-yr from NOAA		0.568	
Itensity Coeff		0.2787	
Intensity BMP (in/hr)		0.317	
Flow (cfs)	Q =	6.59	

Contech CDS4045-8
Q-required = 6.59 cfs
Q-provided = 9.5 cfs

DA 2-A – CDS "2-A"

Region		Valley	
Drainage Area (acres)		48.40	acres
Drainage Area (sq-ft)		2,108,304	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.81	
1-hr 2-yr from NOAA		0.568	
Itensity Coeff		0.2787	
Intensity BMP (in/hr)		0.317	
Flow (cfs)	Q =	12.37	

Contech CDS4040-8
Q-required = 12.37 cfs
Q-provided = 12.90 cfs

DA 3-A – CDS "3-A"

Region		Valley	
Drainage Area (acres)		14.35	acres
Drainage Area (sq-ft)		625,086	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	**0.81**	
1-hr 2-yr from NOAA		0.568	
Itensity Coeff		**0.2787**	
Intensity BMP (in/hr)		**0.317**	
Flow (cfs)	Q =	**3.67**	

Contech CDS4040-8
Q-required = 3.67 cfs
Q-provided = 4.10 cfs

DA 4-A – CDS "4-A"

Region		Valley	
Drainage Area (acres)		10.00	acres
Drainage Area (sq-ft)		435,600	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	**0.81**	
1-hr 2-yr from NOAA		0.568	
Itensity Coeff		**0.2787**	
Intensity BMP (in/hr)		**0.317**	
Flow (cfs)	Q =	**2.55**	

Contech CDS3035-6
Q-required = 2.55 cfs
Q-provided = 2.60 cfs

DA 5-A – CDS "5-A"

Region		Valley	
Drainage Area (acres)		17.90	acres
Drainage Area (sq-ft)		779,724	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	**0.81**	
1-hr 2-yr from NOAA		0.568	
Itensity Coeff		**0.2787**	
Intensity BMP (in/hr)		**0.317**	
Flow (cfs)	Q =	**4.57**	

Contech CDS4045-8
Q-required = 4.57 cfs
Q-provided = 5.10 cfs

DA 6-A – CDS "6-A"

Region		Valley	
Drainage Area (acres)		18.65	acres
Drainage Area (sq-ft)		812,394	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.81	
1-hr 2-yr from NOAA		0.568	
Itensity Coeff		0.2787	
Intensity BMP (in/hr)		0.317	
Flow (cfs)	Q =	4.76	

Contech CDS4045-8
Q-required = 4.76 cfs
Q-provided = 5.10 cfs

DA 7-A – CDS "7-A"

Region		Valley	
Drainage Area (acres)		8.80	acres
Drainage Area (sq-ft)		383,328	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.81	
1-hr 2-yr from NOAA		0.568	
Itensity Coeff		0.2787	
Intensity BMP (in/hr)		0.317	
Flow (cfs)	Q =	2.25	

Contech CDS3035-6
Q-required = 2.25 cfs
Q-provided = 2.60 cfs

DA 8-A – CDS "8-A"

Region		Valley	
Drainage Area (acres)		23.25	acres
Drainage Area (sq-ft)		1,012,770	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.81	
1-hr 2-yr from NOAA		0.568	
Itensity Coeff		0.2787	
Intensity BMP (in/hr)		0.317	
Flow (cfs)	Q =	5.94	

Contech CDS5640-10
Q-required = 5.94 cfs
Q-provided = 6.10 cfs

DA 9-A – CDS "9-A"

Region		Valley	
Drainage Area (acres)		19.80	acres
Drainage Area (sq-ft)		**862,488**	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	**0.81**	
1-hr 2-yr from NOAA		0.568	
Itensity Coeff		**0.2787**	
Intensity BMP (in/hr)		**0.317**	
Flow (cfs)	Q =	**5.06**	

Contech CDS4045-8
Q-required = 5.06 cfs
Q-provided = 5.10 cfs

VOLUME-BASED BMP DESIGN

$C_{BMP} = 0.858(imp)^3 - 0.78(imp)^2 + 0.774(imp) + 0.04$
P6 = (0.568)(1.4807) = 0.841 inches
$P0 = (1.963)(C_{BMP})(0.841)$
DCV = (P0 * Area) / 12

DA 1-A – CMP "1-A"

Region		Valley	
Drainage Area (acres)		25.80	acres
Drainage Area (sq-ft)		1,123,848	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	**0.807**	
1-hr 2-yr from NOAA		0.568	
P6 Coeff		**1.4807**	
Mean 6-hr (P6)		**0.841**	
Drawdown Rate (a)		1.963	
DCV		**124,774**	cu-ft
DCV		**2.864**	acre-ft

Design infiltration rate = 3.15 in/hr
d_{max} = 151.2 inches = Design infiltration rate x 48 hours = 3.15 in/hr x 48 hrs
d_{BMP} = 100.8 inches = [(6 inches + 6 inches) x 0.40] + 96 inches
$d_{max} > d_{BMP}$

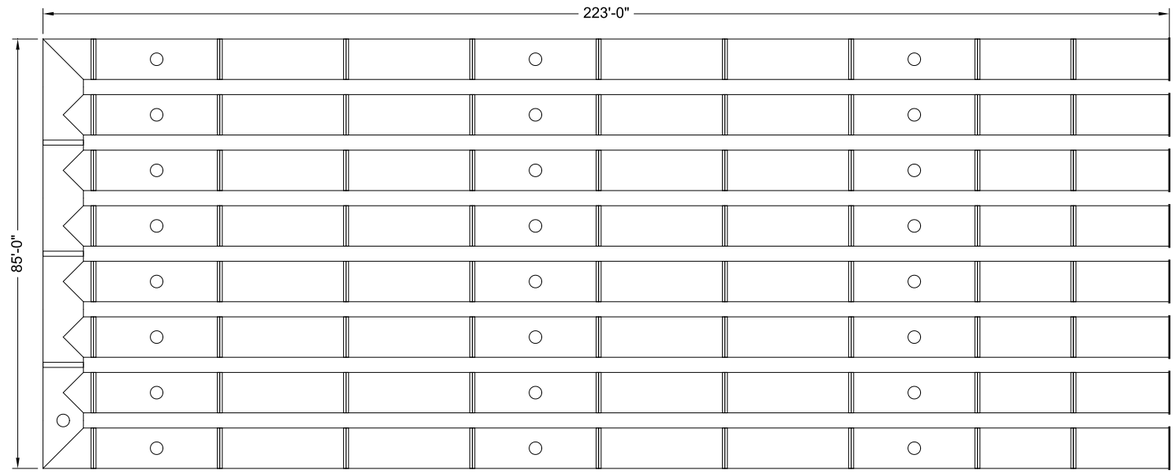
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,805 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 124,774 cf.
- PIPE STORAGE VOLUME = 90,729 cf.
- BACKFILL STORAGE VOLUME = 34,178 cf.
- TOTAL STORAGE PROVIDED = 124,907 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE $2\frac{2}{3}$" x $\frac{1}{2}$" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 30'

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH® CMP DETENTION SYSTEMS
CONTECH **DYODS** DRAWING

DYO12224 TEI 4005
TEI 4005 - CMP#1-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7656	12224	12/21/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

6004

C:\EXPORTS\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM

DA 2-A – CMP "2-A"

Region		Valley	
Drainage Area (acres)		48.40	acres
Drainage Area (sq-ft)		2,108,304	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.807	
1-hr 2-yr from NOAA		0.568	
P6 Coeff		1.4807	
Mean 6-hr (P6)		0.841	
Drawdown Rate (a)		1.963	
DCV		234,072	cu-ft
DCV		5.374	acre-ft

Design infiltration rate = 6.75 in/hr
d_{max} = 324.0 inches = Design infiltration rate x 48 hours = 6.75 in/hr x 48 hrs
d_{BMP} = 100.8 inches = [(6 inches + 6 inches) x 0.40] + 96 inches
$d_{max} > d_{BMP}$

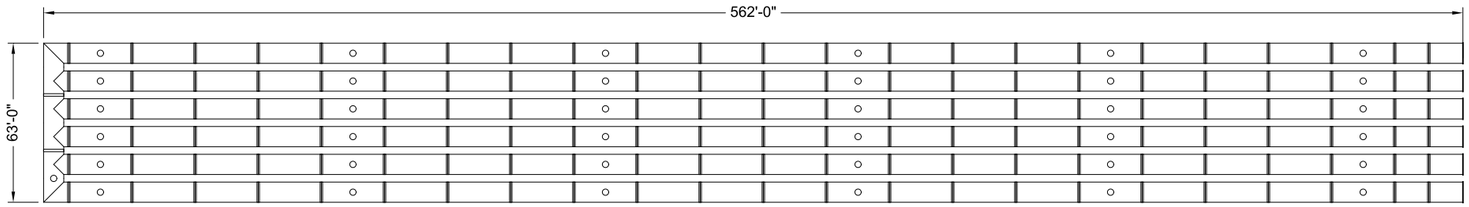
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 3,387 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 234,072 cf.
- PIPE STORAGE VOLUME = 170,249 cf.
- BACKFILL STORAGE VOLUME = 63,876 cf.
- TOTAL STORAGE PROVIDED = 234,125 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE $2\frac{2}{3}$" x $\frac{1}{2}$" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 60'

C:\EXPORTS\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH® CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12225 TEI 4005
TEI 4005 - CMP#2-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7656	12225	12/21/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

6006

DA 3-A – CMP "3-A"

Region		Valley	
Drainage Area (acres)		14.35	acres
Drainage Area (sq-ft)		625,086	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.807	
1-hr 2-yr from NOAA		0.568	
P6 Coeff		1.4807	
Mean 6-hr (P6)		0.841	
Drawdown Rate (a)		1.963	
DCV		69,399	cu-ft
DCV		1.593	acre-ft

Design infiltration rate = 6.75 in/hr
d_{max} = 324.0 inches = Design infiltration rate x 48 hours = 6.75 in/hr x 48 hrs
d_{BMP} = 100.8 inches = [(6 inches + 6 inches) x 0.40] + 96 inches
$d_{max} > d_{BMP}$

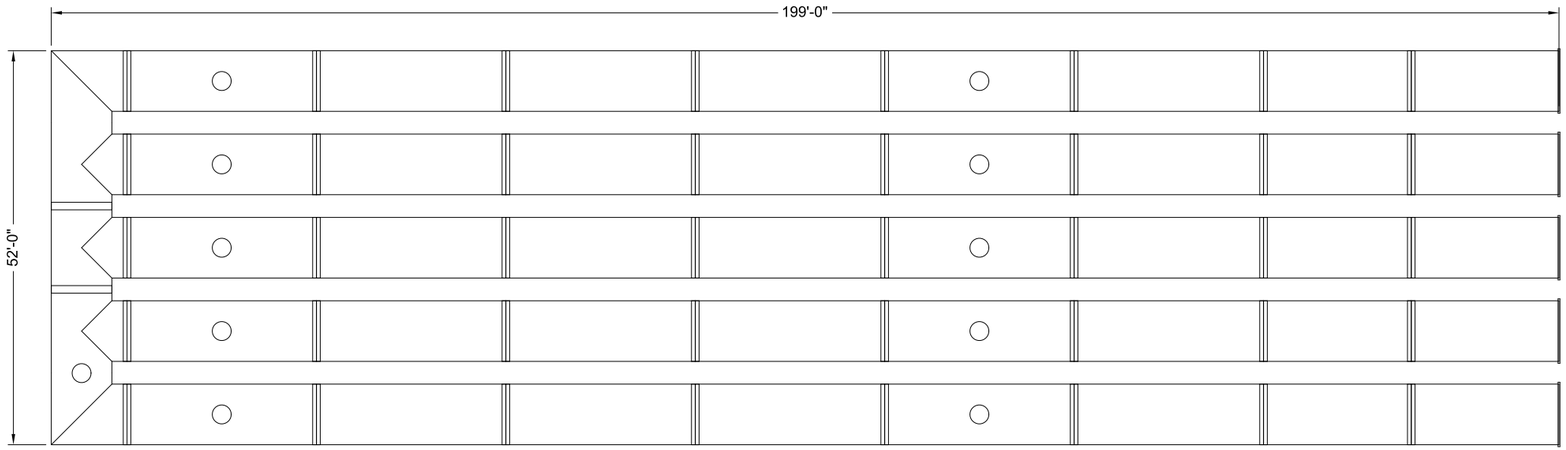
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,007 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 69,399 cf.
- PIPE STORAGE VOLUME = 50,617 cf.
- BACKFILL STORAGE VOLUME = 18,827 cf.
- TOTAL STORAGE PROVIDED = 69,445 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE $2\frac{2}{3}$" x $\frac{1}{2}$" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12227 TEI 4005
TEI 4005 - CMP#3-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7656	12227	12/15/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

6008

C:\EXPORTS\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM

DA 4-A – CMP "4-A"

Region		Valley	
Drainage Area (acres)		10.00	acres
Drainage Area (sq-ft)		435,600	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.807	
1-hr 2-yr from NOAA		0.568	
P6 Coeff		1.4807	
Mean 6-hr (P6)		0.841	
Drawdown Rate (a)		1.963	
DCV		48,362	cu-ft
DCV		1.110	acre-ft

Design infiltration rate = 6.85 in/hr
d_{max} = 328.8 inches = Design infiltration rate x 48 hours = 6.85 in/hr x 48 hrs
d_{BMP} = 100.8 inches = [(6 inches + 6 inches) x 0.40] + 96 inches
$d_{max} > d_{BMP}$

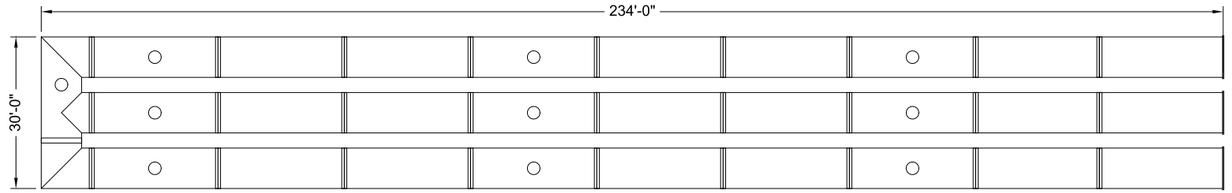
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 708 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 48,362 cf.
- PIPE STORAGE VOLUME = 35,588 cf.
- BACKFILL STORAGE VOLUME = 12,952 cf.
- TOTAL STORAGE PROVIDED = 48,540 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE $2\frac{2}{3}$" x $\frac{1}{2}$" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 30'

C:\EXPORTS\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH® CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12228 TEI 4005
TEI 4005 - CMP#4-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7656	12228	12/15/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

DA 5-A – CMP "5-A"

Region		Valley	
Drainage Area (acres)		17.90	acres
Drainage Area (sq-ft)		779,724	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.807	
1-hr 2-yr from NOAA		0.568	
P6 Coeff		1.4807	
Mean 6-hr (P6)		0.841	
Drawdown Rate (a)		1.963	
DCV		86,568	cu-ft
DCV		1.987	acre-ft

Design infiltration rate = 11.25 in/hr
d_{max} = 540.0 inches = Design infiltration rate x 48 hours = 11.25 in/hr x 48 hrs
d_{BMP} = 100.8 inches = [(6 inches + 6 inches) x 0.40] + 96 inches
$d_{max} > d_{BMP}$

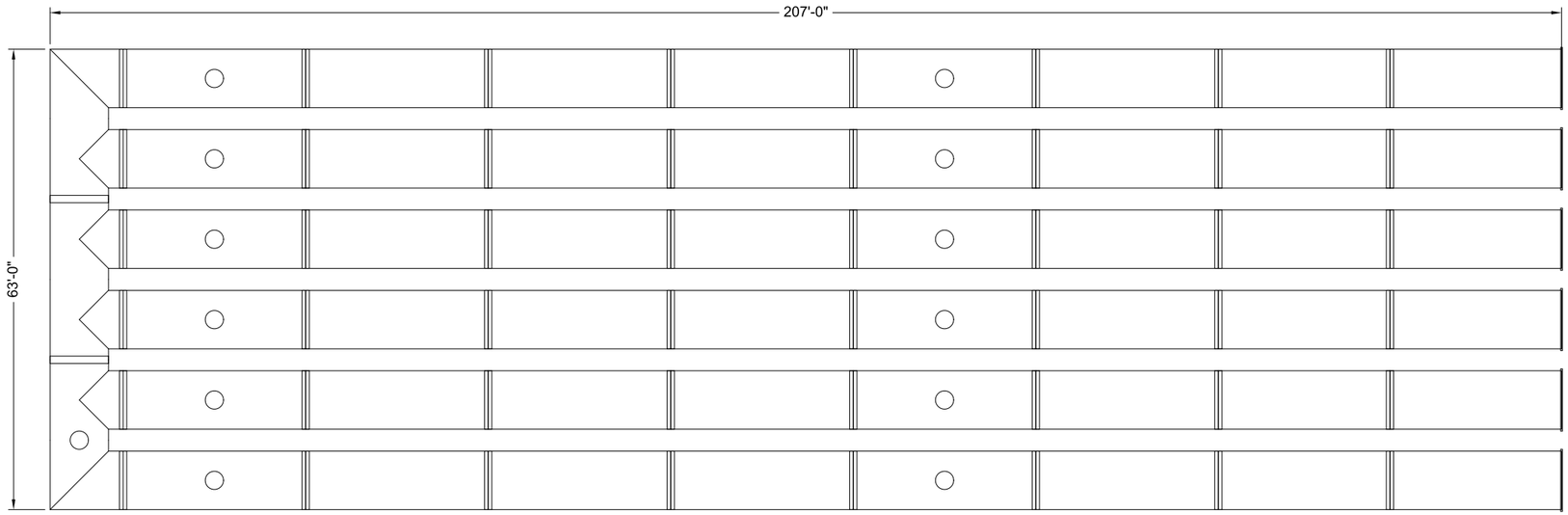
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,257 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 86,568 cf.
- PIPE STORAGE VOLUME = 63,184 cf.
- BACKFILL STORAGE VOLUME = 23,632 cf.
- TOTAL STORAGE PROVIDED = 86,816 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE $2\frac{2}{3}$" x $\frac{1}{2}$" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH® CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12230 TEI 4005
TEI 4005 - CMP#5-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7656	12230	12/15/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

6012

C:\EXPORTS\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM

DA 6-A – CMP "6-A"

Region		Valley	
Drainage Area (acres)		18.65	acres
Drainage Area (sq-ft)		812,394	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.807	
1-hr 2-yr from NOAA		0.568	
P6 Coeff		1.4807	
Mean 6-hr (P6)		0.841	
Drawdown Rate (a)		1.963	
DCV		90,195	cu-ft
DCV		2.071	acre-ft

Design infiltration rate = 9.2 in/hr
d_{max} = 441.6 inches = Design infiltration rate x 48 hours = 9.2 in/hr x 48 hrs
d_{BMP} = 100.8 inches = [(6 inches + 6 inches) x 0.40] + 96 inches
$d_{max} > d_{BMP}$

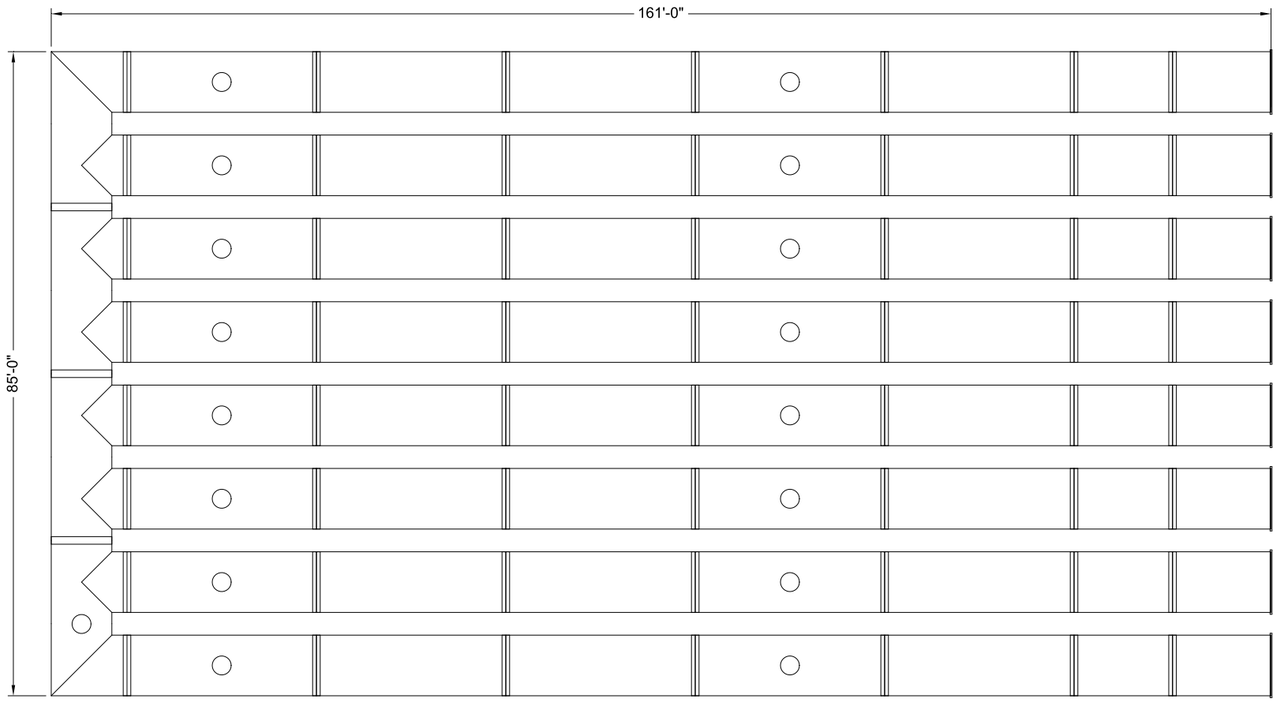
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,309 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 90,195 cf.
- PIPE STORAGE VOLUME = 65,798 cf.
- BACKFILL STORAGE VOLUME = 24,733 cf.
- TOTAL STORAGE PROVIDED = 90,530 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE $2\frac{2}{3}$" x $\frac{1}{2}$" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12231 TEI 4005
TEI 4005 - CMP#6-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7656	12231	12/15/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

6014

C:\EXPORTS\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM

DA 7-A – CMP "7-A"

Region		Valley	
Drainage Area (acres)		8.80	acres
Drainage Area (sq-ft)		383,328	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.807	
1-hr 2-yr from NOAA		0.568	
P6 Coeff		1.4807	
Mean 6-hr (P6)		0.841	
Drawdown Rate (a)		1.963	
DCV		42,559	cu-ft
DCV		0.977	acre-ft

Design infiltration rate = 0.65 in/hr
d_{max} = 31.2 inches = Design infiltration rate x 48 hours = 0.65 in/hr x 48 hrs
d_{BMP} = 100.8 inches = [(6 inches + 6 inches) x 0.40] + 96 inches
$d_{max} > d_{BMP}$

Torrent MaxWell IV Drywell with 4' Diameter to drawdown within 48 hours:

infiltration rate @ 50 ft bgs	22.5	in/hr
safety factor	2	
	11.25	in/hr
DCV	42,559	cf
max drawdown time	48	hours
depth at which infiltration can begin	30	ft bgs
infiltration rate @ 50 ft bgs	0.00027	in/hr to ft/sec
diameter of drywell	4	ft
circumference of drywell diameter	12.57	ft
drywell depth	50	ft
infiltration zone	252.0	sf
	0.068	cfs
one drywell would dispose this many cf within 48 hours	11,750	cf
# of drywells required	4	

4 drywells are required, 5 will be utilized for conceptual design.

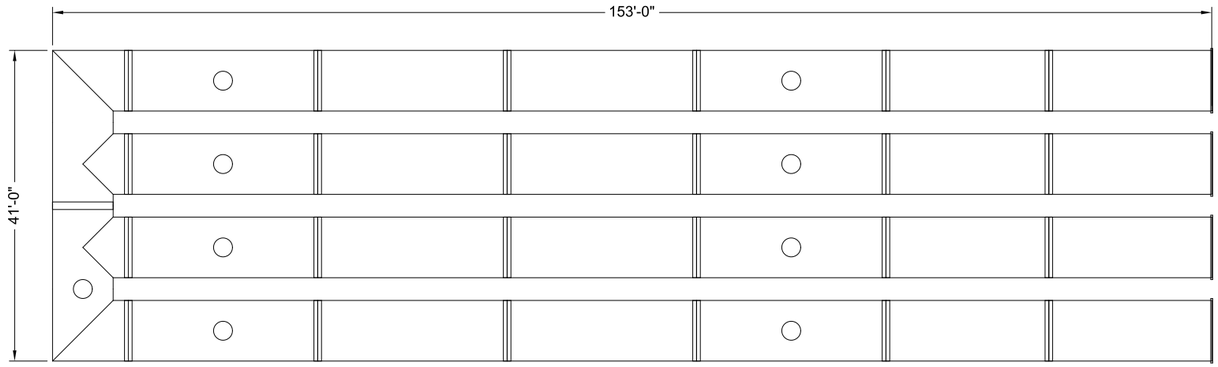
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 621 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 42,559 cf.
- PIPE STORAGE VOLUME = 31,215 cf.
- BACKFILL STORAGE VOLUME = 11,508 cf.
- TOTAL STORAGE PROVIDED = 42,723 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE $2\frac{2}{3}$" x $\frac{1}{2}$" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY

SCALE: 1" = 20'

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH® CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12232 TEI 4005
TEI 4005 - CMP#7-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7656	12232	12/15/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

6016

C:\EXPORTS\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM

DA 8-A – CMP "8-A"

Region		Valley	
Drainage Area (acres)		23.25	acres
Drainage Area (sq-ft)		1,012,770	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.807	
1-hr 2-yr from NOAA		0.568	
P6 Coeff		1.4807	
Mean 6-hr (P6)		0.841	
Drawdown Rate (a)		1.963	
DCV		112,442	cu-ft
DCV		2.581	acre-ft

Design infiltration rate = 5.4 in/hr
d_{max} = 259.2 inches = Design infiltration rate x 48 hours = 5.4 in/hr x 48 hrs
d_{BMP} = 100.8 inches = [(6 inches + 6 inches) x 0.40] + 96 inches
$d_{max} > d_{BMP}$

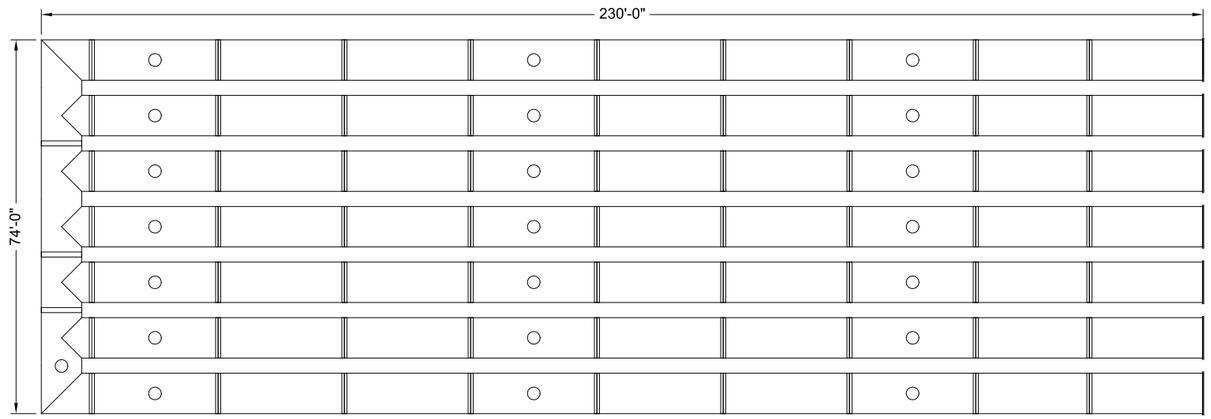
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,628 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 112,442 cf.
- PIPE STORAGE VOLUME = 81,832 cf.
- BACKFILL STORAGE VOLUME = 30,742 cf.
- TOTAL STORAGE PROVIDED = 112,574 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE $2\frac{2}{3}$" x $\frac{1}{2}$" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 30'

C:\EXPORTS\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH CMP DETENTION SYSTEMS
CONTECH DYODS DRAWING

DYO12233 TEI 4005
TEI 4005 - CMP#8-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7656	12233	12/15/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

6018

DA 9-A – CMP "9-A"

Region		Valley	
Drainage Area (acres)		19.80	acres
Drainage Area (sq-ft)		862,488	sq-ft
Impervious Coeff	i =	0.95	< 1.0
Runoff Coeff	**C =**	0.807	
1-hr 2-yr from NOAA		0.568	
P6 Coeff		1.4807	
Mean 6-hr (P6)		0.841	
Drawdown Rate (a)		1.963	
DCV		95,757	cu-ft
DCV		2.198	acre-ft

Design infiltration rate = 2.17 in/hr
d_{max} = 104.2 inches = Design infiltration rate x 48 hours = 2.17 in/hr x 48 hrs
d_{BMP} = 100.8 inches = [(6 inches + 6 inches) x 0.40] + 96 inches
$d_{max} > d_{BMP}$

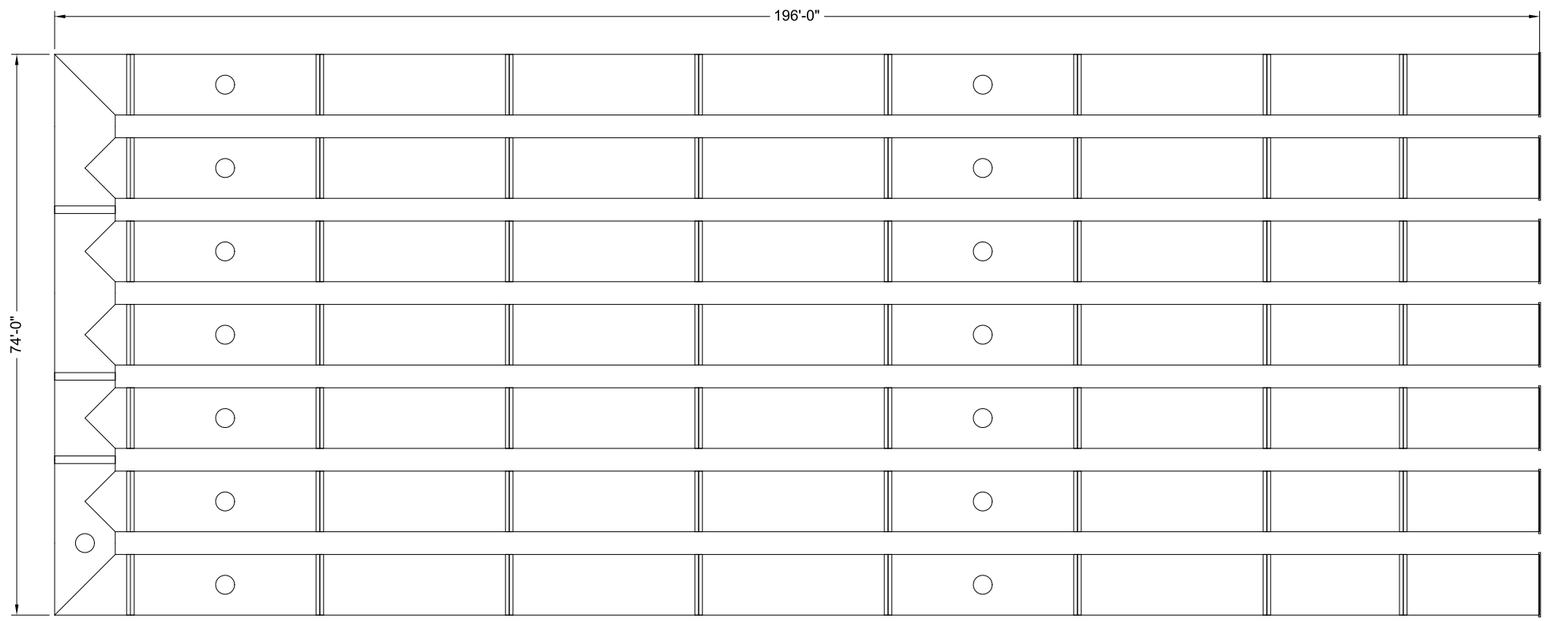
PROJECT SUMMARY

CALCULATION DETAILS
- LOADING = HS20 & HS25
- APPROX. LINEAR FOOTAGE = 1,390 lf.

STORAGE SUMMARY
- STORAGE VOLUME REQUIRED = 95,757 cf.
- PIPE STORAGE VOLUME = 69,869 cf.
- BACKFILL STORAGE VOLUME = 26,225 cf.
- TOTAL STORAGE PROVIDED = 96,094 cf.

PIPE DETAILS
- DIAMETER = 96 IN.
- CORRUGATION = 5x1
- GAGE = 16
- COATING = ALT2
- WALL TYPE = Perforated
- BARRELL SPACING = 36 IN.

BACKFILL DETAILS
- WIDTH AT ENDS = 12 IN.
- ABOVE PIPE = 6 IN.
- WIDTH AT SIDES = 12 IN.
- BELOW PIPE = 6 IN.



NOTES

- ALL RISER AND STUB DIMENSIONS ARE TO CENTERLINE. ALL ELEVATIONS, DIMENSIONS, AND LOCATIONS OF RISERS AND INLETS, SHALL BE VERIFIED BY THE ENGINEER OF RECORD PRIOR TO RELEASING FOR FABRICATION.
- ALL FITTINGS AND REINFORCEMENT COMPLY WITH ASTM A998.
- ALL RISERS AND STUBS ARE $2\frac{2}{3}$" x $\frac{1}{2}$" CORRUGATION AND 16 GAGE UNLESS OTHERWISE NOTED.
- RISERS TO BE FIELD TRIMMED TO GRADE.
- QUANTITY OF PIPE SHOWN DOES NOT PROVIDE EXTRA PIPE FOR CONNECTING THE SYSTEM TO EXISTING PIPE OR DRAINAGE STRUCTURES. OUR SYSTEM AS DETAILED PROVIDES NOMINAL INLET AND/OR OUTLET PIPE STUB FOR CONNECTION TO EXISTING DRAINAGE FACILITIES. IF ADDITIONAL PIPE IS NEEDED IT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- BAND TYPE TO BE DETERMINED UPON FINAL DESIGN.
- THE PROJECT SUMMARY IS REFLECTIVE OF THE DYODS DESIGN, QUANTITIES ARE APPROX. AND SHOULD BE VERIFIED UPON FINAL DESIGN AND APPROVAL. FOR EXAMPLE, TOTAL EXCAVATION DOES NOT CONSIDER ALL VARIABLES SUCH AS SHORING AND ONLY ACCOUNTS FOR MATERIAL WITHIN THE ESTIMATED EXCAVATION FOOTPRINT.
- THESE DRAWINGS ARE FOR CONCEPTUAL PURPOSES AND DO NOT REFLECT ANY LOCAL PREFERENCES OR REGULATIONS. PLEASE CONTACT YOUR LOCAL CONTECH REP FOR MODIFICATIONS.

ASSEMBLY
SCALE: 1" = 20'

The design and information shown on this drawing is provided as a service to the project owner, engineer and contractor by Contech Engineered Solutions LLC ("Contech"). Neither this drawing, nor any part thereof, may be used, reproduced or modified in any manner without the prior written consent of Contech. Failure to comply is done at the user's own risk and Contech expressly disclaims any liability or responsibility for such use.

If discrepancies between the supplied information upon which the drawing is based and actual field conditions are encountered as site work progresses, these discrepancies must be reported to Contech immediately for re-evaluation of the design. Contech accepts no liability for designs based on missing, incomplete or inaccurate information supplied by others.

DATE	REVISION DESCRIPTION	BY

CONTECH® ENGINEERED SOLUTIONS LLC
www.ContechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CONTECH® CMP DETENTION SYSTEMS
CONTECH **DYODS** DRAWING

DYO12234 TEI 4005
TEI 4005 - CMP#9-A
Ontario, CA
DETENTION SYSTEM

PROJECT No.:	SEQ. No.:	DATE:
7656	12234	12/15/2021
DESIGNED: DYO	DRAWN: DYO	
CHECKED: DYO	APPROVED: DYO	
SHEET NO.: D1		

6020

C:\EXPORTS\TEMPLATES\CMP_V5.DWG 10/18/2019 10:02 AM

INFILTRATION FEASIBILITY

December 23, 2021

McDonald Property Group
1140 N. Coast Highway
Laguna Beach, California 92651

Attention: Mr. Bruce McDonald
President

Project No.: **21G197-3**

Subject: **Results of Additional Infiltration Testing**
Proposed California Logistics Center
SEC Airport Drive and Haven Avenue
Ontario, California

References: 1) Geotechnical Feasibility Study, California Logistics Center, SEC Airport Drive and Haven Avenue, Ontario, California, prepared by Southern California Geotechnical, prepared for McDonald Property Group, SCG Project No. 21G197-1, dated October 25, 2021.

2) Preliminary Infiltration Testing, Proposed California Logistics Center, SEC Airport Drive and Haven Avenue, Ontario, California, prepared by SCG, prepared for McDonald Property Group, SCG Project No. 21G197-2, dated October 26, 2021.

Mr. McDonald:

In accordance with your request, we have performed infiltration testing at the subject site. The infiltration testing was performed for the proposed stormwater disposal systems that will be utilized at the subject site. We are pleased to present this report summarizing the results of the infiltration testing and our design recommendations.

Scope of Services

The scope of services performed for this project was in general accordance with our Change Order No. 21G197-CO1, dated November 4, 2021. The scope of services included visual site reconnaissance, subsurface exploration, field testing, and engineering analysis to determine the infiltration rates of the on-site soils for the stormwater disposal system.

Shallow infiltration tests at depth of 10± feet were performed in order to analyze the infiltration characteristics of near-surface soils. The shallow infiltration testing was performed in general accordance with the guidelines published in the Technical Guidance Document for Water Quality Management Plans (WQMP), prepared for the County of San Bernardino Areawide Stormwater Program dated June 7, 2013. The San Bernardino County standards defer to guidelines published by Riverside County Department of Environmental Health (RCDEH).

Deep infiltration tests at 50± feet were performed using the constant-head method to analyze the infiltration characteristics of soils at depths greater than 50± feet.

Site and Project Description

The subject site is located at the southeast corner of Airport Drive and Haven Avenue in Ontario, California. The site is bounded to the west by the Ontario International Airport, to the north by Airport Drive, to the east by Doubleday Avenue and a commercial/industrial development, and to the south by Jurupa Street and commercial/industrial buildings. It should be noted that Airport Drive, which borders the northern boundary of the site, turns into South Commerce Parkway and transects the site in a north-to-south direction. The site is also partially transected by Carnegie Avenue (trending north-to-south), as well as Santa Ana Street and La Salle Street (both trending east-to-west). The general location of the site is illustrated on the Site Location Map, included as Plate 1 of this report.

The overall site is an irregular-shaped property that is comprised of numerous contiguous parcels totaling 197.08± acres. The overall site is currently vacant and undeveloped. Our review of historical aerial photographs indicates that the parcels may have been previously subdivided as agricultural lots. Based on our visit to the site, ground surface cover within the vacant lots consists of sparse to moderate native grass and weed growth. Occasional east-west trending soil berms approximate 2-3± feet in height are located every 500± feet throughout each region of the site except for the northern portion.

Detailed topographic information was not available at the time of this report. However, based on topographic information obtained from Google Earth, the overall site topography slopes gently downward to the south at a gradient of about 1 to 1½± percent.

Proposed Development

Our office was provided a site plan (SITE_2021, dated November 19, 2021), which was prepared by Thienes Engineering, inc. Based on the plan, the site will be developed with a total of nine (9) buildings, identified as Buildings 1 through 9. The buildings will range from 205,500± ft² to 930,300± ft² in size. Dock-high doors will be constructed along a portion of at least one building wall for all of the buildings. Building 3 will be constructed in a cross-dock configuration. The buildings will be surrounded by asphaltic concrete pavements in the parking and drive lane areas, Portland cement concrete pavements in the loading dock areas, and isolated areas of concrete flatwork and landscape planters.

We understand that the proposed development will include on-site infiltration for stormwater disposal. The infiltration systems will consist of a combination of below-grade chambers and deep dry wells. There will be a total of seven (7) infiltration areas throughout the site. The bottom of the below-grade chambers will be 10± feet below the existing site grades and the bottom of the dry wells will extend to a depth of 50± feet below the existing site grades.

Previous Studies

Southern California Geotechnical, Inc. (SCG) performed a feasibility study at the subject site (Reference 1). As a part of this study, ten (10) borings were advanced to depths of 20 to 25± feet below the previously existing site grades. A surficial layer of disturbed alluvium was encountered at the ground surface at most of the boring locations, extending to depths of 1½ to 2½± feet. The disturbed alluvium generally consists of loose to medium dense silty fine

sands with varying medium sand content. At greater depths, the native alluvium generally consists of loose to medium dense silty fine sands, fine sands and fine sandy silts with varying medium sand content, extending to at least the maximum depth explored of 25± feet. Some of the soils below depths of 13 feet are dense.

Southern California Geotechnical, Inc. (SCG) also previously performed a preliminary infiltration study at the subject site (Reference 2). As a part of this study, four (4) infiltration test borings (identified as Infiltration Test Nos. I-1 through I-4) were advanced to a depth of 10± feet below existing site grades. Artificial fill soils were encountered at the ground surface at one of the infiltration boring locations, extending to a depth of 3± below the existing site grades. The fill soils generally consisted of very dense fine sands, little silt. A surficial layer of disturbed alluvium was encountered at the ground surface at most of the infiltration boring locations, extending to a depth of 3± feet. The disturbed alluvium generally consisted of medium dense silty fine sands with varying medium to coarse sand content. Native alluvial soils were encountered beneath the fill soils or disturbed alluvium at all of the infiltration boring locations, extending to at least the maximum depth explored of 10± feet below the existing site grades. The alluvial soils generally consisted of medium dense to dense silty fine sands, silty fine to medium sands, and fine sandy silts.

Free water was not encountered during drilling of any of our previous studies borings. Based on the lack of water within the borings, the groundwater was considered to have existed at a depth in excess of 25± feet at the time of our subsurface exploration.

Subsurface Exploration

The subsurface exploration performed for the infiltration testing consisted of a total of twelve (12) infiltration test borings. Five (5) of the infiltration borings were advanced to a depth of 10± feet below the existing site grades for the below-grade chamber systems. Seven (7) deeper infiltration test borings were advanced to a depth of 50± feet below the existing site grades for the dry well infiltration systems. The infiltration borings were advanced using a truck-mounted drilling rig, equipped with 8-inch diameter hollow stem augers and were logged during drilling by a member of our staff. The approximate locations of the infiltration test borings (identified as Infiltration Boring Nos. I-5 through I-16) are indicated on the Infiltration Test Location Plan, enclosed as Plate 2 of this report.

Upon the completion of the infiltration borings, each infiltration test boring was filled with 2± inches of clean ¾-inch gravel. A sufficient length of 3-inch-diameter perforated PVC casing was then placed into each test hole so that the PVC casing extended from the bottom of the test hole to the ground surface. Clean ¾-inch gravel was installed in the annulus surrounding the PVC casing.

Geotechnical Conditions

Native alluvium was encountered at the ground surface of all twelve (12) infiltration test locations, extending to at least the maximum explored depth of 50± feet below existing site grades. The near-surface alluvium consists of loose to medium dense silty well-graded sands, well-graded sands, and fine sandy silts extending to depths of up to 25± feet. At greater depths, the alluvium consists of dense to very dense silty fine to coarse sands, fine to coarse

sands, and gravelly fine to coarse sands. The Boring Logs, which illustrate the conditions encountered at each of the borings, are included with this report.

Free water was not encountered during drilling of any of our infiltration borings. Based on the lack of water within the borings, the groundwater was considered to have existed at a depth in excess of 50± feet at the time of our subsurface exploration.

Recent water level data was obtained from the California State Water Resources Control Board, GeoTracker, website, https://geotracker.waterboards.ca.gov/. One monitoring well on record is located 2,916± south of the site. Water level readings within this monitoring well indicate a high groundwater level of 231± feet below the ground surface in July 2021.

Infiltration Testing

As previously mentioned, the infiltration testing was performed in general accordance with the guidelines published in the Technical Guidance Document for Water Quality Management Plans, prepared for the County of San Bernardino Areawide Stormwater Program and the constant head method.

Pre-soaking

In accordance with the county infiltration standards, all of the infiltration test borings were pre-soaked prior to the infiltration testing or until all of the water had percolated through each test hole. The pre-soaking process consisted of filling the test borings by inverting a full 5-gallon bottle of clear water supported over each hole so that the water level reaches a level of at least 5 times the hole's radius above the gravel at the bottom of each hole. The pre-soaking was completed after all of the water had percolated through each test hole or after 15 hours since initiating the pre-soak. Based on the results of the pre-soaking process, different infiltration procedures were used during the infiltration testing at each of the infiltration boring locations.

Shallow Infiltration Testing

Following the pre-soaking process of Infiltration Boring Nos. I-9 through I-11 and Infiltration Boring Nos. I-15 and I-16, SCG performed the infiltration testing. Each test hole was filled with water to a depth of at least 5 times the radius of the hole above the gravel at the bottom of each test hole, and less than or equal to the water level used during the pre-soaking process. In accordance with the San Bernardino County guidelines, since "sandy soils" were encountered at each of the Infiltration Borings (where 6 inches of water infiltrated into the surrounding soils for two-consecutive 25-minute readings), readings were taken at 10-minute intervals, for a total of 1 hour. After each reading, the borings were refilled to the original water level above the gravel. The water level readings are presented on the spreadsheets enclosed with this report. The infiltration rates for each of the timed intervals are also tabulated on the spreadsheets.
The infiltration rates from the shallow tests are tabulated in inches per hour. The rates for the deep tests are reported in gallons per square foot per day. In accordance with typically accepted practice, it is recommended that the most conservative reading from the latter part of the infiltration tests be used as the design infiltration rate. The rates are summarized below:

Infiltration Test No.	Depth (feet)	Soil Description	Infiltration Rate (inches/hour)
I-9	10	Brown Silty fine Sand	13.5
I-10	10	Brown to Gray fine to coarse Sand, little fine Gravel	18.4
I-11	10	Brown Gray fine to medium Sand, little Silt, trace coarse Sand	13.7
I-15	10	Brown fine to coarse Sand, little fine Gravel, trace Silt	22.4
I-16	10	Gray Brown fine to coarse Sand, little to some fine to coarse Gravel	10.8

Dry Wells

Following the pre-soaking process for Infiltration Boring Nos. I-5 through I-8 and Infiltration Boring Nos. I-12 through I-14, the constant-head infiltration test method was utilized to test the rates of deeper soils. This method consisted of filling the borings to a maximum water level of 10 to 19± feet below the ground surface, based on the soil conditions encountered. Once the hole was filled, the inflow of water was controlled via a ball valve in order to maintain the water level constant below ground surface. It was necessary to constantly monitor this depth due to varying inflows from the water source and the change in infiltration rate with time. Readings were taken every ten minutes using a water level meter. The ball valve was used to make adjustments by increasing or decreasing the inflow of water when slight changes in depth occurred. The water level readings are presented on the spreadsheets enclosed with this report. The infiltration rates for each of the timed intervals are also tabulated on the spreadsheets.

The infiltration rates from the deep infiltration test are tabulated in gallons per square foot per day.

Infiltration Test No.	Depth (feet)	Infiltration Rate (inches per hour)	Infiltration Rate ($gal/ft^2/day$)
I-5	50	1.3	18.8
I-6	50	5.6	83.0
I-7	50	4.3	64.8
I-8	50	8.8	131.8
I-12	50	4.7	70.4
I-13	50	2.5	37.6
I-14	50	1.5	22.3

Laboratory Testing

Moisture Content

The moisture contents for the recovered soil samples within the borings were determined in accordance with ASTM D-2216 and are expressed as a percentage of the dry weight. These test results are presented on the Boring Logs.

Grain Size Analysis

The grain size distribution of selected soils collected from the bottom of each infiltration test boring have been determined using a range of wire mesh screens. These tests were performed in general accordance with ASTM D-422 and/or ASTM D-1140. The weight of the portion of the sample retained on each screen is recorded and the percentage finer or coarser of the total weight is calculated. The results of these tests are presented on Plates C-1 through C-51 of this report.

Design Recommendations

Shallow Systems (Below-Grade Chambers)

Five (5) shallow infiltration tests were performed within the proposed below-grade chambers at the site for this investigation. As noted above, the infiltration rates at these locations range from 9.3 and 22.5 inches per hour. Based on the results of Infiltration Test Nos. I-9 through I-11 and Infiltration Test Nos. I-15 through I-16, we recommend infiltration rates as follows:

Below-Grade Chamber System	Infiltration Rate (inches/hour)	Location
"A"	13.5	Northwest
"B"	18.4	Central
"C"	13.7	Southwest
"D"	22.4	Northeast
"E"	10.8	Southeast

We recommend that a representative from the geotechnical engineer be on-site during the construction of the proposed infiltration systems to identify the composition of the soil at the base of each chamber system. It should be confirmed that the soils at the base of the proposed infiltration systems correspond with those presented in this report. If the soil conditions at the base of the system differ from those at the test locations, the performance of the system may be inconsistent with the recommended infiltration rates provided herein.

The design of the proposed storm water infiltration system should be performed by the project civil engineer, in accordance with the City of Ontario and/or County of San Bernardino guidelines. However, it is recommended that the system be constructed so as to facilitate removal of silt and clay, or other deleterious materials from any water that may enter the system. The presence of such materials would decrease the effective infiltration rate. **It is recommended that the project civil engineer apply an appropriate factor of safety.**

The infiltration rates recommended above are based on the assumption that only clean water will be introduced to the subsurface profile. Any fines, debris, or organic materials could significantly impact the infiltration rates. It should be noted that the recommended infiltration rates are based on infiltration testing at five (5) discrete locations and the overall infiltration rates of the storm water infiltration systems could vary considerably.

Dry Wells

Seven (7) deep infiltration tests were performed at the subject site using a constant head test method. As noted above, the infiltration rates range from 18.8 to 131.8 gallons per square foot per day hour. These rates are valid for dry wells extending to depths of 50± feet below existing grades at these locations. The infiltration rates recommended below are based on the assumption that only clean water will be introduced to the dry well. Any fines, debris, or organic materials could significantly impact the infiltration rate. The presence of such materials would decrease the effective infiltration rate. It is recommended that any dry wells be constructed so as to facilitate removal of silt and clay, or other deleterious materials of any water that may enter the storm water retention/disposal system. It should be noted that the recommended infiltration rate is based on infiltration testing at one discrete location and that infiltration rates may vary considerably at other locations. Based on the results of the deep infiltration tests, we recommend the following infiltration rates for the infiltration systems at these locations:

Dry Well System	Percolation Rate (gal/ft²/day)	Infiltration Rate (inches/hour)	Location
"A"	18.8	1.3	Northwest
"B"	83.0	5.6	Central
"C"	131.8	8.8	Southwest
"D"	70.4	4.7	Northeast
"E"	37.6	2.5	Southeast
"F"	64.8	4.3	Southeast
"G"	22.3	1.5	Southwest

We recommend that a representative from the geotechnical engineer be on-site during the construction of the proposed infiltration systems to identify the composition of the soil at the base of each chamber system. It should be confirmed that the soils at the base of the proposed infiltration systems correspond with those presented in this report. If the soil conditions at the base of the system differ from those at the test locations, the performance of the system may be inconsistent with the recommended infiltration rates provided herein.

The design of the proposed storm water infiltration system should be performed by the project civil engineer, in accordance with the City of Ontario and/or County of San Bernardino guidelines. However, it is recommended that the system be constructed so as to facilitate removal of silt and clay, or other deleterious materials from any water that may enter the system. The presence of such materials would decrease the effective infiltration rate. **It is recommended that the project civil engineer apply an appropriate factor of safety. The infiltration rates recommended above are based on the assumption that only clean water will be introduced to the subsurface profile. Any fines, debris, or organic materials could significantly impact the infiltration rates.** It should be noted that the

recommended infiltration rates are based on infiltration testing at seven (7) discrete locations and the overall infiltration rates of the storm water infiltration systems could vary considerably.

Construction Considerations

The infiltration rates presented in this report are specific to the tested locations and tested depths. Infiltration rates can be significantly reduced if the soils are exposed to excessive disturbance or compaction during construction. Therefore, the subgrade soils within proposed infiltration system areas should not be overexcavated, undercut or compacted in any significant manner. **It is recommended that a note to this effect be added to the project plans and/or specifications.**

Infiltration versus Permeability

Infiltration rates are based on unsaturated flow. As water is introduced into soils by infiltration, the soils become saturated and the wetting front advances from the unsaturated zone to the saturated zone. Once the soils become saturated, infiltration rates become zero, and water can only move through soils by hydraulic conductivity at a rate determined by pressure head and soil permeability. The infiltration rates presented herein were determined in accordance with the ASTM Test Method D-3385-03 standard and are considered valid for the time and place of the actual test. Changes in soil moisture content will affect these infiltration rates. Infiltration rates should be expected to decrease until the soils become saturated. Soil permeability values will then govern groundwater movement. Permeability values may be on the order of 10 to 20 times less than infiltration rates. The system designer should incorporate adequate factors of safety and allow for overflow design into appropriate traditional storm drain systems, which would transport storm water off-site.

Location of Infiltration Systems

The use of on-site storm water infiltration systems carries a risk of creating adverse geotechnical conditions. Increasing the moisture content of the soil can cause the soil to lose internal shear strength and increase its compressibility, resulting in a change in the designed engineering properties. Overlying structures and pavements in the infiltration areas could potentially be damaged due to saturation of subgrade soils. **The proposed infiltration systems for this site should be located at least 25 feet away from any structures, including retaining walls.** Even with this provision of locating the infiltration system at least 25 feet from the building, it is possible that infiltrating water into the subsurface soils could have an adverse effect on the proposed or existing structures. It should also be noted that utility trenches which happen to collect storm water can also serve as conduits to transmit storm water toward the structure, depending on the slope of the utility trench. Therefore, consideration should also be given to the proposed locations of underground utilities which may pass near the proposed infiltration systems.

General Comments

This report has been prepared as an instrument of service for use by the client in order to aid in the evaluation of this property and to assist the architects and engineers in the design and preparation of the project plans and specifications. This report may be provided to the contractor(s) and other design consultants to disclose information relative to the project.

However, this report is not intended to be utilized as a specification in and of itself, without appropriate interpretation by the project architect, structural engineer, and/or civil engineer. The design of the infiltration system is the responsibility of the civil engineer. The role of the geotechnical engineer is limited to determination of infiltration rate only. By using the design infiltration rates contained herein, the civil engineer agrees to indemnify, defend, and hold harmless the geotechnical engineer for all aspects of the design and performance of the infiltration system. The reproduction and distribution of this report must be authorized by the client and Southern California Geotechnical, Inc. Furthermore, any reliance on this report by an unauthorized third party is at such party's sole risk, and we accept no responsibility for damage or loss which may occur. The analysis of this site was based on a subsurface profile interpolated from limited discrete soil samples. While the materials encountered in the project area are considered to be representative of the total area, some variations should be expected between trench locations and testing depths. If the conditions encountered during construction vary significantly from those detailed herein, we should be contacted immediately to determine if the conditions alter the recommendations contained herein.

This report has been based on assumed or provided characteristics of the proposed development. It is recommended that the owner, client, architect, structural engineer, and civil engineer carefully review these assumptions to ensure that they are consistent with the characteristics of the proposed development. If discrepancies exist, they should be brought to our attention to verify that they do not affect the conclusions and recommendations contained herein. We also recommend that the project plans and specifications be submitted to our office for review to verify that our recommendations have been correctly interpreted. The analysis, conclusions, and recommendations contained within this report have been promulgated in accordance with generally accepted professional geotechnical engineering practice. No other warranty is implied or expressed.

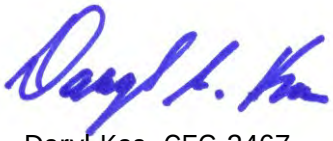
Closure

We sincerely appreciate the opportunity to be of service on this project. We look forward to providing additional consulting services during the course of the project. If we may be of further assistance in any manner, please contact our office.

Respectfully Submitted,

SOUTHERN CALIFORNIA GEOTECHNICAL, INC.

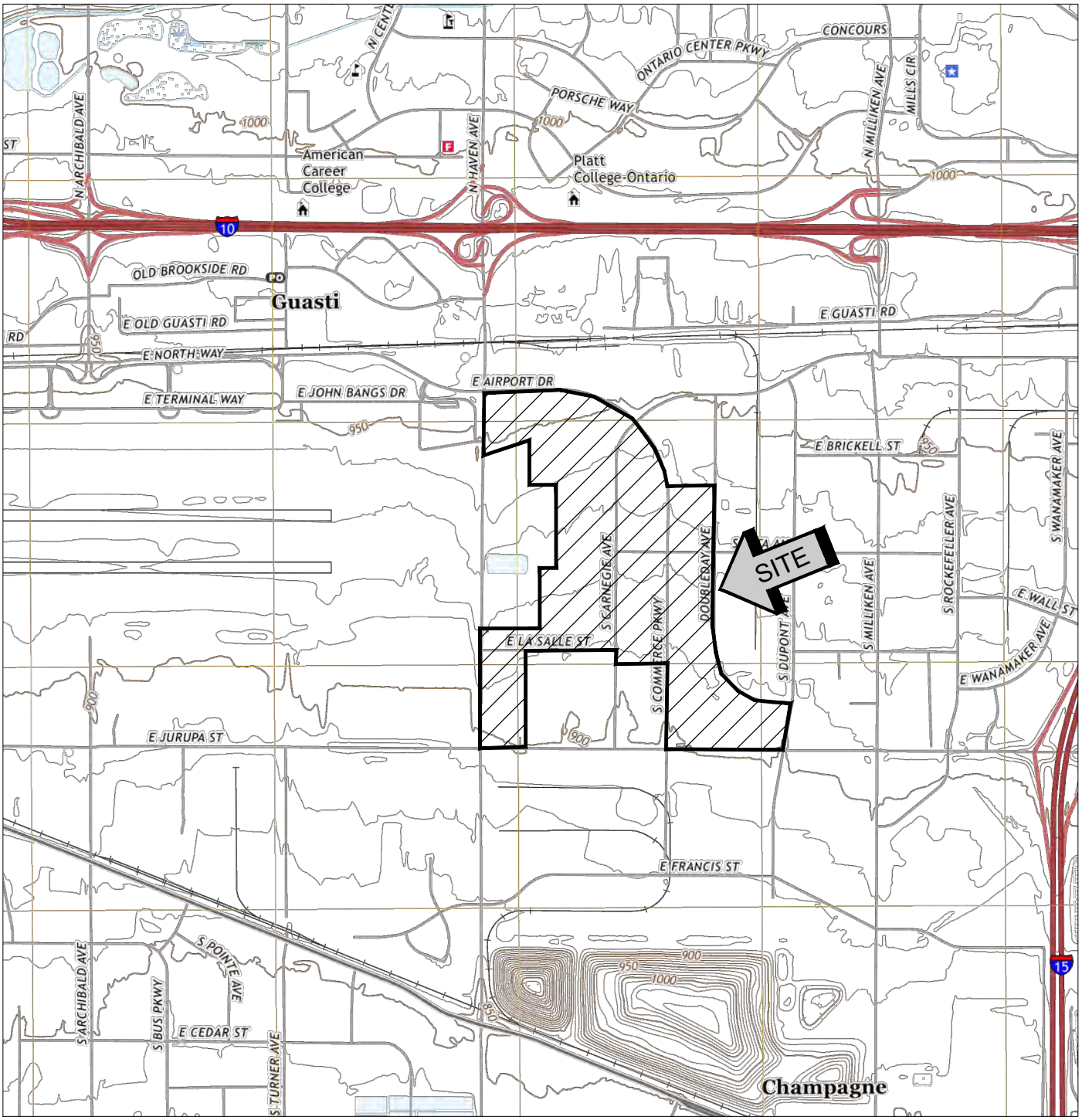
Ryan Bremer
Staff Geologist



Daryl Kas, CEG 2467
Senior Geologist

Distribution: (1) Addressee

Enclosures: Plate 1 - Site Location Map
Plate 2 - Infiltration Test Location Plan
Boring Log Legend and Logs (21 pages)
Infiltration Test Results Spreadsheets (12 pages)
Grain Size Distribution Graphs (51 pages)



SOURCE: USGS TOPOGRAPHIC MAP OF THE GUASTI 7.5-MINUTE QUADRANGLE, SAN BERNARDINO COUNTY, CALIFORNIA, 2018

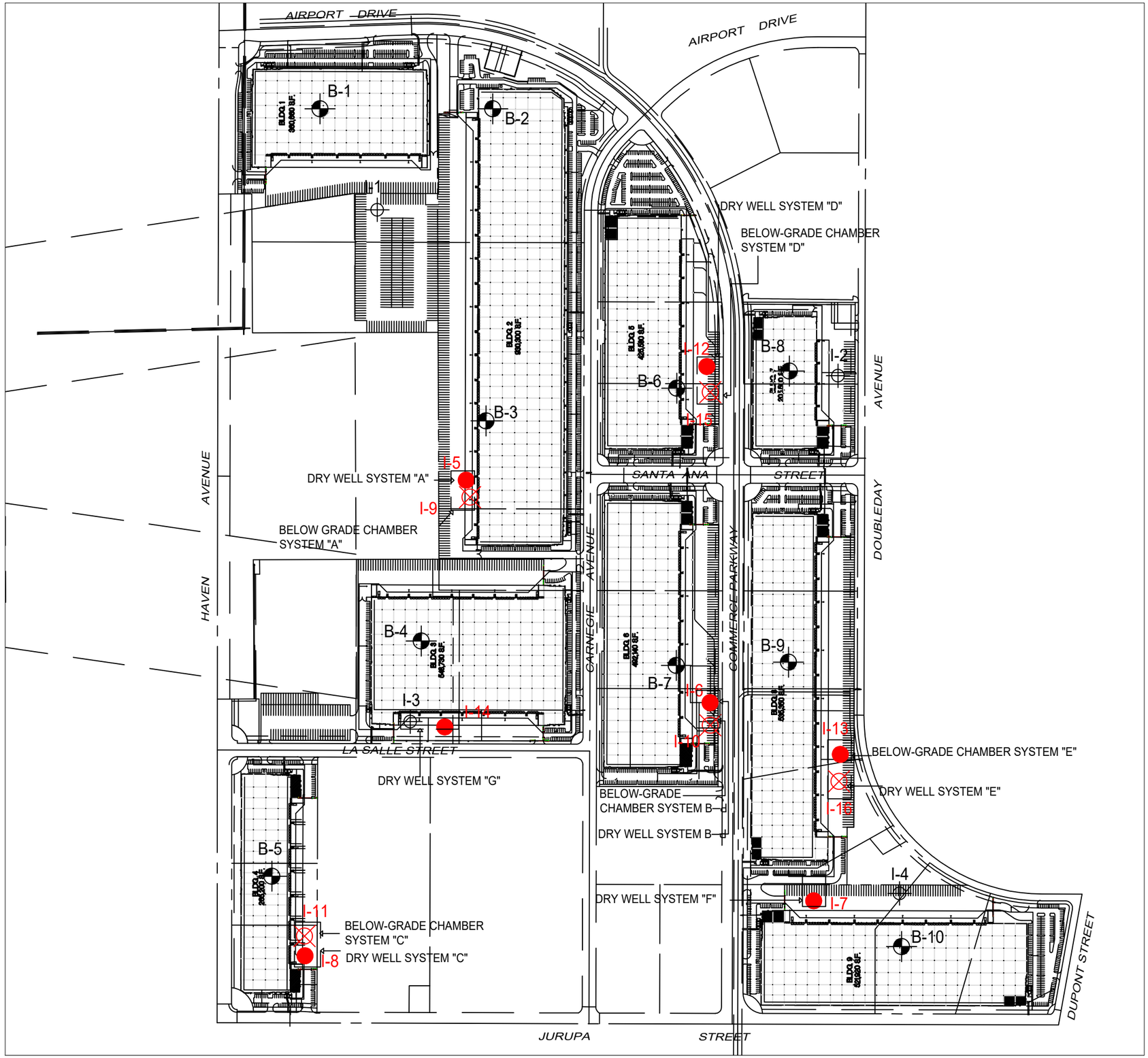
SITE LOCATION MAP

CALIFORNIA LOGISTICS CENTER

ONTARIO, CALIFORNIA

SCALE: 1" = 2000'	
DRAWN: RB CHKD: GKM	
SCG PROJECT 21G197-3	
PLATE 1	

SoCalGeo SOUTHERN CALIFORNIA GEOTECHNICAL



NORTH

SoCalGeo

GEOTECHNICAL LEGEND

APPROXIMATE SHALLOW INFILTRATION LOCATION

APPROXIMATE DEEP INFILTRATION LOCATION

APPROXIMATE PREVIOUS INFILTRATION LOCATION (SCG PROJECT NO 21G197-2)

APPROIMATE PREVIOUS BORING LOCATION` (SCG PROJECT NO. 21G197-1)

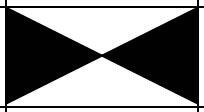
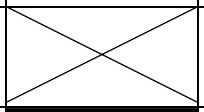
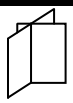
NOTE: SITE PLAN PREPARED BY THIENES ENGINEERING.

INFILTRATION TEST LOCATION PLAN
CALIFORNIA LOGISTICS CENTER
ONTARIO, CALIFORNIA

SCALE: 1" = 500'
DRAWN: MD
CHKD: GKM
SCG PROJECT 21G197-3
PLATE 2

SOUTHERN CALIFORNIA GEOTECHNICAL

BORING LOG LEGEND

SAMPLE TYPE	GRAPHICAL SYMBOL	SAMPLE DESCRIPTION
AUGER		SAMPLE COLLECTED FROM AUGER CUTTINGS, NO FIELD MEASUREMENT OF SOIL STRENGTH. (DISTURBED)
CORE		ROCK CORE SAMPLE: TYPICALLY TAKEN WITH A DIAMOND-TIPPED CORE BARREL. TYPICALLY USED ONLY IN HIGHLY CONSOLIDATED BEDROCK.
GRAB		SOIL SAMPLE TAKEN WITH NO SPECIALIZED EQUIPMENT, SUCH AS FROM A STOCKPILE OR THE GROUND SURFACE. (DISTURBED)
CS		CALIFORNIA SAMPLER: 2-1/2 INCH I.D. SPLIT BARREL SAMPLER, LINED WITH 1-INCH HIGH BRASS RINGS. DRIVEN WITH SPT HAMMER. (RELATIVELY UNDISTURBED)
NSR		NO RECOVERY: THE SAMPLING ATTEMPT DID NOT RESULT IN RECOVERY OF ANY SIGNIFICANT SOIL OR ROCK MATERIAL.
SPT		STANDARD PENETRATION TEST: SAMPLER IS A 1.4 INCH INSIDE DIAMETER SPLIT BARREL, DRIVEN 18 INCHES WITH THE SPT HAMMER. (DISTURBED)
SH		SHELBY TUBE: TAKEN WITH A THIN WALL SAMPLE TUBE, PUSHED INTO THE SOIL AND THEN EXTRACTED. (UNDISTURBED)
VANE		VANE SHEAR TEST: SOIL STRENGTH OBTAINED USING A 4 BLADED SHEAR DEVICE. TYPICALLY USED IN SOFT CLAYS-NO SAMPLE RECOVERED.

COLUMN DESCRIPTIONS

DEPTH: Distance in feet below the ground surface.

SAMPLE: Sample Type as depicted above.

BLOW COUNT: Number of blows required to advance the sampler 12 inches using a 140 lb hammer with a 30-inch drop. 50/3" indicates penetration refusal (>50 blows) at 3 inches. WH indicates that the weight of the hammer was sufficient to push the sampler 6 inches or more.

POCKET PEN.: Approximate shear strength of a cohesive soil sample as measured by pocket penetrometer.

GRAPHIC LOG: Graphic Soil Symbol as depicted on the following page.

DRY DENSITY: Dry density of an undisturbed or relatively undisturbed sample in lbs/ft^3.

MOISTURE CONTENT: Moisture content of a soil sample, expressed as a percentage of the dry weight.

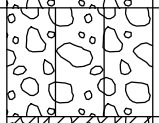
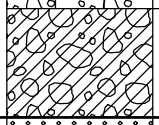
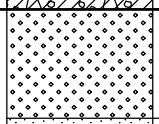
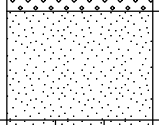
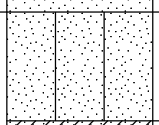
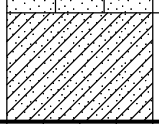
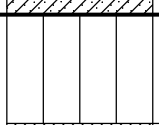
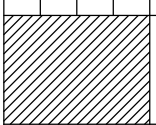
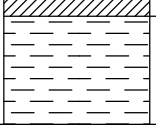
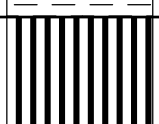
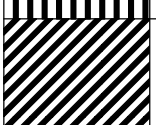
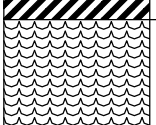
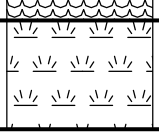
LIQUID LIMIT: The moisture content above which a soil behaves as a liquid.

PLASTIC LIMIT: The moisture content above which a soil behaves as a plastic.

PASSING #200 SIEVE: The percentage of the sample finer than the #200 standard sieve.

UNCONFINED SHEAR: The shear strength of a cohesive soil sample, as measured in the unconfined state.

SOIL CLASSIFICATION CHART

MAJOR DIVISIONS			SYMBOLS		TYPICAL DESCRIPTIONS
			GRAPH	LETTER	
COARSE GRAINED SOILS MORE THAN 50% OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVEL AND GRAVELLY SOILS MORE THAN 50% OF COARSE FRACTION RETAINED ON NO. 4 SIEVE	CLEAN GRAVELS (LITTLE OR NO FINES)		GW	WELL-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
				GP	POORLY-GRADED GRAVELS, GRAVEL - SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES (APPRECIABLE AMOUNT OF FINES)		GM	SILTY GRAVELS, GRAVEL - SAND - SILT MIXTURES
				GC	CLAYEY GRAVELS, GRAVEL - SAND - CLAY MIXTURES
	SAND AND SANDY SOILS MORE THAN 50% OF COARSE FRACTION PASSING ON NO. 4 SIEVE	CLEAN SANDS (LITTLE OR NO FINES)		SW	WELL-GRADED SANDS, GRAVELLY SANDS, LITTLE OR NO FINES
				SP	POORLY-GRADED SANDS, GRAVELLY SAND, LITTLE OR NO FINES
		SANDS WITH FINES (APPRECIABLE AMOUNT OF FINES)		SM	SILTY SANDS, SAND - SILT MIXTURES
				SC	CLAYEY SANDS, SAND - CLAY MIXTURES
FINE GRAINED SOILS MORE THAN 50% OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS	LIQUID LIMIT LESS THAN 50		ML	INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS OR CLAYEY SILTS WITH SLIGHT PLASTICITY
				CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
				OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50		MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SAND OR SILTY SOILS
				CH	INORGANIC CLAYS OF HIGH PLASTICITY
				OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				PT	PEAT, HUMUS, SWAMP SOILS WITH HIGH ORGANIC CONTENTS

NOTE: DUAL SYMBOLS ARE USED TO INDICATE BORDERLINE SOIL CLASSIFICATIONS

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-5

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					ALLUVIUM: Brown Silty fine Sand, trace medium Sand, trace fine root fibers, loose-damp							
		6					3					
					Brown to Gray Brown fine to coarse Sand, trace Silt, trace to little fine to coarse Gravel, medium dense-dry to damp							
		15					2					
5												
		24					1					
					Light Brown Silty fine Sand, medium dense-damp to very moist							
		15					17					
10												
		12					5			28		
15												
					Brown Silty fine to medium Sand, medium dense-damp							
		17					7			35		
20												
					Brown fine Sandy Silt, trace medium Sand, little Iron Oxide, medium dense-damp to moist							
		13					13			62		
25												
					Brown Silty fine to medium Sand, trace Iron Oxide staining, medium dense-very moist							
		13					24			42		
30												
					Brown Silty fine Sand, trace medium Sand, medium dense-damp							
		22					10			36		

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-1a

6036

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-5

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION (Continued)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					Brown Silty fine Sand, trace medium Sand, medium dense-damp							
					Brown fine to coarse Sand, little fine Gravel, little Silt, dense-dry to damp							
		36					3			9		
40												
					Brown fine Sandy Silt, trace medium Sand, trace Clay, medium dense-very moist							
		14					21			70		
45												
					Brown Silty fine to coarse Sand, little fine Gravel, trace Clay nodules, dense-damp							
		34					5					
50					Boring Terminated at 50'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-1b

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-6

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					ALLUVIUM: Brown Silty fine Sand, trace medium to coarse Sand, medium dense to dense-damp							
		33					4					
		14					4					
5												
		27			Brown fine to medium Sand, trace coarse Sand, trace fine to coarse Gravel, medium dense-dry to damp		2					
		15					2					
10												
					Brown Silty fine Sand, trace medium Sand, medium dense-damp							
		11					5			20		
15												
		15					5					
20												
					Brown fine Sandy Silt, loose-very moist							
		8					27			85		
25												
					Brown Silty fine to medium Sand, medium dense-moist							
		14					14			44		
30												
					Brown Silty fine to medium Sand, trace coarse Sand, trace fine Gravel, medium dense-damp							
		20			at 33½', trace fine Gravel, trace Clay nodules		5			25		

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-2a

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-6

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION (Continued)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
40		24			Brown Silty fine to medium Sand, trace coarse Sand, trace fine Gravel, medium dense-damp		9			30		
45		17			Brown fine Sandy Silt, medium dense-very moist		20			77		
50		22			Brown Silty fine to medium Sand, medium dense-damp		5					
					Boring Terminated at 50'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-2b

6039

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-7

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		29			ALLUVIUM: Brown Silty fine Sand, trace medium Sand, medium dense-damp		4					
		23			Brown fine Sand, trace to little Silt, trace medium Sand, medium dense-dry to damp		3					
5		9			Brown Silty fine Sand, little medium Sand, loose-damp		6					
		15			Brown fine to coarse Sand, trace fine Gravel, trace Silt, medium dense-damp		5					
10												
		18					3			5		
15												
		11			Brown fine Sandy Silt, trace medium Sand, medium dense-very moist		19			71		
20												
		24			Brown Silty fine to medium Sand, trace fine Gravel, medium dense-damp		10			36		
25												
		14					3					
30												
		13			Brown Silty fine to medium Sand, medium dense-damp		8			29		

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-3a

6040

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-7

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION (Continued)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					Brown fine Sandy Silt, trace medium Sand, medium dense-moist							
					Brown fine Sandy Silt, trace medium Sand, medium dense-moist							
		11					16			61		
40												
					Brown Silty fine Sand, medium dense-damp							
		19					10			43		
45												
					Brown Silty fine to coarse Sand, trace fine Gravel, medium dense-moist							
		20			at 48½', 4±-inch Silty Clay lense		15					
50												
					Boring Terminated at 50'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-3b

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-8

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		23			ALLUVIUM: Brown Silty fine Sand, trace medium to coarse Sand, medium dense-dry	2						
		18			Light Brown Silty fine Sand to fine Sandy Silt, trace medium Sand, medium dense-damp	4						
5		15			Brown Silty fine to coarse Sand, trace fine Gravel, medium dense-dry	1						
		12			Gray fine to medium Sand, trace coarse Sand, medium dense-damp	3						
10												
		8			Brown Silty fine to medium Sand, trace fine Gravel, loose-damp	8				44		
15												
		18				7						
20												
		8			Brown fine Sandy Silt, loose-very moist	30				78		
25												
		12			Brown Silty fine to medium Sand, trace coarse Sand, trace fine Gravel, medium dense-very moist	9				34		
30												
		35			Brown Gravelly fine to coarse Sand, trace Silt, dense-damp	3				7		

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-4a

6042

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-8

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION (Continued)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					Brown Gravelly fine to coarse Sand, trace Silt, dense-damp							
					Brown Gray Gravelly fine to coarse Sand to fine to coarse Sandy Gravel, trace Silt, very dense-dry							
40		50/5"				2				6		
					Brown Silty fine to medium Sand, trace medium Sand, medium dense-damp to moist							
45		20				6						
		20				9				35		
50					Boring Terminated at 50'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-4b

6043

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-9

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		6			ALLUVIUM: Brown Silty fine Sand, trace medium Sand, loose-damp		4					
		11			Brown fine Sand, trace to little medium to coarse Sand, trace to little Silt, medium dense-dry		2					
5		26			Brown Gravelly fine to coarse Sand, trace to little Silt, medium dense-dry		2					
		14			Brown Silty fine Sand, medium dense-moist		9			9		
10					Boring Terminated at 10'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-5
6044

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-10

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		11			ALLUVIUM: Brown to Light Brown Silty fine Sand, trace medium to coarse Sand, loose to medium dense-damp		3					
		6					4					
5		15			Brown to Gray fine to coarse Sand, little fine Gravel, medium dense-dry to damp		3					
		14					2			5		
10					Boring Terminated at 10'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-6

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-11

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/11/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		23			ALLUVIUM: Light Brown Silty fine Sand, trace medium to coarse Sand, medium dense-damp		4					
		20					4					
5		15			Light Brown fine Sandy Silt, trace medium to coarse Sand, medium dense-damp		5					
		14			Gray Brown Silty fine to coarse Sand, medium dense-dry		2			16		
10					Boring Terminated at 10'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-7
6046

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-12

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/23/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		16			ALLUVIUM: Brown Gray fine to coarse Sand, trace to little fine to coarse Gravel, trace Silt, medium dense-dry to damp		2					
		12					1					
5		22					3					
		27					2					
10												
		17			Gray Brown fine to coarse Sand, little fine Gravle, trace Silt, medium dense-dry to damp		3			5		
15												
		6			Brown fine Sandy Silt, trace medium Sand, loose-very moist		19			63		
20												
		9			Brown Silty fine to medium Sand, loose-damp		7			29		
25												
		10			Brown fine to medium Sandy Silt, medium dense-damp to moist		15			59		
30												
		15			Brown Silty fine to medium Sand, medium dense-damp		11			42		

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-8a

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-12

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/23/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION (Continued)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					Brown Gravelly fine to coarse Sand, trace Silt, dense-damp							
		17					11			47		
40												
					Brown Gravelly fine to coarse Sand, trace Silt, dense-damp							
		10					16					
45												
					Brown fine to coarse Sand, trace Silt, little fine Gravel, medium dense-damp							
		13					3			7		
50												
					Boring Terminated at 50'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-8b

6048

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-13

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/23/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		17			ALLUVIUM: Brown fine Sand, trace Silt, medium dense-damp		4					
		13			Brown fine Sandy Silt, medium dense-damp		5					
5		11			Brown Silty fine Sand, loose to medium dense-damp		6					
		9					4					
10					Gray fine to medium Sand, trace Silt, medium dense-dry to damp							
		16					2			5		
15												
		16					5					
20					Brown Silty fine Sand, medium dense-damp							
		10					5			31		
25					Brown fine to medium Sandy Silt, medium dense-damp to moist							
		12	2.0				12			62		
30												
		11	3.0				17					

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-9a

6049

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-13

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/23/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION (Continued)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					Brown Silty to medium fine Sand, medium dense-moist							
					Brown Silty to medium fine Sand, medium dense-moist							
		21					10			39		
40												
					Brown Gravelly fine to coarse Sand, little Silt, dense-dry to damp							
		32					4			10		
45												
					Brown fine to coarse Sand, little fine Gravel, little Silt, medium dense-dry to damp							
		29					4			10		
50												
					Boring Terminated at 50'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-9b
6050

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-14

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/23/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					ALLUVIUM: Brown Silty fine Sand, trace medium Sand, medium dense-damp							
		28					4					
		16					4					
5												
					Light Brown fine to medium Sandy Silt, loose-moist							
		6					11					
		7					9					
10												
					Brown Gray Silty fine Sand, trace medium Sand, medium dense-damp							
		12					4			18		
15												
		12					5					
20												
					Brown fine to medium Sandy Silt, loose-moist							
		7					18			62		
25												
		6	3.0				18					
30												
					Brown fine to coarse Sand, trace Silt, medium dense-damp							
		23					4			6		

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-10a

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-14

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/23/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION (Continued)	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
					Brown fine to coarse Sand, trace Silt, medium dense-damp							
					Brown Silty fine Sand, trace fine Gravel, medium dense-damp							
		12					10			37		
40												
					Brown fine Sandy Silt, medium dense-moist to very moist							
		13					20			70		
45												
					Brown Silty fine to medium Sand, medium dense-moist							
		26					9			32		
50												
					Boring Terminated at 50'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-10b

6052

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-15

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/23/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		19			ALLUVIUM: Brown fine to coarse Sand, trace Silt, trace fine Gravel, medium dense-dry to damp		1					
		18					1					
5		12					2					
		19					3			5		
10					Boring Terminated at 10'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-11

6053

SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

BORING NO. I-16

JOB NO.: 21G197-3
PROJECT: California Logistics Center
LOCATION: Ontario, California

EXCAVATION DATE: 11/23/21
EXCAVATION METHOD: Hollow Stem Auger
LOGGED BY: Ryan Bremer

WATER DEPTH: Dry
CAVE DEPTH: ---
READING TAKEN: At Completion

FIELD RESULTS						LABORATORY RESULTS						
DEPTH (FEET)	SAMPLE	BLOW COUNT	POCKET PEN. (TSF)	GRAPHIC LOG	DESCRIPTION SURFACE ELEVATION: --- MSL	DRY DENSITY (PCF)	MOISTURE CONTENT (%)	LIQUID LIMIT	PLASTIC LIMIT	PASSING #200 SIEVE (%)	ORGANIC CONTENT (%)	COMMENTS
		26			ALLUVIUM: Brown fine Sand, trace Silt, medium dense-dry to damp		2					
		13					5					
5					Light Brown fine Sandy Silt, loose-damp to moist							
		9					9					
		12			Gray Brown Gravelly fine to coarse Sand, trace Silt, medium dense-dry to damp		2			5		
10												
					Boring Terminated at 10'							

TBL 21G197-3 AND 4 COMBINED.GPJ SOCALGEO.GDT 12/22/21

TEST BORING LOG

PLATE B-12

6054

PERCOLATION CALCULATIONS

Project Name	Proposed California Logistics
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Borehole Diameter	8
Borehole Depth	50.15
Water Depth from Ground Surface	10

Percolation Boring No. I-5

Interval Number		Time	Time Interval (hrs)	Avergae Wetted Depth for Interval (ft)	Inflow Meter Readings (gallons)	Volume of Outflow (gallons)	Percolation Rate Q (gallons/minute)	Percolation Rate Q ($gal/ft^2/day$)
1	Initial	8:50 AM	0.1667	40.15	1106.0	13	1.30	22.26
	Final	9:00 AM			1119.0			
2	Initial	9:00 AM	0.1667	40.15	1119.0	11	1.10	18.84
	Final	9:10 AM			1130.0			
3	Initial	9:10 AM	0.1667	40.15	1130.0	12	1.20	20.55
	Final	9:20 AM			1142.0			
4	Initial	9:20 AM	0.1667	40.15	1142.0	11	1.10	18.84
	Final	9:30 AM			1153.0			
5	Initial	9:30 AM	0.1667	40.15	1153.0	11	1.10	18.84
	Final	9:40 AM			1164.0			
6	Initial	9:40 AM	0.1667	40.15	1164.0	11	1.10	18.84
	Final	9:50 AM			1175.0			
7	Initial	9:50 AM	0.1667	40.15	1175.0	11	1.10	18.84
	Final	10:00 AM			1186.0			

PERCOLATION CALCULATIONS

Project Name	Proposed California Logistics
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Borehole Diameter	8
Borehole Depth	50.1
Water Depth from Ground Surface	12

Percolation Boring No. I-6

Interval Number		Time	Time Interval (hrs)	Avergae Wetted Depth for Interval (ft)	Inflow Meter Readings (gallons)	Volume of Outflow (gallons)	Percolation Rate Q (gallons/minute)	Percolation Rate Q (gal/ft^2/day)
1	Initial	11:08 AM	0.1667	38.10	1350.0	47	4.70	84.82
	Final	11:18 AM			1397.0			
2	Initial	11:18 AM	0.1667	38.10	1397.0	48	4.80	86.62
	Final	11:28 AM			1445.0			
3	Initial	11:28 AM	0.1667	38.10	1445.0	46	4.60	83.01
	Final	11:38 AM			1491.0			
4	Initial	11:38 AM	0.1667	38.10	1491.0	46	4.60	83.01
	Final	11:48 AM			1537.0			

PERCOLATION CALCULATIONS

Project Name	Proposed California Logistics
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Borehole Diameter	8
Borehole Depth	50.1
Water Depth from Ground Surface	14

Percolation Boring No.	I-7

Interval Number		Time	Time Interval (hrs)	Avergae Wetted Depth for Interval (ft)	Inflow Meter Readings (gallons)	Volume of Outflow (gallons)	Percolation Rate Q (gallons/minute)	Percolation Rate Q (gal/ft^2/day)
1	Initial	8:36 AM	0.1667	36.10	1661.0	41	4.10	78.09
	Final	8:46 AM			1702.0			
2	Initial	8:46 AM	0.1667	36.10	1702.0	39	3.90	74.28
	Final	8:56 AM			1741.0			
3	Initial	8:56 AM	0.1667	36.10	1741.0	36	3.60	68.56
	Final	9:06 AM			1777.0			
4	Initial	9:06 AM	0.1667	36.10	1777.0	35	3.50	66.66
	Final	9:16 AM			1812.0			
5	Initial	9:16 AM	0.1667	36.10	1812.0	41	4.10	78.09
	Final	9:26 AM			1853.0			
6	Initial	9:26 AM	0.1667	36.10	1853.0	34	3.40	64.76
	Final	9:36 AM			1887.0			

PERCOLATION CALCULATIONS

Project Name	Proposed California Logistics
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Borehole Diameter	8
Borehole Depth	50.3
Water Depth from Ground Surface	19

Percolation Boring No.	I-8

Interval Number		Time	Time Interval (hrs)	Avergae Wetted Depth for Interval (ft)	Inflow Meter Readings (gallons)	Volume of Outflow (gallons)	Percolation Rate Q (gallons/minute)	Percolation Rate Q ($gal/ft^2/day$)
1	Initial	11:30 AM	0.1667	31.30	2132.0	61	6.10	134.00
	Final	11:40 AM			2193.0			
2	Initial	11:40 AM	0.1667	31.30	2193.0	62	6.20	136.19
	Final	11:50 AM			2255.0			
3	Initial	11:50 AM	0.1667	31.30	2255.0	60	6.00	131.80
	Final	12:00 PM			2315.0			
4	Initial	12:00 PM	0.1667	31.30	2315.0	60	6.00	131.80
	Final	12:10 PM			2375.0			
5	Initial	12:10 PM	0.1667	31.30	2375.0	60	6.00	131.80
	Final	12:20 PM			2435.0			
6	Initial	12:20 PM	0.1667	31.30	2435.0	60	6.00	131.80
	Final	12:30 PM			2495.0			

INFILTRATION CALCULATIONS

Project Name	California Logistics Center
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Test Hole Radius	4	(in)
Test Depth	10.10	(ft)

Infiltration Test Hole: I-9

Soil Criteria Test

Interval Number		Time	Time Interval (min)	Water Depth (ft)	Change in Water Level (in)	Did 6 inches of water seep away in less than 25 minutes?	Sandy Soils or Non-Sandy Soils?
1	Initial	7:36 AM	25.00	7.00	37.20	YES	SANDY SOILS
	Final	8:01 AM		10.10			
2	Initial	8:01 AM	25.00	6.00	45.60	YES	SANDY SOILS
	Final	8:26 AM		9.80			

Test Data

Interval Number		Time	Time Interval (min)	Water Depth (ft)	Change in Water Level (ft)	Average Head Height (ft)	Infiltration Rate Q (in/hr)
1	Initial	8:26 AM	10.00	7.00	2.40	1.90	13.94
	Final	8:36 AM		9.40			
2	Initial	8:36 AM	10.00	7.00	2.40	1.90	13.94
	Final	8:46 AM		9.40			
3	Initial	8:46 AM	10.00	7.00	2.40	1.90	13.94
	Final	8:56 AM		9.40			
4	Initial	8:56 AM	10.00	7.00	2.40	1.90	13.94
	Final	9:06 AM		9.40			
5	Initial	9:06 AM	10.00	7.00	2.35	1.93	13.48
	Final	9:16 AM		9.35			
6	Initial	9:16 AM	10.00	7.00	2.35	1.93	13.48
	Final	9:26 AM		9.35			

Per County Standards, Infiltration Rate calculated as follows:

$$Q = \frac{\Delta H(60r)}{\Delta t(r + 2H_{avg})}$$

Where:
- Q = Infiltration Rate (in inches per hour)
- ΔH = Change in Height (Water Level) over the time interval
- r = Test Hole (Borehole) Radius
- Δt = Time Interval
- H_{avg} = Average Head Height over the time interval

INFILTRATION CALCULATIONS

Project Name	California Logistics Center
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Test Hole Radius	4	(in)
Test Depth	10.10	(ft)

Infiltration Test Hole: I-10

Soil Criteria Test

Interval Number		Time	Time Interval (min)	Water Depth (ft)	Change in Water Level (in)	Did 6 inches of water seep away in less than 25 minutes?	Sandy Soils or Non-Sandy Soils?
1	Initial	9:24 AM	25.00	7.00	37.20	YES	SANDY SOILS
	Final	9:49 AM		10.10			
2	Initial	9:49 AM	25.00	5.00	61.20	YES	SANDY SOILS
	Final	10:14 AM		10.10			

Test Data

Interval Number		Time	Time Interval (min)	Water Depth (ft)	Change in Water Level (ft)	Average Head Height (ft)	Infiltration Rate Q (in/hr)
1	Initial	10:14 AM	10.00	6.00	3.98	2.11	20.98
	Final	10:24 AM		9.98			
2	Initial	10:24 AM	10.00	6.00	3.95	2.13	20.68
	Final	10:34 AM		9.95			
3	Initial	10:34 AM	10.00	6.00	3.80	2.20	19.27
	Final	10:44 AM		9.80			
4	Initial	10:44 AM	10.00	6.00	3.71	2.25	18.46
	Final	10:54 AM		9.71			
5	Initial	10:54 AM	10.00	6.00	3.70	2.25	18.37
	Final	11:04 AM		9.70			
6	Initial	11:04 AM	10.00	6.00	3.70	2.25	18.37
	Final	11:14 AM		9.70			

Per County Standards, Infiltration Rate calculated as follows:

$$Q = \frac{\Delta H(60r)}{\Delta t(r + 2H_{avg})}$$

Where:
- Q = Infiltration Rate (in inches per hour)
- ΔH = Change in Height (Water Level) over the time interval
- r = Test Hole (Borehole) Radius
- Δt = Time Interval
- H_{avg} = Average Head Height over the time interval

INFILTRATION CALCULATIONS

Project Name	California Logistics Center
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Test Hole Radius	4	(in)
Test Depth	10.20	(ft)

Infiltration Test Hole	I-11

Soil Criteria Test

Interval Number		Time	Time Interval (min)	Water Depth (ft)	Change in Water Level (in)	Did 6 inches of water seep away in less than 25 minutes?	Sandy Soils or Non-Sandy Soils?
1	Initial	11:12 AM	25.00	6.00	50.40	YES	SANDY SOILS
	Final	11:37 AM		10.20			
2	Initial	11:37 AM	25.00	6.00	50.40	YES	SANDY SOILS
	Final	12:02 PM		10.20			

Test Data

Interval Number		Time	Time Interval (min)	Water Depth (ft)	Change in Water Level (ft)	Average Head Height (ft)	Infiltration Rate Q (in/hr)
1	Initial	12:02 PM	10.00	7.00	2.75	1.83	16.57
	Final	12:12 PM		9.75			
2	Initial	12:12 PM	10.00	7.00	2.55	1.93	14.63
	Final	12:22 PM		9.55			
3	Initial	12:22 PM	10.00	7.00	2.50	1.95	14.17
	Final	12:32 PM		9.50			
4	Initial	12:32 PM	10.00	7.00	2.45	1.98	13.73
	Final	12:42 PM		9.45			
5	Initial	12:42 PM	10.00	7.00	2.45	1.98	13.73
	Final	12:52 PM		9.45			
6	Initial	12:52 PM	10.00	7.00	2.45	1.98	13.73
	Final	1:02 PM		9.45			

Per County Standards, Infiltration Rate calculated as follows:

$$Q = \frac{\Delta H(60r)}{\Delta t(r + 2H_{avg})}$$

Where: Q = Infiltration Rate (in inches per hour)
ΔH = Change in Height (Water Level) over the time interval
r = Test Hole (Borehole) Radius
Δt = Time Interval
H_{avg} = Average Head Height over the time interval

PERCOLATION CALCULATIONS

Project Name	Proposed California Logistics
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Borehole Diameter	8
Borehole Depth	51
Water Depth from Ground Surface	10

Percolation Boring No.	I-12

Interval Number		Time	Time Interval (hrs)	Avergae Wetted Depth for Interval (ft)	Inflow Meter Readings (gallons)	Volume of Outflow (gallons)	Percolation Rate Q (gallons/minute)	Percolation Rate Q (gal/ft^2/day)
1	Initial	7:50 AM	0.1667	41.00	2653.0	52	5.20	87.20
	Final	8:00 AM			2705.0			
2	Initial	8:00 AM	0.1667	41.00	2705.0	49	4.90	82.17
	Final	8:10 AM			2754.0			
3	Initial	8:10 AM	0.1667	41.00	2754.0	44	4.40	73.79
	Final	8:20 AM			2798.0			
4	Initial	8:20 AM	0.1667	41.00	2798.0	42	4.20	70.43
	Final	8:30 AM			2840.0			
5	Initial	8:30 AM	0.1667	41.00	2840.0	42	4.20	70.43
	Final	8:40 AM			2882.0			
6	Initial	8:40 AM	0.1667	41.00	2882.0	42	4.20	70.43
	Final	8:50 AM			2924.0			

PERCOLATION CALCULATIONS

Project Name	Proposed California Logistics
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Borehole Diameter	8
Borehole Depth	50.25
Water Depth from Ground Surface	10

Percolation Boring No.	I-13

Interval Number		Time	Time Interval (hrs)	Avergae Wetted Depth for Interval (ft)	Inflow Meter Readings (gallons)	Volume of Outflow (gallons)	Percolation Rate Q (gallons/minute)	Percolation Rate Q (gal/ft^2/day)
1	Initial	10:19 AM	0.1667	40.25	2561.0	22	2.20	37.58
	Final	10:29 AM			2583.0			
2	Initial	10:29 AM	0.1667	40.25	2583.0	21	2.10	35.87
	Final	10:39 AM			2604.0			
3	Initial	10:39 AM	0.1667	40.25	2604.0	22	2.20	37.58
	Final	10:49 AM			2626.0			
4	Initial	10:49 AM	0.1667	40.25	2626.0	22	2.20	37.58
	Final	10:59 AM			2648.0			
5	Initial	10:59 AM	0.1667	40.25	2648.0	22	2.20	37.58
	Final	11:09 AM			2670.0			
6	Initial	11:09 AM	0.1667	40.25	2670.0	22	2.20	37.58
	Final	11:19 AM			2692.0			

PERCOLATION CALCULATIONS

Project Name	Proposed California Logistics
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Borehole Diameter	8
Borehole Depth	50.15
Water Depth from Ground Surface	10

Percolation Boring No.	I-14

Interval Number		Time	Time Interval (hrs)	Avergae Wetted Depth for Interval (ft)	Inflow Meter Readings (gallons)	Volume of Outflow (gallons)	Percolation Rate Q (gallons/minute)	Percolation Rate Q (gal/ft^2/day)
1	Initial	7:47 AM	0.1667	40.15	2314.0	27	2.70	46.24
	Final	7:57 AM			2341.0			
2	Initial	7:57 AM	0.1667	40.15	2341.0	17	1.70	29.11
	Final	8:07 AM			2358.0			
3	Initial	8:07 AM	0.1667	40.15	2358.0	16	1.60	27.40
	Final	8:17 AM			2374.0			
4	Initial	8:17 AM	0.1667	40.15	2374.0	13	1.30	22.26
	Final	8:27 AM			2387.0			
5	Initial	8:27 AM	0.1667	40.15	2387.0	13	1.30	22.26
	Final	8:37 AM			2400.0			
6	Initial	8:37 AM	0.1667	40.15	2400.0	13	1.30	22.26
	Final	8:47 AM			2413.0			

INFILTRATION CALCULATIONS

Project Name	California Logistics Center
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Test Hole Radius	4	(in)
Test Depth	9.95	(ft)

Infiltration Test Hole	I-15

Soil Criteria Test

Interval Number		Time	Time Interval (min)	Water Depth (ft)	Change in Water Level (in)	Did 6 inches of water seep away in less than 25 minutes?	Sandy Soils or Non-Sandy Soils?
1	Initial	9:29 AM	25.00	8.00	23.40	YES	SANDY SOILS
	Final	9:54 AM		9.95			
2	Initial	9:54 AM	25.00	8.00	23.40	YES	SANDY SOILS
	Final	10:19 AM		9.95			

Test Data

Interval Number		Time	Time Interval (min)	Water Depth (ft)	Change in Water Level (ft)	Average Head Height (ft)	Infiltration Rate Q (in/hr)
1	Initial	10:19 AM	10.00	5.00	4.95	2.48	22.49
	Final	10:29 AM		9.95			
2	Initial	10:29 AM	10.00	5.00	4.95	2.48	22.49
	Final	10:39 AM		9.95			
3	Initial	10:39 AM	10.00	5.00	4.95	2.48	22.49
	Final	10:49 AM		9.95			
4	Initial	10:49 AM	10.00	5.00	4.94	2.48	22.40
	Final	10:59 AM		9.94			
5	Initial	10:59 AM	10.00	5.00	4.94	2.48	22.40
	Final	11:09 AM		9.94			
6	Initial	11:09 AM	10.00	5.00	4.94	2.48	22.40
	Final	11:19 AM		9.94			

Per County Standards, Infiltration Rate calculated as follows:

$$Q = \frac{\Delta H(60r)}{\Delta t(r + 2H_{avg})}$$

Where: Q = Infiltration Rate (in inches per hour)
ΔH = Change in Height (Water Level) over the time interval
r = Test Hole (Borehole) Radius
Δt = Time Interval
H_{avg} = Average Head Height over the time interval

INFILTRATION CALCULATIONS

Project Name	California Logistics Center
Project Location	Ontario, CA
Project Number	21G197-3
Engineer	OS

Test Hole Radius	4	(in)
Test Depth	10.20	(ft)

Infiltration Test Hole	I-16

Soil Criteria Test

Interval Number		Time	Time Interval (min)	Water Depth (ft)	Change in Water Level (in)	Did 6 inches of water seep away in less than 25 minutes?	Sandy Soils or Non-Sandy Soils?
1	Initial	10:51 AM	25.00	3.00	86.40	YES	SANDY SOILS
	Final	11:16 AM		10.20			
2	Initial	11:16 AM	25.00	3.00	86.40	YES	SANDY SOILS
	Final	11:41 AM		10.20			

Test Data

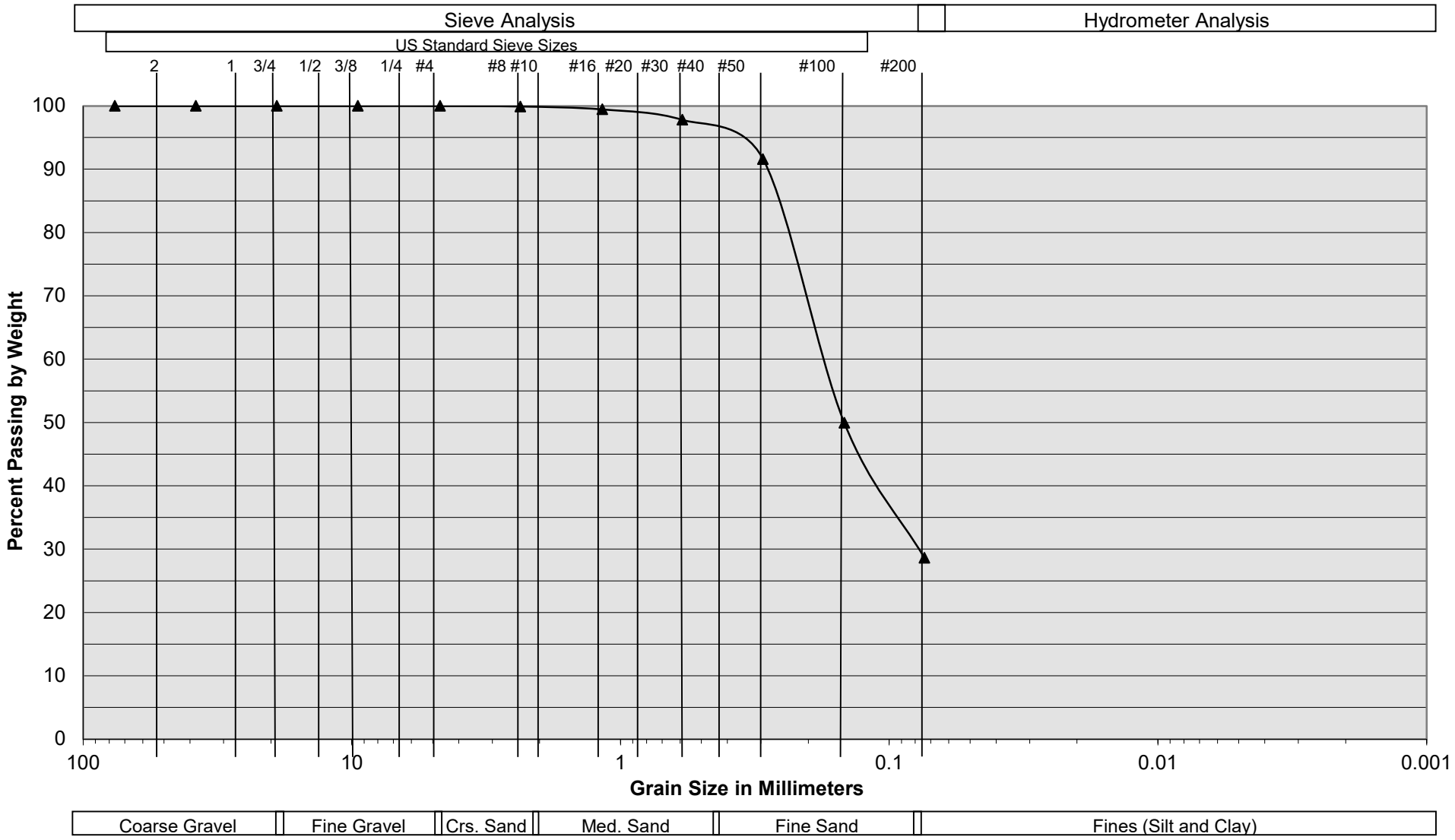
Interval Number		Time	Time Interval (min)	Water Depth (ft)	Change in Water Level (ft)	Average Head Height (ft)	Infiltration Rate Q (in/hr)
1	Initial	11:41 AM	10.00	7.70	1.75	1.63	11.72
	Final	11:51 AM		9.45			
2	Initial	11:51 AM	10.00	7.70	1.70	1.65	11.23
	Final	12:01 PM		9.40			
3	Initial	12:01 PM	10.00	7.70	1.68	1.66	11.04
	Final	12:11 PM		9.38			
4	Initial	12:11 PM	10.00	7.70	1.66	1.67	10.85
	Final	12:21 PM		9.36			
5	Initial	12:21 PM	10.00	7.70	1.65	1.68	10.75
	Final	12:31 PM		9.35			
6	Initial	12:31 PM	10.00	7.70	1.65	1.68	10.75
	Final	12:41 PM		9.35			

Per County Standards, Infiltration Rate calculated as follows:

$$Q = \frac{\Delta H(60r)}{\Delta t(r + 2H_{avg})}$$

Where: Q = Infiltration Rate (in inches per hour)
ΔH = Change in Height (Water Level) over the time interval
r = Test Hole (Borehole) Radius
Δt = Time Interval
H_{avg} = Average Head Height over the time interval

Grain Size Distribution



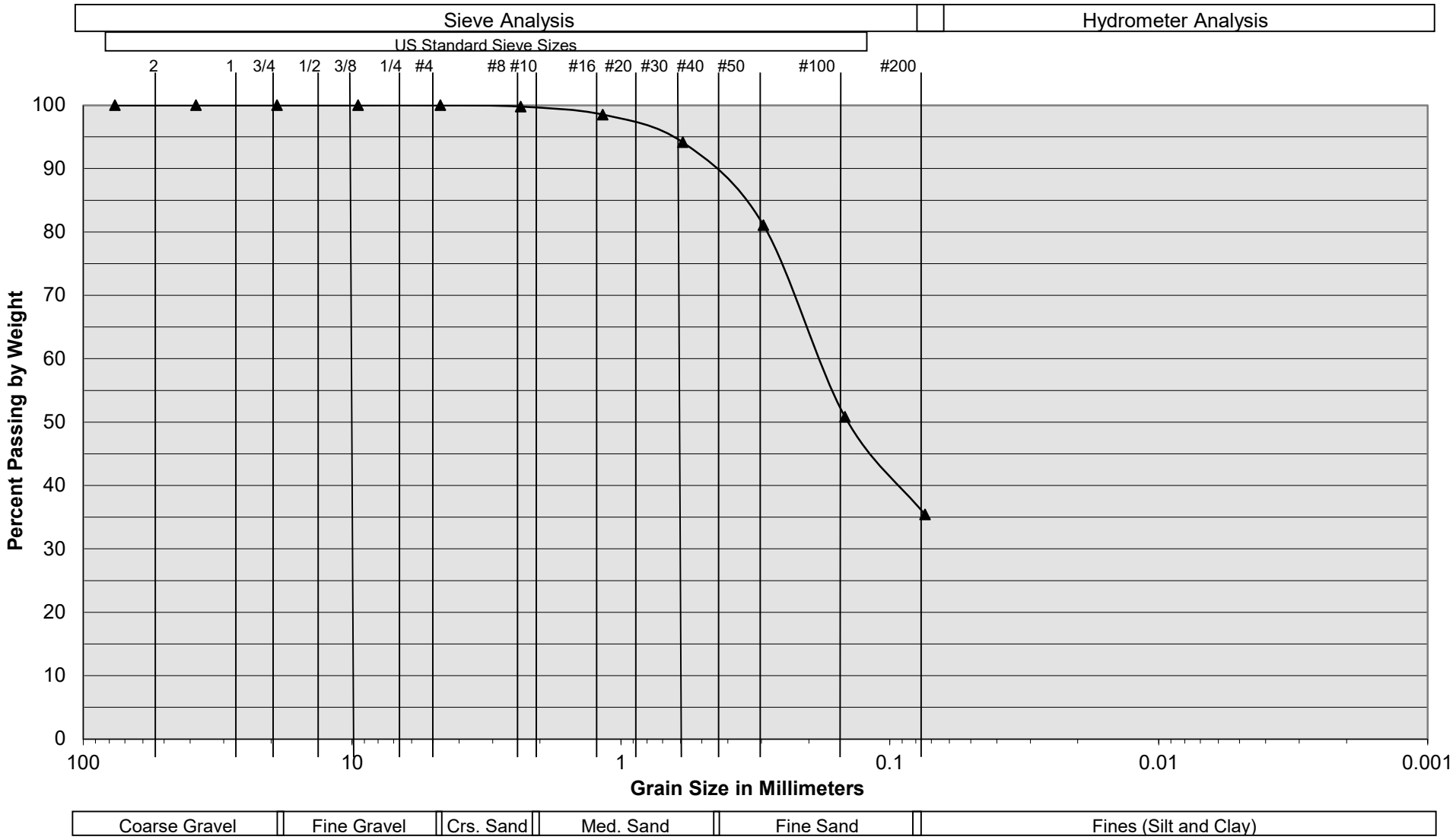
Sample Description	I-5 @ 13.5'
Soil Classification	ALLUVIUM: Light Brown Silty fine Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 1

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6067

Grain Size Distribution



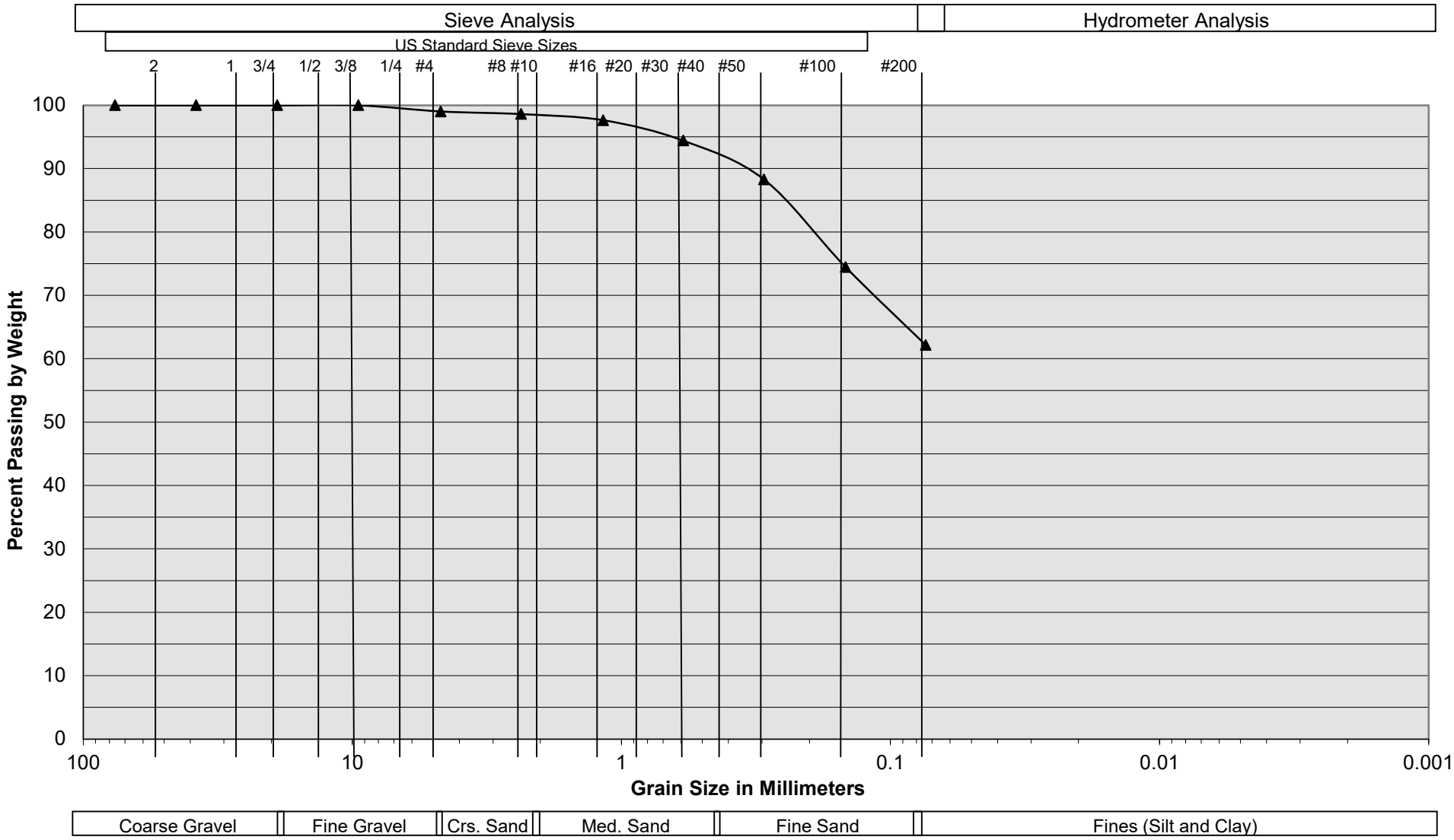
Sample Description	I-5 @ 18.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 2

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6068

Grain Size Distribution



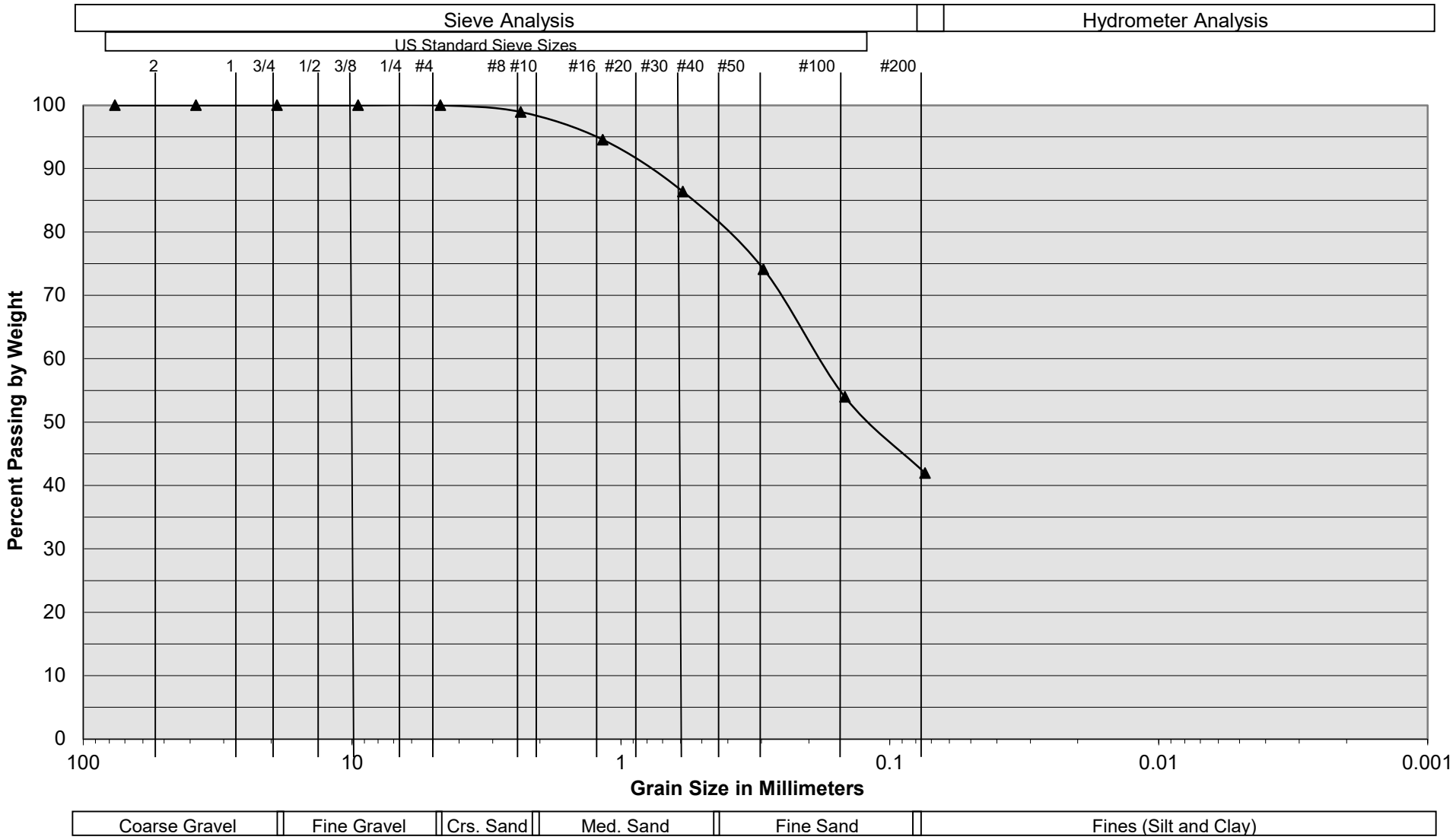
Sample Description	I-5 @ 23.5'
Soil Classification	ALLUVIUM: Brown fine Sandy Silt, trace medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 3

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6069

Grain Size Distribution



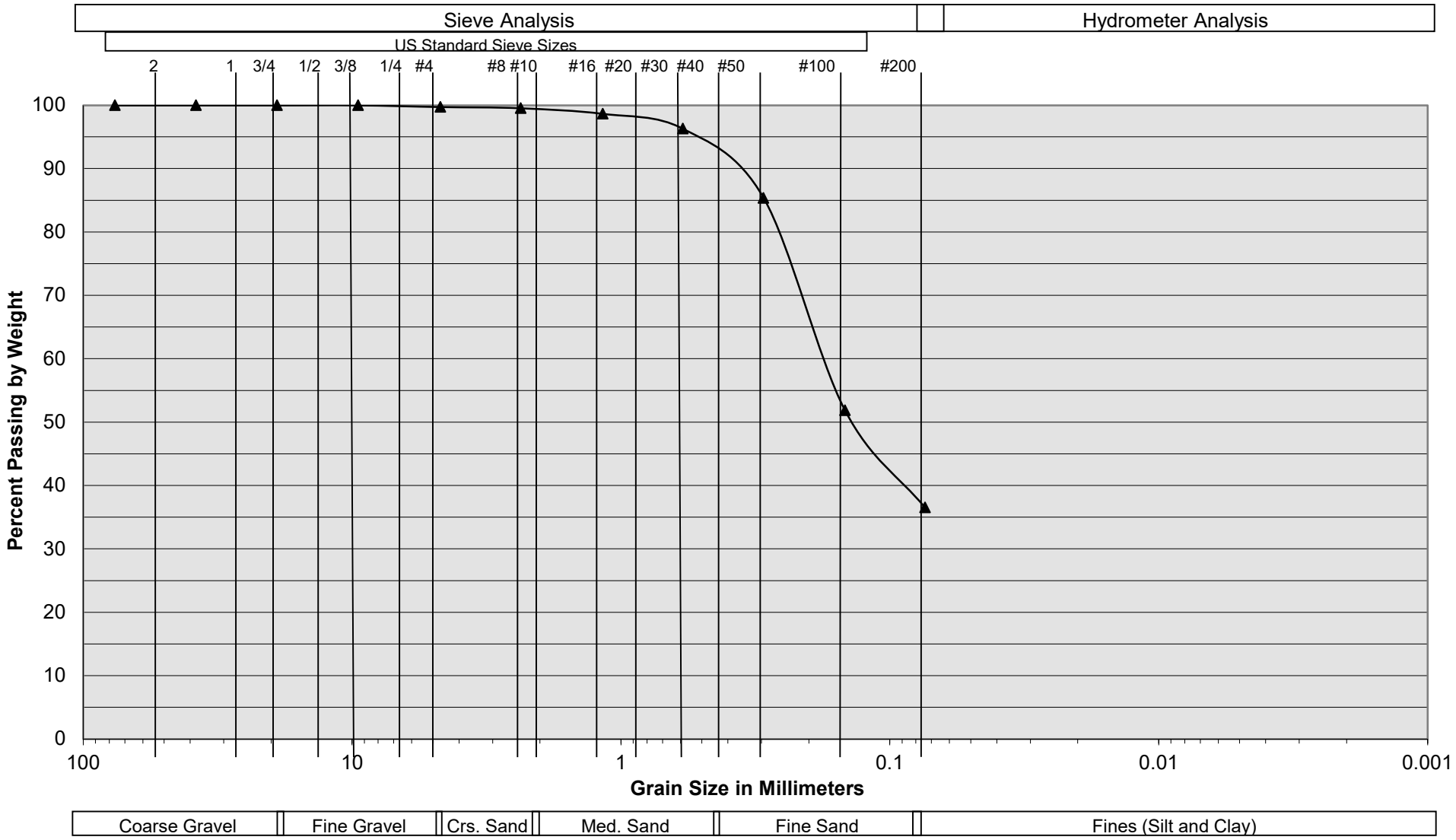
Sample Description	I-5 @ 28.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 4

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6070

Grain Size Distribution



Sample Description	I-5 @ 33.5'
Soil Classification	ALLUVIUM: Brown Silty fine Sand, trace medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 5

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6071

Grain Size Distribution

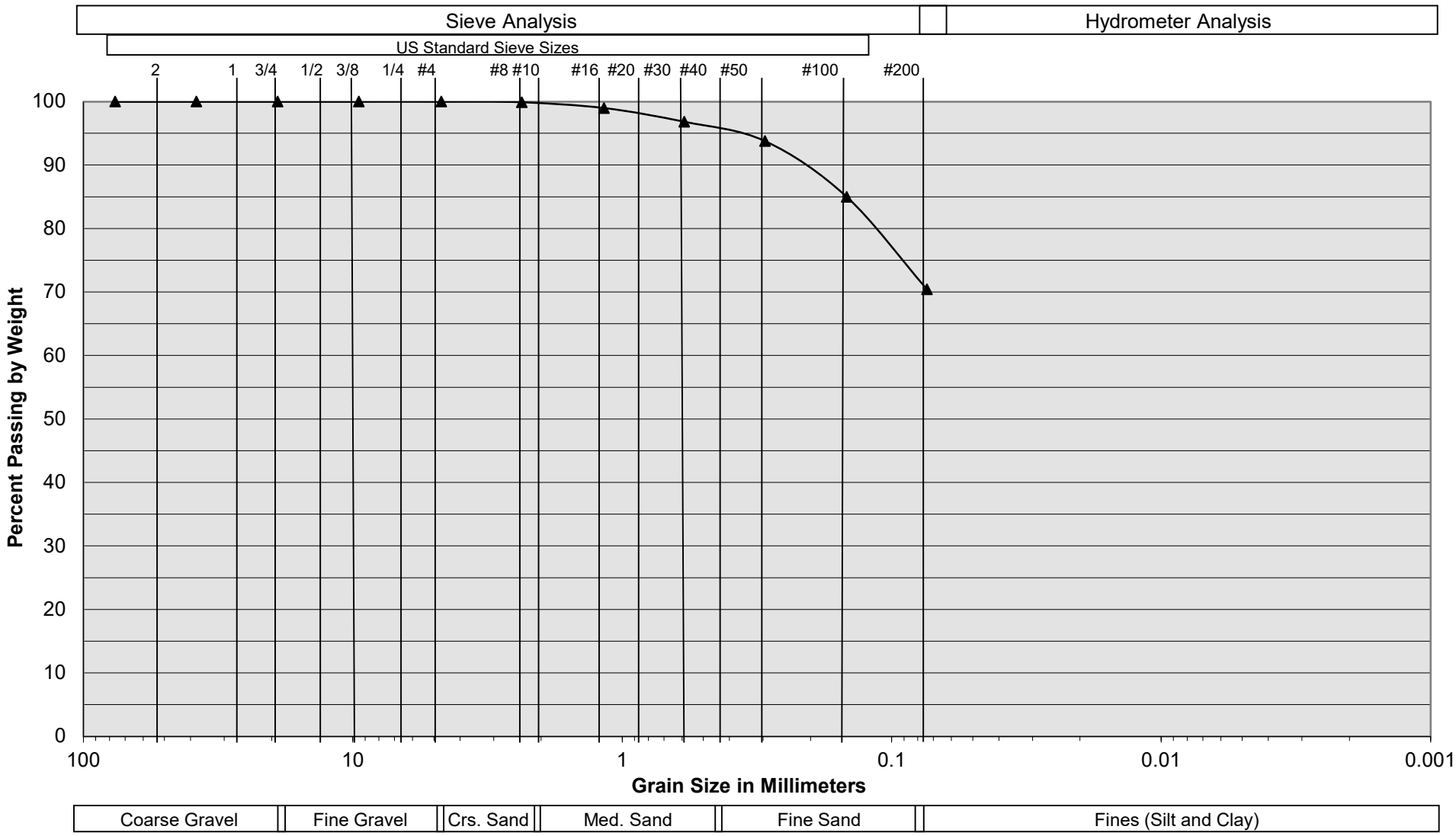
Sample Description	I-5 @ 38.5'
Soil Classification	ALLUVIUM: Brown fine to coarse Sand, little fine Gravel, little Silt

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 6

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6072

Grain Size Distribution



Sample Description	I-5 @ 43.5'
Soil Classification	ALLUVIUM: Brown fine Sandy Silt, trace Clay, trace medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 7

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6073

Grain Size Distribution

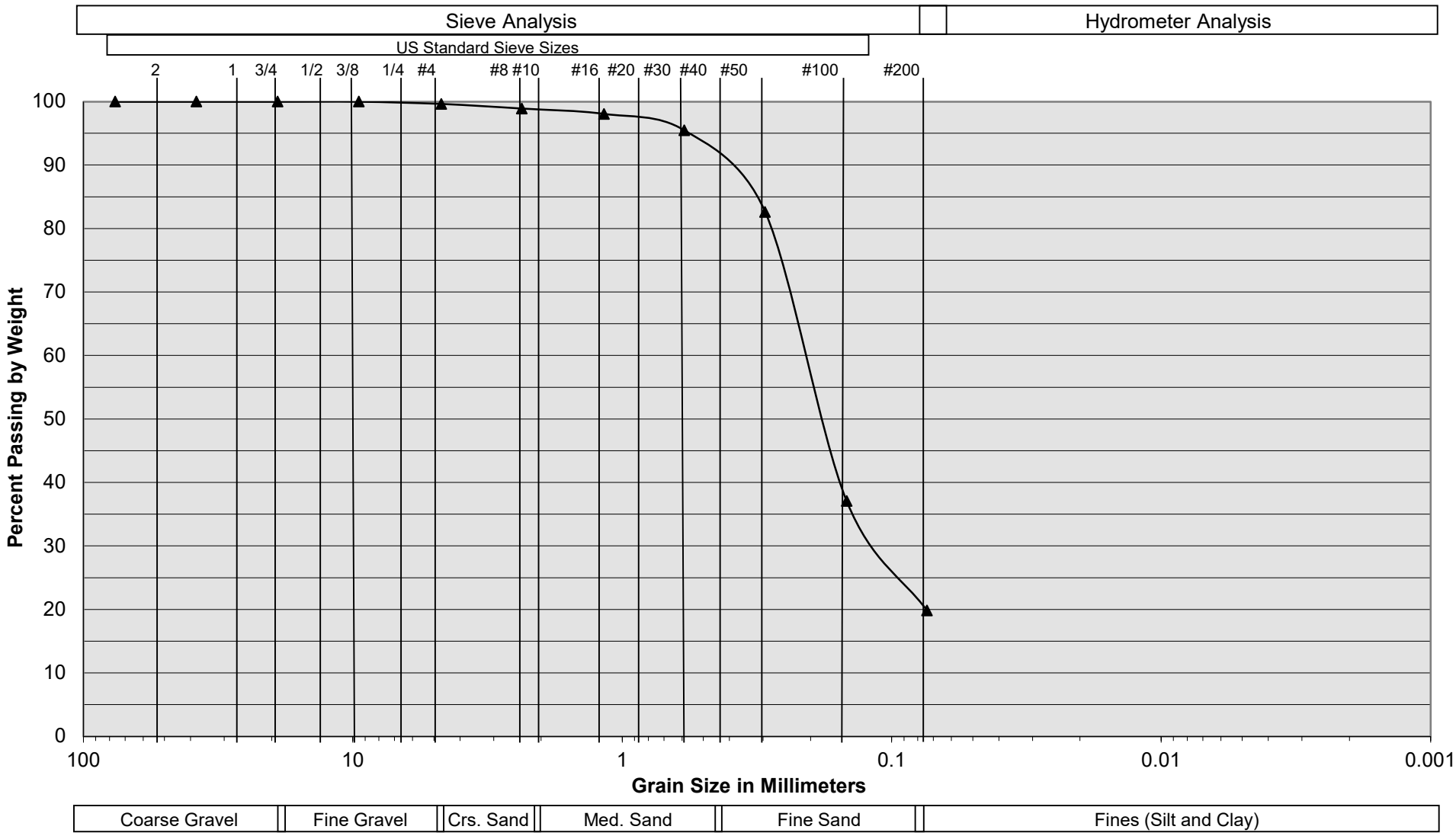
Sample Description	I-5 @ 48.5'
Soil Classification	ALLUVIUM: Brown Silty fine to coarse Sand, little fine Gravel, trace Clay nodules

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 8

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6074

Grain Size Distribution



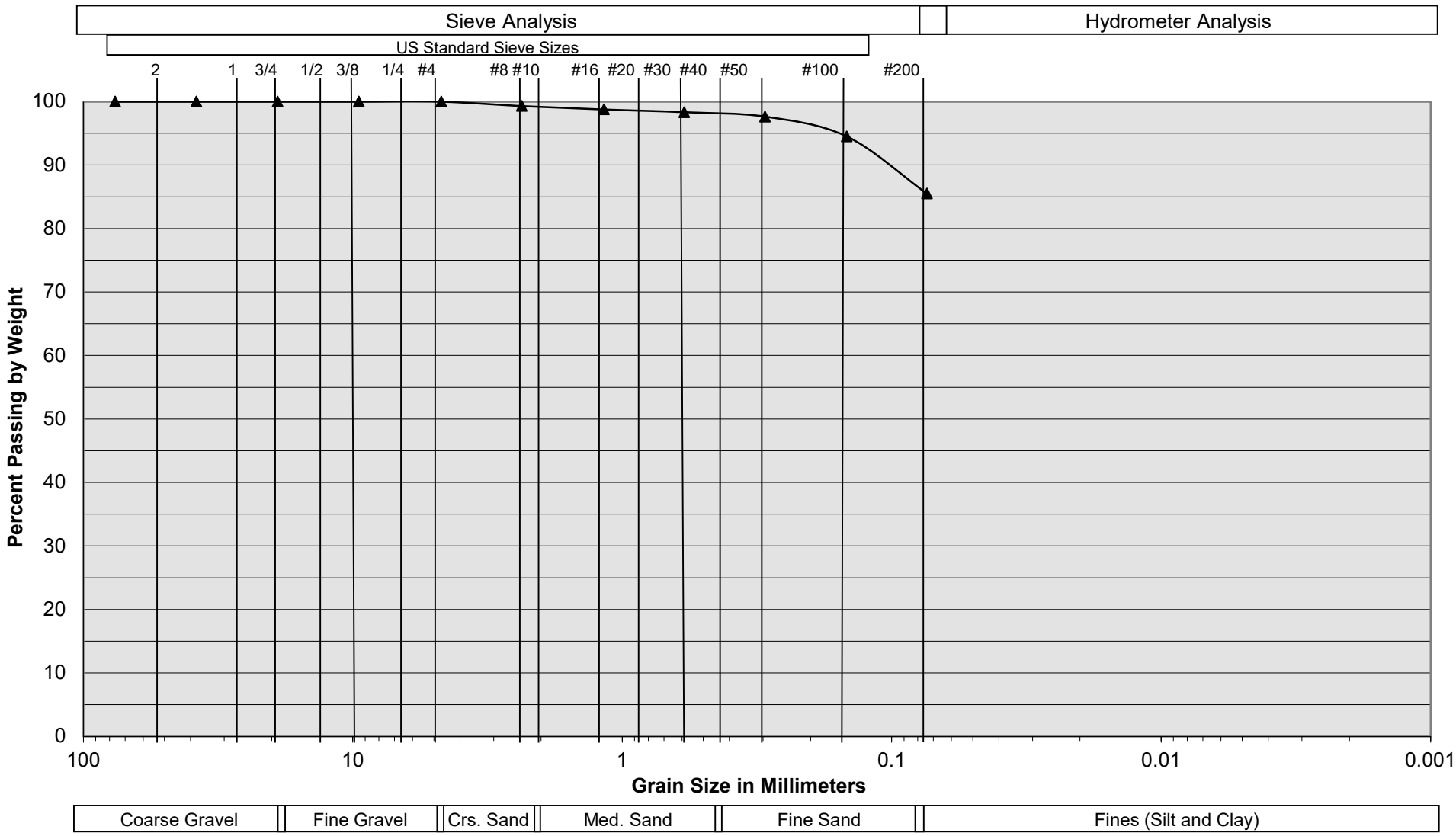
Sample Description	I-6 @ 13.5'
Soil Classification	ALLUVIUM: Brown Silty fine Sand, trace medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 9

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6075

Grain Size Distribution



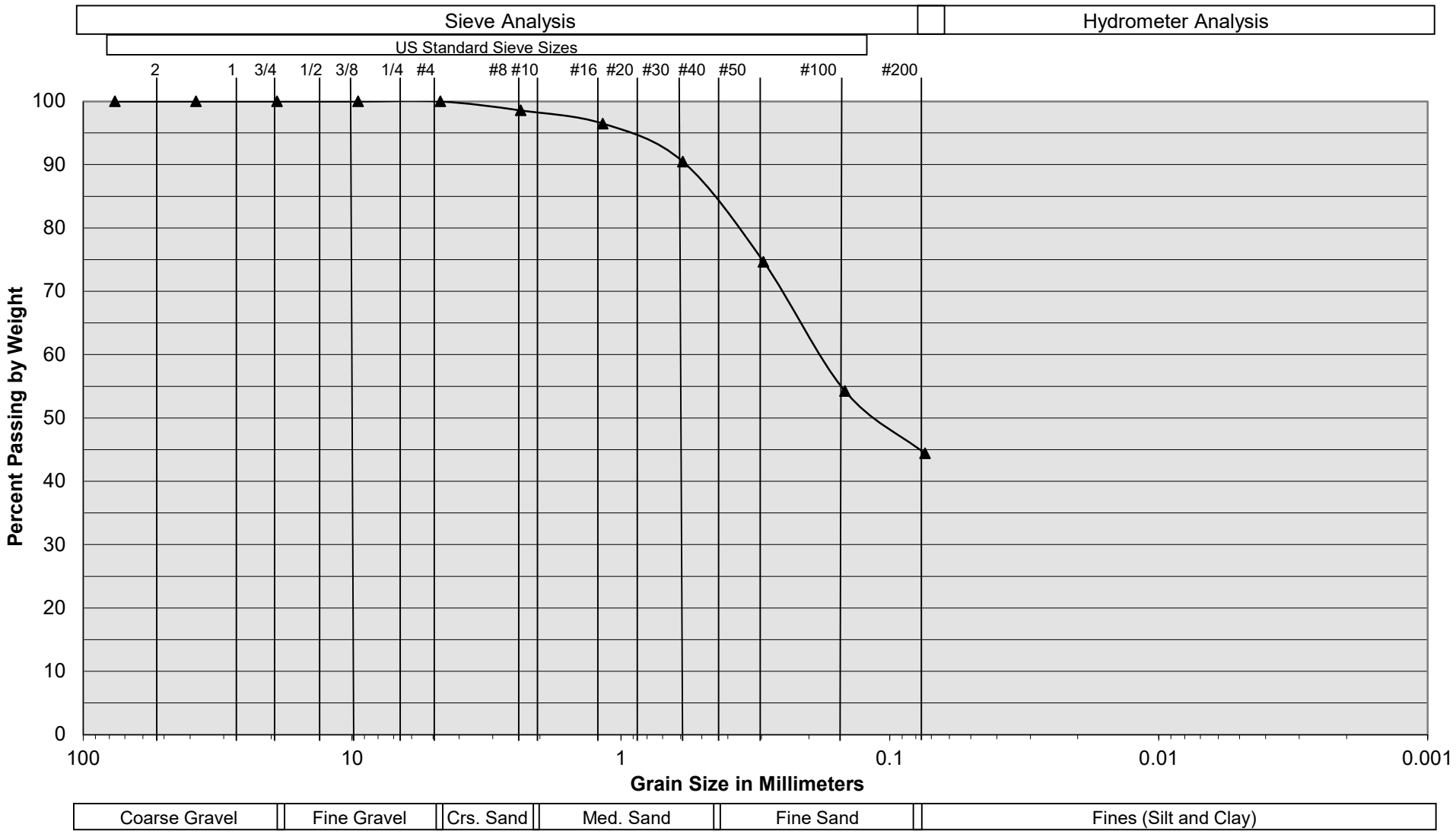
Sample Description	I-6 @ 23.5'
Soil Classification	ALLUVIUM: Brown fine Sandy Silt

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 10

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6076

Grain Size Distribution



Sample Description	I-6 @ 28.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 11

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6077

Grain Size Distribution

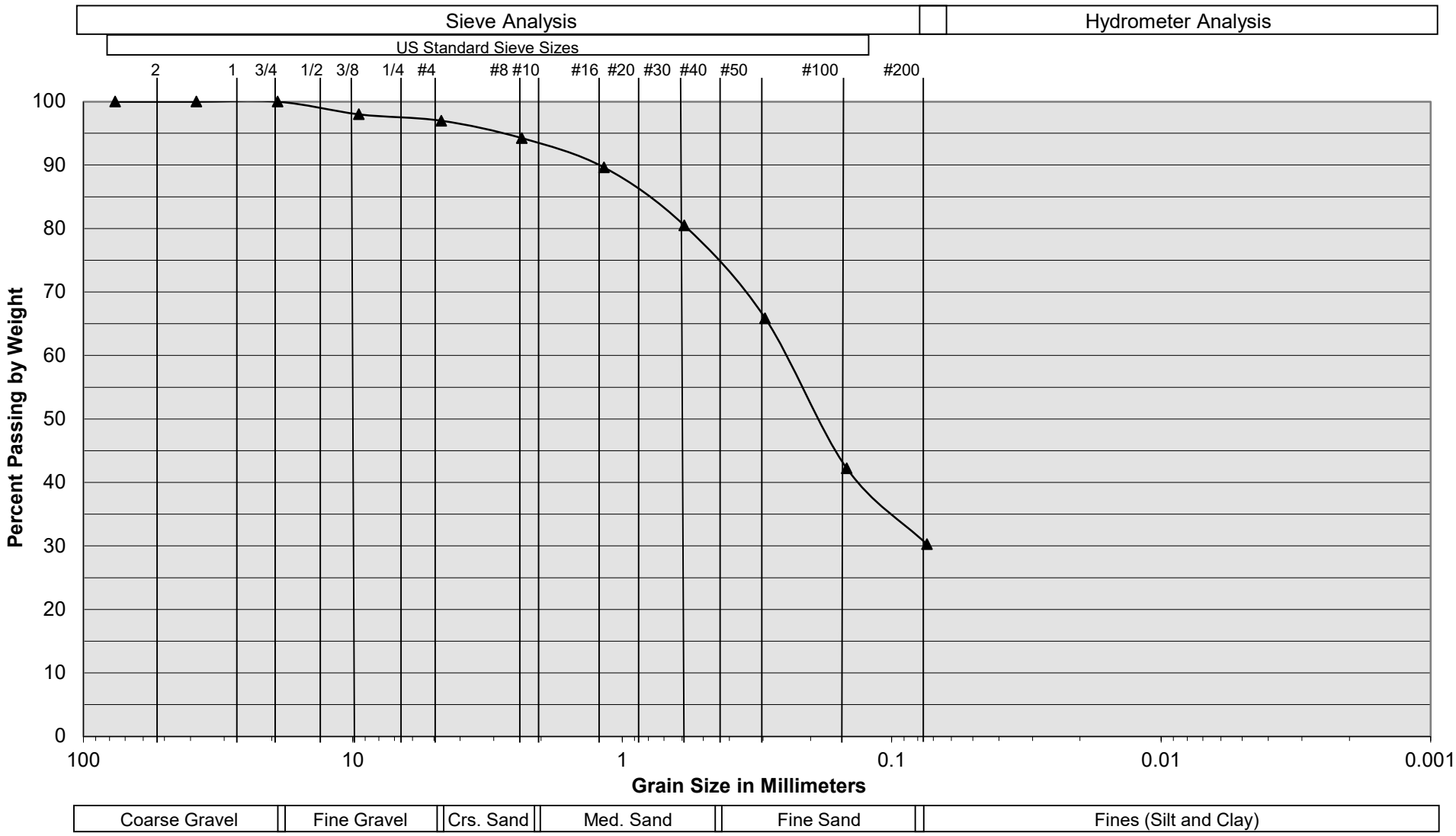
Sample Description	I-6 @ 33.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand, trace fine Gravel, trace coarse Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 12

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6078

Grain Size Distribution



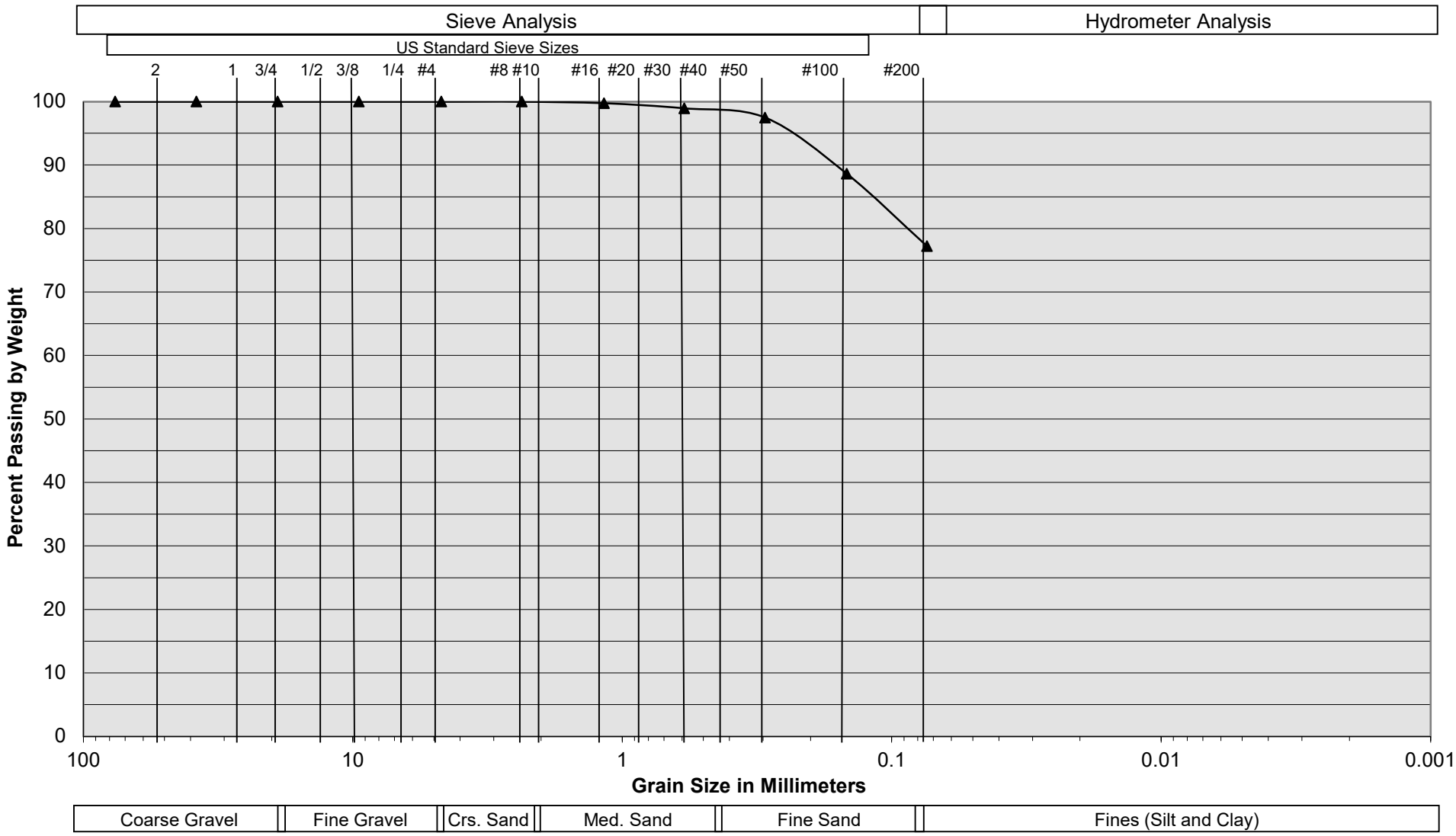
Sample Description	I-6 @ 38.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand, trace coarse Sand, trace fine Gravel

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 13

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6079

Grain Size Distribution



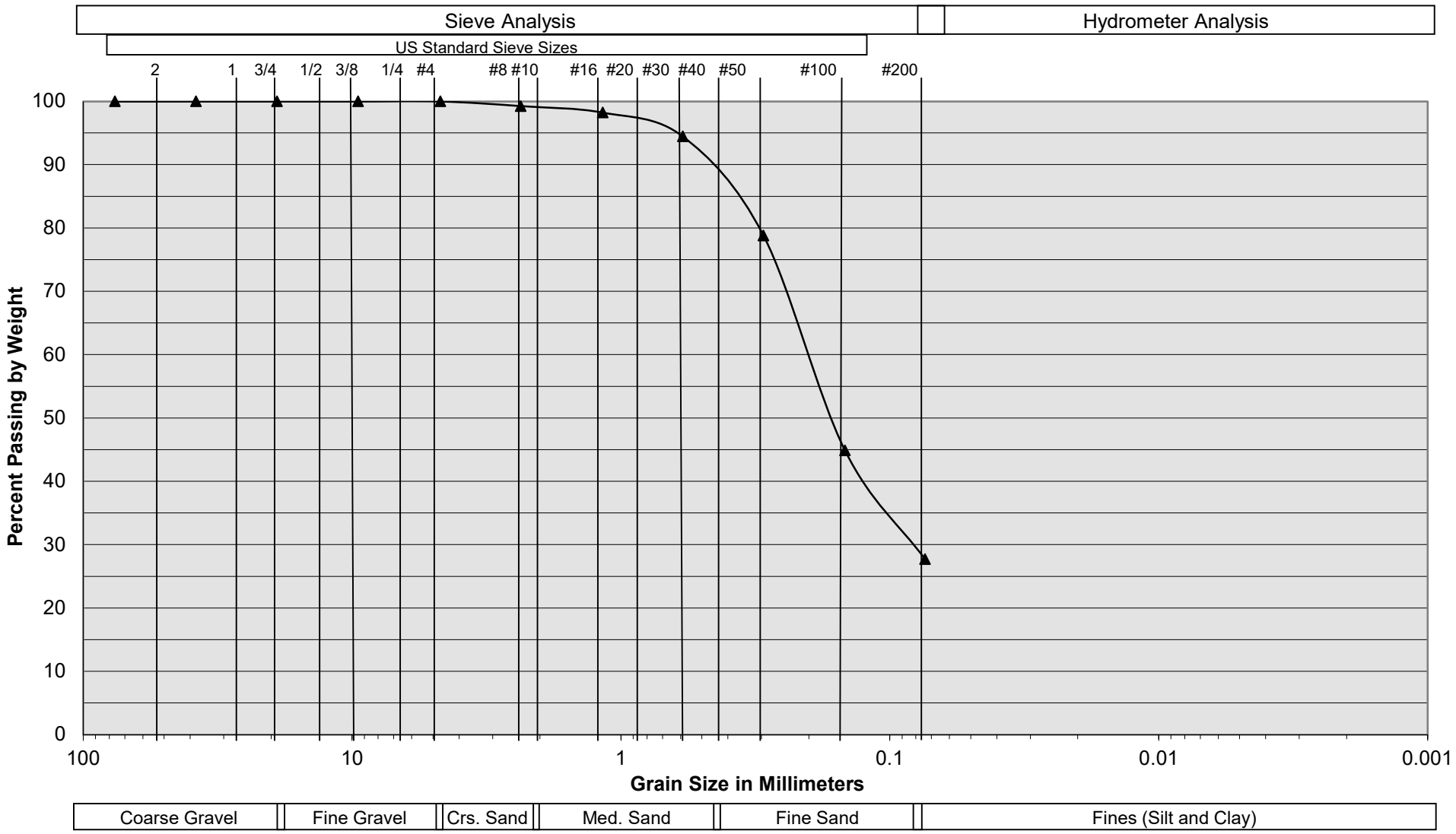
Sample Description	I-6 @43.5'
Soil Classification	ALLUVIUM: Brown fine Sandy Silt

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 14

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6080

Grain Size Distribution



Sample Description	I-6 @48.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 15

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6081

Grain Size Distribution

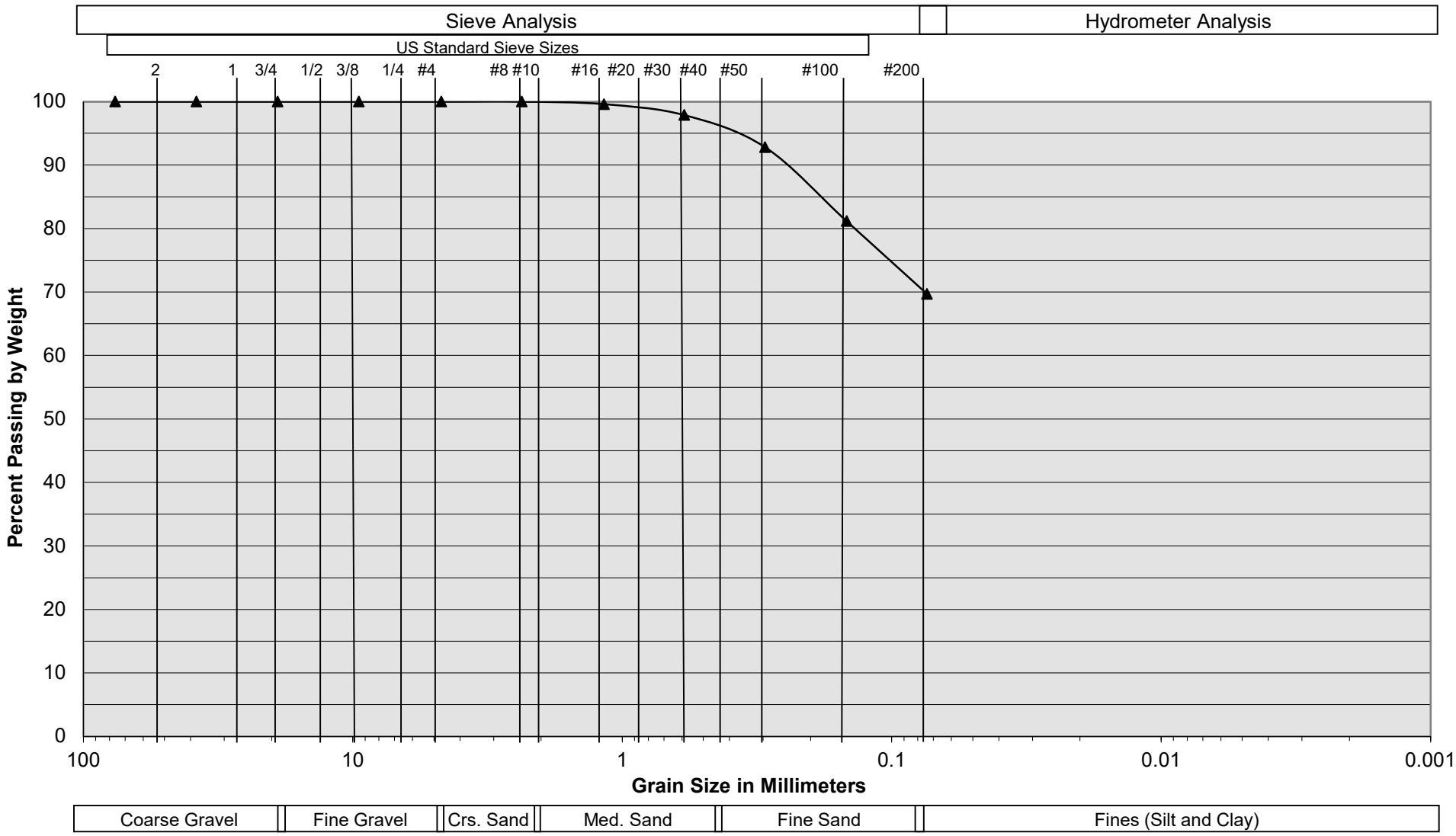
Sample Description	I-7 @13.5'
Soil Classification	ALLUVIUM: Brown fine to coarse Sand, trace fine Gravel, trace Silt

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 16

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6082

Grain Size Distribution



Sample Description	I-7 @18.5'
Soil Classification	ALLUVIUM: Brown fine Sandy Silt, trace medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 17

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6083

Grain Size Distribution

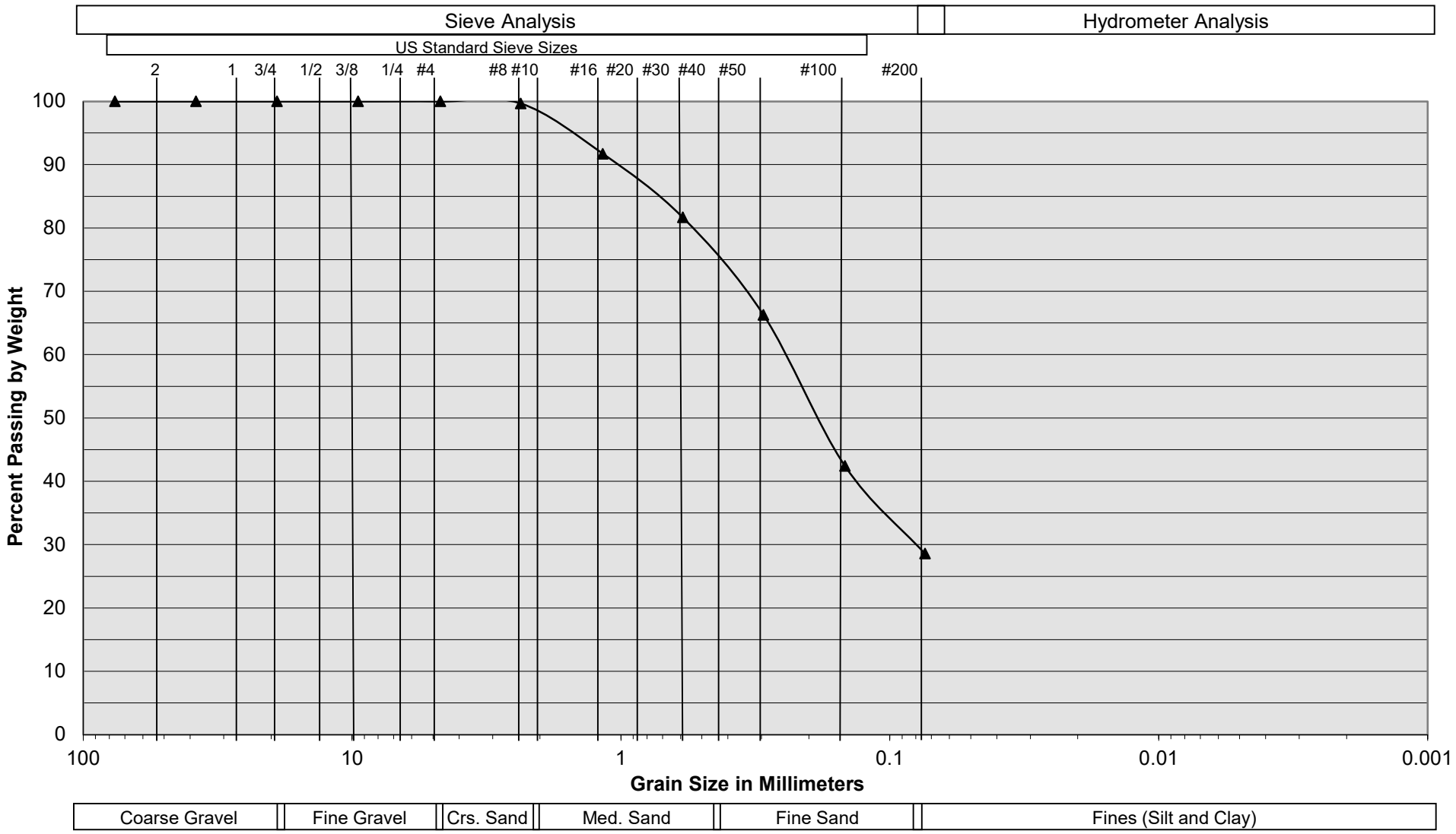
Sample Description	I-7 @23.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand, trace fine Gravel

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 18

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6084

Grain Size Distribution



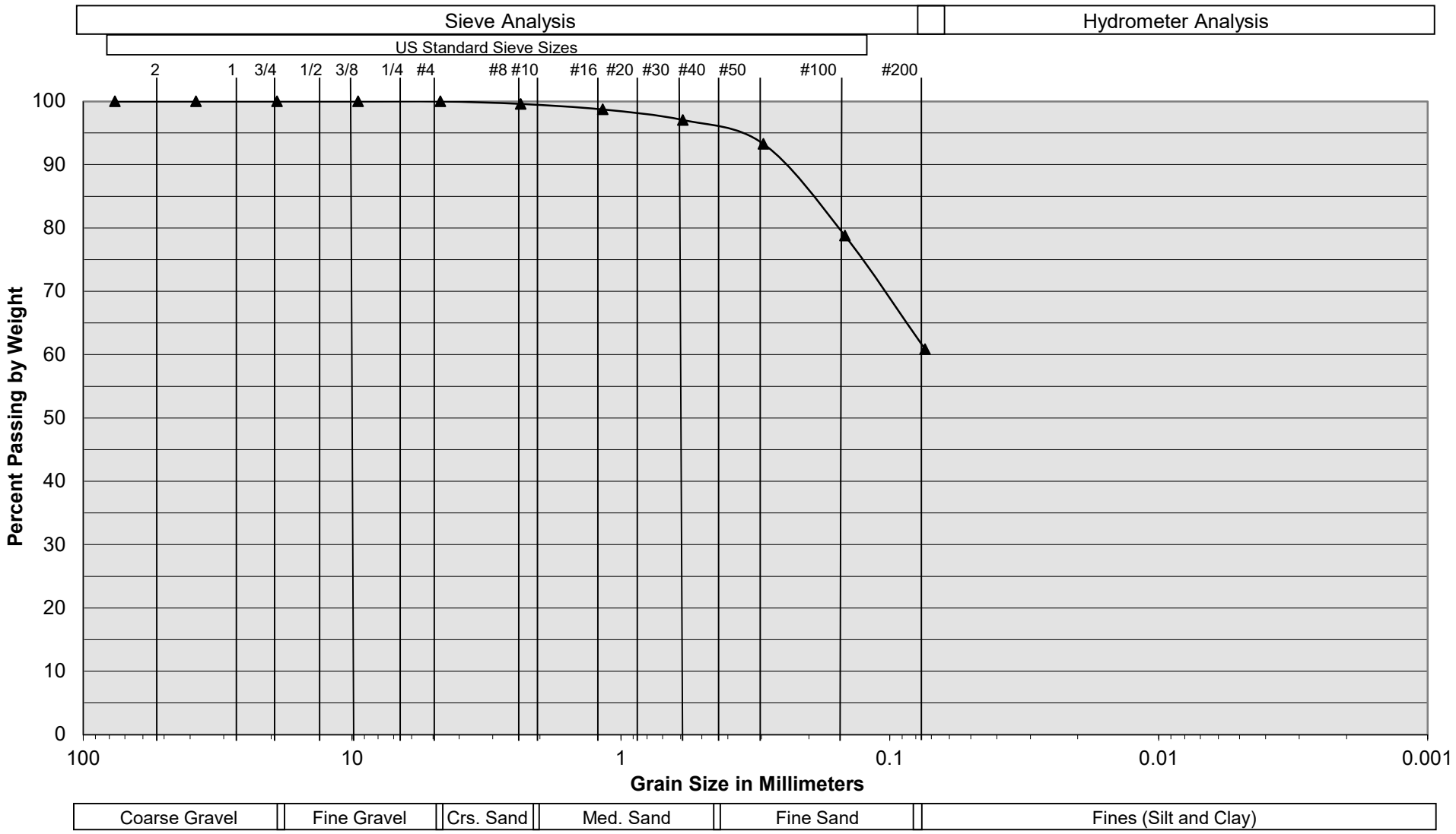
Sample Description	I-7 @33.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 19

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6085

Grain Size Distribution



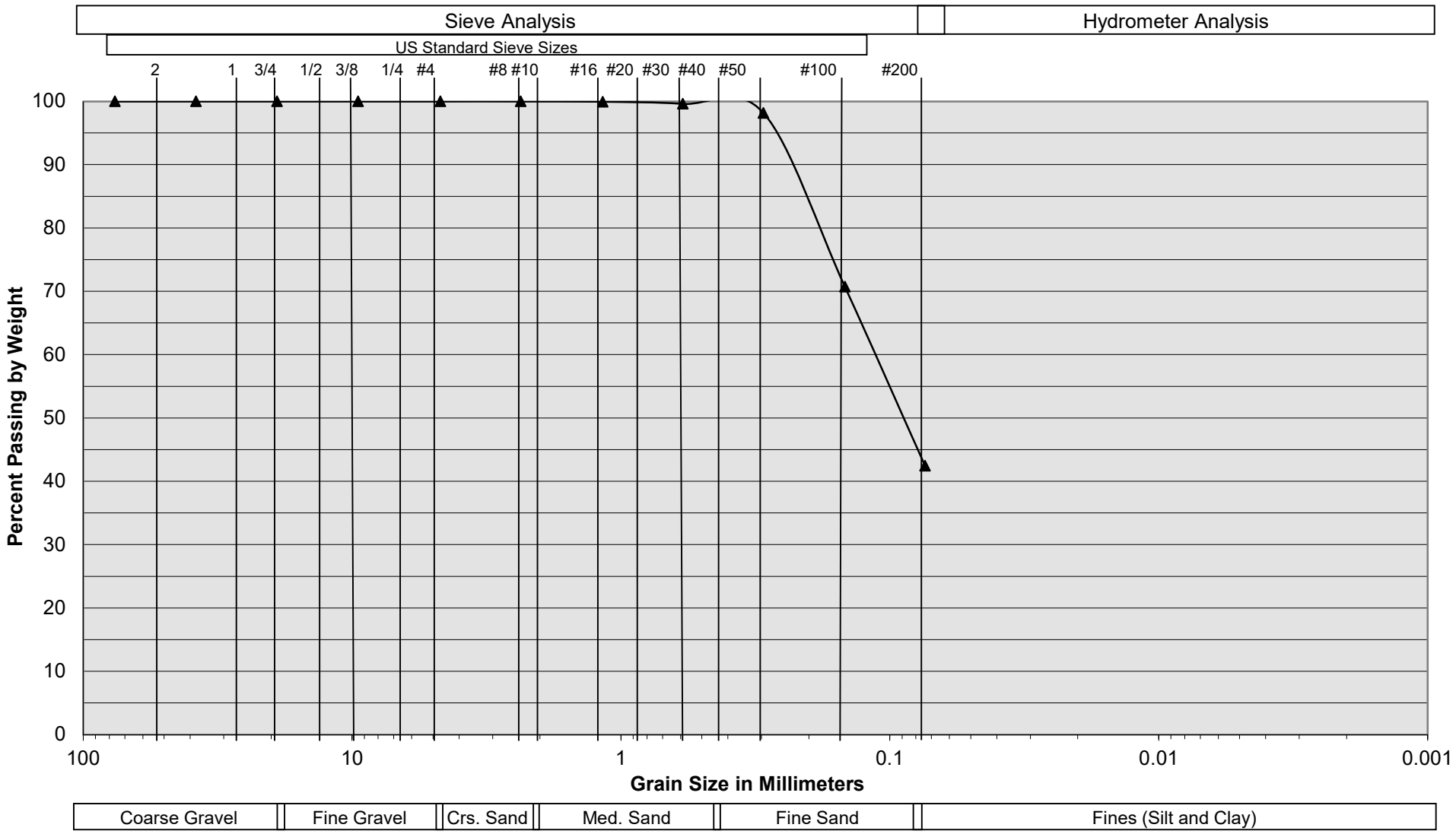
Sample Description	I-7 @38.5'
Soil Classification	ALLUVIUM: Brown fine Sandy Silt, trace medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 20

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6086

Grain Size Distribution



Sample Description	I-7 @43.5'
Soil Classification	ALLUVIUM: Brown Silty fine Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 21

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6087

Grain Size Distribution

Sample Description	I-7 @48.5'
Soil Classification	ALLUVIUM: Brown Silty fine to coarse Sand, trace fine Gravel with 4-inch Silty Clay lens

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 22

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6088

Grain Size Distribution

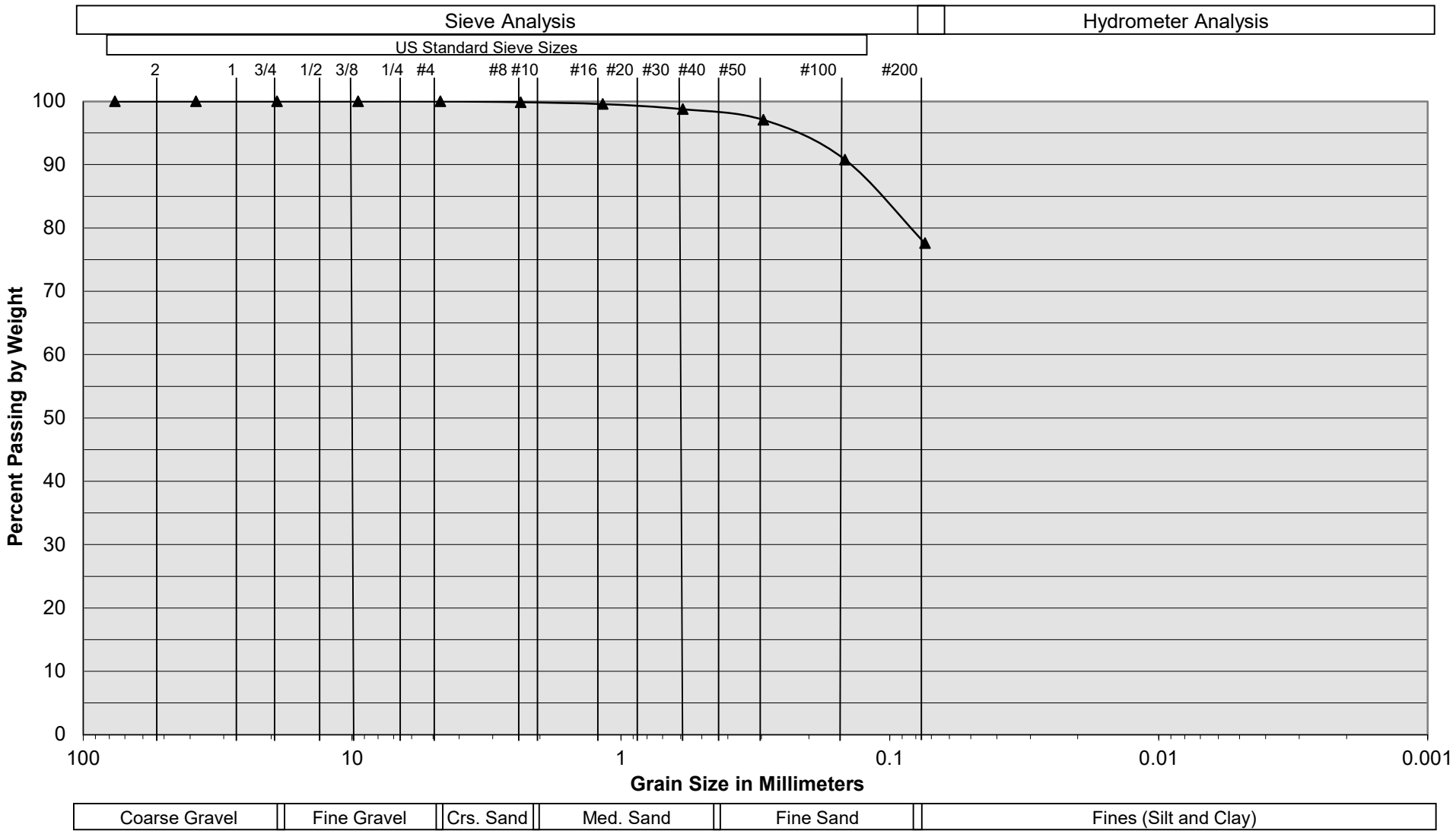
Sample Description	I-8 @13.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand, trace fine Gravel

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 23

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6089

Grain Size Distribution



Sample Description	I-8 @23.5'
Soil Classification	ALLUVIUM: Brown fine Sandy Silt

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 24

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

Grain Size Distribution

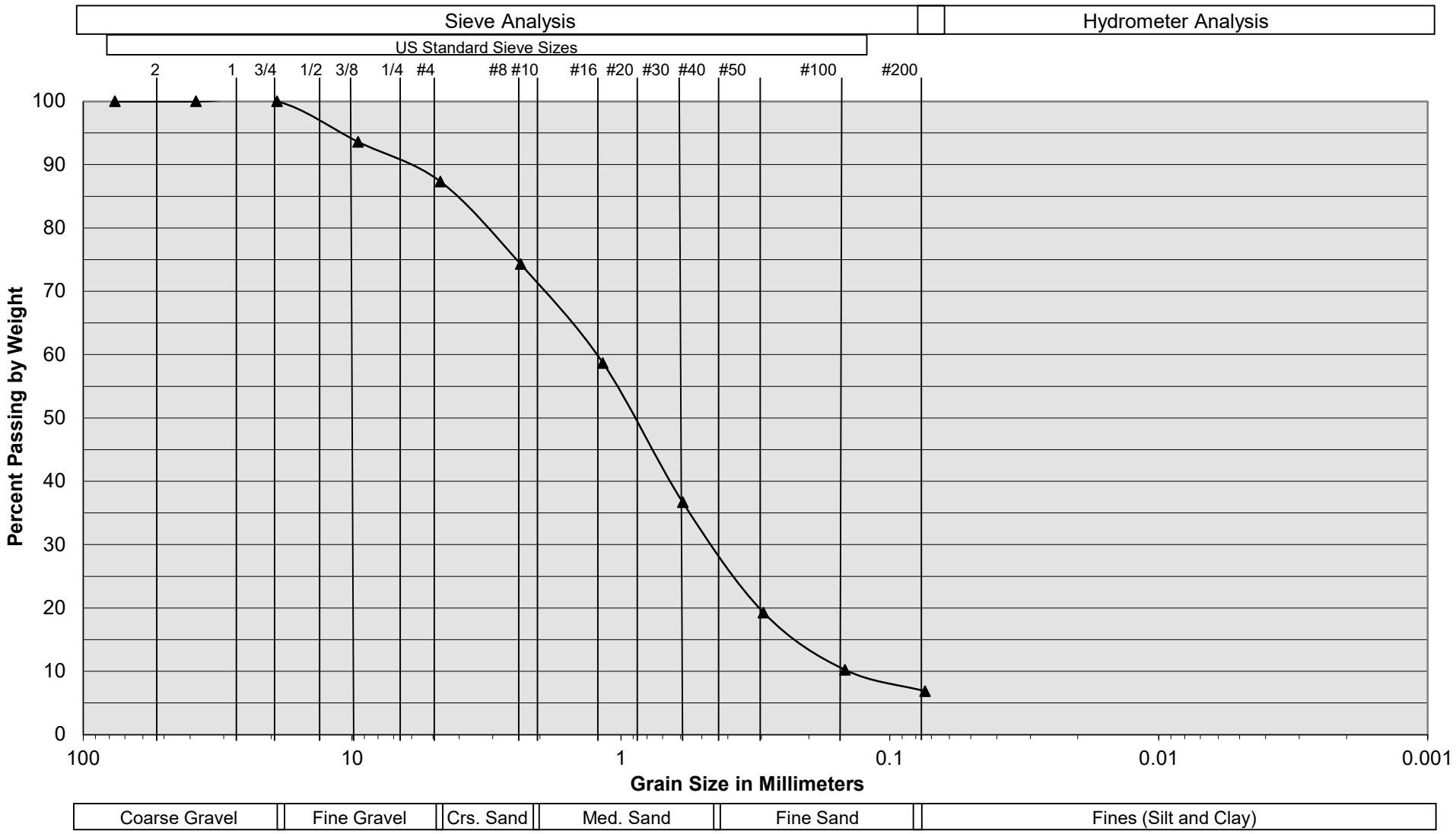
Sample Description	I-8 @28.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand, trace coarse Sand, trace fine Gravel

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 25

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6091

Grain Size Distribution



Sample Description	I-8 @33.5'
Soil Classification	ALLUVIUM: Brown Gravelly fine to coarse Sand, trace Silt

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 26

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6092

Grain Size Distribution

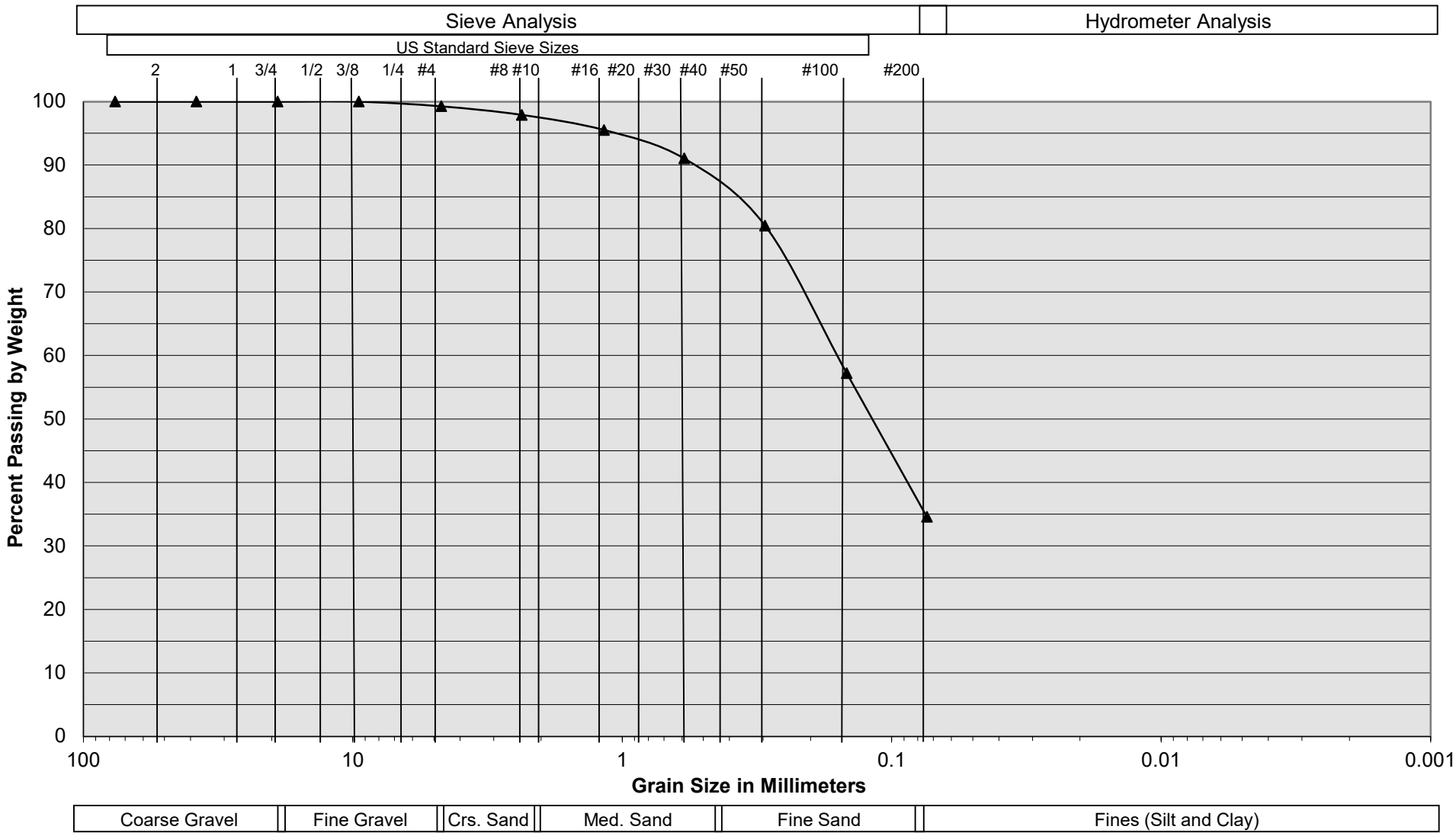
Sample Description	I-8 @38.5'
Soil Classification	ALLUVIUM: Brown Gray Gravelly fine to coarse Sand, trace Silt

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 27

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6093

Grain Size Distribution



Sample Description	I-8 @48.5'
Soil Classification	ALLUVIUM: Brown Silty fine to medium Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 28

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6094

Grain Size Distribution

Sample Description	I-10 @8.5'
Soil Classification	ALLUVIUM: Brown to Gray fine to coarse Sand, little fine Gravel

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 29

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6095

Grain Size Distribution

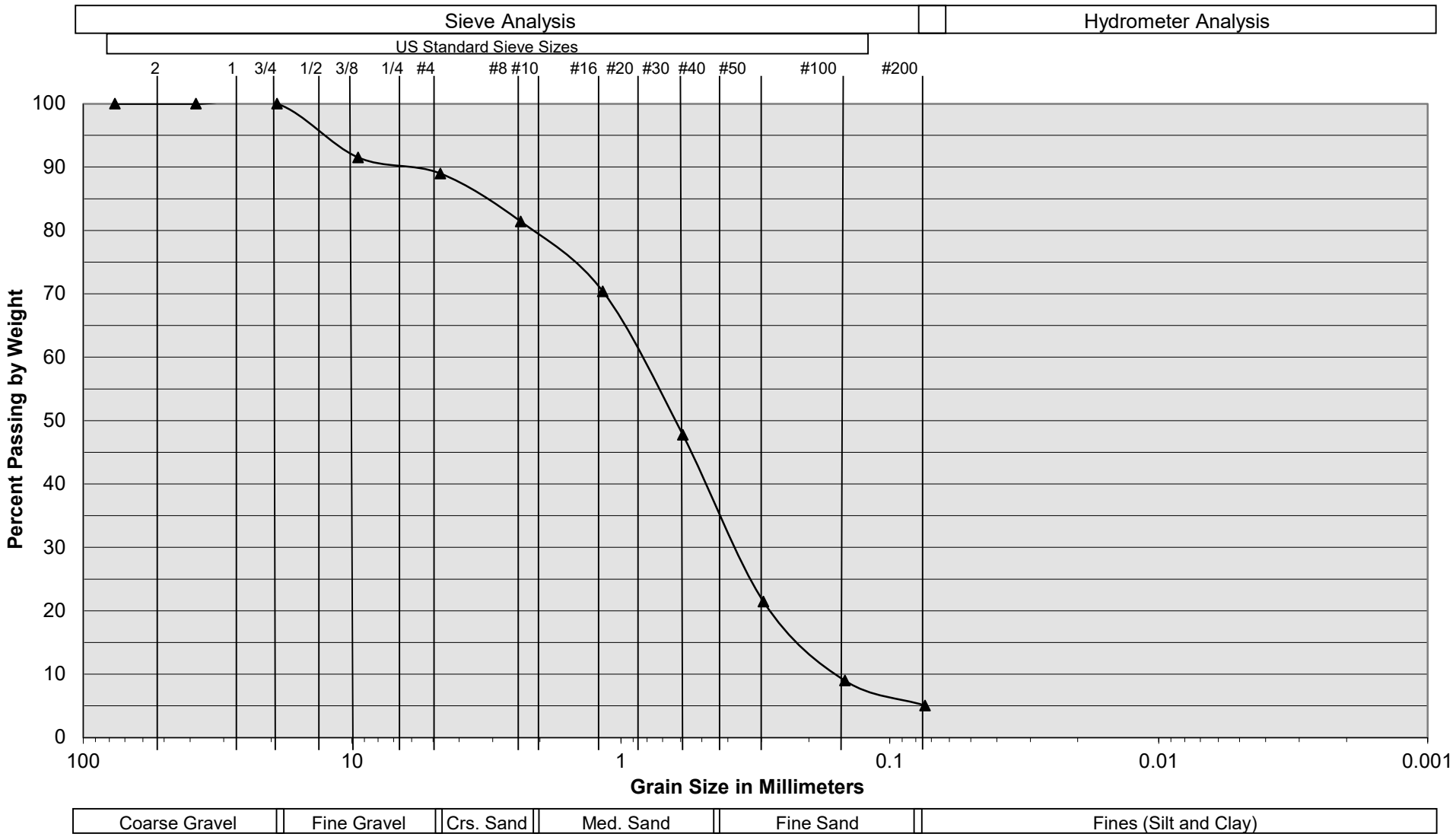
Sample Description	I-11 @8.5'
Soil Classification	ALLUVIUM: Gray Brown Silty fine to coarse Sand

California Logistics Center
Ontario, CA
Project No. 21G197-3
PLATE C- 30

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6096

Grain Size Distribution



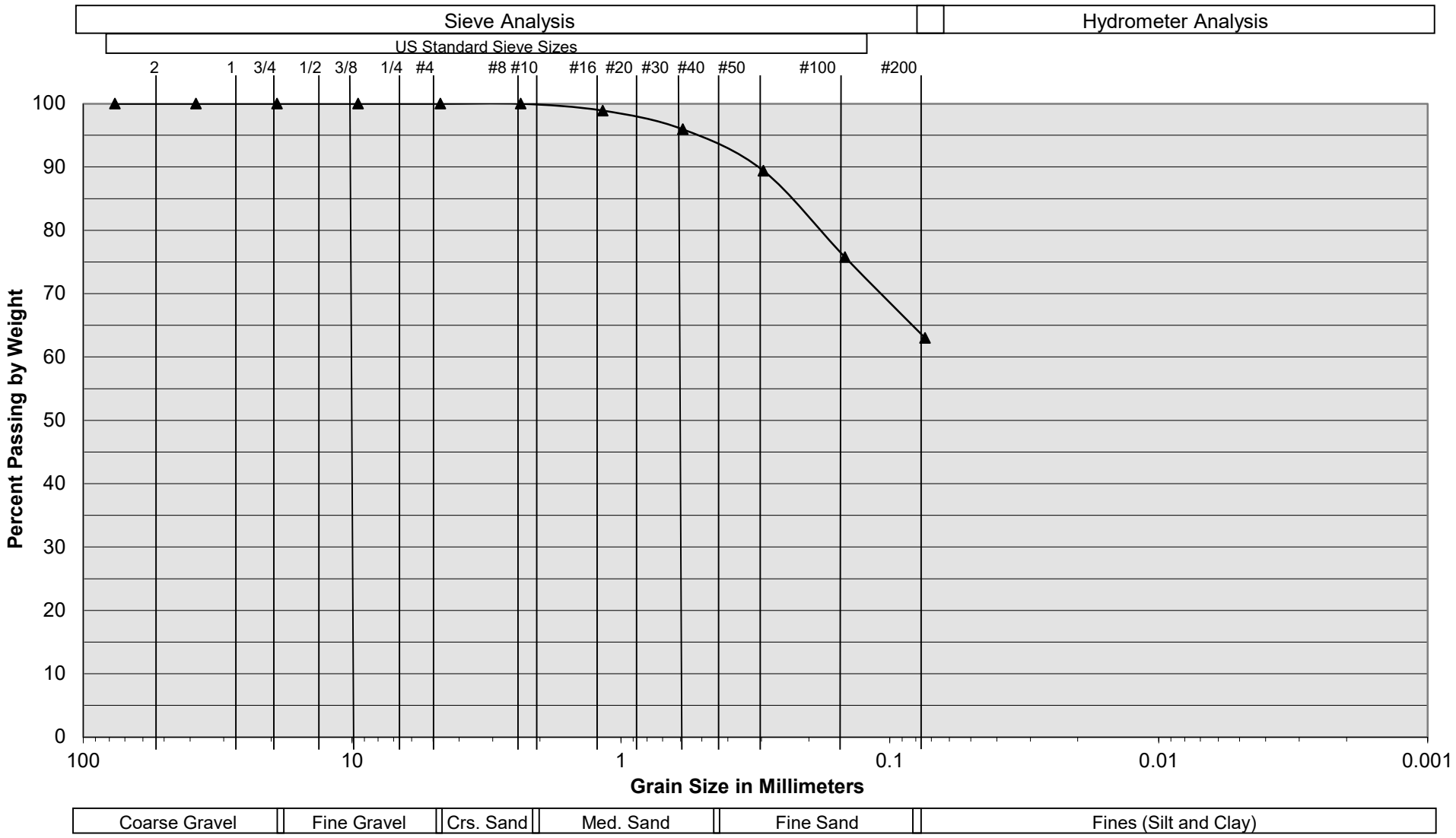
Sample Description	I-12 @ 13.5'
Soil Classification	ALLUVIUM: Gray Brown fine to coarse Sand, trace Silt, trace fine Gravel

California Logistics Center
Ontario, California
Project No. 21G197-3
PLATE C- 31

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6097

Grain Size Distribution



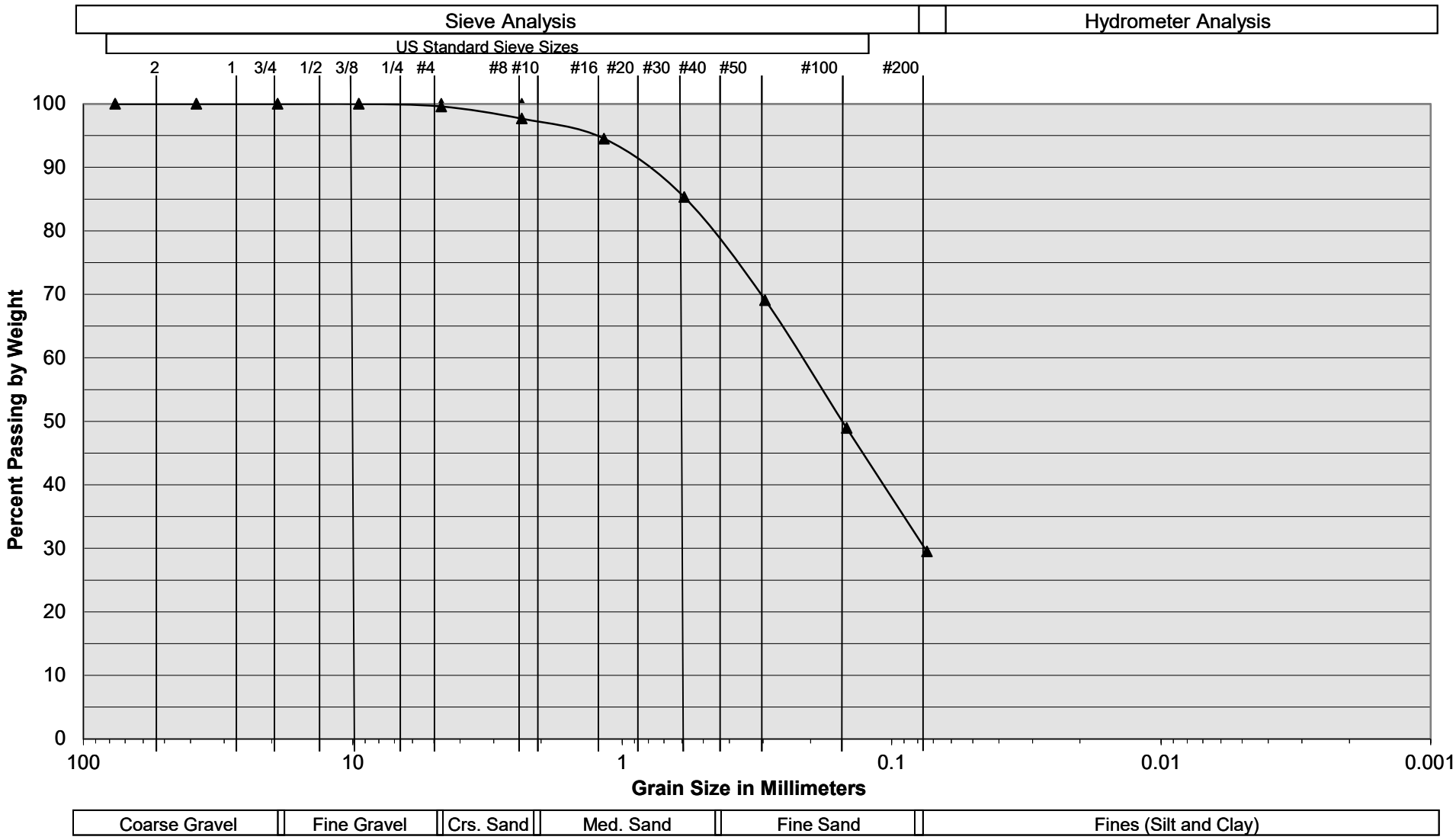
Sample Description	I-12 @ 18.5'
Soil Classification	ALLUVIUM: Brown fine Sandy Silt, trace medium Sand

California Logistics Center
Ontario, California
Project No. 21G197-3
PLATE C- 32

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6098

Grain Size Distribution



Sample Description	I-12 @ 23.5'
Soil Classification	Brown Silty fine to medium Sand

California Logistics Center
Ontario, California
Project No. 21G197-3
PLATE C- 33

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation

6099

Grain Size Distribution

Sample Description	I-12 @ 28.5'
Soil Classification	ALLUVIUM: Brown fine to medium Sandy Silt

California Logistics Center
Ontario, California
Project No. 21G197-3
PLATE C- 34

SoCalGeo
SOUTHERN CALIFORNIA GEOTECHNICAL
A California Corporation